











PROJECT DESCRIPTION

The Transbay Tower is located in San Francisco, California between 1st Street and Fremont Street south of Mission Street. The project consists of an office tower of 60 stories above grade and three basements. The structural design is performed in accordance with the 2010 San Francisco Building Code, including the San Francisco Department of Building Inspection Administrative Bulletin 083, utilizing a non-prescriptive seismic design for the tower structure.



Figure #1: Transbay Tower from the East (adjacent Transit Center in the foreground)

The Tower is designed using a non-prescriptive seismic design approach. A three-step design/verification procedure in accordance with San Francisco's Administrative Bulletin 083 is performed to demonstrate equivalent seismic performance to that intended by the Building Code.

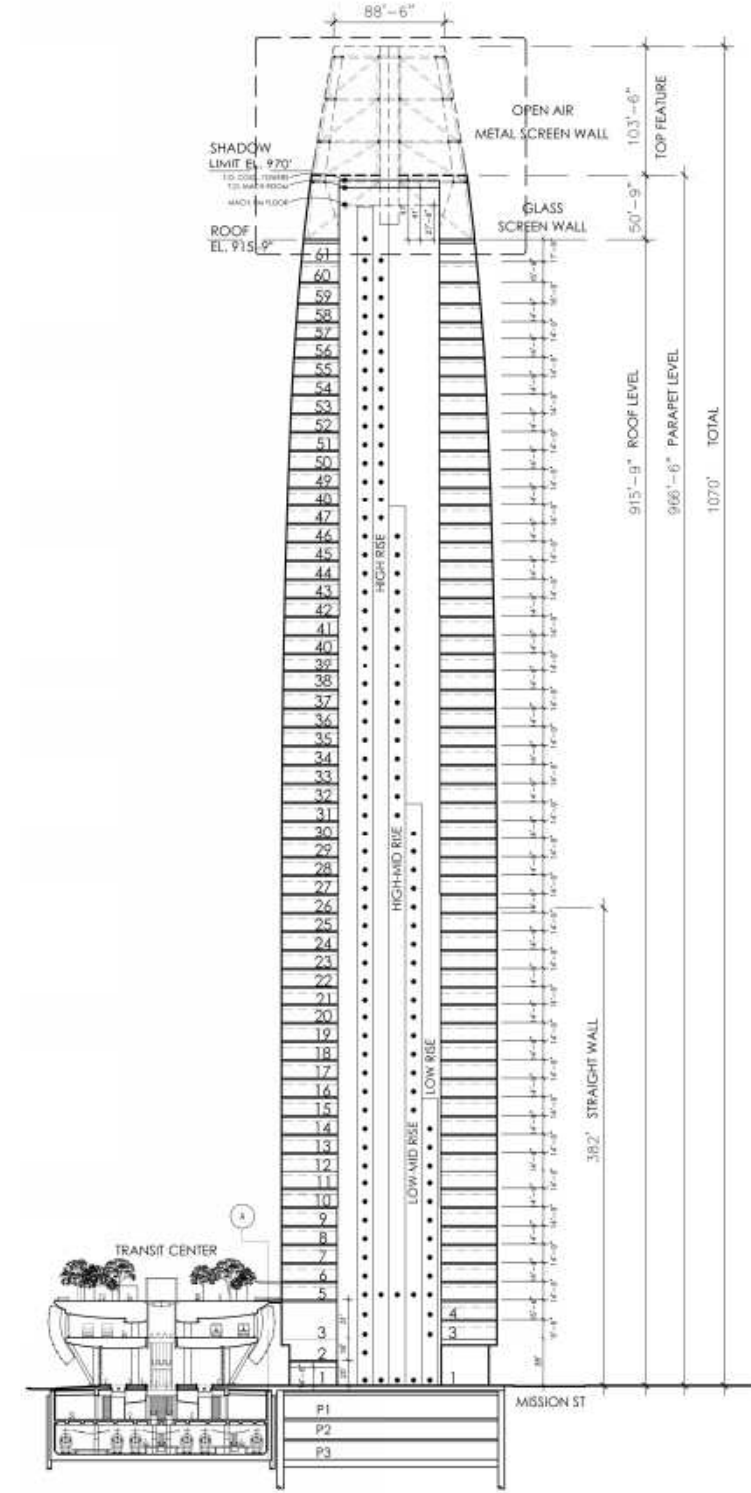


Figure #2: Section through the Transbay Tower (and adjacent Transit Center)

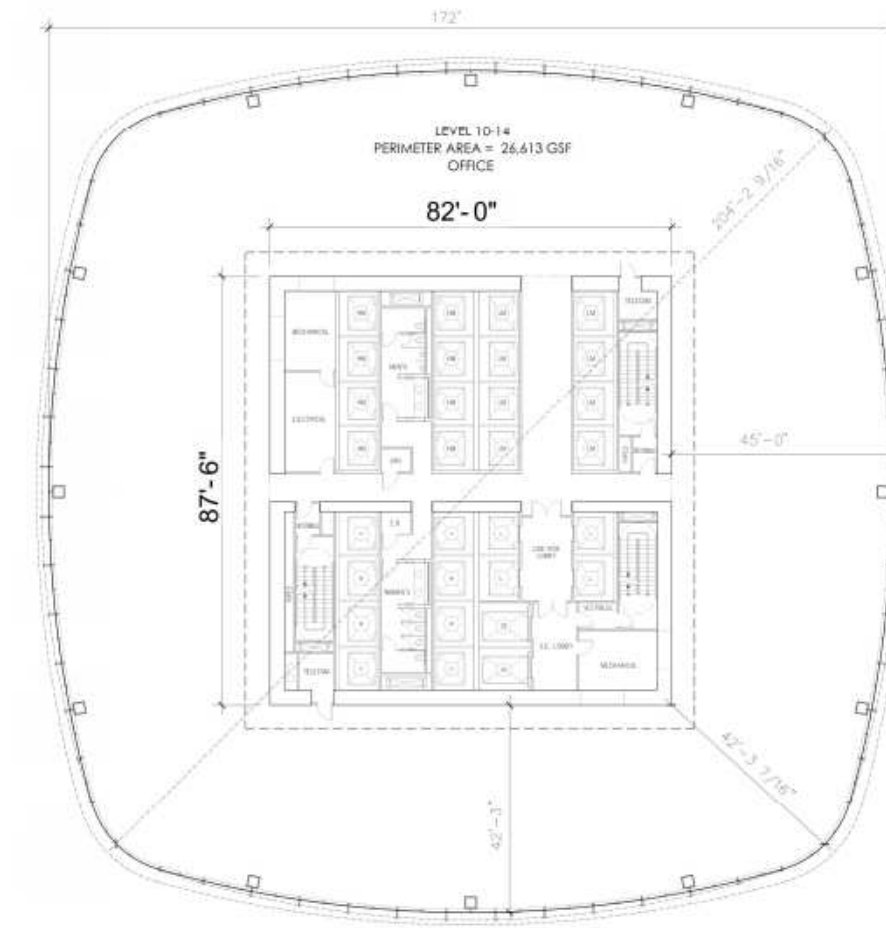


Figure #3: Typical Tower Floor Plan

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014

SUPERSTRUCTURE

Anticipated structural systems and sizes are listed in Table 1.

Table 1. Anticipated Structural Systems and Sizes. Columns: Element, Structural System and Sizes. Rows: Foundation, Core Walls, Columns, Basement Walls, Below-Grade Slabs, Grade-Level Slab, Level 2-5 Slabs, Office Slabs, Roof Slab.

LATERAL FORCE-RESISTING SYSTEM

Lateral forces are resisted by coupled concrete structural walls placed around the central elevator and stair core of the tower. Wall coupling is provided by diagonally reinforced coupling beams...

TOWER TOP FRAMING SYSTEM

The framing at the tower top, which supports a building maintenance unit and the perimeter screen wall, is designed in accordance with prescriptive requirements of the San Francisco Building Code.

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014



BUILDING CODES

The project is designed in accordance with the following building and material codes:

BUILDING CODE

- San Francisco Building Code, 2010 Edition (SFBC 2010)
San Francisco Department of Building Inspection AB 083, Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures. (AB-083-2011)

MATERIAL REFERENCES

- Reinforced Concrete: Building Code Requirements for Structural Concrete and Commentary, American Concrete Institute, 2008 Edition (ACI 318-08)
Structural Steel: Specification for Structural Steel Buildings, American Institute of Steel Construction, AISC 360-05
Steel Coupling Beams: Seismic Provisions for Structural Steel Buildings, American Institute of Steel Construction, AISC 341-05.

OTHER REFERENCES

- Guidelines for Performance-Based Seismic Design of Tall Buildings, Version 1.0, Pacific Earthquake Engineering Research Center, Tall Building Initiative, Report No. 2010/05, November 2010 (PEER TBI Guidelines)
An Alternative Procedure for Seismic Analysis and Design of Tall Buildings Located in the Los Angeles Region, 2011 Edition, Los Angeles Tall Buildings Structural Design Council (LATBSDC)
Minimum Design Loads for Buildings and Other Structures, American Society of Civil Engineers, (ASCE 7), 2005 Edition (as referenced by the SFBC 2010) and 2010 Edition (used for development of target spectra and ground motion determination)
Seismic Rehabilitation of Existing Buildings, American Society of Civil Engineers, 2006 Edition (ASCE 41-06) including supplement 1.
Modeling and Acceptance Criteria for Seismic Design and Analysis of Tall Buildings, PEER/ATC 72-1, October 2010.
Transbay Tower Geotechnical Data Report, Arup, June 17, 2013.
Transbay Tower Geotechnical Interpretive Report, Arup, July 31, 2013.
Transbay Tower Seismic Hazard Analysis and Ground-Motion Development Report, Arup, August 30, 2013.

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014



BUILDING CODES

The project is designed in accordance with the following building and material codes:

BUILDING CODE

- San Francisco Building Code, 2010 Edition (SFBC 2010)
San Francisco Department of Building Inspection AB 083, Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures. (AB-083-2011)

MATERIAL REFERENCES

- Reinforced Concrete: Building Code Requirements for Structural Concrete and Commentary, American Concrete Institute, 2008 Edition (ACI 318-08)
Structural Steel: Specification for Structural Steel Buildings, American Institute of Steel Construction, AISC 360-05
Steel Coupling Beams: Seismic Provisions for Structural Steel Buildings, American Institute of Steel Construction, AISC 341-05.

OTHER REFERENCES

- Guidelines for Performance-Based Seismic Design of Tall Buildings, Version 1.0, Pacific Earthquake Engineering Research Center, Tall Building Initiative, Report No. 2010/05, November 2010 (PEER TBI Guidelines)
An Alternative Procedure for Seismic Analysis and Design of Tall Buildings Located in the Los Angeles Region, 2011 Edition, Los Angeles Tall Buildings Structural Design Council (LATBSDC)
Minimum Design Loads for Buildings and Other Structures, American Society of Civil Engineers, (ASCE 7), 2005 Edition (as referenced by the SFBC 2010) and 2010 Edition (used for development of target spectra and ground motion determination)
Seismic Rehabilitation of Existing Buildings, American Society of Civil Engineers, 2006 Edition (ASCE 41-06) including supplement 1.
Modeling and Acceptance Criteria for Seismic Design and Analysis of Tall Buildings, PEER/ATC 72-1, October 2010.
Transbay Tower Geotechnical Data Report, Arup, June 17, 2013.
Transbay Tower Geotechnical Interpretive Report, Arup, July 31, 2013.
Transbay Tower Seismic Hazard Analysis and Ground-Motion Development Report, Arup, August 30, 2013.

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014



LOADING CRITERIA

A summary of the project-specific loading criteria follows.

GRAVITY LOADING

The following loads are in addition to the self-weight of the structure. The minimum loading requirements have been taken from Table 1607.1 of the SFBC and Table 4-1 of ASCE 7-05. For more detailed gravity loading assumptions, refer to the load maps included in the structural drawings.

Table 2. Gravity Loads

Table with 3 columns: Use, Live Loading (psf), Superimposed Dead Loading (psf). Rows: Amenity/Health Club, Corridor/Stairs/Exit Facilities, Elevator Machine Room, Light Storage, Loading Dock, Mechanical/Electrical, Meeting Room/Lobbies/Assembly, Parking (Garages), Office, Roof, Stores (Retail), Plaza, Rain water storage, Fire water storage.

In addition to these uniform slab loads, a perimeter dead load is applied to the structure to account for the weight of the cladding system.

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014



BUILDING CODES

The project is designed in accordance with the following building and material codes:

BUILDING CODE

- San Francisco Building Code, 2010 Edition (SFBC 2010)
San Francisco Department of Building Inspection AB 083, Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures. (AB-083-2011)

MATERIAL REFERENCES

- Reinforced Concrete: Building Code Requirements for Structural Concrete and Commentary, American Concrete Institute, 2008 Edition (ACI 318-08)
Structural Steel: Specification for Structural Steel Buildings, American Institute of Steel Construction, AISC 360-05
Steel Coupling Beams: Seismic Provisions for Structural Steel Buildings, American Institute of Steel Construction, AISC 341-05.

OTHER REFERENCES

- Guidelines for Performance-Based Seismic Design of Tall Buildings, Version 1.0, Pacific Earthquake Engineering Research Center, Tall Building Initiative, Report No. 2010/05, November 2010 (PEER TBI Guidelines)
An Alternative Procedure for Seismic Analysis and Design of Tall Buildings Located in the Los Angeles Region, 2011 Edition, Los Angeles Tall Buildings Structural Design Council (LATBSDC)
Minimum Design Loads for Buildings and Other Structures, American Society of Civil Engineers, (ASCE 7), 2005 Edition (as referenced by the SFBC 2010) and 2010 Edition (used for development of target spectra and ground motion determination)
Seismic Rehabilitation of Existing Buildings, American Society of Civil Engineers, 2006 Edition (ASCE 41-06) including supplement 1.
Modeling and Acceptance Criteria for Seismic Design and Analysis of Tall Buildings, PEER/ATC 72-1, October 2010.
Transbay Tower Geotechnical Data Report, Arup, June 17, 2013.
Transbay Tower Geotechnical Interpretive Report, Arup, July 31, 2013.
Transbay Tower Seismic Hazard Analysis and Ground-Motion Development Report, Arup, August 30, 2013.

Table with 1 row: Basis of Design, Transbay Tower, San Francisco, California, May 2, 2014

Transbay Tower, 101 First Street, San Francisco, CA



- BOSTON PROPERTIES / HINES, Owner
PELLI CLARKE PELLI ARCHITECTS, Design Architect
KENDALL/HEATON ASSOCIATES, INC., Architect of Record
MAGNUSSON KLEMENCIC ASSOCIATES, Structural Engineer
WSP, MEPFP Engineer
PWP LANDSCAPE ARCHITECTURE, Landscape Architect
BKF ENGINEERS, Civil Engineer
PERSON/HAHN ASSOCIATES, INC., Elevator Consultant
AON FIRE PROTECTION ENGINEERING, Building Security
HWA PARKING, Parking Consultant
ARUP, Geotechnical Consultant
HLB LIGHTING DESIGN, INC., Lighting Consultant
CERAMI AND ASSOCIATES, INC., Acoustical Consultant
MORRISON HERSHFIELD, Curtain Wall Consultant
ENVIRONMENTAL BUILDING STRATEGIES, LEED Consultant
HMA CONSULTING, Building Management and Controls Engineer
C.S. CAULKINS CO., INC., Window Wasting Consultant
ENGINEERING SPECIALTIES GROUP, Aerial Tram Consultant
DEBRA NICHOLS DESIGN, Graphic Design Consultant
ROYSTON HANAMOTO ALLEY & ABEY, Landscape Architect of Record

Revision table with columns: NO., DATE, ISSUE. Rows: 8 (02 MAY 14, GMP), 7 (11 FEB 14, ADDENDUM #2 PERMIT REVISION NO. 1), 6 (10 FEB 14, BID ADDENDUM #2), 5 (12 DEC 13, ADDENDUM #2 PERMIT), 4 (25 NOV 13, BARRETTE LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1), 3 (25 SEP 13, BARRETTE LOAD BEARING ELEMENT ADDENDUM), 2 (23 AUG 13, FOUNDATION PERMIT), 1 (25 JUN 13, PERMIT REVISION NO. 4)

PROJECT INFORMATION: DTD FILENAME, DRAWING TITLE (STRUCTURAL DESIGN CRITERIA), REV. PROJECT NO. (08044), DRAWING NUMBER (S0.11)









- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

Compare MCE Results to Acceptance Criteria and Revise Design as Necessary

- Demands are calculated from the NRHA and are compared against the acceptance criteria, for verification of design.
- Where parameters of interest do not meet the acceptance criteria, elements are redesigned and reanalyzed until acceptable performance is achieved.

FOUNDATION ANALYSIS AND DESIGN PROCEDURE

As discussed above, the ETABS elastic models (for wind, SLE, and DBE) and the PERFORM nonlinear models (for MCE) include structural elements above the top of mat foundation, with translational degrees of freedom fixed there. LPILE models are used to assess lateral response of individual LBEs (including group effect modifiers as appropriate). The mat foundation is designed using the finite element analysis program SAFE. This foundation analysis is conducted with a stand-alone model separate from the tower. In this analysis, the concrete foundation plate elements explicitly consider local demands and calculate cracked section properties where appropriate. Core and basement walls are modeled as beam elements on the mat, with stiffness corresponding to true wall dimensions (i.e., very stiff). LBEs are modeled as elastic spring supports and soil support is modeled with compression-only springs. Soil spring stiffness values as provided by Arup (including an estimate of their variability) are used for this analysis. Several SAFE models are used to study how element-to-element variability of shaft axial spring stiffness would affect rocking response of the tower, mat demands, and distribution of loads to shafts. The mat and shafts are designed to remain essentially elastic.

Earthquake core wall overturning forces considered for internal mechanisms that are ductile (flexure) will be the designed for the average of the NRHA demands, while brittle (shear) will be designed for 1.5 times the average of the NRHA demands.

Mat flexural capacity will be determined based on standard provisions of ACI 318, Chapter 10, using code-specified phi factors and expected material properties. Mat shear capacity will be determined based on standard provisions of ACI 318, Chapter 11. The minimum shear reinforcement requirements for beams (ACI 318 Section 11.4.6) will be applied to the mat foundation to account for size effects for thick members. More specifically, for one-way shear  $V_u$  is taken as  $1/7c(bd)$  unless shear reinforcement is provided per ACI 318 Eq. (11-13), and the critical section is taken  $d$  away from the core for a width extending  $d$  on each side of the core. For two-way shear, design is in accordance with ACI 318 Sec. 11.11.2 - 11.11.4, and critical sections are in accordance with ACI 318 Sec. 11.11.1.2.

STRUCTURE-SOIL-STRUCTURE INTERACTION ANALYSIS

Following design of the Transbay Tower, the structure-soil-structure interaction between the Tower and the adjacent Transbay Transit Center (TTC) will be assessed using a comprehensive analysis developed jointly by Arup and MKA. That model will include detailed modeling of soil layering, groundwater conditions, shoring walls, detailed representation of below-grade elements of both structures (including LBEs), and simplified representation of above-grade elements of both structures. In order to establish representative effective stress in the soil media, the construction sequence is simulated before application of earthquake ground shaking.

Basis of Design

Transbay Tower, San Francisco, California May 2, 2014

City and County of San Francisco  
Department of Building Inspection



Edwin M. Lee, Mayor  
Tom C. Hui, S.E., Acting Director

NOTICE

SPECIAL INSPECTION REQUIREMENTS

Please note that the Special Inspections shown on the approved plans and checked on the Special Inspections form issued with the permit are required for this project. The employment of special inspections is the direct responsibility of the owner or the engineer/architect of record acting as the owner's representative.

These special inspections are required in addition to the called inspections performed by the Department of Building Inspection. The name of the special inspector shall be furnished to the district building inspector prior to start of work for which special inspection is required.

For questions regarding the details or extent of required inspection or tests, please call the Plan Checker assigned to this project or 415-558-6132. If there are any field problems regarding special inspection, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of special inspection compliance must be submitted to and approved by the Special Inspection Services staff. To avoid delays in this process, the project owner should request final compliance reports from the architect or engineer of record and/or special inspection agency soon after the conclusion of work requiring special inspection. The permit will not be finalized without compliance with the special inspection requirements.

STRUCTURAL OBSERVATION REQUIREMENTS

Structural observation shall be provided as required per Section 1710. The building permit will not be finalized without compliance with the structural observation requirements.

Special Inspection Services Contact Information

1. Telephone: (415) 558-6132
2. Fax: (415) 558-6474
3. Email: [dbi\\_specialinspections@sfdpw.org](mailto:dbi_specialinspections@sfdpw.org)
4. In person: 3<sup>rd</sup> floor at 1660 Mission Street

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Special Inspection Services  
1660 Mission Street - San Francisco CA 94163  
Office (415) 558-6132 - FAX (415) 558-6474 - [www.sfdbi.org](http://www.sfdbi.org)

SPECIAL INSPECTION AND STRUCTURAL OBSERVATION  
A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED STRUCTURAL DRAWING SET

JOB ADDRESS: 101 1st St APPLICATION NO. 2013.03.13.2080S ADDENDUM NO. 2  
OWNER NAME: Boston Properties / Hines OWNER PHONE NO. 415 772-0700

Employment of Special Inspection is the direct responsibility of the OWNER, or the engineer/architect of record acting as the owner's representative. Special inspector shall be one of those as prescribed in Sec.1704. Name of special inspector shall be furnished to DBI District Inspector prior to start of the work for which the Special Inspection is required. Structural observation shall be performed as provided by Section 1710. A preconstruction conference is recommended for owner/builder or designer/builder projects, complex and highrise projects, and for projects utilizing new processes or materials.

In accordance with Sec. 1701;1703;1704 (2010 SFBIC), Special Inspection and/or testing is required for the following work:

- |   |  |  |
|---|--|--|
| 1. <input checked="" type="checkbox"/> Concrete (Placement & sampling)                          | 6. <input checked="" type="checkbox"/> High-strength bolting                         | 16. <input checked="" type="checkbox"/> Bolts installed in existing concrete or masonry:   |
| 2. <input checked="" type="checkbox"/> Bolts installed in concrete                              | 7. <input type="checkbox"/> Structural masonry                                       | <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Masonry  |
| 3. <input type="checkbox"/> Special moment-resisting concrete frame                             | 8. <input type="checkbox"/> Reinforced gypsum concrete                               | <input type="checkbox"/> Pullout tests per SFBIC Sec.1607C & 1615C   |
| 4. <input checked="" type="checkbox"/> Reinforcing steel and prestressing tendons               | 9. <input type="checkbox"/> Building concrete II                                     | 19. <input type="checkbox"/> Shear walls and floor systems used as shear diaphragms  |
| 5. <input checked="" type="checkbox"/> Structural welding:                                      | 10. <input type="checkbox"/> Spray-on fireproofing                                   | 20. <input type="checkbox"/> Hollows   |
| A. Periodic visual inspection   | 11. <input type="checkbox"/> Fillets, drilled piers and caissons                     | 21. <input type="checkbox"/> Special cases:  |
| <input checked="" type="checkbox"/> Single lines fillet welds 5/16" or smaller                  | 12. <input type="checkbox"/> Shocks  | <input type="checkbox"/> Shoring   |
| <input checked="" type="checkbox"/> Steel deck  | 13. <input type="checkbox"/> Special grading, excavation and filling (See, Engineer) | <input type="checkbox"/> Underpinning <input type="checkbox"/> Not affecting adjacent property   |
| <input checked="" type="checkbox"/> Welded studs  | 14. <input type="checkbox"/> Shockproofing system                                    | <input type="checkbox"/> Affecting adjacent property - PA  |
| <input type="checkbox"/> Cast-in-place concrete   | 15. <input type="checkbox"/> Demolition  | 22. <input type="checkbox"/> Others  |
| <input type="checkbox"/> Cast-in-place concrete   | 16. <input type="checkbox"/> Exterior Fining   | 23. <input checked="" type="checkbox"/> Others: "As recommended by professional record" <input type="checkbox"/> Geotechnical Engineer |
| <input checked="" type="checkbox"/> Reinforcing steel   | 17. <input type="checkbox"/> Retrofit of unreinforced masonry buildings:             |  |
| <input type="checkbox"/> Continuous visual inspection and NDT (Section 1704)                    | <input type="checkbox"/> Testing of mortar quality and shear tests                   |  |
| <input checked="" type="checkbox"/> All other welding (NDT exception: fillet welds)             | <input type="checkbox"/> Inspection of reporting operations                          |  |
| <input checked="" type="checkbox"/> Reinforcing steel and <input type="checkbox"/> NDT required | <input type="checkbox"/> Installation inspection for embedded bolts                  |  |
| <input type="checkbox"/> Moment-resisting frames  | <input type="checkbox"/> Pullout tests per SFBIC Sec.1607C & 1615C                   |  |
| <input type="checkbox"/> Others:  |  |  |

24. Structural observation per Sec. 1710 (2010 SFBIC) for the following:  Foundations  Steel framing  Concrete construction  Masonry construction  Wood framing  Other:

25. Certification is required for:  Glu-Lam components

Prepared by: Ron Klemencic, S.E. (MKA) Phone: 206 292-1200  
Engineer/Architect of Record

Required information:  
FAX: 206 292-1201 Email: [rklemencic@mka.com](mailto:rklemencic@mka.com)

Review by: DBI Engineer or Plan Checker Phone: (415) 558-  
\*\*\*\*\*

APPROVAL (Based on submitted reports.)  
DATE DBI Engineer or Plan Checker / Special Inspection Services Staff

QUESTIONS ABOUT SPECIAL INSPECTION AND STRUCTURAL OBSERVATION SHOULD BE DIRECTED TO: Special Inspection Services (415) 558-6132; or, [dbi\\_specialinspections@sfdpw.org](mailto:dbi_specialinspections@sfdpw.org); or FAX (415) 558-6474

NO.	DATE	PERMIT REVISION NO.	ISSUE
8	02 MAY 14	GMP	
7	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	10 FEB 14	BID ADDENDUM #2	
5	12 DEC 13	ADDENDUM #2 PERMIT	
4	25 NOV 13	BARRETTE LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1	
3	25 SEP 13	BARRETTE LOAD BEARING ELEMENT ADDENDUM	
2	23 AUG 13	FOUNDATION PERMIT	
1	25 JUN 13	PERMIT REVISION NO. 4	

NO. DATE PERMIT REVISION NO. ISSUE

DRAWING TITLE

STRUCTURAL DESIGN CRITERIA

NO. PROJECT NO. 08044 DRAWING NUMBER S0.14



















- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHNHAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

Compare MCE Results to Acceptance Criteria and Revise Design as Necessary

- Demands are calculated from the NRHA and are compared against the acceptance criteria, for verification of design.
- Where parameters of interest do not meet the acceptance criteria, elements are redesigned and reanalyzed until acceptable performance is achieved.

FOUNDATION ANALYSIS AND DESIGN PROCEDURE

As discussed above, the ETABS elastic models (for wind, SLE, and DBE) and the PERFORM nonlinear models (for MCE) include structural elements above the top of mat foundation, with translational degrees of freedom fixed there. LPILE models are used to assess lateral response of individual LBEs (including group effect modifiers as appropriate). The mat foundation is designed using the finite element analysis program SAFE. This foundation analysis is conducted with a stand-alone model separate from the tower. In this analysis, the concrete foundation plate elements explicitly consider local demands and calculate cracked section properties where appropriate. Core and basement walls are modeled as beam elements on the mat, with stiffness corresponding to true wall dimensions (i.e., very stiff). LBEs are modeled as elastic spring supports and soil support is modeled with compression-only springs. Soil spring stiffness values as provided by Arup (including an estimate of their variability) are used for this analysis. Several SAFE models are used to study how element-to-element variability of shaft axial spring stiffness would affect rocking response of the tower, mat demands, and distribution of loads to shafts. The mat and shafts are designed to remain essentially elastic.

Earthquake core wall overturning forces considered for internal mechanisms that are ductile (flexure) will be the designed for the average of the NRHA demands, while brittle (shear) will be designed for 1.5 times the average of the NRHA demands.

Mat flexural capacity will be determined based on standard provisions of ACI 318, Chapter 10, using code-specified phi factors and expected material properties. Mat shear capacity will be determined based on standard provisions of ACI 318, Chapter 11. The minimum shear reinforcement requirements for beams (ACI 318 Section 11.4.6) will be applied to the mat foundation to account for size effects for thick members. More specifically, for one-way shear  $V_c$  is taken as  $1/7c(bd)$  unless shear reinforcement is provided per ACI 318 Eq. (11-13), and the critical section is taken  $d$  away from the core for a width extending  $d$  on each side of the core. For two-way shear, design is in accordance with ACI 318 Sec. 11.11.2 - 11.11.4, and critical sections are in accordance with ACI 318 Sec. 11.11.1.2.

STRUCTURE-SOIL-STRUCTURE INTERACTION ANALYSIS

Following design of the Transbay Tower, the structure-soil-structure interaction between the Tower and the adjacent Transbay Transit Center (TTC) will be assessed using a comprehensive analysis developed jointly by Arup and MKA. That model will include detailed modeling of soil layering, groundwater conditions, shoring walls, detailed representation of below-grade elements of both structures (including LBEs), and simplified representation of above-grade elements of both structures. In order to establish representative effective stress in the soil media, the construction sequence is simulated before application of earthquake ground shaking.

Basis of Design

Transbay Tower, San Francisco, California May 2, 2014

City and County of San Francisco  
Department of Building Inspection



Edwin M. Lee, Mayor  
Tom C. Hui, S.E., Acting Director

NOTICE

SPECIAL INSPECTION REQUIREMENTS

Please note that the Special Inspections shown on the approved plans and checked on the Special Inspections form issued with the permit are required for this project. The employment of special inspections is the direct responsibility of the owner or the engineer/architect of record acting as the owner's representative.

These special inspections are required in addition to the called inspections performed by the Department of Building Inspection. The name of the special inspector shall be furnished to the district building inspector prior to start of work for which special inspection is required.

For questions regarding the details or extent of required inspection or tests, please call the Plan Checker assigned to this project or 415-558-6132. If there are any field problems regarding special inspection, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of special inspection compliance must be submitted to and approved by the Special Inspection Services staff. To avoid delays in this process, the project owner should request final compliance reports from the architect or engineer of record and/or special inspection agency soon after the conclusion of work requiring special inspection. The permit will not be finalized without compliance with the special inspection requirements.

STRUCTURAL OBSERVATION REQUIREMENTS

Structural observation shall be provided as required per Section 1710. The building permit will not be finalized without compliance with the structural observation requirements.

Special Inspection Services Contact Information

1. Telephone: (415) 558-6132
2. Fax: (415) 558-6474
3. Email: [dbi\\_specialinspections@sfdpw.org](mailto:dbi_specialinspections@sfdpw.org)
4. In person: 3<sup>rd</sup> floor at 1660 Mission Street

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Special Inspection Services  
1660 Mission Street - San Francisco CA 94163  
Office (415) 558-6132 - FAX (415) 558-6474 - [www.sfdbi.org](http://www.sfdbi.org)

SPECIAL INSPECTION AND STRUCTURAL OBSERVATION  
A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED STRUCTURAL DRAWING SET

JOB ADDRESS: 101 1st St APPLICATION NO. 2013.03.13.2080S ADDENDUM NO. 2  
OWNER NAME: Boston Properties / Hines OWNER PHONE NO. 415 772-0700

Employment of Special Inspection is the direct responsibility of the OWNER, or the engineer/architect of record acting as the owner's representative. Special inspector shall be one of those as prescribed in Sec.1704. Name of special inspector shall be furnished to DBI District Inspector prior to start of the work for which the Special Inspection is required. Structural observation shall be performed as provided by Section 1710. A preconstruction conference is recommended for owner/builder or designer/builder projects, complex and highrise projects, and for projects utilizing new processes or materials.

In accordance with Sec. 1701;1703;1704 (2010 SFBIC), Special Inspection and/or testing is required for the following work:

- |   |  |  |
|---|--|--|
| 1. <input checked="" type="checkbox"/> Concrete (Placement & sampling)                          | 6. <input checked="" type="checkbox"/> High-strength bolting                         | 16. <input checked="" type="checkbox"/> Bolts installed in existing concrete or masonry:                             |
| 2. <input checked="" type="checkbox"/> Bolts installed in concrete                              | 7. <input type="checkbox"/> Structural masonry                                       | <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Masonry  |
| 3. <input type="checkbox"/> Special moment-resisting concrete frame                             | 8. <input type="checkbox"/> Reinforced gypsum concrete                               | <input type="checkbox"/> Pullout tests per SFBIC Sec.1607C & 1615C   |
| 4. <input checked="" type="checkbox"/> Reinforcing steel and prestressing tendons               | 9. <input type="checkbox"/> Building concrete II                                     | 19. <input type="checkbox"/> Shear walls and floor systems used as shear diaphragms                                  |
| 5. <input checked="" type="checkbox"/> Structural welding:                                      | 10. <input type="checkbox"/> Spray-on fireproofing                                   | 20. <input type="checkbox"/> Hollows   |
| A. Periodic visual inspection   | 11. <input type="checkbox"/> Fillets, drilled piers and caissons                     | 21. <b>Special cases:</b>  |
| <input checked="" type="checkbox"/> Single lines fillet welds 5/16" or smaller                  | 12. <input type="checkbox"/> Shocks  | <input type="checkbox"/> Shoring   |
| <input checked="" type="checkbox"/> Steel deck  | 13. <input type="checkbox"/> Special grading, excavation and filling (See, Engineer) | <input type="checkbox"/> Underpinning <input type="checkbox"/> Not affecting adjacent property                       |
| <input checked="" type="checkbox"/> Welded studs  | 14. <input type="checkbox"/> Shockproofing system                                    | <input type="checkbox"/> Affecting adjacent property - PA  |
| <input type="checkbox"/> Cast-in-place concrete   | 15. <input type="checkbox"/> Demolition  | 22. <input type="checkbox"/> Others  |
| <input type="checkbox"/> Cast-in-place concrete   | 16. <input type="checkbox"/> Exterior Fining   | <input type="checkbox"/> Crane safety (Apply to the operation of lower cranes on highrise building)                  |
| <input checked="" type="checkbox"/> Reinforcing steel   | 17. <b>Retort of unreinforced masonry buildings:</b>                                 | 23. <input checked="" type="checkbox"/> Others: "As recommended by professional record" <i>Geotechnical Engineer</i> |
| <input type="checkbox"/> Continuous visual inspection and NDT (Section 1704)                    | <input type="checkbox"/> Testing of mortar quality and shear tests                   |  |
| <input checked="" type="checkbox"/> All other welding (NDT exception: fillet weld)              | <input type="checkbox"/> Inspection of reporting operations                          |  |
| <input checked="" type="checkbox"/> Reinforcing steel and <input type="checkbox"/> NDT required | <input type="checkbox"/> Installation inspection for embedded bolts                  |  |
| <input type="checkbox"/> Moment-resisting frames  | <input type="checkbox"/> Pullout tests per SFBIC Sec.1607C & 1615C                   |  |
| <input type="checkbox"/> Others:  |  |  |

24. Structural observation per Sec. 1710 (2010 SFBIC) for the following:  Foundations  Steel framing  Concrete construction  Masonry construction  Wood framing  Other:

25. Certification is required for:  Glu-Lam components

Prepared by: Ron Klemencic, S.E. (MKA) Phone: 206 292-1200  
Engineer/Architect of Record

Required information:  
FAX: 206 292-1201 Email: [rklemencic@mka.com](mailto:rklemencic@mka.com)

Review by: DBI Engineer or Plan Checker Phone: (415) 558-6132

APPROVAL (Based on submitted reports.)

DATE: DBI Engineer or Plan Checker / Special Inspection Services Staff

QUESTIONS ABOUT SPECIAL INSPECTION AND STRUCTURAL OBSERVATION SHOULD BE DIRECTED TO: Special Inspection Services (415) 558-6132; or, [dbi\\_specialinspections@sfdpw.org](mailto:dbi_specialinspections@sfdpw.org); or FAX (415) 558-6474

NO.	DATE	PERMIT REVISION NO.	ISSUE
8	02 MAY 14	GMP	
7	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	10 FEB 14	BID ADDENDUM #2	
5	12 DEC 13	ADDENDUM #2 PERMIT	
4	25 NOV 13	BARRETTE LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1	
3	25 SEP 13	BARRETTE LOAD BEARING ELEMENT ADDENDUM	
2	23 AUG 13	FOUNDATION PERMIT	
1	25 JUN 13	PERMIT REVISION NO. 4	

NO. DATE PERMIT REVISION NO. ISSUE

DRAWING TITLE

STRUCTURAL DESIGN CRITERIA

NO. PROJECT NO. 08044 DRAWING NUMBER S0.14



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- ◇ INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

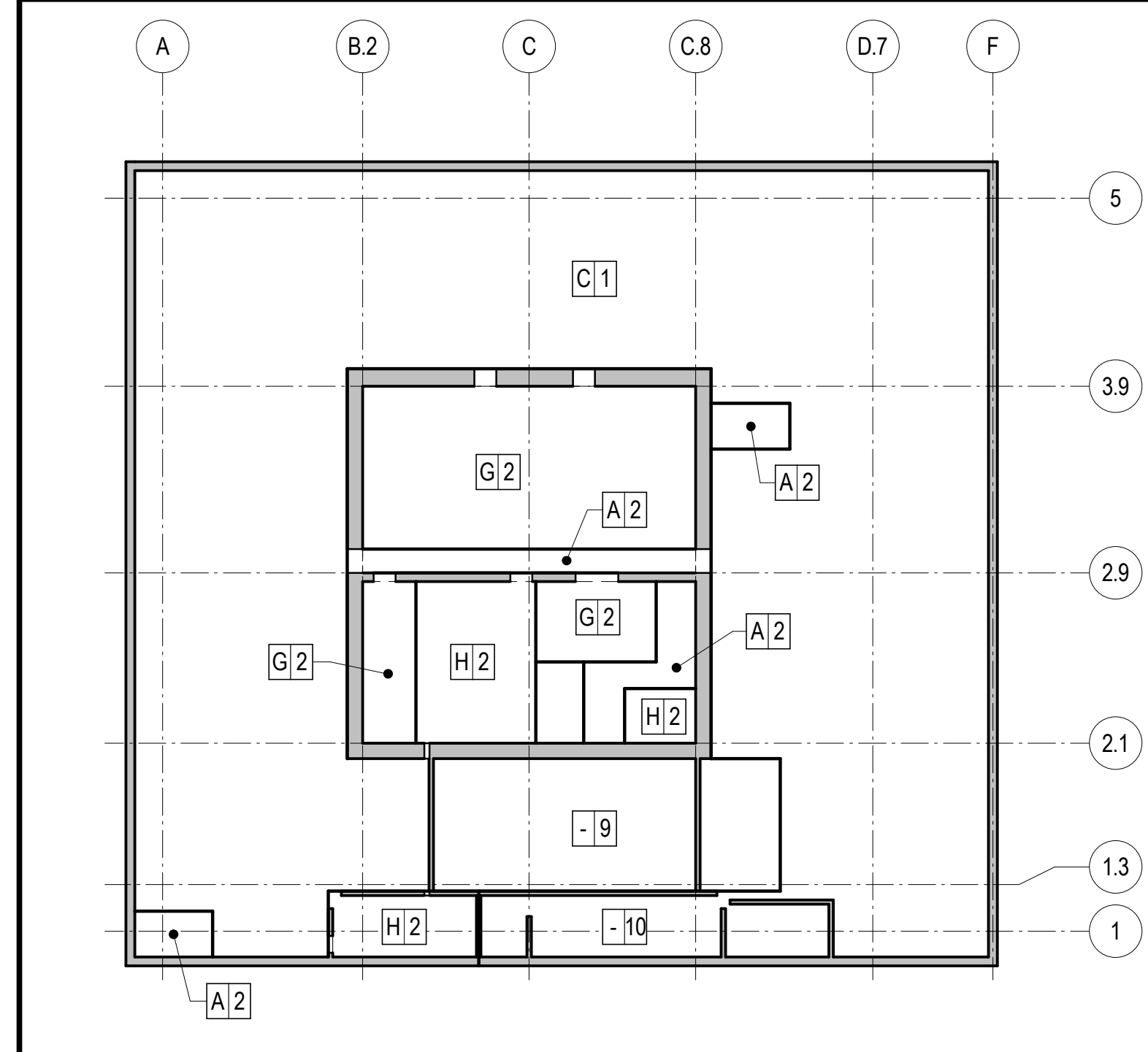
LIVE LOAD (LL) DESIGNATIONS		
LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MEP	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE CATWALK	40

SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS						
SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	12	-	-
2	TYPICAL INTERIOR	20	8	-	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA, HARDSCAPE	150	5	-	145	-
8	PLAZA, TREE WELLS	650	5	-	645	WATERPROOFING, PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

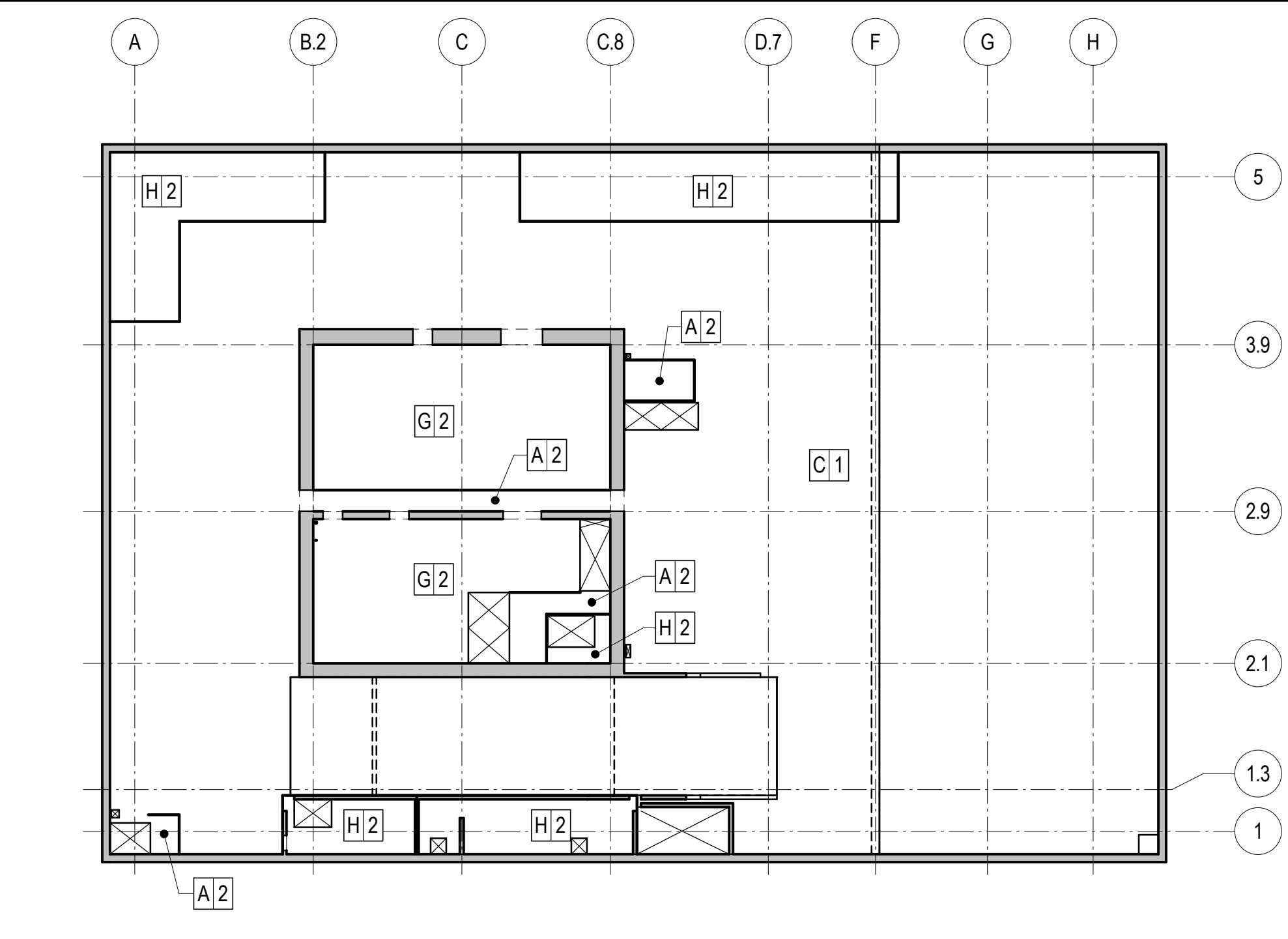
**LOAD MAP NOTES:**

- LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
- SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

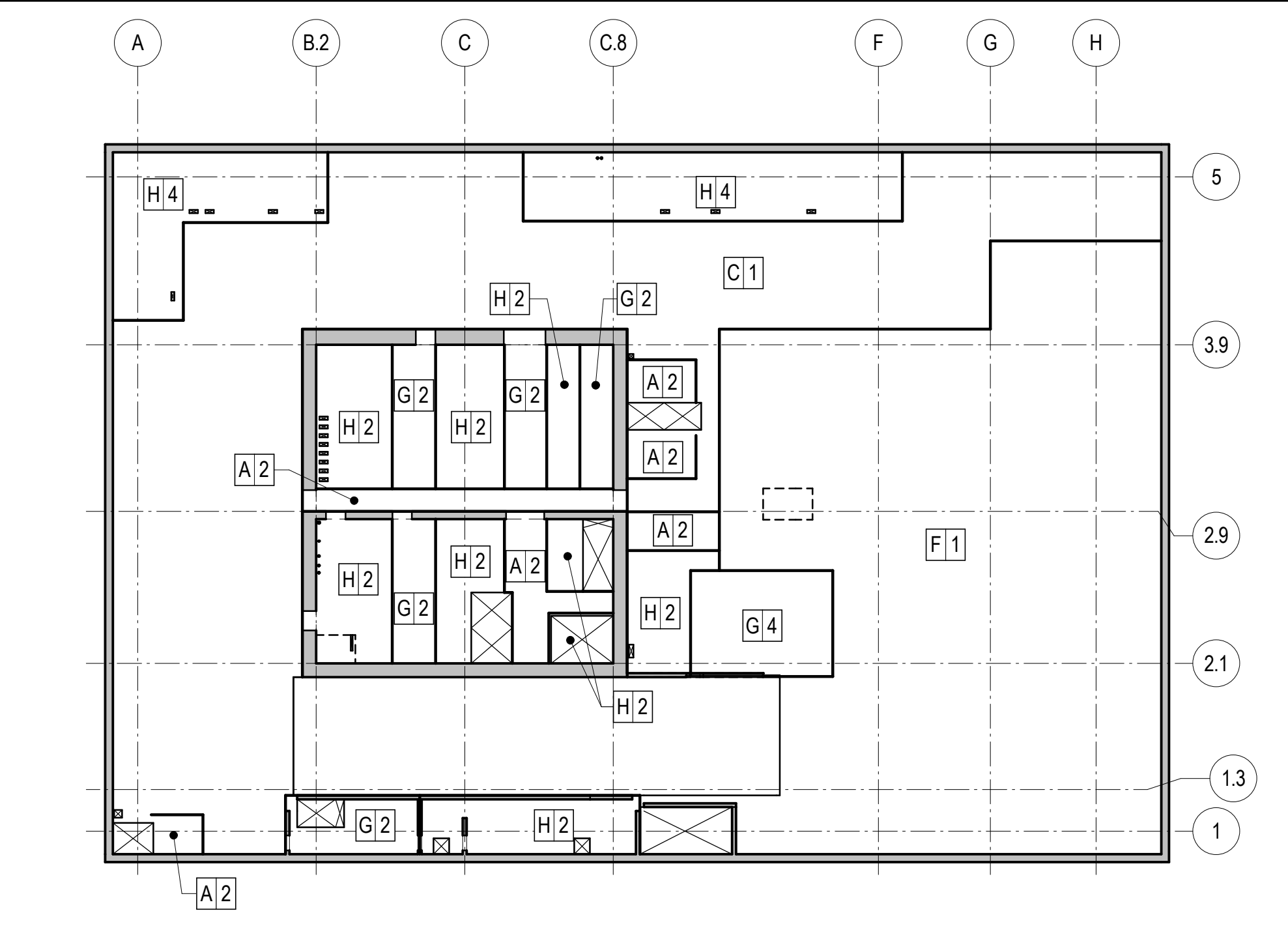
**10 LOAD MAP NOTES AND DESIGNATIONS**



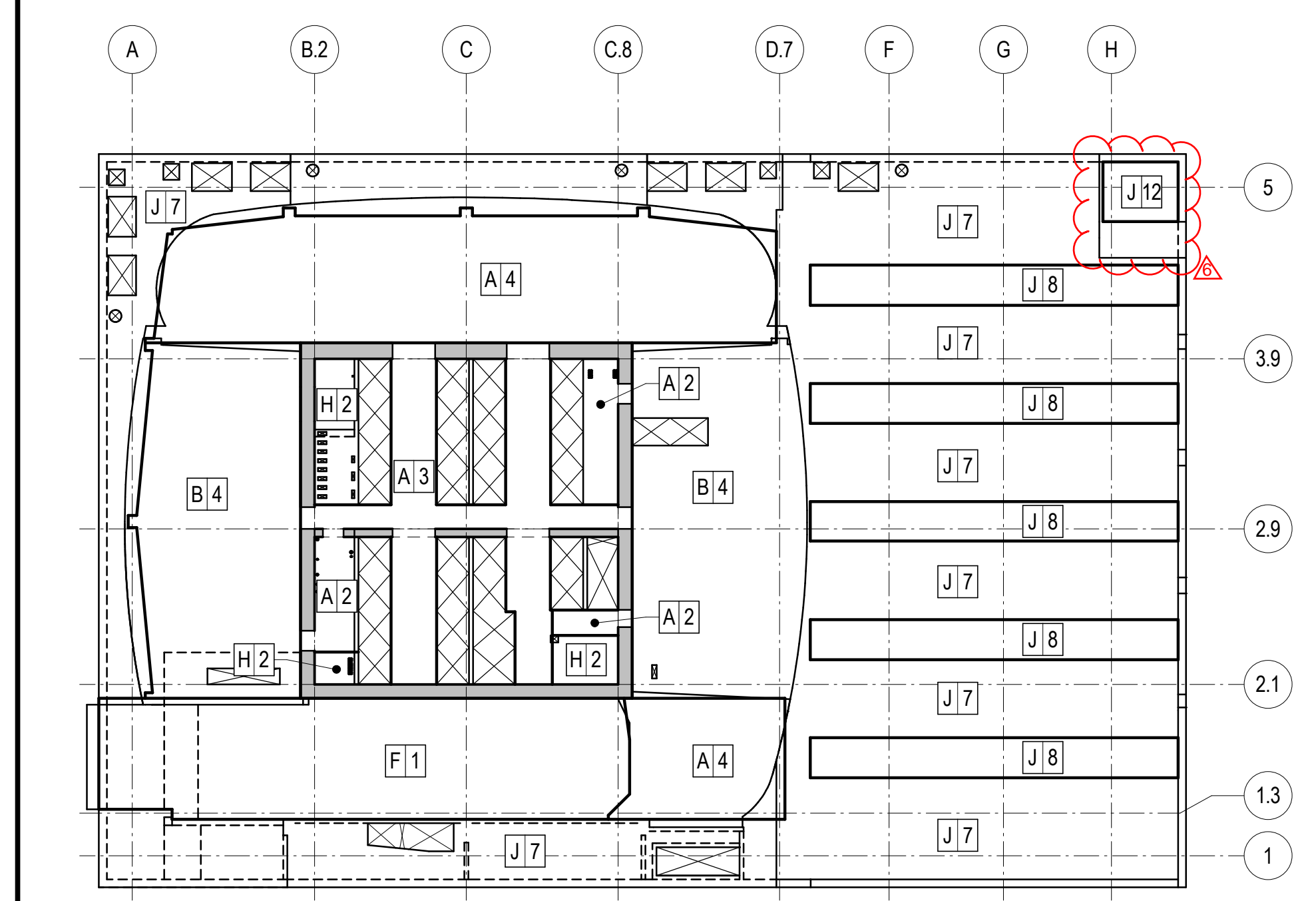
**6 LEVEL P3**



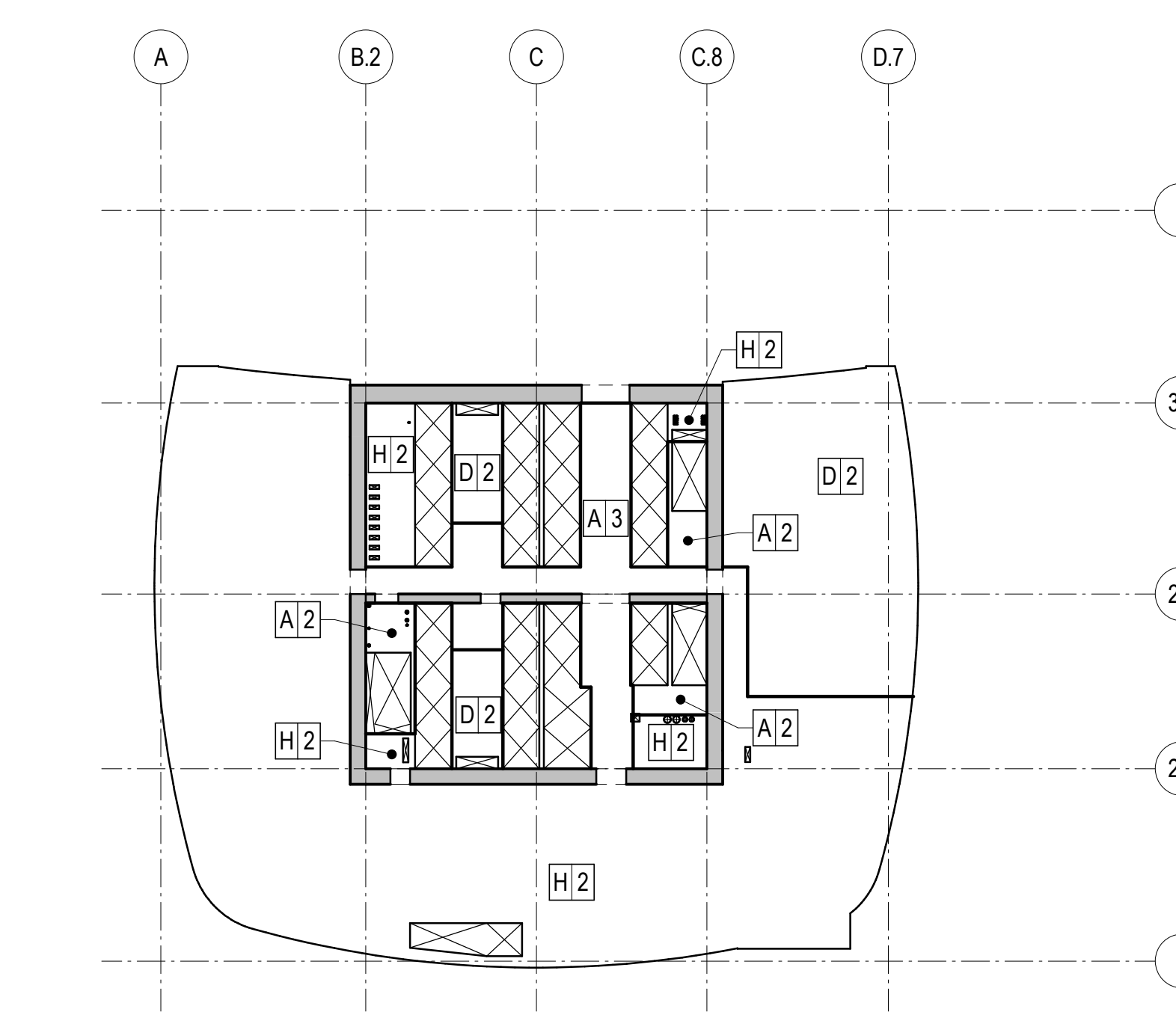
**8 LEVEL P2**



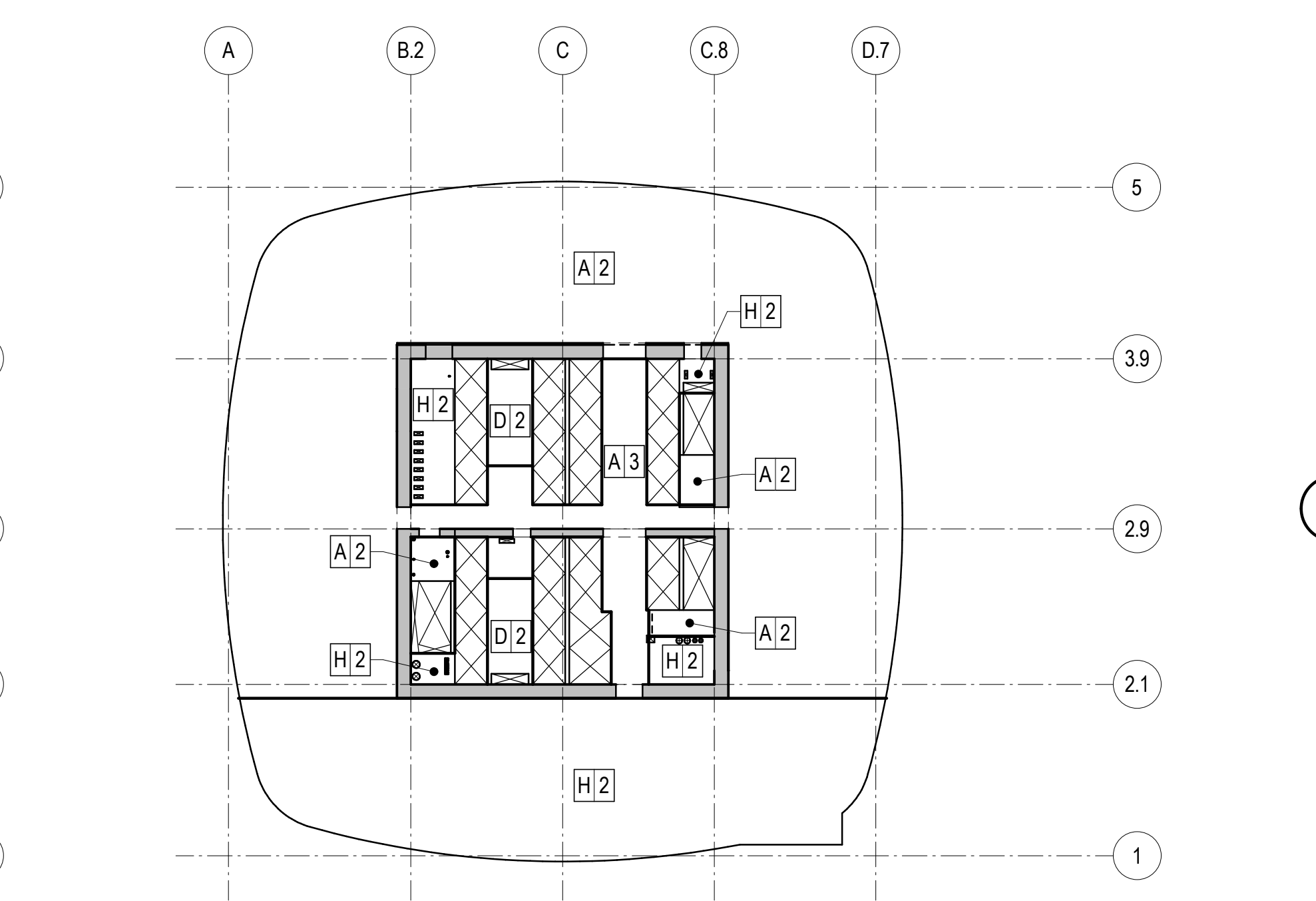
**9 LEVEL P1**



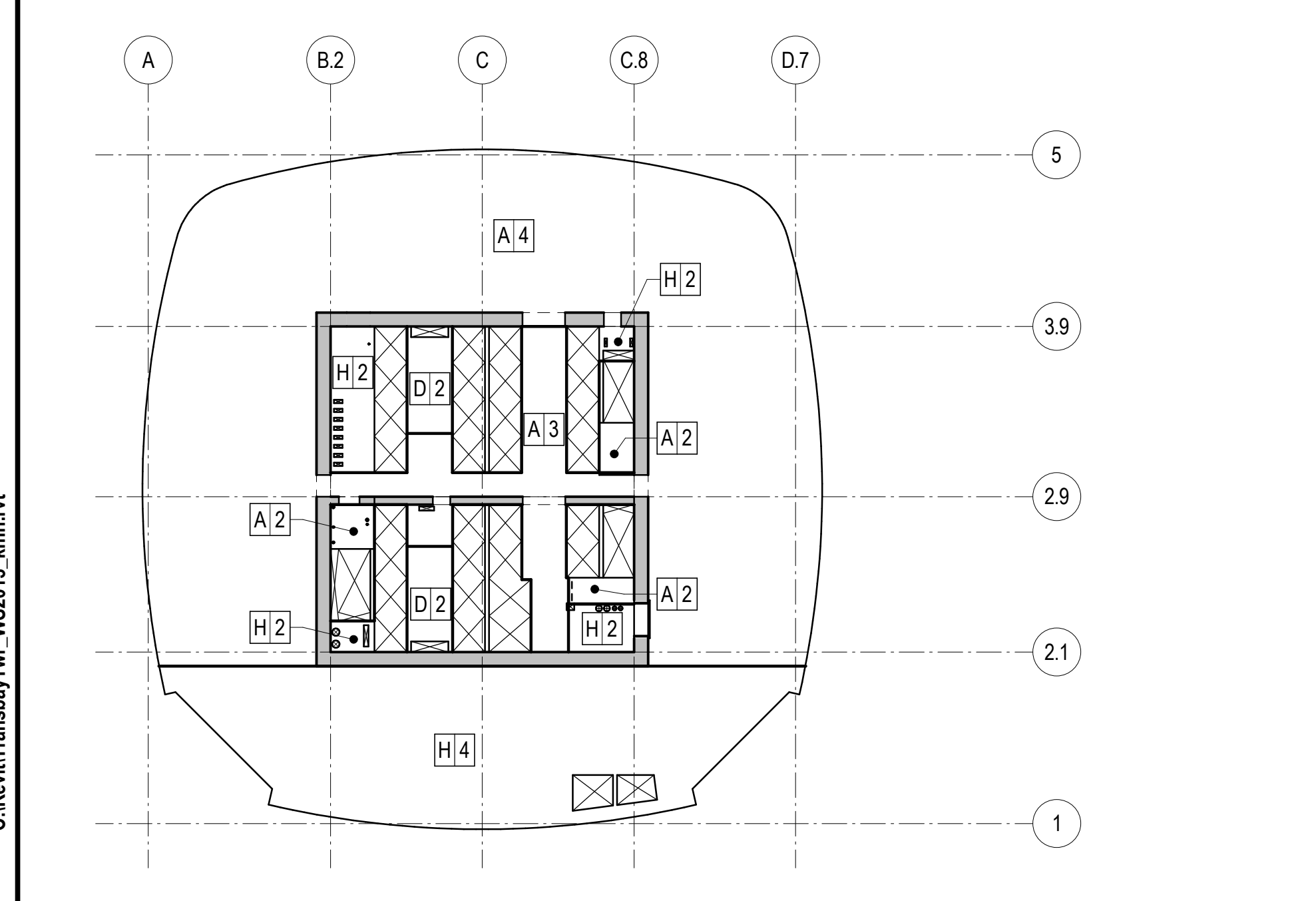
**12 LEVEL 1**



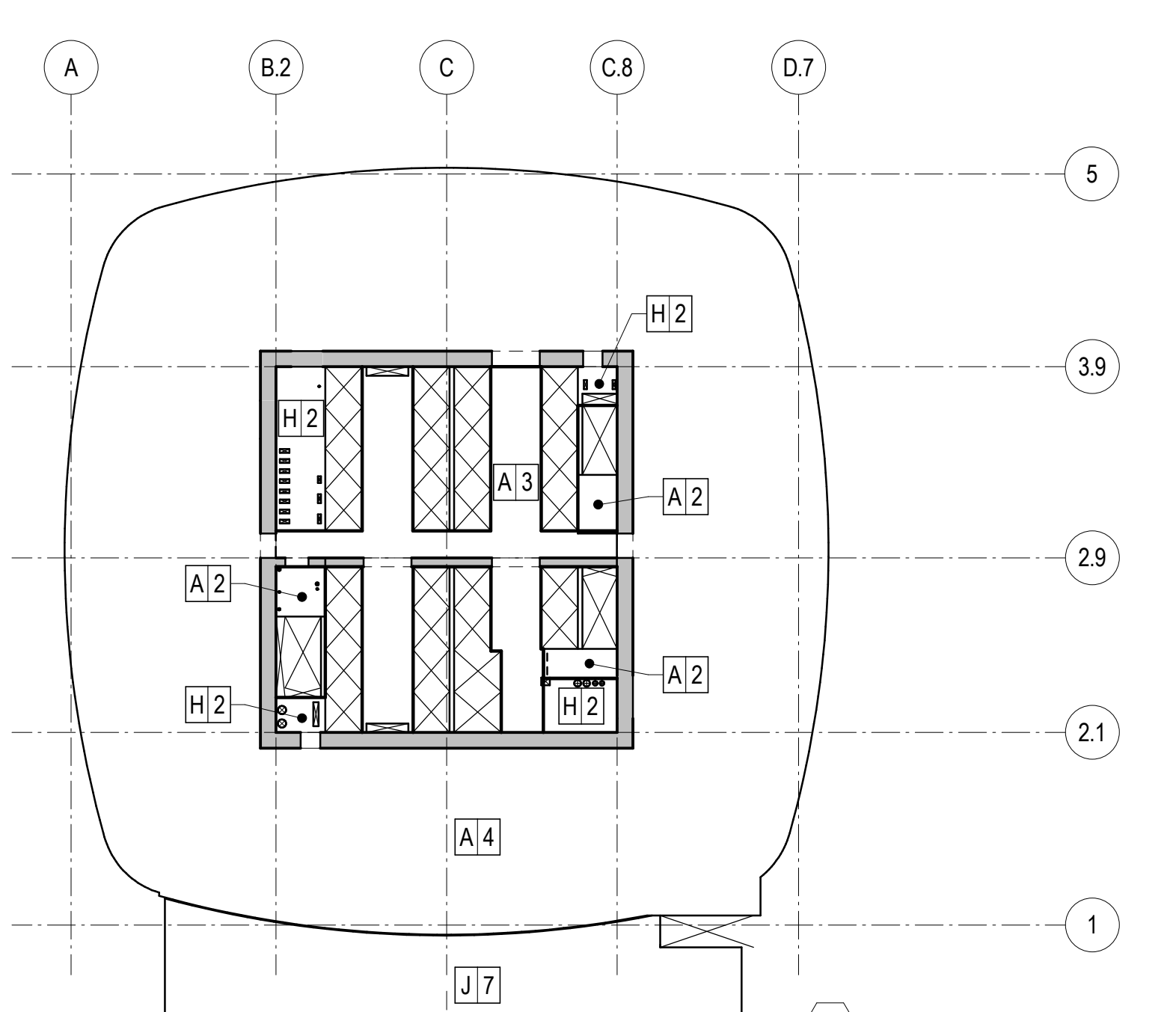
**13 LEVEL 2**



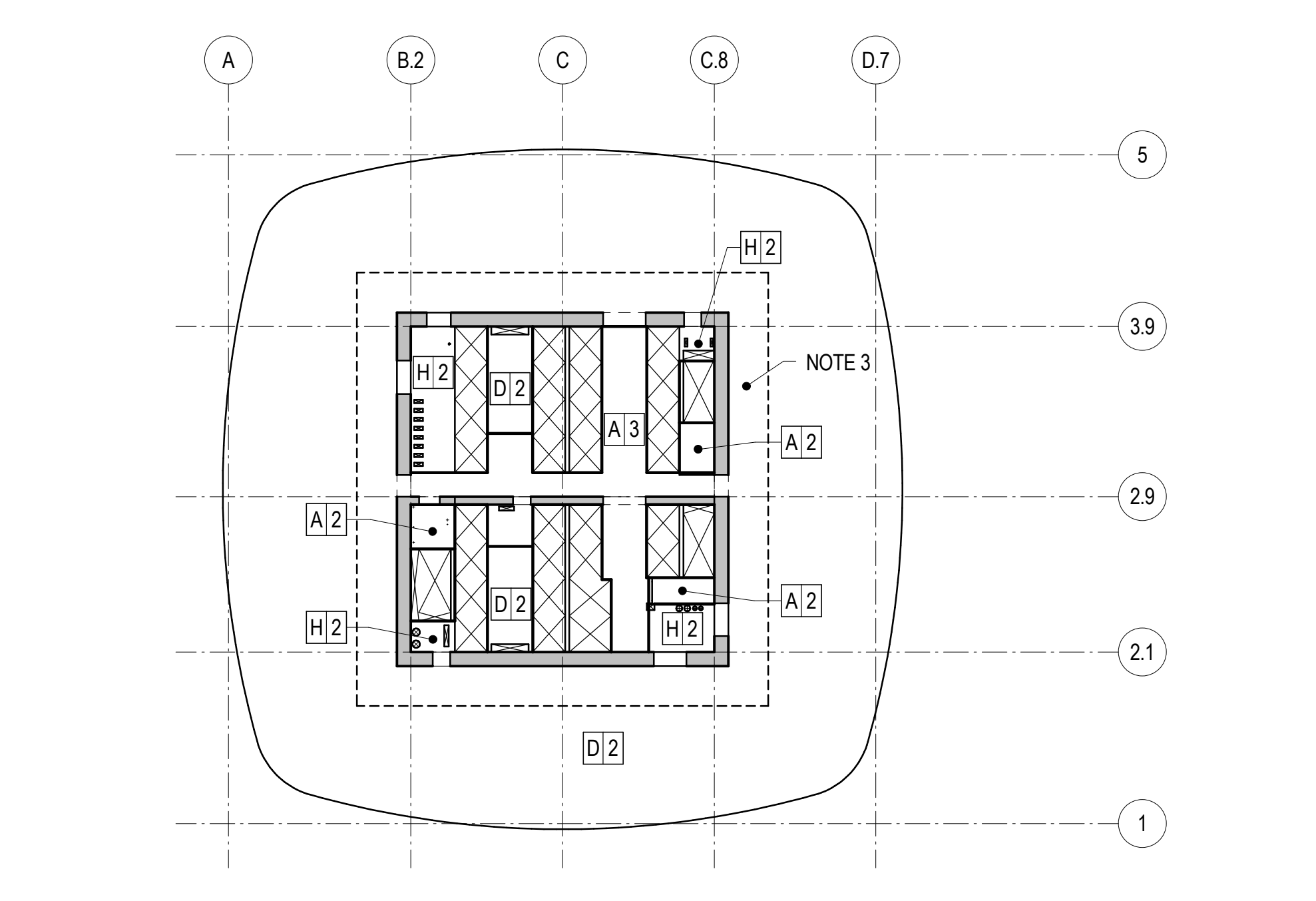
**14 LEVEL 3**



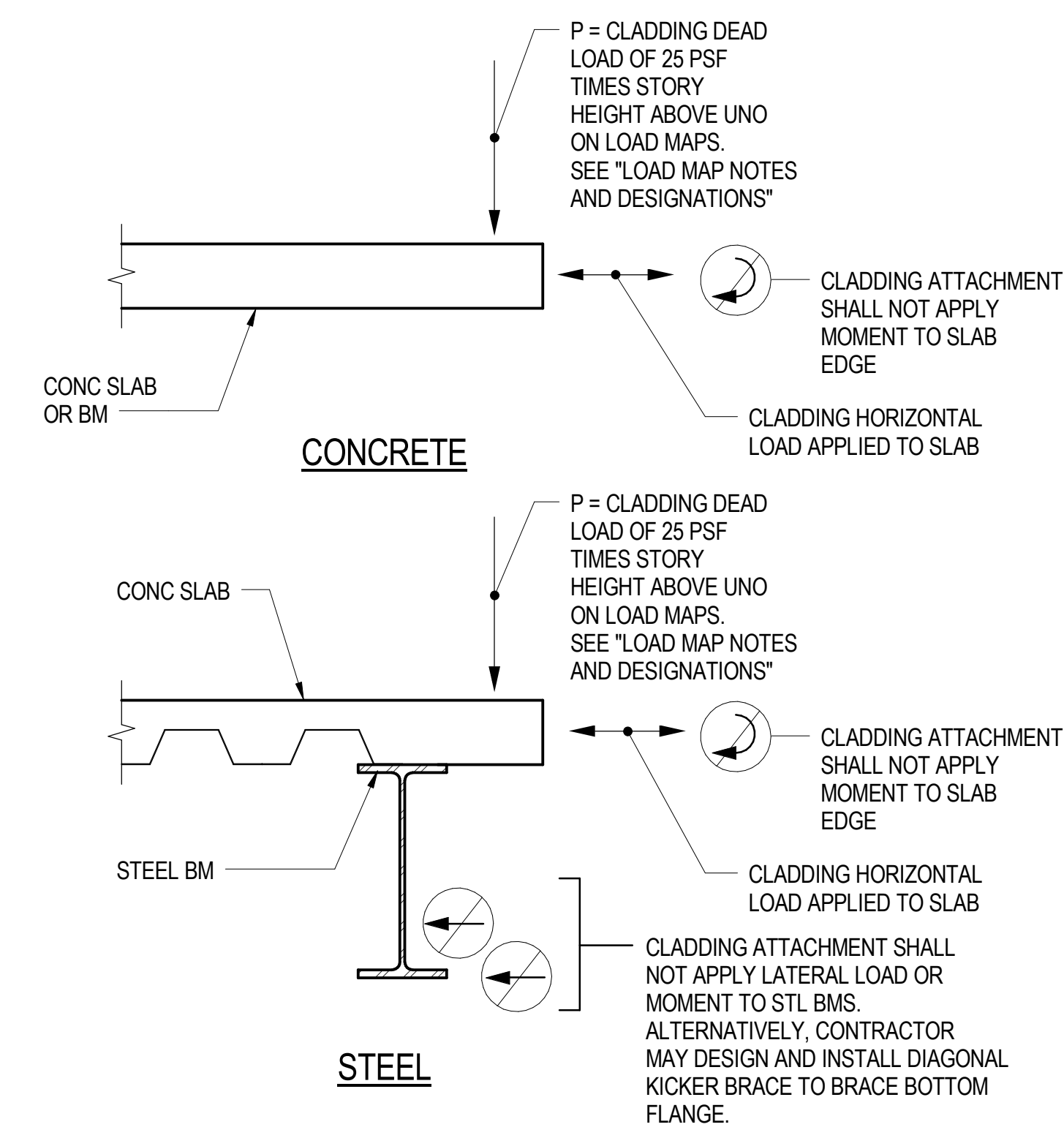
**16 LEVEL 4**



**18 LEVEL 5**



**19 LEVELS 6-15**



**NOTES:**

- REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
- STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.

**20 CLADDING LOAD NOTES**

4/29/2014 10:51:06 PM C:\Revit\Transbay\lw\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE: **LOAD MAPS**

NO. PROJECT NO. 08044

DRAWING NUMBER: **S1.01**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

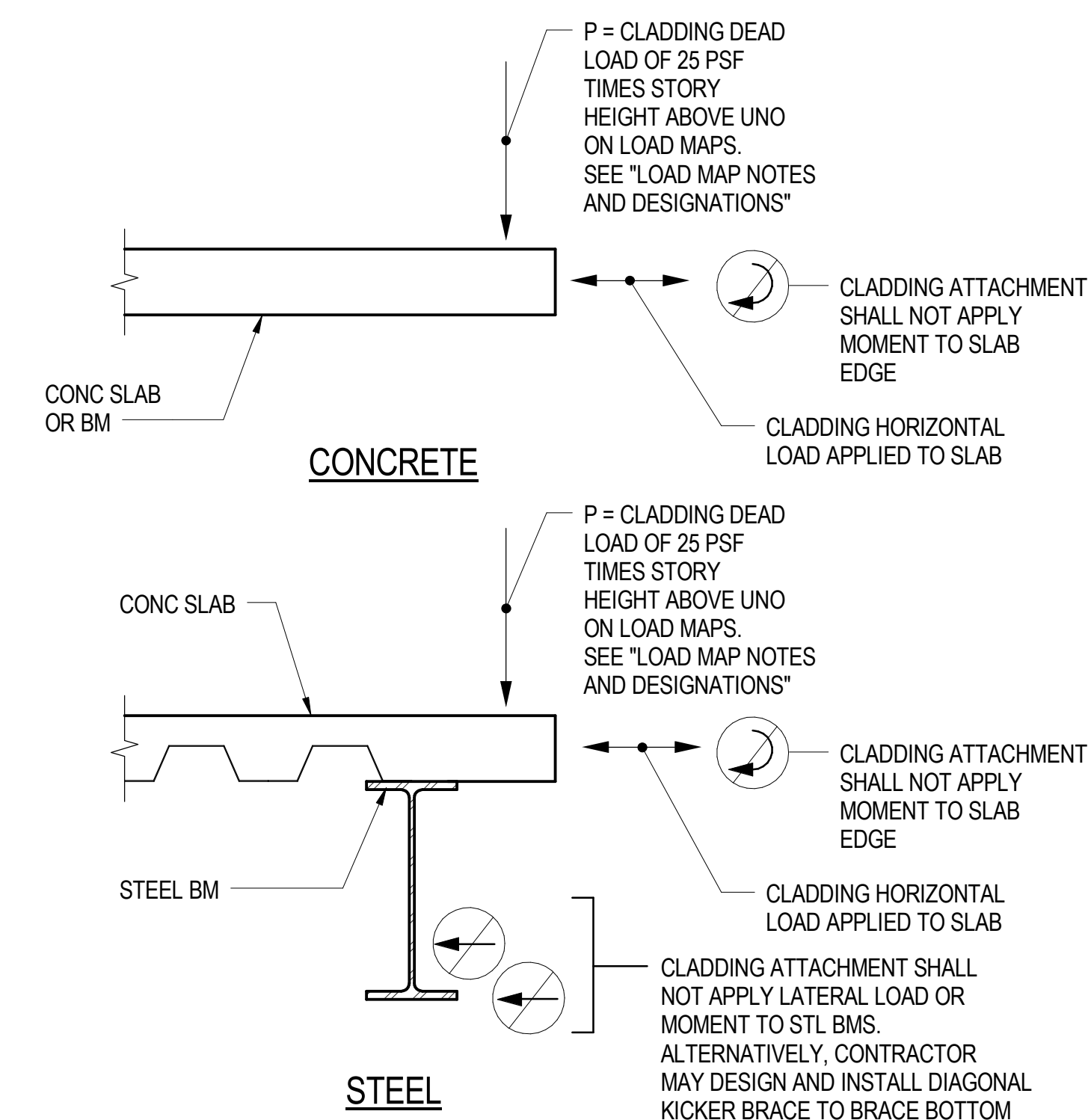
LIVE LOAD (LL) DESIGNATIONS		
LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MER	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE PATHWALK	40

SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS						
SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	-	-	-
2	TYPICAL INTERIOR	20	8	12	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA HARDSCAPE	150	5	-	145	-
8	PLAZA TREE WELLS	650	5	-	645	WATERPROOFING, PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

**LOAD MAP NOTES:**

- LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
- SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

**10 LOAD MAP NOTES AND DESIGNATIONS**



**NOTES:**

- REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
- STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.

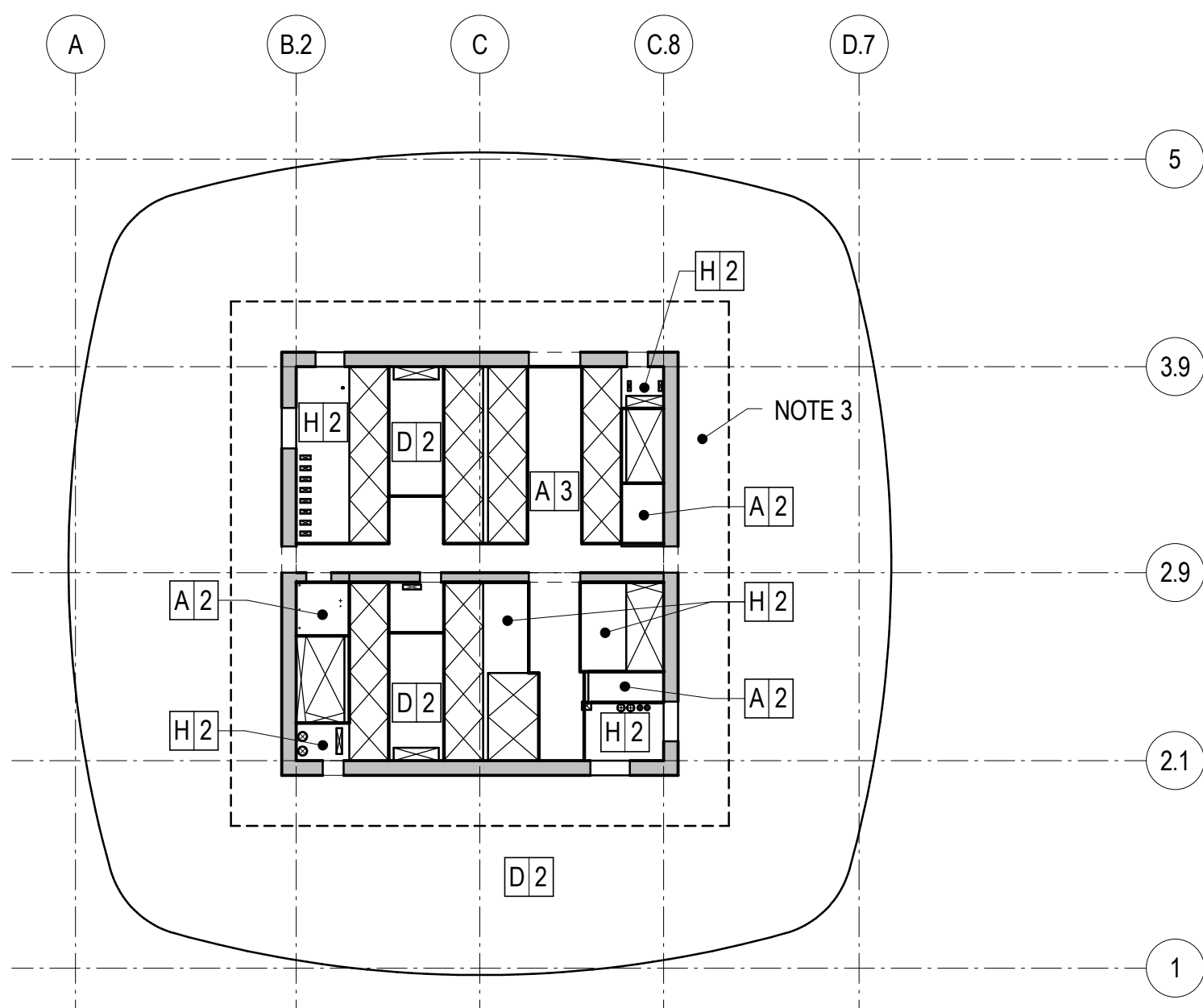
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

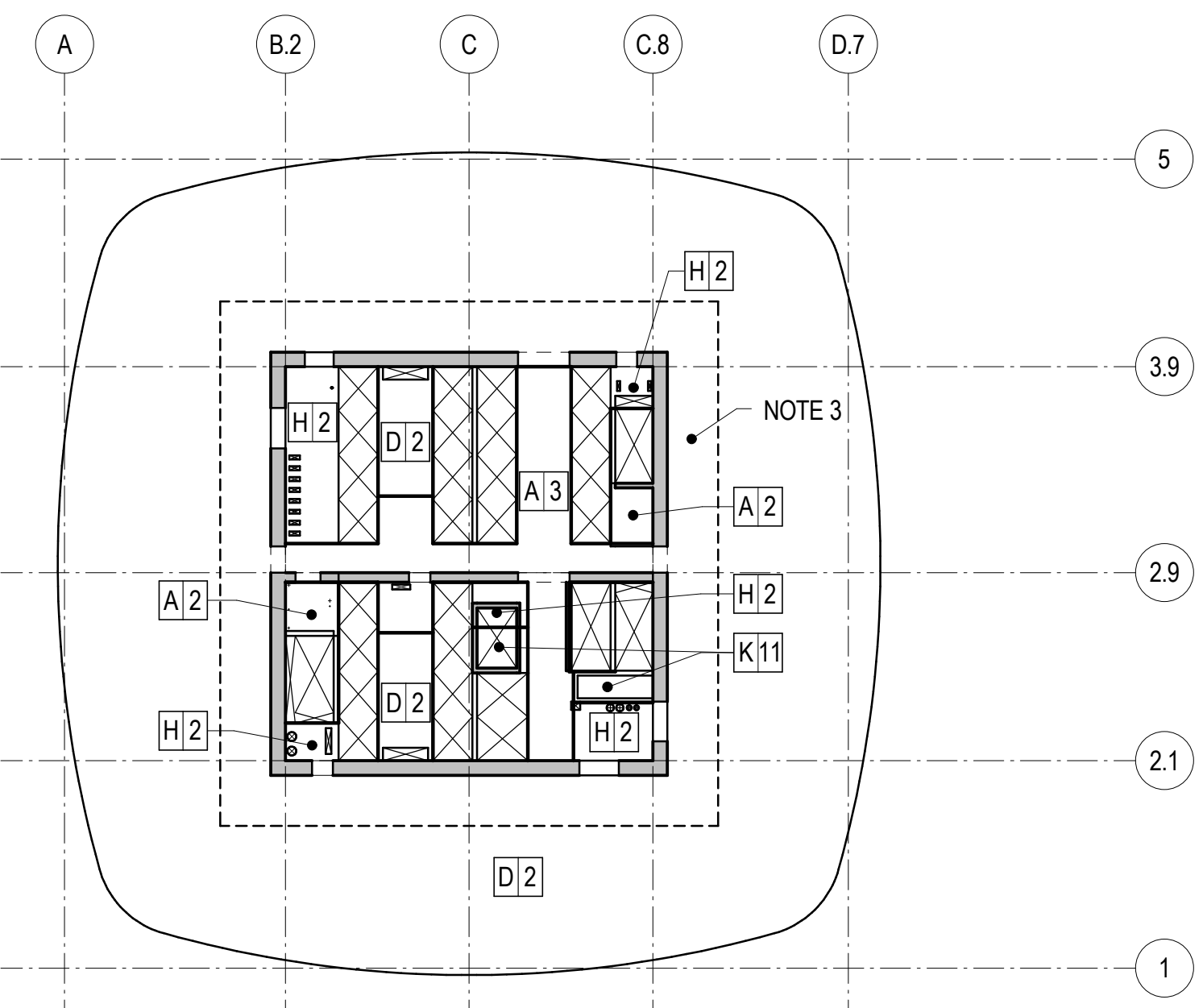
**LOAD MAPS**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

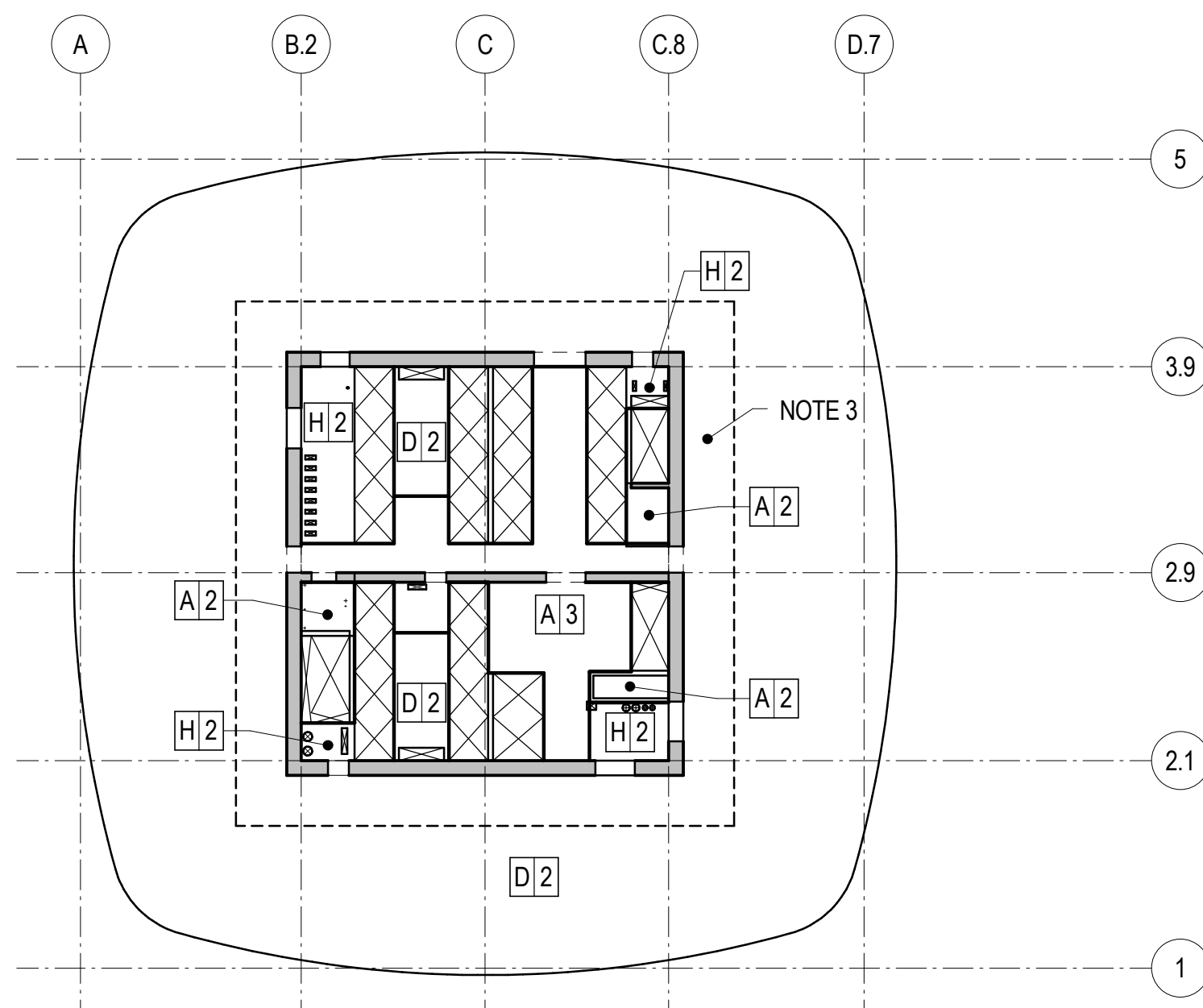
DRAWING NUMBER  
**S1.02**



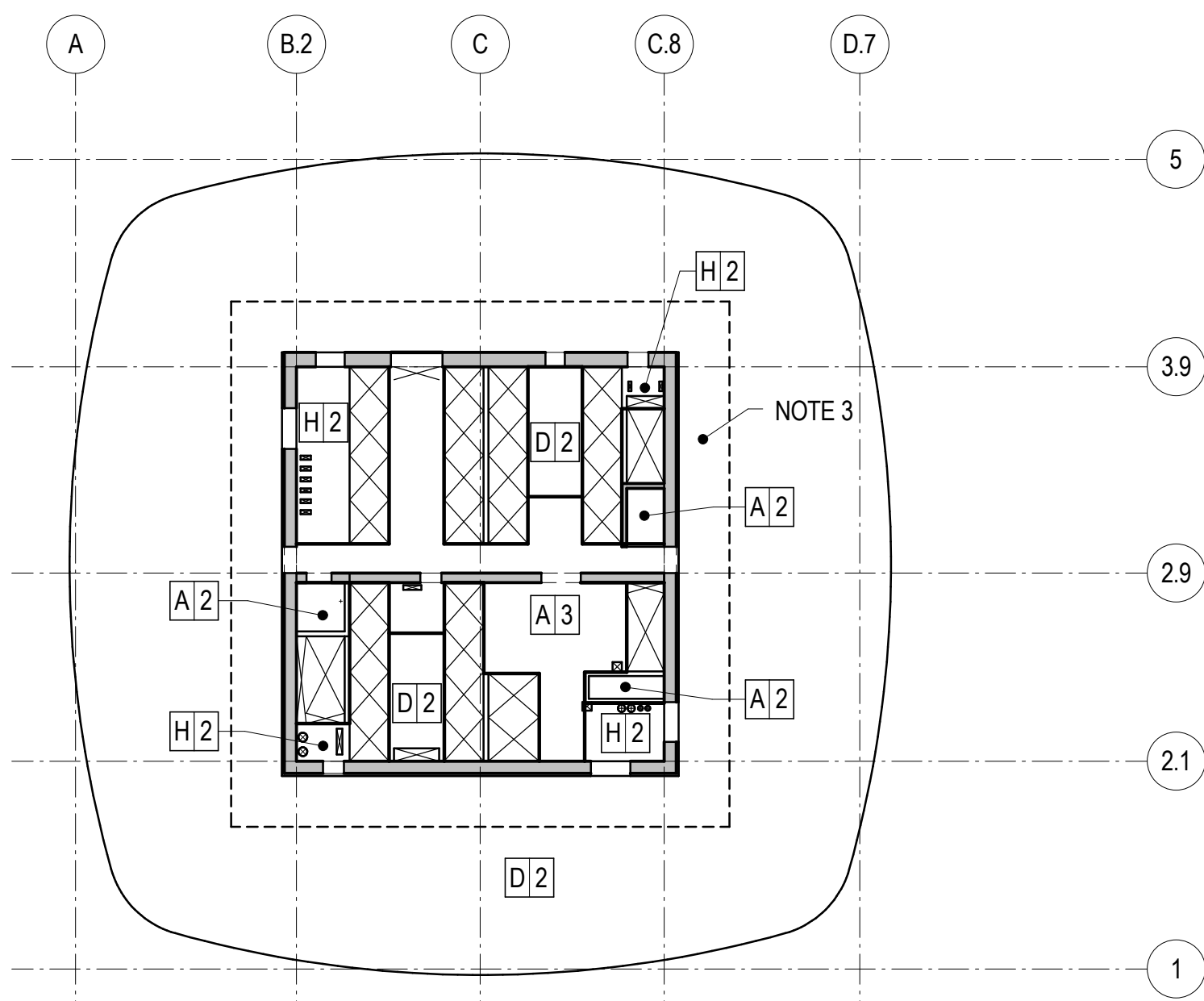
**6 LEVEL 16**



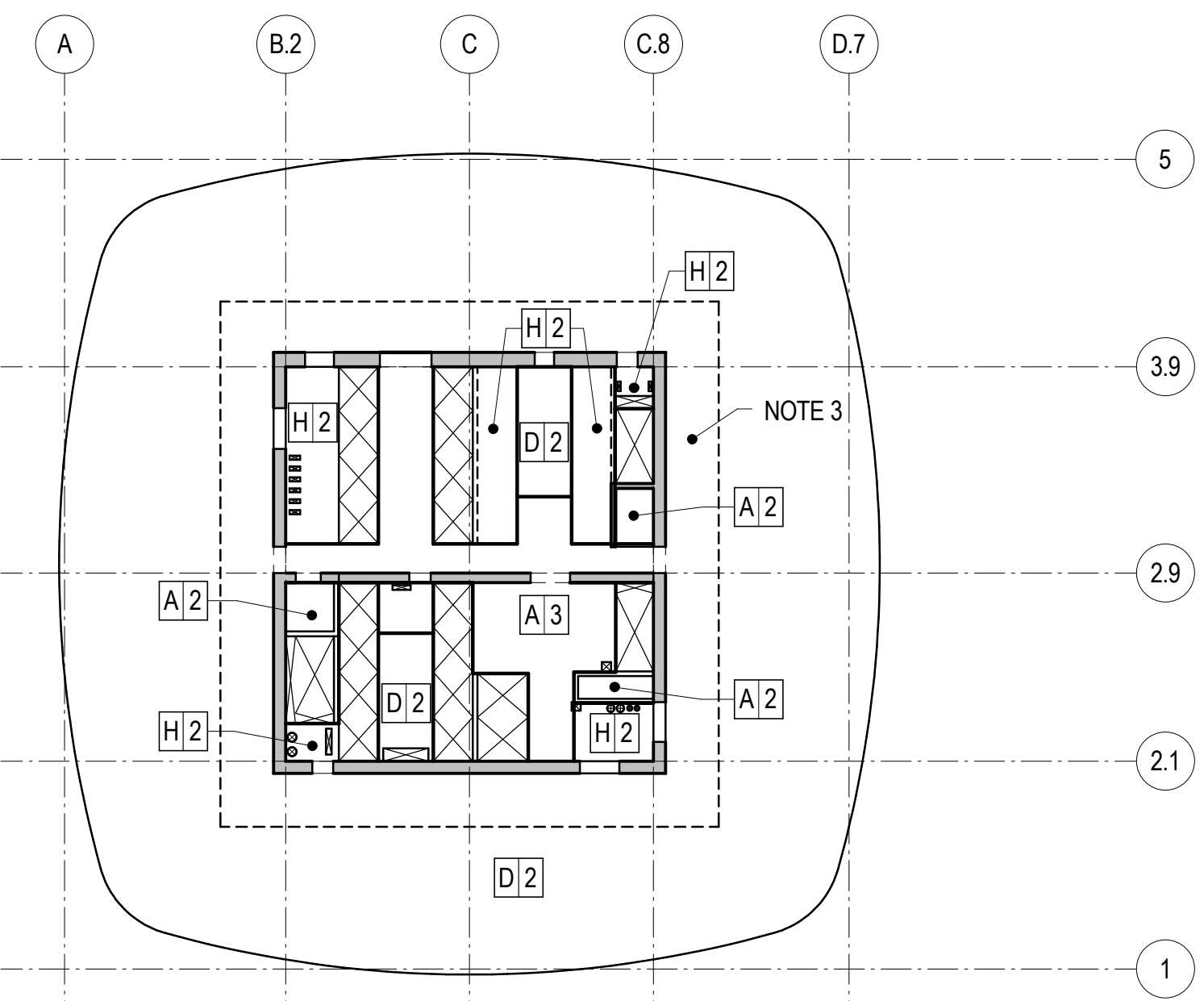
**8 LEVEL 17**



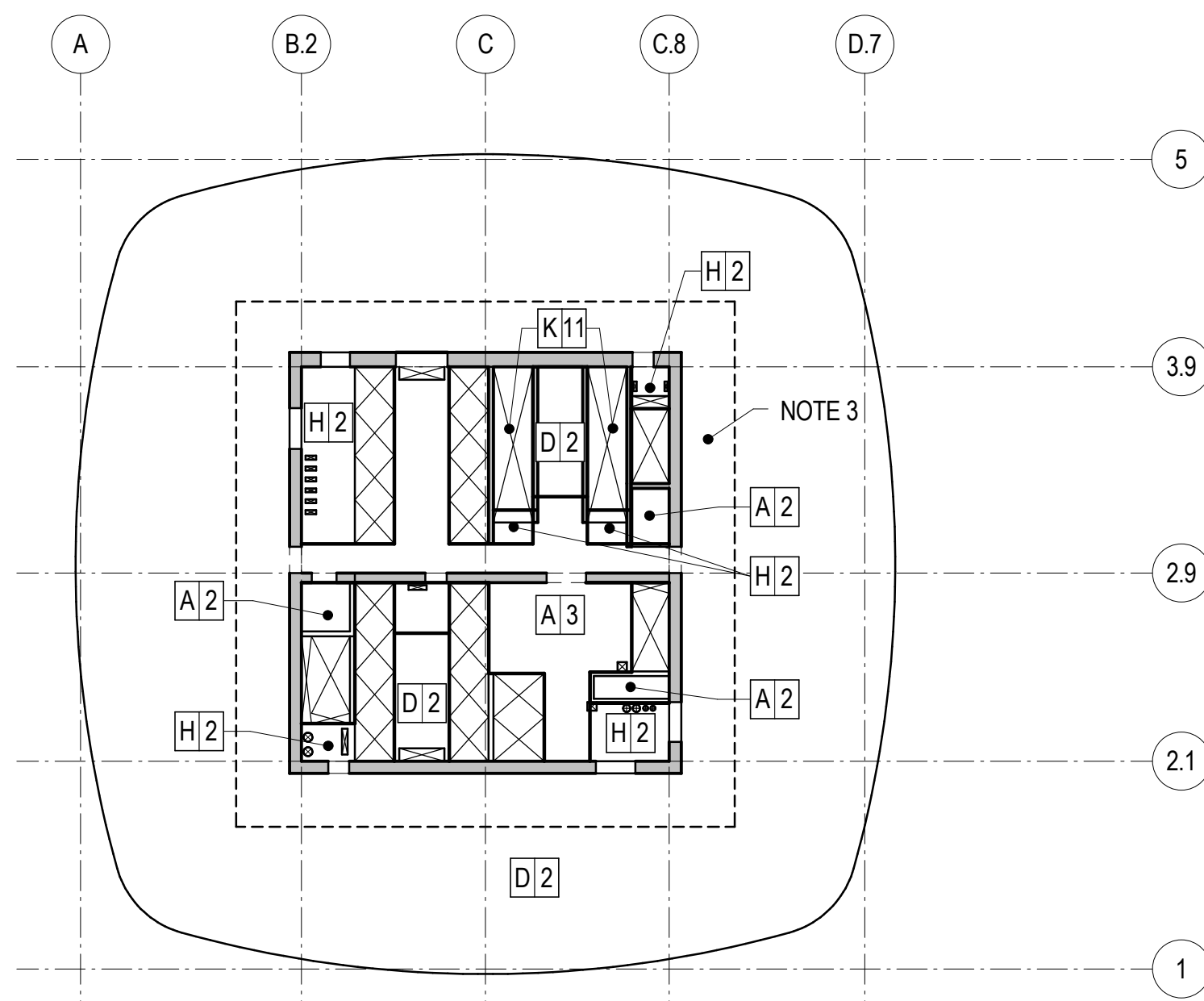
**9 LEVELS 18-30**



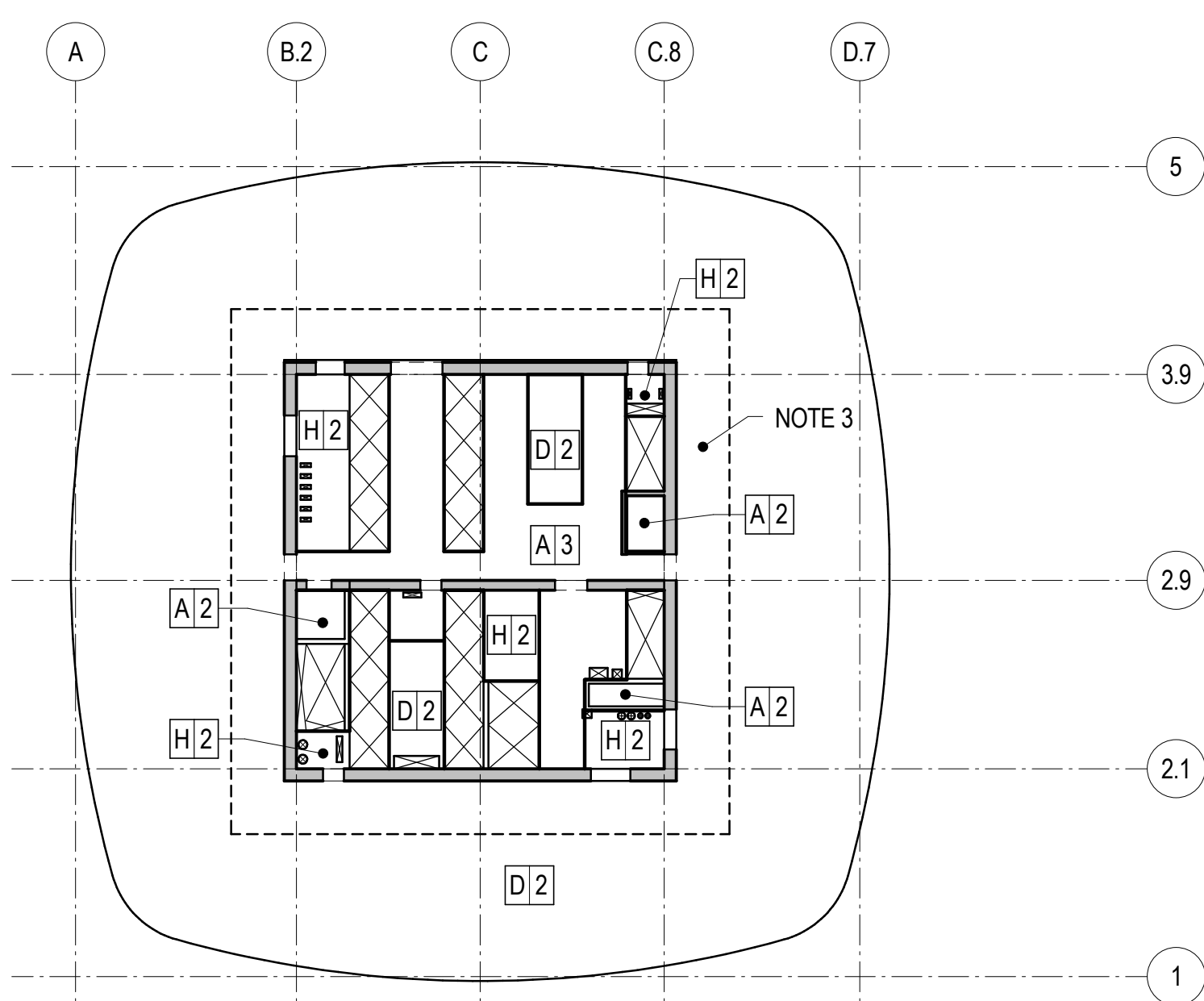
**11 LEVEL 31**



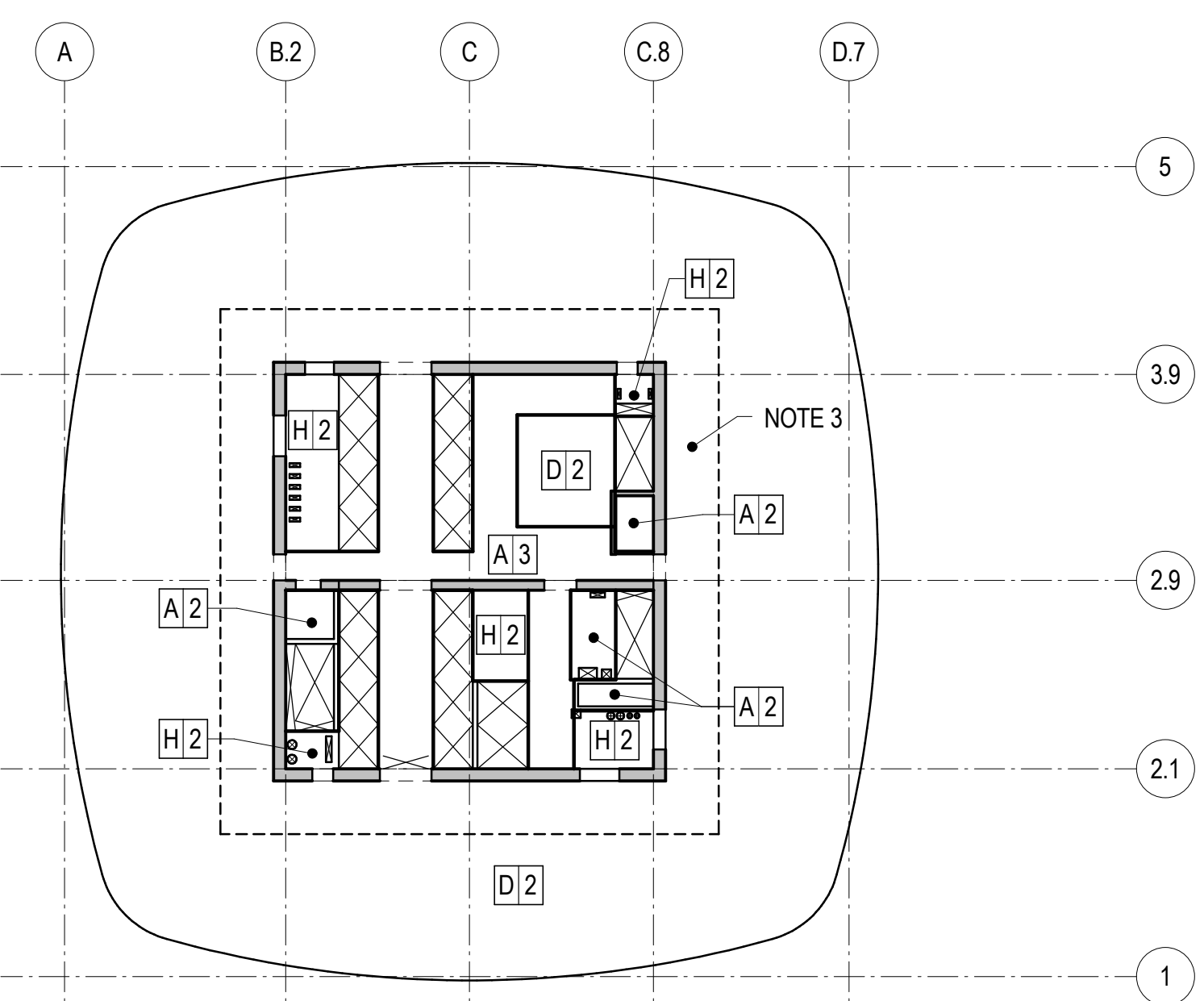
**13 LEVEL 32**



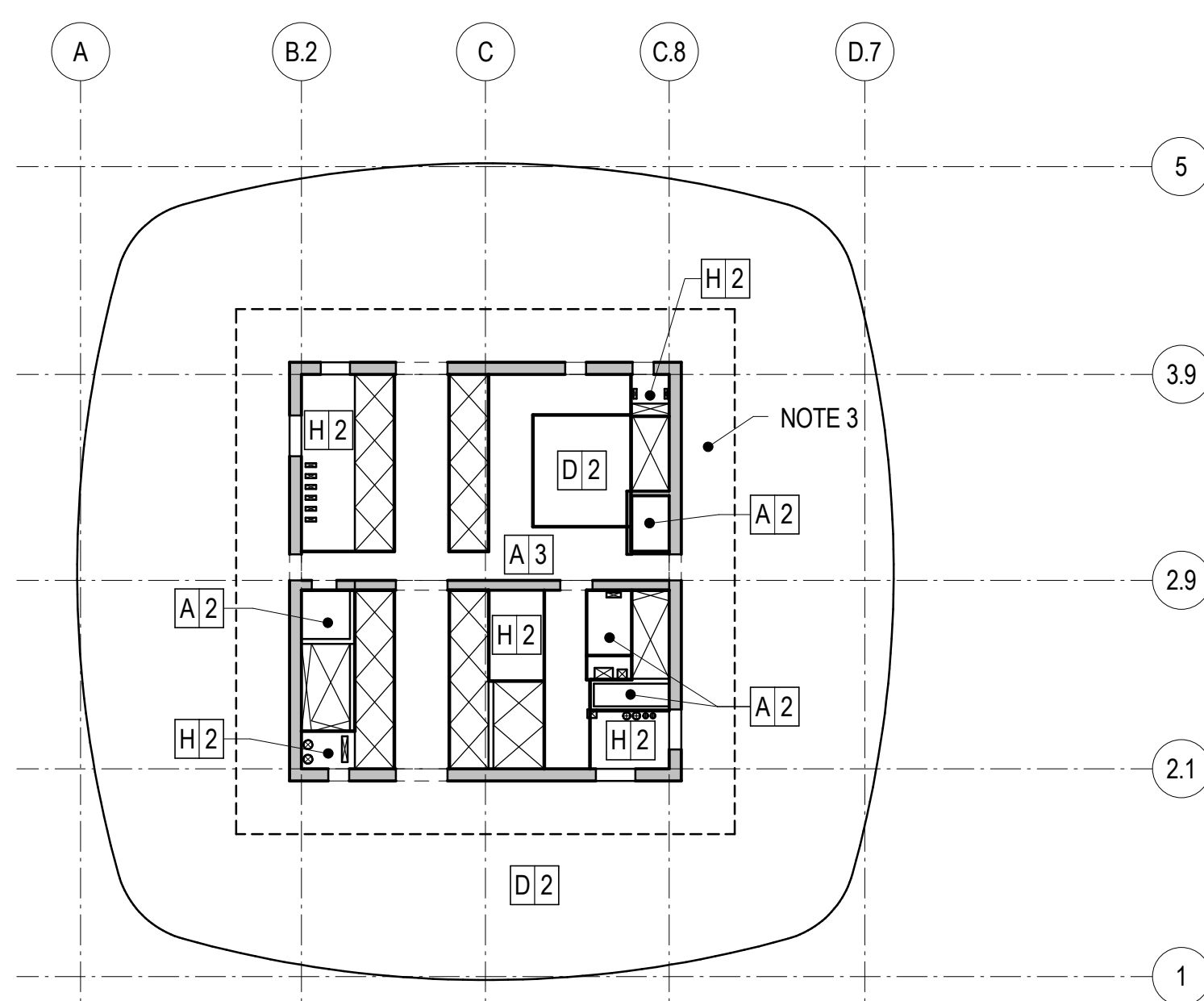
**14 LEVEL 33**



**16 LEVEL 34**



**18 LEVEL 35**



**19 LEVELS 36-47**

**20 CLADDING LOAD NOTES**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

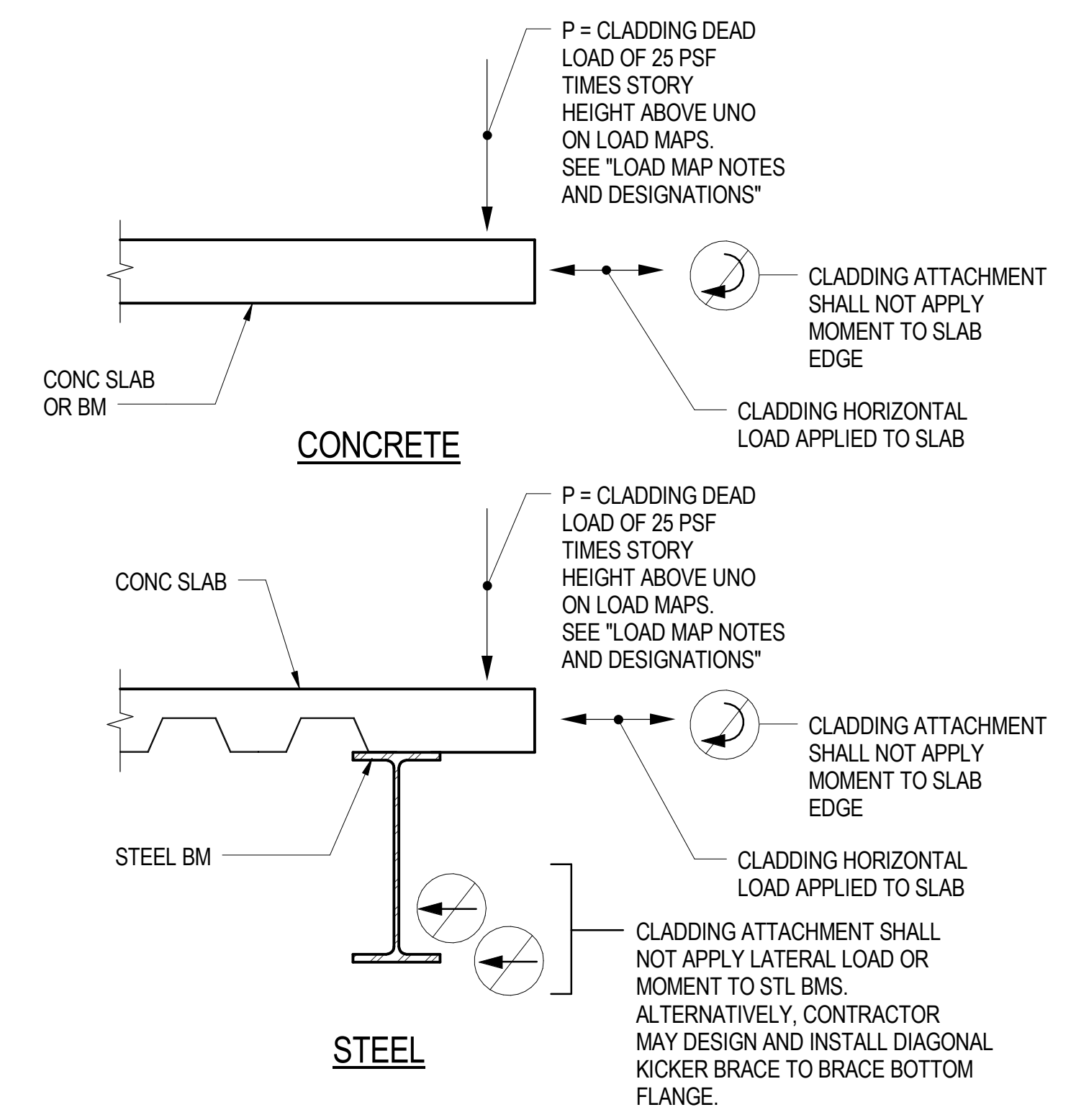
LIVE LOAD (LL) DESIGNATIONS		
LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MEP	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE CATWALK	40

SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS						
SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	-	-	-
2	TYPICAL INTERIOR	20	8	12	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP ROOF	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA HARDSCAPE	150	5	-	145	-
8	PLAZA TREE WELLS	650	5	-	645	WATERPROOFING PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

**LOAD MAP NOTES:**

- LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
- SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

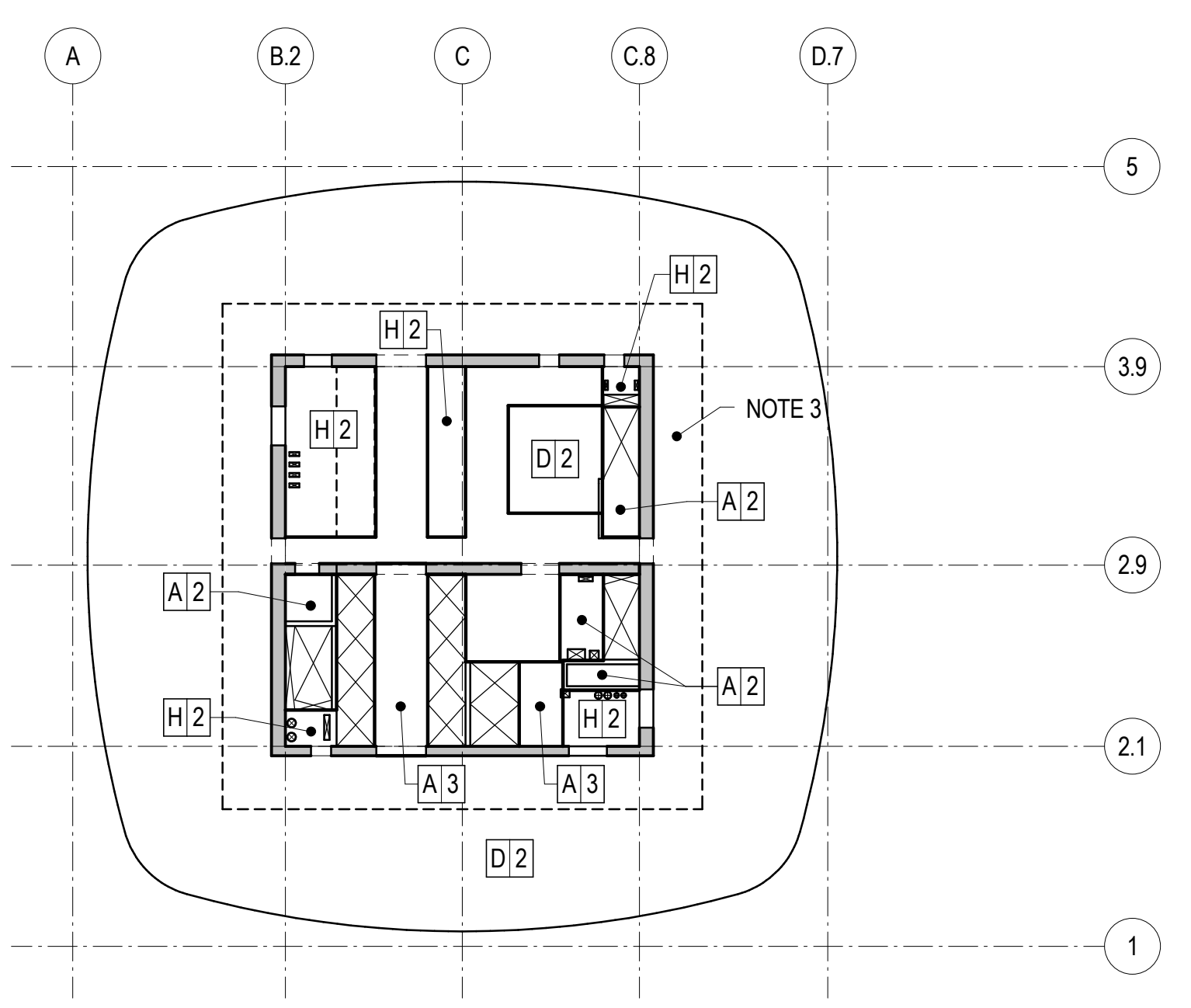
**10 LOAD MAP NOTES AND DESIGNATIONS**



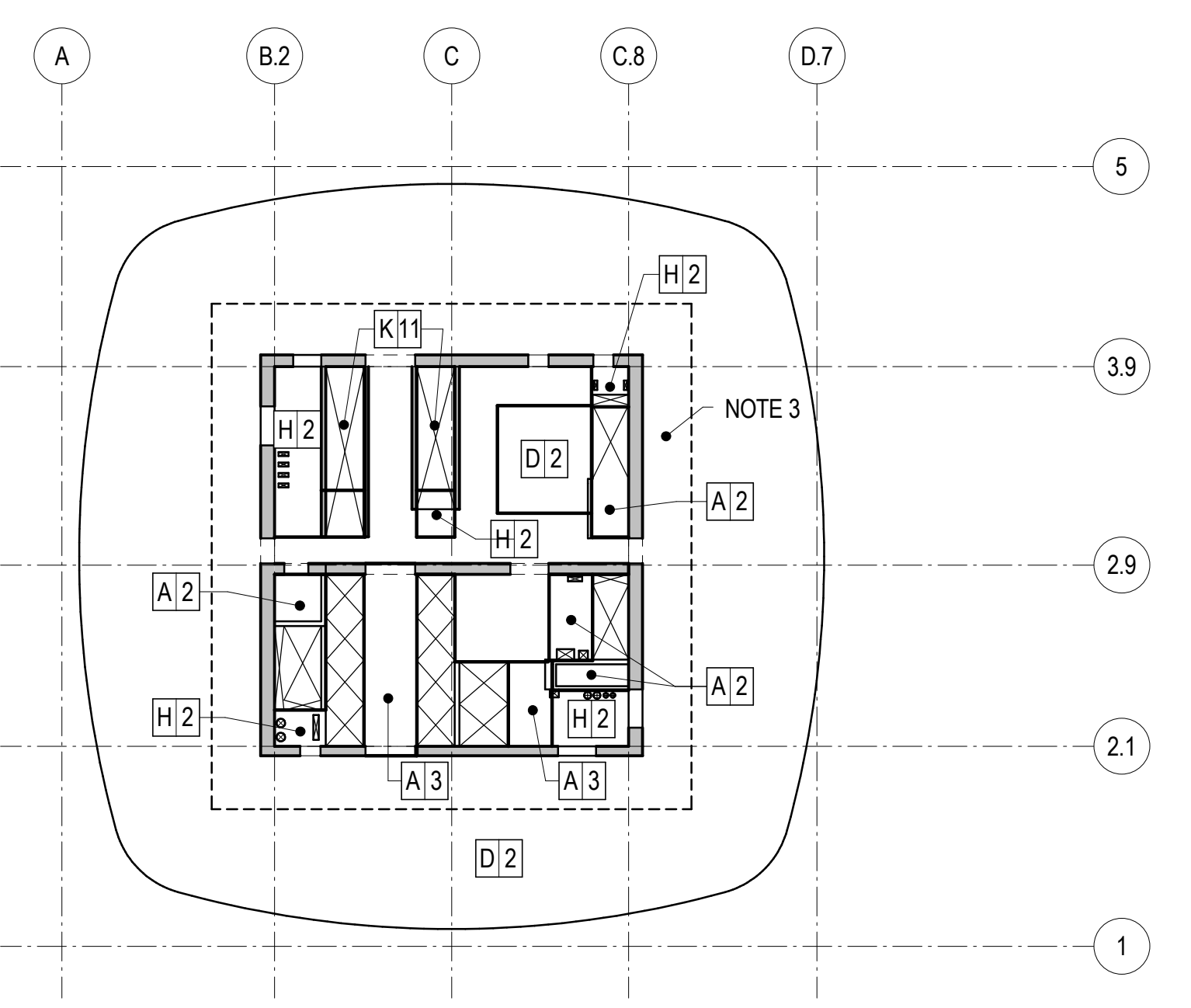
**NOTES:**

- REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
- STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.

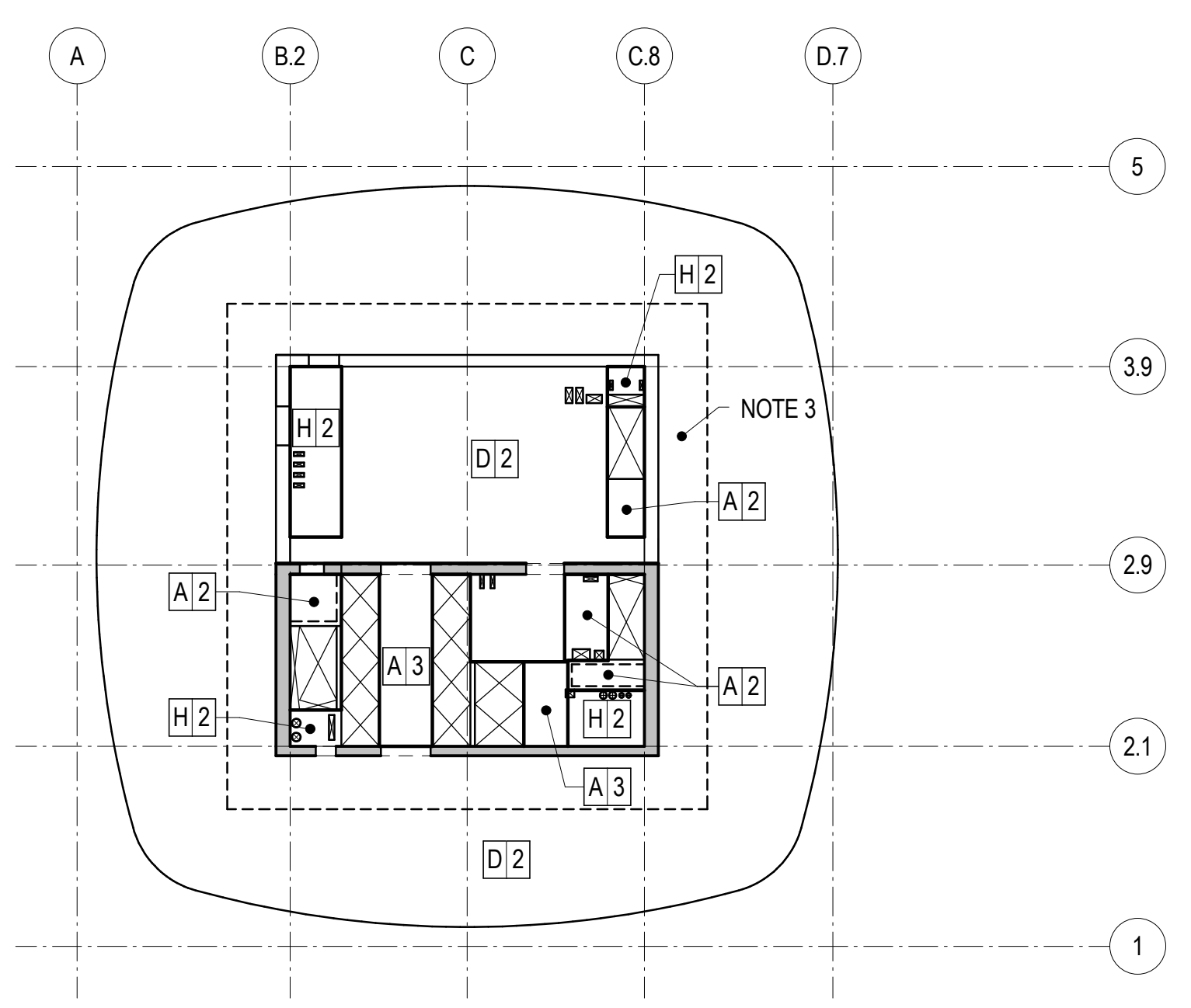
**20 CLADDING LOAD NOTES**



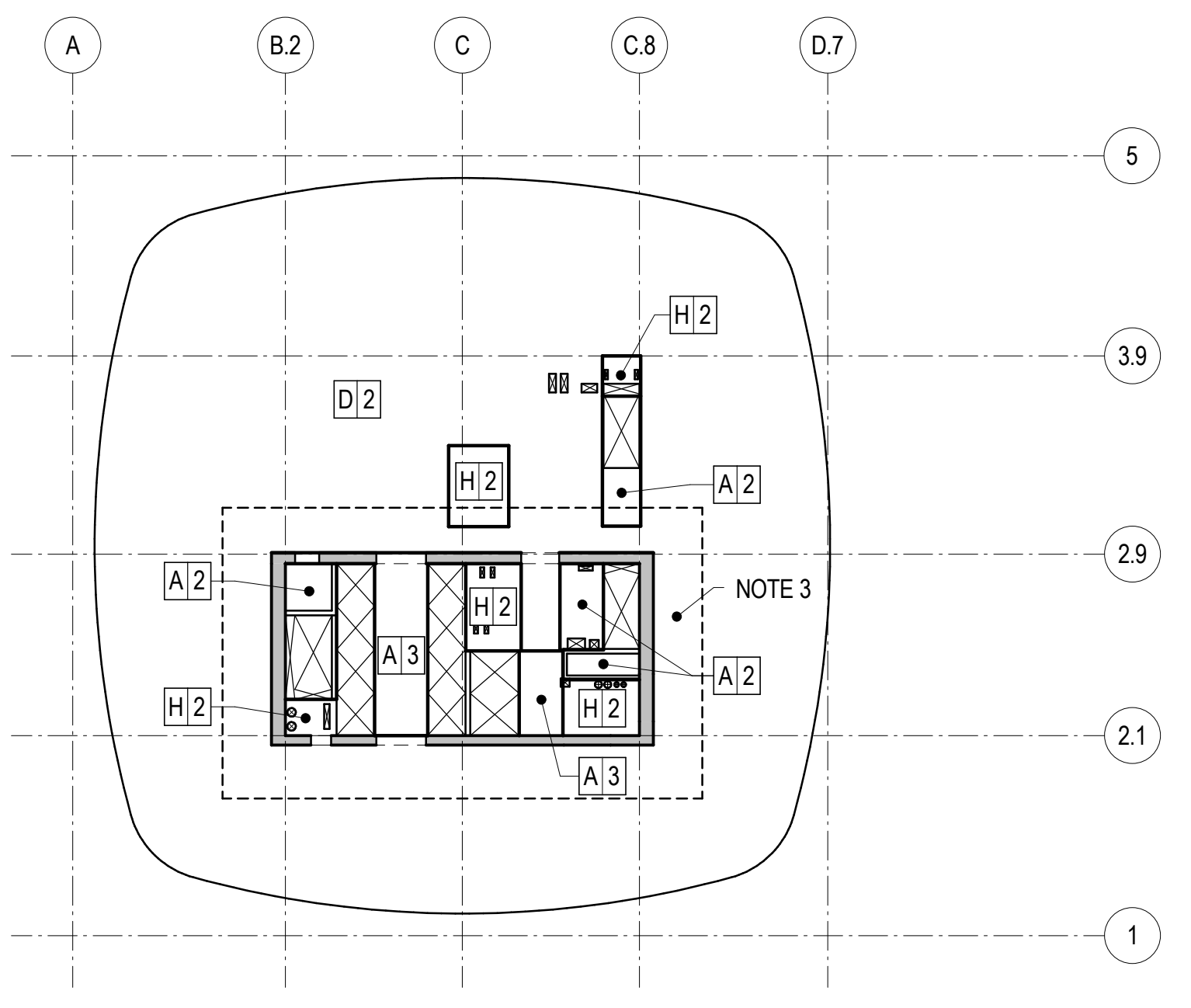
**6 LEVEL 48**



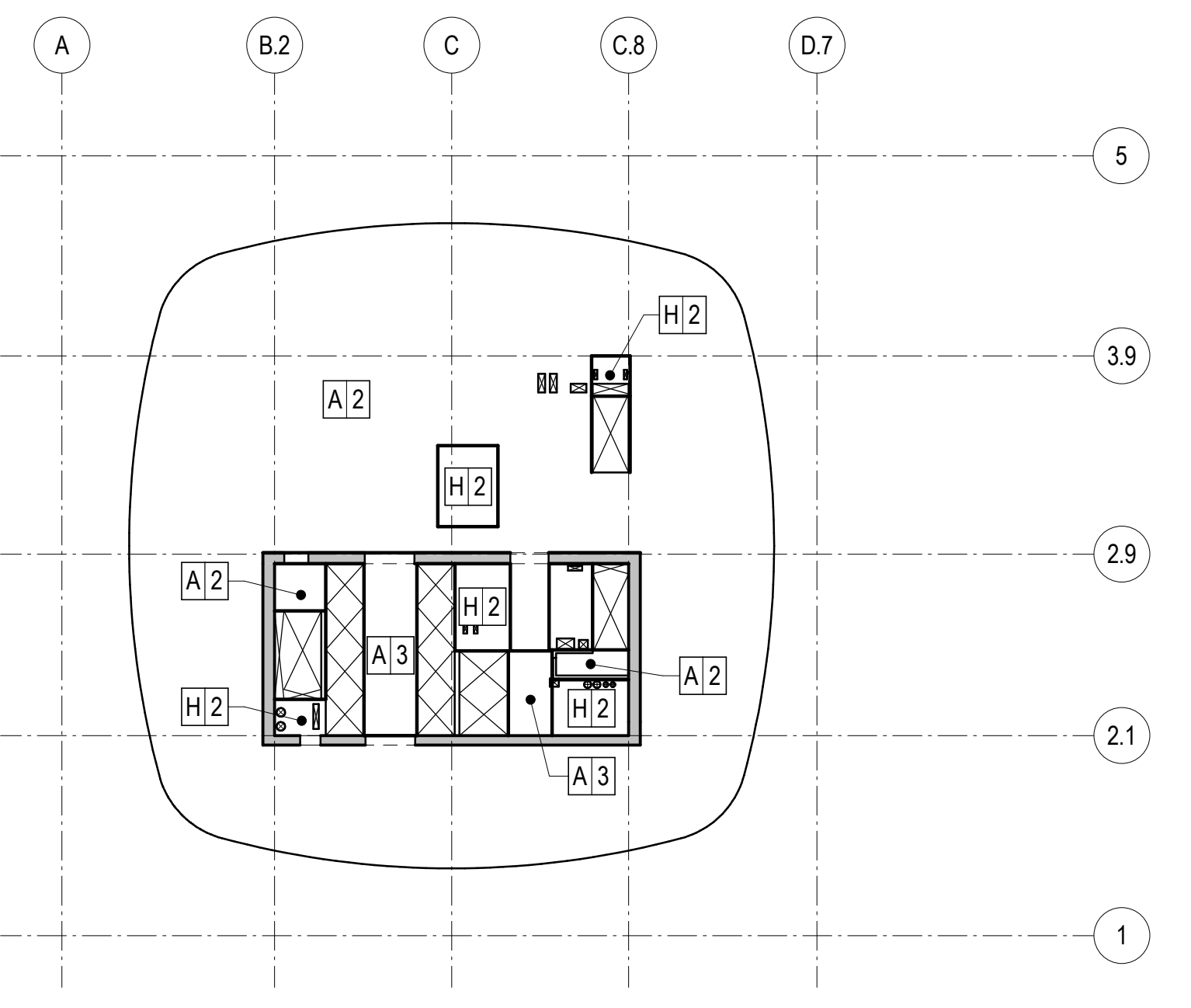
**8 LEVEL 49**



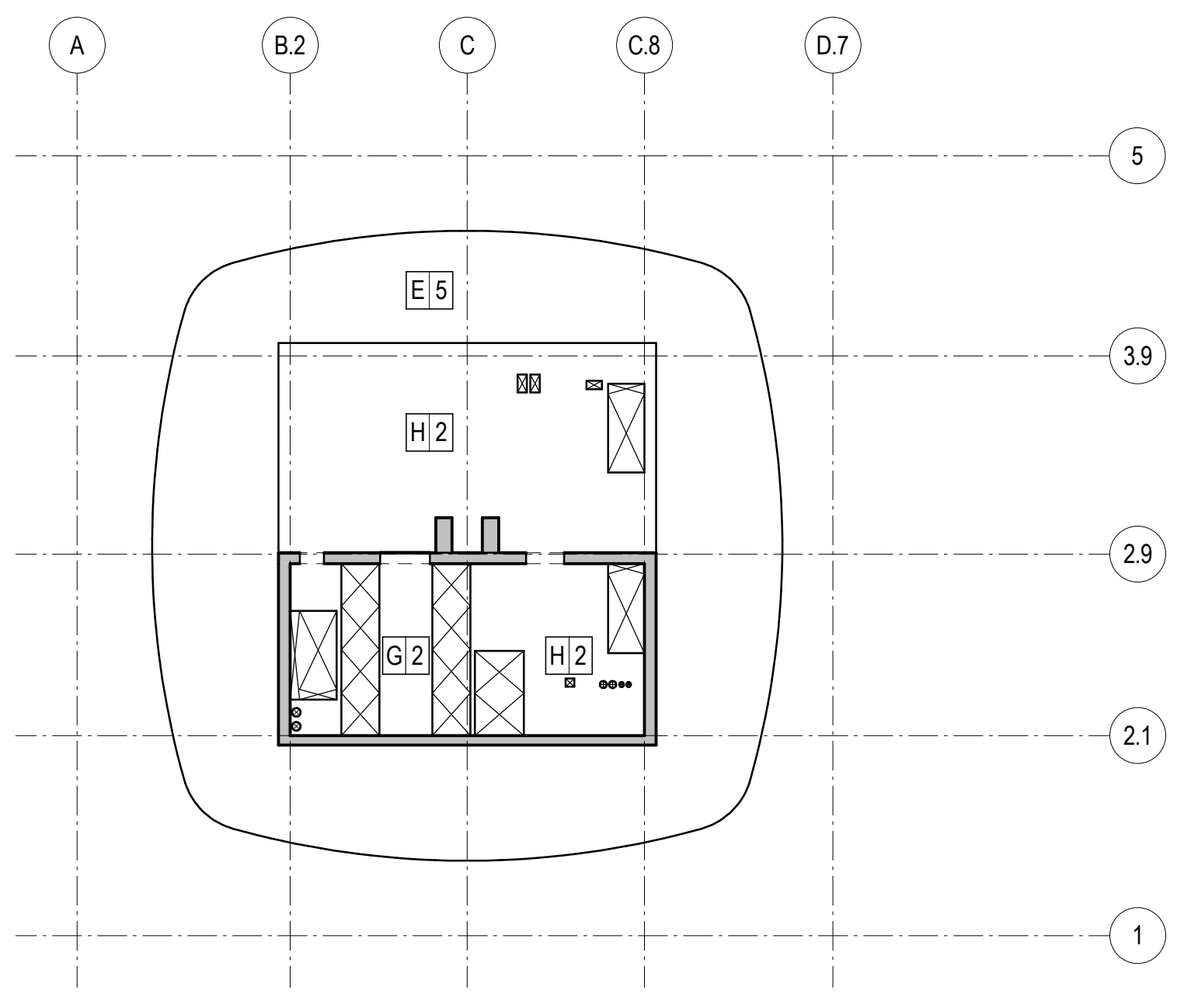
**9 LEVEL 50**



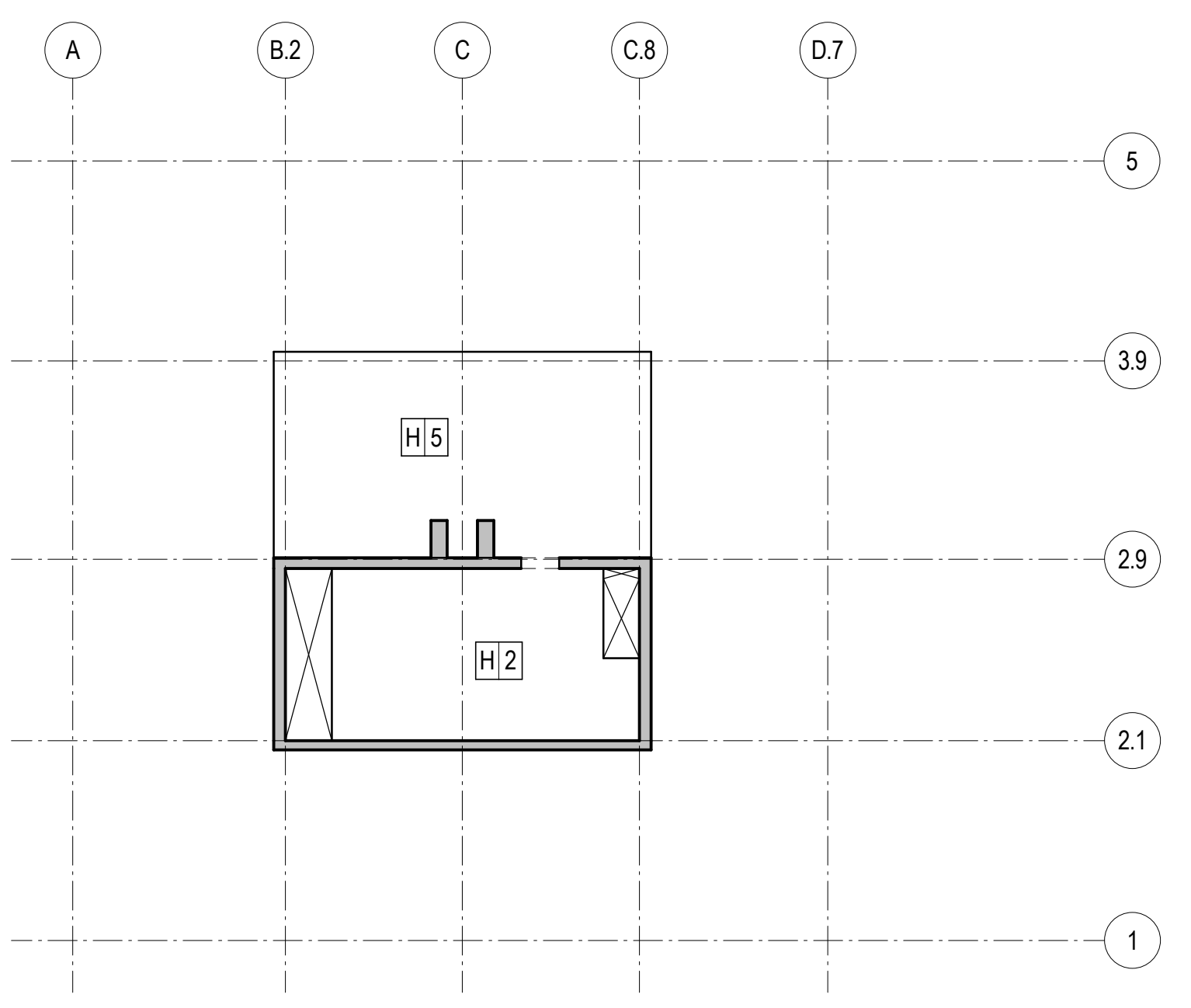
**11 LEVELS 51-60**



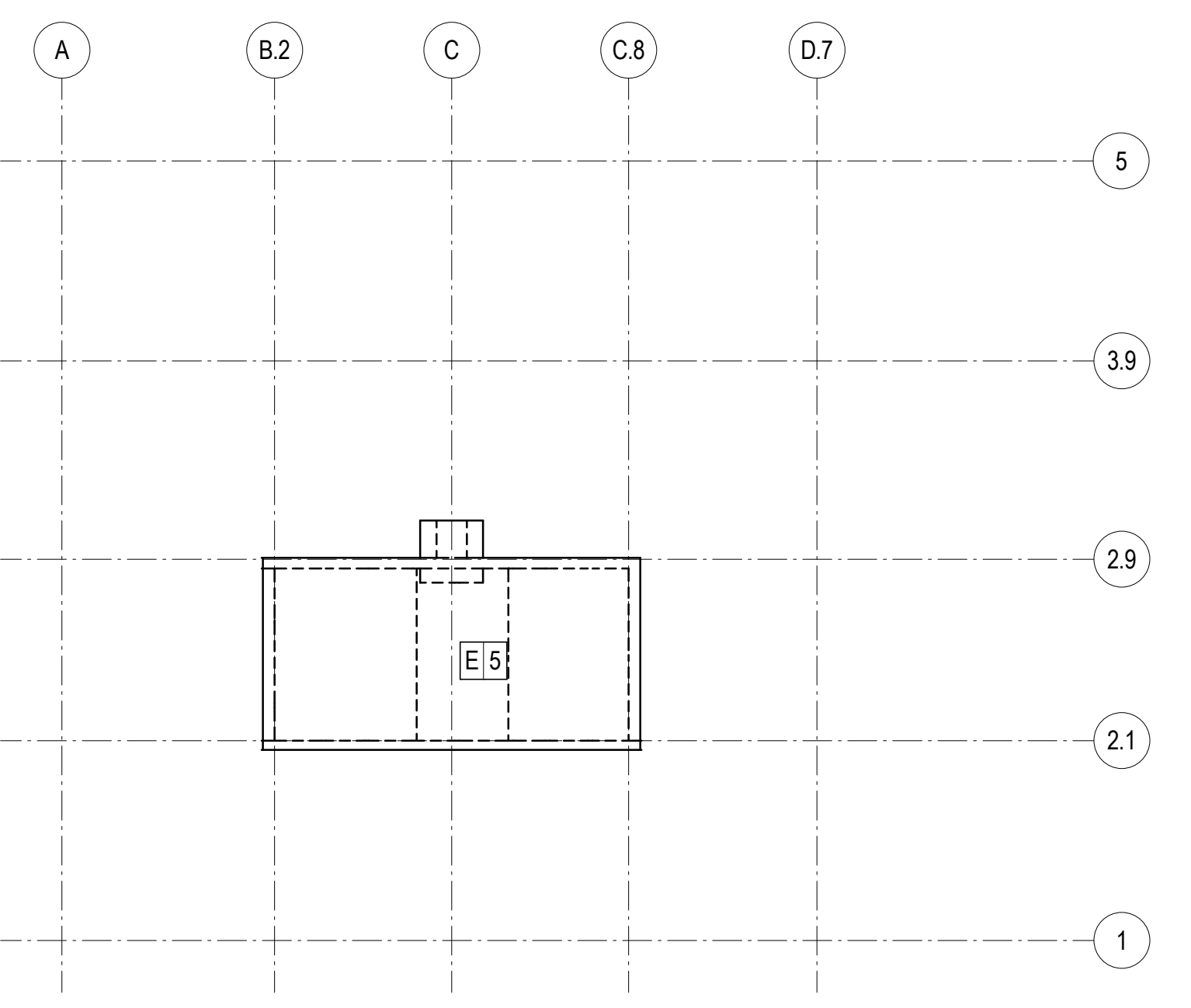
**13 LEVEL 61**



**14 LEVEL 62**



**16 LEVEL 63**



**18 LEVEL 64**

4/29/2014 10:51:24 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LOAD MAPS**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- ◇ INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

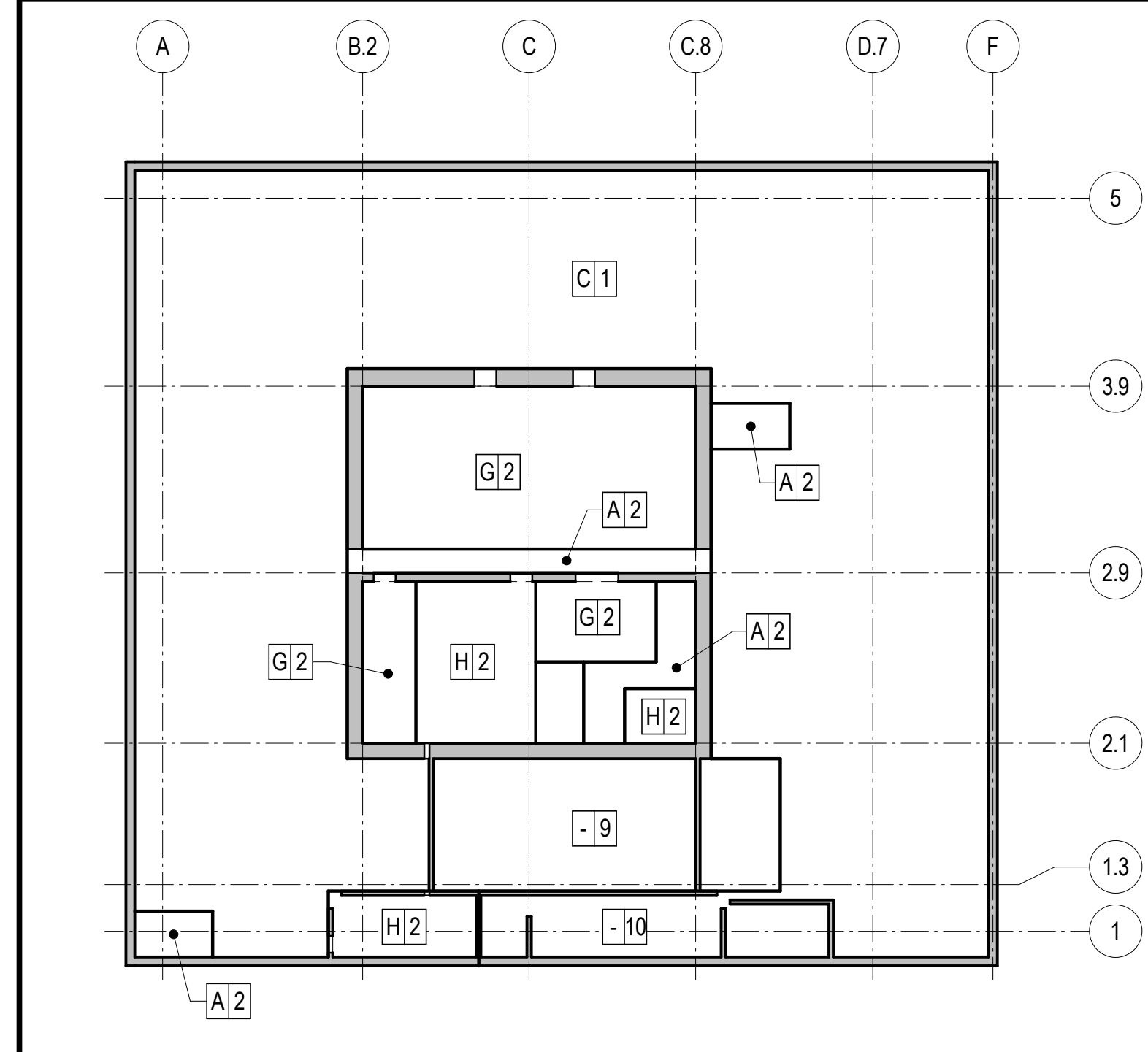
LIVE LOAD (LL) DESIGNATIONS		
LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MEP	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE CATWALK	40

SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS						
SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	12	-	-
2	TYPICAL INTERIOR	20	8	-	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA, HARDSCAPE	150	5	-	145	-
8	PLAZA, TREE WELLS	650	5	-	645	WATERPROOFING, PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

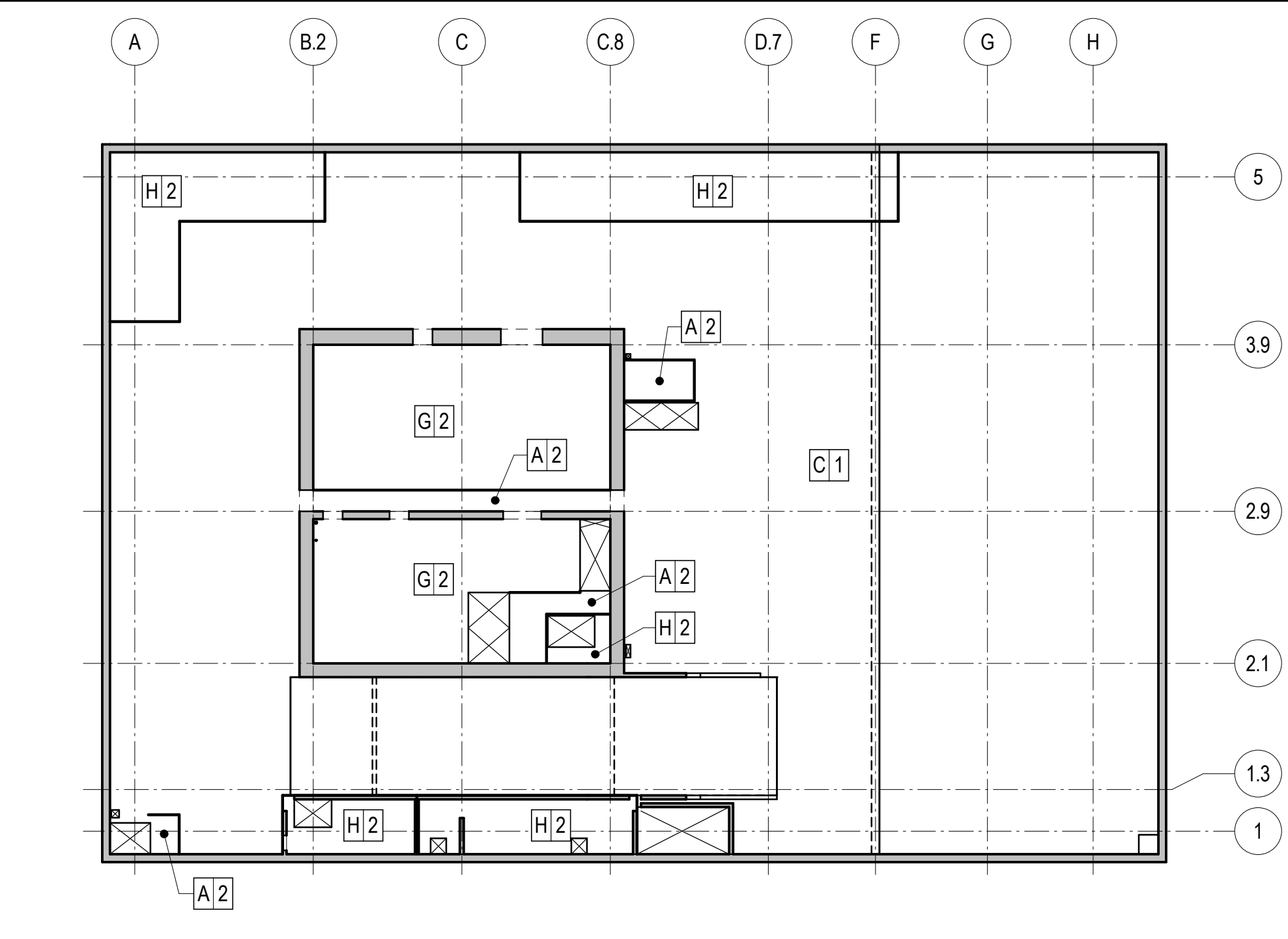
**LOAD MAP NOTES:**

- LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
- SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

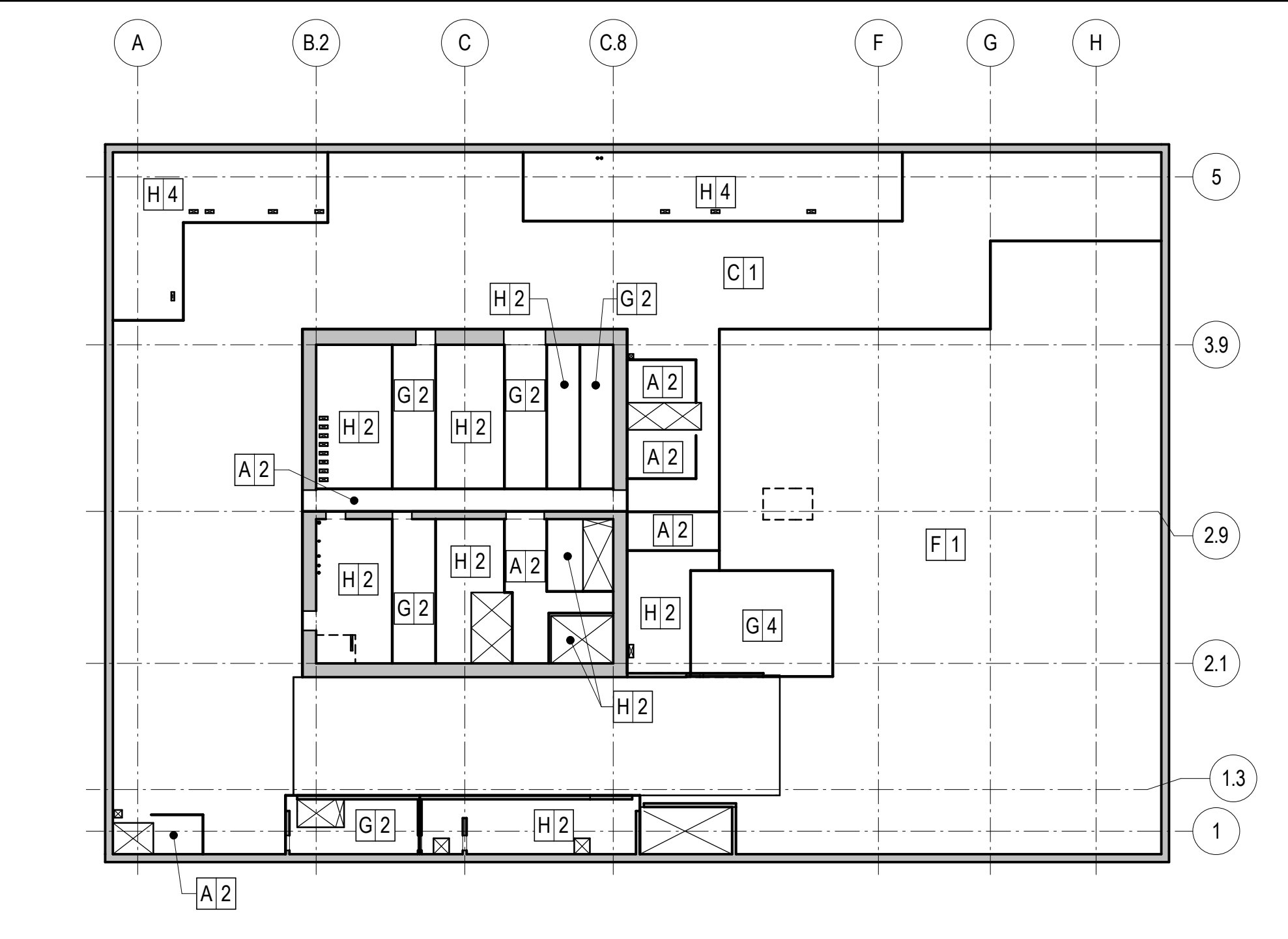
**10 LOAD MAP NOTES AND DESIGNATIONS**



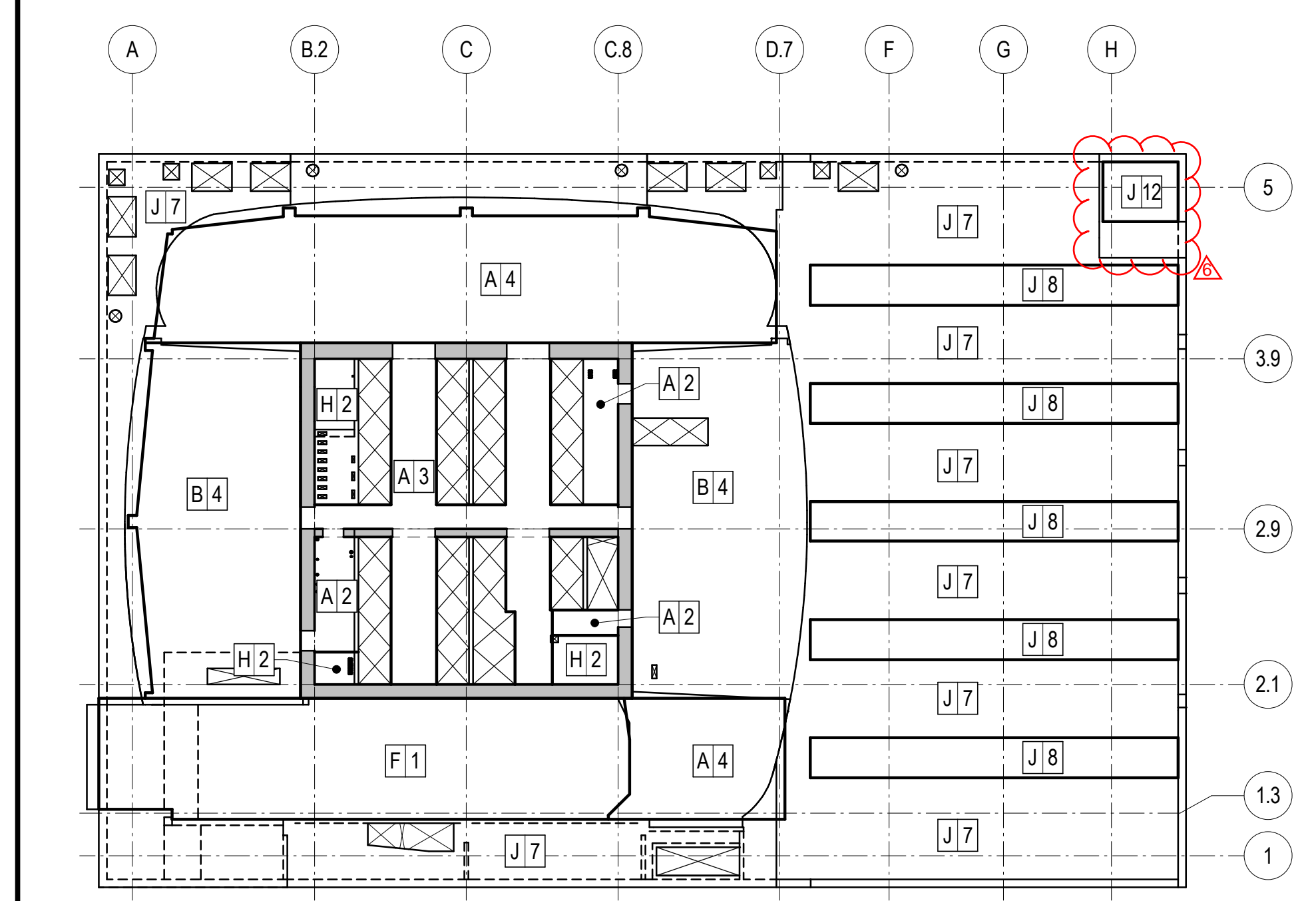
**6 LEVEL P3**



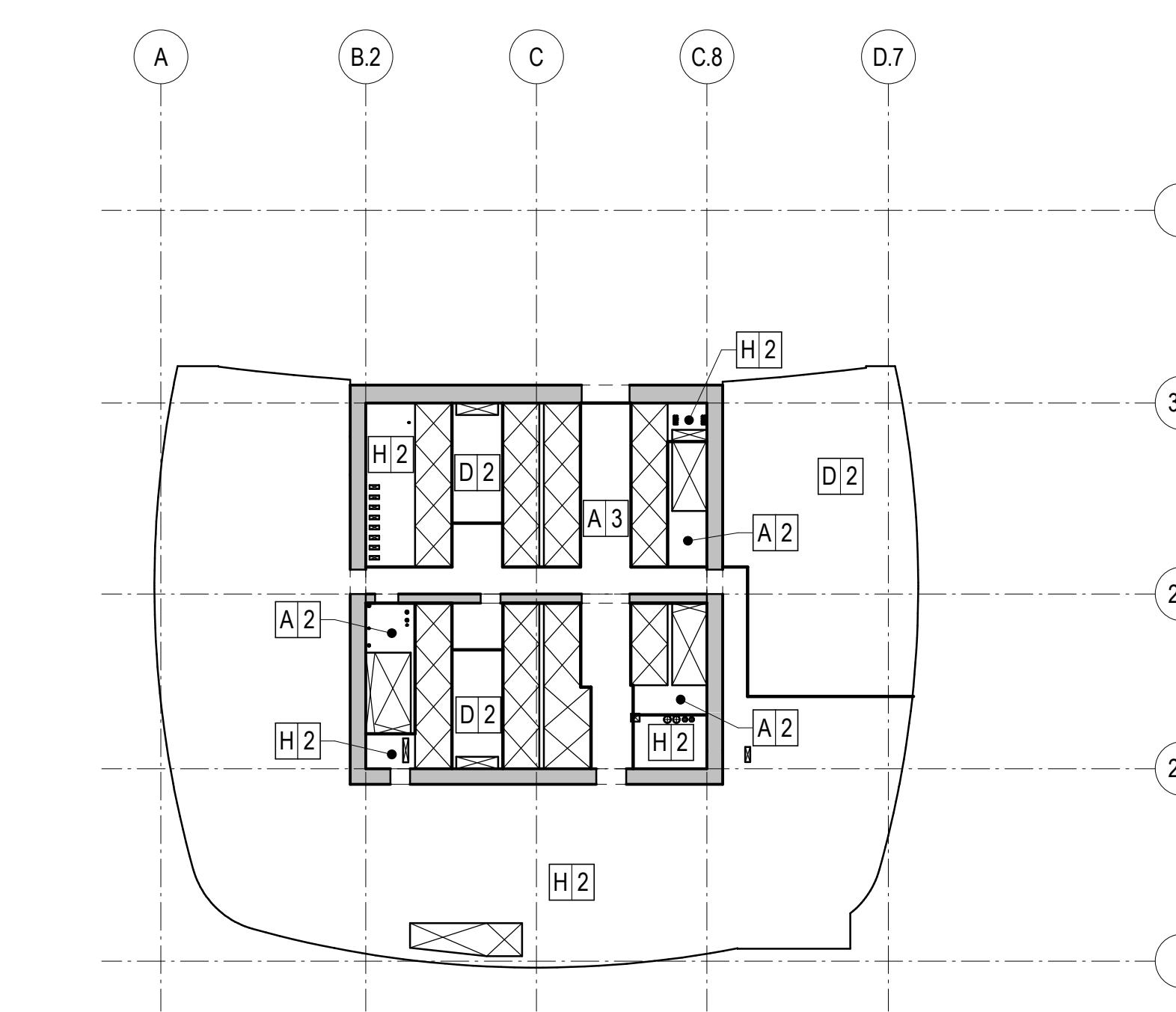
**8 LEVEL P2**



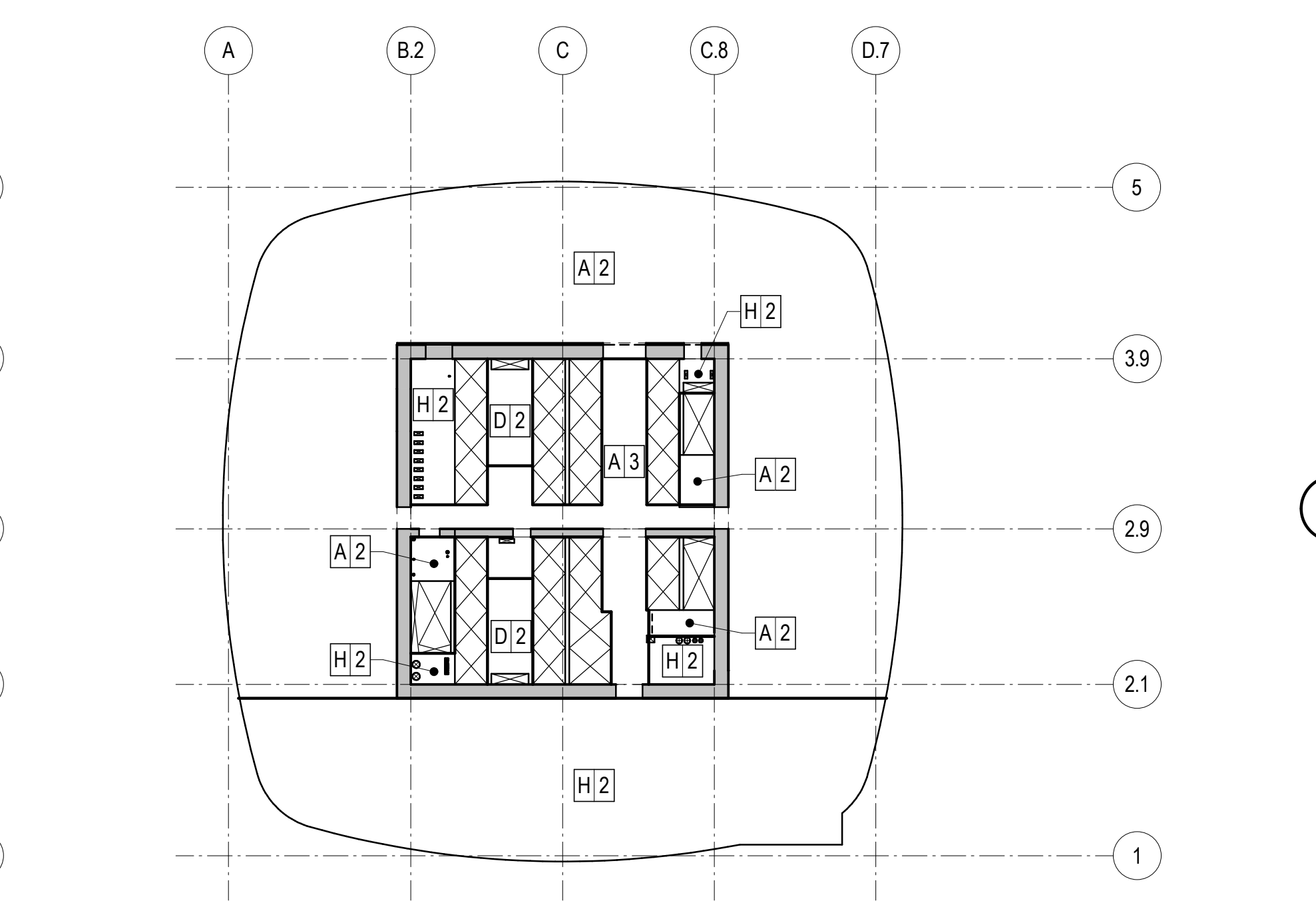
**9 LEVEL P1**



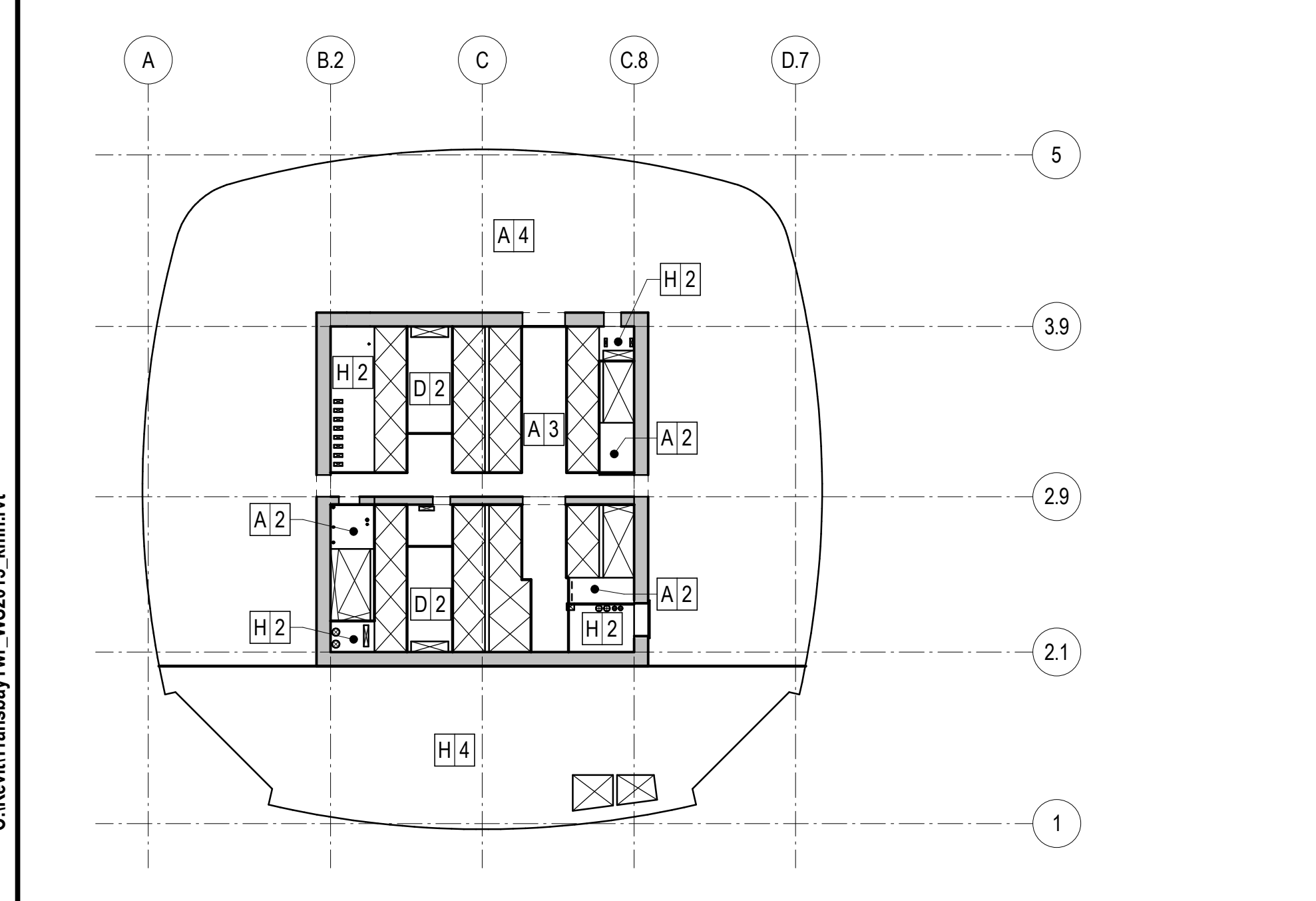
**12 LEVEL 1**



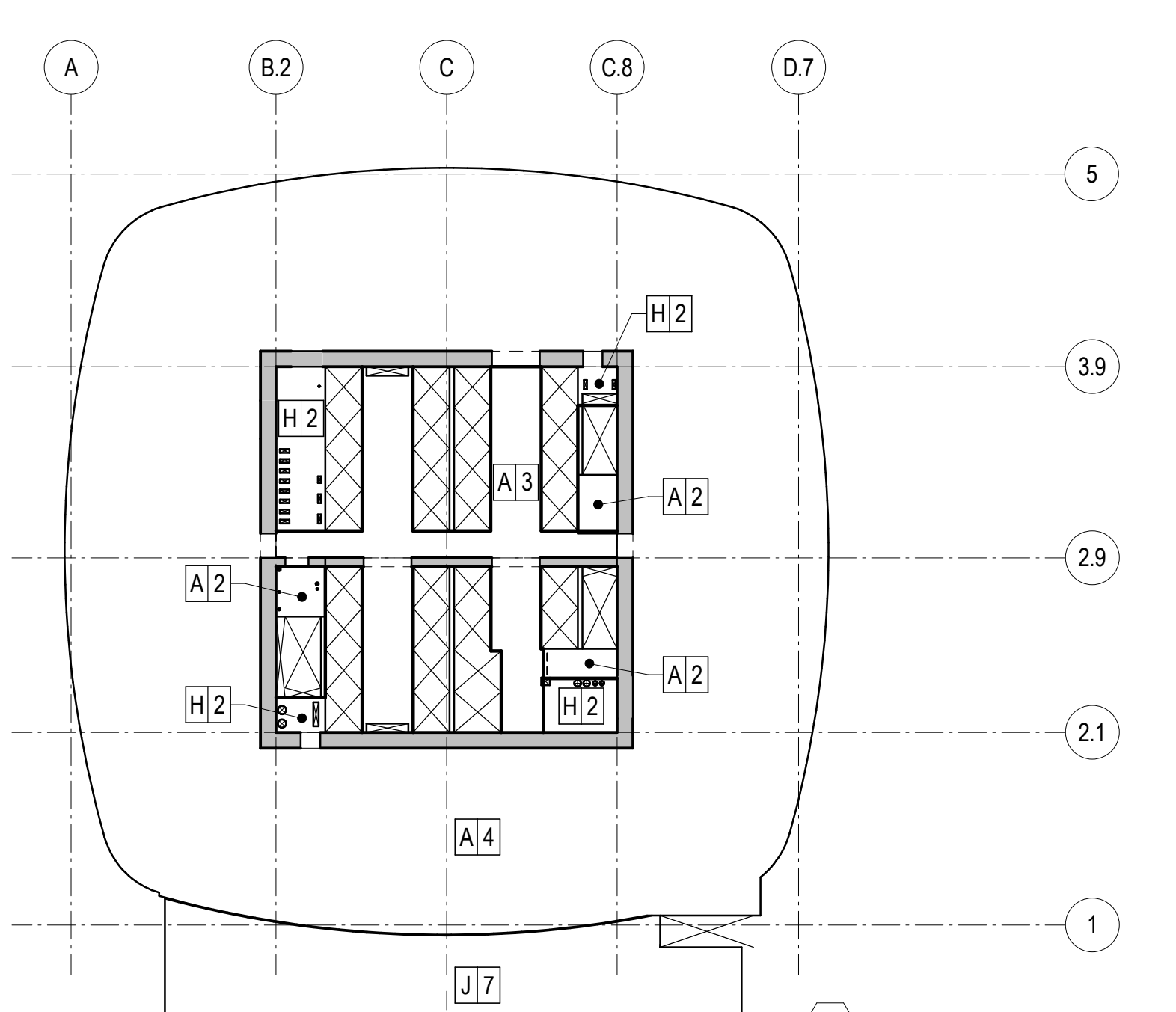
**13 LEVEL 2**



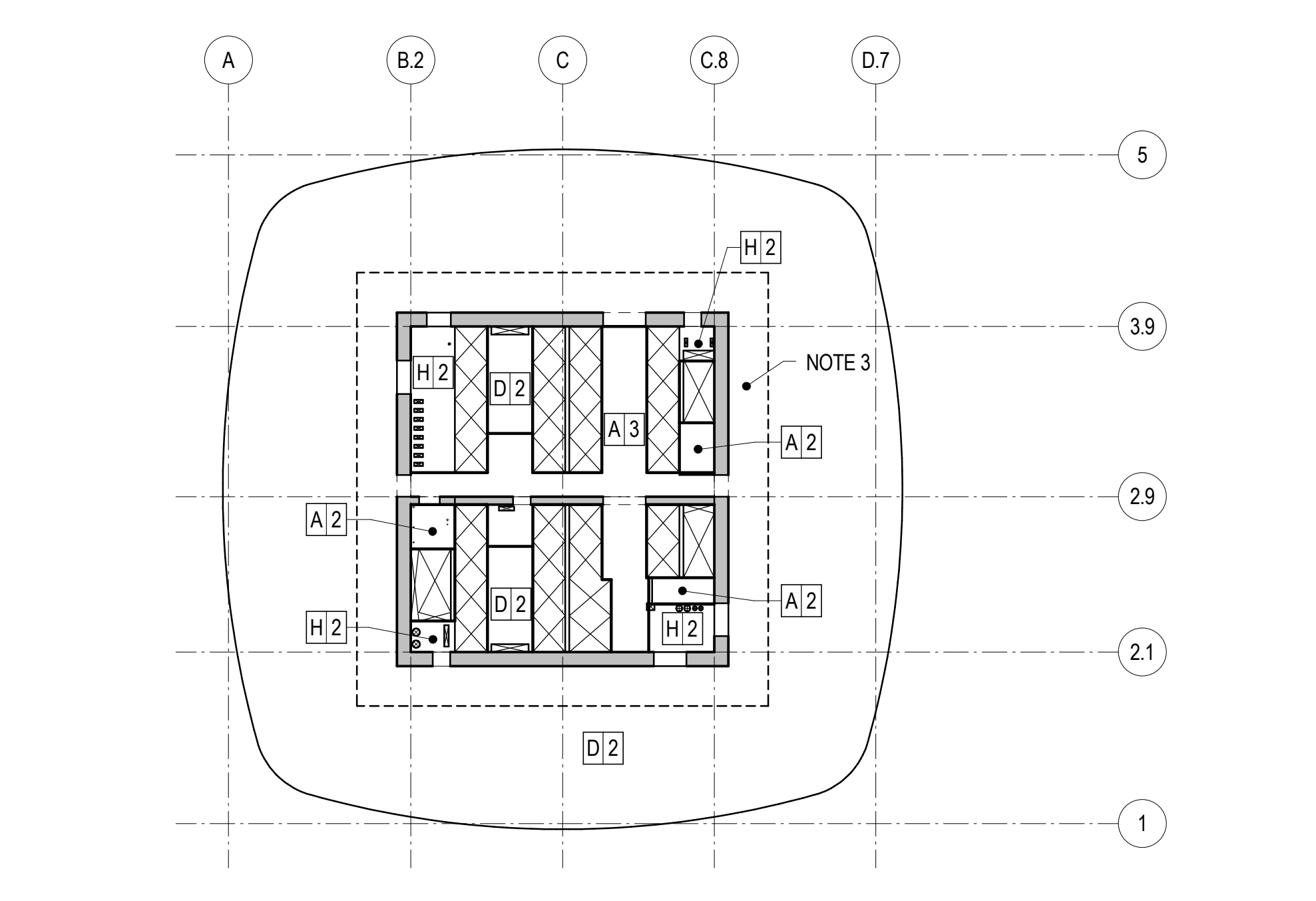
**14 LEVEL 3**



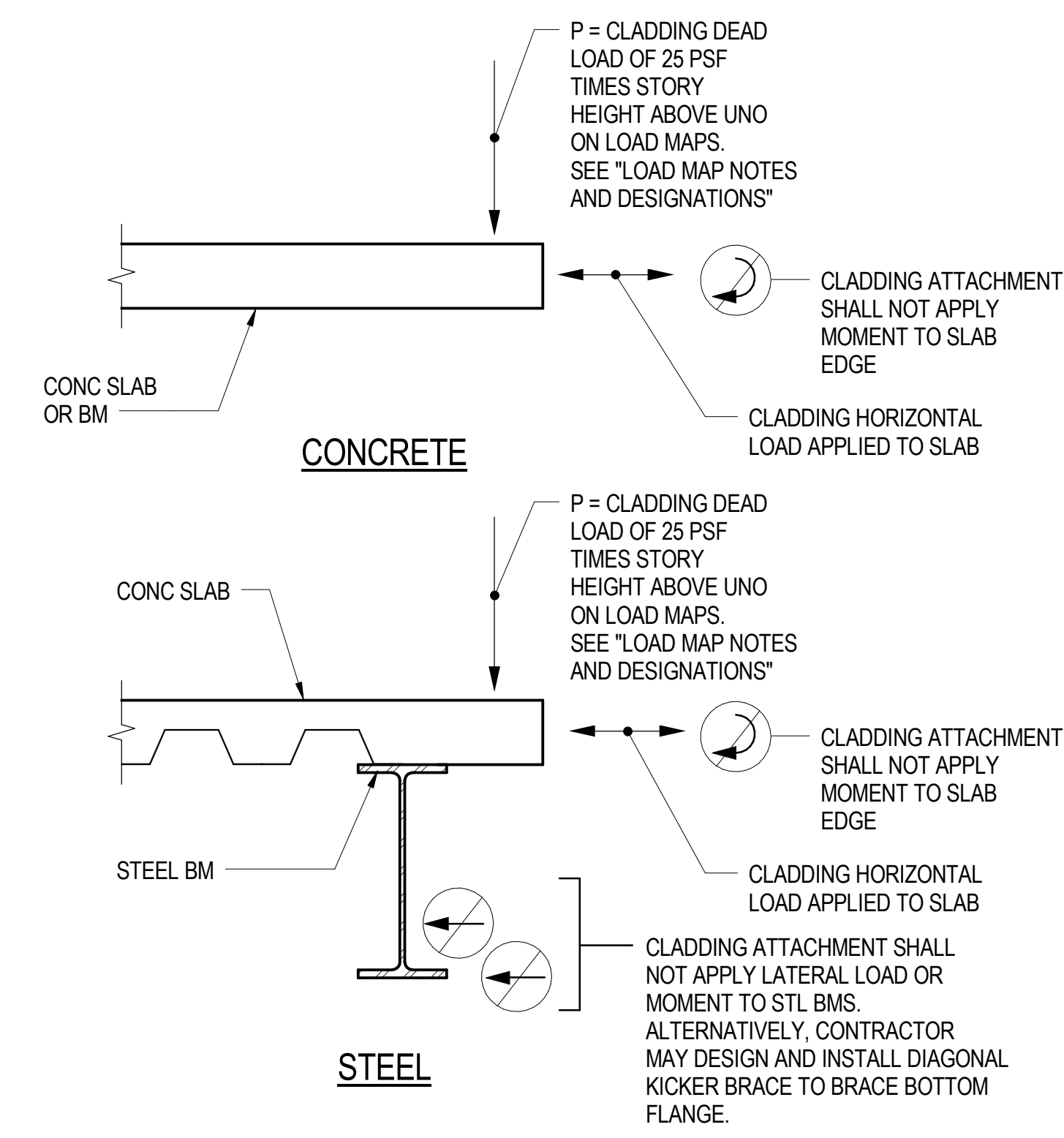
**16 LEVEL 4**



**18 LEVEL 5**



**19 LEVELS 6-15**



**NOTES:**

- REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
- STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.

**20 CLADDING LOAD NOTES**

4/29/2014 10:51:06 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE: **LOAD MAPS**

NO. PROJECT NO. 08044

DRAWING NUMBER: **S1.01**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

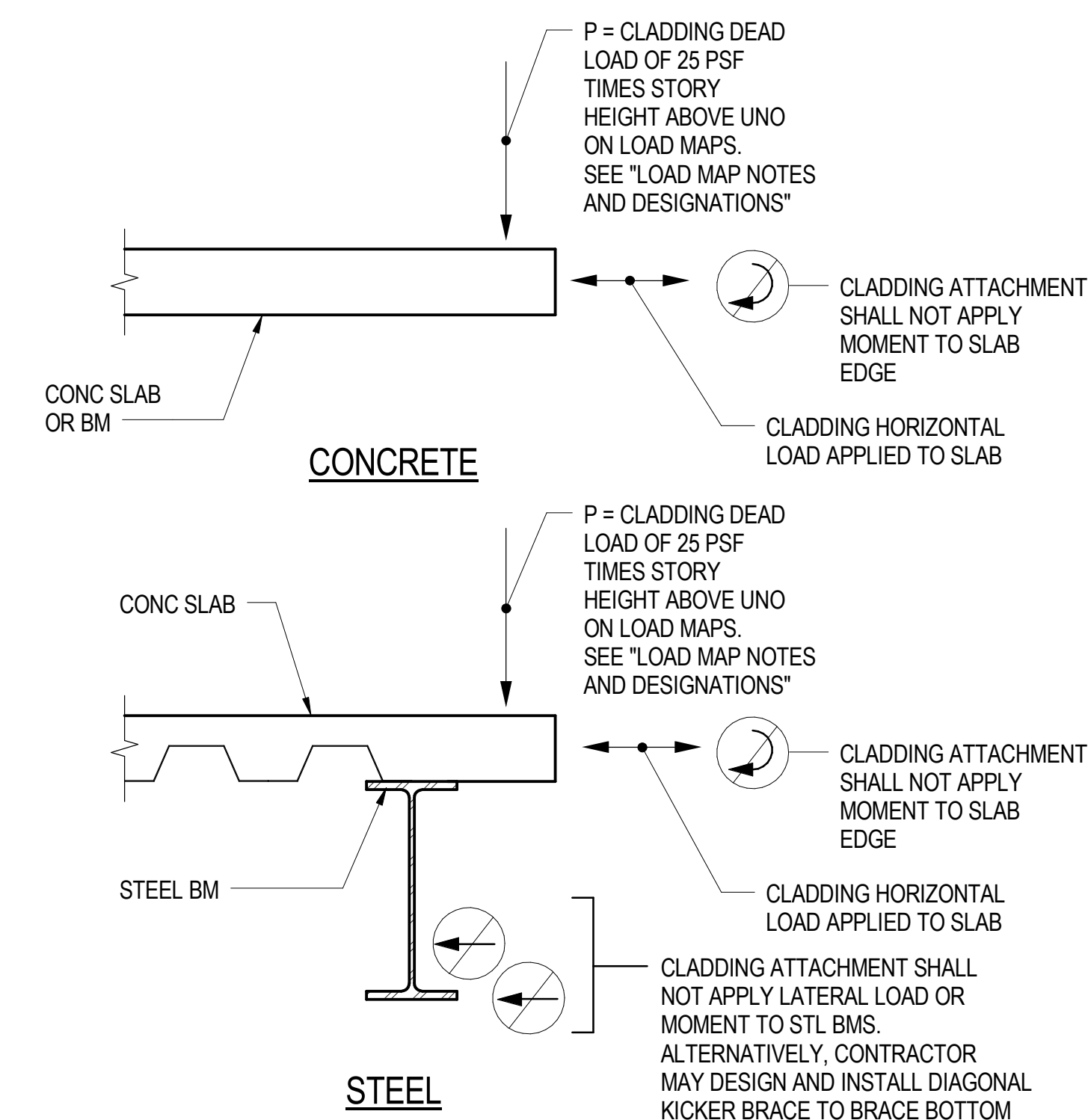
LIVE LOAD (LL) DESIGNATIONS		
LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MER	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE PATHWALK	40

SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS						
SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	-	-	-
2	TYPICAL INTERIOR	20	8	12	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP ROOF	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA HARDSCAPE	150	5	-	145	-
8	PLAZA TREE WELLS	650	5	-	645	WATERPROOFING, PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

**LOAD MAP NOTES:**

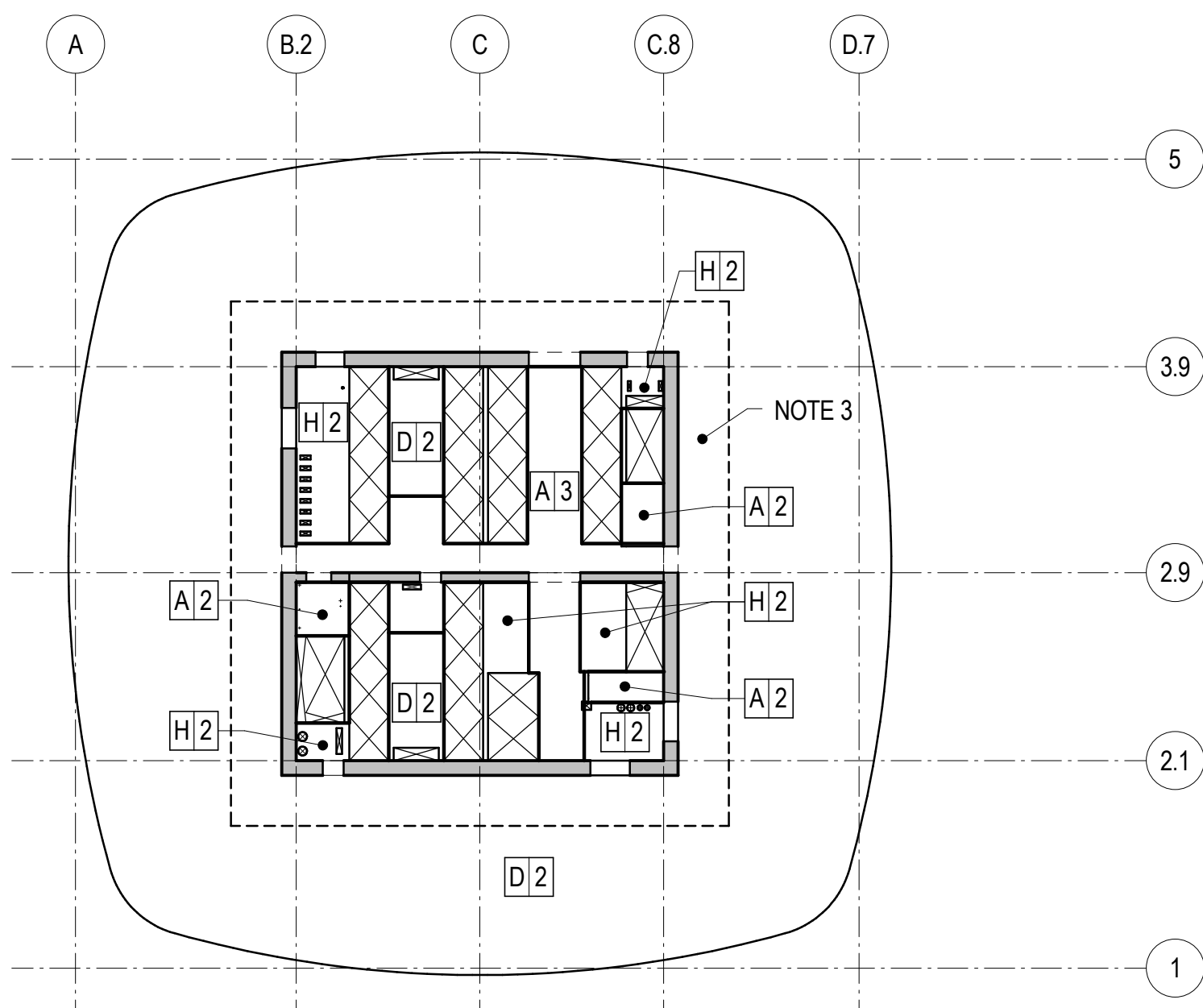
1. LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
2. SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
3. DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

**10 LOAD MAP NOTES AND DESIGNATIONS**

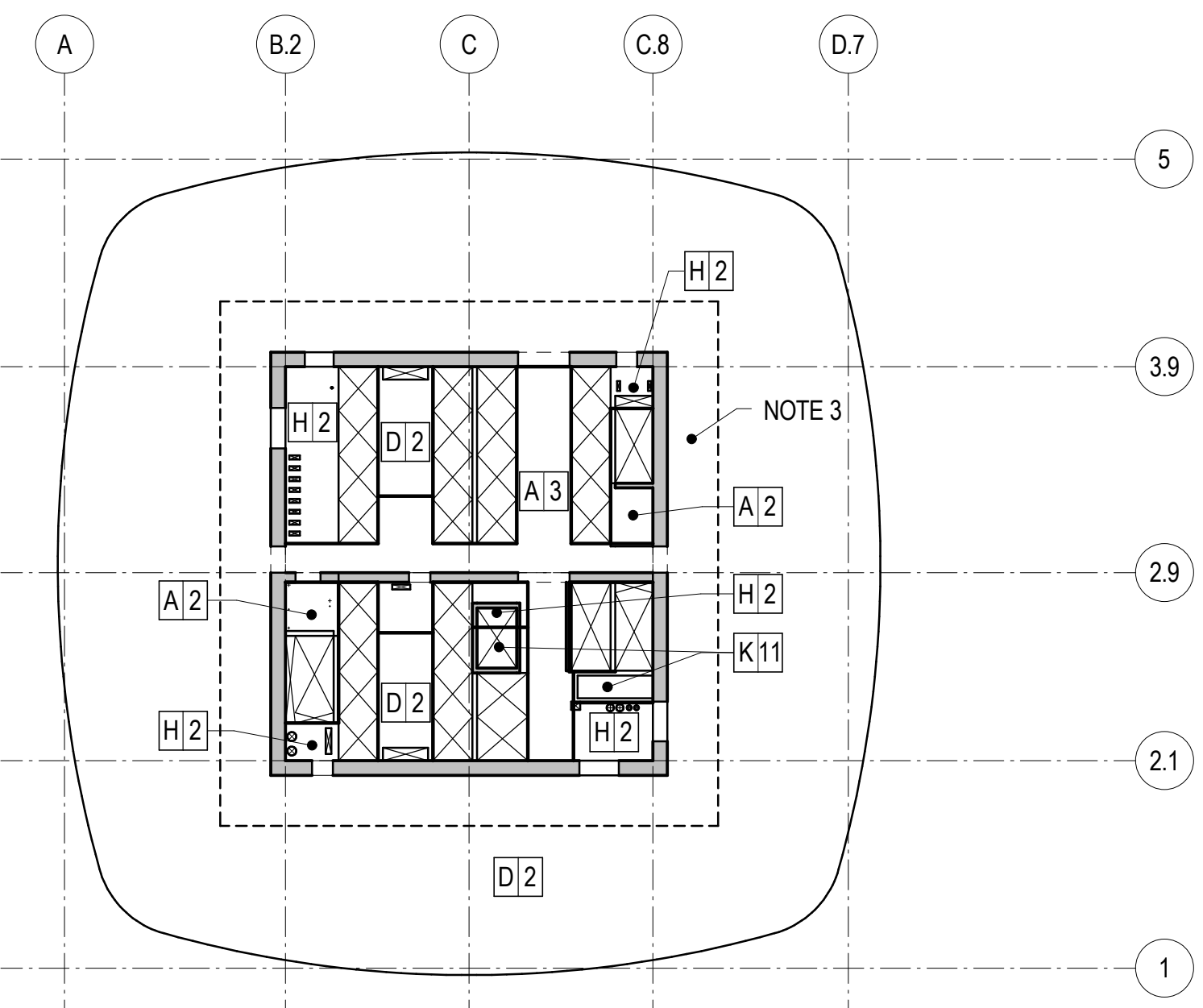


**NOTES:**

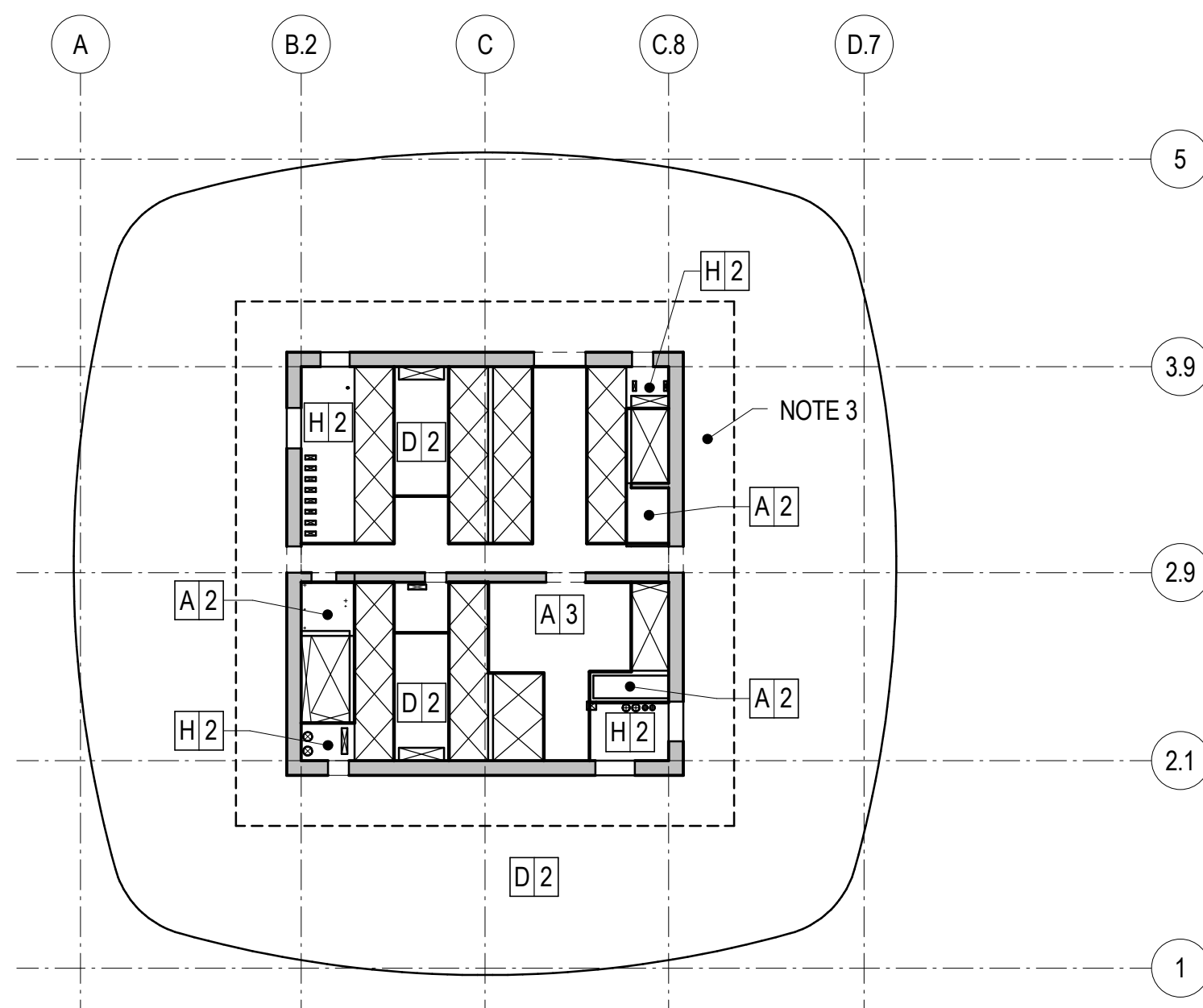
1. REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
2. STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.



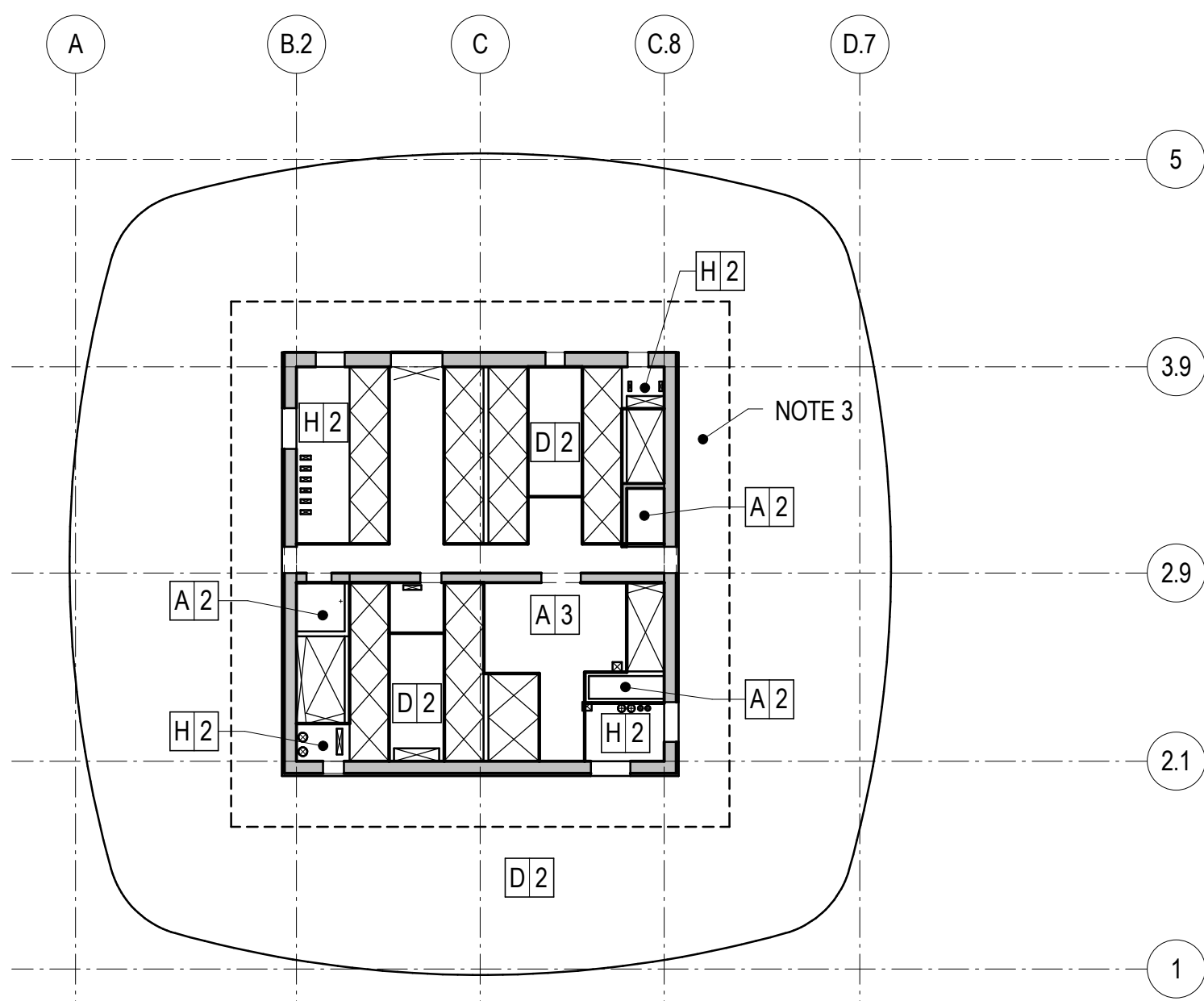
**6 LEVEL 16**



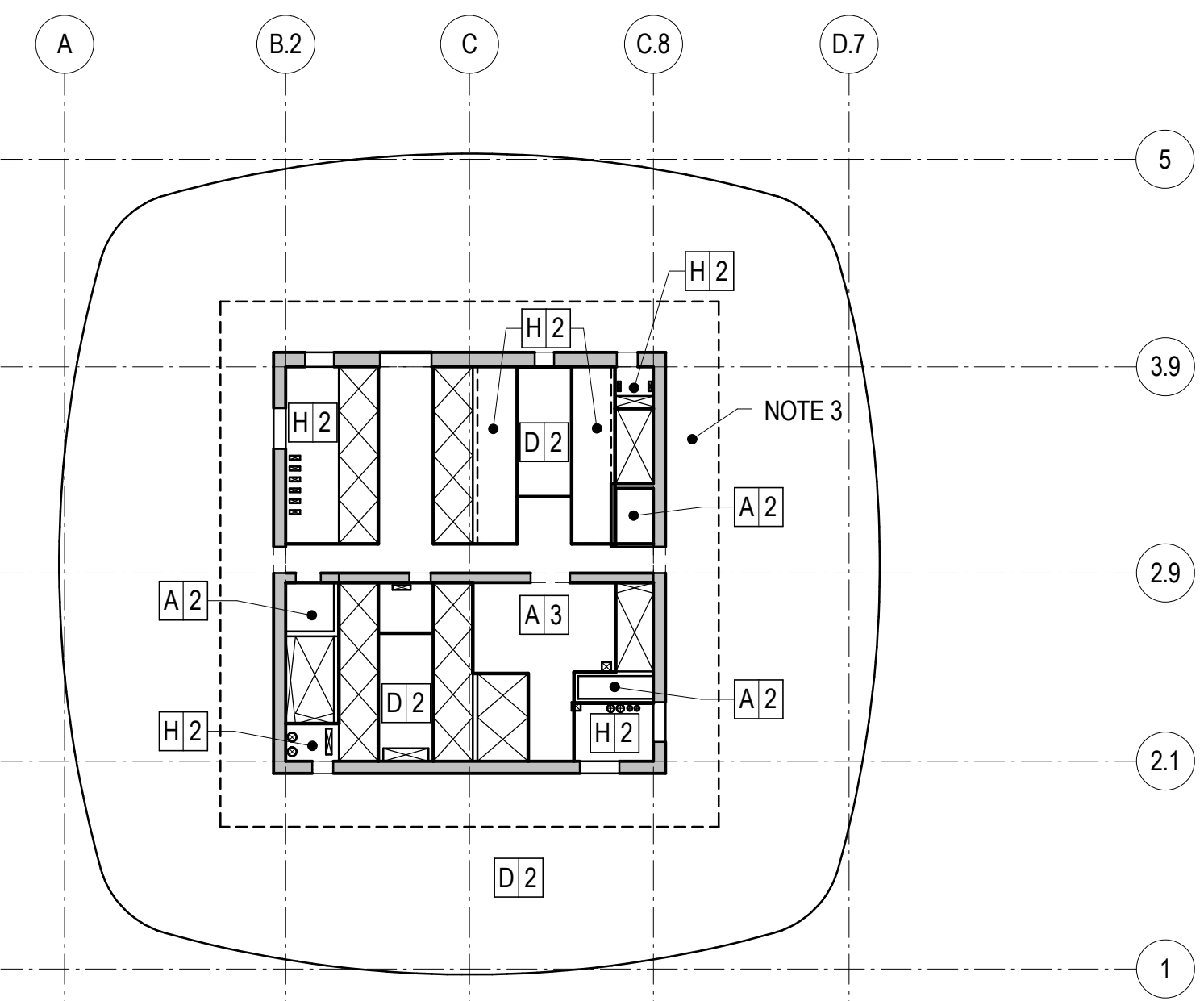
**8 LEVEL 17**



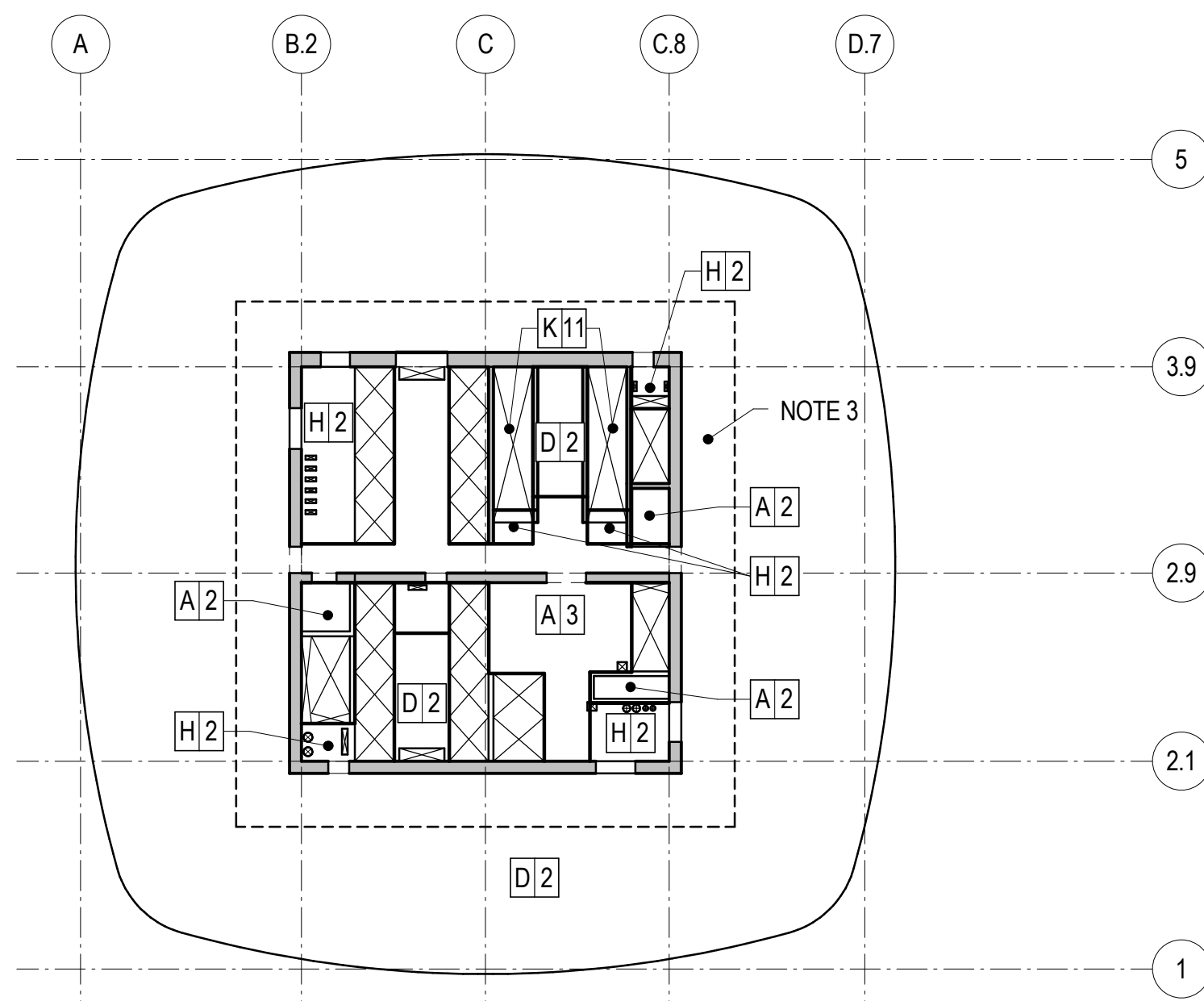
**9 LEVELS 18-30**



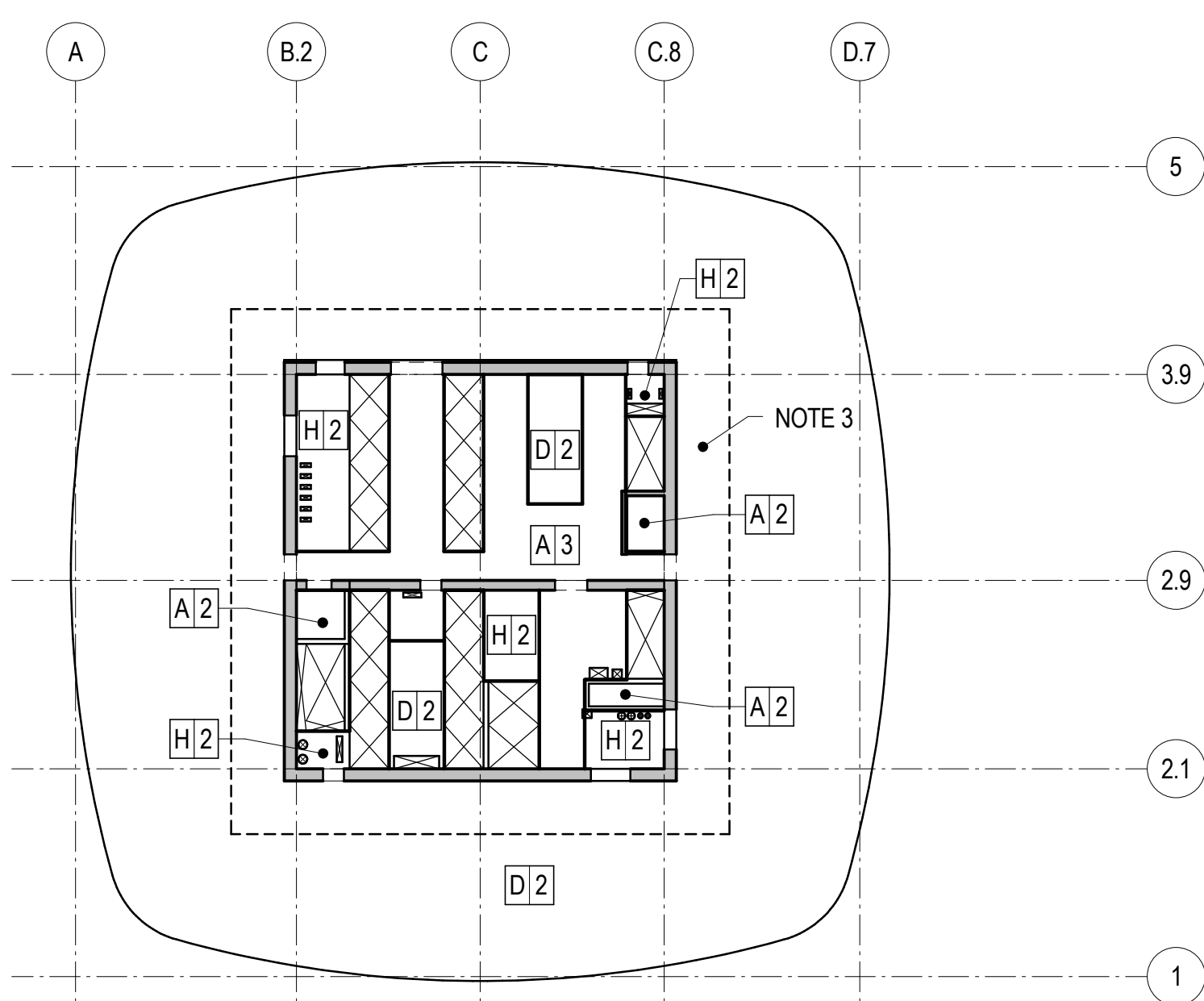
**11 LEVEL 31**



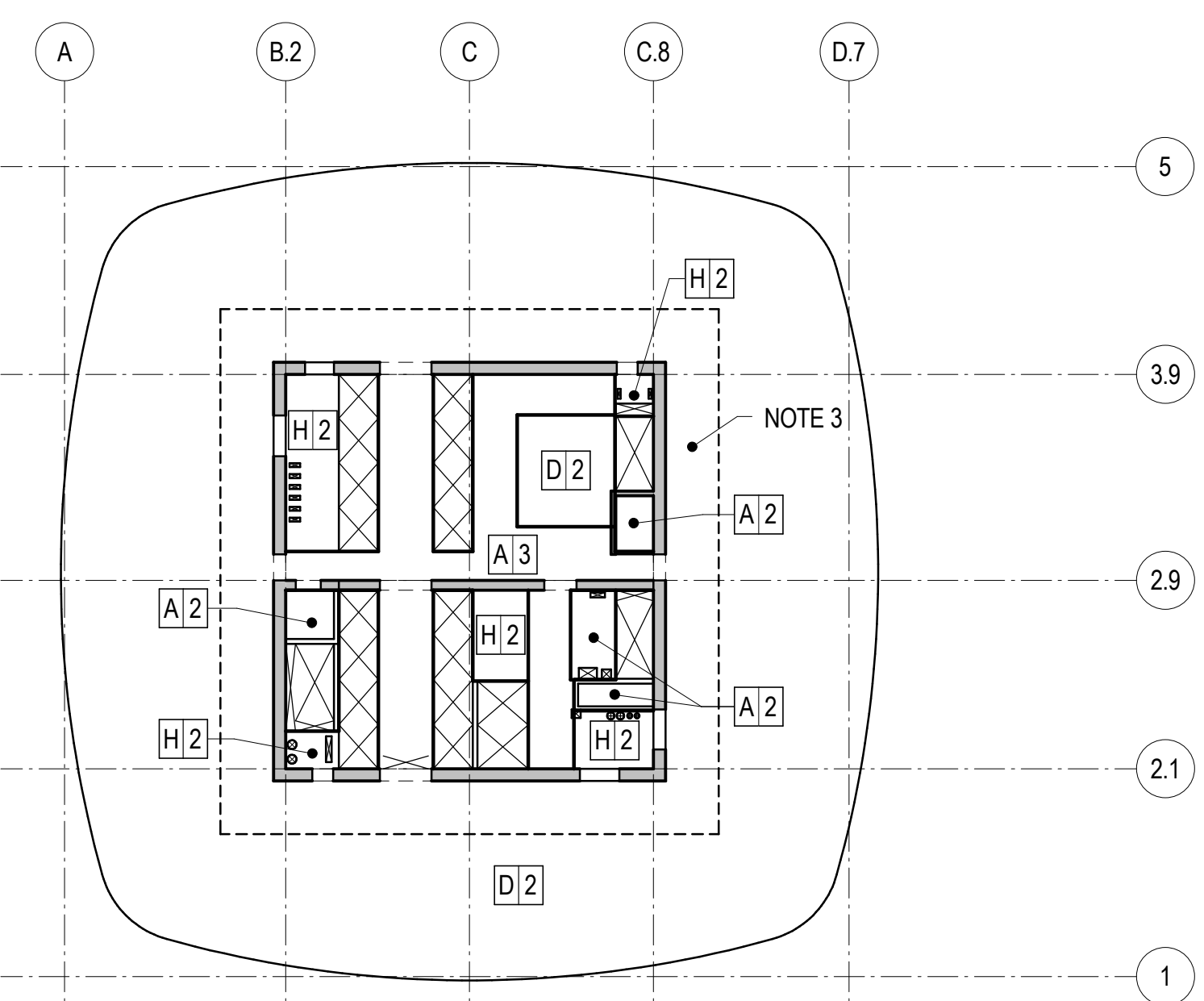
**13 LEVEL 32**



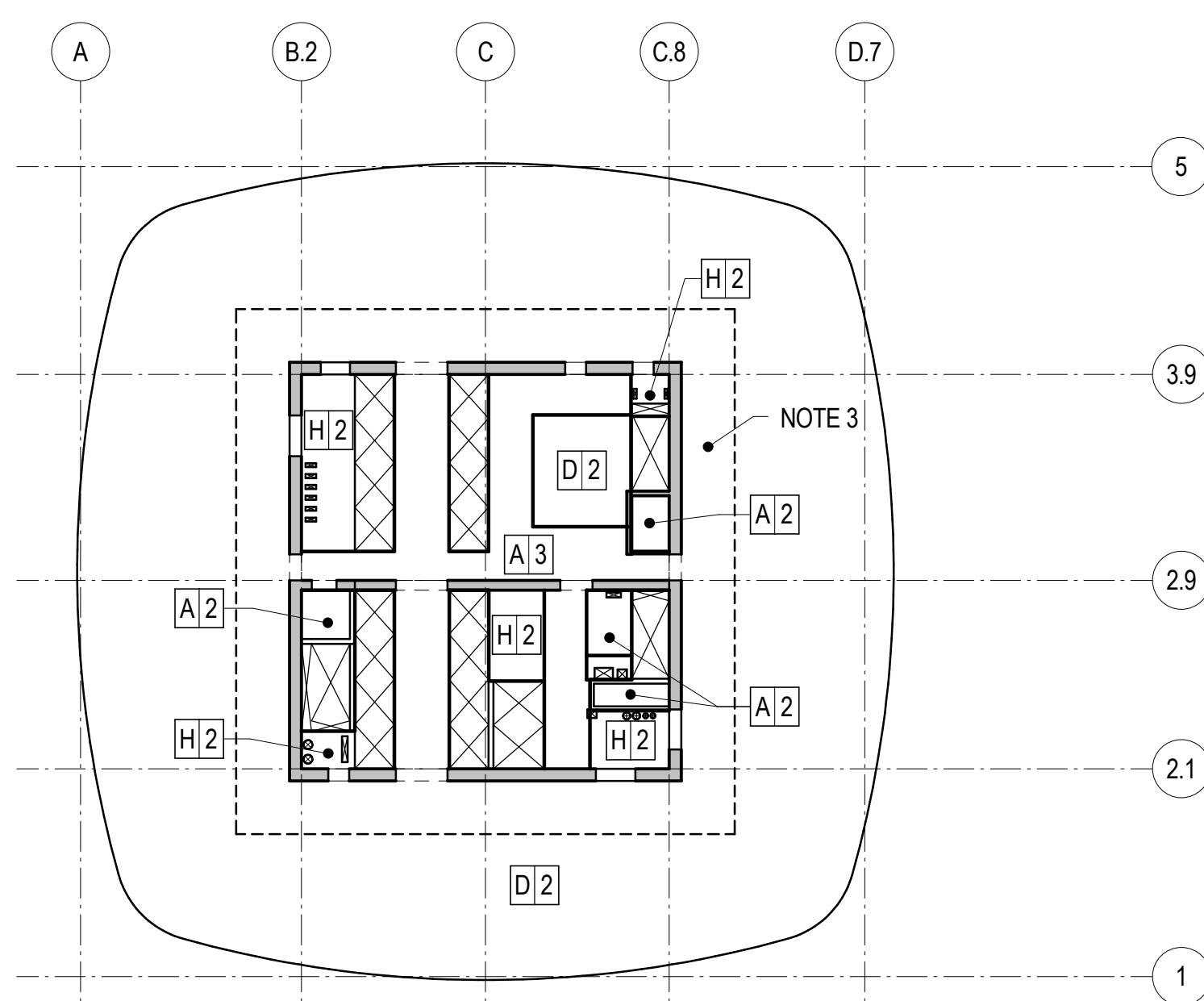
**14 LEVEL 33**



**16 LEVEL 34**



**18 LEVEL 35**



**19 LEVELS 36-47**

**20 CLADDING LOAD NOTES**

4/29/2014 10:31:16 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LOAD MAPS**

NO. PROJECT NO. 08044

DRAWING NUMBER

**S1.02**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**LOAD MAP KEY:**

- NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
- LETTER INDICATES LIVE LOAD MARK
- INDICATES CLADDING LOAD IN POUNDS PER SQUARE FOOT OF SURFACE AREA. SEE "CLADDING LOAD NOTES" DETAIL AT THE END OF LOAD MAPS.

**LIVE LOAD (LL) DESIGNATIONS**

LL MARK	USE	LIVE LOAD (PSF)
A	ASSEMBLY/AMENITY/CORRIDOR/STAIR	100
B	RETAIL	100 (R)
C	PARKING	70 (R)
D	OFFICE	50 + 15 PARTITION (R)
E	ROOF	50
F	LOADING DOCK	250 OR H-20
G	STORAGE (LIGHT)	125
H	MEP	125
J	PLAZA ASSEMBLY	100
K	MAINTENANCE CATWALK	40

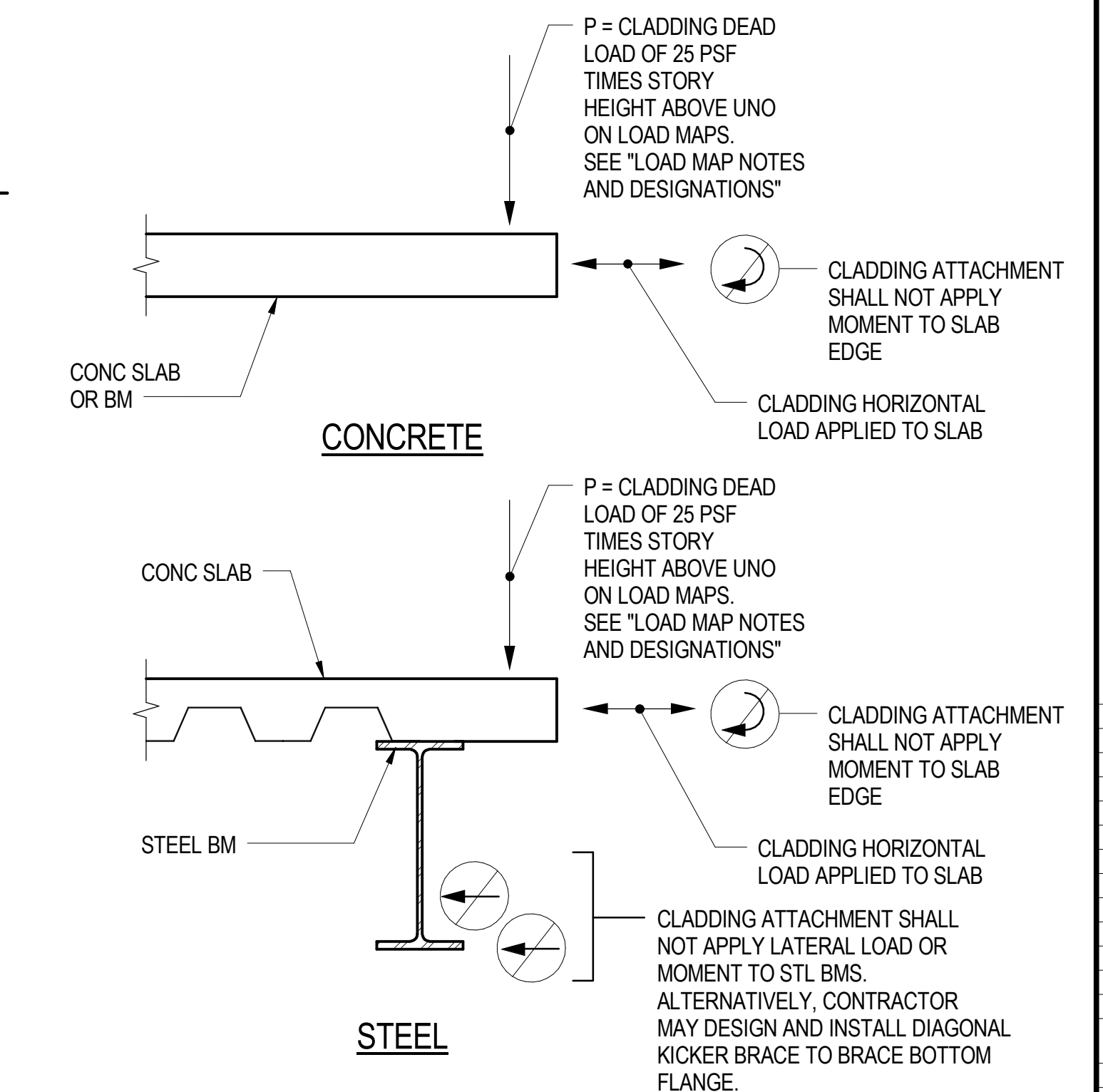
**SUPERIMPOSED DEAD LOAD (SDL) DESIGNATIONS**

SDL MARK	TYPE	TOTAL SDL (PSF)	CEILING/MEP LOAD (PSF)	FLOOR FINISH LOAD (PSF)	SPECIAL LOAD (PSF)	SPECIAL LOAD DESCRIPTION
1	PARKING	5	5	-	-	-
2	TYPICAL INTERIOR	20	8	12	-	-
3	HEAVY INTERIOR	40	8	32	-	-
4	BUILT-UP ROOF	65	8	57	-	-
5	TYPICAL ROOF	40	8	-	32	ROOFING
6	TYPICAL EXTERIOR	70	8	50	12	ROOFING
7	PLAZA HARDSCAPE	150	5	-	145	-
8	PLAZA TREE WELLS	650	5	-	645	WATERPROOFING, PROTECTION SLAB, 3.5 FT SOIL, HARDSCAPE
9	RAIN WATER STORAGE	875	-	-	-	WATER (14 FT DEEP)
10	FIRE WATER STORAGE	1750	-	-	-	WATER (28 FT DEEP)
11	ELEVATOR CONTROL ROOM	20	-	-	-	STEEL GRATING
12	SCULPTURE	1200	-	-	-	SCULPTURE, 2.5 FT MAT

**LOAD MAP NOTES:**

- LIVE LOADS MARKED (R) ARE REDUCIBLE IN ACCORDANCE WITH THE BUILDING CODE.
- SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- DESIGN LIVE LOAD IS 100 PSF (R) IN A 10 FEET WIDE ZONE AROUND THE CONCRETE CORE WALL PERIMETER.

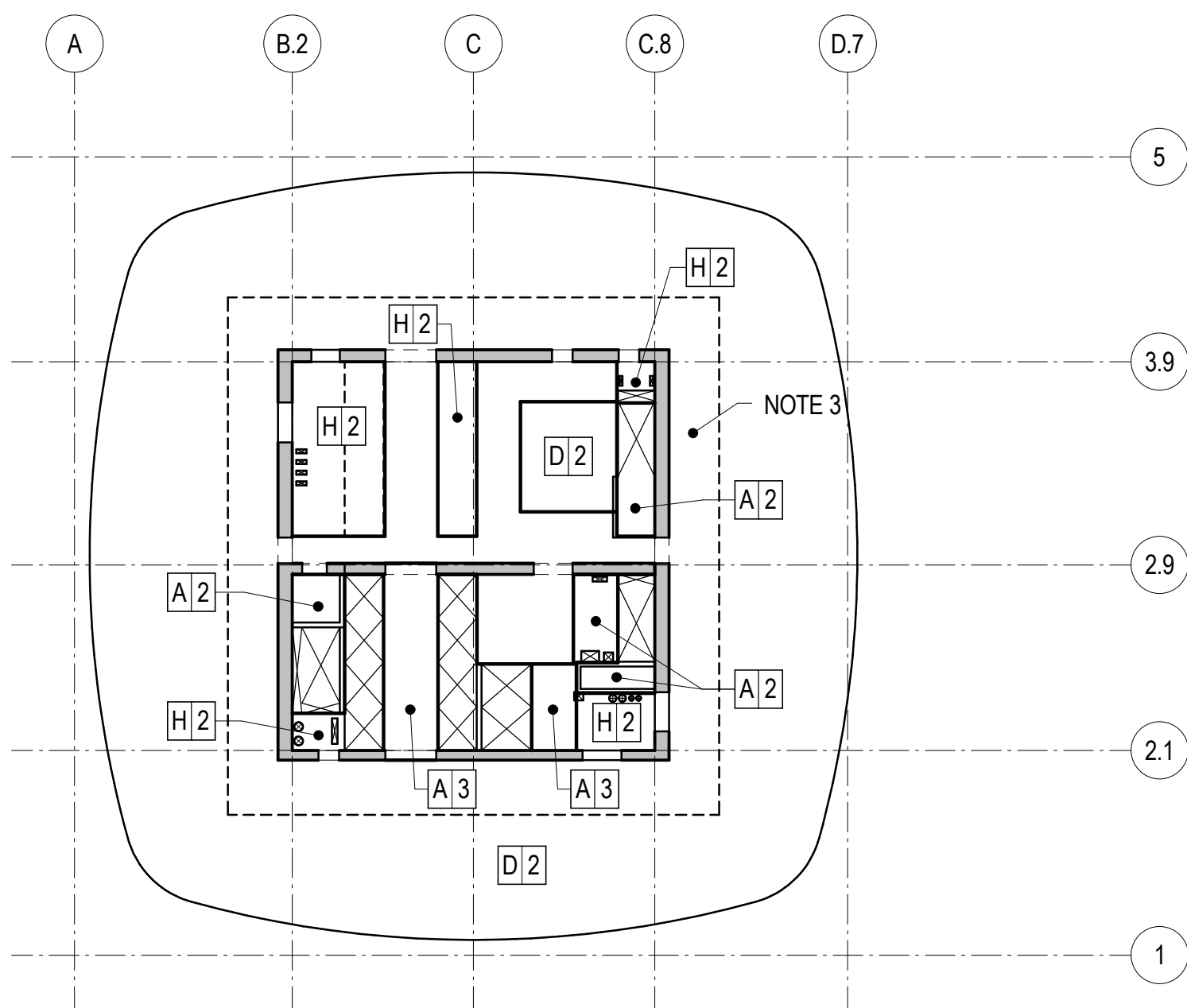
**10 LOAD MAP NOTES AND DESIGNATIONS**



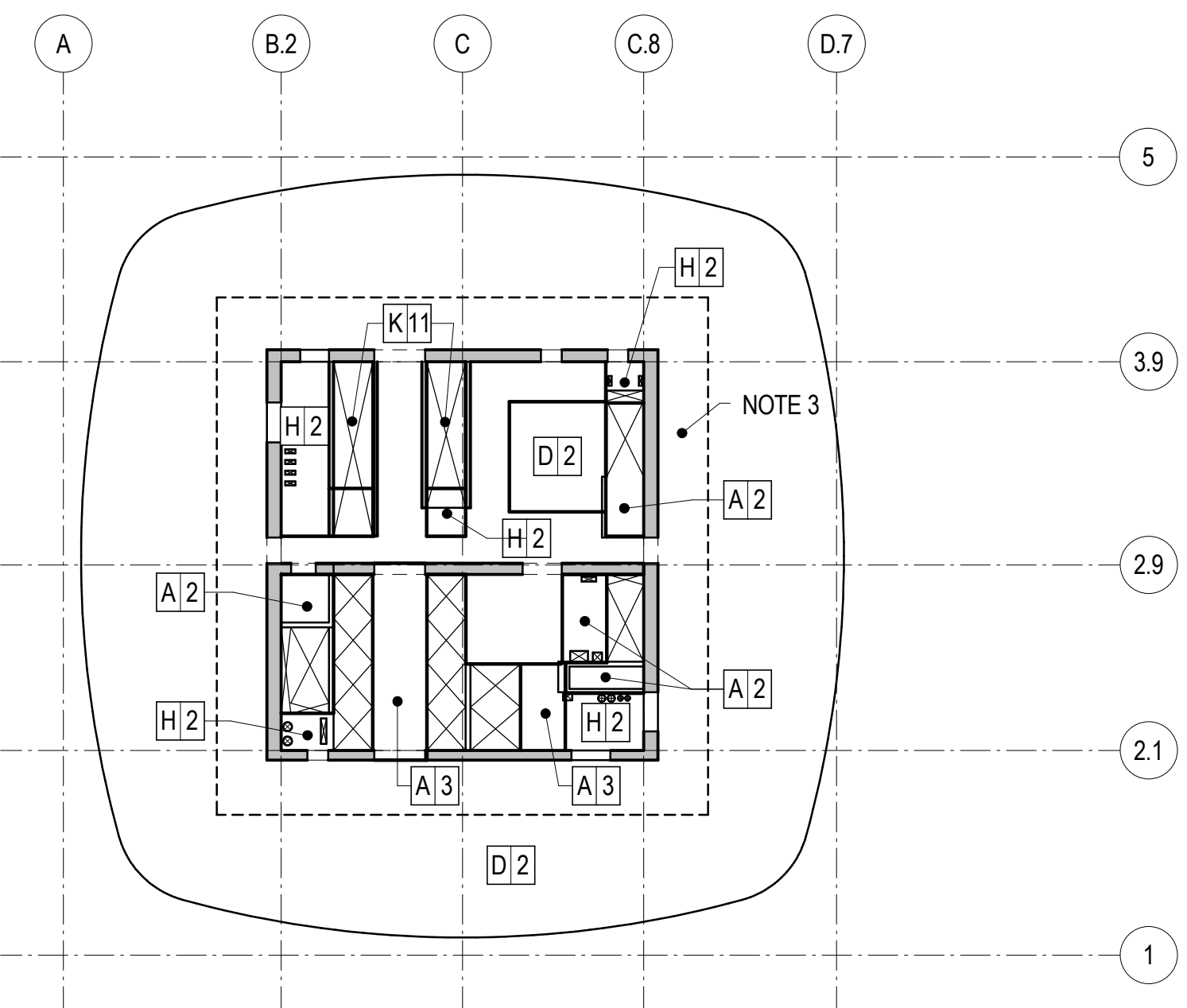
**NOTES:**

- REFER TO GENERAL NOTES, "EXTERIOR CLADDING" FOR ADDITIONAL INFORMATION.
- STRUCTURE IS DESIGNED FOR THE EQUIVALENT UNIFORM LOAD CORRESPONDING TO THE ANTICIPATED WEIGHT OF THE CLADDING SYSTEM. CLADDING ATTACHMENTS WILL APPLY CONCENTRATED LOADS TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT TYPICAL CLADDING ATTACHMENT DETAILS FOR REVIEW AND COMMENT PRIOR TO PREPARATION OF DETAILED CLADDING SUBMITTAL.

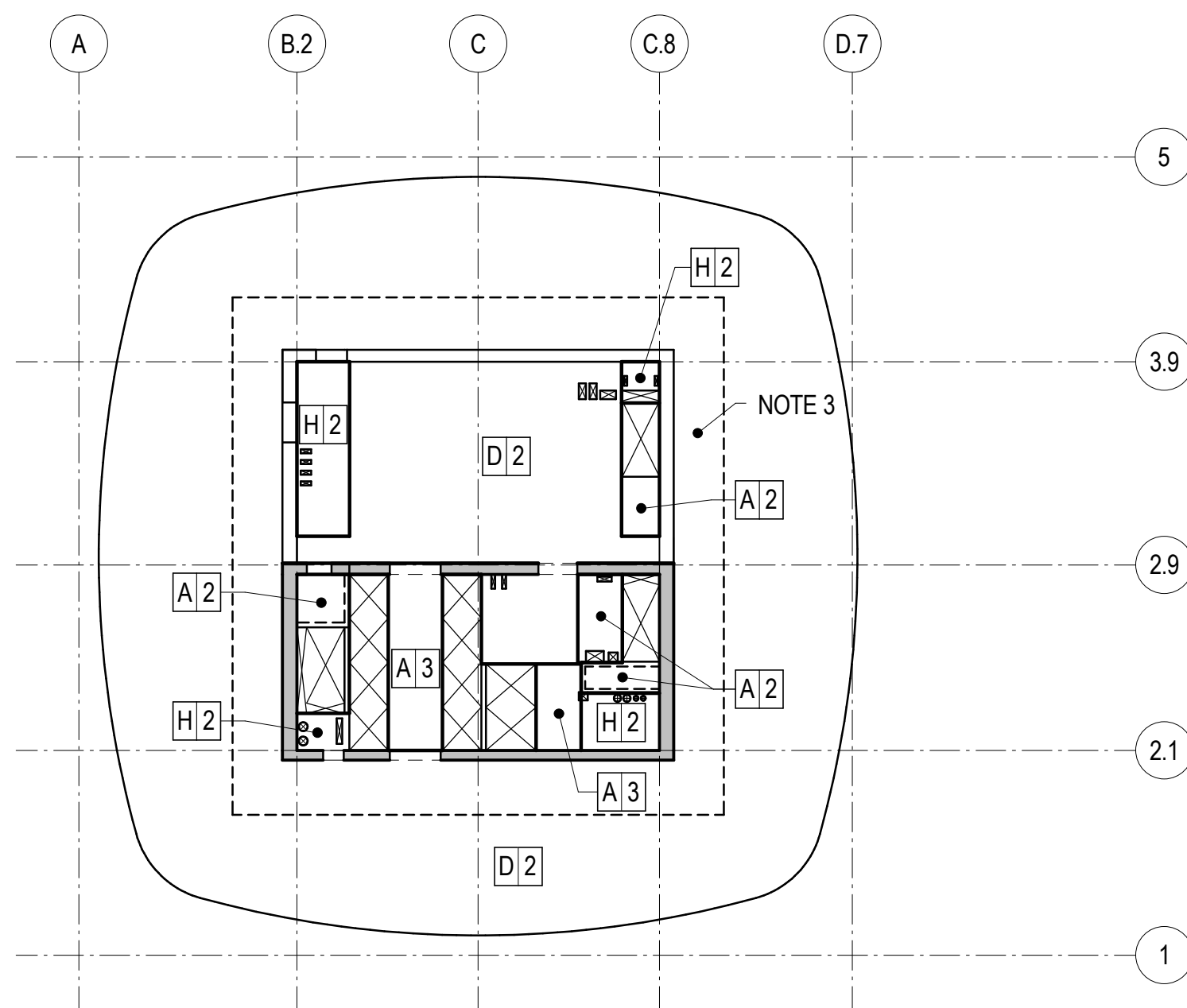
**20 CLADDING LOAD NOTES**



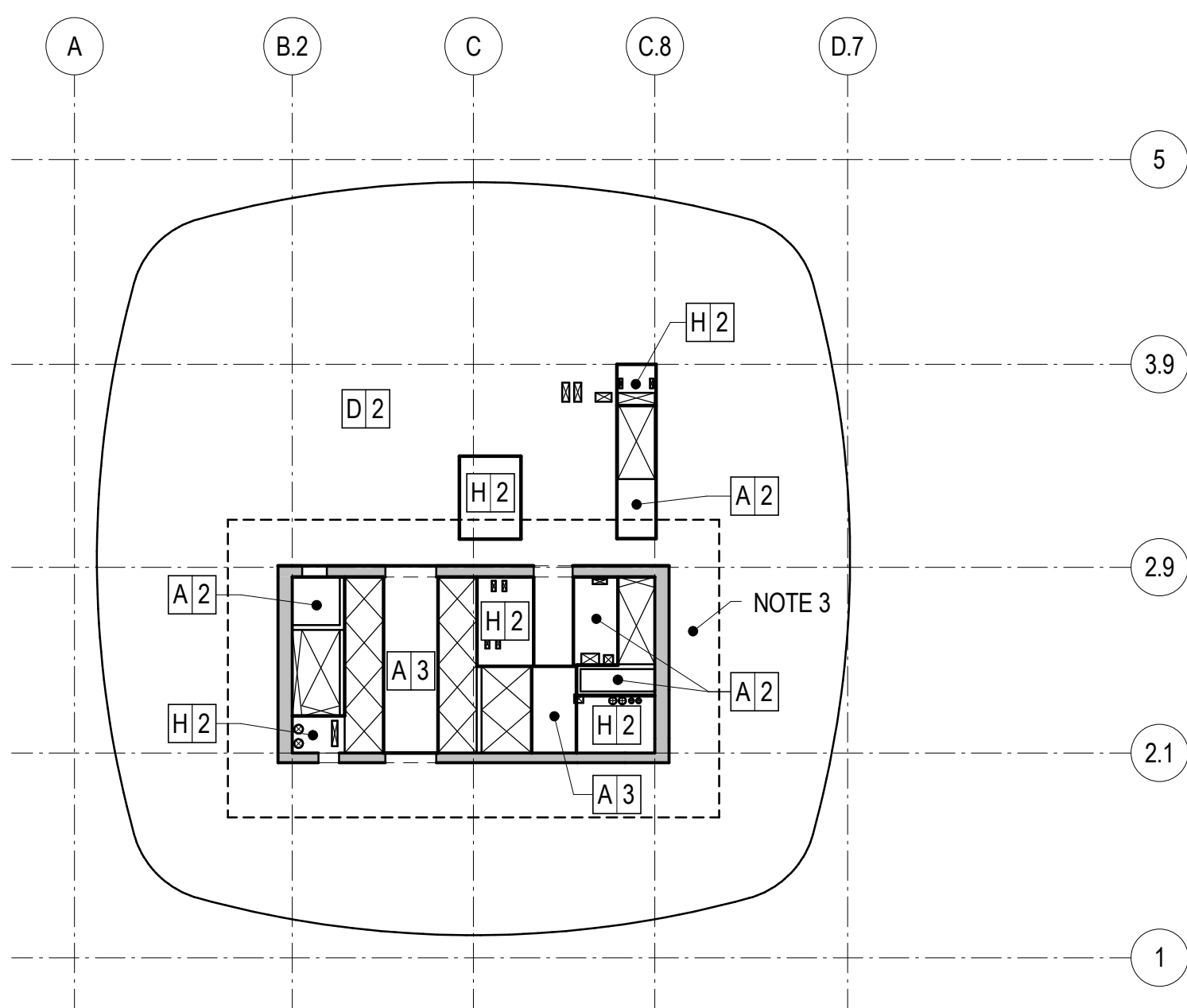
**6 LEVEL 48**



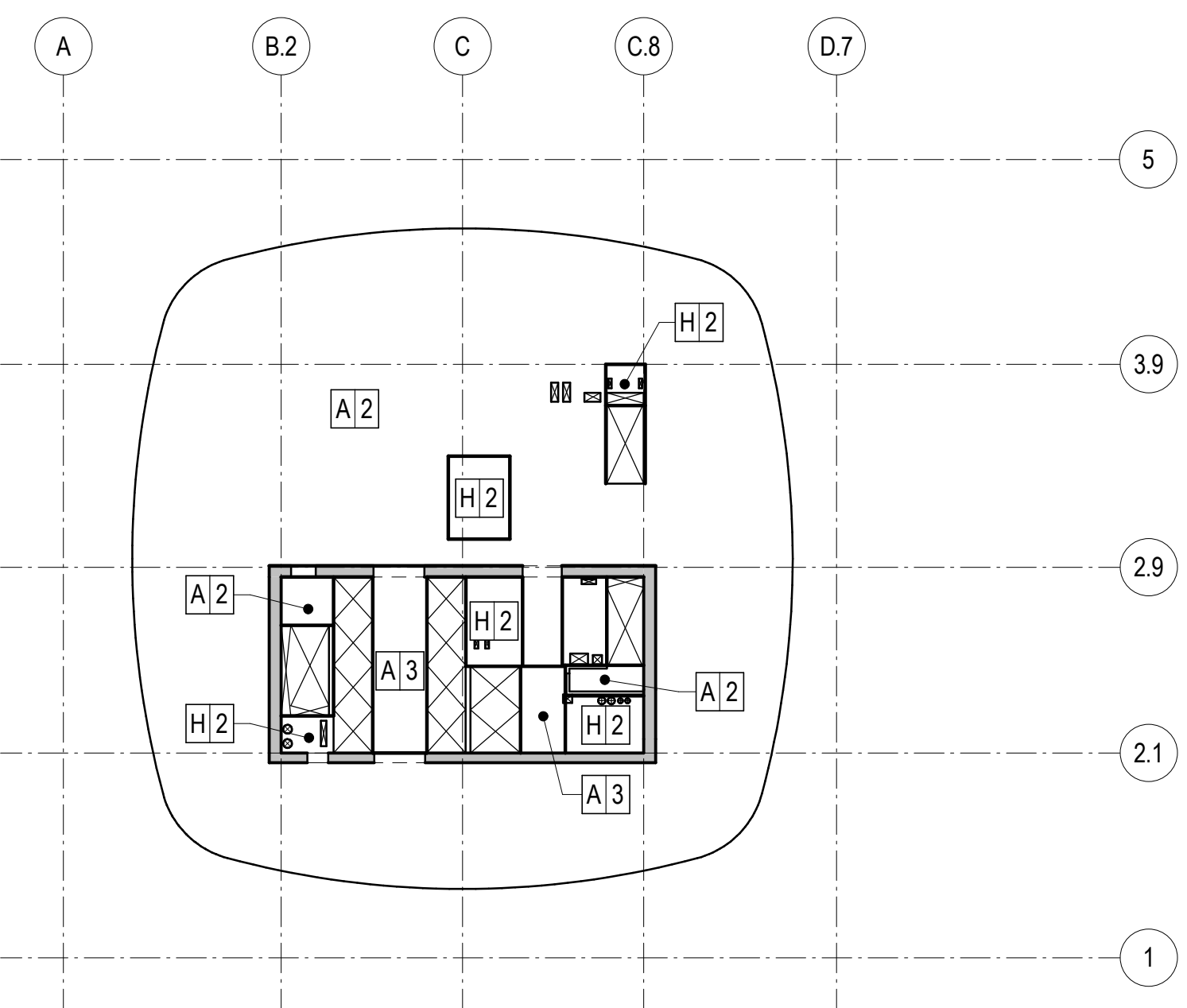
**8 LEVEL 49**



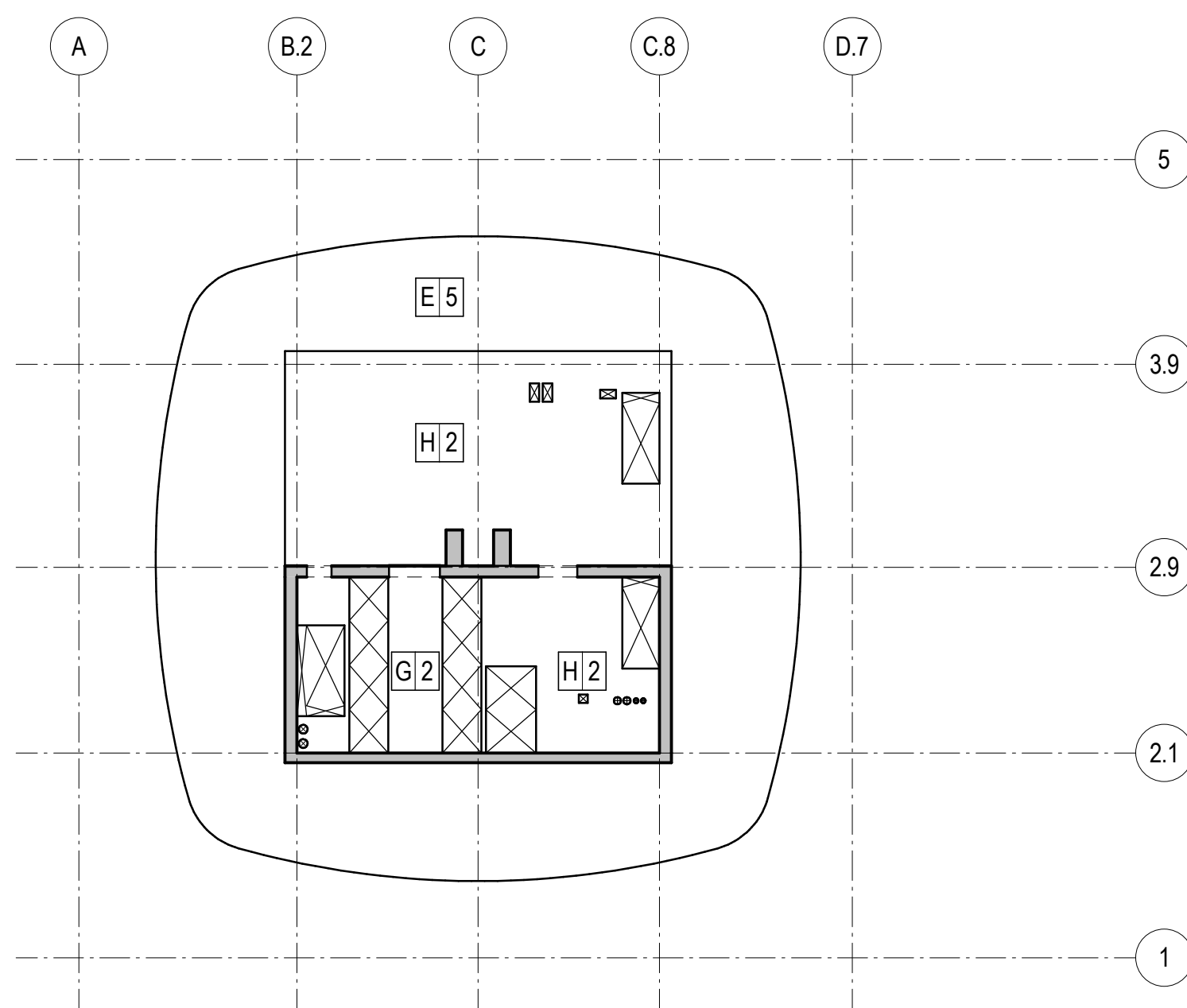
**9 LEVEL 50**



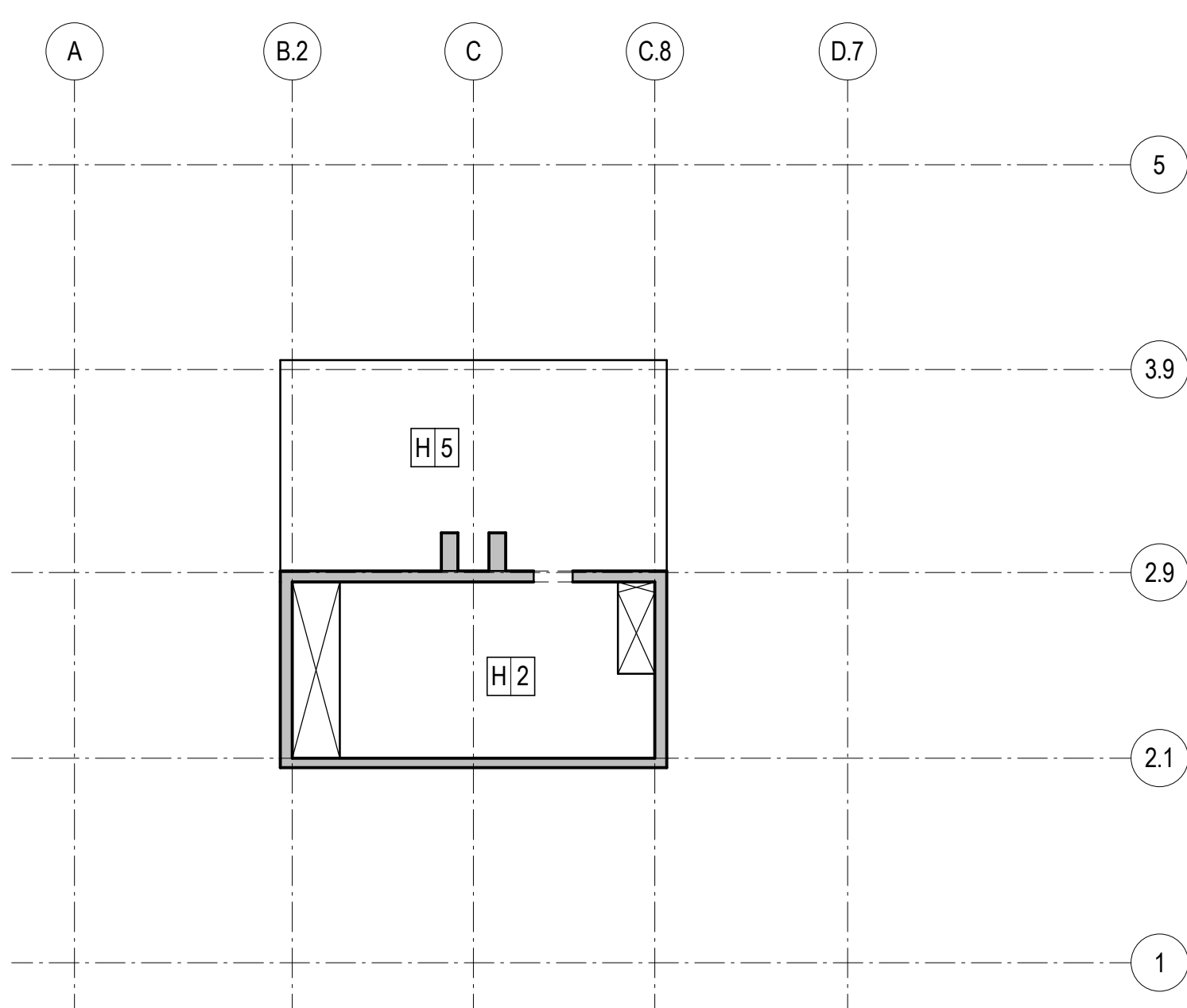
**11 LEVELS 51-60**



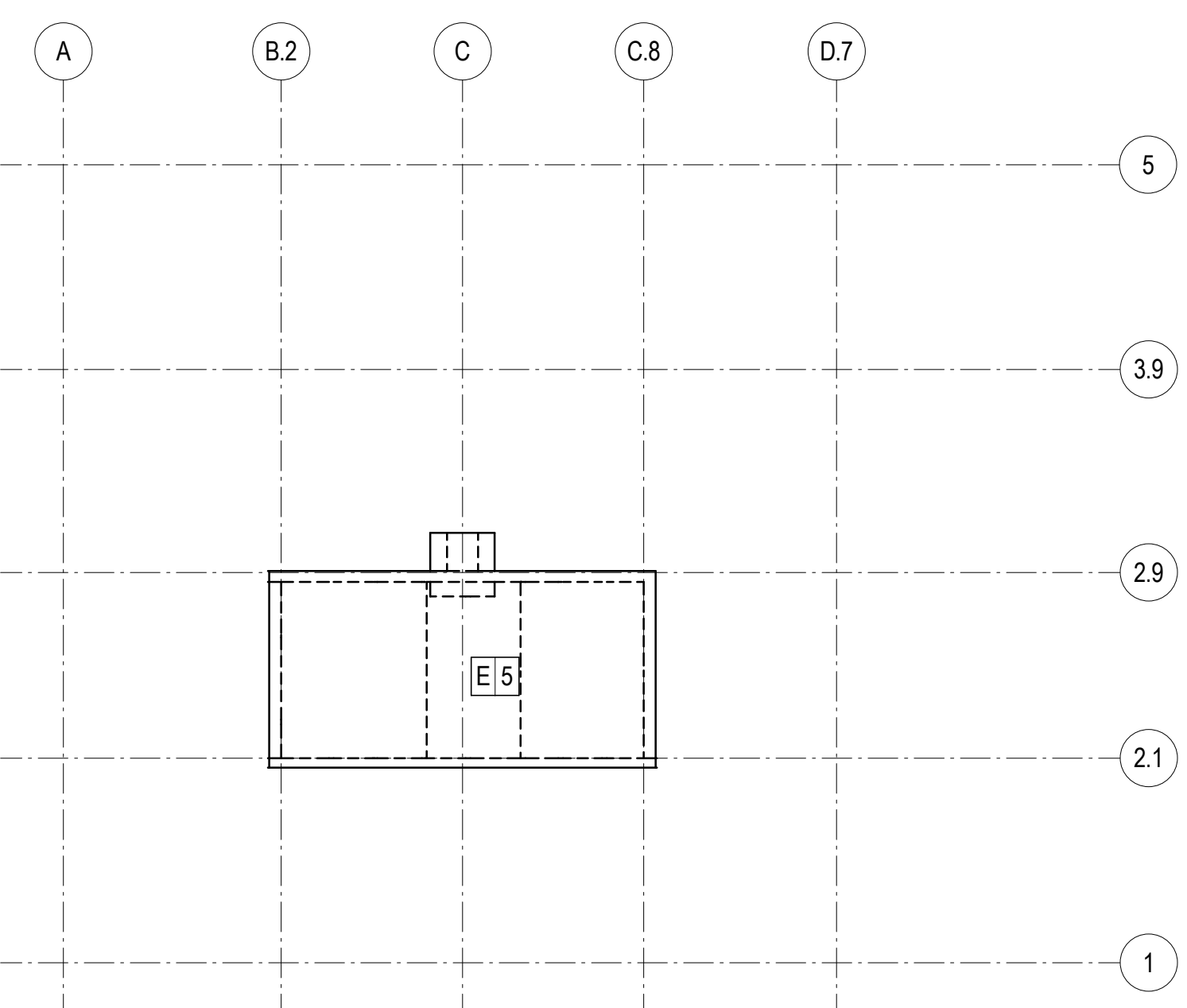
**13 LEVEL 61**



**14 LEVEL 62**



**16 LEVEL 63**



**18 LEVEL 64**

4/29/2014 10:51:24 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LOAD MAPS**

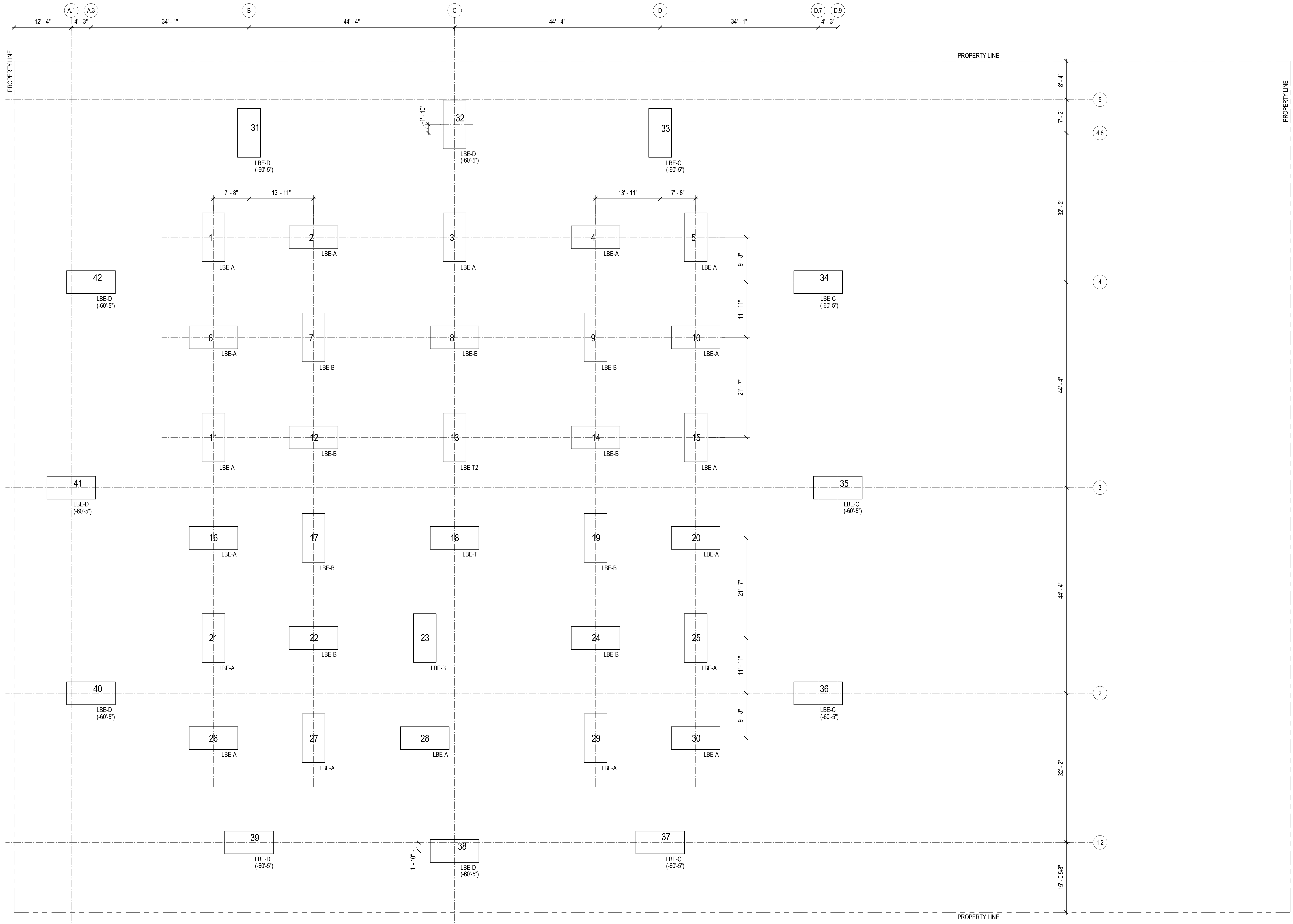
PROJECT NO. 08044 DRAWING NUMBER S1.03



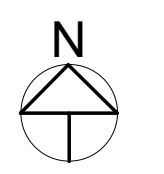
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	ISSUE
9	02 MAY 14	GMP
8	12 FEB 14	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 2
7	24 JAN 14	BARRETTE/LOAD BEARING ELEMENT BULLETIN NO. 2
6	25 NOV 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1
5	25 SEP 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM
4	03 SEP 13	50% CONSTRUCTION DOCUMENTS
3	19 JUL 13	DESIGN DEVELOPMENT
2	03 JUN 13	50% DESIGN DEVELOPMENT
1	19 APR 13	100% SCHEMATIC DESIGN

NO.	DATE	ISSUE
CAD FILENAME		
DRAWING TITLE		
<b>LOAD BEARING ELEMENT PLAN</b>		
NO.	PROJECT NO.	DRAWING NUMBER
08044		<b>S2.00</b>



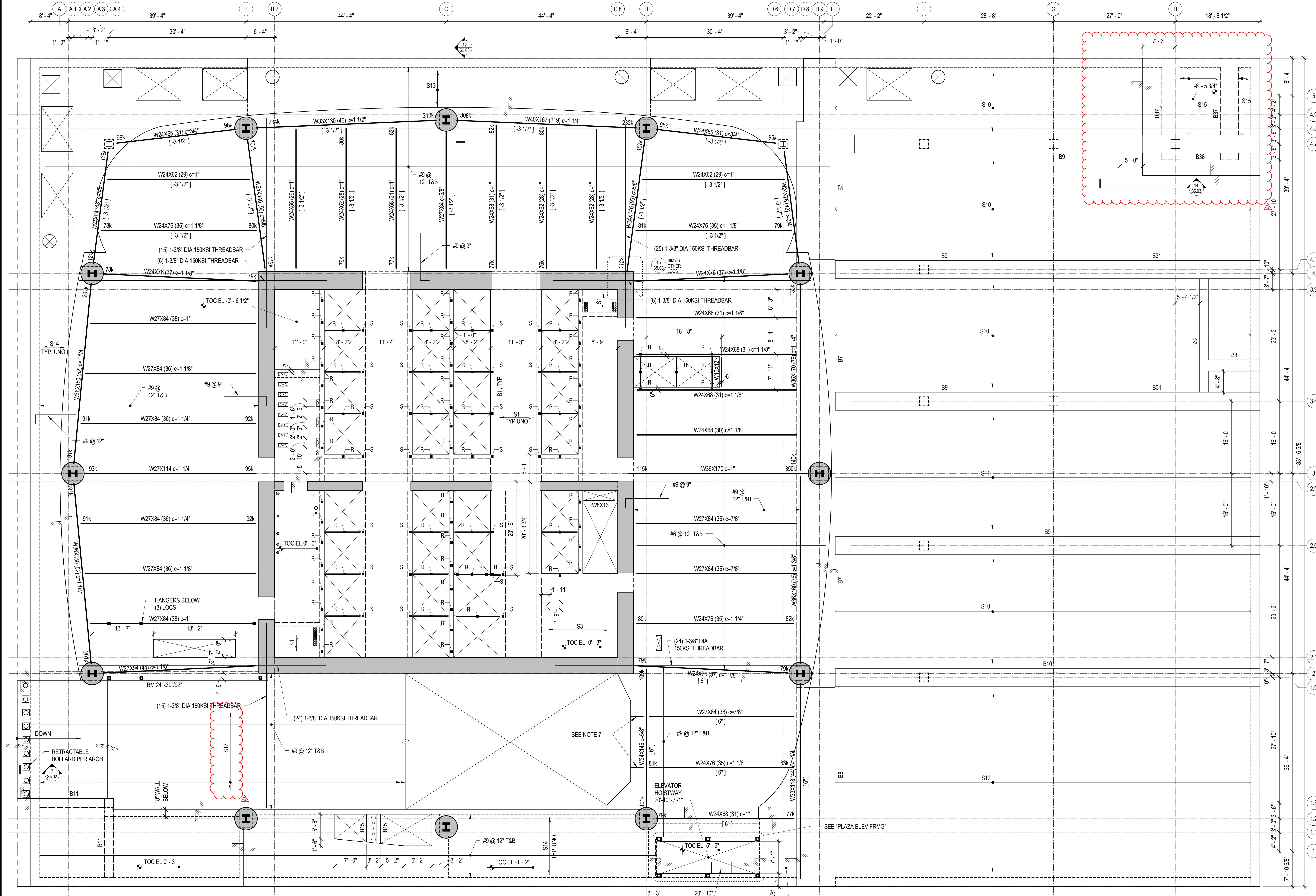
- NOTES:**
- LBE INDICATES LOAD BEARING ELEMENT MARK. SEE LOAD BEARING ELEMENT SCHEDULE FOR SIZE, DEPTH, AND REINFORCEMENT.
  - ( ) INDICATES TOP OF LBE. TOP OF LBE IS AT ELEVATION -69'-5" UNLESS NOTED OTHERWISE.
  - BUILDING ELEVATION 0'-0" = +5.05' CITY DATUM.
  - DESIGN OF LBE IS BASED ON THE "TRANSBAY TOWER GEOTECHNICAL DATA REPORT," BY ARUP, DATED JUNE 17, 2013.
  - THE CONTRACTOR SHALL COORDINATE AS REQUIRED THE INSTALLATION OF LBES WITH THE EXCAVATION SUPPORT SYSTEM.
  - REFER TO SHEET S4.01 FOR ADDITIONAL LBE NOTES AND DETAILS.







- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**REFERENCE DRAWINGS**

S0\_\_\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES  
 S1\_\_\_ LOAD MAPS  
 S2\_\_\_ PLANS  
 S3\_\_\_ ELEVATIONS  
 S4\_\_\_ TYPICAL DETAILS AND SCHEDULES  
 S5\_\_\_ CONCRETE SECTIONS AND DETAILS  
 S6\_\_\_ STEEL SECTIONS AND DETAILS

**NOTES**

- REFERENCE FLOOR ELEVATION IS 0'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 2'-0" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 3 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE TOWER STRUCTURAL SLAB IS 18 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #6@6" OC EACH WAY, TOP AND BOTTOM. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). THE REINFORCED CONCRETE STRUCTURAL SLAB AT THE TOWER PERIMETER IS A 18-INCH-THICK REINFORCED FLAT SLAB AND A 6-INCH-THICK REINFORCED ONE-WAY SLAB WITHIN THE CORE UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEETS S4.03 & S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- PROVIDE W76 SLAB SUPPORT PER DETAIL 2/S4.25.
- INDICATES SHAFT WALL SUPPORT COLUMN. SEE "LEVEL 1 SHAFT WALL SUPPORT FRAME" PARTIAL PLAN ON S2.70.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_  
 DRAWING TITLE: **LEVEL 1 FRAMING PLAN**  
 SHEET NO.: **S2.01**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window/Westing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 2 FRAMING PLAN**

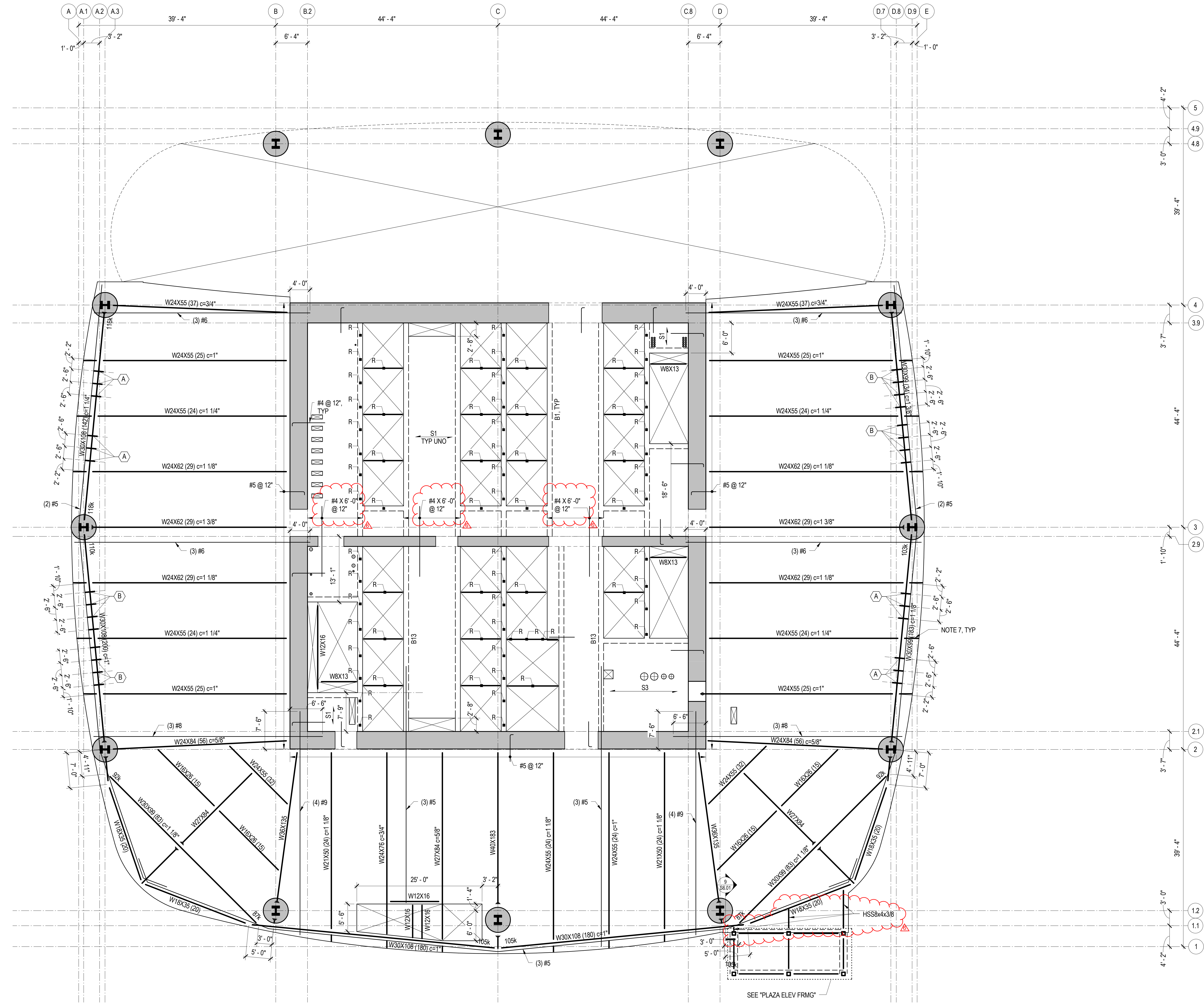
PROJECT NO. 08044 DRAWING NUMBER S2.02

REFERENCE DRAWINGS

- S0 ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1 LOAD MAPS
- S2 PLANS
- S3 ELEVATIONS
- S4 TYPICAL DETAILS AND SCHEDULES
- S5 CONCRETE SECTIONS AND DETAILS
- S6 STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 19'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 11" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W16 SLAB SUPPORT PER TYPICAL SLAB SUPPORT "STUB" DETAIL ON SHEET S4.25.





**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 37'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR COLUMNS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4@12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP-BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W6 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Structural Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPFP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

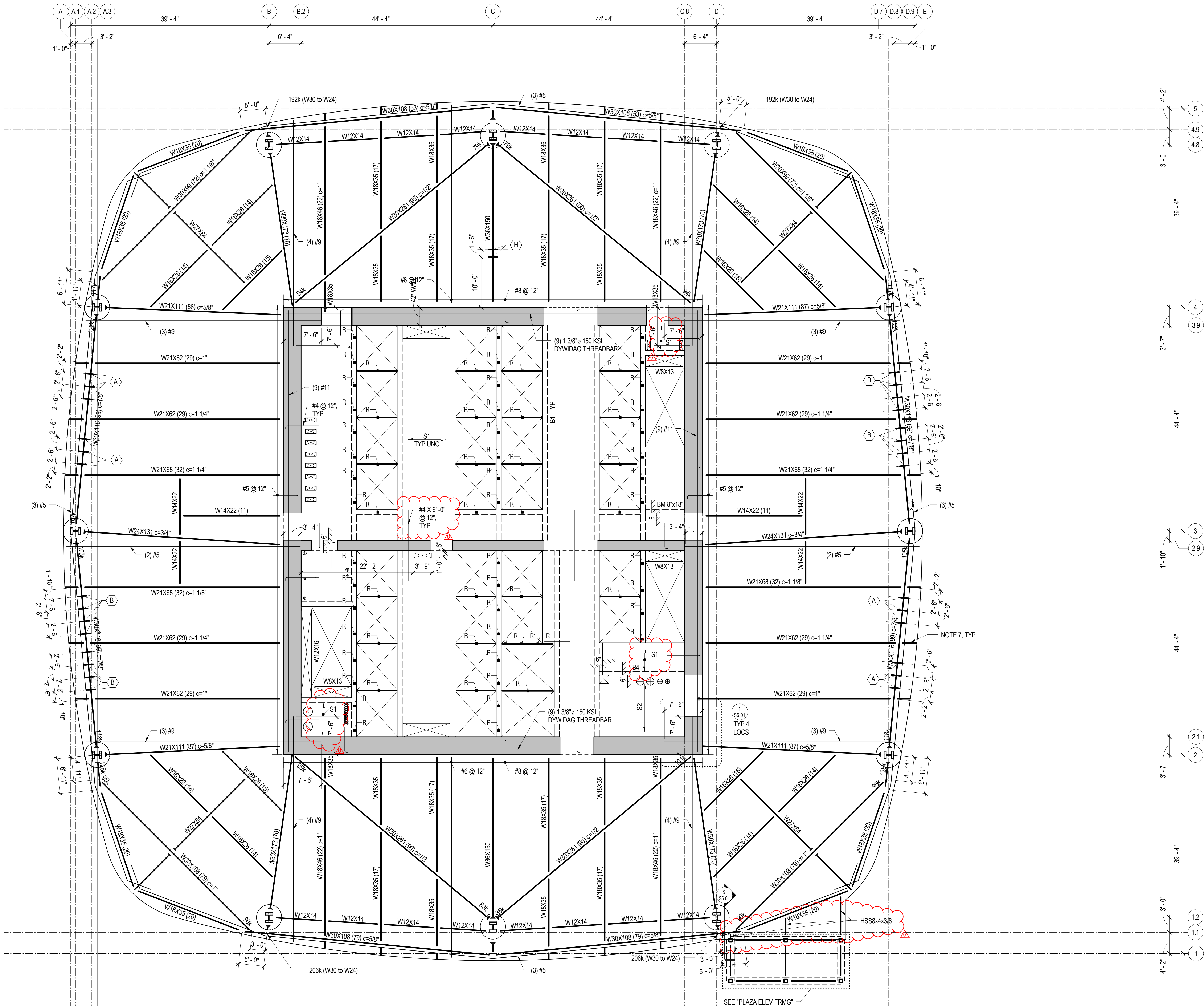
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



5  
4.9  
4.8  
4  
3.9  
3  
2.9  
2.1  
2  
1.2  
1.1  
1  
4'-2"  
3'-0"  
39'-4"  
44'-4"  
44'-4"  
39'-4"  
3'-0"  
3'-7"  
1'-10"  
44'-4"  
44'-4"  
39'-4"  
3'-0"  
4'-2"

4/29/2014 10:51:40 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

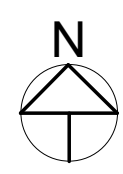
**LEVEL 3 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 3 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.03**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

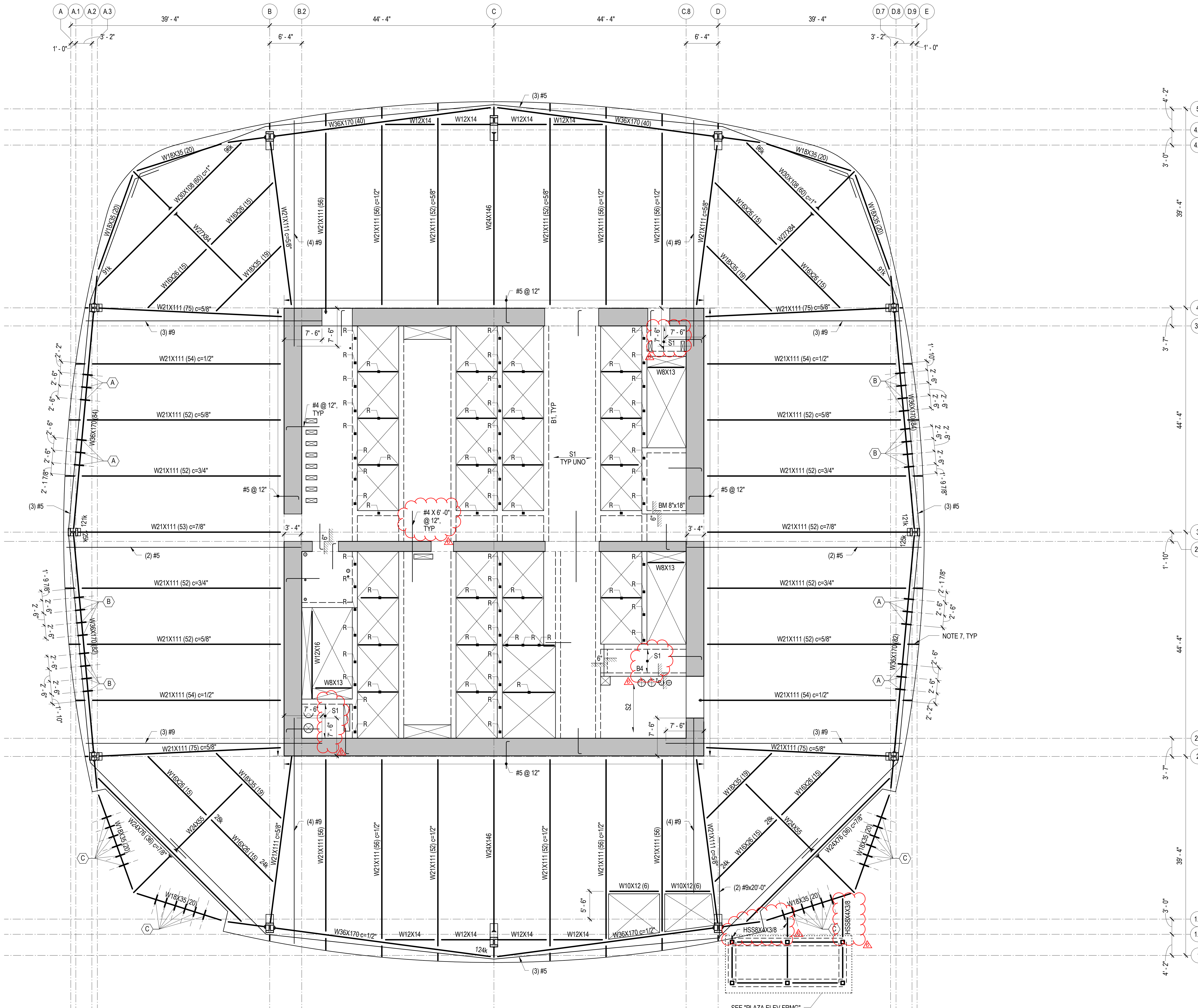
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 55'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ONSHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W16 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 4 FRAMING PLAN**

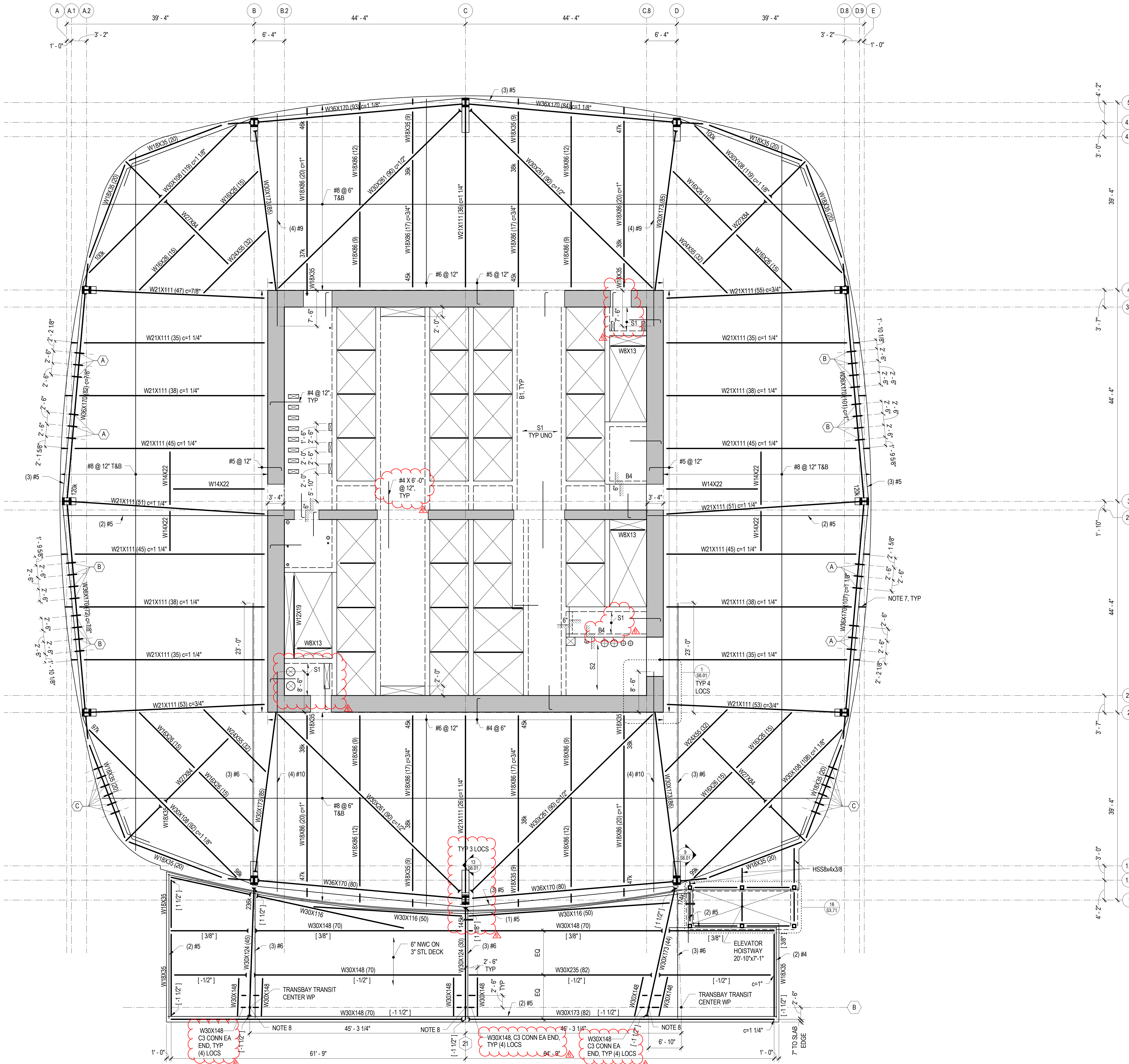


**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 70'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W16 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB\* DETAIL ON SHEET S4.25.
8. PROVIDE EARTHQUAKE PROTECTION SYSTEMS FP23870/11 SINGLE PENDULUM BEARING.



5  
4.9  
4.8  
4  
3.9  
4  
3  
2.9  
2.1  
2  
1.2  
1.1  
1  
4'-2"  
3'-0"  
39'-4"  
44'-4"  
39'-4"  
3'-7"  
44'-4"  
44'-4"  
3'-7"  
39'-4"  
3'-0"  
4'-2"

**LEVEL 5 FRAMING PLAN**  
1/8" = 1'-0"

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	27 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 5 FRAMING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

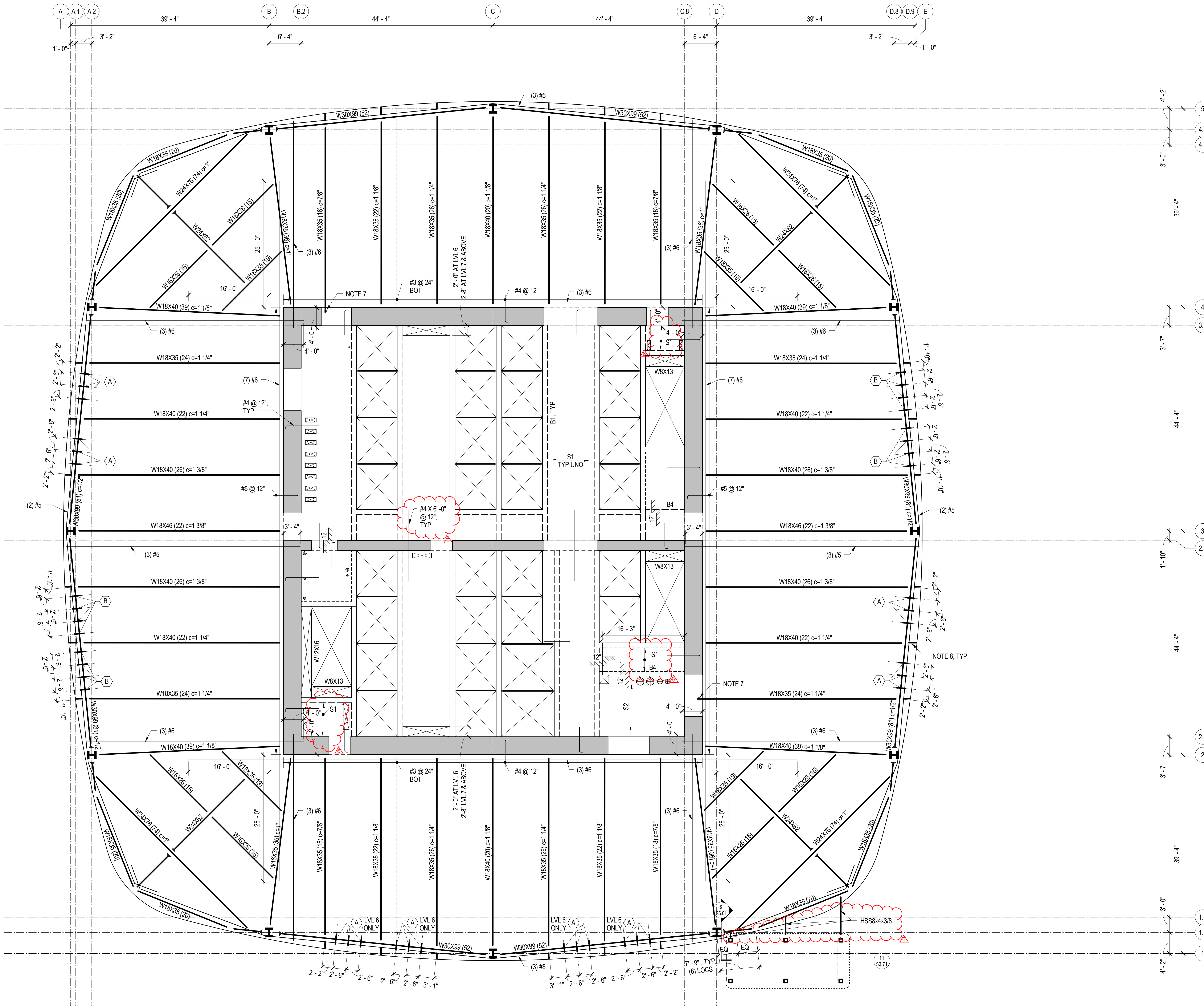
- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
LEVEL 6: +85'-6"  
LEVEL 7: +100'-3"  
LEVEL 8: +115'-0"  
LEVEL 9: +129'-9"  
LEVEL 10: +144'-6"  
LEVEL 11: +159'-3"  
LEVEL 12: +174'-0"  
LEVEL 13: +188'-9"  
LEVEL 14: +203'-6"

REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.

- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_MS2013\_1.rvt

LEVELS 6-14 FRAMING PLAN

1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVELS 6-14 FRAMING PLAN

PROJECT NO. 08044

DRAWING NUMBER S2.06



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

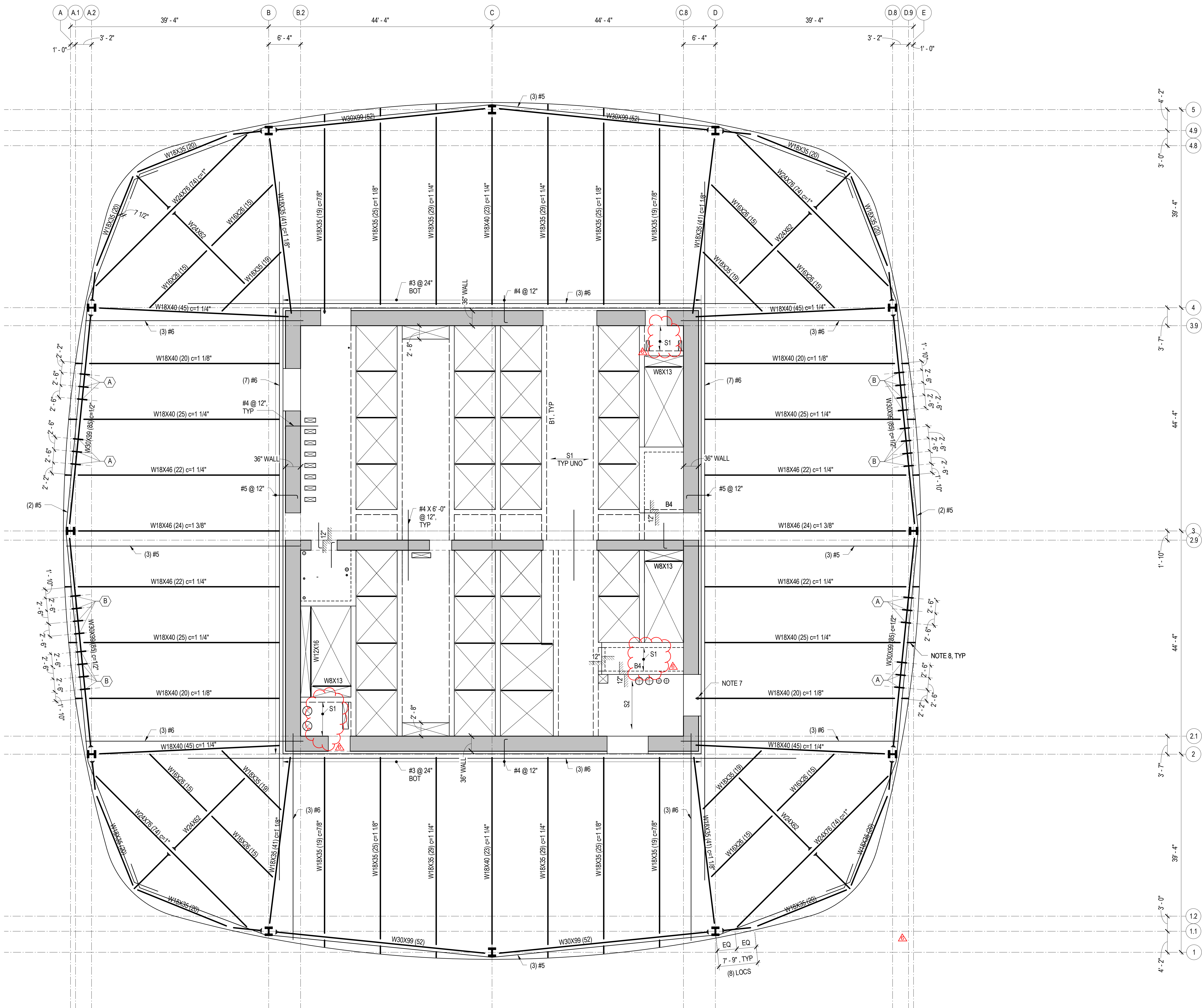
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 218'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR #6@12, 3#W2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE 'TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING' ON SHEET S4.25.
8. PROVIDE W/6 SLAB SUPPORT PER 'TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



4/29/2014 10:31:56 PM C:\Revit\Transbay\lw\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	DRAWING NUMBER
LEVEL 15 FRAMING PLAN	S2.15

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON/HEATON ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

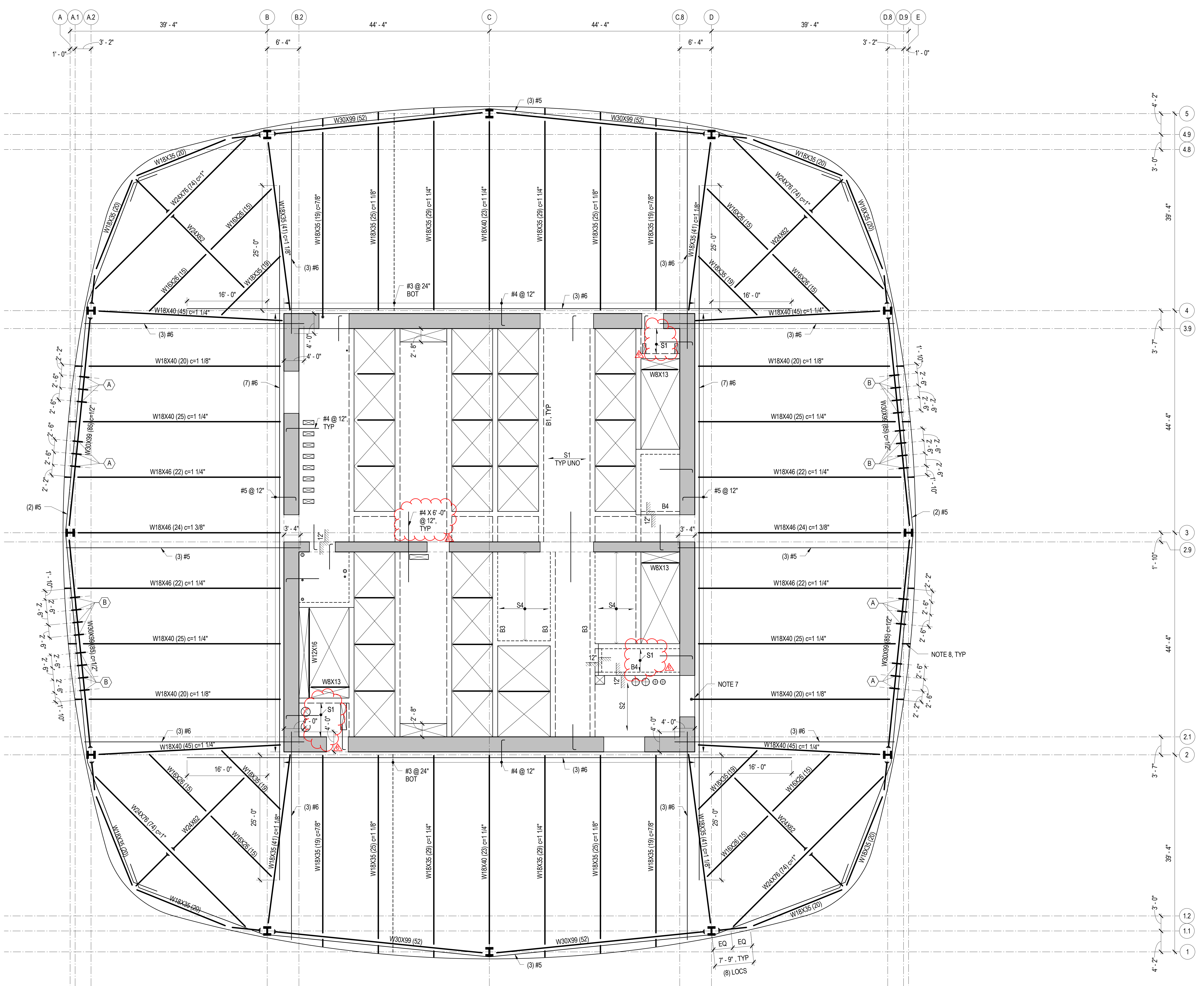
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 233'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR #6@12.3xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE 'TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING' ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER 'TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



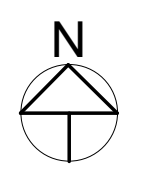
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	
NO.	DATE	STRUCTURAL	ISSUE

DRAWING TITLE

**LEVEL 16 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.16**







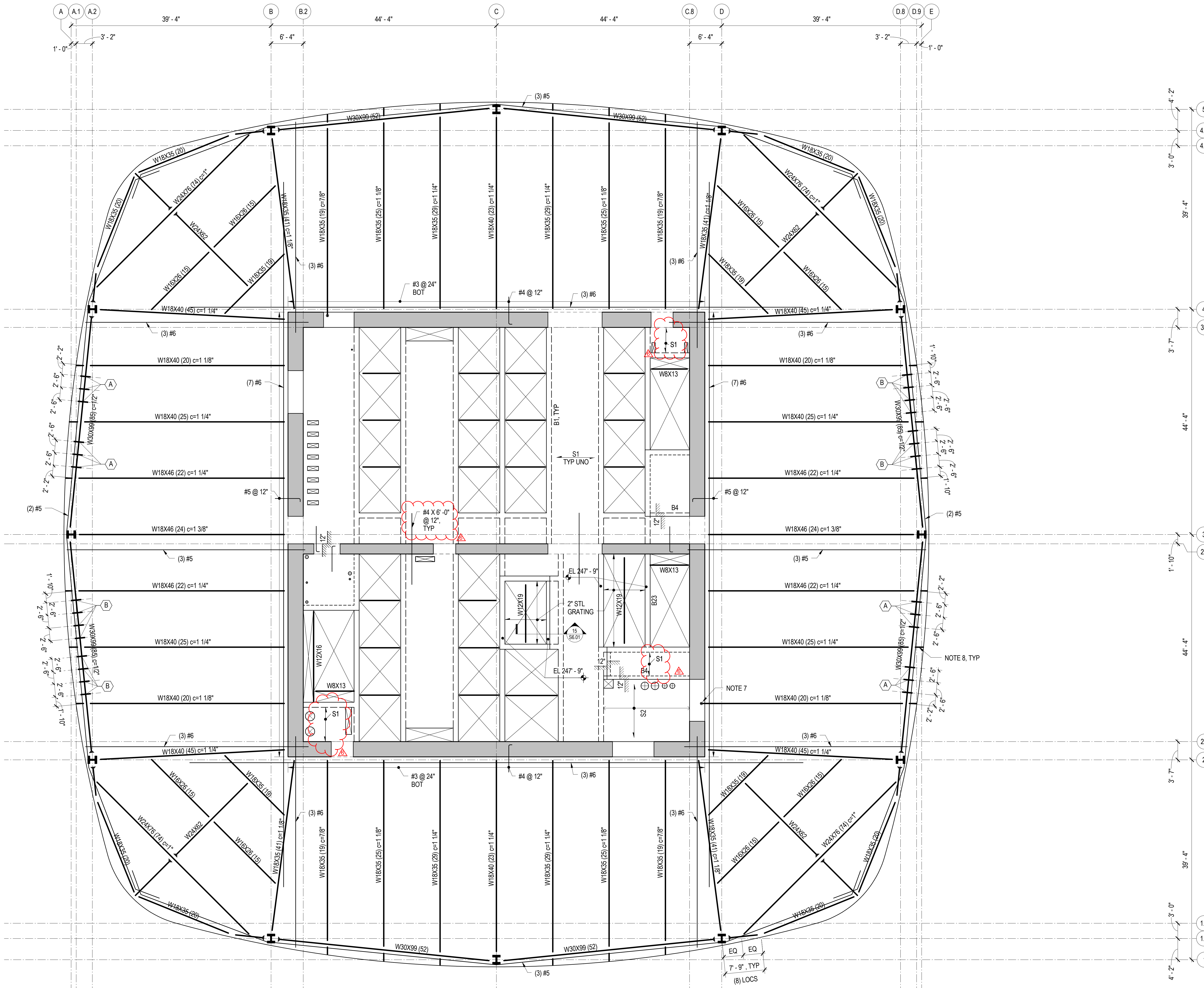
**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 247'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 10:52:03 PM C:\Revit\Transbay\17r\_WS2013\_kmh.rvt

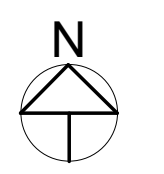
**LEVEL 17 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 17 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.17





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

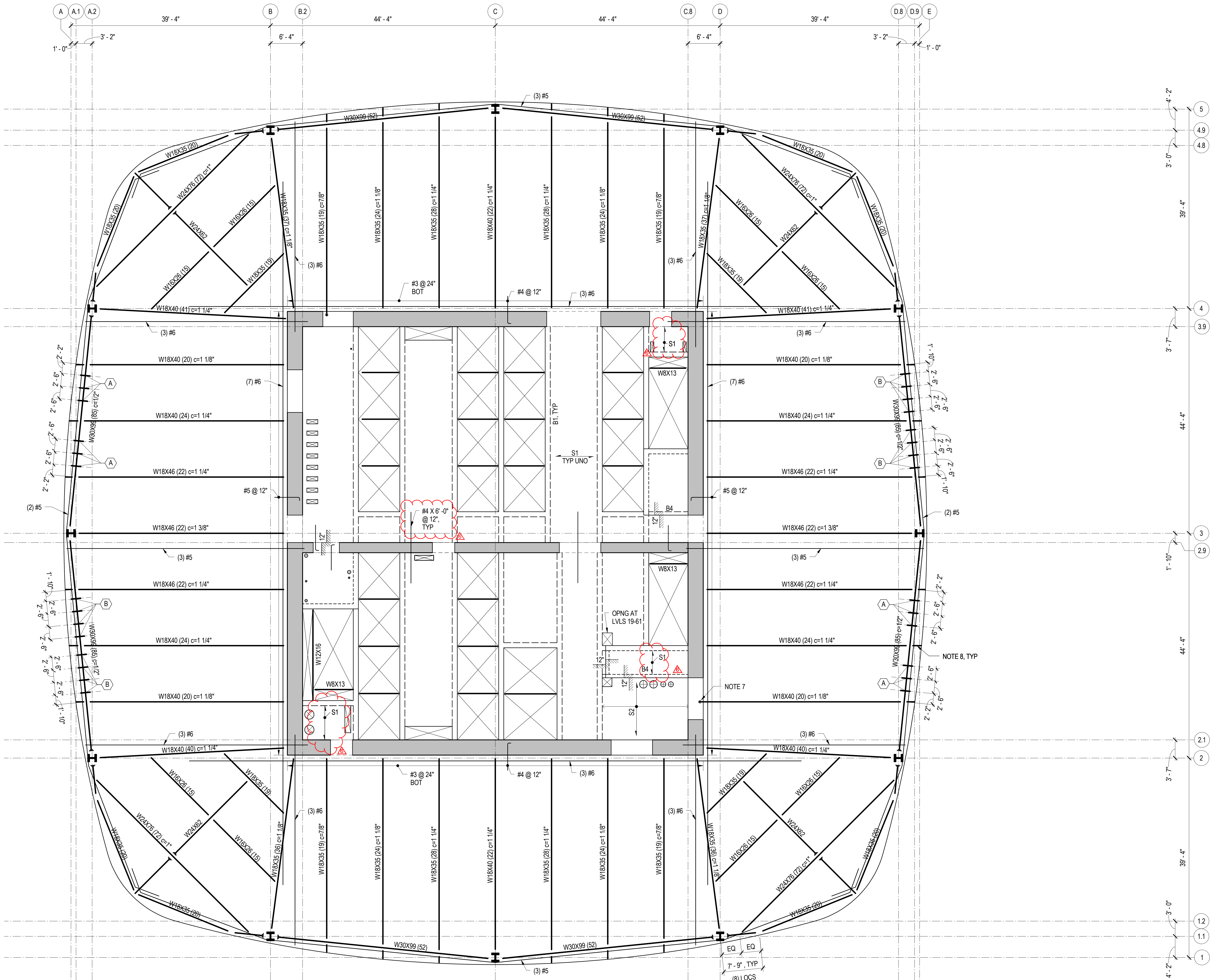
- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
LEVEL 18: +262'-6"  
LEVEL 19: +277'-3"  
LEVEL 20: +292'-0"  
LEVEL 21: +306'-9"  
LEVEL 22: +321'-6"  
LEVEL 23: +336'-3"  
LEVEL 24: +351'-0"  
LEVEL 25: +365'-9"  
LEVEL 26: +380'-6"

REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.

2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9 REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:06 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVELS 18-24 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVELS 18-24 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.18



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

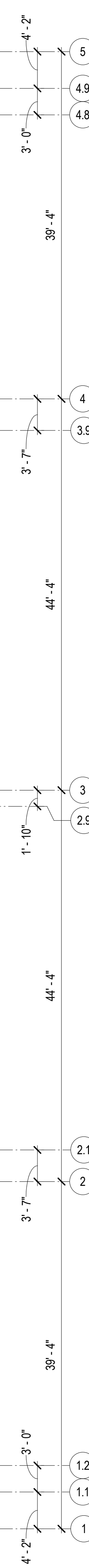
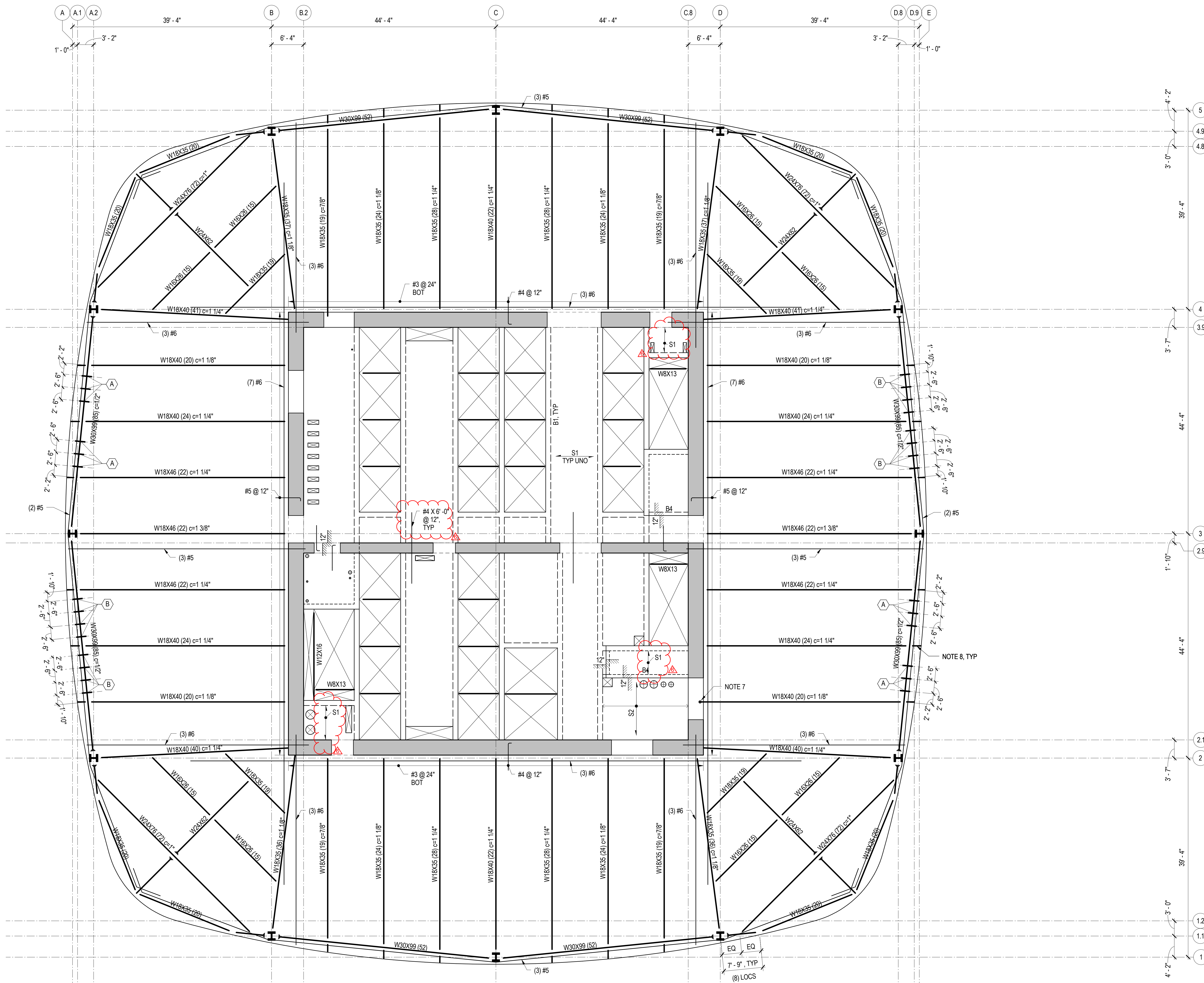
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 365'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:32:10 PM C:\Revit\Transbay\wr\_MS2013\_kmh.rvt

**LEVEL 25 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 25 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.25



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

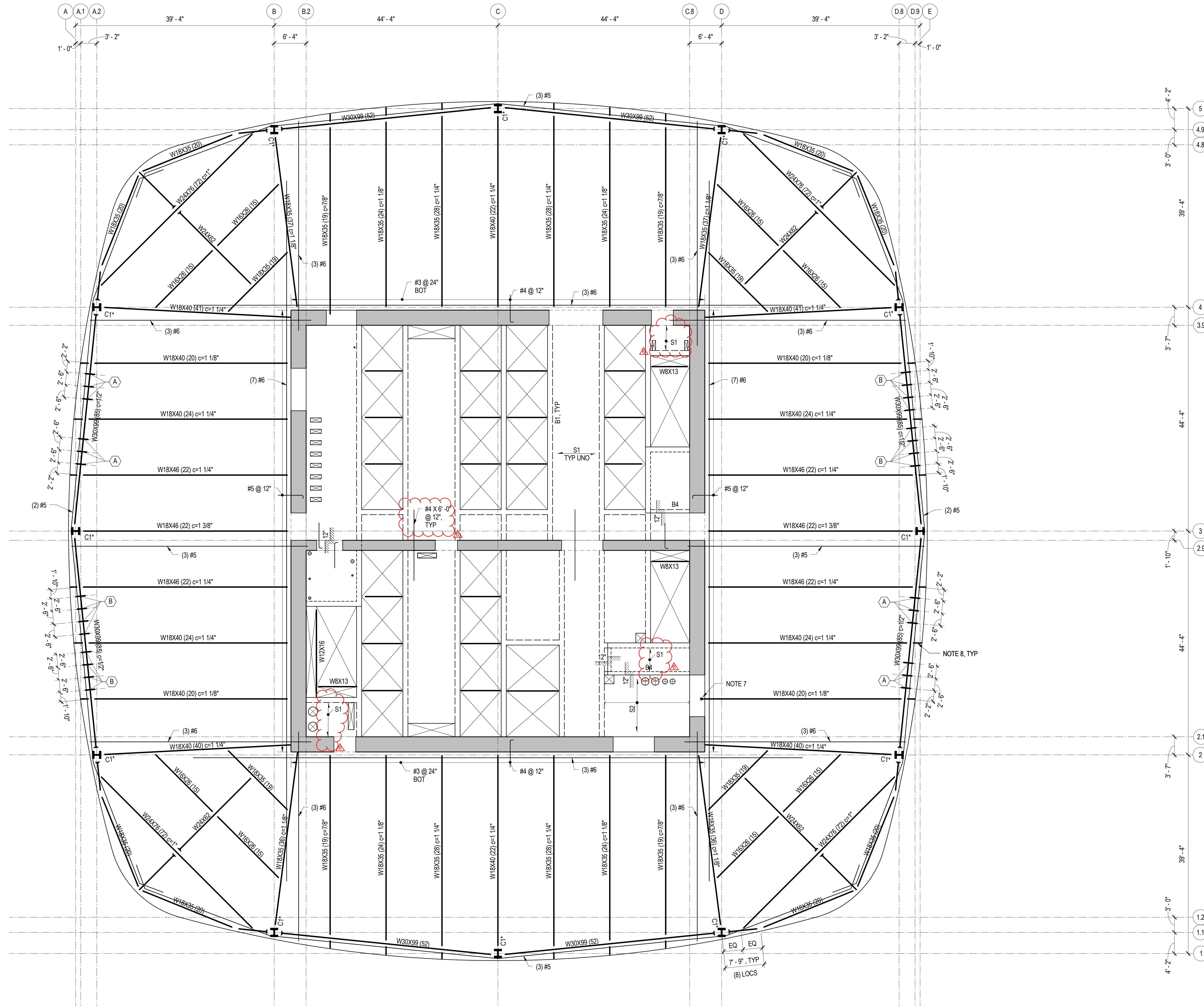
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 380'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:32:15 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

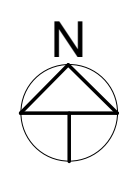
**LEVEL 26 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 26 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S2.26**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

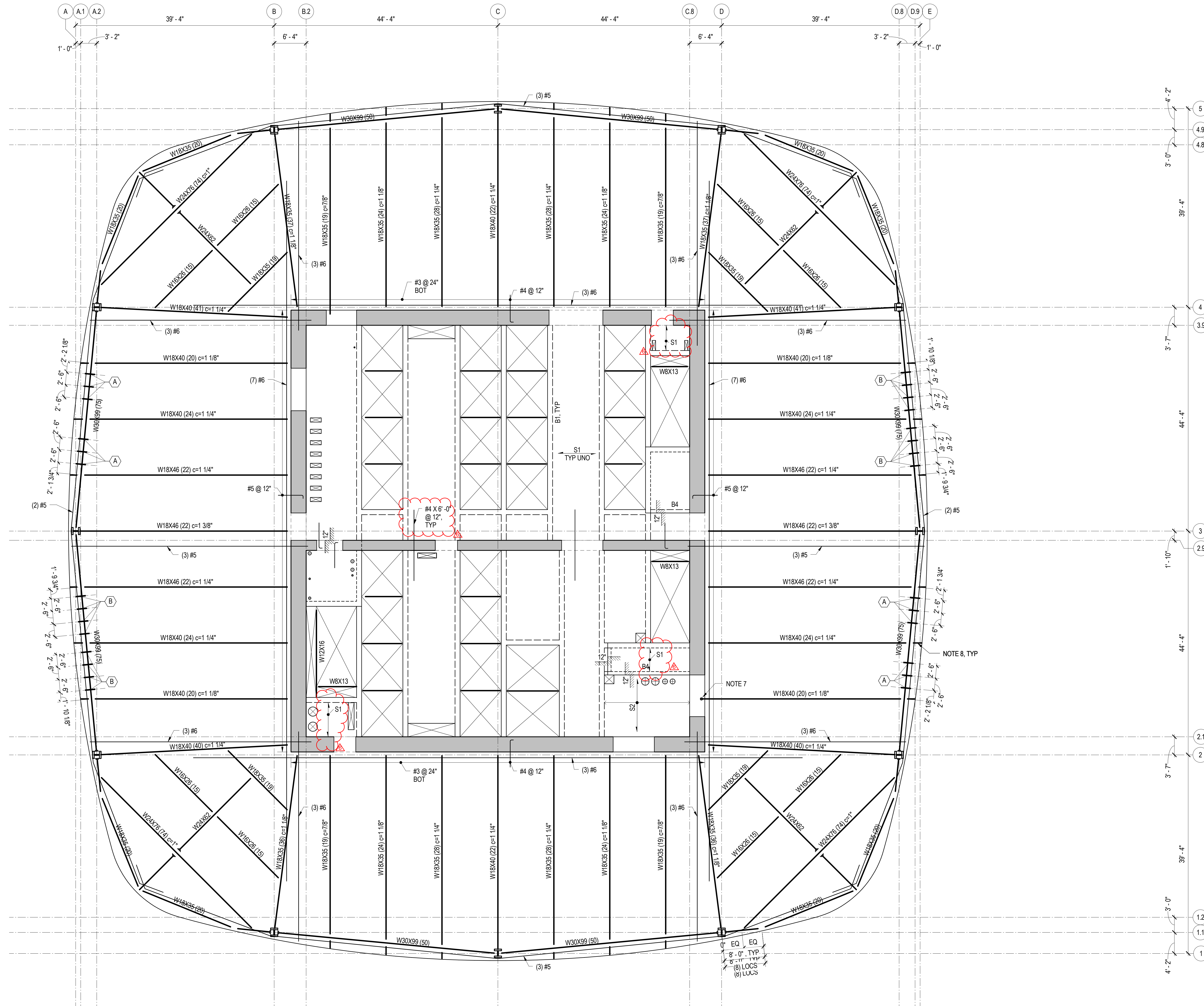
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 395'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:32:19 PM C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

**LEVEL 27 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 27 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.27**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

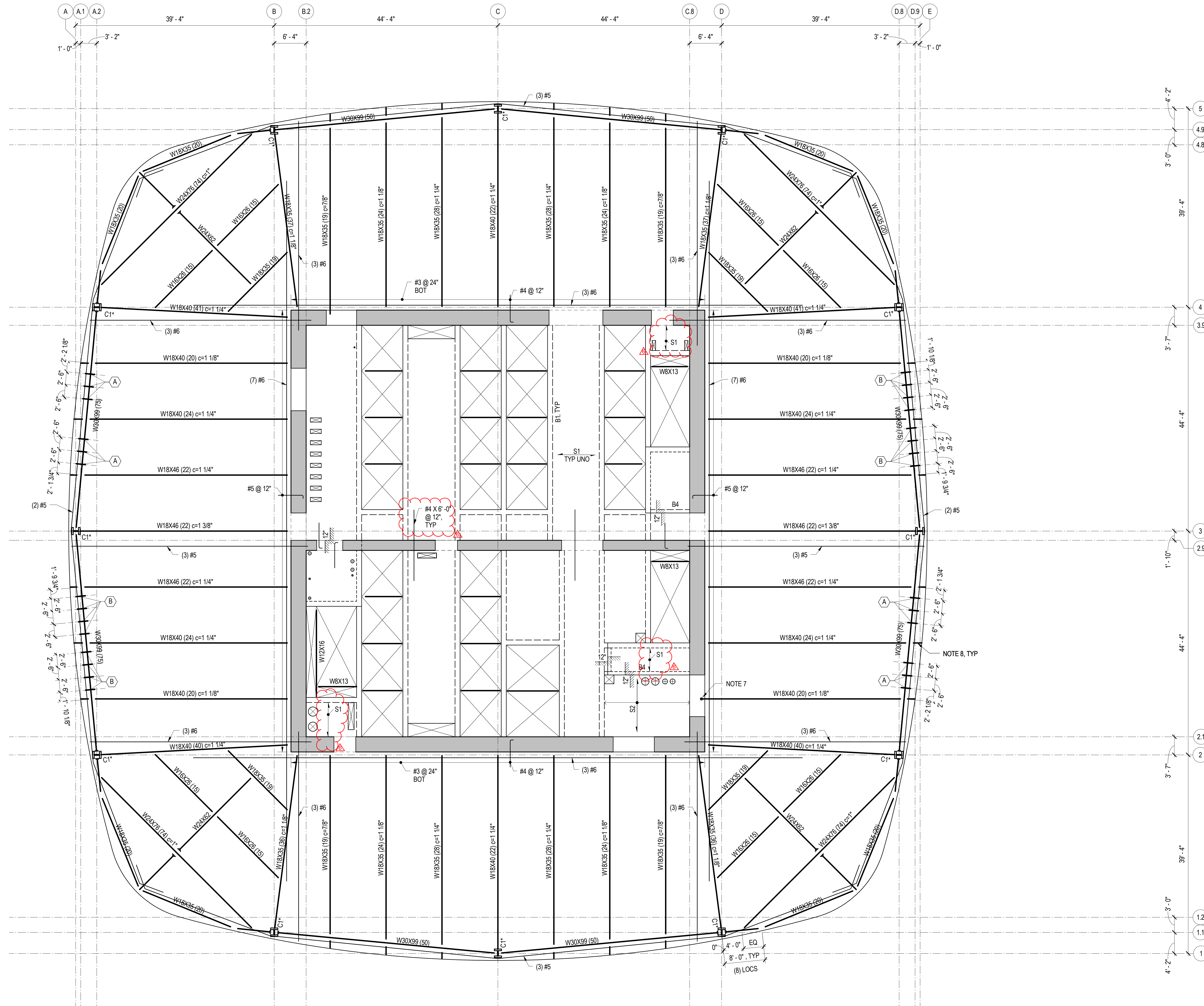
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 410'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:24 PM C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

**LEVEL 28 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 28 FRAMING PLAN**

PROJECT NO. 08044 DRAWING NUMBER **S2.28**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

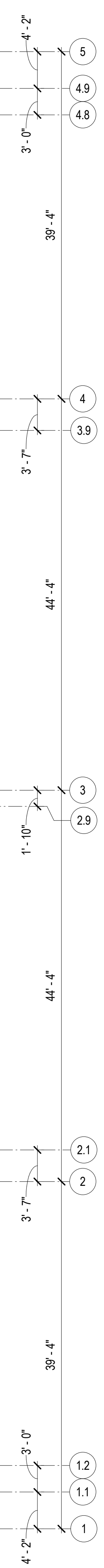
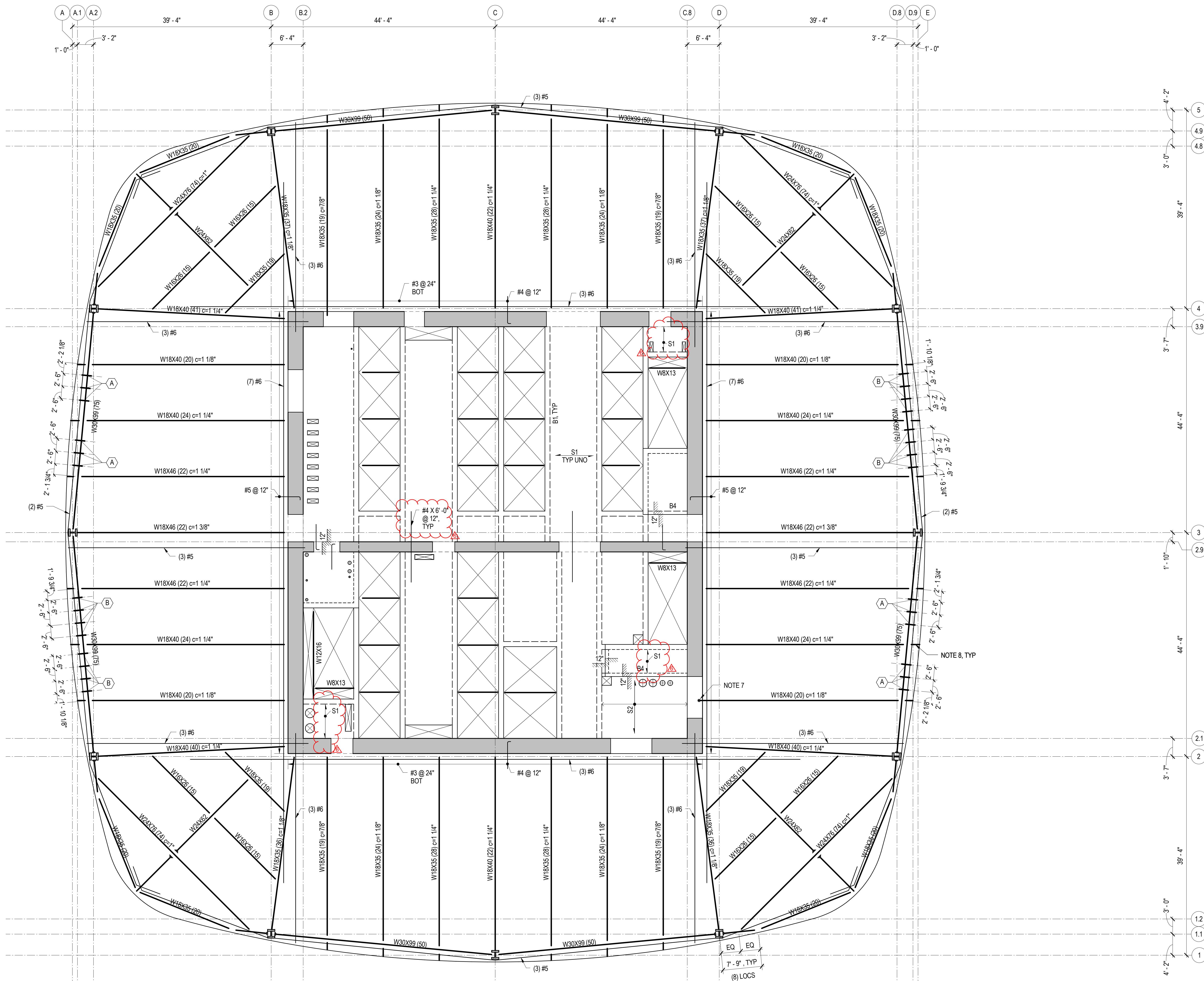
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 424'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/30/2014 11:17:27 AM C:\Revit\Transbay\Twr\_MS2013\_1.rvt

**LEVEL 29 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 29 FRAMING PLAN**

NO. PROJECT NO. 08044

DRAWING NUMBER **S2.29**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

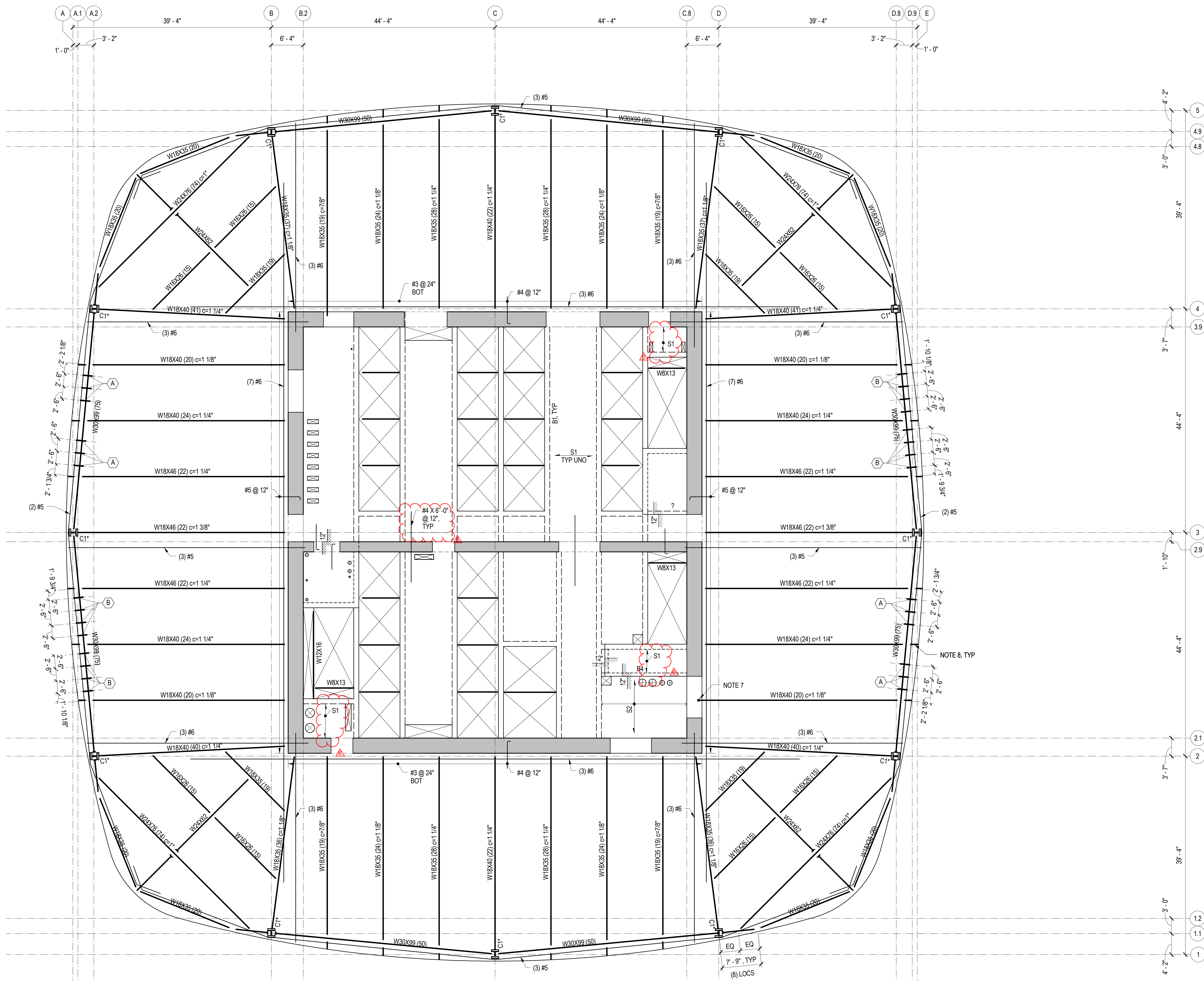
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 439'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WS2013\_18.rvt

**LEVEL 30 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

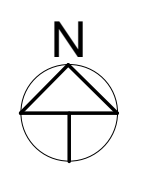
CAD FILENAME

DRAWING TITLE

**LEVEL 30 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.30**







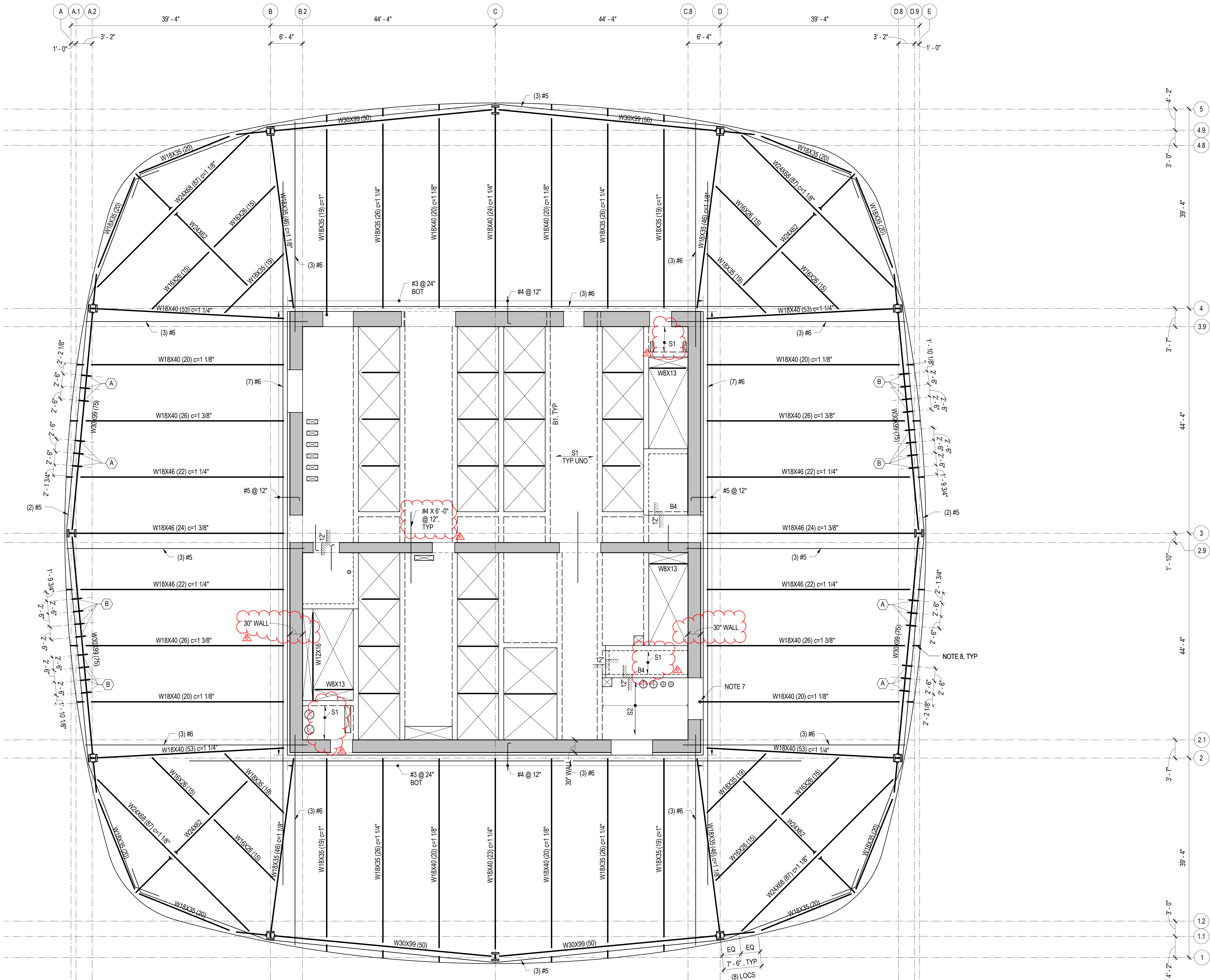
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 454'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:33 PM C:\Revit\Transbay\wr\_ws2013\_kmh.rvt

**LEVEL 31 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 31 FRAMING PLAN**

NO. PROJECT NO. **08044** DRAWING NUMBER **S2.31**



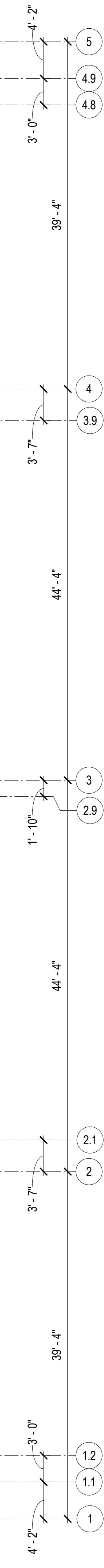
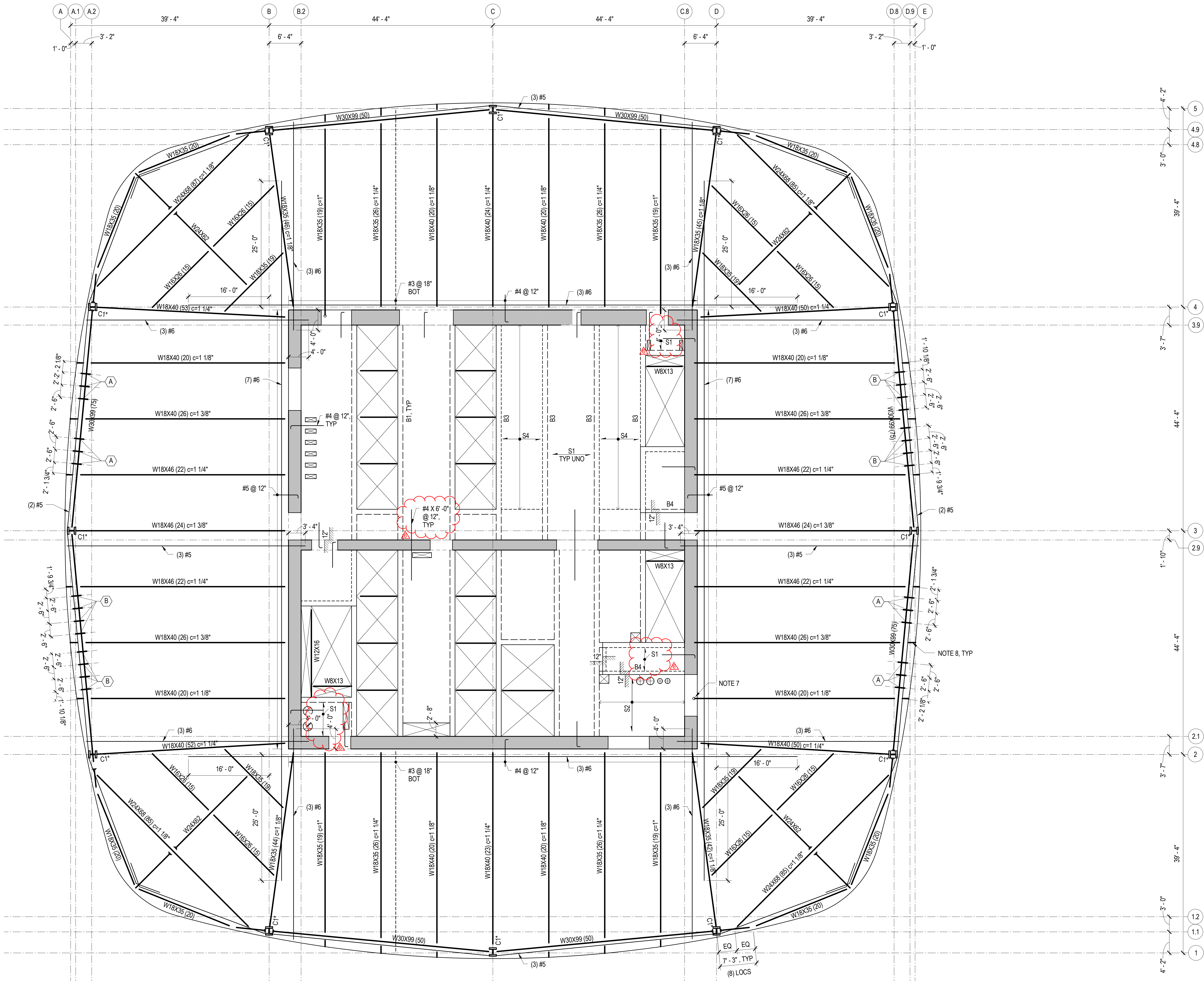
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEUMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 469'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_MS2013\_18.rvt

**LEVEL 32 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME  
DRAWING TITLE

**LEVEL 32 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.32



**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 483'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

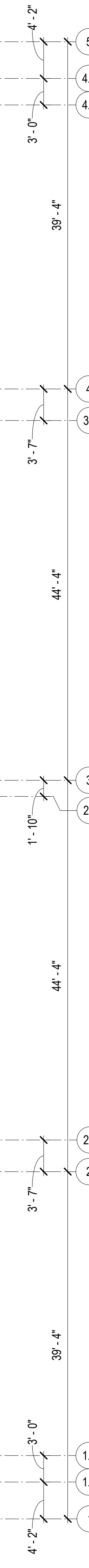
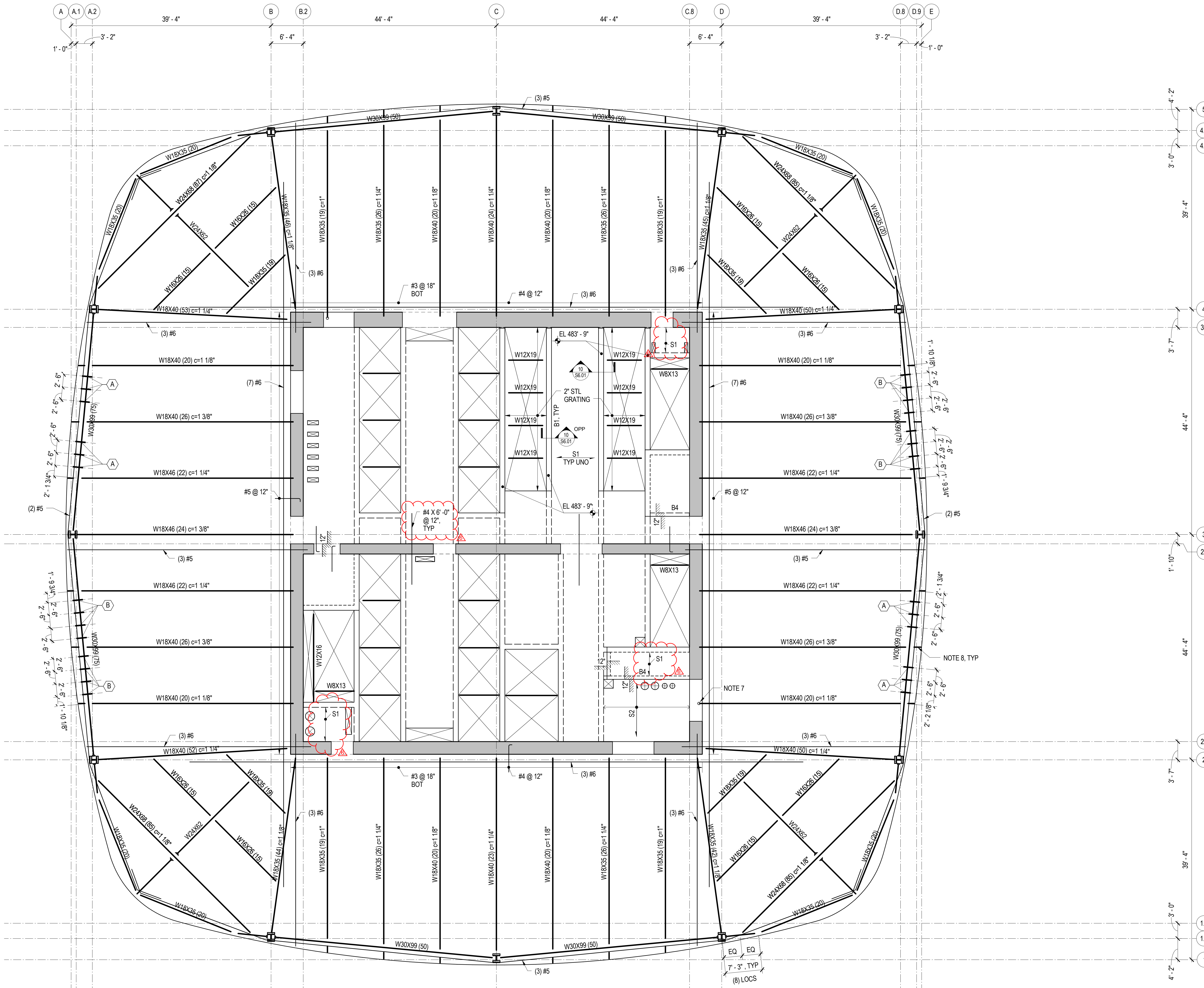
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 10:52:41 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

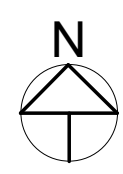
**LEVEL 33 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 33 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.33





REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 498'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.3xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 34 FRAMING PLAN

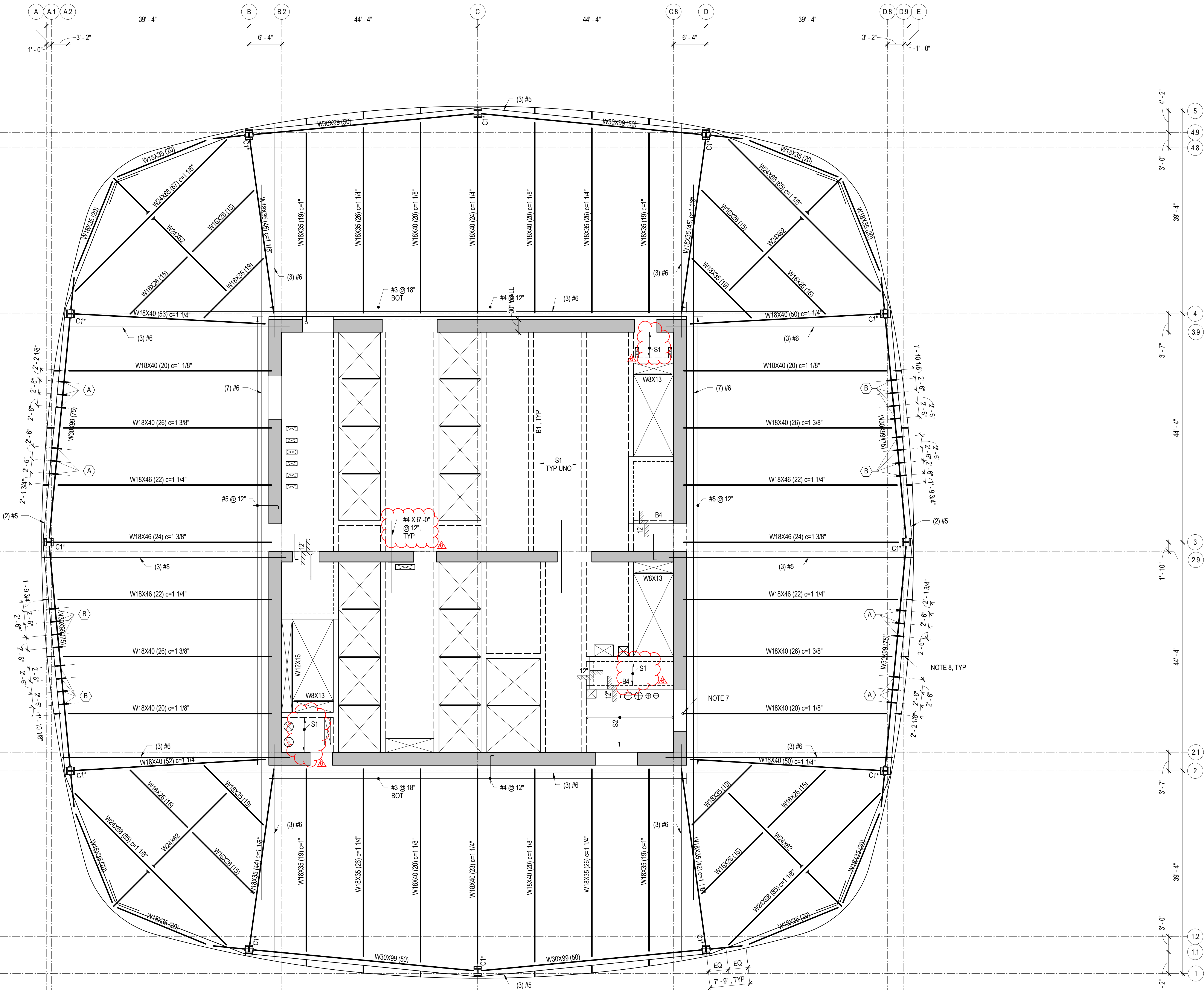
NO.

PROJECT NO.

08044

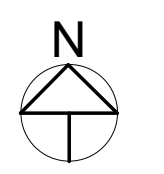
DRAWING NUMBER

S2.34



C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL 34 FRAMING PLAN**  
1/8" = 1'-0"





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

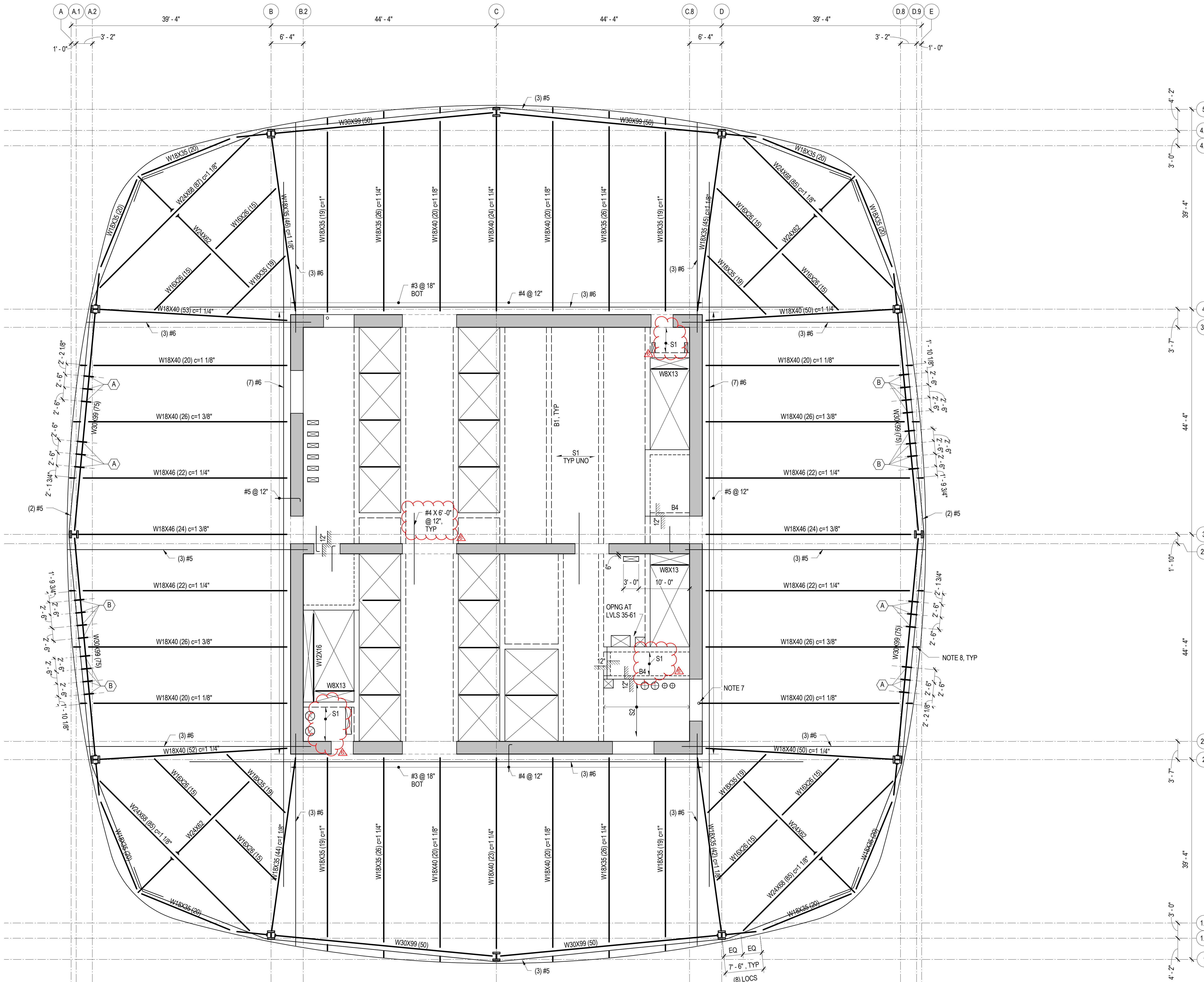
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 513'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:49 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

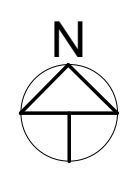
1 LEVEL 35 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 35 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.35





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window/Westing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

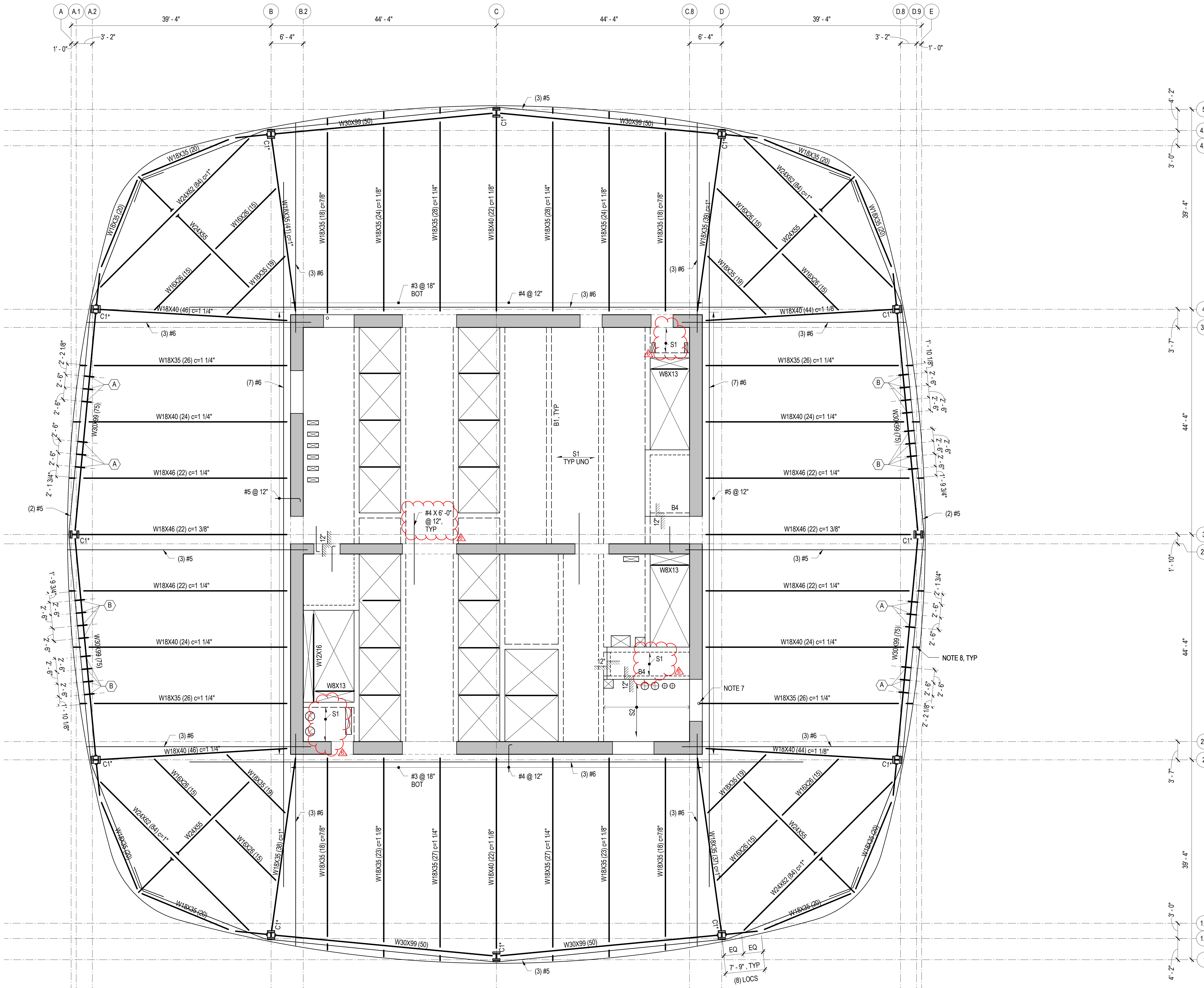
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 528'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENINGS" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:53 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

1 LEVEL 36 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

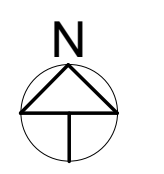
CAD FILENAME

DRAWING TITLE

**LEVEL 36 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.36**





**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 542'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Acoustical Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

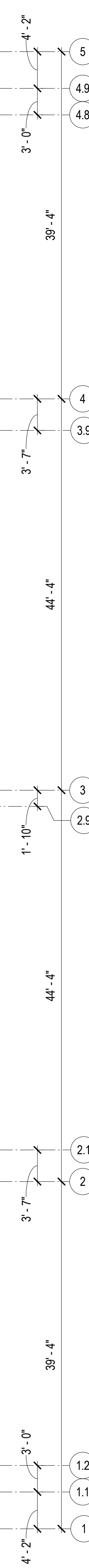
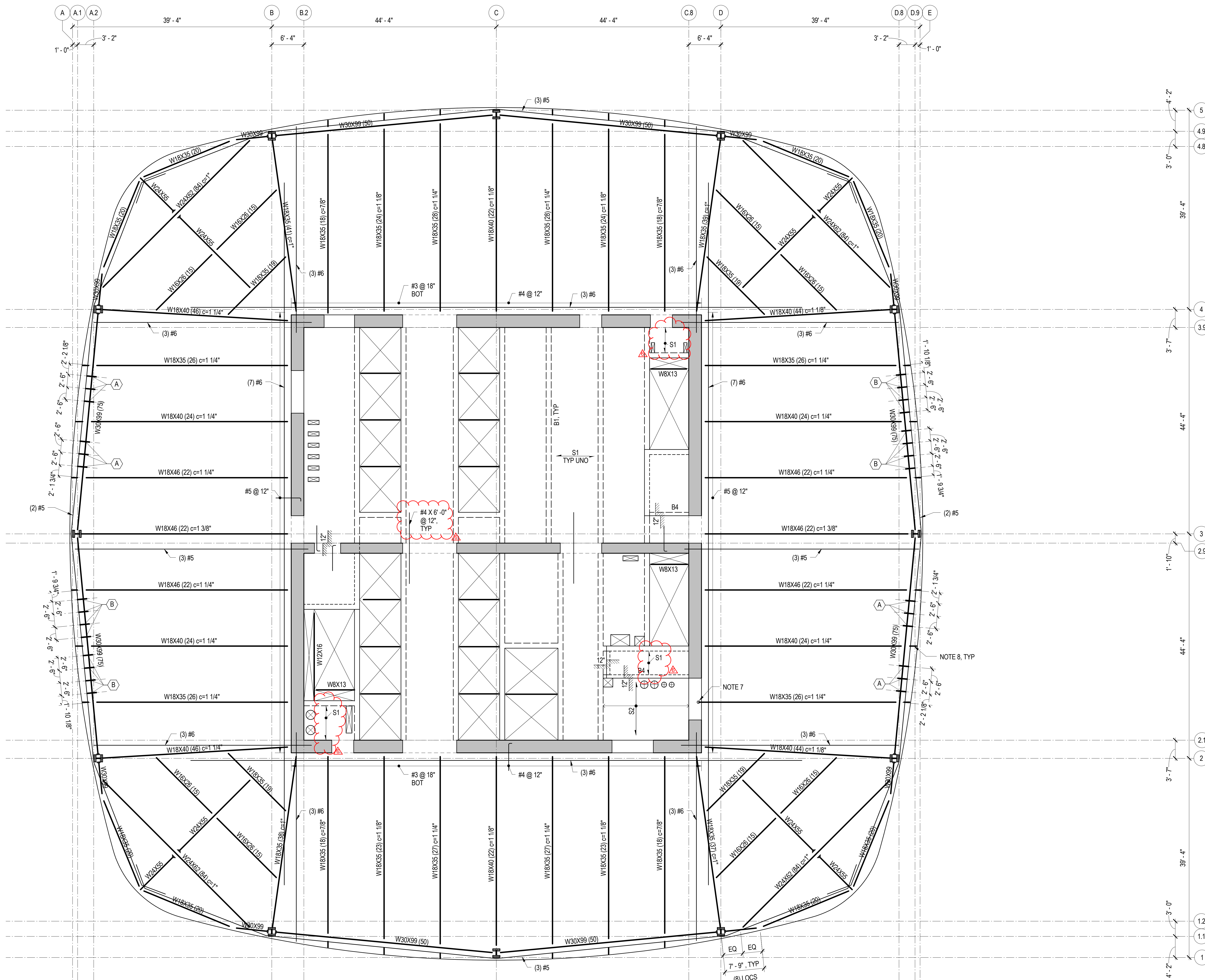
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

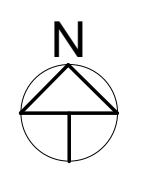
**LEVEL 37 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.37**



4/29/2014 10:52:54 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

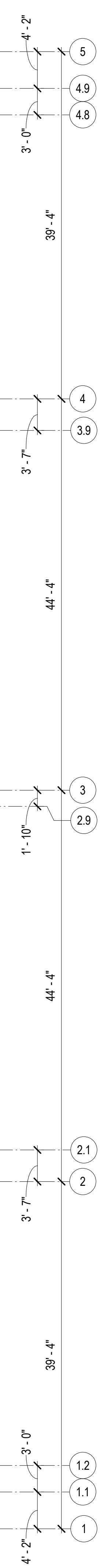
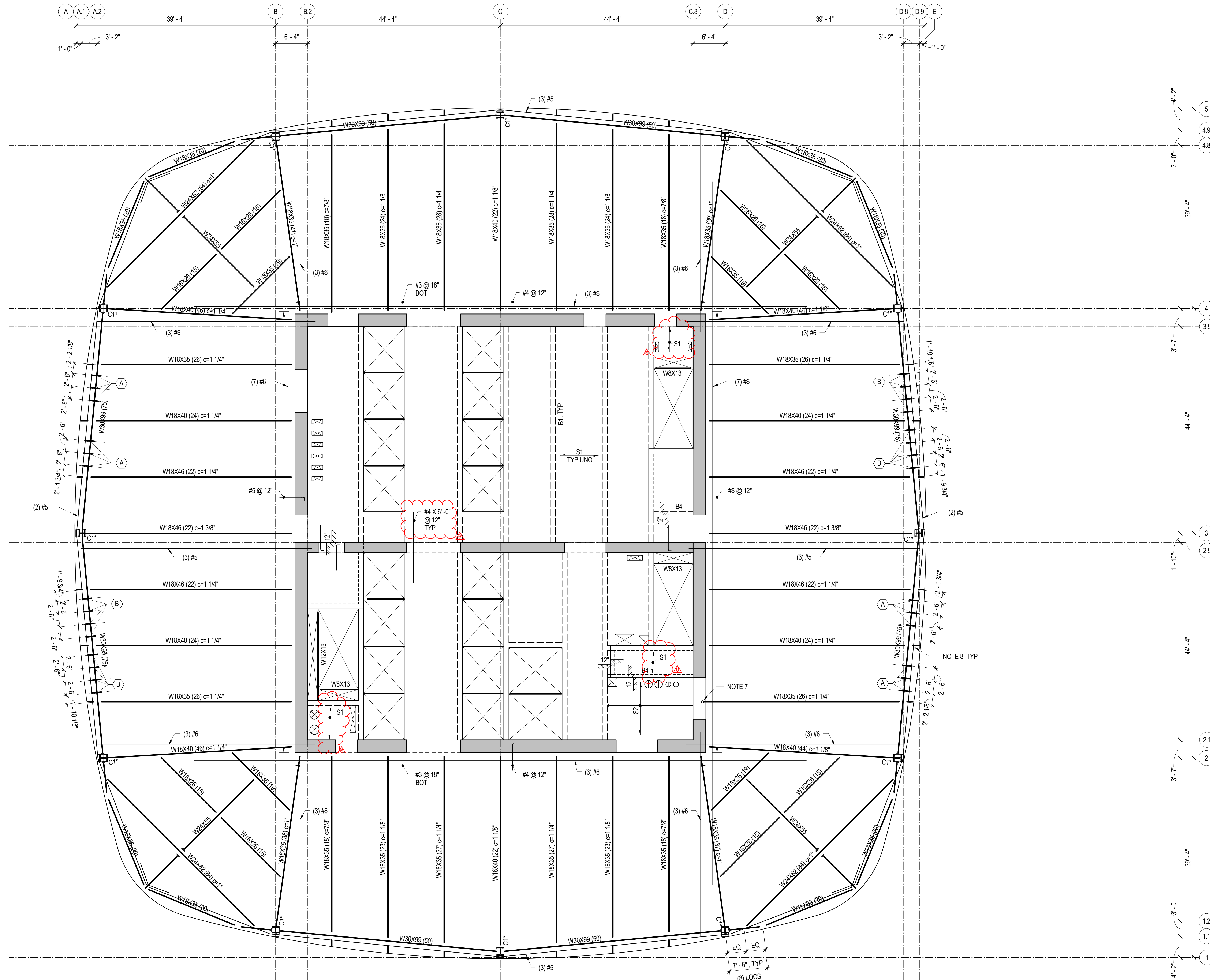
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 557'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:58 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 38 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 38 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER **S2.38**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

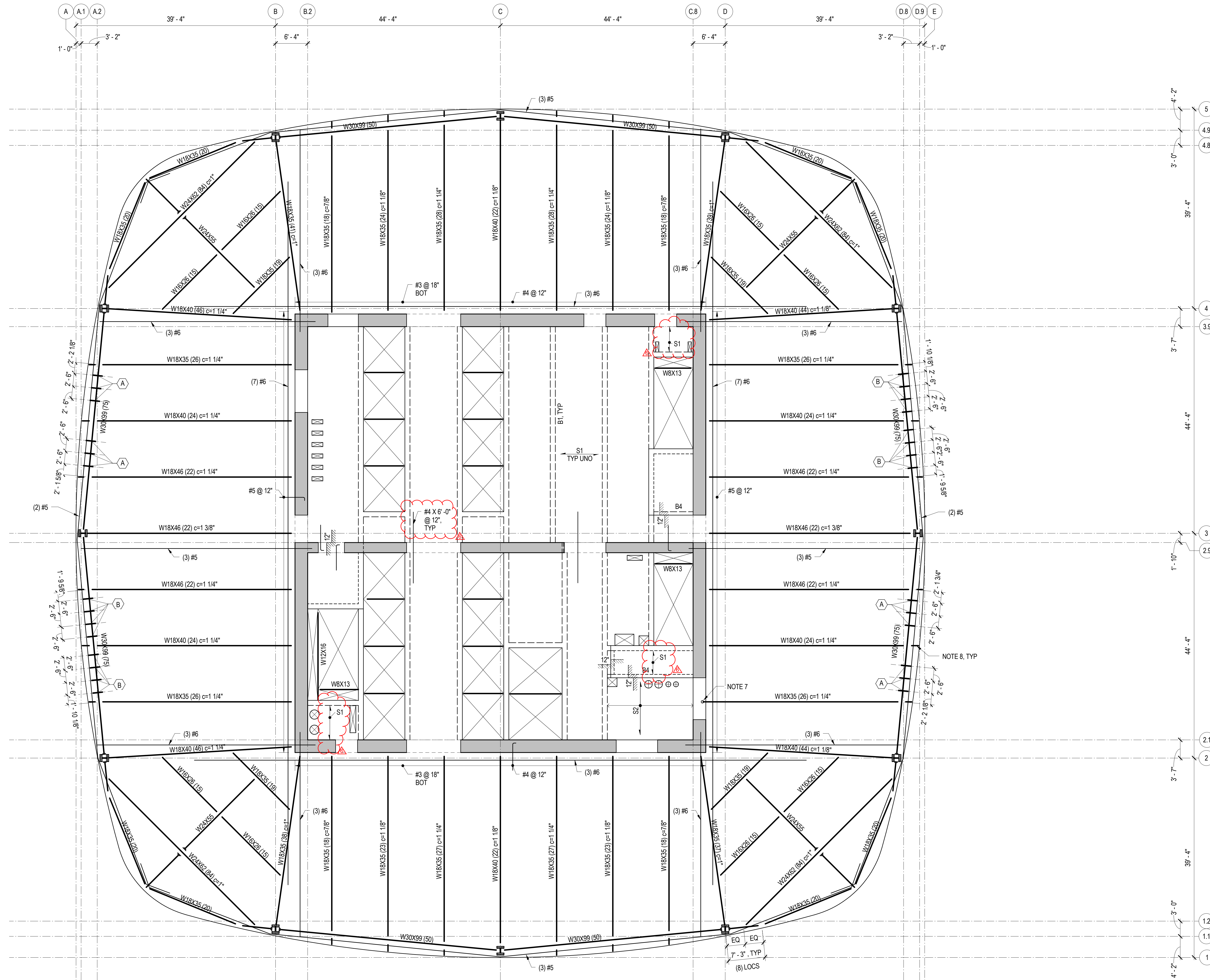
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 572'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:02 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 39 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 39 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.39



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

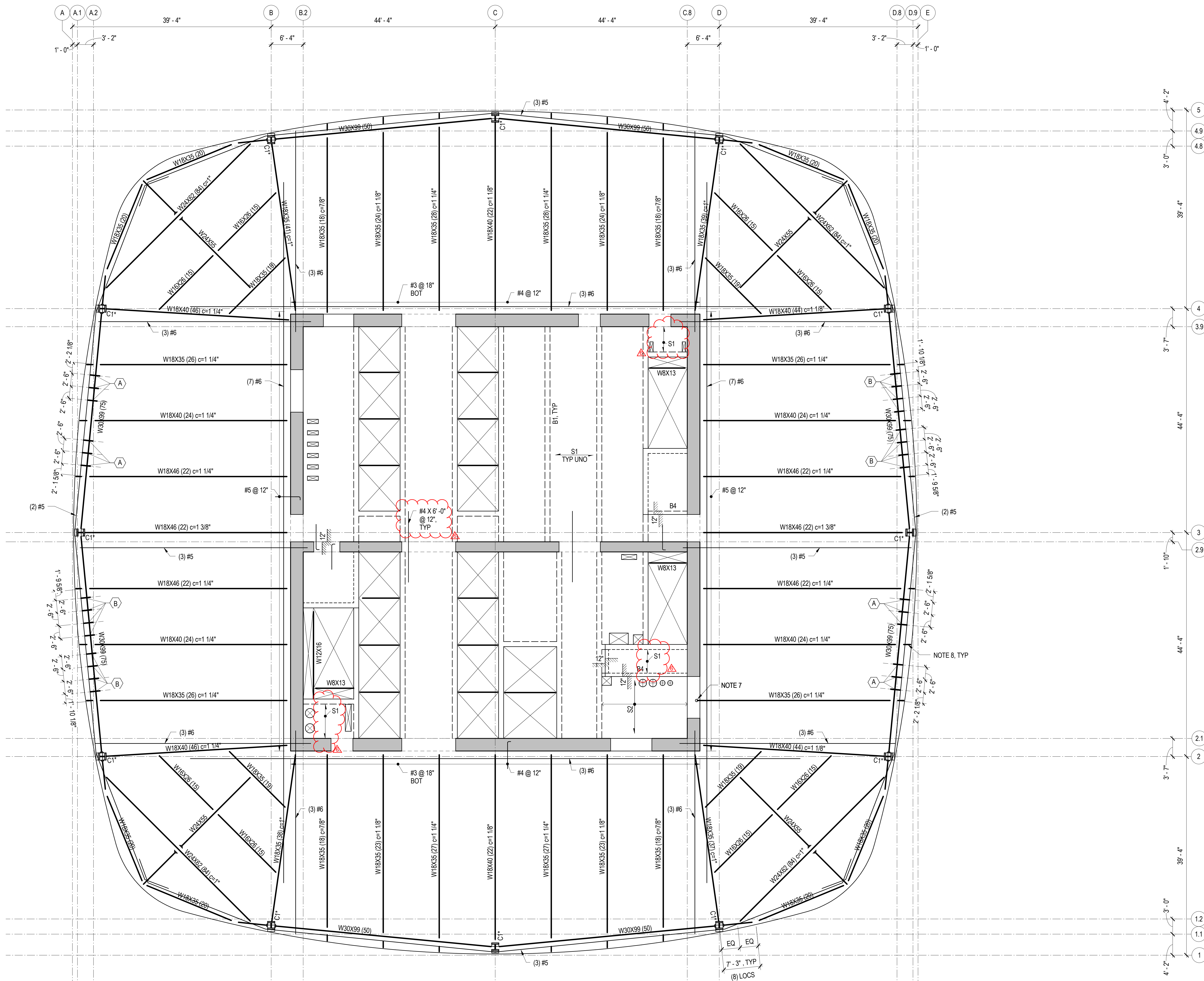
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 587'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:06 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

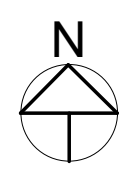
**LEVEL 40 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 40 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.40**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

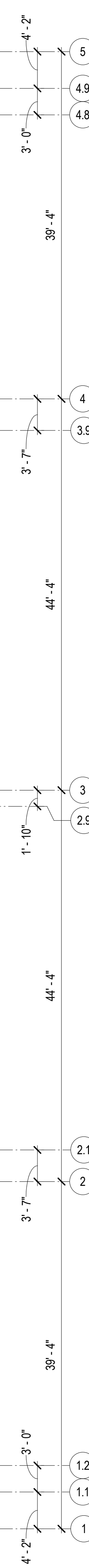
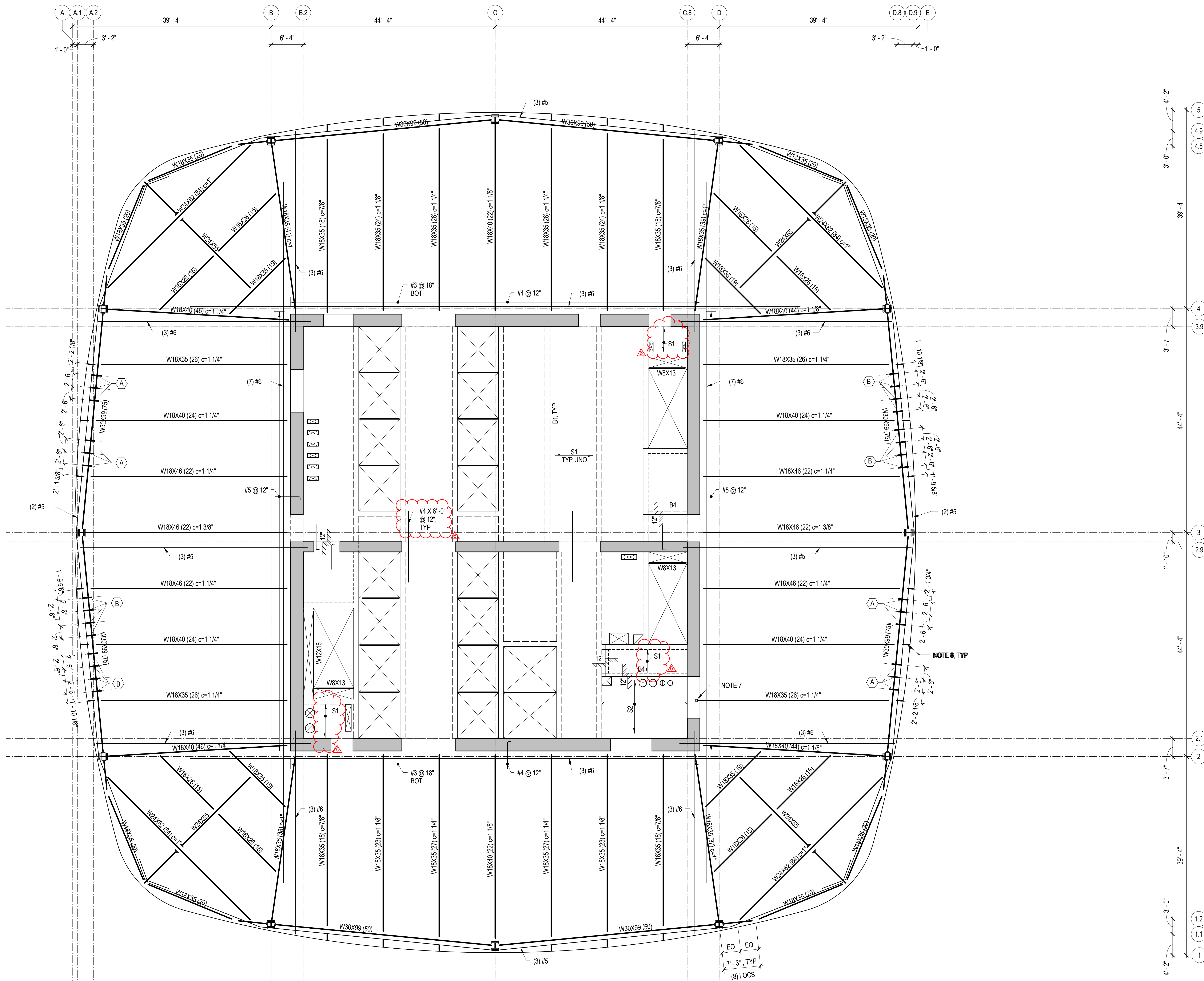
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 601'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:33:10 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 41 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 41 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER **S2.41**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

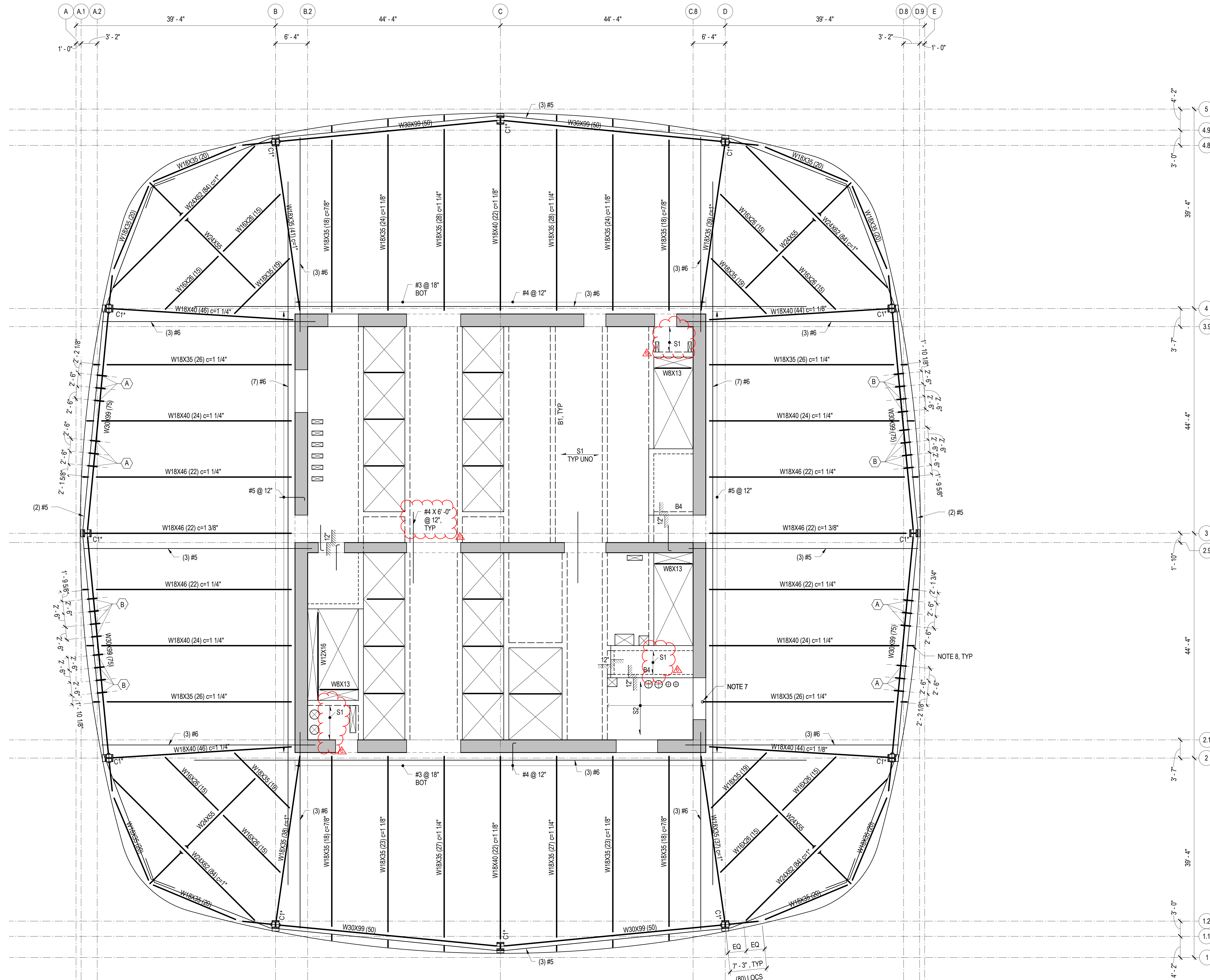
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 616'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:33:14 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 42 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 42 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.42**

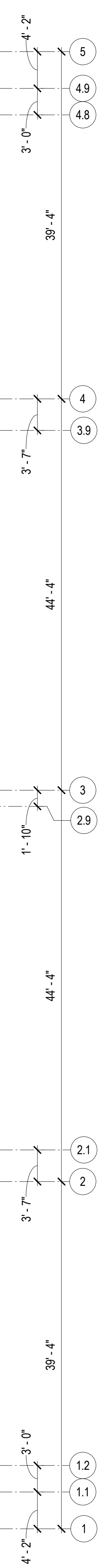
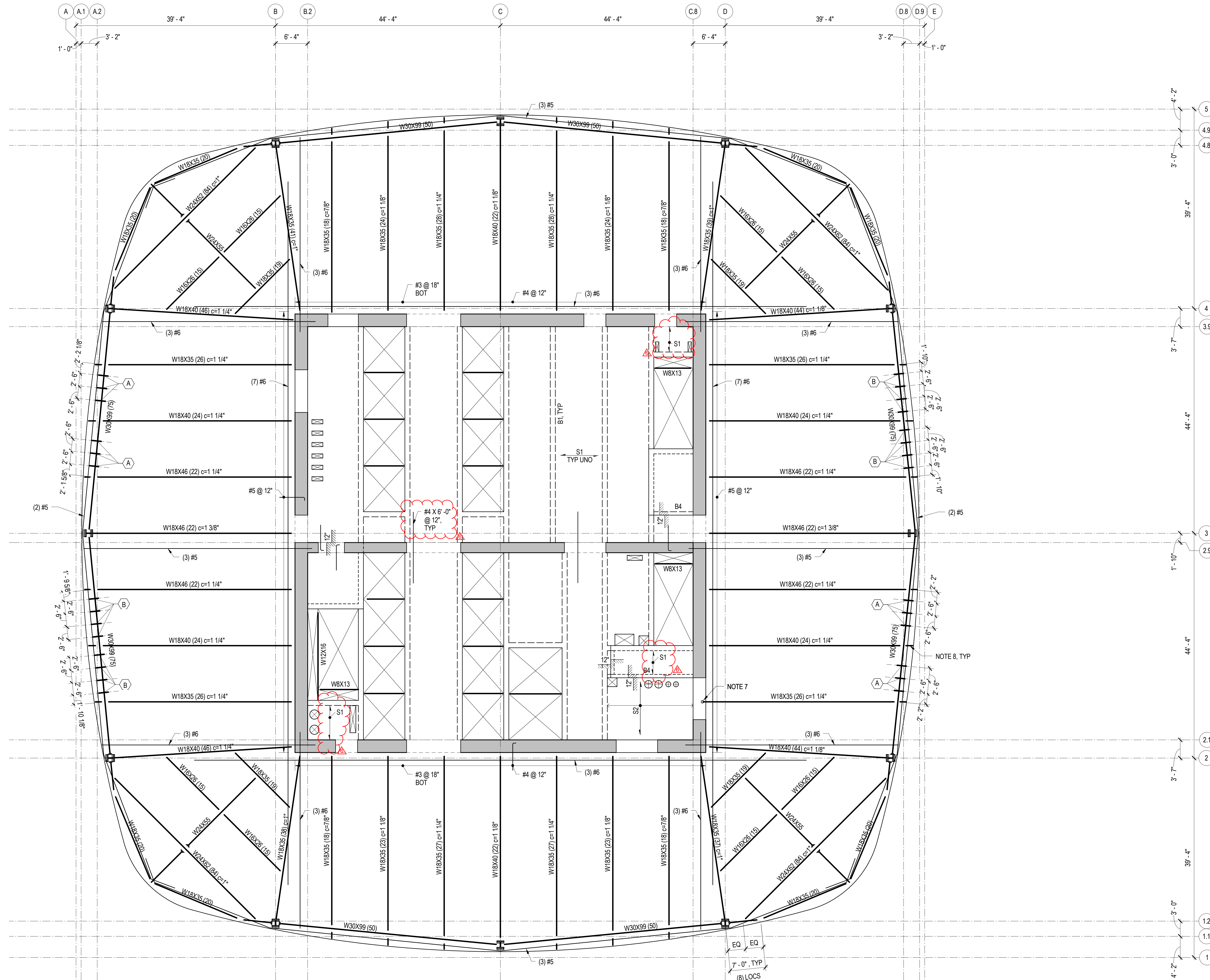


**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 631'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window W/ashing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

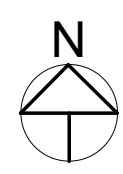
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 43 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.43

4/29/2014 10:33:18 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Acoustical Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

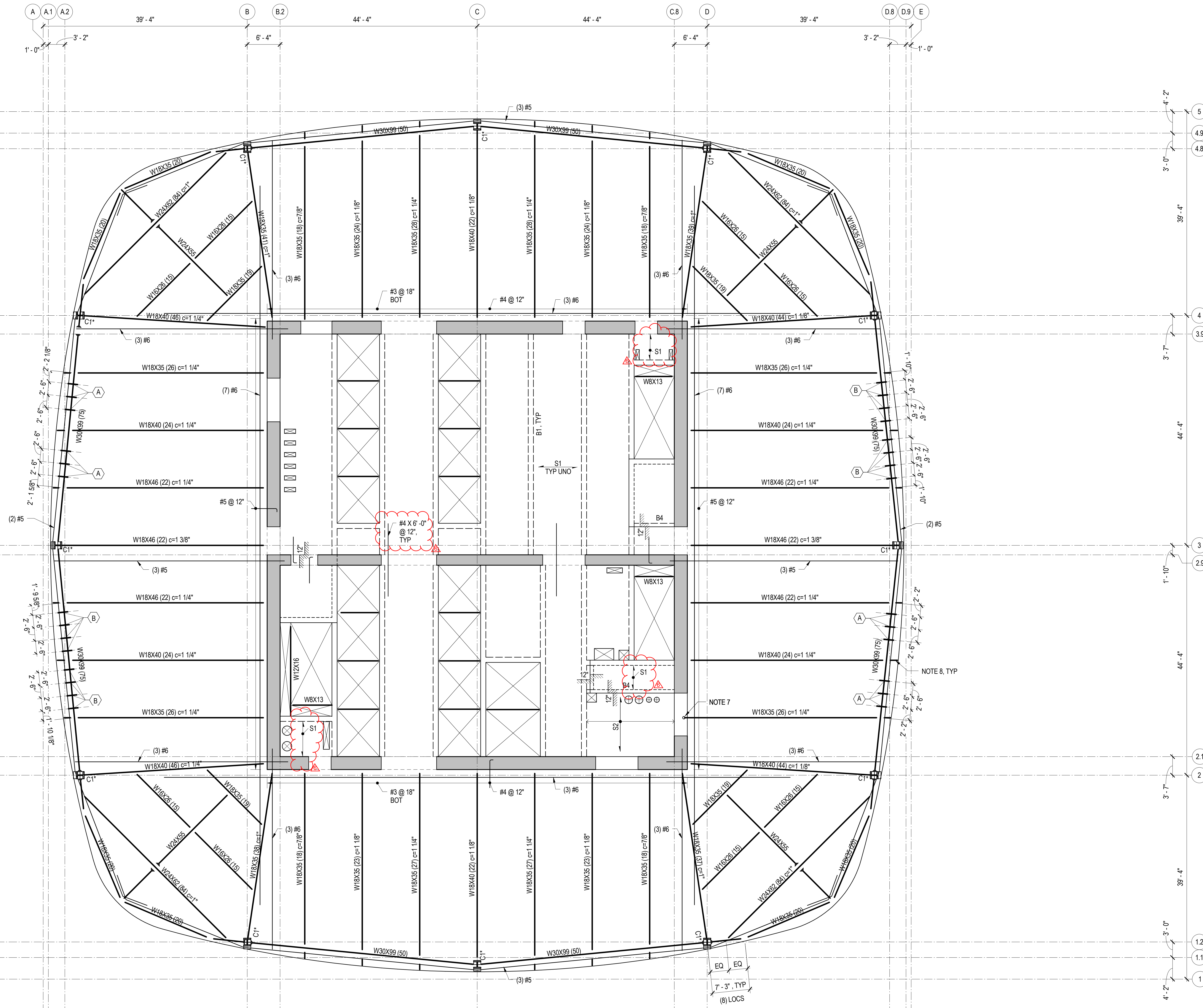
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 646'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:22 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

**LEVEL 44 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

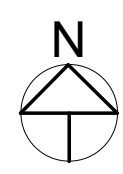
CAD FILENAME

DRAWING TITLE

**LEVEL 44 FRAMING PLAN**

NO. PROJECT NO. 08044

DRAWING NUMBER **S2.44**





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window/Westing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

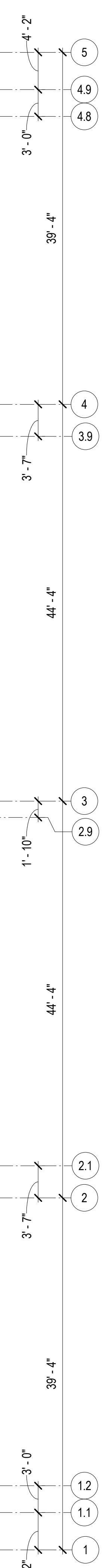
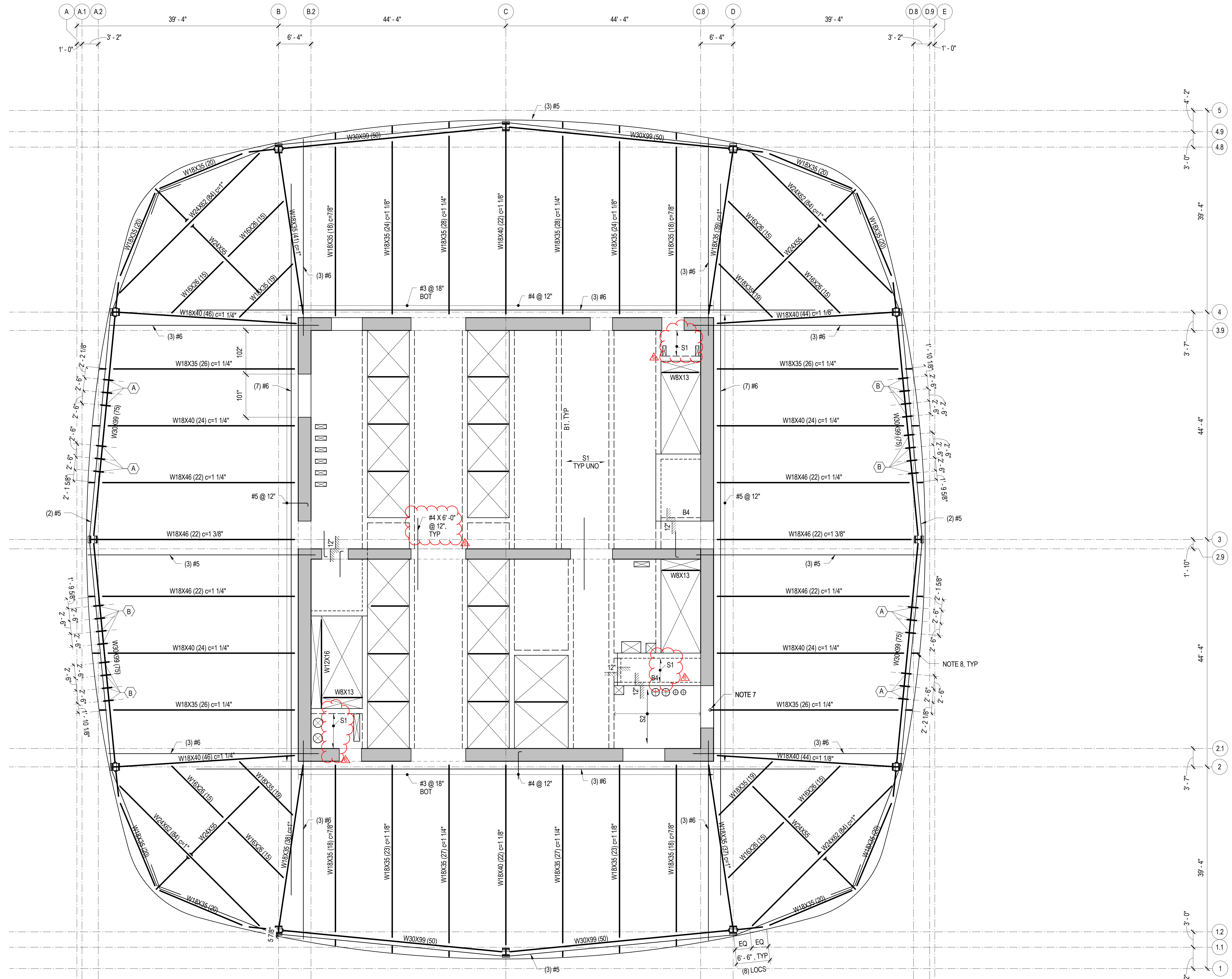
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0 ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1 LOAD MAPS
- S2 PLANS
- S3 ELEVATIONS
- S4 TYPICAL DETAILS AND SCHEDULES
- S5 CONCRETE SECTIONS AND DETAILS
- S6 STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 660'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 45 FRAMING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

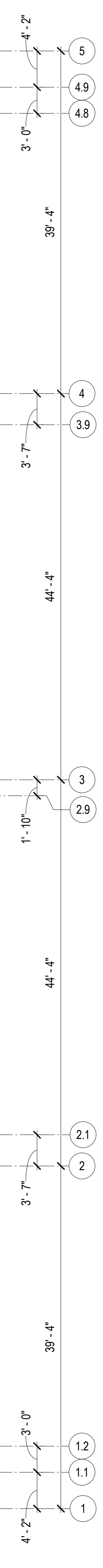
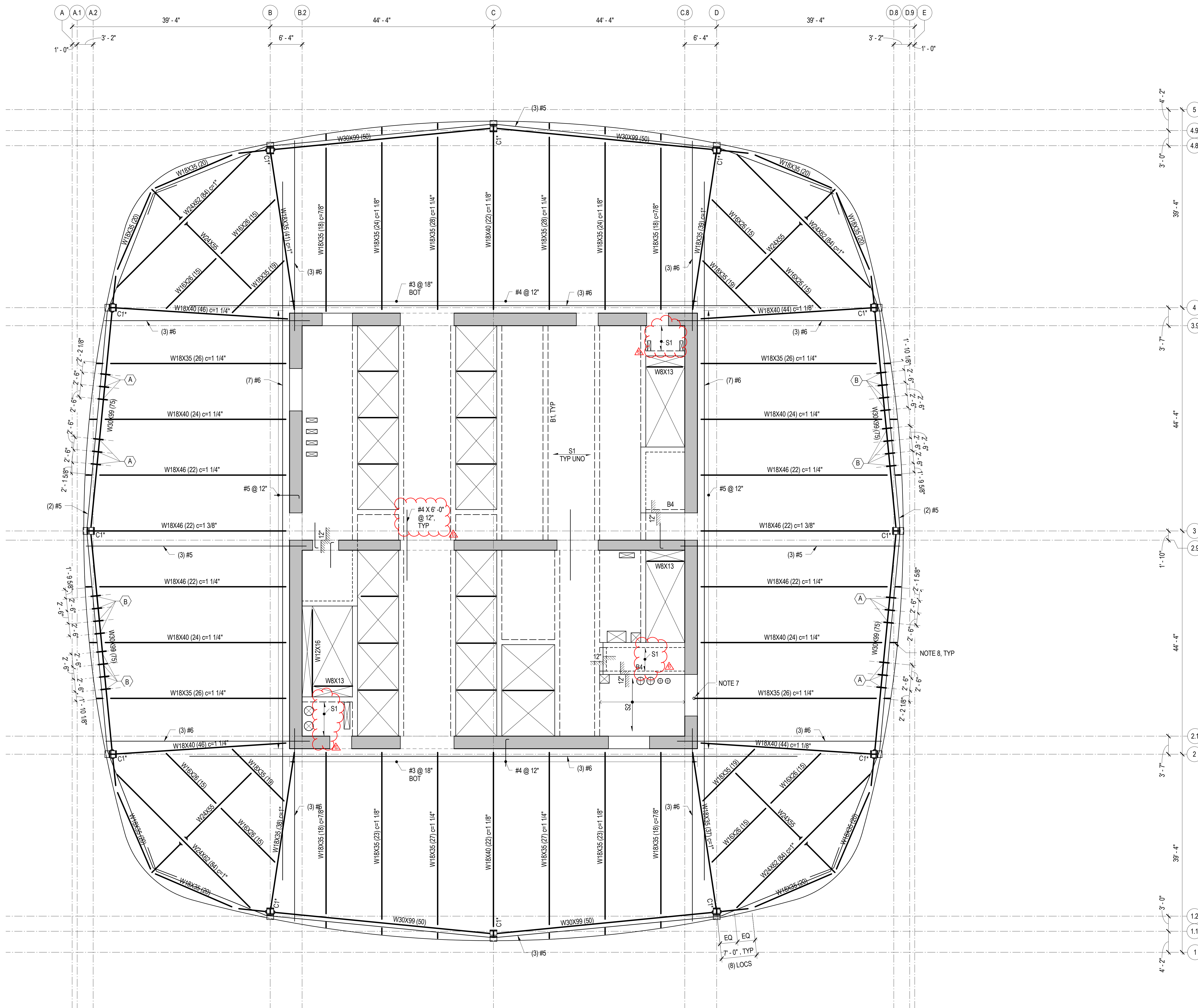
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 675'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

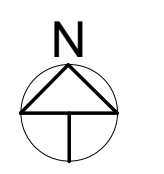


4/29/2014 10:53:30 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**LEVEL 46 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.46







**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 690'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE WTS SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

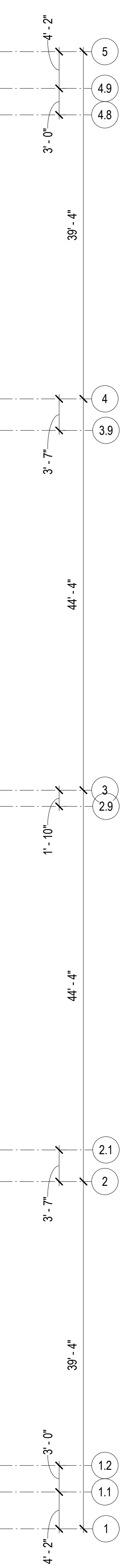
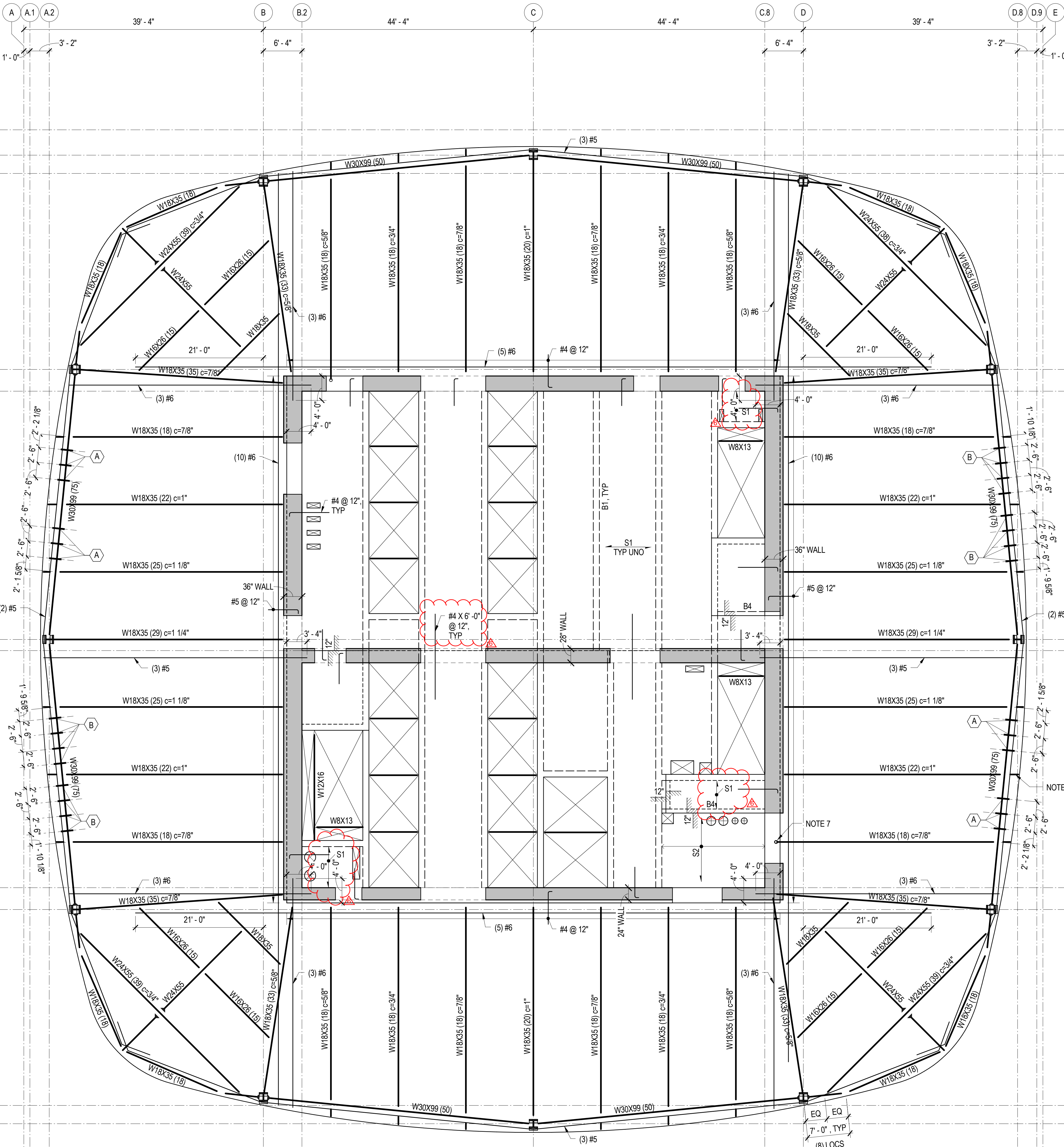
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window/Walling Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 10:53:34 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 47 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME	DRAWING TITLE
	<b>LEVEL 47 FRAMING PLAN</b>

NO.	PROJECT NO.	DRAWING NUMBER
08044		<b>S2.47</b>



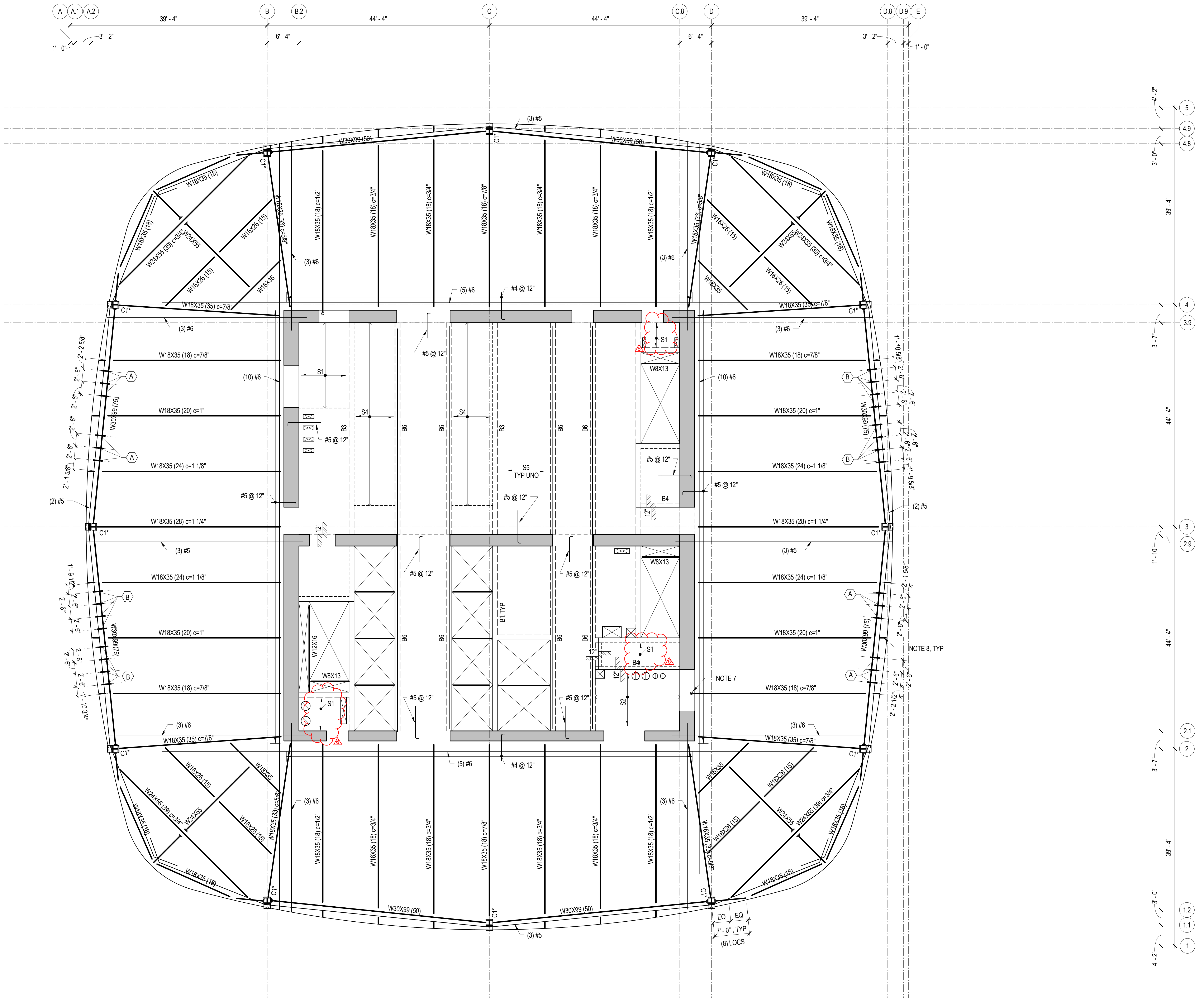
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 705'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. [Symbol] INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:38 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 48 FRAMING PLAN**  
1/8" = 1'-0"

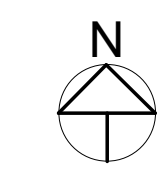
NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**LEVEL 48 FRAMING PLAN**

NO. DATE STRUCTURAL ISSUE

NO. PROJECT NO. 08044

DRAWING NUMBER  
**S2.48**





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

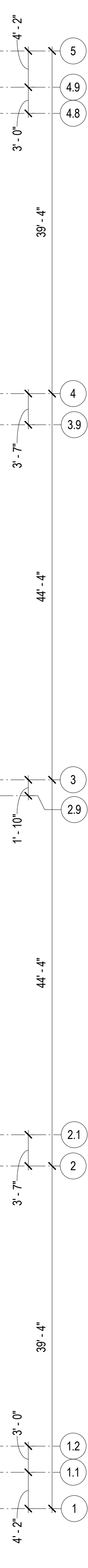
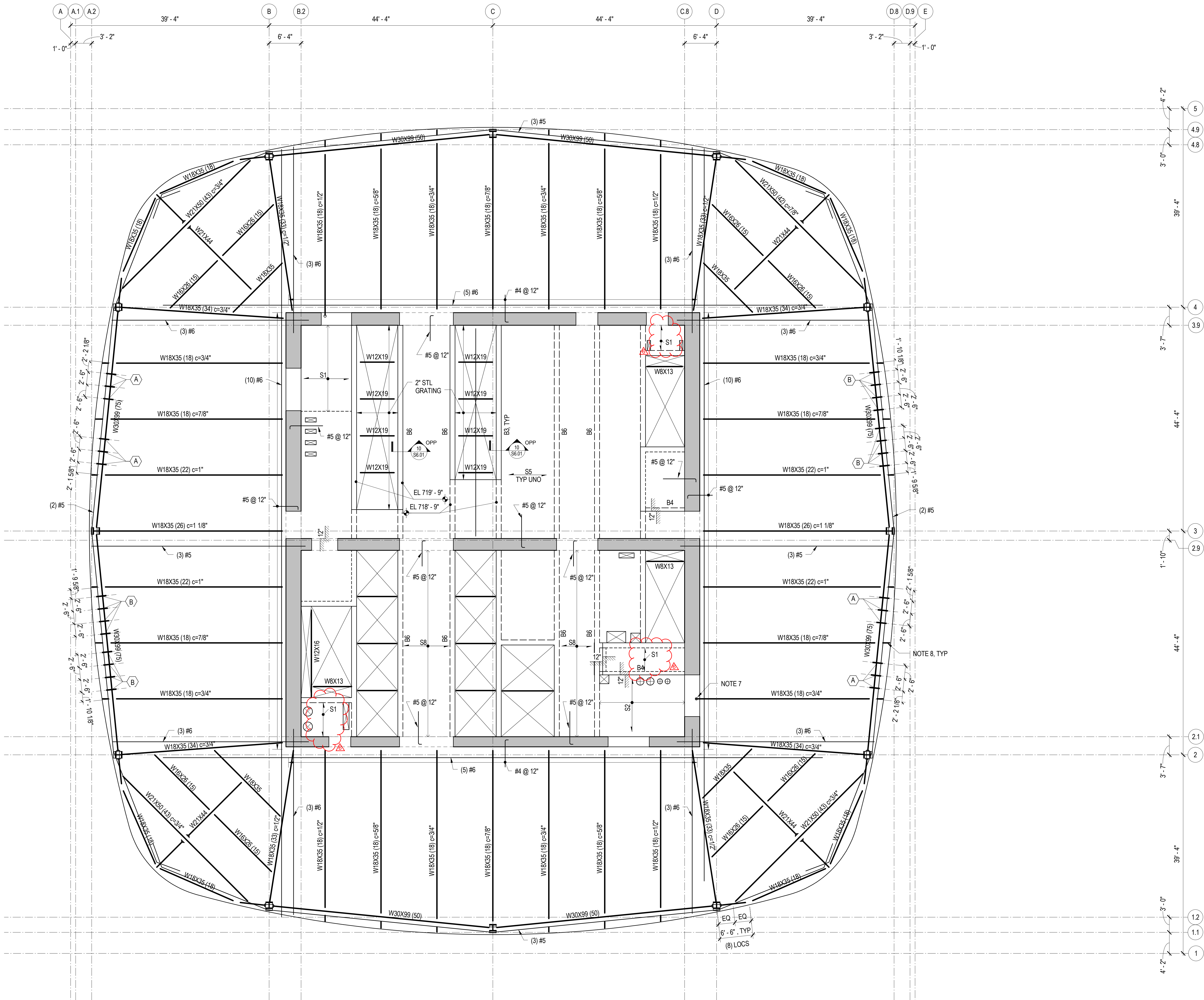
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 719'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W6 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:42 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

1 LEVEL 49 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 49 FRAMING PLAN

PROJECT NO. 08044 DRAWING NUMBER S2.49



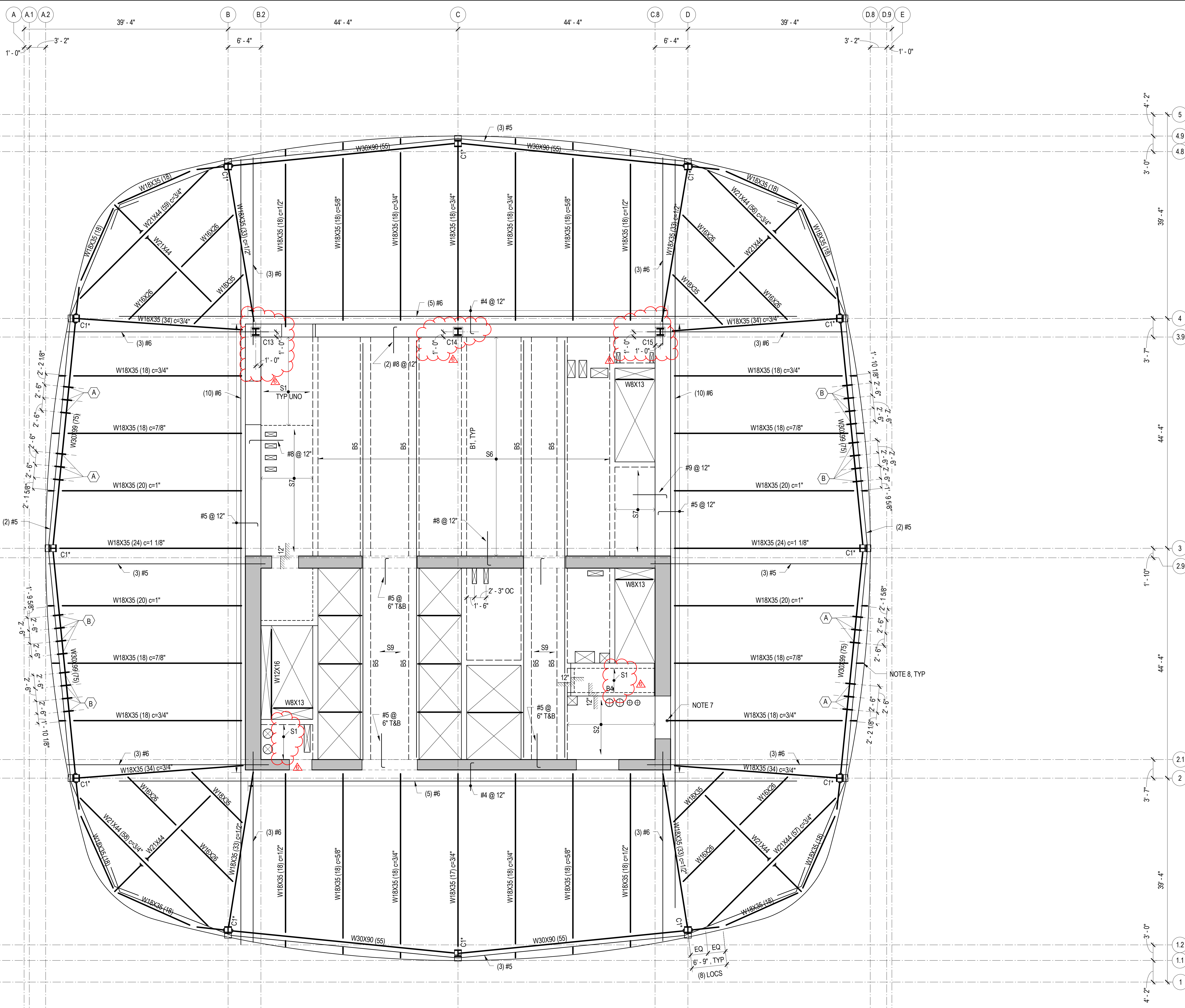
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 734'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. [Symbol] INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W6 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



**LEVEL 50 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 50 FRAMING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

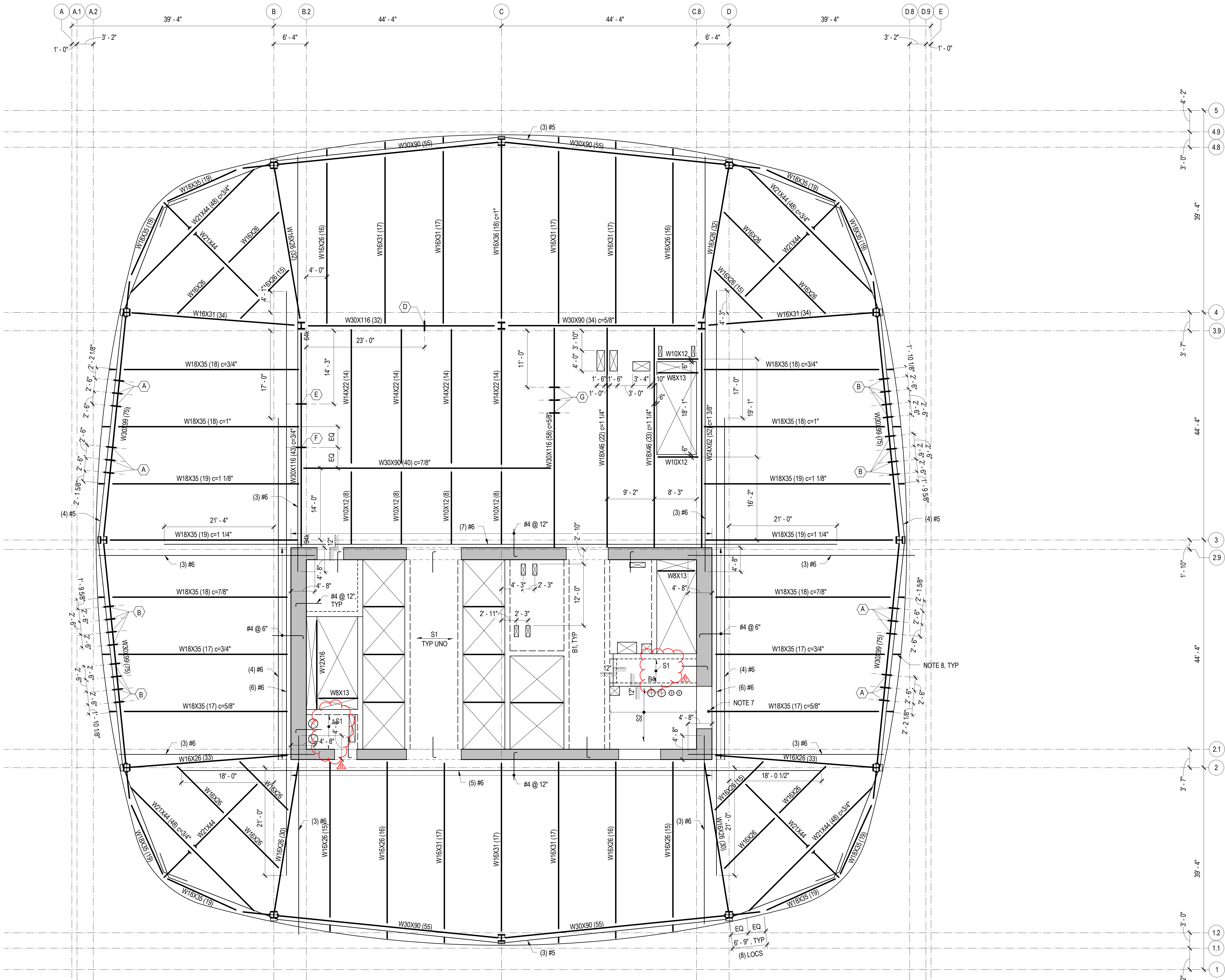
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 749'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:50 PM C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

1 LEVEL 51 FRAMING PLAN  
1/8" = 1'-0"

6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID
NO.	DATE	ISSUE

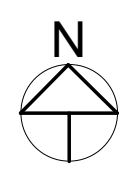
CAD FILENAME

DRAWING TITLE

LEVEL 51 FRAMING PLAN

NO. PROJECT NO. 08044

DRAWING NUMBER S2.51





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

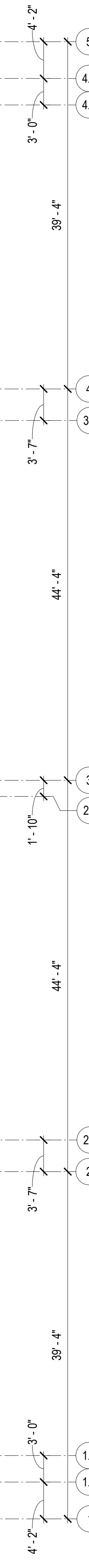
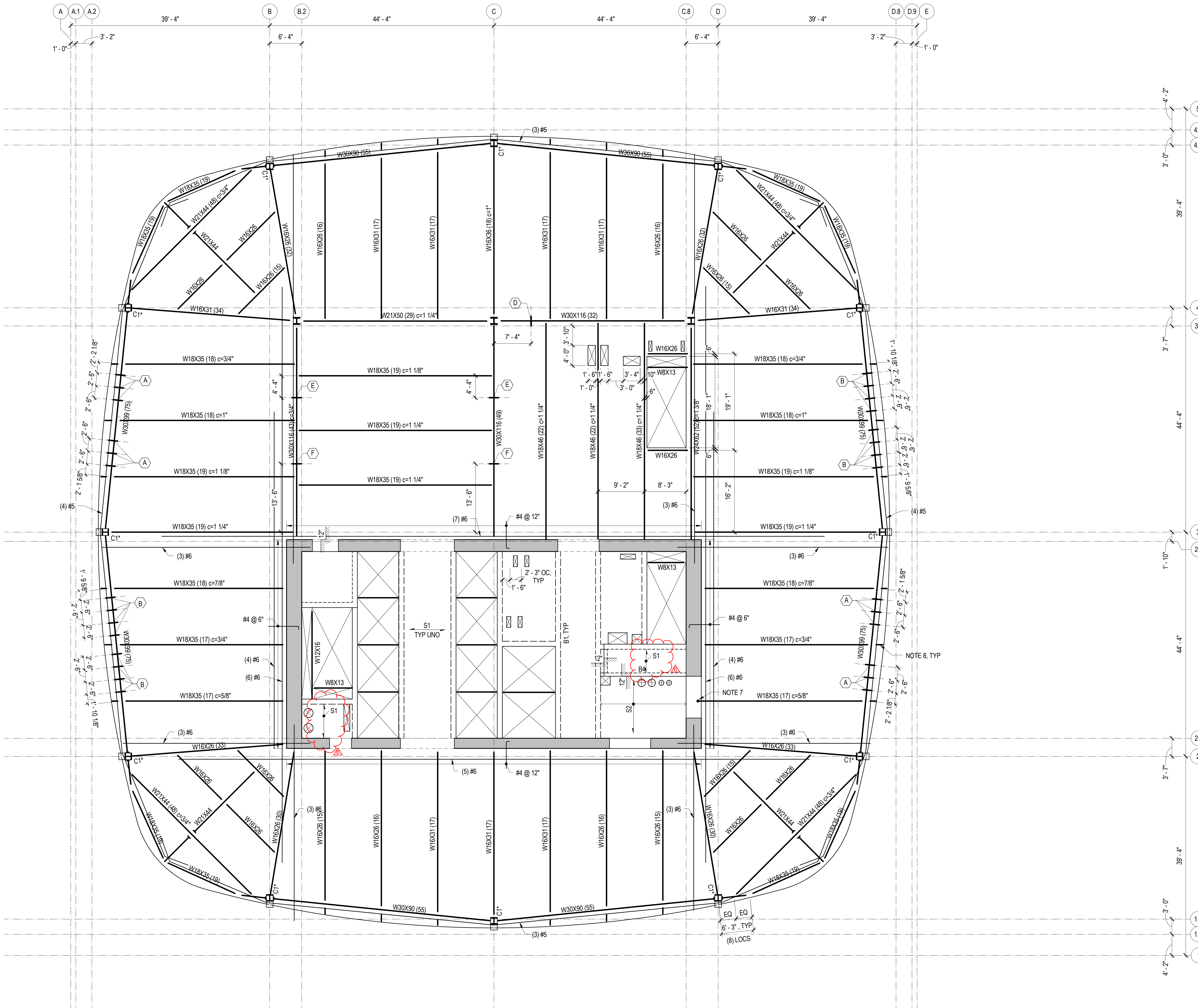
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 764'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 52 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.52



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

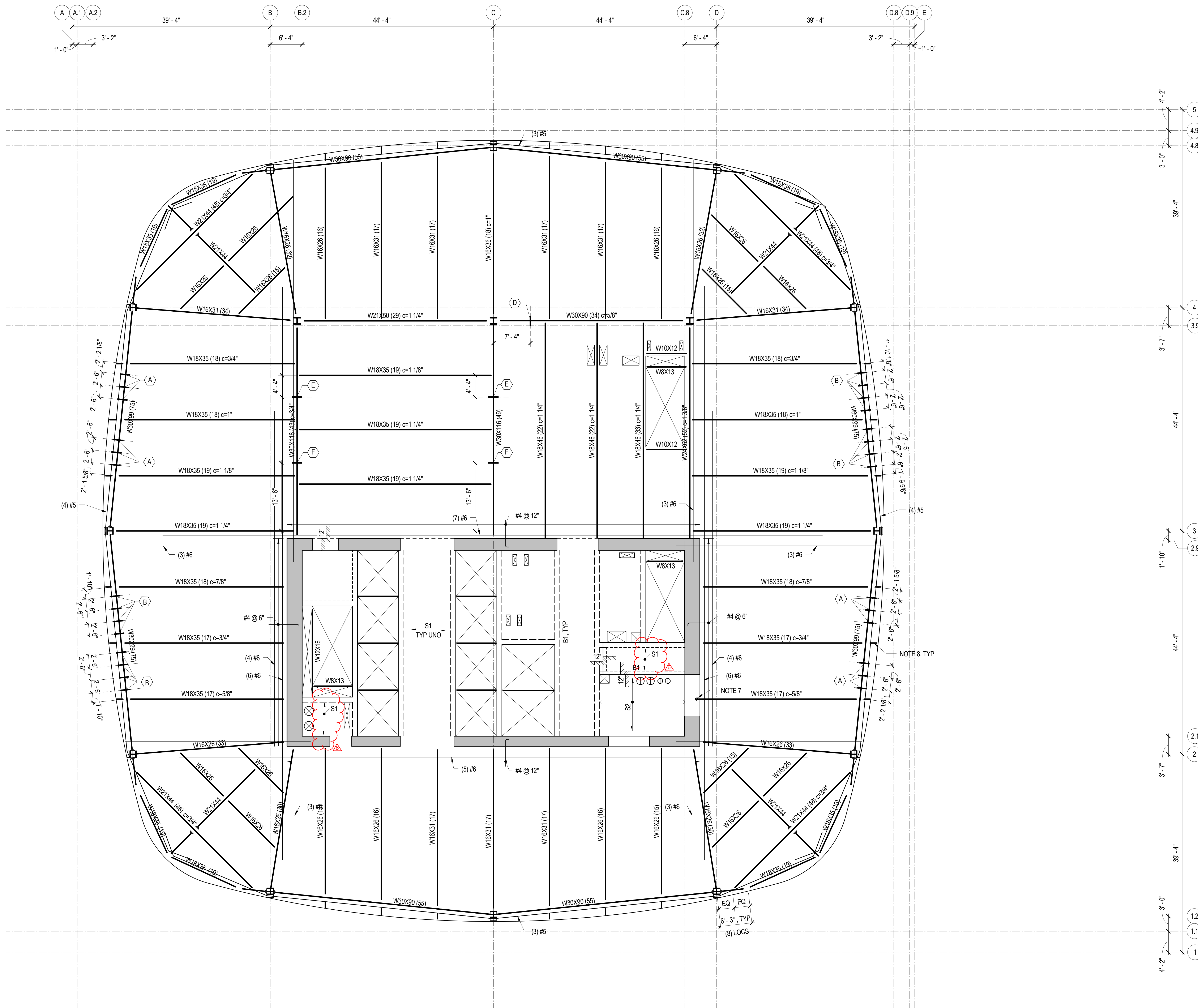
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 778'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

LEVEL 53 FRAMING PLAN

PROJECT NO. 08044

DRAWING NUMBER S2.53



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

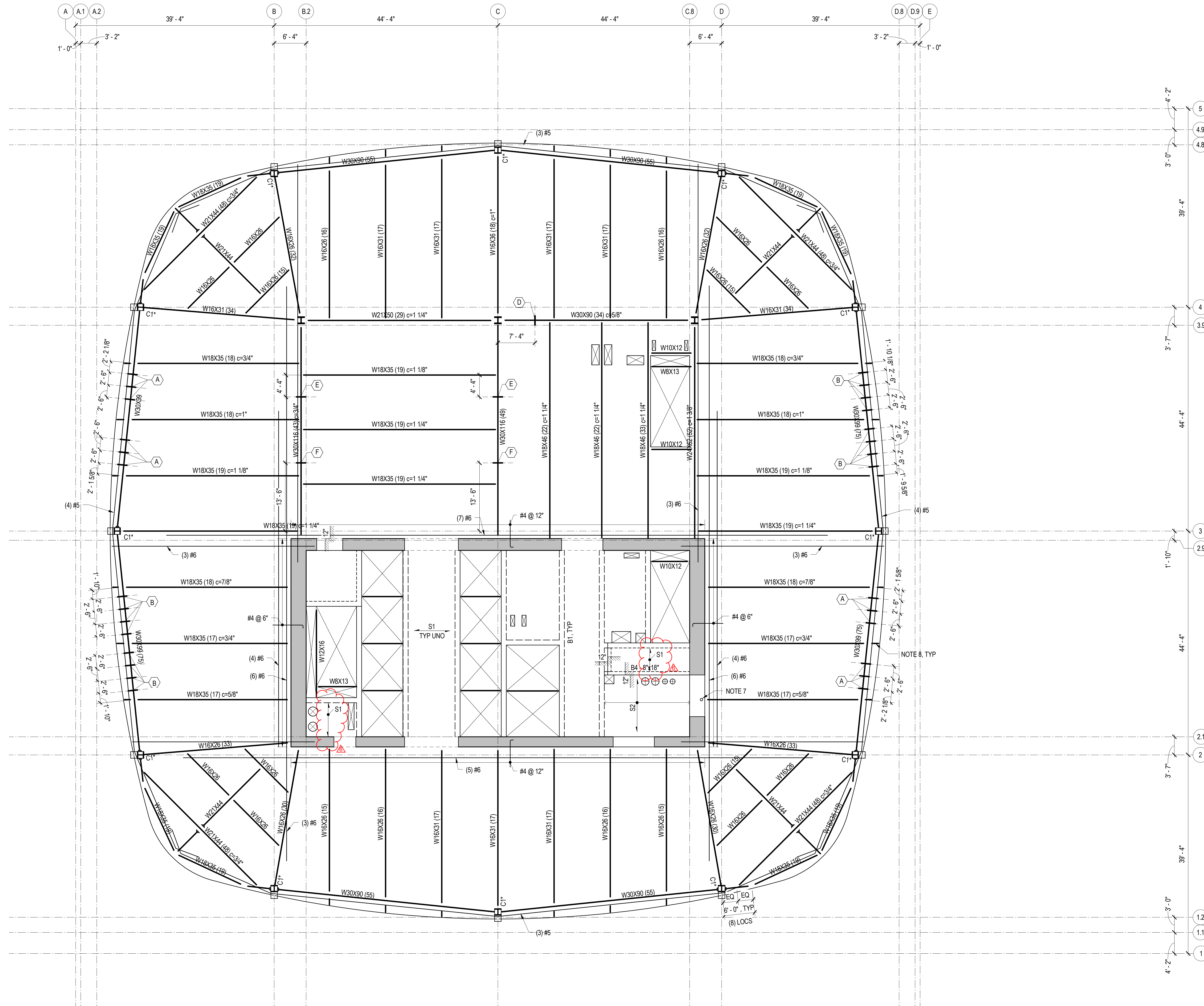
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 793'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:02 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

1 LEVEL 54 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 54 FRAMING PLAN

PROJECT NO. 08044  
DRAWING NUMBER S2.54





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

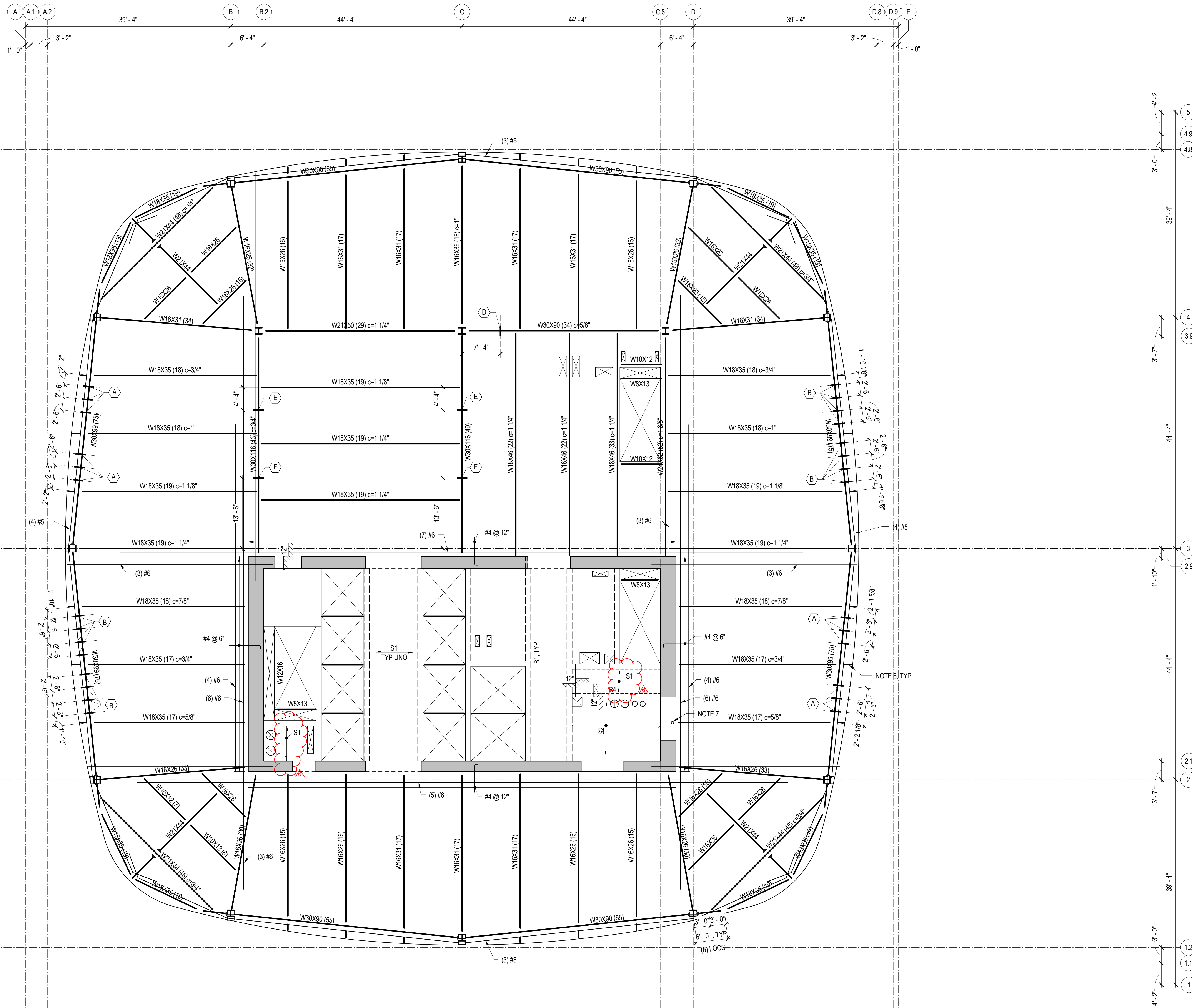
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 808'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:06 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

**LEVEL 55 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 55 FRAMING PLAN**

PROJECT NO. 08044 DRAWING NUMBER **S2.55**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

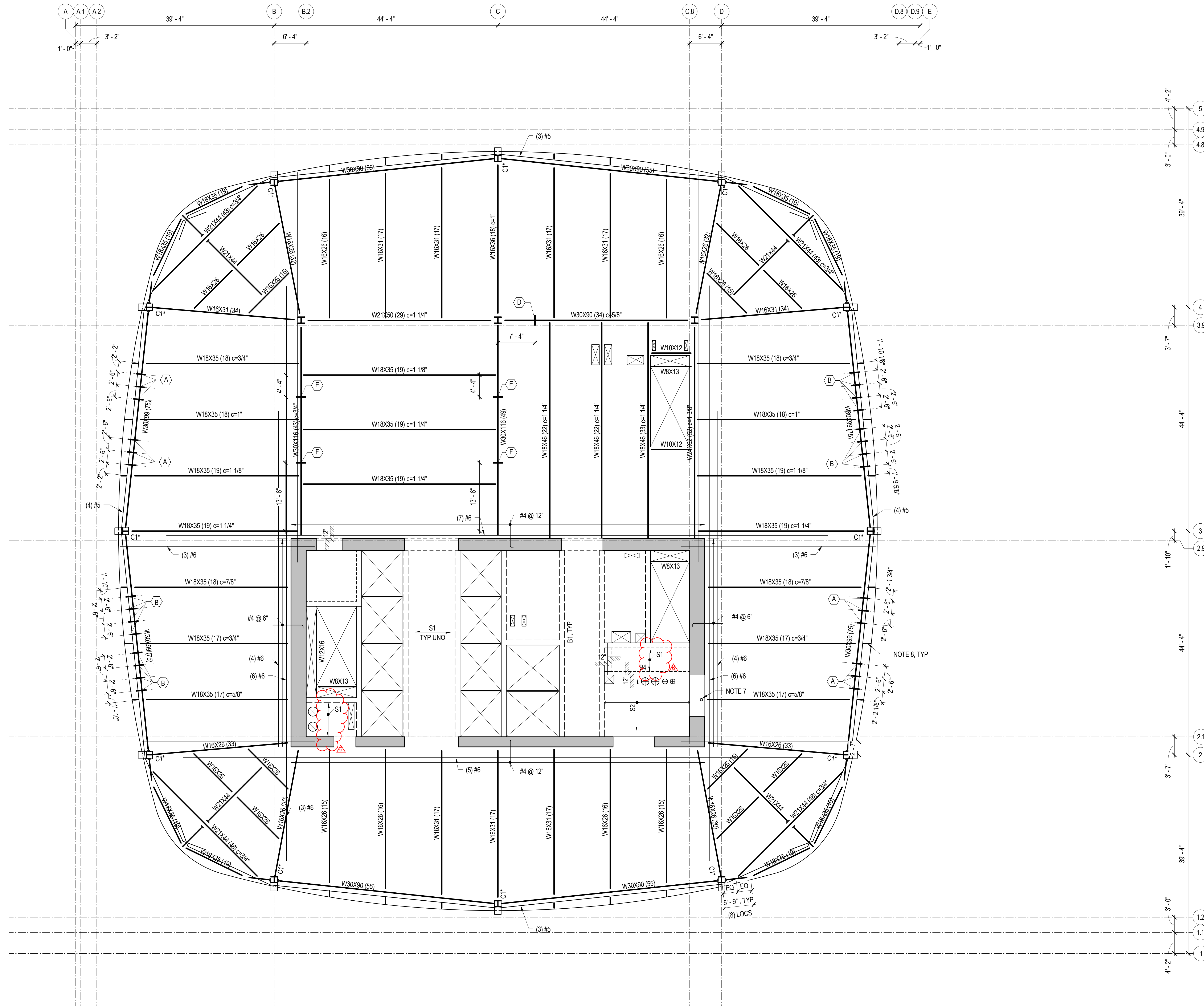
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 823'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:10 PM C:\Rev\IT\Transbay\Twr\_WIS2013\_kmh.rvt

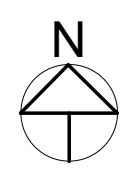
1 LEVEL 56 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 56 FRAMING PLAN

PROJECT NO. 08044 DRAWING NUMBER S2.56





REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 837'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

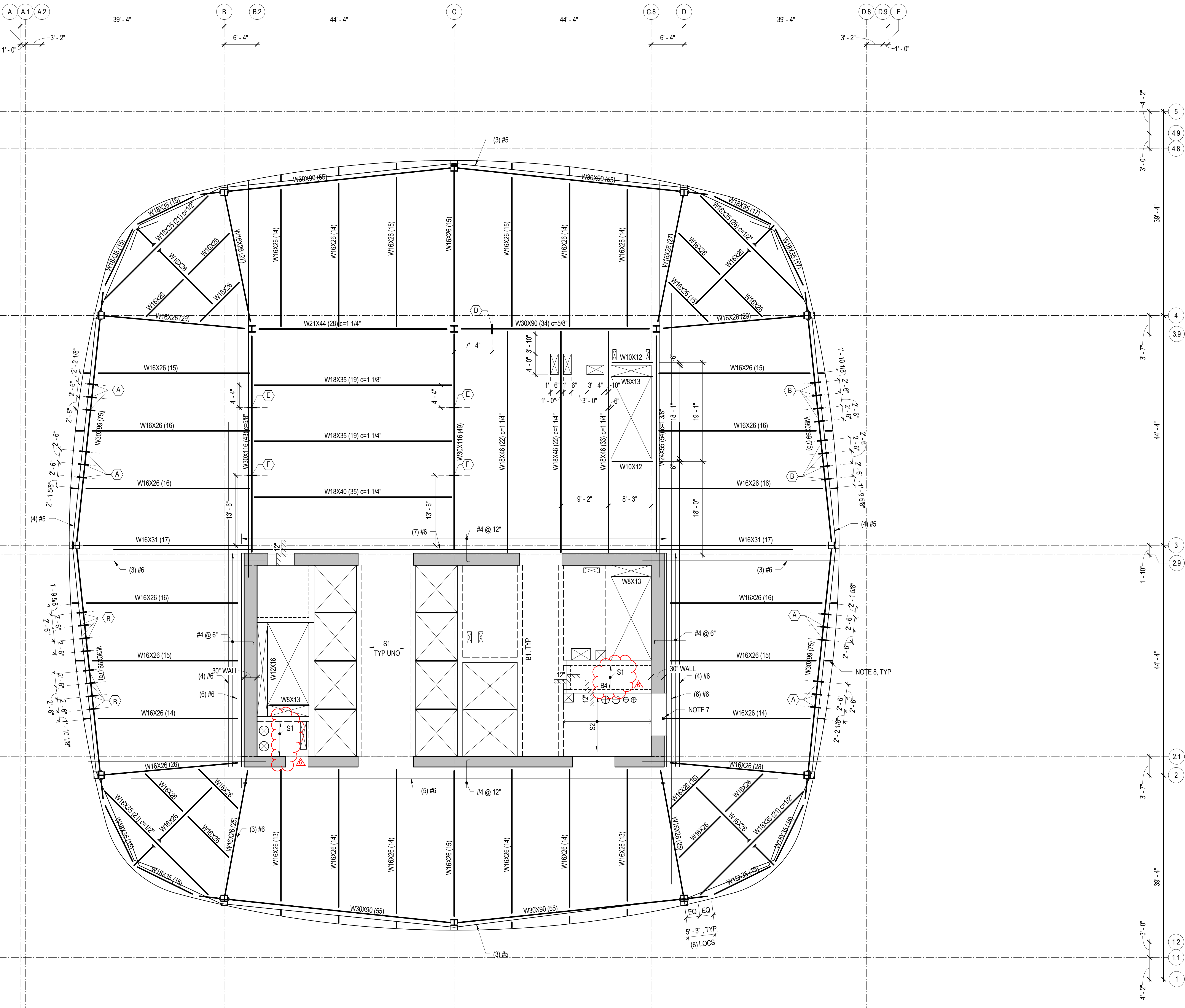
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



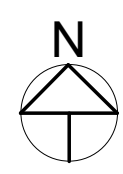
C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 57 FRAMING PLAN**

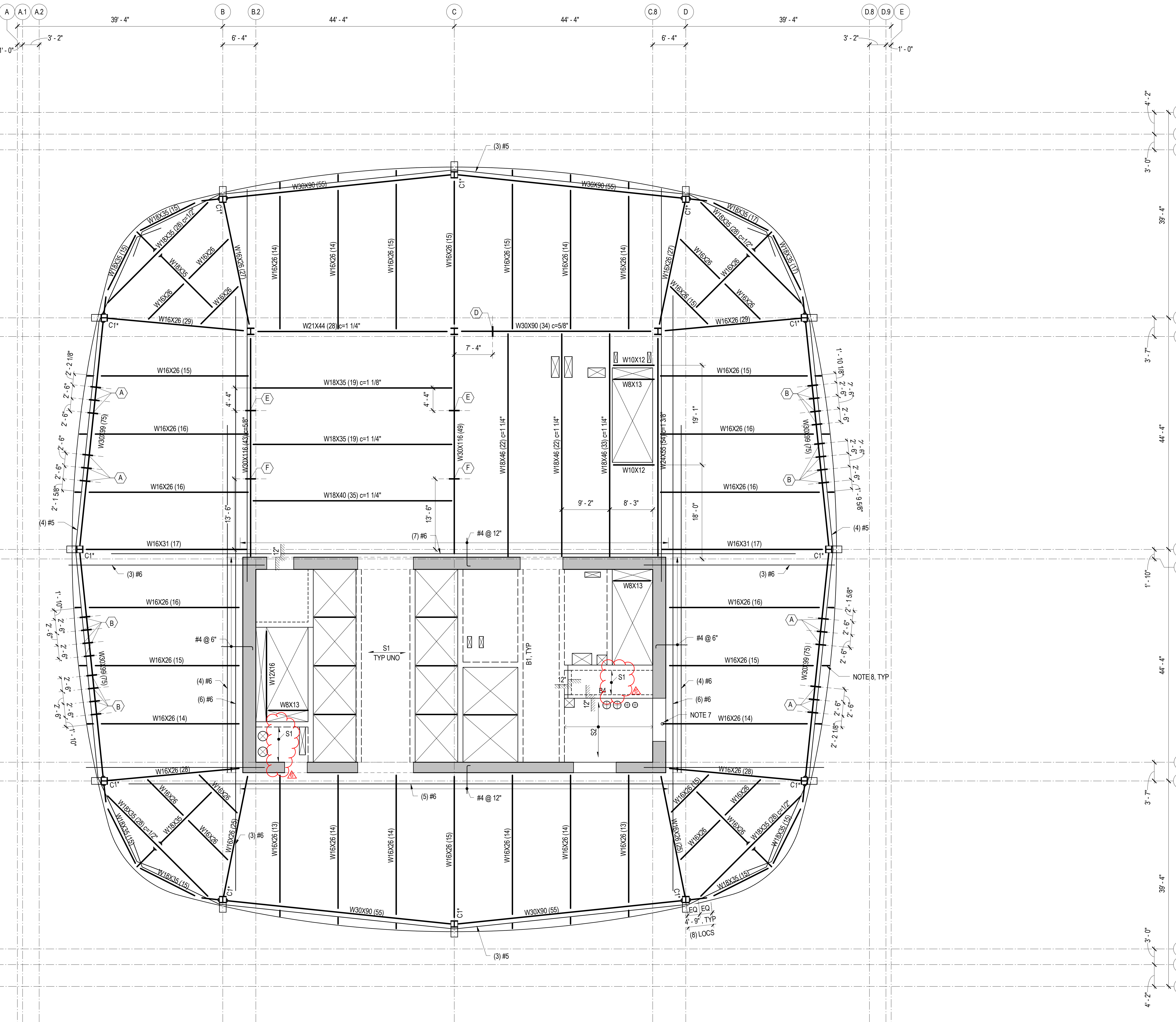
PROJECT NO. 08044  
DRAWING NUMBER S2.57



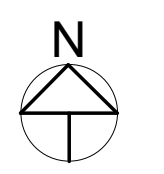


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

- REFERENCE DRAWINGS**
- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1... LOAD MAPS
  - S2... PLANS
  - S3... ELEVATIONS
  - S4... TYPICAL DETAILS AND SCHEDULES
  - S5... CONCRETE SECTIONS AND DETAILS
  - S6... STEEL SECTIONS AND DETAILS
- NOTES**
- REFERENCE FLOOR ELEVATION IS 852'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
  - STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
  - THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
  - COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
  - SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
  - INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
  - FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
  - PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



- 5  
4.9  
4.8  
3'-0"
- 4  
3.9  
3'-7"
- 44'-4"
- 3  
2.9  
1'-10"
- 44'-4"
- 2.1  
2  
3'-7"
- 39'-4"
- 1.2  
1.1  
1  
4'-2"
- 3'-0"



**LEVEL 58 FRAMING PLAN**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

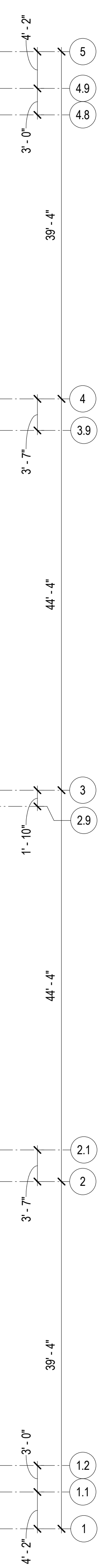
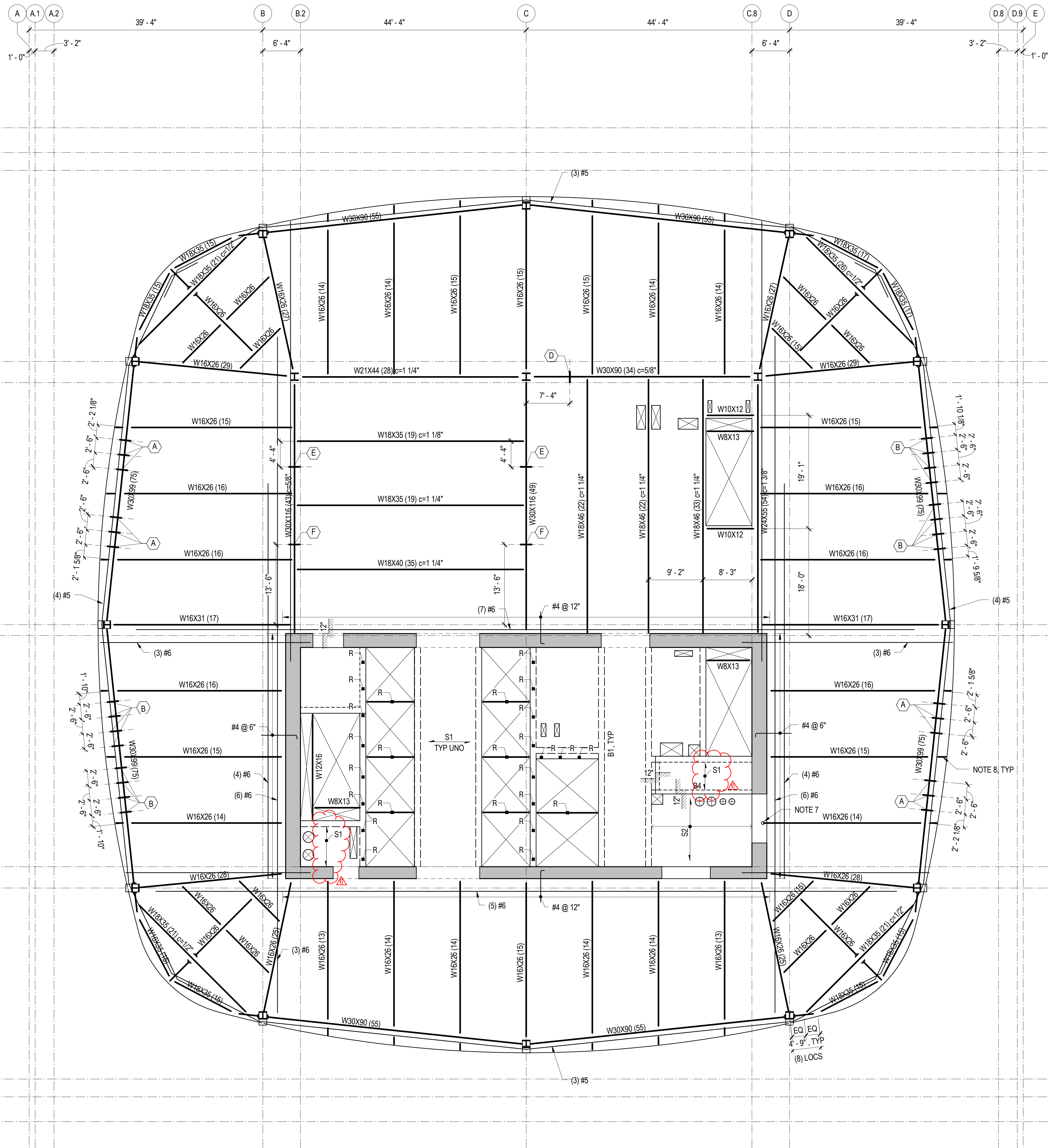
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 867'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:22 PM C:\Rev\IT\transbay\tr\_ws2013\_kmh.rvt

LEVEL 59 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

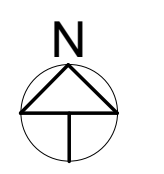
CAD FILENAME

DRAWING TITLE

LEVEL 59 FRAMING PLAN

PROJECT NO. 08044

DRAWING NUMBER S2.59





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

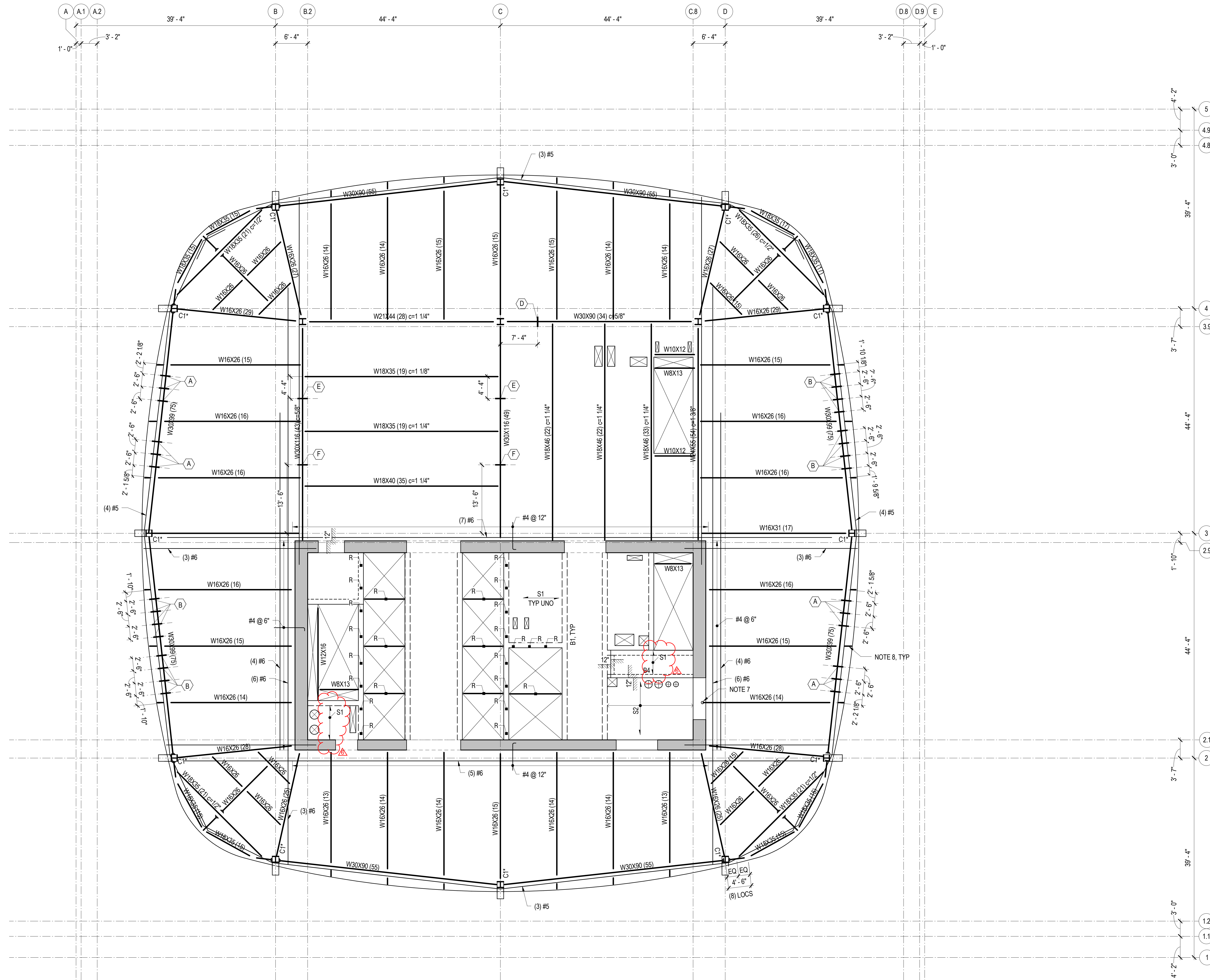
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 884'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:26 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

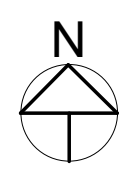
**LEVEL 60 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 60 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.60**





BOSTON PROPERTIES / HINES  
 Owner

PELLI CLARKE PELLI ARCHITECTS  
 Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
 Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
 Structural Engineer

WSP  
 MEPFP Engineer

PWP LANDSCAPE ARCHITECTURE  
 Landscape Architect

BKF ENGINEERS  
 Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
 Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
 Building Security

HWA PARKING  
 Parking Consultant

ARUP  
 Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
 Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
 Acoustical Consultant

MORRISON HERSHFIELD  
 Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
 LEED Consultant

HMA CONSULTING  
 Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
 Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
 Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
 Graphic Design Consultant

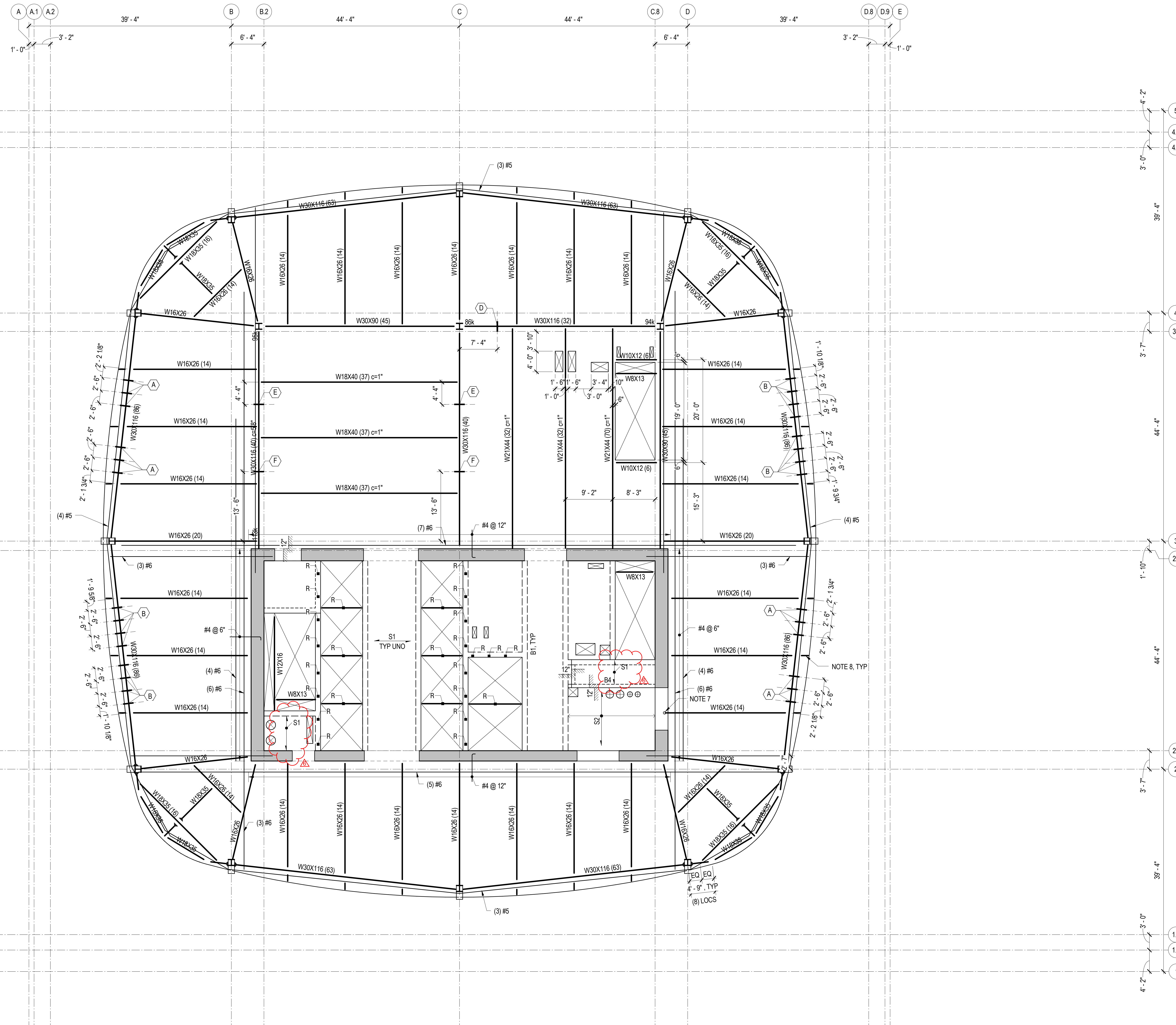
ROYSTON HANAMOTO ALLEY & ABEY  
 Landscape Architect of Record

REFERENCE DRAWINGS

- S0 ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1 LOAD MAPS
- S2 PLANS
- S3 ELEVATIONS
- S4 TYPICAL DETAILS AND SCHEDULES
- S5 CONCRETE SECTIONS AND DETAILS
- S6 STEEL SECTIONS AND DETAILS

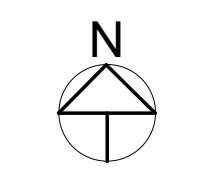
NOTES

1. REFERENCE FLOOR ELEVATION IS 900'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:30 PM

1 LEVEL 61 FRAMING PLAN  
 1/8" = 1'-0"



NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT	REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	DRAWING NUMBER
LEVEL 61 FRAMING PLAN	S2.61

PROJECT NO. 08044



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

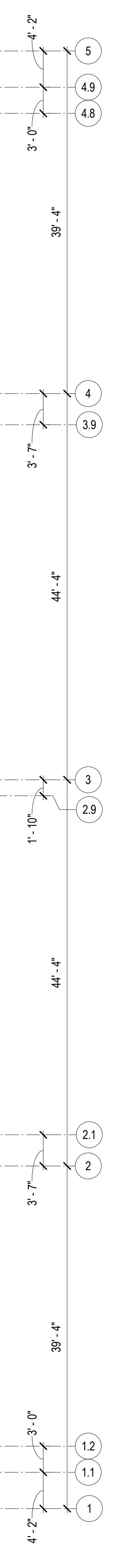
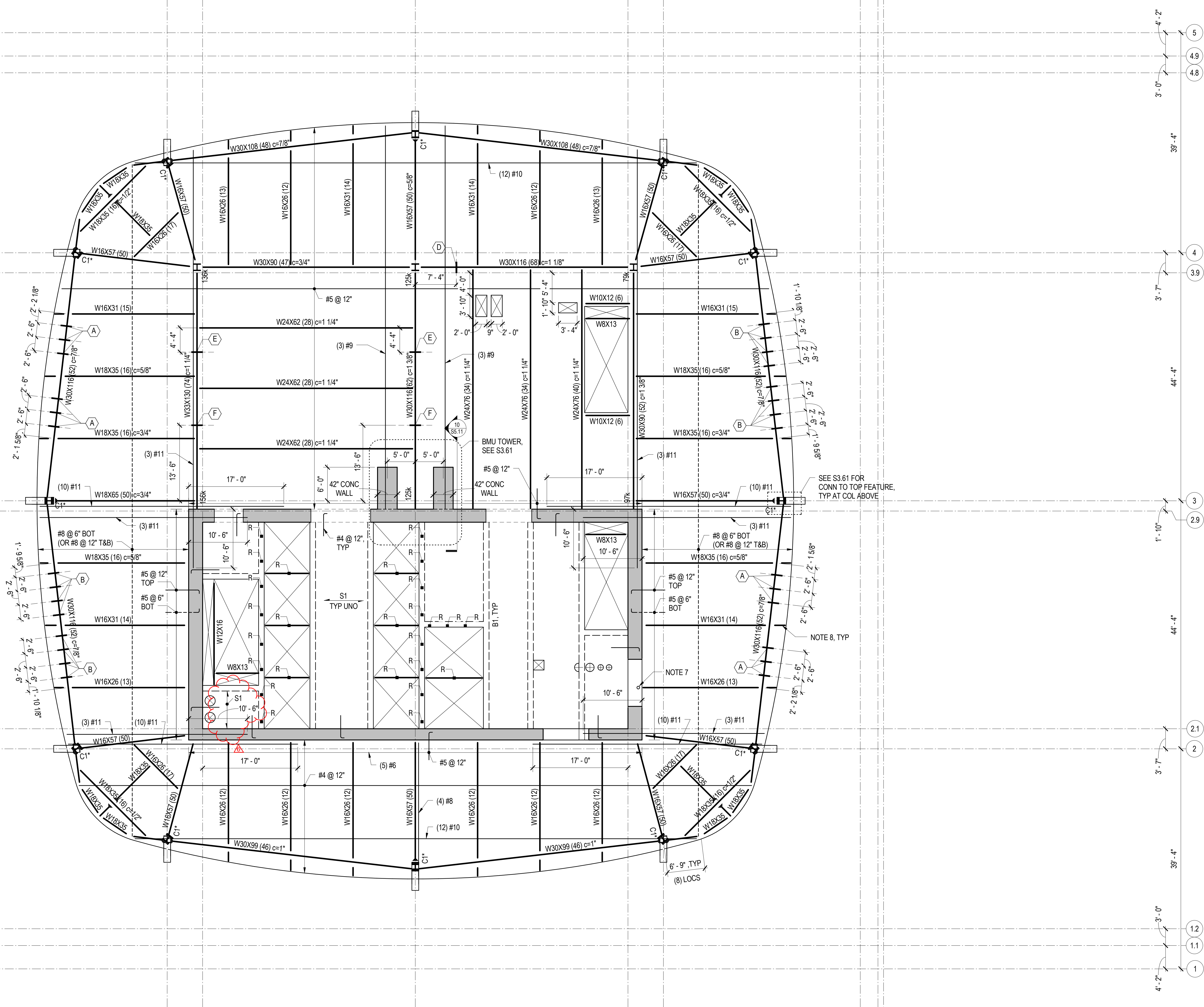
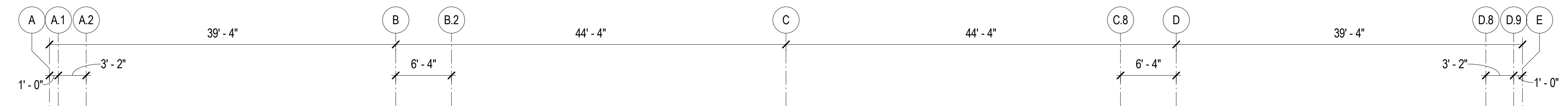
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 917'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 13 INCHES BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE. ALL BEAM ENDS AT THE ROOF PERIMETER ARE 7 INCHES ABOVE THE REFERENCE TOP OF STEEL AND SLOPE TO 0 INCHES AS INDICATED BY TYPICAL BEAM CALLOUTS SHOWN IN PLAN.
- THE STRUCTURAL SLAB IS 10 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/54.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE WTS SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:35 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

LEVEL 62 FRAMING PLAN

1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 62 FRAMING PLAN

PROJECT NO. 08044 DRAWING NUMBER S2.62





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

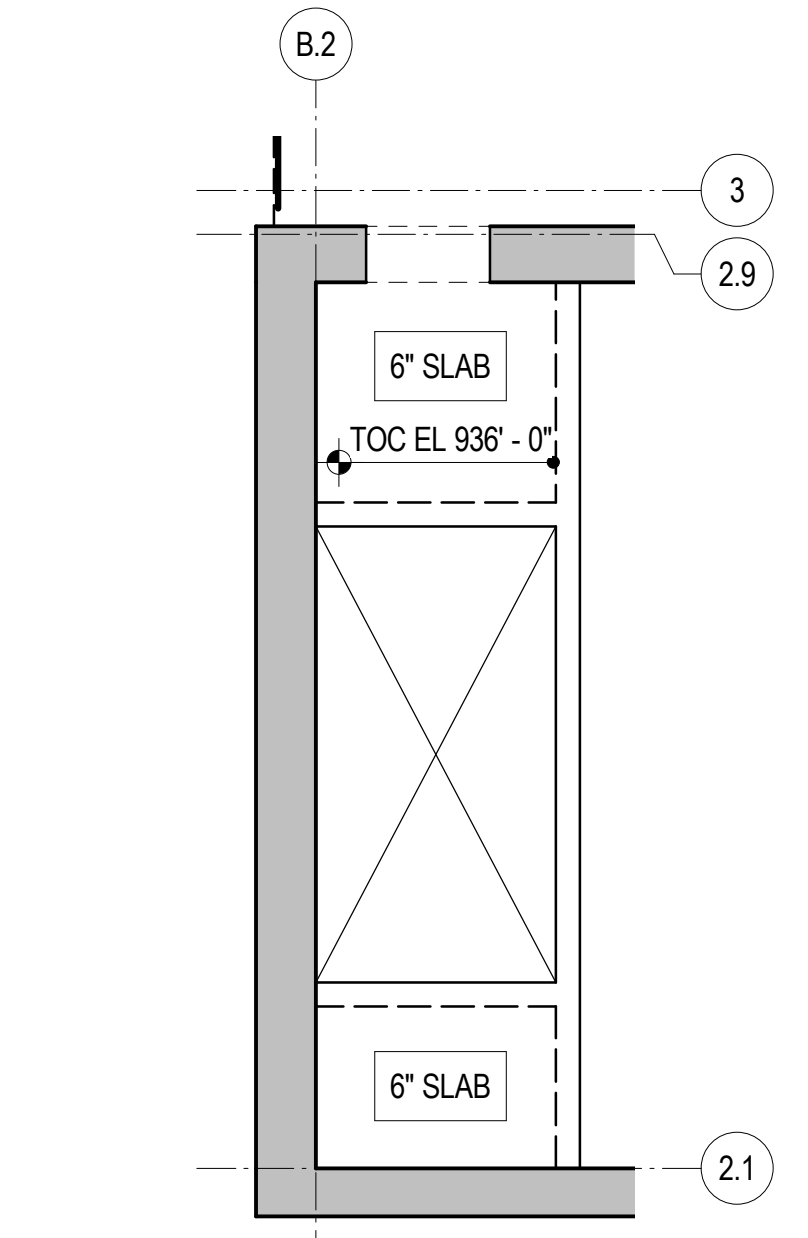
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

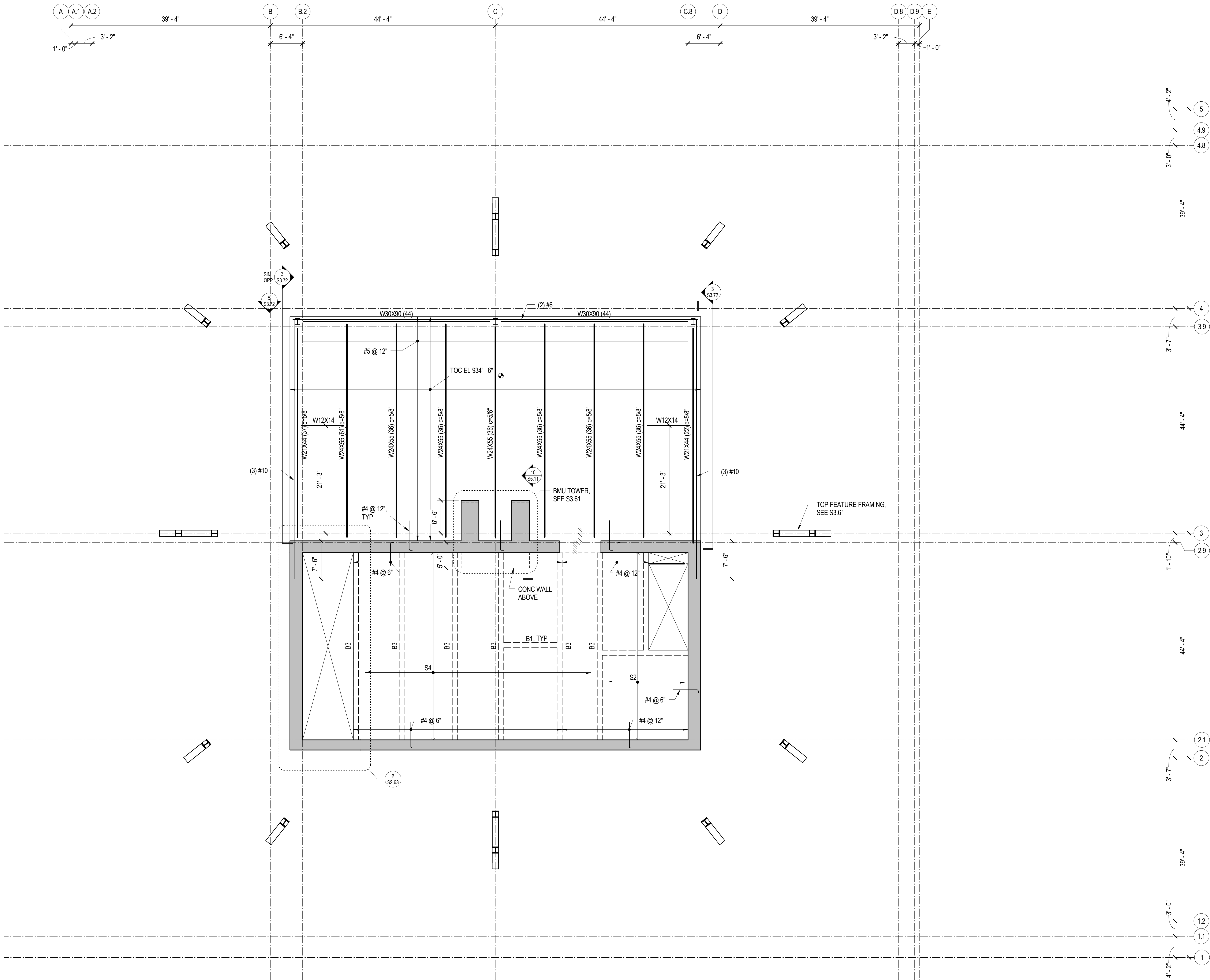
- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 947'-0". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 6 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK. REINFORCE WITH #4@12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.



**2 PARTIAL FRAMING PLAN**  
1/8" = 1'-0"



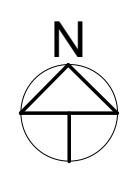
4/29/2014 10:54:39 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 63 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.63**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

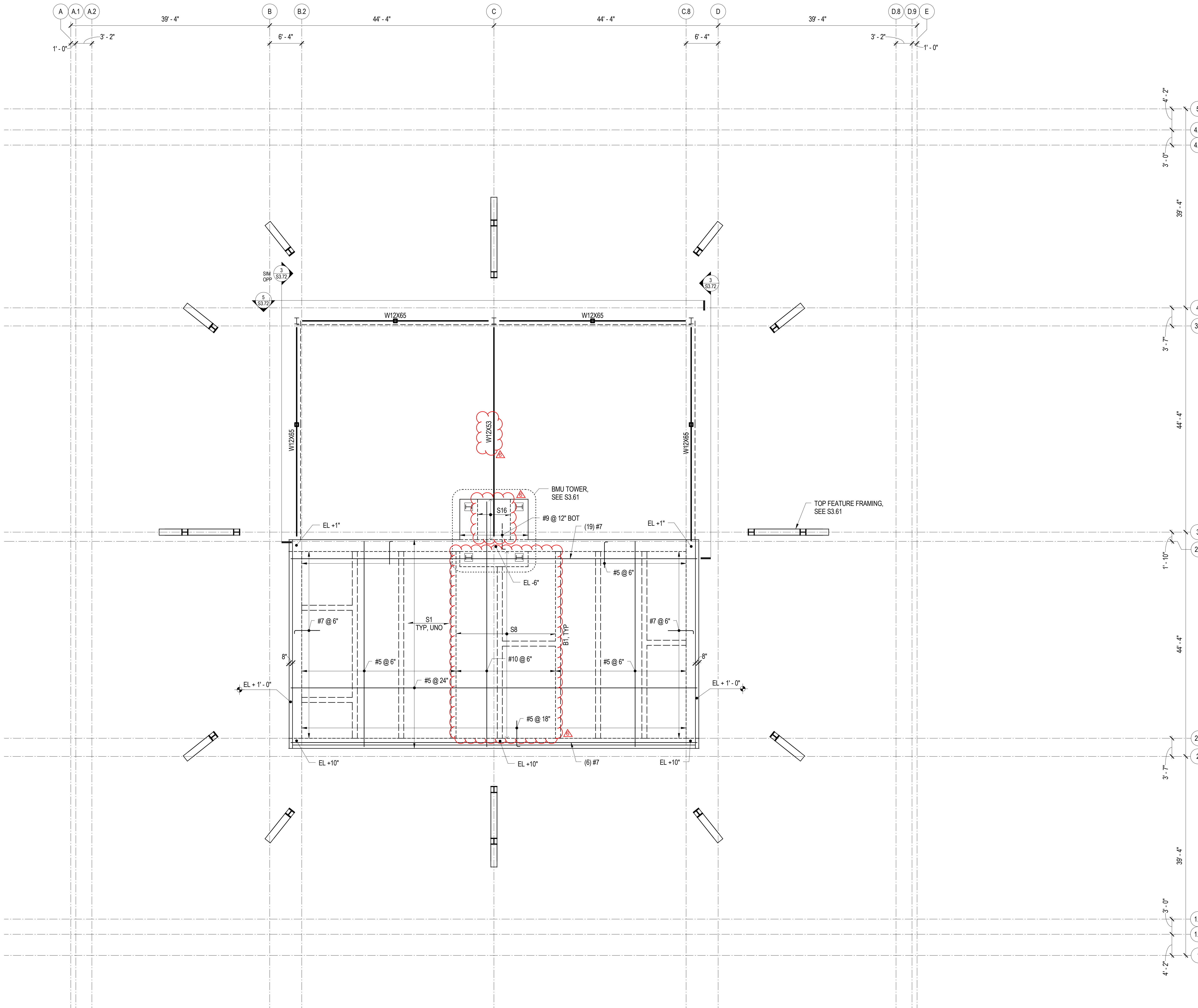
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 960'-6". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNO). SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WIS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

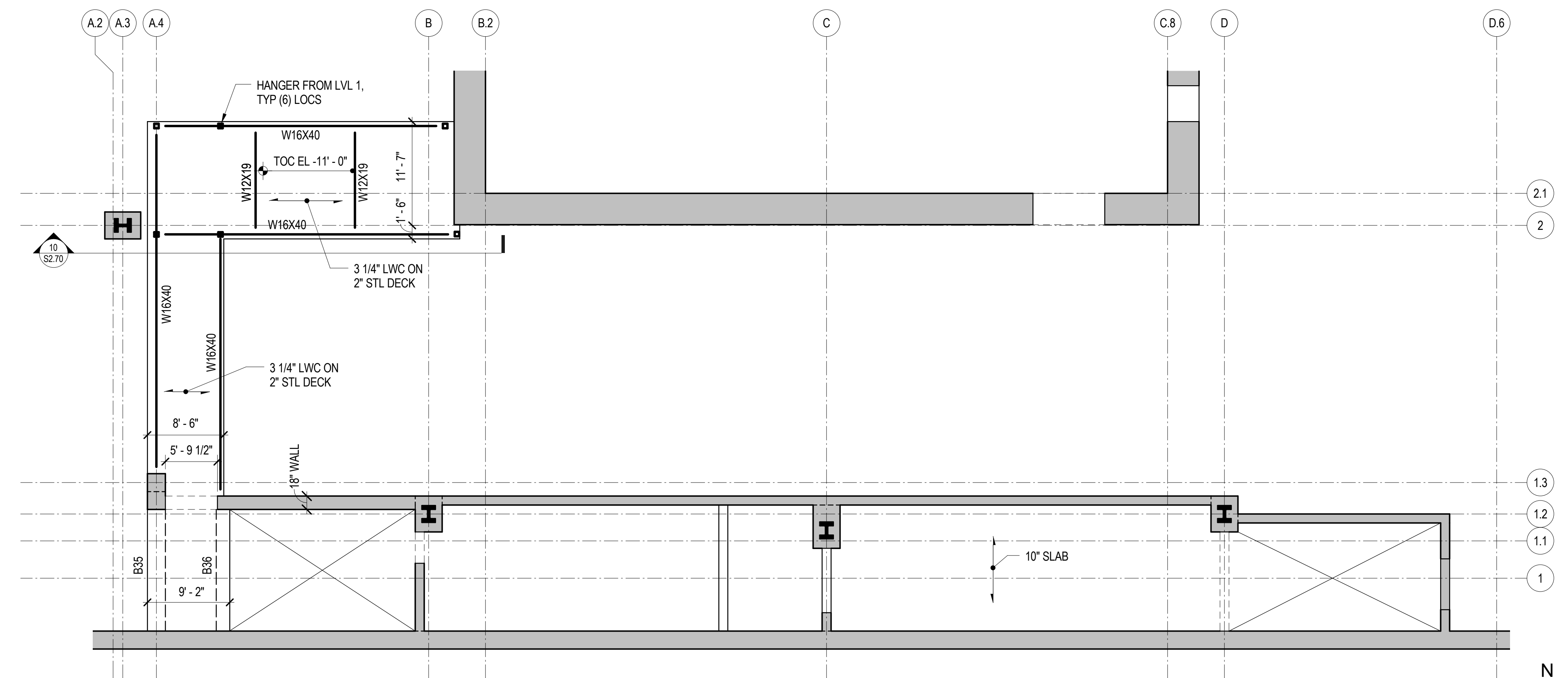
DRAWING TITLE

**LEVEL 64 FRAMING PLAN**

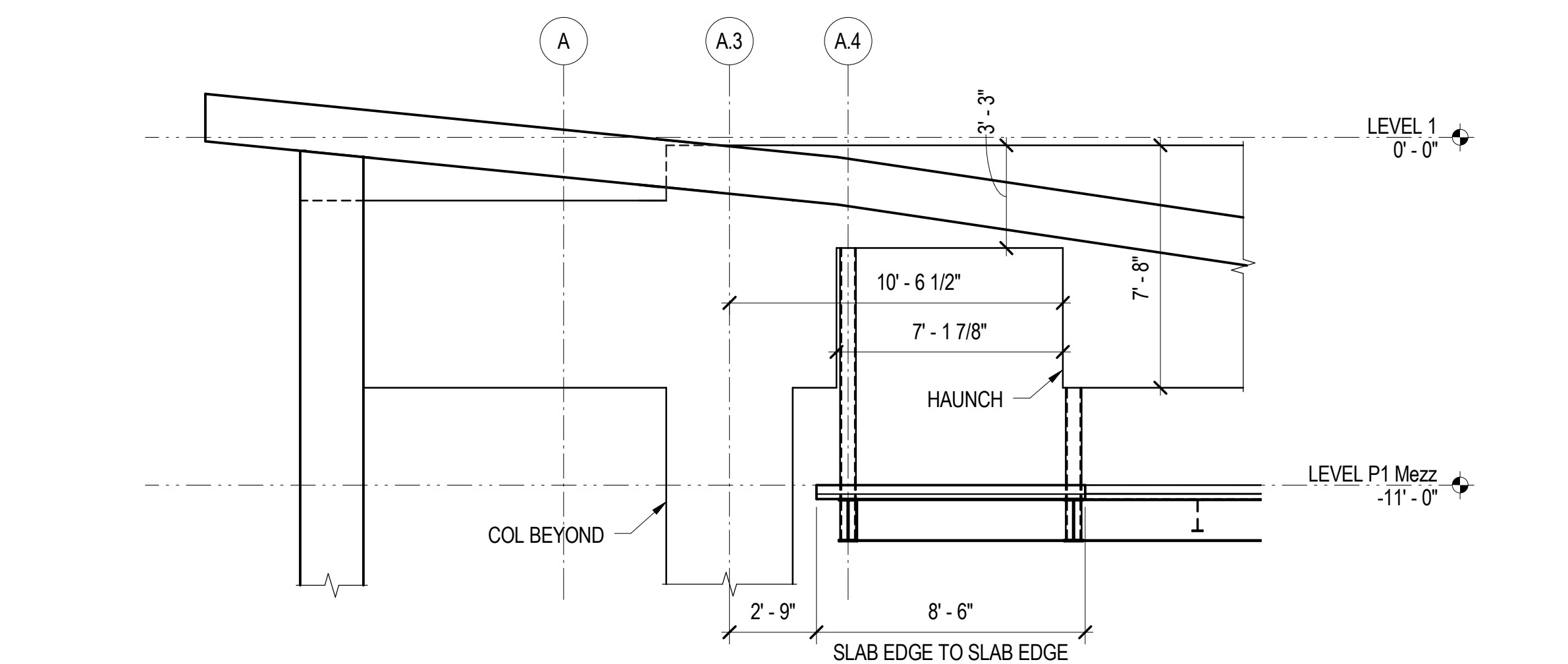
PROJECT NO. 08044 DRAWING NUMBER S2.64



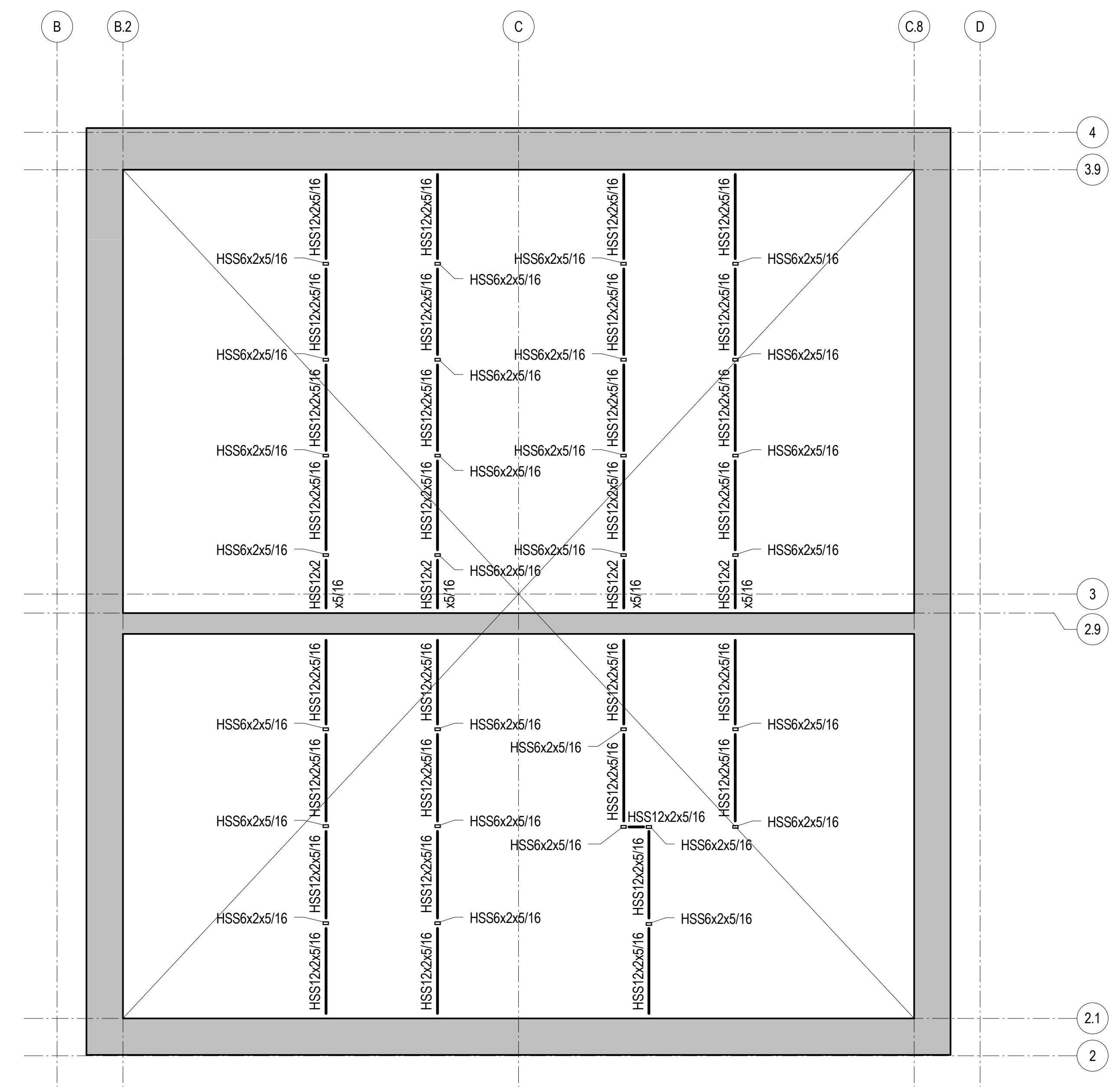
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



5 LEVEL P1 MEZZANINE FRAMING PLAN  
1/8" = 1'-0"



10 SECTION  
1/4" = 1'-0"



NOTES:  
1. REFERENCE TOP OF STRUCTURAL STEEL IS 12'-6"

16 LEVEL 1 SHAFT WALL SUPPORT FRAME PLAN  
1/8" = 1'-0"

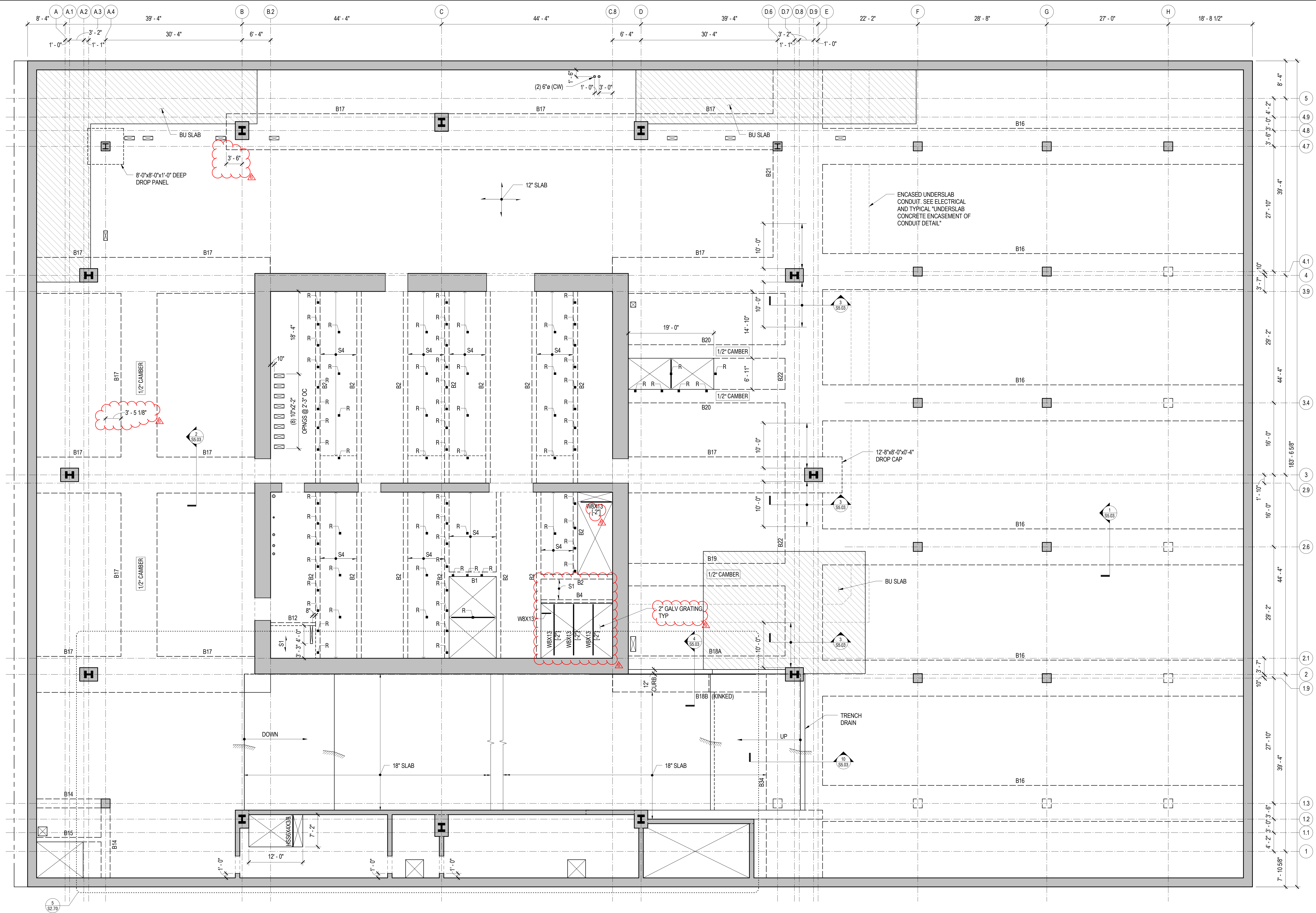
NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>PARTIAL PLANS</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	S2.70

4/29/2014 10:54:48 PM C:\Revit\Transbay\Twr\_MSP2013\_kmh.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



- REFERENCE DRAWINGS**
- S0\_\_\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1\_\_\_ LOAD MAPS
  - S2\_\_\_ PLANS
  - S3\_\_\_ ELEVATIONS
  - S4\_\_\_ TYPICAL DETAILS AND SCHEDULES
  - S5\_\_\_ CONCRETE SECTIONS AND DETAILS
  - S6\_\_\_ STEEL SECTIONS AND DETAILS

- NOTES**
1. REFERENCE FLOOR ELEVATION IS -22'-8". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
  2. STRUCTURAL SLAB IS A 12-INCH-THICK REINFORCED FLAT SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.03.

3. SLAB REINFORCING BARS SHALL BE PLACED IN THE FOLLOWING SEQUENCE:
  - N-S BOTTOM BARS
  - E-W BOTTOM BARS
  - E-W TOP BARS
  - N-S TOP BARS
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.

5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.

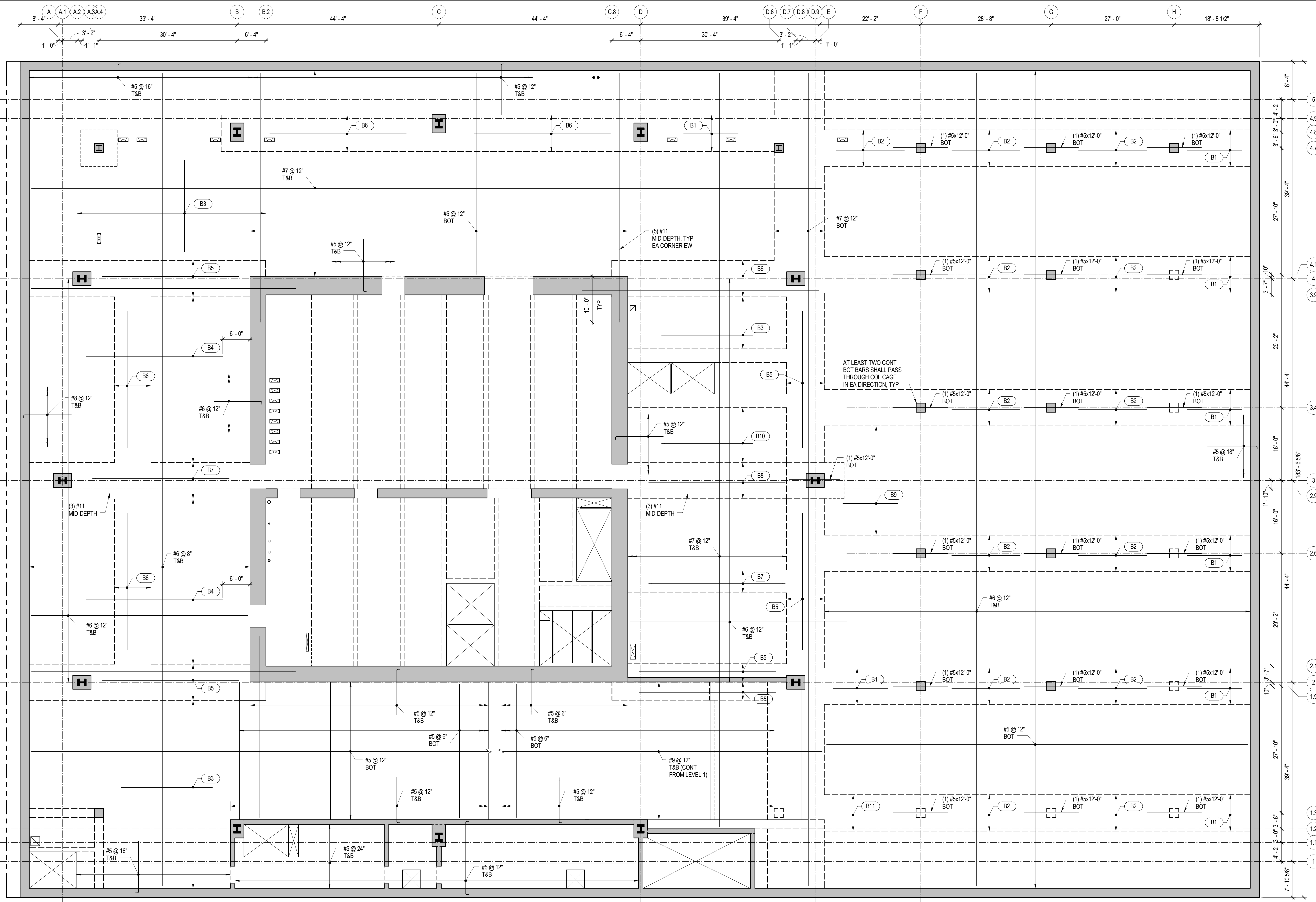
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT	REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P1 FRAMING PLAN**

4/30/2014 9:47:38 AM C:\Revit\Transbay\Twr\_MS2013.lam.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
B1	#5x12'-0" @ 36"	
B2	#6x15'-0" @ 12"	STAGGER 2'-0"
B3	#5x20'-0" @ 36"	STAGGER 2'-0"
B4	#5x30'-0" @ 36"	
B5	#7x30'-0" @ 6"	
B6	#7x30'-0" @ 12"	
B7	#8x30'-0" @ 6"	STAGGER 3'-0"
B8	#8x30'-0" @ 4"	STAGGER 3'-0"
B9	#5x12'-0" @ 12"	
B10	#5x20'-0" @ 12"	STAGGER 2'-0"
B11	#5x20'-0" @ 6"	
B12	#6x30'-0" @ 6"	
B13	#5x15'-0" @ 12"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
B14	#5x30'-0" @ 24"	
B15	#6x15'-0" @ 36"	
B16	#6x20'-0" @ 24"	STAGGER 2'-0"
B17	#6x20'-0" @ 18"	STAGGER 2'-0"
B18	#6x20'-0" @ 12"	STAGGER 2'-0"
B19	#7x20'-0" @ 12"	STAGGER 2'-0"
B20	#8x20'-0" @ 6"	STAGGER 2'-0"
B21	#9x20'-0" @ 6"	STAGGER 2'-0"
B22	#10x20'-0" @ 12"	STAGGER 2'-0"
B23	#9x20'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

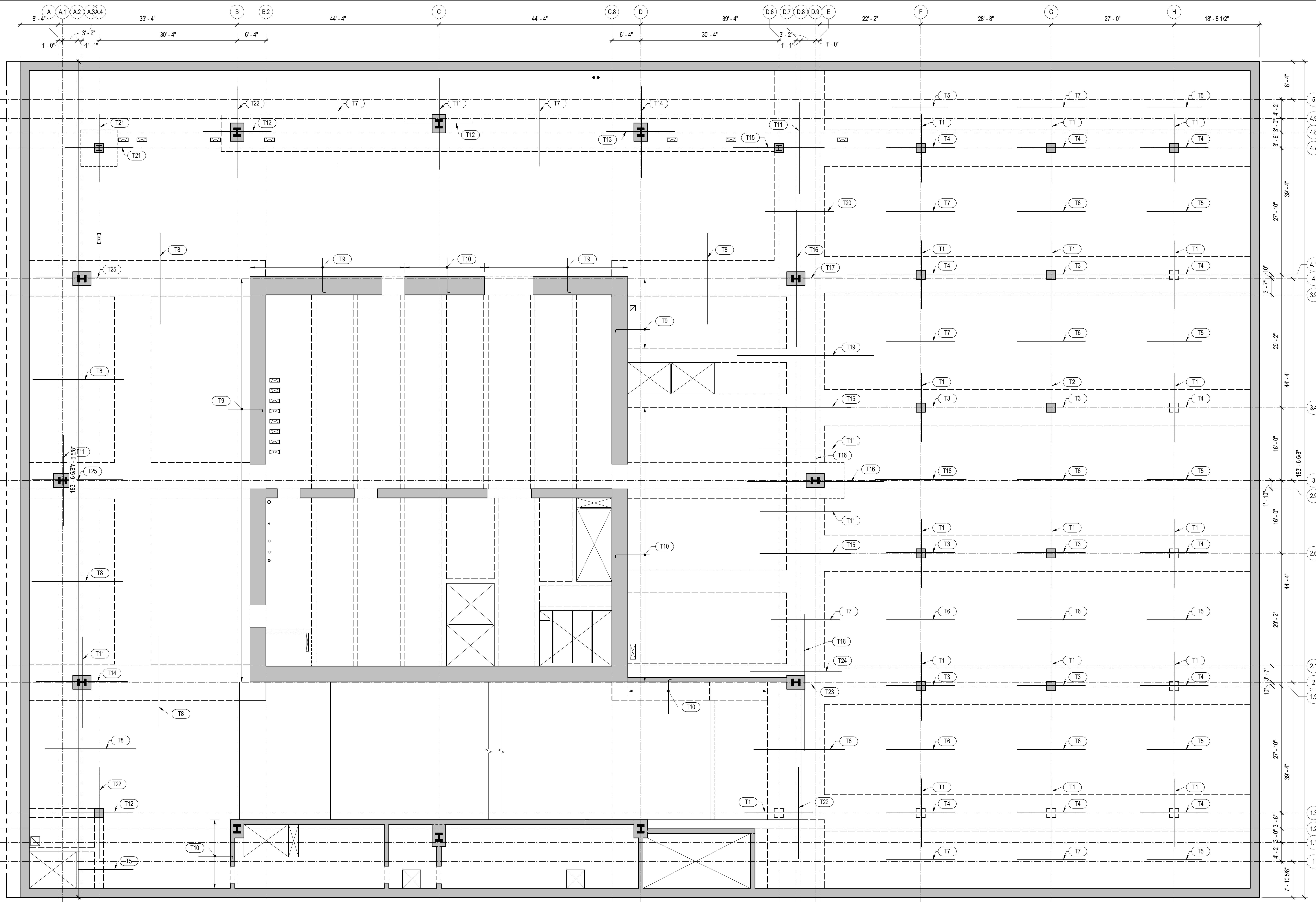
**LEVEL P1 BOTTOM REINFORCING PLAN**

4/29/2014 10:54:56 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**1** LEVEL P1 BOTTOM REINFORCING PLAN  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
T1	(5) #6x15'-0" @ 36"	STAGGER 2'-0"
T2	(7) #6x15'-0" @ 36"	STAGGER 2'-0"
T3	(24) #6x15'-0" @ 4"	STAGGER 3'-0"
T4	(16) #6x15'-0" @ 6"	STAGGER 3'-0"
T5	#4x12'-0" @ 18"	INFILL BTWN COLS
T6	#5x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T7	#4x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T8	#4x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T9	#6x7'-6" @ 36"	W/ STD HOOK
T10	#6x7'-6" @ 12"	W/ STD HOOK
T11	(12) #6x20'-0" @ 12"	STAGGER 2'-0"
T12	(12) #6x15'-0" @ 8"	STAGGER 2'-0"
T13	(16) #6x15'-0" @ 6"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
T14	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T15	(5) #6x20'-0" @ 24"	STAGGER 2'-0"
T16	(24) #6x30'-0" @ 4"	STAGGER 3'-0"
T17	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T18	#6x20'-0" @ 12"	INFILL BTWN COLS, STAGGER 3'-0"
T19	#4x30'-0" @ 18"	INFILL BTWN COLS
T20	#6x18'-0" @ 12"	INFILL BTWN COLS, STAGGER 2'-0"
T21	(8) #6x15'-0" @ 12"	STAGGER 2'-0"
T22	(6) #6x20'-0" @ 18"	STAGGER 2'-0"
T23	(4) #6x20'-0" @ 12"	STAGGER 2'-0"
T24	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T25	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T26	#6x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 3'-0"

MARK	REINFORCING	REMARKS
T27	(11) #6x20'-0" @ 9"	STAGGER 2'-0"
T28	(12) #6x20'-0" @ 8"	STAGGER 3'-0"
T29	(8) #6x20'-0" @ 12"	STAGGER 2'-0"
T30	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T31	#7x20'-0" @ 12"	STAGGER 2'-0"
T32	#7x20'-0" @ 24"	STAGGER 2'-0"
T33	#8x20'-0" @ 24"	STAGGER 2'-0"
T34	#9x40'-0" @ 12"	STAGGER 2'-0"
T35	#10x60'-0" @ 12"	STAGGER 2'-0"
T36	#6x40'-0" @ 6"	STAGGER 2'-0"
T37	#7x40'-0" @ 6"	STAGGER 2'-0"
T38	#7x40'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P1 TOP REINFORCING PLAN**

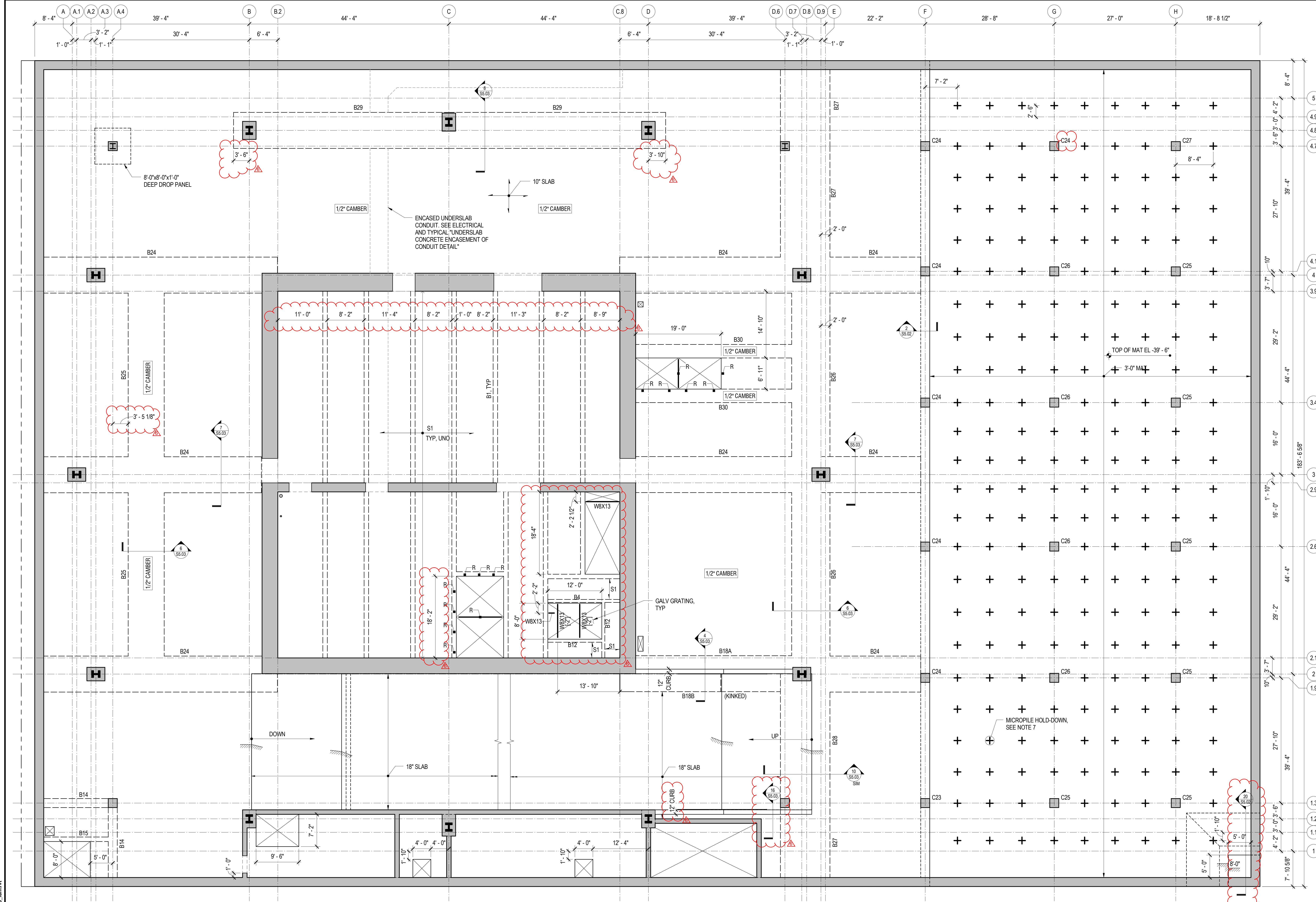
NO. 08044 PROJECT NO. 08044

4/29/2014 10:50:01 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P1 TOP REINFORCING PLAN**  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**REFERENCE DRAWINGS**

S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES  
 S1\_ LOAD MAPS  
 S2\_ PLANS  
 S3\_ ELEVATIONS  
 S4\_ TYPICAL DETAILS AND SCHEDULES  
 S5\_ CONCRETE SECTIONS AND DETAILS  
 S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

- REFERENCE FLOOR ELEVATION IS -38'-10". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
- STRUCTURAL SLAB IS A 10-INCH-THICK REINFORCED FLAT SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.03.
- SLAB REINFORCING BARS SHALL BE PLACED IN THE FOLLOWING SEQUENCE:  
 - N-S BOTTOM BARS  
 - E-W BOTTOM BARS  
 - E-W TOP BARS  
 - N-S TOP BARS
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.

- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- PLACE 4" SOG ON 4" OF COMPACTED GRAVEL OVER ENTIRE MAT.
- SEE S4.02 FOR INFORMATION ON MICROPILES.

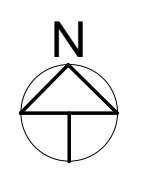
8. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P2 FRAMING PLAN**

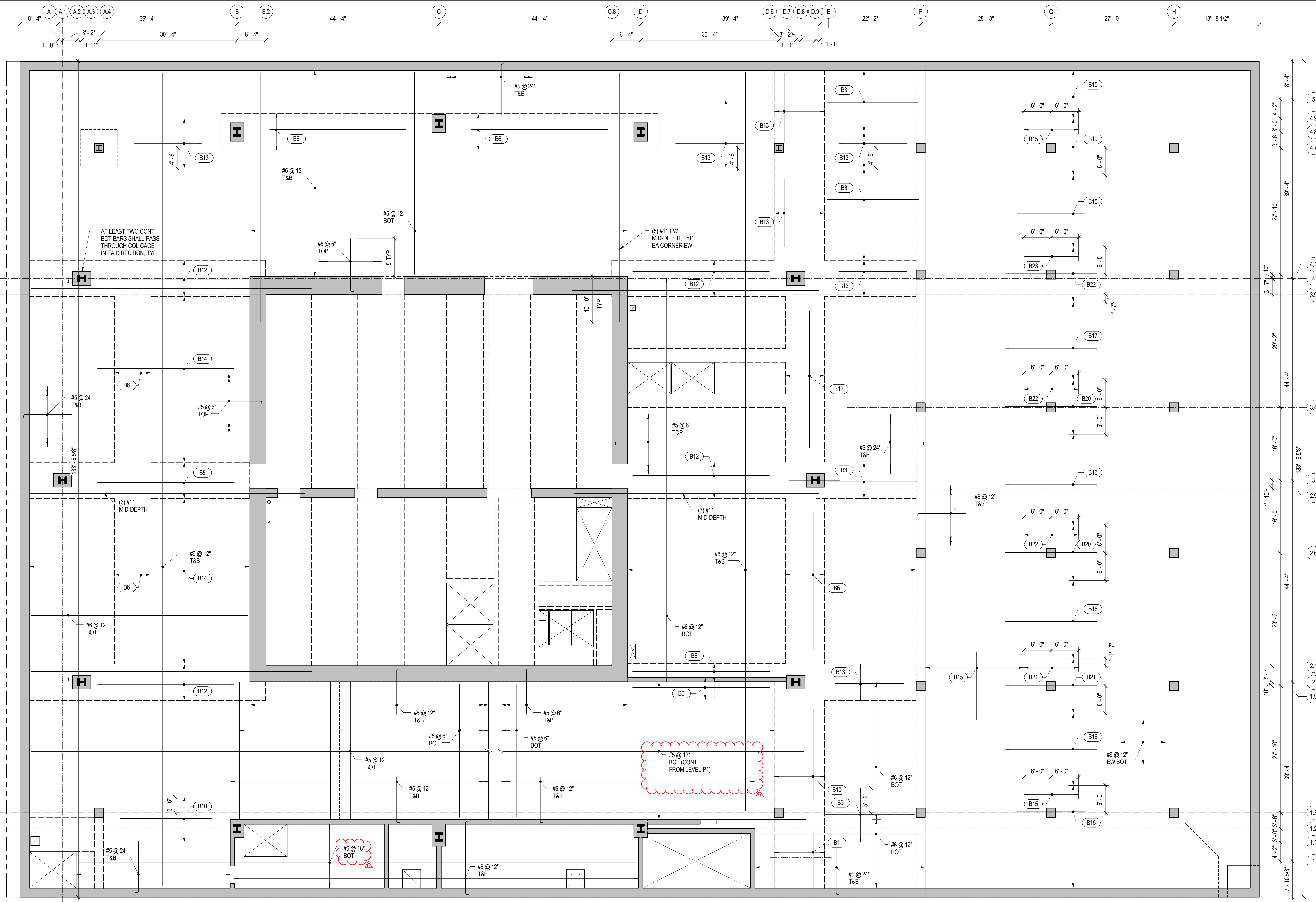
NO. PROJECT NO. 08044  
 DRAWING NUMBER S2.P2

4/30/2014 9:47:39 AM C:\Revit\Transbay\Twr\_MS2013.lam.rvt





- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
B1	#5x12'-0\" @ 36"	
B2	#6x15'-0\" @ 12"	STAGGER 2'-0"
B3	#5x20'-0\" @ 36"	STAGGER 2'-0"
B4	#5x30'-0\" @ 36"	
B5	#7x30'-0\" @ 6"	
B6	#7x30'-0\" @ 12"	
B7	#8x30'-0\" @ 6"	STAGGER 3'-0"
B8	#8x30'-0\" @ 4"	STAGGER 3'-0"
B9	#5x12'-0\" @ 12"	
B10	#5x20'-0\" @ 12"	STAGGER 2'-0"
B11	#5x20'-0\" @ 6"	
B12	#6x30'-0\" @ 6"	
B13	#5x15'-0\" @ 12"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
B14	#5x30'-0\" @ 24"	
B15	#6x15'-0\" @ 36"	
B16	#6x20'-0\" @ 24"	STAGGER 2'-0"
B17	#6x20'-0\" @ 18"	STAGGER 2'-0"
B18	#6x20'-0\" @ 12"	STAGGER 2'-0"
B19	#7x20'-0\" @ 12"	STAGGER 2'-0"
B20	#8x20'-0\" @ 6"	STAGGER 2'-0"
B21	#9x20'-0\" @ 6"	STAGGER 2'-0"
B22	#10x20'-0\" @ 12"	STAGGER 2'-0"
B23	#9x20'-0\" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P2 BOTTOM REINFORCING PLAN**

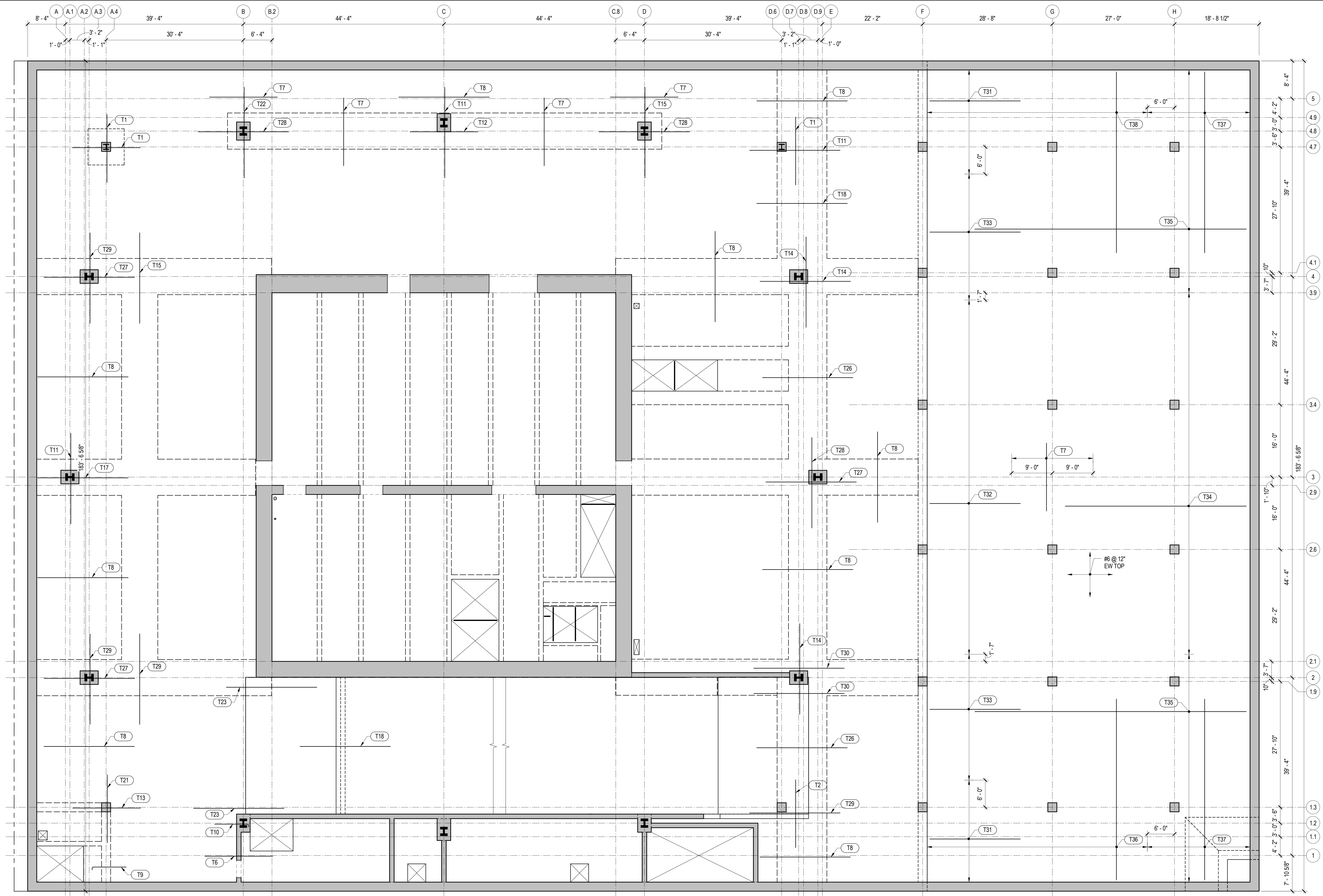
4/29/2014 10:55:13 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P2 BOTTOM REINFORCING PLAN**  
1/8" = 1'-0"





- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
T1	(5) #6x15'-0" @ 36"	STAGGER 2'-0"
T2	(7) #6x15'-0" @ 36"	STAGGER 2'-0"
T3	(24) #6x15'-0" @ 4"	STAGGER 3'-0"
T4	(16) #6x15'-0" @ 6"	STAGGER 3'-0"
T5	#4x12'-0" @ 18"	INFILL BTWN COLS
T6	#5x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T7	#4x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T8	#4x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T9	#6x7'-6" @ 36"	W/ STD HOOK
T10	#6x7'-6" @ 12"	W/ STD HOOK
T11	(12) #6x20'-0" @ 12"	STAGGER 2'-0"
T12	(12) #6x15'-0" @ 8"	STAGGER 2'-0"
T13	(16) #6x15'-0" @ 6"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
T14	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T15	(5) #6x20'-0" @ 24"	STAGGER 2'-0"
T16	(24) #6x30'-0" @ 4"	STAGGER 3'-0"
T17	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T18	#6x20'-0" @ 12"	INFILL BTWN COLS, STAGGER 3'-0"
T19	#4x30'-0" @ 18"	INFILL BTWN COLS
T20	#6x18'-0" @ 12"	INFILL BTWN COLS, STAGGER 2'-0"
T21	(8) #6x15'-0" @ 12"	STAGGER 2'-0"
T22	(6) #6x20'-0" @ 18"	STAGGER 2'-0"
T23	(4) #6x20'-0" @ 12"	STAGGER 2'-0"
T24	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T25	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T26	#6x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 3'-0"

MARK	REINFORCING	REMARKS
T27	(11) #8x20'-0" @ 9"	STAGGER 2'-0"
T28	(12) #6x20'-0" @ 8"	STAGGER 3'-0"
T29	(8) #6x20'-0" @ 12"	STAGGER 2'-0"
T30	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T31	#7x20'-0" @ 12"	STAGGER 2'-0"
T32	#7x20'-0" @ 24"	STAGGER 2'-0"
T33	#8x20'-0" @ 24"	STAGGER 2'-0"
T34	#9x40'-0" @ 12"	STAGGER 2'-0"
T35	#10x60'-0" @ 12"	STAGGER 2'-0"
T36	#6x40'-0" @ 6"	STAGGER 2'-0"
T37	#7x40'-0" @ 6"	STAGGER 2'-0"
T38	#7x40'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

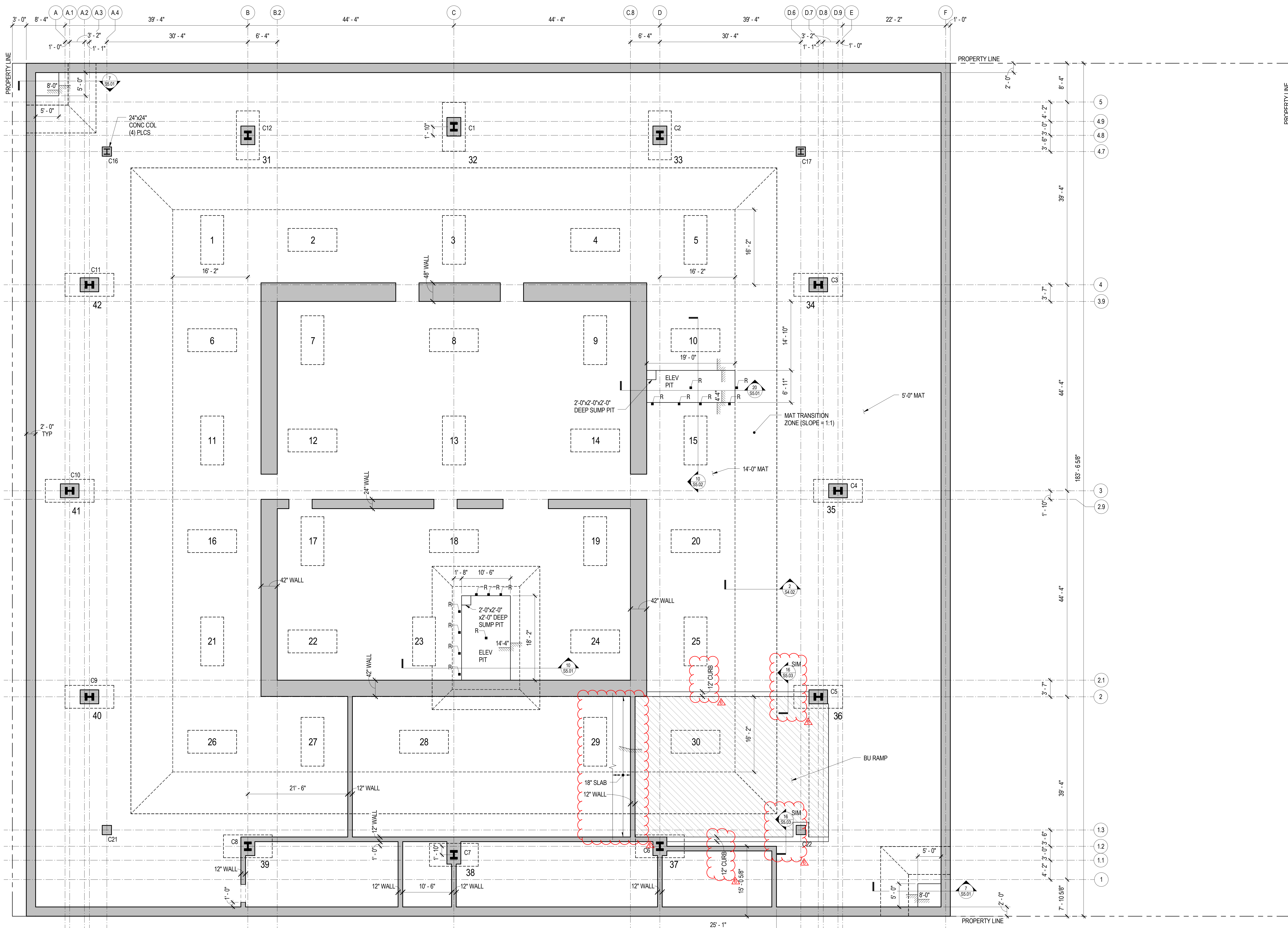
**LEVEL P2 TOP REINFORCING PLAN**

4/29/2014 10:55:19 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P2 TOP REINFORCING PLAN**  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS -55'-0". TOP OF MAT FOUNDATION IS 8 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. MAT FOUNDATION IS 5'-0" THICK UNLESS NOTED OTHERWISE. FOUNDATION SHALL BE PLACED ATOP COMPACTED STRUCTURAL FILL OR MUD SLAB IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. PLACE 4" SOG ON 4" OF COMPACTED GRAVEL OVER ENTIRE MAT.
3. ( ) INDICATES TOP OF MAT FOUNDATION ELEVATION.
4. BASEMENT WALLS SHALL BE RESTRAINED AT THE TOP BY THE LEVEL P2 STRUCTURAL SLAB, AT THE BOTTOM BY THE MAT FOUNDATION, AND SHALL HAVE REACHED DESIGN STRENGTH PRIOR TO REMOVING CONSTRUCTION SHORES.
5. SEE ARCHITECTURAL/CIVIL DRAWINGS FOR SIDEWALKS, PAVING, AND SITE DETAILS AT BUILDING EXTERIOR UNLESS NOTED OTHERWISE.
6. REFERENCE ALL CONSTRUCTION DOCUMENTS FOR SIZE, EXTENT, AND LOCATION OF CONCRETE CURBS, HOUSEKEEPING PADS, CMU WALLS, PLANTER WALLS, BOLLARDS, EDGE ANGLES, AND SLAB PENETRATIONS. REINFORCE PER TYPICAL DETAILS.

4/30/2014 11:17:30 AM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

**LEVEL P3 FOUNDATION PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

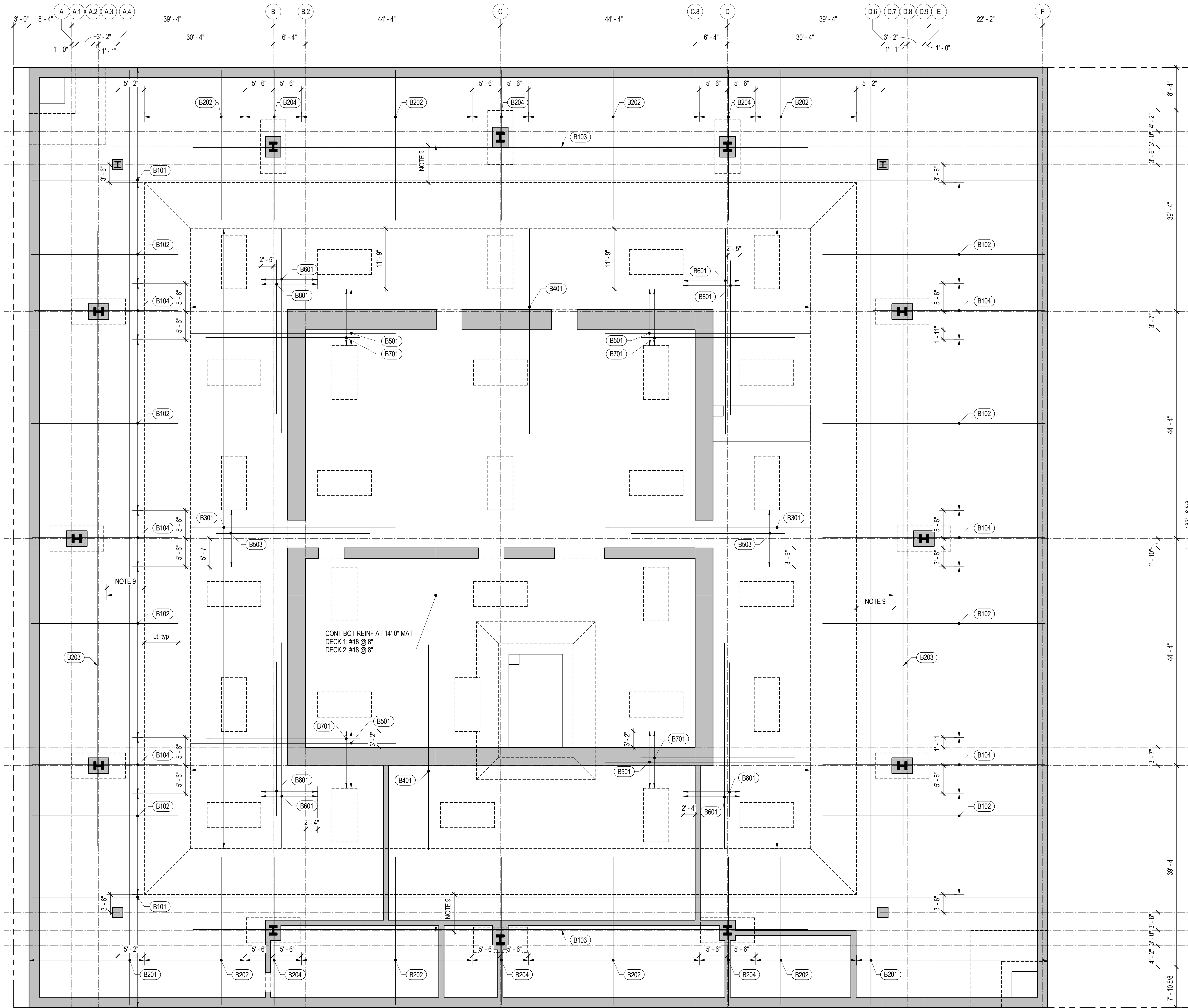
**FOUNDATION PLAN**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

PROJECT NO. 08044 DRAWING NUMBER S2.P3



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**MAT BOTTOM REINFORCING NOTES:**

- REINFORCING PLACEMENT SEQUENCE:
  - 5 DECK 8
  - 4.9 DECK 7
  - 4.8 DECK 6
  - 4.7 DECK 5
  - DECK 4
  - DECK 3
  - DECK 2 (N-S)
  - DECK 1 (E-W)
- WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:
  - DIMENSION LINE
  - EQ EQ
  - STAGGER
- #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPLICED. STAGGER COUPLERS 36" MIN.
- REINFORCEMENT MARK KEY:
  - B101 REINFORCING MARK DECK NUMBER BOTTOM REINFORCING
  - M1 REINFORCING MARK MAT SHEAR REINFORCING
- CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.
- Fy = 75 KSI FOR TOP AND BOTTOM BARS. Fy = 60 KSI FOR ALL OTHER REINFORCEMENT.
- CENTER MAT BOTTOM BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.
- REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.
- SEE "TYPICAL MAT TRANSITION DETAIL."

LEVEL P3 BOTTOM REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
B101	#14 @ 8"	
B102	#14 @ 8"	
B103	(5) #18x120'-0"	
B104	#18 @ 8"	
B201	#14 @ 8"	
B202	#14 @ 8"	
B203	(5) #18x120'-0"	
B204	#18 @ 8"	
B301	#18x40'-0" @ 8"	
B401	#18x40'-0" @ 8"	
B501	#18x40'-0" @ 8"	
B502	#18x40'-0" @ 8"	
B503	#18x30'-0" @ 8"	
B601	#18x40'-0" @ 8"	
B701	#18x30'-0" @ 8"	
B801	#18x30'-0" @ 8"	
B901	#18x30'-0" @ 8"	
B1001	#18x30'-0" @ 8"	
B1101	#18x40'-0" @ 8"	
B1201	#18x40'-0" @ 8"	

CONT BOT REINF AT 14'-0" MAT  
DECK 1: #18 @ 8"  
DECK 2: #18 @ 8"

4/29/2014 10:55:28 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**FOUNDATION MAT BOTTOM REINFORCING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

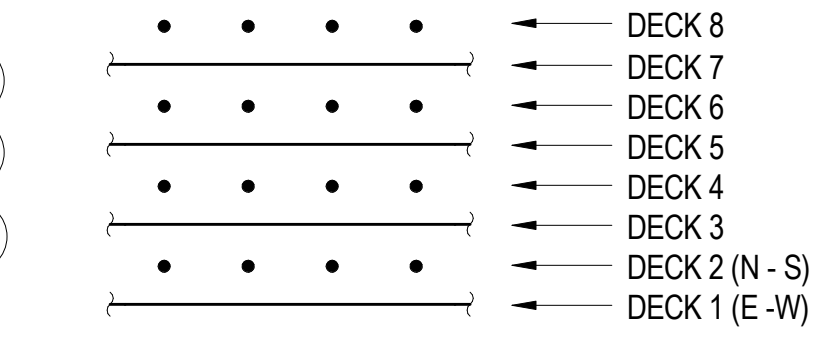
ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

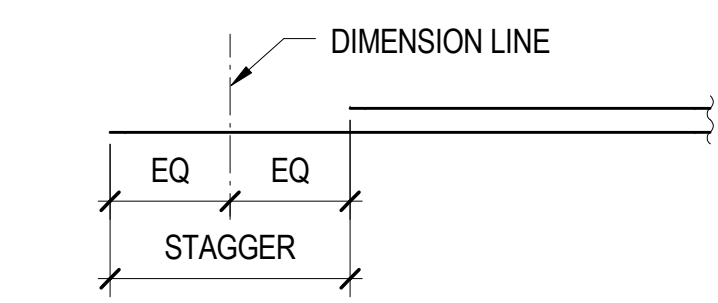
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**MAT BOTTOM REINFORCING NOTES:**

**1. REINFORCING PLACEMENT SEQUENCE:**

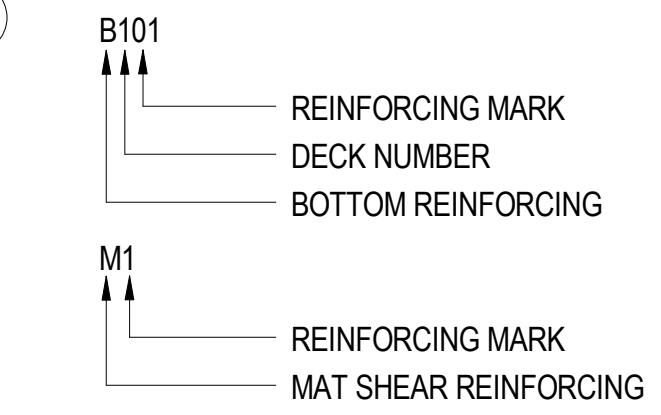


**2. WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:**



**3. #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPICED**

**4. REINFORCEMENT MARK KEY:**



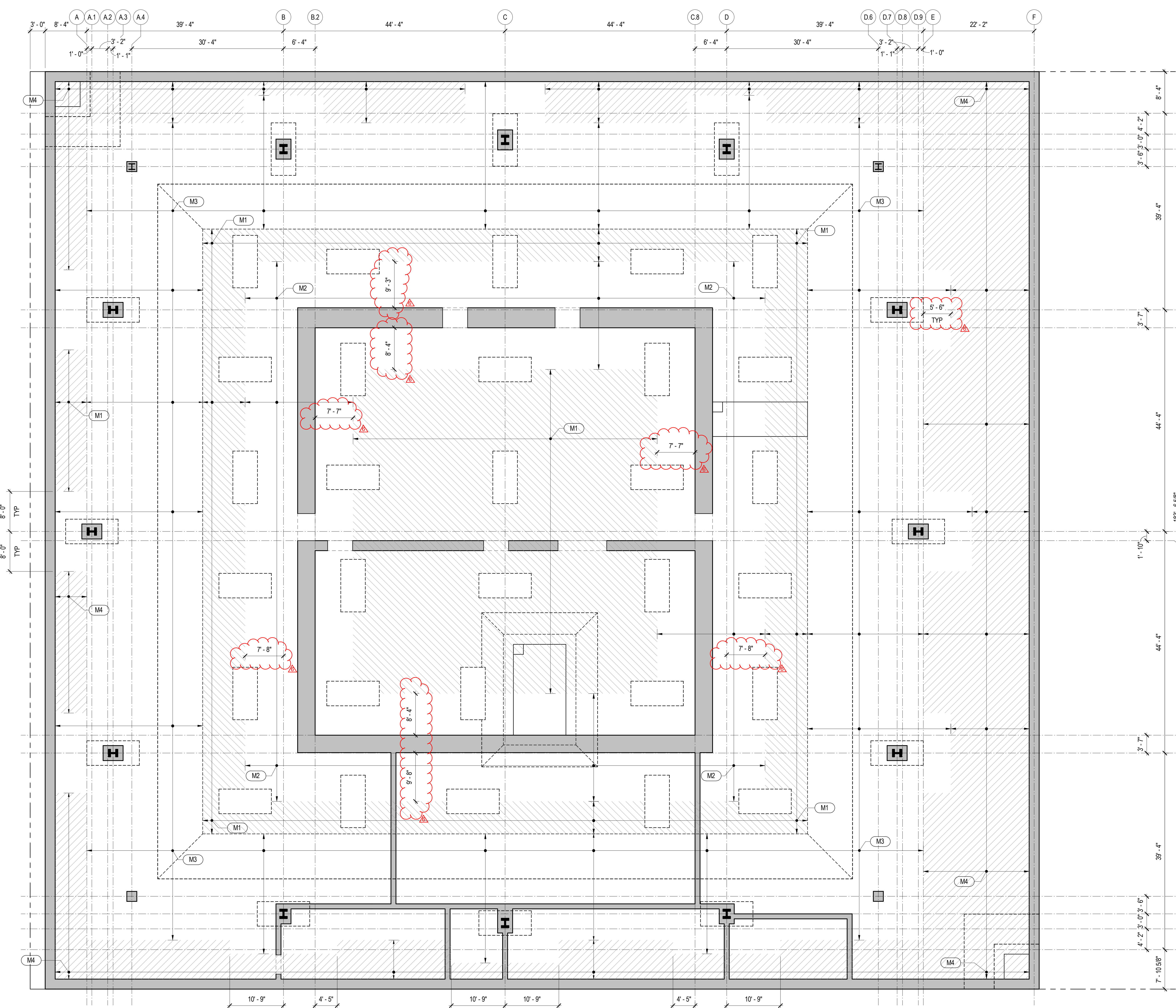
**5. CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.**

**6. REINFORCEMENT DESIGN BASED ON  $F_y = 60$  KSI FOR SHEAR REINF.,  $F_y = 75$  KSI FOR FLEXURAL**

**7. CENTER MAT BOTTOM BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.**

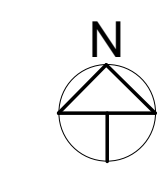
**8. REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.**

MARK	REINFORCING	REMARKS
M1	#10 @ 36"	EACH DIRECTION
M2	#10 @ 16"	EACH DIRECTION
M3	#11 @ 16"	EACH DIRECTION
M4	#7 @ 24"	EACH DIRECTION



4/29/2014 10:55:33 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**FOUNDATION MAT SHEAR REINFORCING PLAN**  
1/8" = 1'-0"



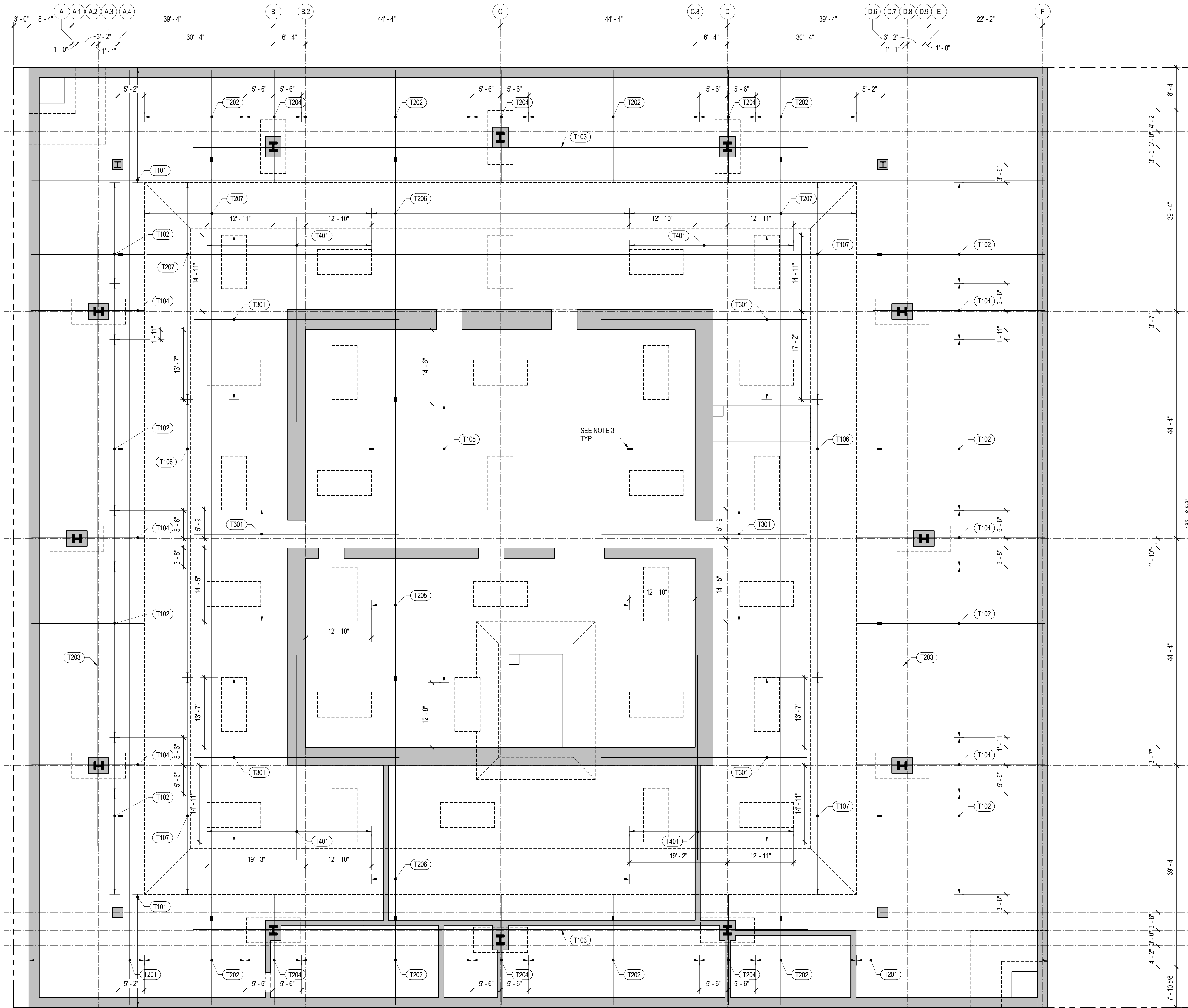
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**FOUNDATION MAT SHEAR REINFORCING PLAN**

PROJECT NO. 08044 DRAWING NUMBER S2.P3S



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**MAT BOTTOM REINFORCING NOTES:**

- REINFORCING PLACEMENT SEQUENCE:
- WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:
- #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPLICED. STAGGER COUPLERS 36" MIN.
- REINFORCEMENT MARK KEY:
- CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.
- F<sub>y</sub> = 75 KSI FOR TOP AND BOTTOM BARS. F<sub>y</sub> = 60 KSI FOR ALL OTHER REINFORCEMENT.
- CENTER MAT TOP BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.
- REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.

**LEVEL P3 TOP REINFORCING SCHEDULE**

MARK	REINFORCING	REMARKS
T101	#14 @ 8"	
T102	#14 @ 8"	
T103	(5) #18x120'-0"	
T104	#18 @ 8"	
T105	#14 @ 8"	
T106	#18 @ 8"	
T107	#18 @ 8"	
T201	#14 @ 8"	
T202	#14 @ 8"	
T203	(5) #18x120'-0"	
T204	#18 @ 8"	
T205	#14 @ 8"	
T206	#18 @ 8"	
T207	#18 @ 8"	
T301	#18x40'-0" @ 8"	
T401	#18x40'-0" @ 8"	

C:\Revit\Transbay\Twr\_MS2013.kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

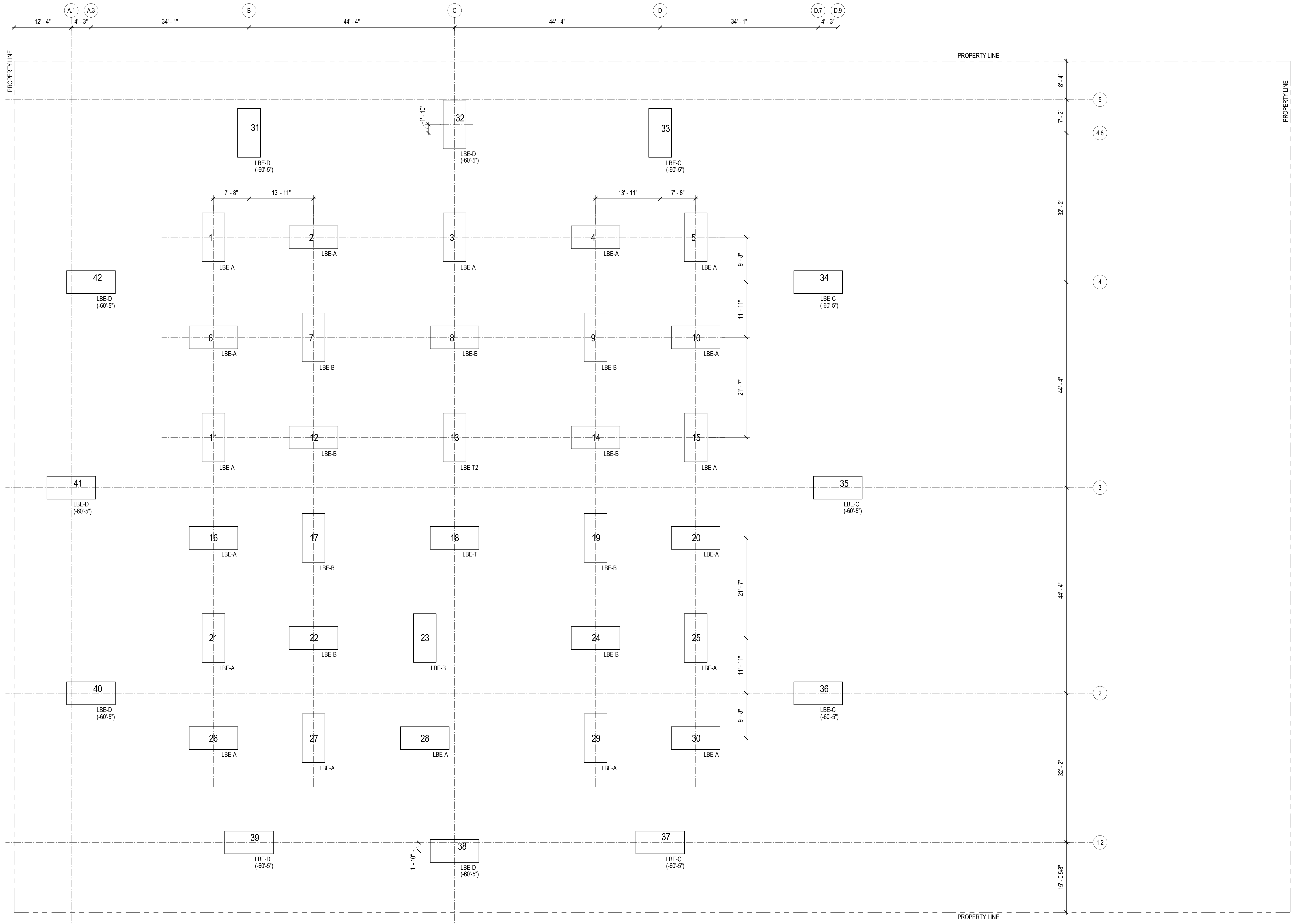
**FOUNDATION MAT TOP REINFORCING PLAN**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

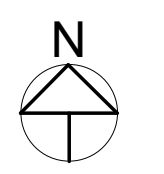
NO.	DATE	ISSUE
9	02 MAY 14	GMP
8	12 FEB 14	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 2
7	24 JAN 14	BARRETTE/LOAD BEARING ELEMENT BULLETIN NO. 2
6	25 NOV 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1
5	25 SEP 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM
4	03 SEP 13	50% CONSTRUCTION DOCUMENTS
3	19 JUL 13	DESIGN DEVELOPMENT
2	03 JUN 13	50% DESIGN DEVELOPMENT
1	19 APR 13	100% SCHEMATIC DESIGN

DRAWING TITLE	
<b>LOAD BEARING ELEMENT PLAN</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S2.00</b>



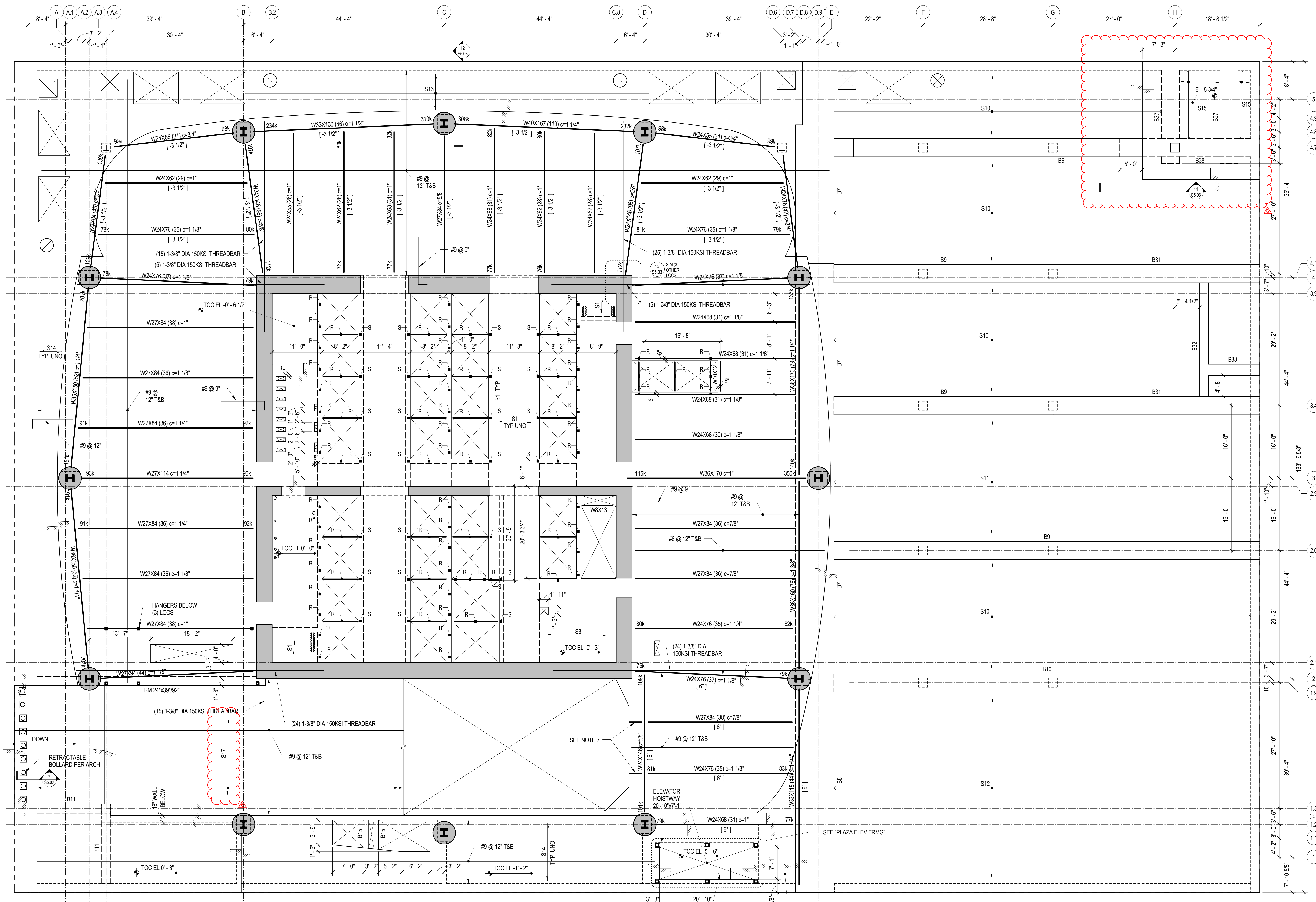
- NOTES:**
- LBE INDICATES LOAD BEARING ELEMENT MARK. SEE LOAD BEARING ELEMENT SCHEDULE FOR SIZE, DEPTH, AND REINFORCEMENT.
  - ( ) INDICATES TOP OF LBE. TOP OF LBE IS AT ELEVATION -69'-5" UNLESS NOTED OTHERWISE.
  - BUILDING ELEVATION 0'-0" = +5.05' CITY DATUM.
  - DESIGN OF LBE IS BASED ON THE "TRANSBAY TOWER GEOTECHNICAL DATA REPORT," BY ARUP, DATED JUNE 17, 2013.
  - THE CONTRACTOR SHALL COORDINATE AS REQUIRED THE INSTALLATION OF LBES WITH THE EXCAVATION SUPPORT SYSTEM.
  - REFER TO SHEET S4.01 FOR ADDITIONAL LBE NOTES AND DETAILS.

4/29/2014 10:51:27 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt





- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



- REFERENCE DRAWINGS**
- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1\_ LOAD MAPS
  - S2\_ PLANS
  - S3\_ ELEVATIONS
  - S4\_ TYPICAL DETAILS AND SCHEDULES
  - S5\_ CONCRETE SECTIONS AND DETAILS
  - S6\_ STEEL SECTIONS AND DETAILS

- NOTES**
1. REFERENCE FLOOR ELEVATION IS 0'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 2'-0" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 3 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
  2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.

3. THE TOWER STRUCTURAL SLAB IS 18 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #6@6" OC EACH WAY, TOP AND BOTTOM. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). THE REINFORCED CONCRETE STRUCTURAL SLAB AT THE TOWER PERIMETER IS A 18-INCH-THICK REINFORCED FLAT SLAB AND A 6-INCH-THICK REINFORCED ONE-WAY SLAB WITHIN THE CORE UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEETS S4.03 & S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.

5. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W/6 SLAB SUPPORT PER DETAIL 2/S4.25.
8. INDICATES SHAFT WALL SUPPORT COLUMN. SEE "LEVEL 1 SHAFT WALL SUPPORT FRAME" PARTIAL PLAN ON S2.70.

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	1	STRUCTURAL BID ADDENDUM NO. 1
2	27 NOV 13	1	STRUCTURAL BID ADDENDUM NO. 2
3	12 DEC 13	1	ADDENDUM #2 PERMIT
4	10 FEB 14	1	BID ADDENDUM #2
5	11 FEB 14	1	ADDENDUM #2 PERMIT REVISION NO. 1
6	02 MAY 14	1	GMP

**LEVEL 1 FRAMING PLAN**



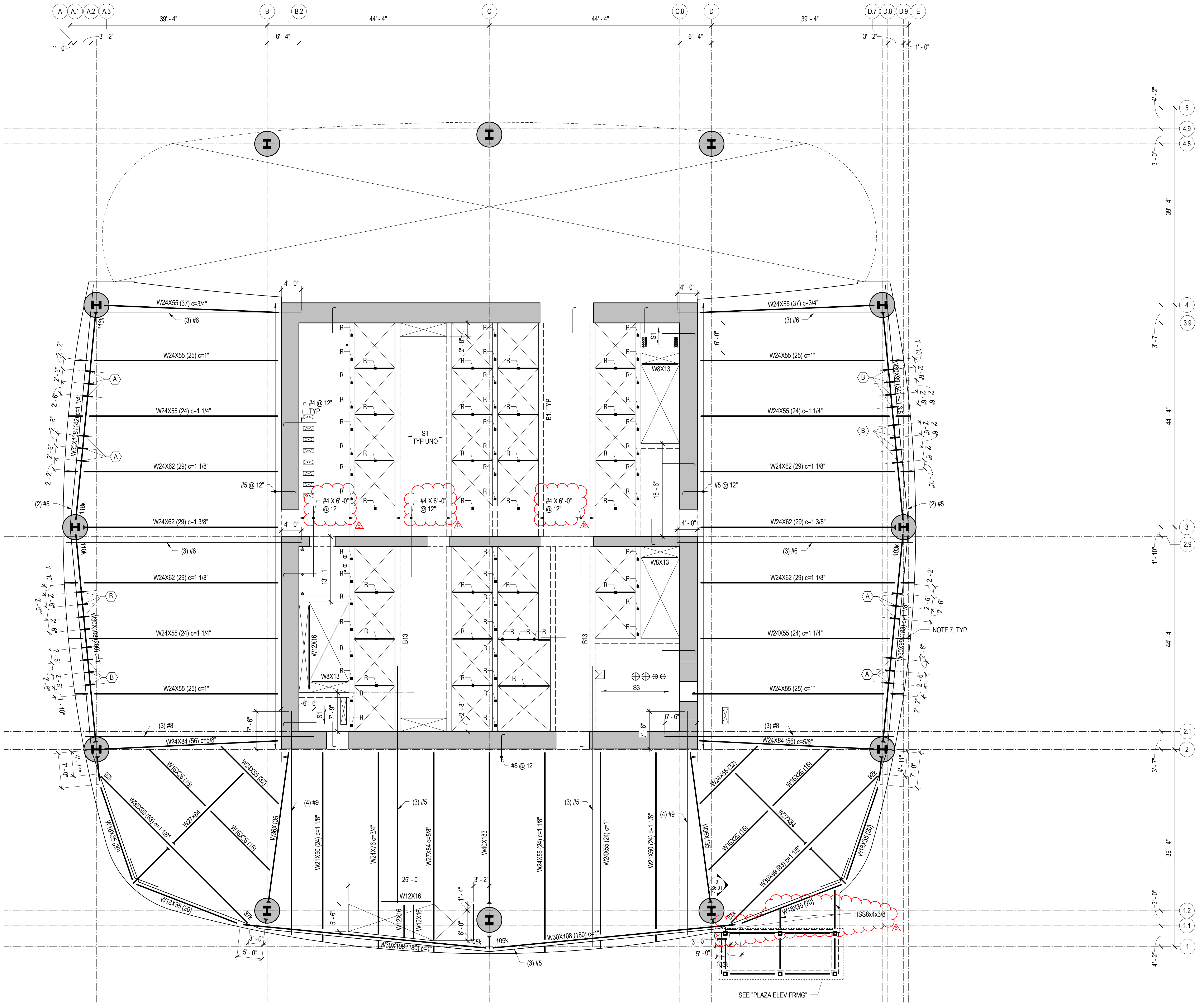
**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 19'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 11" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W6 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB\* DETAIL ON SHEET S4.25.

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 10:51:35 PM C:\Revit\Transbay\lwr\_WIS2013\_kmh.rvt

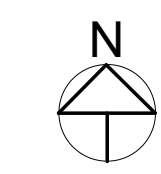
**LEVEL 2 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 2 FRAMING PLAN**

NO. PROJECT NO. **08044** DRAWING NUMBER **S2.02**





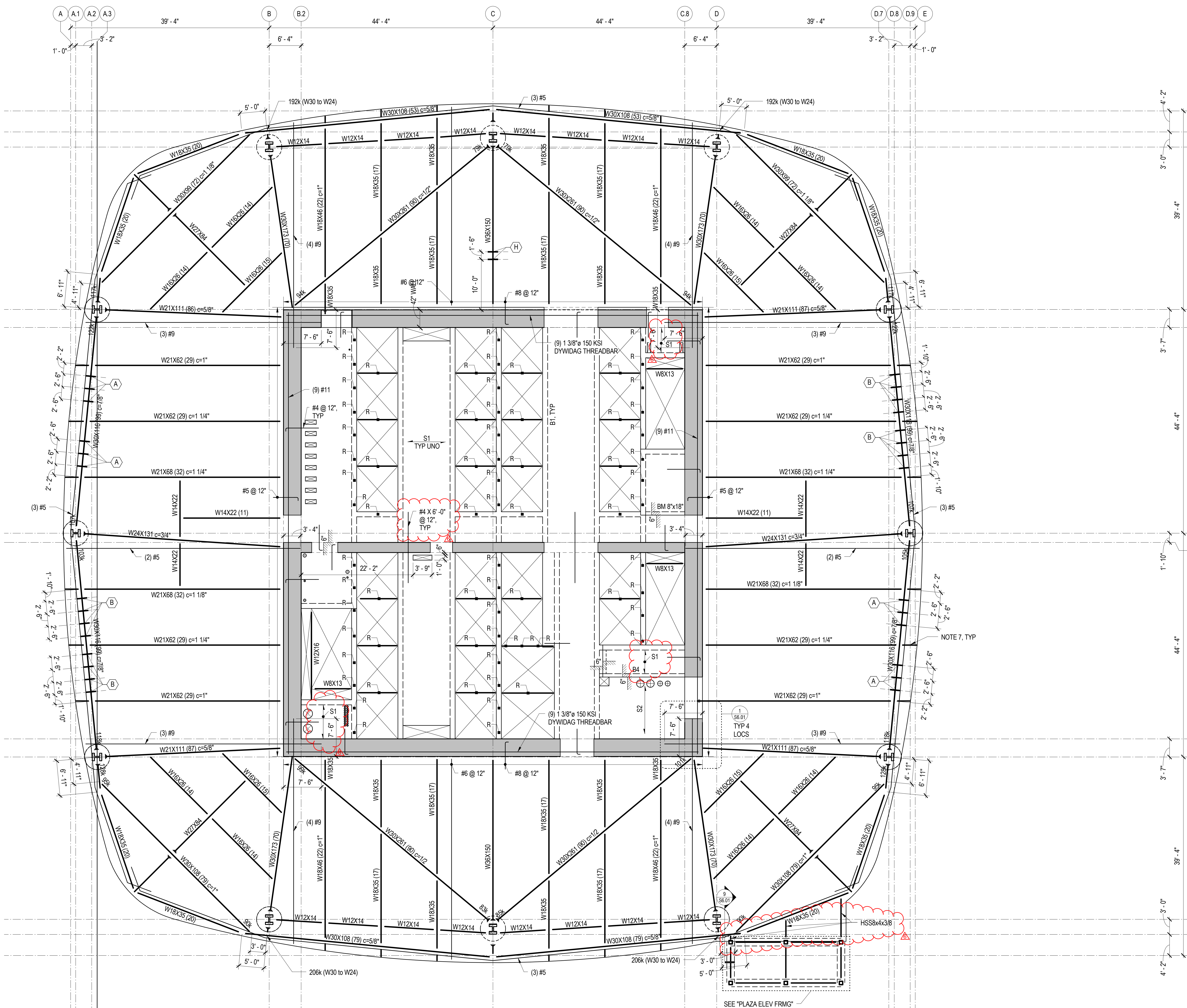


**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 37'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR COLUMNS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4@12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP-BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W6 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.

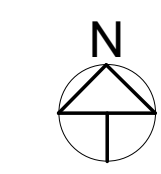


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**LEVEL 3 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER **S2.03**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

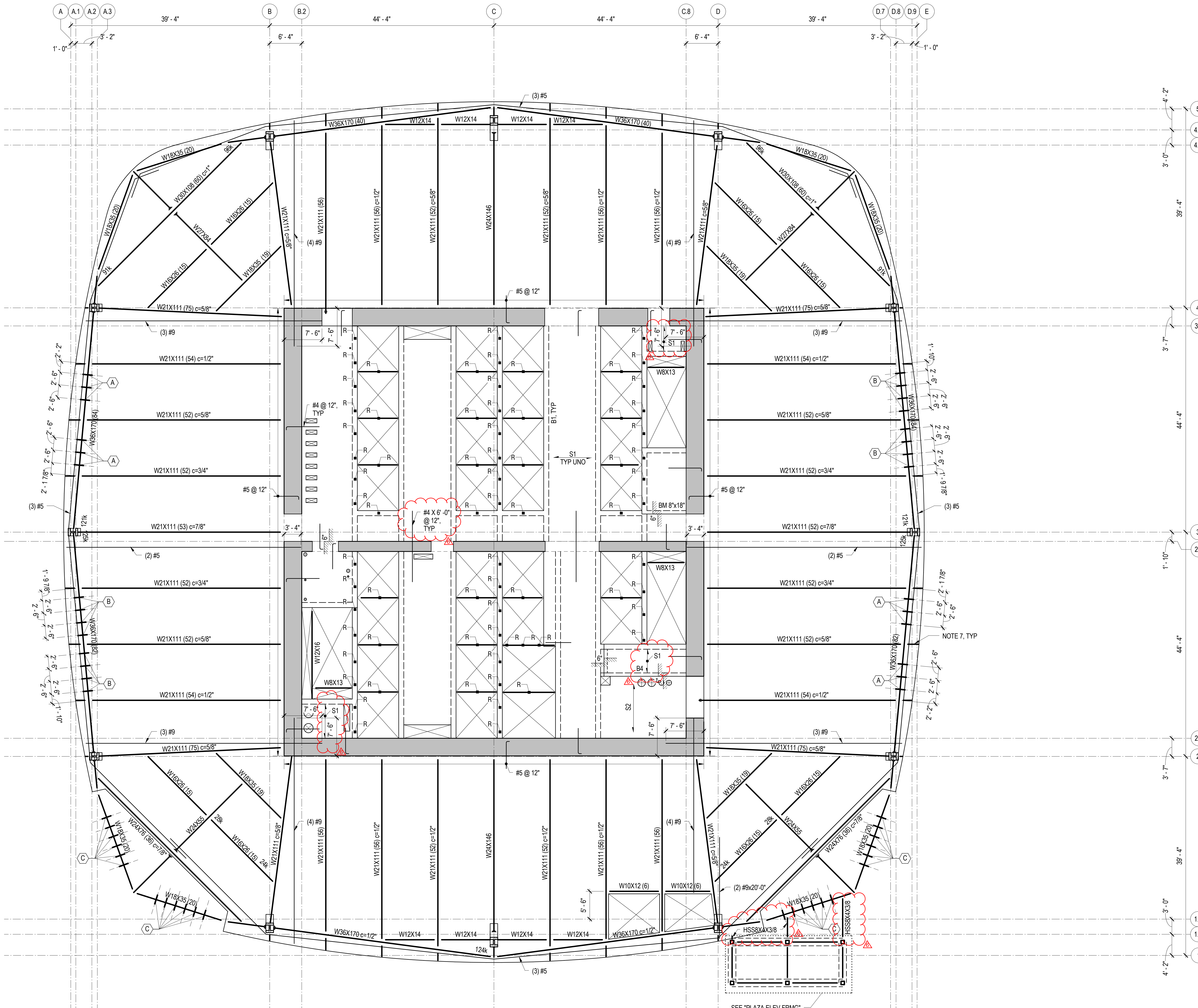
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 55'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ONSHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W6 SLAB SUPPORT PER TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



5  
4.9  
4.8  
4  
3.9  
4  
3  
2.9  
3  
2  
2.1  
2  
1.2  
1.1  
1

4/29/2014 10:51:45 PM C:\Revit\Transbay\wr\_WS2013\_kmh.rvt

**LEVEL 4 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 4 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.04**

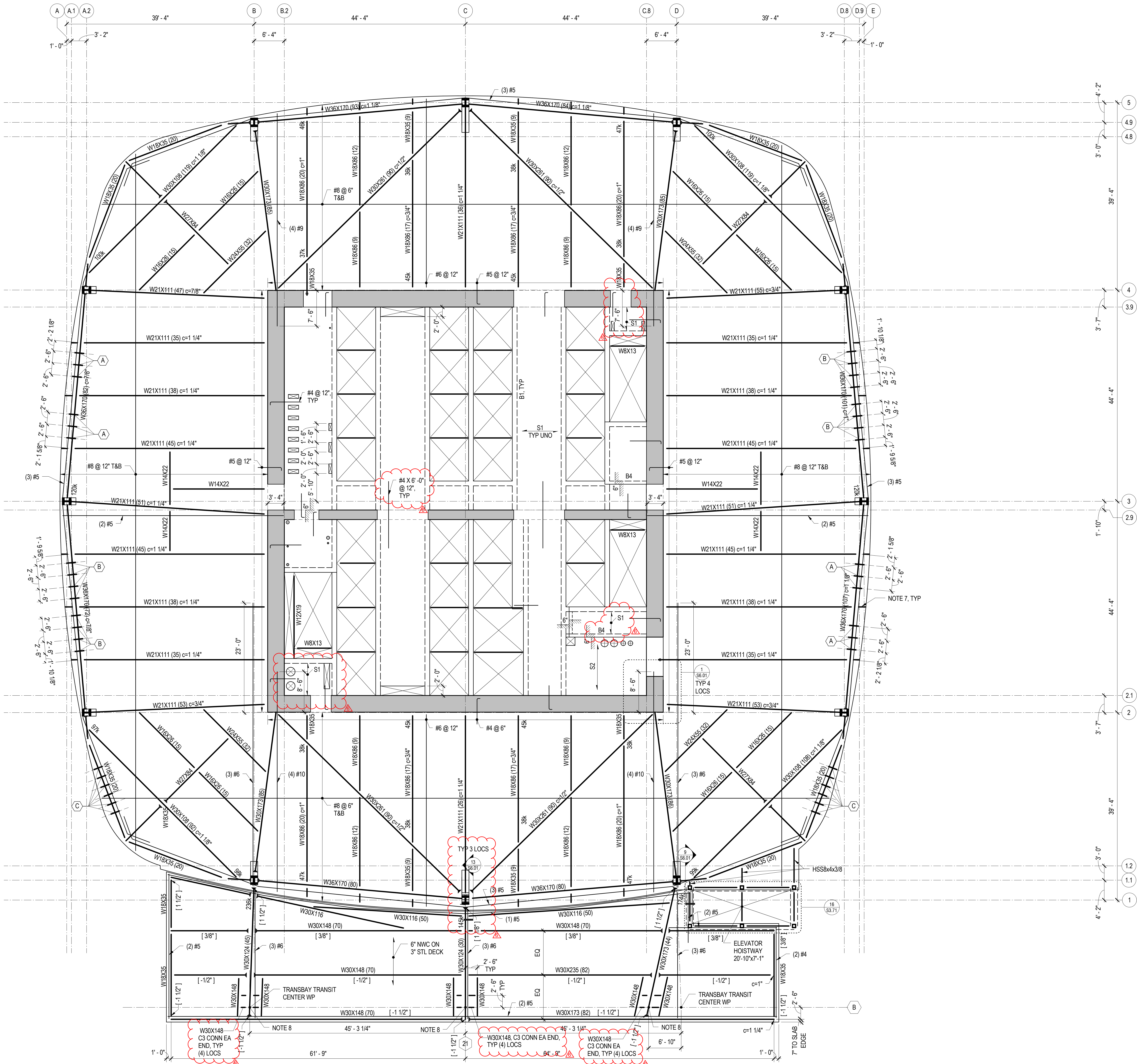


**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 70'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 6 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 8 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/S4.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. PROVIDE W16 SLAB SUPPORT PER TYPICAL SLAB SUPPORT 'STUB' DETAIL ON SHEET S4.25.
8. PROVIDE EARTHQUAKE PROTECTION SYSTEMS FP23870/11 SINGLE PENDULUM BEARING.



5  
4.9  
4.8  
4  
3.9  
4  
3  
2.9  
3  
2  
2.1  
2  
3  
3'-0"  
39'-4"  
44'-4"  
44'-4"  
39'-4"  
3'-0"  
3'-7"  
1'-10"  
44'-4"  
44'-4"  
3'-7"  
3'-0"  
4'-2"  
3'-0"  
1.2  
1.1  
1

**LEVEL 5 FRAMING PLAN**  
1/8" = 1'-0"

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	27 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 5 FRAMING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

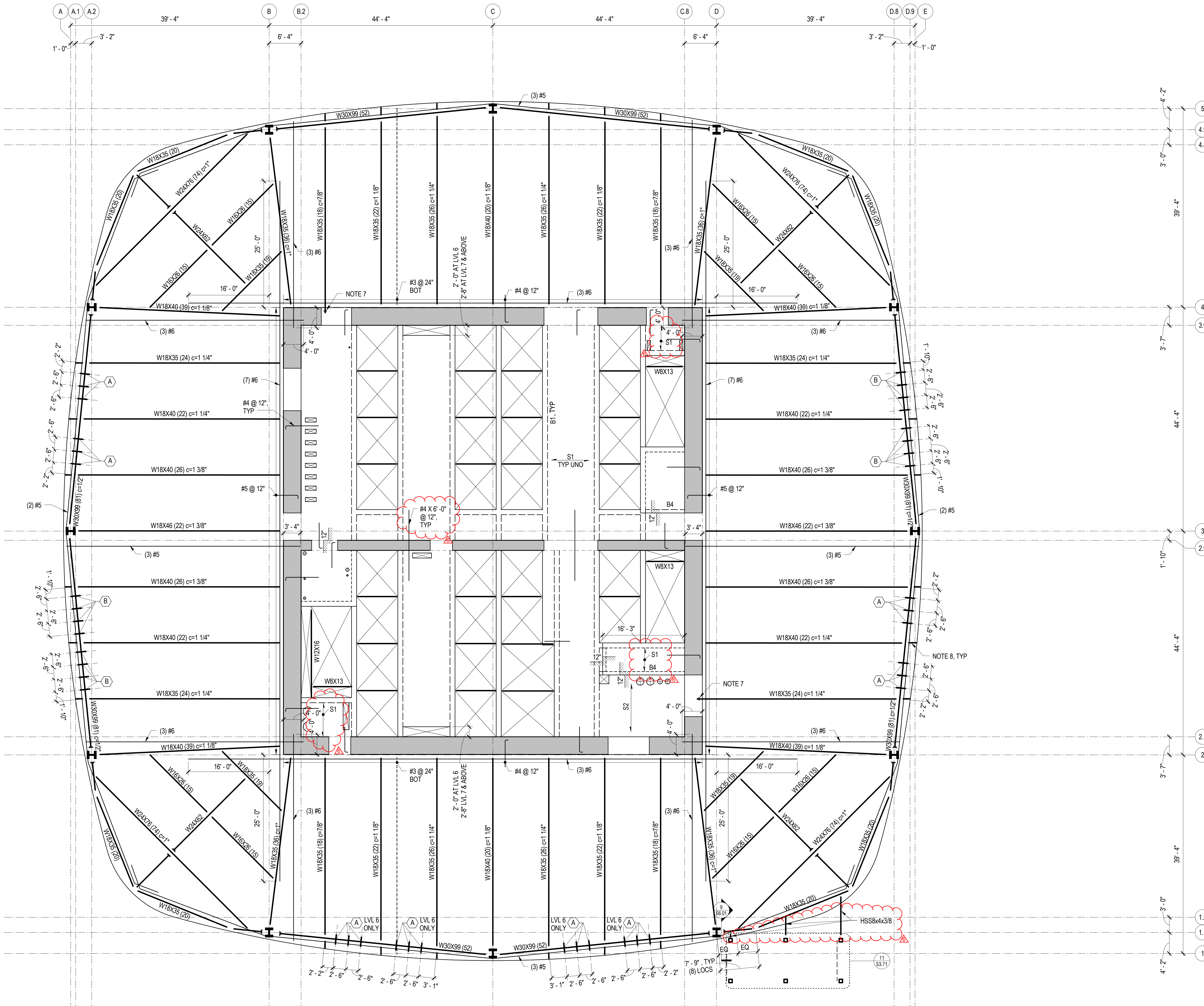
- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
LEVEL 6: +85'-6"  
LEVEL 7: +100'-3"  
LEVEL 8: +115'-0"  
LEVEL 9: +129'-9"  
LEVEL 10: +144'-6"  
LEVEL 11: +159'-3"  
LEVEL 12: +174'-0"  
LEVEL 13: +188'-9"  
LEVEL 14: +203'-6"

REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.

2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.5xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE WT6 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WS2013\_1.rvt

LEVELS 6-14 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVELS 6-14  
FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.06



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

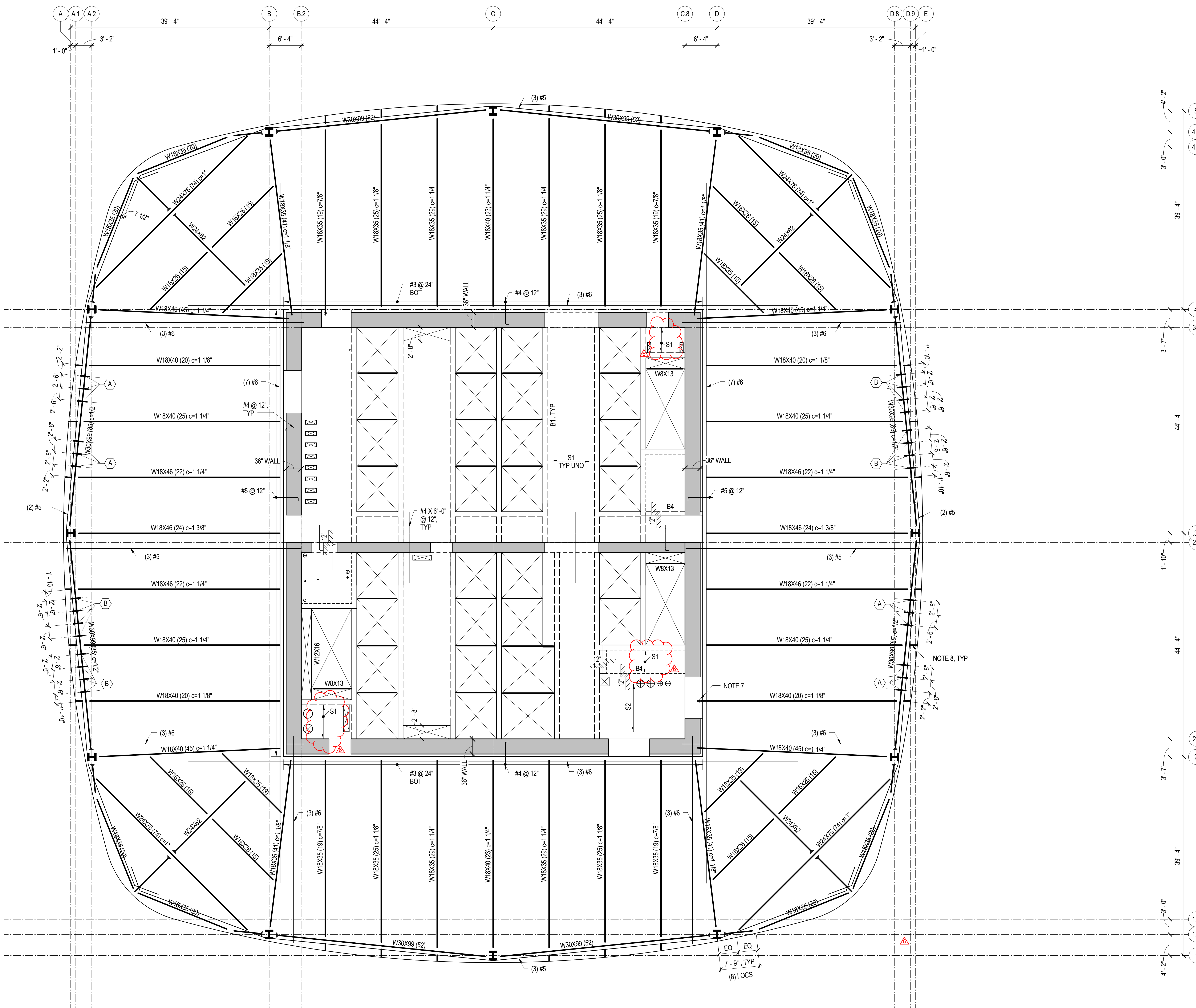
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 218'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6#6-W/2.3#W/2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE 'TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING' ON SHEET S4.25.
8. PROVIDE W/6 SLAB SUPPORT PER 'TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 15 FRAMING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON/HELMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Acoustical Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

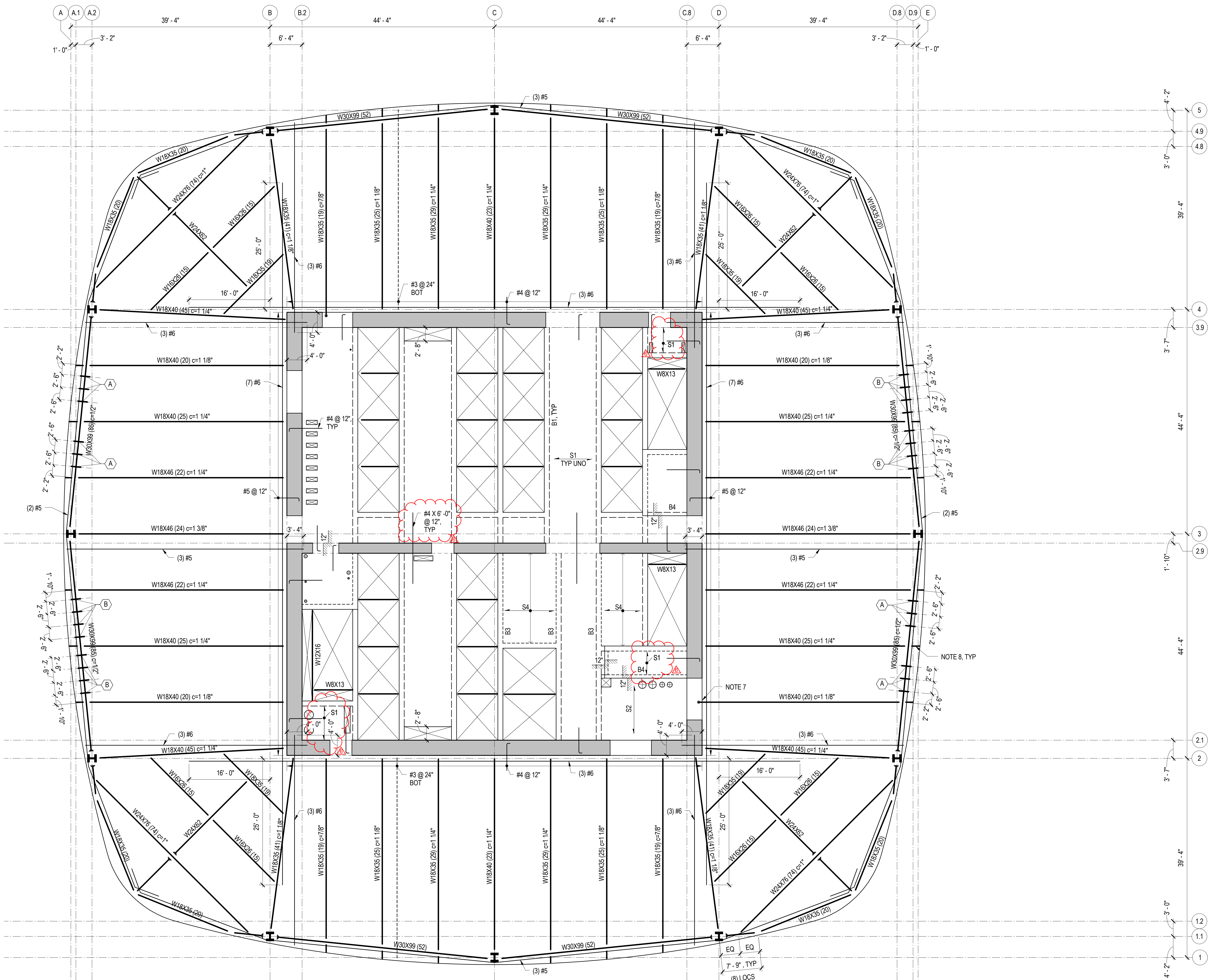
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 233'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR #6@12, 3#W2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE 'TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING' ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER 'TYPICAL SLAB SUPPORT STUB' DETAIL ON SHEET S4.25.



C:\Revit\Transbay\16r\_WS2013\_kmh.rvt

LEVEL 16 FRAMING PLAN

1/8" = 1'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

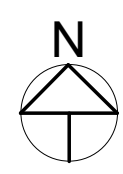
CAD FILENAME

DRAWING TITLE

LEVEL 16 FRAMING PLAN

PROJECT NO. 08044

DRAWING NUMBER S2.16





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

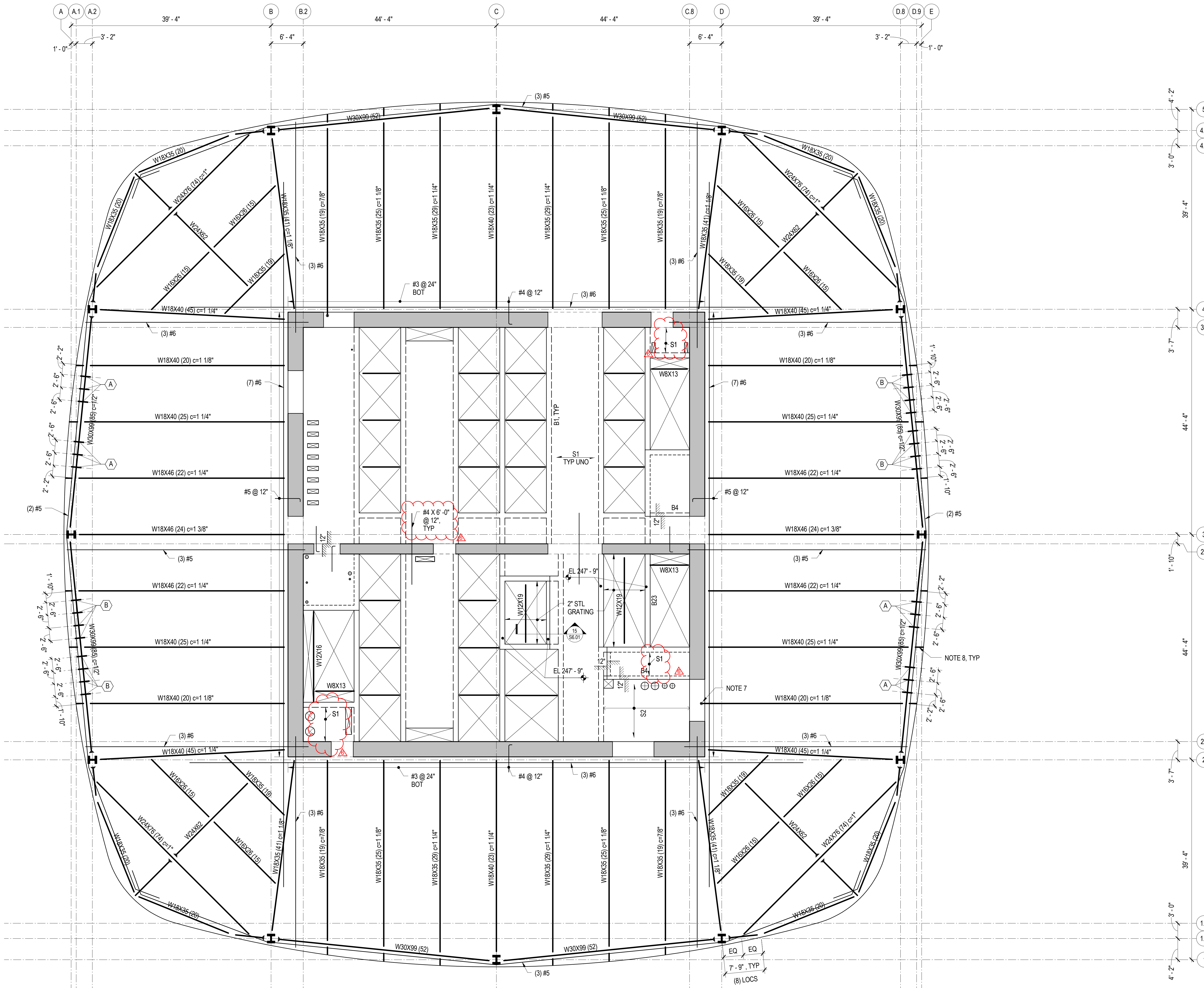
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 247'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:03 PM C:\Revit\Transbay\17r\_WS2013\_kmh.rvt

**LEVEL 17 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 17 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.17**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

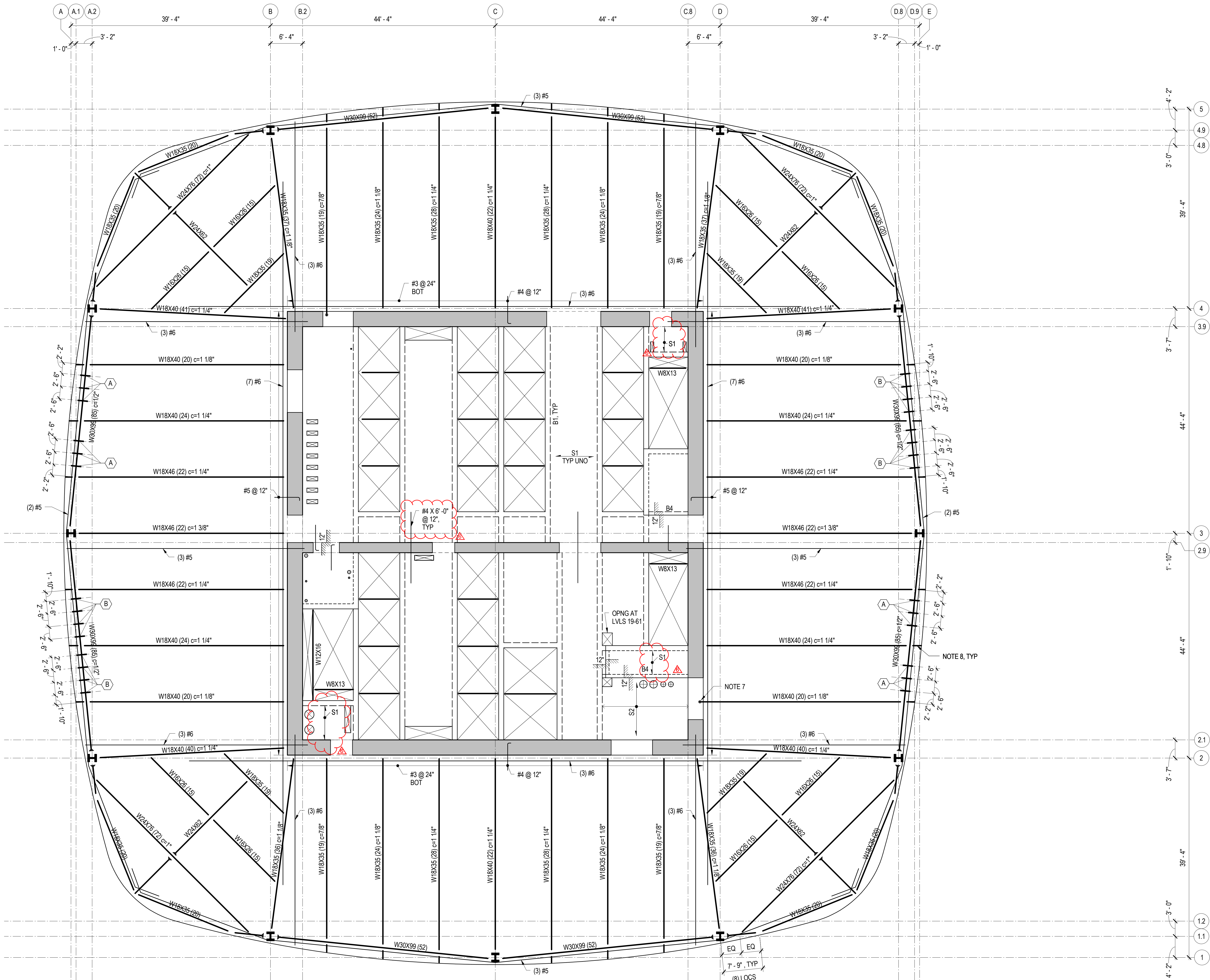
- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
LEVEL 18: +262'-6"  
LEVEL 19: +277'-3"  
LEVEL 20: +292'-0"  
LEVEL 21: +306'-9"  
LEVEL 22: +321'-6"  
LEVEL 23: +336'-3"  
LEVEL 24: +351'-0"  
LEVEL 25: +365'-9"  
LEVEL 26: +380'-6"

REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.

2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9 REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:06 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVELS 18-24 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVELS 18-24 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.18**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

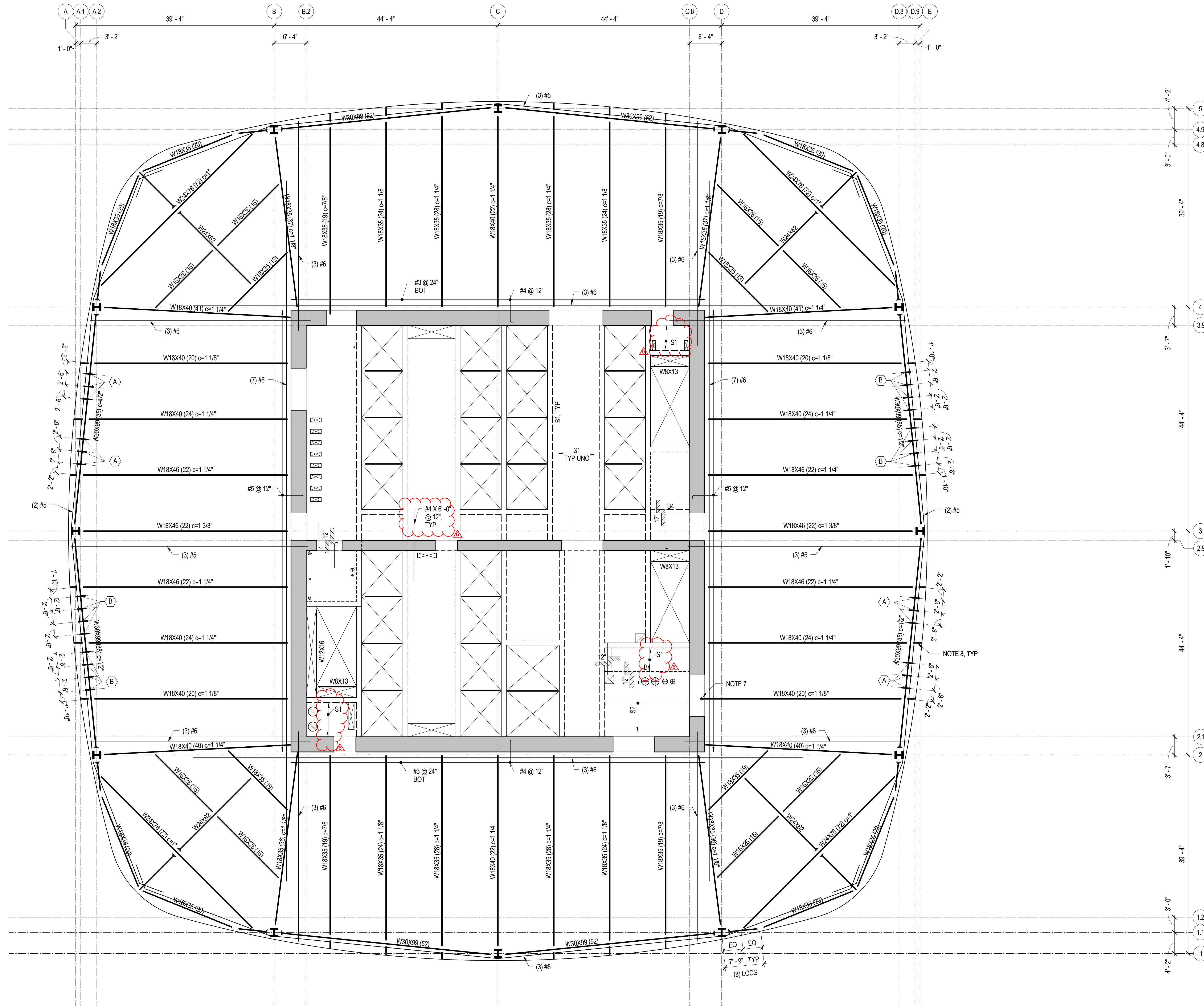
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 365'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:32:10 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

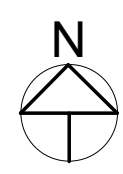
**LEVEL 25 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 25 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.25





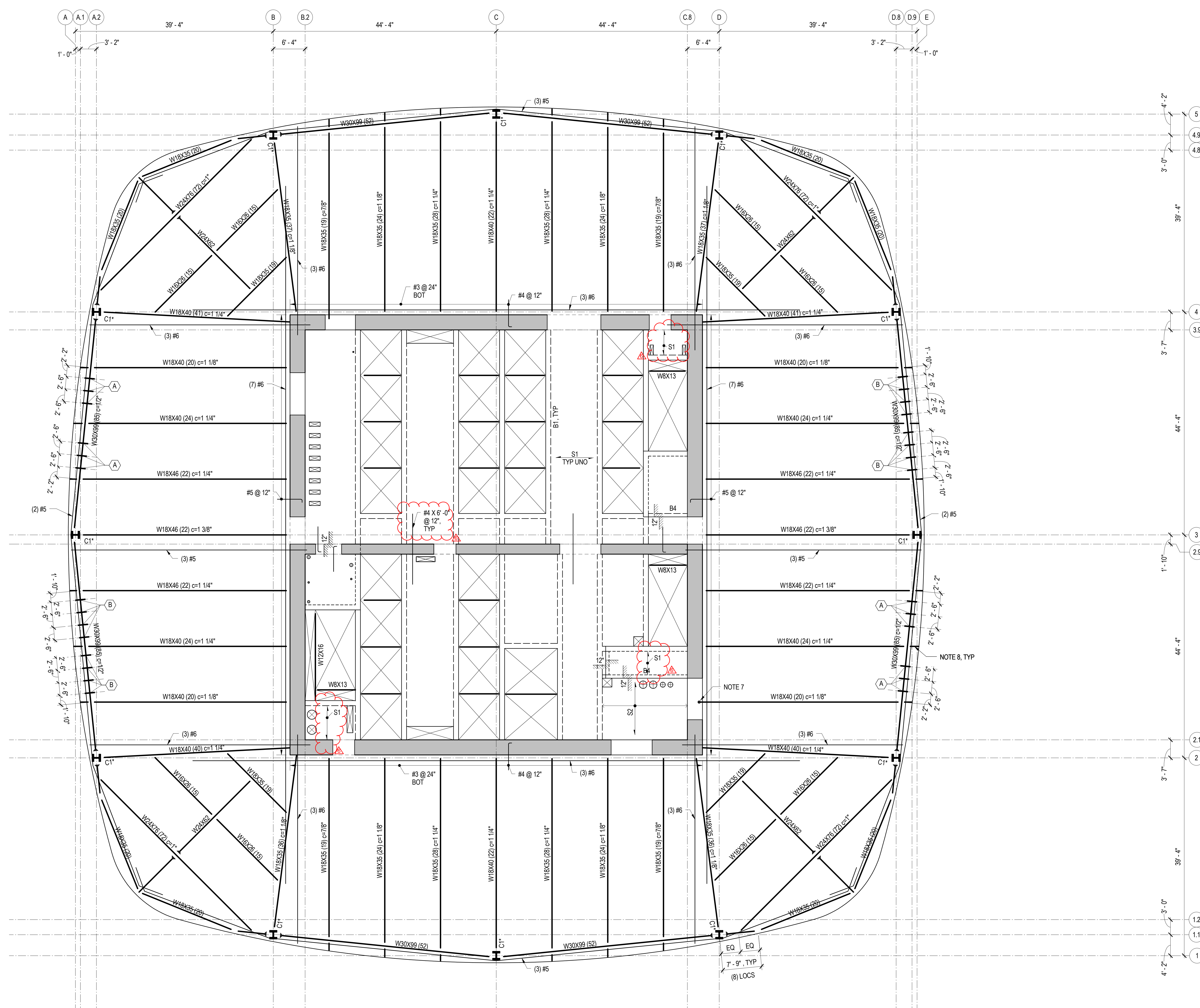
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 380'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



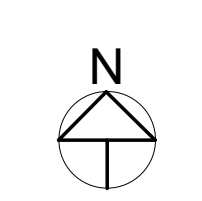
4/29/2014 10:32:15 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

**LEVEL 26 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME	
DRAWING TITLE	<b>LEVEL 26 FRAMING PLAN</b>
NO.	<b>S2.26</b>

NO.	PROJECT NO.	08044
NO.	DRAWING NUMBER	<b>S2.26</b>





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

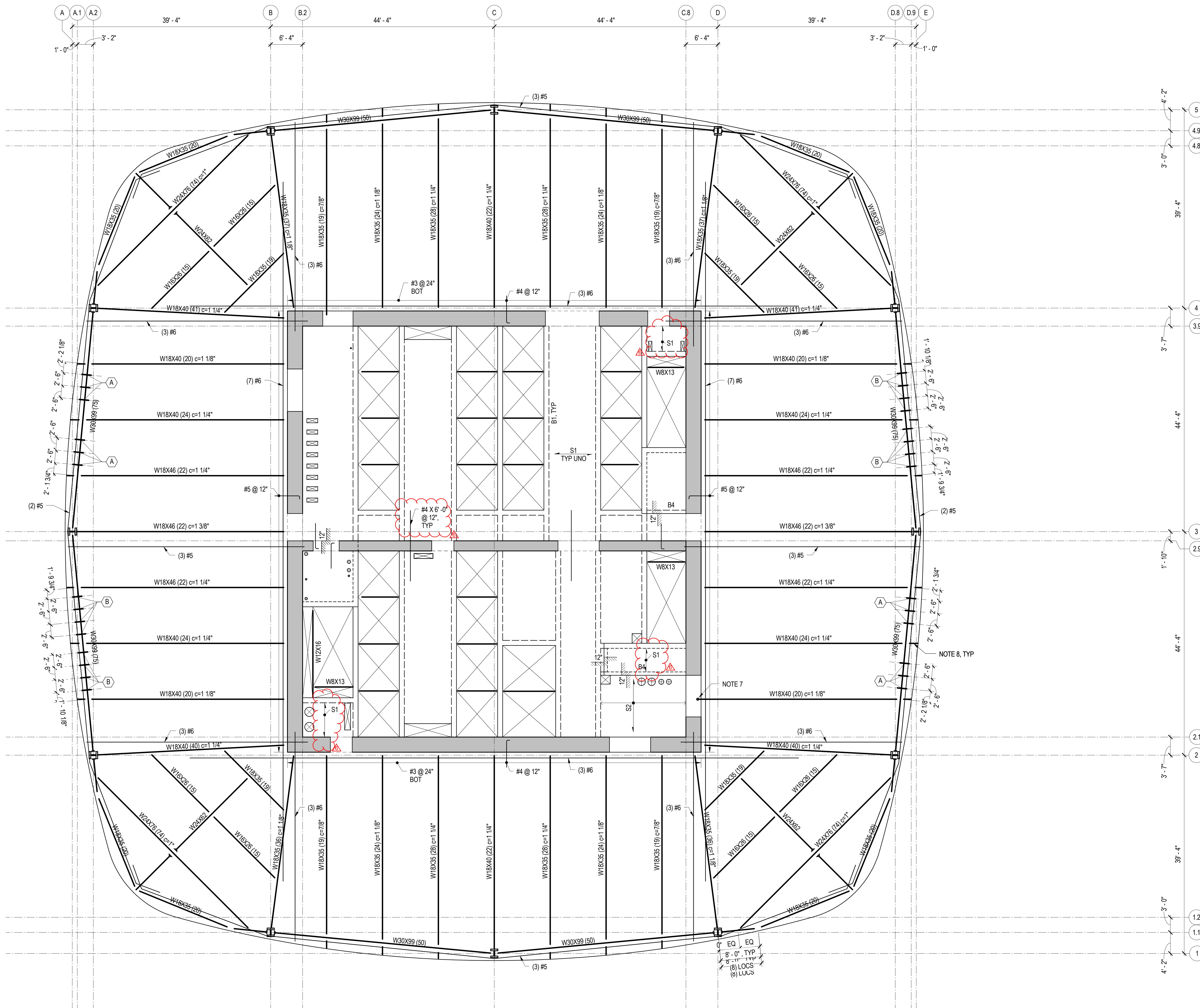
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 395'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:32:19 PM C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

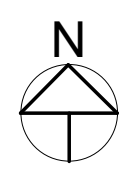
**LEVEL 27 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 27 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER **S2.27**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

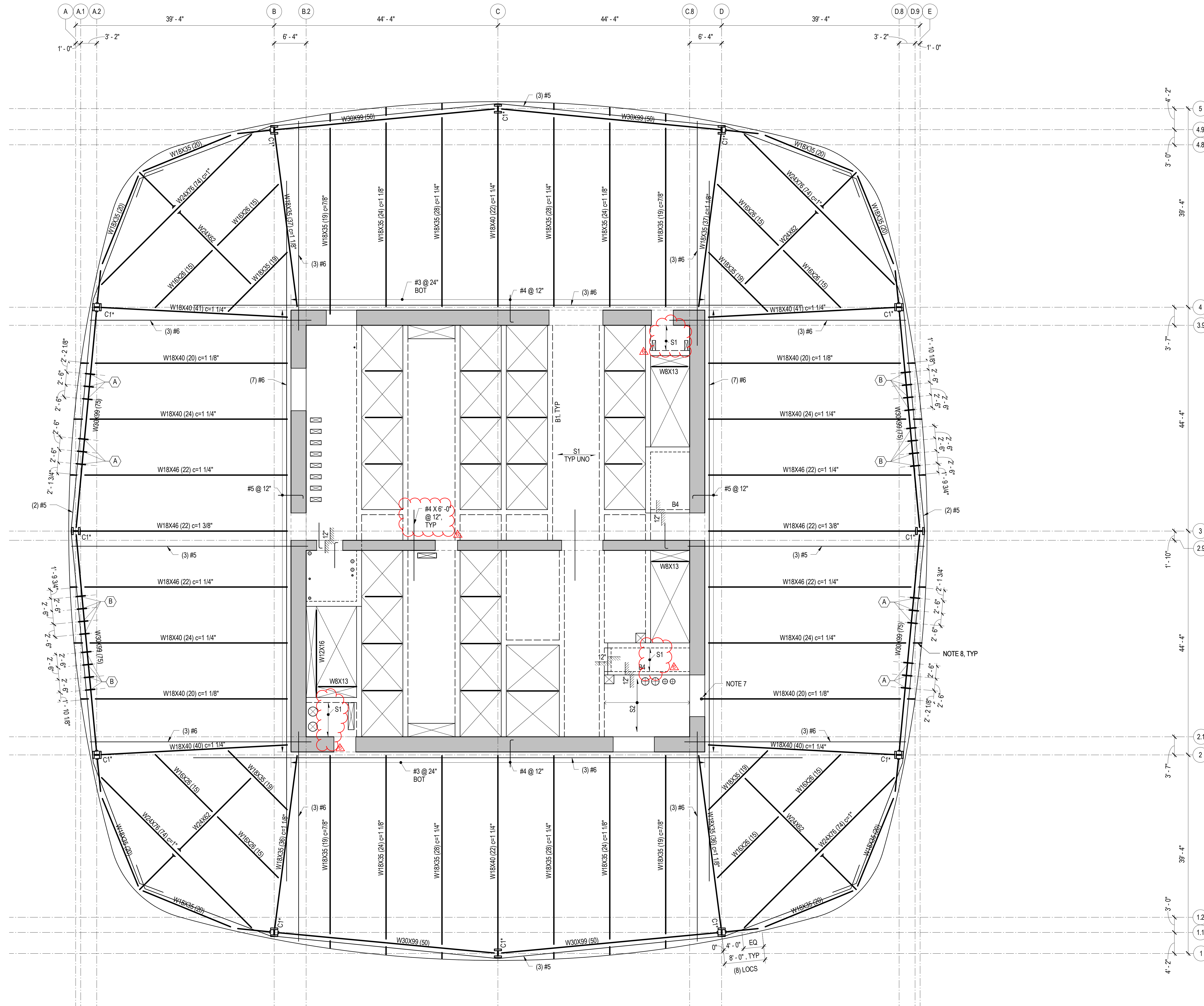
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 410'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:24 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

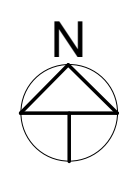
**LEVEL 28 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 28 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.28





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

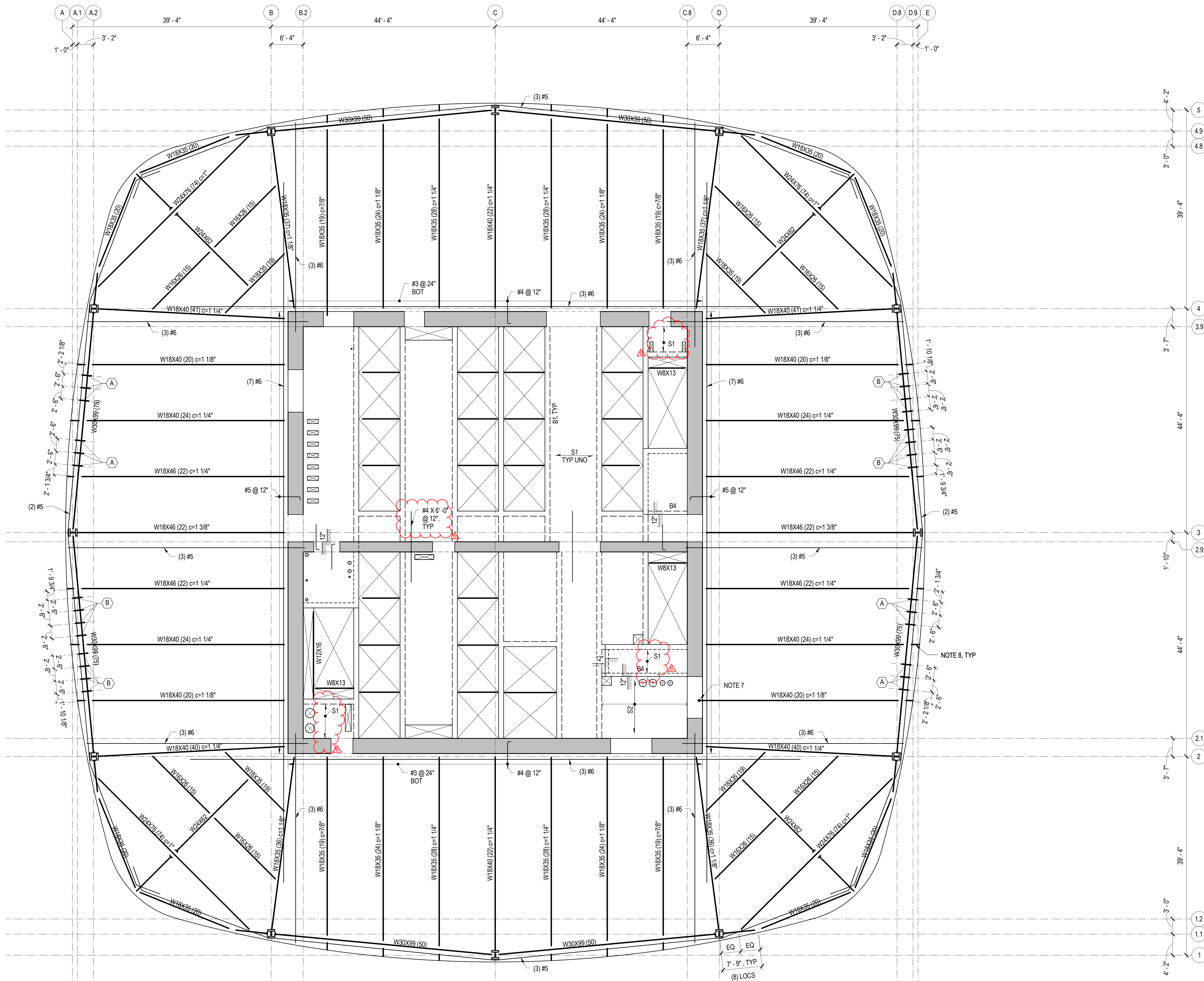
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 424'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/30/2014 11:17:27 AM C:\Revit\Transbay\Twr\_MS2013\_1.rvt

**LEVEL 29 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 29 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.29**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

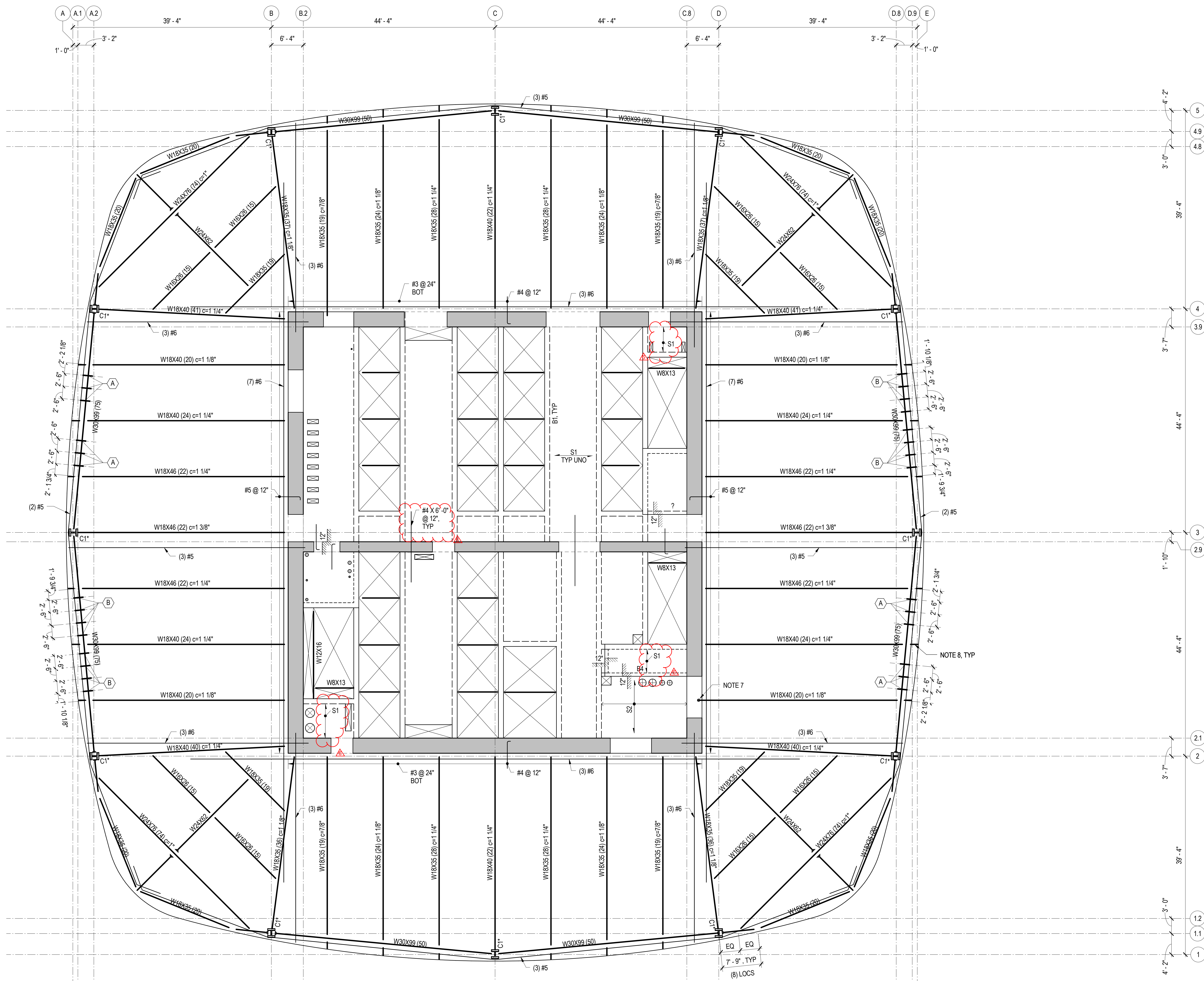
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 439'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WS2013\_18.rvt

**LEVEL 30 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

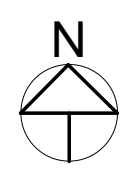
CAD FILENAME

DRAWING TITLE

**LEVEL 30 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.30**





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

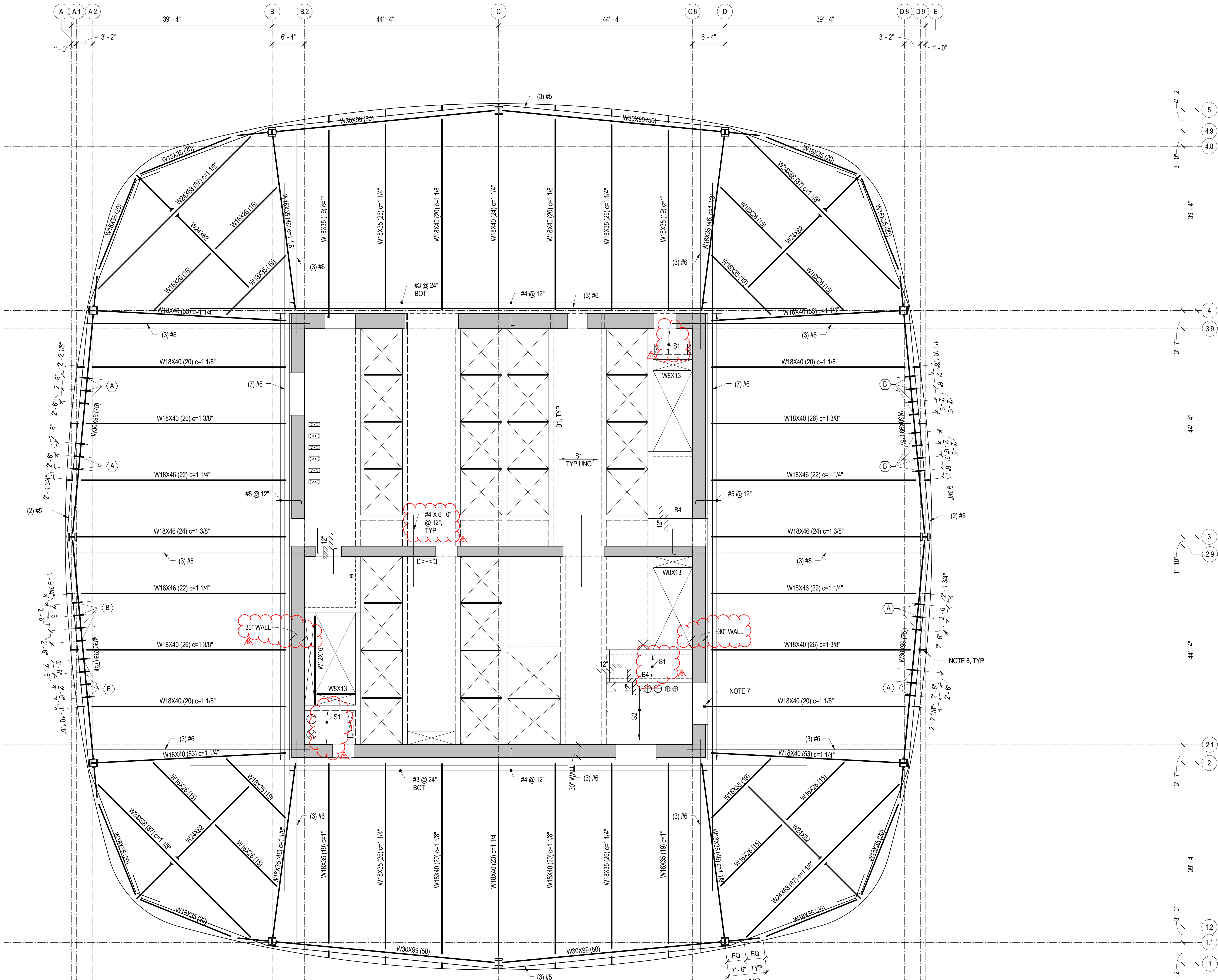
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 454'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL. BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



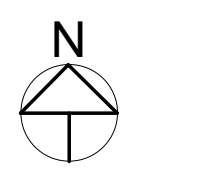
5  
4.9  
4.8  
4  
3.9  
4  
3  
2.9  
3  
2  
2.1  
2  
3  
3  
3  
4  
12  
11  
1

LEVEL 31 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME	
DRAWING TITLE	

**LEVEL 31 FRAMING PLAN**



PROJECT NO. 08044 DRAWING NUMBER S2.31

4/29/2014 10:52:33 PM C:\Revit\Transbay\TW\_MS2013\_kmh.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEUMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

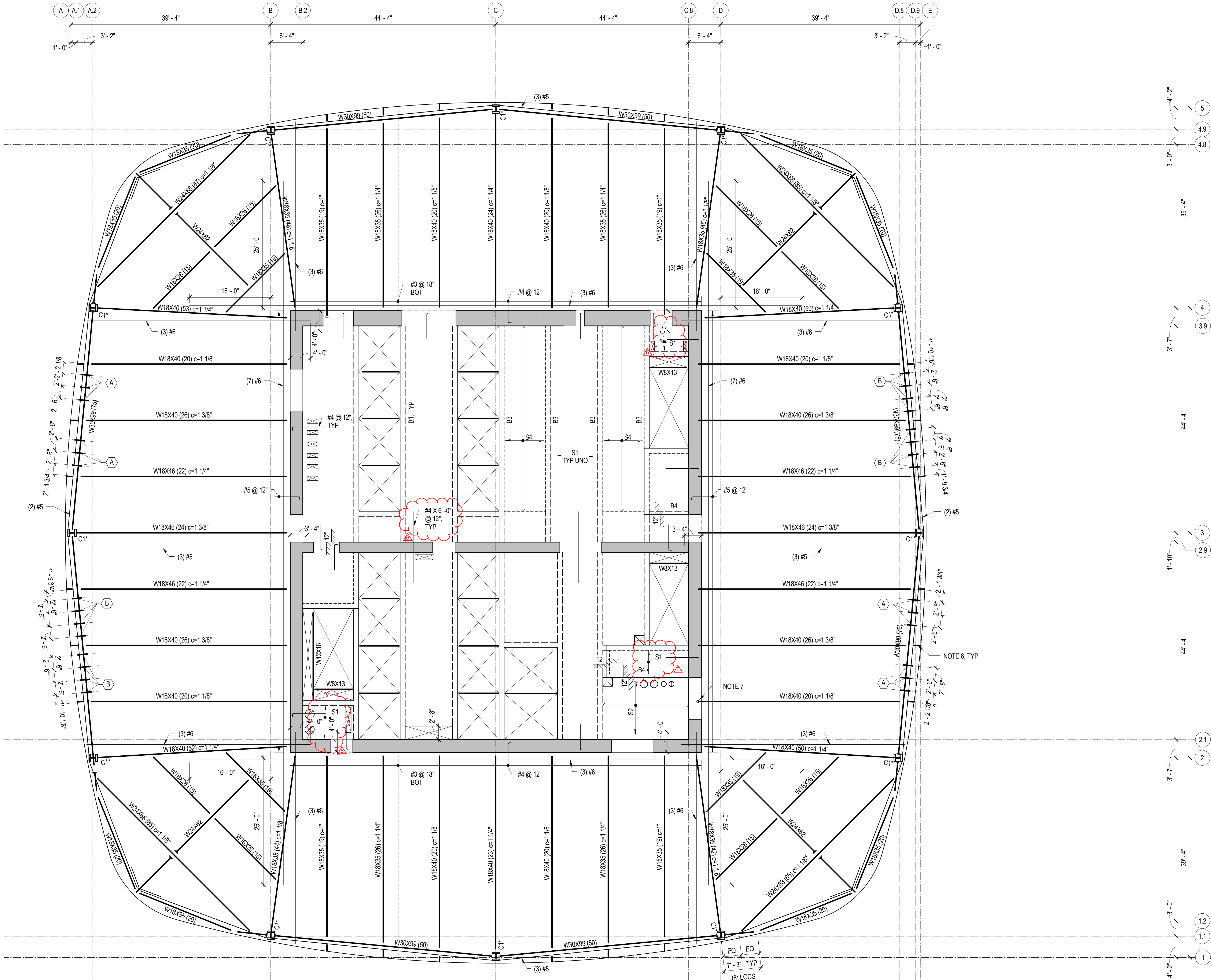
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 469'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. **SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.**
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_MS2013\_11e.rvt

1 LEVEL 32 FRAMING PLAN  
1/8" = 1'-0"

6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

NO.	DATE	STRUCTURAL	ISSUE
-----	------	------------	-------

DRAWING TITLE

**LEVEL 32 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.32**





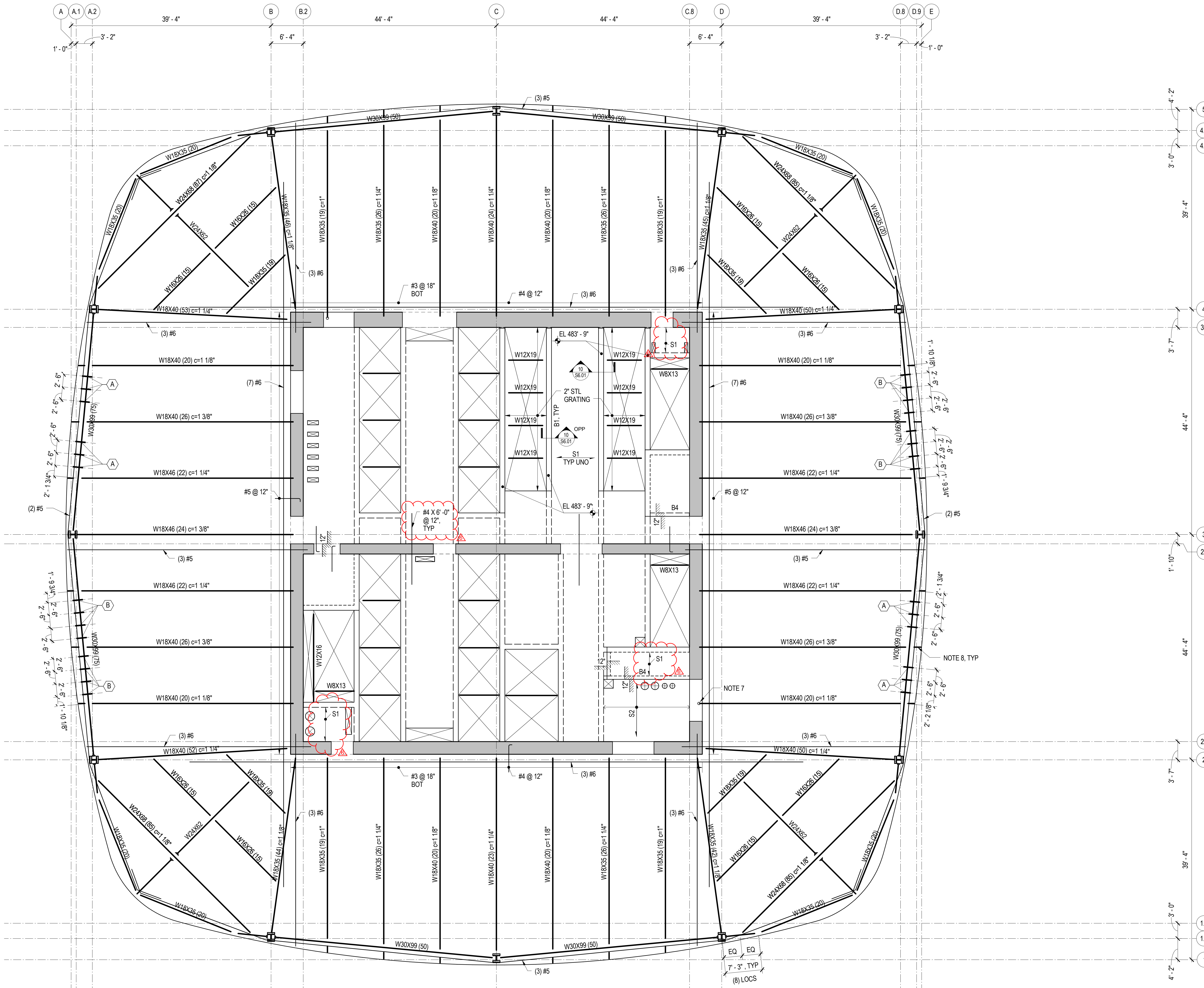
**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 483'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 10:52:41 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 33 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 33 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.33



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEUMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

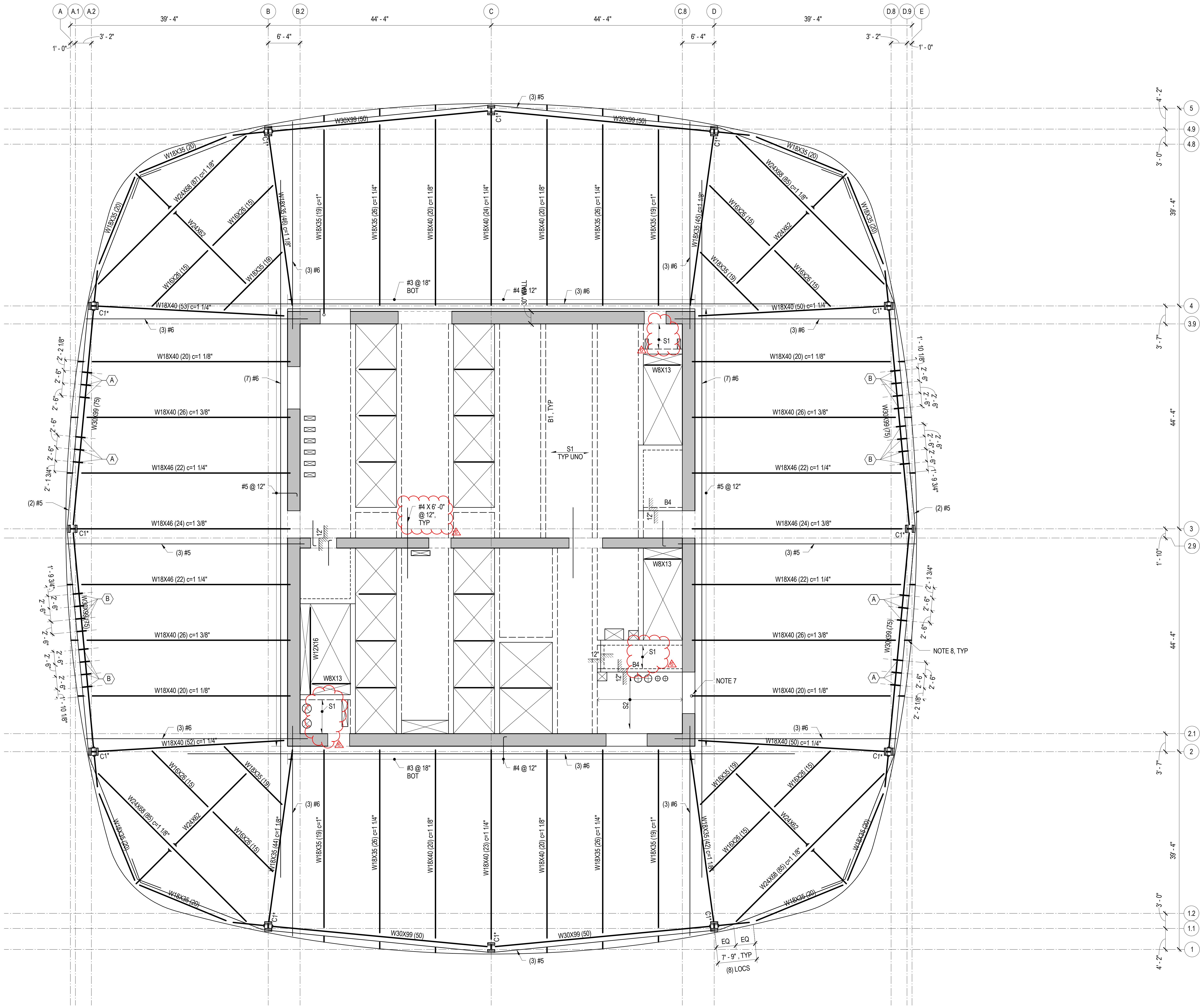
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 498'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.3xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:45 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

LEVEL 34 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 34 FRAMING PLAN

PROJECT NO. 08044  
DRAWING NUMBER S2.34



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

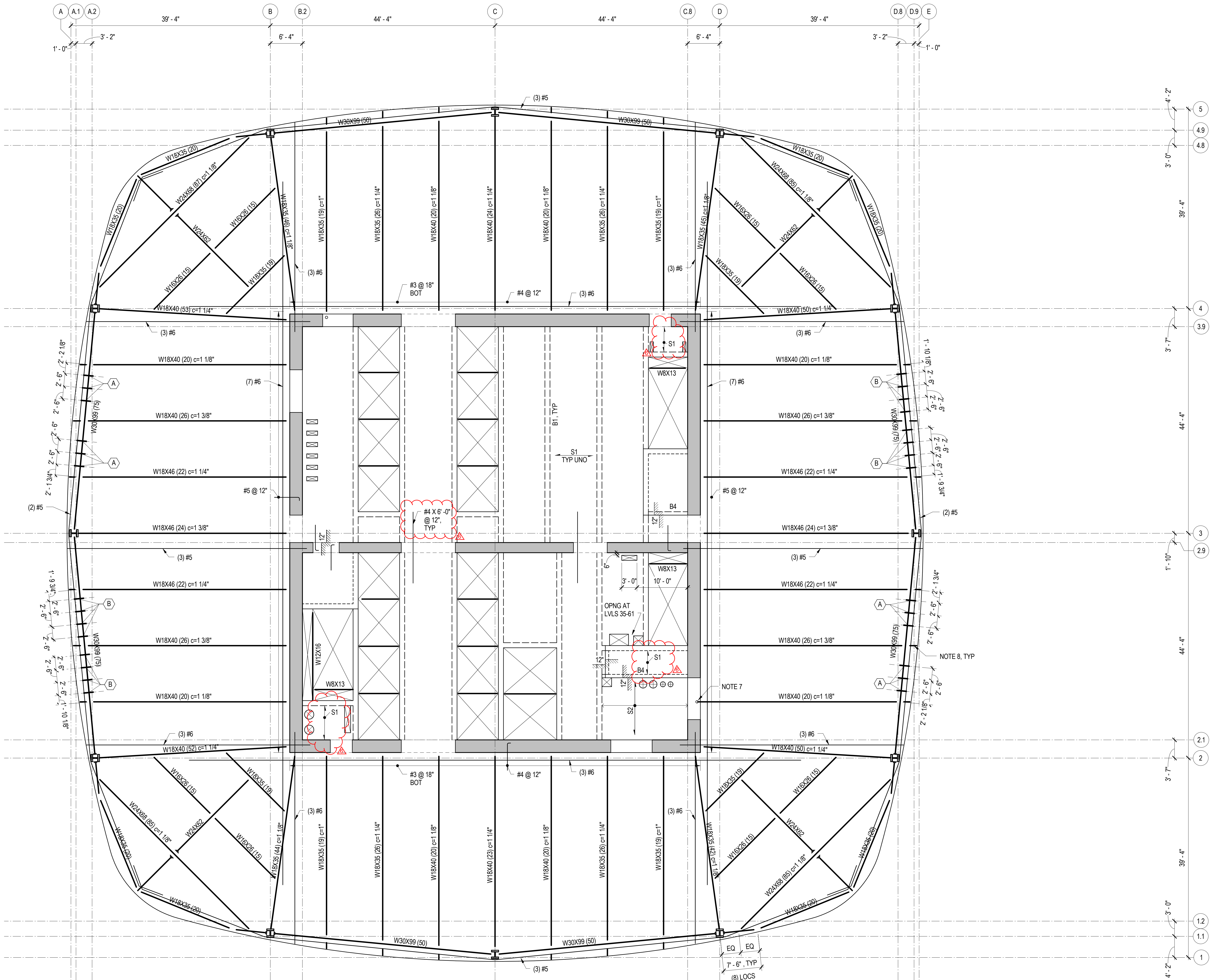
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 513'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:49 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

1 LEVEL 35 FRAMING PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

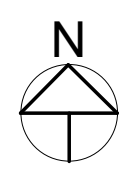
CAD FILENAME

DRAWING TITLE

LEVEL 35 FRAMING PLAN

PROJECT NO. 08044

DRAWING NUMBER S2.35





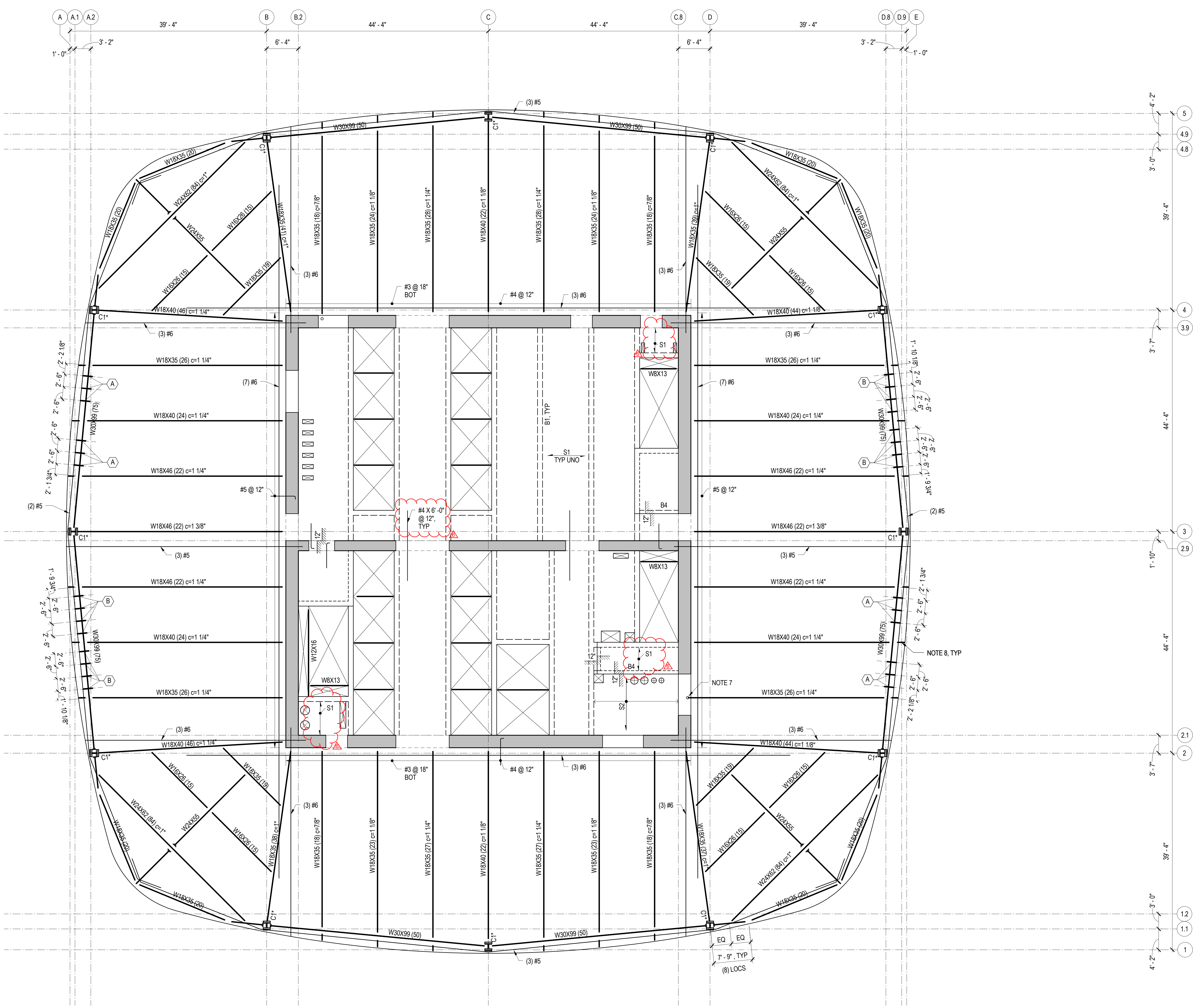
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 528'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENINGS" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:53 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 36 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 36 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.36**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Acoustical Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

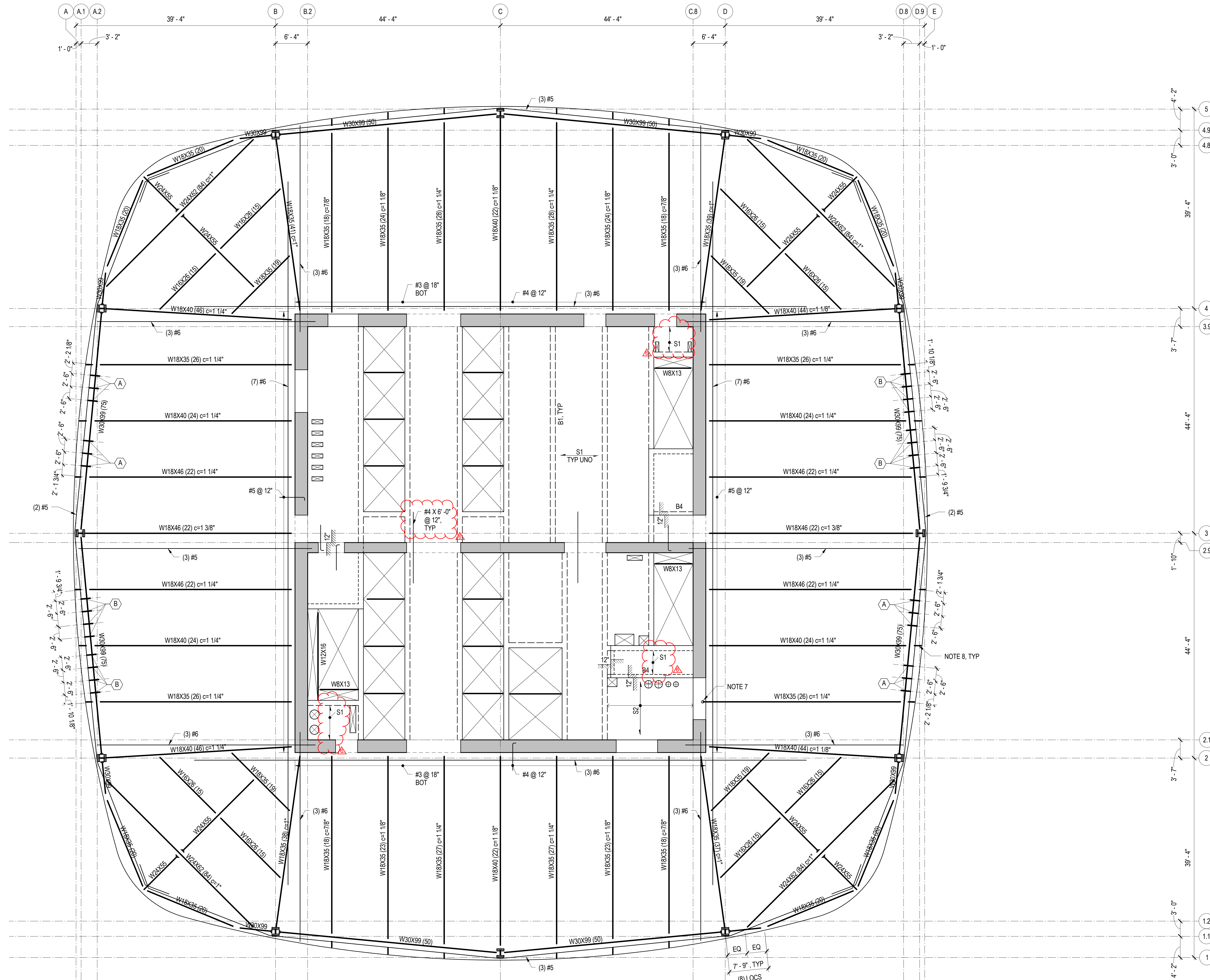
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 542'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:54 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

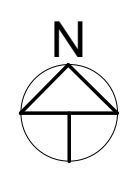
**LEVEL 37 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 37 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.37





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

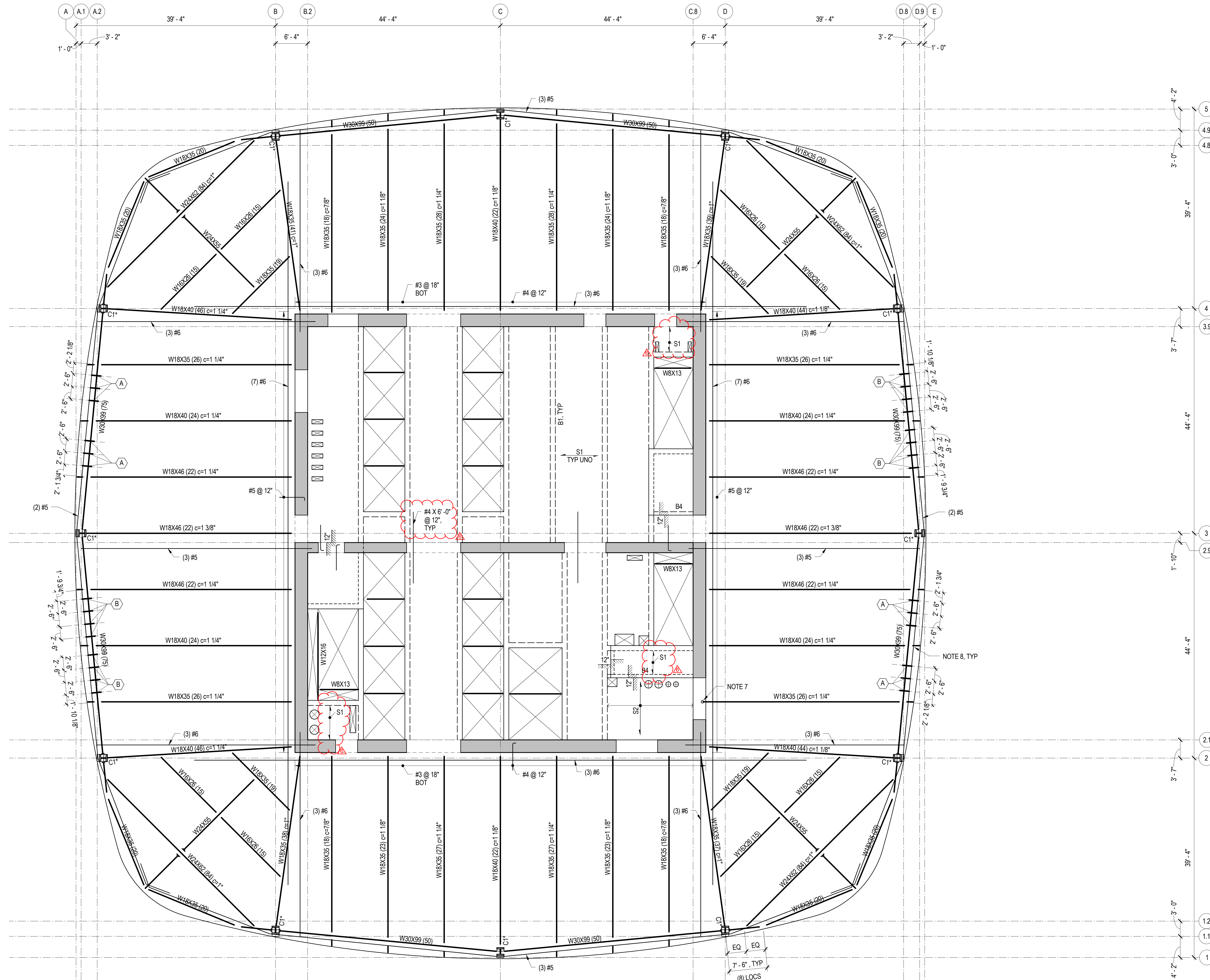
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 557'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:52:58 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 38 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 38 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.38



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

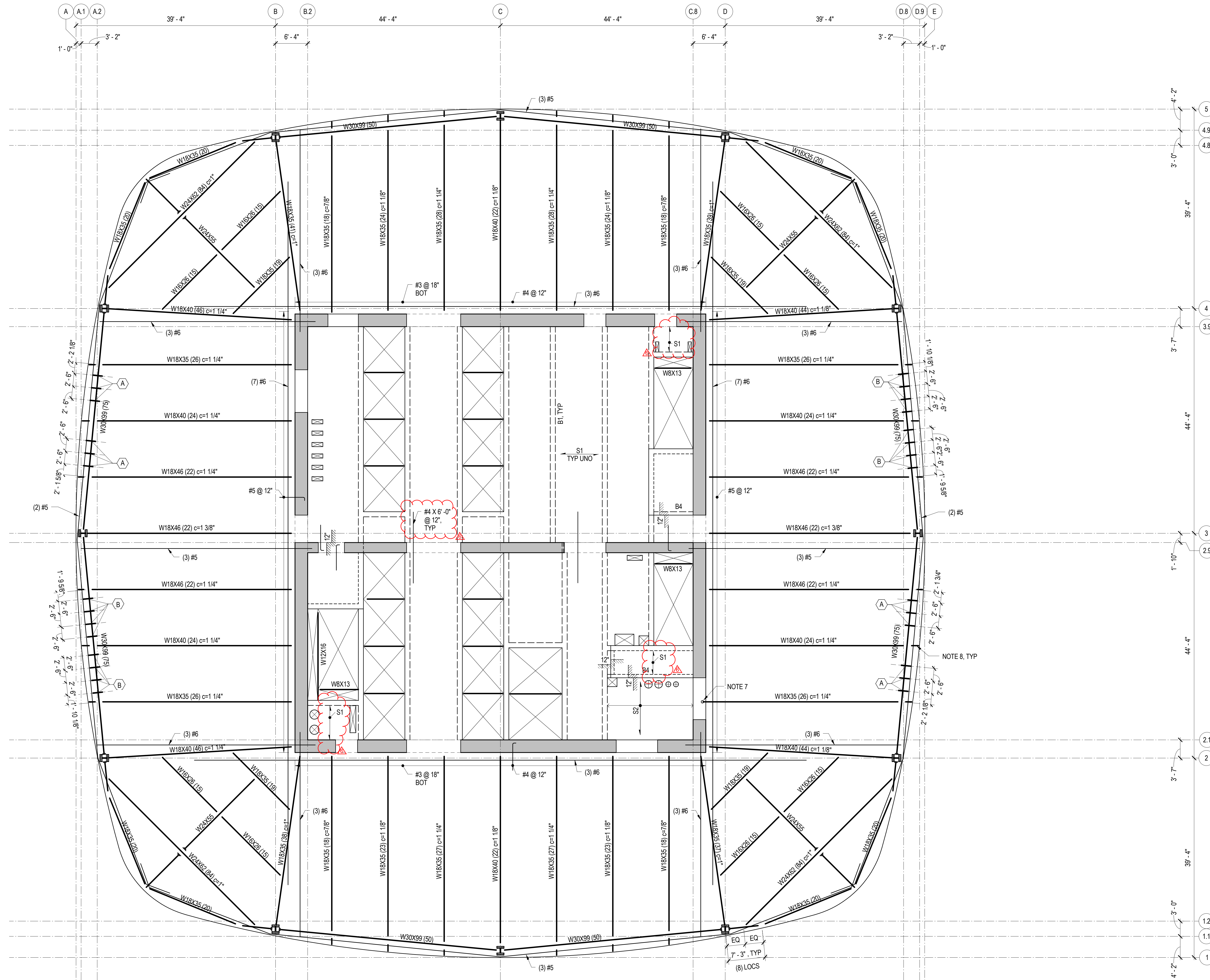
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 572'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:02 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 39 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 39 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.39



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

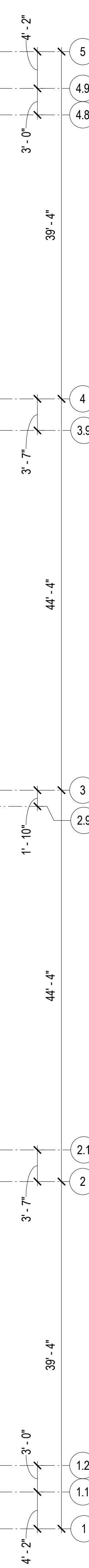
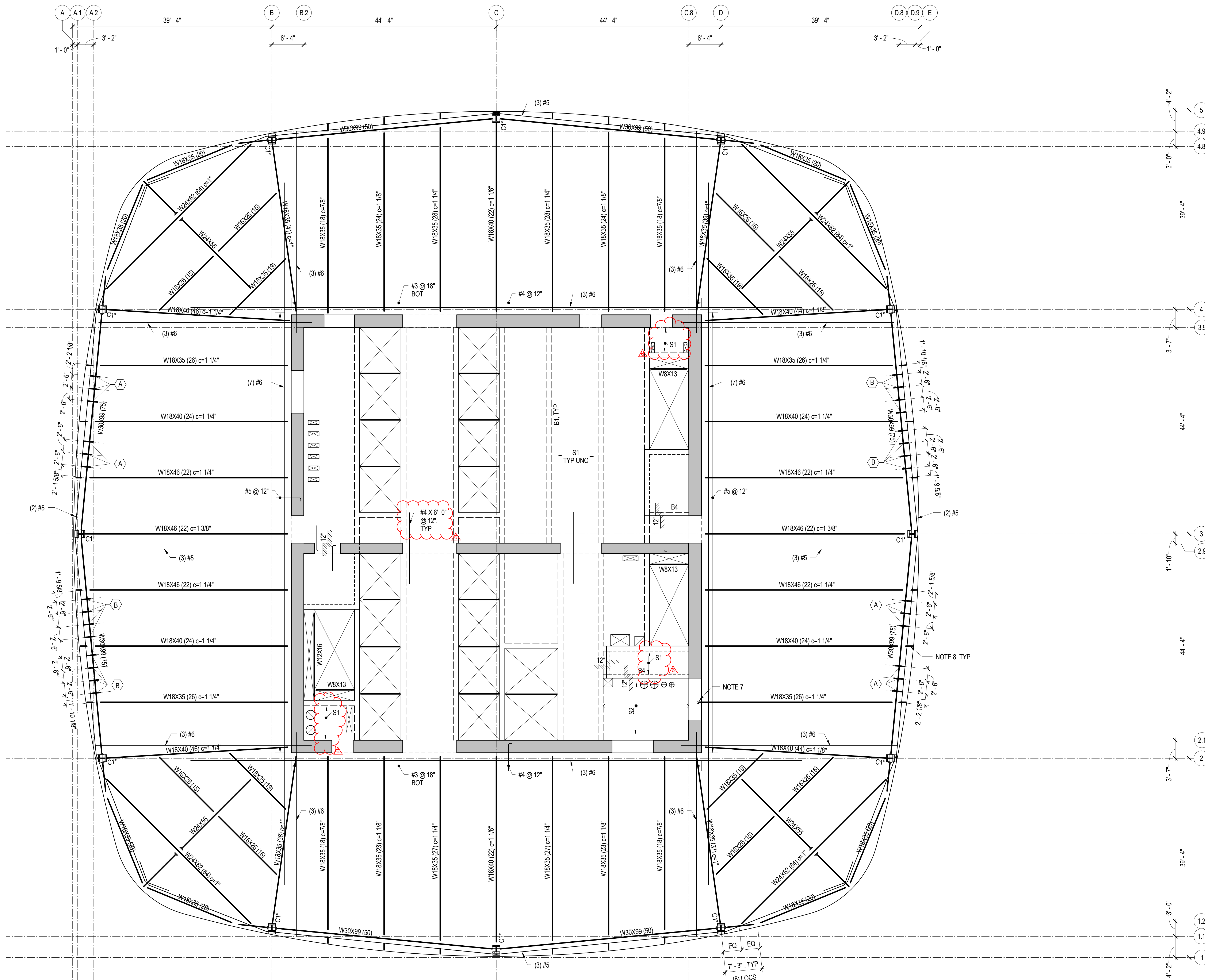
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 587'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:06 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 40 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

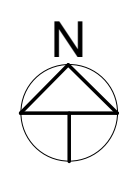
CAD FILENAME

DRAWING TITLE

**LEVEL 40 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.40**







BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window/Westing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

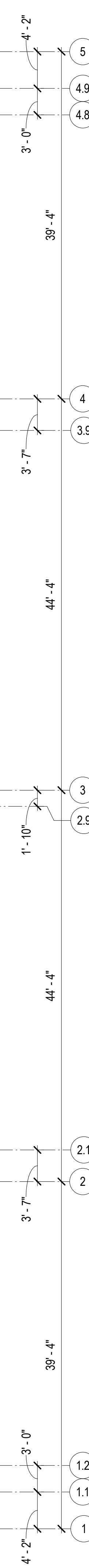
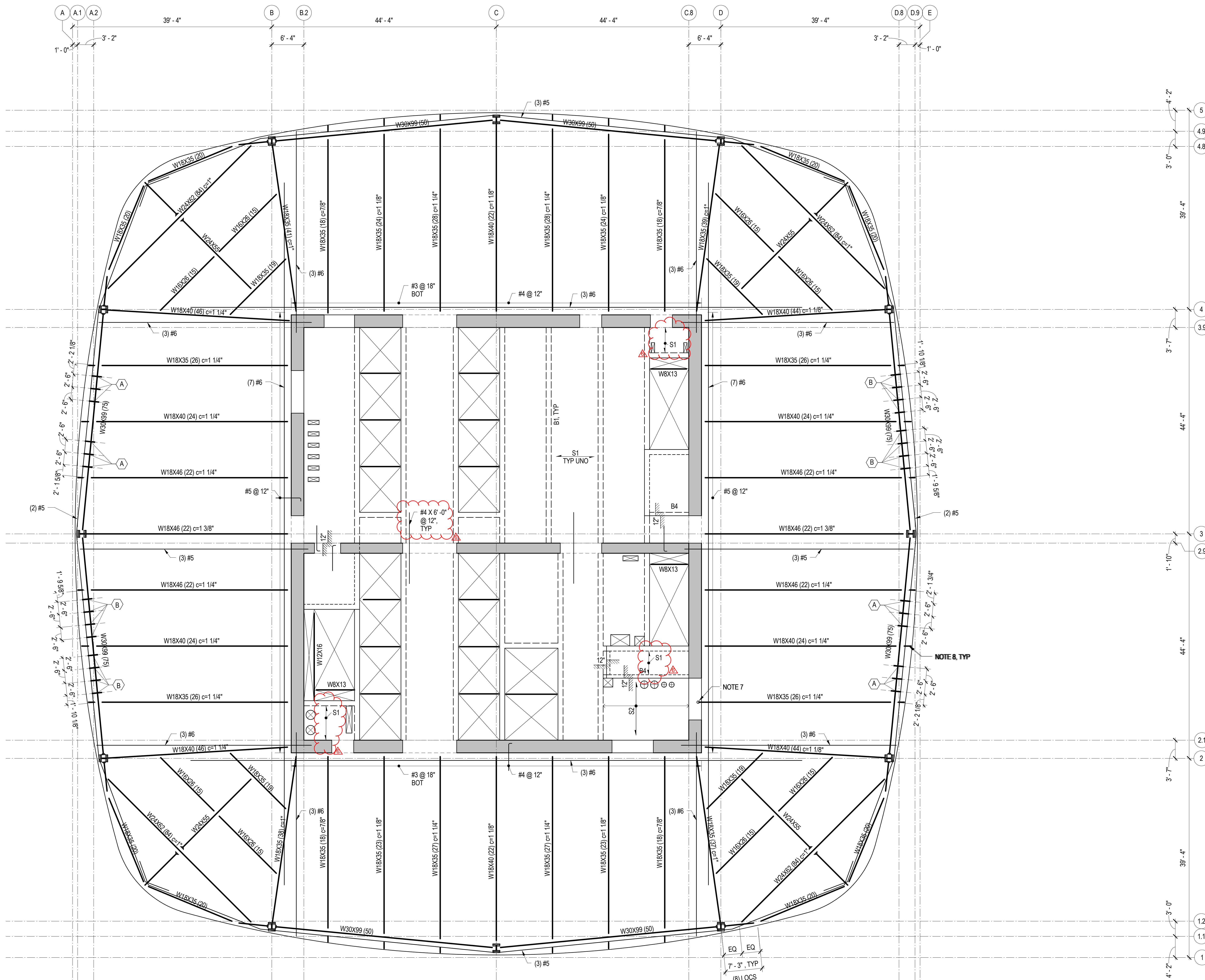
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 601'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:33:10 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 41 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 41 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.41



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window/Westing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

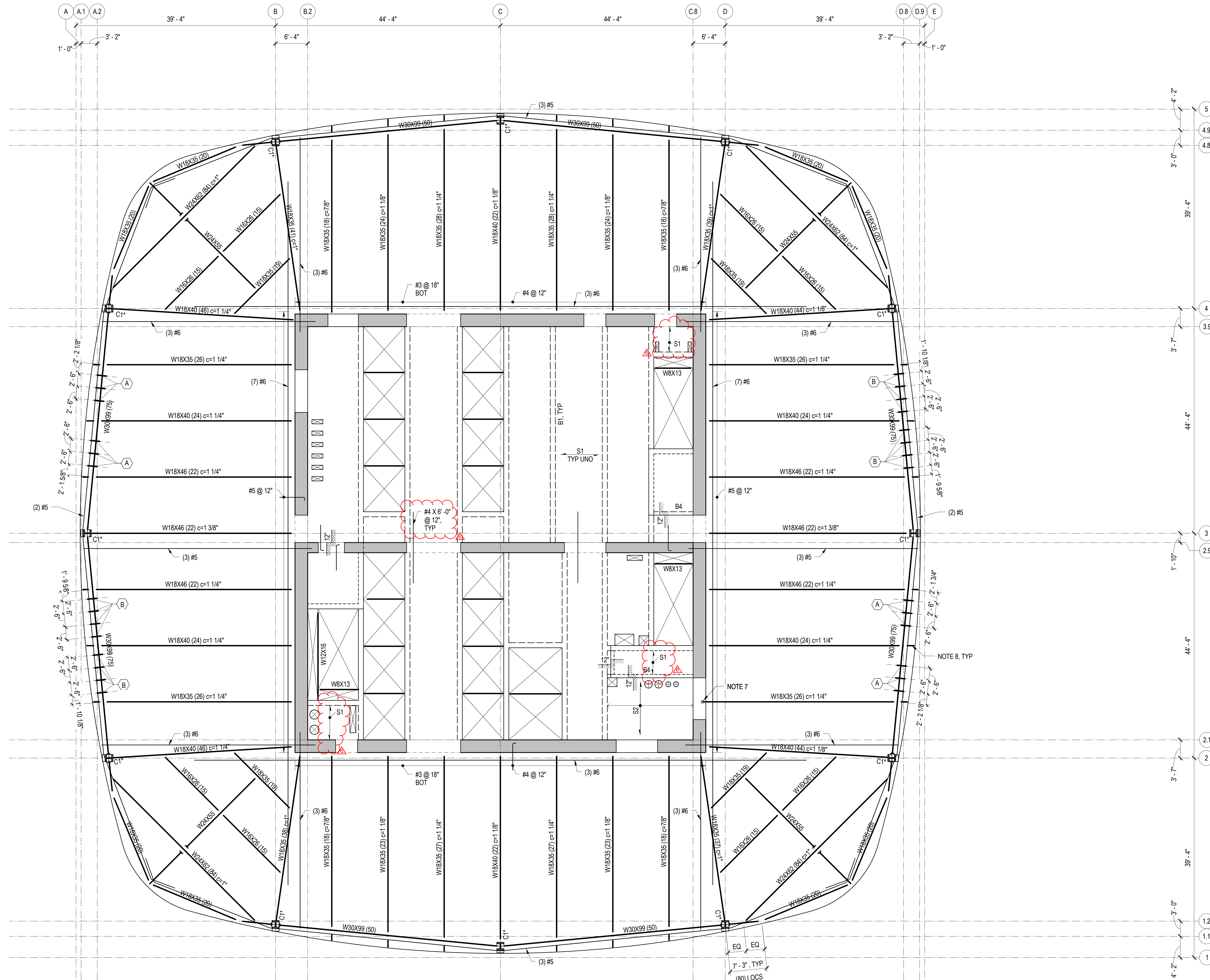
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 616'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:33:14 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 42 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

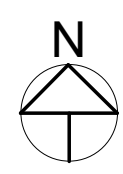
CAD FILENAME

DRAWING TITLE

**LEVEL 42 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER **S2.42**





**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 631'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

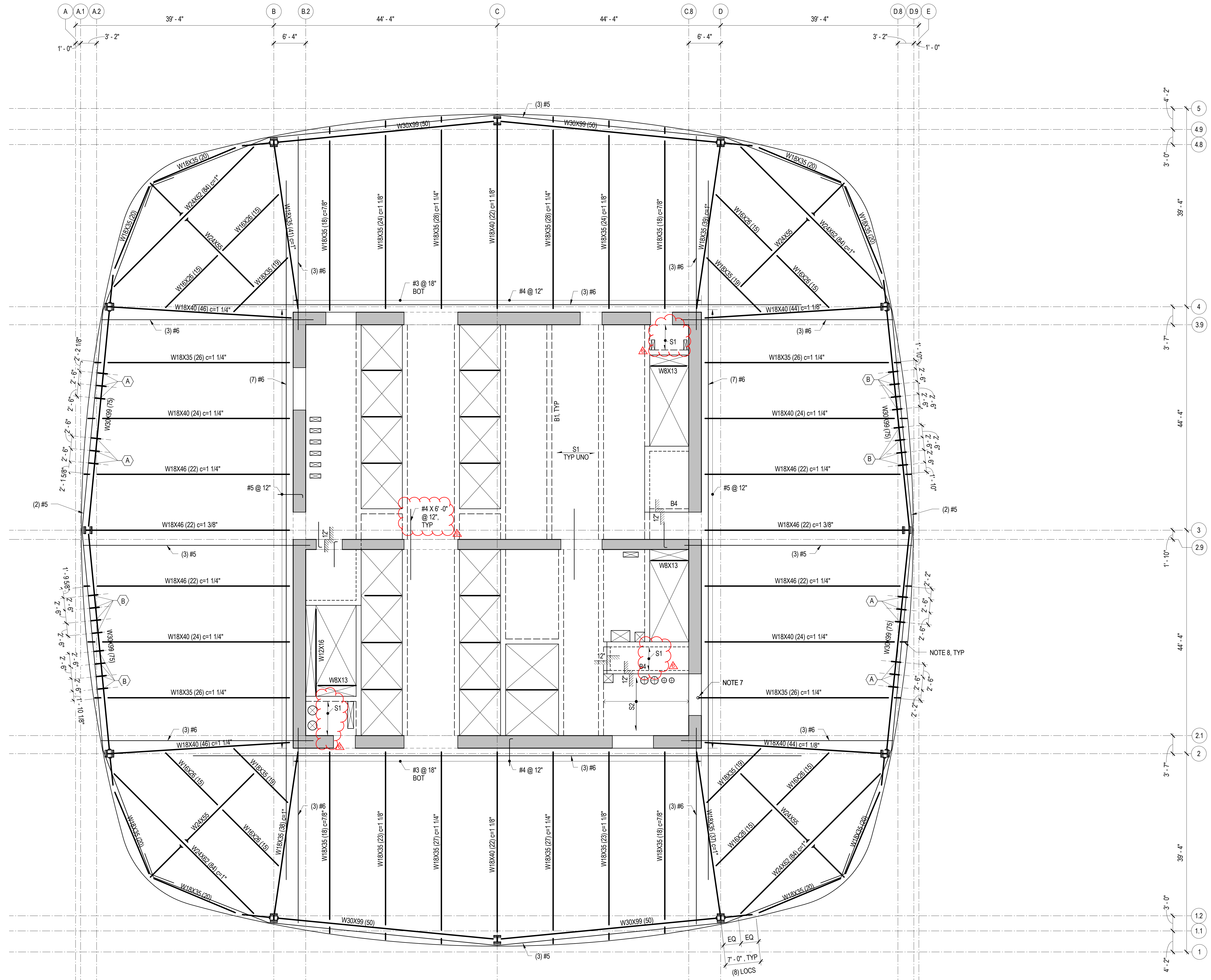
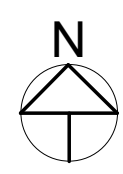
CAD FILENAME

DRAWING TITLE

**LEVEL 43 FRAMING PLAN**

PROJECT NO. 08044

DRAWING NUMBER S2.43



4/29/2014 10:33:18 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

**LEVEL 43 FRAMING PLAN**  
1/8" = 1'-0"



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Acoustical Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

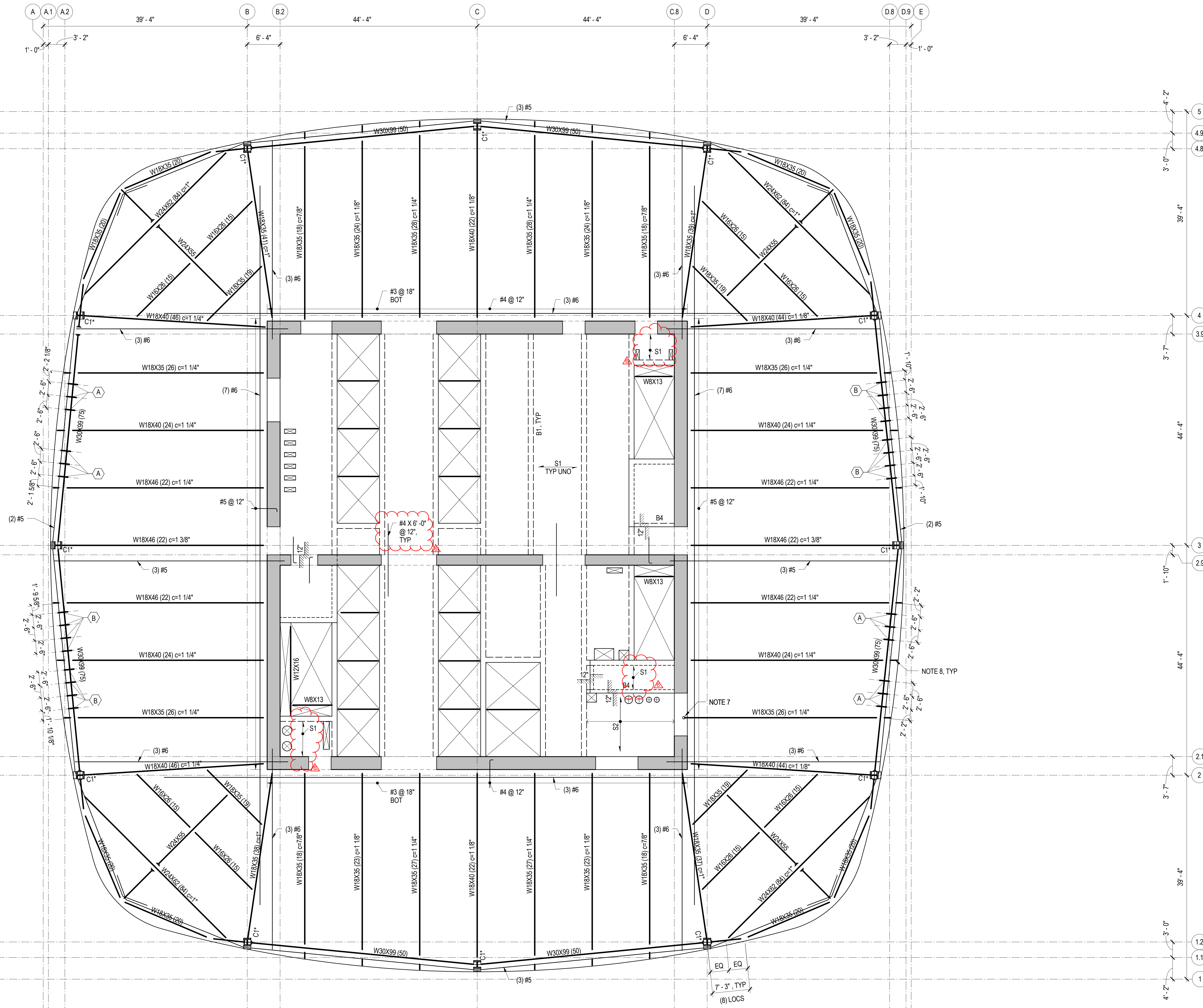
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 646'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:22 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

**LEVEL 44 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 44 FRAMING PLAN**

NO. PROJECT NO. 08044

DRAWING NUMBER **S2.44**



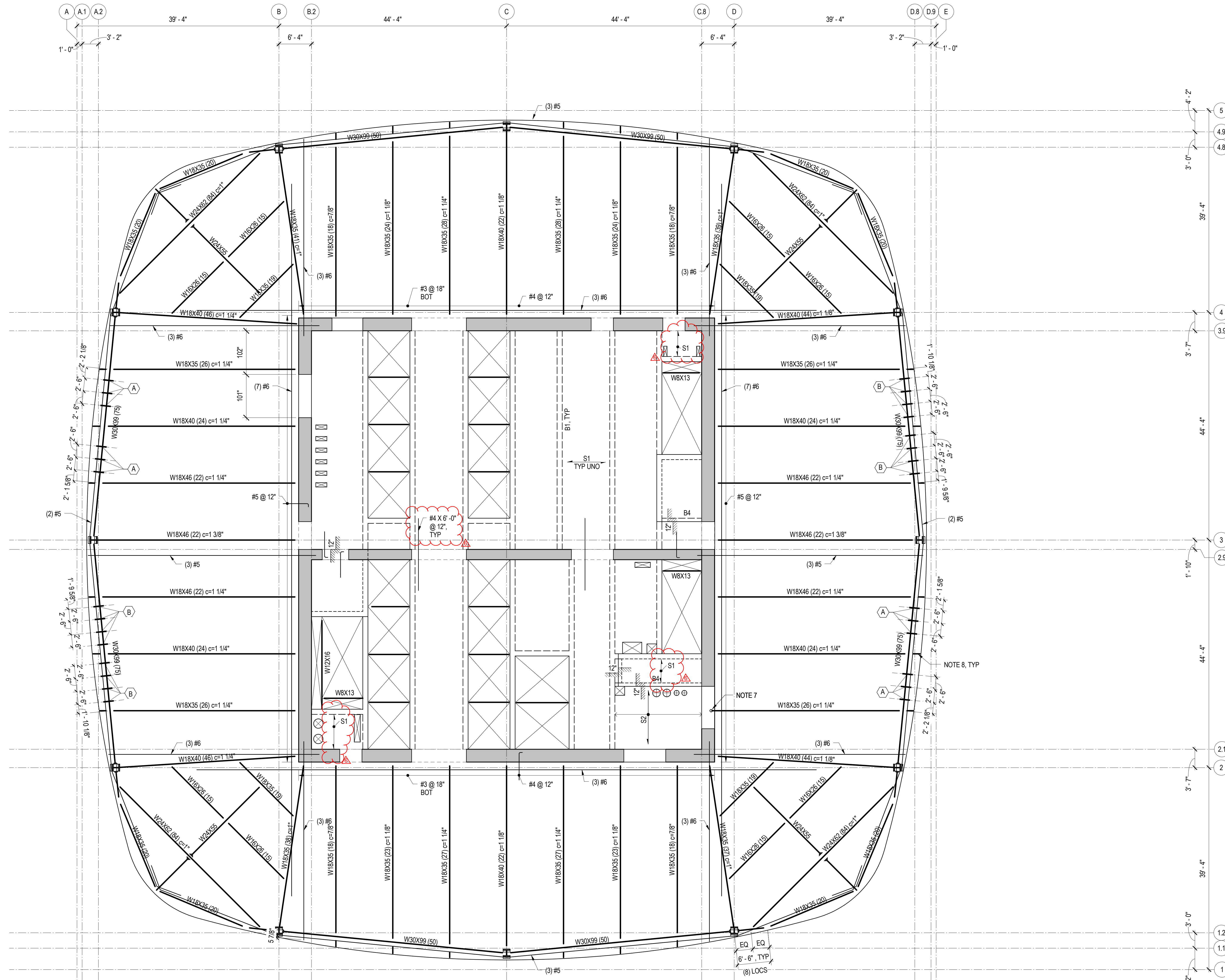
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0 ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1 LOAD MAPS
- S2 PLANS
- S3 ELEVATIONS
- S4 TYPICAL DETAILS AND SCHEDULES
- S5 CONCRETE SECTIONS AND DETAILS
- S6 STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 660'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:26 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 45 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 45 FRAMING PLAN**

NO. PROJECT NO. 08044

DRAWING NUMBER **S2.45**



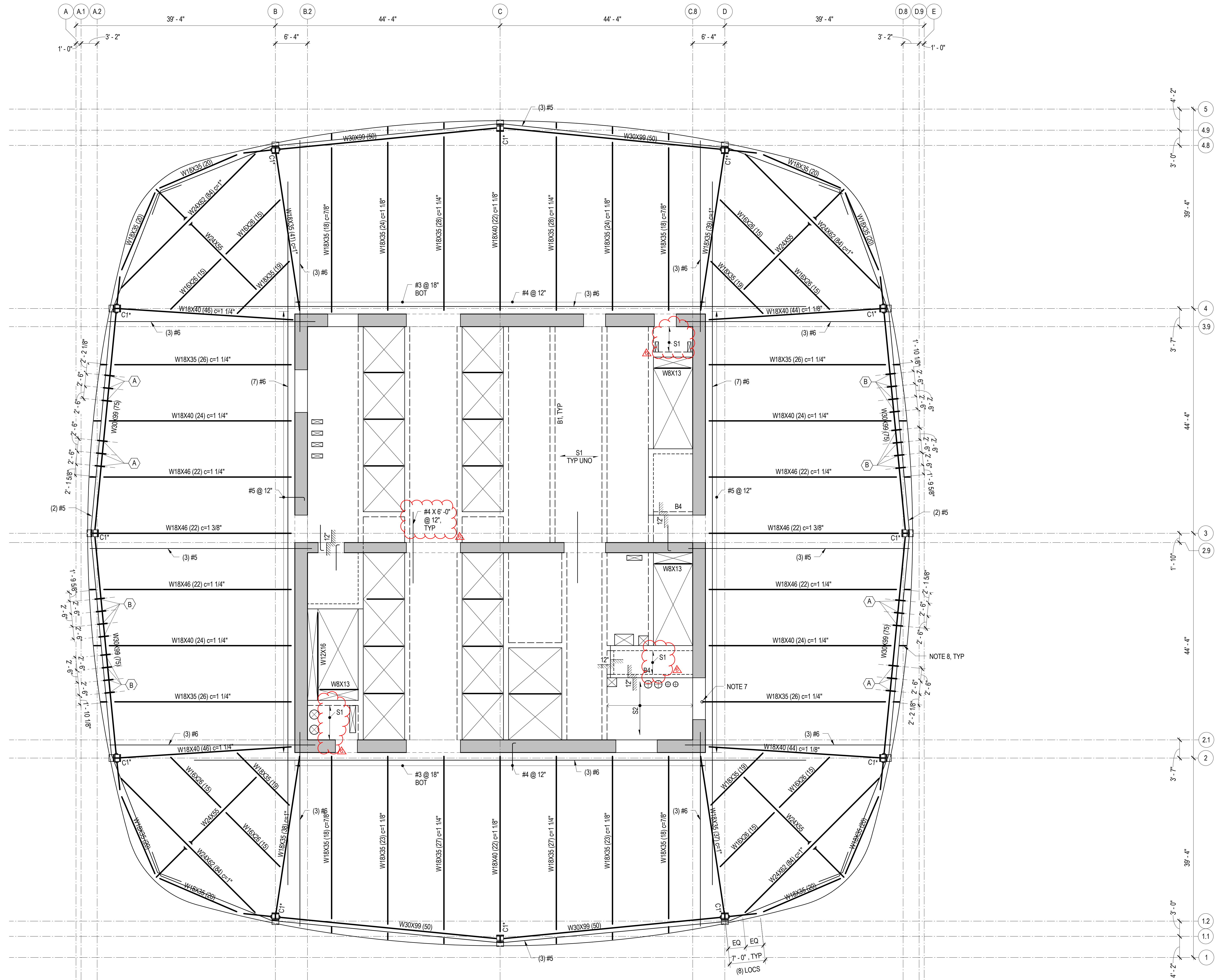
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 675'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS. SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:30 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

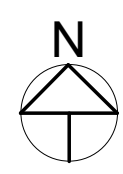
**LEVEL 46 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_  
DRAWING TITLE: \_\_\_\_\_

**LEVEL 46 FRAMING PLAN**

PROJECT NO. 08044  
DRAWING NUMBER S2.46





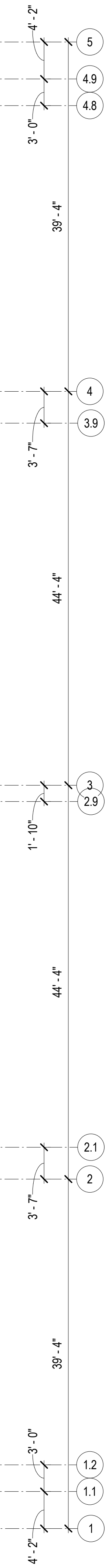
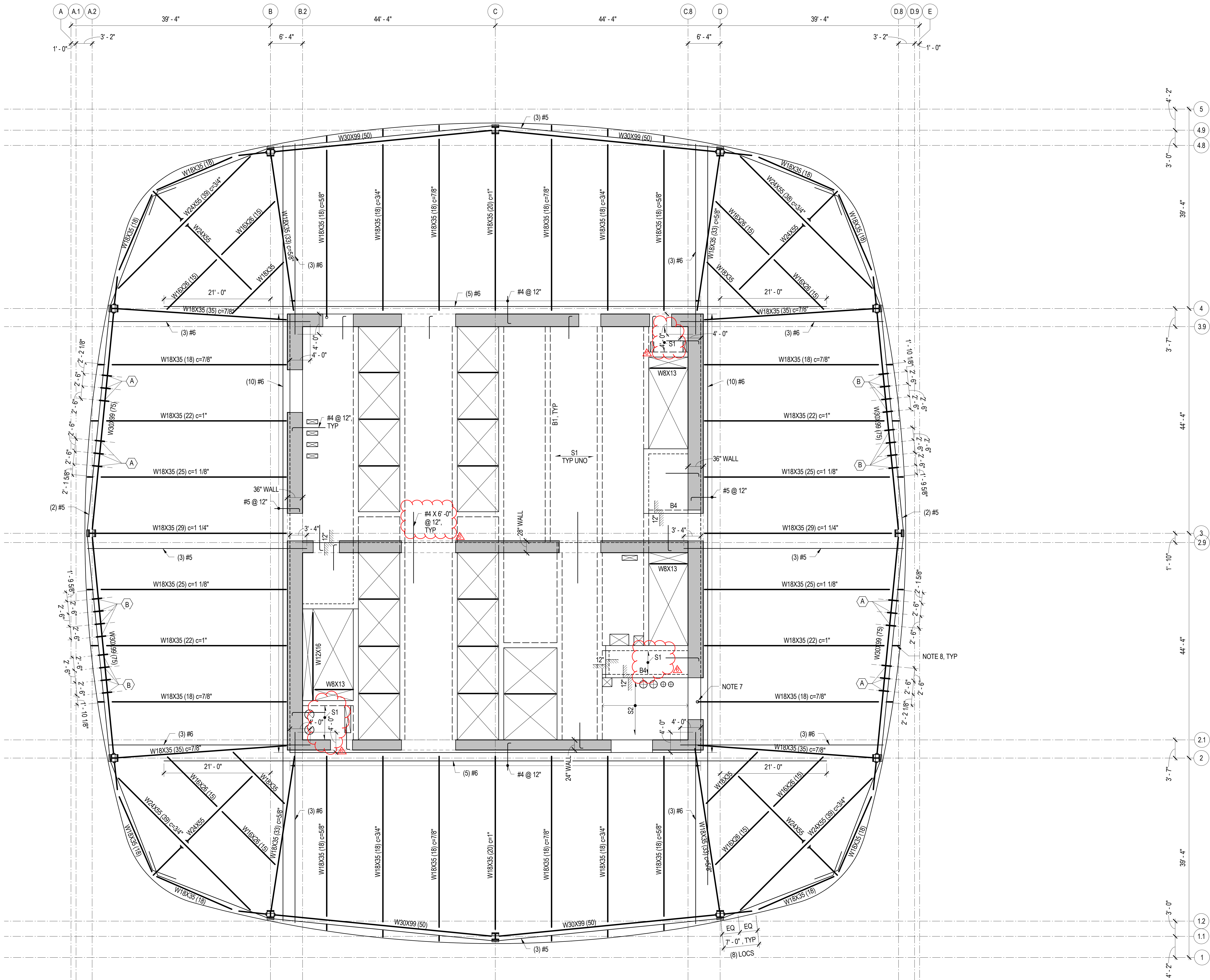
**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 690'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE WTS SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 10:53:34 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 47 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

**LEVEL 47 FRAMING PLAN**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

PROJECT NO. 08044 DRAWING NUMBER S2.47



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

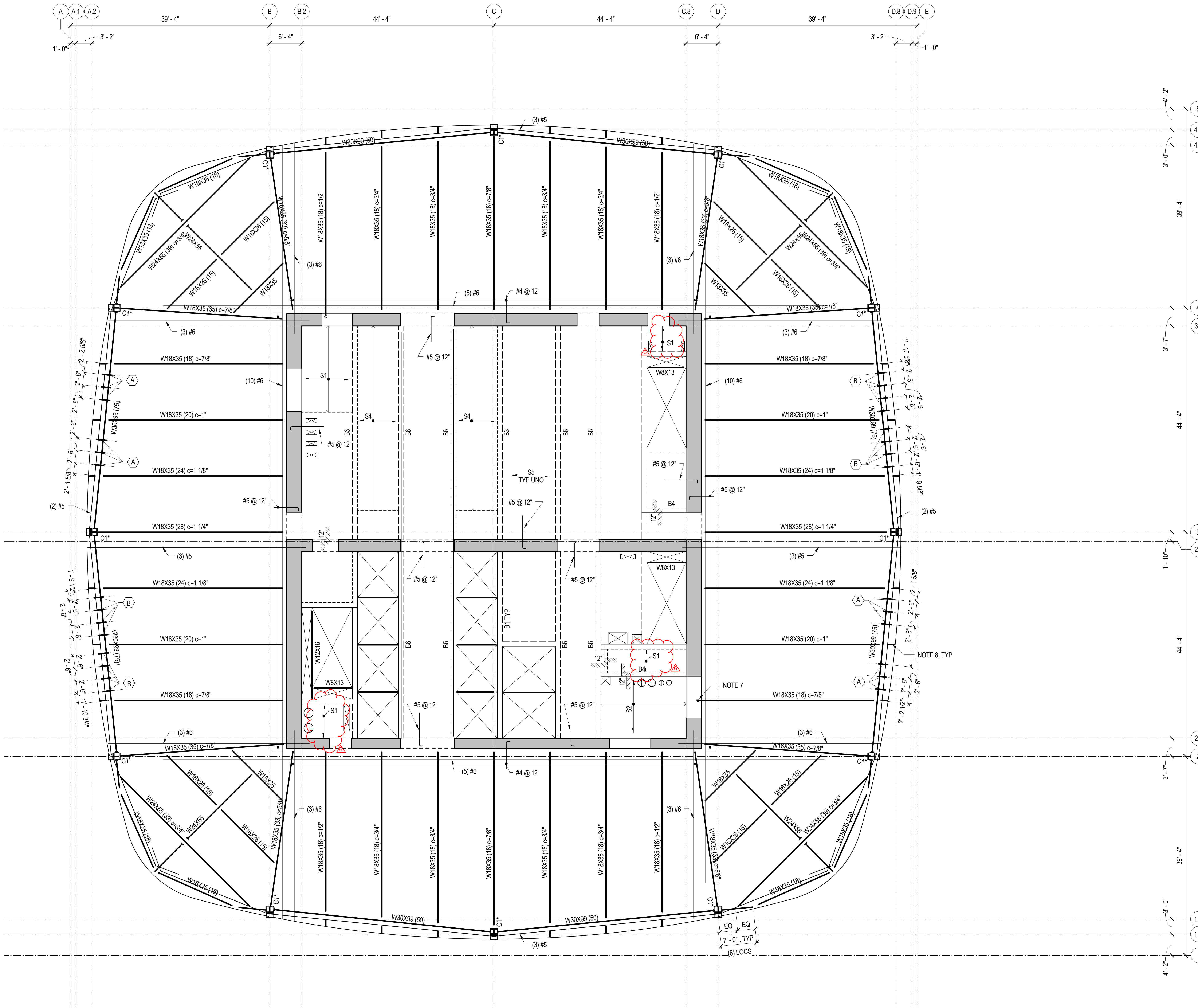
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 705'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:38 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

**LEVEL 48 FRAMING PLAN**  
1/8" = 1'-0"

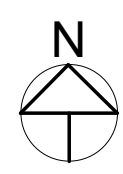
NO.	DATE	STRUCTURAL	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 48 FRAMING PLAN**

NO. DATE STRUCTURAL ISSUE  
08044

DRAWING NUMBER  
**S2.48**







BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

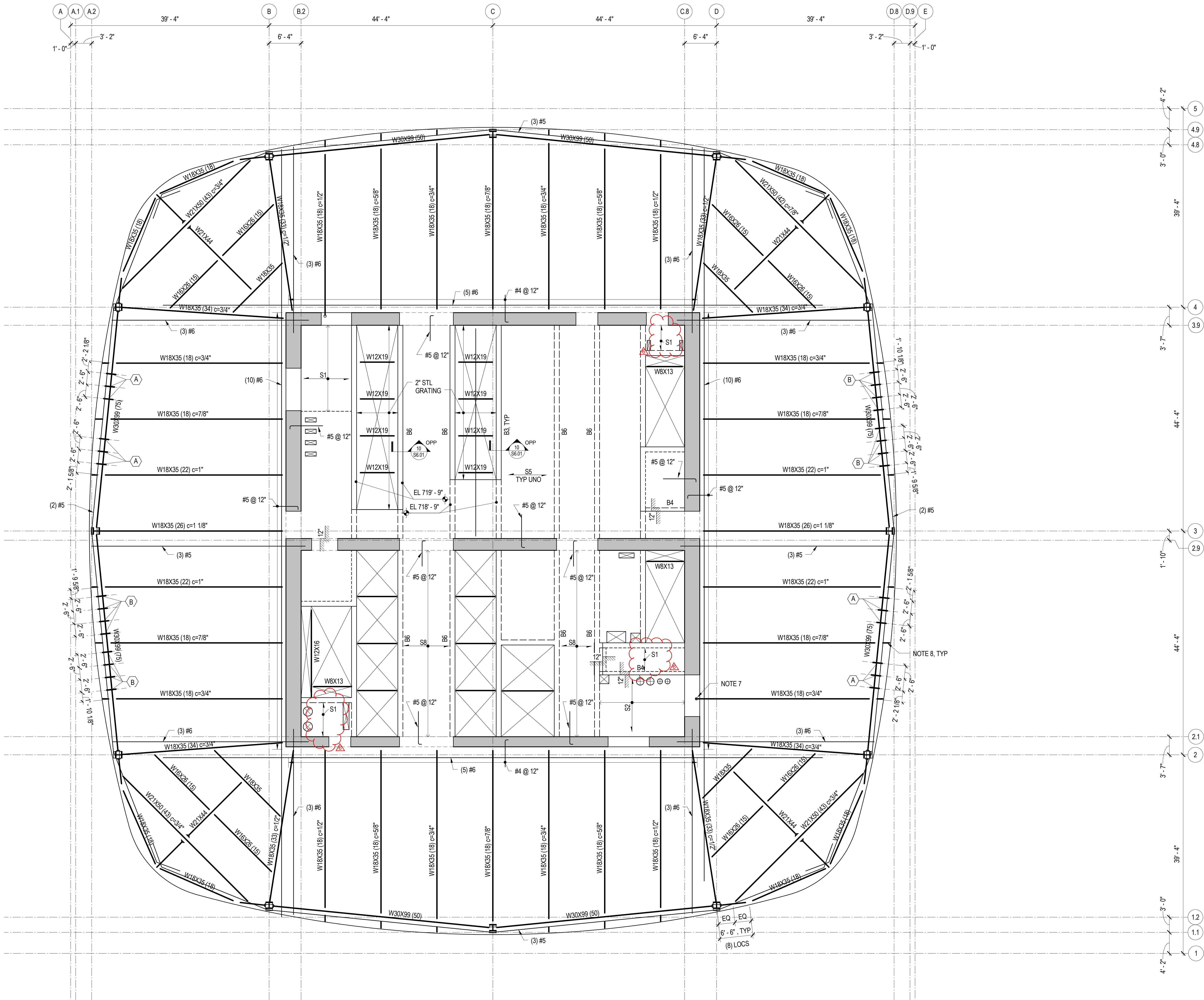
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0 ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1 LOAD MAPS
- S2 PLANS
- S3 ELEVATIONS
- S4 TYPICAL DETAILS AND SCHEDULES
- S5 CONCRETE SECTIONS AND DETAILS
- S6 STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 719'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.5xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W6 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



5  
4.9  
4.8  
4  
3.9  
3  
2.9  
2.1  
2  
1.2  
1.1  
1

C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 49 FRAMING PLAN

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.49



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

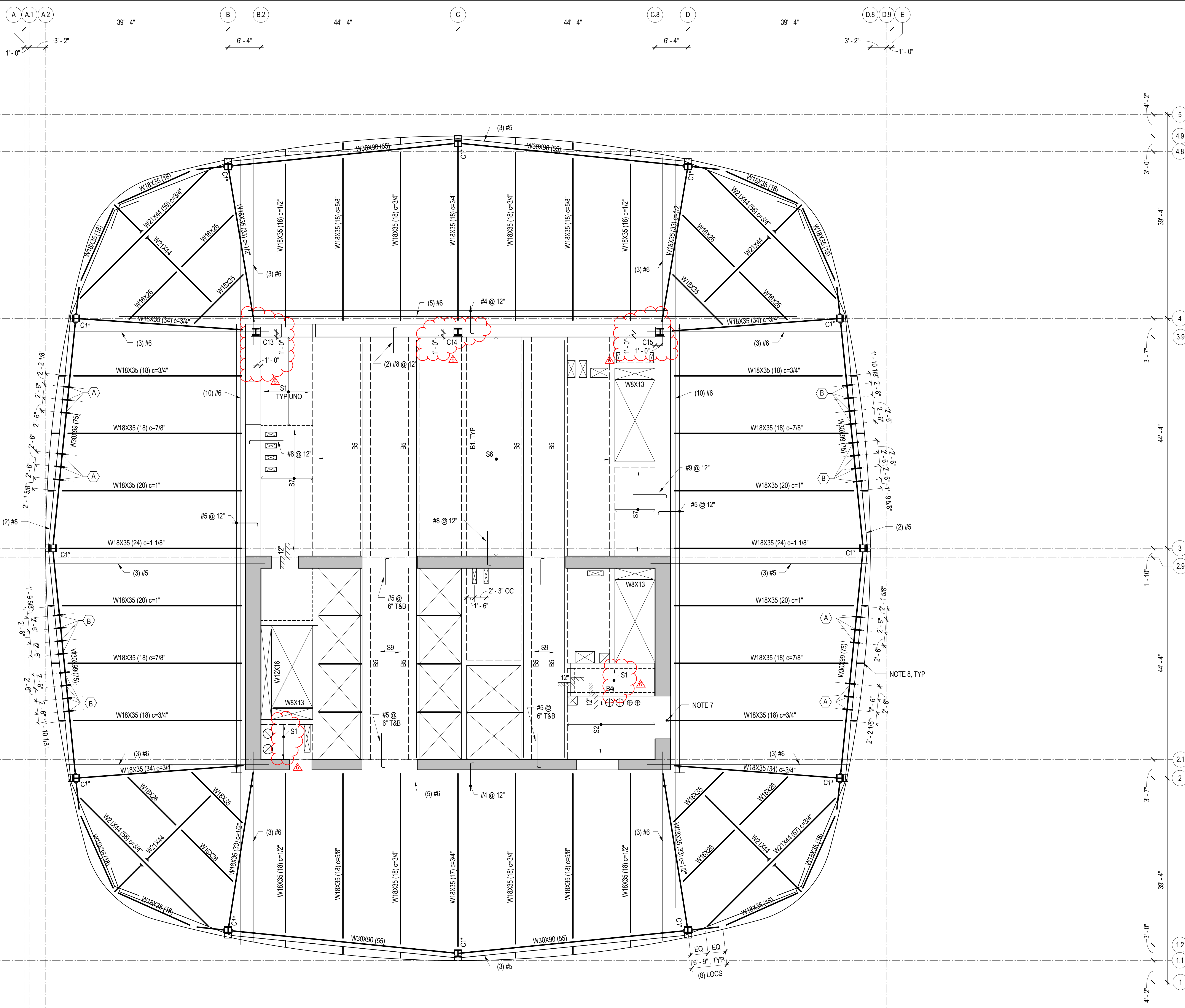
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 734'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. [Symbol] INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W6 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:53:46 PM C:\Revit\Transbay\Twr\_W52013\_kmh.rvt

**LEVEL 50 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 50 FRAMING PLAN**

PROJECT NO. 08044 DRAWING NUMBER S2.50



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

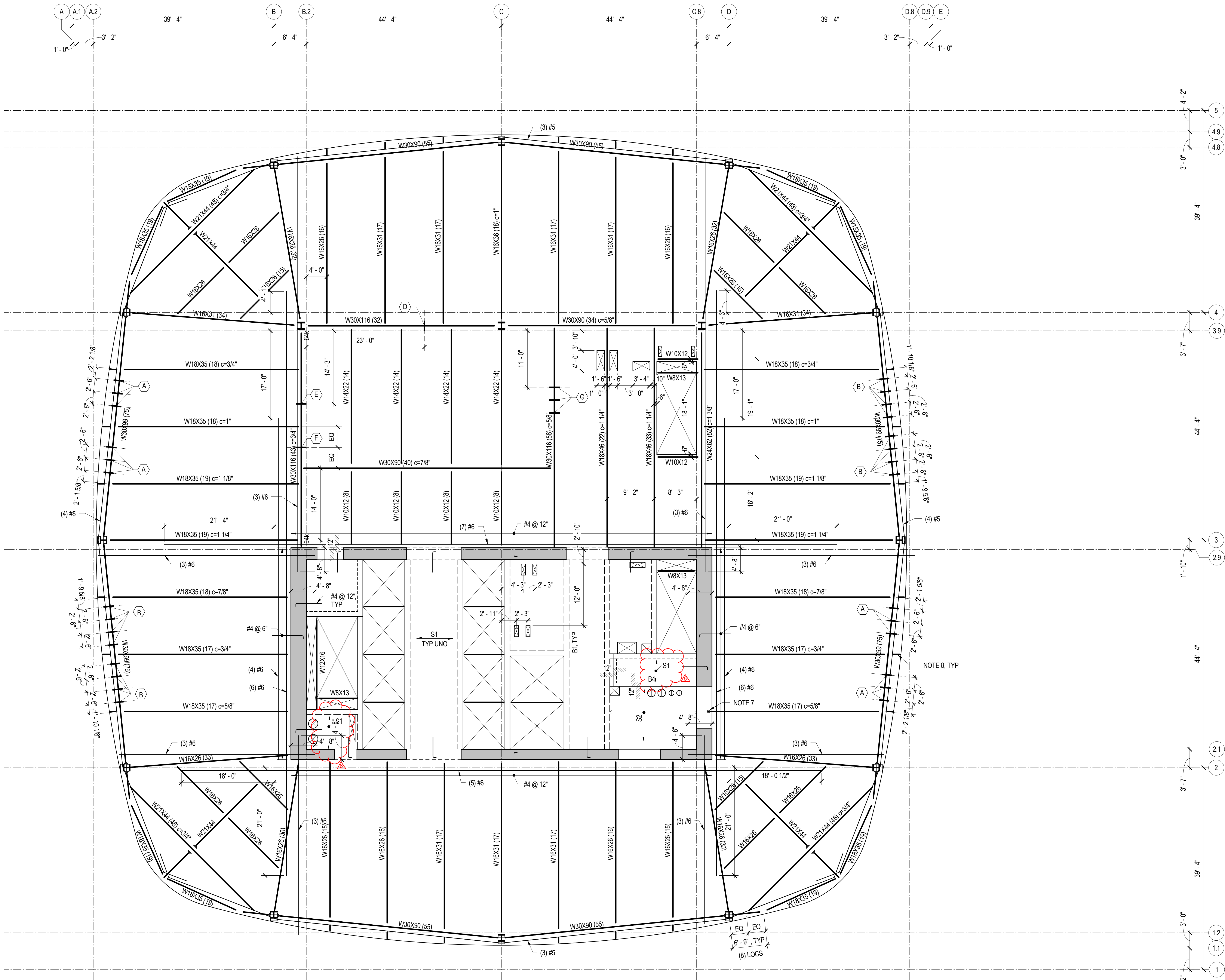
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 749'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

LEVEL 51 FRAMING PLAN

1/8" = 1'-0"

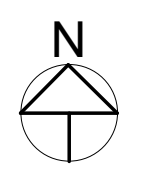
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID
NO.	DATE	ISSUE

DRAWING TITLE

LEVEL 51 FRAMING PLAN

NO. PROJECT NO. 08044

DRAWING NUMBER S2.51





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

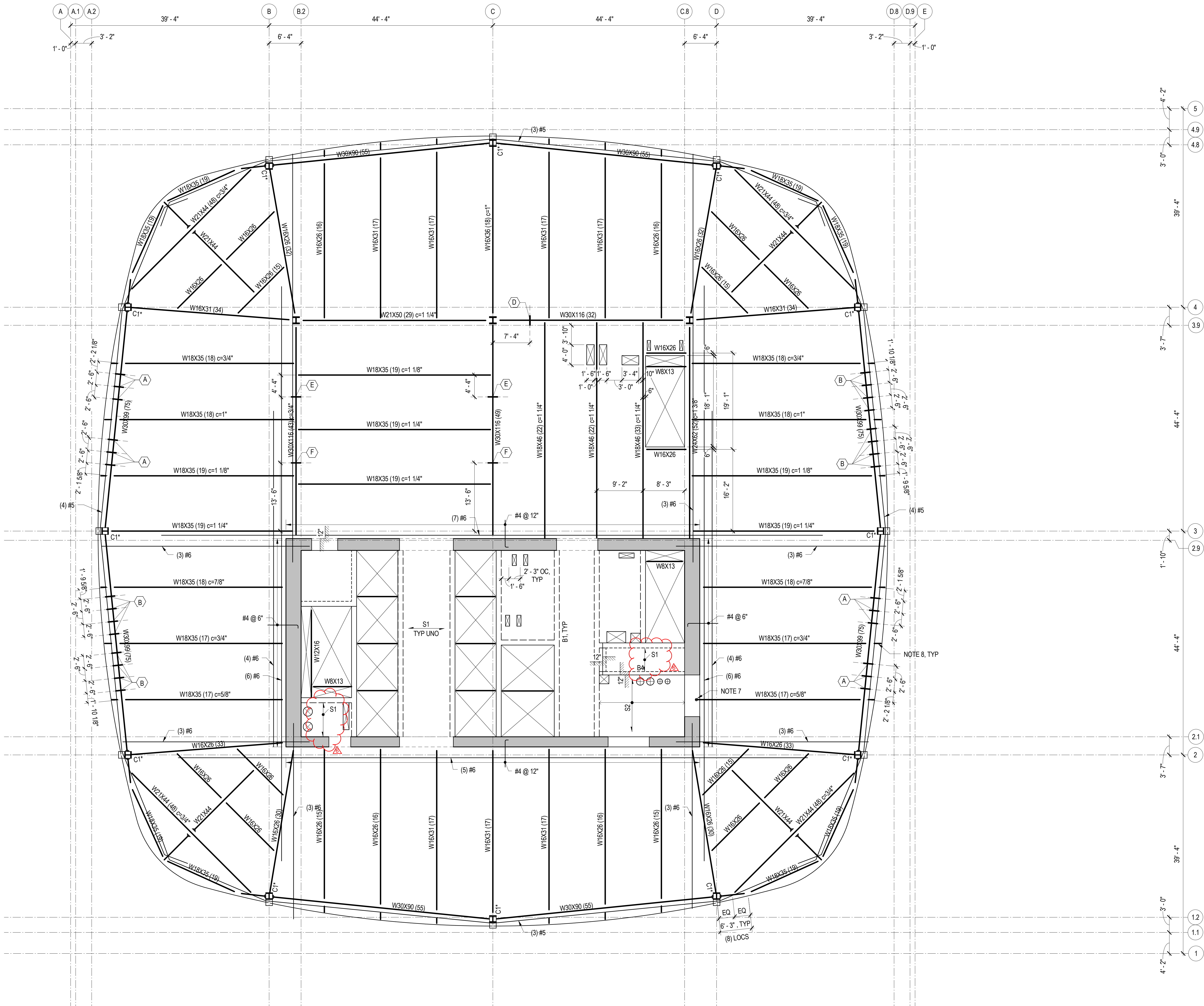
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 764'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



- 5
- 4.9
- 4.8
- 4
- 3.9
- 3
- 2.9
- 2.1
- 2
- 1.2
- 1.1
- 1

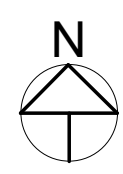
4/29/2014 10:53:54 PM C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 52 FRAMING PLAN**

PROJECT NO. 08044 DRAWING NUMBER S2.52





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

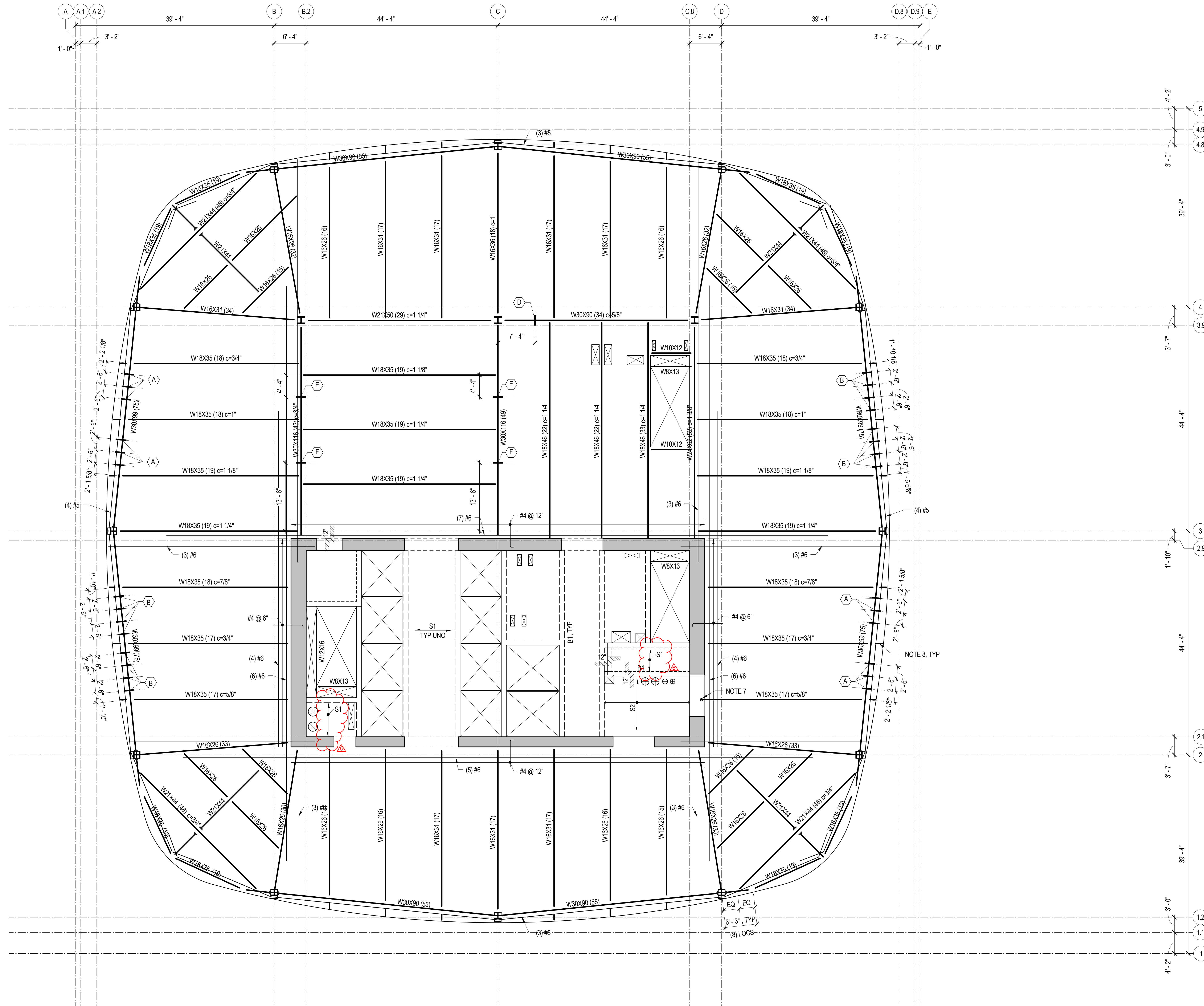
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 778'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 53 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.53**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

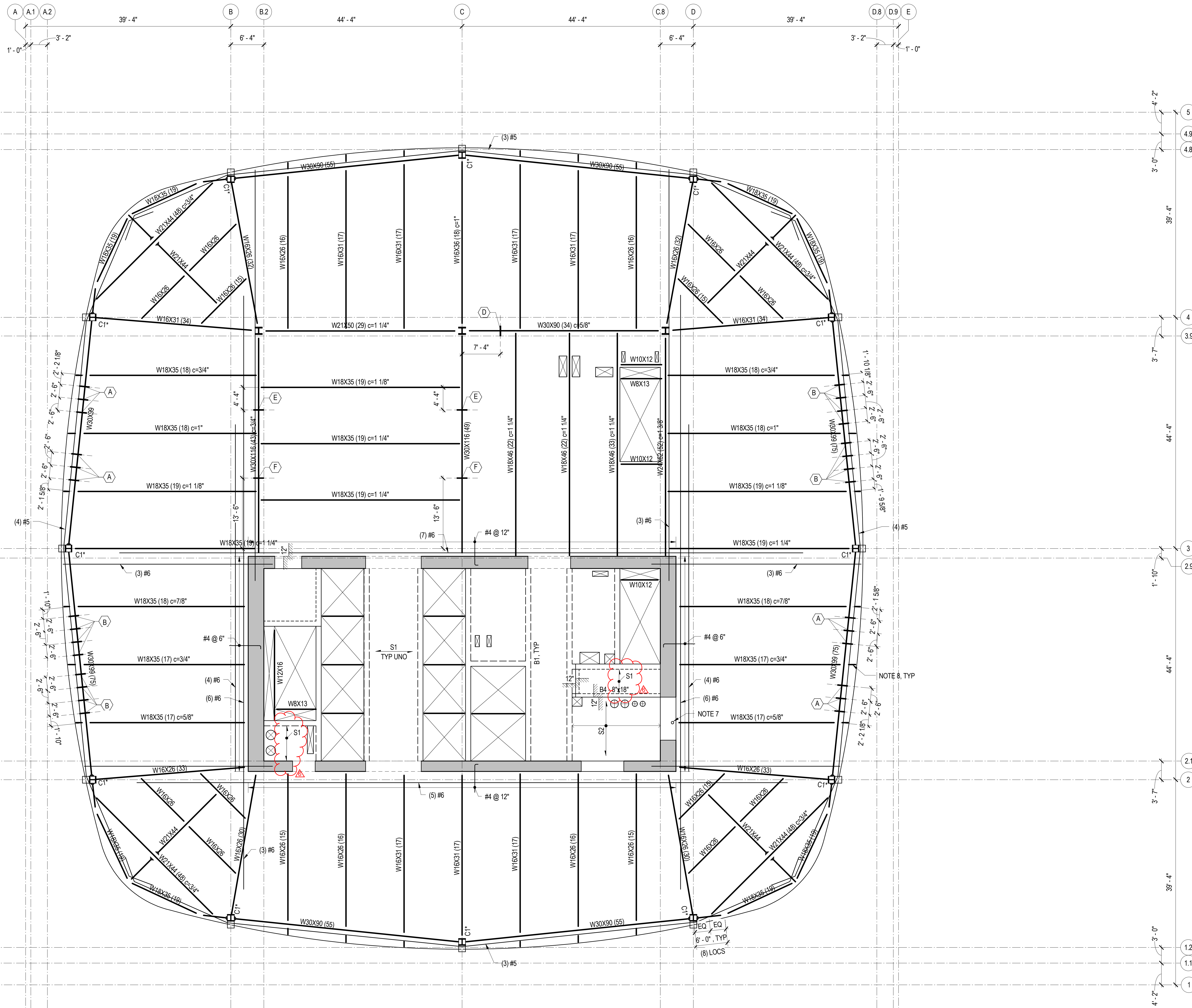
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 793'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

4/29/2014 10:54:02 PM

LEVEL 54 FRAMING PLAN

1/8" = 1'-0"

6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

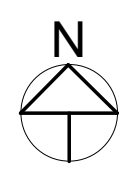
DRAWING TITLE

LEVEL 54 FRAMING PLAN

NO. DATE ISSUE

NO. PROJECT NO. DRAWING NUMBER

08044 S2.54





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

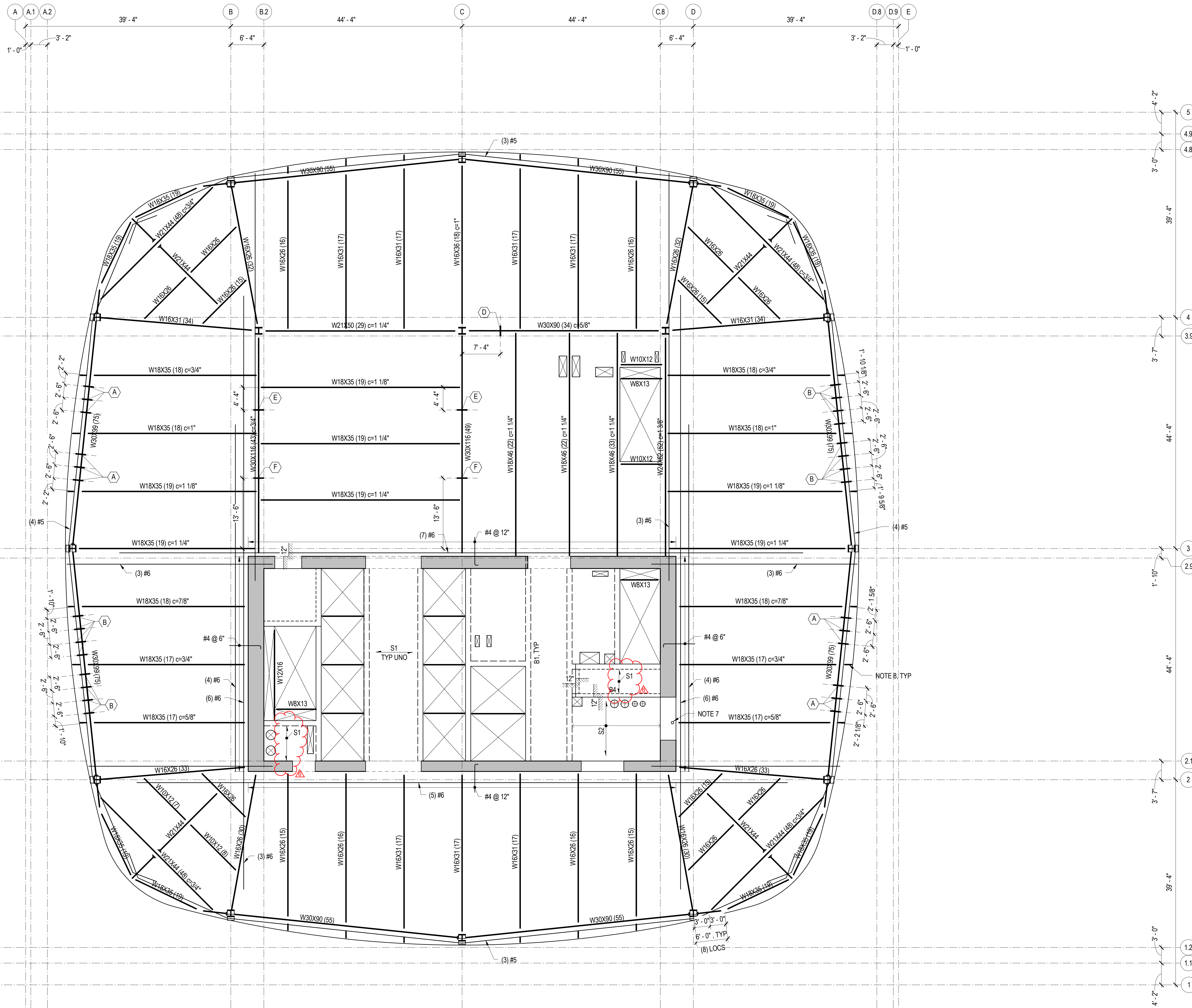
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 808'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. <sup>R</sup> INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:06 PM C:\Revit\Transbay\w\_ WIS2013\_kmh.rvt

**LEVEL 55 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 55 FRAMING PLAN**

PROJECT NO. 08044 DRAWING NUMBER **S2.55**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

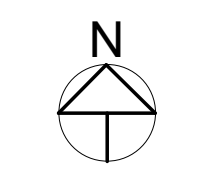
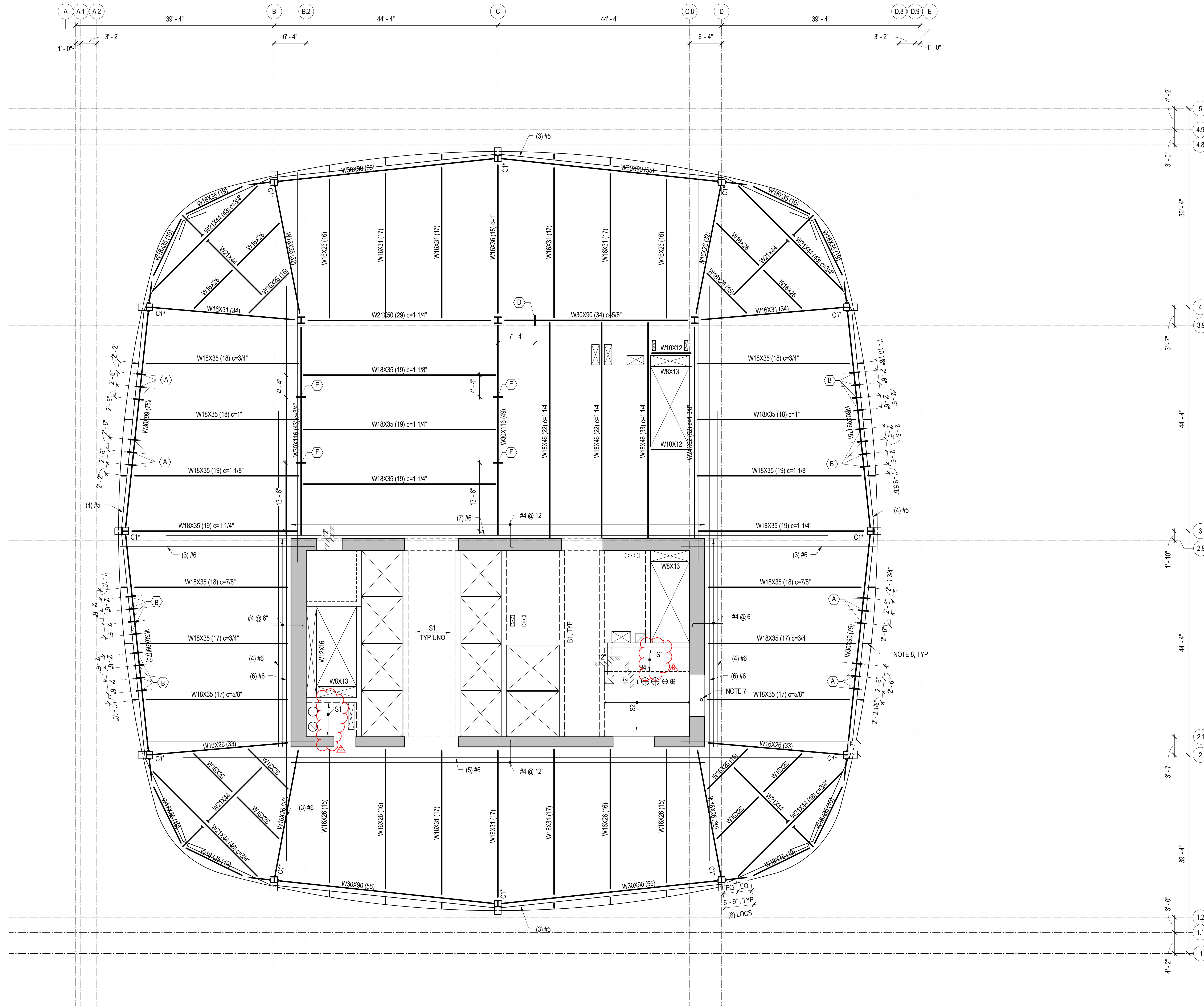
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 823'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.







BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

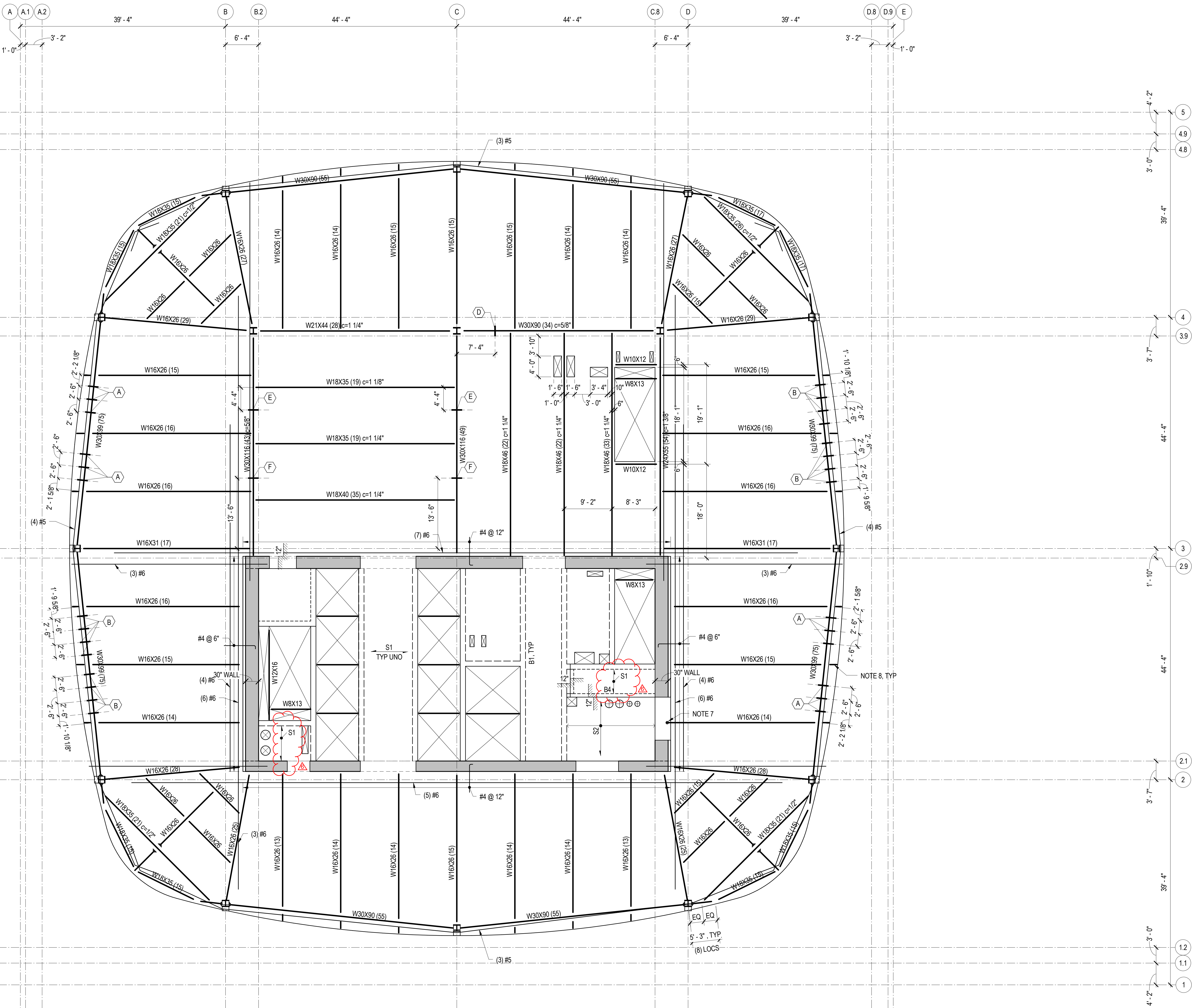
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 837'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



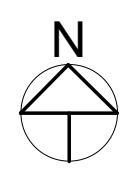
C:\Revit\Transbay\w\_ WS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

LEVEL 57 FRAMING PLAN

PROJECT NO. 08044  
DRAWING NUMBER S2.57





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

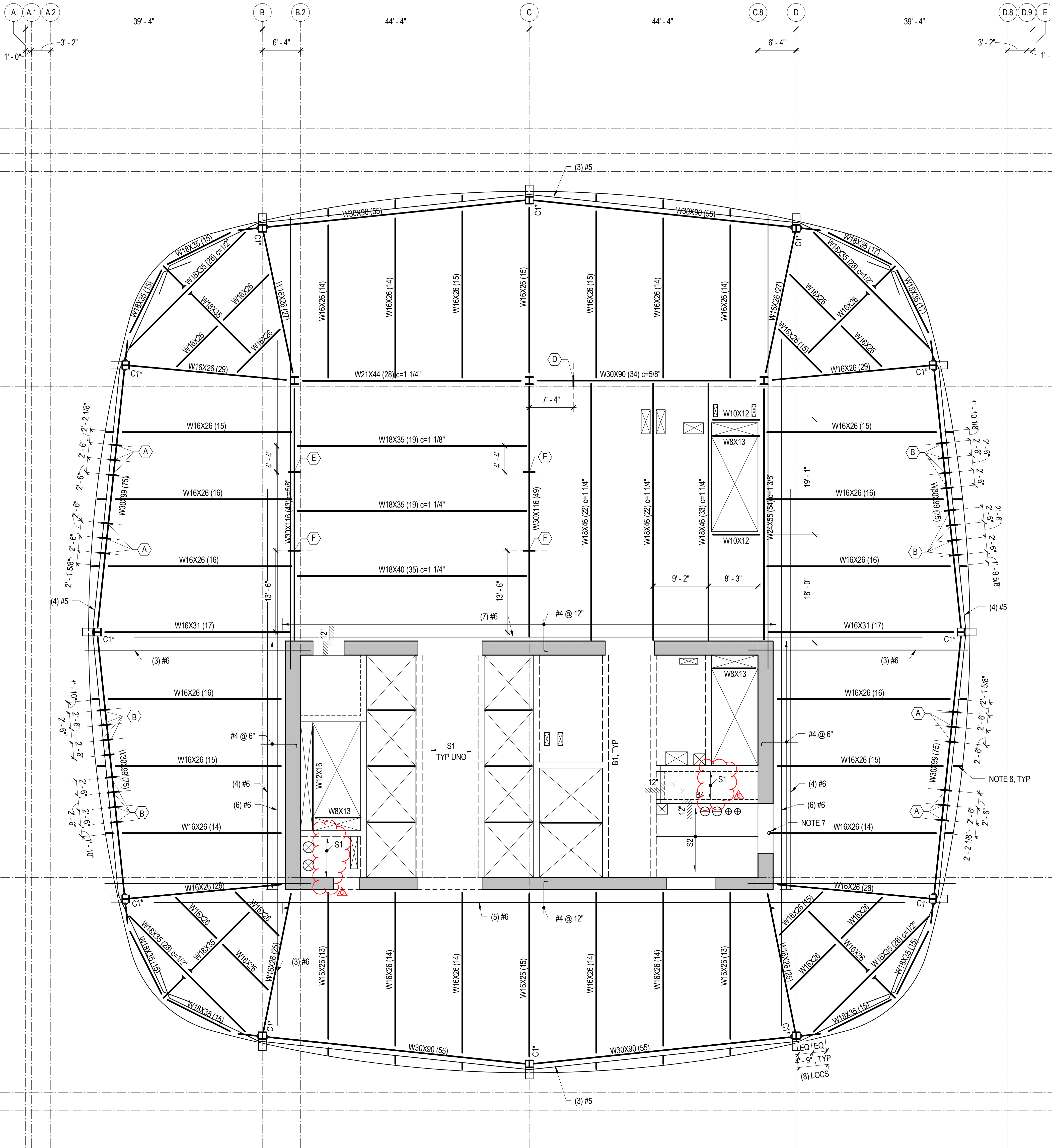
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

- REFERENCE FLOOR ELEVATION IS 852'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
- THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
- FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
- PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



C:\Revit\Transbay\w\WS2013\_kmh.rvt

4/29/2014 10:54:18 PM

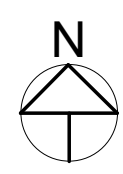
1 LEVEL 58 FRAMING PLAN  
1/8" = 1'-0"

6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	
NO.	DATE	STRUCTURAL BID	ISSUE

DRAWING TITLE

LEVEL 58 FRAMING PLAN

NO.	PROJECT NO.	DRAWING NUMBER
08044		S2.58



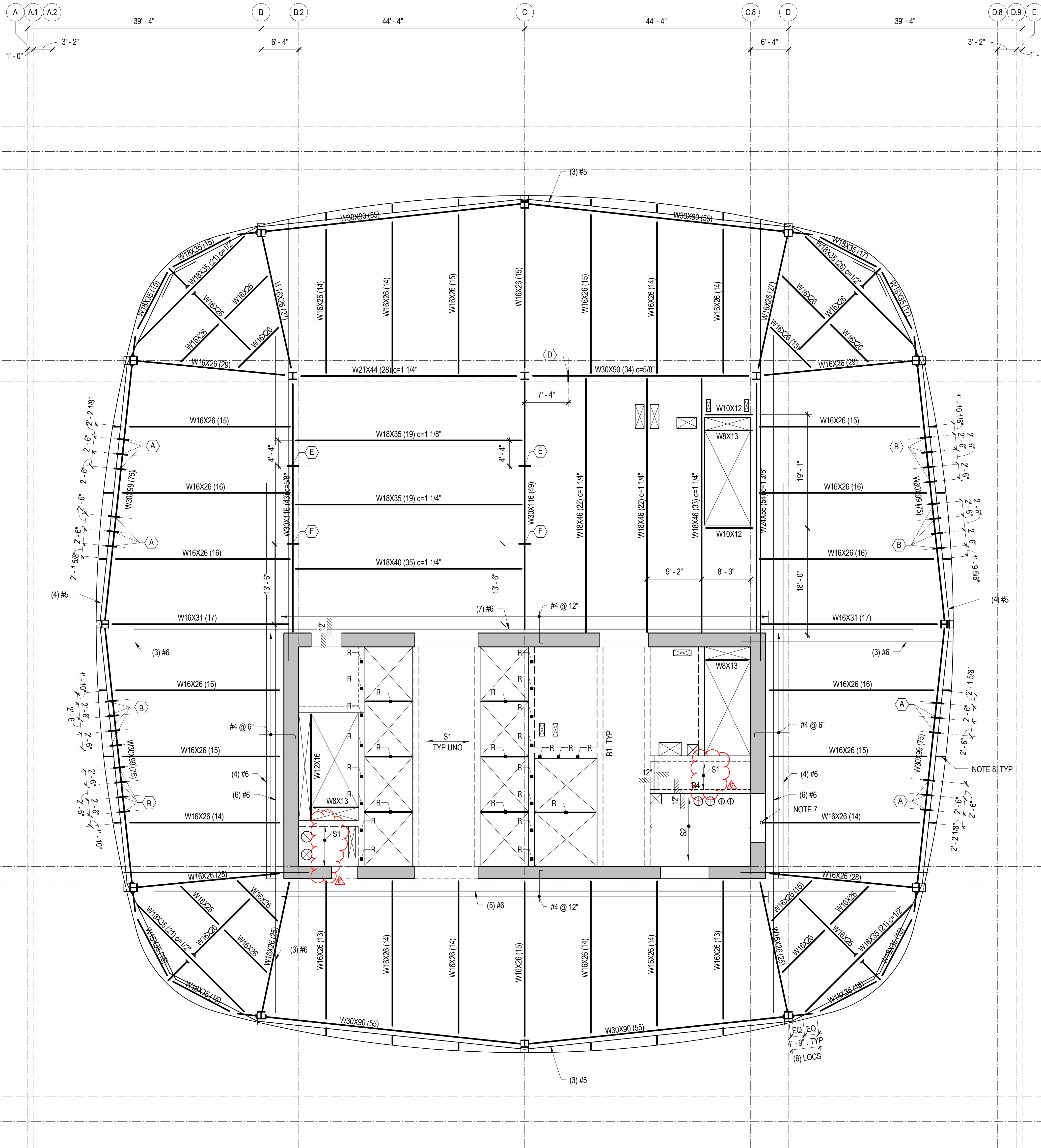


REFERENCE DRAWINGS

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

NOTES

1. REFERENCE FLOOR ELEVATION IS 867'-3". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCING WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

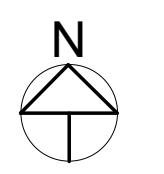
DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID
NO.	DATE	ISSUE

DRAWING TITLE

LEVEL 59 FRAMING PLAN





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

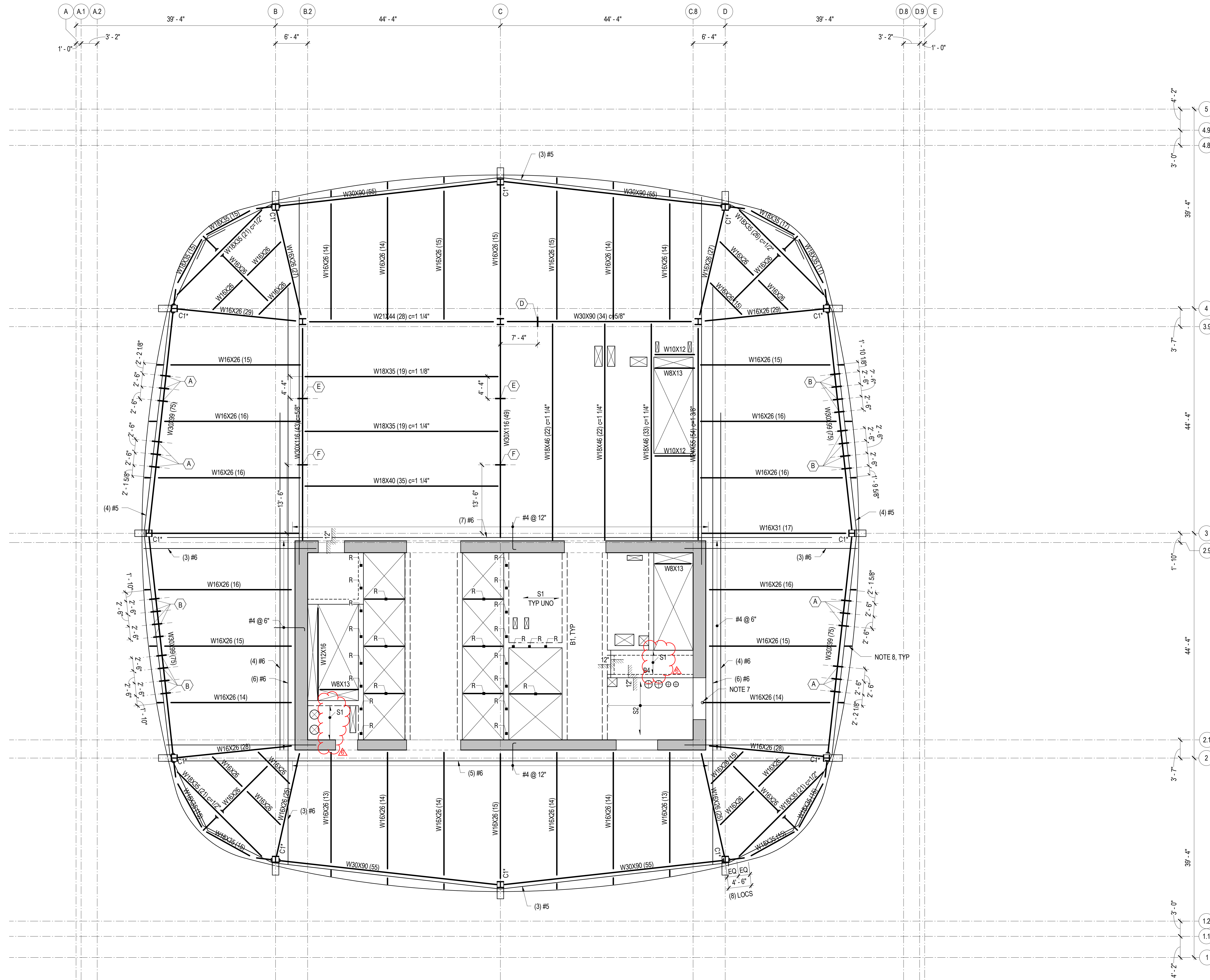
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0... ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1... LOAD MAPS
- S2... PLANS
- S3... ELEVATIONS
- S4... TYPICAL DETAILS AND SCHEDULES
- S5... CONCRETE SECTIONS AND DETAILS
- S6... STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 884'-0". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:26 PM C:\Revit\Transbay\Twr\_WIS2013\_kmh.rvt

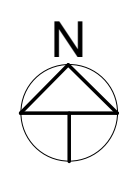
**LEVEL 60 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 60 FRAMING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.60





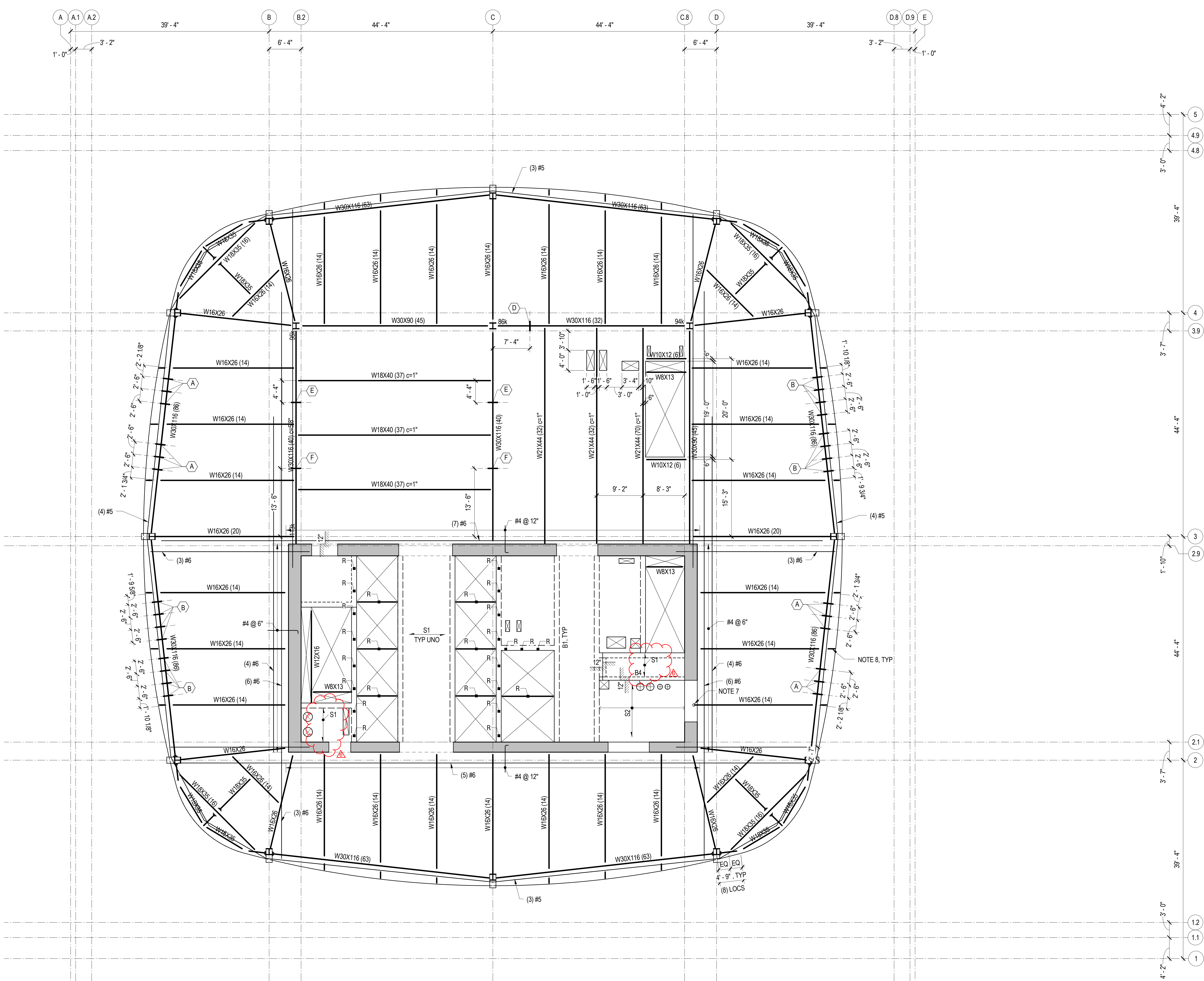
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 900'-9". REFERENCE TOP OF STRUCTURAL STEEL IS 1'-5 1/4" BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS 12 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THE STRUCTURAL SLAB IS 3-1/4 INCHES OF SAND LIGHTWEIGHT CONCRETE ON 2-INCH COMPOSITE STEEL DECK. REINFORCE WITH WWR 6x6-W2.9xW2.9. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE W16 SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:30 PM C:\Revit\Transbay\w\_152013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL 61 FRAMING PLAN**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

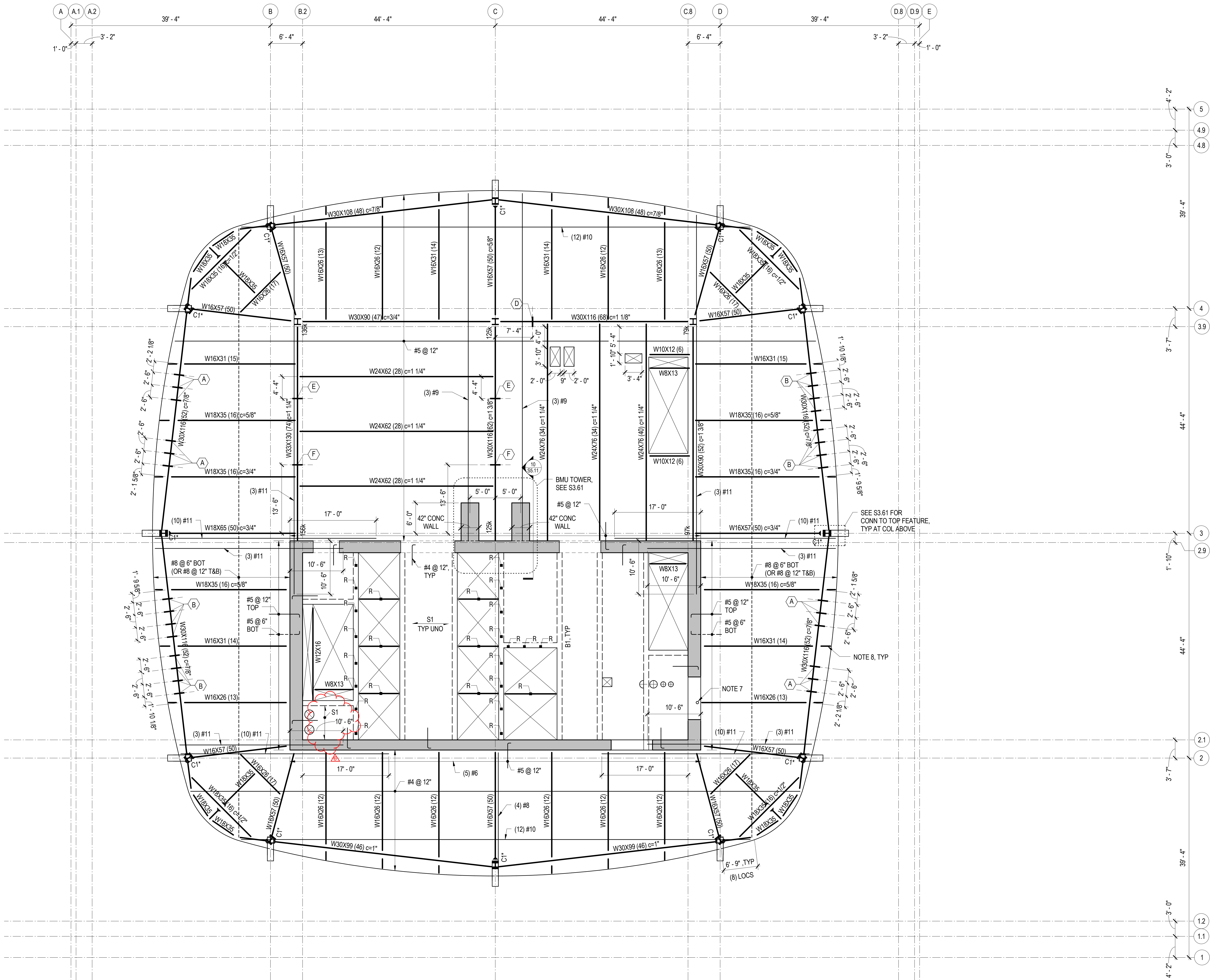
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0. ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1. LOAD MAPS
- S2. PLANS
- S3. ELEVATIONS
- S4. TYPICAL DETAILS AND SCHEDULES
- S5. CONCRETE SECTIONS AND DETAILS
- S6. STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 917'-6". REFERENCE TOP OF STRUCTURAL STEEL IS 13 INCHES BELOW THE REFERENCE FLOOR ELEVATION. TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE. ALL BEAM ENDS AT THE ROOF PERIMETER ARE 7 INCHES ABOVE THE REFERENCE TOP OF STEEL AND SLOPE TO 0 INCHES AS INDICATED BY TYPICAL BEAM CALLOUTS SHOWN IN PLAN.
3. THE STRUCTURAL SLAB IS 10 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK (SEE 1/54.26). REINFORCE WITH #4 @ 12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. R INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.
8. PROVIDE WTS SLAB SUPPORT PER "TYPICAL SLAB SUPPORT STUB" DETAIL ON SHEET S4.25.



4/29/2014 10:54:35 PM C:\Revit\Transbay\Twr\_WS2013\_kmh.rvt

**LEVEL 62 FRAMING PLAN**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**LEVEL 62 FRAMING PLAN**

PROJECT NO. **08044** DRAWING NUMBER **S2.62**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

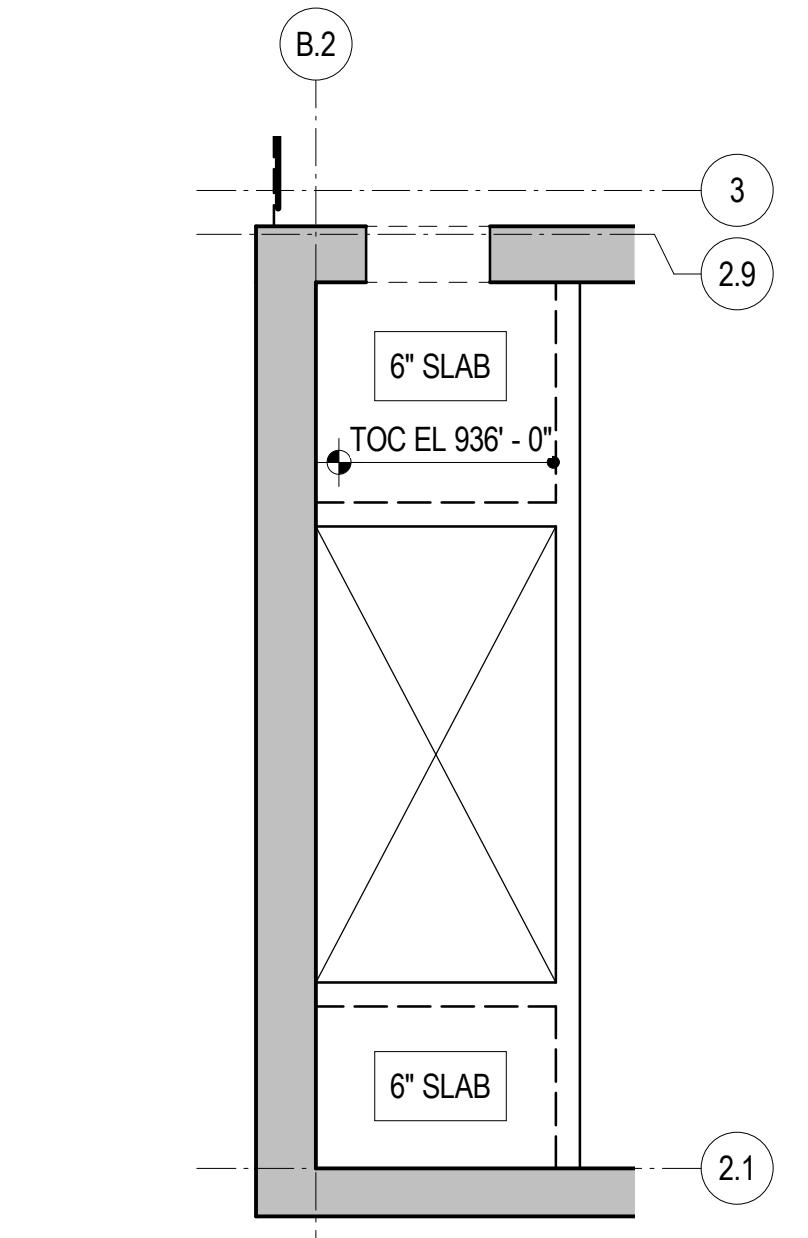
**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

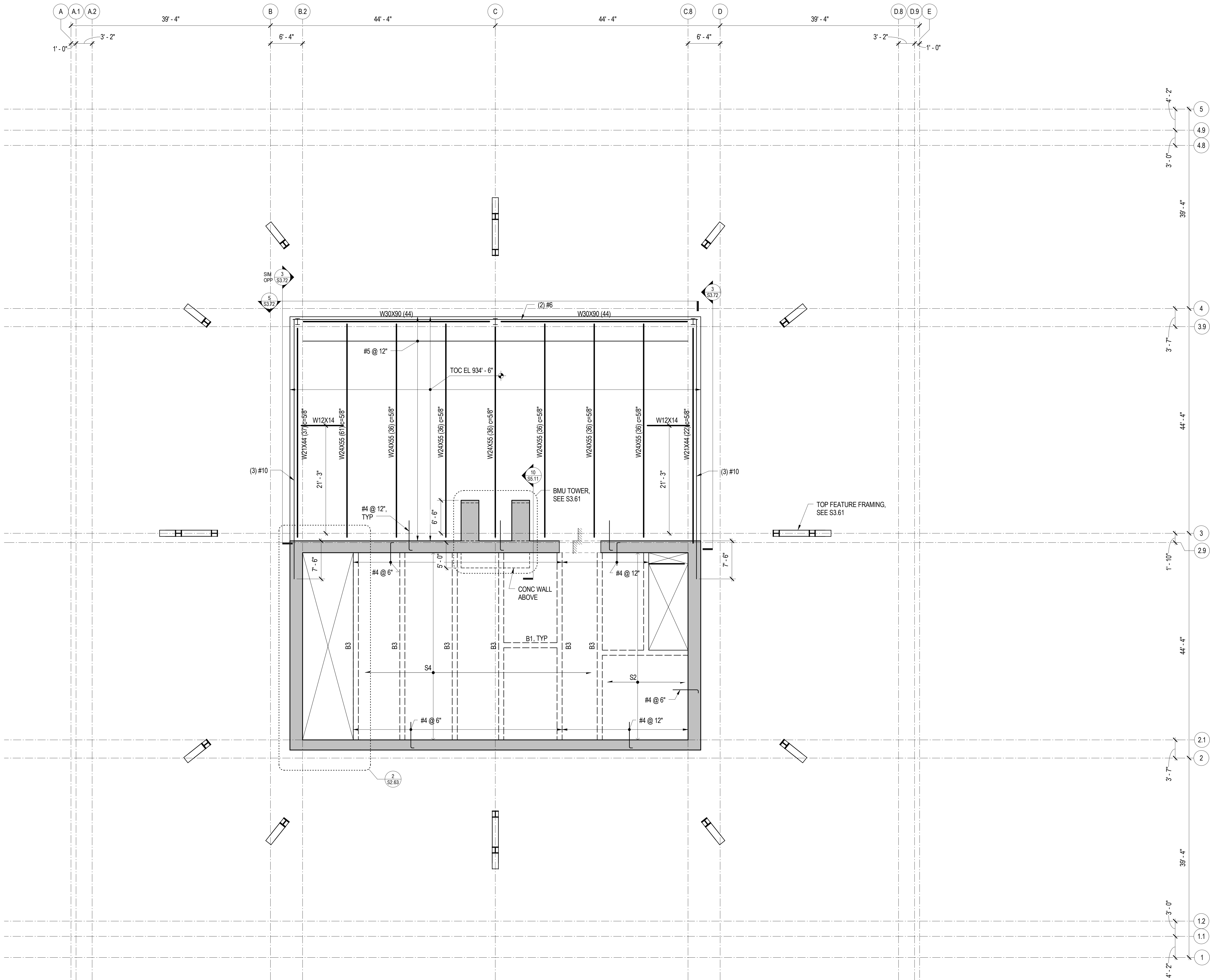
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

- REFERENCE DRAWINGS**
- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1\_ LOAD MAPS
  - S2\_ PLANS
  - S3\_ ELEVATIONS
  - S4\_ TYPICAL DETAILS AND SCHEDULES
  - S5\_ CONCRETE SECTIONS AND DETAILS
  - S6\_ STEEL SECTIONS AND DETAILS

- NOTES**
1. REFERENCE FLOOR ELEVATION IS 947'-0". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
  2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
  3. THE STRUCTURAL SLAB IS 6 INCHES OF NORMAL WEIGHT CONCRETE ON 3-INCH COMPOSITE STEEL DECK. REINFORCE WITH #4@12" OC EACH WAY. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNLESS NOTED OTHERWISE). CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
  4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
  5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
  6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
  7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.



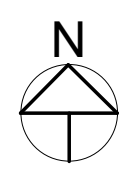
**2 PARTIAL FRAMING PLAN**  
1/8" = 1'-0"



4/29/2014 10:54:39 PM C:\Revit\Transbay\wr\_WIS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>LEVEL 63 FRAMING PLAN</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S2.63</b>





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

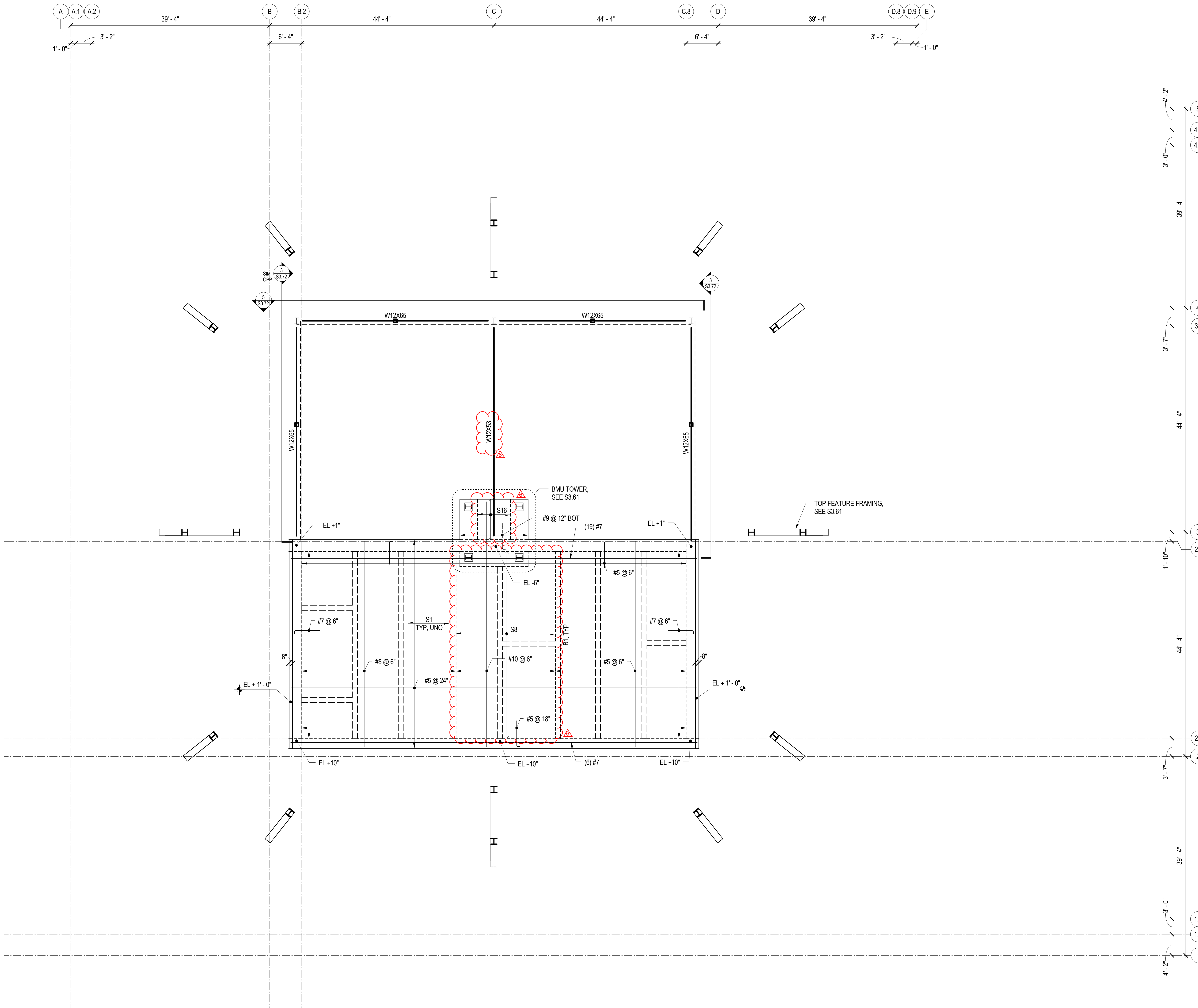
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**REFERENCE DRAWINGS**

- S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_ LOAD MAPS
- S2\_ PLANS
- S3\_ ELEVATIONS
- S4\_ TYPICAL DETAILS AND SCHEDULES
- S5\_ CONCRETE SECTIONS AND DETAILS
- S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS 960'-6". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN TOP OF STEEL ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH TOP OF STEEL UNLESS NOTED OTHERWISE.
3. CONCRETE STRUCTURAL SLAB WITHIN THE CORE IS A 6-INCH-THICK REINFORCED ONE-WAY SLAB UNLESS NOTED OTHERWISE. REINFORCING SHOWN ON THE PLAN AND IN THE TYPICAL DETAILS IS IN ADDITION TO THIS REINFORCING (TOP BAR UNO). SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.04.
4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.
7. FOR BEAM SUPPORT AT CORE WALL OPENINGS, SEE "TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING" ON SHEET S4.25.



C:\Revit\Transbay\Twr\_WIS2013\_116.rvt

4/30/2014 12:23:21 PM

**1 LEVEL 64 FRAMING PLAN**  
1/8" = 1'-0"

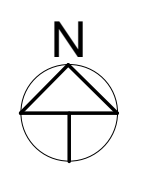
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**LEVEL 64 FRAMING PLAN**

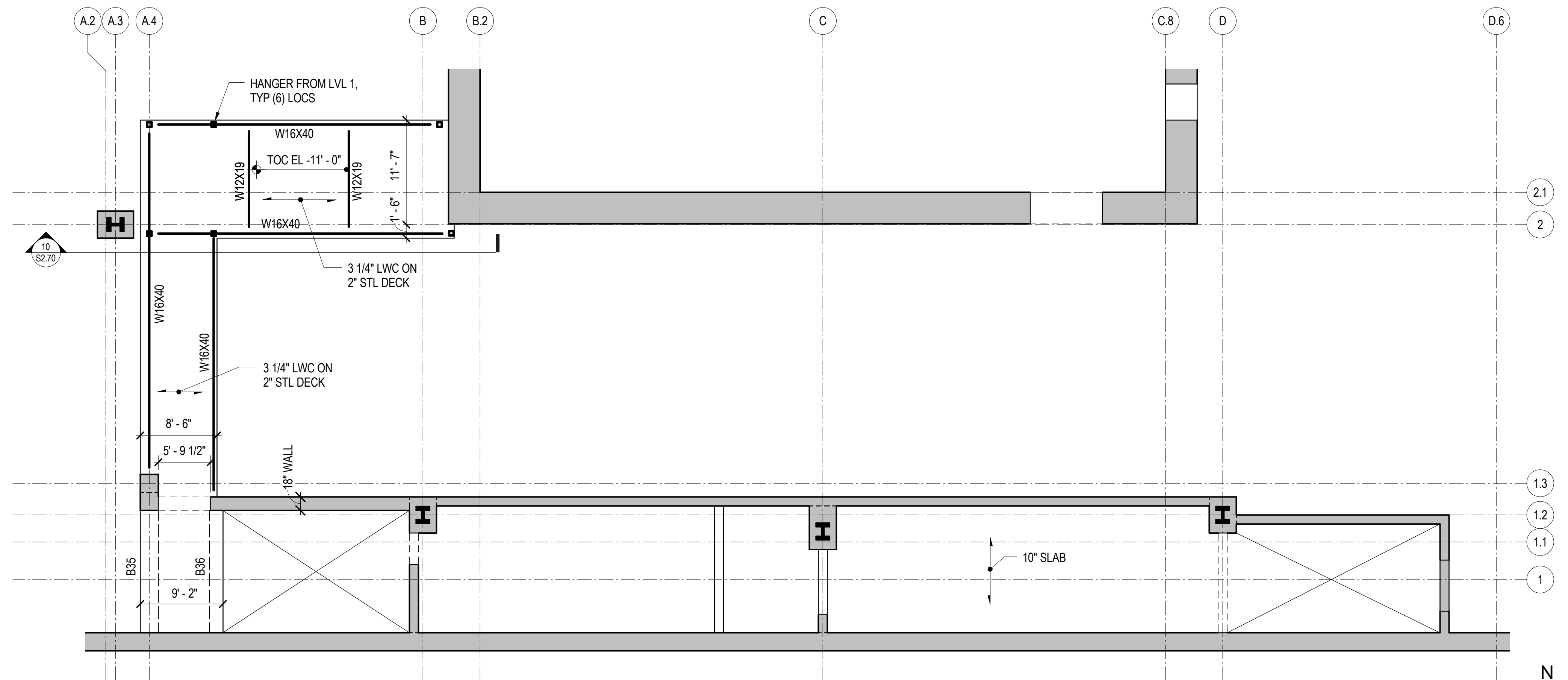
PROJECT NO. 08044 DRAWING NUMBER S2.64



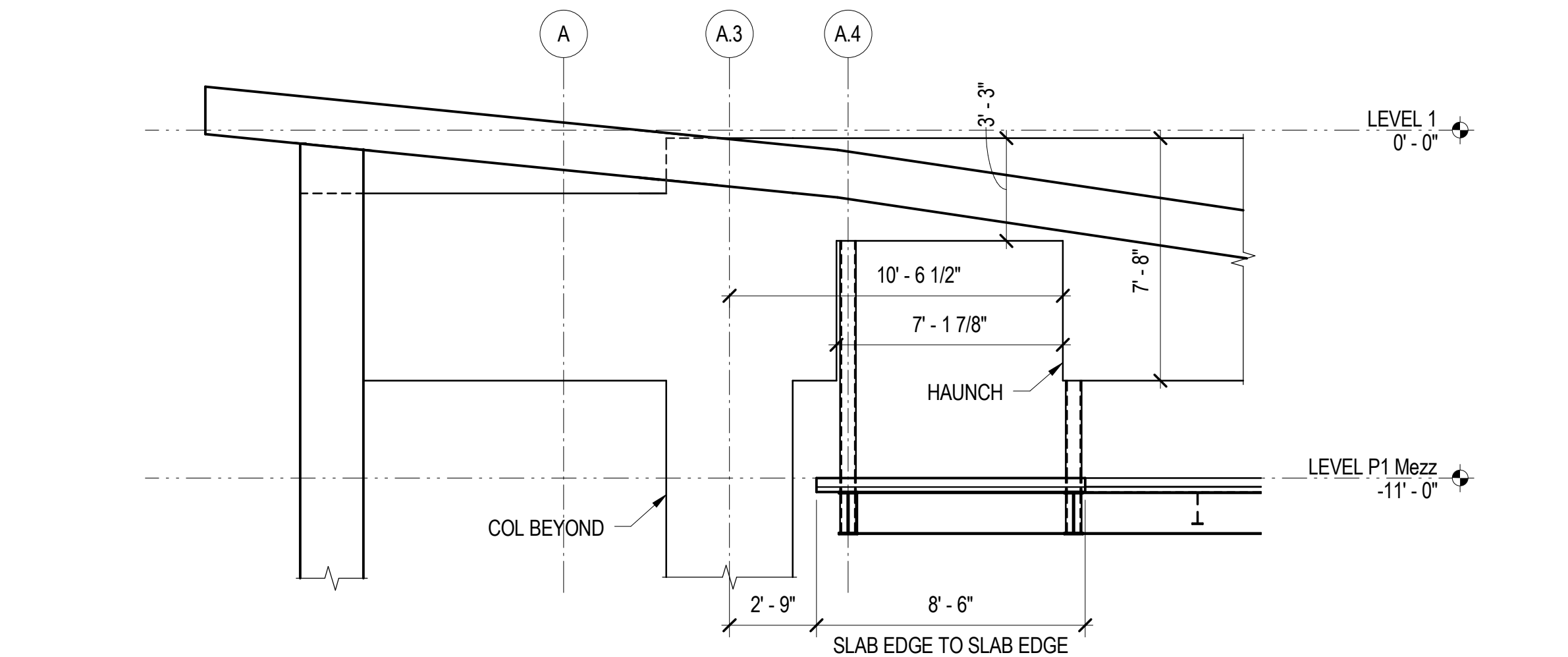




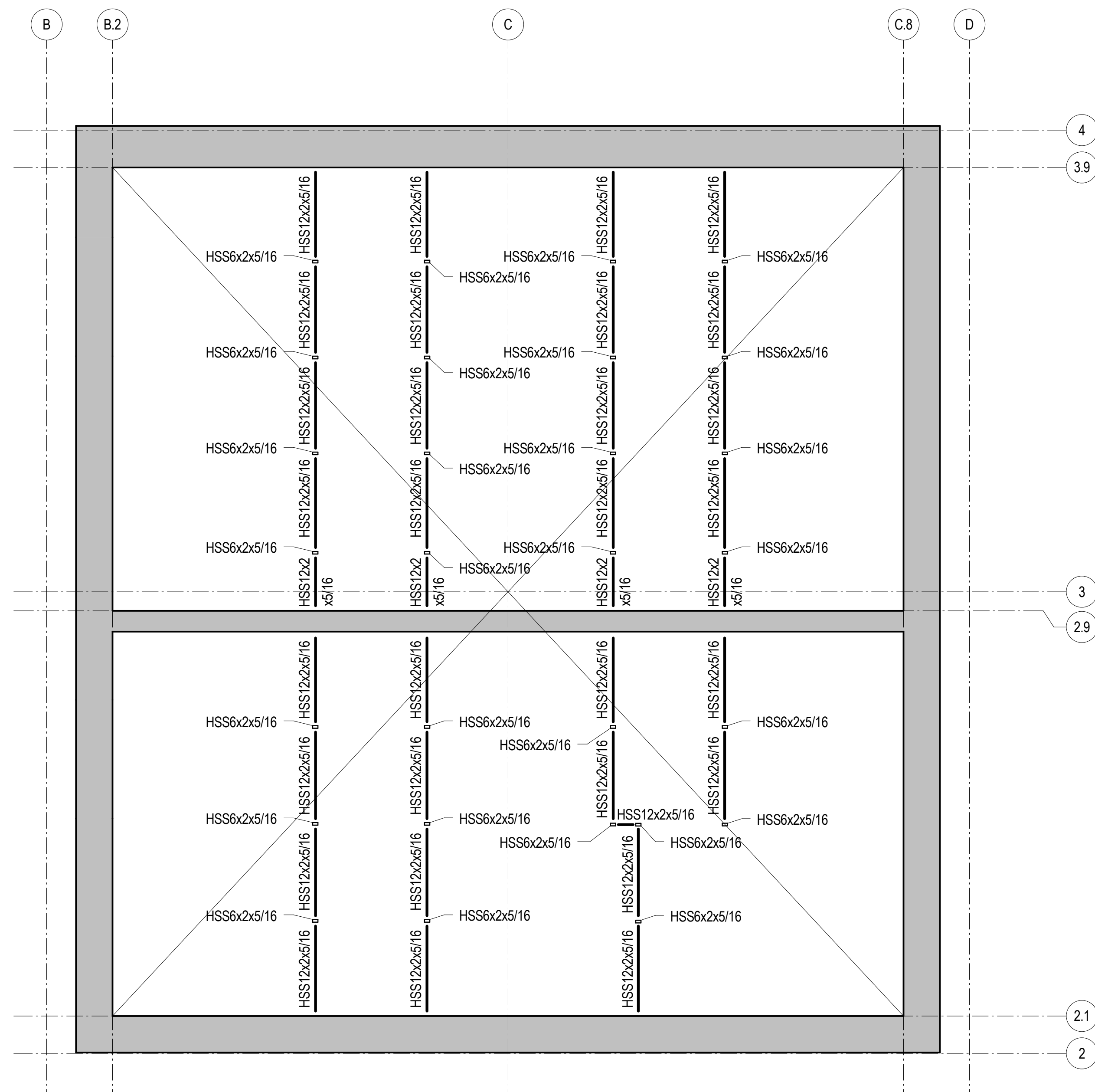
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



5 LEVEL P1 MEZZANINE FRAMING PLAN  
1/8" = 1'-0"



10 SECTION  
1/4" = 1'-0"



NOTES:  
1. REFERENCE TOP OF STRUCTURAL STEEL IS 12'-6".

16 LEVEL 1 SHAFT WALL SUPPORT FRAME PLAN  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

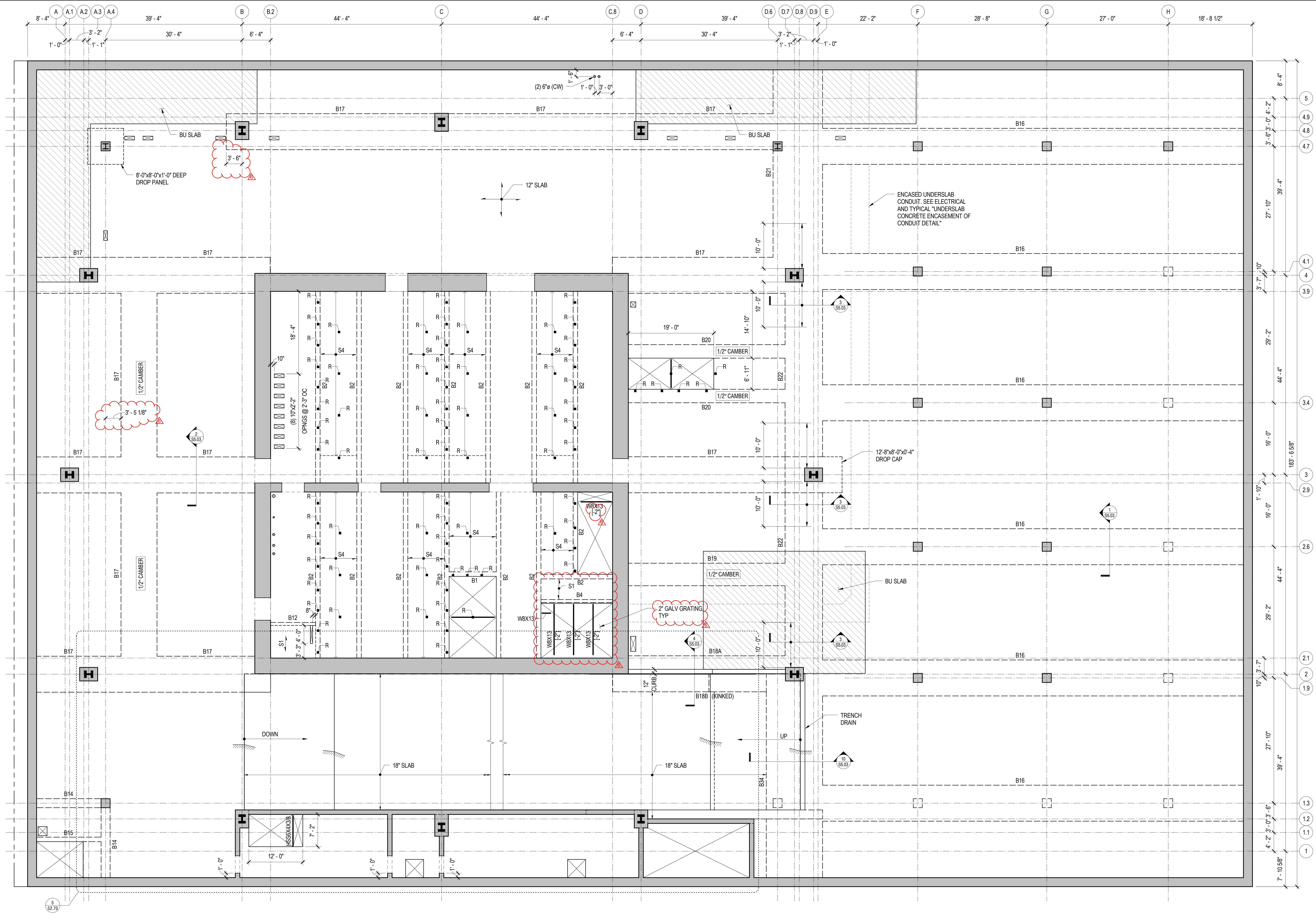
DRAWING TITLE

**PARTIAL PLANS**

PROJECT NO. 08044  
DRAWING NUMBER S2.70



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



- REFERENCE DRAWINGS**
- S0\_\_\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1\_\_\_ LOAD MAPS
  - S2\_\_\_ PLANS
  - S3\_\_\_ ELEVATIONS
  - S4\_\_\_ TYPICAL DETAILS AND SCHEDULES
  - S5\_\_\_ CONCRETE SECTIONS AND DETAILS
  - S6\_\_\_ STEEL SECTIONS AND DETAILS

- NOTES**
1. REFERENCE FLOOR ELEVATION IS -22'-8". TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
  2. STRUCTURAL SLAB IS A 12-INCH-THICK REINFORCED FLAT SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.03.
  3. SLAB REINFORCING BARS SHALL BE PLACED IN THE FOLLOWING SEQUENCE:
    - N-S BOTTOM BARS
    - E-W BOTTOM BARS
    - E-W TOP BARS
    - N-S TOP BARS
  4. COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.

5. SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
6. INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.

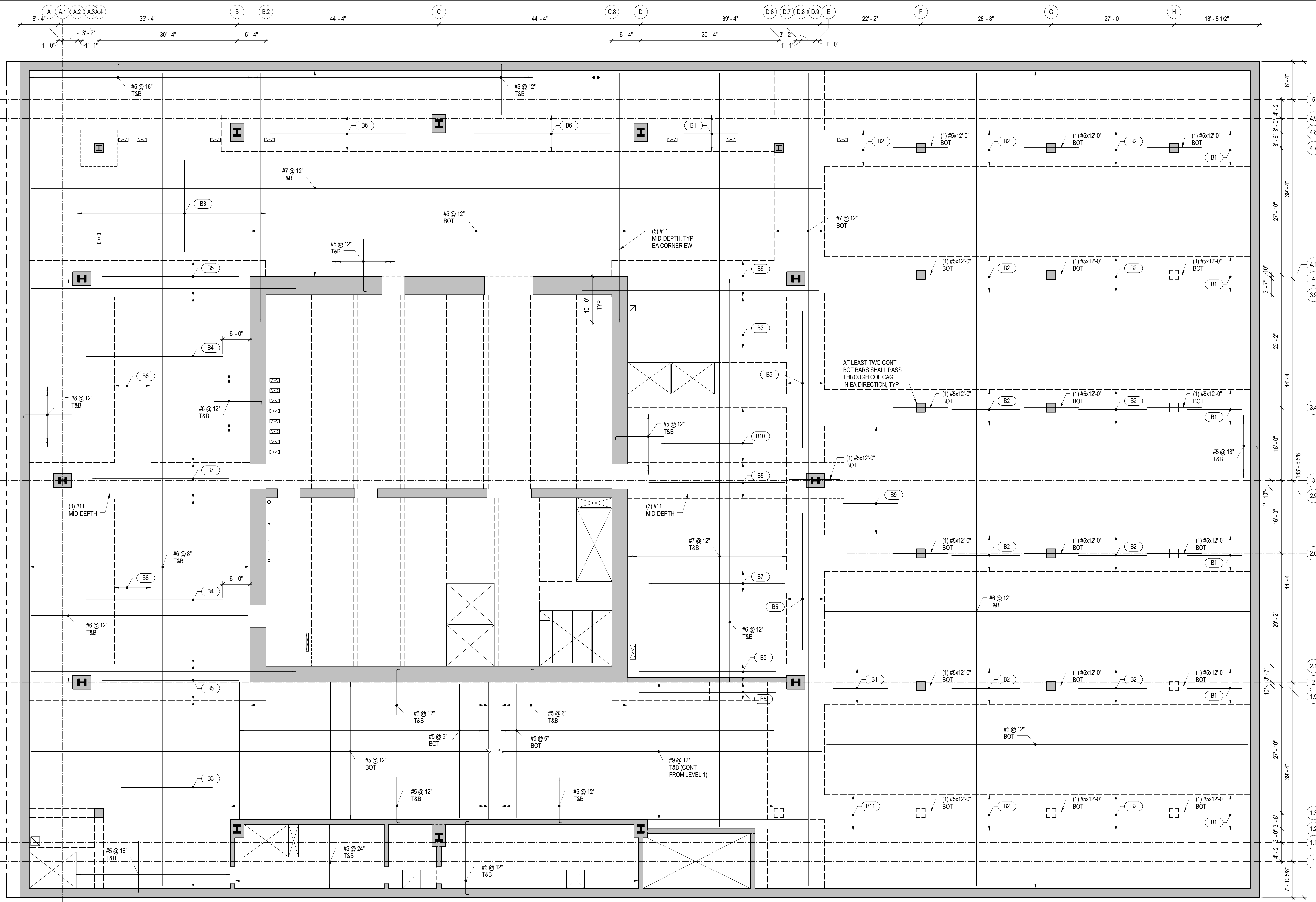
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT	REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P1 FRAMING PLAN**

4/30/2014 9:47:38 AM C:\Revit\Transbay\Twr\_MS2013.lam.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
B1	#5x12'-0" @ 36"	
B2	#6x15'-0" @ 12"	STAGGER 2'-0"
B3	#5x20'-0" @ 36"	STAGGER 2'-0"
B4	#5x30'-0" @ 36"	
B5	#7x30'-0" @ 6"	
B6	#7x30'-0" @ 12"	
B7	#8x30'-0" @ 6"	STAGGER 3'-0"
B8	#8x30'-0" @ 4"	STAGGER 3'-0"
B9	#5x12'-0" @ 12"	
B10	#5x20'-0" @ 12"	STAGGER 2'-0"
B11	#5x20'-0" @ 6"	
B12	#6x30'-0" @ 6"	
B13	#5x15'-0" @ 12"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
B14	#5x30'-0" @ 24"	
B15	#6x15'-0" @ 36"	
B16	#6x20'-0" @ 24"	STAGGER 2'-0"
B17	#6x20'-0" @ 18"	STAGGER 2'-0"
B18	#6x20'-0" @ 12"	STAGGER 2'-0"
B19	#7x20'-0" @ 12"	STAGGER 2'-0"
B20	#8x20'-0" @ 6"	STAGGER 2'-0"
B21	#9x20'-0" @ 6"	STAGGER 2'-0"
B22	#10x20'-0" @ 12"	STAGGER 2'-0"
B23	#9x20'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

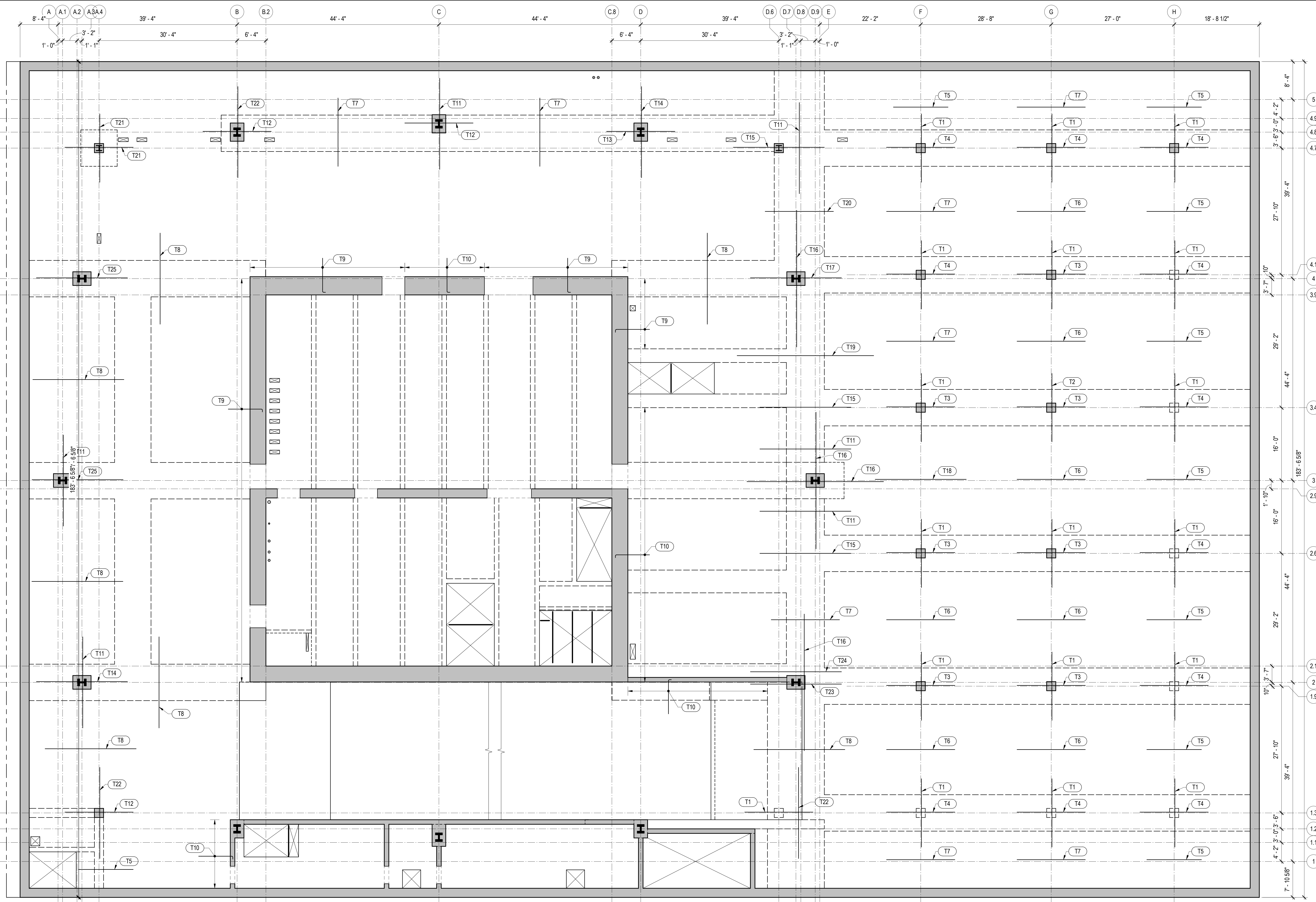
**LEVEL P1 BOTTOM REINFORCING PLAN**

4/29/2014 10:54:56 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**1** LEVEL P1 BOTTOM REINFORCING PLAN  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
T1	(5) #6x15'-0" @ 36"	STAGGER 2'-0"
T2	(7) #6x15'-0" @ 36"	STAGGER 2'-0"
T3	(24) #6x15'-0" @ 4"	STAGGER 3'-0"
T4	(16) #6x15'-0" @ 6"	STAGGER 3'-0"
T5	#4x12'-0" @ 18"	INFILL BTWN COLS
T6	#5x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T7	#4x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T8	#4x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T9	#6x7'-6" @ 36"	W/ STD HOOK
T10	#6x7'-6" @ 12"	W/ STD HOOK
T11	(12) #6x20'-0" @ 12"	STAGGER 2'-0"
T12	(12) #6x15'-0" @ 8"	STAGGER 2'-0"
T13	(16) #6x15'-0" @ 6"	

MARK	REINFORCING	REMARKS
T14	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T15	(5) #6x20'-0" @ 24"	STAGGER 2'-0"
T16	(24) #6x30'-0" @ 4"	
T17	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T18	#6x20'-0" @ 12"	INFILL BTWN COLS, STAGGER 3'-0"
T19	#4x30'-0" @ 18"	INFILL BTWN COLS
T20	#6x18'-0" @ 12"	INFILL BTWN COLS, STAGGER 2'-0"
T21	(8) #6x15'-0" @ 12"	STAGGER 2'-0"
T22	(6) #6x20'-0" @ 18"	
T23	(4) #6x20'-0" @ 12"	
T24	(8) #6x20'-0" @ 6"	
T25	(16) #6x20'-0" @ 6"	
T26	#6x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 3'-0"

MARK	REINFORCING	REMARKS
T27	(11) #6x20'-0" @ 9"	STAGGER 2'-0"
T28	(12) #6x20'-0" @ 8"	STAGGER 3'-0"
T29	(8) #6x20'-0" @ 12"	
T30	(8) #6x20'-0" @ 6"	
T31	#7x20'-0" @ 12"	
T32	#7x20'-0" @ 24"	
T33	#8x20'-0" @ 24"	
T34	#9x40'-0" @ 12"	
T35	#10x60'-0" @ 12"	
T36	#6x40'-0" @ 6"	
T37	#7x40'-0" @ 6"	
T38	#7x40'-0" @ 12"	

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**LEVEL P1 TOP REINFORCING PLAN**

NO. PROJECT NO. 08044

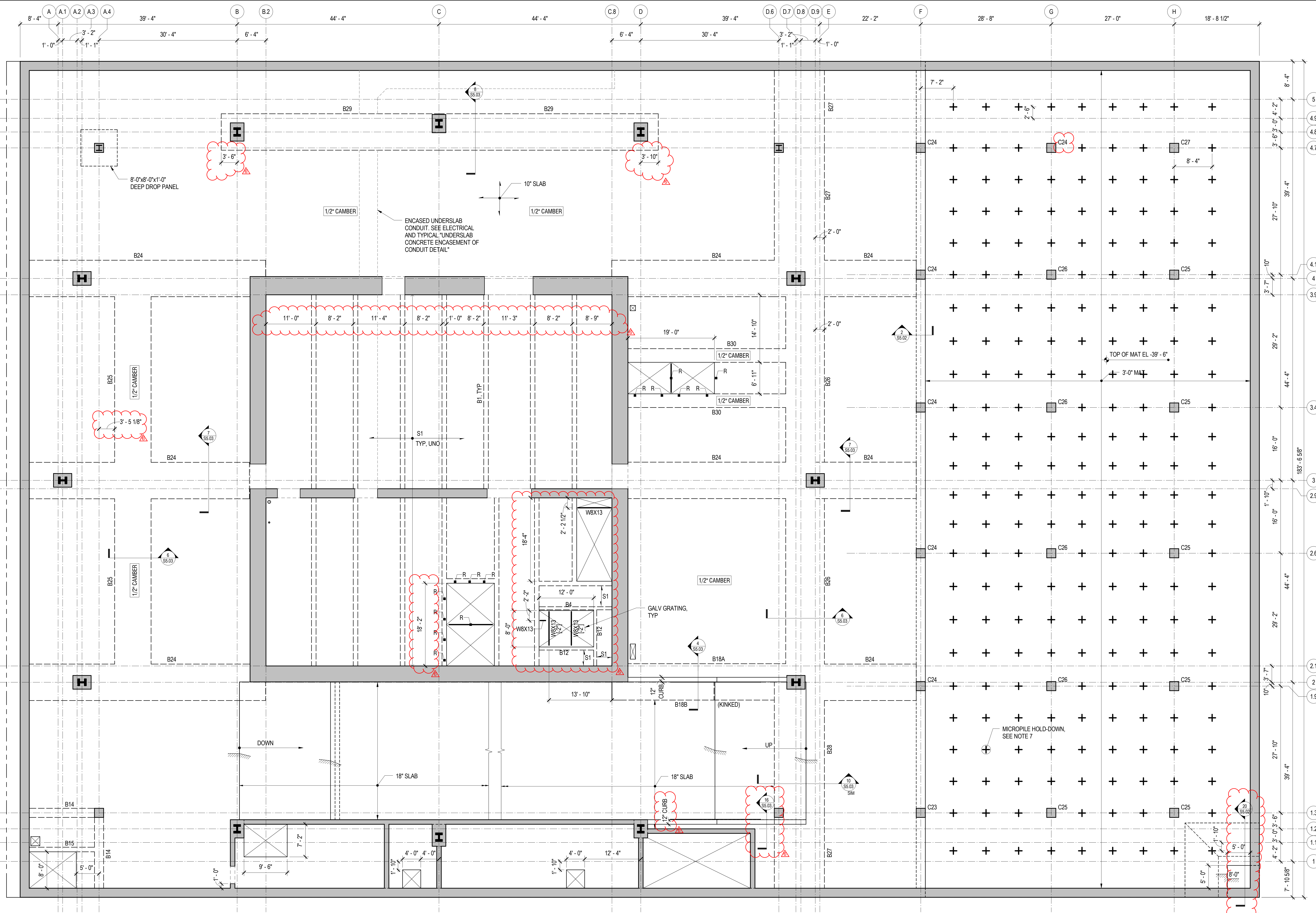
DRAWING NUMBER S2.P1T

4/29/2014 10:50:01 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P1 TOP REINFORCING PLAN**  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**REFERENCE DRAWINGS**

S0\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES  
 S1\_ LOAD MAPS  
 S2\_ PLANS  
 S3\_ ELEVATIONS  
 S4\_ TYPICAL DETAILS AND SCHEDULES  
 S5\_ CONCRETE SECTIONS AND DETAILS  
 S6\_ STEEL SECTIONS AND DETAILS

**NOTES**

- REFERENCE FLOOR ELEVATION IS -38'-10" TOP OF CONCRETE SLAB IS AT THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR DRAINAGE SLOPES NOT SHOWN.
- STRUCTURAL SLAB IS A 10-INCH-THICK REINFORCED FLAT SLAB UNLESS NOTED OTHERWISE. SEE THE TYPICAL CONCRETE SLAB DETAILS ON SHEET S4.03.
- SLAB REINFORCING BARS SHALL BE PLACED IN THE FOLLOWING SEQUENCE:  
 - N-S BOTTOM BARS  
 - E-W BOTTOM BARS  
 - E-W TOP BARS  
 - N-S TOP BARS
- COORDINATE LOCATION OF ALL EMBEDS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND EXTERIOR WALL SYSTEMS PRIOR TO CASTING THE SLAB.
- SEE TYPICAL CONCRETE DETAILS FOR REINFORCING AROUND OPENINGS. NOTIFY STRUCTURAL ENGINEER OF ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS FOR WHICH THE TYPICAL DETAILS DO NOT APPLY. ADDED REINFORCING MAY BE REQUIRED.
- PLACE 4" SOG ON 4" OF COMPACTED GRAVEL OVER ENTIRE MAT.
- SEE S4.02 FOR INFORMATION ON MICROPILES.
- INDICATES ELEVATOR RAIL SUPPORT COLUMN. SEE THE TYPICAL STEEL DETAILS AND SCHEDULE.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_

DRAWING TITLE: **LEVEL P2 FRAMING PLAN**

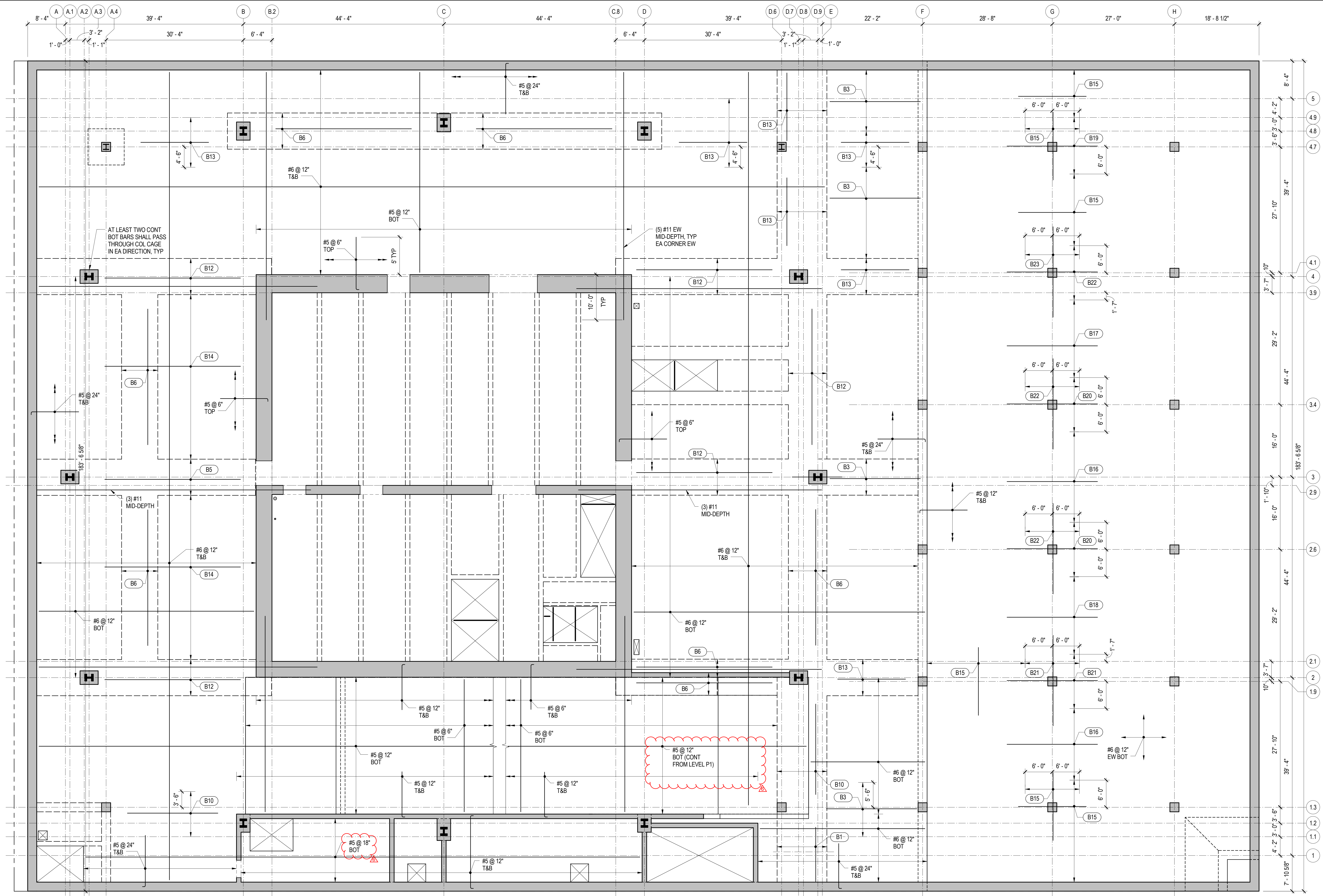
PROJECT NO: 08044

DRAWING NUMBER: **S2.P2**

4/30/2014 9:47:39 AM C:\Revit\Transbay\Twr\_MS2013.lam.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
B1	#5x12'-0" @ 36"	
B2	#6x15'-0" @ 12"	STAGGER 2'-0"
B3	#5x20'-0" @ 36"	STAGGER 2'-0"
B4	#5x30'-0" @ 36"	
B5	#7x30'-0" @ 6"	
B6	#7x30'-0" @ 12"	
B7	#8x30'-0" @ 6"	STAGGER 3'-0"
B8	#8x30'-0" @ 4"	STAGGER 3'-0"
B9	#5x12'-0" @ 12"	
B10	#5x20'-0" @ 12"	STAGGER 2'-0"
B11	#5x20'-0" @ 6"	
B12	#6x30'-0" @ 6"	
B13	#5x15'-0" @ 12"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
B14	#5x30'-0" @ 24"	
B15	#6x15'-0" @ 36"	
B16	#6x20'-0" @ 24"	STAGGER 2'-0"
B17	#6x20'-0" @ 18"	STAGGER 2'-0"
B18	#6x20'-0" @ 12"	STAGGER 2'-0"
B19	#7x20'-0" @ 12"	STAGGER 2'-0"
B20	#8x20'-0" @ 6"	STAGGER 2'-0"
B21	#9x20'-0" @ 6"	STAGGER 2'-0"
B22	#10x20'-0" @ 12"	STAGGER 2'-0"
B23	#9x20'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**LEVEL P2 BOTTOM REINFORCING PLAN**

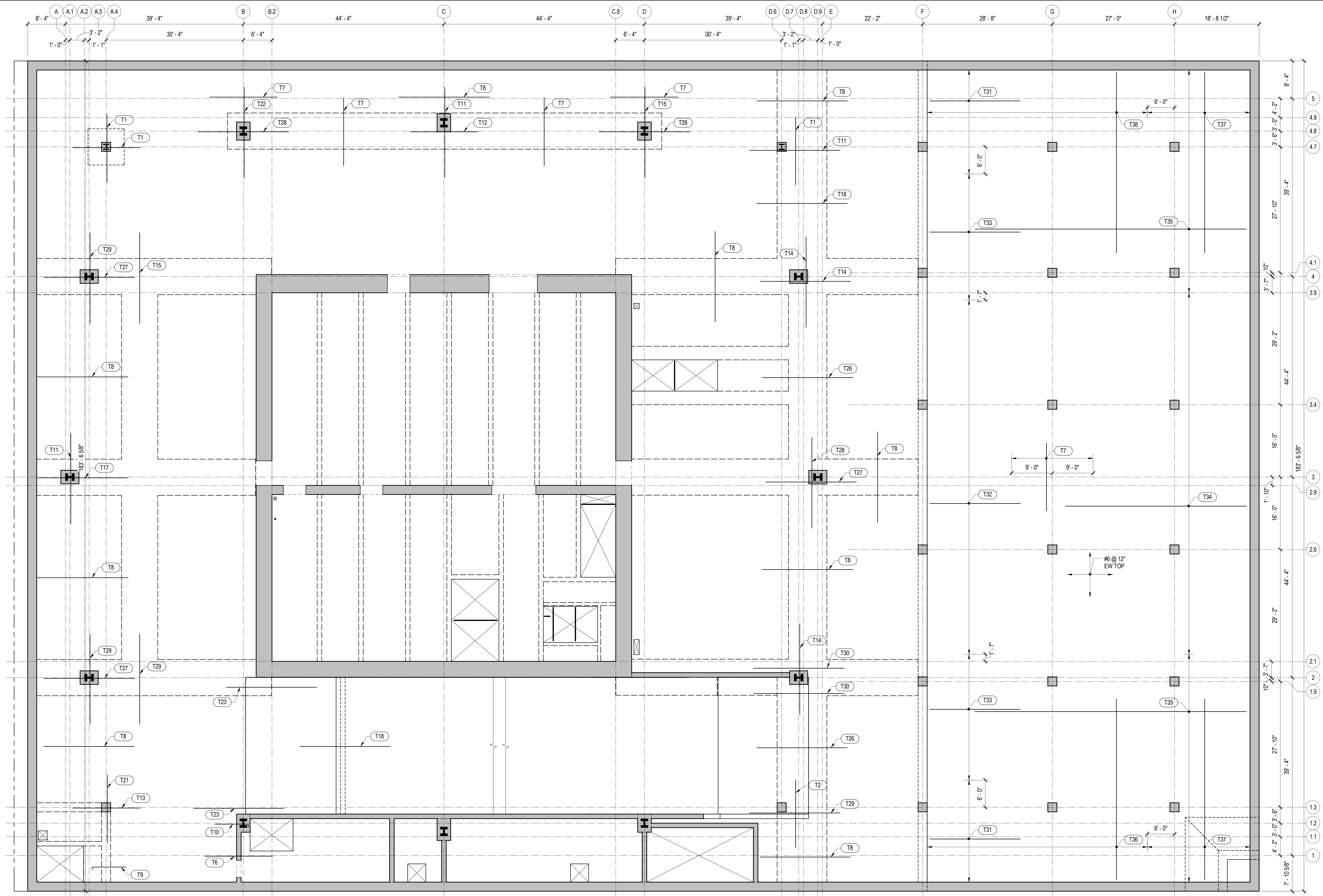
PROJECT NO. 08044  
DRAWING NUMBER **S2.P2B**

4/29/2014 10:55:13 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P2 BOTTOM REINFORCING PLAN**  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



MARK	REINFORCING	REMARKS
T1	(5) #6x15'-0" @ 36"	STAGGER 2'-0"
T2	(7) #6x15'-0" @ 36"	STAGGER 2'-0"
T3	(24) #6x15'-0" @ 4"	STAGGER 3'-0"
T4	(16) #6x15'-0" @ 6"	STAGGER 3'-0"
T5	#4x12'-0" @ 18"	INFILL BTWN COLS
T6	#5x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T7	#4x15'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T8	#4x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 2'-0"
T9	#6x7'-6" @ 36"	W/ STD HOOK
T10	#6x7'-6" @ 12"	W/ STD HOOK
T11	(12) #6x20'-0" @ 12"	STAGGER 2'-0"
T12	(12) #6x15'-0" @ 8"	STAGGER 2'-0"
T13	(16) #6x15'-0" @ 6"	STAGGER 2'-0"

MARK	REINFORCING	REMARKS
T14	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T15	(5) #6x20'-0" @ 24"	STAGGER 2'-0"
T16	(24) #6x30'-0" @ 4"	STAGGER 3'-0"
T17	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T18	#6x20'-0" @ 12"	INFILL BTWN COLS, STAGGER 3'-0"
T19	#4x30'-0" @ 18"	INFILL BTWN COLS
T20	#6x18'-0" @ 12"	INFILL BTWN COLS, STAGGER 2'-0"
T21	(8) #6x15'-0" @ 12"	STAGGER 2'-0"
T22	(6) #6x20'-0" @ 18"	STAGGER 2'-0"
T23	(4) #6x20'-0" @ 12"	STAGGER 2'-0"
T24	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T25	(16) #6x20'-0" @ 6"	STAGGER 2'-0"
T26	#6x20'-0" @ 18"	INFILL BTWN COLS, STAGGER 3'-0"

MARK	REINFORCING	REMARKS
T27	(11) #6x20'-0" @ 9"	STAGGER 2'-0"
T28	(12) #6x20'-0" @ 8"	STAGGER 3'-0"
T29	(8) #6x20'-0" @ 12"	STAGGER 2'-0"
T30	(8) #6x20'-0" @ 6"	STAGGER 2'-0"
T31	#7x20'-0" @ 12"	STAGGER 2'-0"
T32	#7x20'-0" @ 24"	STAGGER 2'-0"
T33	#8x20'-0" @ 24"	STAGGER 2'-0"
T34	#9x40'-0" @ 12"	STAGGER 2'-0"
T35	#10x60'-0" @ 12"	STAGGER 2'-0"
T36	#6x40'-0" @ 6"	STAGGER 2'-0"
T37	#7x40'-0" @ 6"	STAGGER 2'-0"
T38	#7x40'-0" @ 12"	STAGGER 2'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

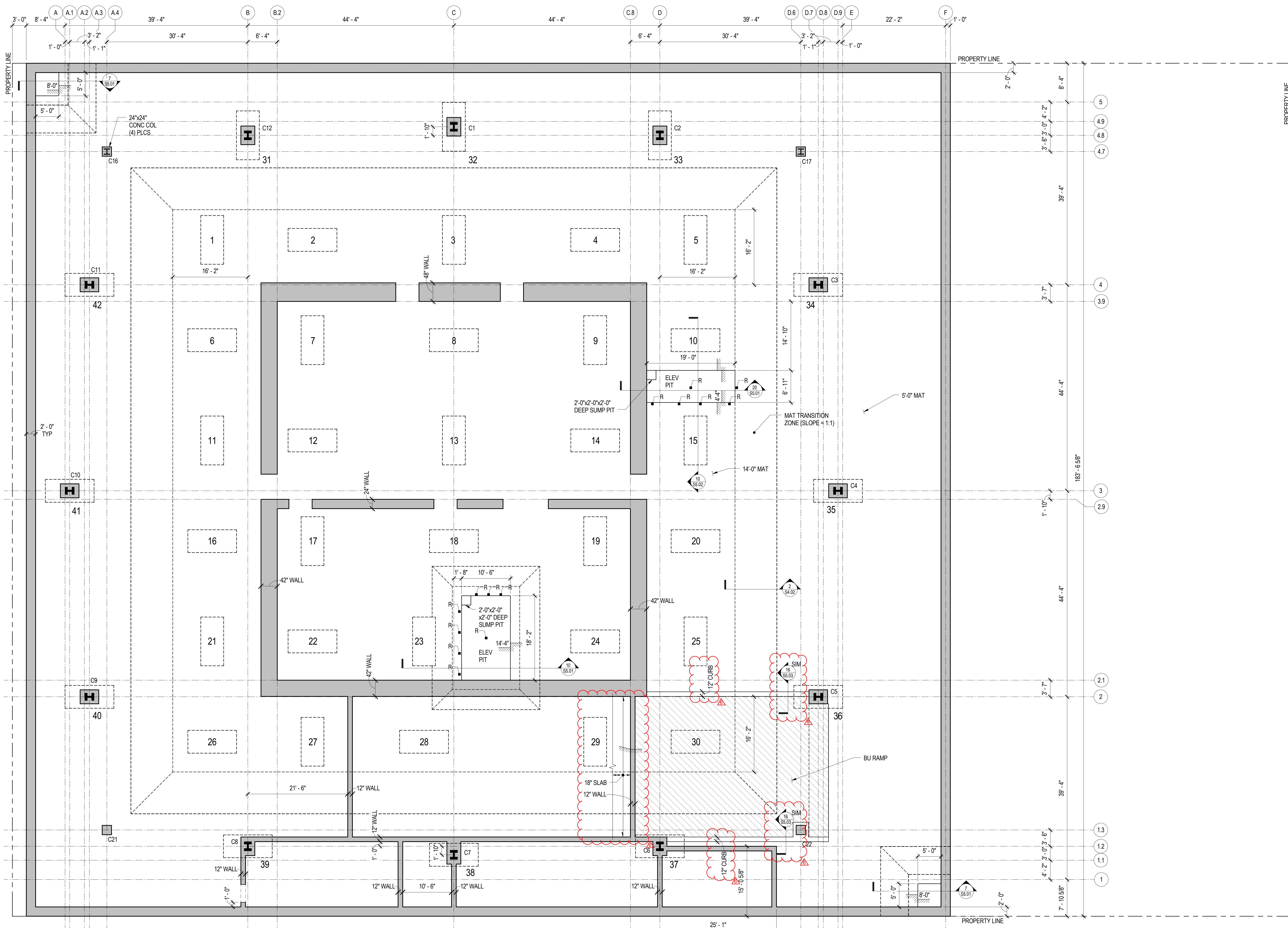
**LEVEL P2 TOP REINFORCING PLAN**

4/29/2014 10:55:19 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

**LEVEL P2 TOP REINFORCING PLAN**  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**REFERENCE DRAWINGS**

- S0\_\_\_ ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1\_\_\_ LOAD MAPS
- S2\_\_\_ PLANS
- S3\_\_\_ ELEVATIONS
- S4\_\_\_ TYPICAL DETAILS AND SCHEDULES
- S5\_\_\_ CONCRETE SECTIONS AND DETAILS
- S6\_\_\_ STEEL SECTIONS AND DETAILS

**NOTES**

1. REFERENCE FLOOR ELEVATION IS -55'-0". TOP OF MAT FOUNDATION IS 8 INCHES BELOW THE REFERENCE ELEVATION UNLESS NOTED OTHERWISE.
2. MAT FOUNDATION IS 5'-0" THICK UNLESS NOTED OTHERWISE. FOUNDATION SHALL BE PLACED ATOP COMPACTED STRUCTURAL FILL OR MUD SLAB IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. PLACE 4" SOG ON 4" OF COMPACTED GRAVEL OVER ENTIRE MAT.
3. ( ) INDICATES TOP OF MAT FOUNDATION ELEVATION.
4. BASEMENT WALLS SHALL BE RESTRAINED AT THE TOP BY THE LEVEL P2 STRUCTURAL SLAB, AT THE BOTTOM BY THE MAT FOUNDATION, AND SHALL HAVE REACHED DESIGN STRENGTH PRIOR TO REMOVING CONSTRUCTION SHORES.
5. SEE ARCHITECTURAL/CIVIL DRAWINGS FOR SIDEWALKS, PAVING, AND SITE DETAILS AT BUILDING EXTERIOR UNLESS NOTED OTHERWISE.
6. REFERENCE ALL CONSTRUCTION DOCUMENTS FOR SIZE, EXTENT, AND LOCATION OF CONCRETE CURBS, HOUSEKEEPING PADS, CMU WALLS, PLANTER WALLS, BOLLARDS, EDGE ANGLES, AND SLAB PENETRATIONS. REINFORCE PER TYPICAL DETAILS.

4/30/2014 11:17:30 AM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

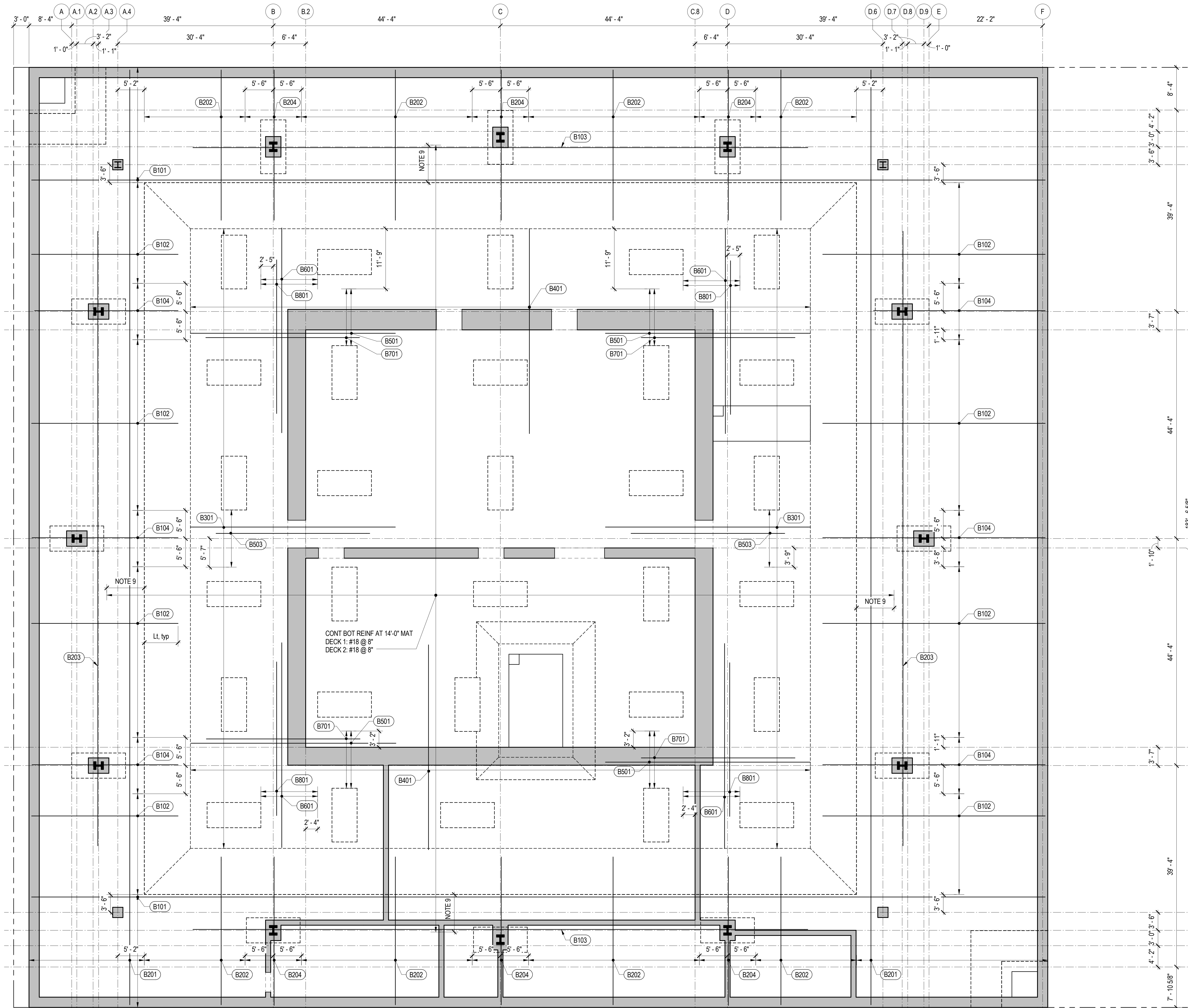
**FOUNDATION PLAN**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	





- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**MAT BOTTOM REINFORCING NOTES:**

- REINFORCING PLACEMENT SEQUENCE:
  - 5
  - 4.9
  - 4.8
  - 4.7
- WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:
  - DIMENSION LINE
  - EQ EQ
  - STAGGER
- #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPLICED. STAGGER COUPLERS 36" MIN.
- REINFORCEMENT MARK KEY:
  - B101: REINFORCING MARK, DECK NUMBER, BOTTOM REINFORCING
  - M1: REINFORCING MARK, MAT SHEAR REINFORCING
- CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.
- Fy = 75 KSI FOR TOP AND BOTTOM BARS. Fy = 60 KSI FOR ALL OTHER REINFORCEMENT.
- CENTER MAT BOTTOM BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.
- REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.
- SEE "TYPICAL MAT TRANSITION DETAIL."

LEVEL P3 BOTTOM REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
B101	#14 @ 8"	
B102	#14 @ 8"	
B103	(5) #18x120'-0"	
B104	#18 @ 8"	
B201	#14 @ 8"	
B202	#14 @ 8"	
B203	(5) #18x120'-0"	
B204	#18 @ 8"	
B301	#18x40'-0" @ 8"	
B401	#18x40'-0" @ 8"	
B501	#18x40'-0" @ 8"	
B502	#18x40'-0" @ 8"	
B503	#18x30'-0" @ 8"	
B601	#18x40'-0" @ 8"	
B701	#18x30'-0" @ 8"	
B801	#18x30'-0" @ 8"	
B901	#18x30'-0" @ 8"	
B1001	#18x30'-0" @ 8"	
B1101	#18x40'-0" @ 8"	
B1201	#18x40'-0" @ 8"	

CONT BOT REINF AT 14'-0" MAT  
DECK 1: #18 @ 8"  
DECK 2: #18 @ 8"

4/29/2014 10:55:28 PM C:\Revit\Transbay\Tw\_MS2013\_kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**FOUNDATION MAT BOTTOM REINFORCING PLAN**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

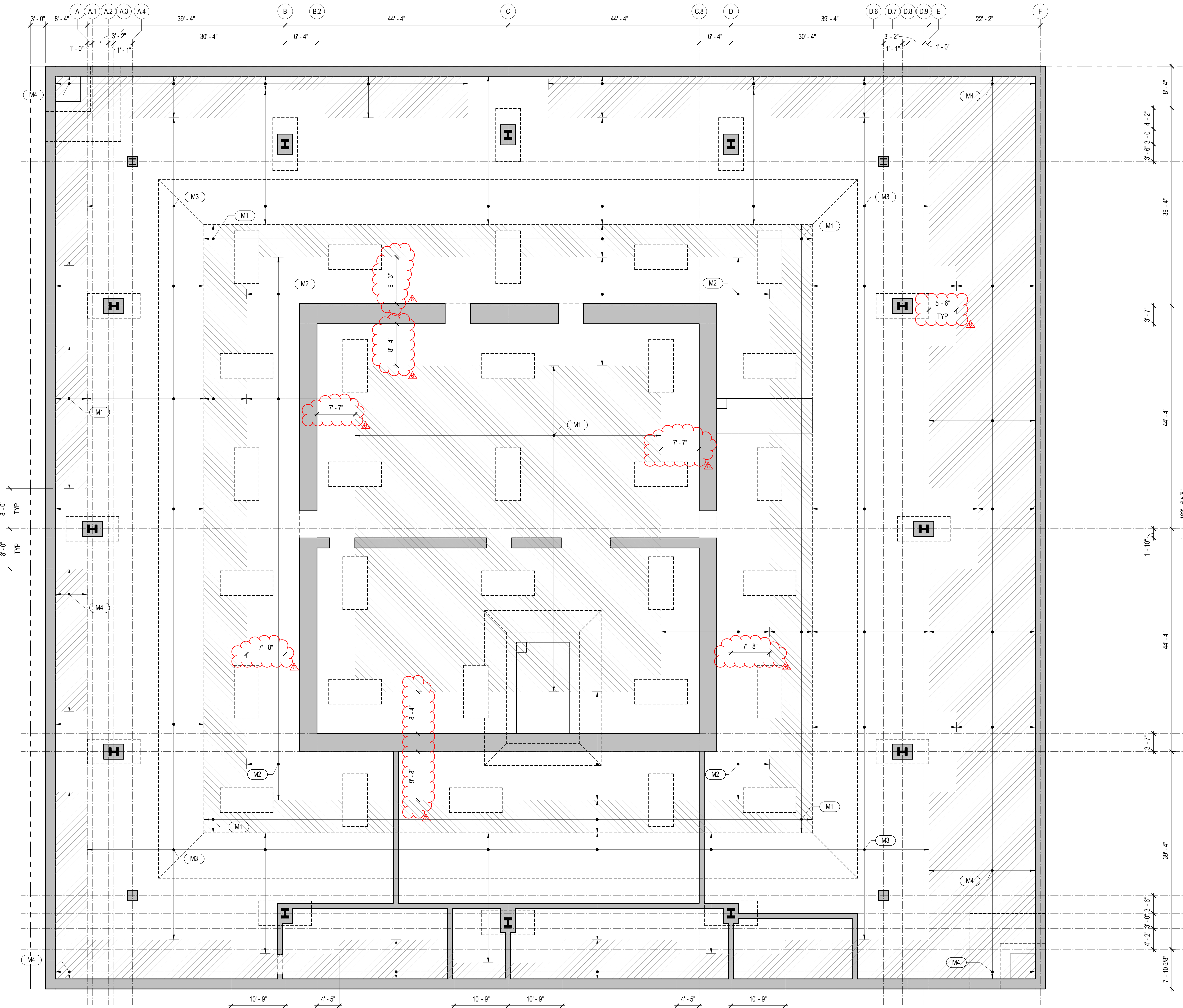
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



**MAT BOTTOM REINFORCING NOTES:**

- REINFORCING PLACEMENT SEQUENCE:
  - DECK 8
  - DECK 7
  - DECK 6
  - DECK 5
  - DECK 4
  - DECK 3
  - DECK 2 (N-S)
  - DECK 1 (E-W)
- WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:
  - DIMENSION LINE
  - EQ
  - EQ
  - STAGGER
- #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPICED
- REINFORCEMENT MARK KEY:
  - B101 REINFORCING MARK
  - DECK NUMBER
  - BOTTOM REINFORCING
  - M1 REINFORCING MARK
  - MAT SHEAR REINFORCING
- CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.
- REINFORCEMENT DESIGN BASED ON  $F_y = 60$  KSI FOR SHEAR REINF.,  $F_y = 75$  KSI FOR FLEXURAL
- CENTER MAT BOTTOM BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.
- REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.

MARK	REINFORCING	REMARKS
M1	#10 @ 36"	EACH DIRECTION
M2	#10 @ 16"	EACH DIRECTION
M3	#11 @ 16"	EACH DIRECTION
M4	#7 @ 24"	EACH DIRECTION

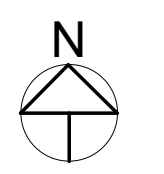
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**FOUNDATION MAT SHEAR REINFORCING PLAN**

PROJECT NO. 08044 DRAWING NUMBER S2.P3S

4/29/2014 10:55:33 PM C:\Revit\Transbay\Twr\_MS2013\_kmh.rvt

1 FOUNDATION MAT SHEAR REINFORCING PLAN  
1/8" = 1'-0"





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

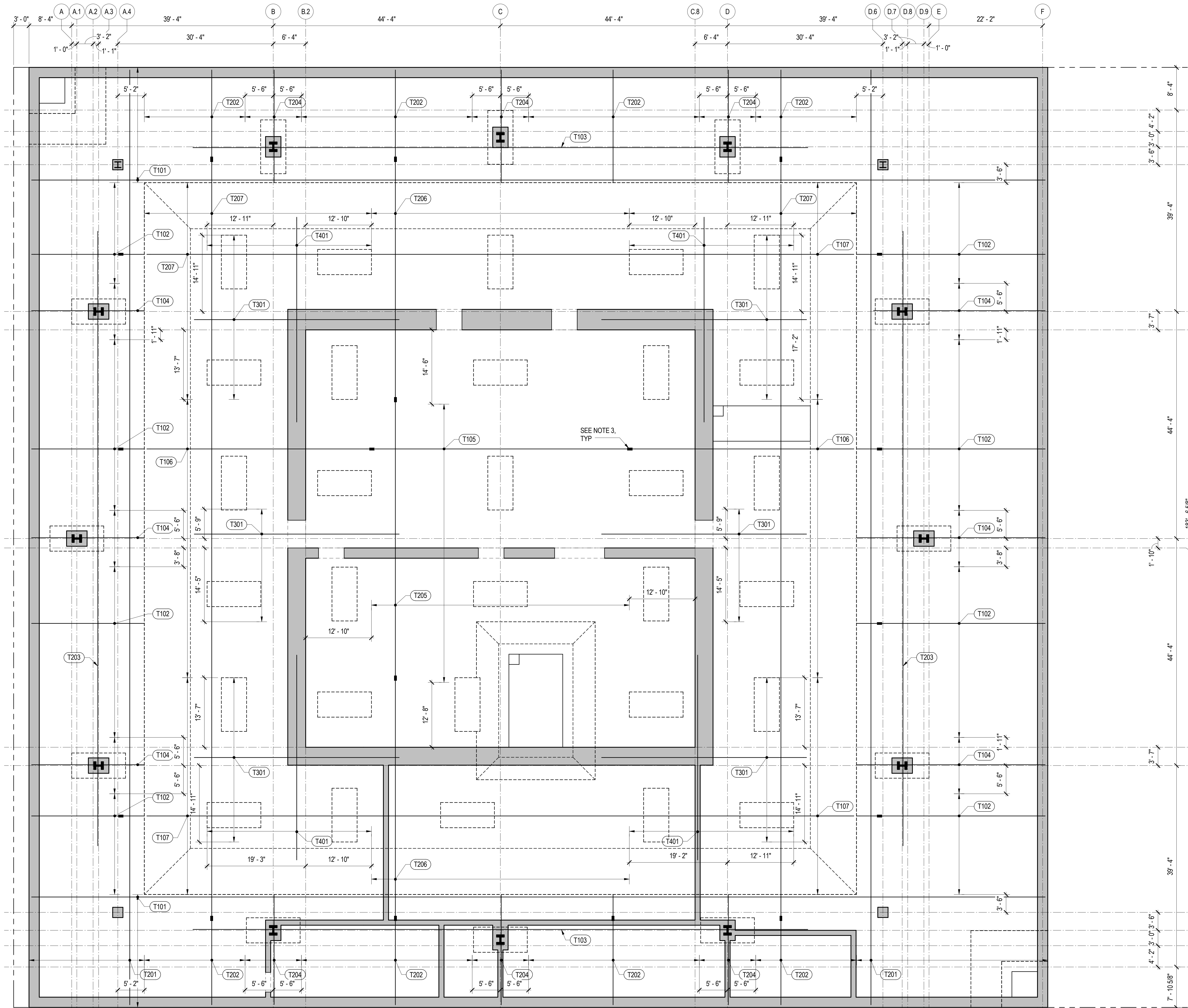
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**MAT BOTTOM REINFORCING NOTES:**

- REINFORCING PLACEMENT SEQUENCE:
- WHERE BARS ARE CALLED OUT AS STAGGER, ALTERNATE BARS THUS:
- #14 AND #18 BARS REQUIRE MECHANICAL COUPLER WHERE SPLICED. STAGGER COUPLERS 36" MIN.
- REINFORCEMENT MARK KEY:
- CONTRACTOR SHALL DESIGN SUPPORT STEEL TO HOLD BOT REINFORCING IN PLACE DURING CONCRETE POUR.
- F<sub>y</sub> = 75 KSI FOR TOP AND BOTTOM BARS. F<sub>y</sub> = 60 KSI FOR ALL OTHER REINFORCEMENT.
- CENTER MAT TOP BARS OVER COLUMN GRID LINES, UNLESS NOTED OTHERWISE. STAGGER BARS PER SCHEDULE.
- REFER TO "MAT REINFORCEMENT DIAGRAM" FOR PLACEMENT REQUIREMENTS.

**LEVEL P3 TOP REINFORCING SCHEDULE**

MARK	REINFORCING	REMARKS
T101	#14 @ 8"	
T102	#14 @ 8"	
T103	(5) #18x120'-0"	
T104	#18 @ 8"	
T105	#14 @ 8"	
T106	#18 @ 8"	
T107	#18 @ 8"	
T201	#14 @ 8"	
T202	#14 @ 8"	
T203	(5) #18x120'-0"	
T204	#18 @ 8"	
T205	#14 @ 8"	
T206	#18 @ 8"	
T207	#18 @ 8"	
T301	#18x40'-0" @ 8"	
T401	#18x40'-0" @ 8"	

4/29/2014 10:55:38 PM C:\Revit\Transbay\Twr\_MS2013.kmh.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**FOUNDATION MAT TOP REINFORCING PLAN**

NO. PROJECT NO. 08044  
DRAWING NUMBER S2.P3T



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

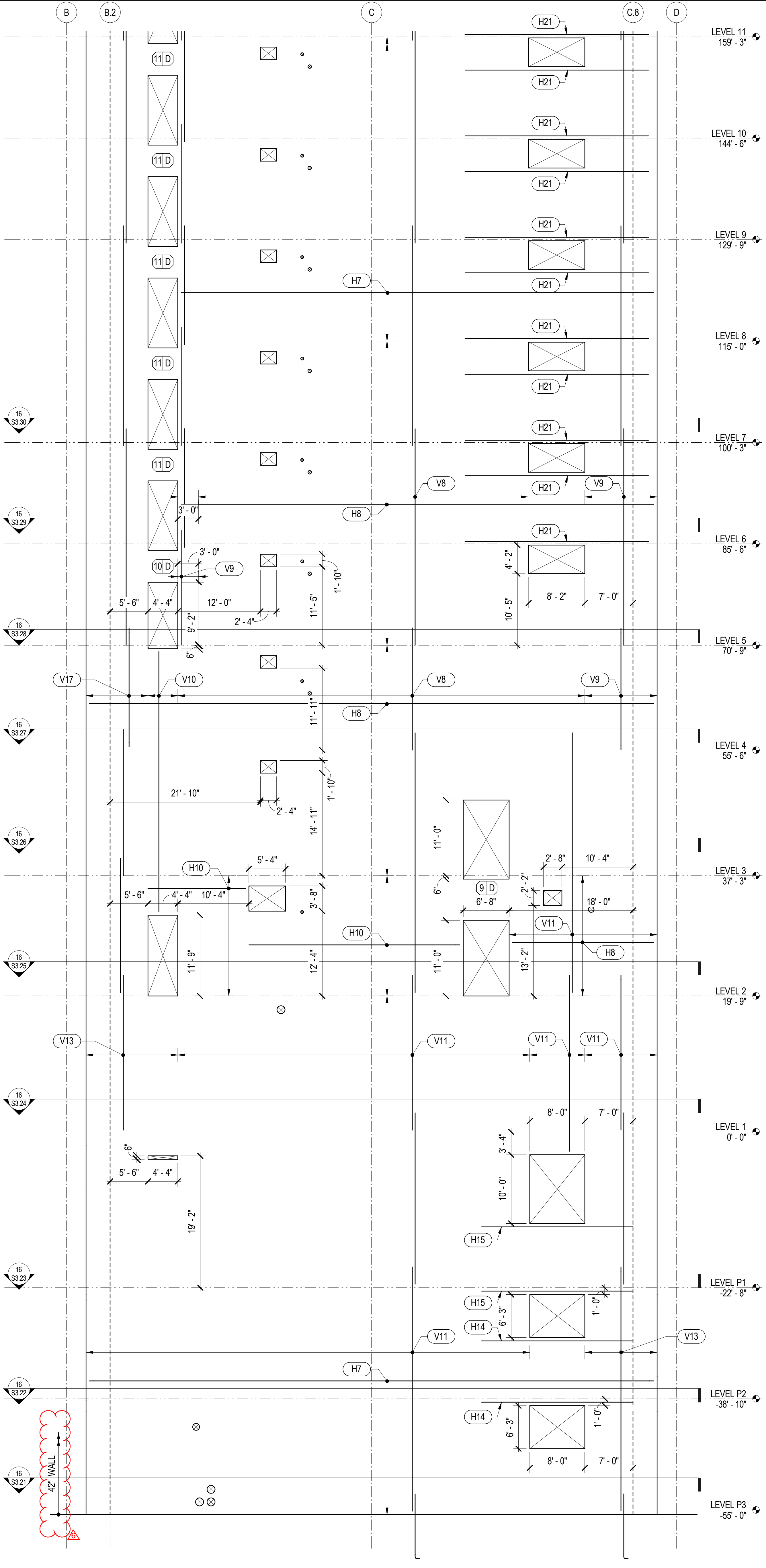
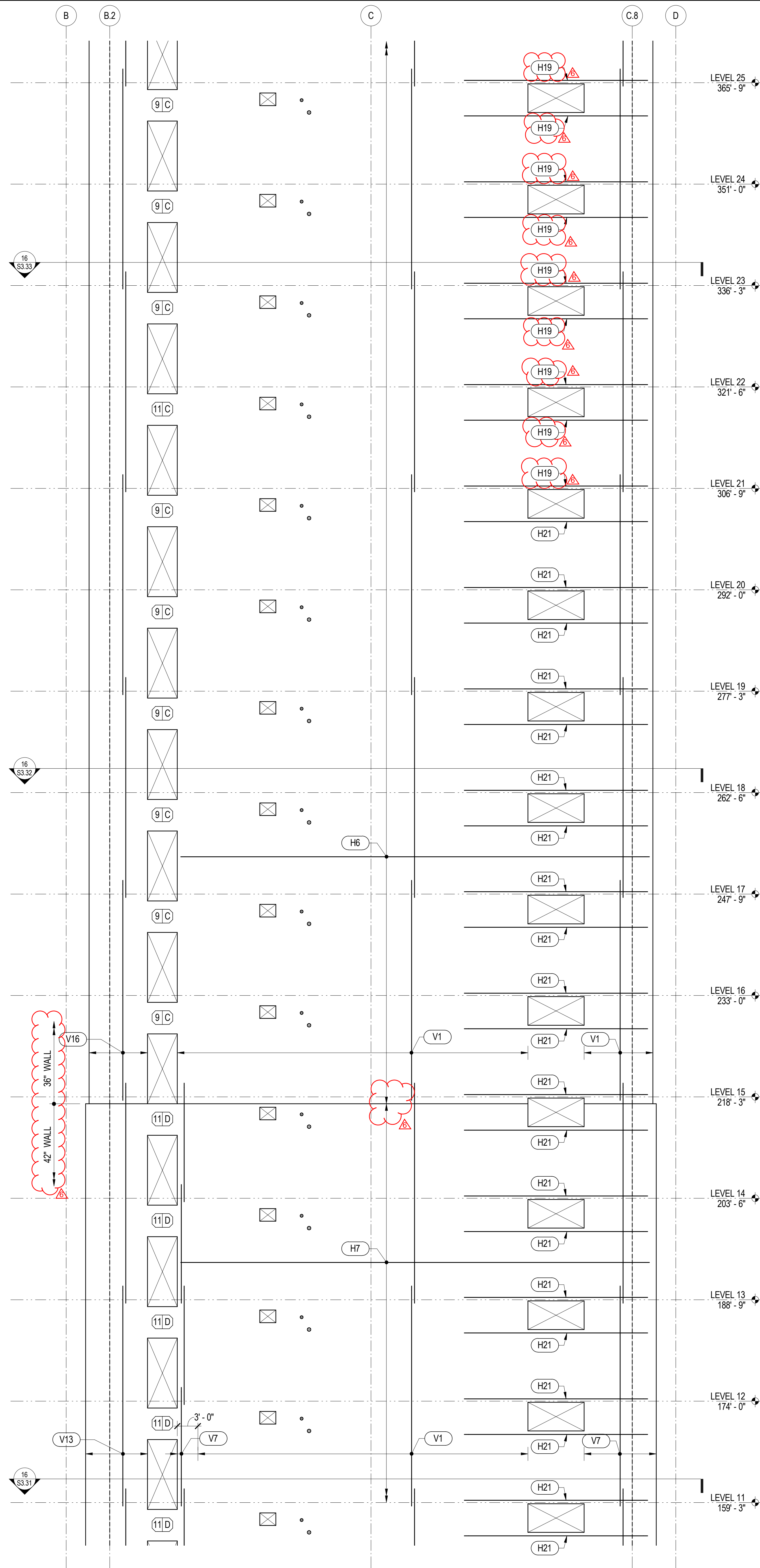
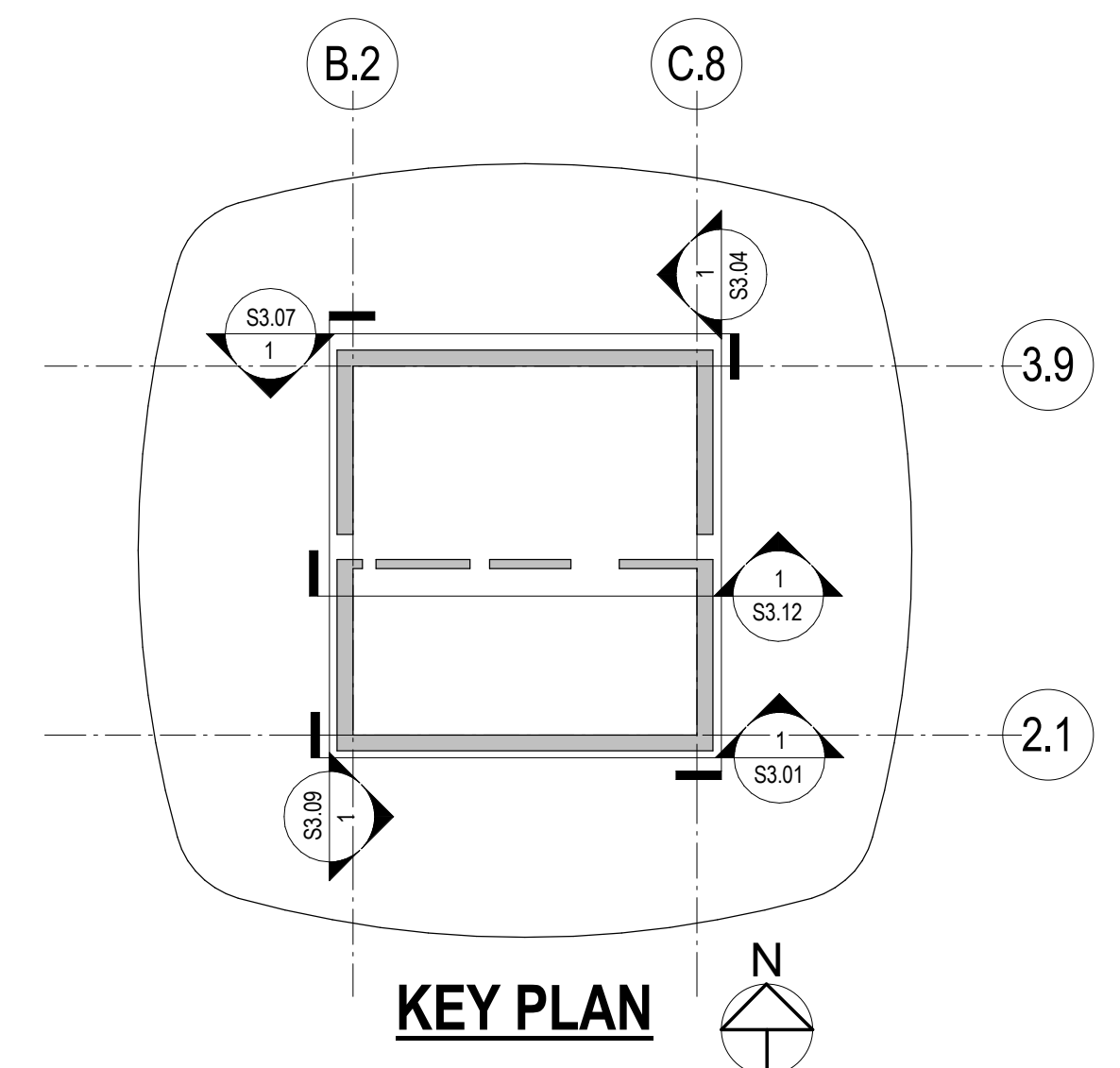
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"

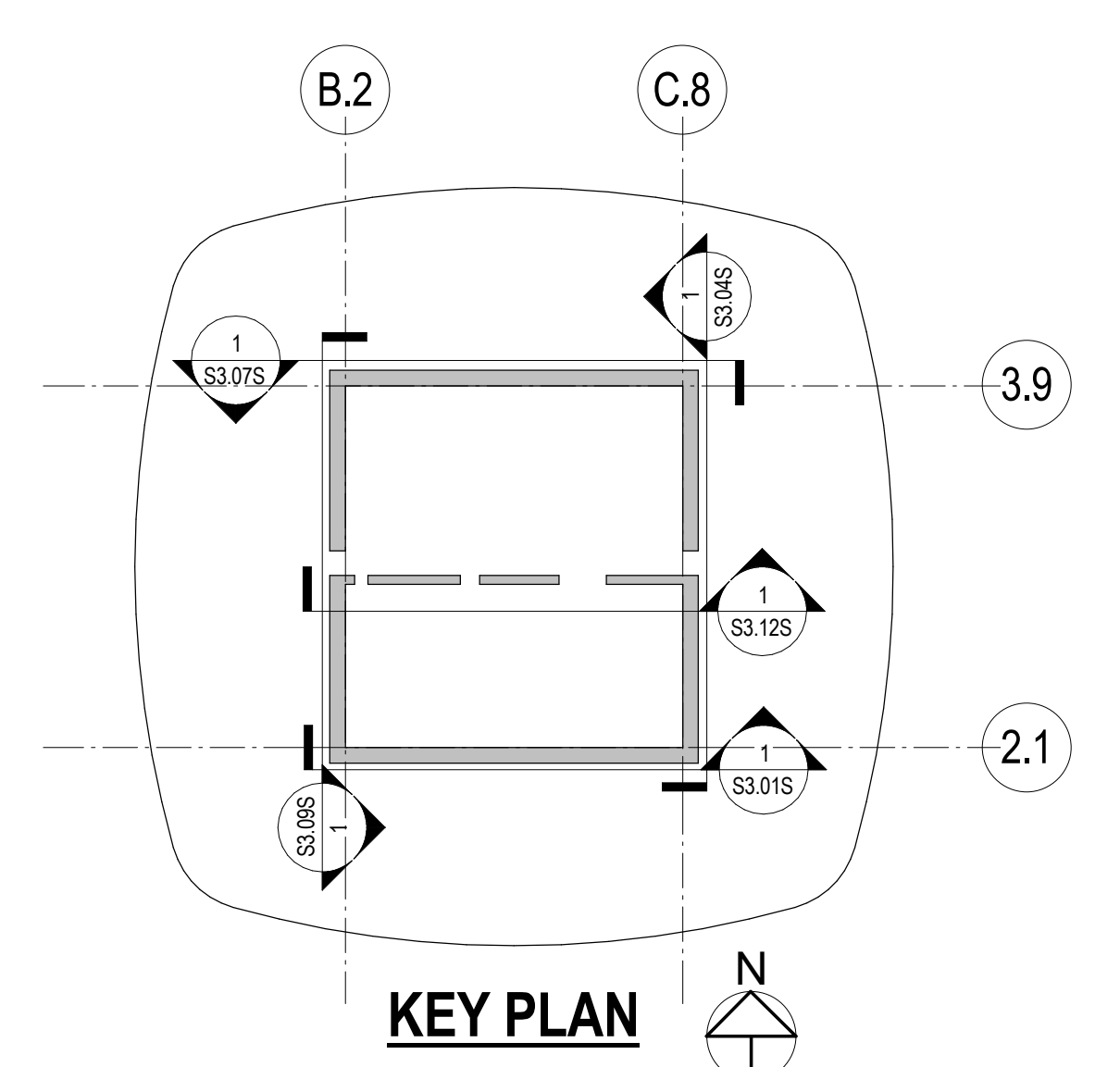
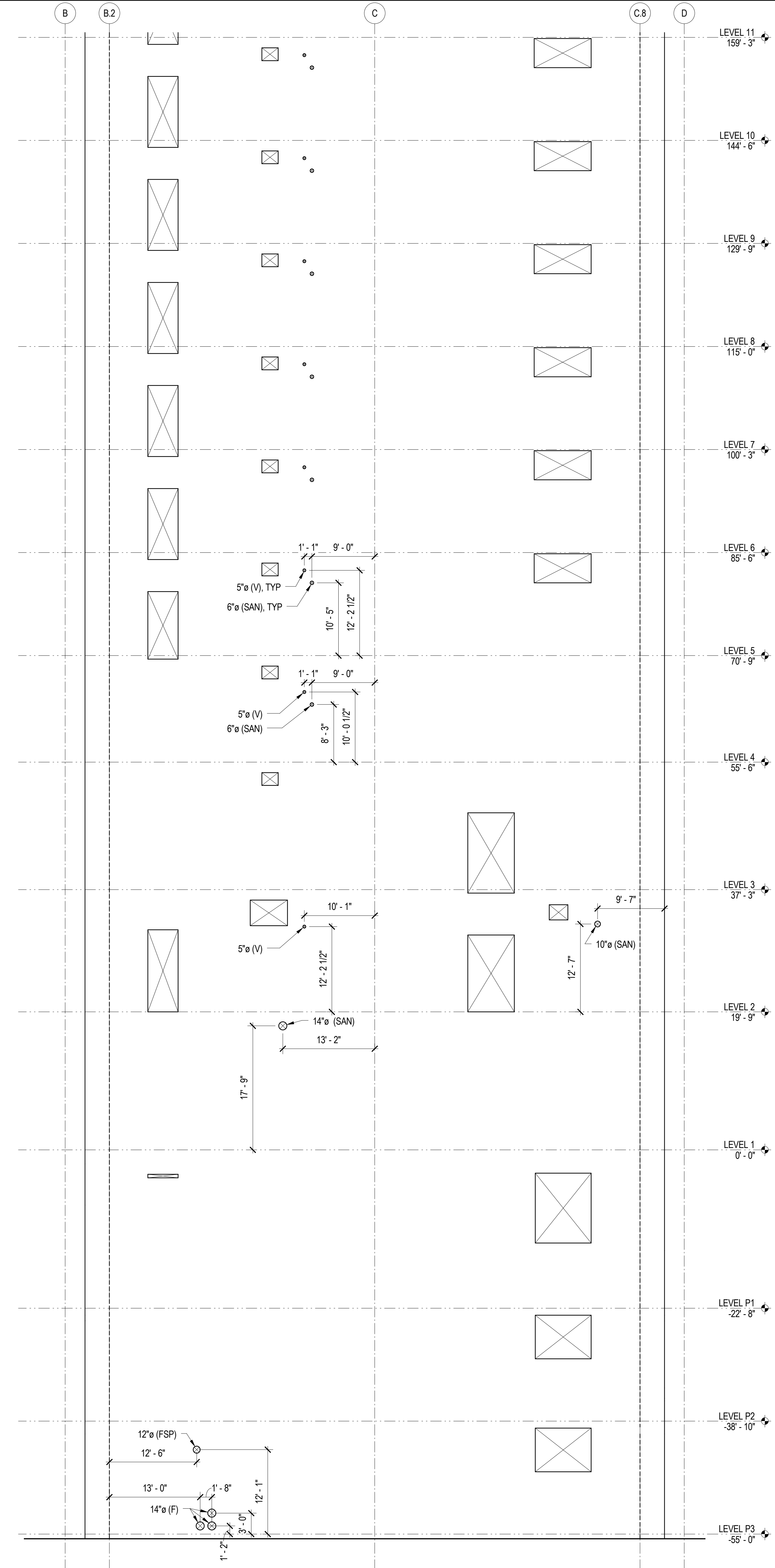
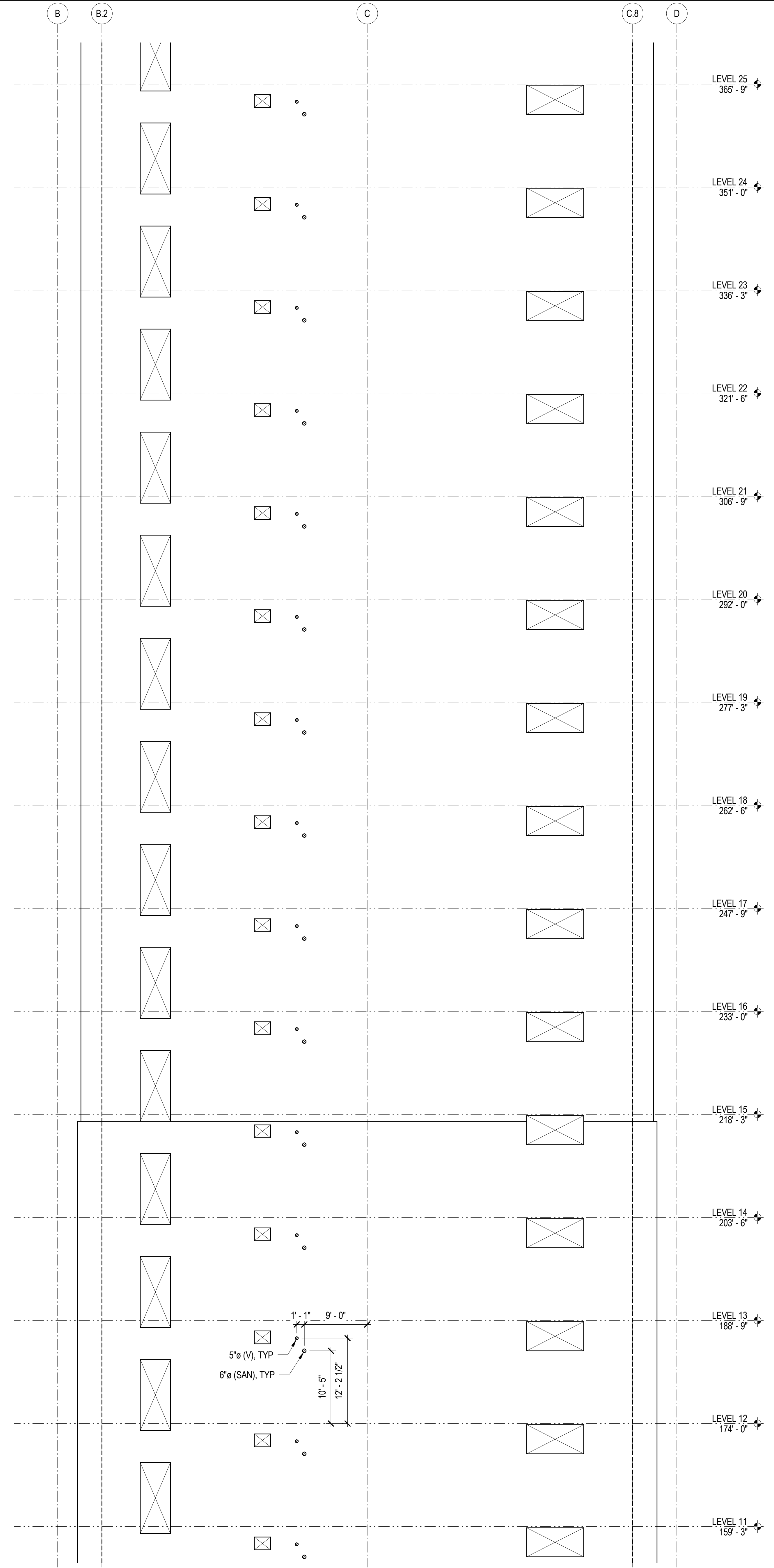
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.01S

4/30/2014 12:23:31 PM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

1 SHEAR WALL ELEVATION - SOUTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

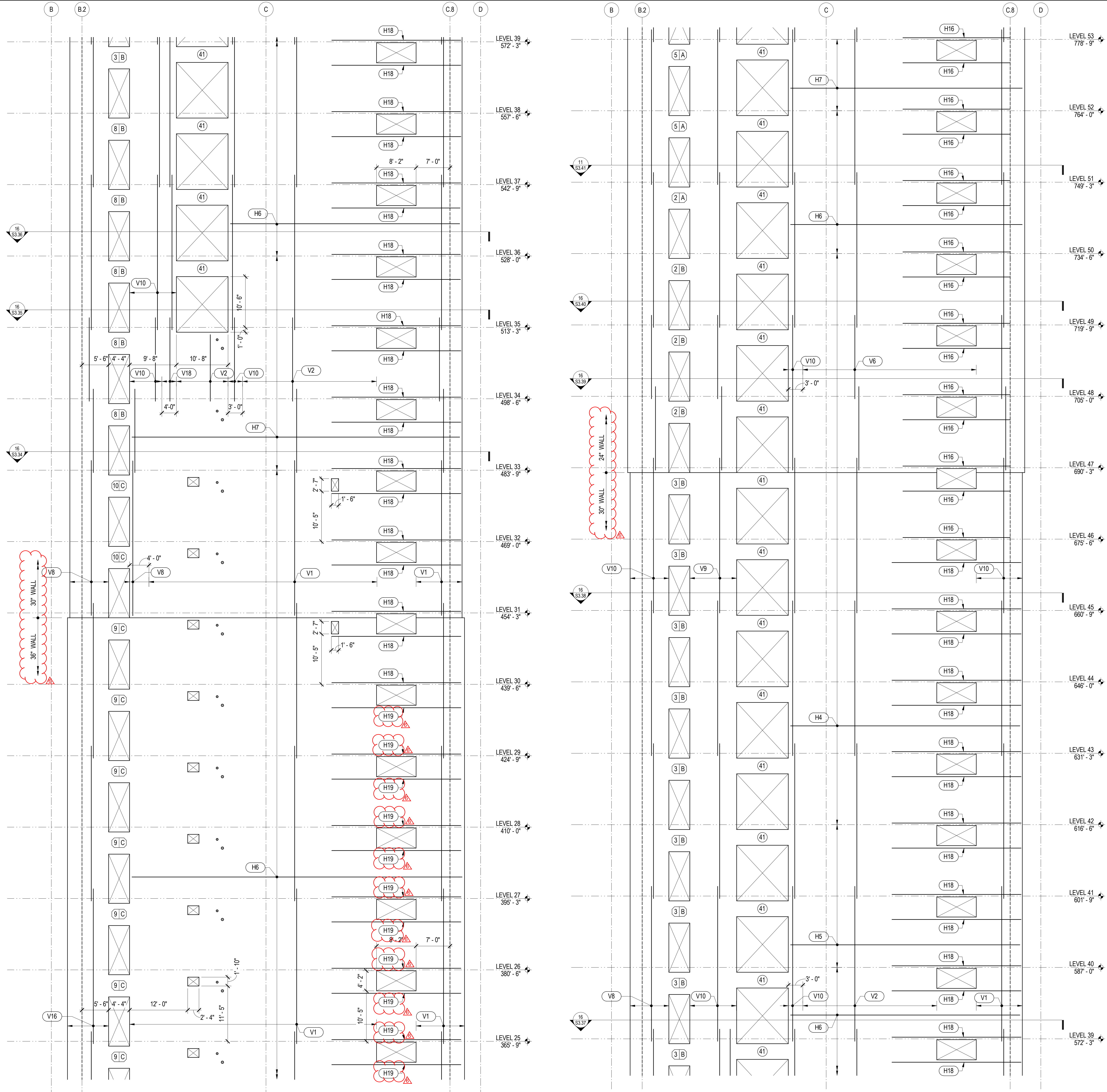
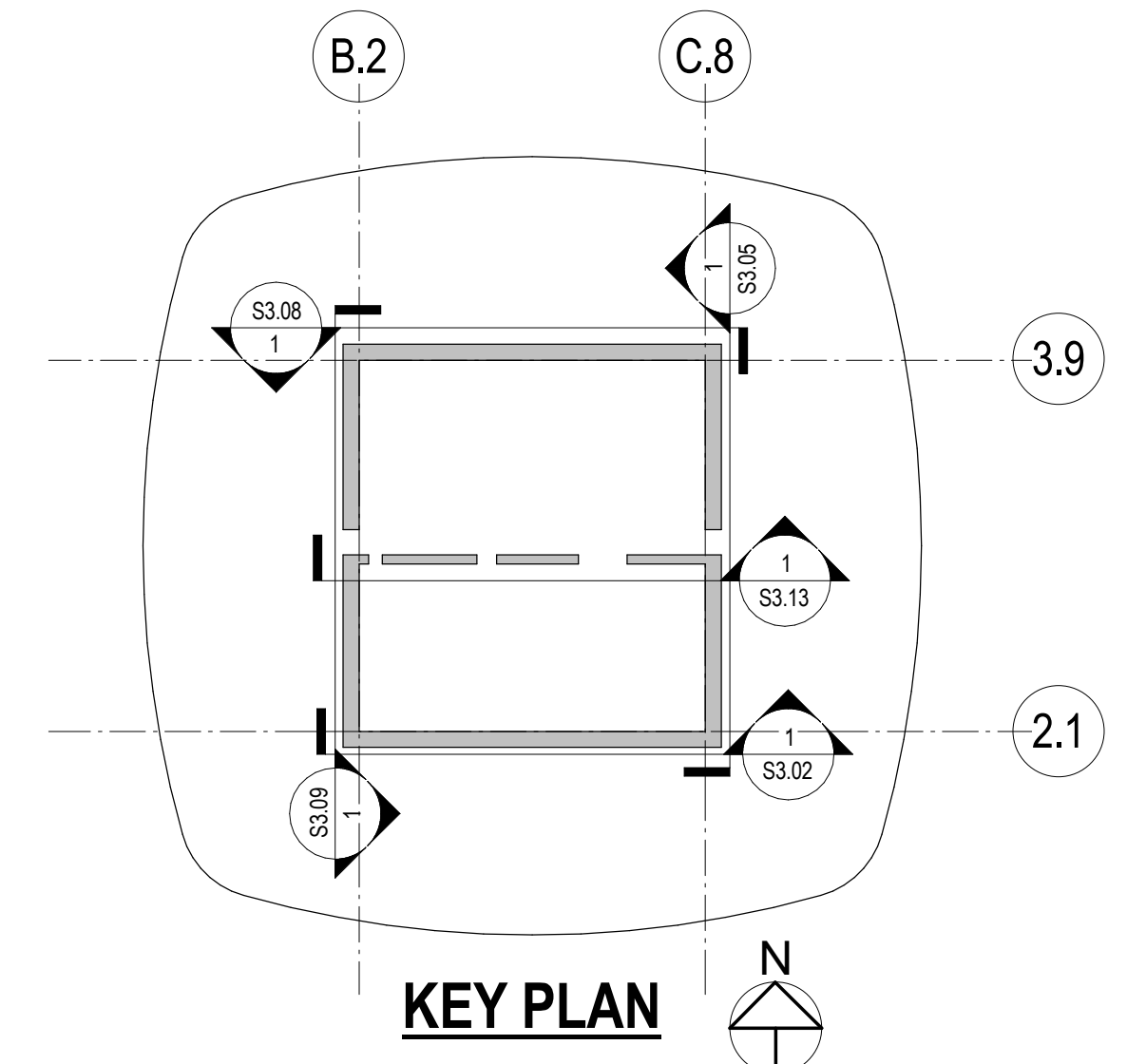
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"

4/29/2014 7:05:56 PM C:\Revit\Transbay\Twr\_MS2013\_13.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_

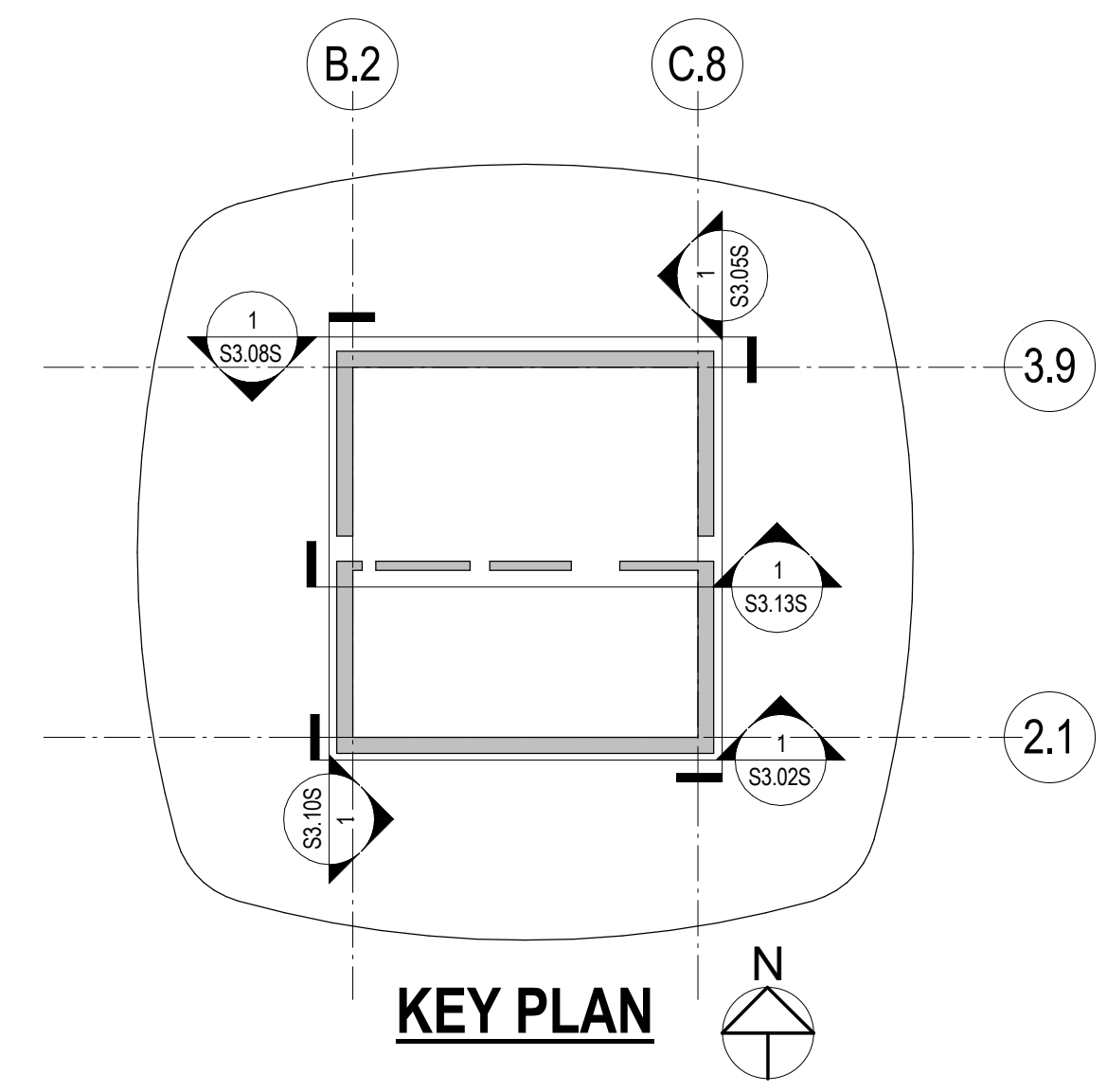
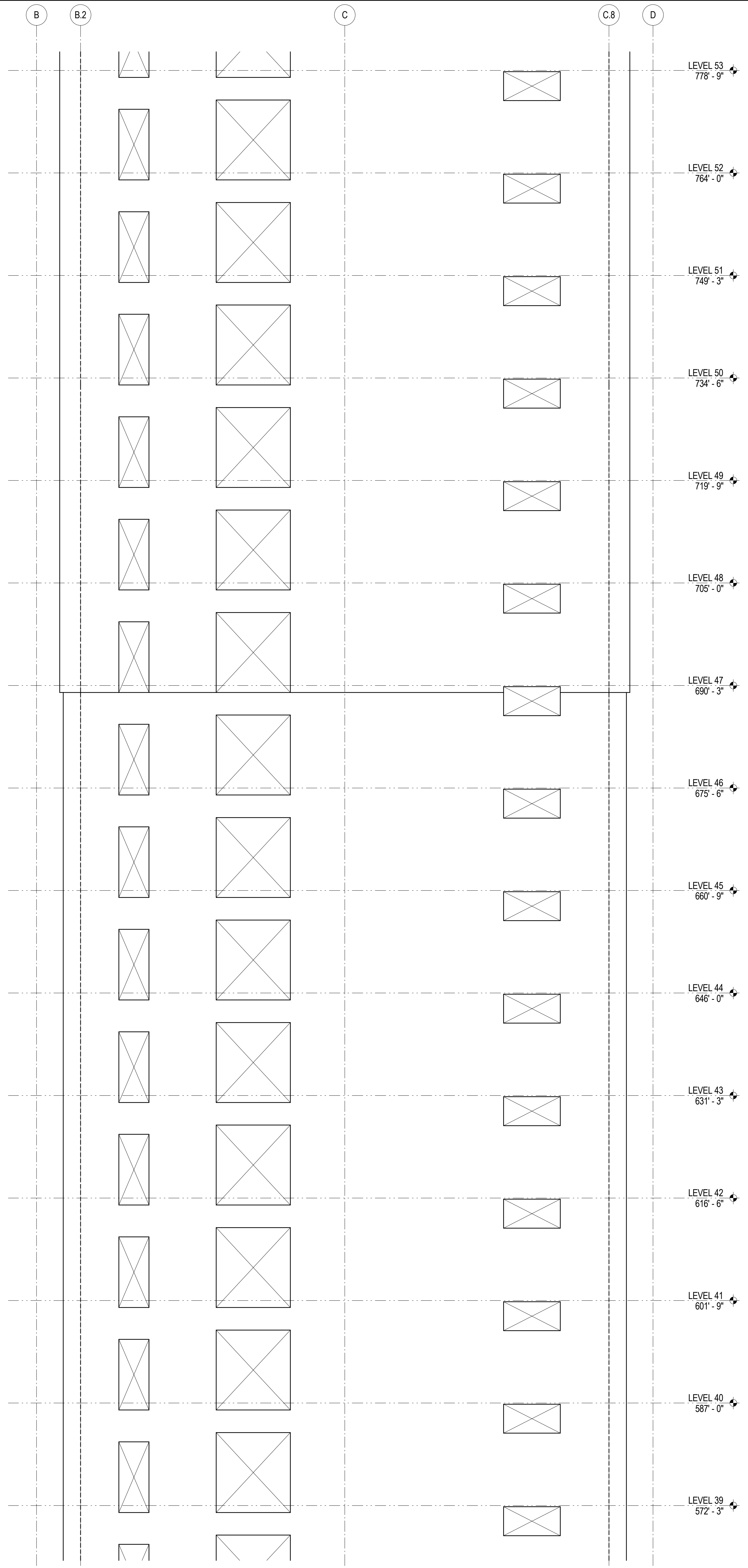
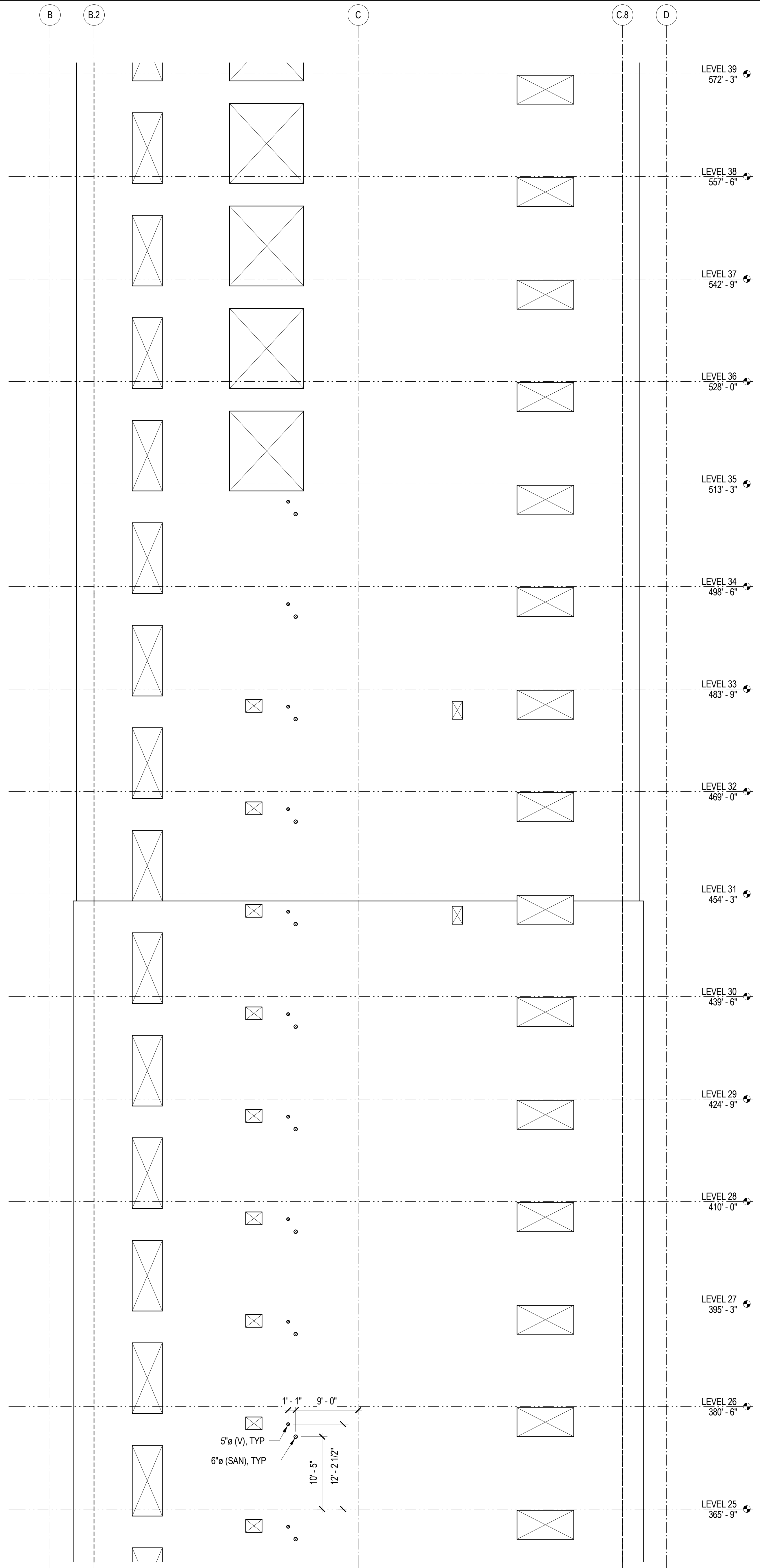
DRAWING TITLE: **SHEAR WALL ELEVATIONS**

NO. PROJECT NO: 08044

DRAWING NUMBER: **S3.02**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:05:59 PM C:\Revit\Transbay\Tw\_MS2013\_116.rvt

1 SHEAR WALL ELEVATION - SOUTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

PROJECT NO. 08044

DRAWING NUMBER **S3.02S**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

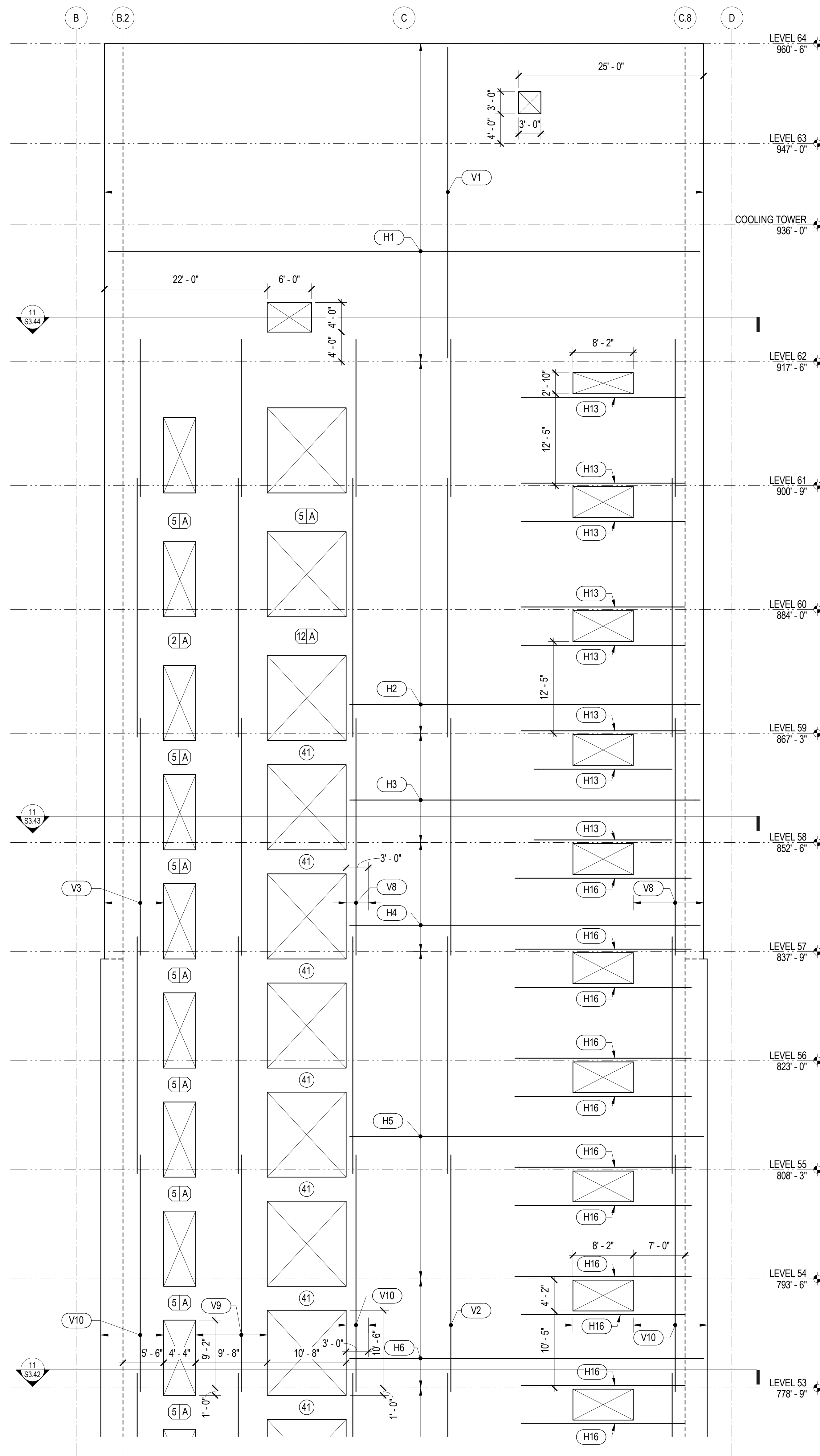
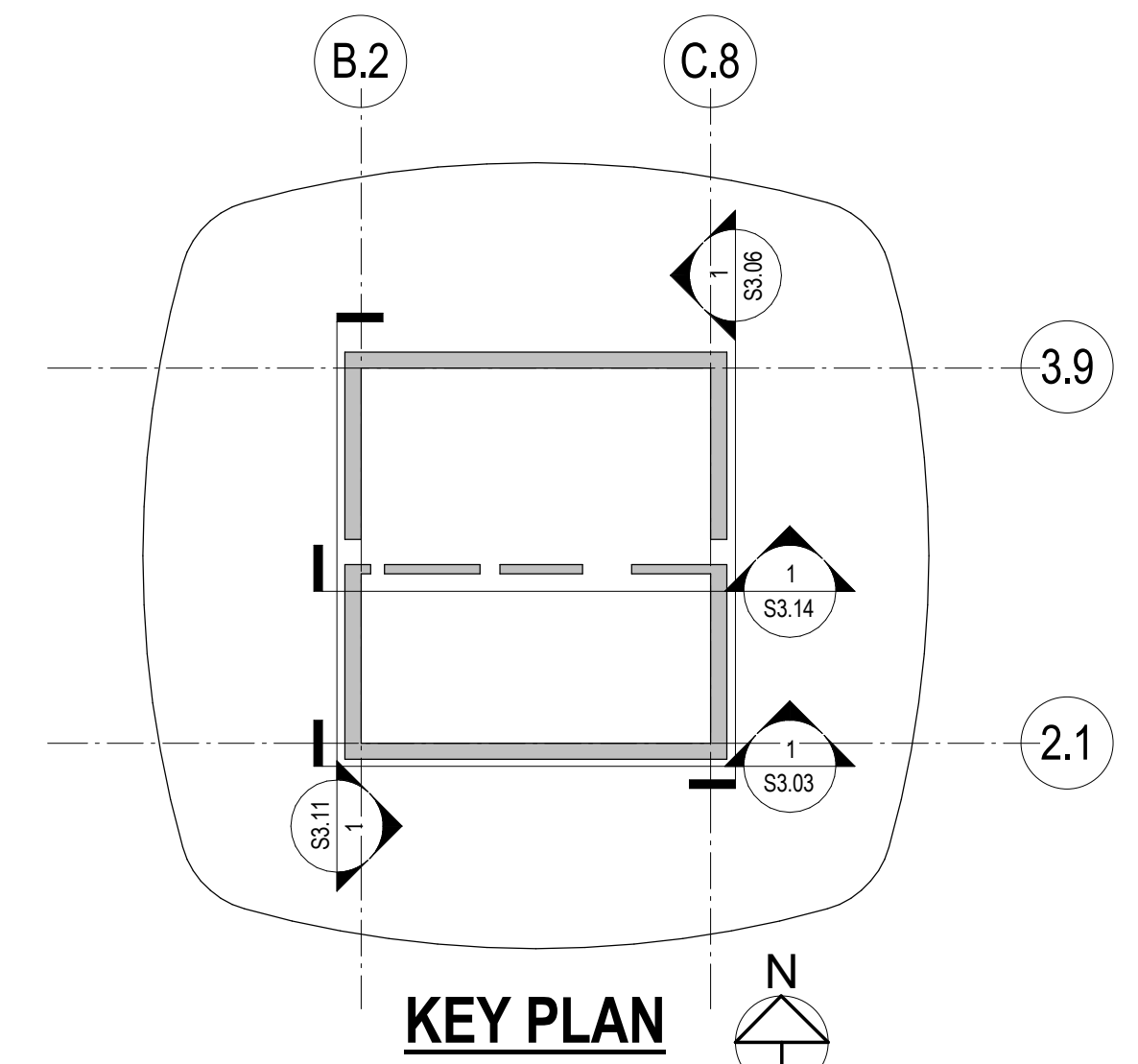
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

NOTES:

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (41) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $4b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.03





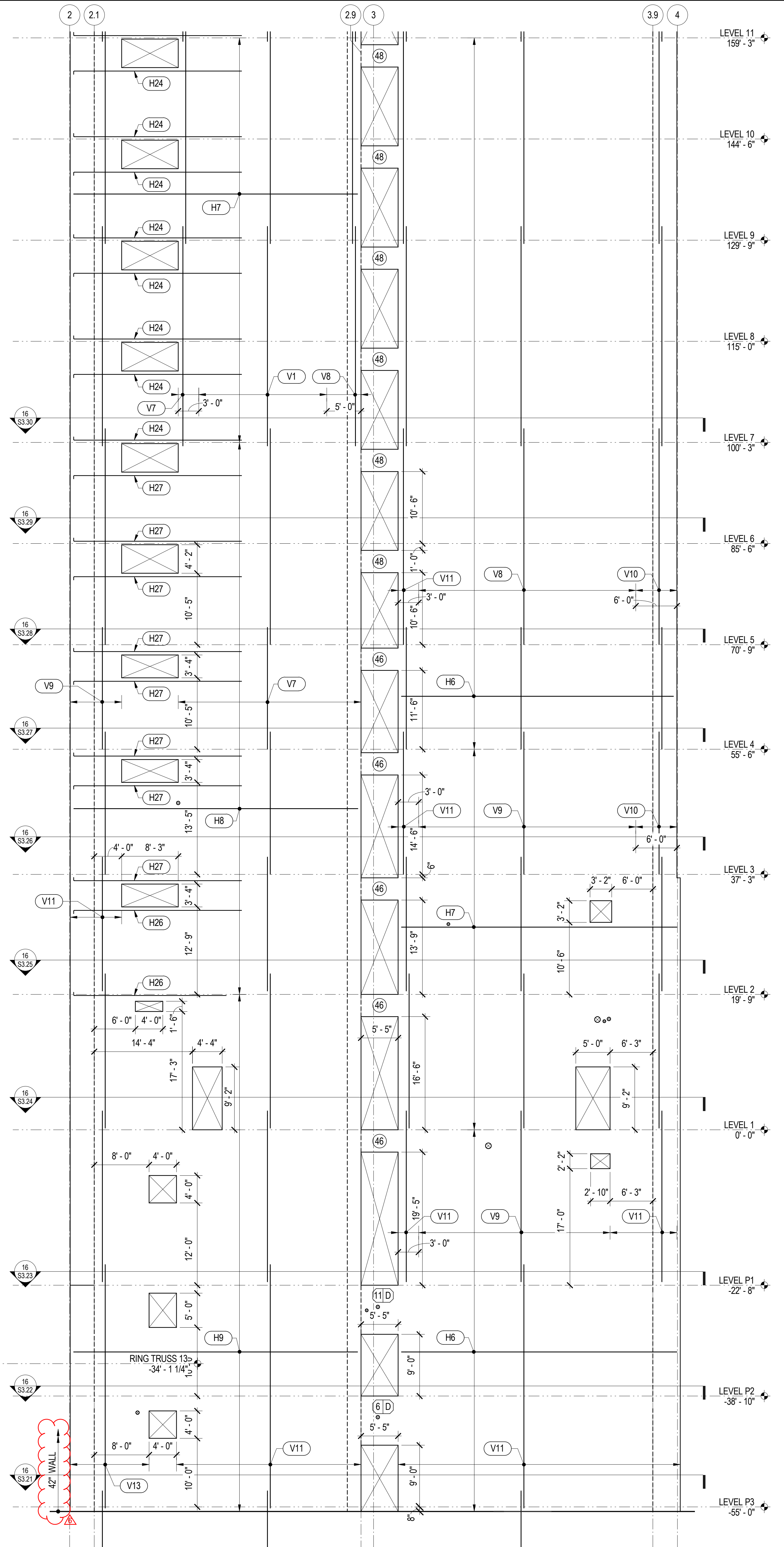
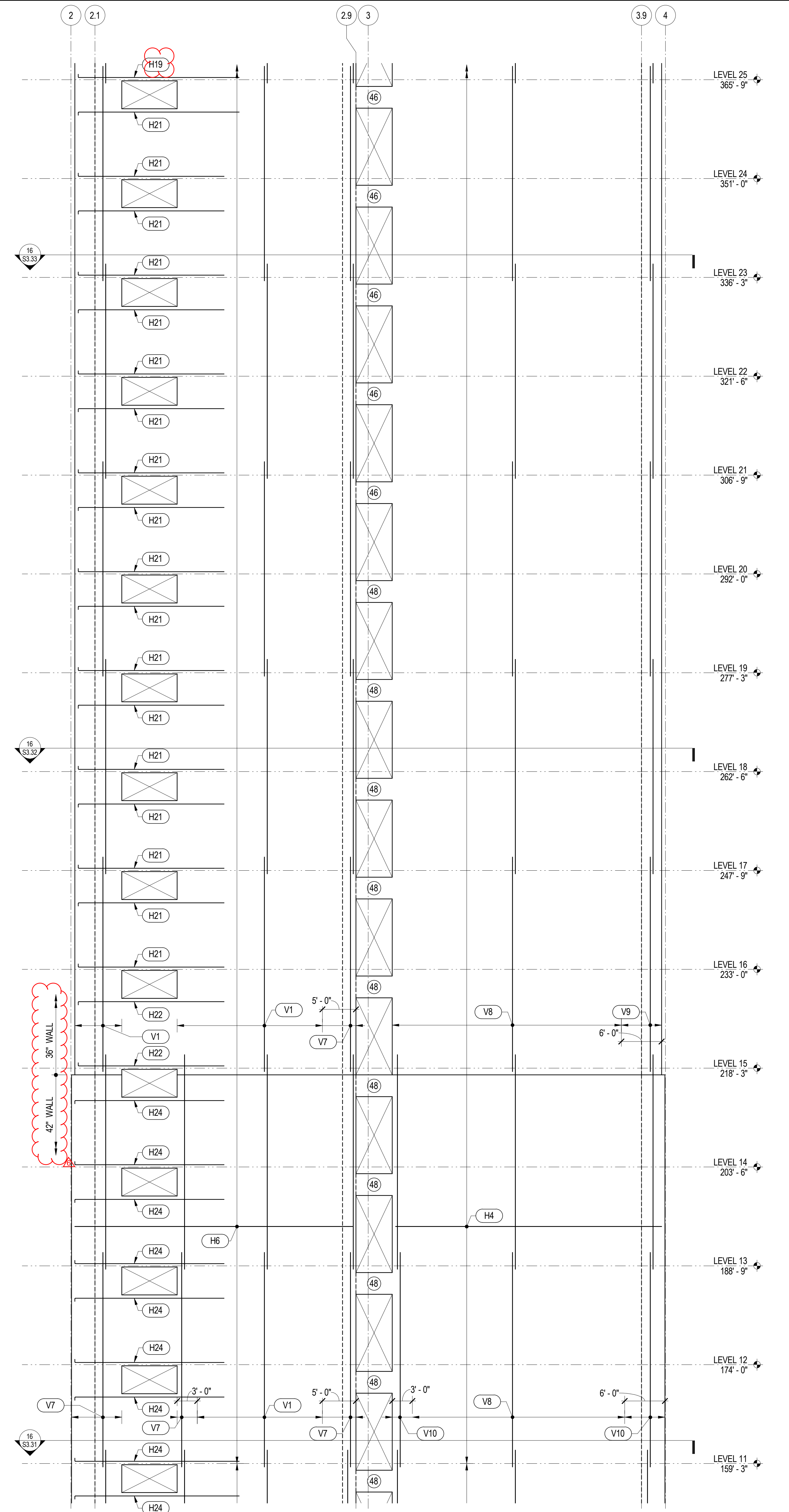
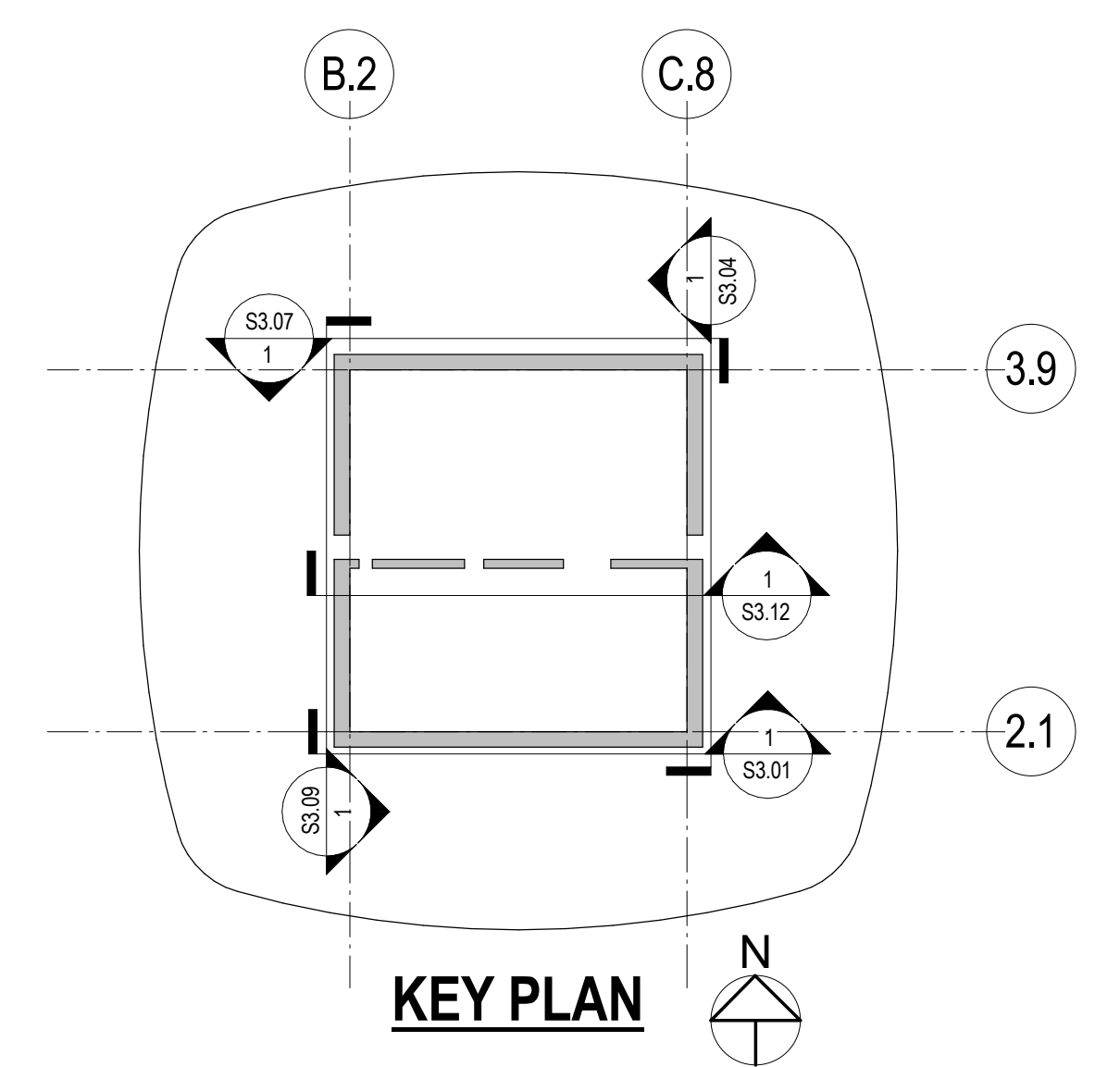
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE 4b AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

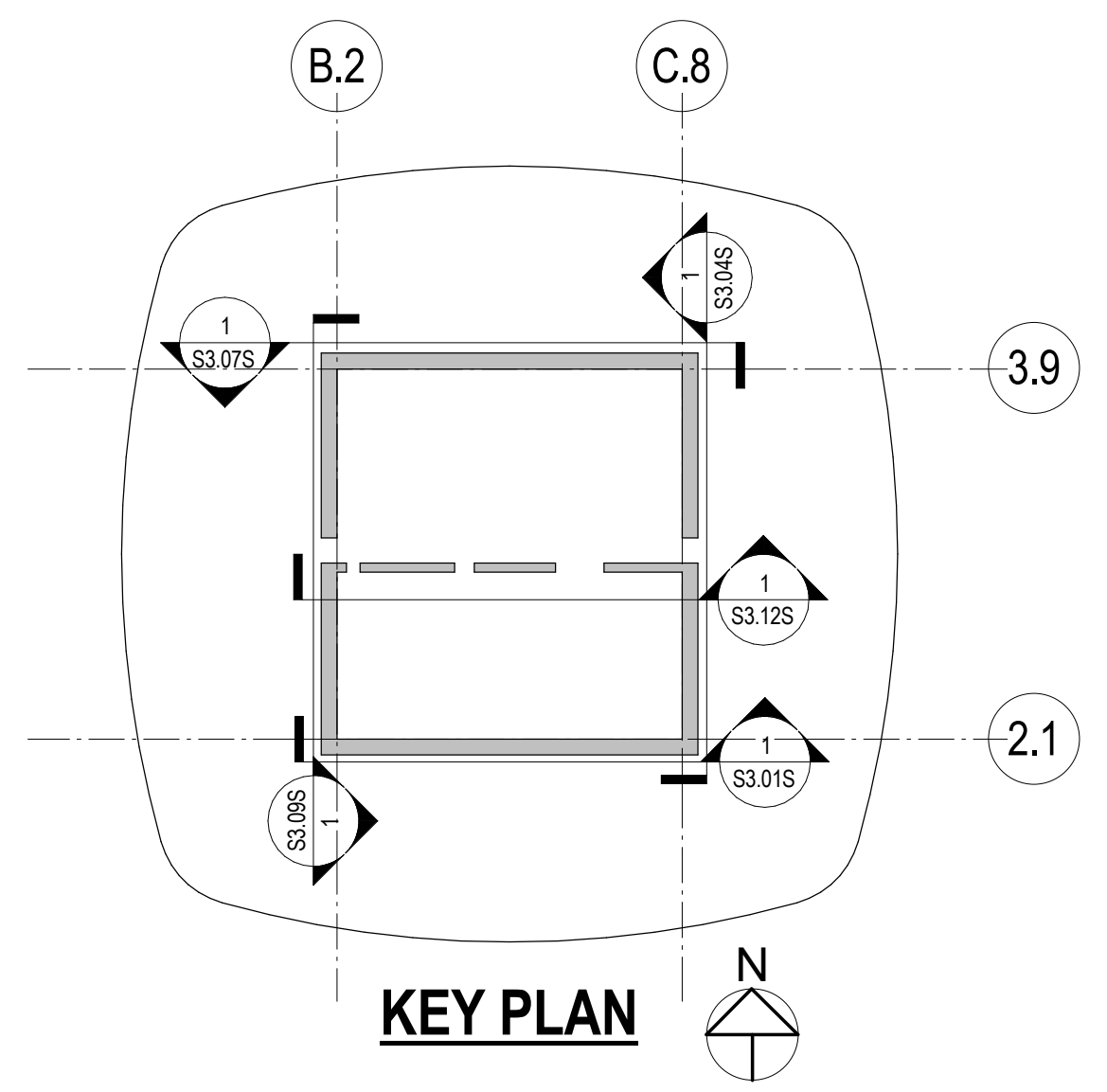
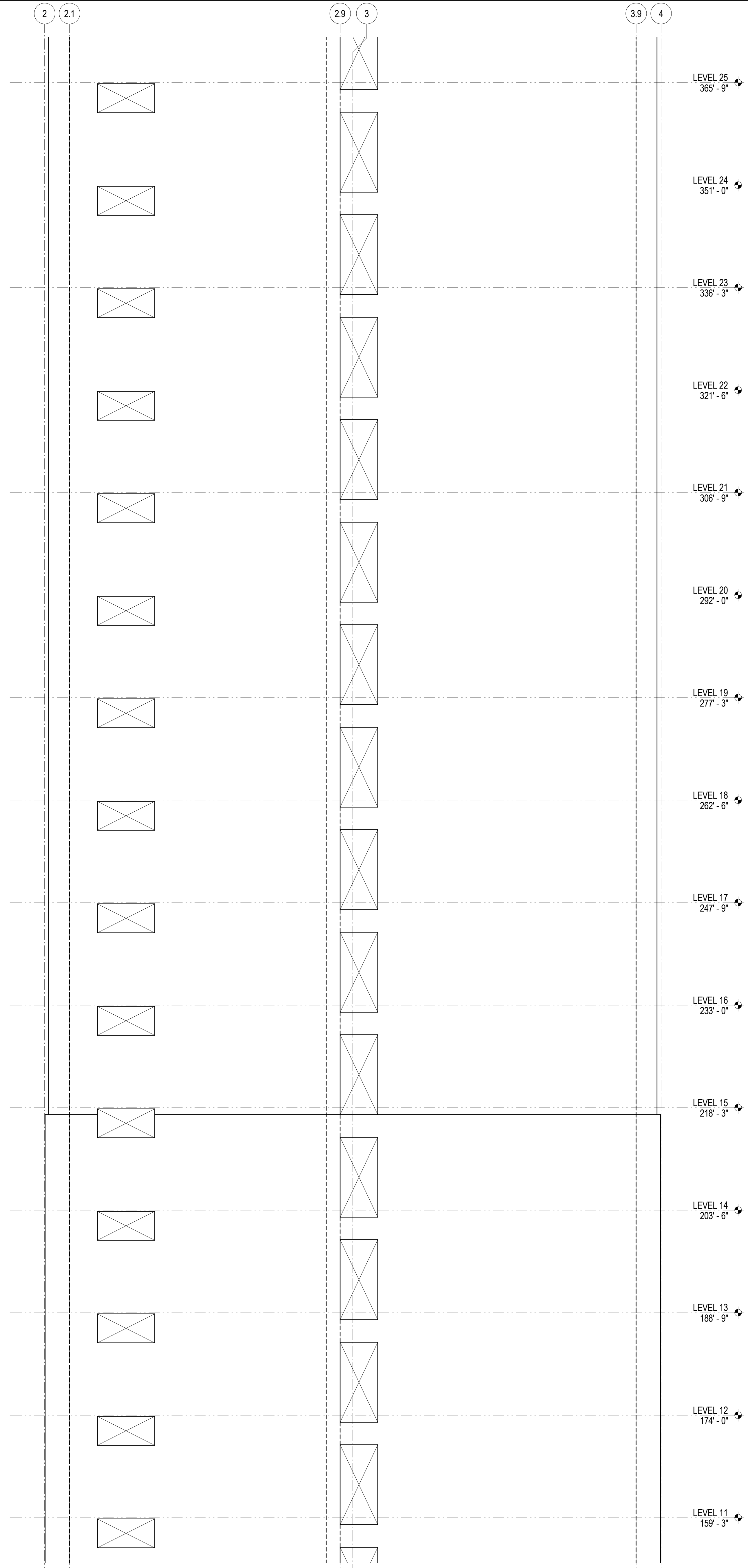
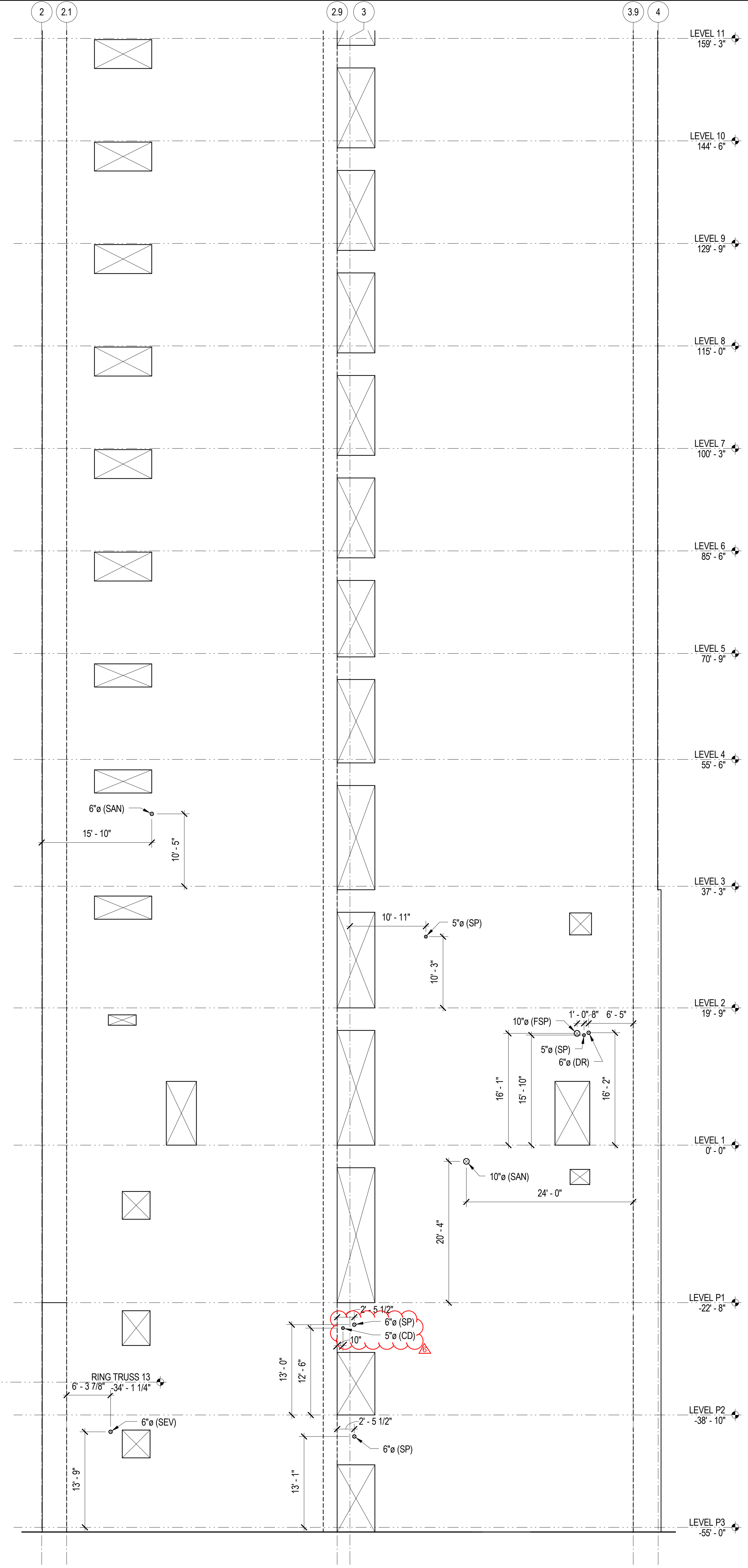
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_  
DRAWING TITLE: **SHEAR WALL ELEVATIONS**  
SCALE: 1/8" = 1'-0"  
PROJECT NO.: 08044  
DRAWING NUMBER: **S3.04**

4/29/2014 7:06:10 PM C:\Revit\Transbay\Tw\_MS2013\_18.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 7:06:13 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

**1 SHEAR WALL ELEVATION - EAST - SLEEVE PENETRATIONS**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. 08044 PROJECT NO. DRAWING NUMBER **S3.04S**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

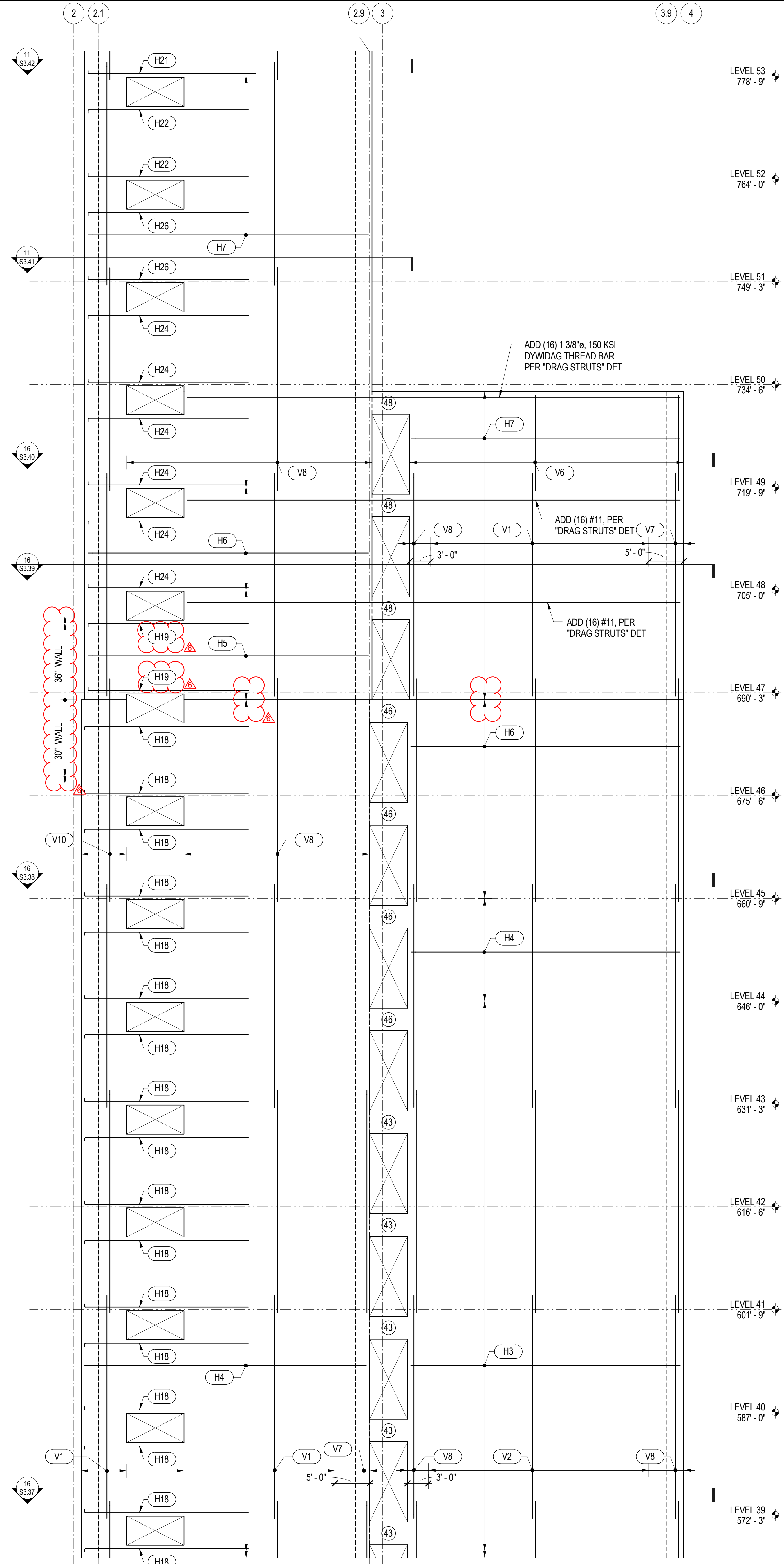
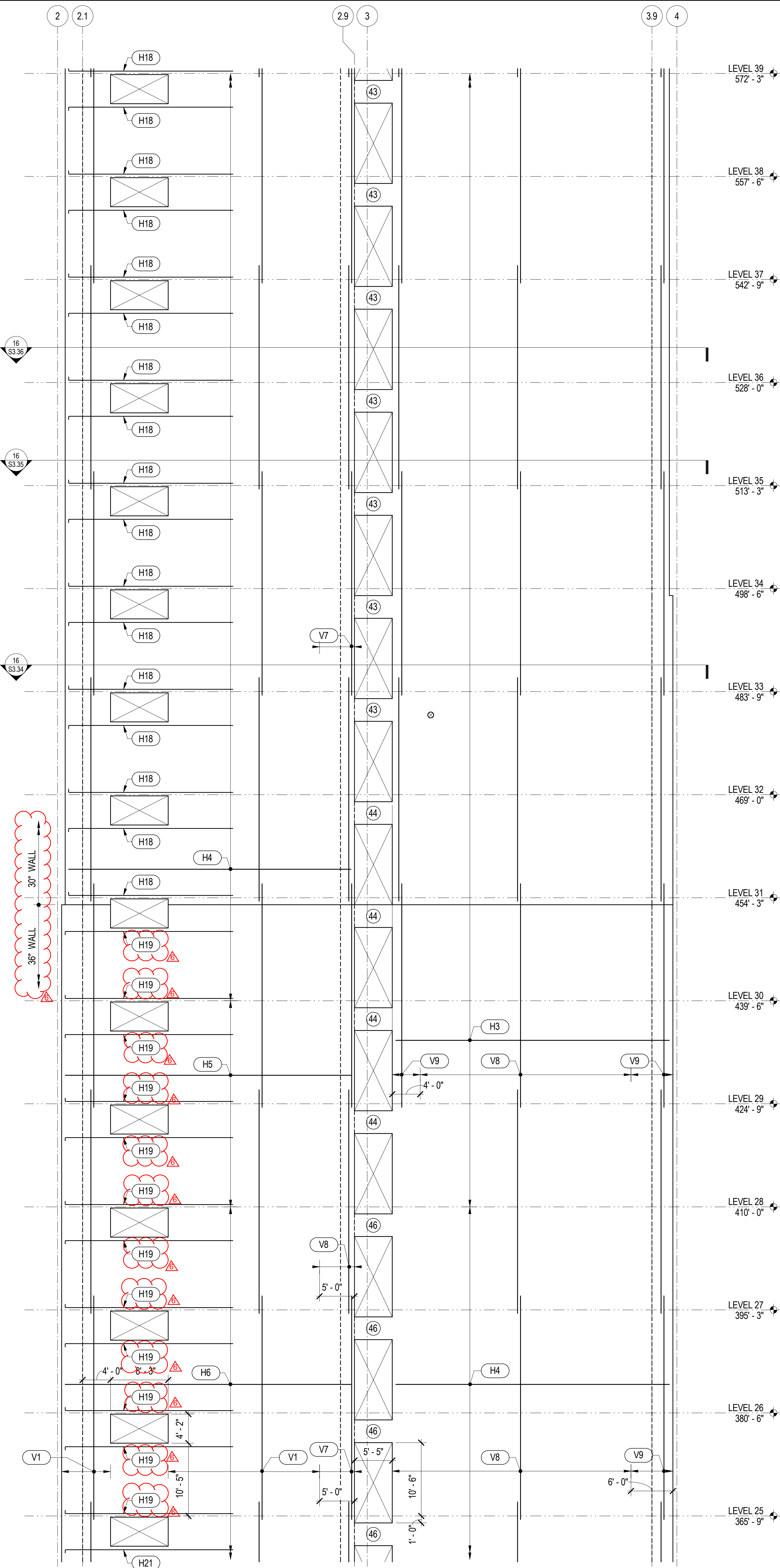
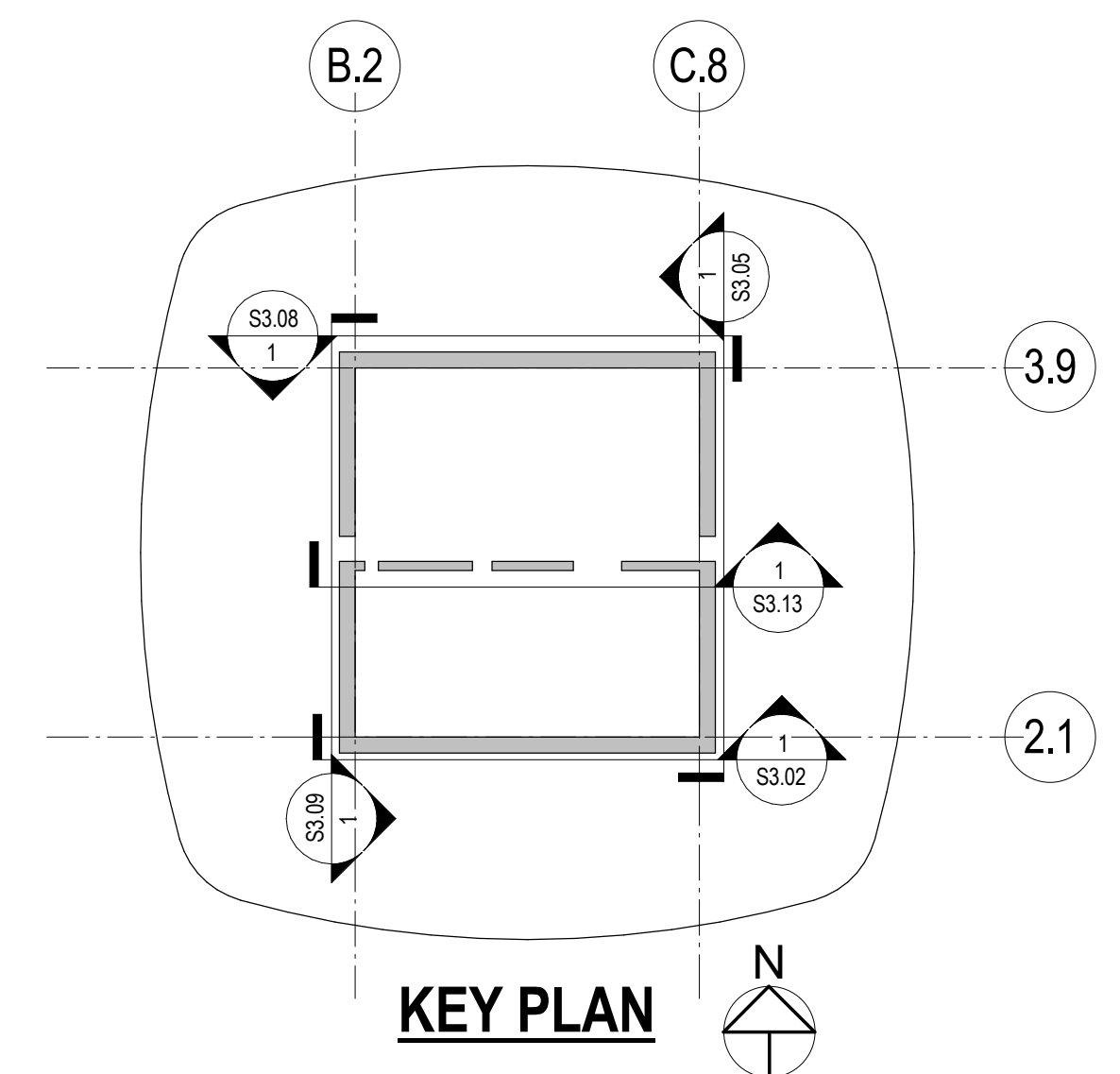
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1) A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE 4b AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

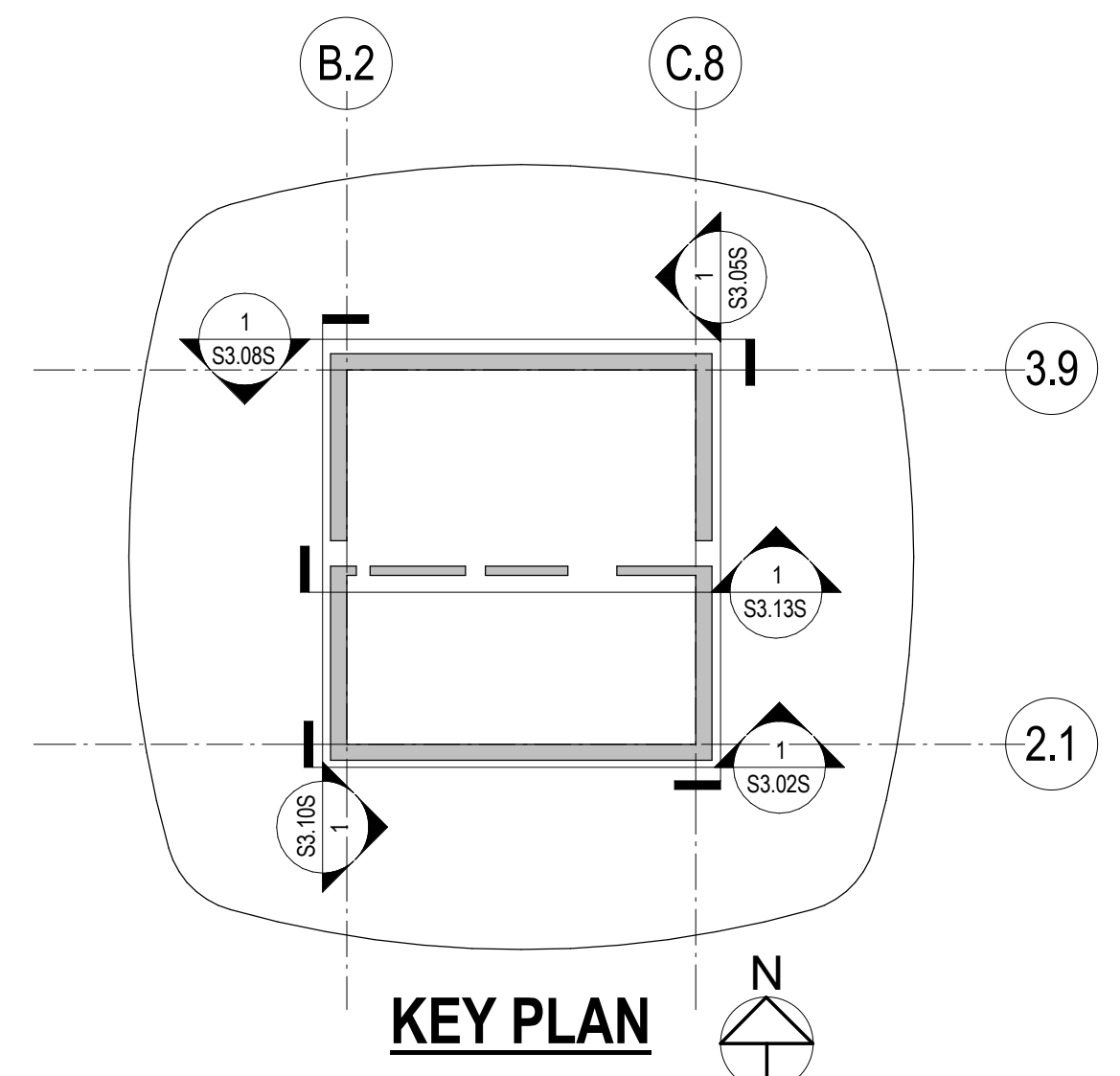
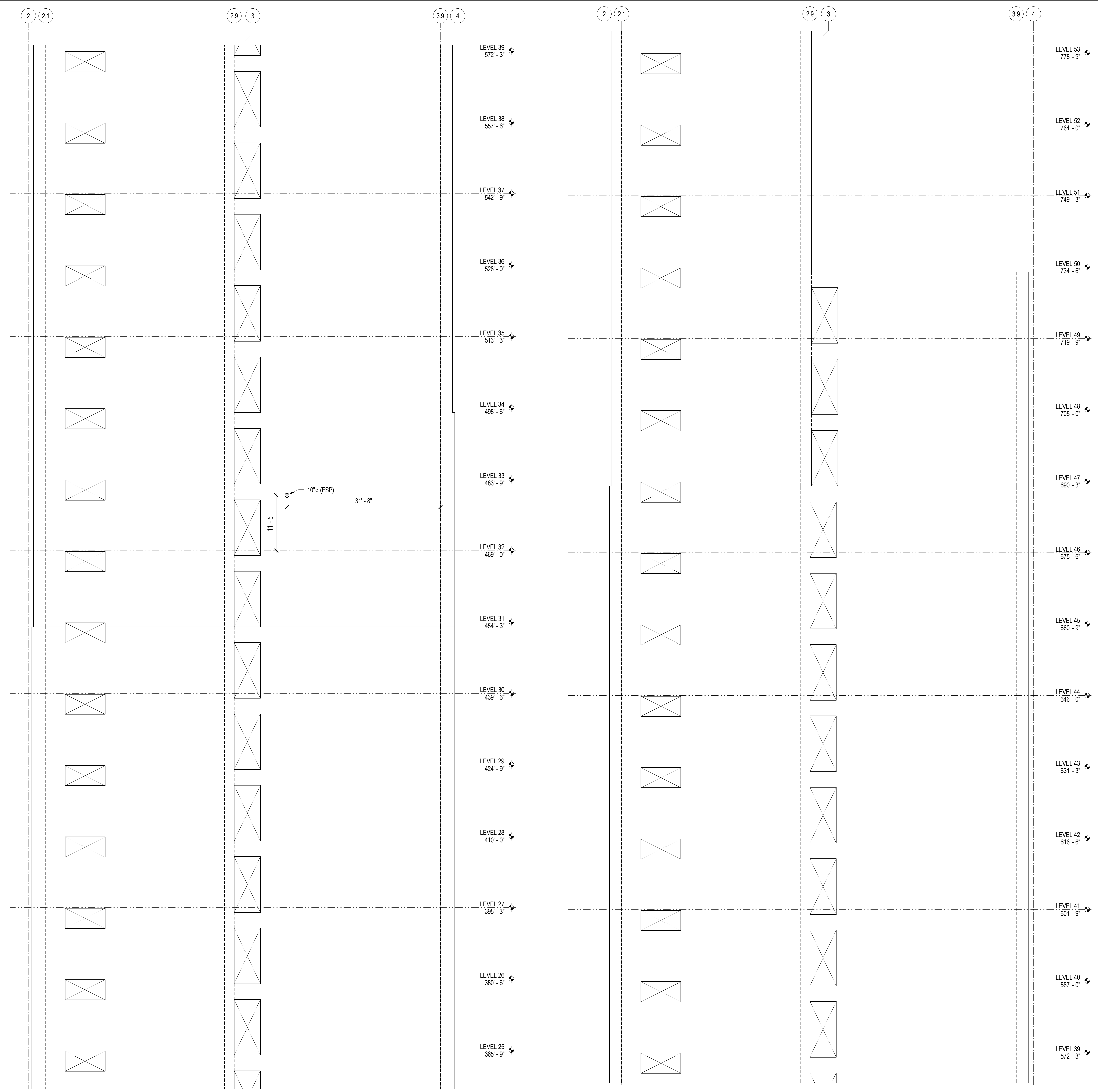
DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S3.05**

4/29/2014 7:06:18 PM C:\Revit\Transbay\Twr\_MS2013\_13e.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - EAST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER **S3.05S**

4/28/2014 7:06:21 PM C:\Revit\Transbay\Tw\_MS2013\_1\se.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

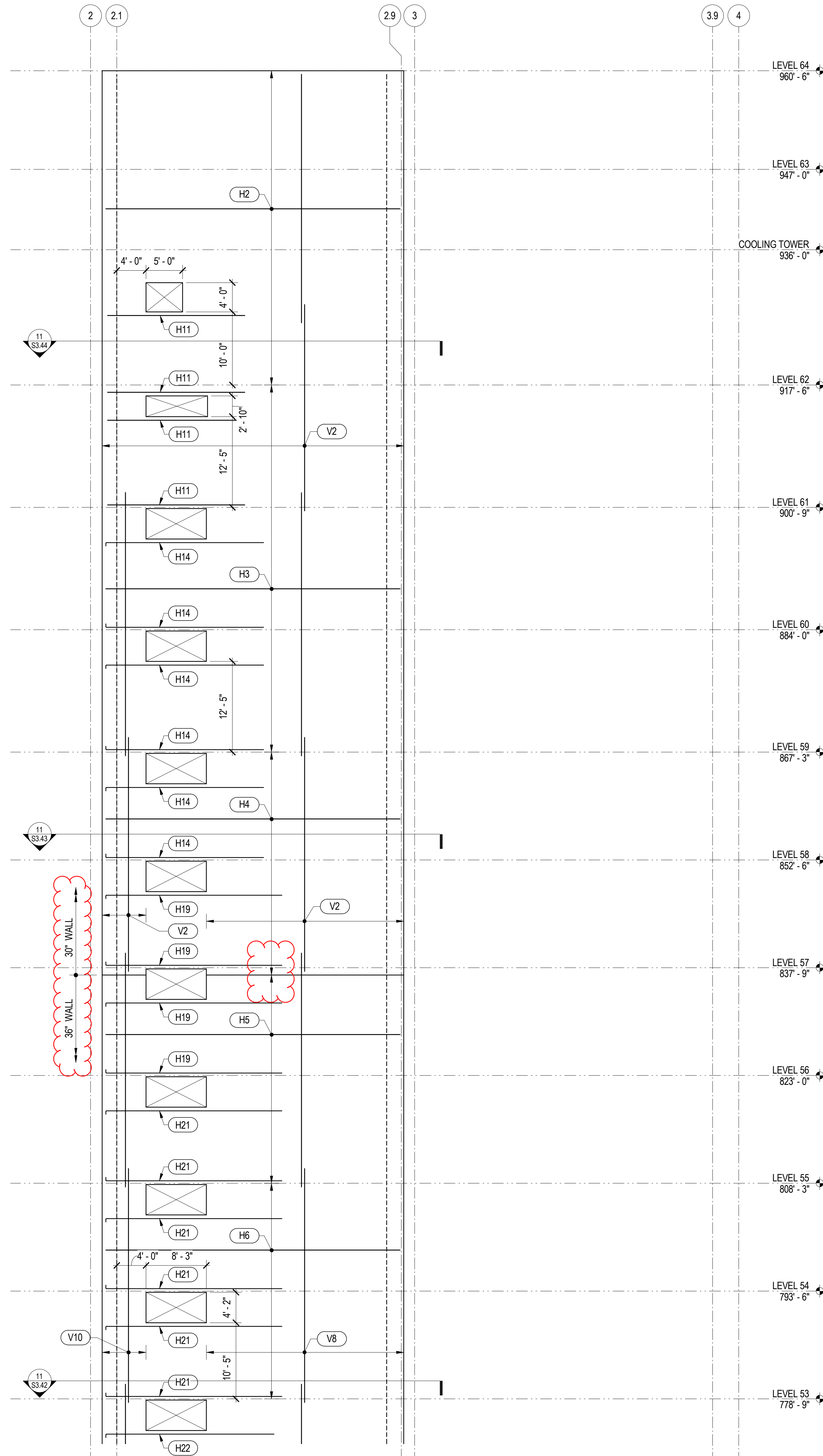
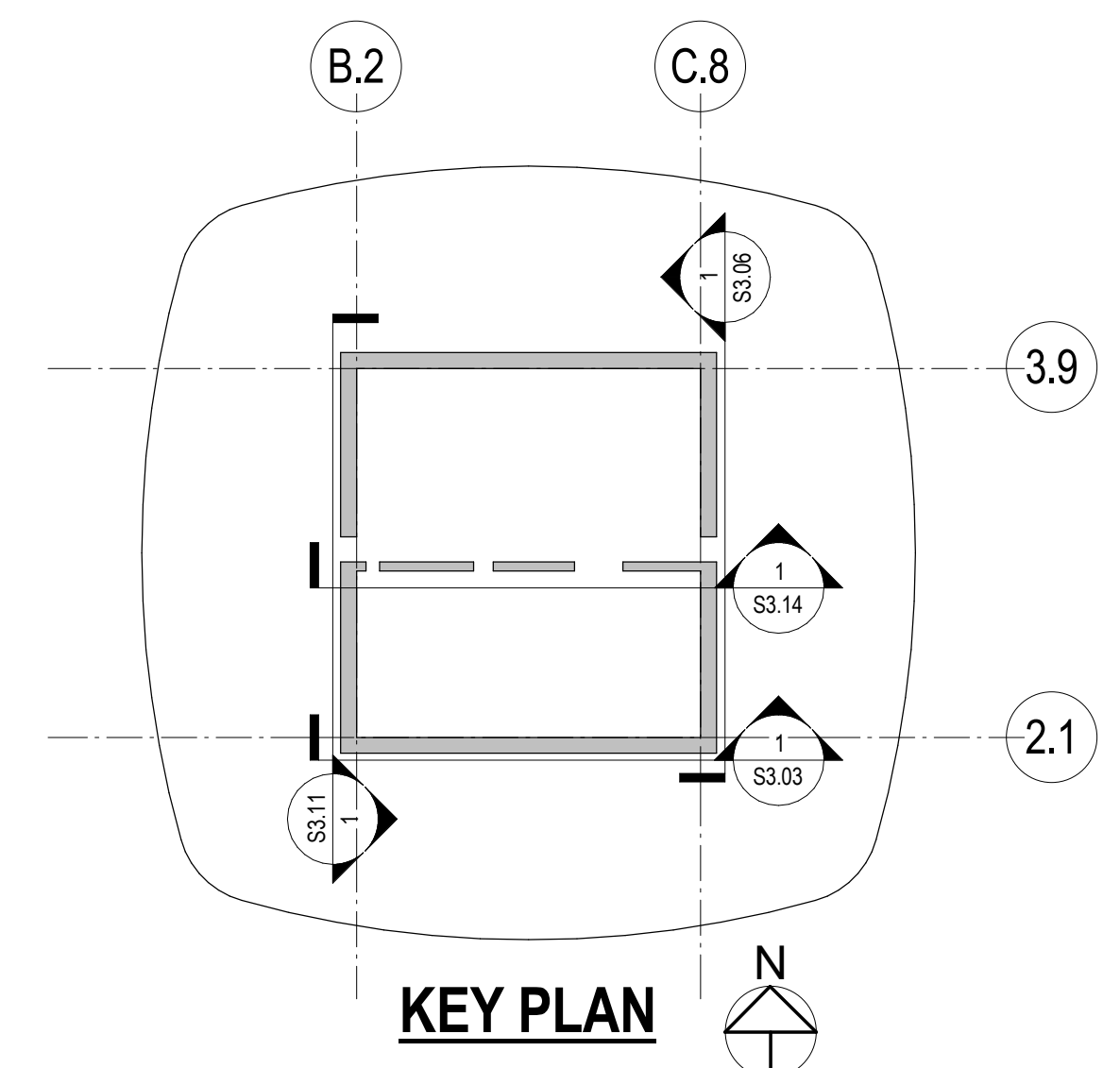
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $4b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

4/29/2014 7:06:26 PM C:\Revit\Transbay\Tw\_MS2013\_1.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER **S3.06**



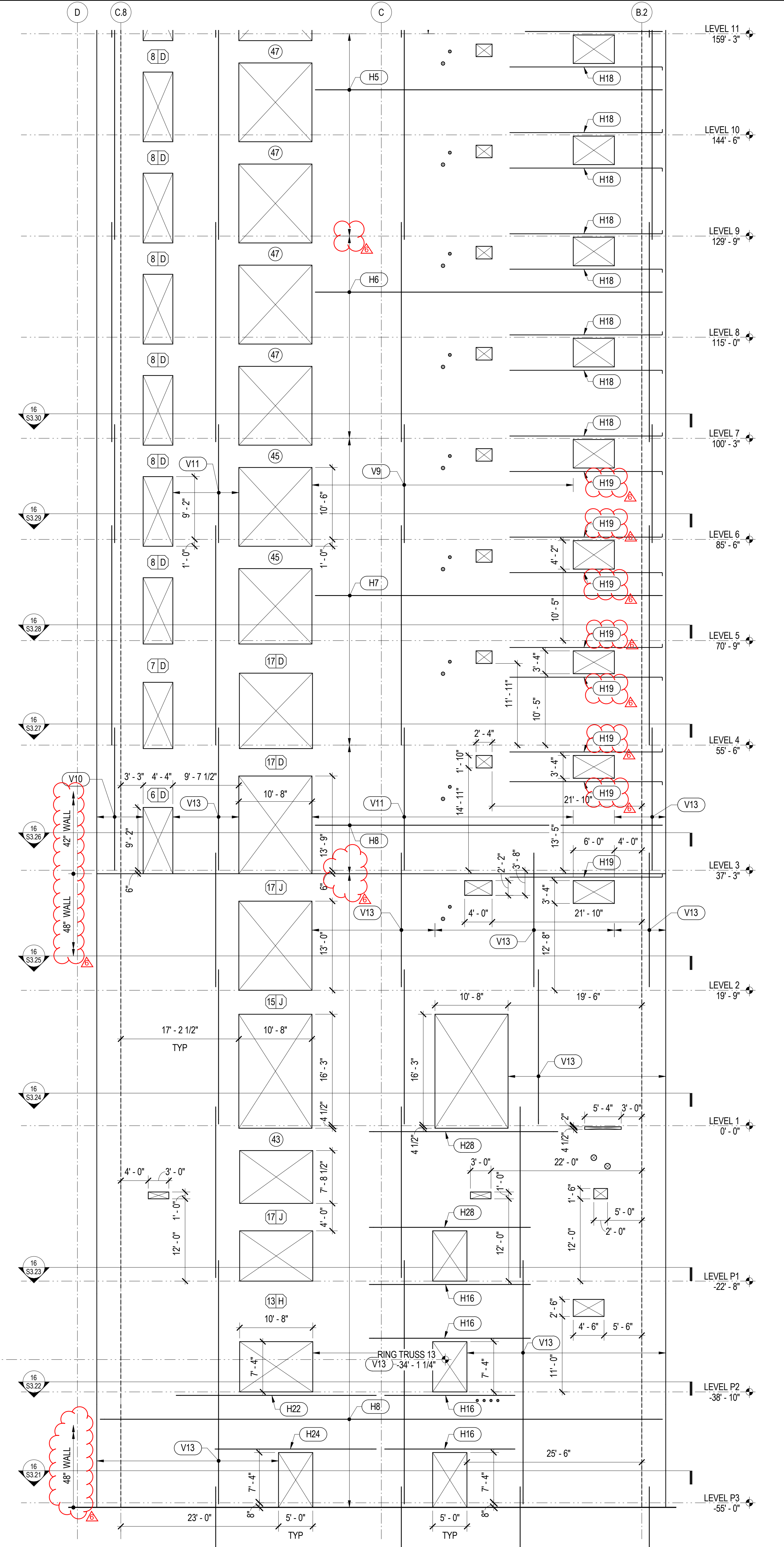
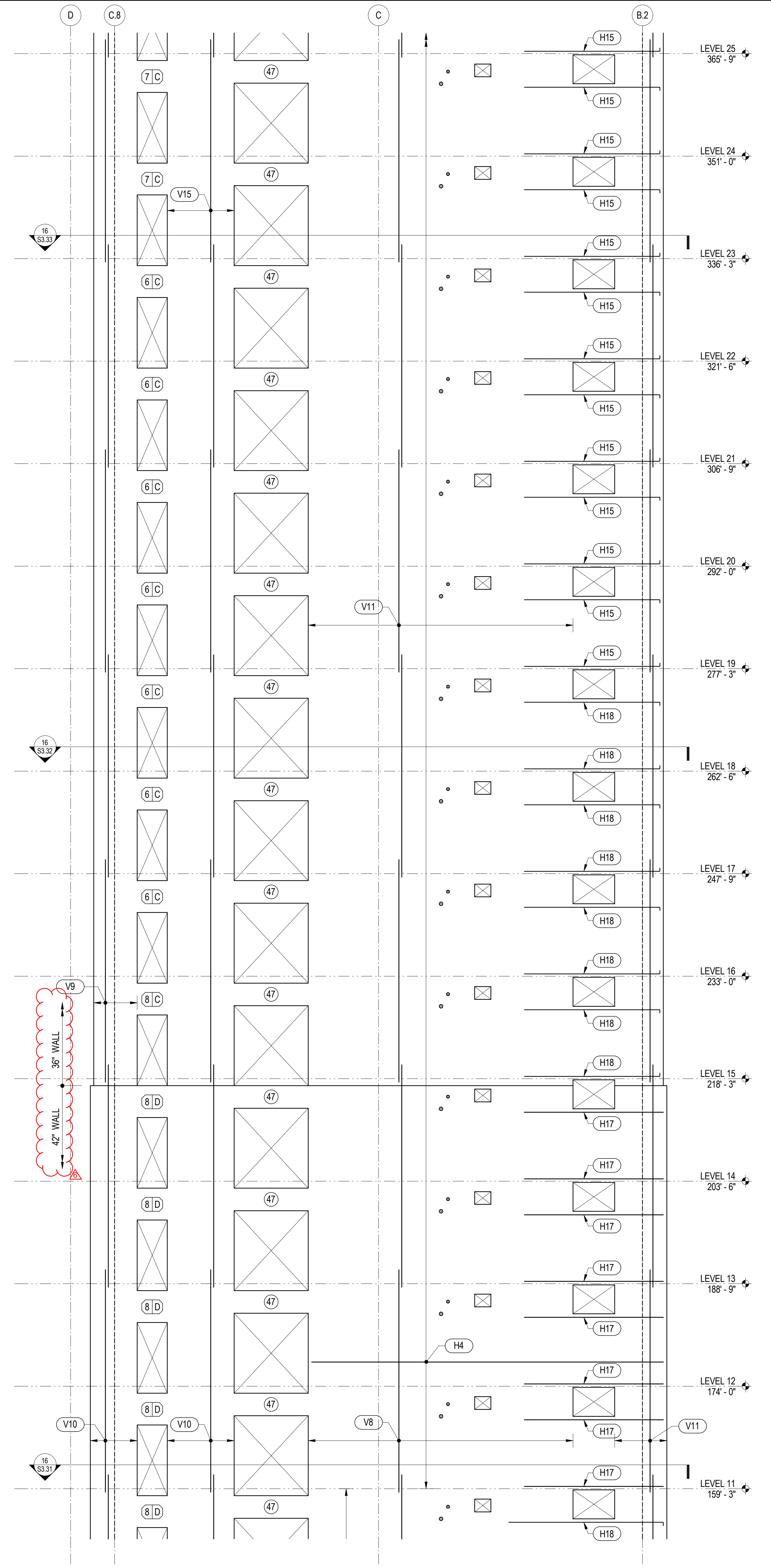
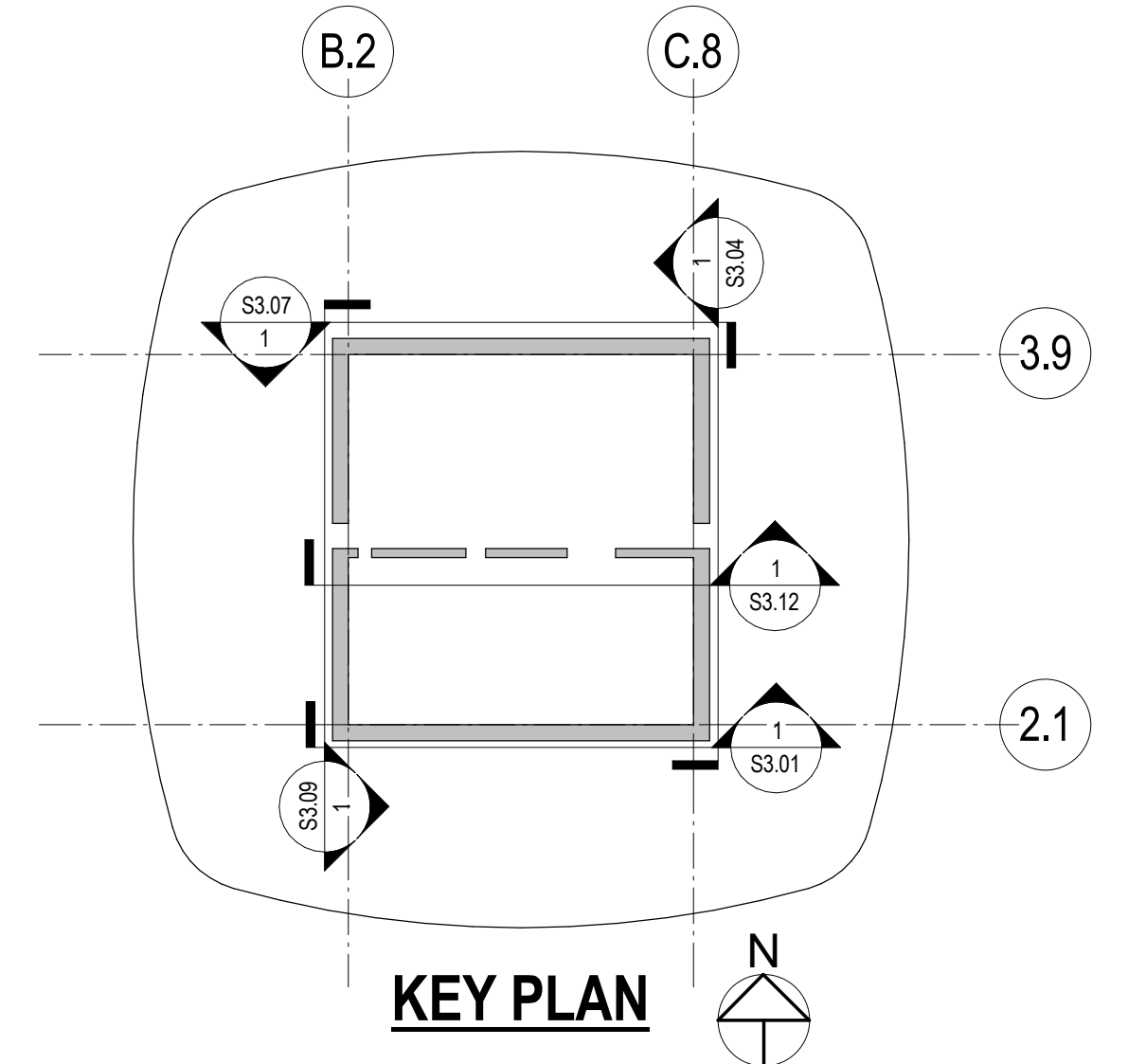
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $db$  AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - NORTH**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS**

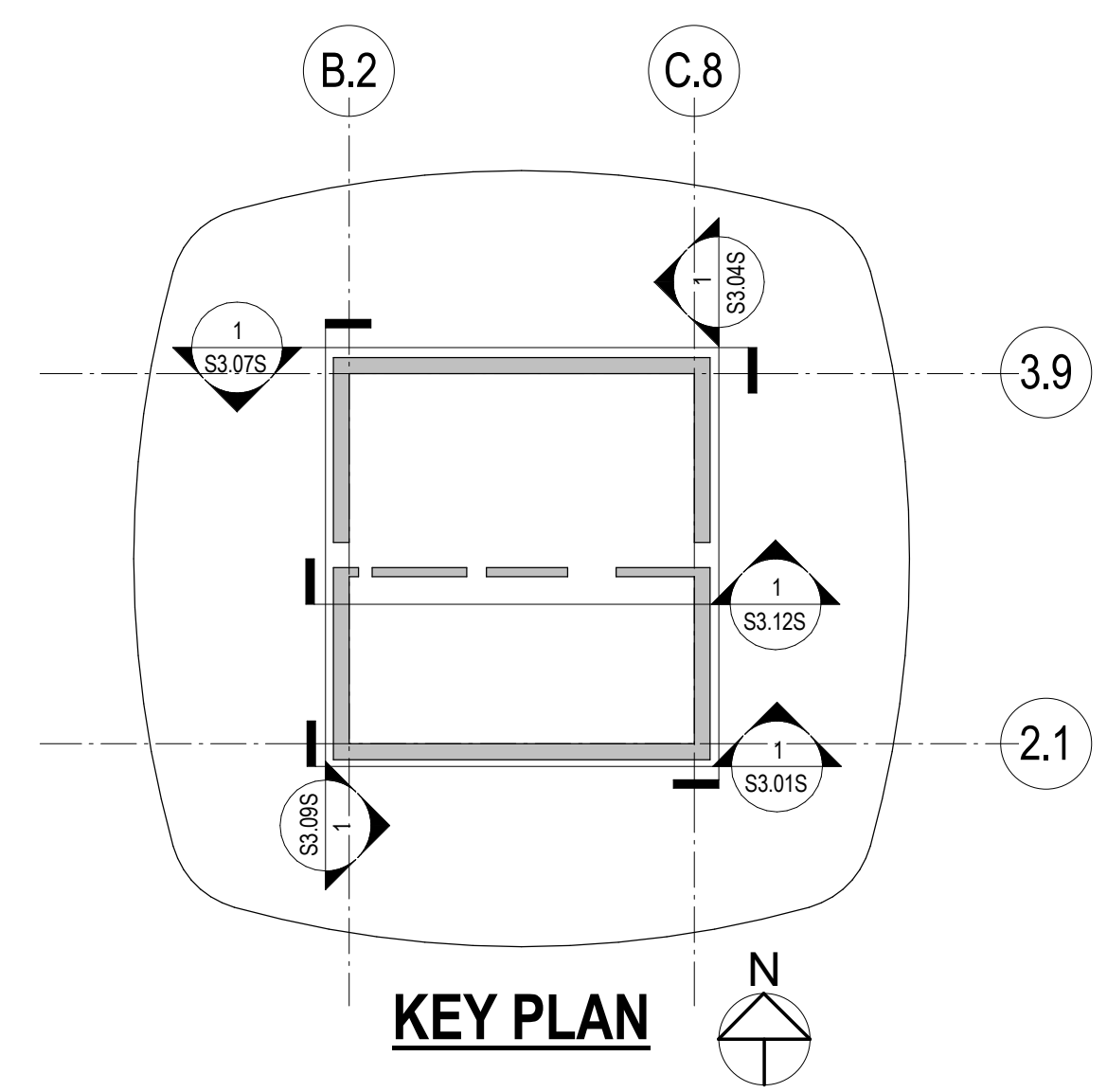
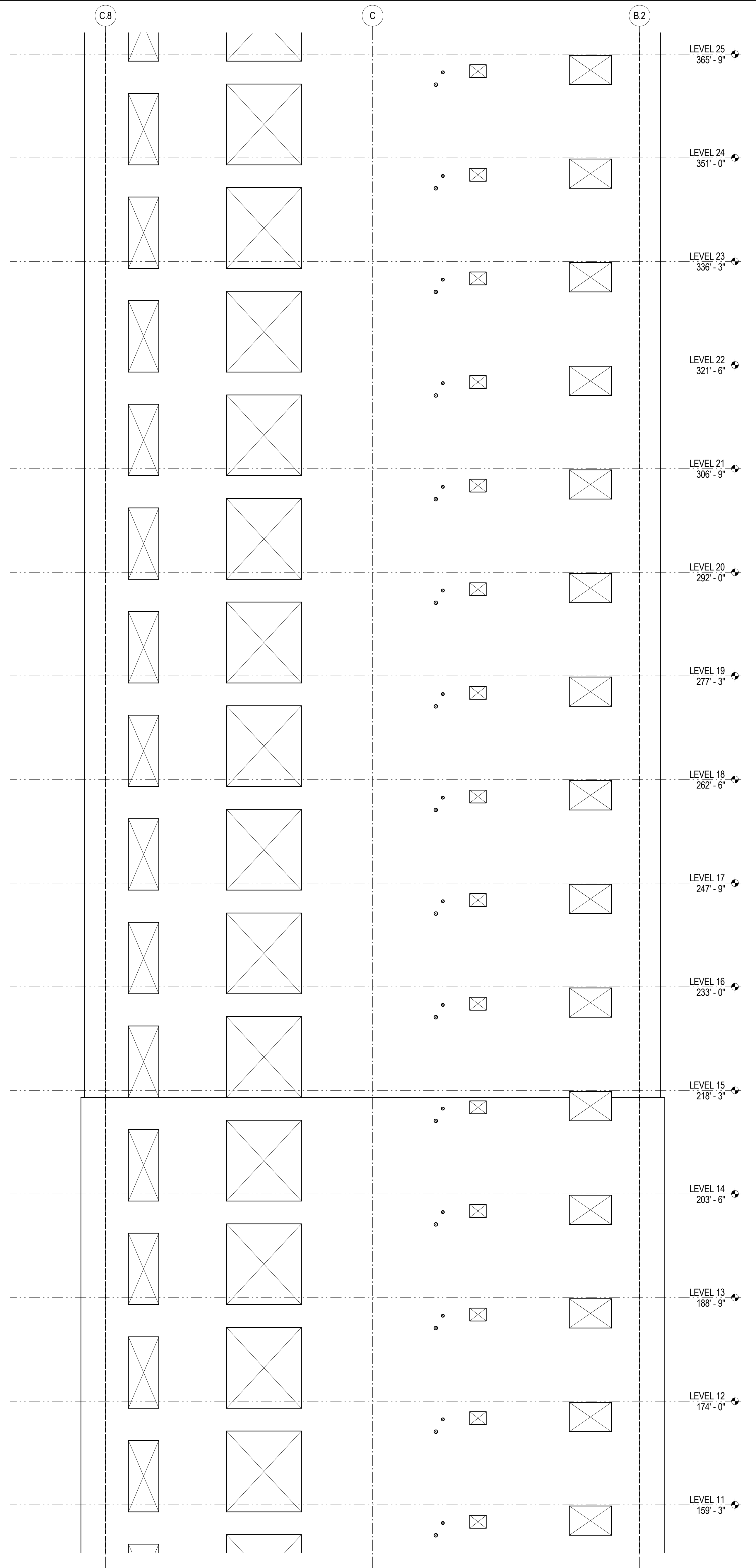
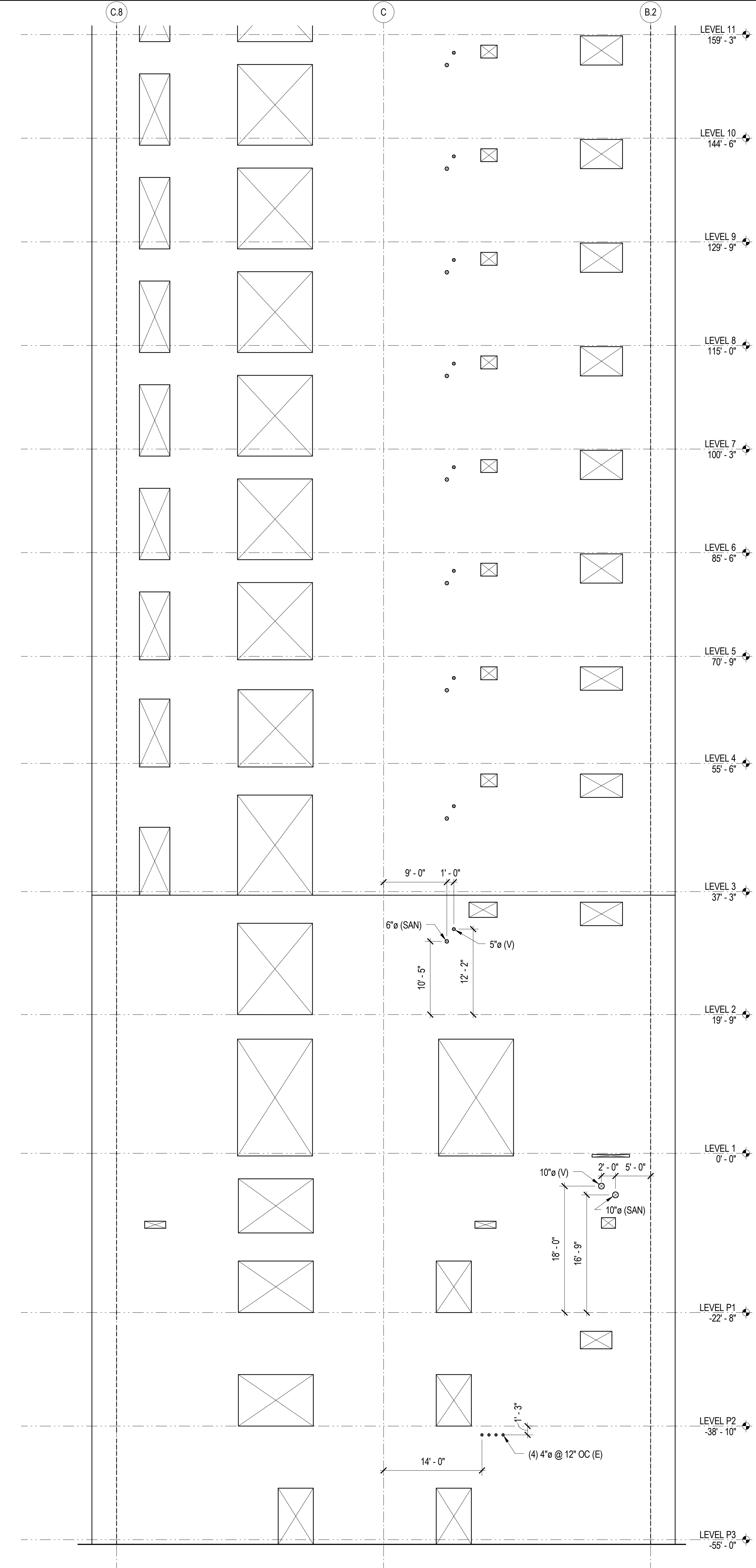
PROJECT NO. 08044

DRAWING NUMBER **S3.07**

4/29/2014 7:06:32 PM C:\Revit\Transbay\Tw\_MS2013\_13.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/30/2014 12:23:50 PM C:\Revit\Transbay\Twr\_MS2013\_11e.rvt

1 SHEAR WALL ELEVATION - NORTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.075



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

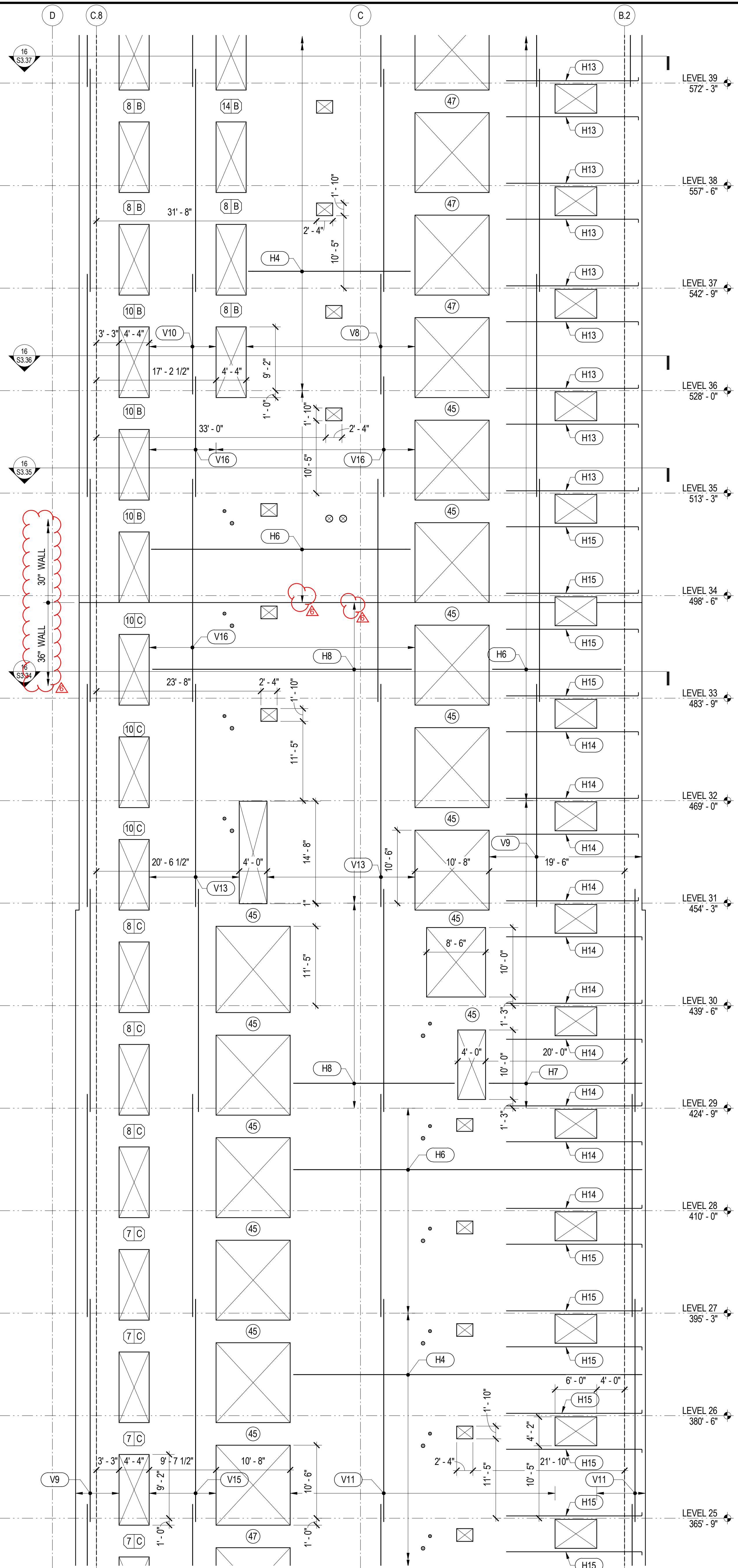
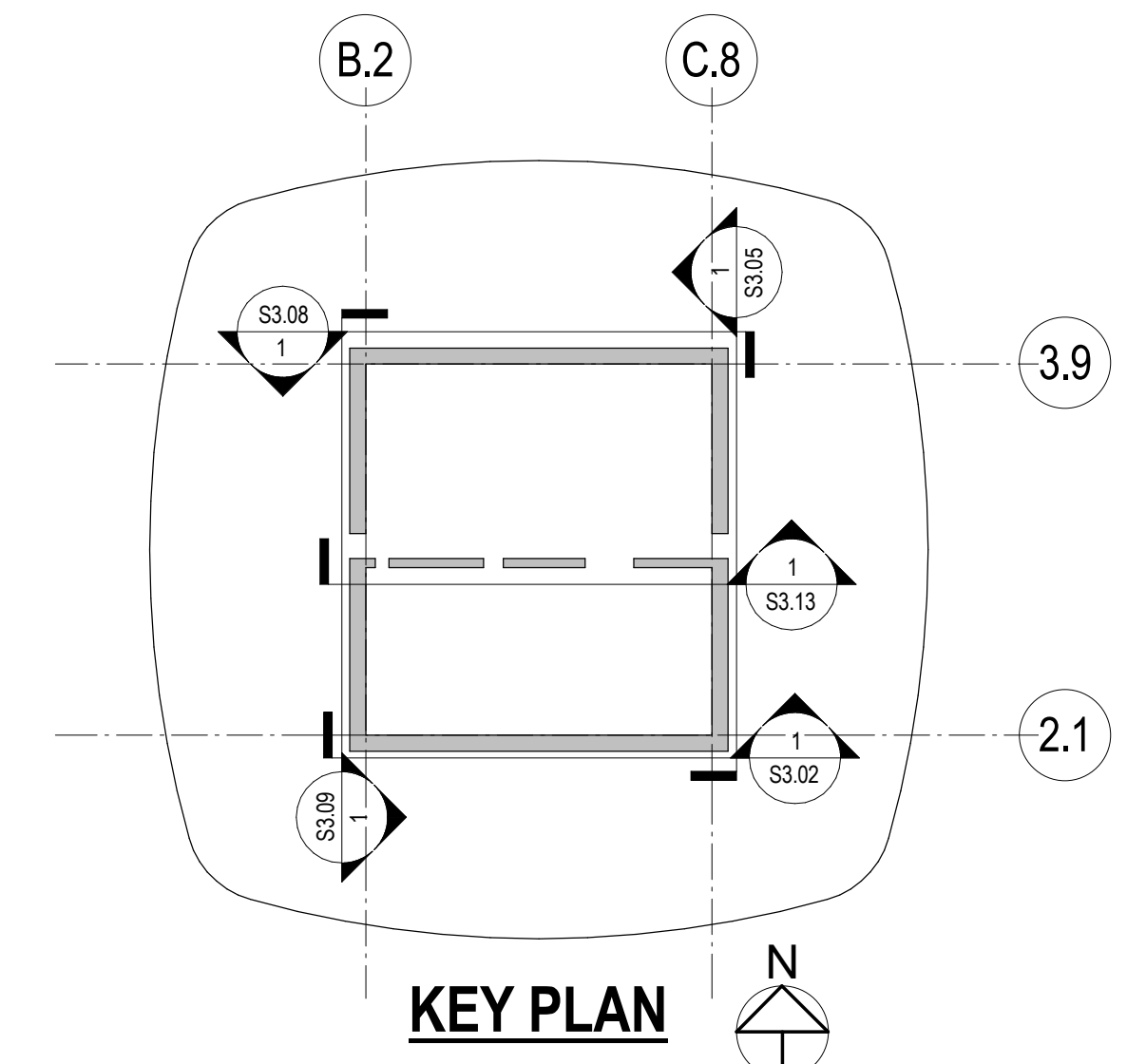
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

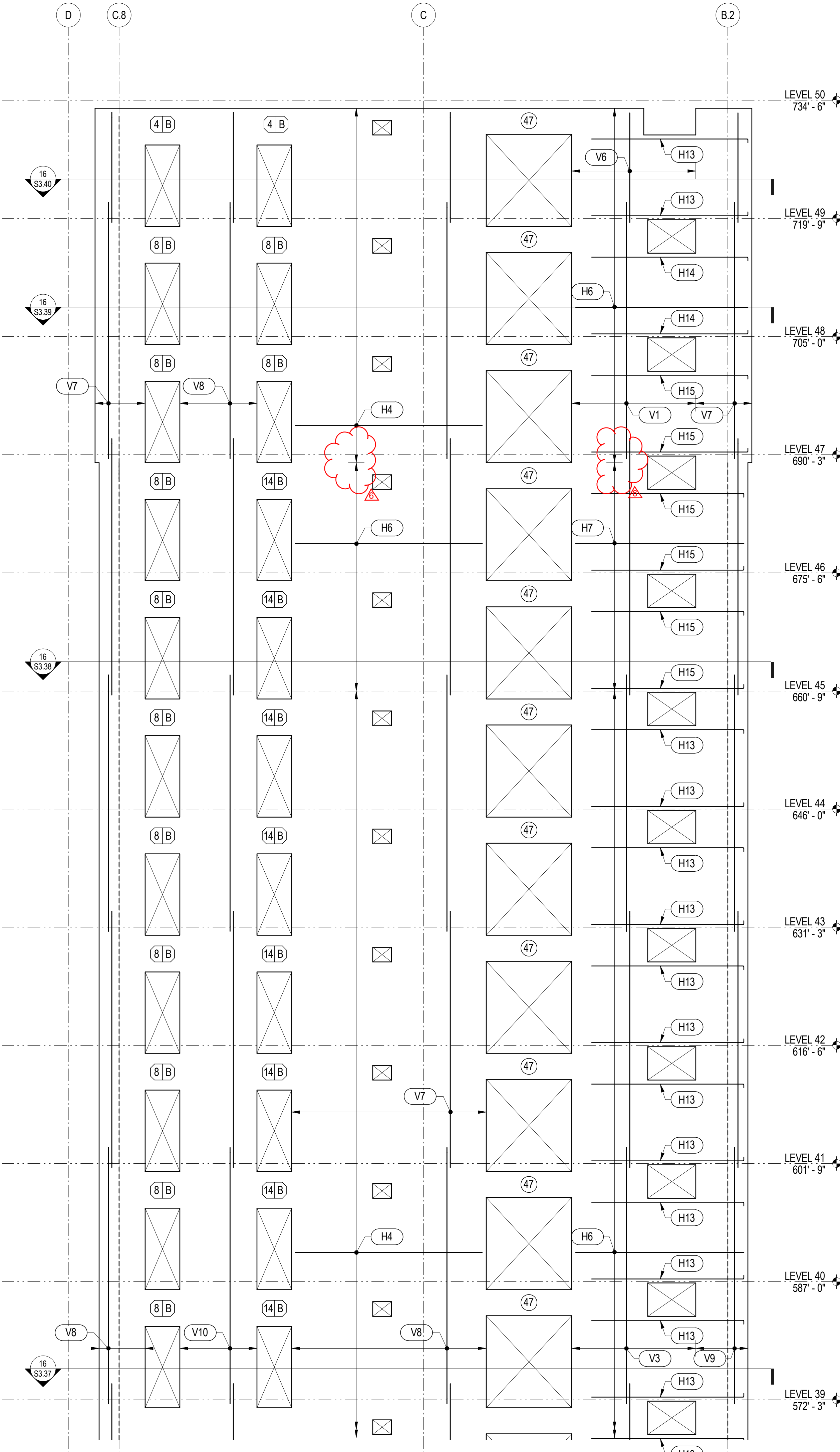
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1) A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) 1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - NORTH  
1/8" = 1'-0"



4/29/2014 7:06:40 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

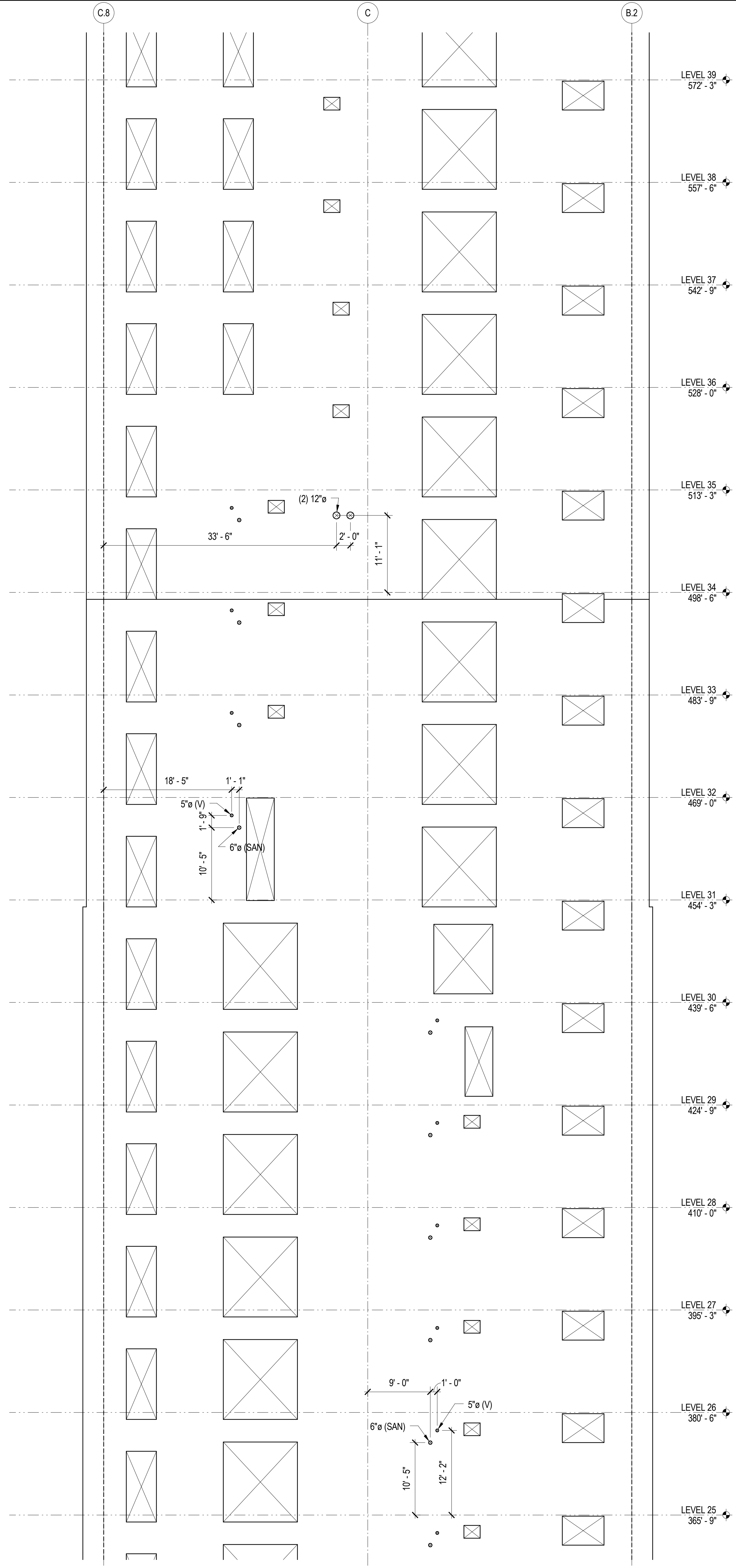
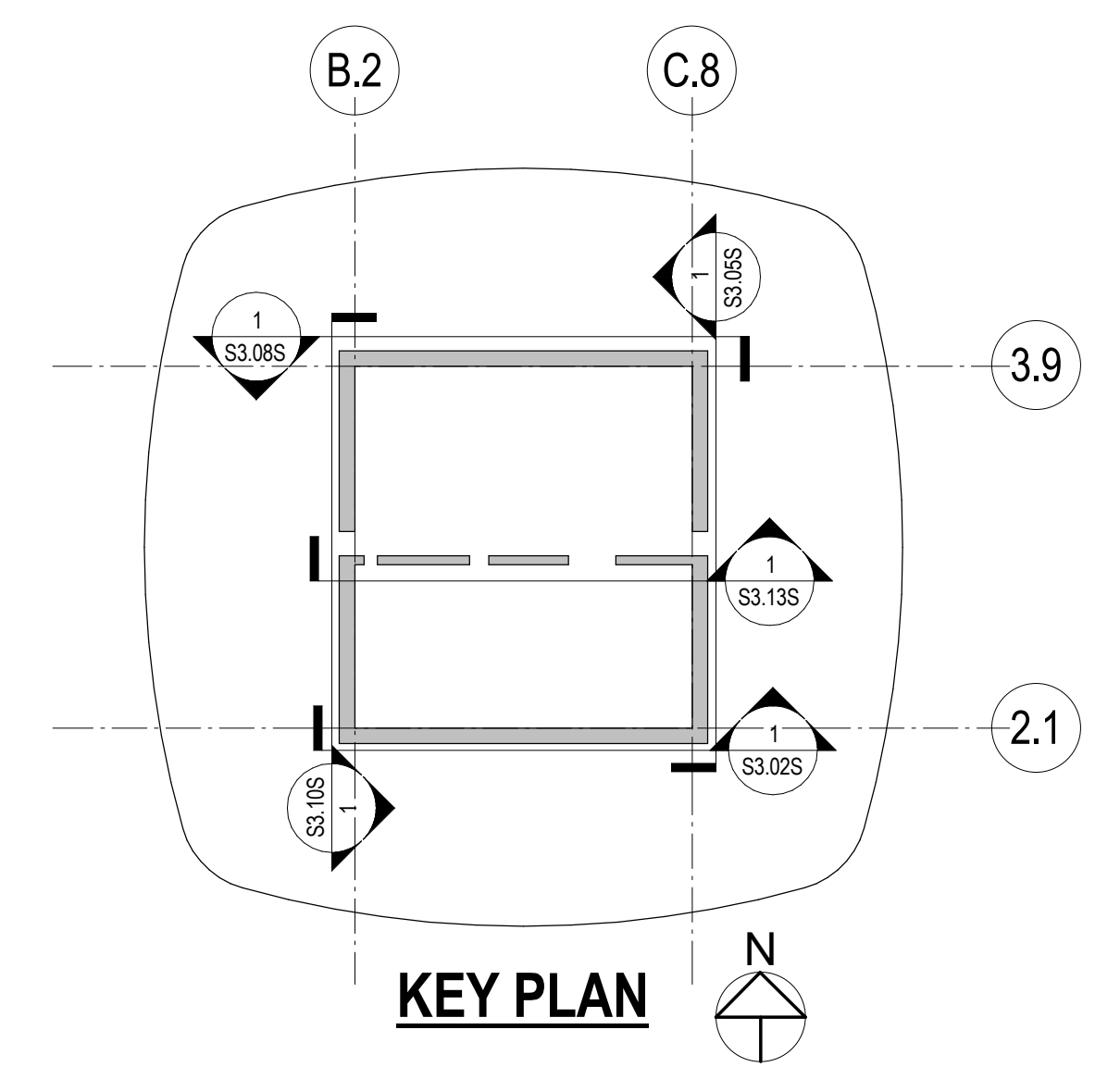
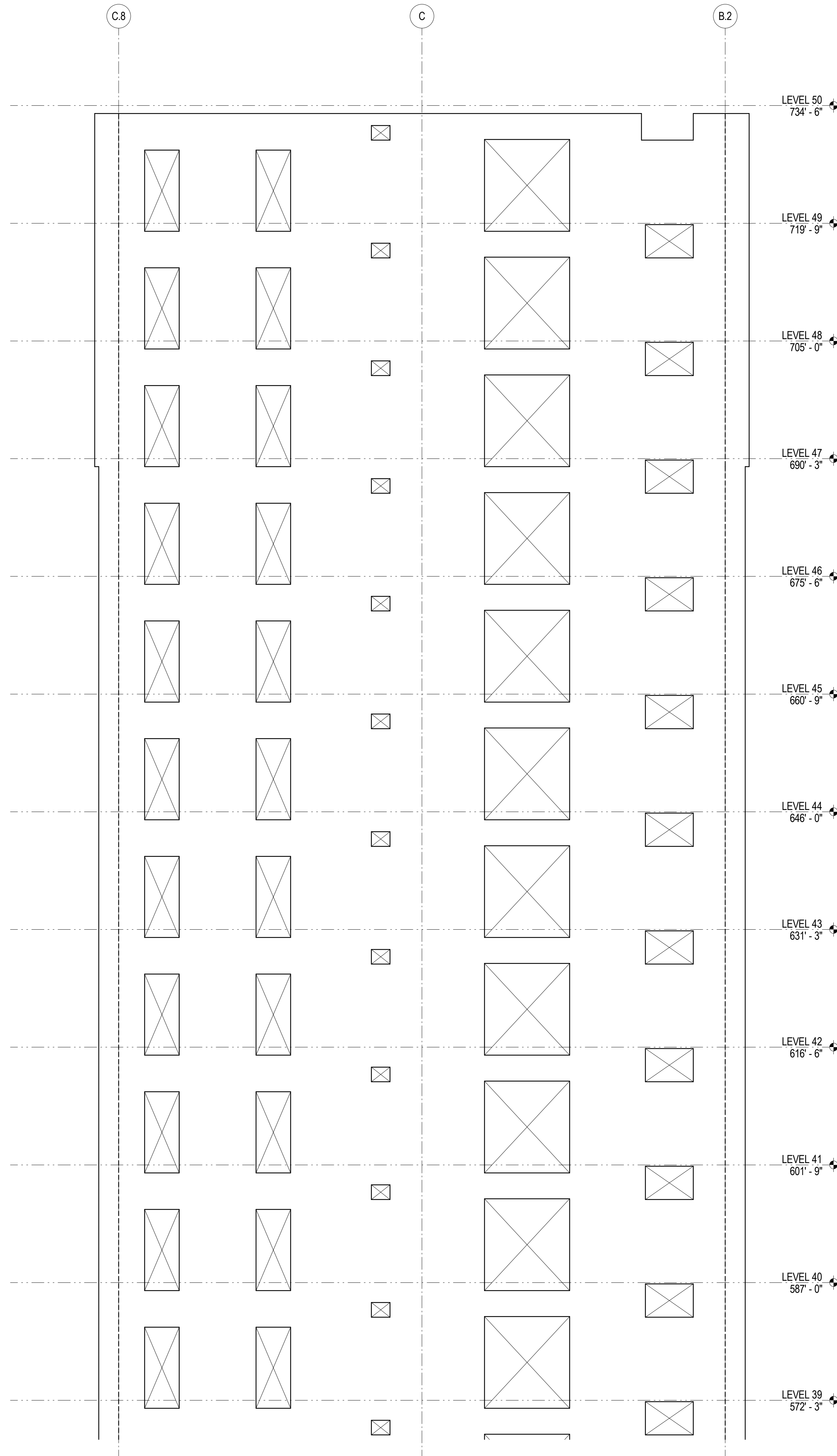
**SHEAR WALL ELEVATIONS**

PROJECT NO. 08044 DRAWING NUMBER **S3.08**





- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - NORTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

DRAWING NUMBER  
**S3.08S**

PROJECT NO.  
08044

4/29/2014 7:06:43 PM C:\Revit\Transbay\Tw\_MS2013\_11s.rvt



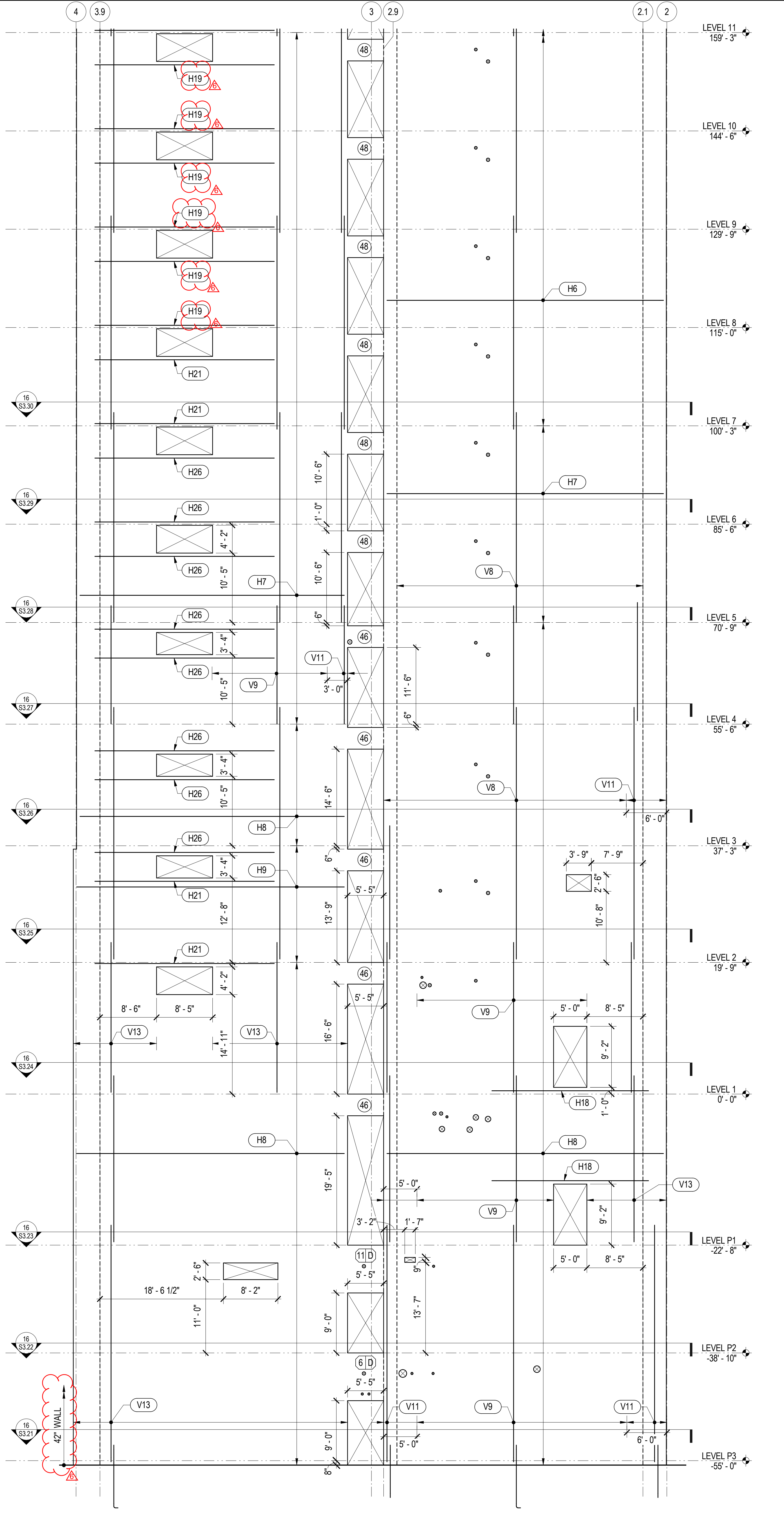
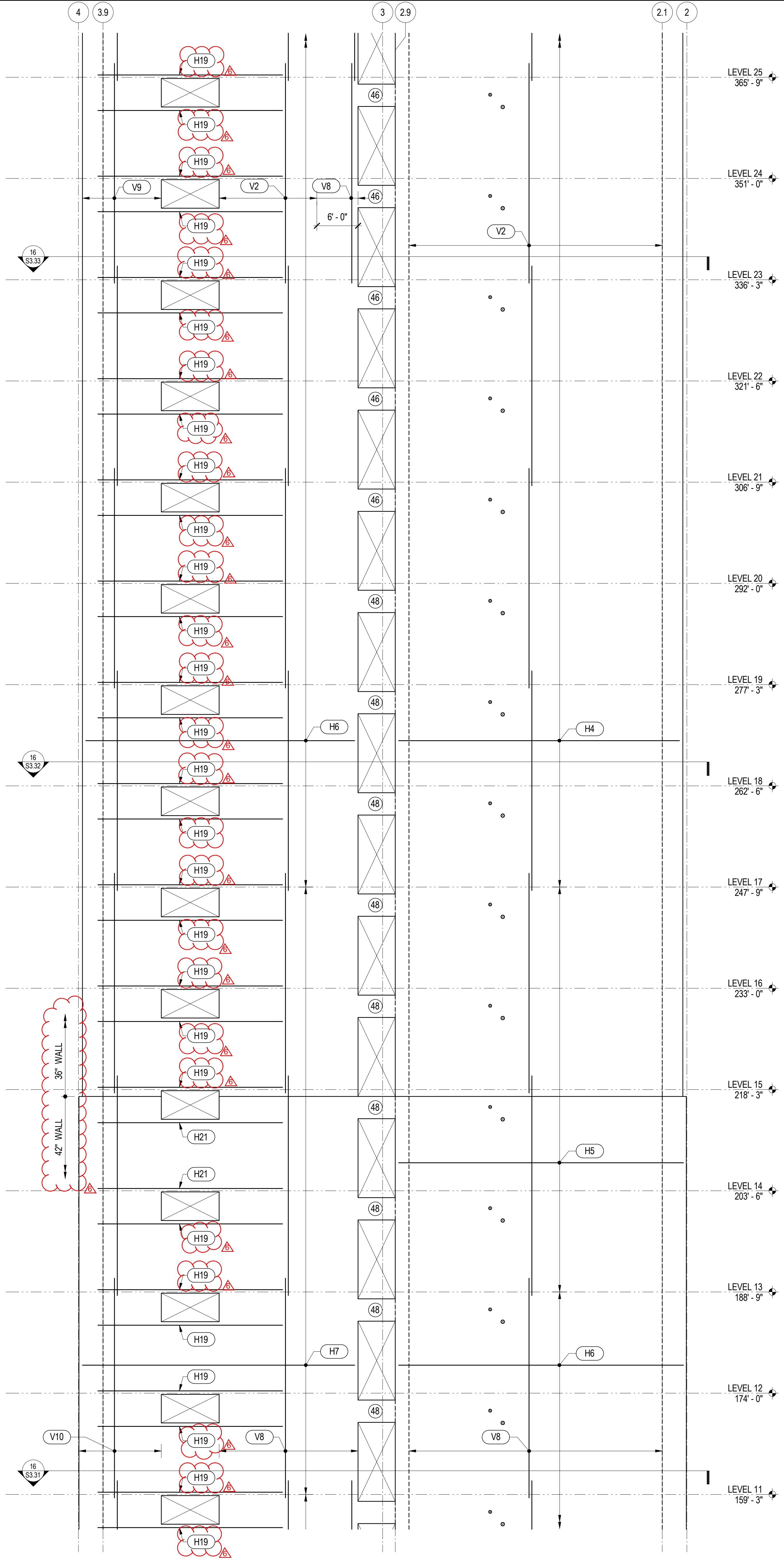
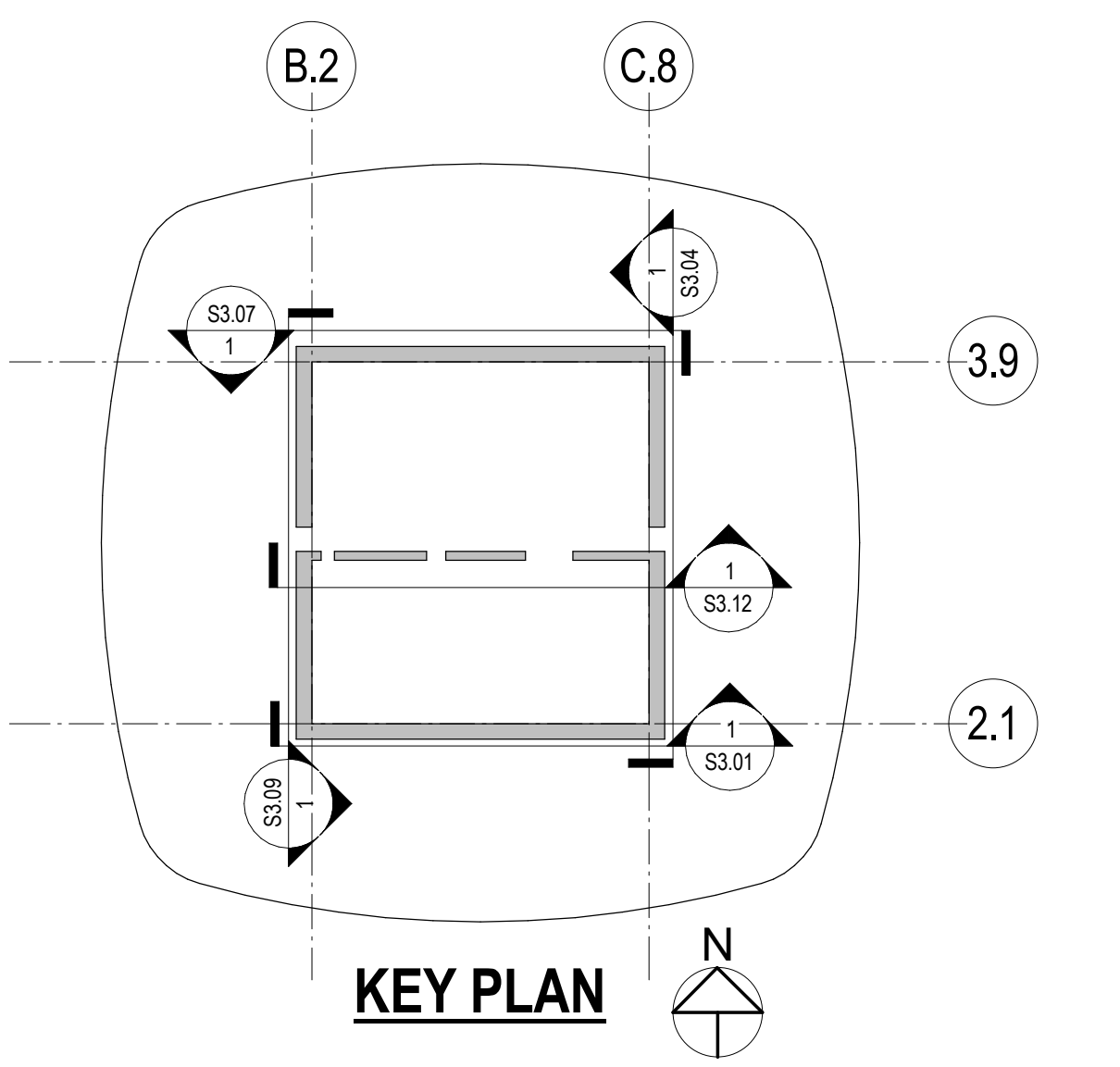
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - WEST  
1/8" = 1'-0"

4/30/2014 12:23:56 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_

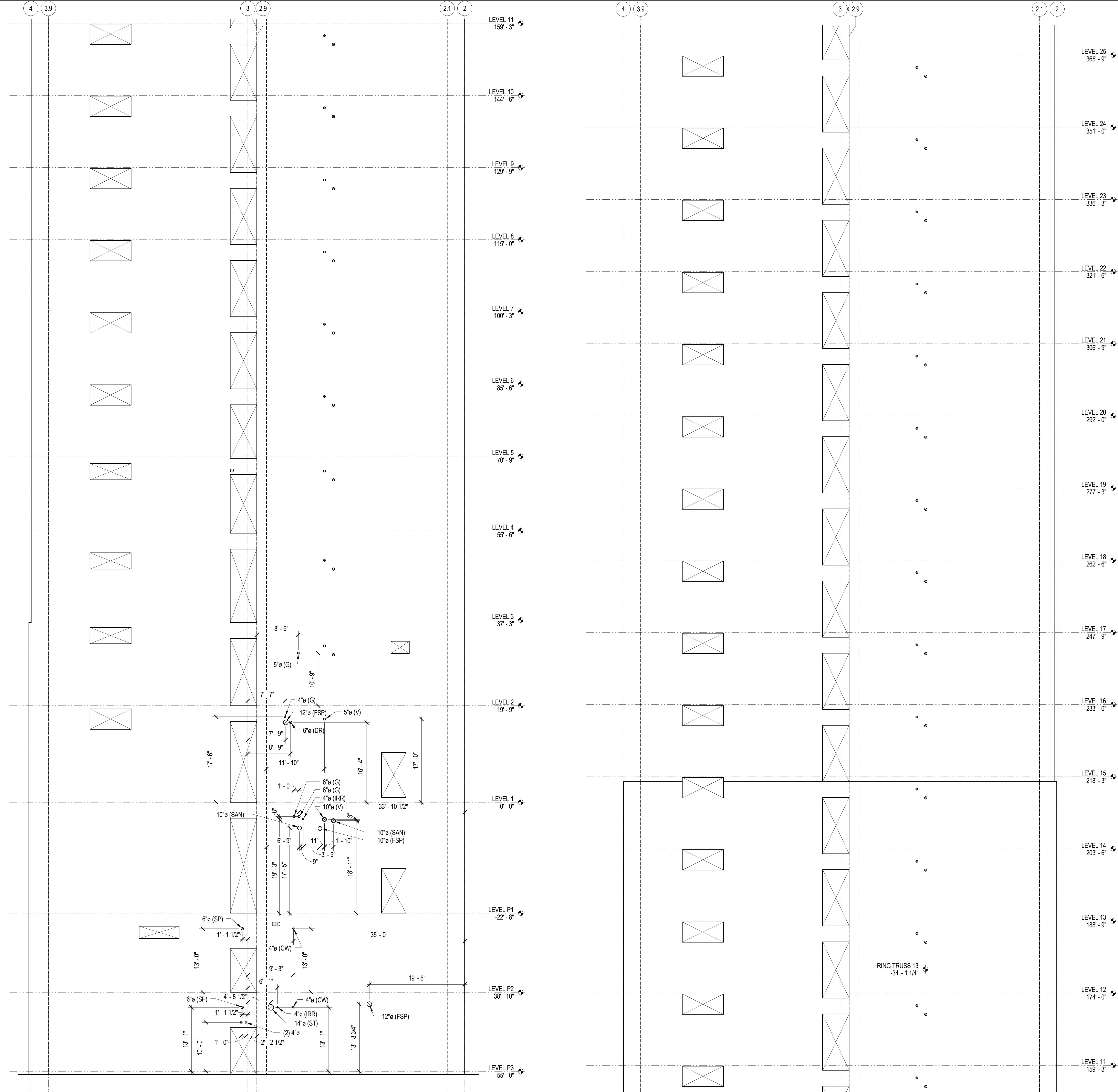
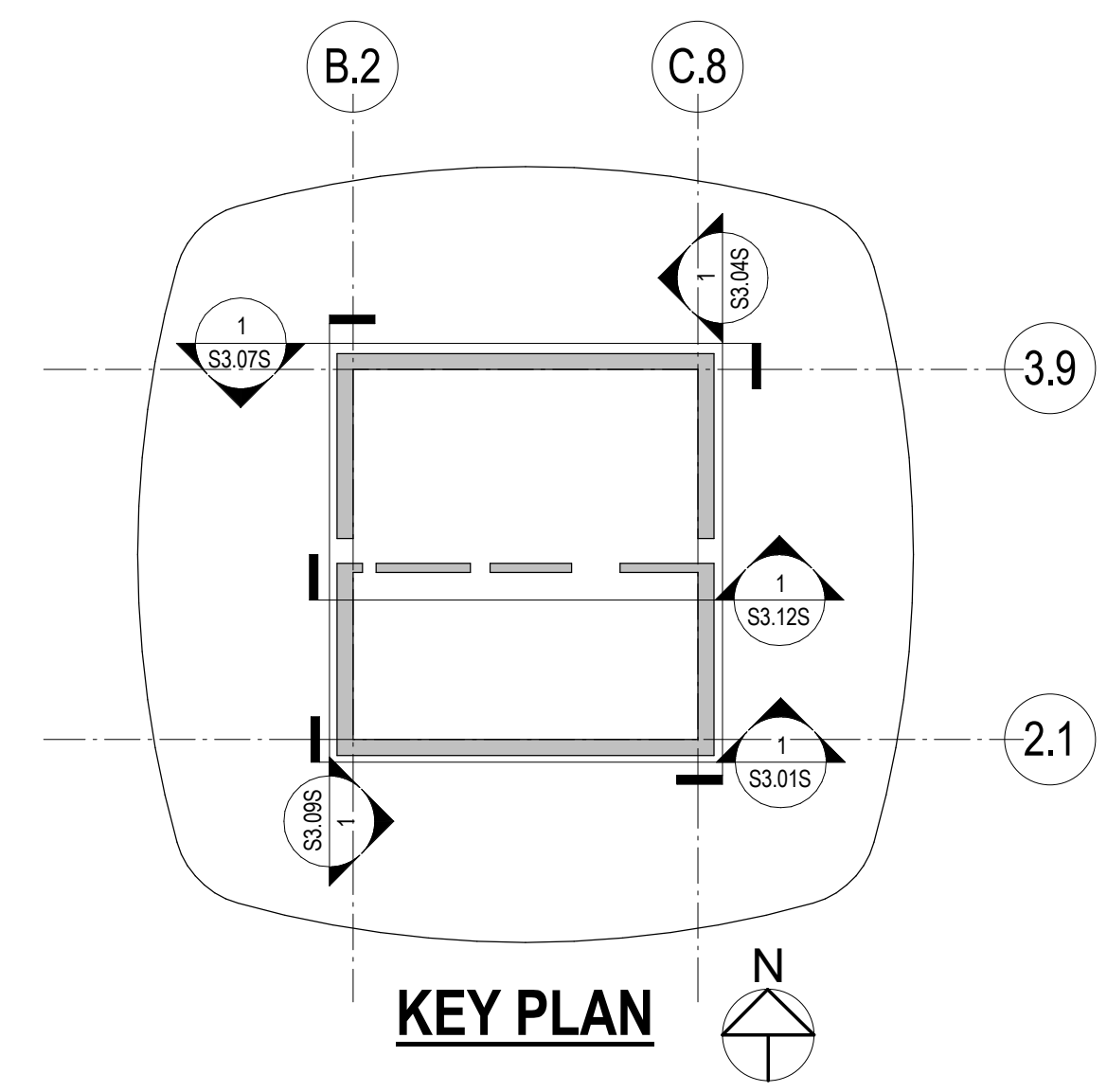
DRAWING TITLE: **SHEAR WALL ELEVATIONS**

NO. PROJECT NO. DATE: \_\_\_\_\_

DRAWING NUMBER: **S3.09**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 7:06:52 PM C:\Revit\Transbay\Twr\_MS2013\_13.rvt

**1** SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

DRAWING NUMBER: **S3.09S**

PROJECT NO.: 08044



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

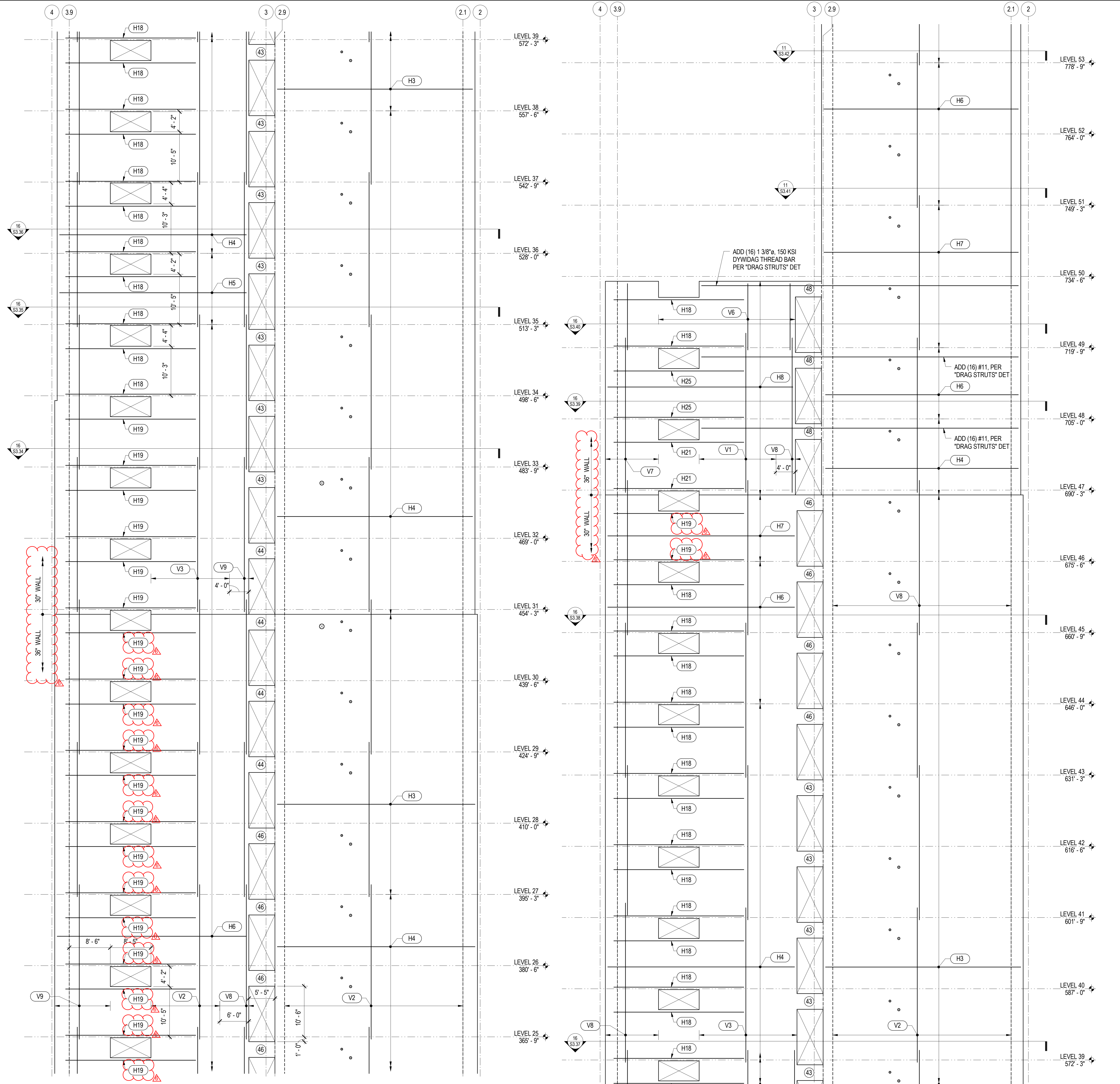
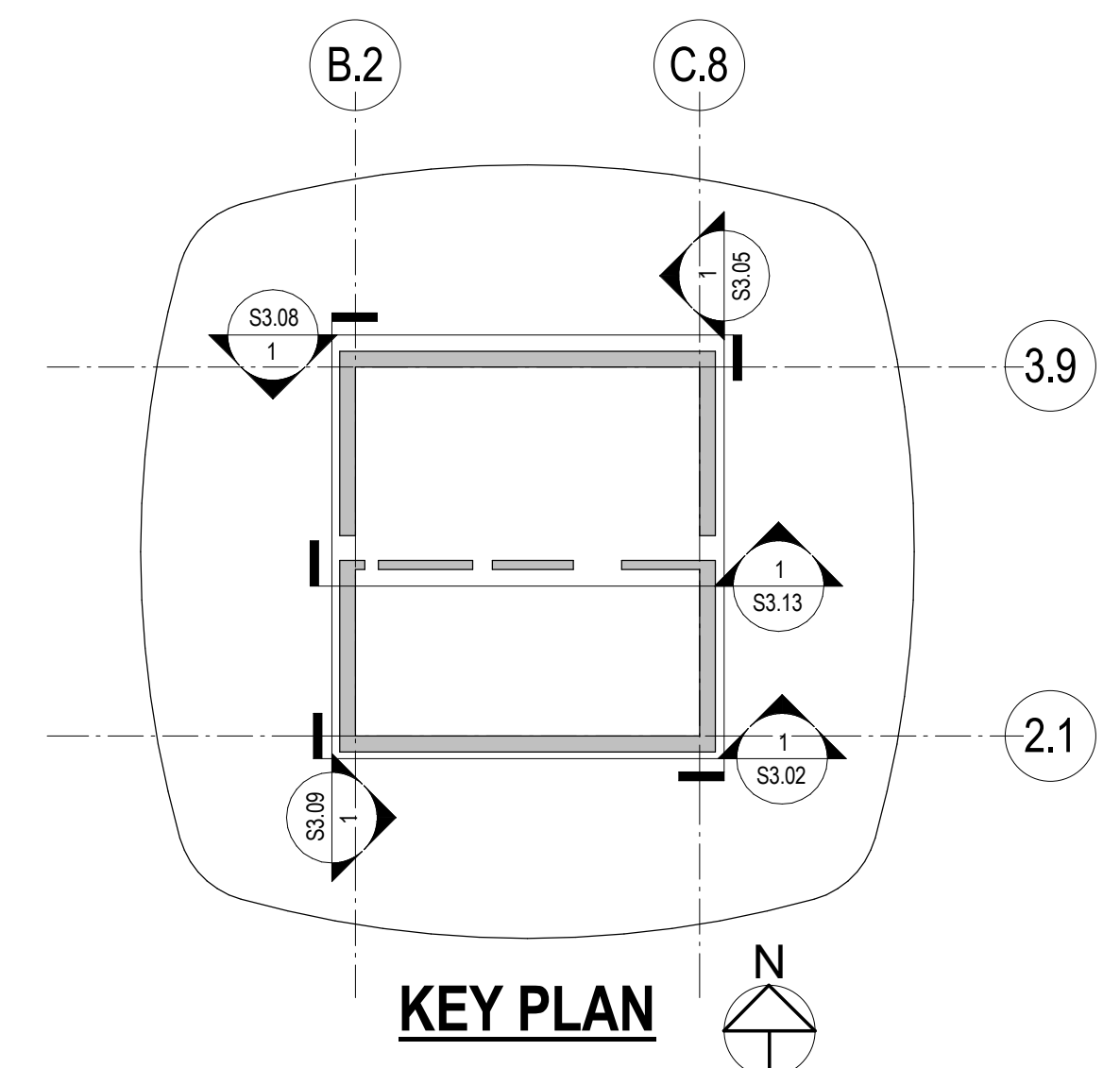
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - WEST**  
1/8" = 1'-0"

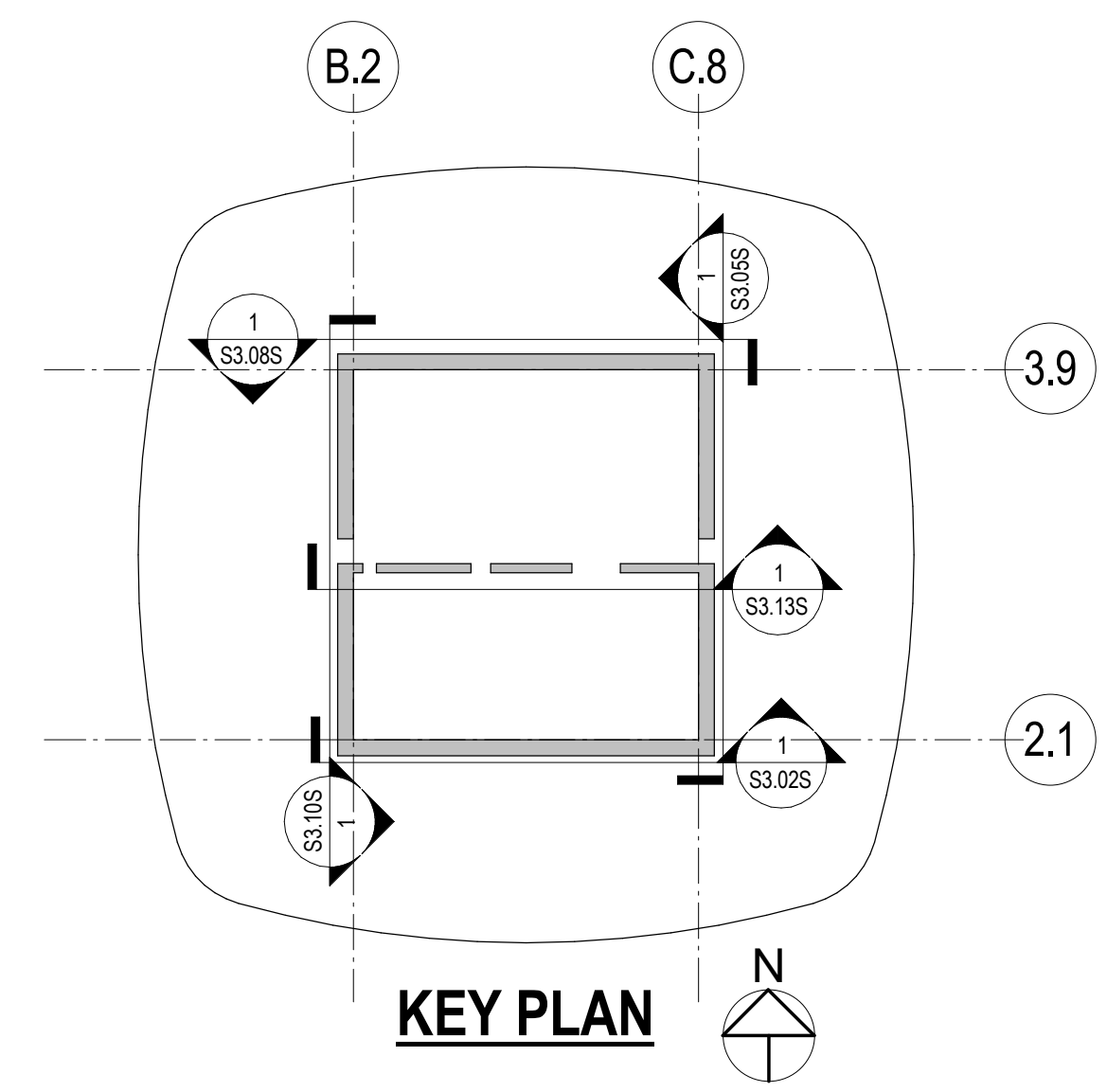
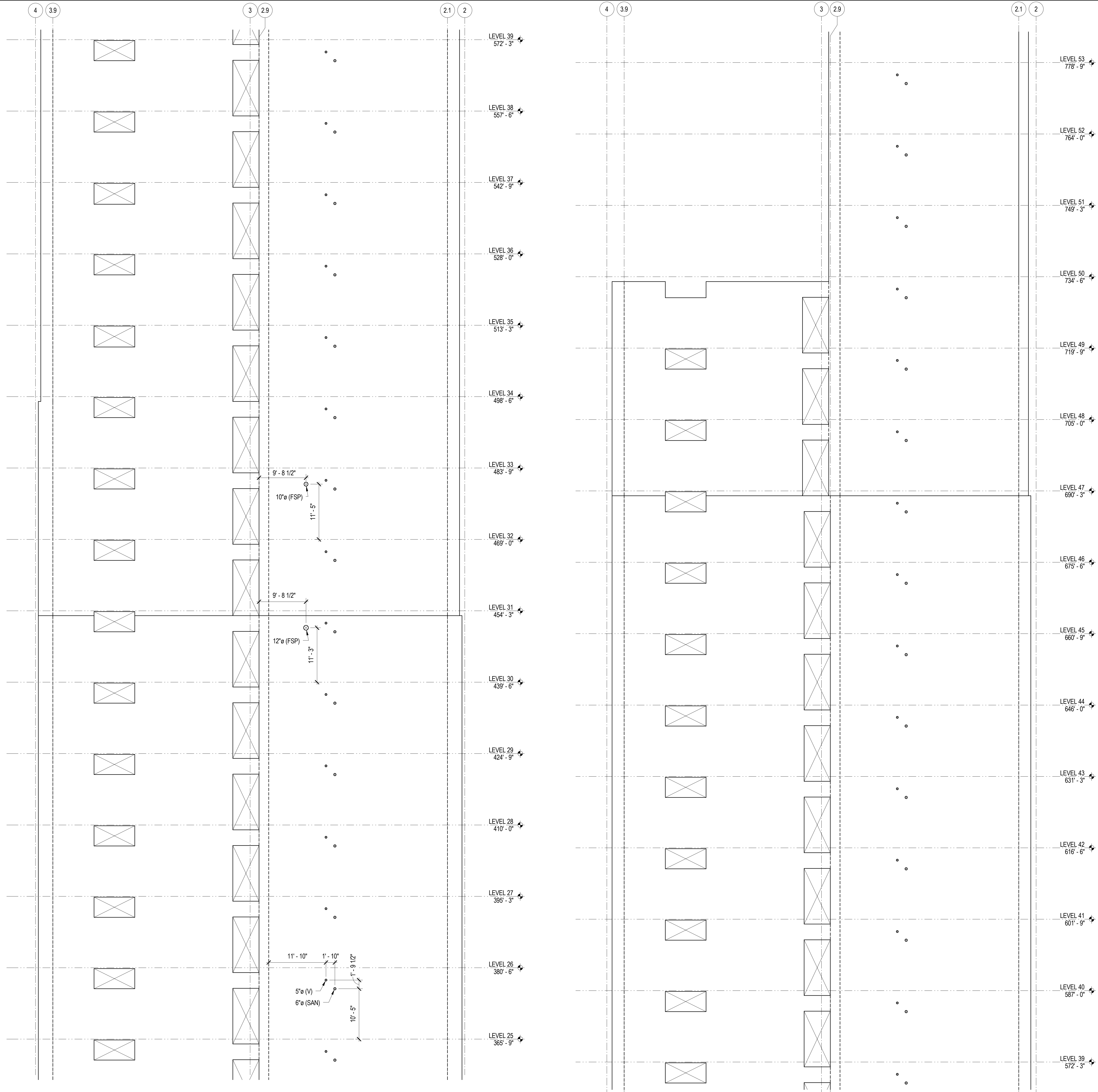
NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILE NAME: \_\_\_\_\_  
DRAWING TITLE: **SHEAR WALL ELEVATIONS**  
REV. PROJECT NO.: 08044  
DRAWING NUMBER: **S3.10**

4/29/2014 7:06:57 PM C:\Revit\Transbay\Tw\_MS2013\_13.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:07:30 PM C:\Revit\Transbay\Tw\_MSD2013\_18.rvt

1 SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. DRAWING NUMBER

08044 S3.10S



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

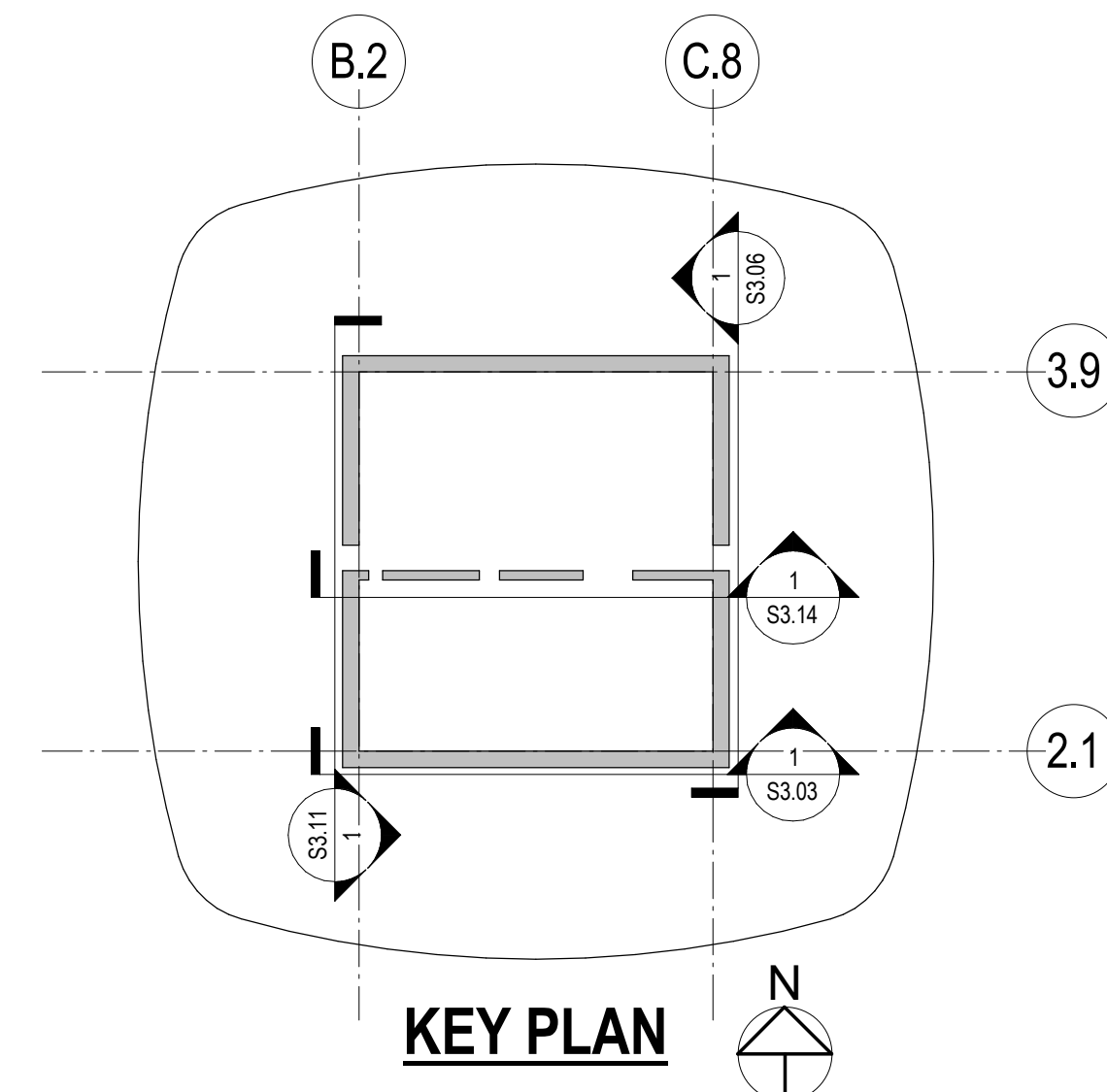
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

NOTES:

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (1) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $L_{sb}$  UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $L_{sb1}$  WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - WEST  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

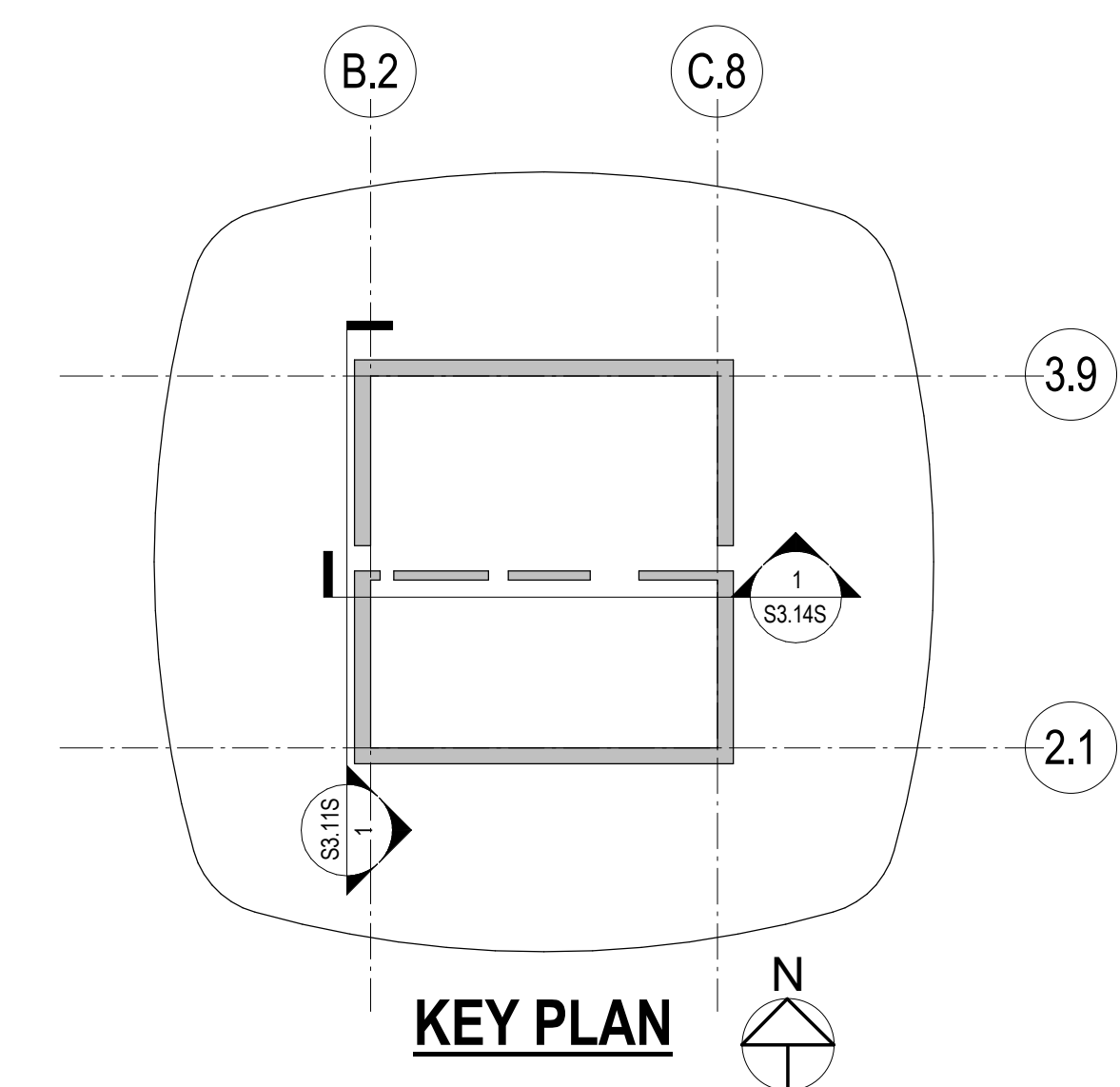
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.11S



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

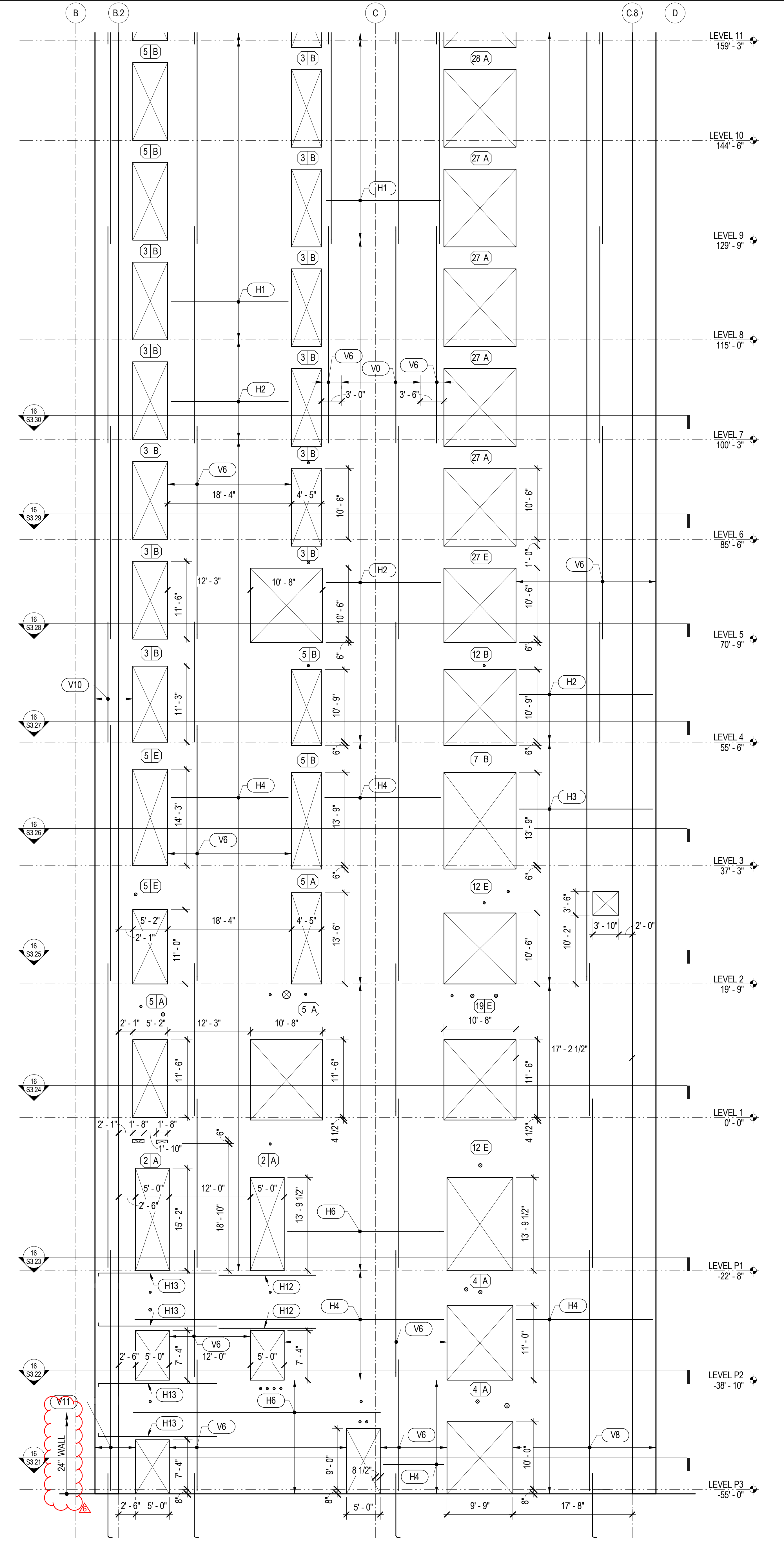
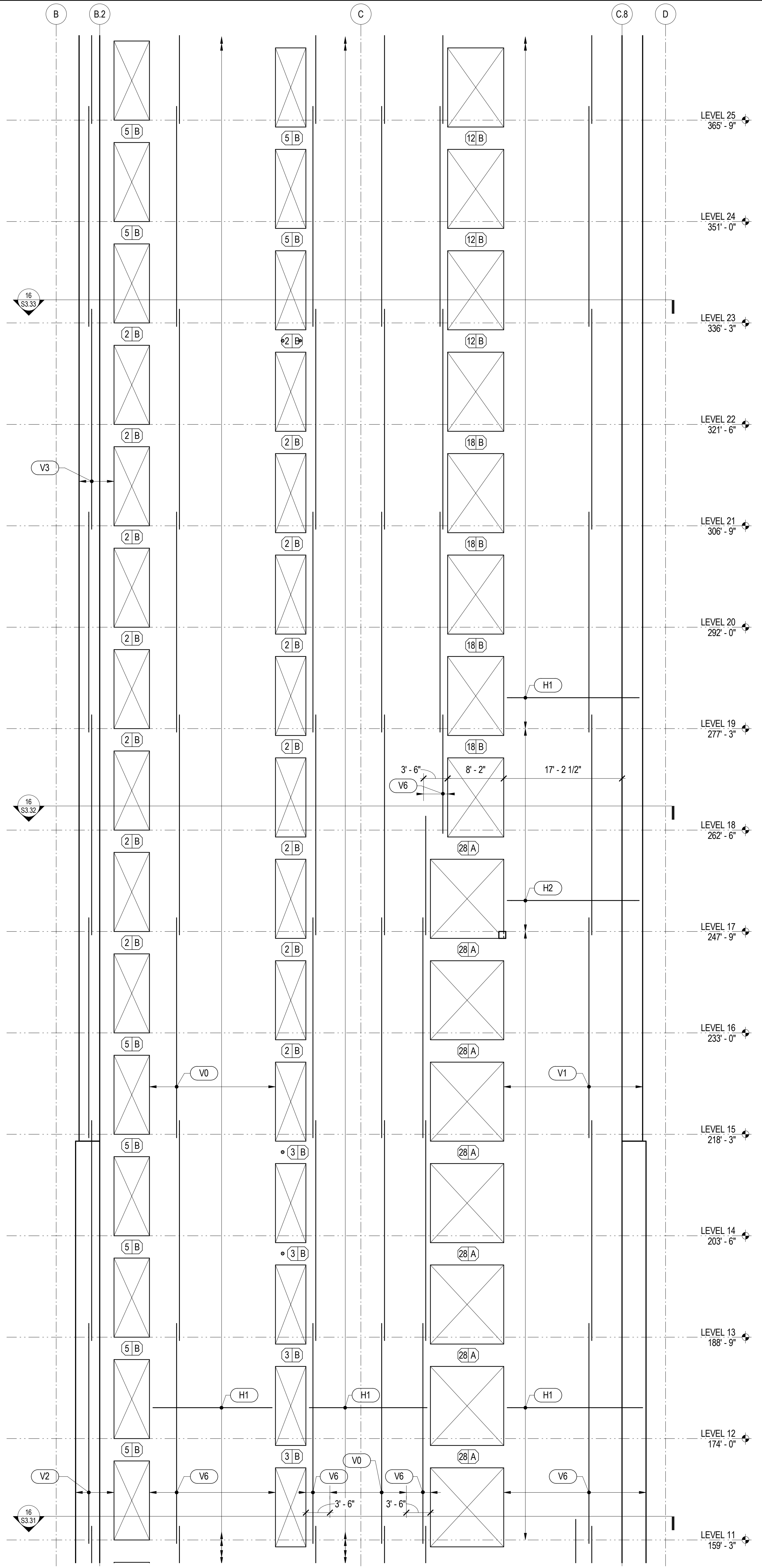
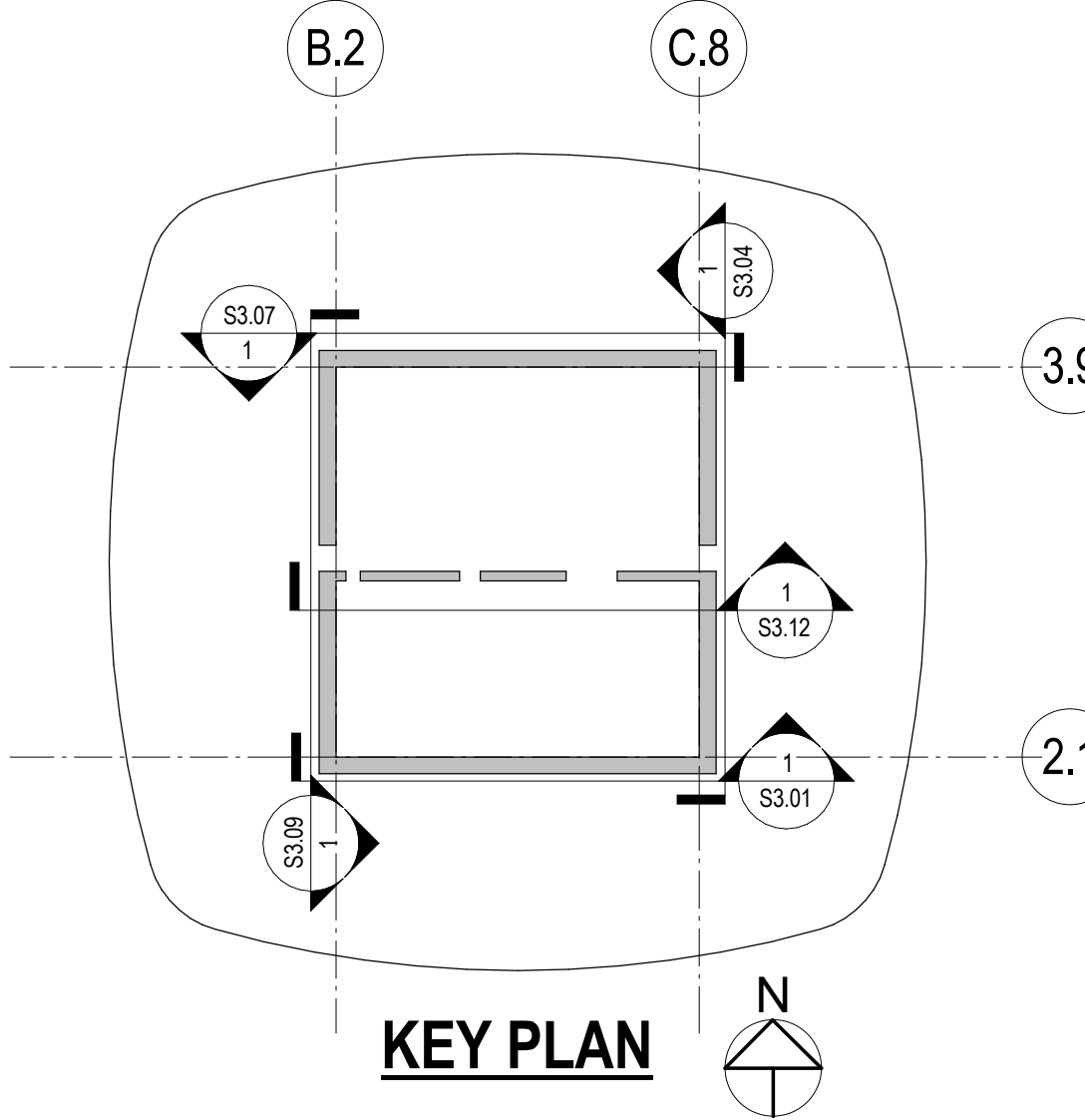
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS".
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS, CLEAR SPACING BETWEEN LAYERS TO BE  $\phi_b$  AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - INTERIOR**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_  
DRAWING TITLE: **SHEAR WALL ELEVATIONS**  
DRAWING NUMBER: **S3.12**  
PROJECT NO.: 08044

4/30/2014 12:24:06 PM C:\Revit\Transbay\Twe\_MS2013\_1.rvt





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

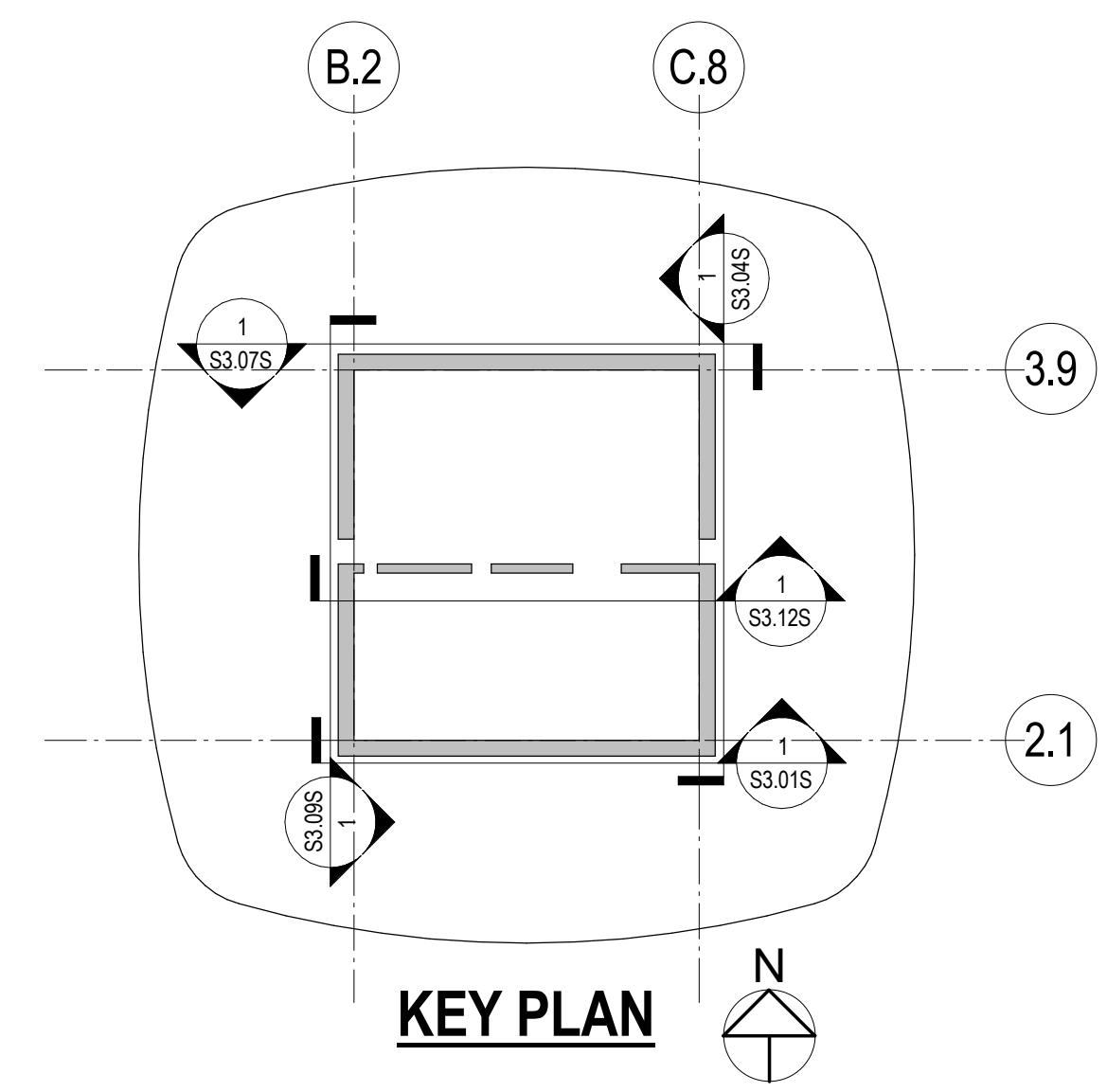
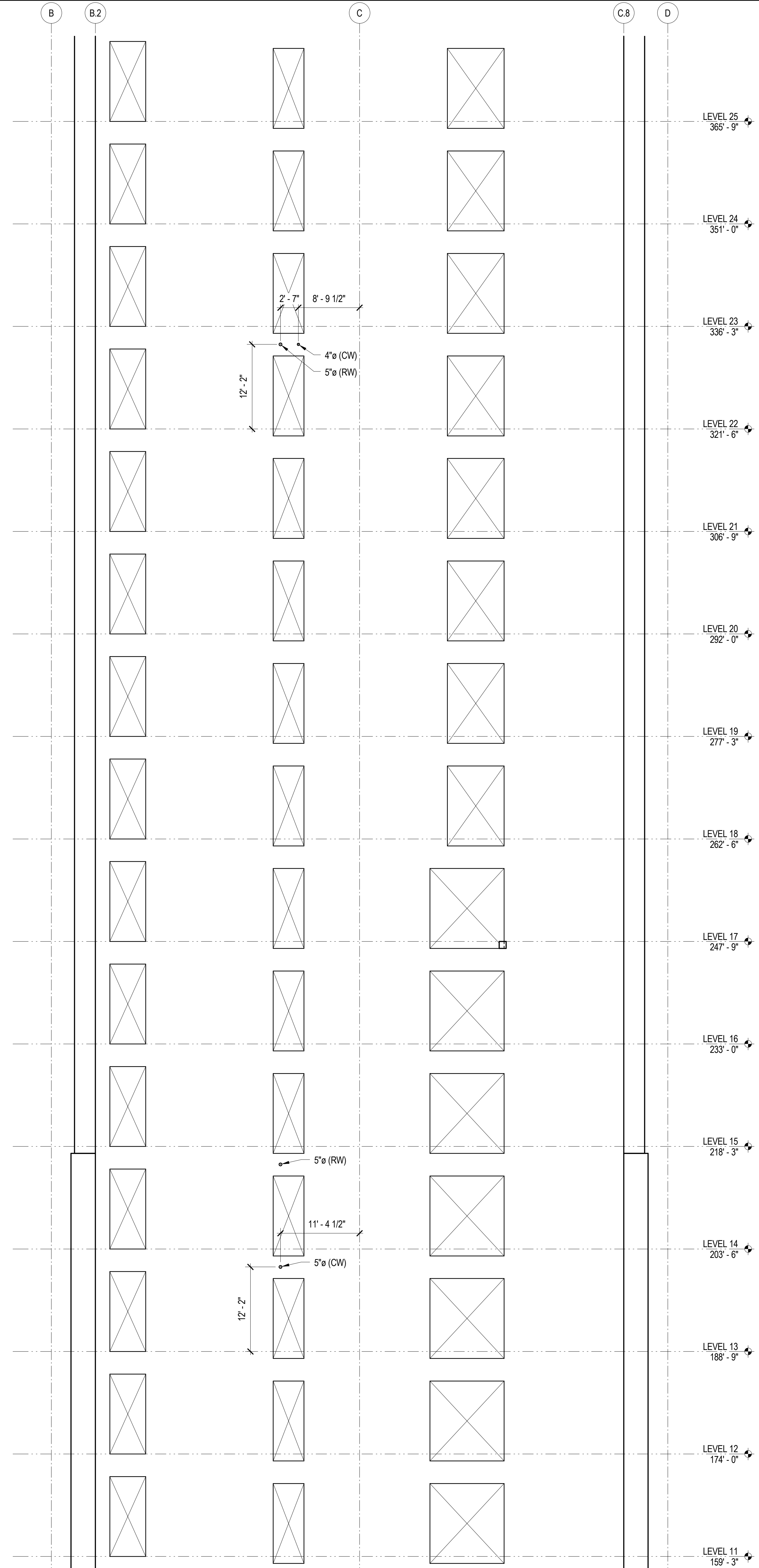
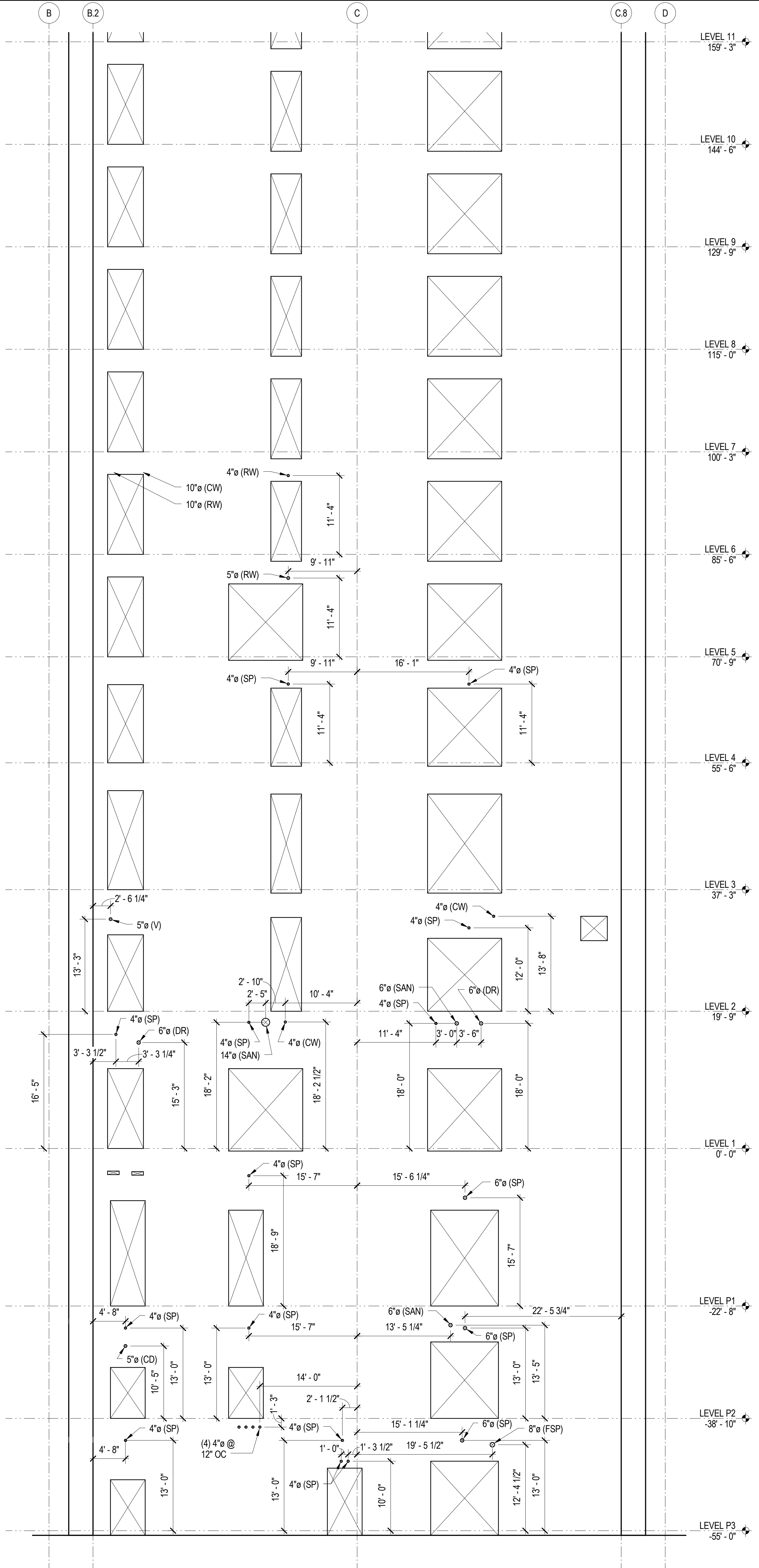
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/30/2014 12:24:09 PM C:\Draw\Transbay\Tw\_MS2013\_11s.rvt

1 SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. DATE  
08044

DRAWING NUMBER  
**S3.12S**

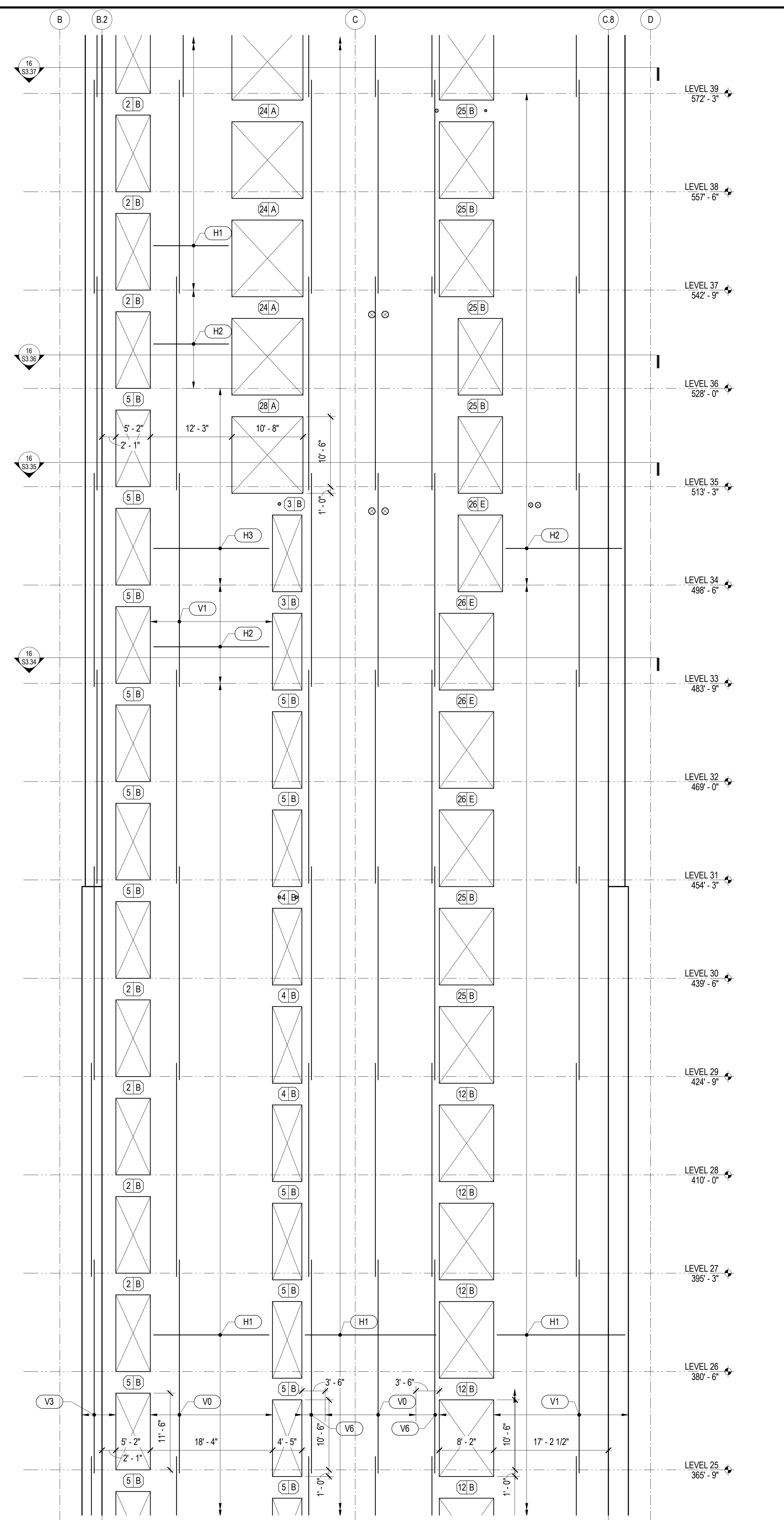
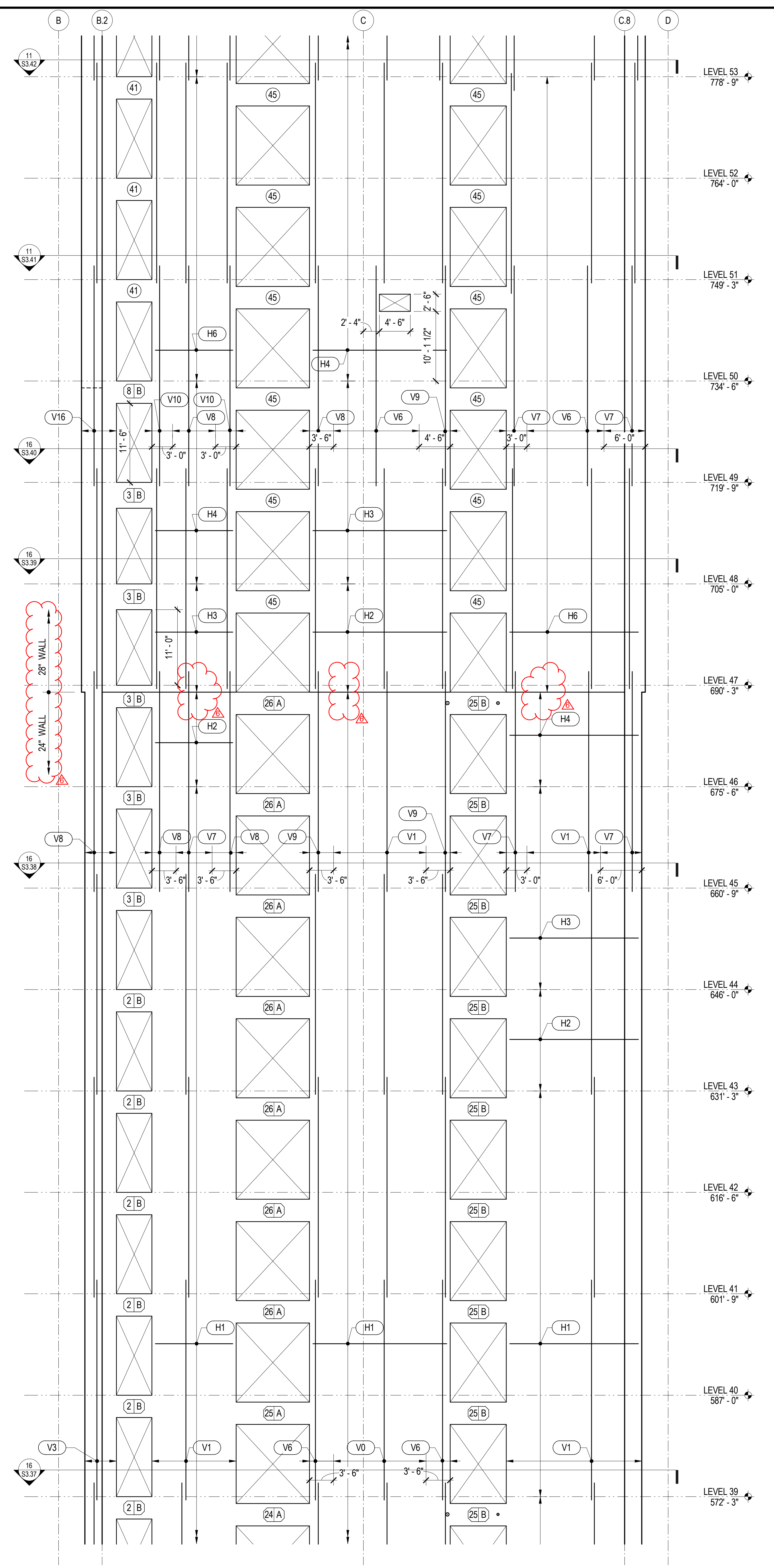
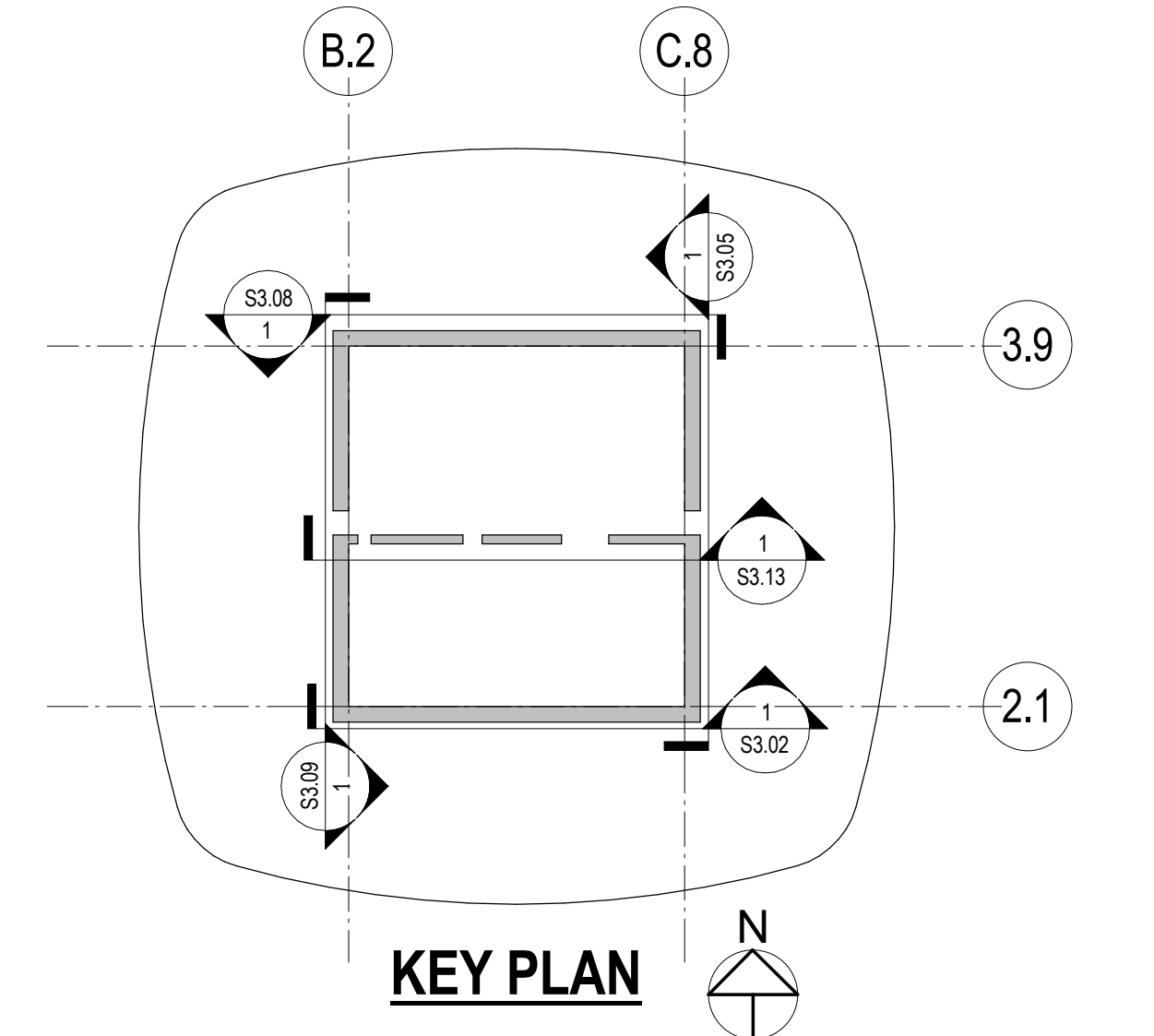


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window/Westing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $L_{sb}$  UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $L_{sb1}$  WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |
- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
  - DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
  - FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $db$  AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - INTERIOR**  
1/8" = 1'-0"

4/29/2014 7:07:22 PM C:\Revit\Transbay\TW\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

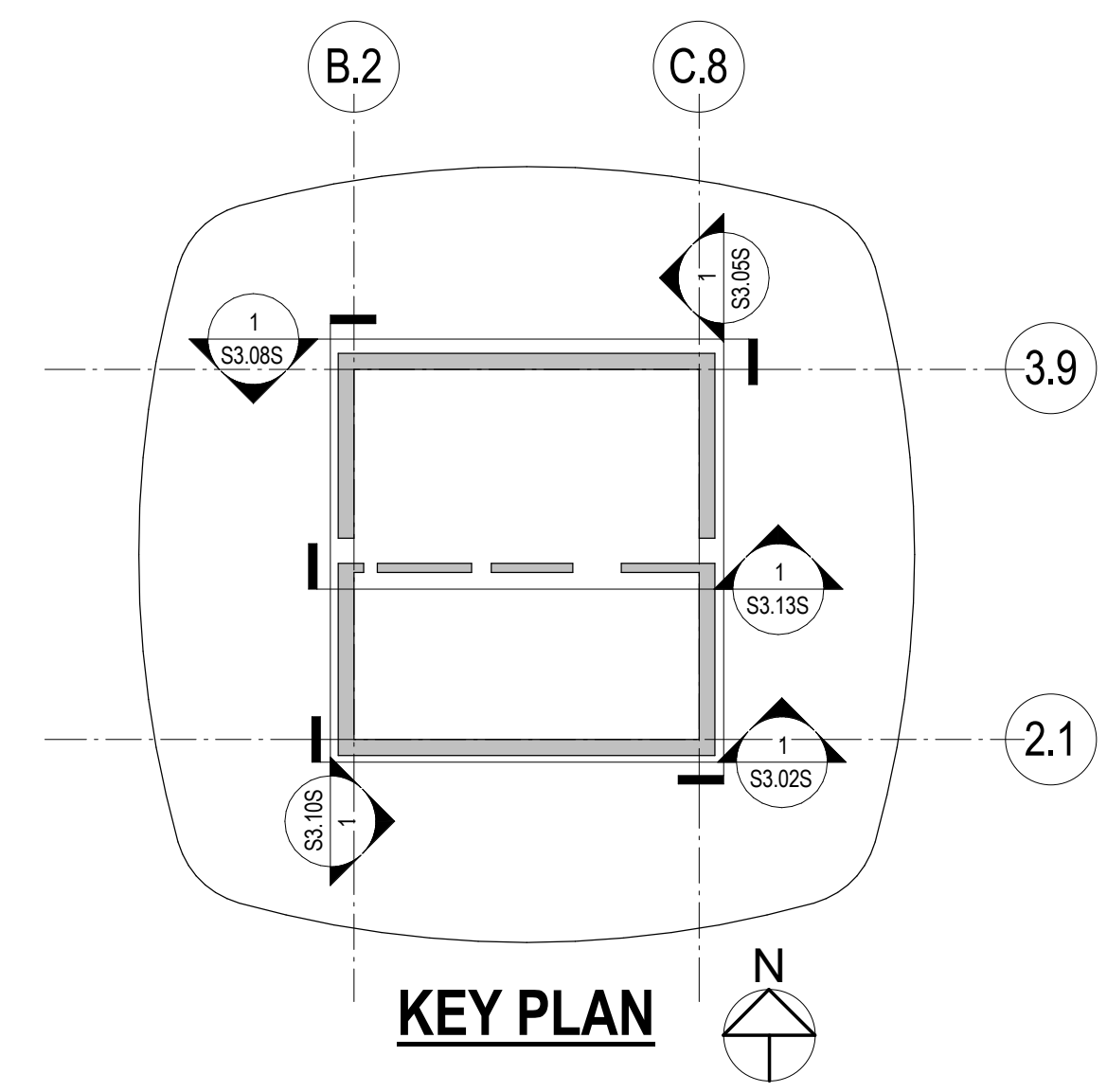
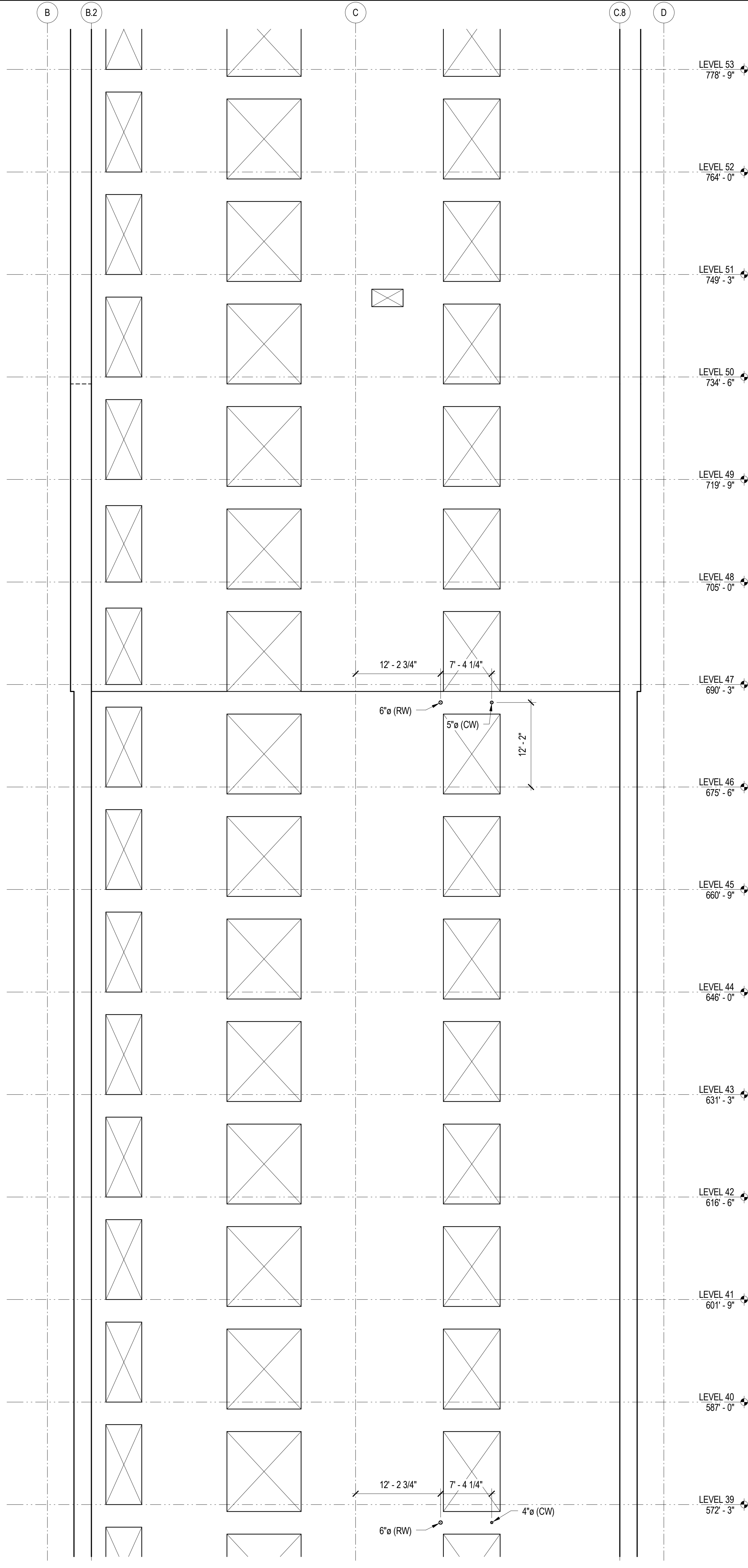
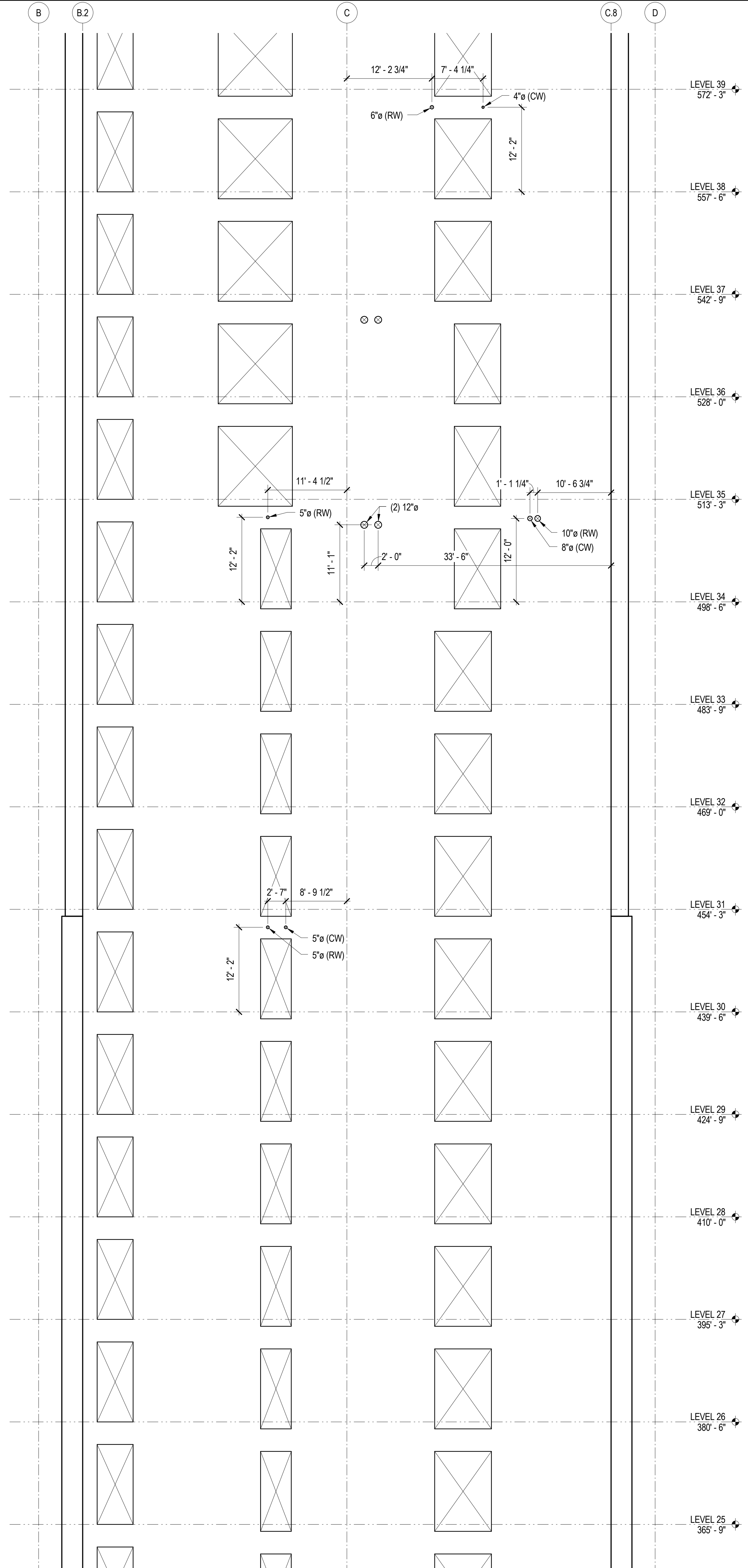
CAD FILENAME: \_\_\_\_\_

DRAWING TITLE: **SHEAR WALL ELEVATIONS**

PROJECT NO. 08044 DRAWING NUMBER **S3.13**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:07:25 PM C:\Revit\Transbay\TW\_MS2013\_116.rvt

1 SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.13S



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

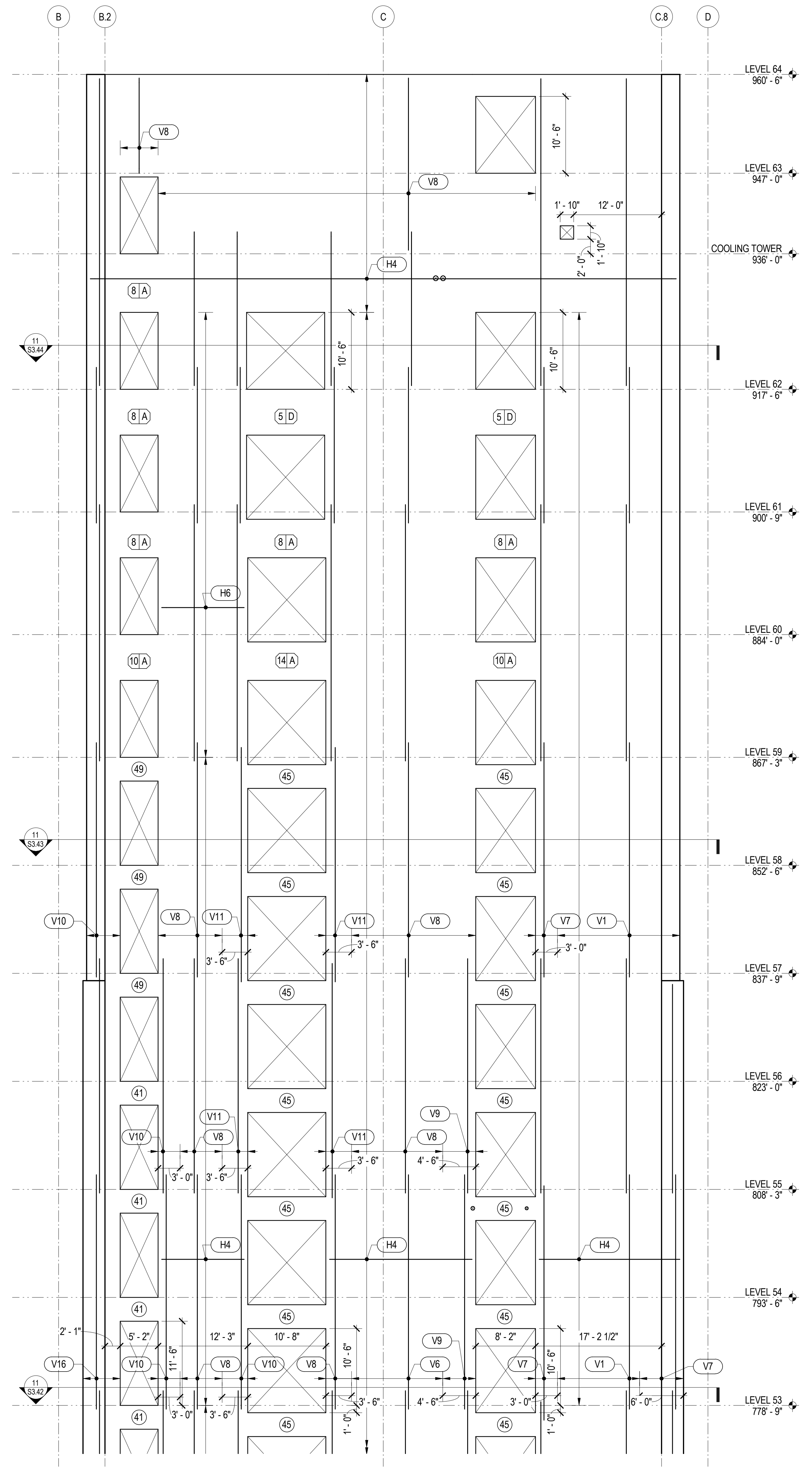
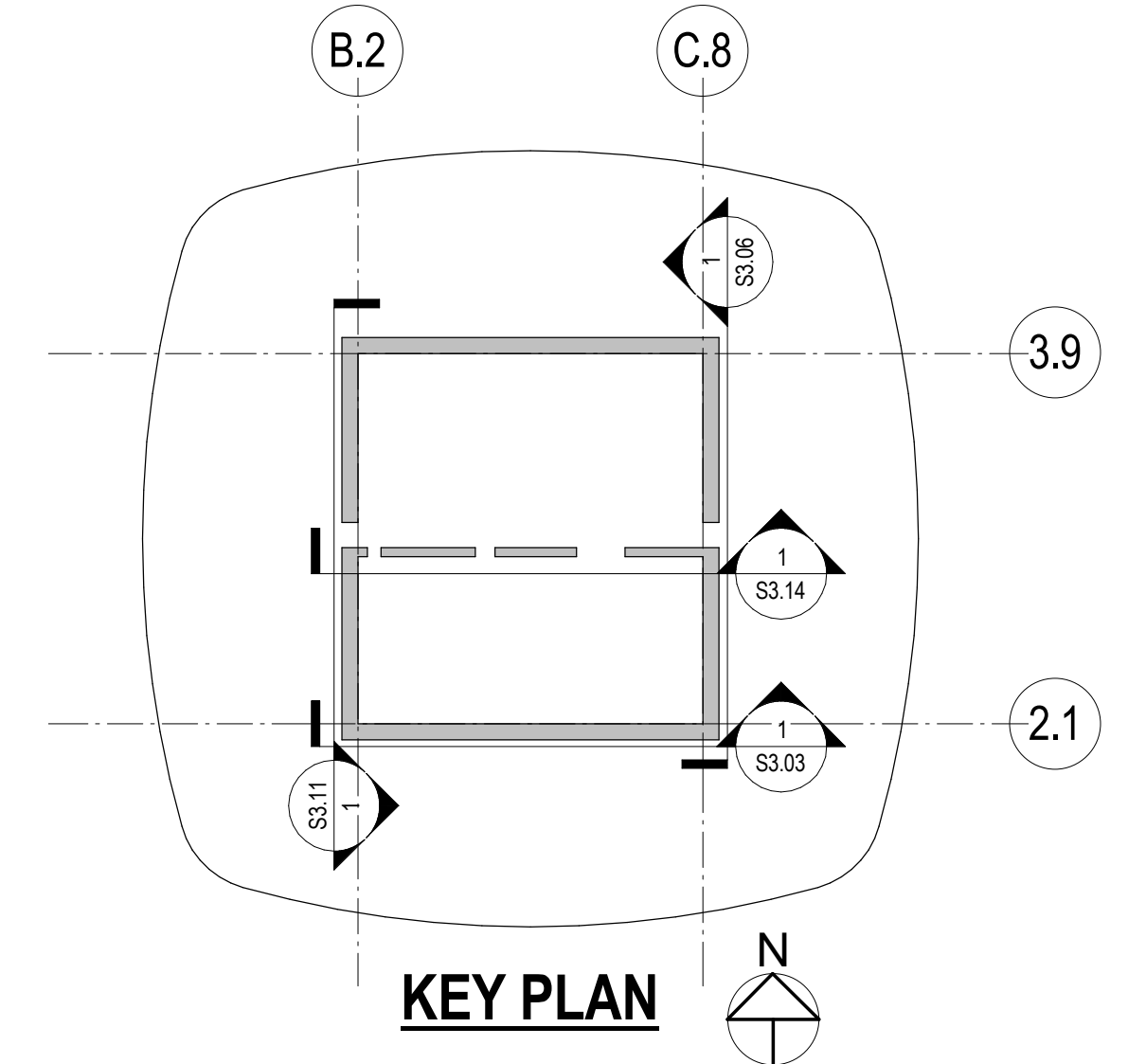
VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (41) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - INTERIOR  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044 DRAWING NUMBER S3.14



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

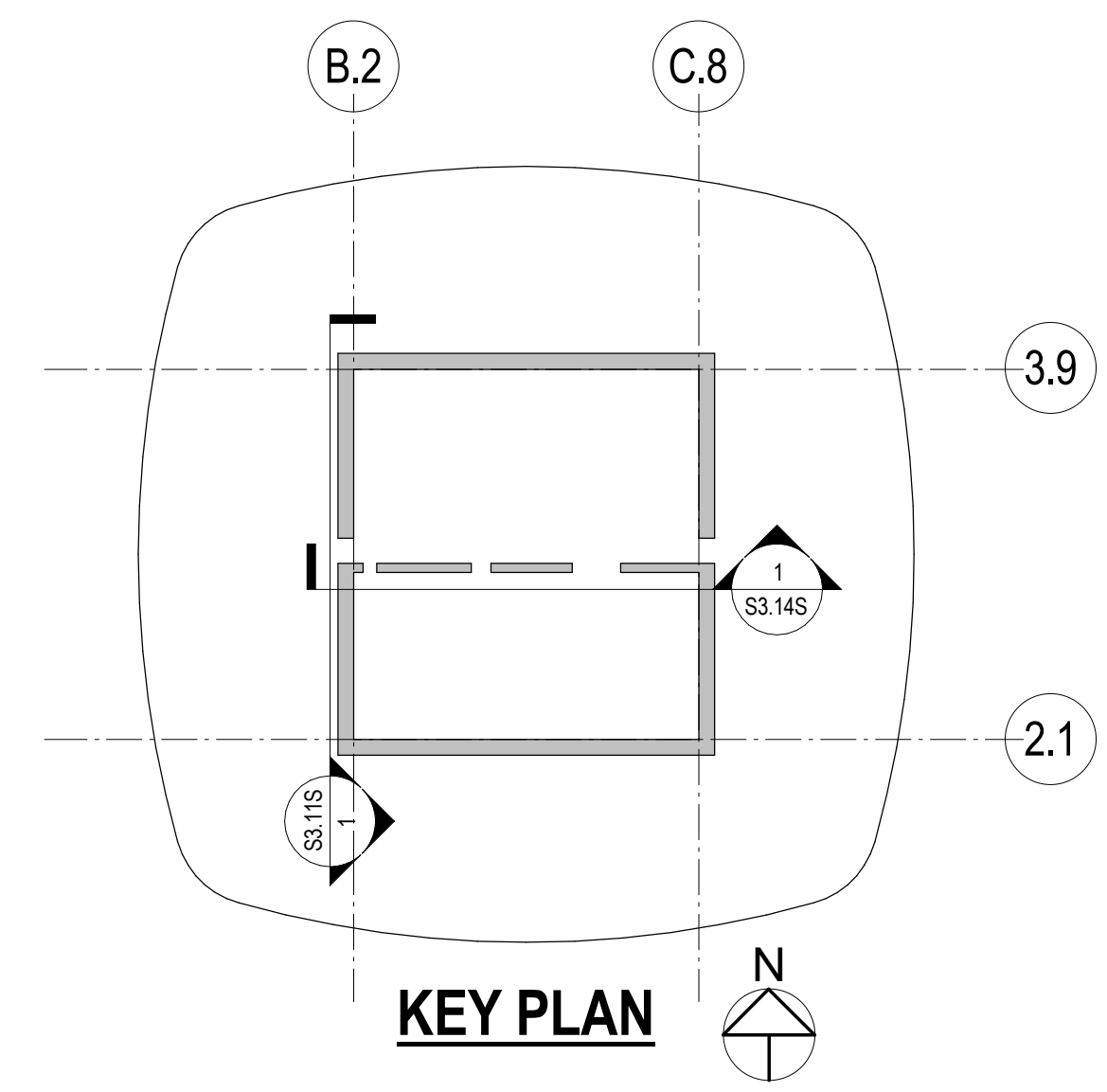
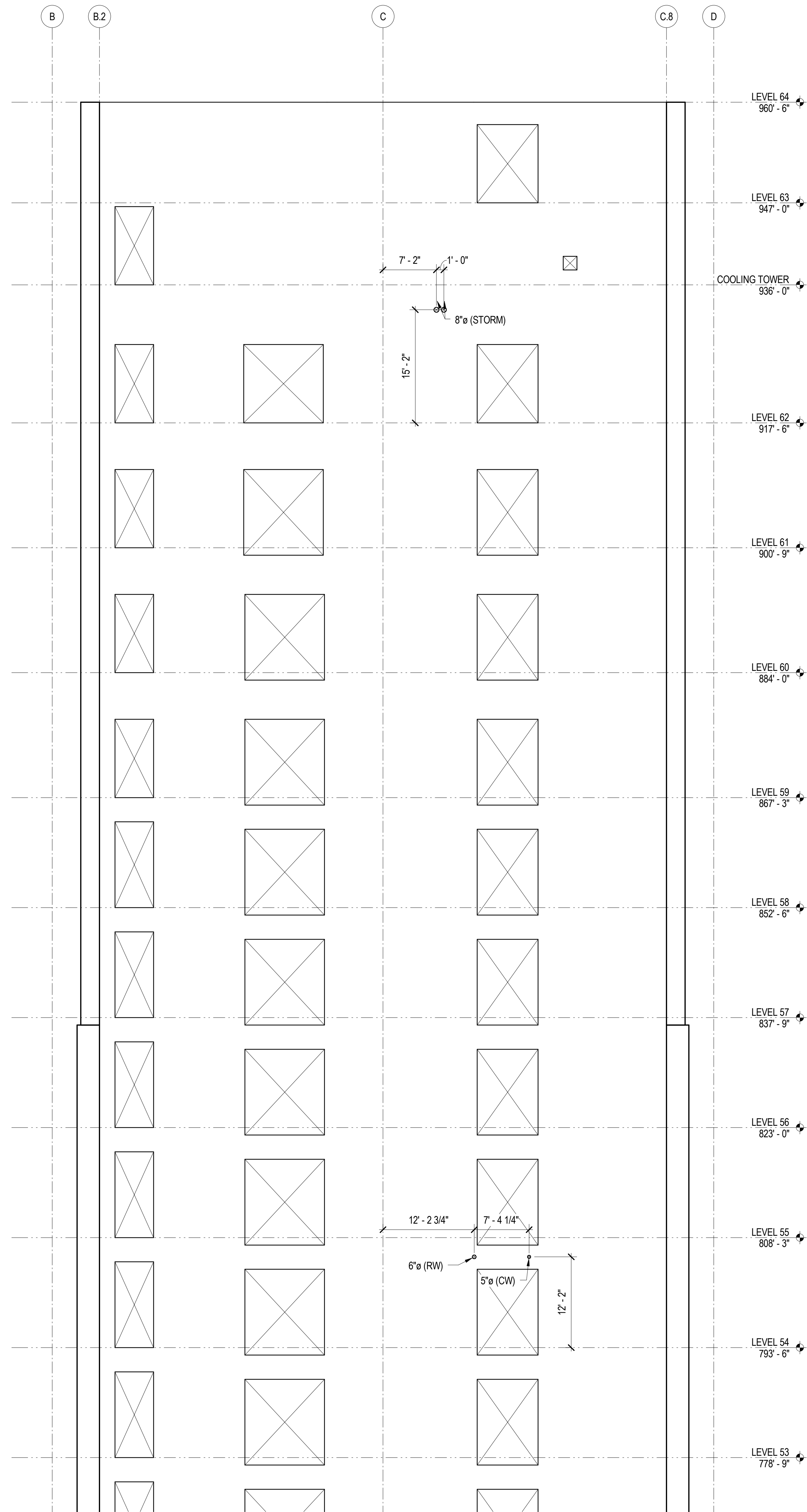
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

4/28/2014 7:07:33 PM C:\Revit\Transbay\Tw\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

PROJECT NO. 08044

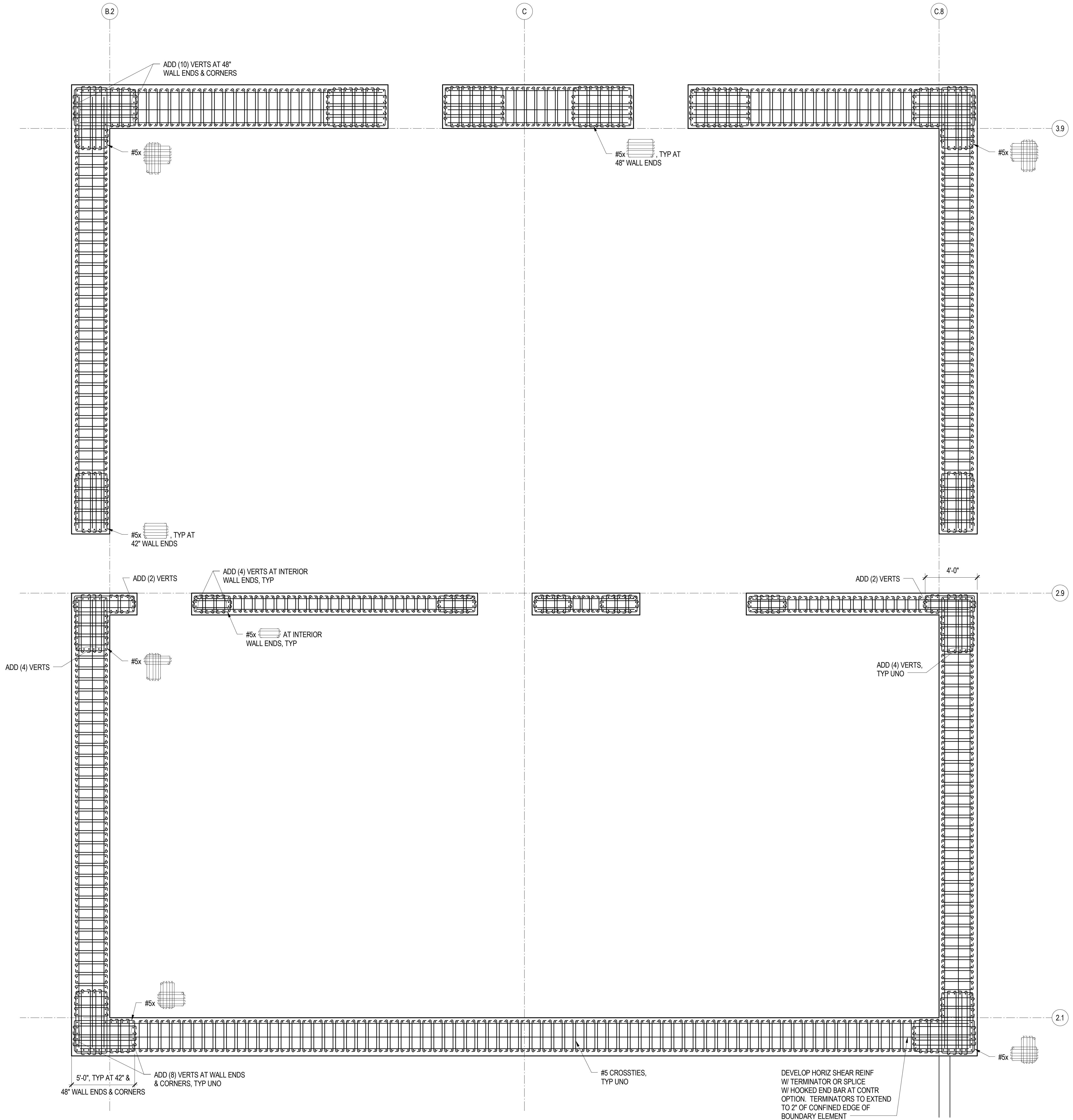
DRAWING NUMBER **S3.14S**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.21



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:35 PM C:\Revit\Transbay\Tw\_MS2013\_18.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

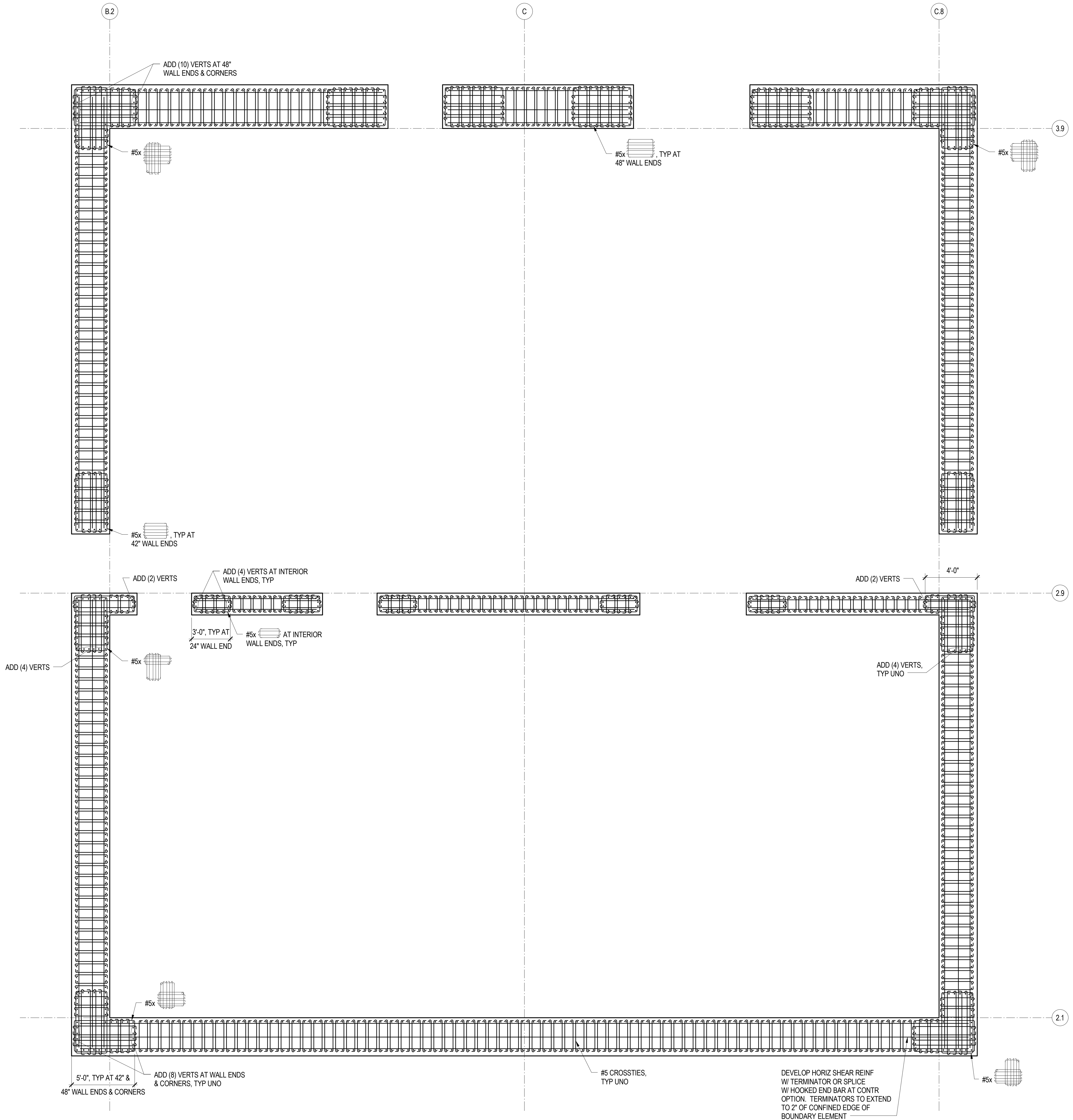
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.22



NOTES:  
1. ALL CROSSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

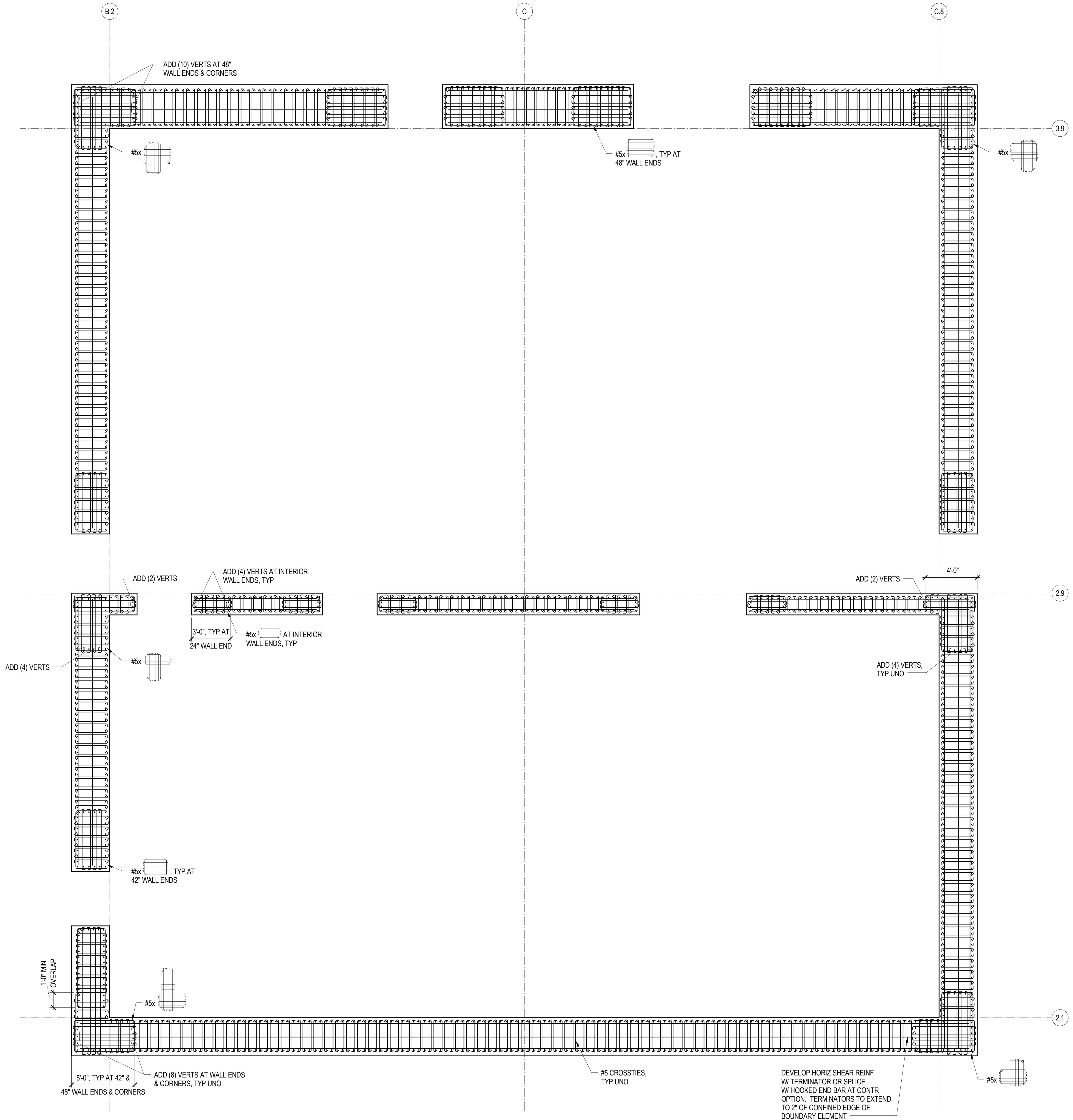
4/28/2014 7:07:38 PM C:\Revit\Transbay\Tw\_MS2013\_18.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.23



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVEL P1  
1/4" = 1'-0"

4/28/2014 7:07:41 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

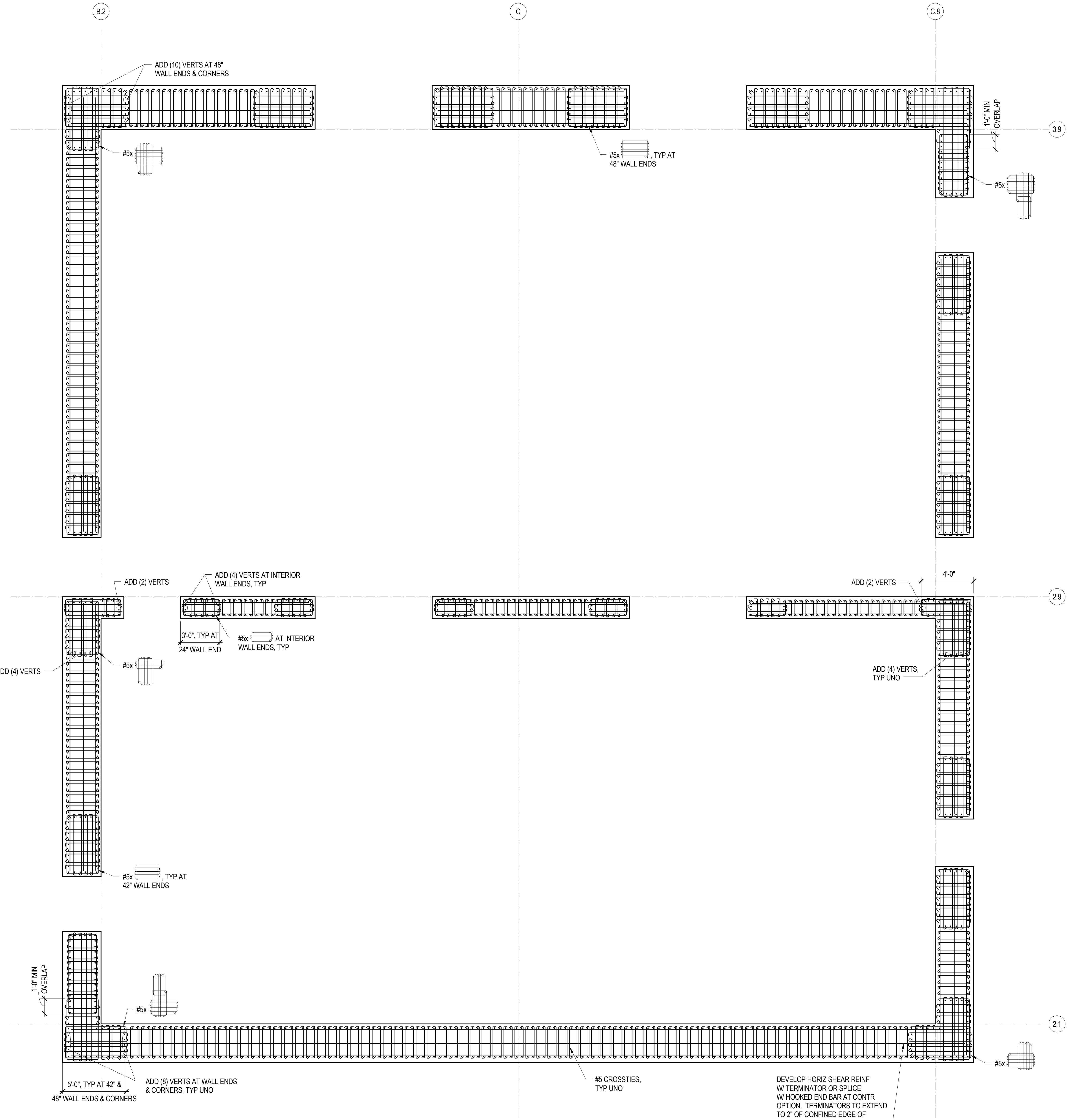
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.24



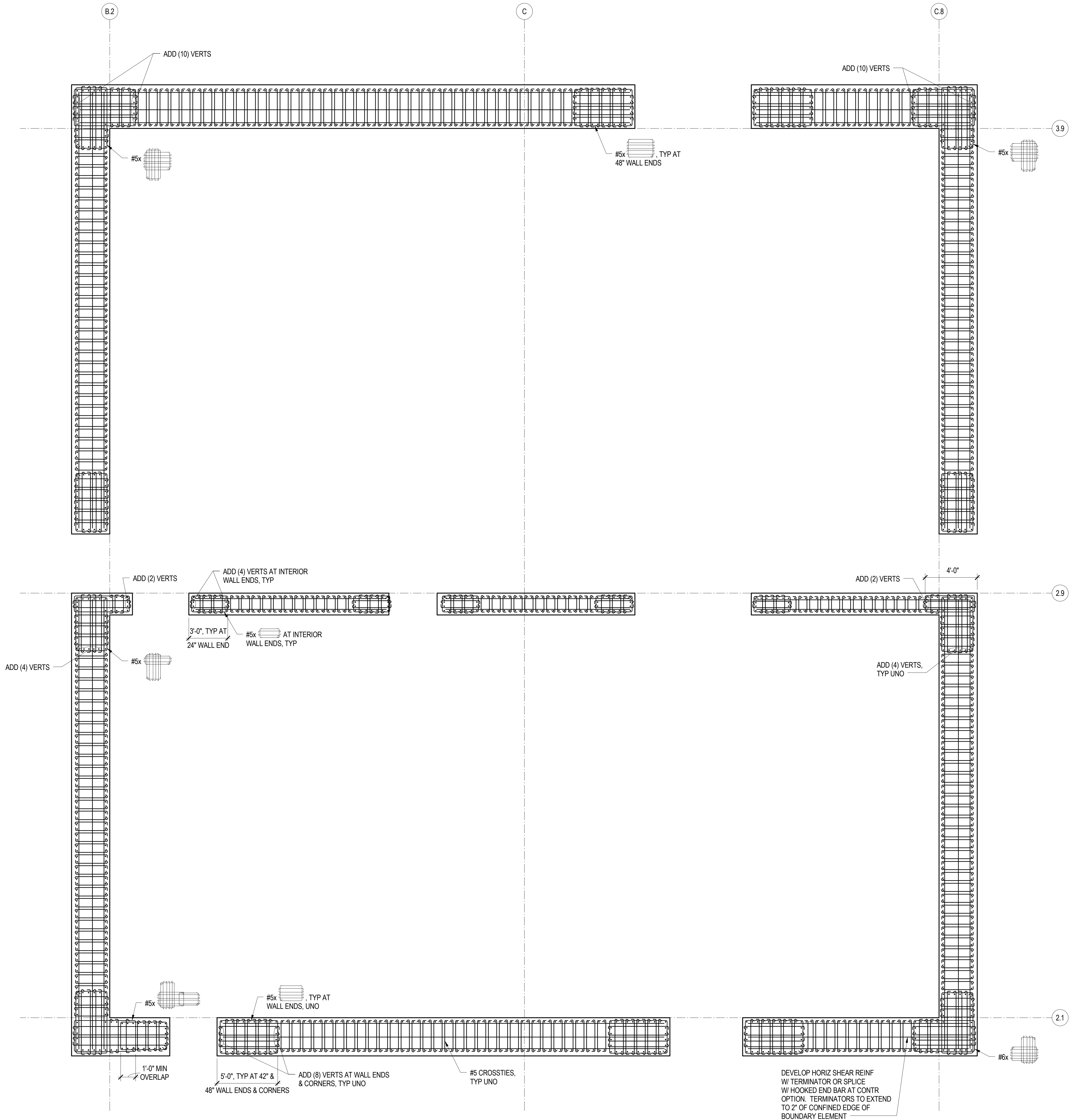
NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.25</b>



**NOTES:**  
1. ALL CROSSIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

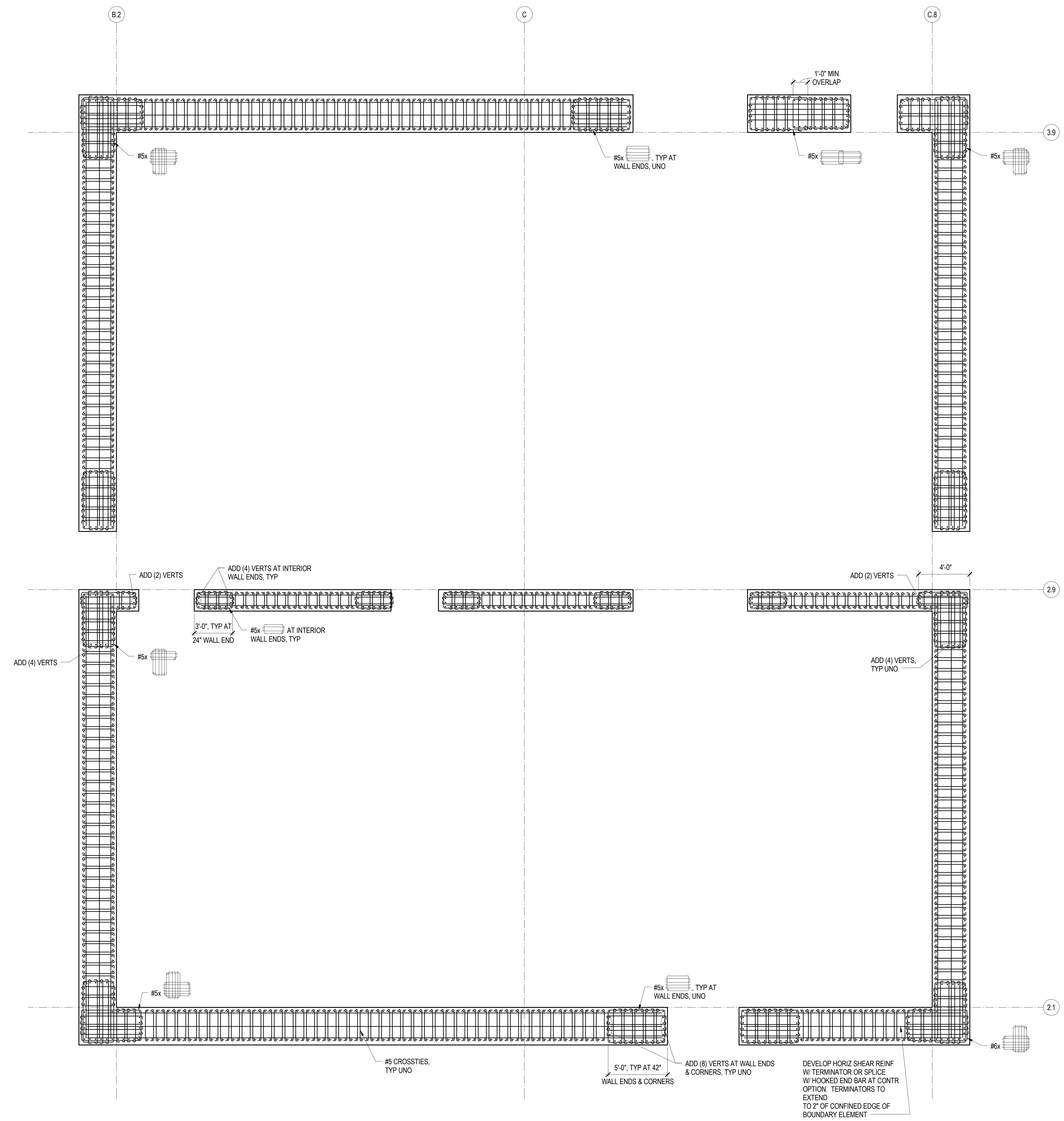
4/28/2014 7:07:46 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt  
**16** SHEAR WALL SECTION AT LEVEL 2  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.26



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

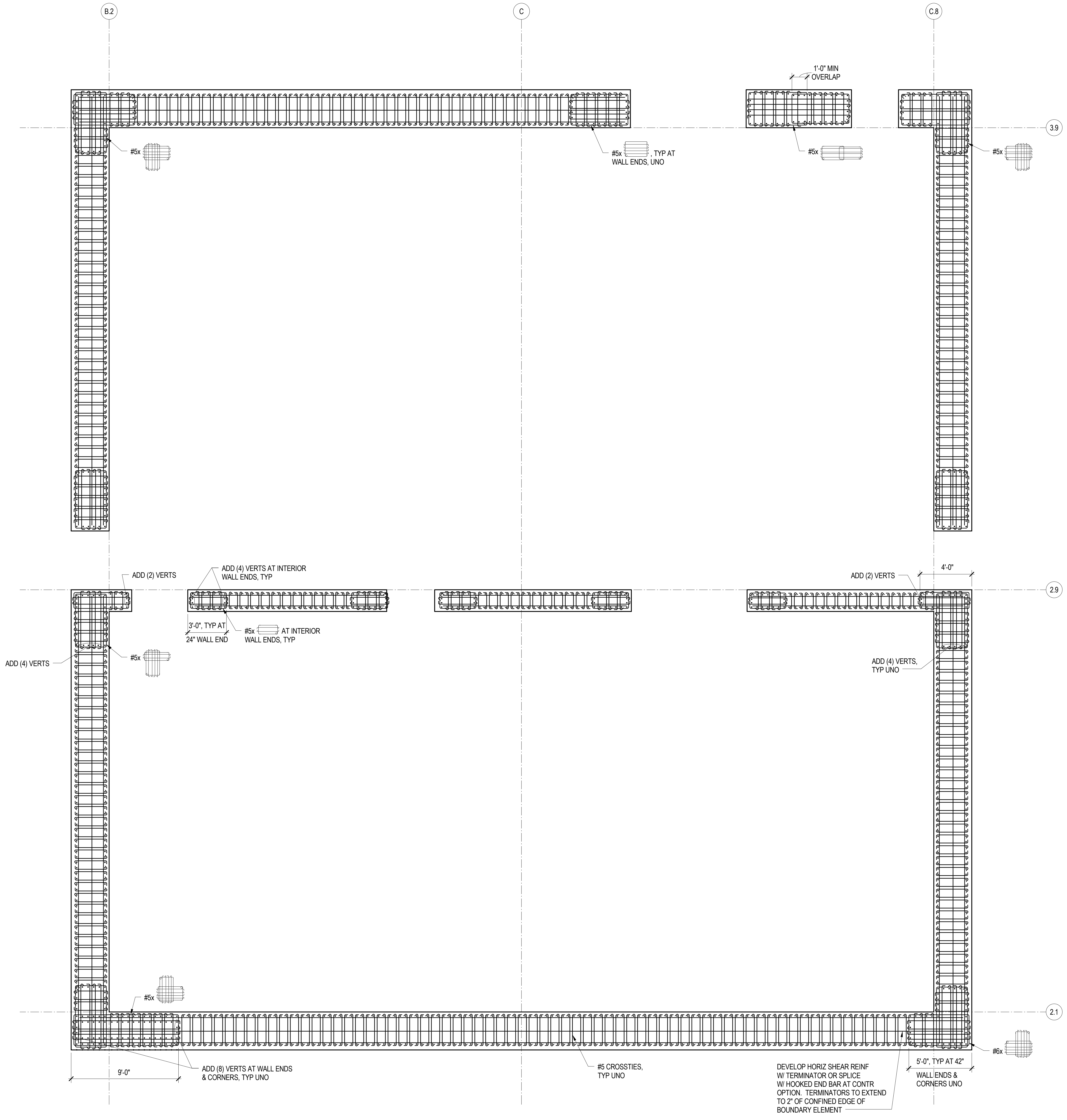
4/28/2014 7:07:49 PM  
C:\Revit\Transbay\Tw\_MS2013\_16.rvt  
16 SHEAR WALL SECTION AT LEVEL 3  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.27



NOTES:  
1. ALL CROSSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVEL 4  
1/4" = 1'-0"

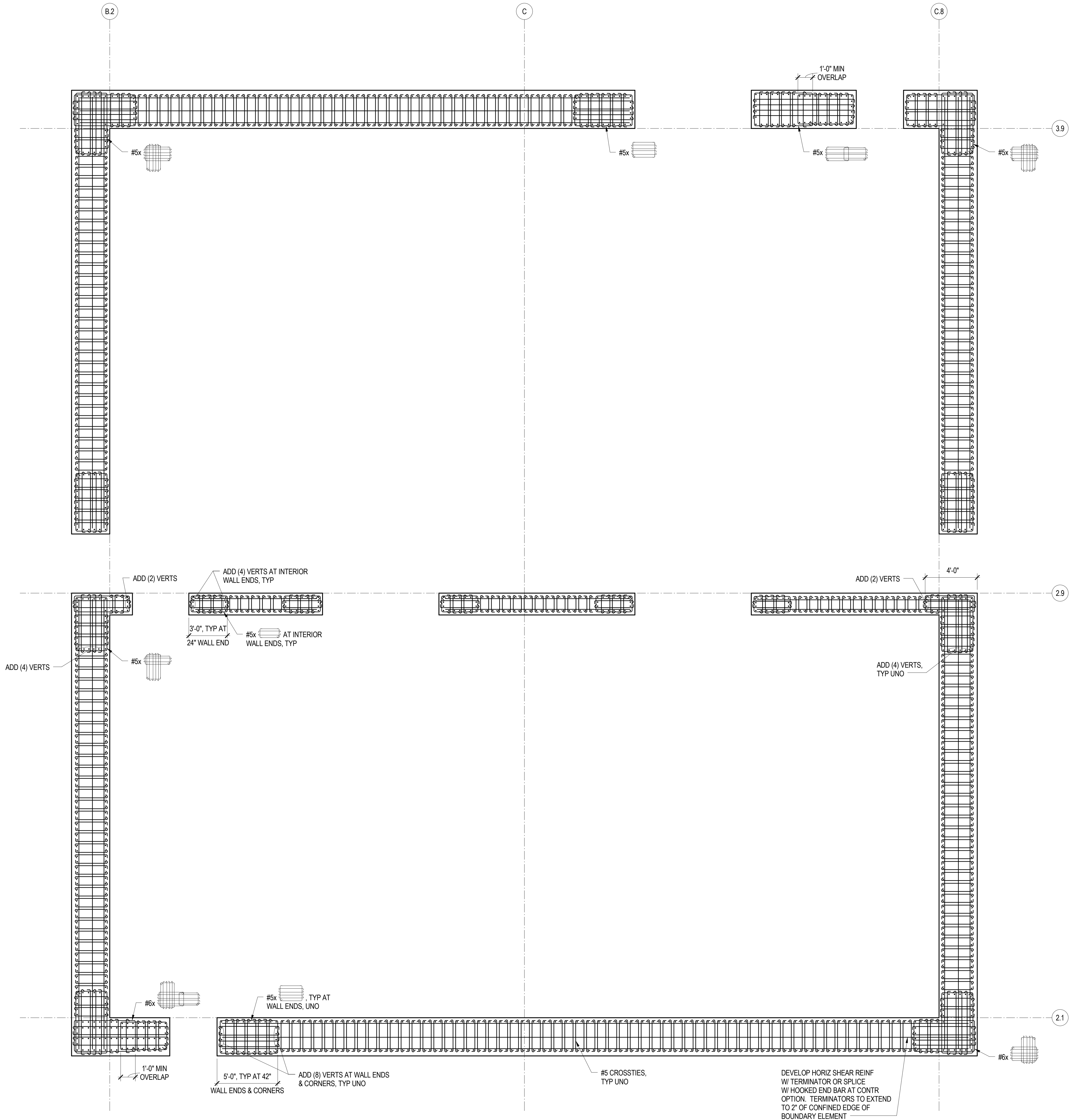
4/28/2014 7:07:52 PM C:\Revit\Transbay\Tw\_MIS2013\_18.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	S3.28



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVEL 5  
1/4" = 1'-0"

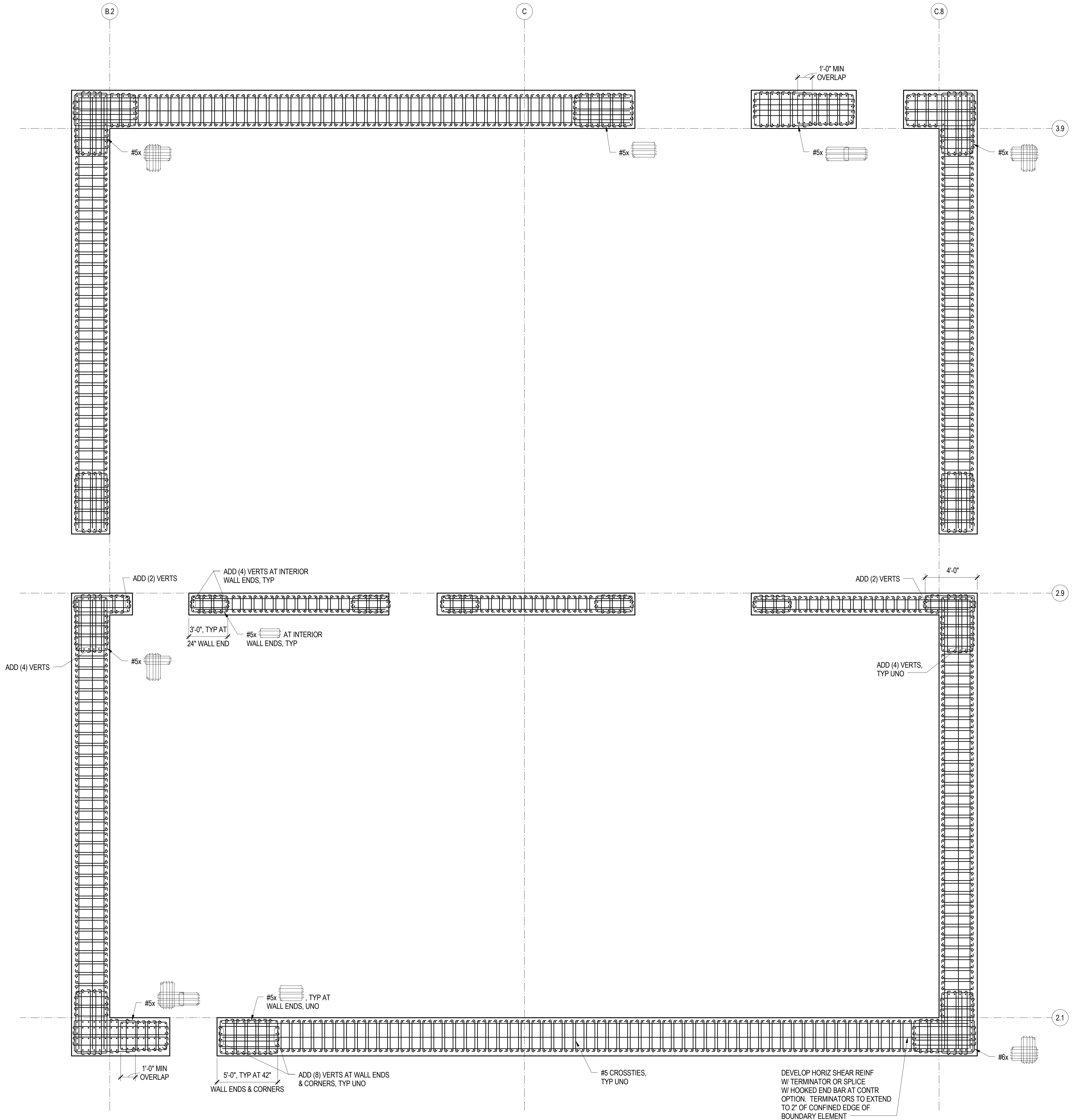
4/28/2014 7:07:54 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S3.29</b>



**NOTES:**  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:57 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

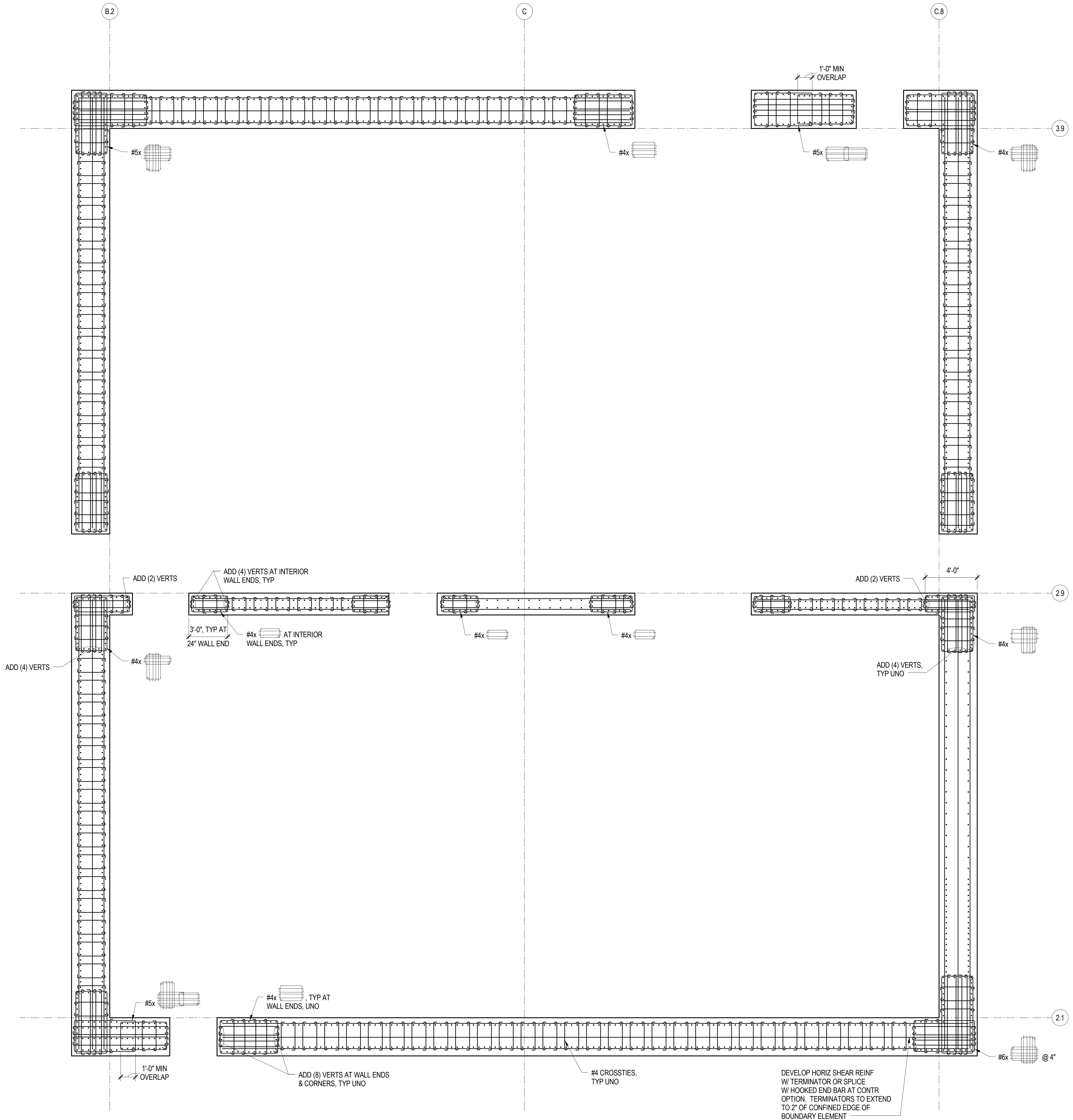
**16** SHEAR WALL SECTION AT LEVEL 6  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.30</b>



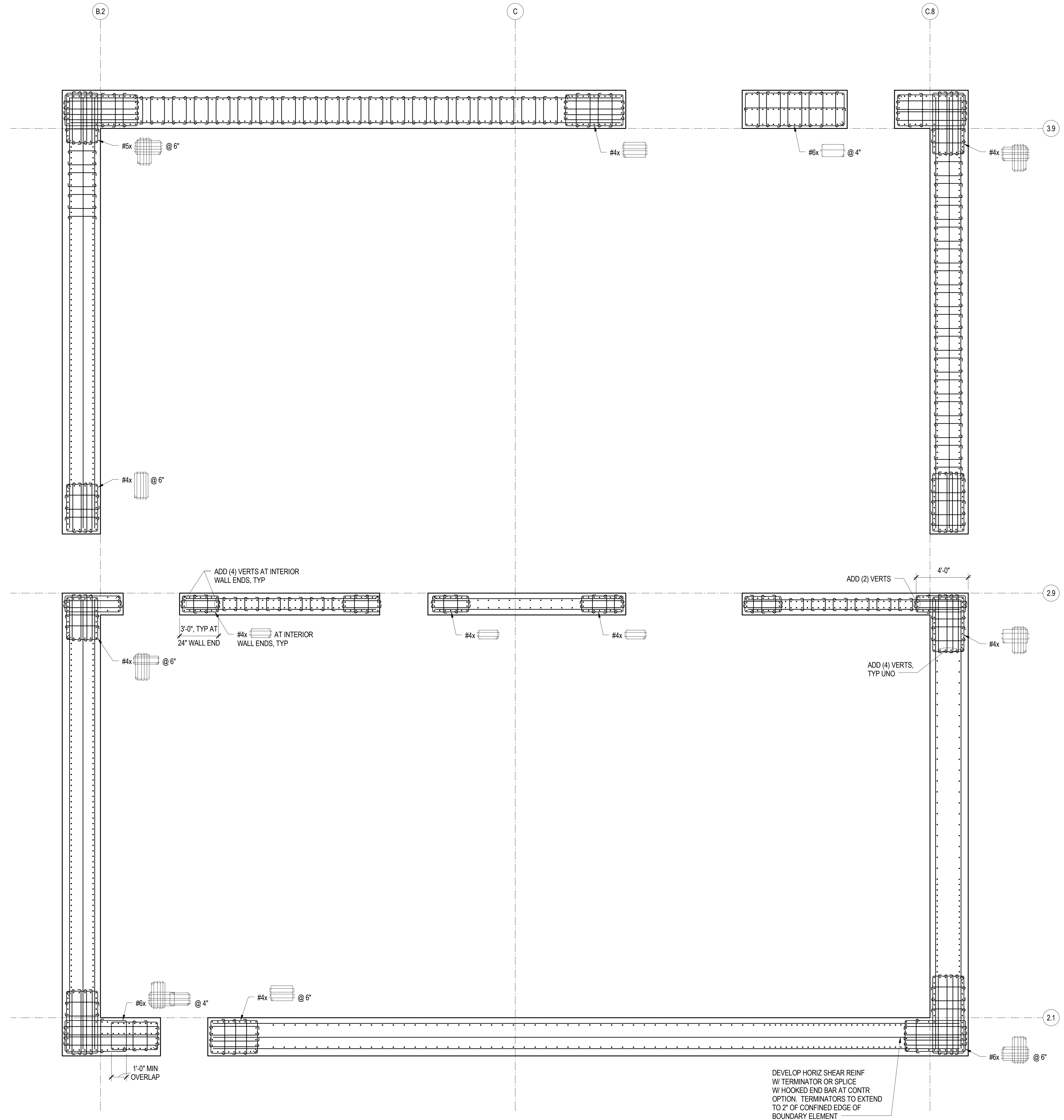
**NOTES:**  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 7-10  
1/4" = 1'-0"

4/29/2014 7:08:00 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 11-14  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.31

4/29/2014 7:08:03 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

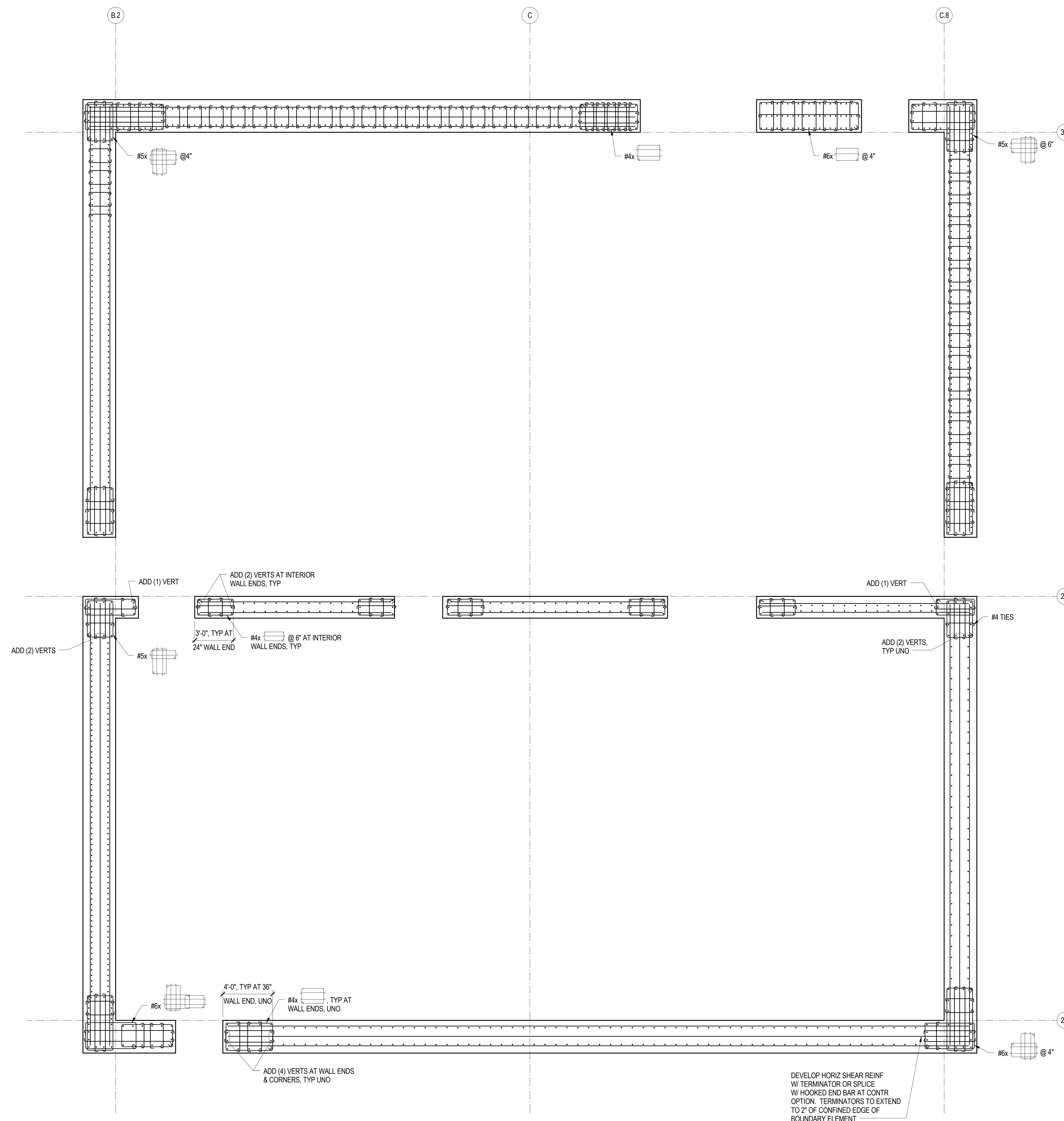
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



- NOTES:
- ALL CROSSTIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 15-22

1/4" = 1'-0"

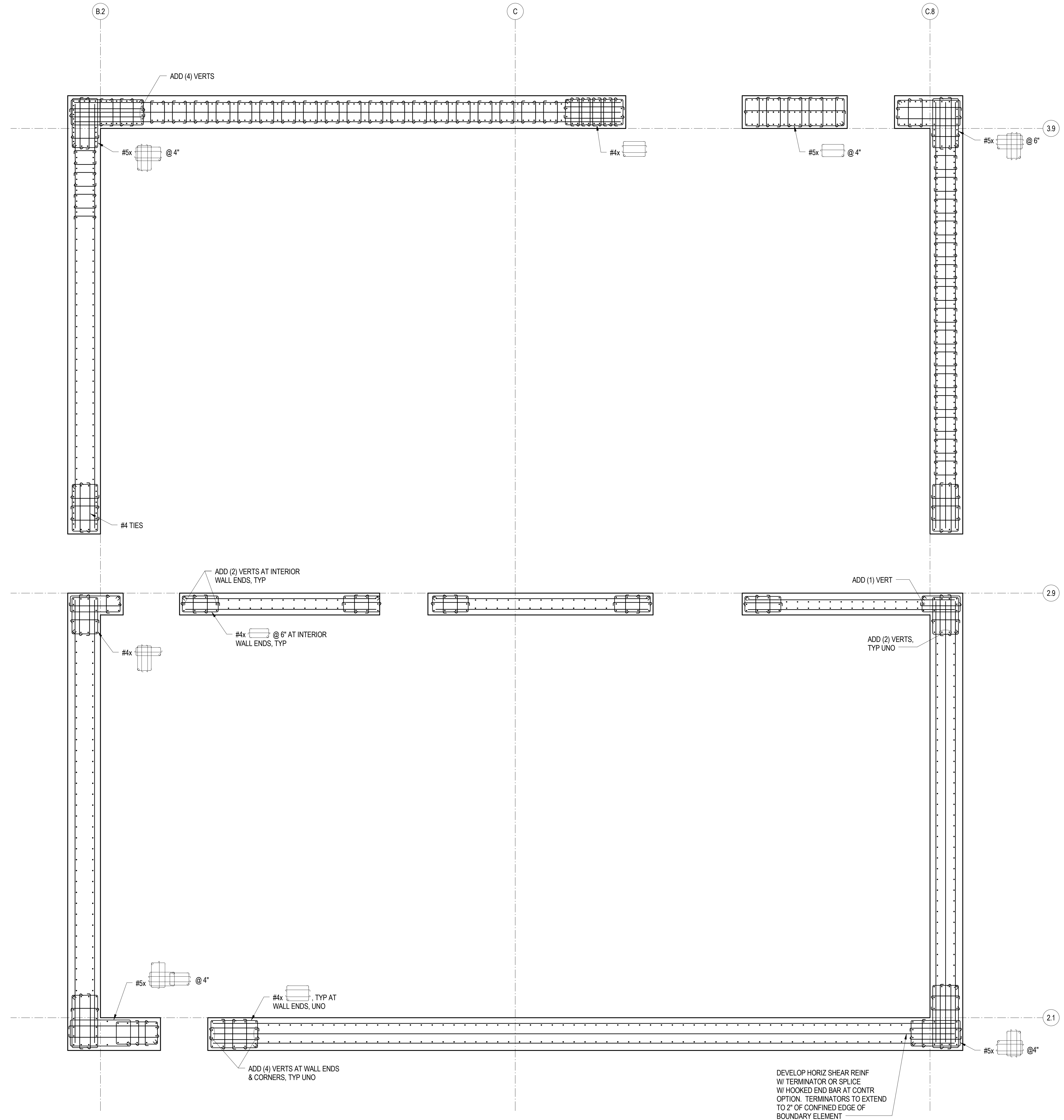
C:\Revit\Transbay\Twr\_MIS2013\_16.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.32</b>



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE F<sub>y</sub>=60 KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

4/28/2014 7:08:08 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

**16** SHEAR WALL SECTION AT LEVELS 23-30  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.33</b>



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

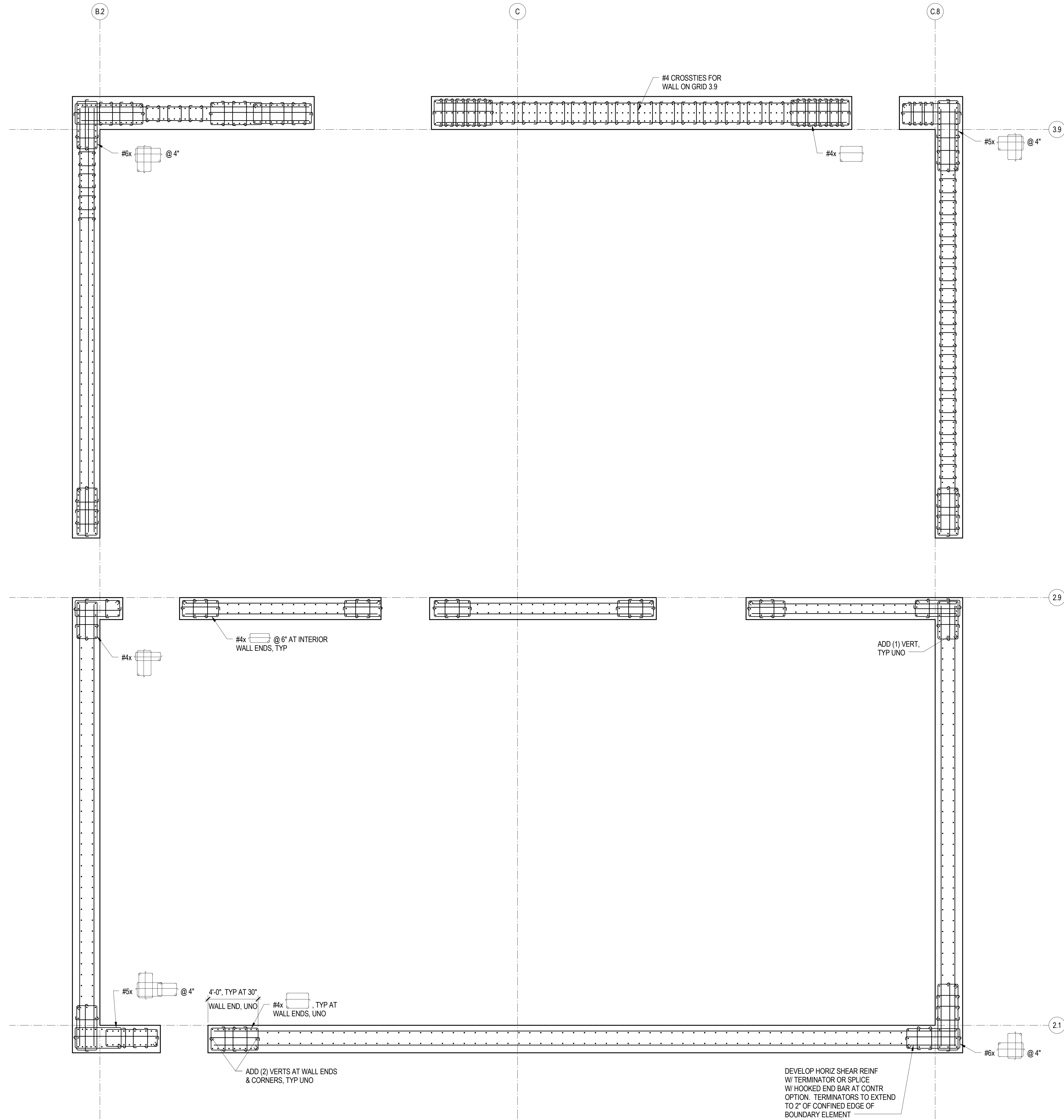
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSS-TIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 31-34  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

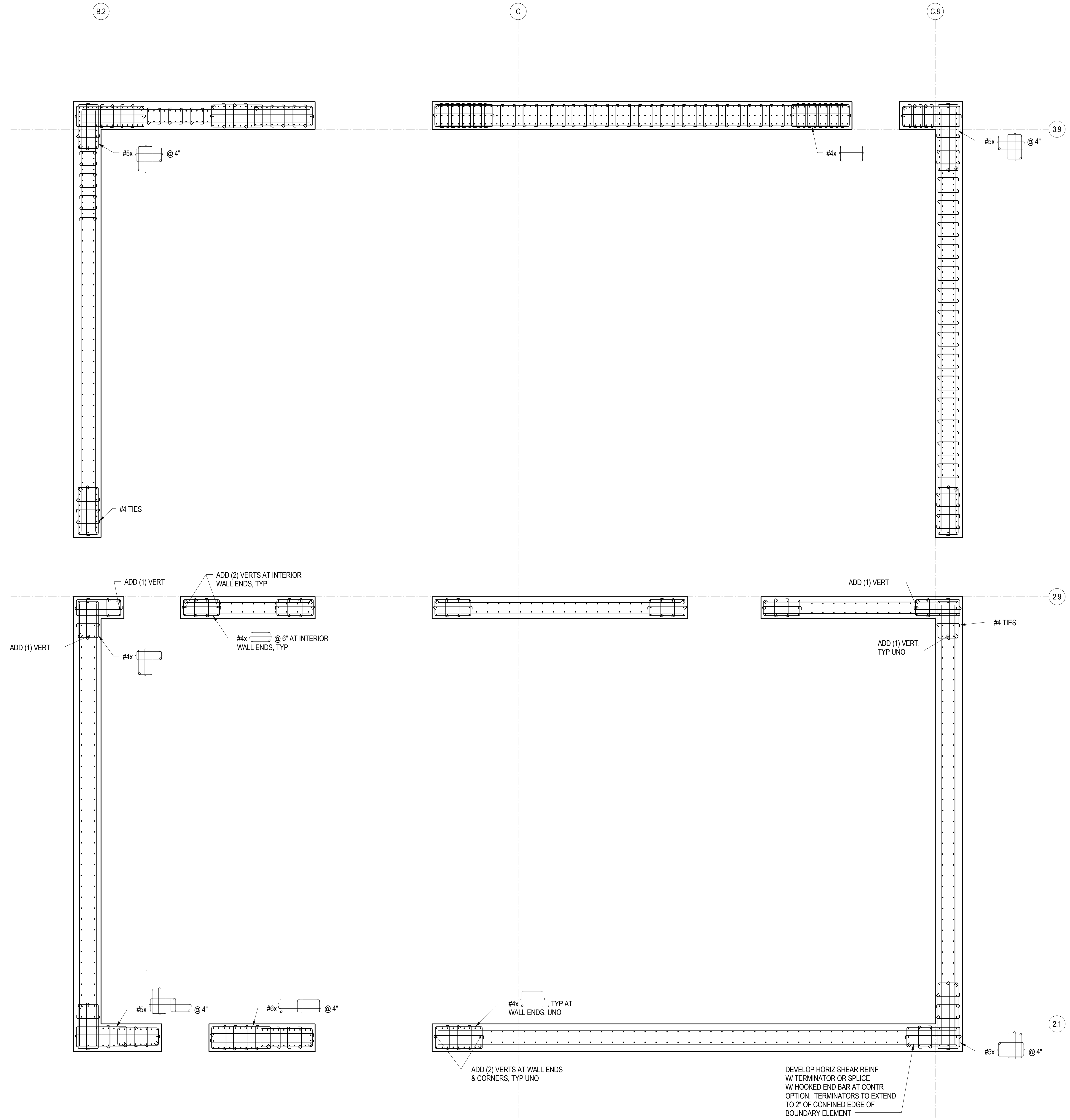
DRAWING TITLE

SHEAR WALL SECTIONS

PROJECT NO. 08044  
DRAWING NUMBER S3.34



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVEL 35  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

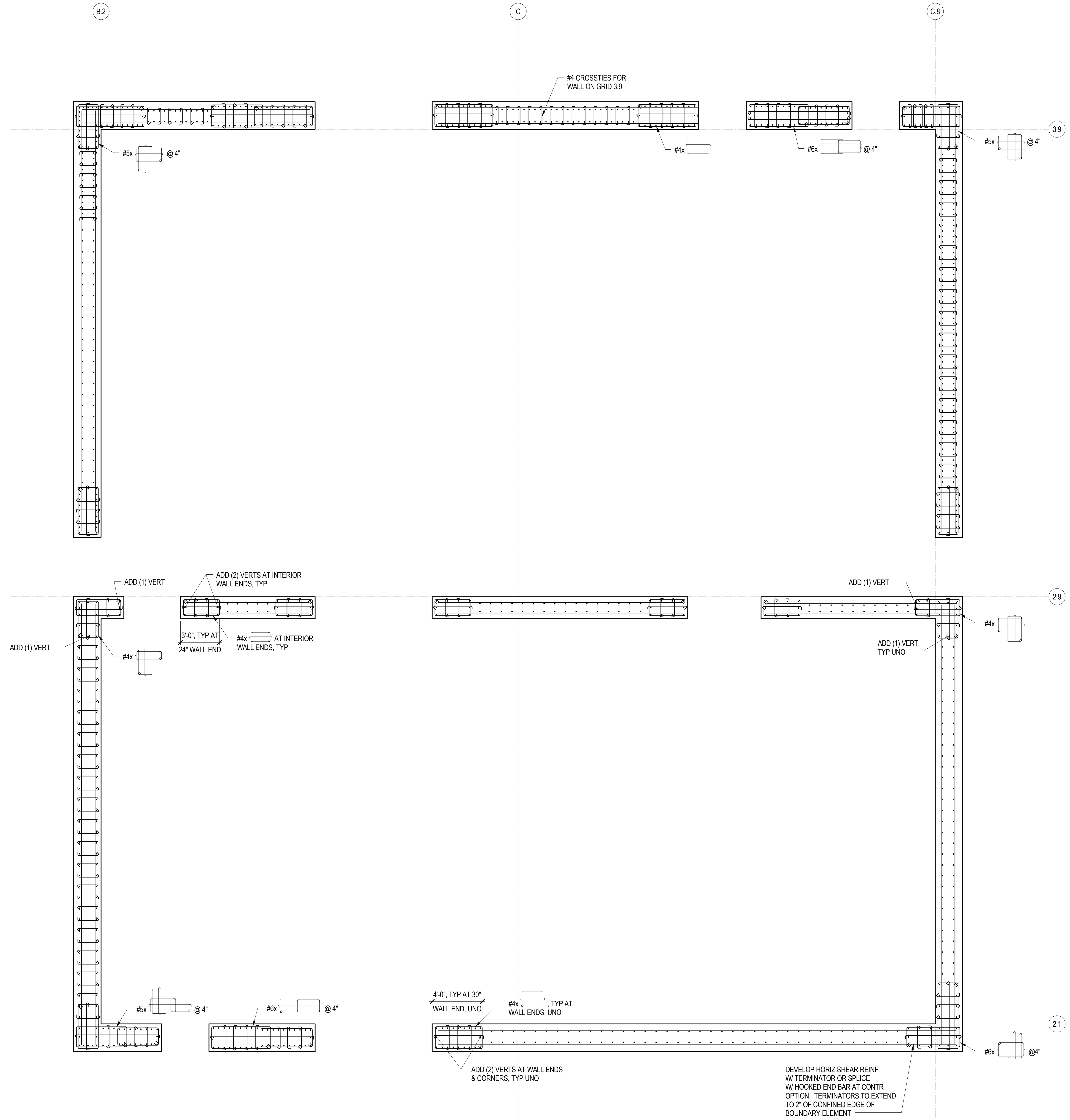
DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S3.35**

4/28/2014 7:08:13 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 36-38  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.36

4/28/2014 7:08:15 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

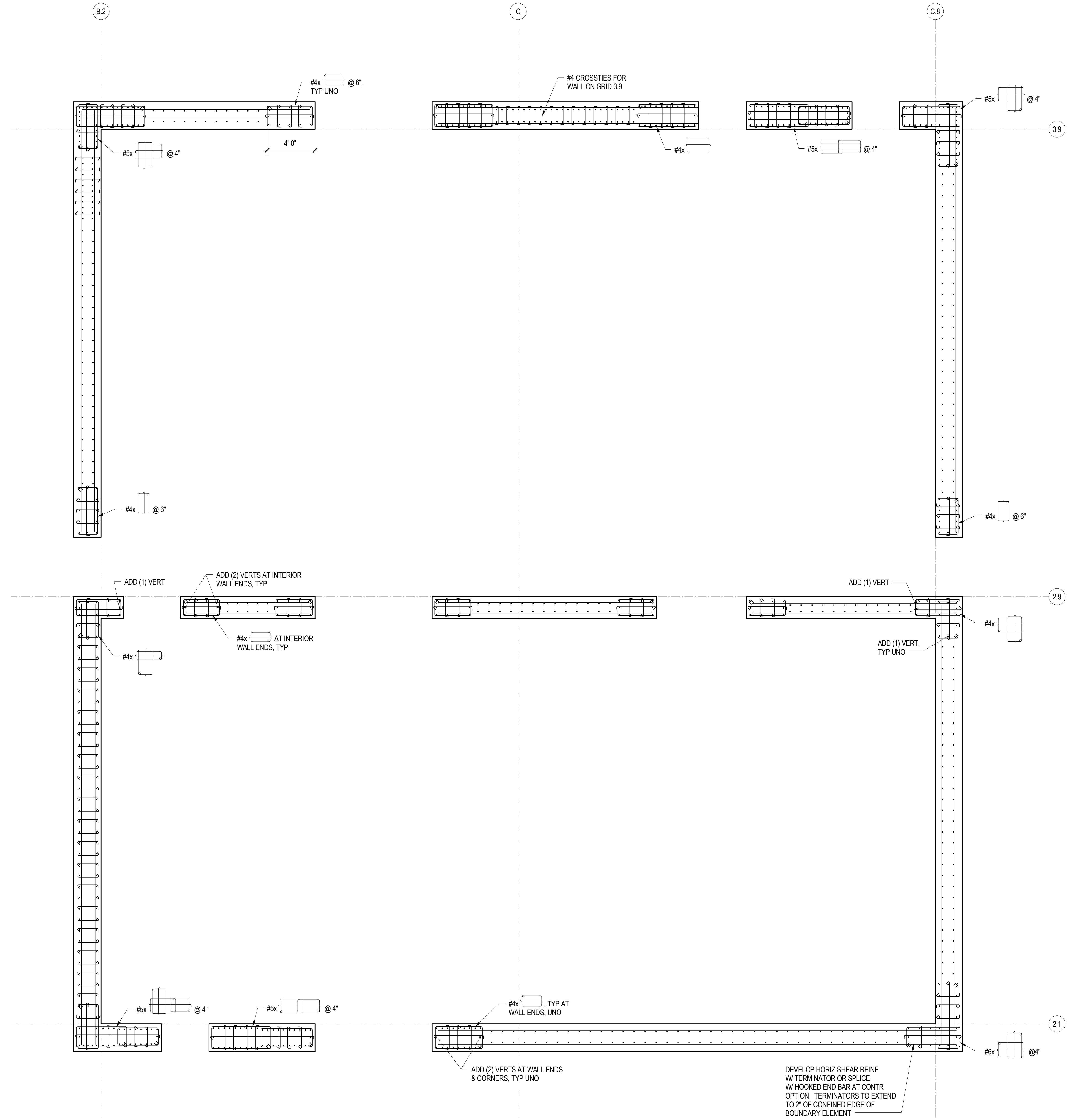
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 39-44  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.37</b>

4/29/2014 7:08:18 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

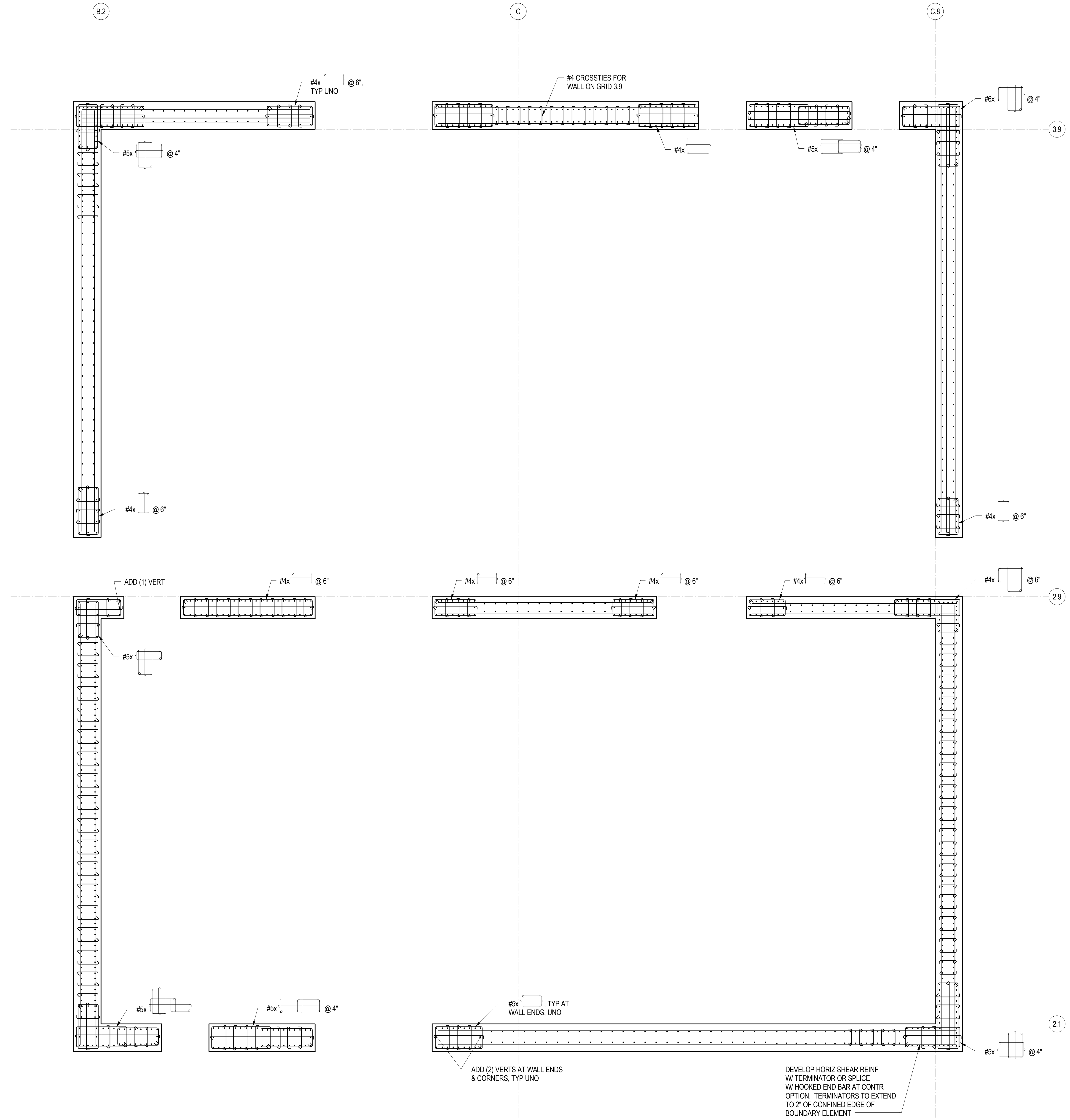
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSS-TIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

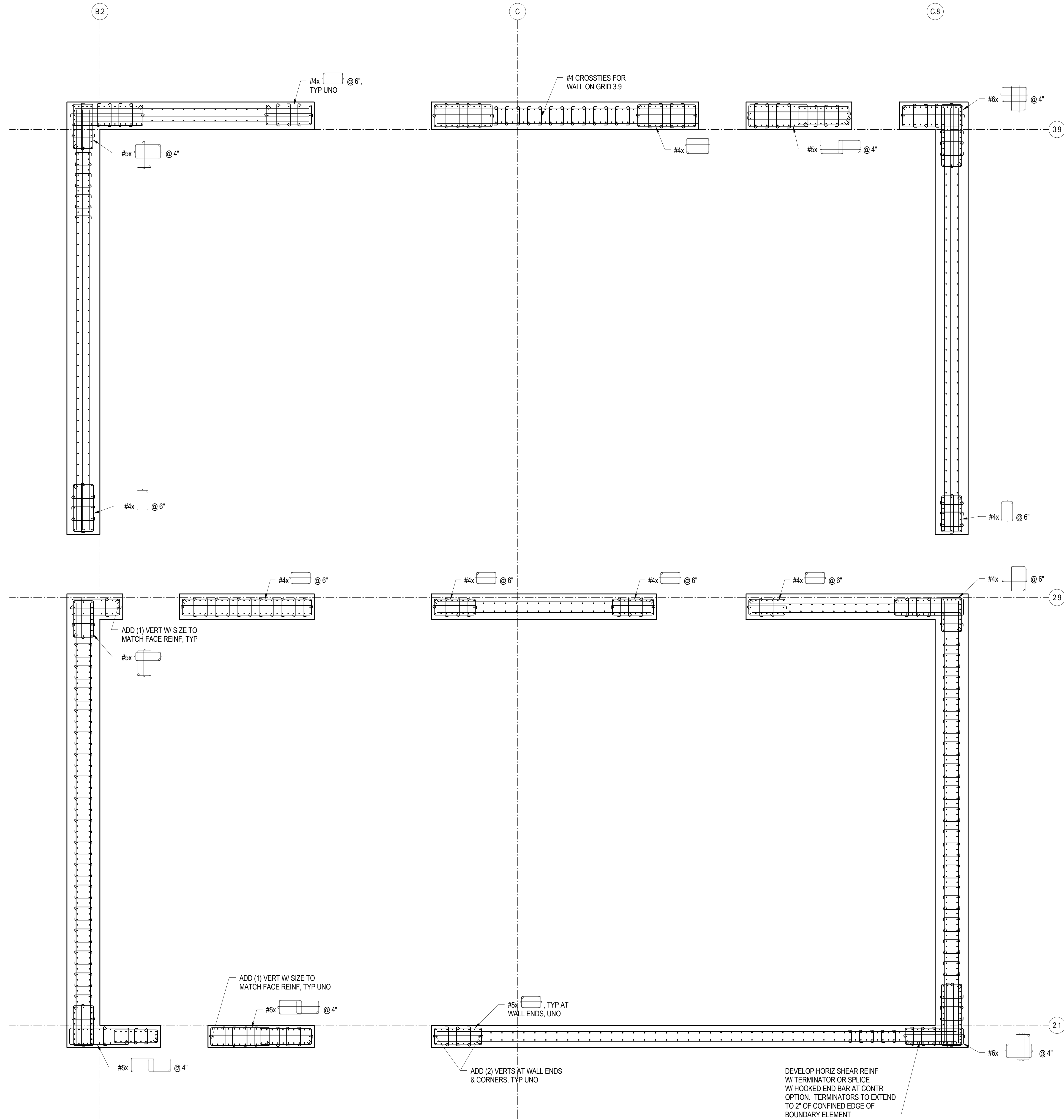
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSS-TIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 47-48  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

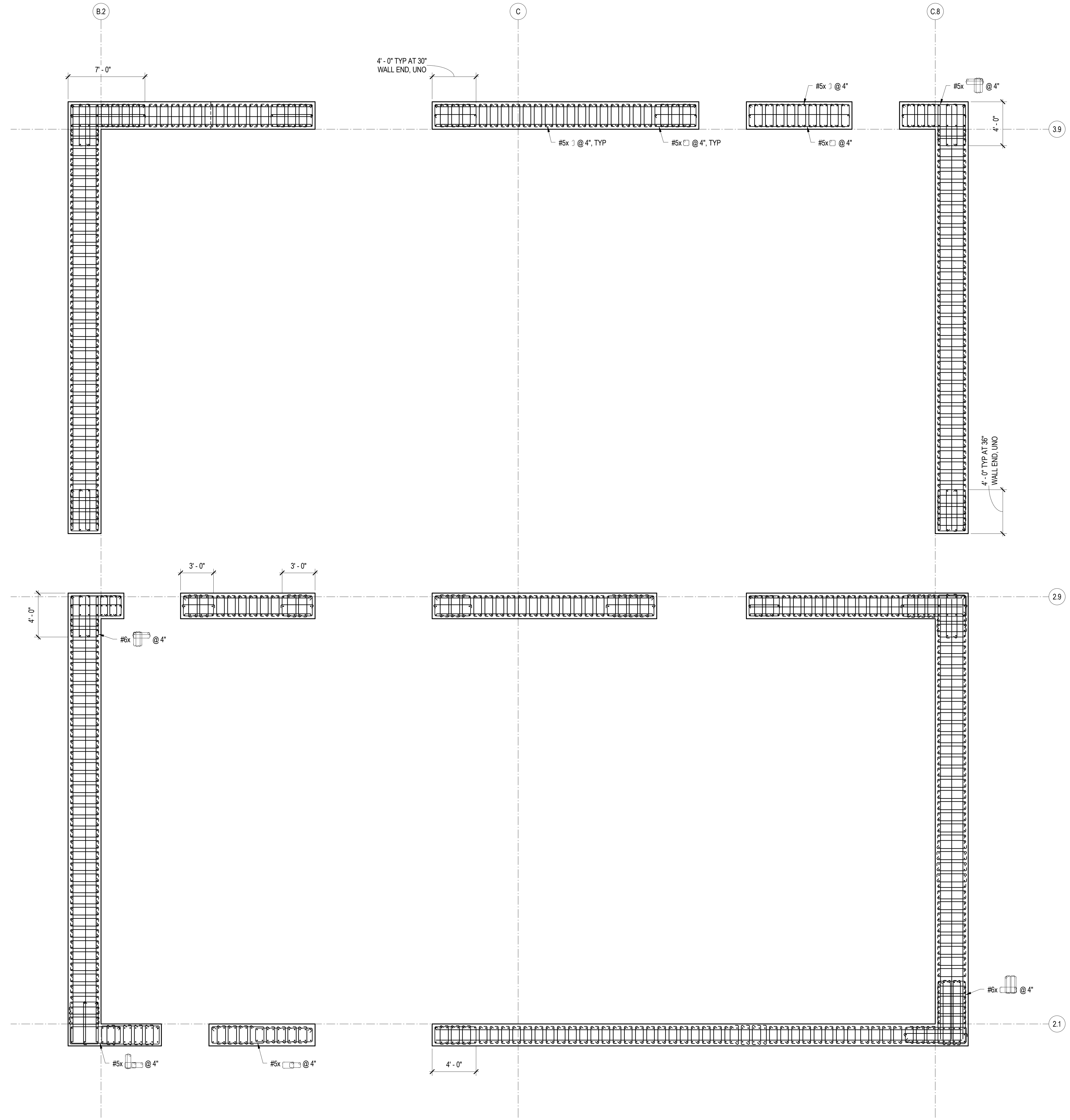
DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.39</b>

4/28/2014 7:08:23 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt





- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVELS 49-50  
1/4" = 1'-0"

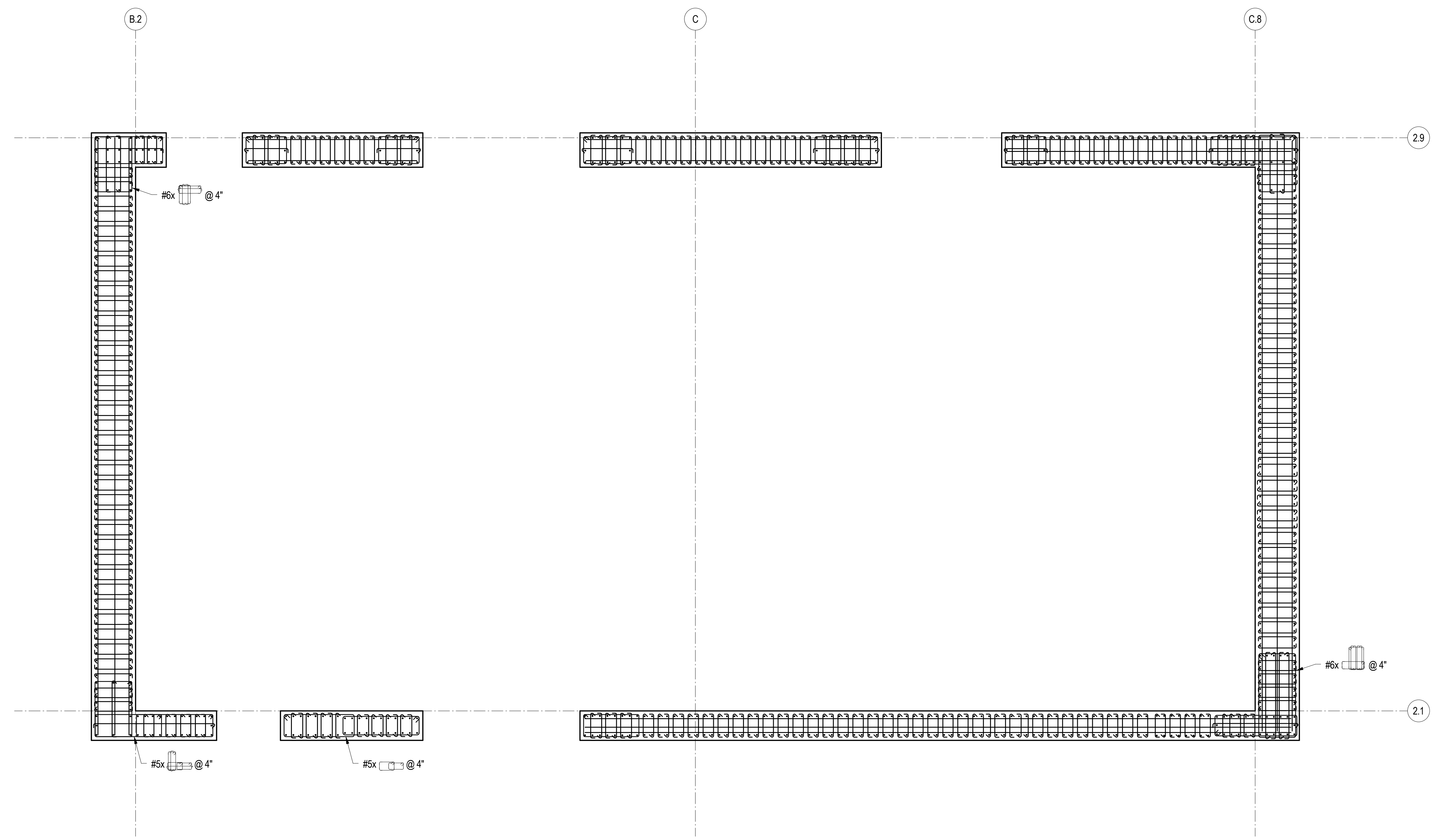
NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044  
DRAWING NUMBER S3.40

4/28/2014 7:08:26 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt



**NOTES:**

1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

**11 SHEAR WALL SECTION AT LEVELS 51-52**  
1/4" = 1'-0"

- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

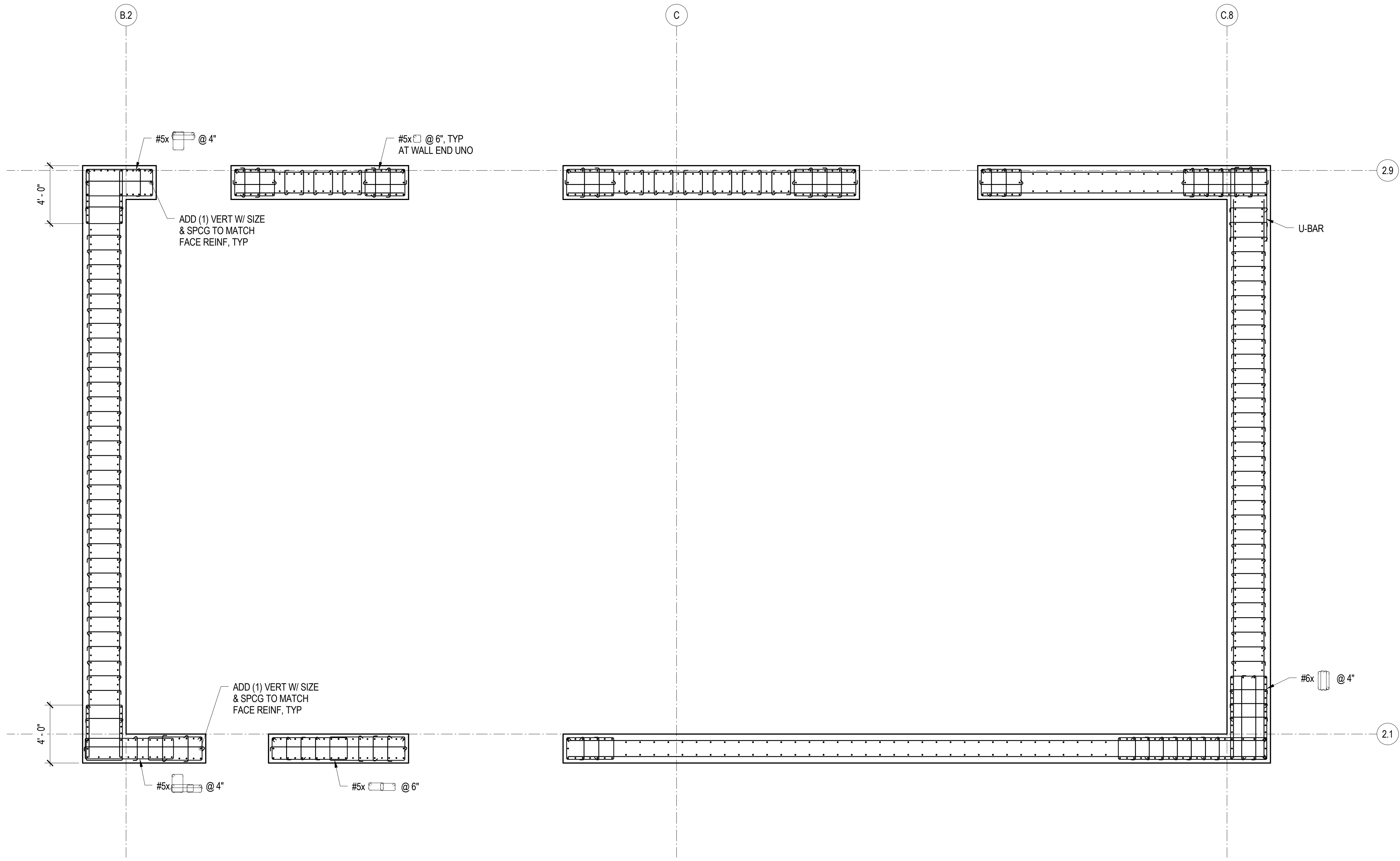
CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

11 SHEAR WALL SECTION AT LEVELS 53-56  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044  
DRAWING NUMBER S3.42



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

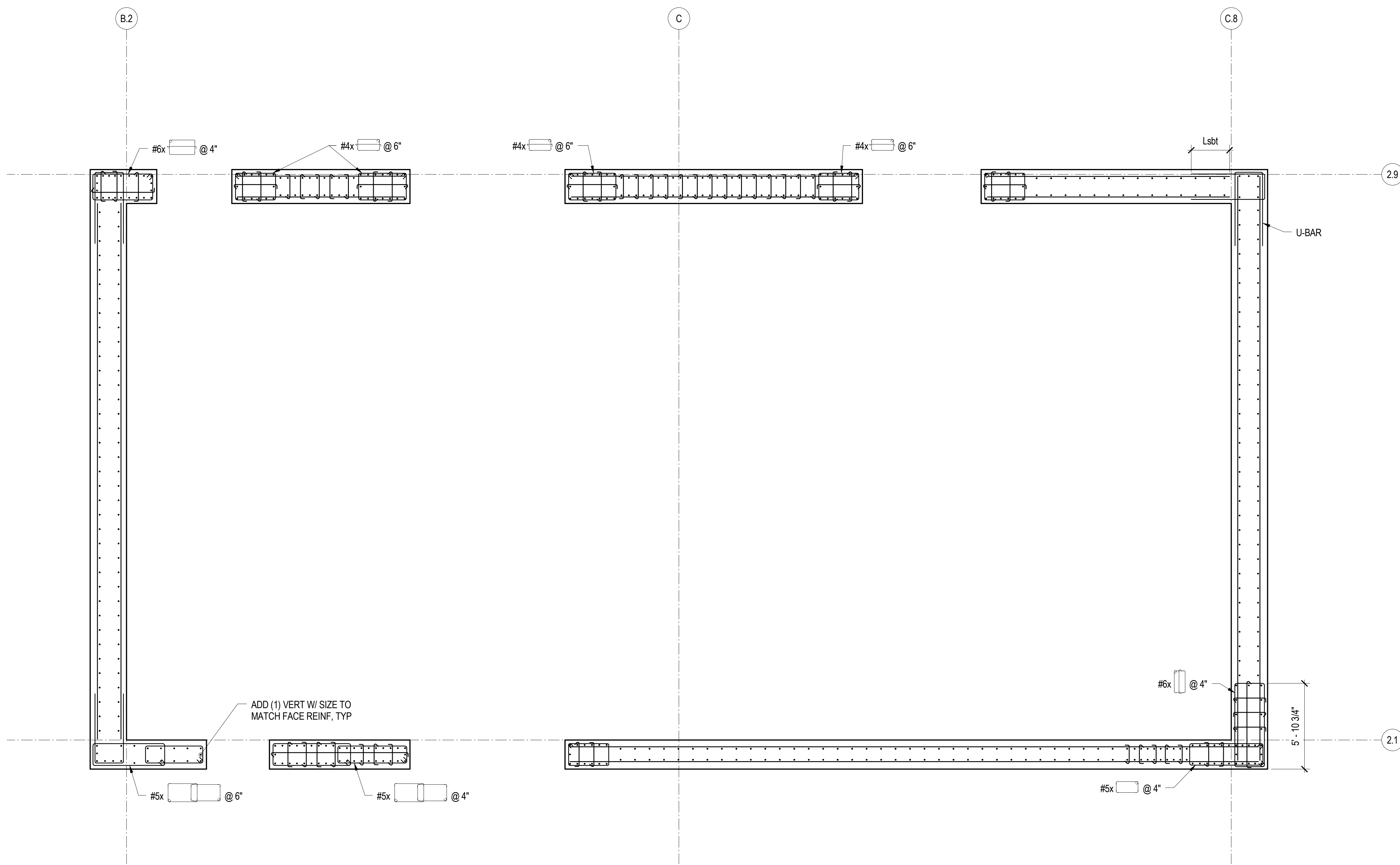
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



NOTES:

- 1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

11 SHEAR WALL SECTION AT LEVELS 57-61  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

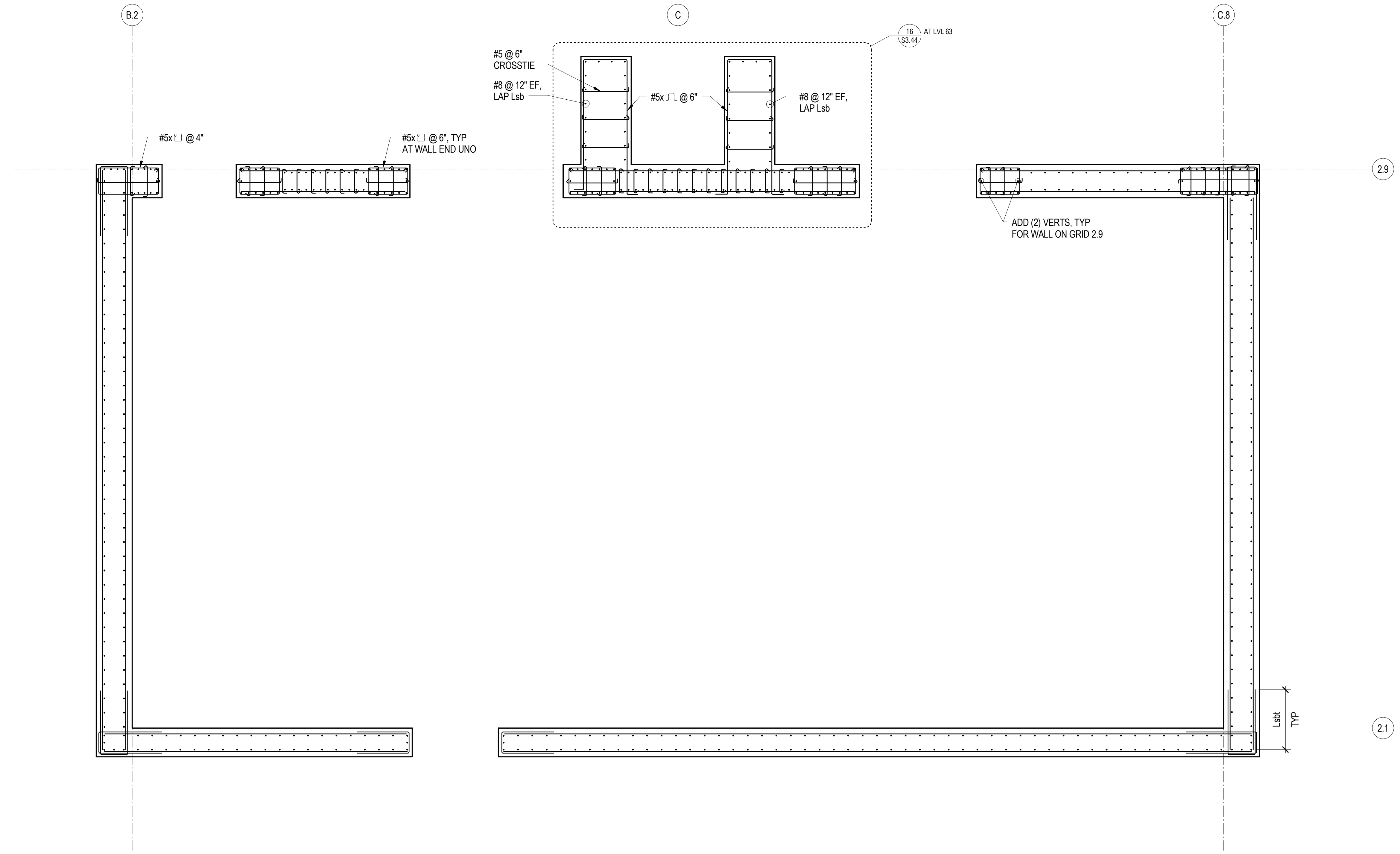
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

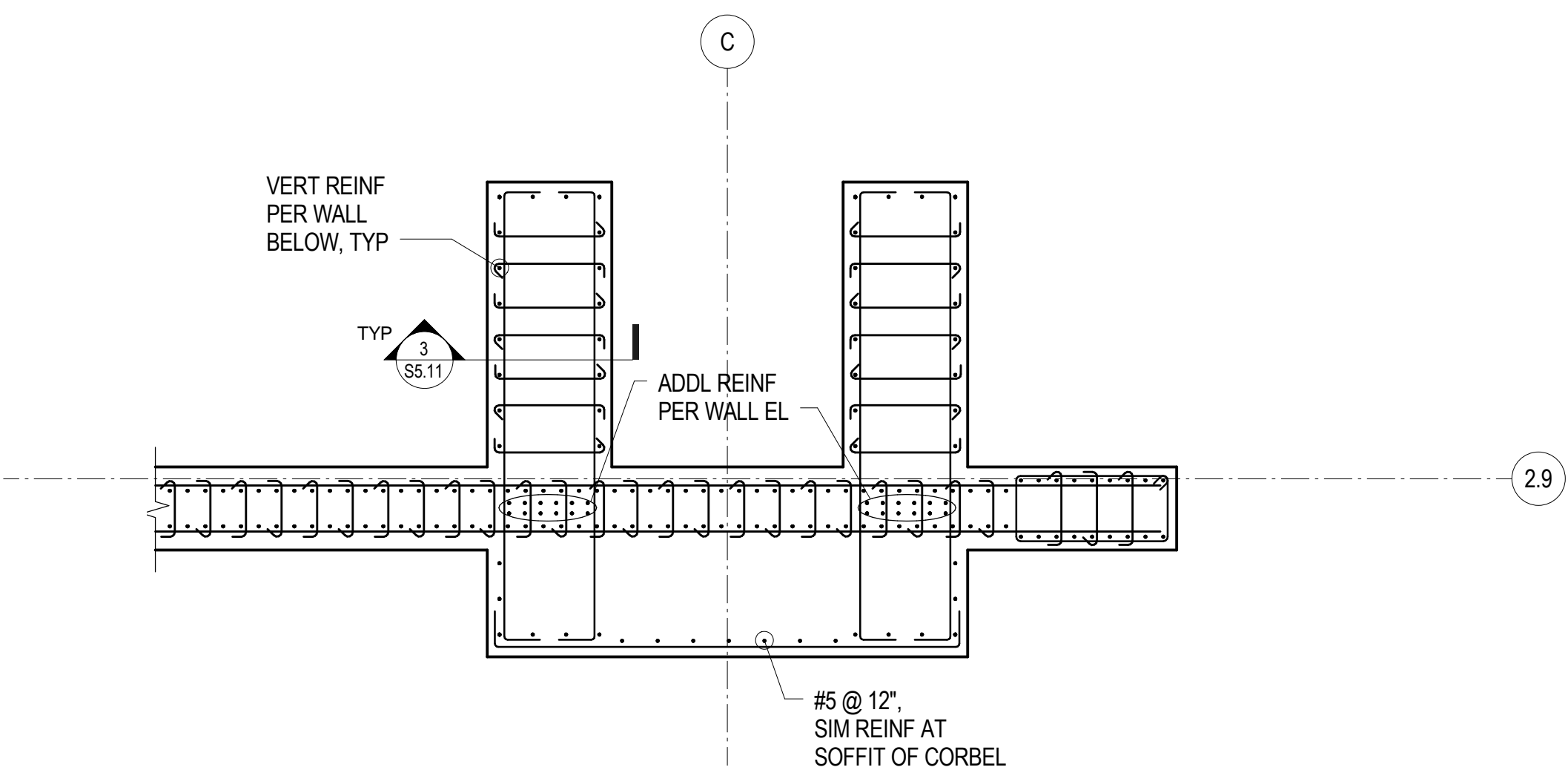
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:

1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

11 SHEAR WALL SECTION AT LEVEL 62  
1/4" = 1'-0"



16 PARTIAL PLAN AT LEVEL 63 TO LEVEL 64  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.44

4/28/2014 7:08:37 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



EMBED LENGTH TABLE 1 (NON-ENCLOSED CONDITION)

BAR SIZE	EMBED LENGTH (INCHES)									
	f <sub>c</sub> = 4 KSI	f <sub>c</sub> = 5 KSI	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 7 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 9 KSI	f <sub>c</sub> = 10 KSI	f <sub>c</sub> = 11 KSI	f <sub>c</sub> = 12 KSI	
4	24	22	20	18	17	16	15	15	14	
5	30	27	25	23	21	20	19	18	18	
6	36	32	30	27	26	24	23	22	21	
7	42	38	36	33	32	30	29	28	27	
8	50	45	43	40	39	37	36	35	34	
9	58	52	50	47	46	44	43	42	41	
10	66	60	58	55	54	52	51	50	49	
11	74	68	66	63	62	60	59	58	57	
12	82	76	74	71	70	68	67	66	65	

NOTES:

- EMBED LENGTH IS CALCULATED AS 1.25 L<sub>d</sub>.
- VALUES ABOVE ARE FOR "a" BAR WITH F<sub>y</sub> = 60 KSI REBAR.
- SEE "TYPICAL WALL CONFINEMENT" DETAIL FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

(NO HOOPS OR CROSS TIES ENCLOSE EMBED LENGTH)

7 EMBED TABLE 1

3 GENERAL NOTES FOR COUPLING BEAMS

4 TYPICAL COUPLING BEAM, TYPE 1

5 TYPICAL COUPLING BEAM, TYPE 1 SECTION

EMBED LENGTH TABLE 2 (ENCLOSED CONDITION)

BAR SIZE	EMBED LENGTH (INCHES)									
	f <sub>c</sub> = 4 KSI	f <sub>c</sub> = 5 KSI	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 7 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 9 KSI	f <sub>c</sub> = 10 KSI	f <sub>c</sub> = 11 KSI	f <sub>c</sub> = 12 KSI	
4	18	16	15	14	13	12	12	12	12	
5	23	20	19	17	16	15	15	14	13	
6	27	24	22	21	19	18	17	16	16	
7	32	28	26	24	23	21	20	19	18	
8	36	32	30	27	26	24	23	22	21	
9	41	36	33	31	29	27	26	25	24	
10	46	41	37	35	32	31	29	28	27	
11	51	45	41	38	36	34	32	31	29	
12	-	-	-	-	-	-	40	-	-	

NOTES:

- EMBED LENGTH IS CALCULATED AS 1.25 L<sub>d</sub> CONFINED.
- VALUES ABOVE ARE FOR "a" BAR WITH F<sub>y</sub> = 60 KSI REBAR.
- SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

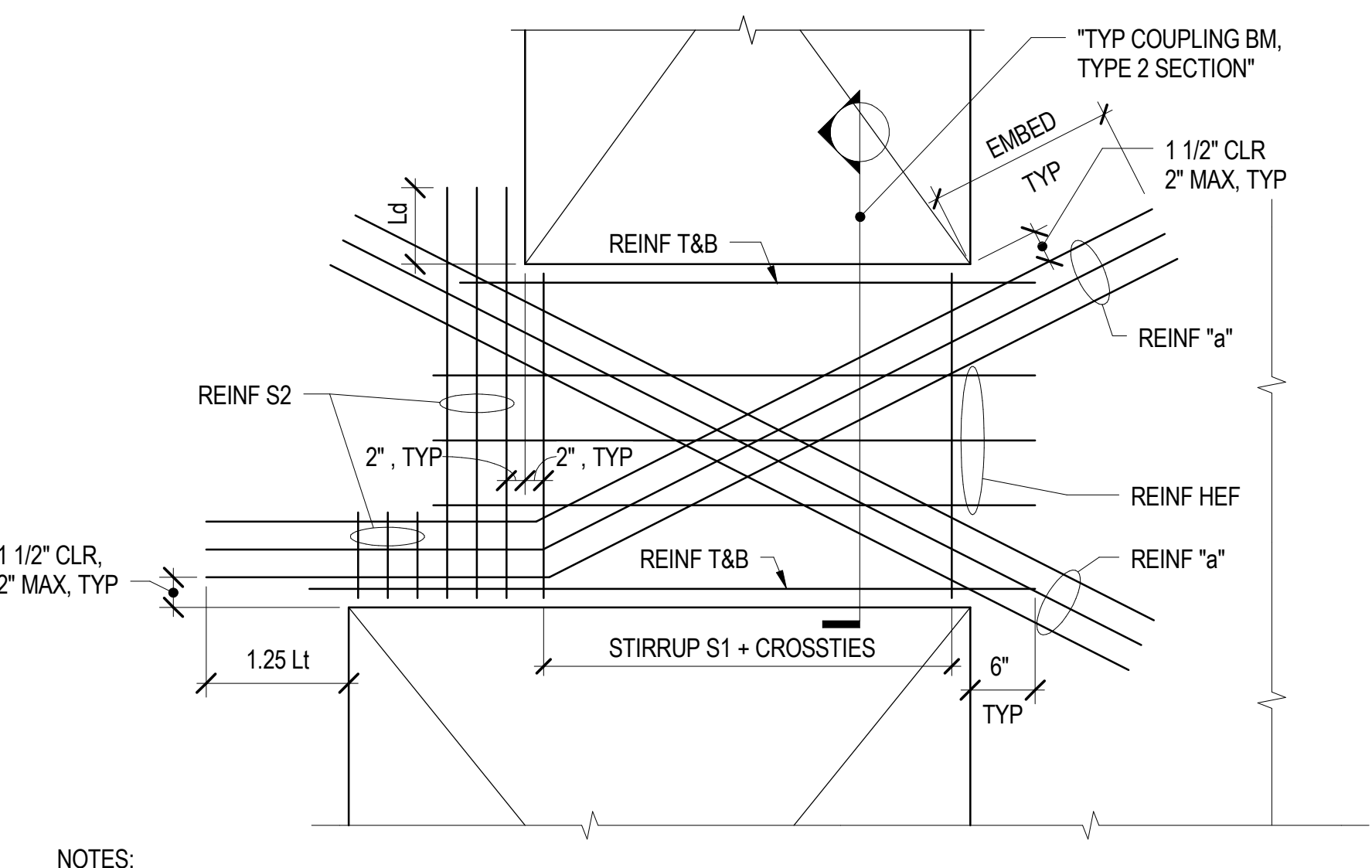
(HOOPS OR CROSS TIES ENCLOSE EMBED LENGTH)

7 EMBED TABLE 2

8 TYPICAL COUPLING BEAM, TYPE 3

9 TYPICAL COUPLING BEAM, TYPE 2

10 TYPICAL COUPLING BEAM, TYPE 2 SECTION



NOTES:

- SEE SECTION FOR REINFORCING NOT SHOWN.

11 TYPE 2 COUPLING BEAM AT UNEQUAL OPENINGS

COUPLING BEAM LONGITUDINAL REINFORCING SCHEDULE

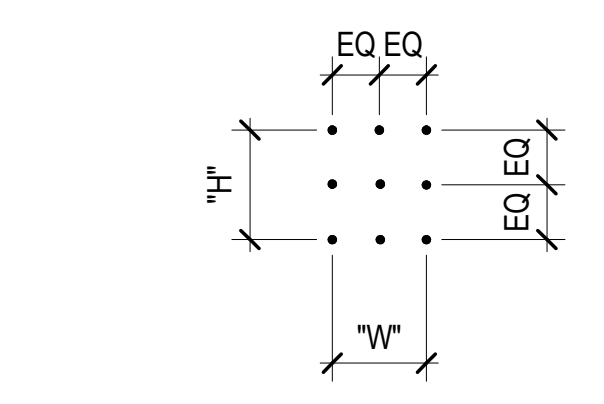
MARK	TYPE	CONFIGURATION DIM (HxW) (INCHES)	REINF "a"	REINF S2	REMARKS
2	2	4x12	(6) #10 [2]	(7) #6 @ 4" [3]	
3	2 OR 3	8x10	(9) #10 [6]	(8) #6 @ 4" [3]	TYPE 3 BM AT LVL 47
4	2 OR 3	4x8	(4) #11 [1]	(7) #6 @ 4" [2]	TYPE 3 BM AT LVL 50
5	2	4x12	(6) #11 [2]	(6) #6 @ 4" [3]	
6	2	4x16	(10) #11 [4]		
7	2	8x12	(9) #11 [6]		
8	2 OR 3	8x12	(12) #11 [7]	(9) #6 @ 4" [4]	TYPE 3 BM AT LVL 15
9	2 OR 3	8x16	(15) #11 [9]	(9) #6 @ 4" [5]	TYPE 3 BM AT LVL 31
10	2 OR 3	12x12	(16) #11 [9]	(12) #6 @ 4" [4]	TYPE 3 BM AT LVL 34
11	2 OR 3	12x16	(20) #11 [10]	(12) #6 @ 4" [5]	TYPE 3 BM AT LVL 15
12	2	12x8	(12) #11 [14]		
13	2	12x24	(28) #11 [12]		
14	2	16x12	(20) #11 [13]		
15	2	12x20	(24) #11 [11]		
16	2	20x24	(42) #11 [16]		
17	2 OR 3	17x30	(30) #14 [15]	(7) #6 @ 4" [6]	TYPE 3 BM AT LVL 3
18	2	8 1/2x12	(9) #14 [6]		
19	2	16x12	(15) #11 [17]		
22	1	-	(4) #9		
23	1	-	(5) #10		
24	1	-	(5) #11		
25	1	-	(10) #9 [4]		
26	1	-	(8) #10 [3]		
27	1	-	(8) #11 [3]		
28	1	-	(12) #9 [5]		
29	1	-	(12) #11 [5]		

COUPLING BEAM VERTICAL REINFORCING SCHEDULE

MARK	STIRRUPS S1	REMARKS
A	#5 @ 4" [4]	
B	#5 @ 4" [5]	
C	#5 @ 4" [6]	
D	#5 @ 4" [8]	
E	#6 @ 4" [6]	
F	#6 @ 4" [5]	
H	#6 @ 4" [7]	
J	#6 @ 4" [6]	

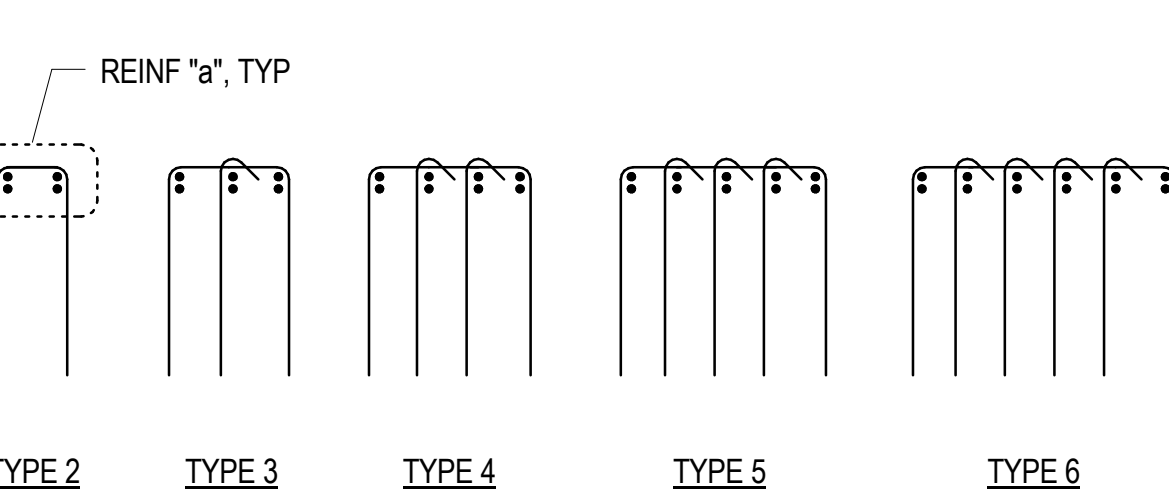
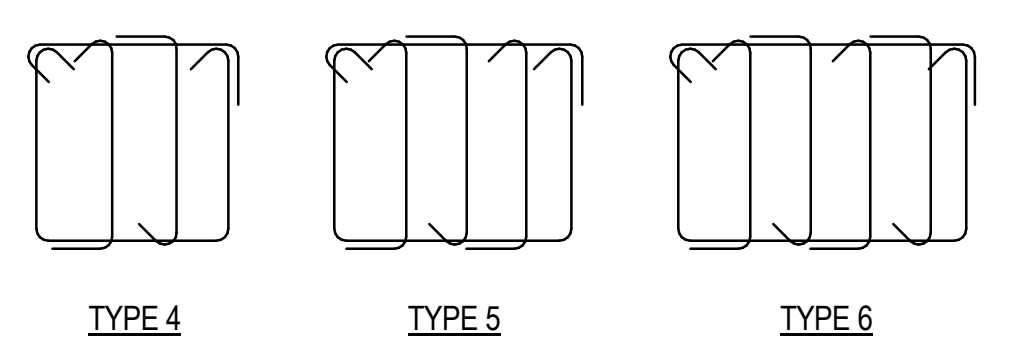
CROSSTIE REINFORCING SCHEDULE

MAX BEAM DEPTH (INCH)	f <sub>c</sub> =8 KSI	f <sub>c</sub> =10 KSI
41"	(5) #5	(7) #5
59"	(8) #5	(10) #5
69"	(9) #5	(12) #5
77"	(10) #5	(13) #5
83"	(12) #5	(14) #5
86"	(12) #5	(15) #5
99"	(13) #5	(17) #5
102"	(18) #5	(18) #5
106"	(20) #5	(20) #5

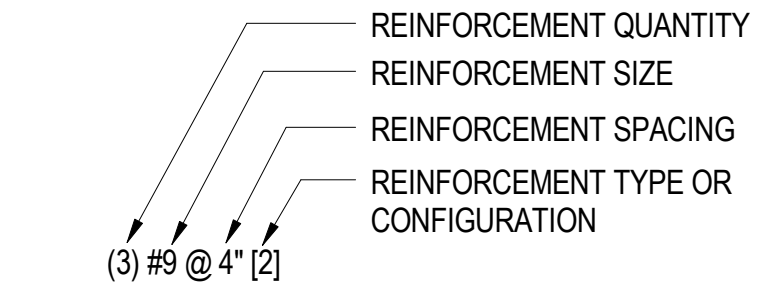


TYPICAL REINFORCING "a" CONFIGURATION

REINFORCING "a" CONFIGURATION TYPES



- NOTES:
- DEPTH OF COUPLING BEAMS PER "SHEAR WALL ELEVATIONS" COUPLING BEAM WIDTH MATCHES ADJACENT SHEAR WALLS.
  - ALTERNATE CONSECUTIVE CROSSTIES END FOR END.
  - LONGITUDINAL REINFORCING SHALL BE SPECIAL DUCTILE QUALITY. SEE "GENERAL NOTES" FOR CRITERIA.
  - REINFORCING CALLOUT NOMENCLATURE IS AS FOLLOWS:



20 COUPLING BEAM REINFORCEMENT SCHEDULE

- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPEP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

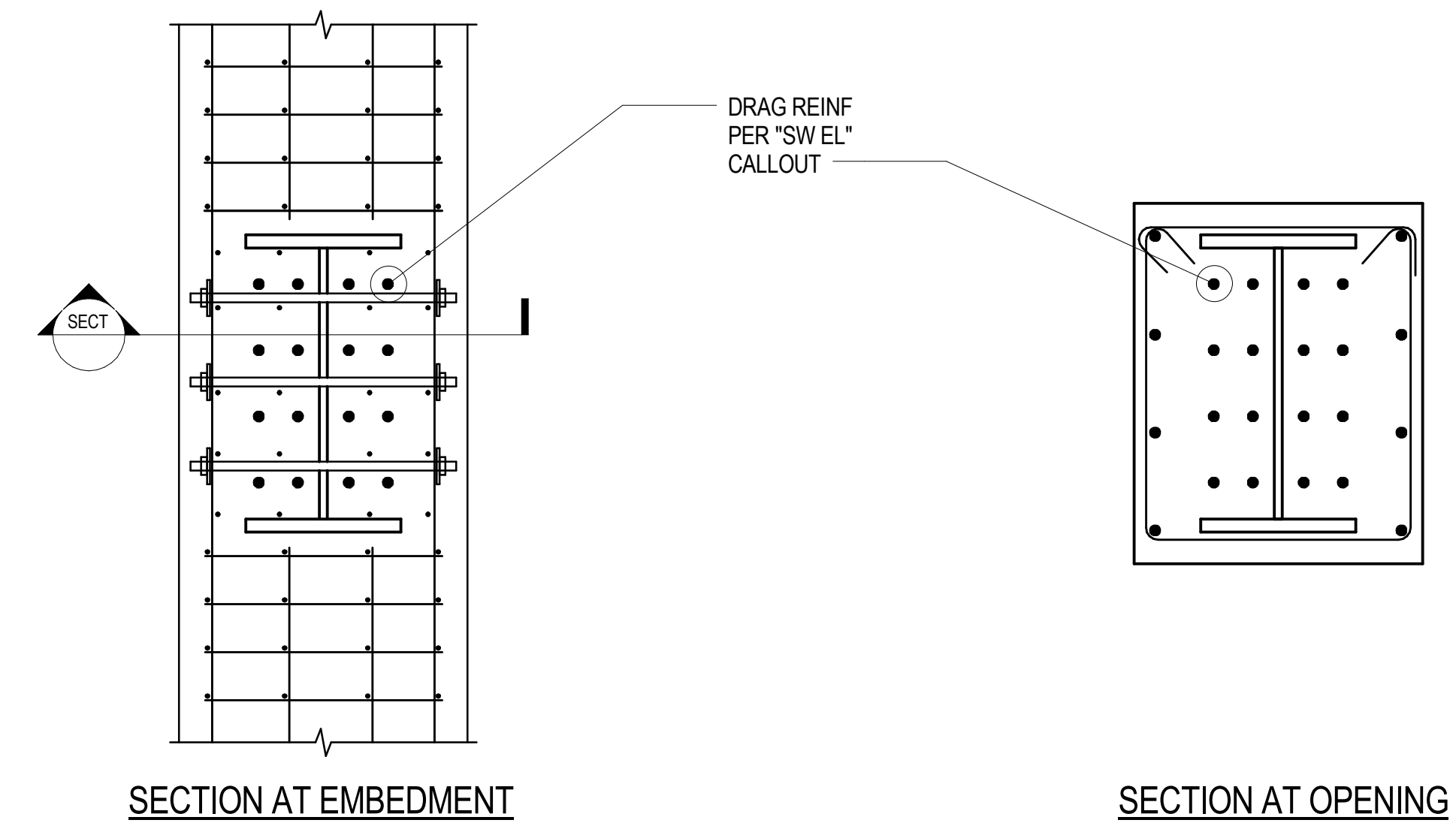
NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13		1
2	27 NOV 13		2
3	12 DEC 13		3
4	10 FEB 14		4
5	11 FEB 14		5
6	02 MAY 14		6

COUPLING BEAM DETAILS AND SCHEDULES

4/28/2014 7:08:43 PM C:\Revit\Transbay\tr\_MS2013\_116.rvt

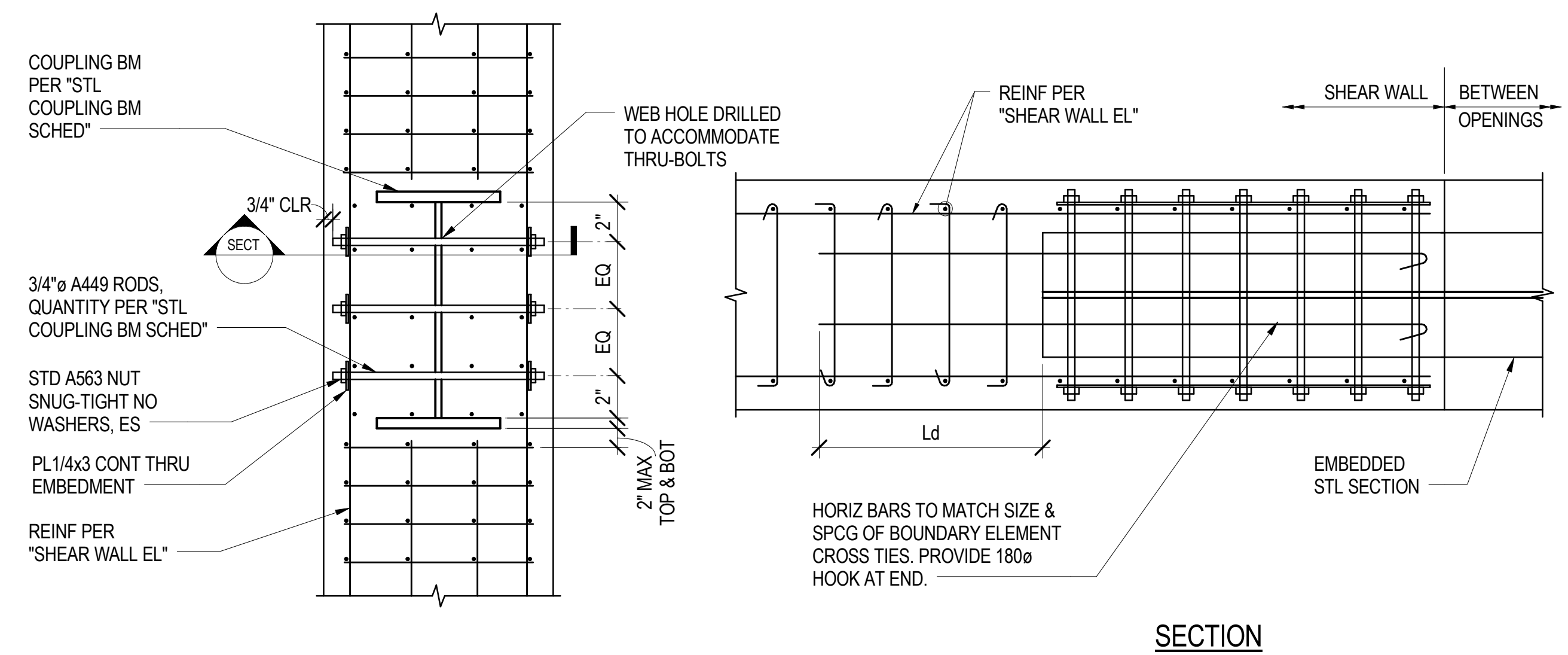


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

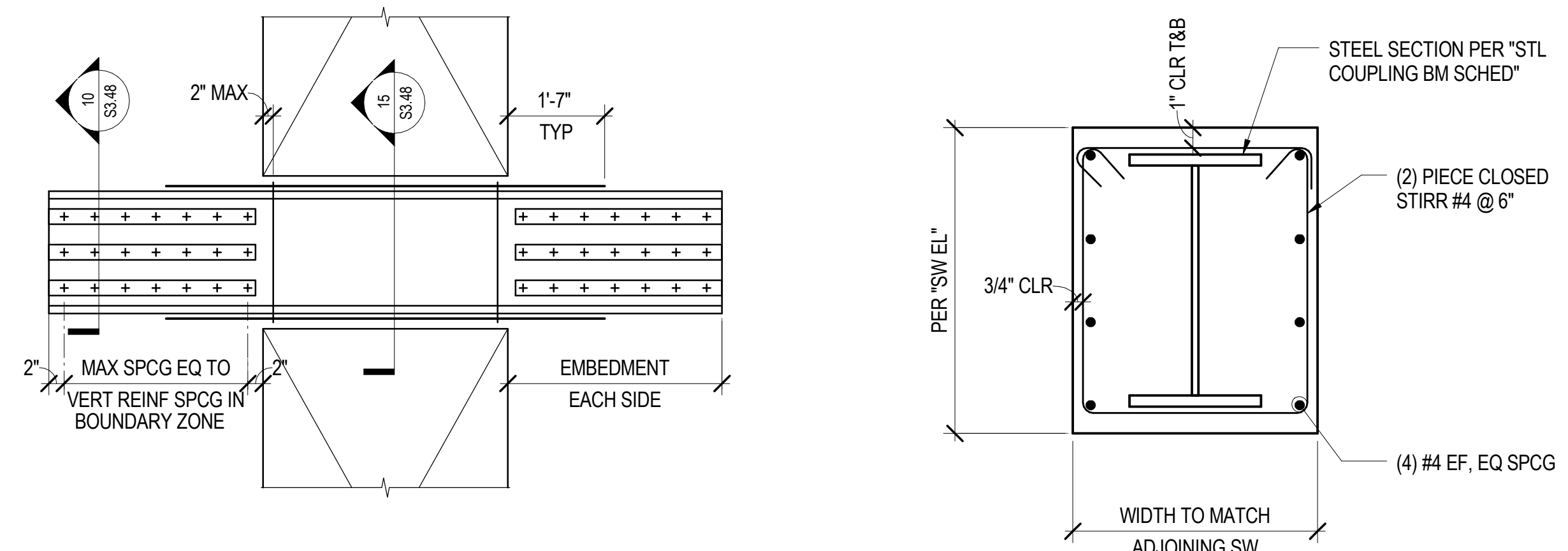


NOTES:  
SEE 10/S3.48 FOR INFORMATION NOT SHOWN.

5 DRAG STRUTS



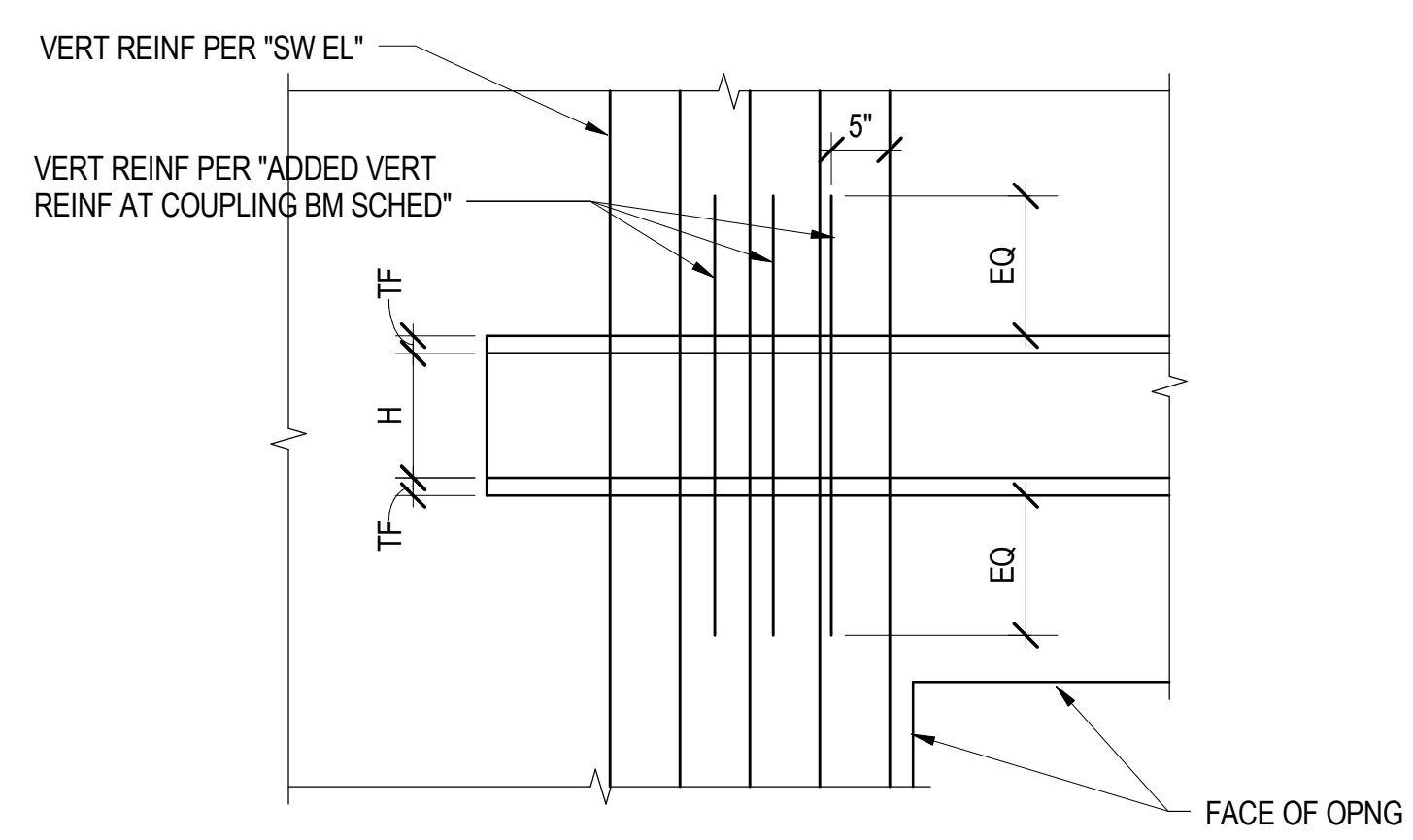
10 SECTION AT EMBEDMENT



NOTES:  
1. SHEAR WALL REINFORCING NOT SHOWN FOR CLARITY.

14 STEEL COUPLING BEAM

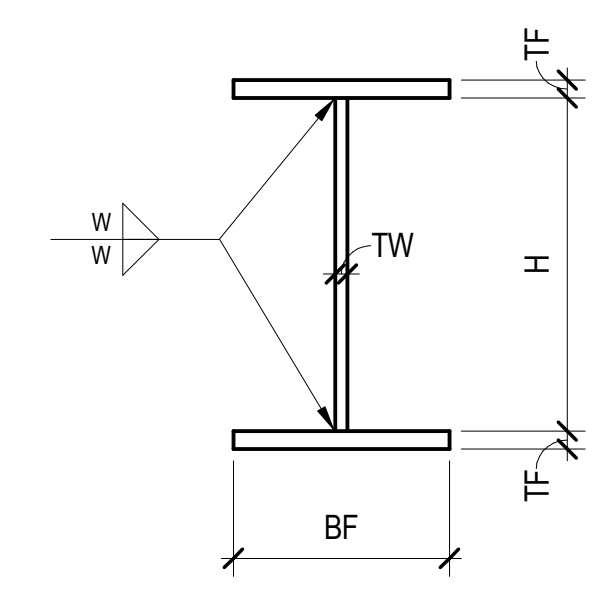
15 STEEL COUPLING BM SECTION AT OPENINGS



ADDED VERTICAL REINFORCING AT STEEL COUPLING BEAM SCHEDULE									
MARK	41	43	44	45	46	47	48	49	
V1	-	-	-	-	-	(5) #6x8-0" @ 6" EF	-	-	-
V2	-	-	-	-	(8) #8x8-0" @ 6" EF	(5) #7x7-6" @ 6" EF	(9) #9x9-0" @ 6" EF	-	-
V3	-	(5) #8x8-0" @ 6" EF	(5) #7x7-6" @ 6" EF	-	-	(5) #7x7-6" @ 6" EF	(9) #7x7-6" @ 6" EF	-	-
V6	-	-	-	-	-	(1) #6x6-0" @ 6" EF	(7) #7x7-6" @ 6" EF	-	-
V7	-	-	-	(3) #6x6-0" @ 6" EF	(7) #8x8-0" @ 6" EF	(3) #7x7-6" @ 6" EF	(7) #8x8-0" @ 6" EF	-	-
V8	-	(4) #7x7-6" @ 6" EF	(5) #8x8-0" @ 6" EF	-	(7) #7x7-6" @ 6" EF	(7) #7x7-6" @ 6" EF	(7) #8x8-0" @ 6" EF	-	-
V9	-	(4) #8x8-0" @ 6" EF	(3) #7x7-6" @ 6" EF	(3) #7x7-6" @ 6" EF	(2) #6x6-0" @ 6" EF	-	-	-	-
V10	-	-	-	-	(4) #7x7-6" @ 6" EF	-	(5) #7x7-6" @ 6" EF	-	-
V11	-	-	-	-	(2) #6x6-0" @ 6" EF	-	-	-	-

18 ADDED VERTICAL STEEL AT STEEL COUPLING BEAM SCHEDULE

STEEL COUPLING BEAM SCHEDULE									
MARK	BF (INCHES)	TF (INCHES)	H (INCHES)	TW (INCHES)	W	EMBED LENGTH	# RODS	REMARKS	
41	14	-	28	1/2	3/8	4'-10"	5	-	-
43	12	1	31	7/8	1/2	4'-11"	6	-	-
44	12	1 1/4	30 1/2	7/8	9/16	5'-5"	6	-	-
45	16	1 3/8	30 1/4	3/4	9/16	5'-8"	6	-	-
46	16	1 1/2	30	1 1/2	-	7'-0"	6	CJP WELD	-
47	18	2	29	1	3/4	5'-11"	6	-	-
48	16	1 3/4	29 1/2	1 3/4	-	7'-8"	6	CJP WELD	-
49	14	1	25	7/16	3/8	4'-5"	5	-	-



NOTES:  
1. STEEL COUPLING BEAMS TO HAVE F<sub>y</sub>=50 KSI.

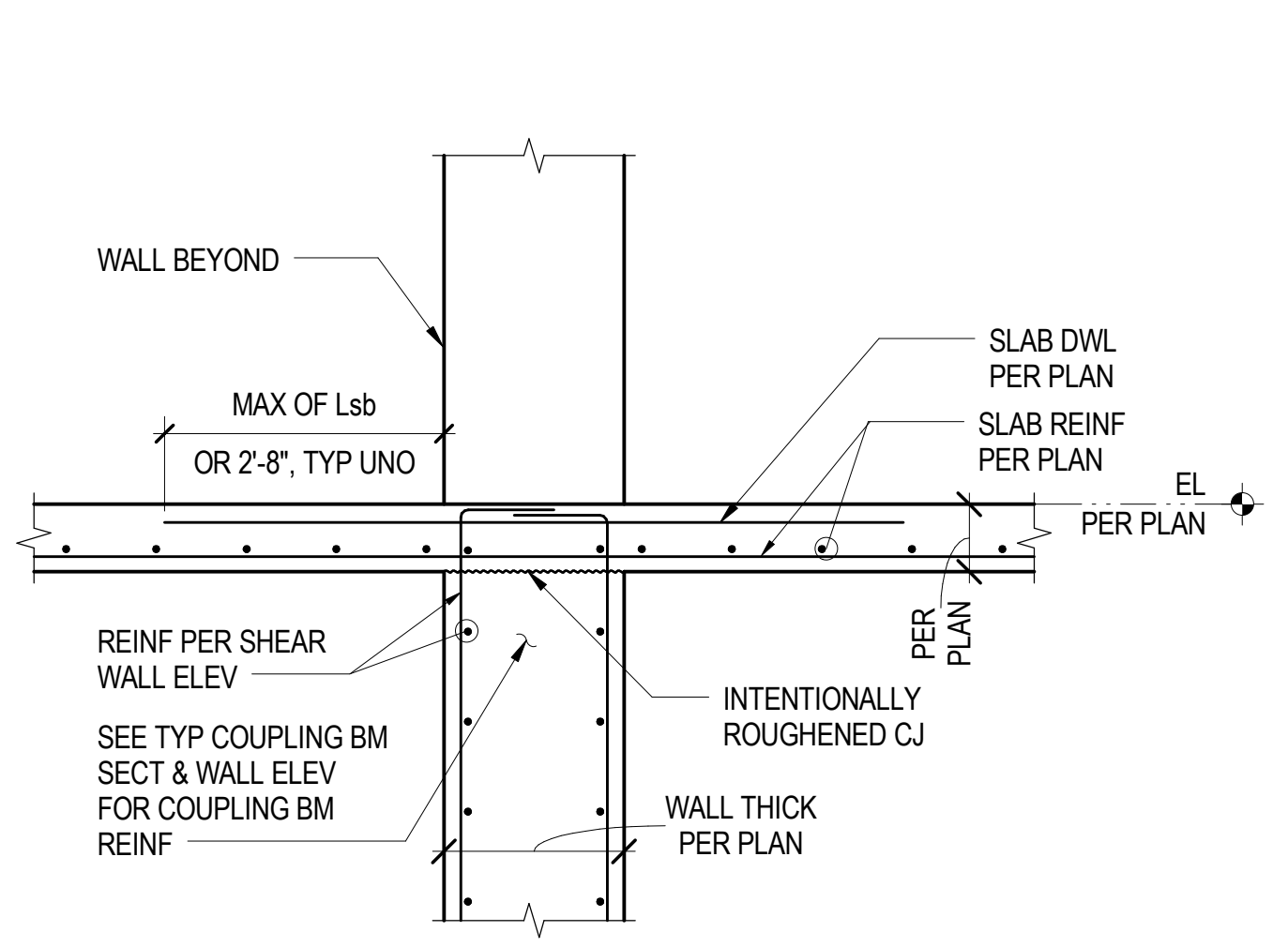
20 STEEL COUPLING BEAM SCHEDULE

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

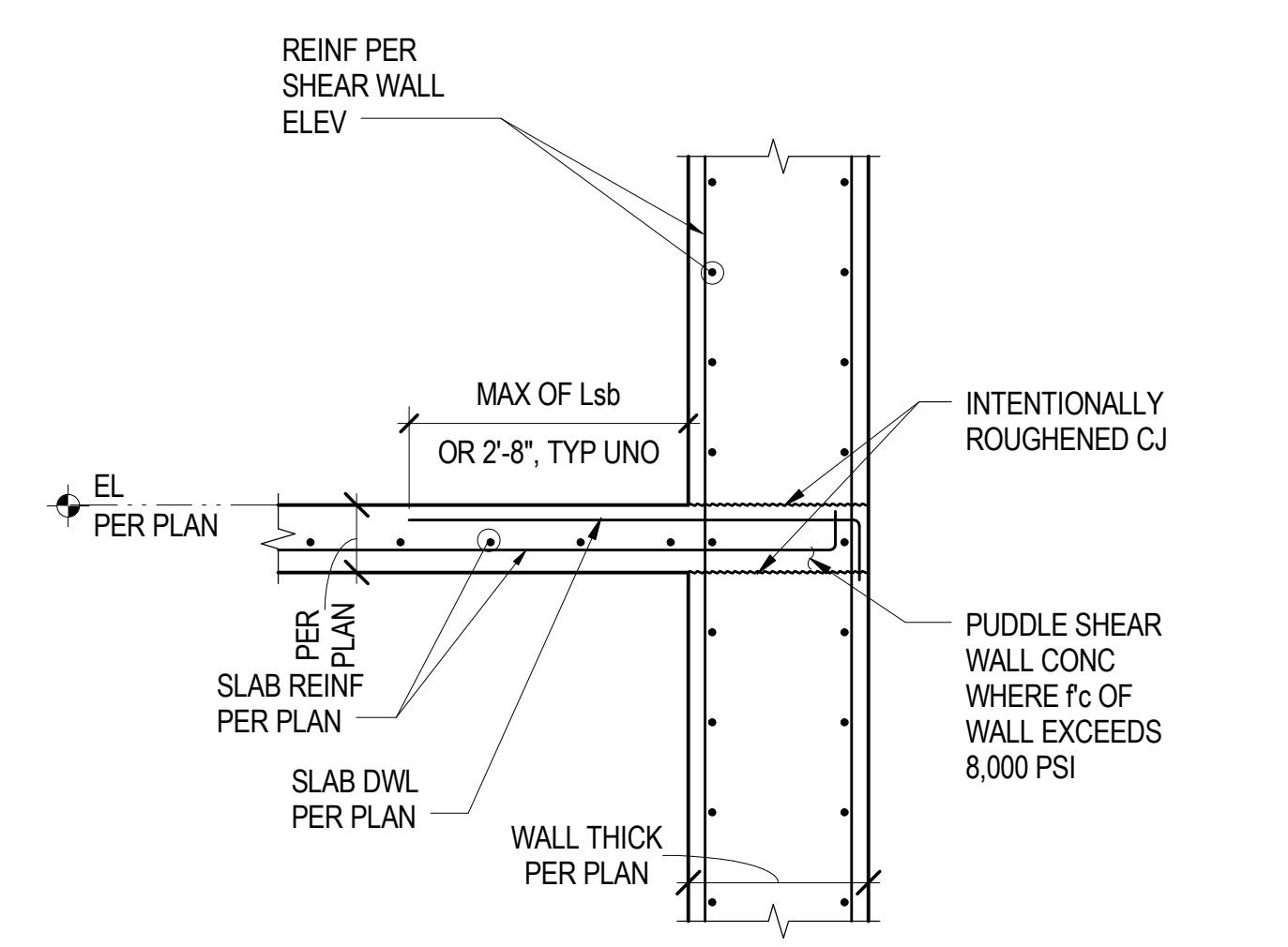
TYPICAL STEEL COUPLING BEAM DETAILS AND SCHEDULE



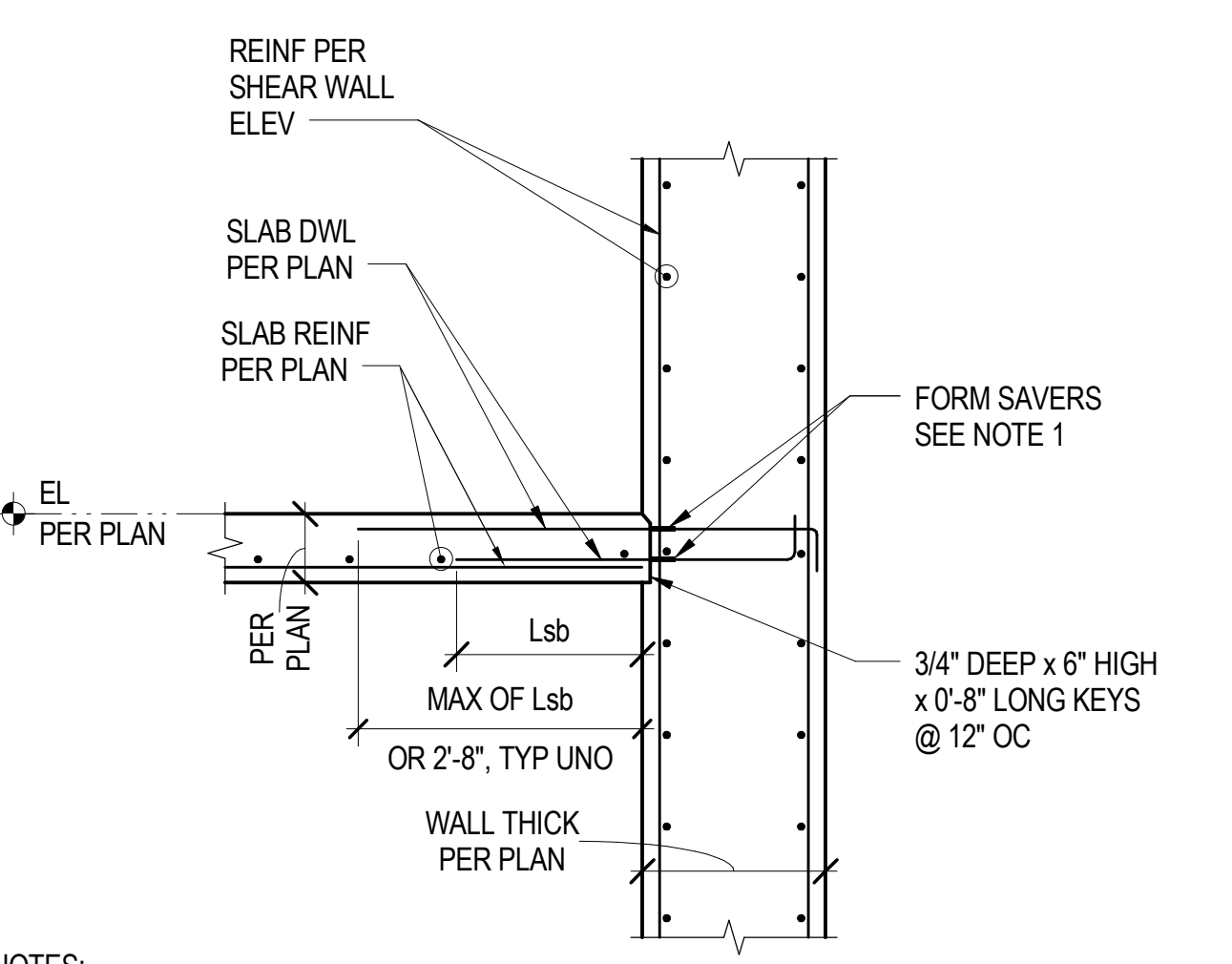
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



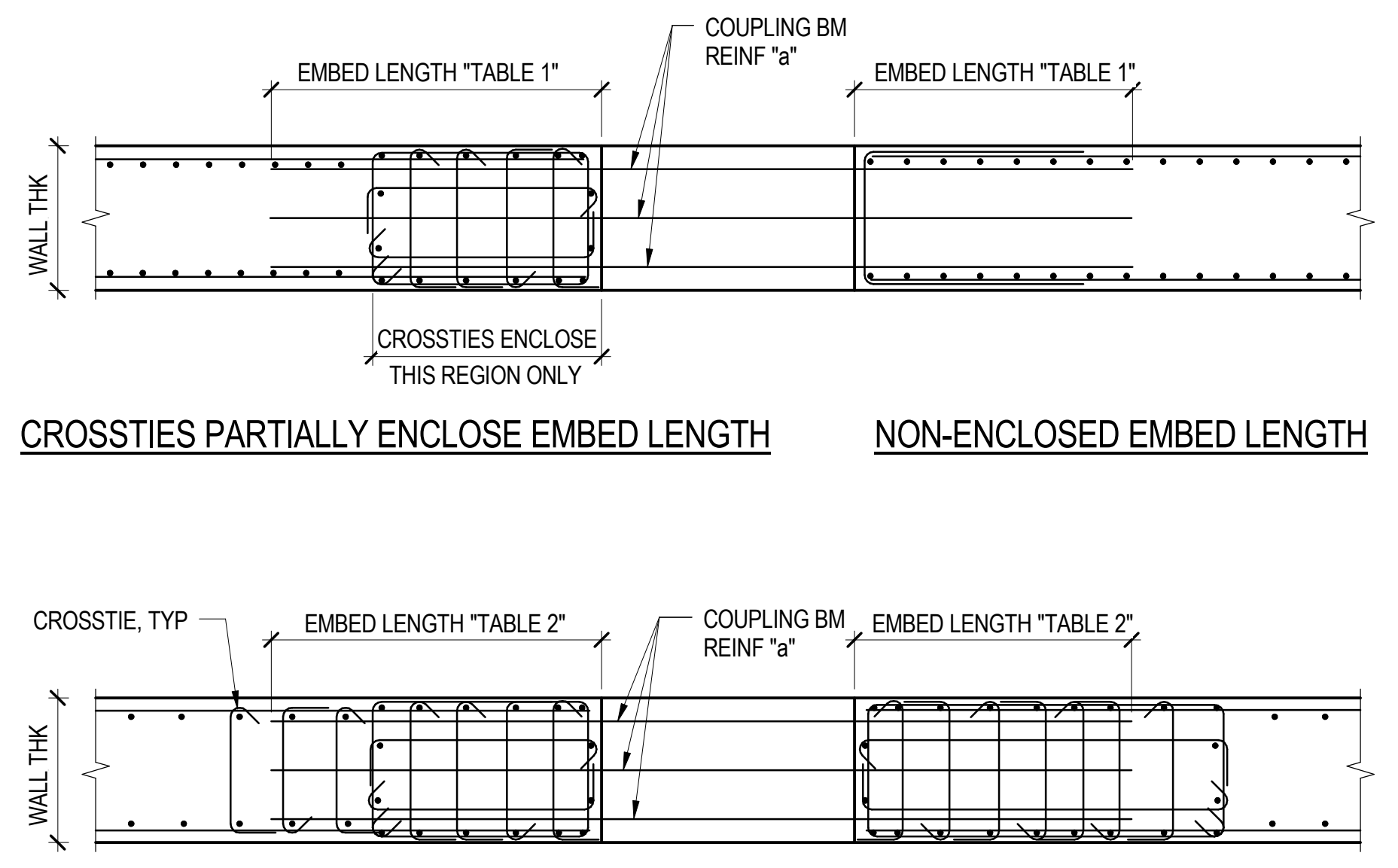
3 SHEAR WALL AT THRESHOLD



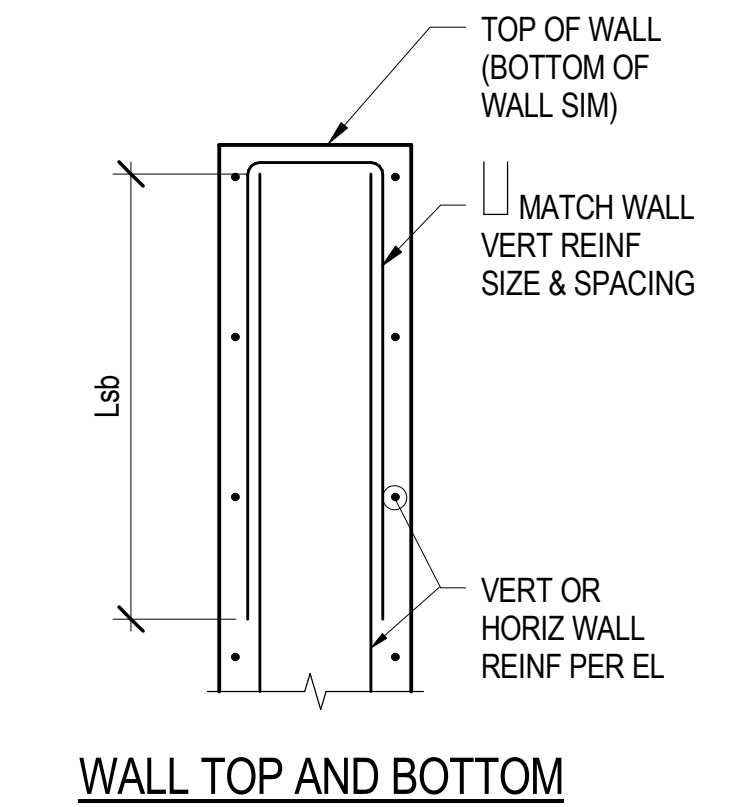
4 SHEAR WALL AT SLAB OPENING



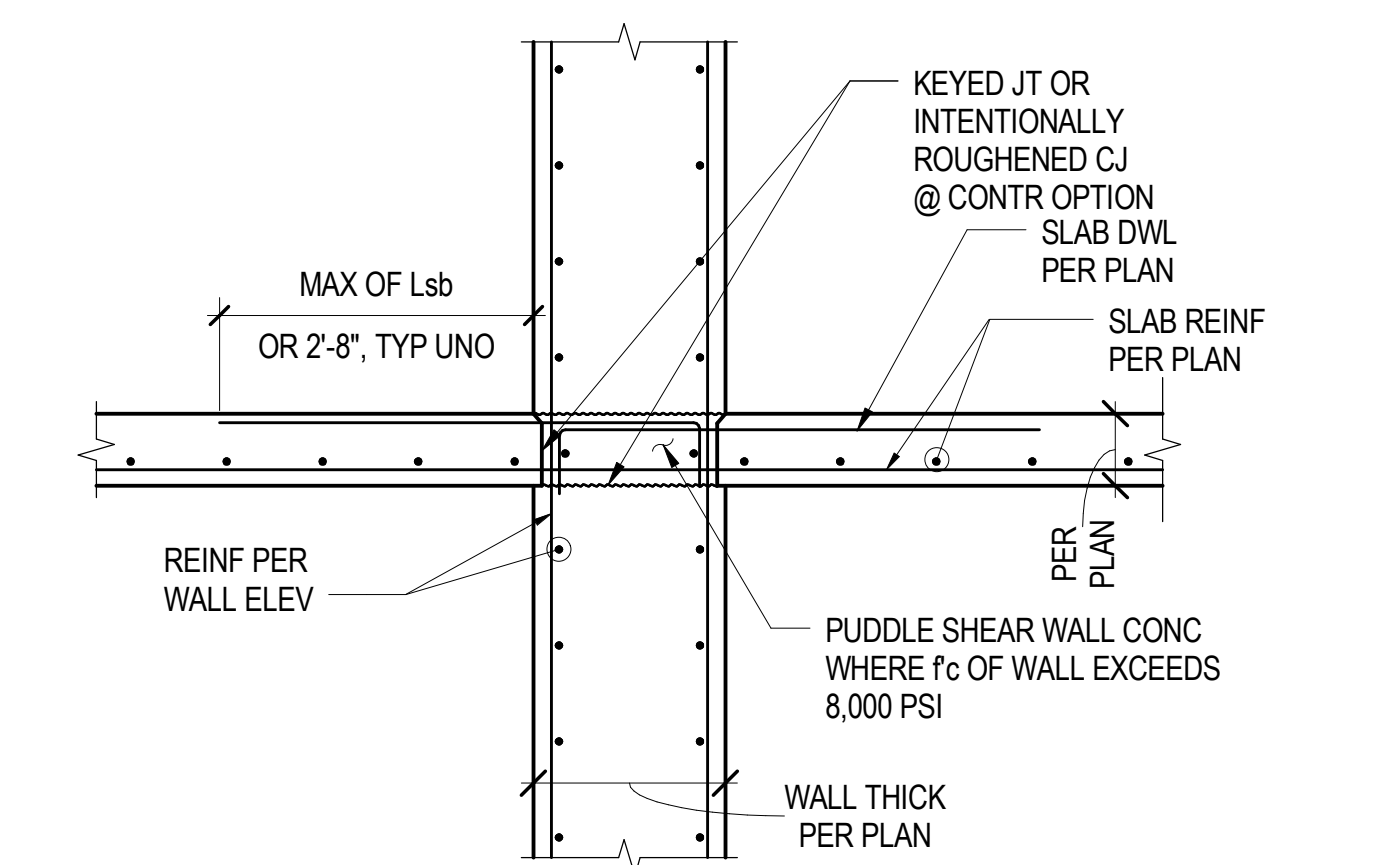
5 JUMP-FORMED WALL AT SLAB OPENING



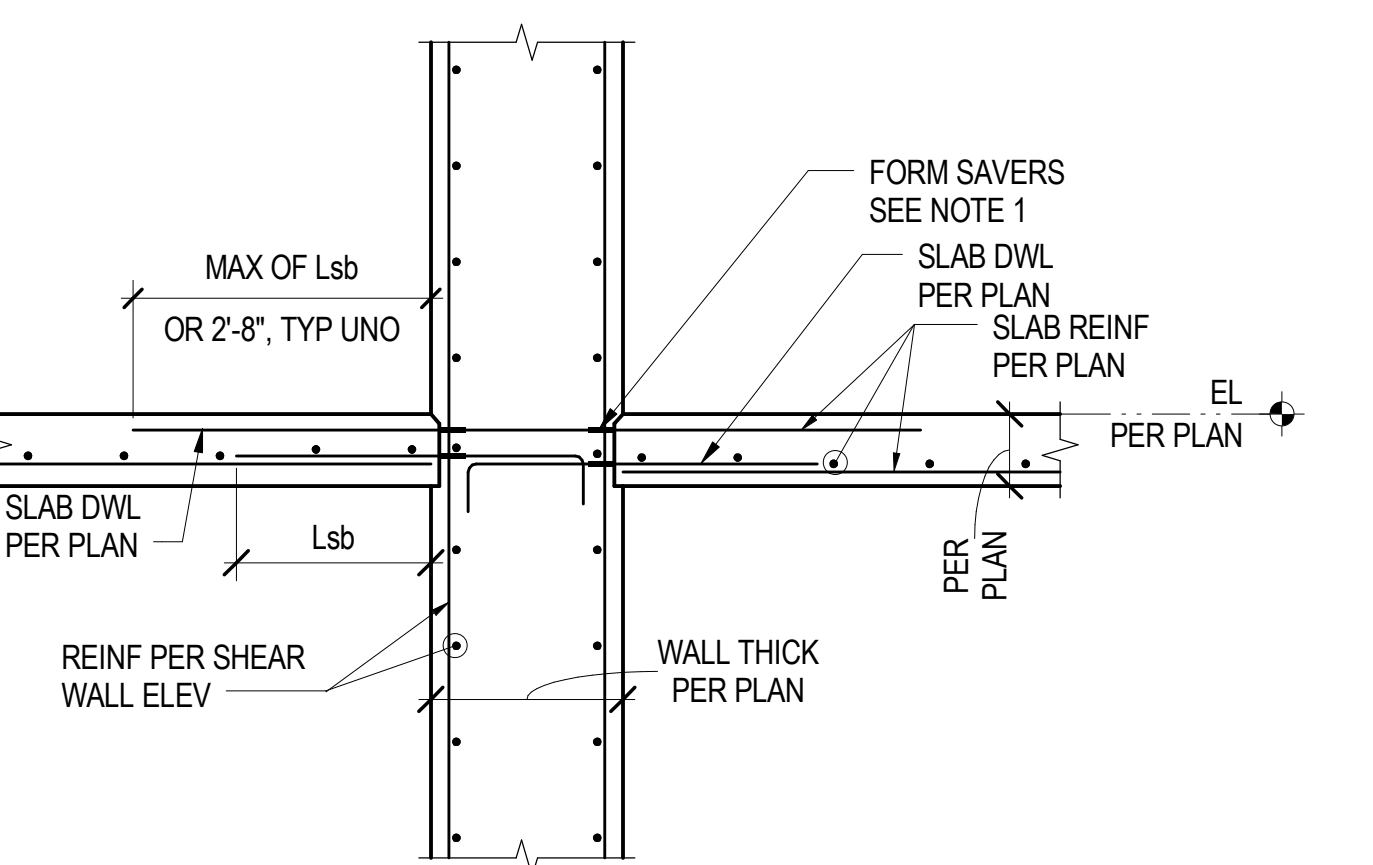
6 TYPICAL WALL CONFINEMENT AT COUPLING BEAMS



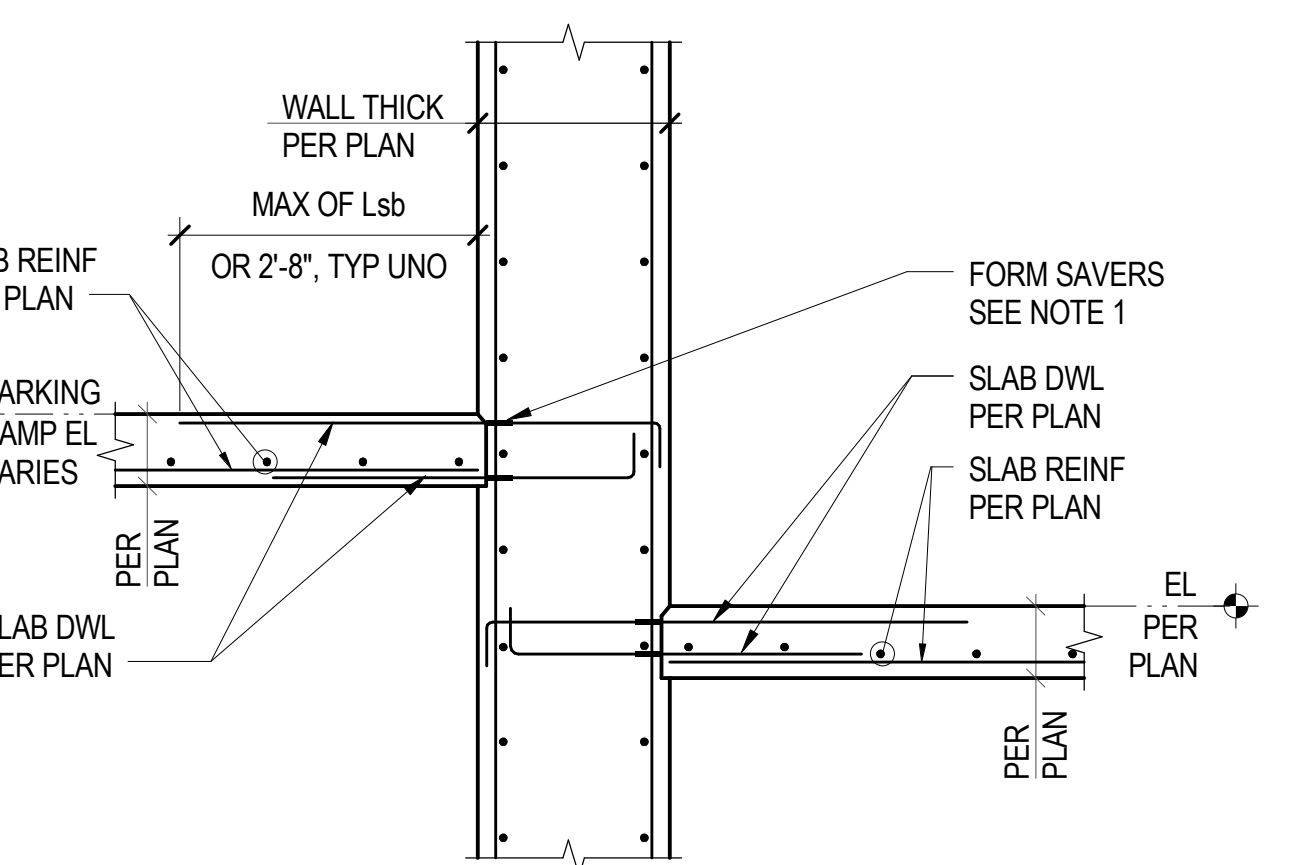
7 SHEAR WALL EDGE REINFORCING



8 SHEAR WALL AT CONTINUOUS SLAB



9 JUMP-FORMED WALL AT CONTINUOUS SLAB



10 JUMP-FORMED WALL WHERE SLAB EL VARIES

NOTES:  
1. WALL REINFORCING AND CROSSTIE DETAILING SHOWN IS GENERIC. SEE THE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

NOTES:  
1. DOOR OPENING OFFSETS SIMILAR TO WALL TOP AND BOTTOM.

NOTES:  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

NOTES:  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

NOTES:  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

**HORIZONTAL LAP LENGTH (L<sub>LAP</sub>) TABLE 1 (NON-ENCLOSED CONDITION)**

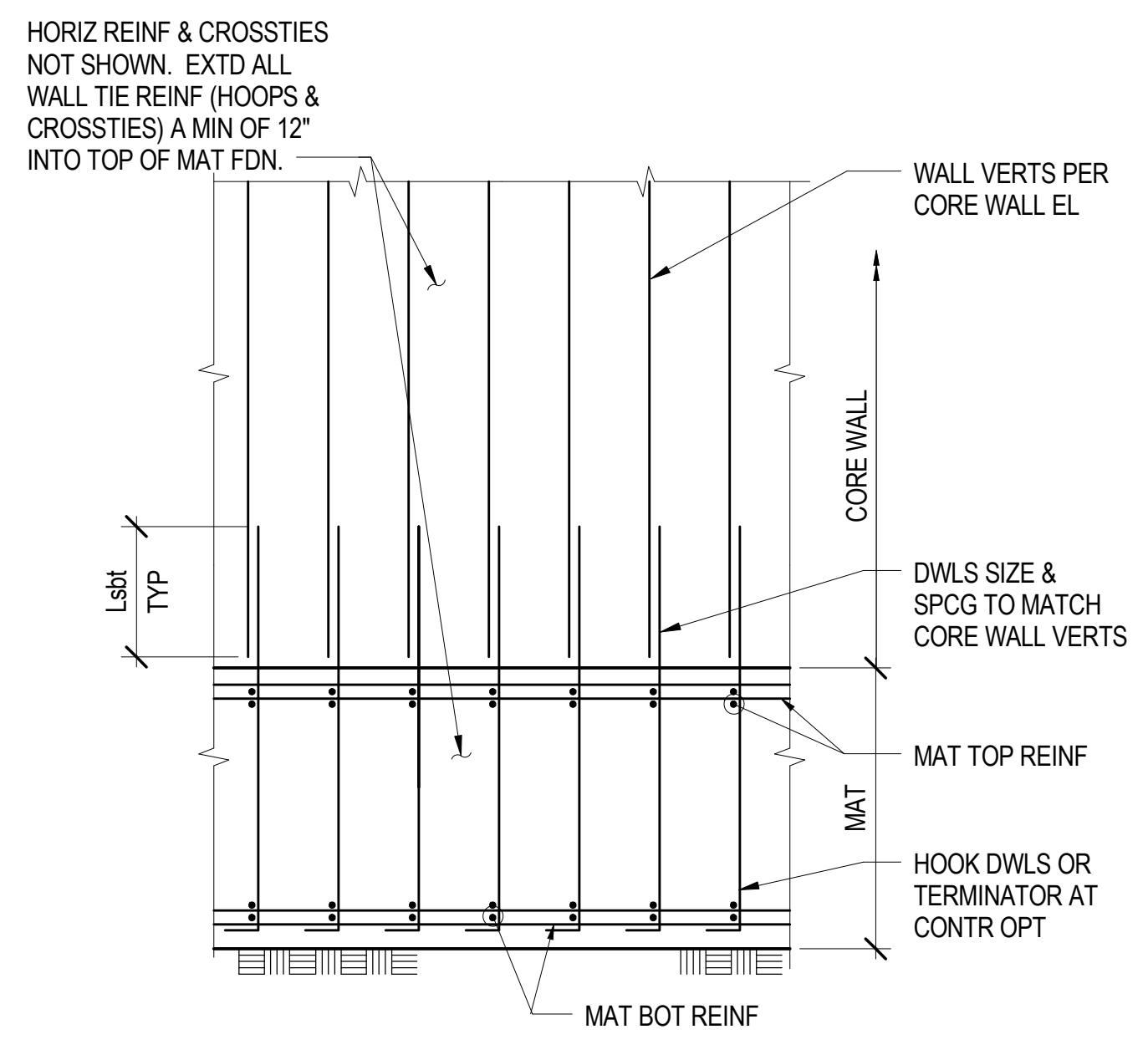
BAR SIZE	EMBED LENGTH (INCHES)		
	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 10 KSI
4	28	25	21
5	34	30	26
6	42	37	32
7	59	51	47
8	67	59	51
9	76	65	59
10	85	73	67
11	94	82	73

NOTES:  
1. LAP LENGTH IS CALCULATED AS 1.3x1.3xL<sub>d</sub>.  
2. SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

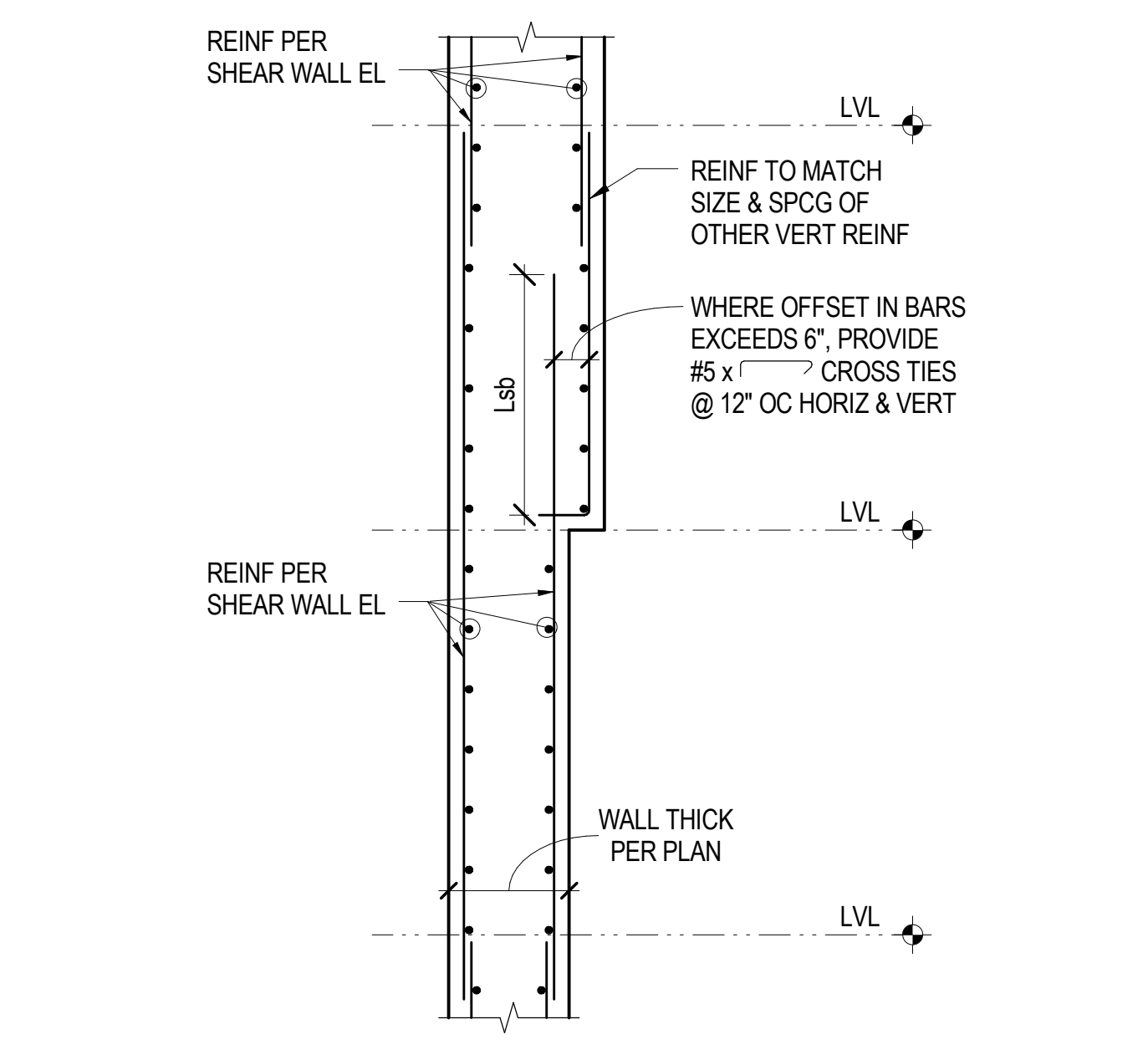
**HORIZONTAL LAP LENGTH (L<sub>LAP</sub>) TABLE 2 (ENCLOSED CONDITION)**

BAR SIZE	EMBED LENGTH (INCHES)		
	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 10 KSI
4	16	14	13
5	20	18	16
6	24	21	19
7	35	30	27
8	40	35	31
9	45	39	35
10	50	43	39
11	54	47	42

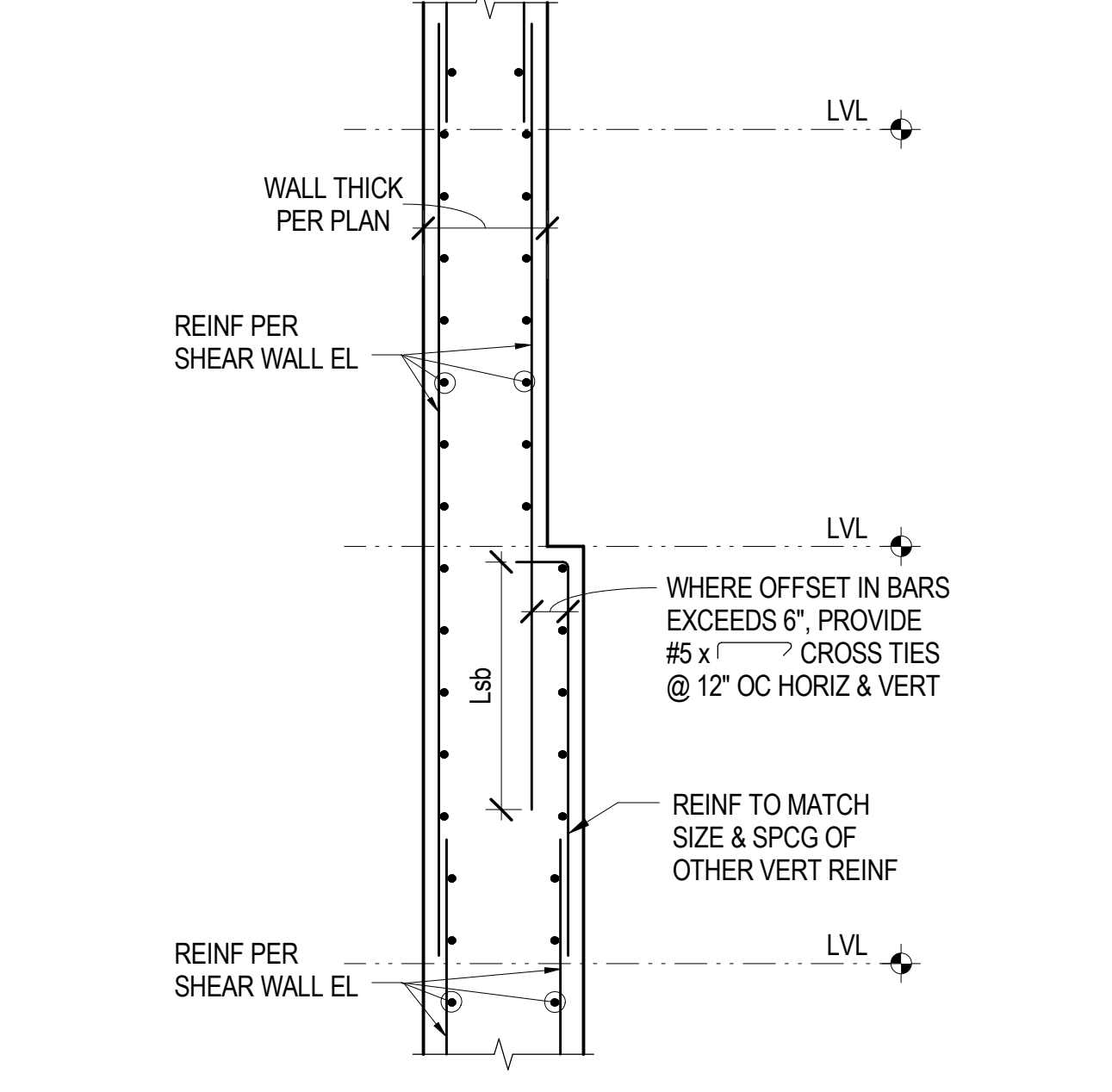
NOTES:  
1. LAP LENGTH IS CALCULATED AS 1.3x1.3x (L<sub>d</sub> CONFINED).  
2. SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.



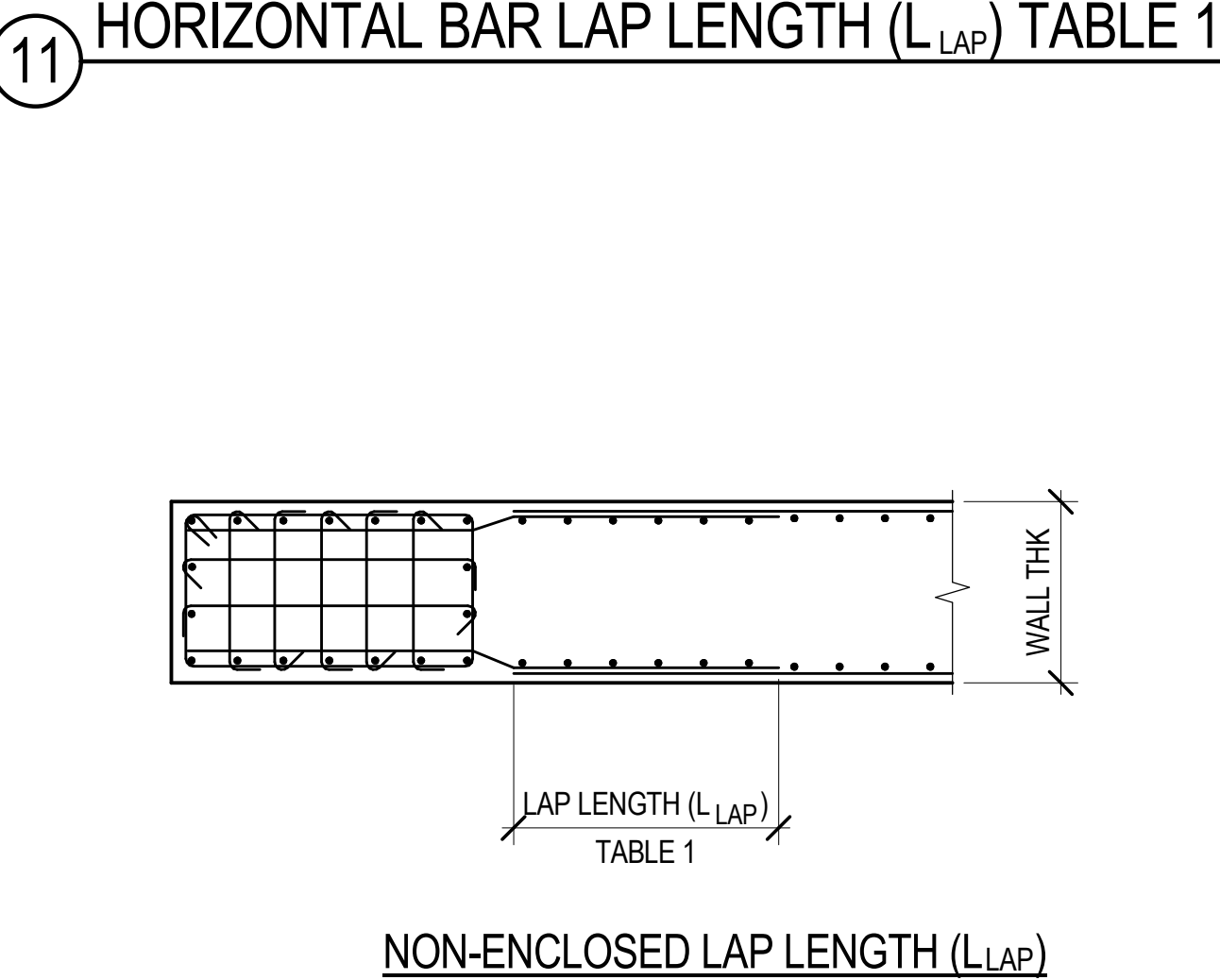
13 TYPICAL SHEAR WALL DOWEL



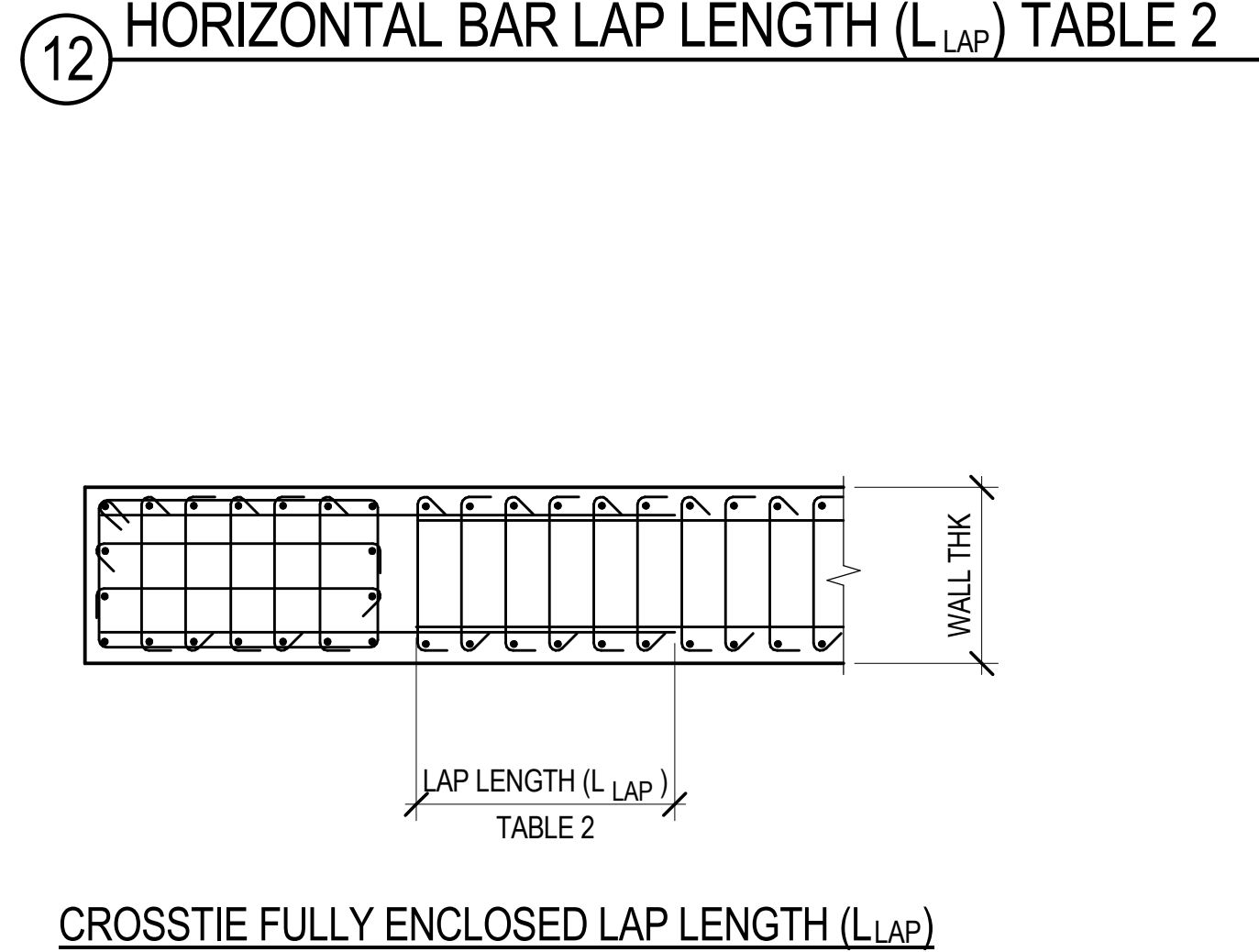
14 INCREASE IN WALL THICKNESS SECTION



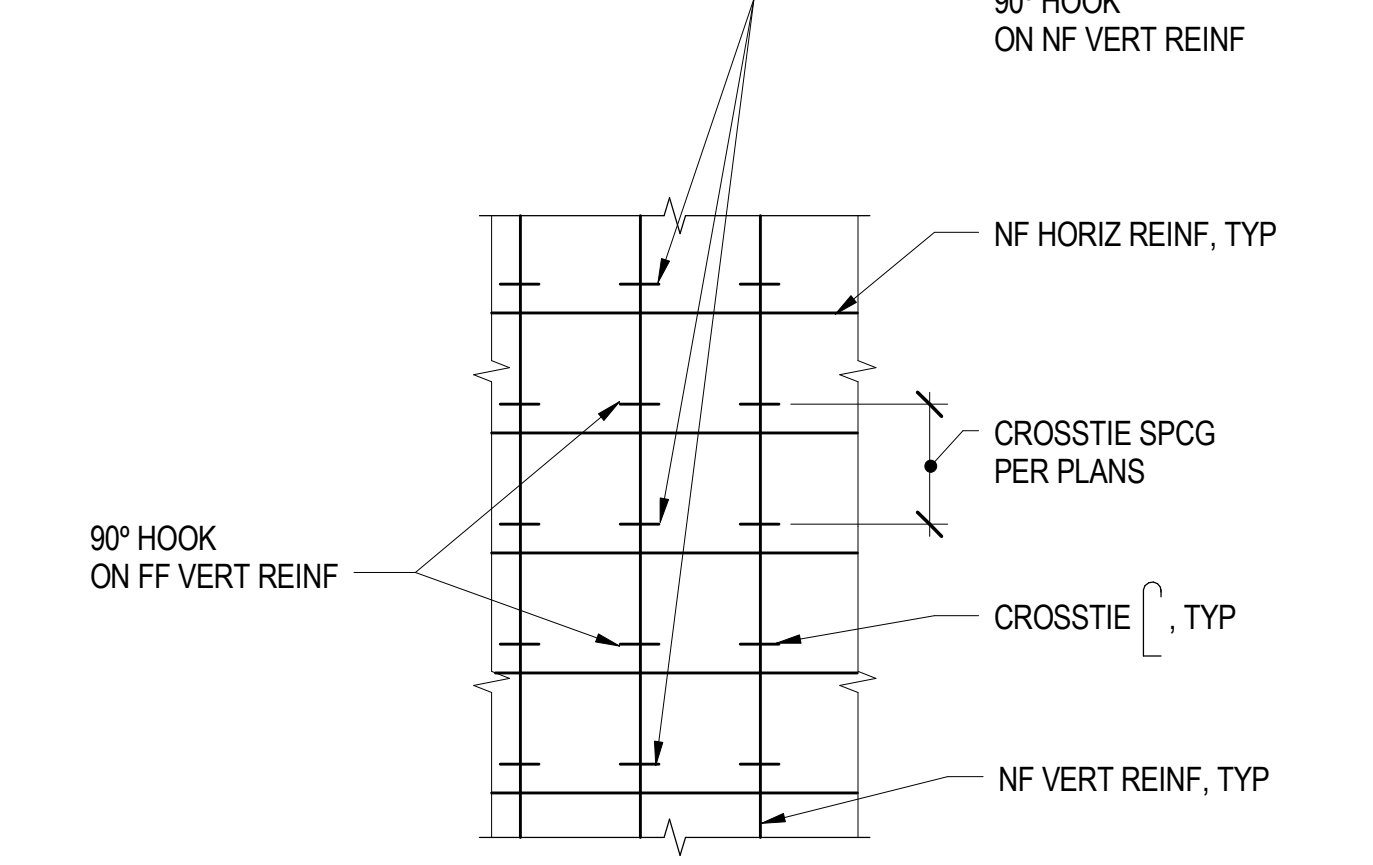
15 REDUCTION IN WALL THICKNESS SECTION



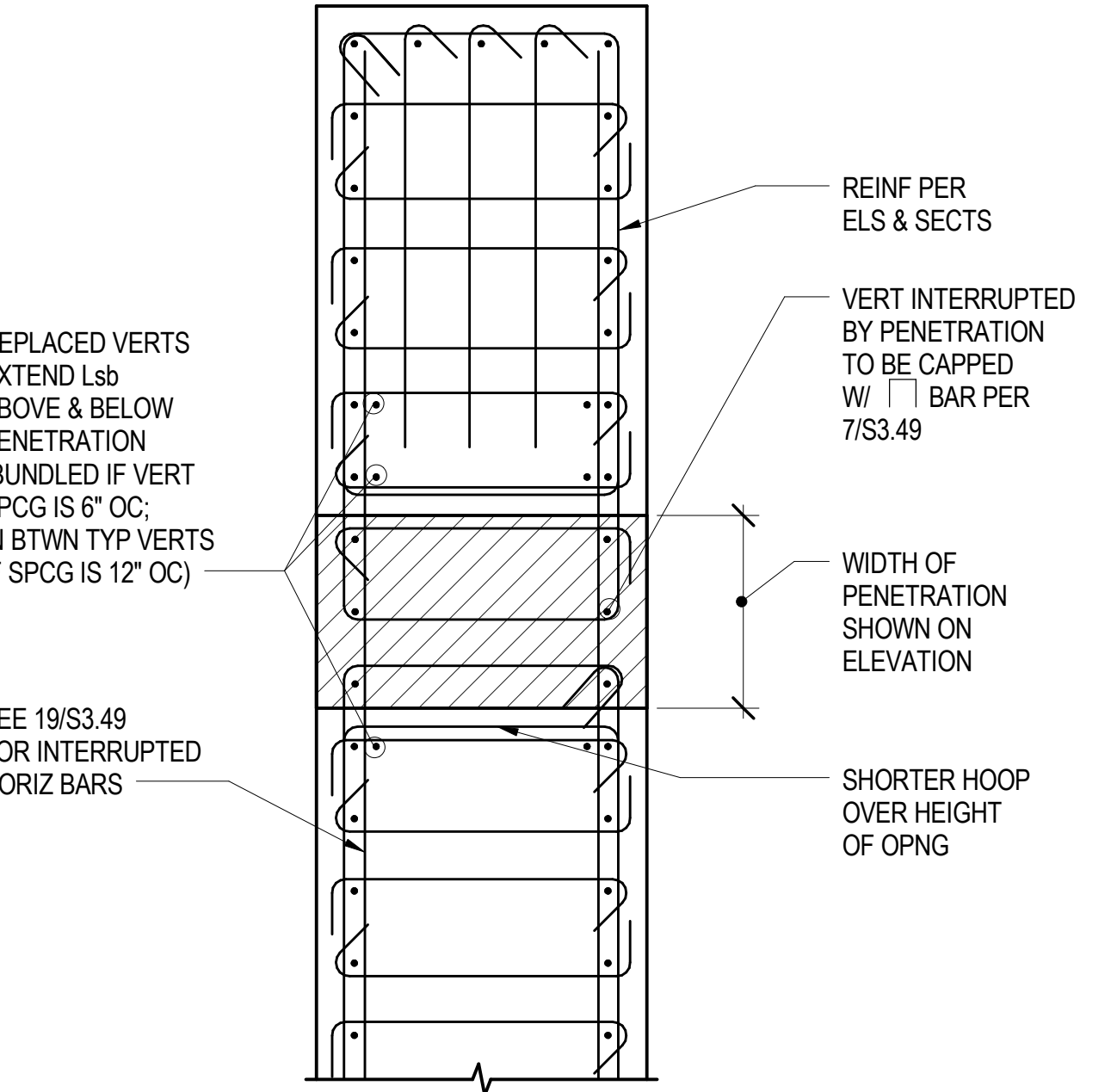
17 TYPICAL WALL CONFINEMENT



18 ELEVATION - CROSSTIE SPACING



19 TYPICAL SMALL SHEAR WALL OPENING



20 PLAN AT SHEAR WALL PENETRATION

NOTES:  
1. WALL REINFORCING AND CROSSTIES SHOWN ARE GENERIC. SEE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

NOTES:  
1. WALL REINFORCING AND CROSSTIES SHOWN ARE GENERIC. SEE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

NOTES:  
1. WALL REINFORCING AND CROSSTIES SHOWN ARE GENERIC. SEE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

NOTES:  
1. WALL REINFORCING AND CROSSTIES SHOWN ARE GENERIC. SEE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**TYPICAL SHEAR WALL DETAILS**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE						
MARK	WALL THICKNESS	F <sub>c</sub> =8,000 PSI		F <sub>c</sub> =10,000 PSI		CROSSTIE CONFINEMENT
		Lt (INCH)	Ldh (INCH)	Lt (INCH)	Ldh (INCH)	
H11	30"	55	15	-	-	(3) #4
H12	24"	-	-	64	14	(3) #5
H13	24"	108	29	80	26	(3) #5
H13	>24"	-	-	72	26	(3) #4
H14	30"	99	29	87	26	(3) #4
H14	36"	-	-	69	26	(3) #4
H14	42"	-	-	55	26	(3) #5
H15	30"	-	-	107	26	(3) #4
H15	36"	-	-	82	26	(3) #4
H15	42"	-	-	64	26	(3) #5
H16	24"	110	29	99	26	(4) #4
H16	48"	-	-	58	26	(4) #4
H17	ALL	-	-	80	26	(3) #4
H18	30"	-	-	121	35	(3) #6
H18	>30"	-	-	100	35	(3) #4
H19	30"	109	39	99	35	(4) #4
H19	36"	-	-	98	35	(4) #4
H19	42"	-	-	92	35	(4) #4
H21	36"	111	39	104	35	(4) #4
H21	>36"	-	-	99	35	(4) #4
H22	ALL	-	-	98	35	(5) #4
H24	36"	-	-	127	35	(4) #4
H24	42"	-	-	108	35	(4) #4
H24	48"	-	-	74	35	(4) #5
H25	36"	-	-	104	35	(5) #4
H26	36"	-	-	116	35	(4) #5
H26	>36"	-	-	99	35	(4) #5
H27	42"	-	-	99	35	(5) #5
H28	48"	-	-	90	35	(5) #5

**NOTES:**

- CROSSTIE QUANTITY SPECIFIED TO BE PROVIDED AT EACH VERTICAL BAR FOR Lt LENGTH BEYOND OPENING.
- PLACE ONE CROSSTIE ABOVE AND BELOW THE GROUP AND BETWEEN EACH LAYER.
- WHERE CROSSTIES LISTED ABOVE COINCIDE WITH CROSSTIES SHOWN IN SHEAR WALL SECTIONS, THE GREATER QUANTITY SHALL BE USED.
- PROVIDE MINIMUM CLEAR COVER OF 2 1/2" AND MINIMUM END COVER OF 2".
- AT CONTRACTOR'S OPTION, INCREASED CONFINEMENT MAY BE PROVIDED TO ELIMINATE HOOKED ENDS AT LOCATIONS SPECIFIED IN "OPTIONAL CONFINEMENT" TABLE.

**10 SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE**

OPTIONAL CONFINEMENT			
WALL	LEVELS	CROSSTIE CONFINEMENT	MARKS
SOUTH	L31-L45	(3) #6	H18
EAST	L2-L6	PER SHEAR WALL SECTIONS	H26, H27
EAST	L7-L14	(4) #6	H24
EAST	L15	(5) #6	H22
EAST	L16-L22	(14) #6	H21
EAST	L23-L24	(14) #6	H21
EAST	L25-L30	(14) #5	H19
EAST	L31-L44	(12) #6	H19
EAST	L45-L46	(12) #5	H19
EAST	L47	(10) #6	H19
EAST	L52	PER SHEAR WALL SECTIONS	H22
EAST	L58-L60	(11) #6	H14
NORTH	L3-L6	PER SHEAR WALL SECTIONS	H19
NORTH	L7-L10	(7) #4	H18
NORTH	L15-L18	(7) #5	H18
NORTH	L19-L32	(3) #4	H14, H15
NORTH	L33	(3) #5	H15
NORTH	L34	(5) #6	H15
NORTH	L35-L44	(3) #4	H13
NORTH	L45-L47	(3) #6	H15
NORTH	L48-L49	PER SHEAR WALL SECTIONS	H13, H14
INTERIOR	P3-P2	PER SHEAR WALL SECTIONS	H13

**NOTES:**

- IN LIEU OF HOOKED END, EXTEND THE HORIZONTAL BARS AND PROVIDE SPECIFIED CROSSTIE CONFINEMENT AT EACH VERTICAL BAR BEYOND OPENING TO WALL END.
- PLACE ONE CROSSTIE ABOVE AND BELOW THE GROUP AND BETWEEN EACH LAYER. REMAINING NUMBER OF CROSSTIES TO BE DISTRIBUTED, SPACED NO MORE THAN 4" VERTICALLY, HALF ABOVE AND HALF BELOW THE GROUP.
- WHERE CROSSTIES LISTED ABOVE COINCIDE WITH CROSSTIES SHOWN IN SHEAR WALL SECTIONS, THE GREATER QUANTITY SHALL BE USED.

**15 OPTIONAL CONFINEMENT TABLE**

NO.	DATE	ISSUE
1	02 MAY 14	GMP

CAD FILENAME

DRAWING TITLE

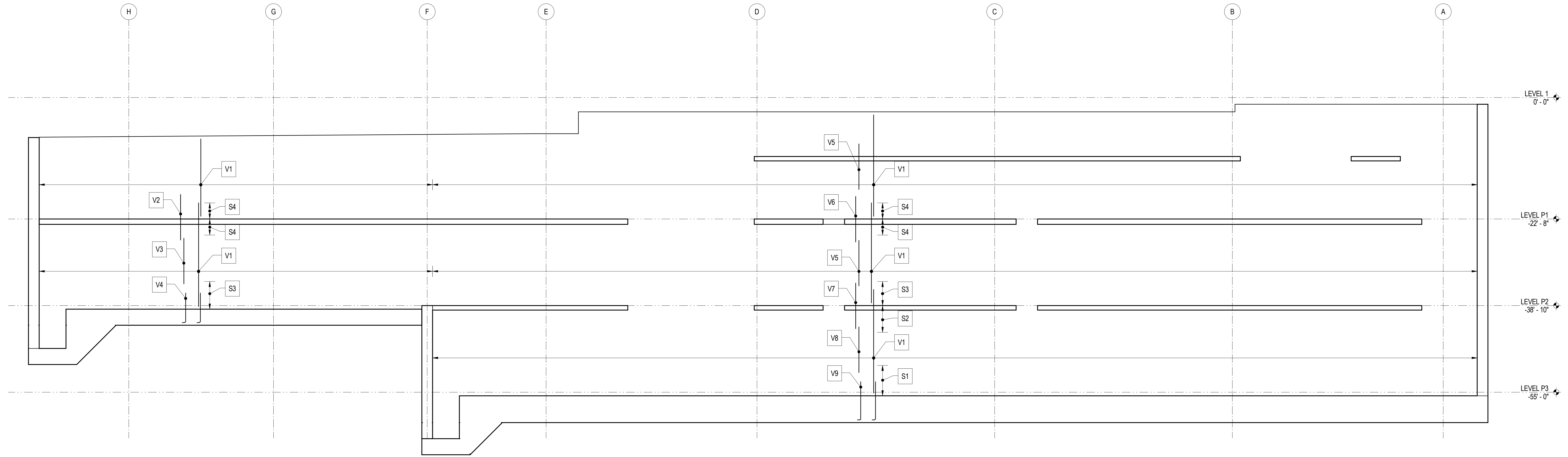
**TYPICAL SHEAR WALL DETAILS**

PROJECT NO. 08044

DRAWING NUMBER **S3.50**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

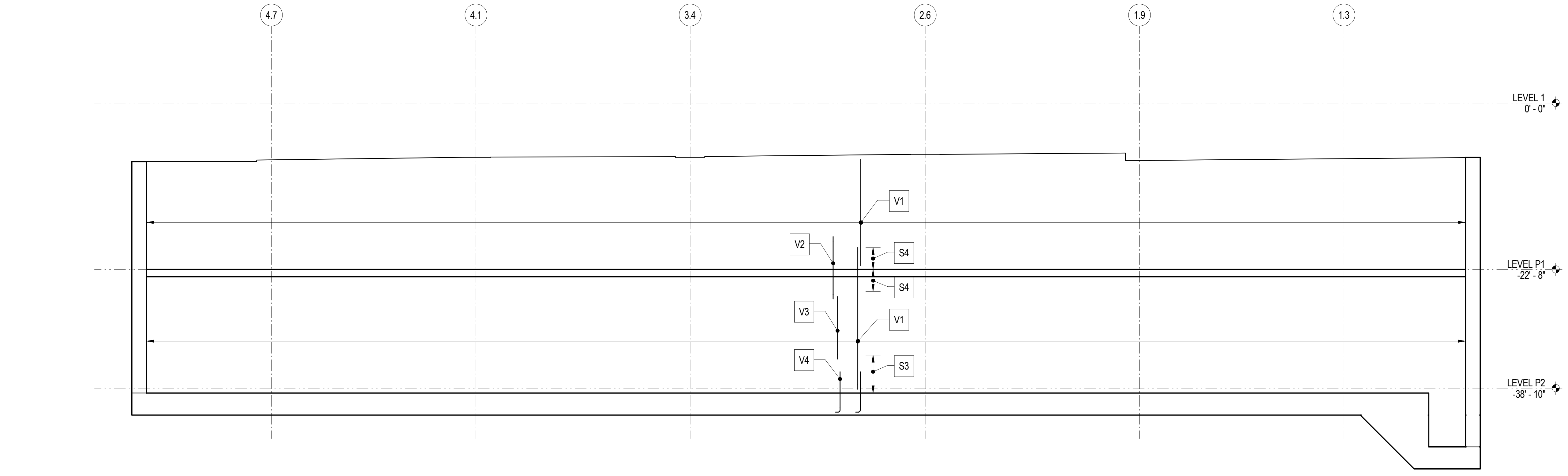


1 SOUTH BASEMENT WALL ELEVATION  
1/8" = 1'-0"

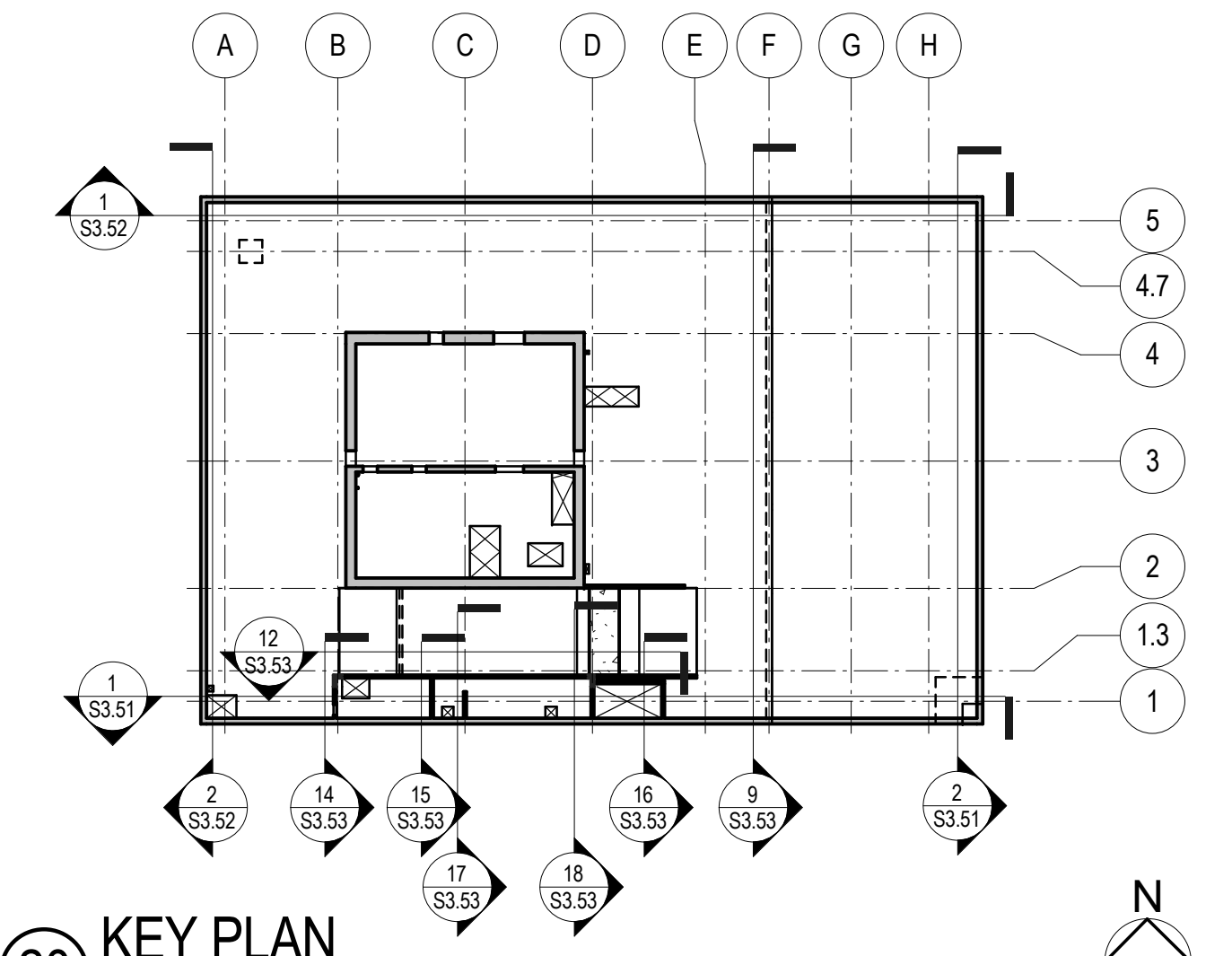
- NOTES:**
- BASEMENT WALL CONCRETE STRENGTH: LEVELS P3 TO 1:  $f_c = 6,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb, UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
  - FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.

MARK	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
	V1	#6 CONT @ 12"	
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#6x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#6x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--

MARK	BAR	SPACING	
		HORIZONTAL	VERTICAL
		S1	#5
S2	#5	9" OC	BELOW P2: (2) TIES @ 6", (4) TIES @ 12"
S3	#5	18" OC	ABOVE P2: (3) TIES @ 6", (3) TIES @ 12"
S4	#5	18" OC	BELOW / ABOVE P1: (3) TIES @ 12"



2 EAST BASEMENT WALL ELEVATION  
1/8" = 1'-0"



20 KEY PLAN

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**DRAWING TITLE**  
BASEMENT WALL ELEVATIONS

**PROJECT NO.**  
08044

**DRAWING NUMBER**  
S3.51

4/30/2014 11:17:34 AM C:\Revit\Transbay\Twr\_MS2013\_116.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

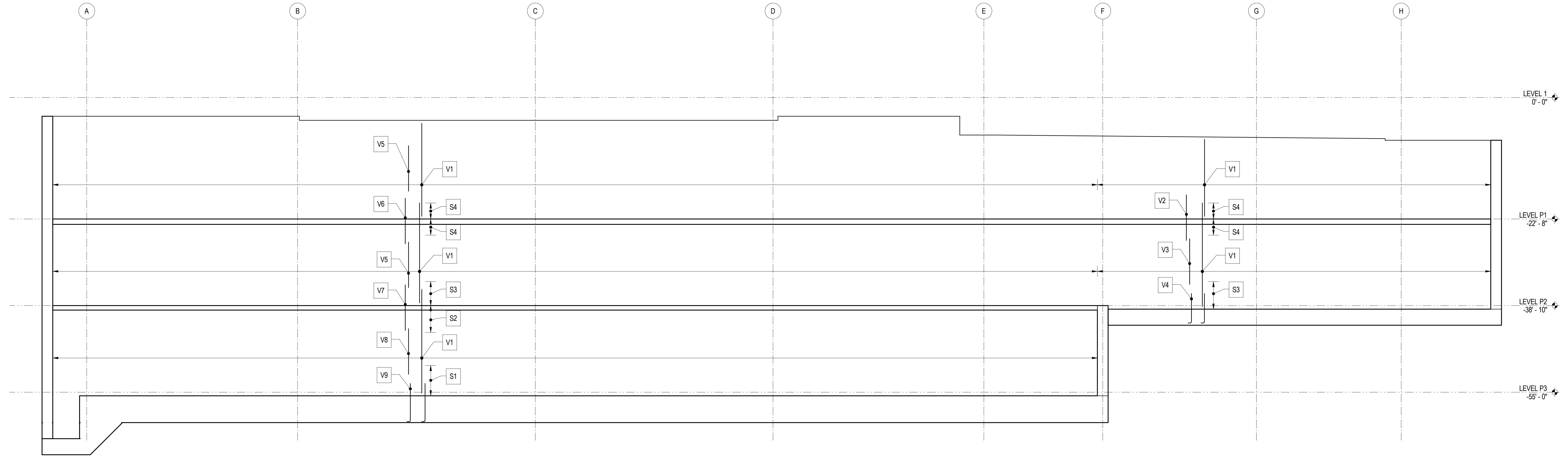
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



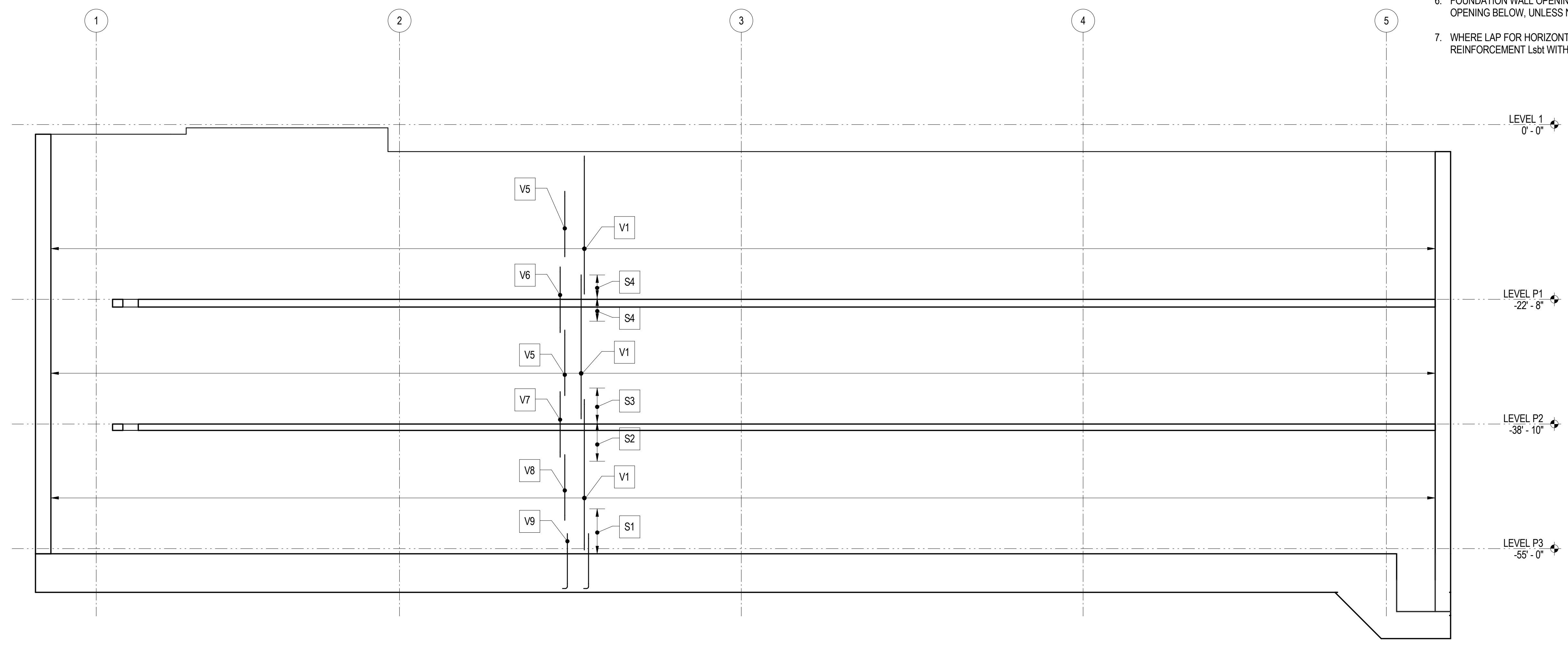
1 NORTH BASEMENT WALL ELEVATION  
1/8" = 1'-0"

NOTES:

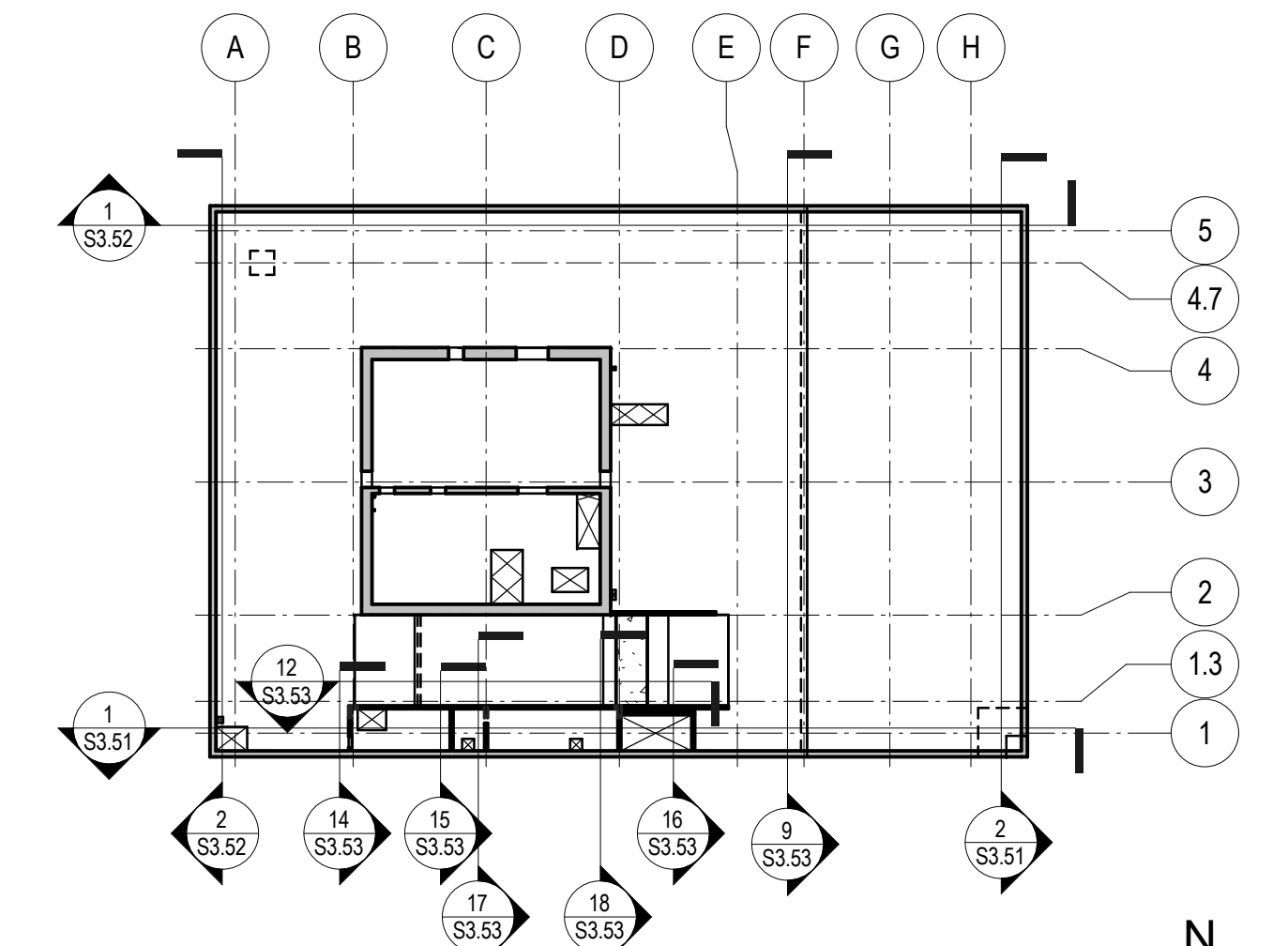
- BASEMENT WALL CONCRETE STRENGTH: LEVELS P3 TO 1:  $f_c = 6,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb, UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
- FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.

MARK	REINFORCING SCHEDULE		
	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
V1	#6 CONT @ 12"	#6 CONT @ 12"	#6 @ 6"
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#6x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#8x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--

MARK	BAR	SHEAR TIE REINFORCING	
		HORIZONTAL	SPACING
			VERTICAL
S1	#5	9" OC	FROM BOT: (6) TIES @ 6", (3) TIES @ 12"
S2	#5	9" OC	BELOW P2: (2) TIES @ 6", (4) TIES @ 12"
S3	#5	18" OC	ABOVE P2: (3) TIES @ 6", (3) TIES @ 12"
S4	#5	18" OC	BELOW / ABOVE P1: (3) TIES @ 12"



2 WEST BASEMENT WALL ELEVATION  
1/8" = 1'-0"



20 KEY PLAN

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

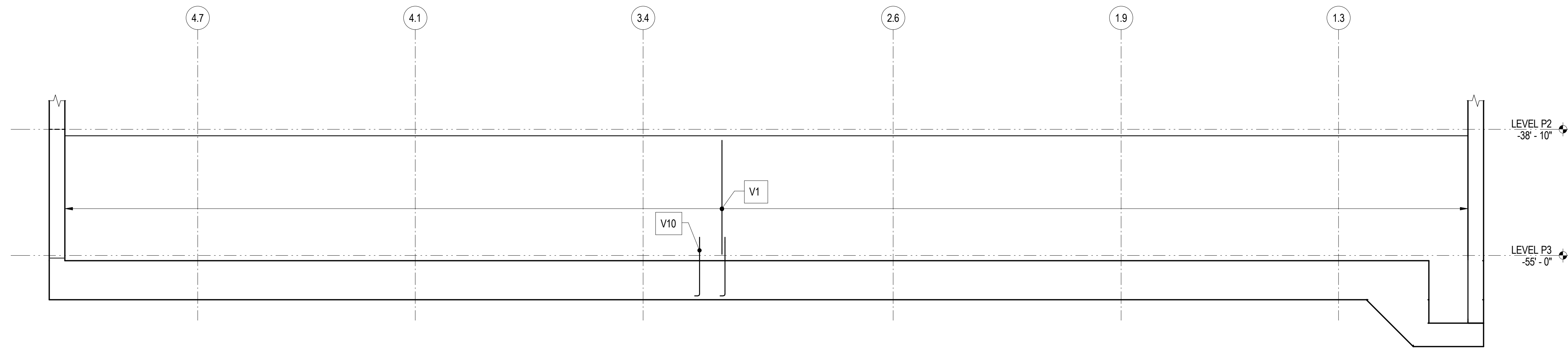
DRAWING TITLE  
**BASEMENT WALL ELEVATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.52

4/30/2014 11:17:37 AM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

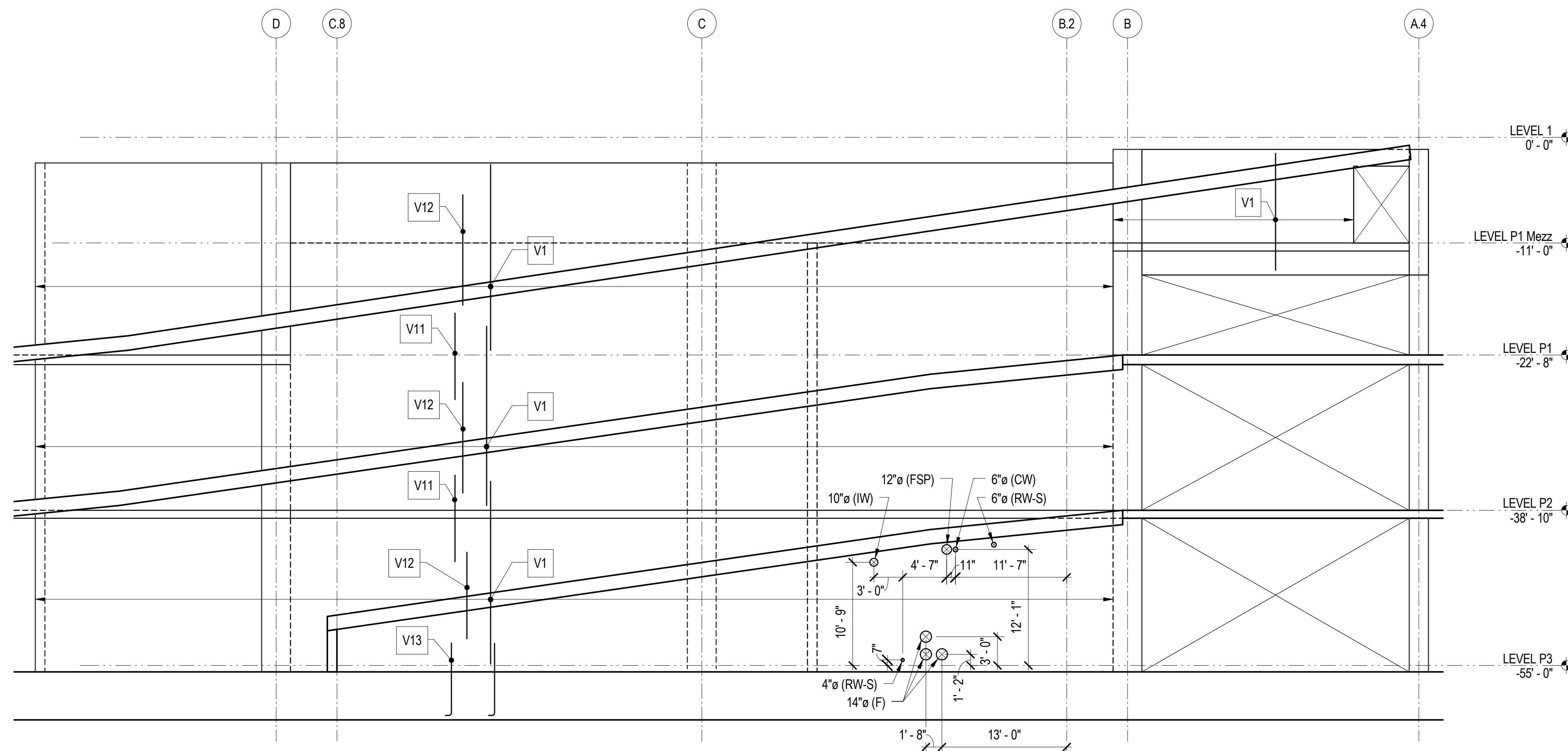


- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



9 BASEMENT WALL ELEVATION ALONG GRID F

1/8" = 1'-0"



14 WALL ELEVATION AT GRID B

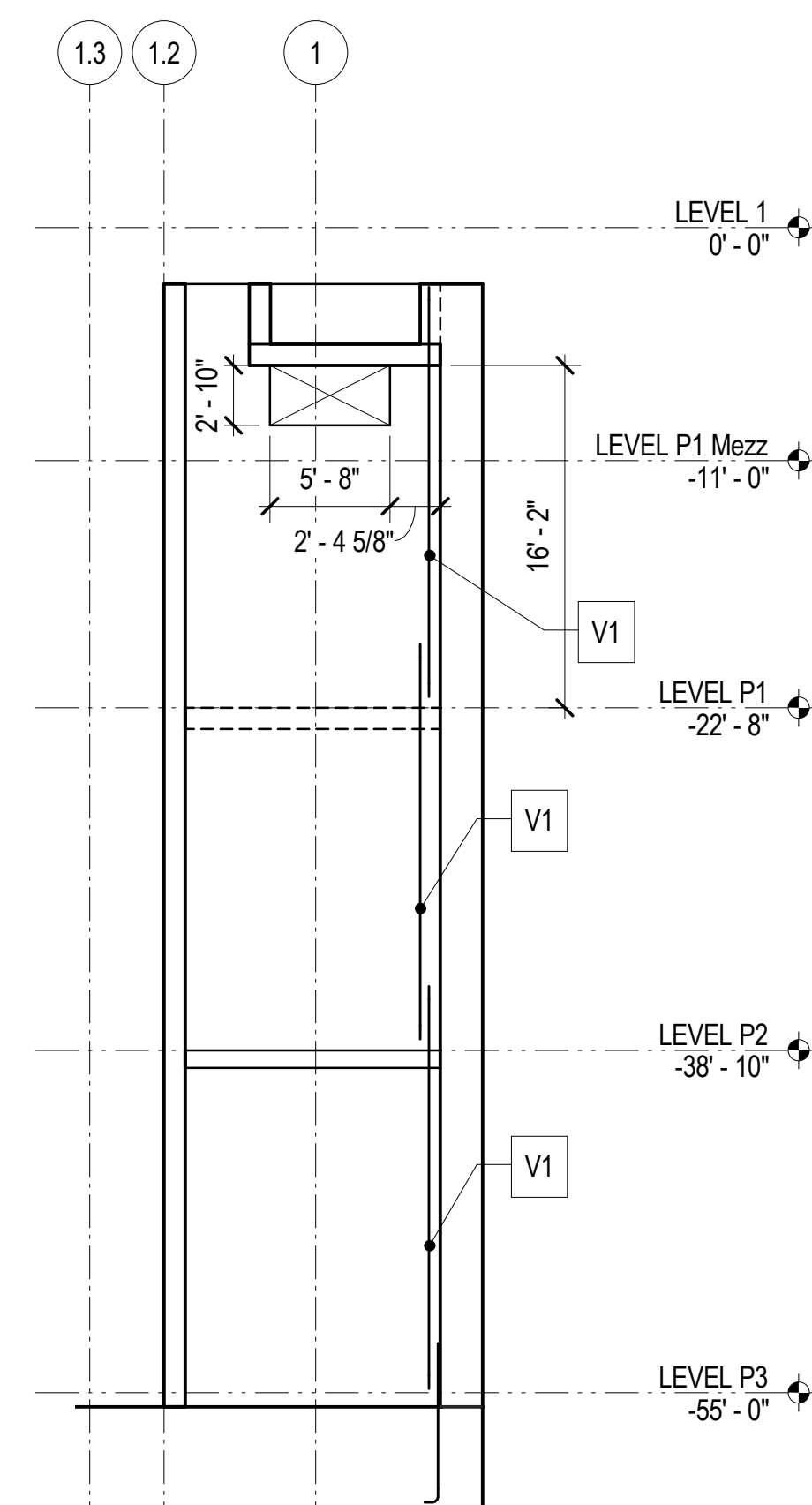
1/8" = 1'-0"

15 WALL ELEVATION NEAR GRID C

1/8" = 1'-0"

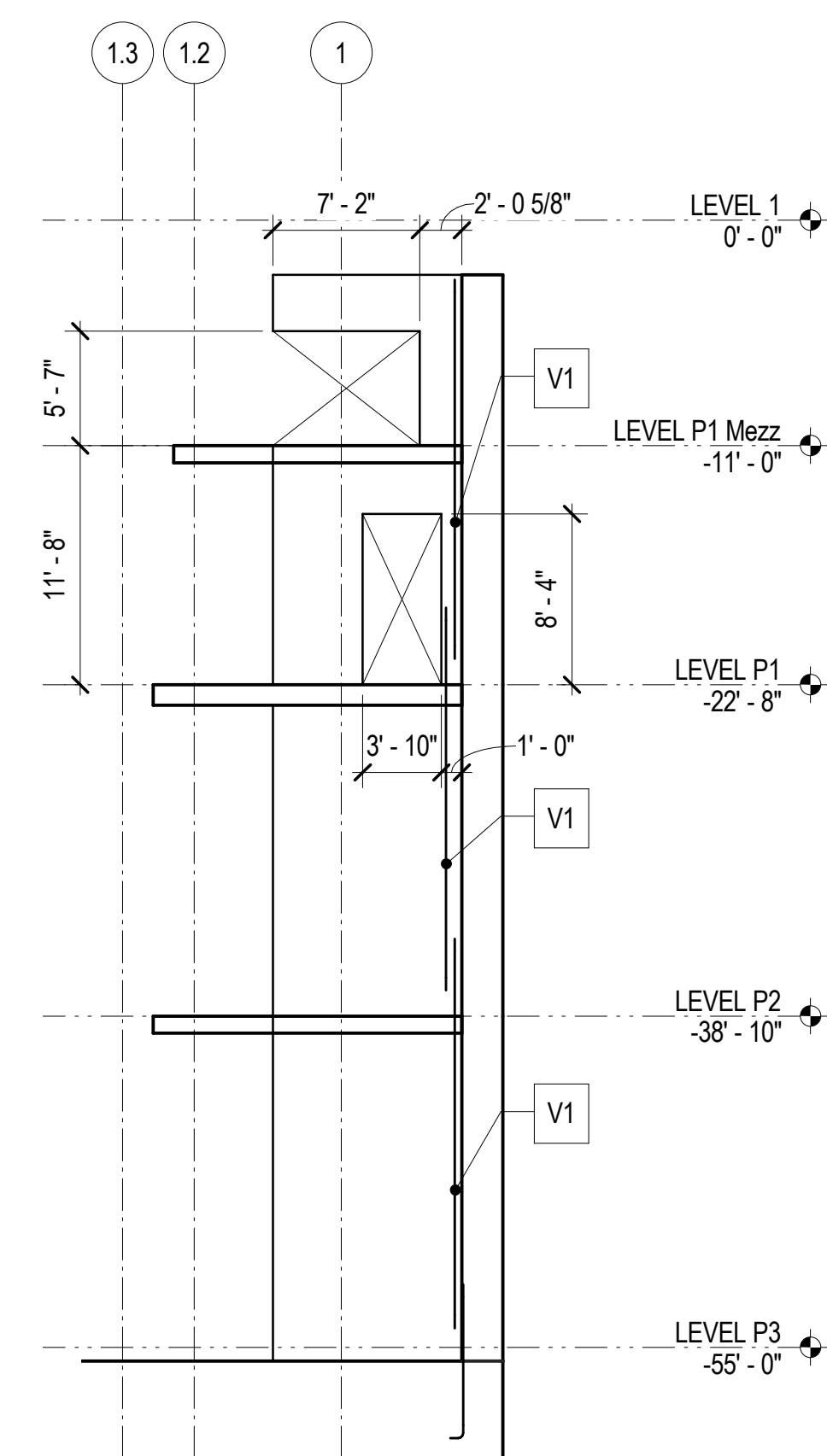
12 WALL ELEVATION AT GRID 1.3

1/8" = 1'-0"



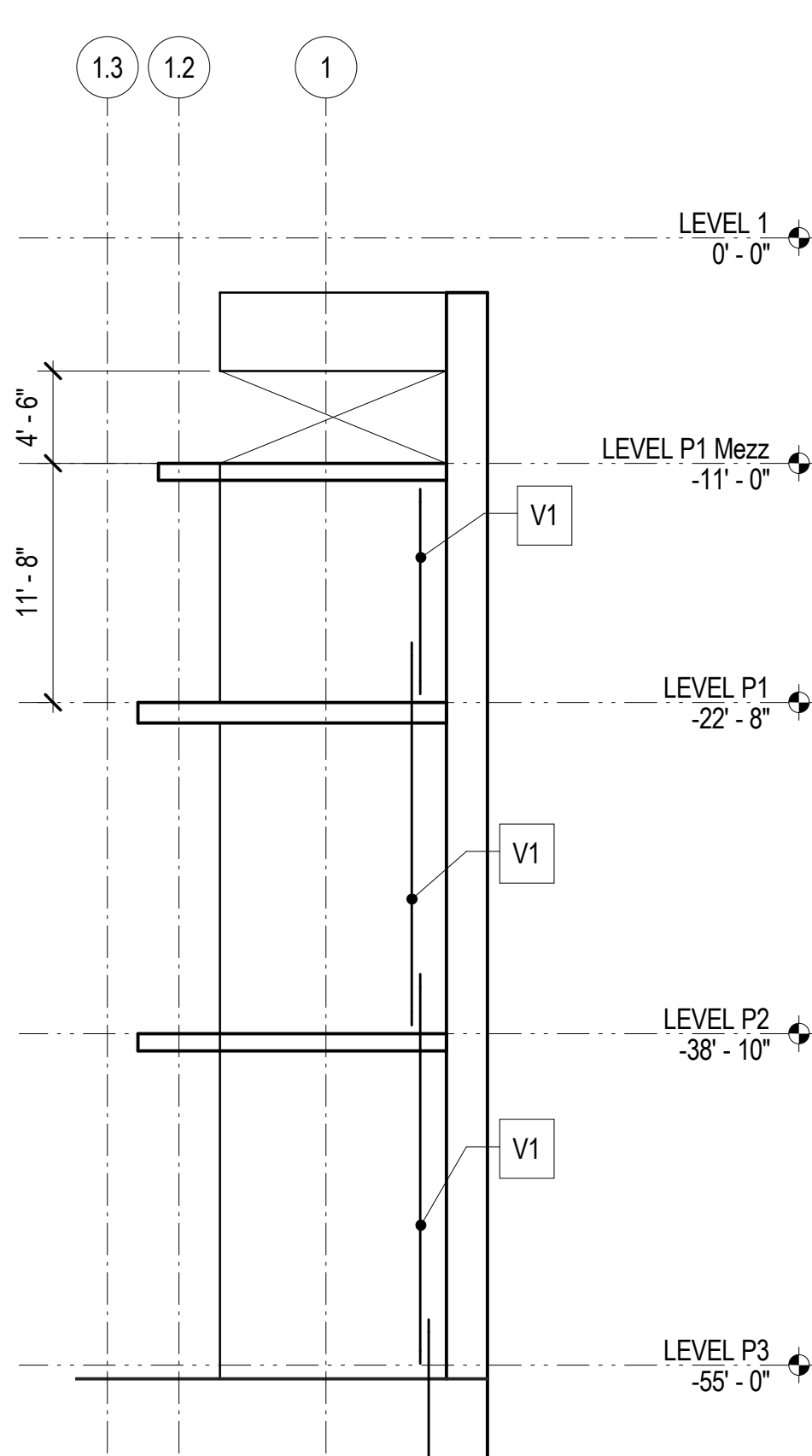
16 WALL ELEVATION NEAR GRID D

1/8" = 1'-0"



17 WALL ELEVATION AT GRID C

1/8" = 1'-0"



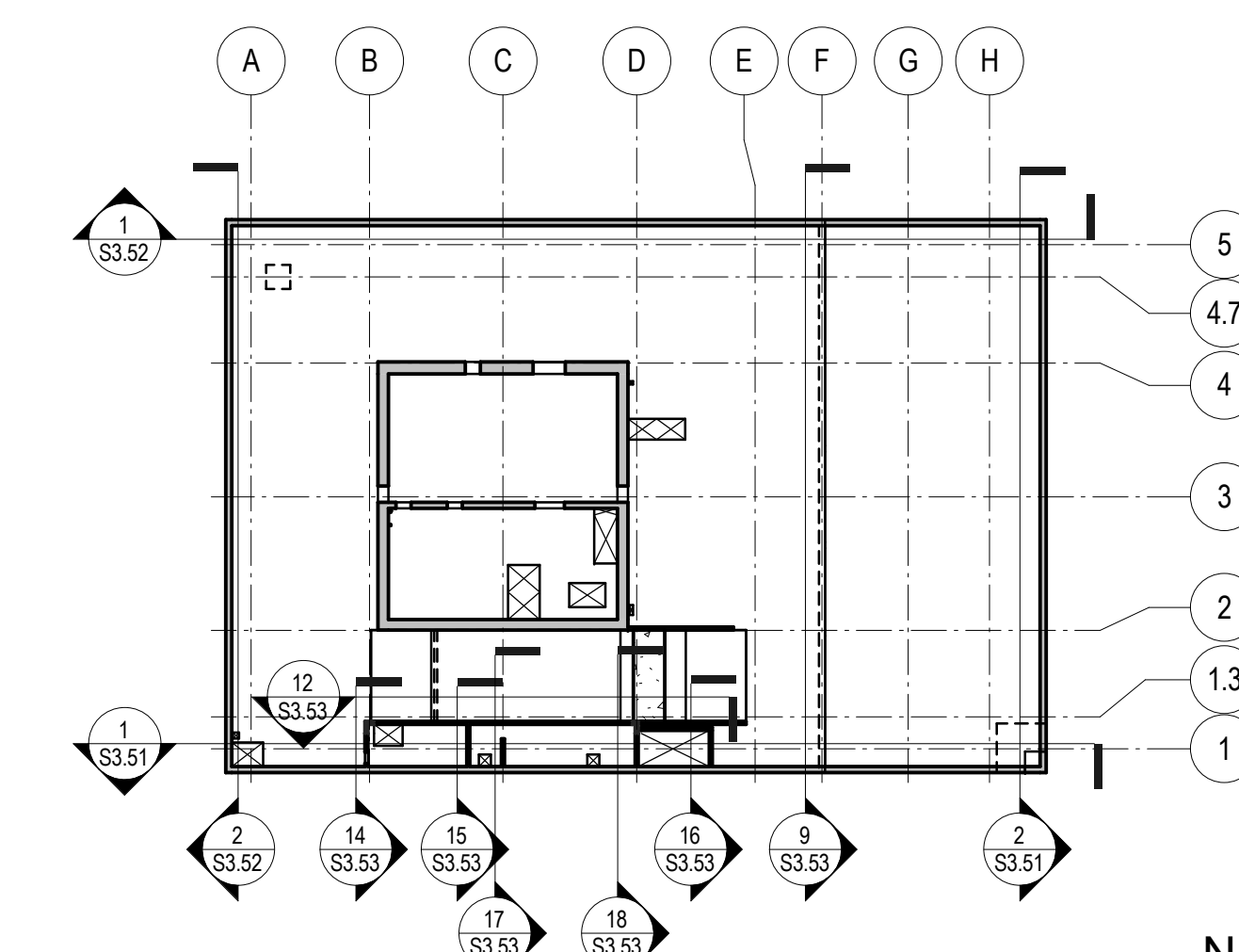
18 WALL ELEVATION AT GRID D

1/8" = 1'-0"

NOTES:

- BASEMENT WALL CONCRETE STRENGTH:  
LEVELS P3 TO 1:  $f_c = 6,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $1.5l_b$ , UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
- FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $1.5l_b$  WITHIN MIDDLE THIRD OF WALL LENGTH.

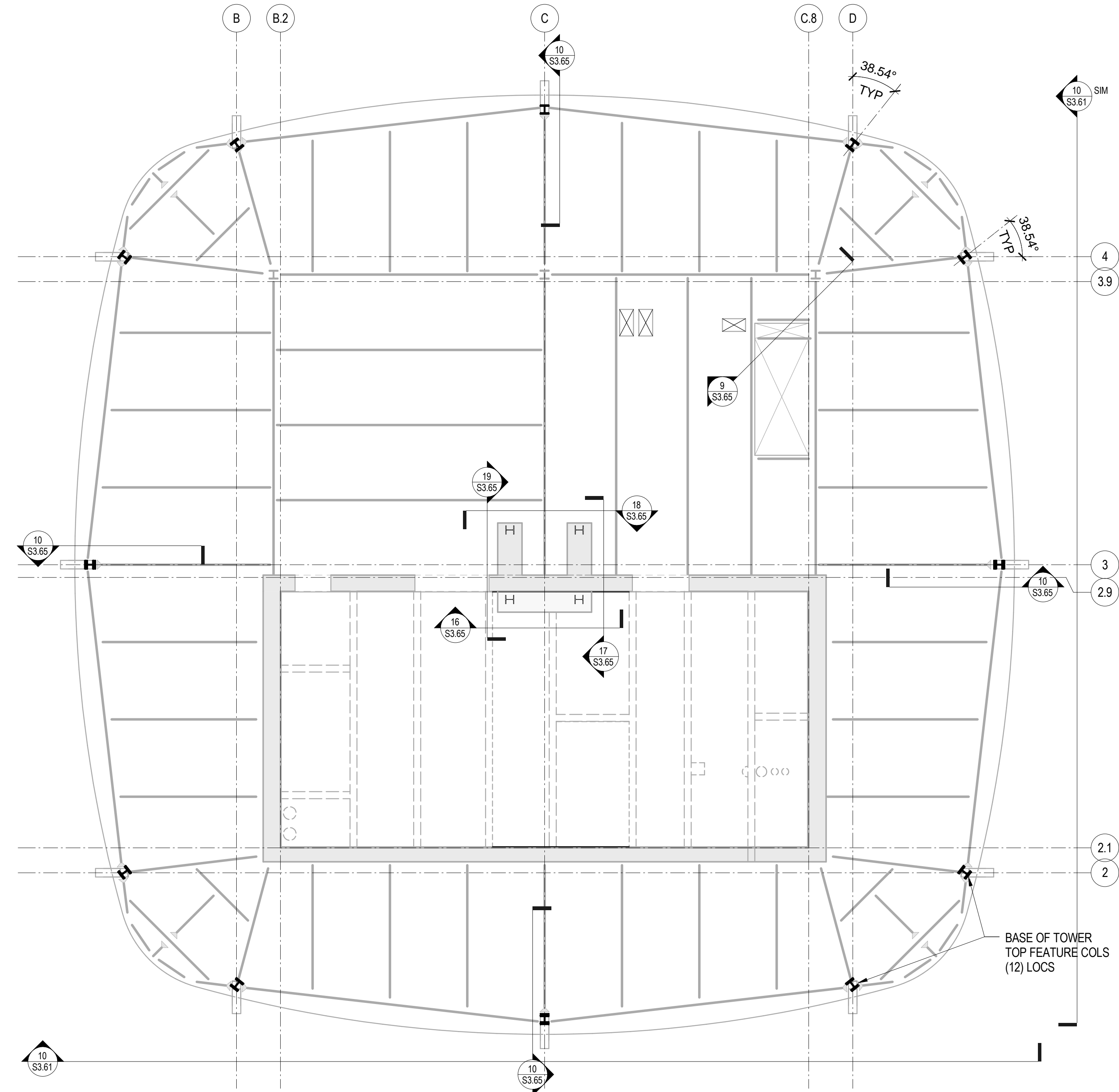
MARK	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
V1	#6 CONT @ 12"	#6 CONT @ 12"	#6 @ 6"
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#8x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#8x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--



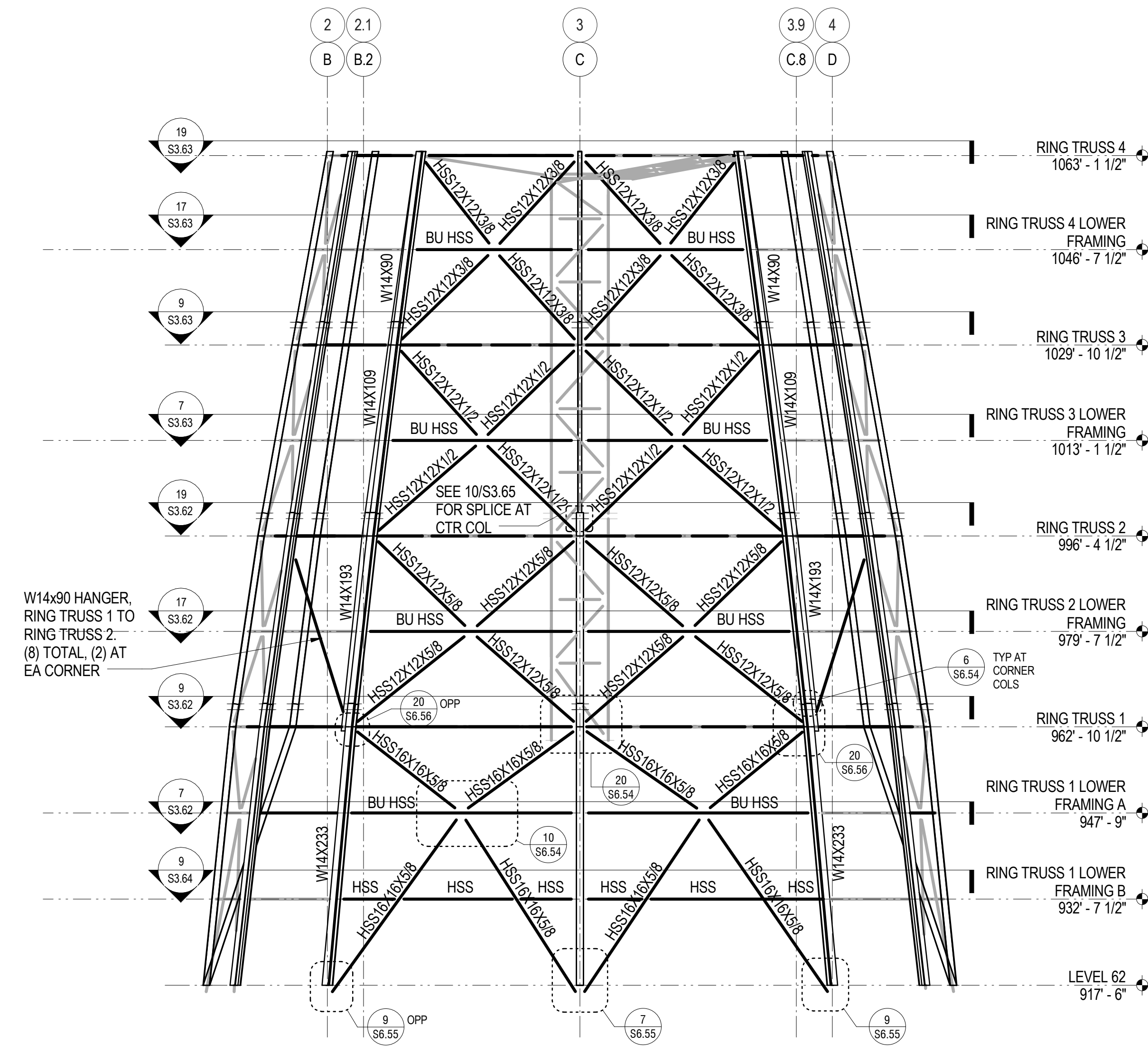
20 KEY PLAN



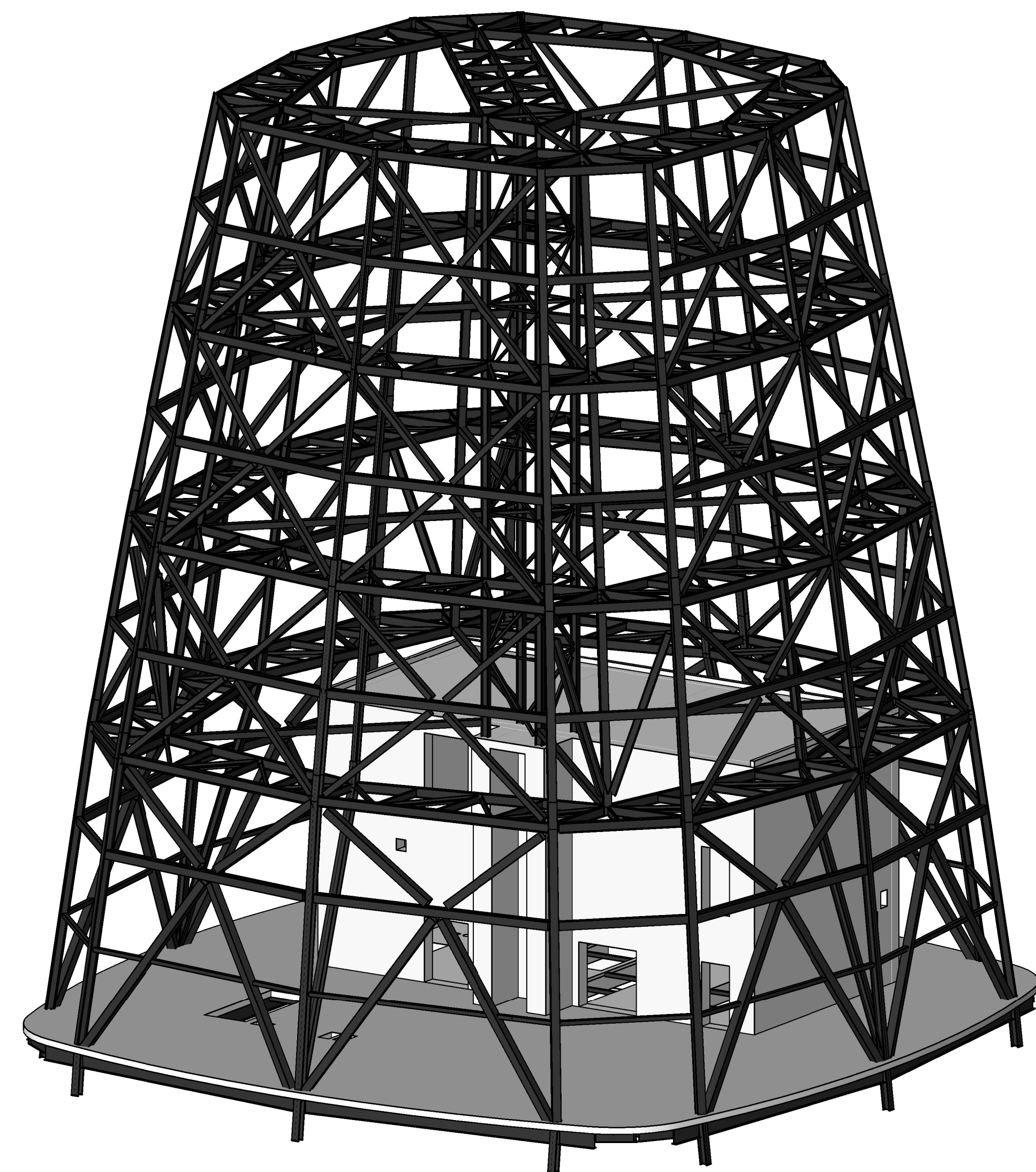
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



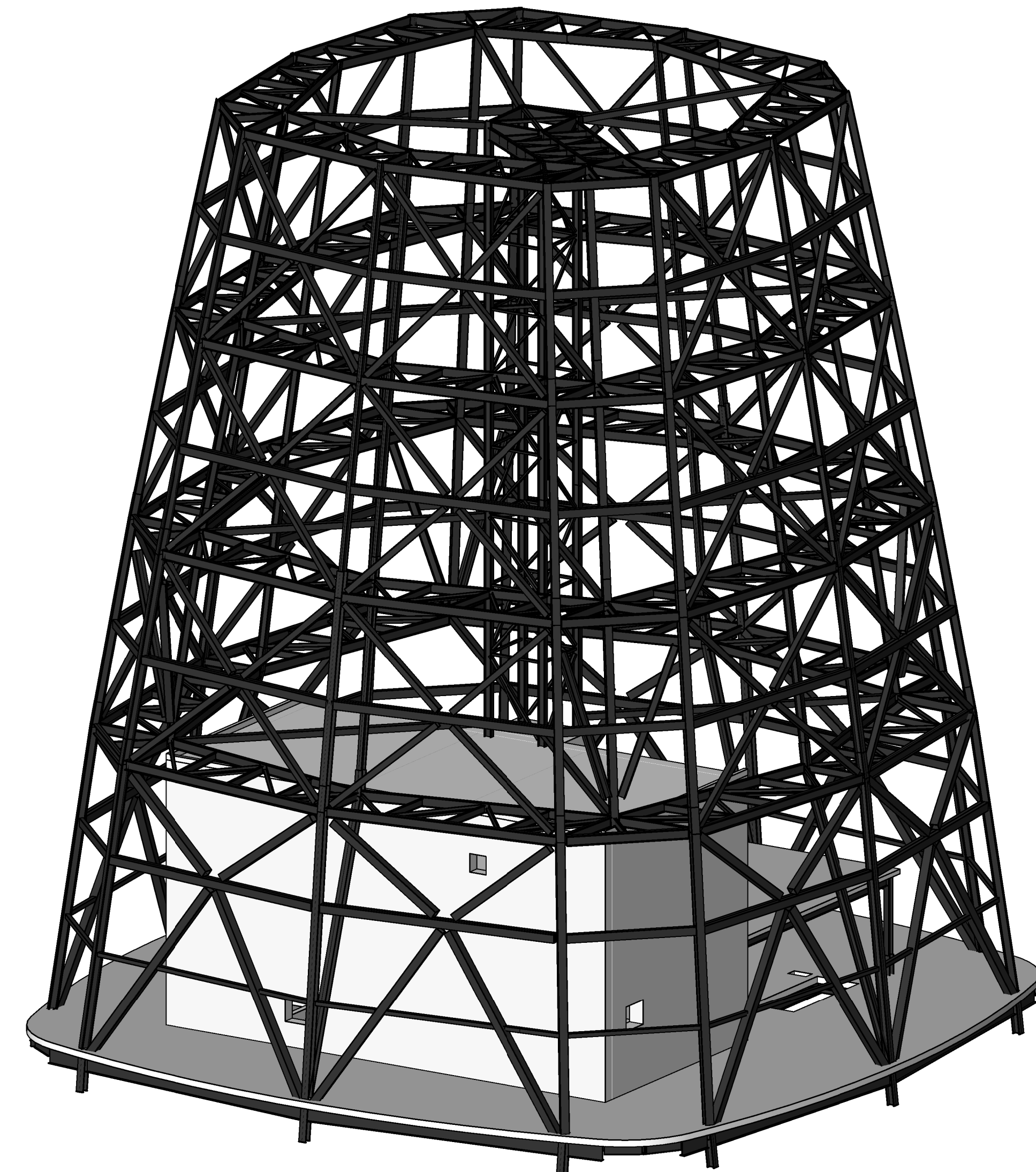
13 TOP FEATURE KEY PLAN  
3/32" = 1'-0"



10 TOWER TOP FEATURE ELEVATION  
1/16" = 1'-0"



16 3D - TOWER TOP FEATURE - NORTHWEST VIEW



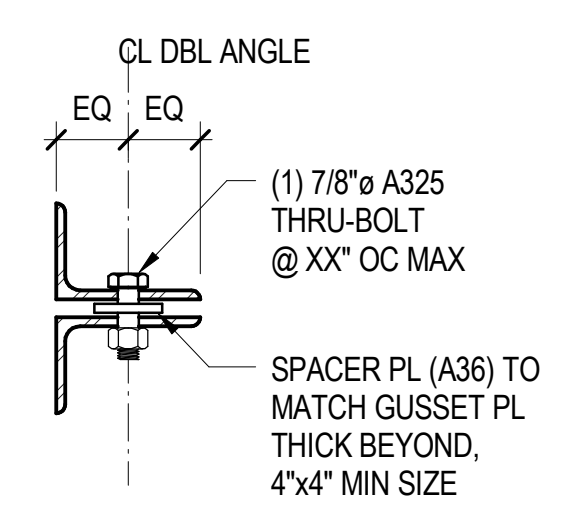
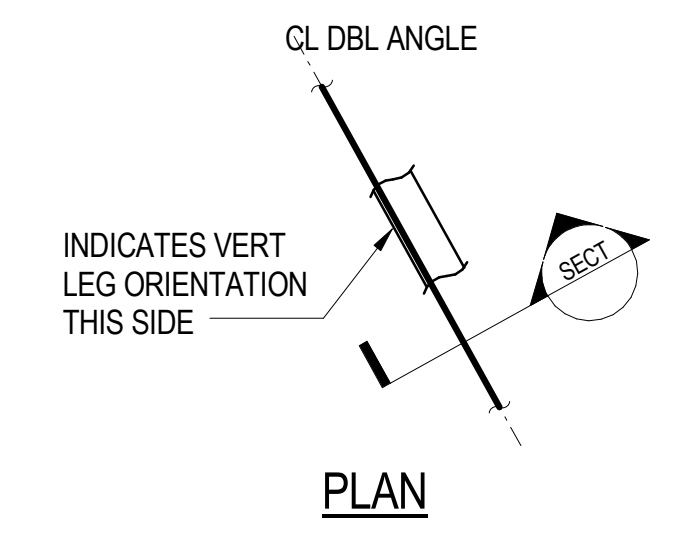
20 3D - TOWER TOP FEATURE - SOUTHEAST VIEW

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

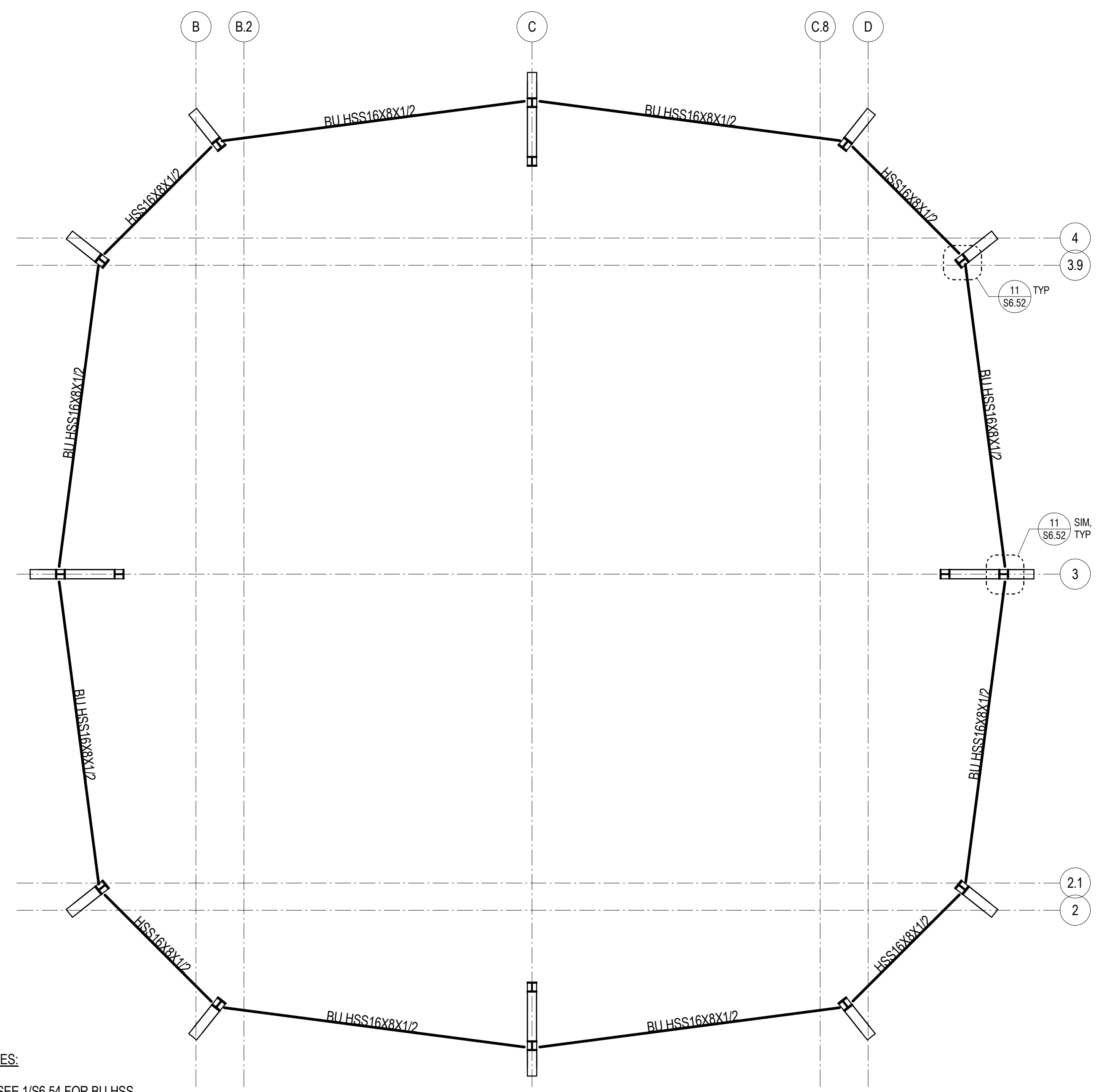
DRAWING TITLE  
**TOWER TOP FEATURE FRAMING**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

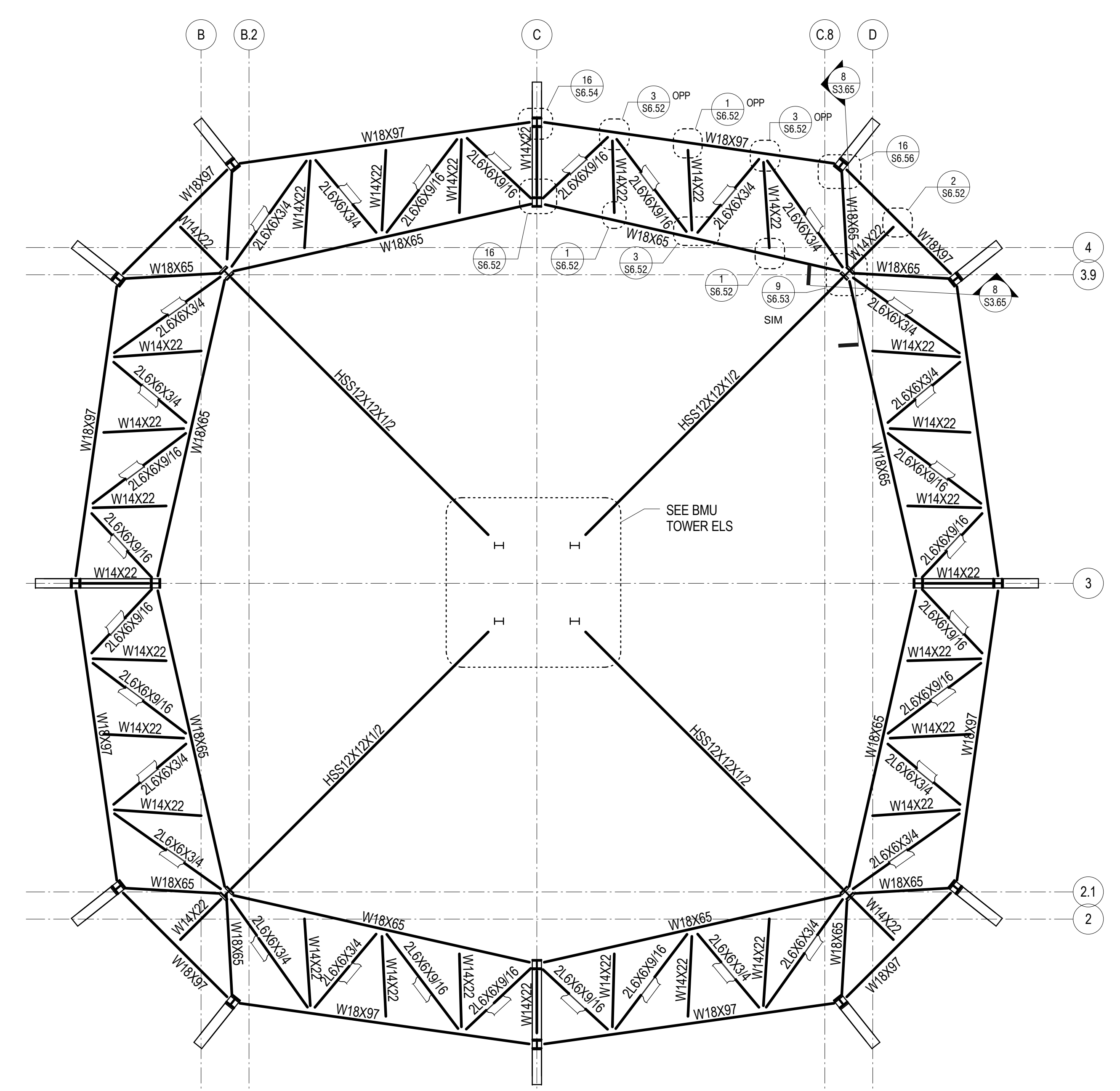


**5** TYPICAL HORIZONTAL DOUBLE ANGLE ORIENTATION

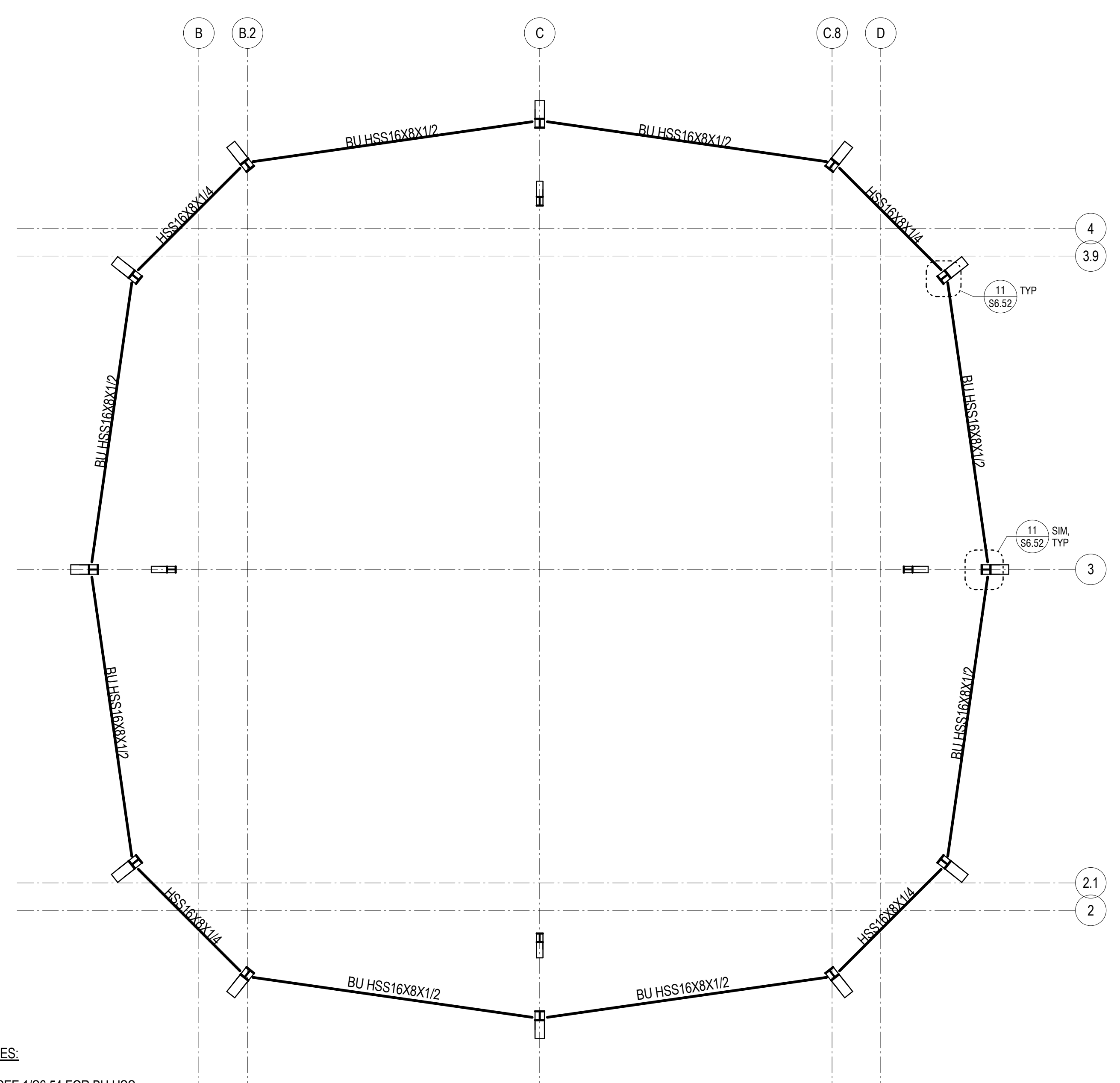


NOTES:  
1. SEE 1/S6.54 FOR BU HSS.

**7** RING TRUSS 1 LOWER FRAMING A  
3/32" = 1'-0"

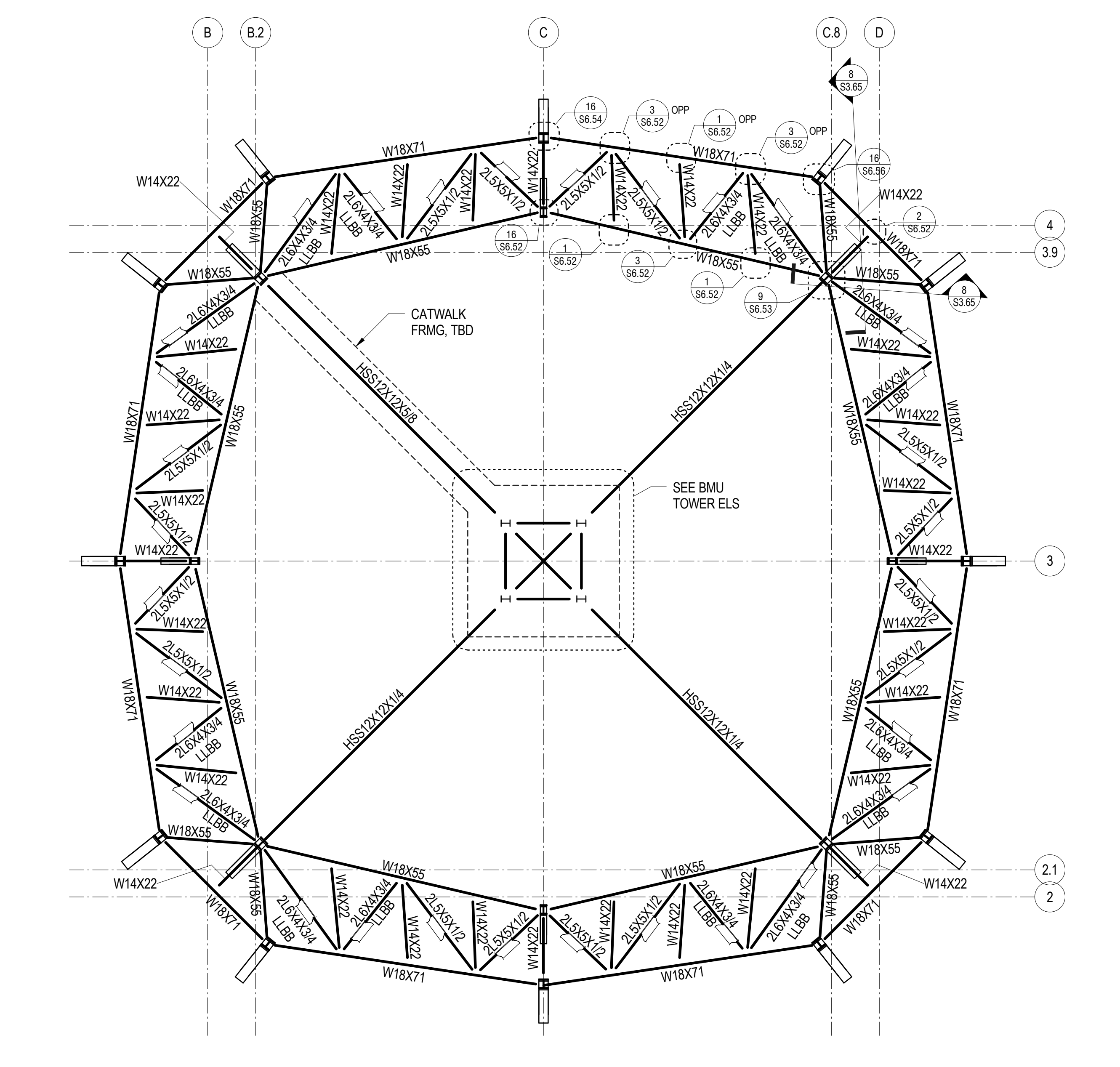


**9** RING TRUSS 1 FRAMING  
3/32" = 1'-0"



NOTES:  
1. SEE 1/S6.54 FOR BU HSS.

**17** RING TRUSS 2 LOWER FRAMING  
3/32" = 1'-0"



**19** RING TRUSS 2 FRAMING  
3/32" = 1'-0"

- REFERENCE DRAWINGS**
- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
  - S1.XX LOAD MAPS
  - S2.XX PLANS
  - S3.XX ELEVATIONS
  - S4.XX TYPICAL DETAILS AND SCHEDULES
  - S5.XX CONCRETE SECTIONS AND DETAILS
  - S6.XX STEEL SECTIONS AND DETAILS

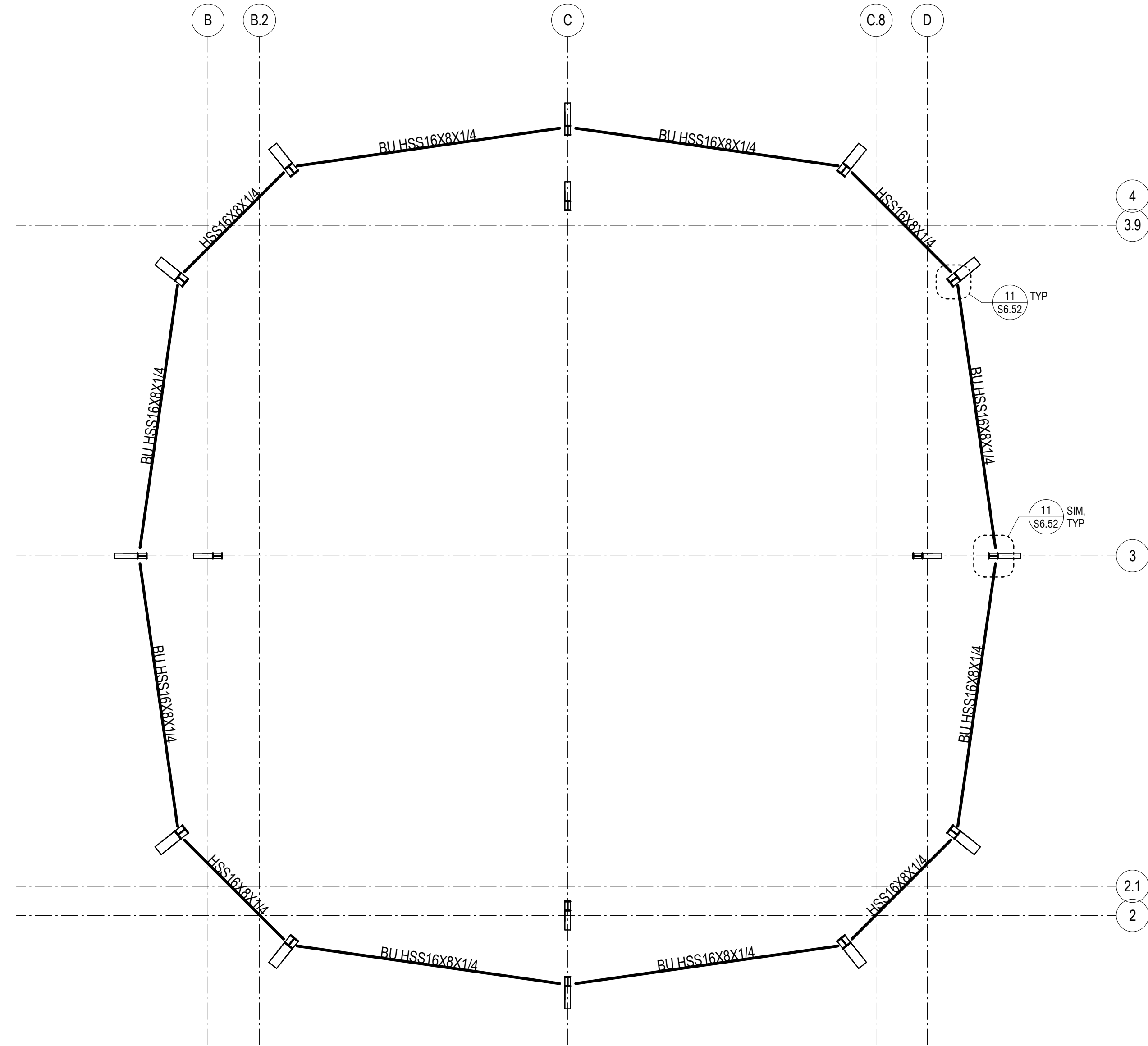
- NOTES:**
1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
  - REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
  2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
  3. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
  4. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
  5. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
  6. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

4/30/2014 12:24:24 PM C:\Revit\Transbay\Twr\_WIS2013\_116.rvt



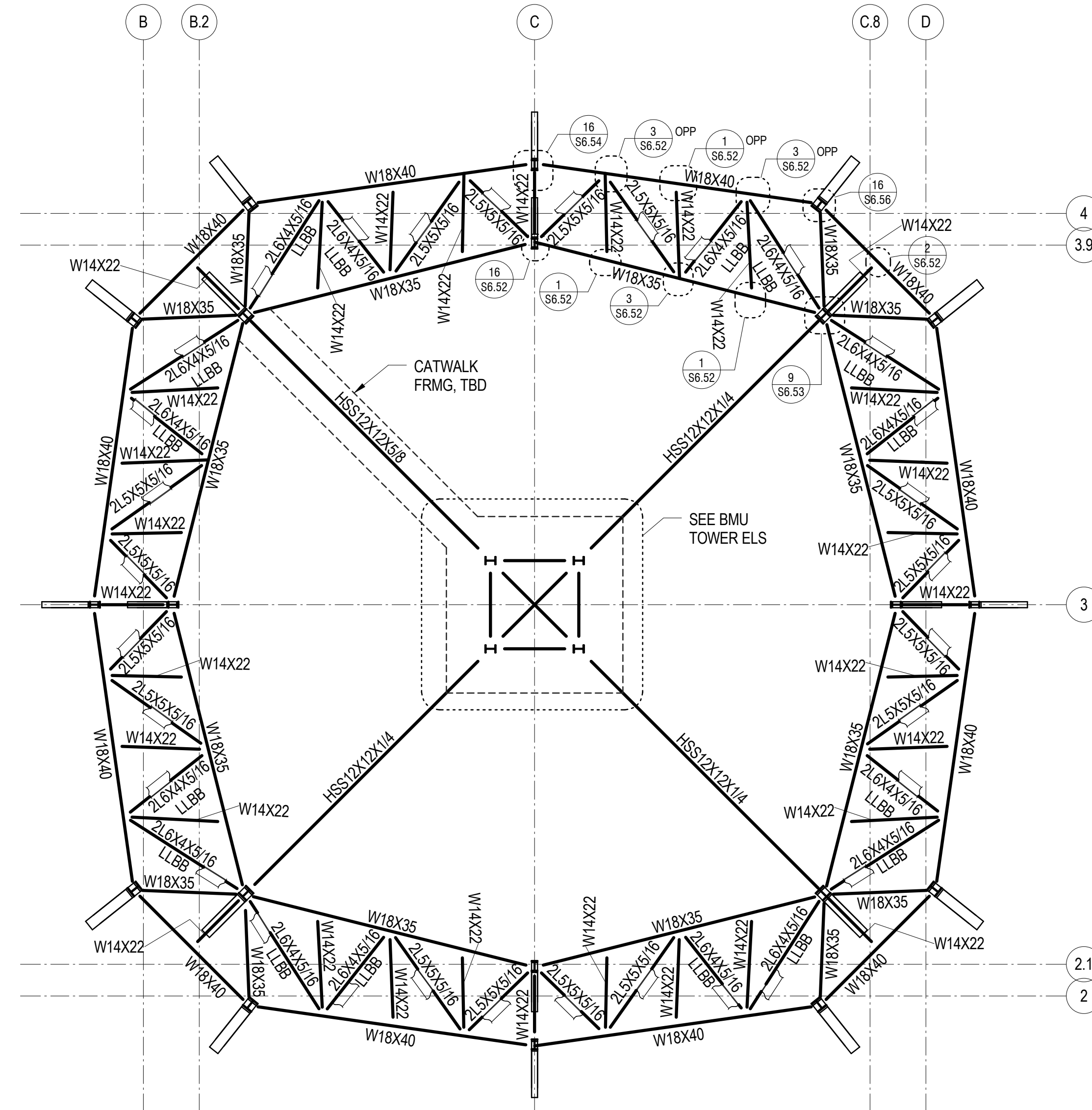
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



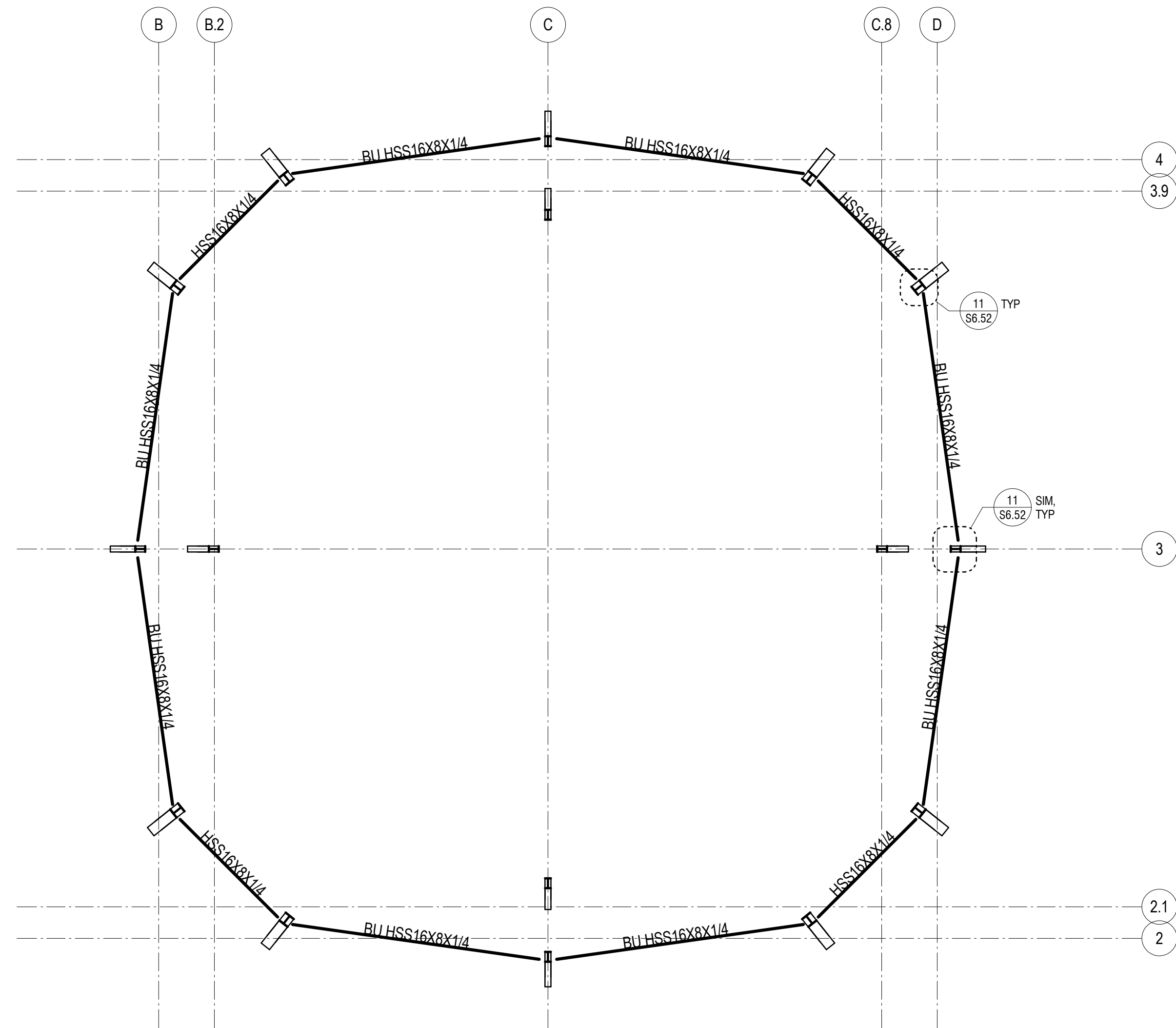
NOTES:

- SEE 1/S6.54 FOR BU HSS.

7 RING TRUSS 3 LOWER FRAMING  
3/32" = 1'-0"



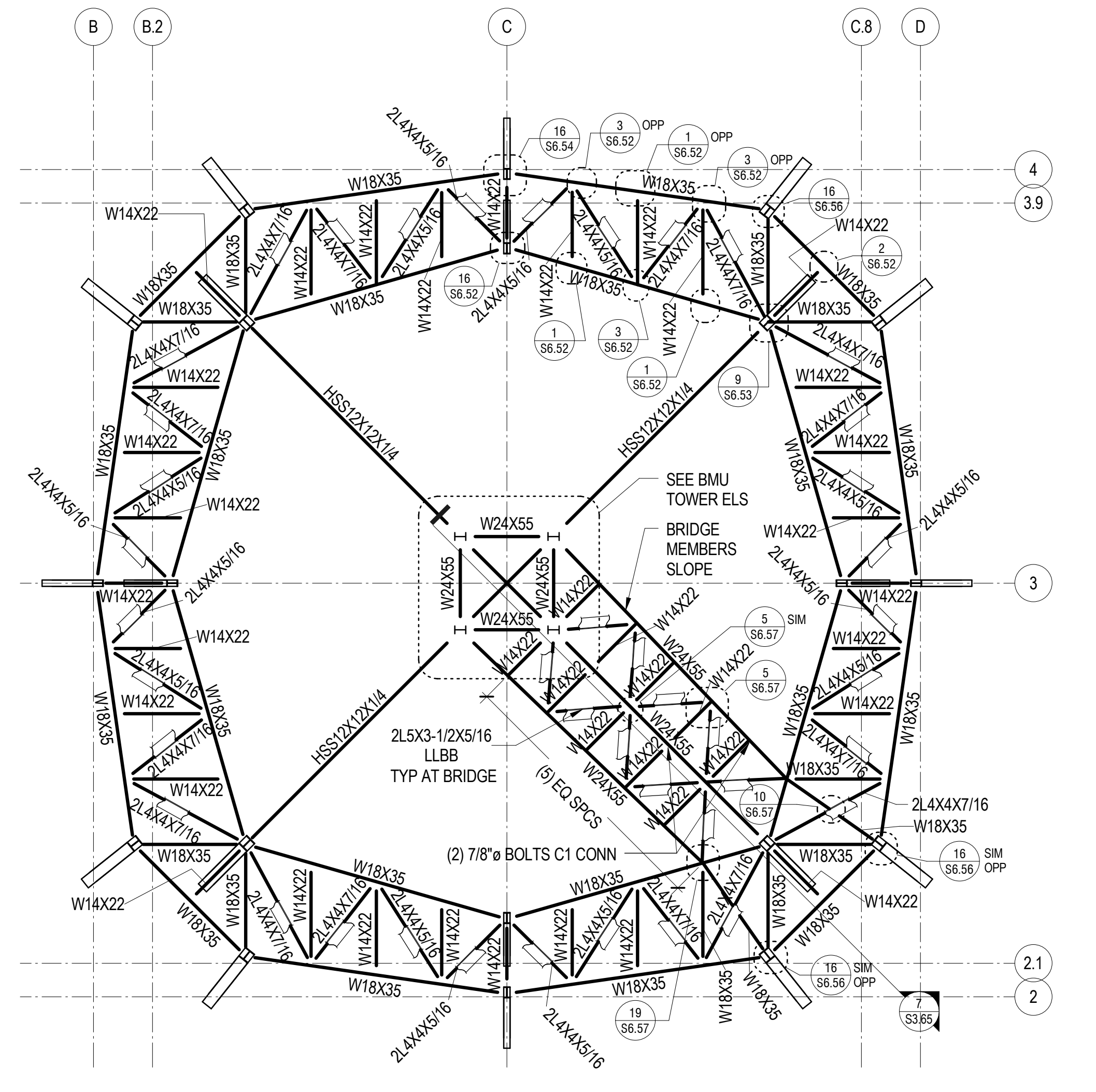
9 RING TRUSS 3 FRAMING  
3/32" = 1'-0"



NOTES:

- SEE 1/S6.54 FOR BU HSS.

17 RING TRUSS 4 LOWER FRAMING  
3/32" = 1'-0"



19 RING TRUSS 4 FRAMING  
3/32" = 1'-0"

REFERENCE DRAWINGS

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

NOTES:

- REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
- REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
- WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
- ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
- ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

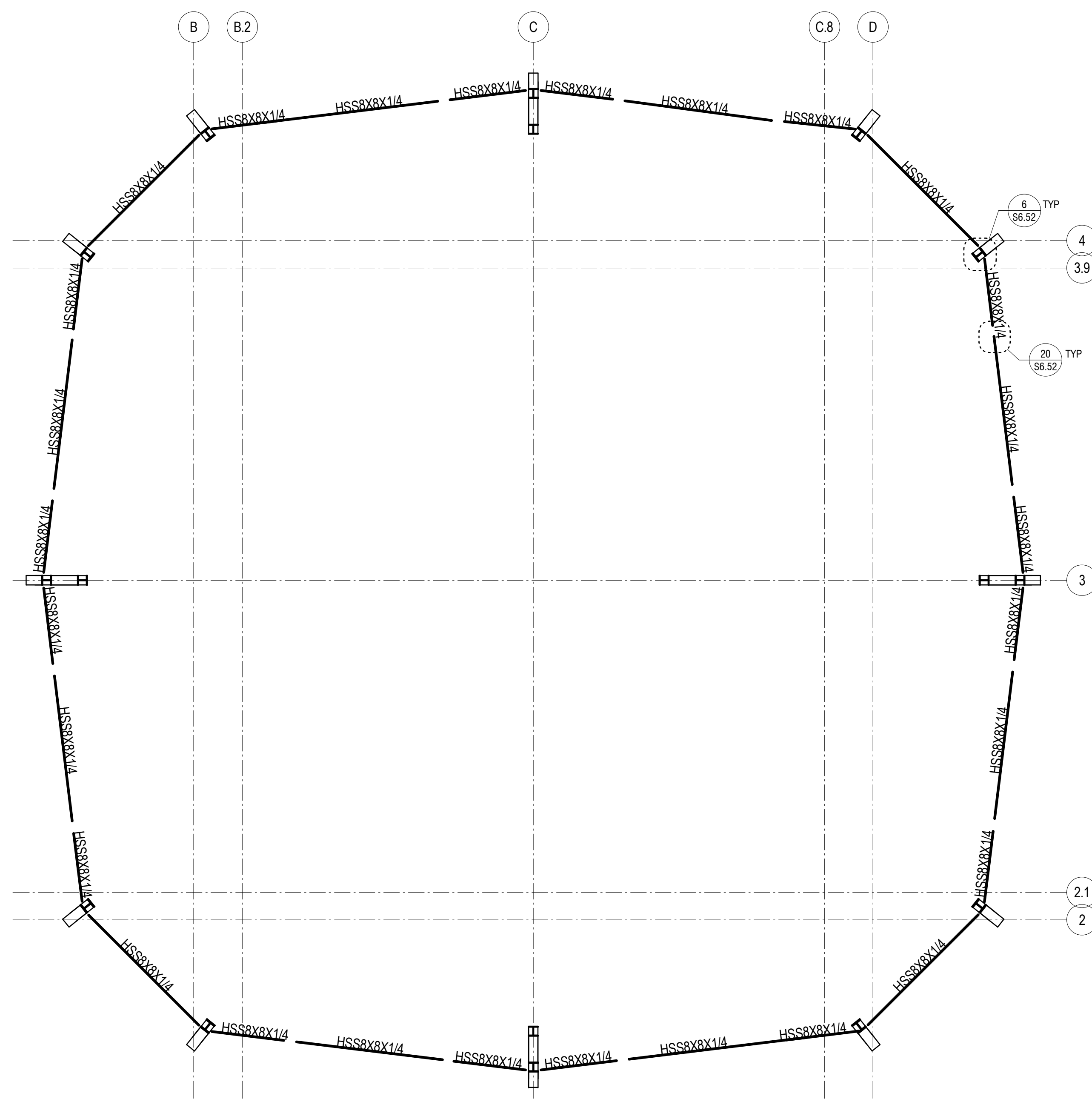
DRAWING TITLE

**TOWER TOP  
FEATURE FRAMING**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.63



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



9 RING TRUSS 1 LOWER FRAMING B  
3/32" = 1'-0"

REFERENCE DRAWINGS

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

NOTES:

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"  
  
REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
3. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
4. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
5. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
6. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

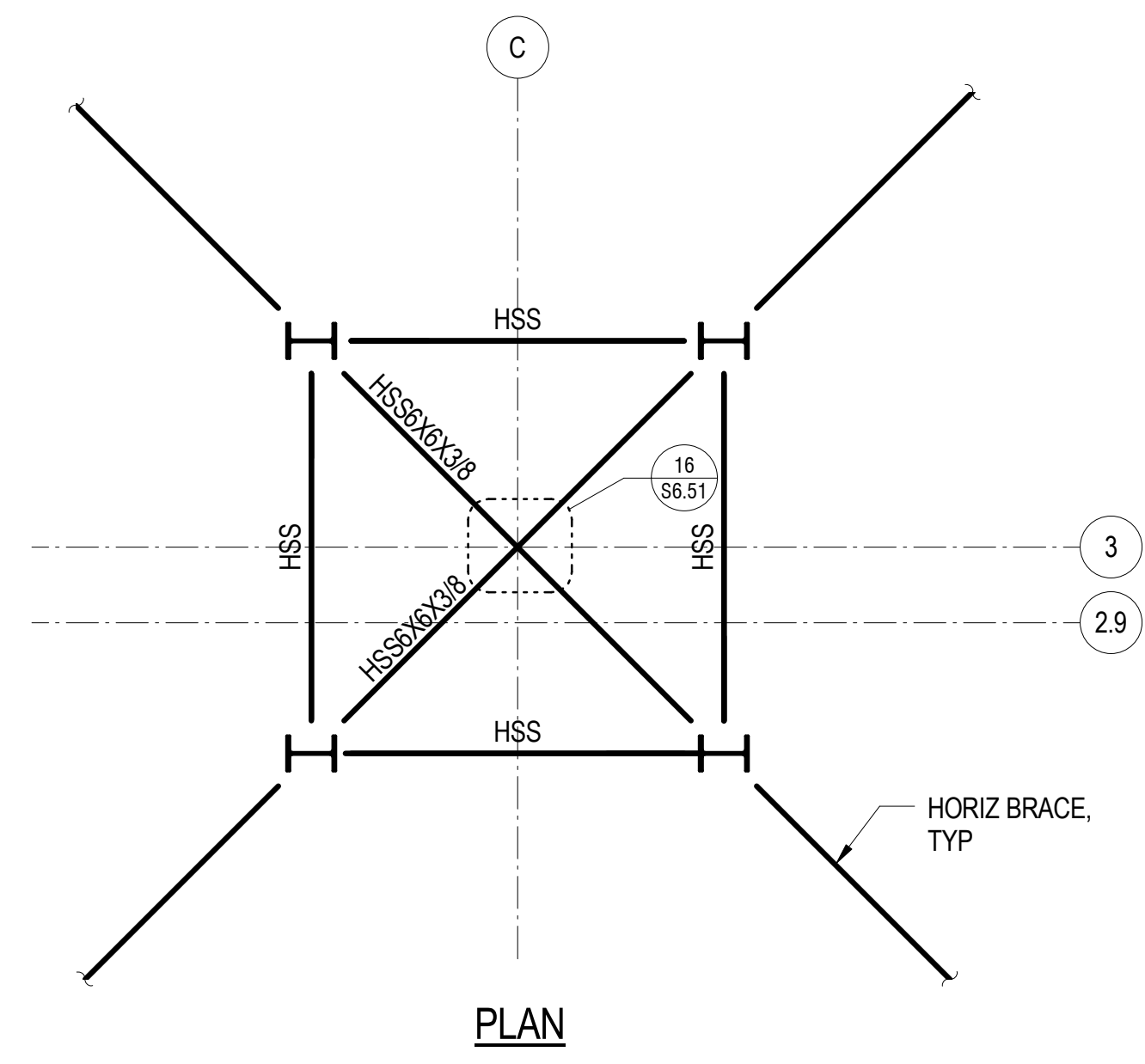
DRAWING TITLE

**TOWER TOP  
FEATURE FRAMING**

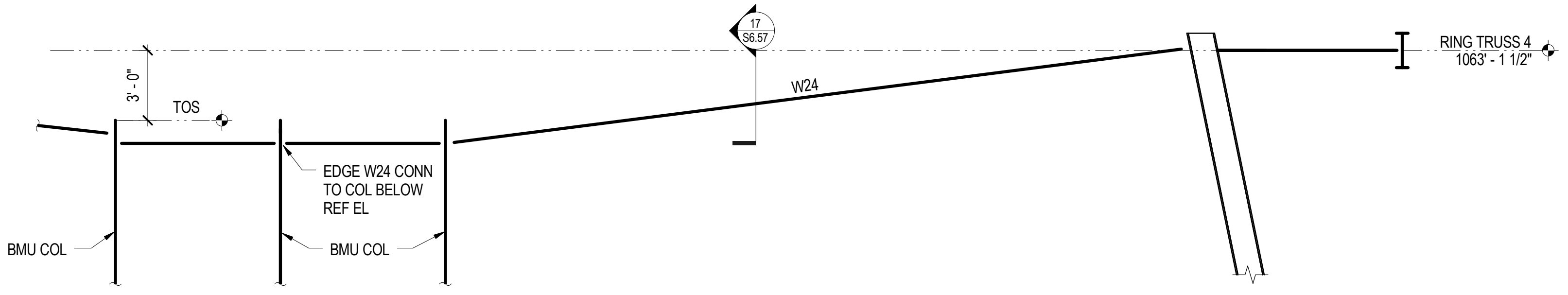




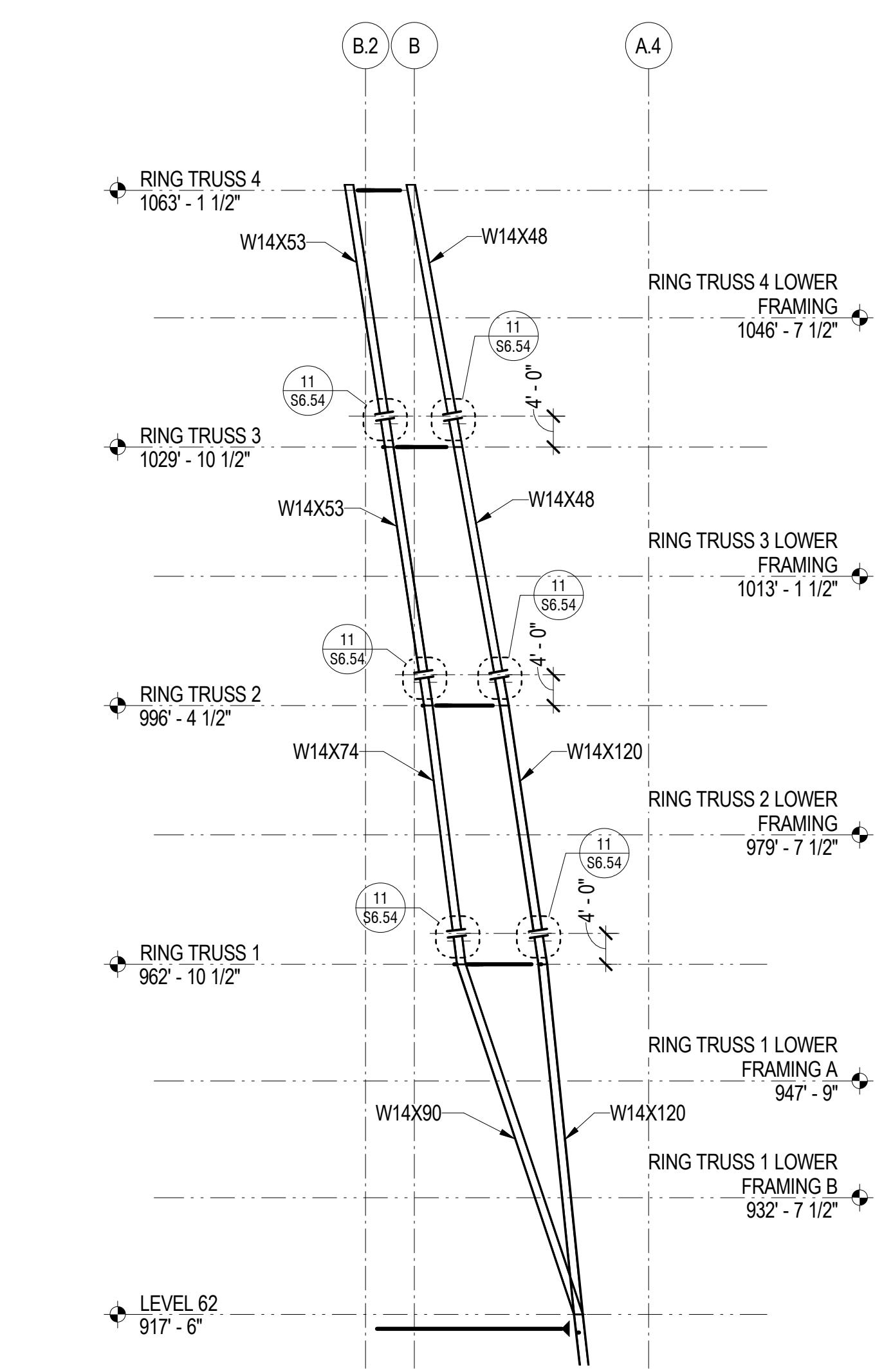
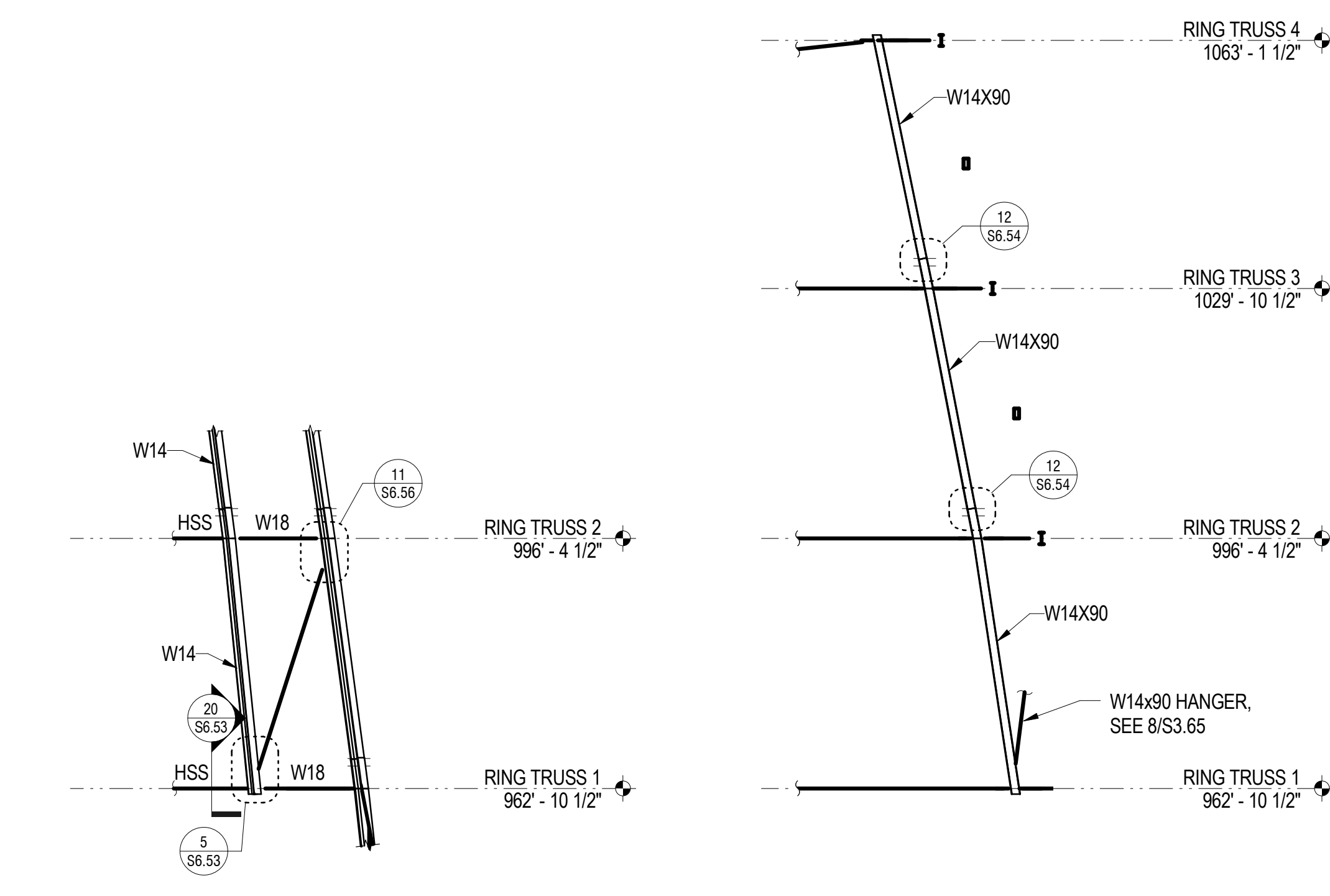
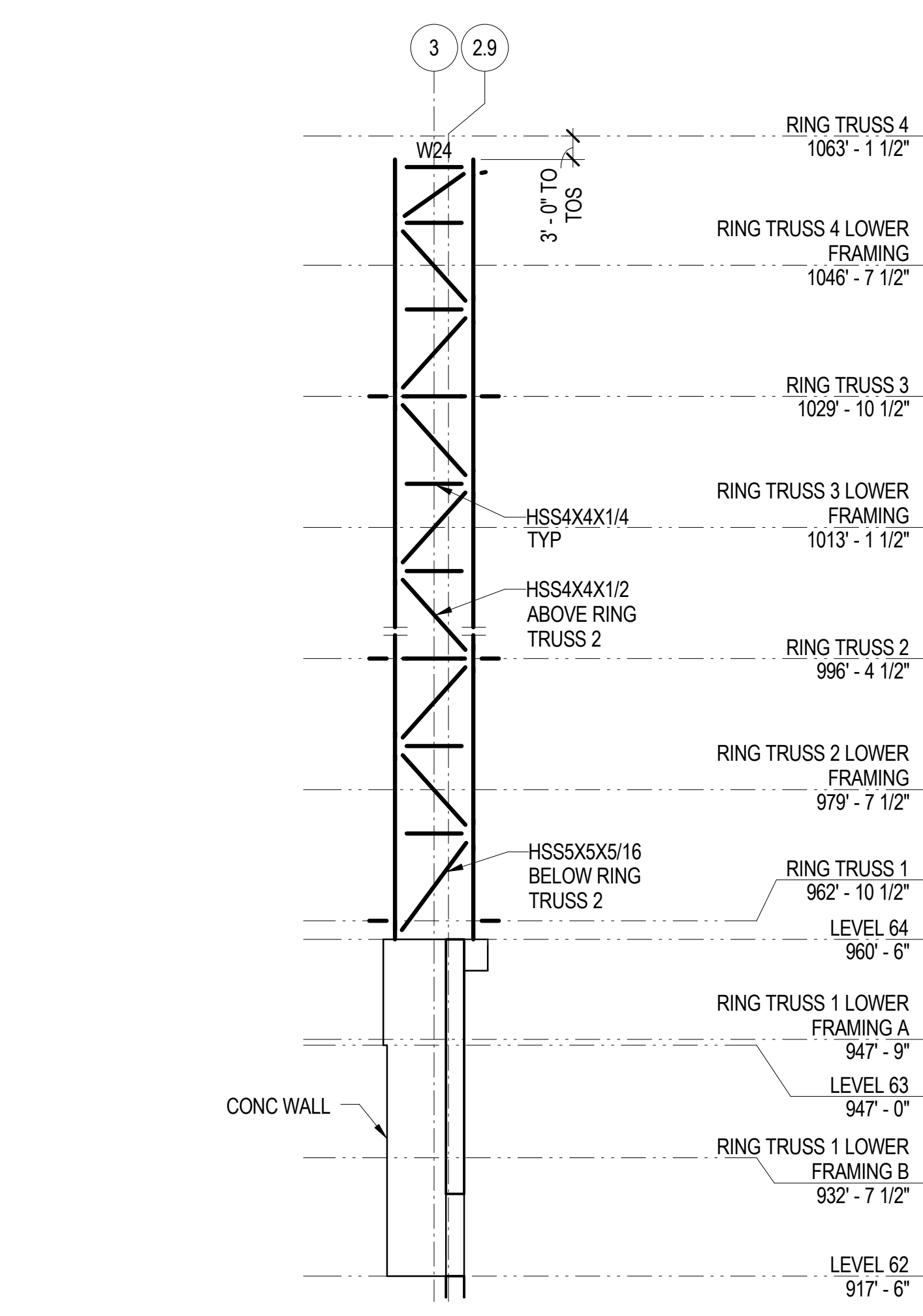
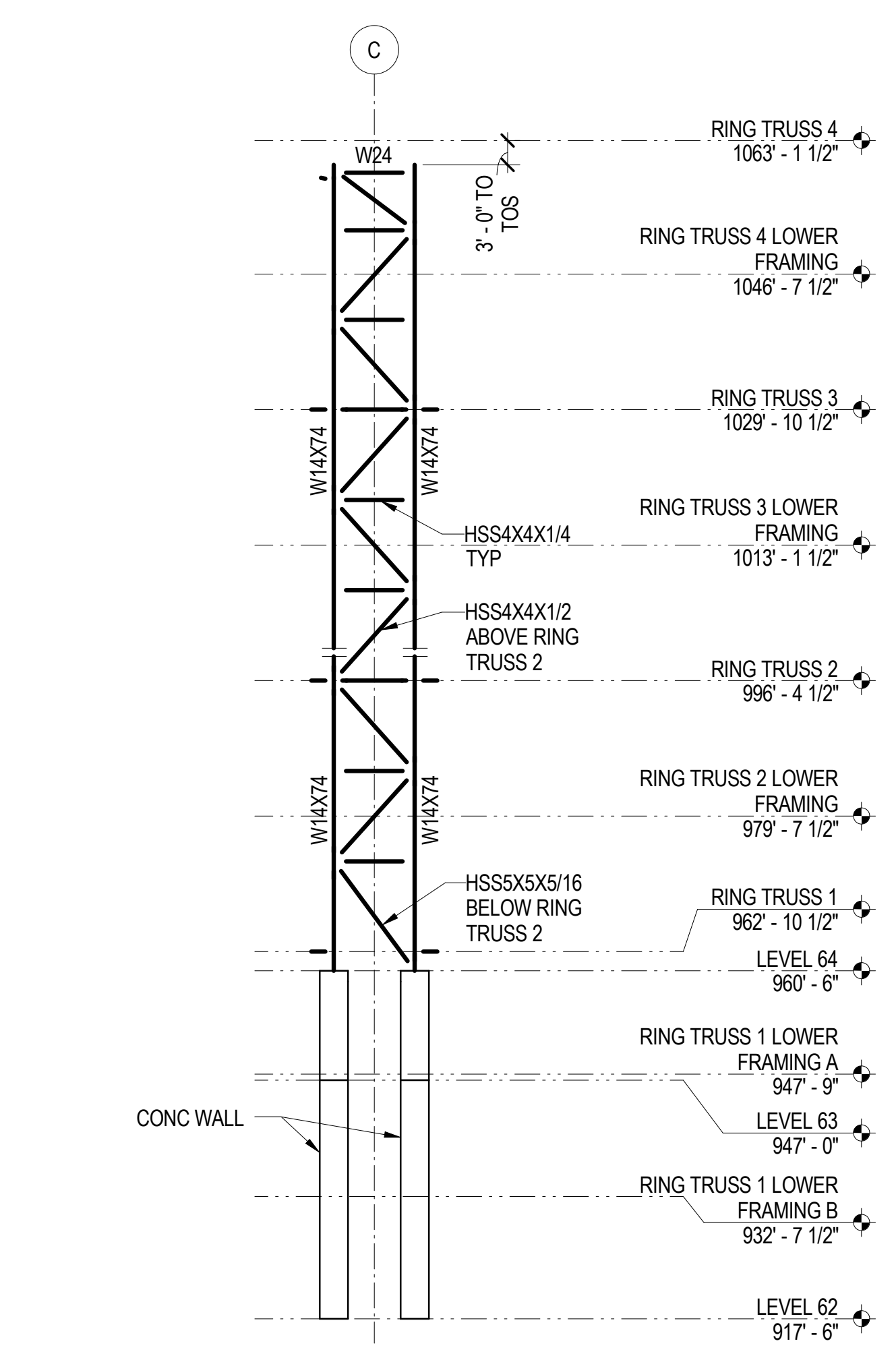
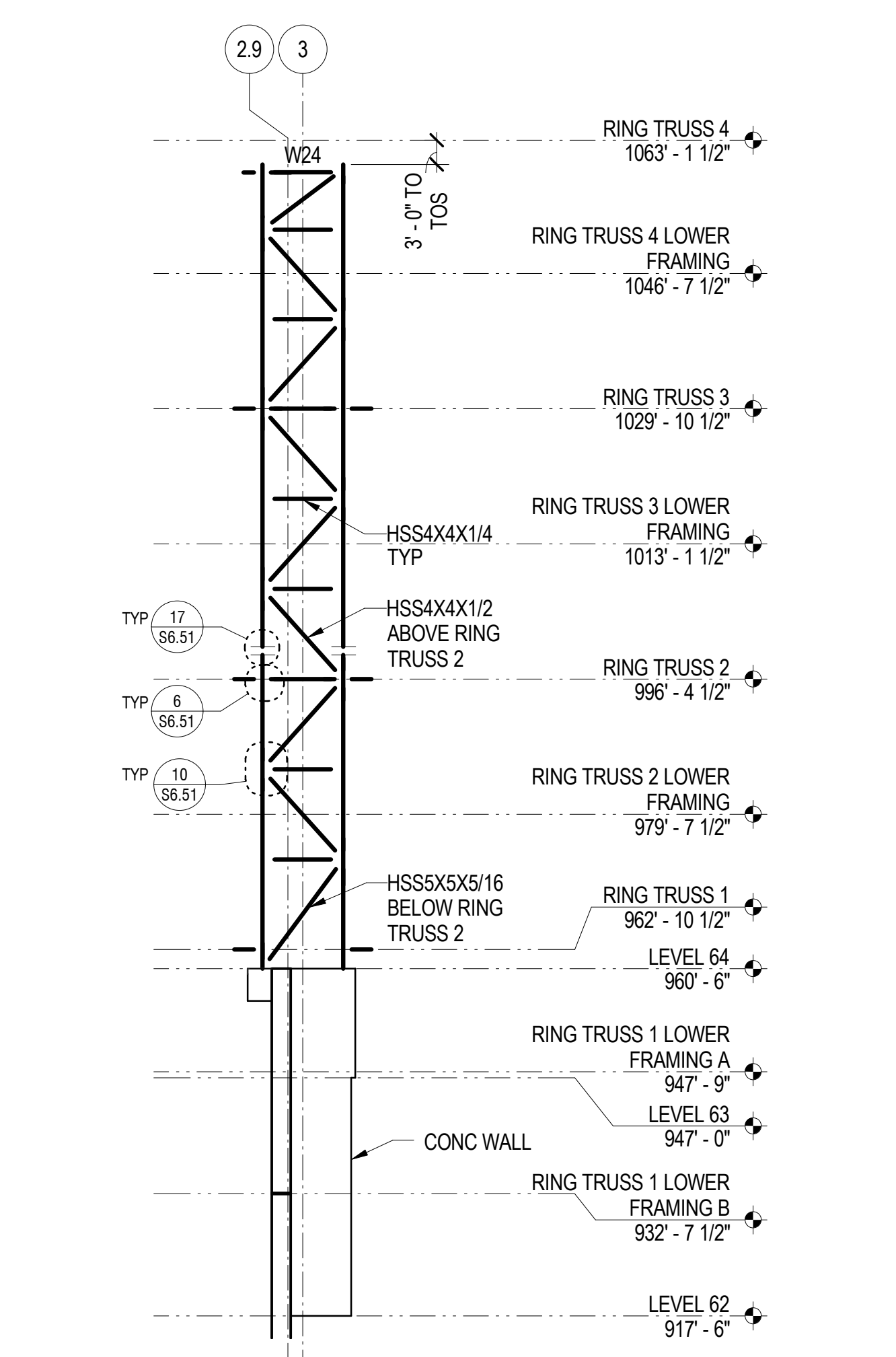
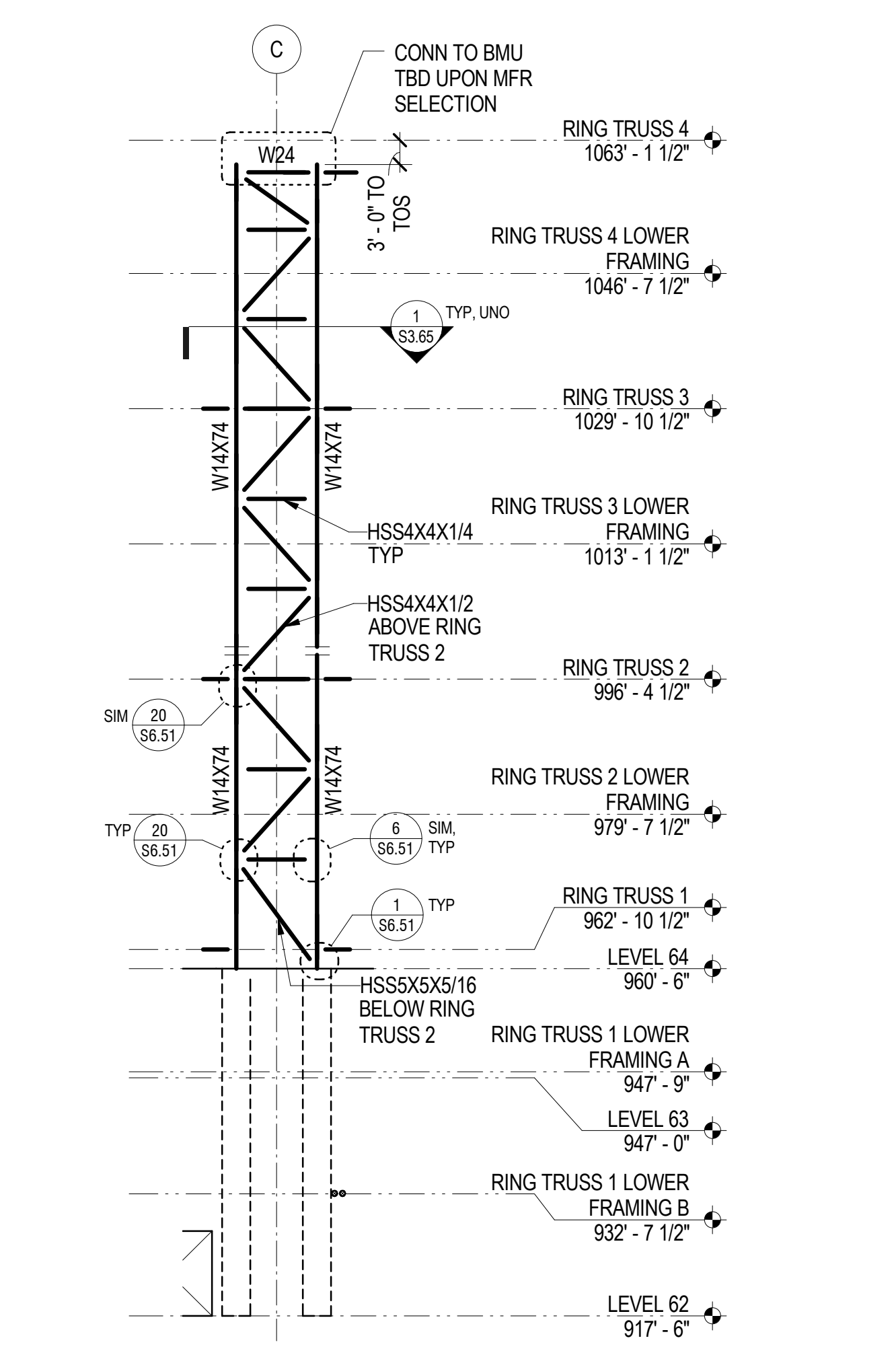
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**1 SECTION**  
1/4" = 1'-0"



**7 SECTION**  
1/4" = 1'-0"



**10 SECTION**  
1/16" = 1'-0"

**REFERENCE DRAWINGS**

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

**NOTES:**

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
2. REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
3. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
4. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
5. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
6. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
7. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	1

**TOWER TOP  
FEATURE PARTIAL  
PLANS AND  
ELEVATIONS**

C:\Revit\Transbay\Twr\_MS2013\_116.rvt 4/29/2014 7:09:39 PM



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

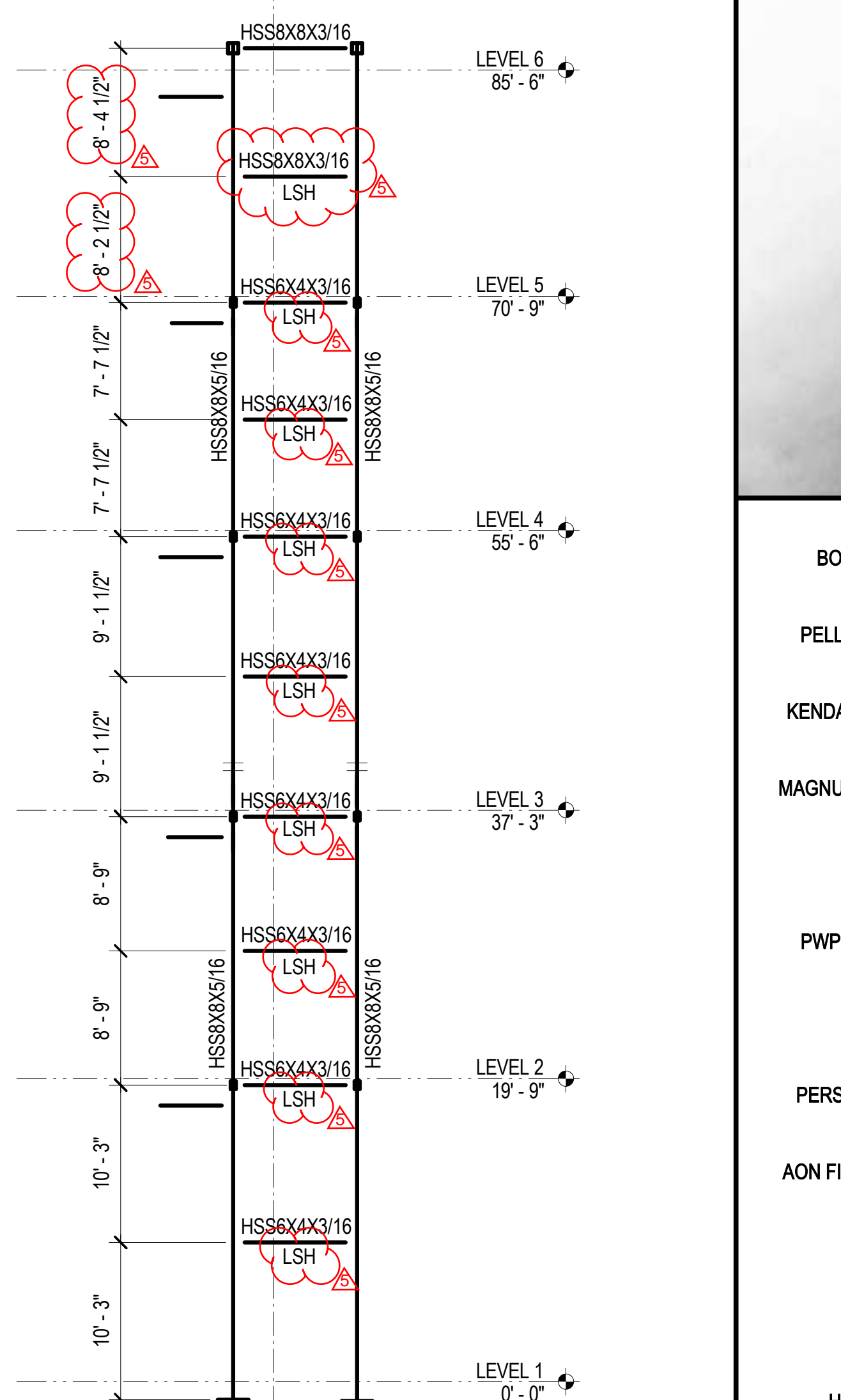
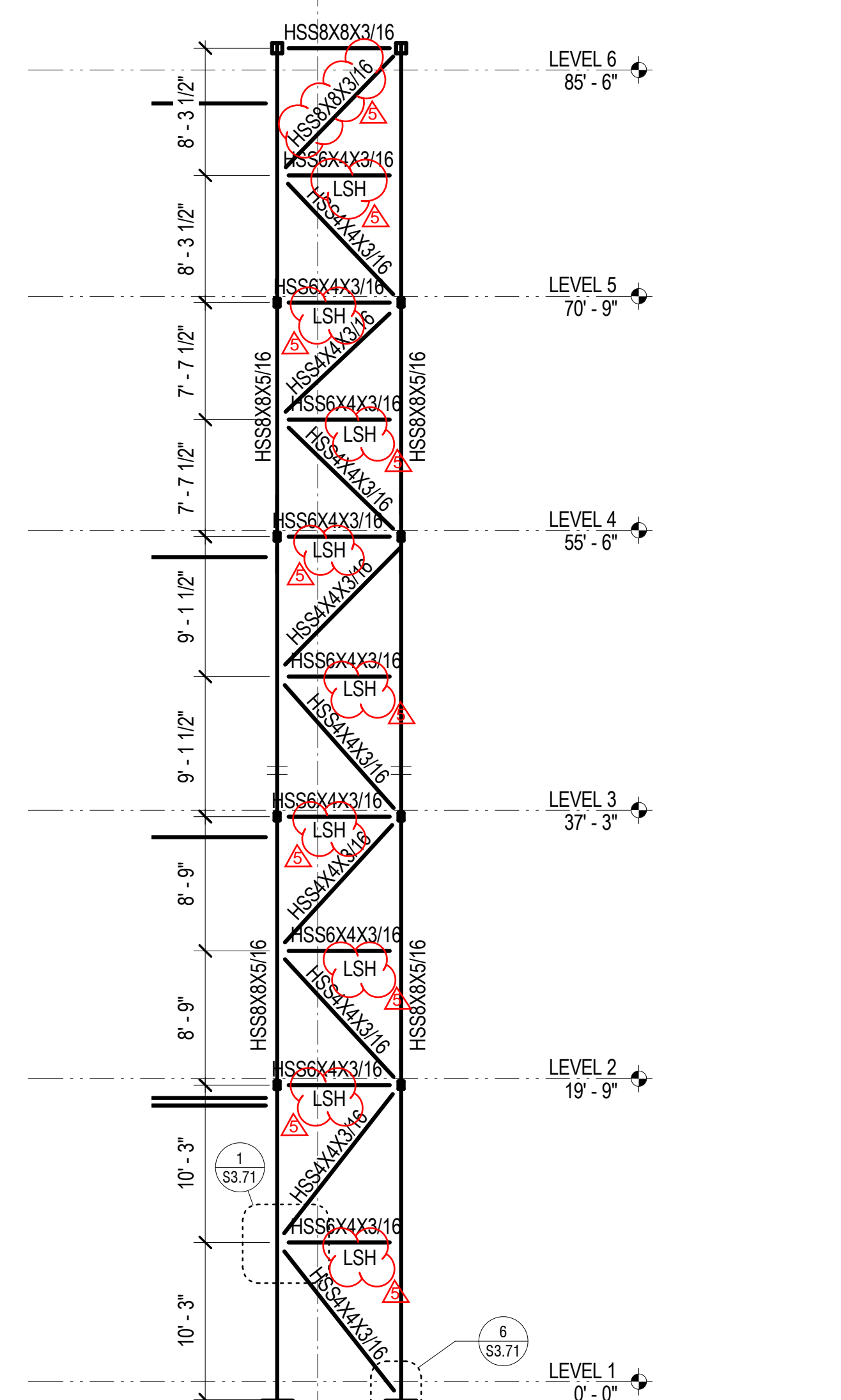
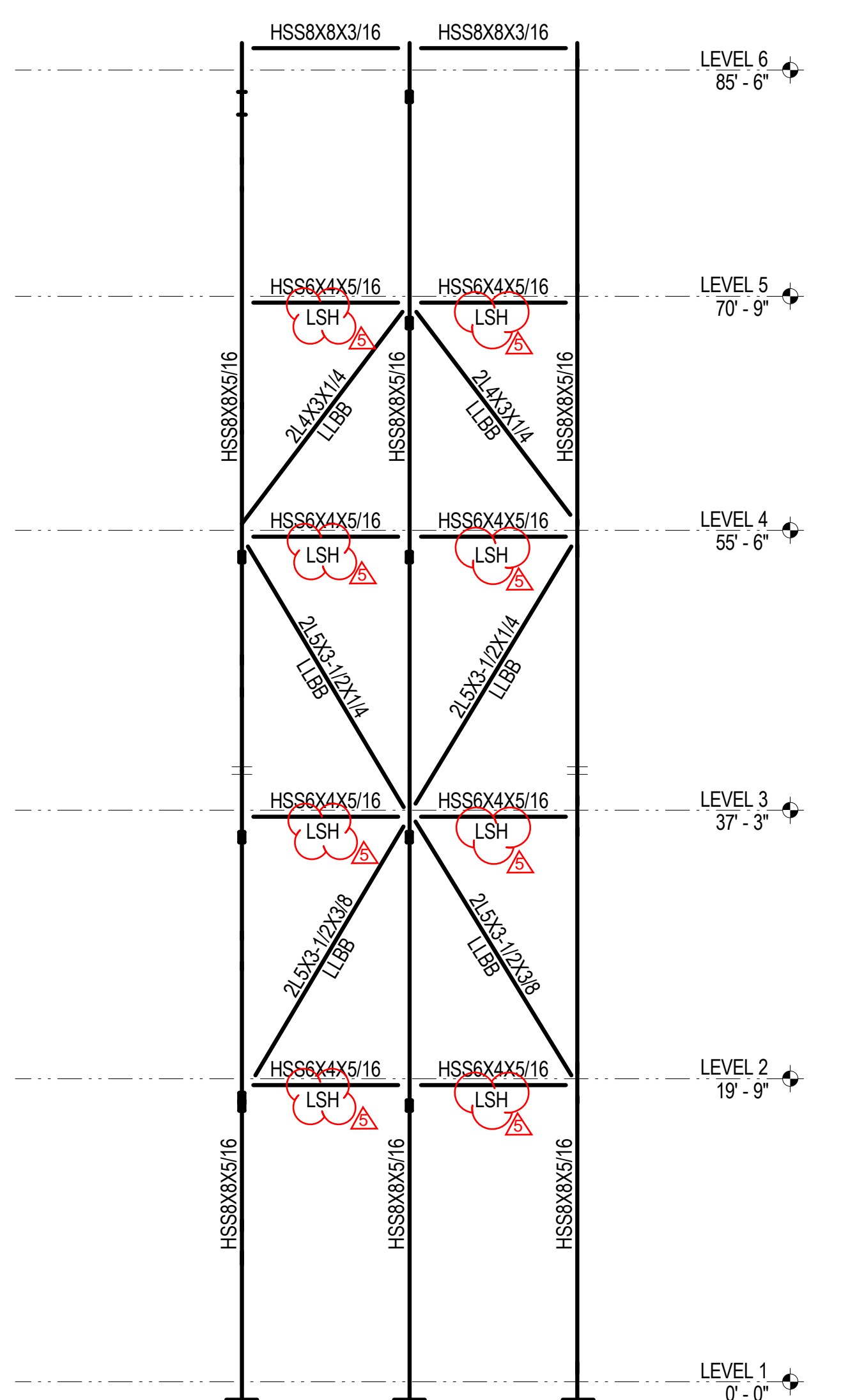
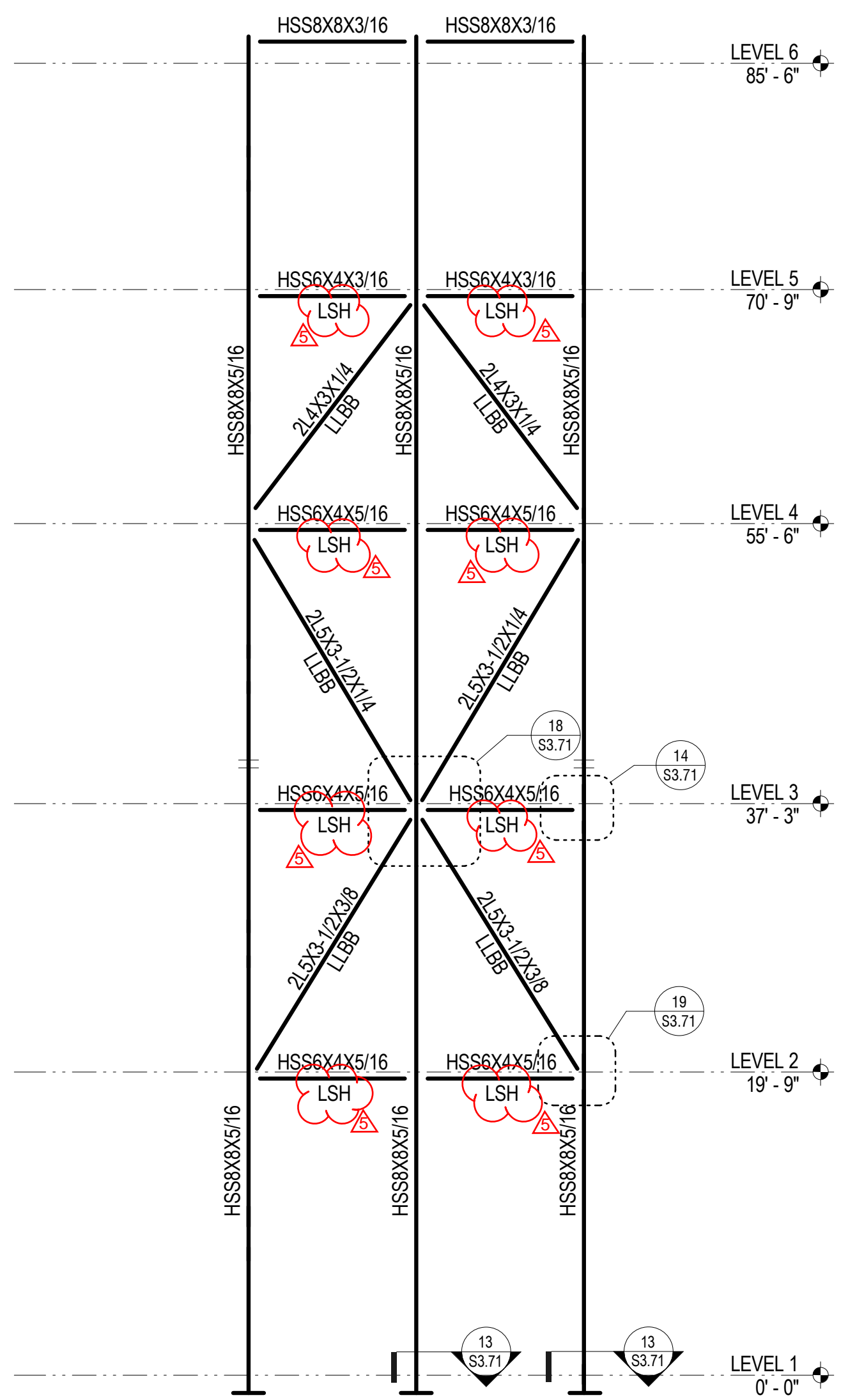
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 DETAIL  
3/4" = 1'-0"

6 DETAIL  
3/4" = 1'-0"

7 PLAZA ELEVATOR ELEVATION - SOUTH  
1/8" = 1'-0"

8 PLAZA ELEVATOR ELEVATION - NORTH  
1/8" = 1'-0"

9 PLAZA ELEVATOR ELEVATION - EAST AND WEST  
1/8" = 1'-0"

10 PLAZA ELEVATOR ELEVATION - CENTER  
1/8" = 1'-0"

11 ELEVATOR ROOF FRAMING  
1/4" = 1'-0"

14 DETAIL  
3/4" = 1'-0"

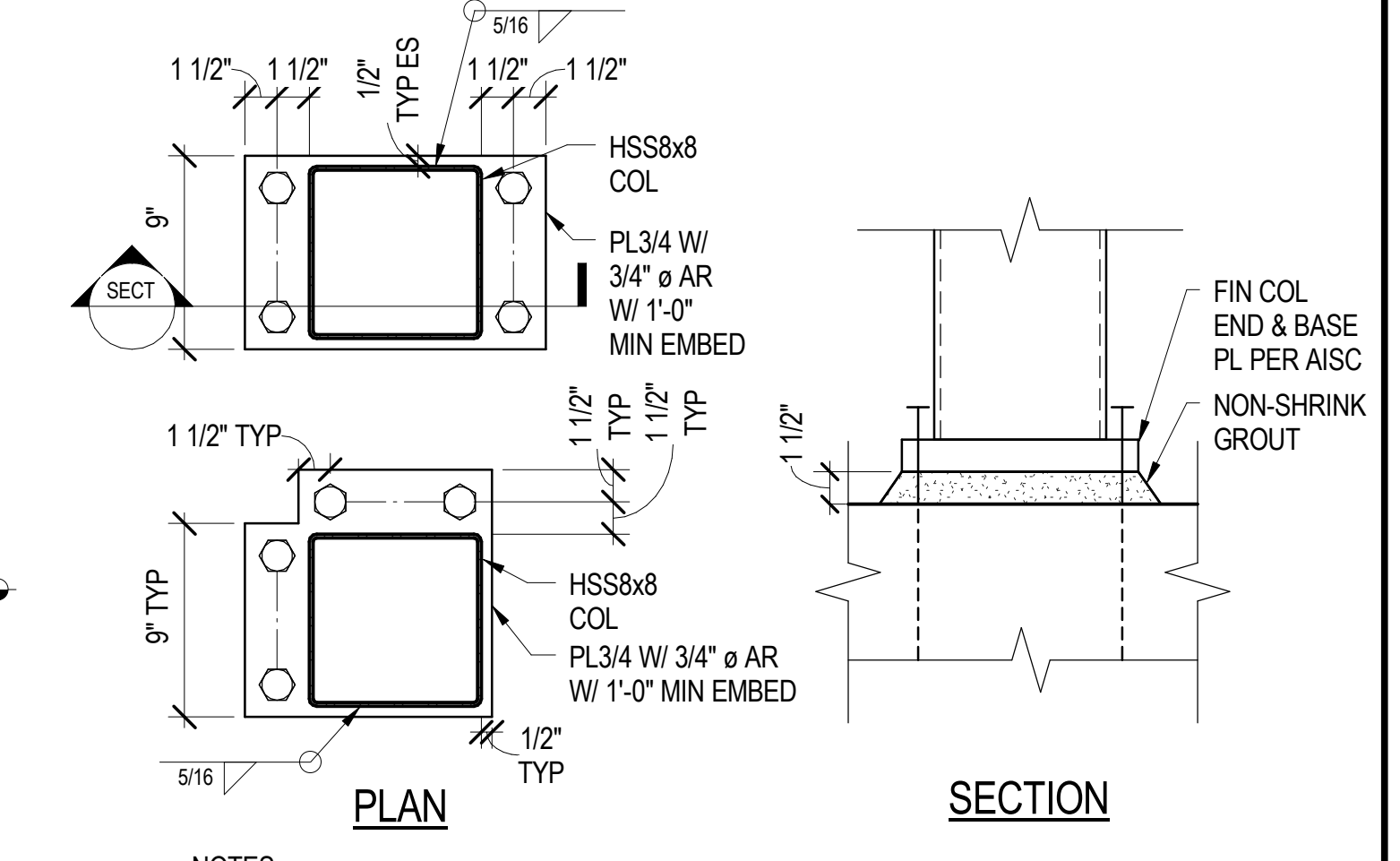
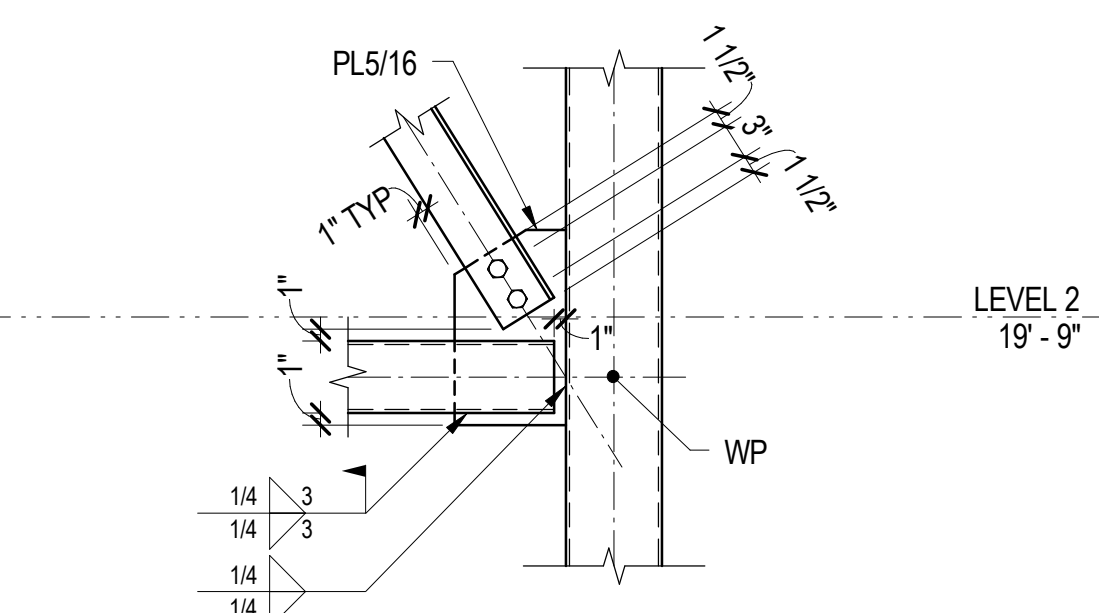
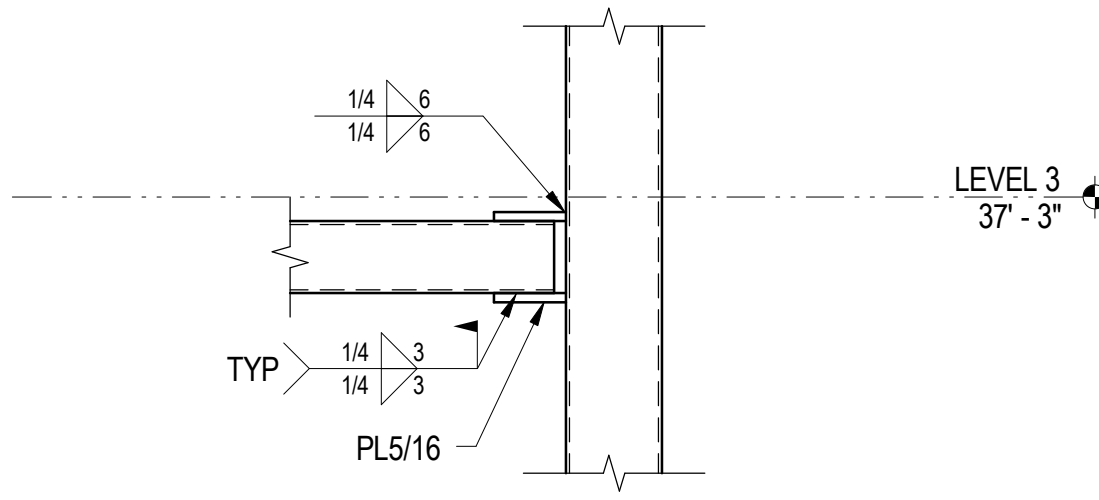
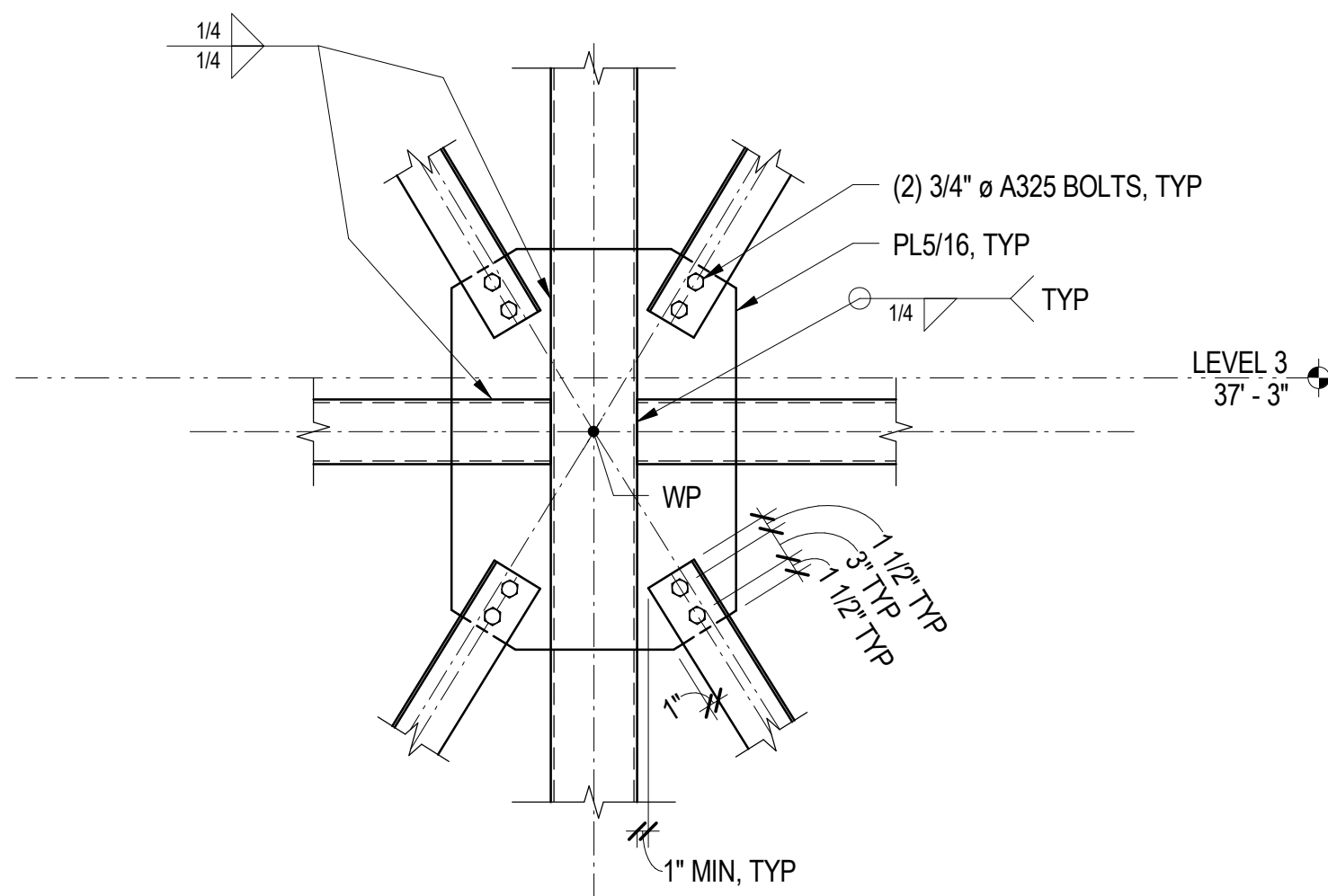
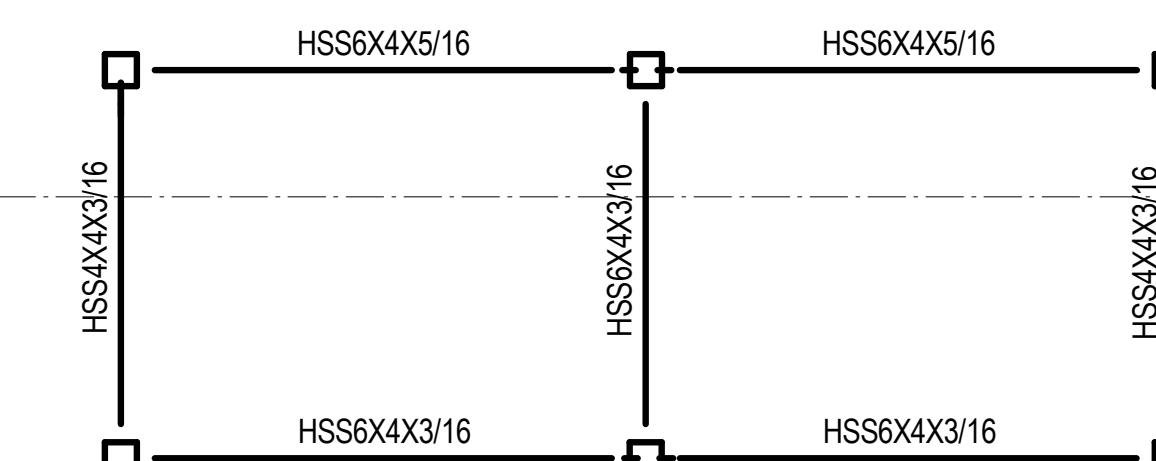
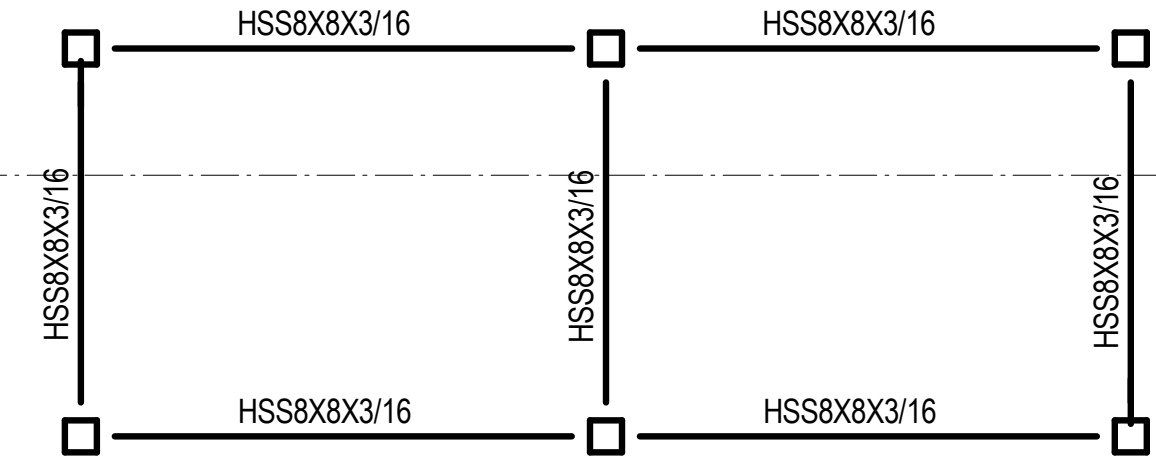
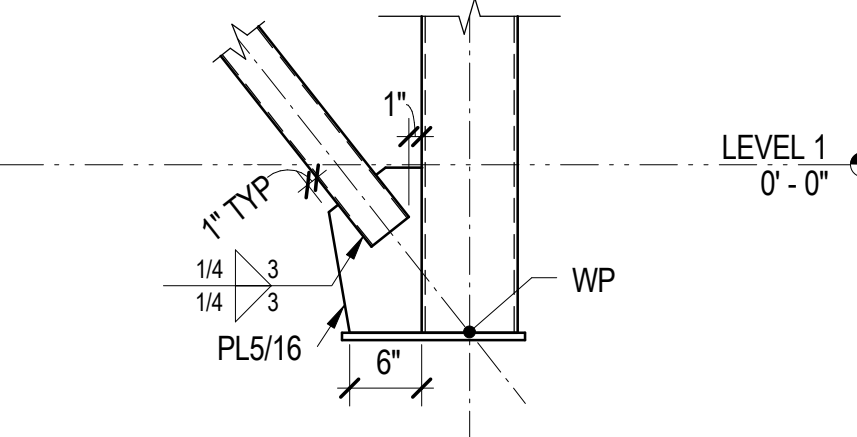
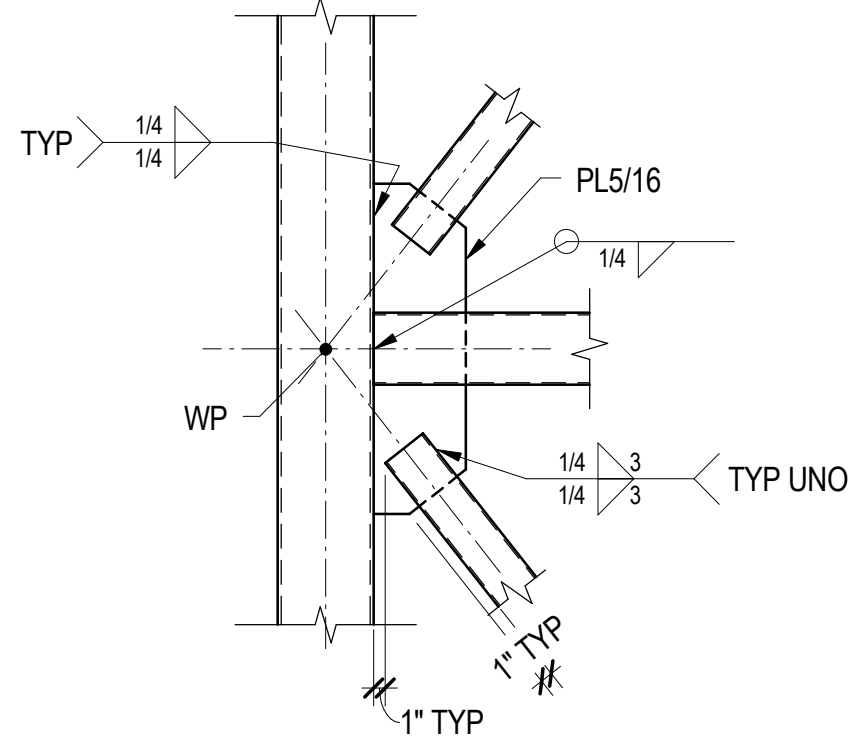
13 DETAIL  
1 1/2" = 1'-0"

16 LEVEL 5 ELEVATOR FRAMING  
1/4" = 1'-0"

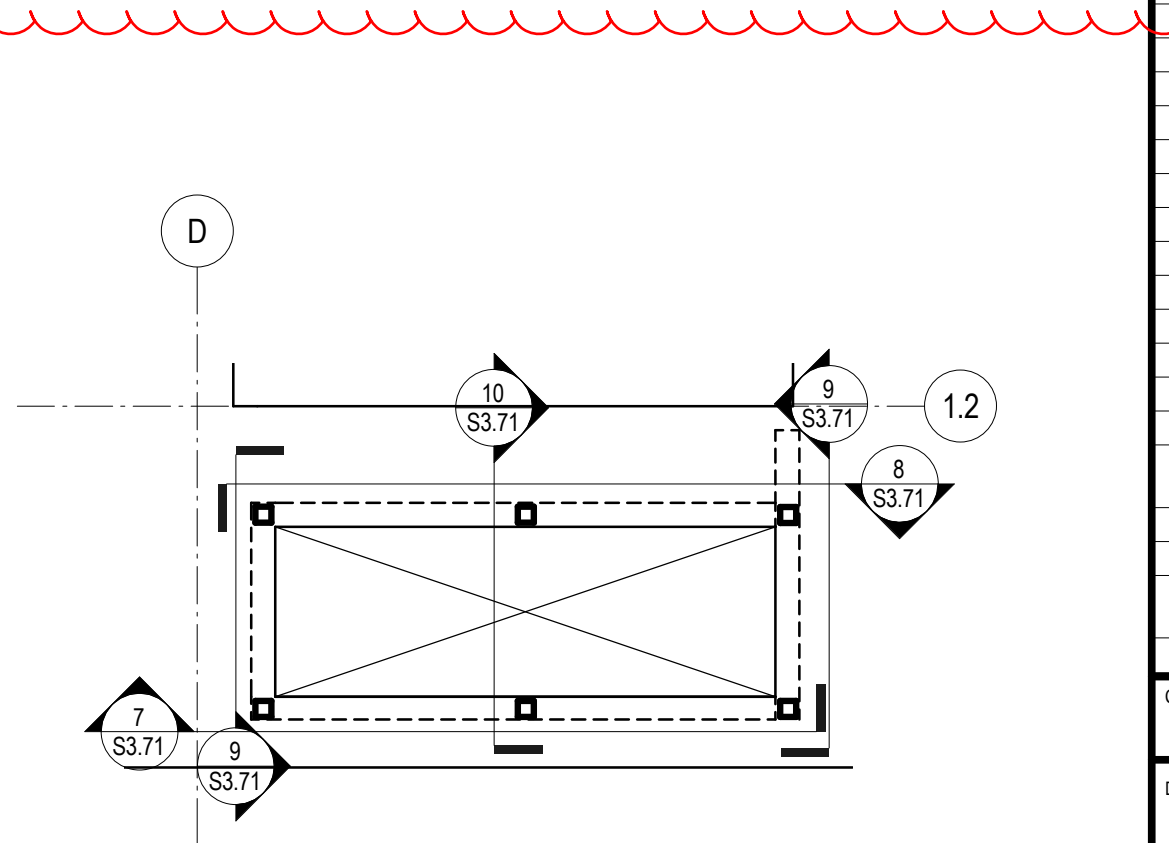
18 DETAIL  
3/4" = 1'-0"

19 DETAIL  
3/4" = 1'-0"

20 KEY PLAN



- NOTES:
- HOLD BASE PLATE RIGIDLY IN PLACE WHILE GROUTING.
  - TIGHTEN ANCHOR RODS TO SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE AND WASHER DIAMETER SHALL BE SIZED PER AISC AT CONTRS OPTION. OVERSIZED HOLES W/ A STD HARDENED WASHER MAY BE USED.



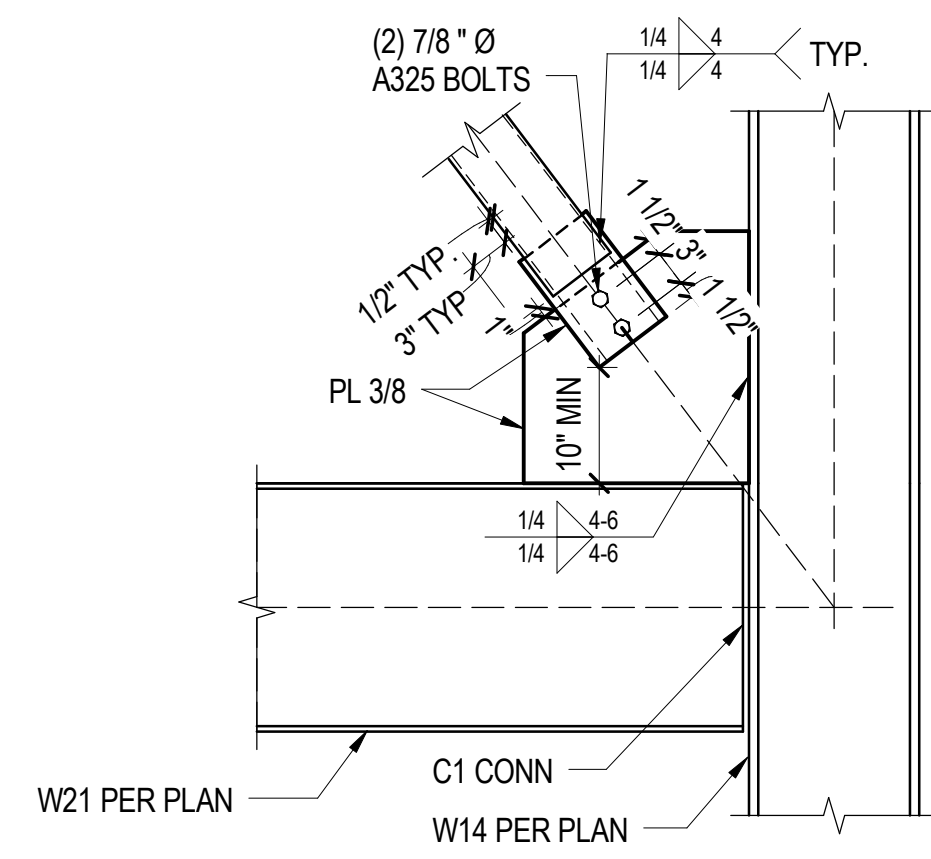
NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

PLAZA ELEVATOR FRAMING

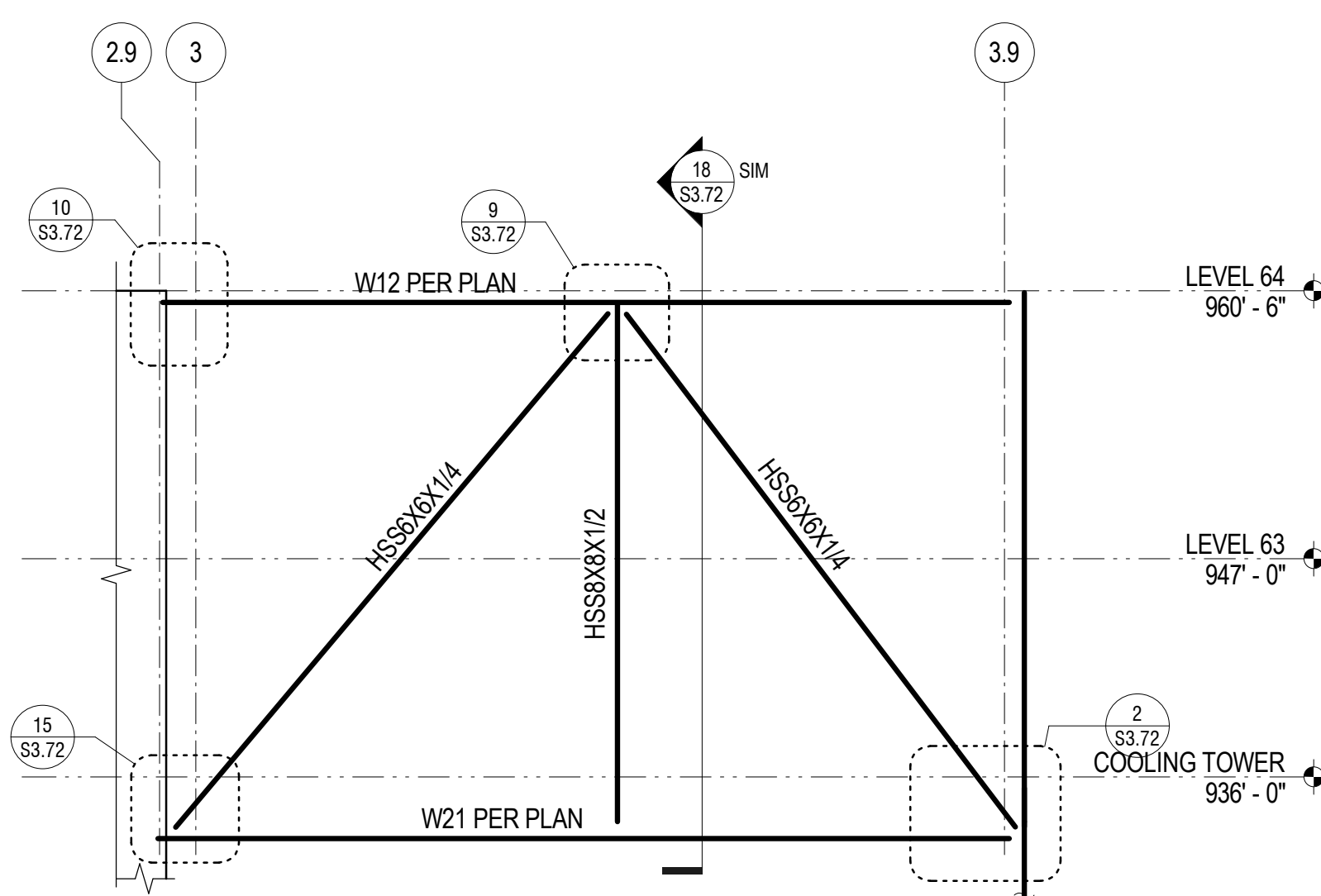
NO.	DATE	ISSUE
1	02 MAY 14	GMP



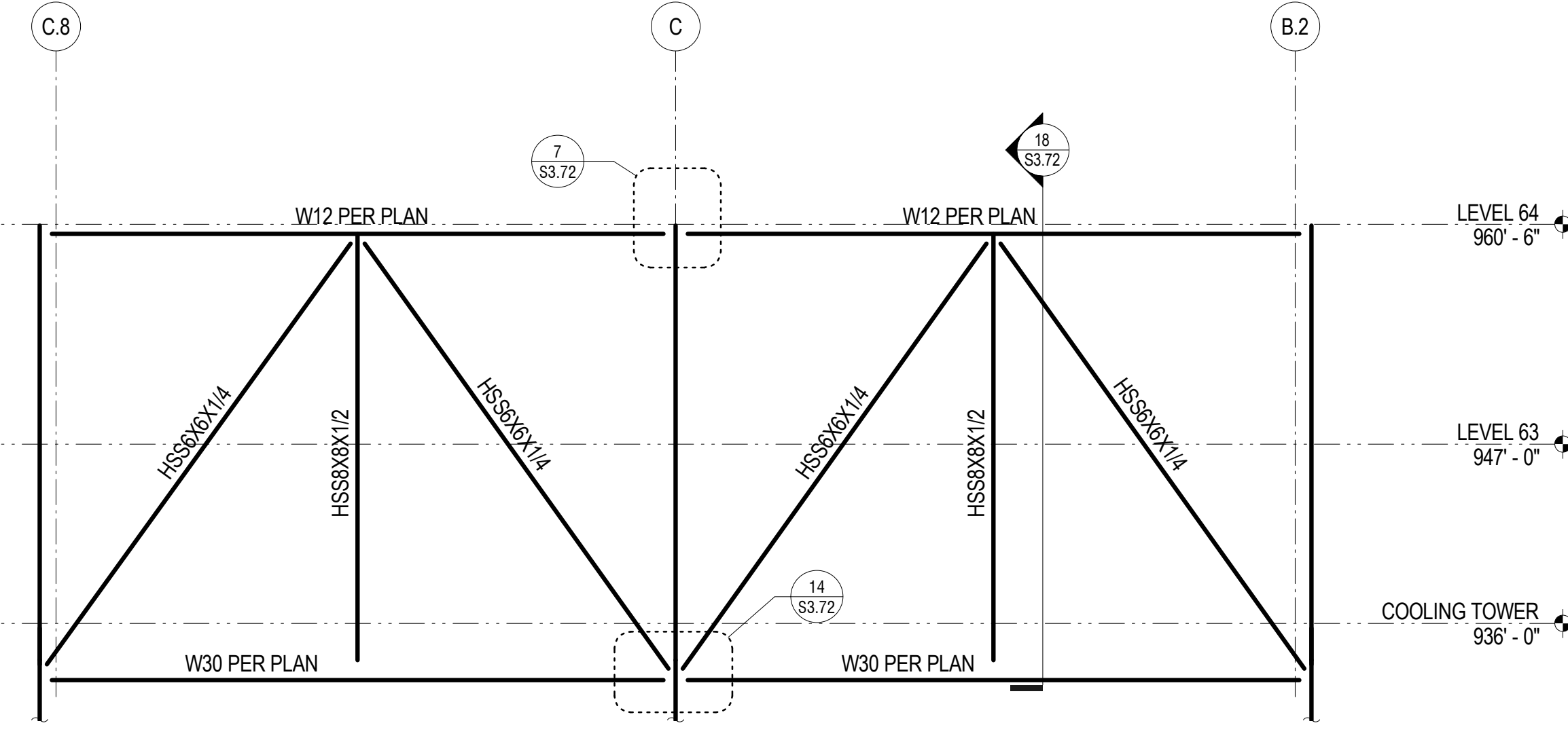
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



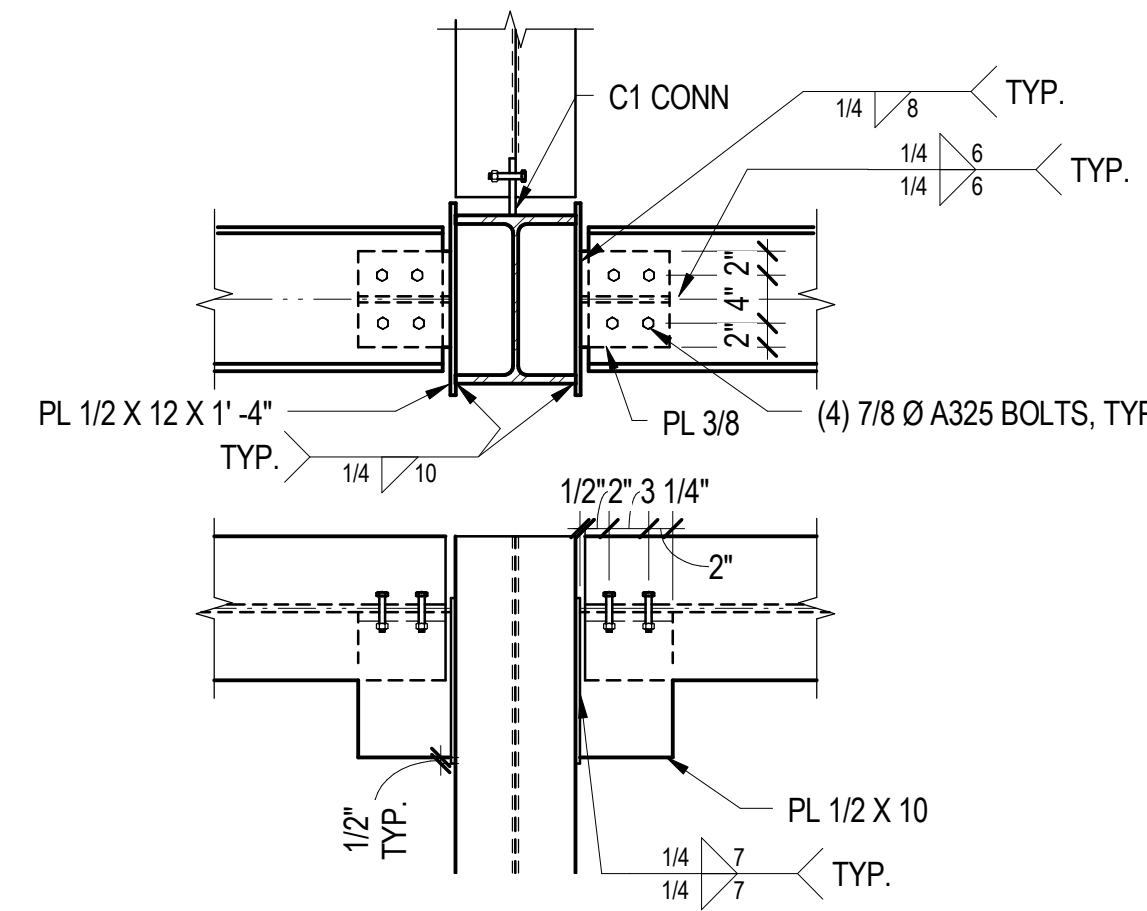
2 SCREENWALL BRACING CONNECTION TO W14 COL  
3/4" = 1'-0"



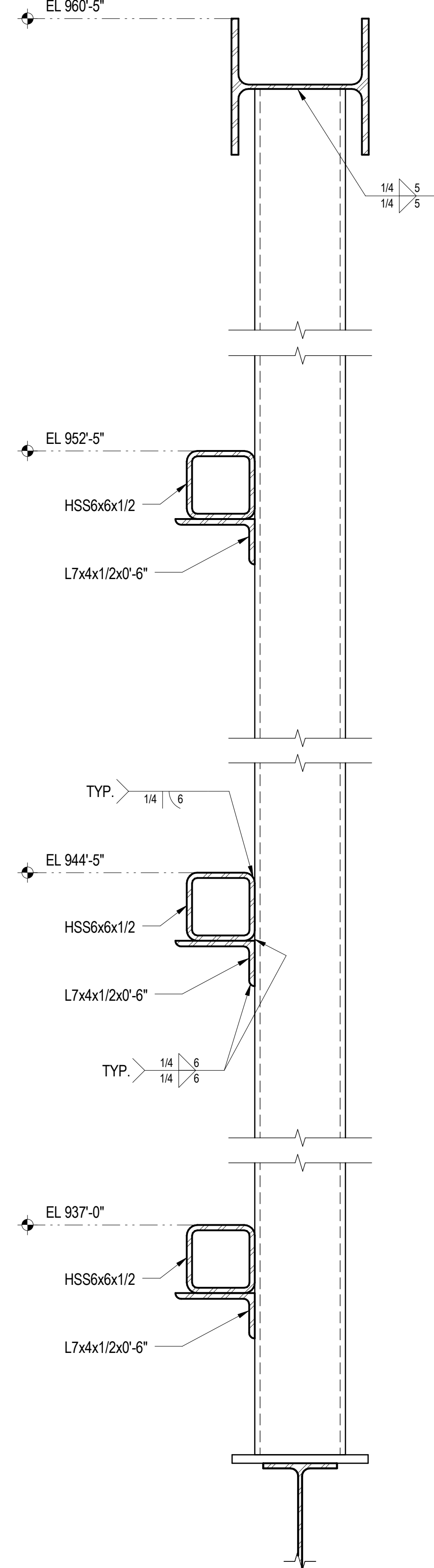
3 SCREENWALL BRACING ELEVATION - EAST  
1/8" = 1'-0"



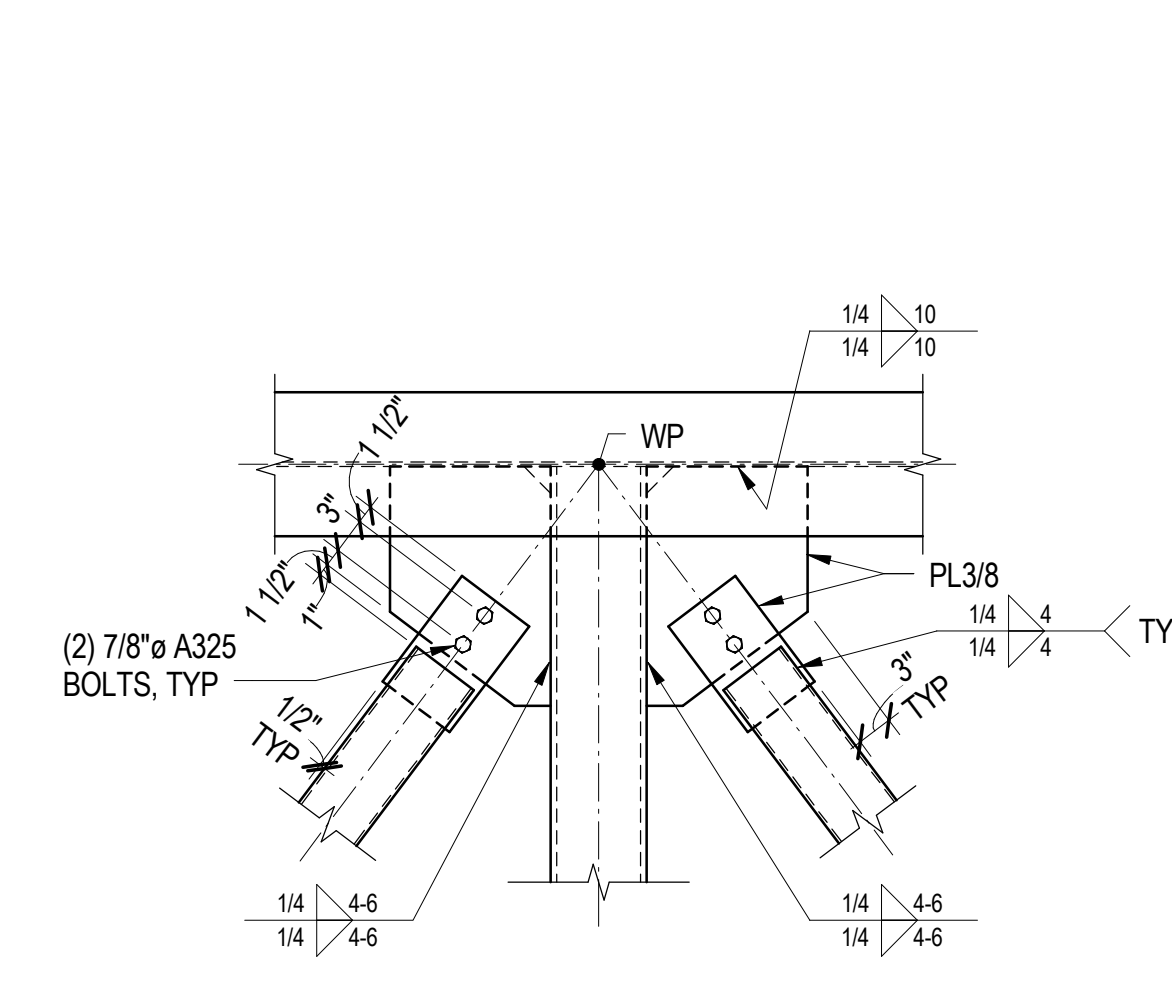
5 SCREENWALL BRACING ELEVATION - NORTH  
1/8" = 1'-0"



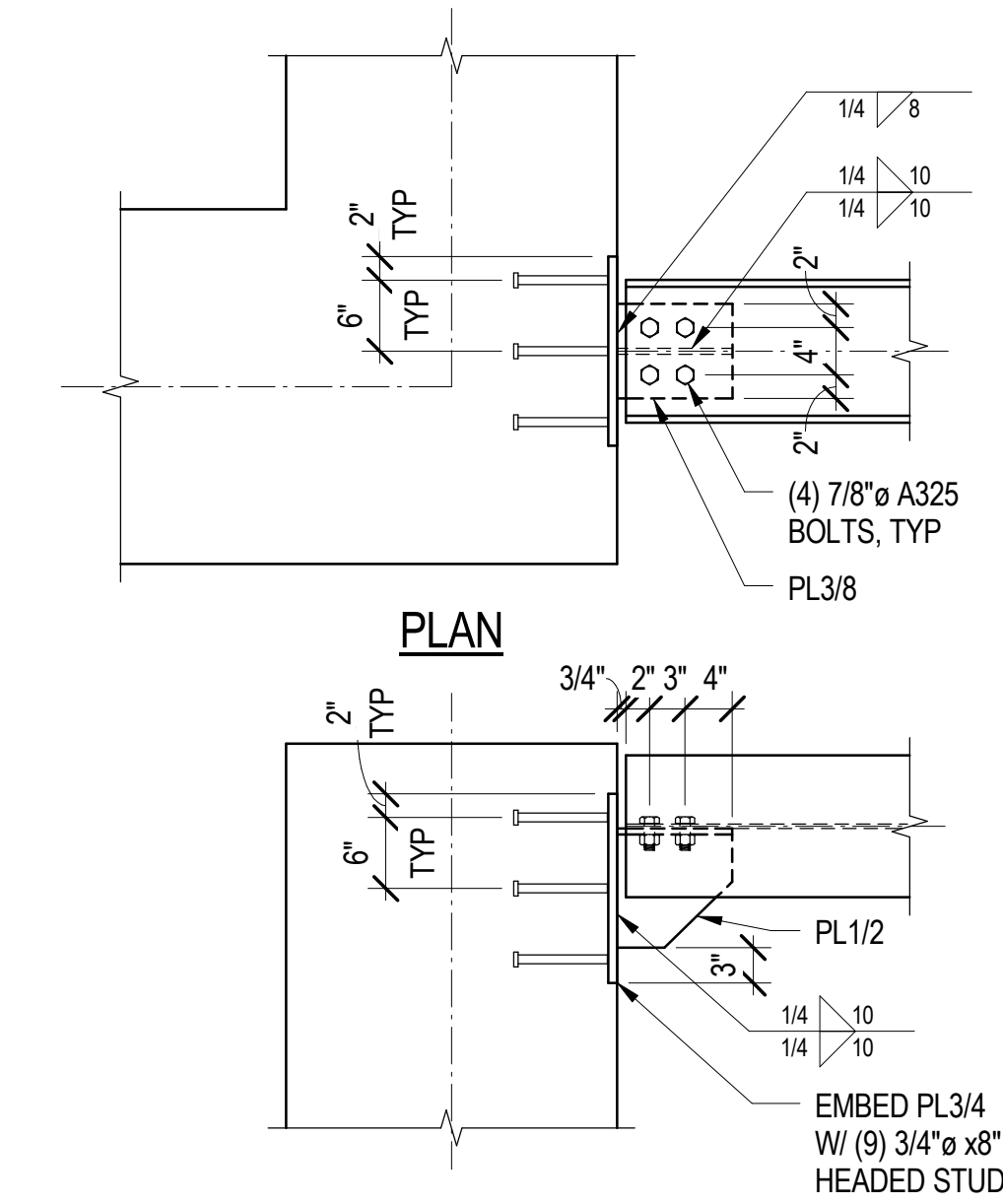
7 SCREENWALL BRACING CONNECTION TO W14 COL  
3/4" = 1'-0"



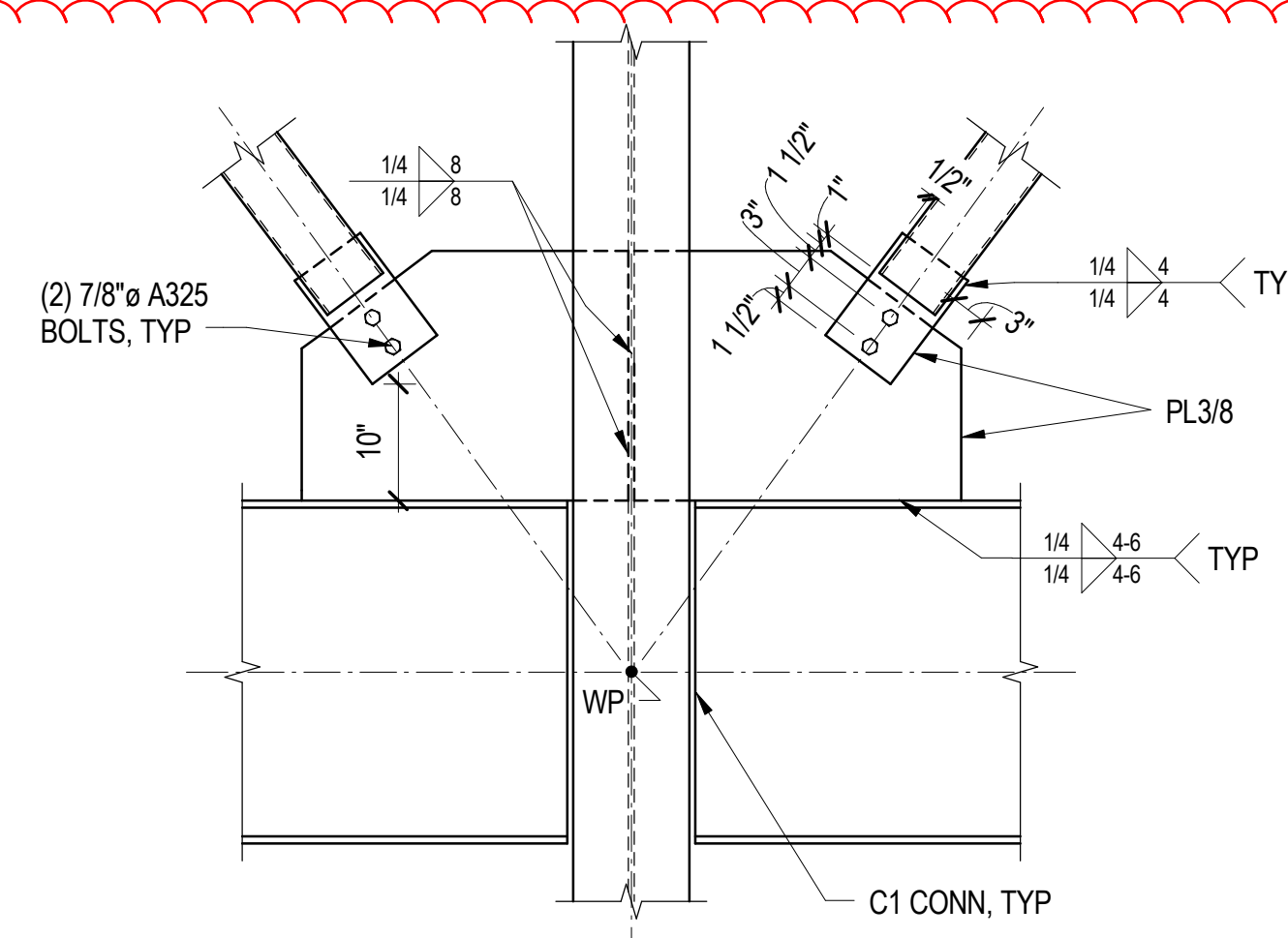
18 SCREENWALL BRACING DETAIL  
1 1/2" = 1'-0"



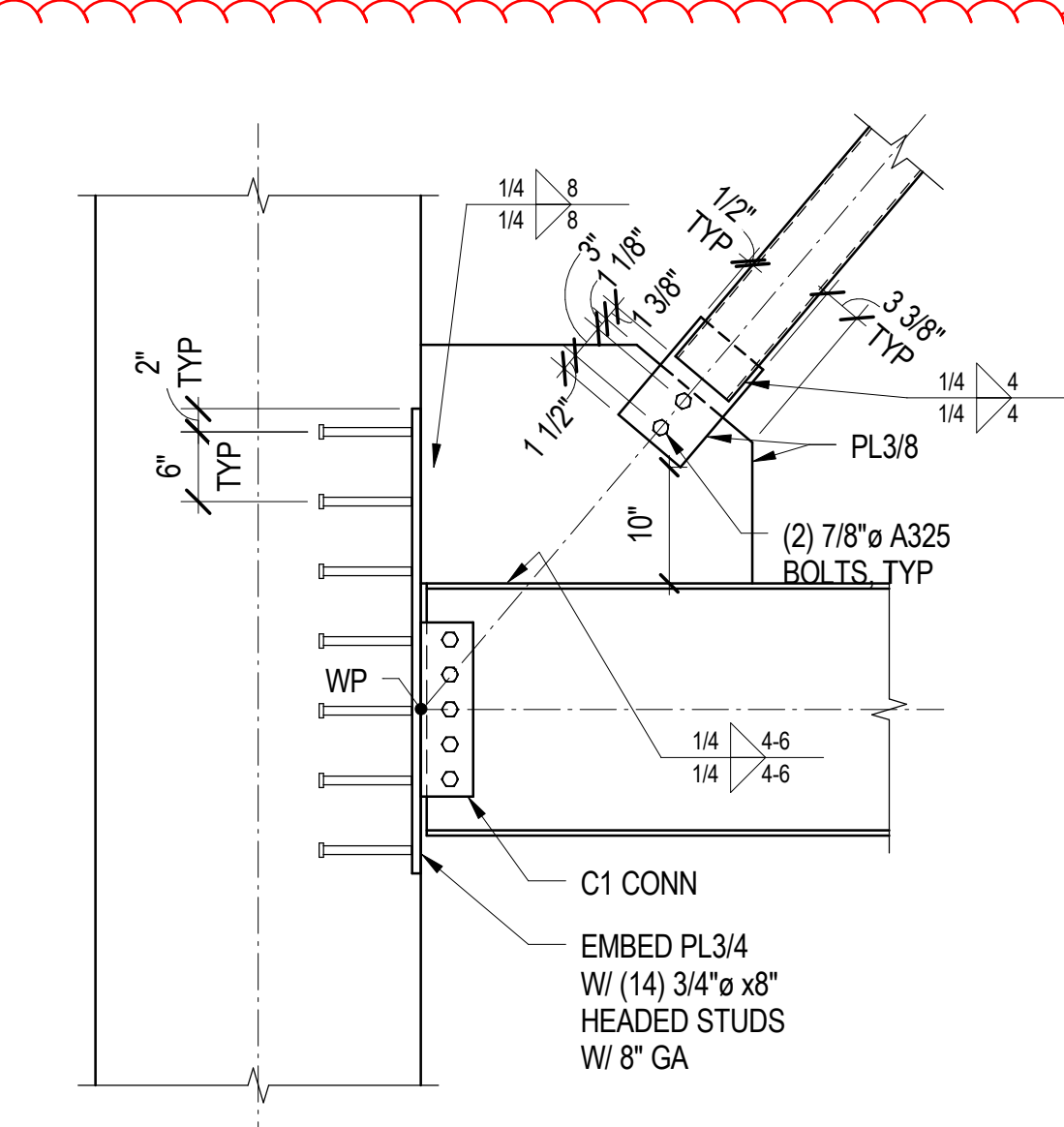
9 SCREENWALL BRACING CONNECTION TO HSS POST  
3/4" = 1'-0"



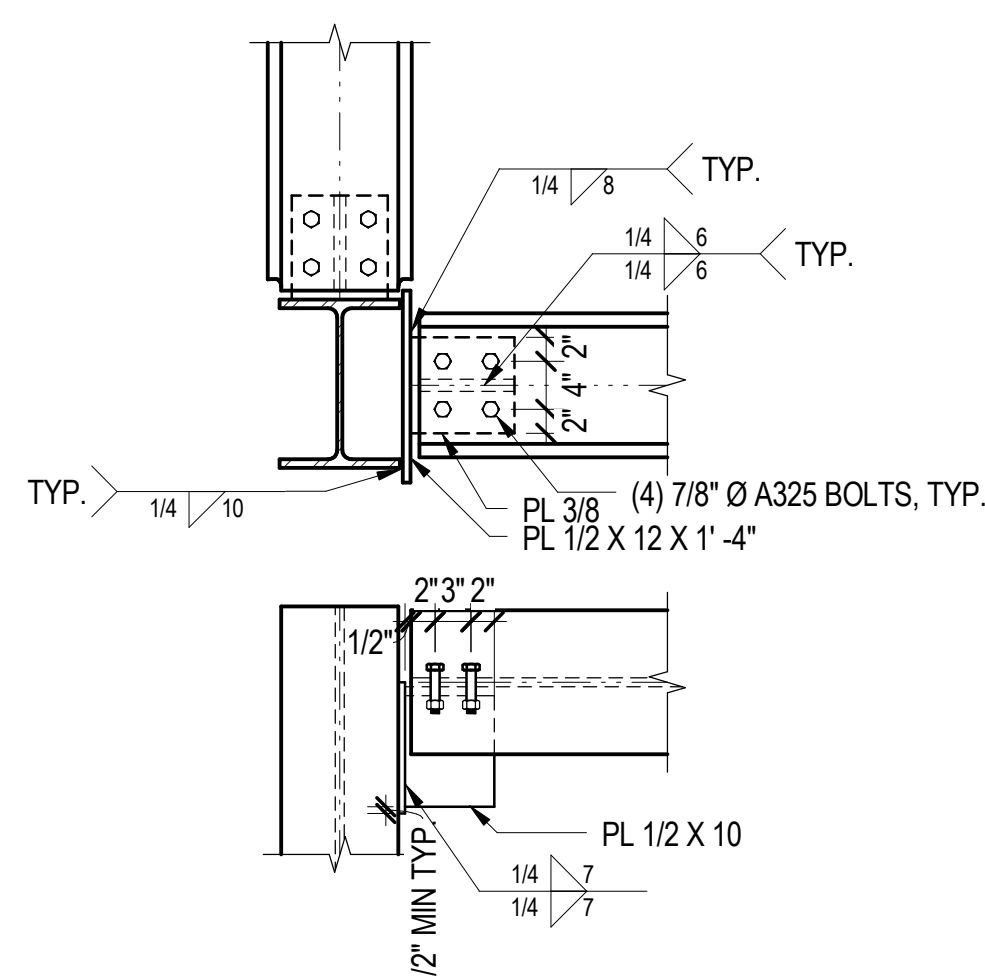
10 W12 CONNECTION TO CONCRETE WALL  
3/4" = 1'-0"



14 SCREENWALL BRACING CONNECTION TO W14  
3/4" = 1'-0"



15 W21 CONNECTION TO CONCRETE WALL  
3/4" = 1'-0"



17 ROTATED W12 CONNECTION TO W14 COLUMN  
3/4" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	IBID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

CAD FILENAME

DRAWING TITLE

**SCREENWALL FRAMING**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

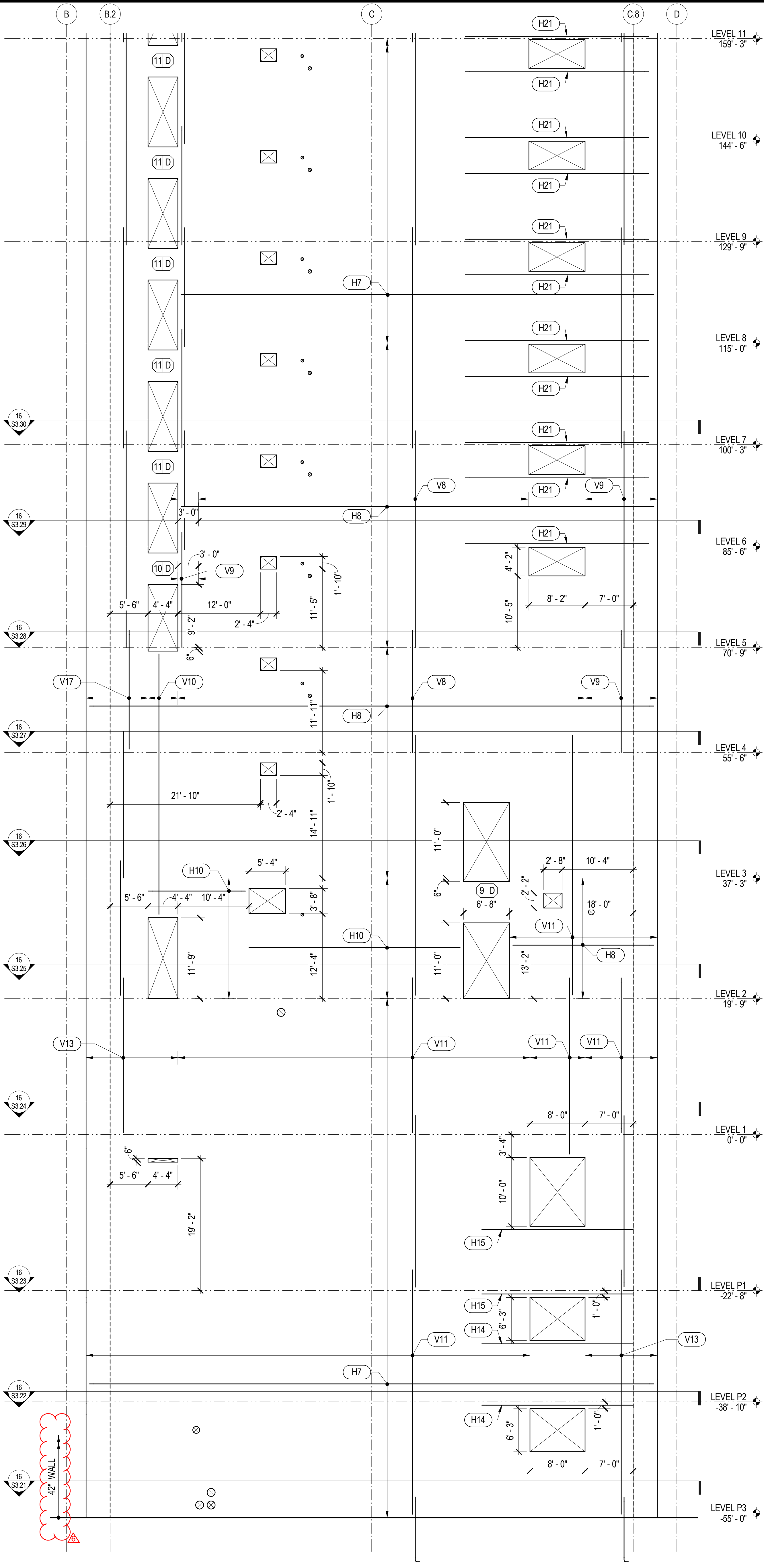
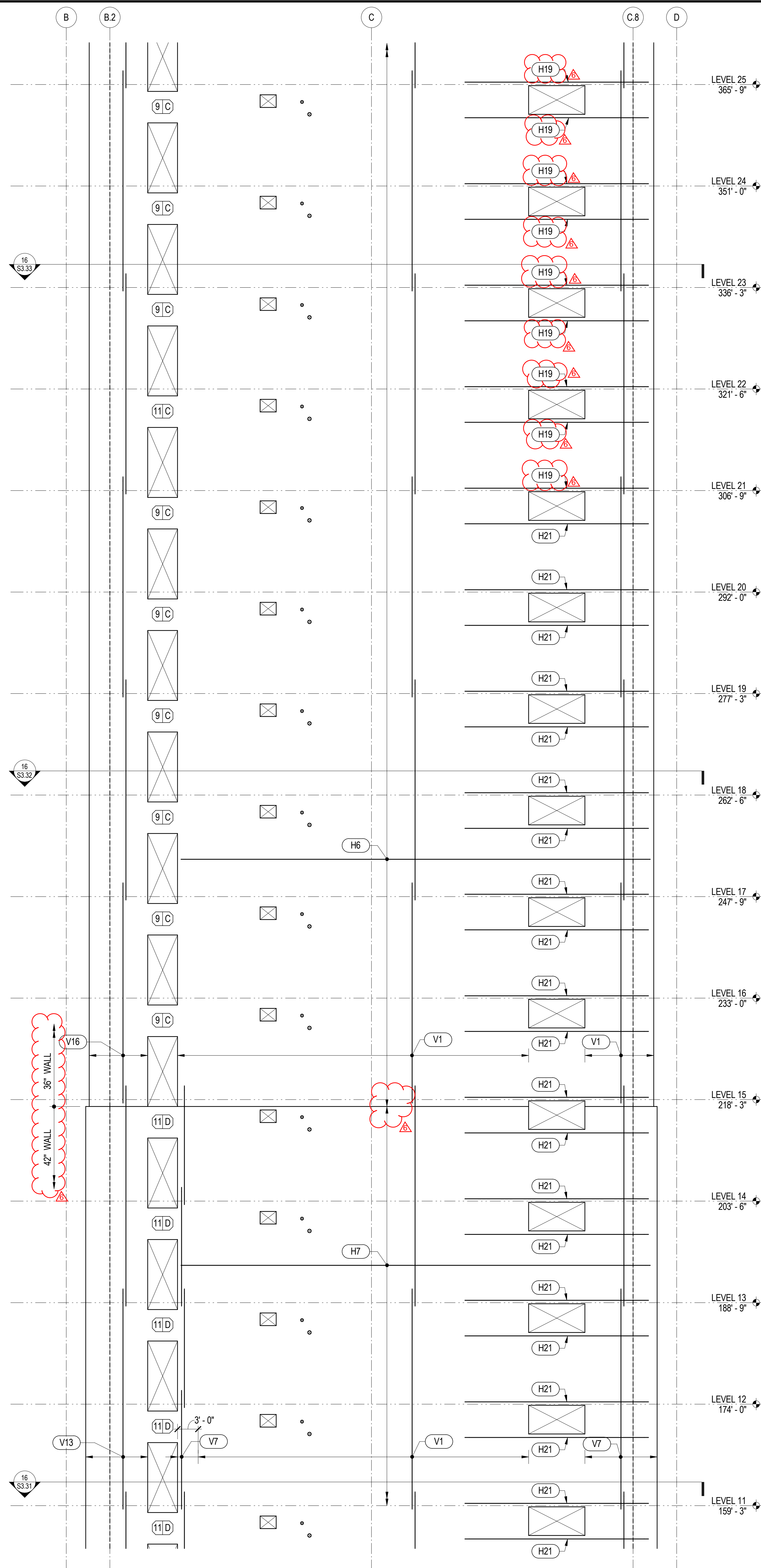
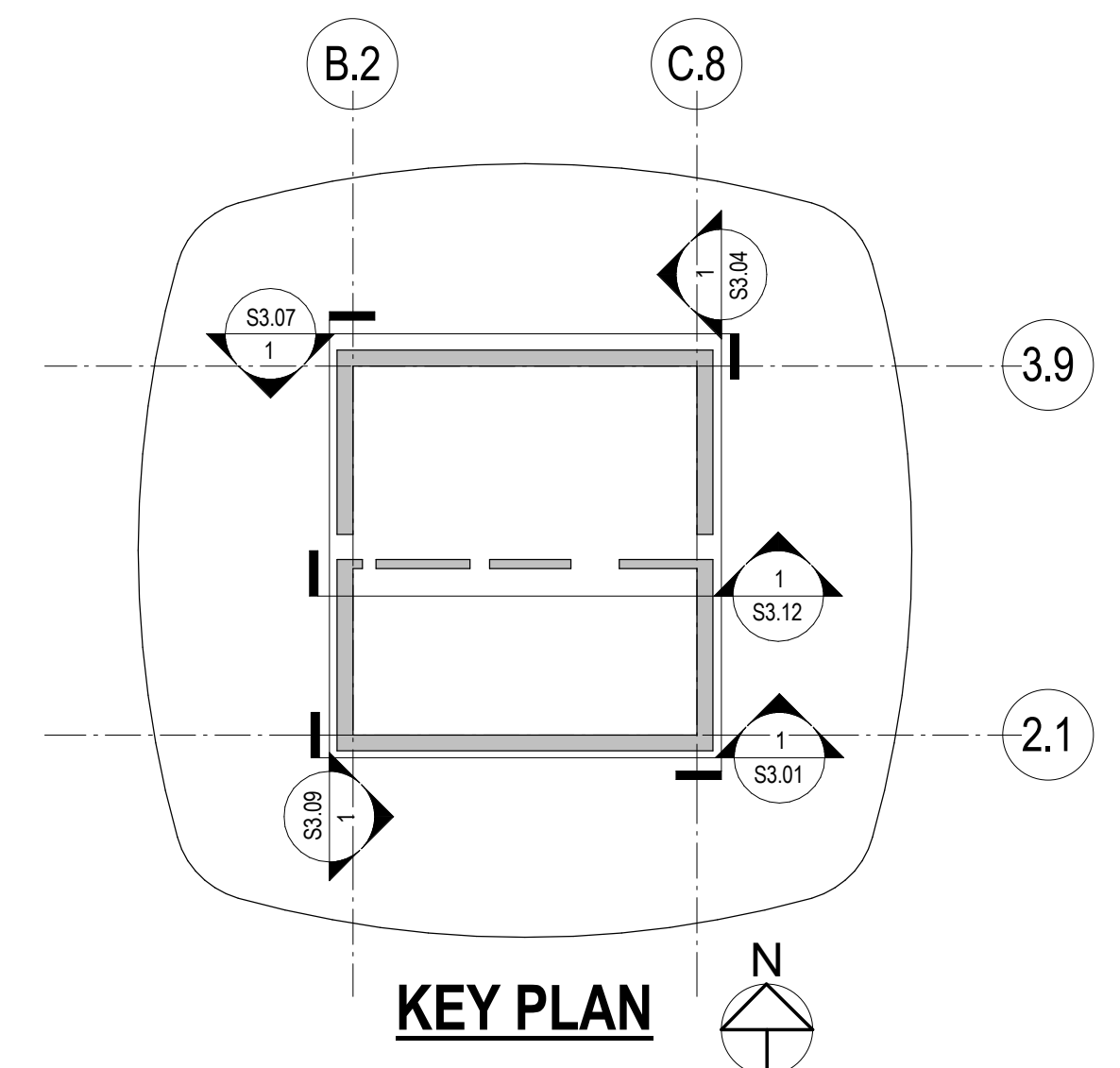
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"

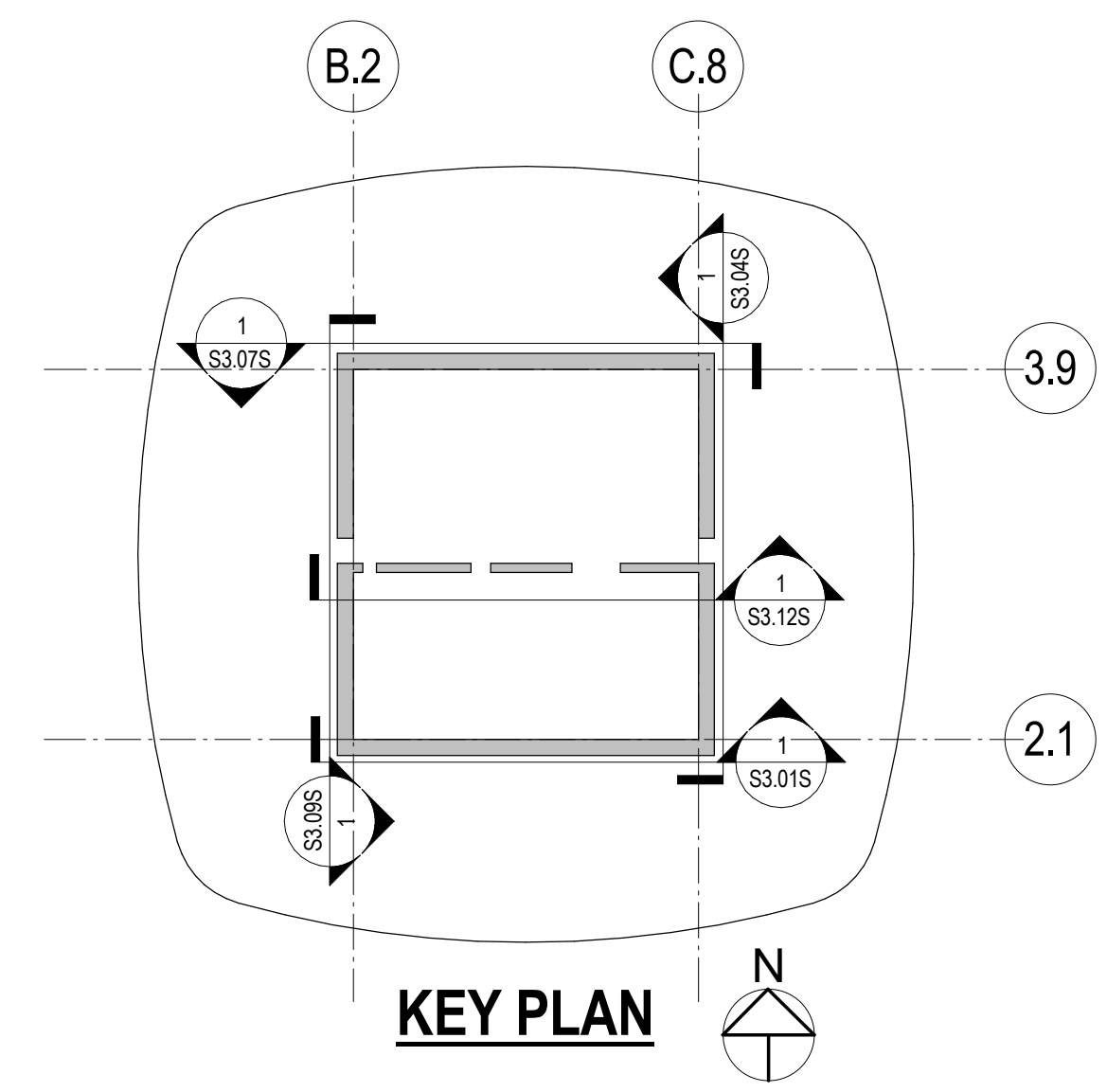
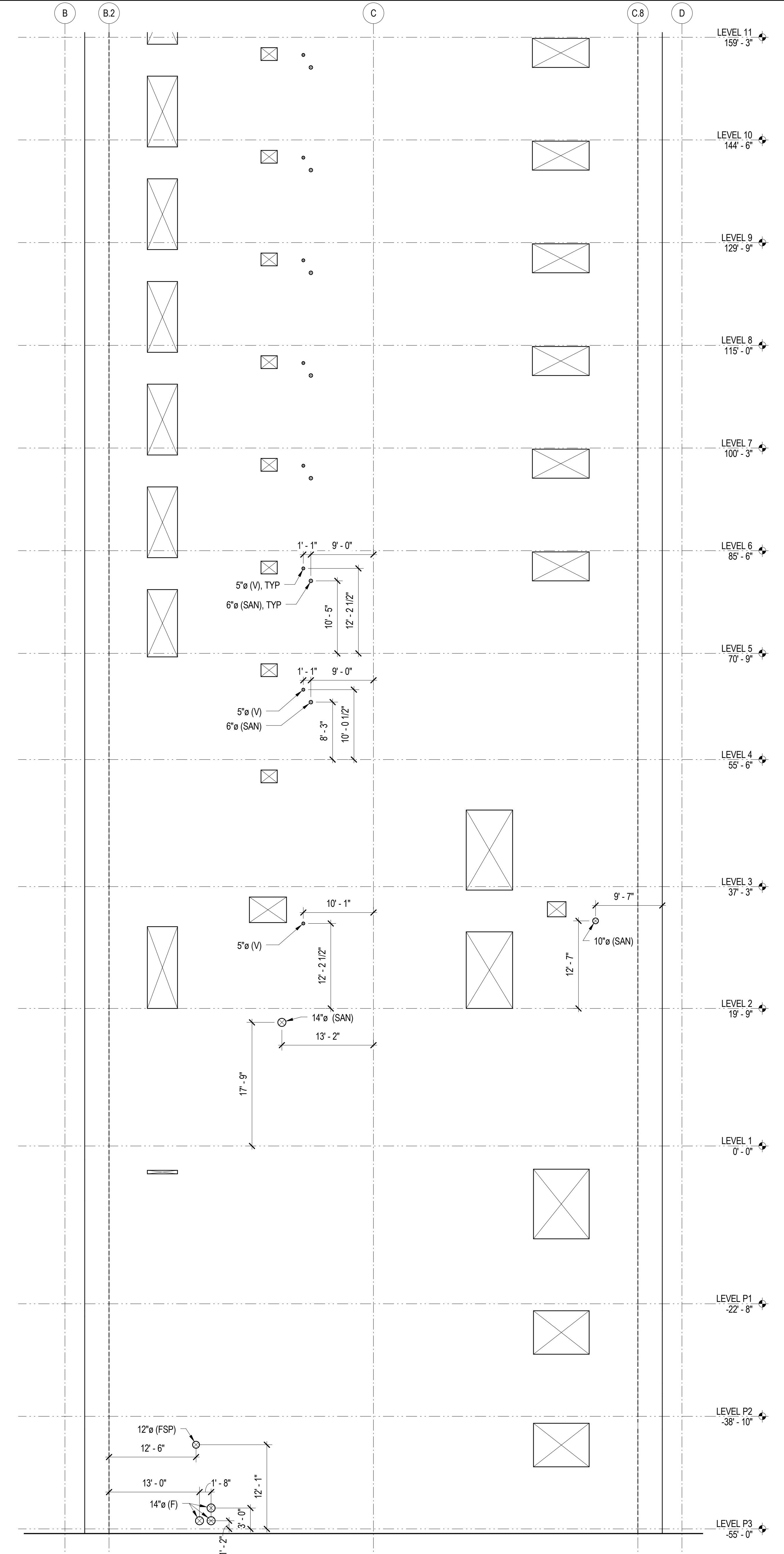
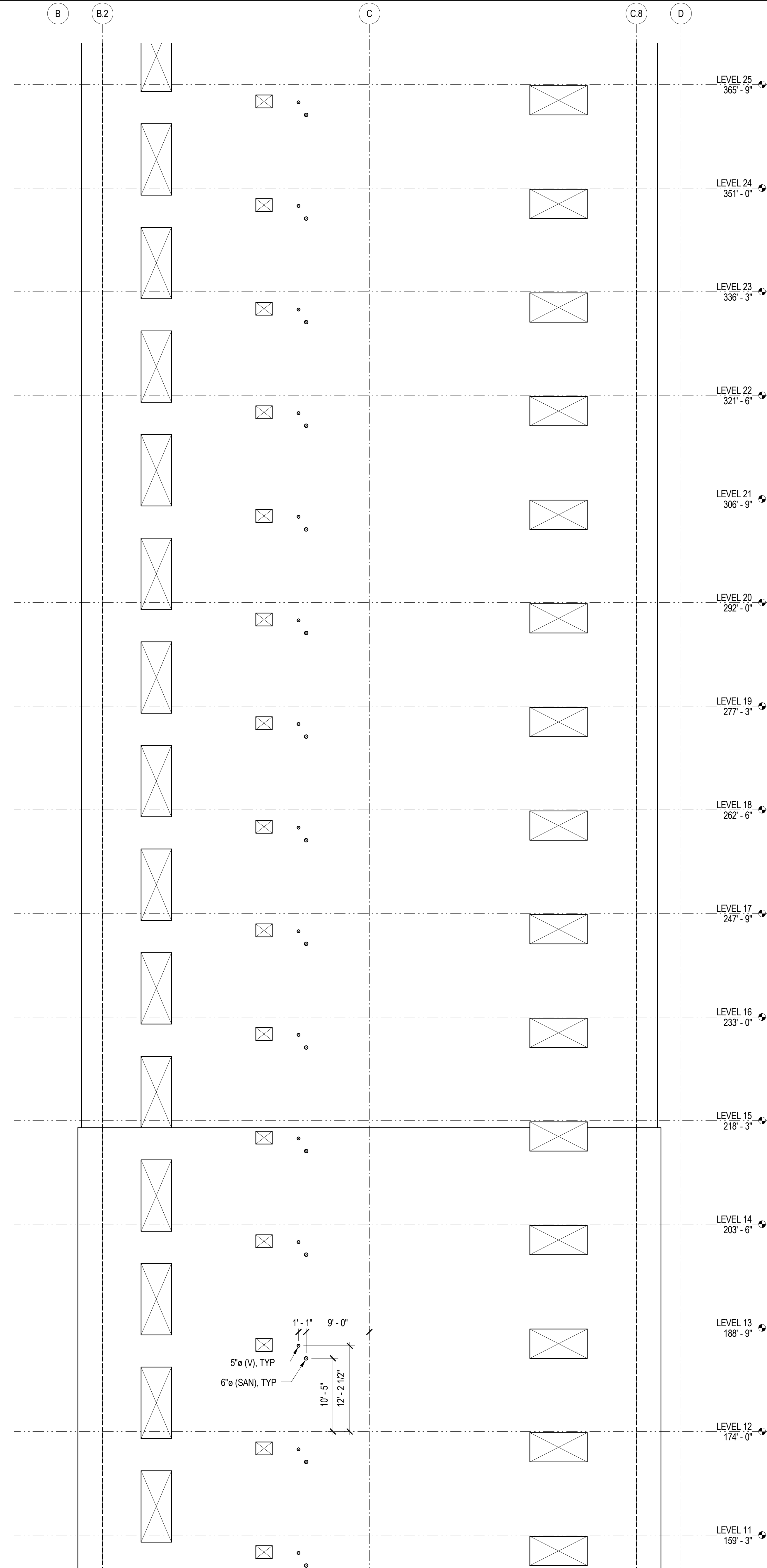
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.01S

4/30/2014 12:23:31 PM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

1 SHEAR WALL ELEVATION - SOUTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"



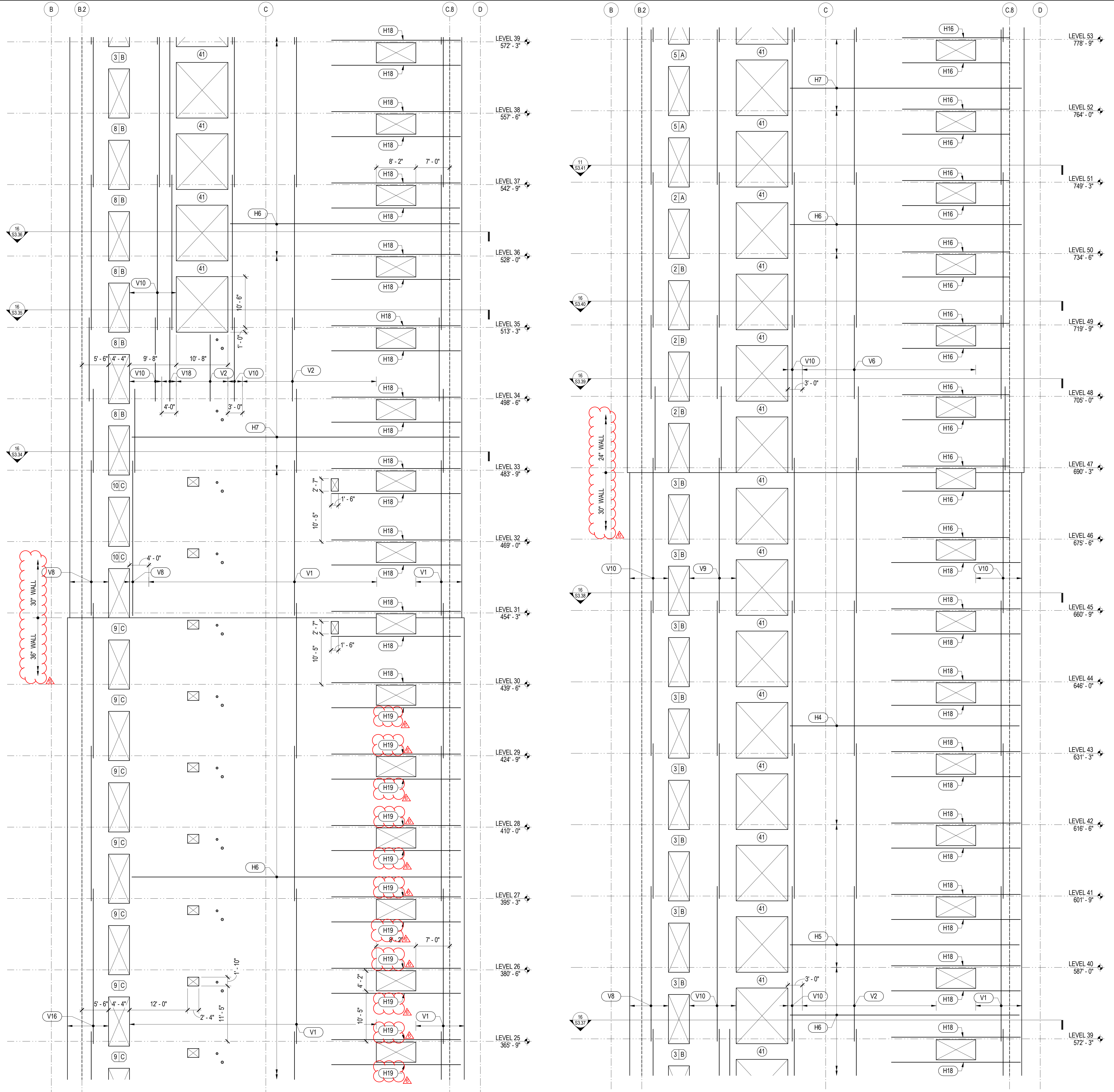
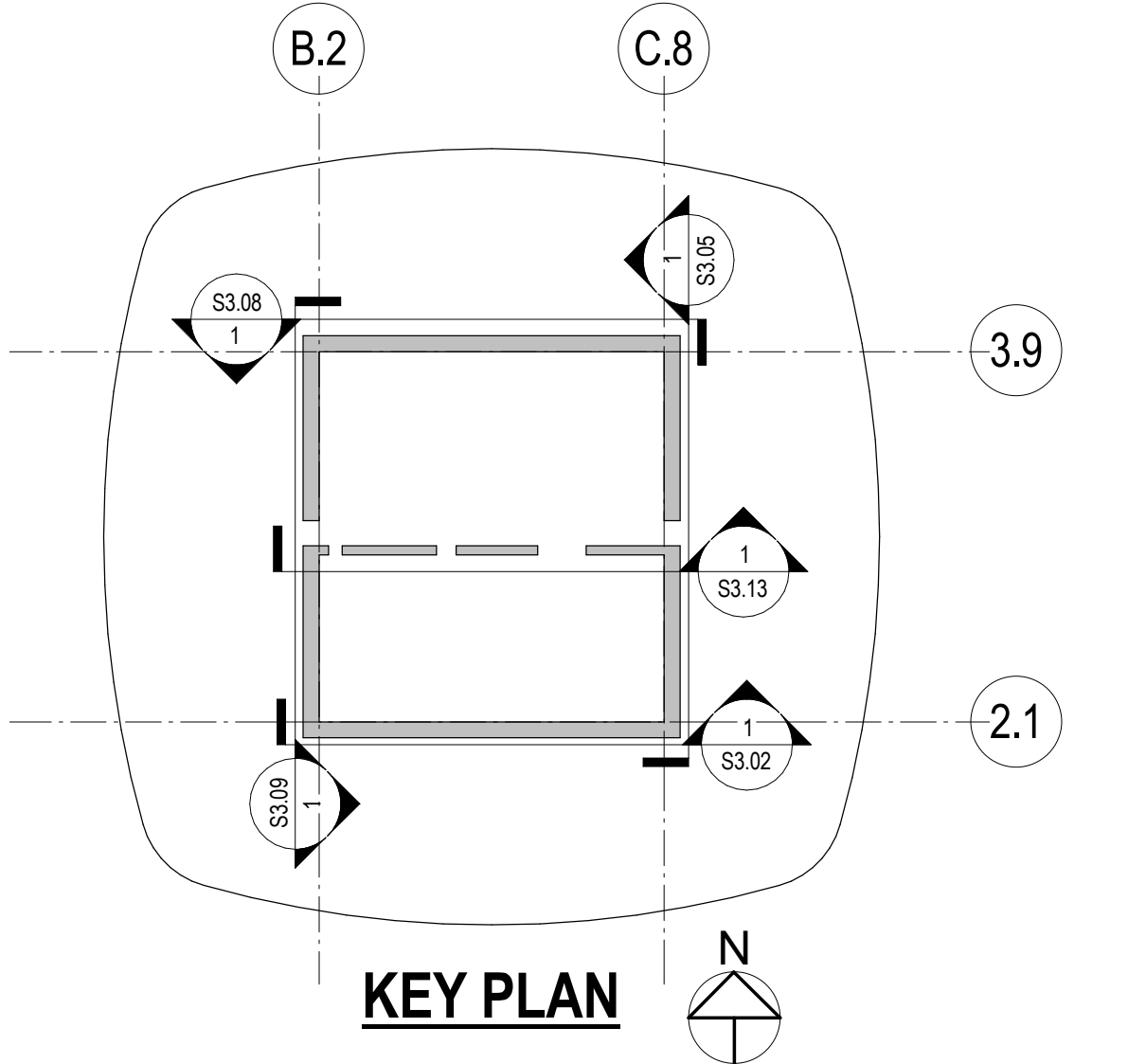
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"

4/29/2014 7:05:56 PM C:\Revit\Transbay\Twr\_MS2013\_13.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: \_\_\_\_\_

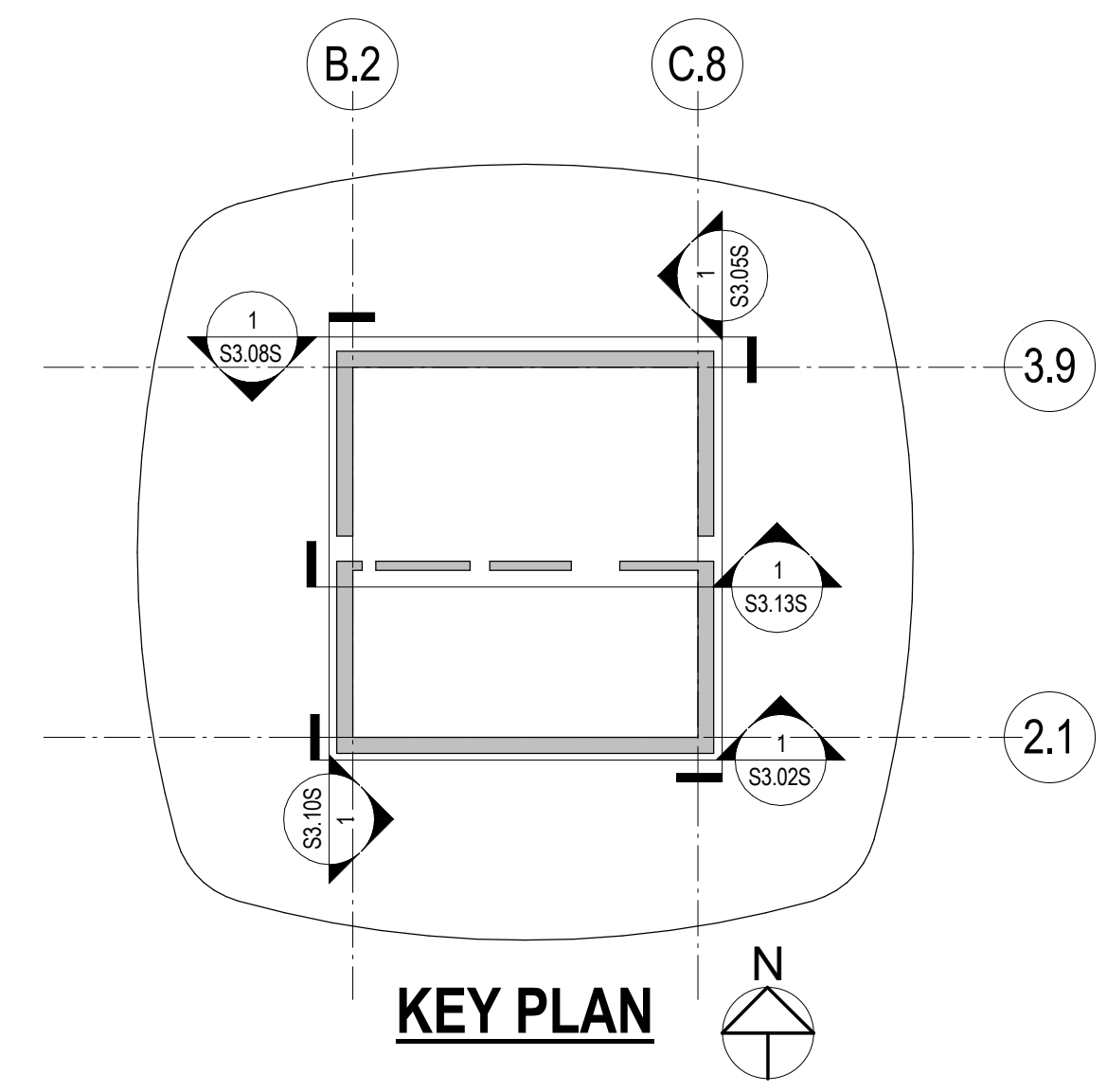
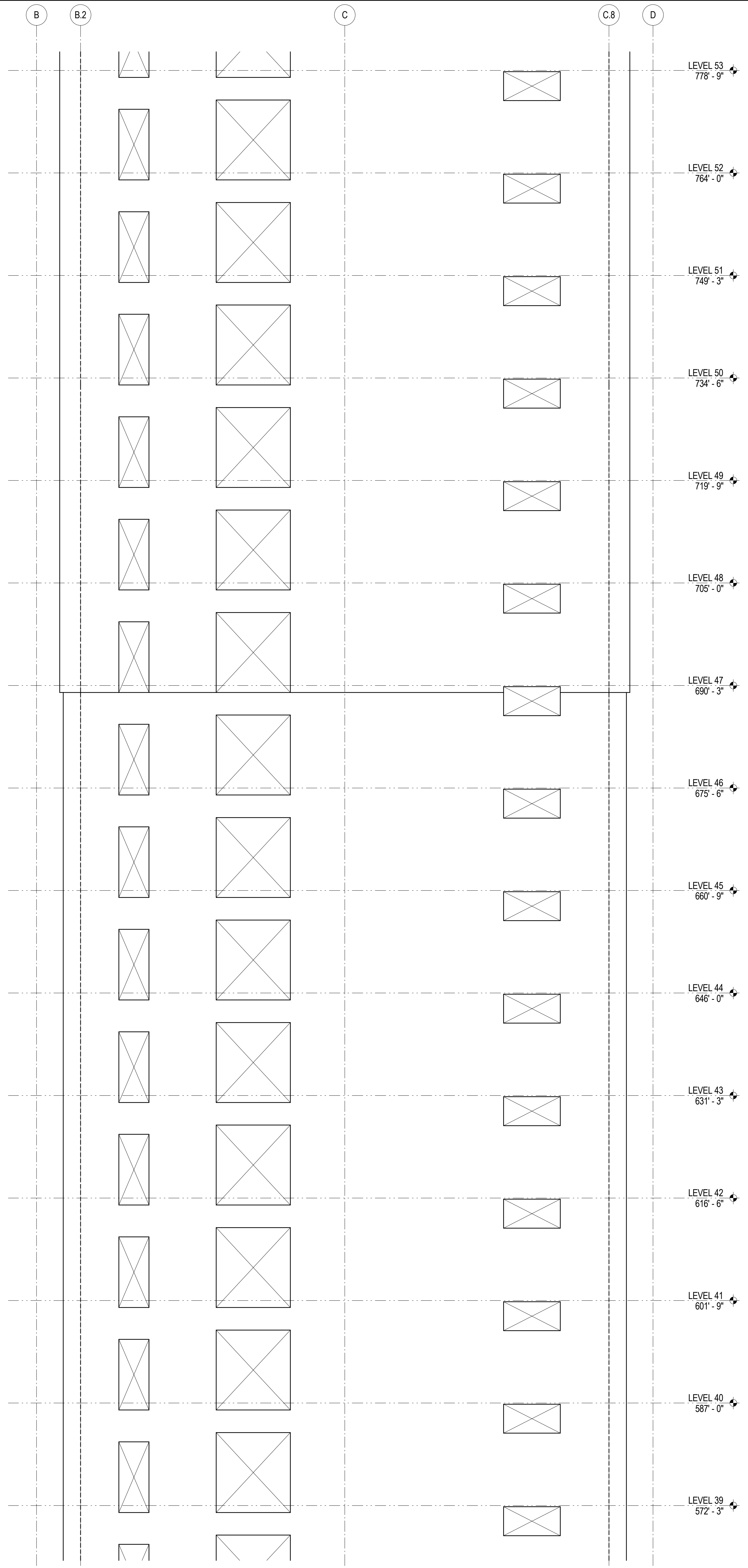
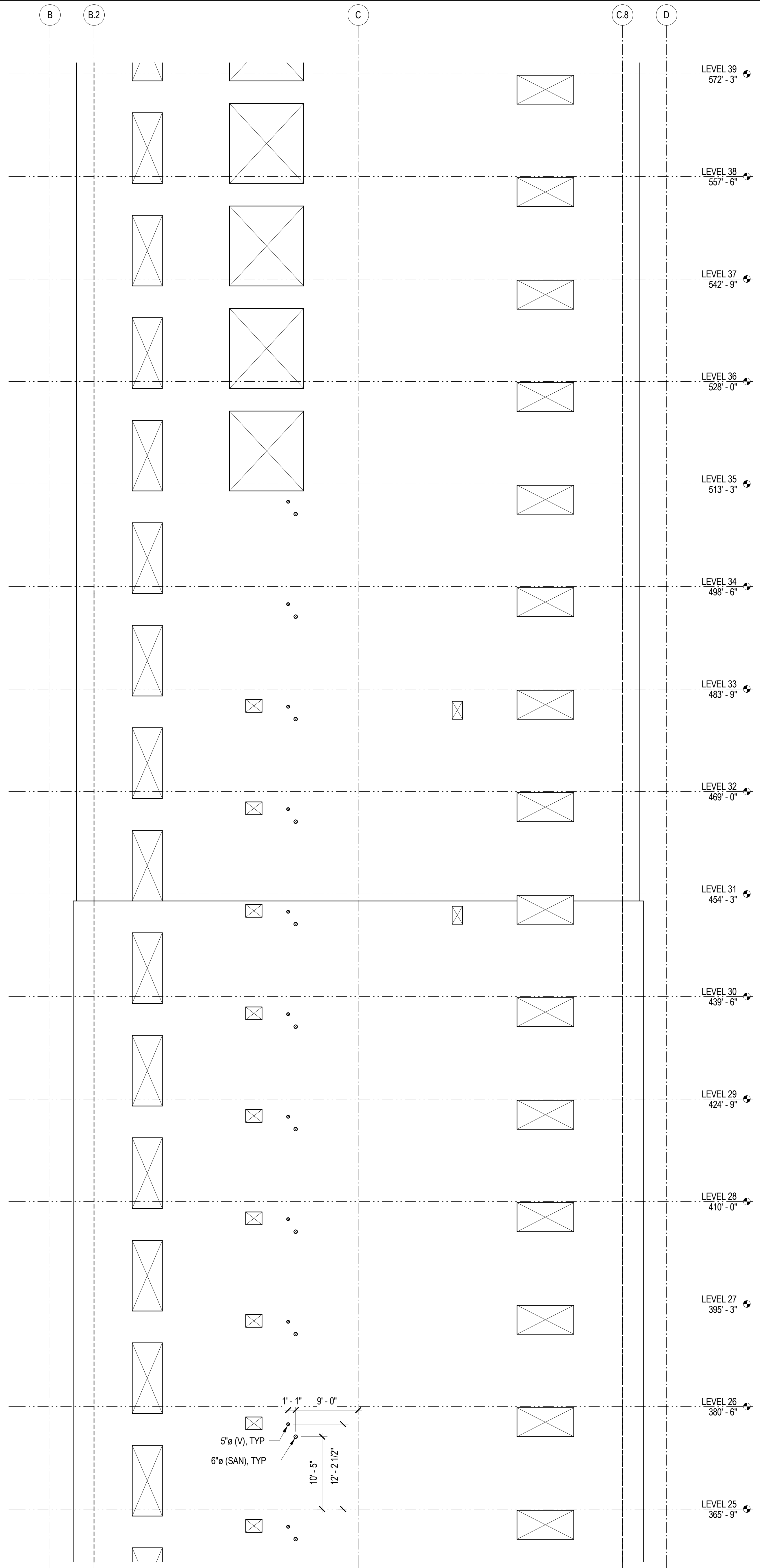
DRAWING TITLE: **SHEAR WALL ELEVATIONS**

NO. PROJECT NO: 08044

DRAWING NUMBER: **S3.02**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:05:59 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

1 SHEAR WALL ELEVATION - SOUTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

PROJECT NO. 08044

DRAWING NUMBER **S3.02S**



MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

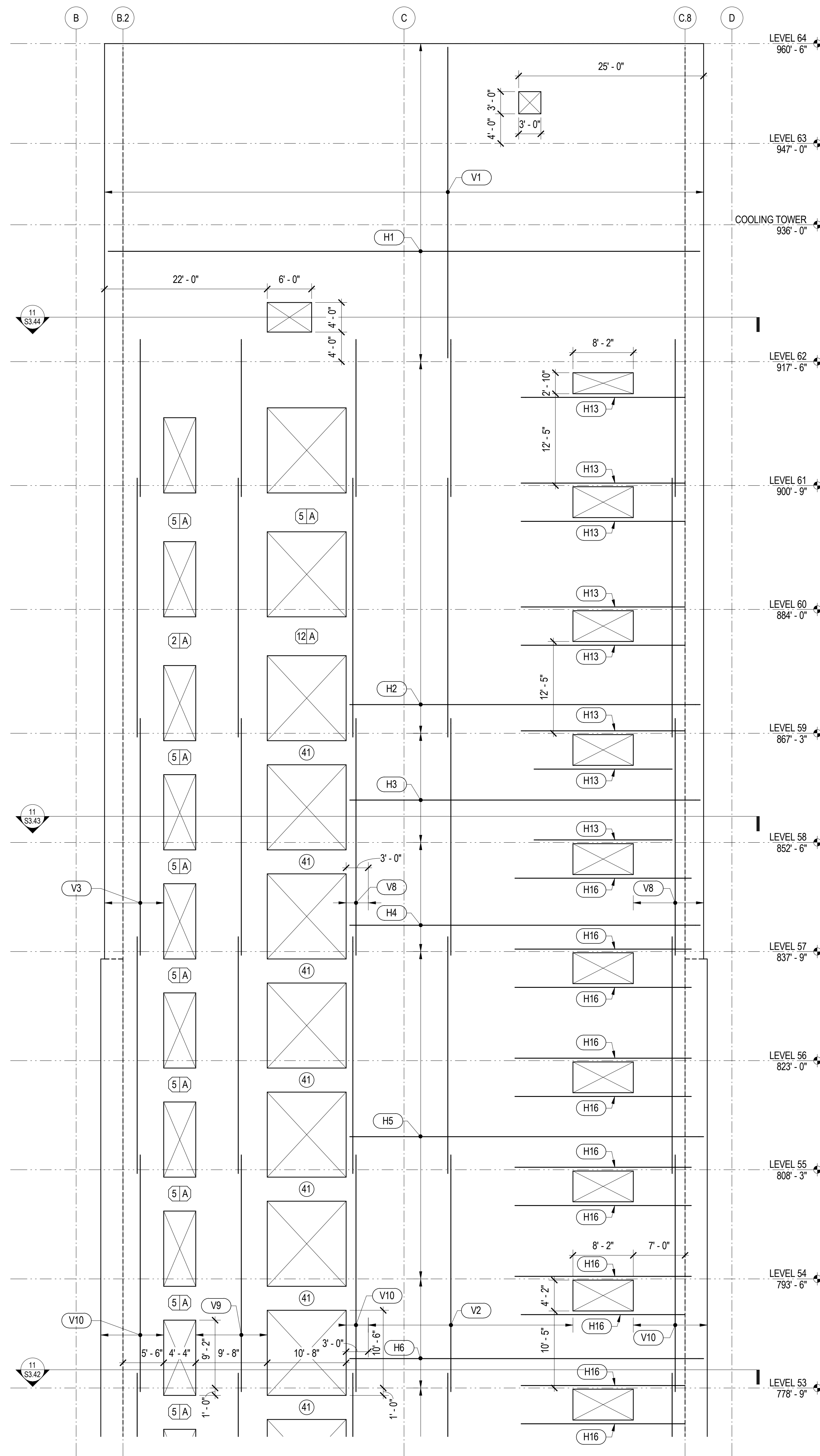
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

NOTES:

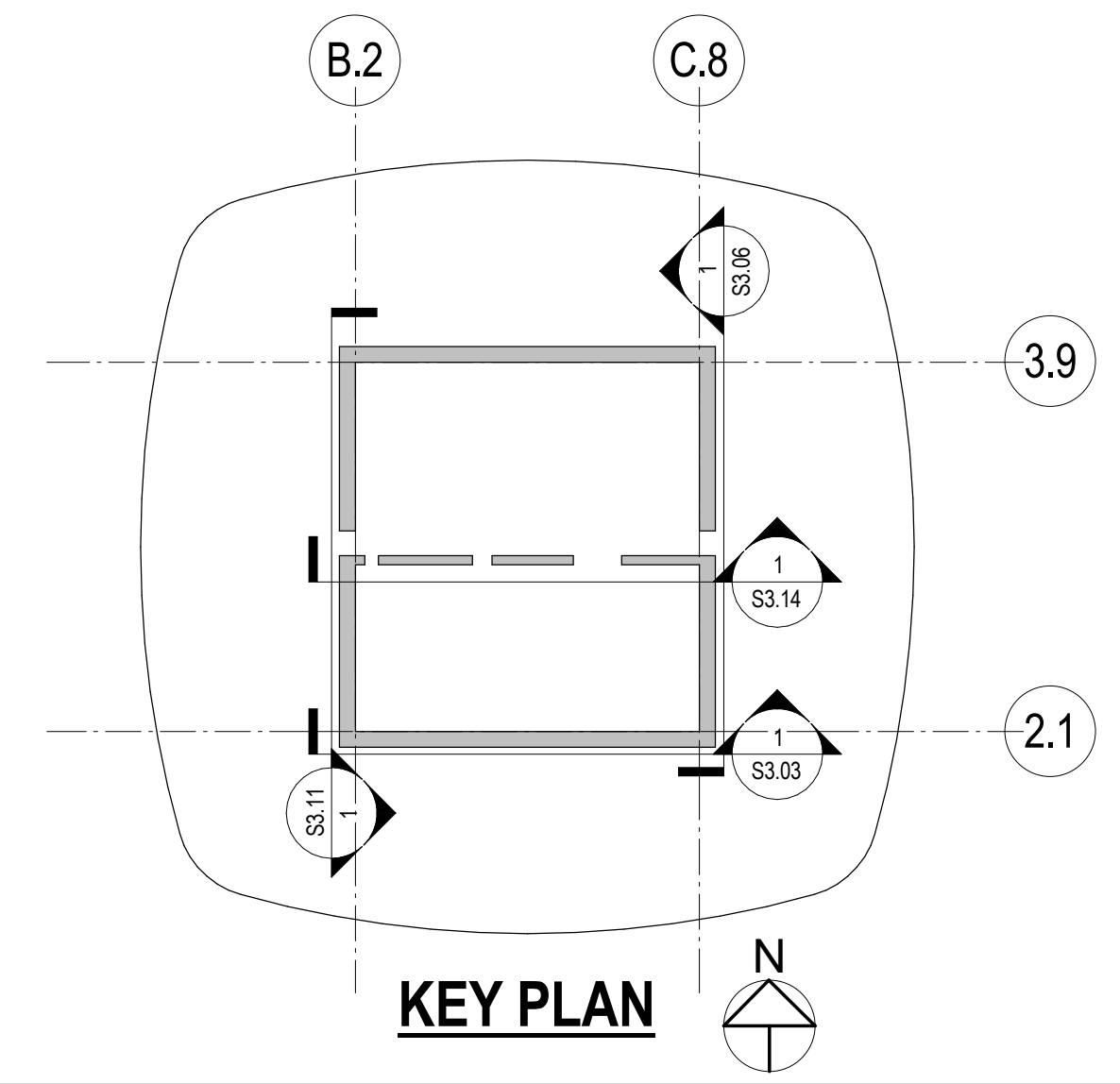
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (41) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $4b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - SOUTH  
1/8" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

PROJECT NO. 08044  
DRAWING NUMBER S3.03





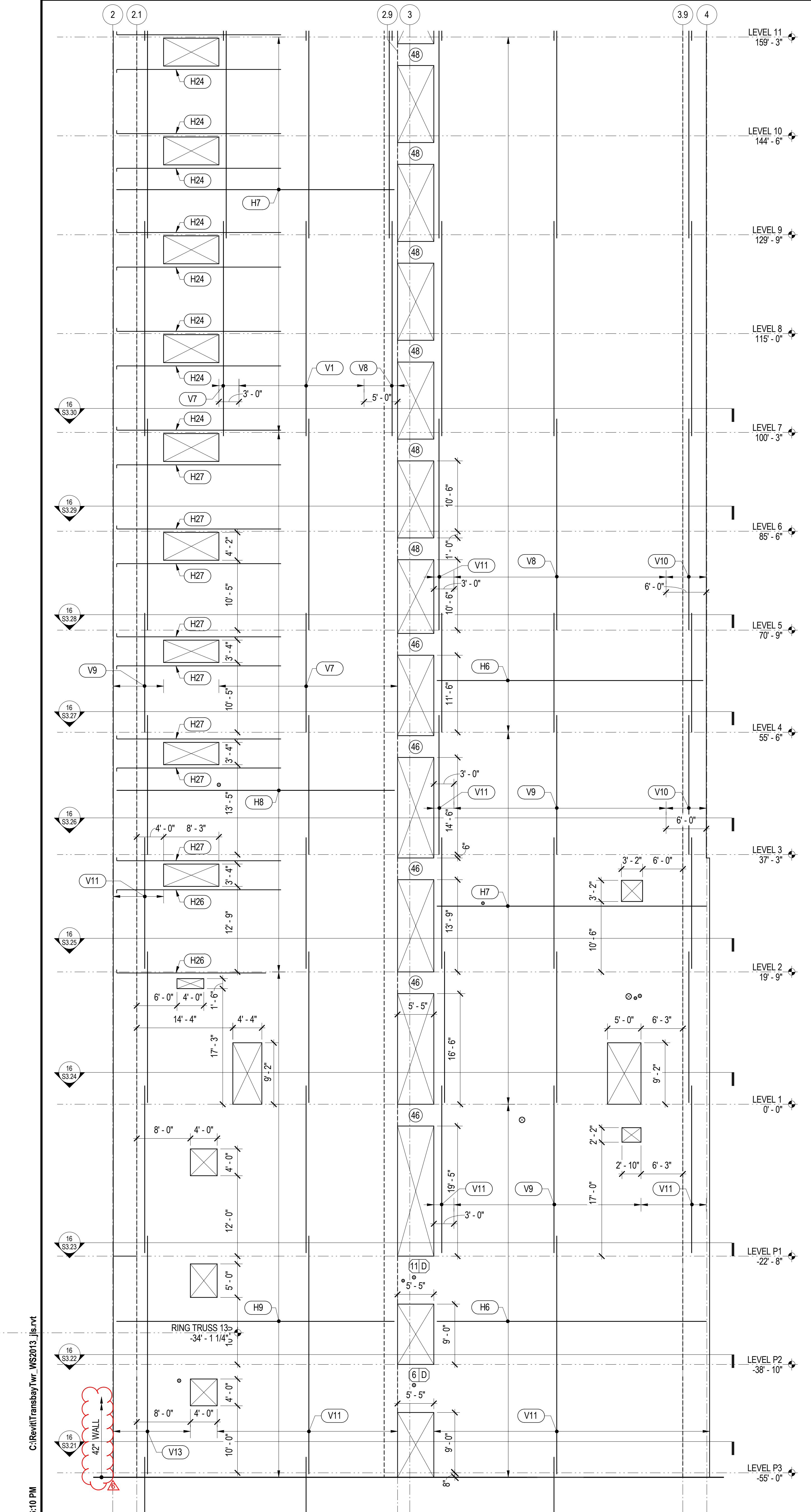
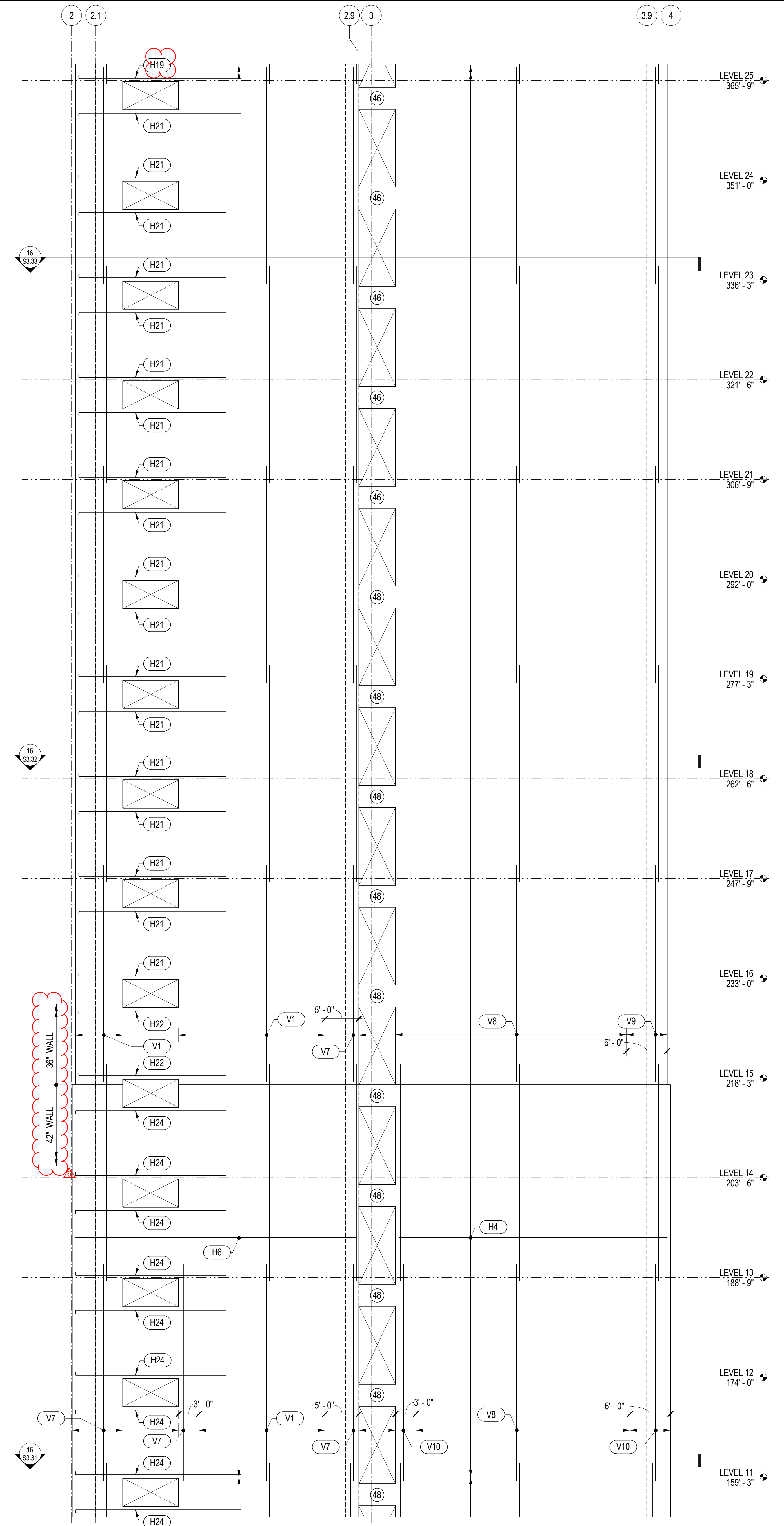
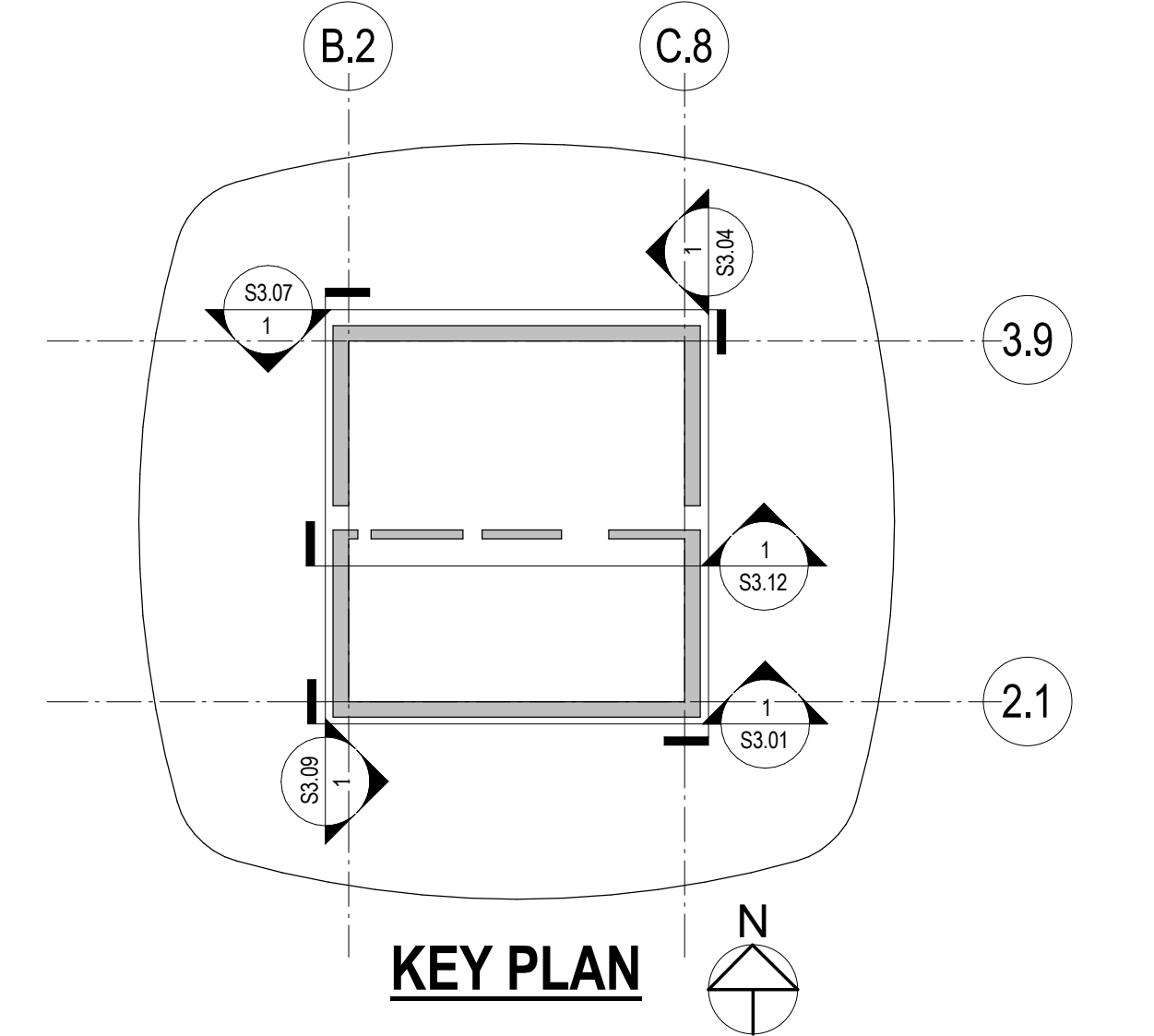
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (41) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $4b$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

4/29/2014 7:06:10 PM C:\Revit\Transbay\TW\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

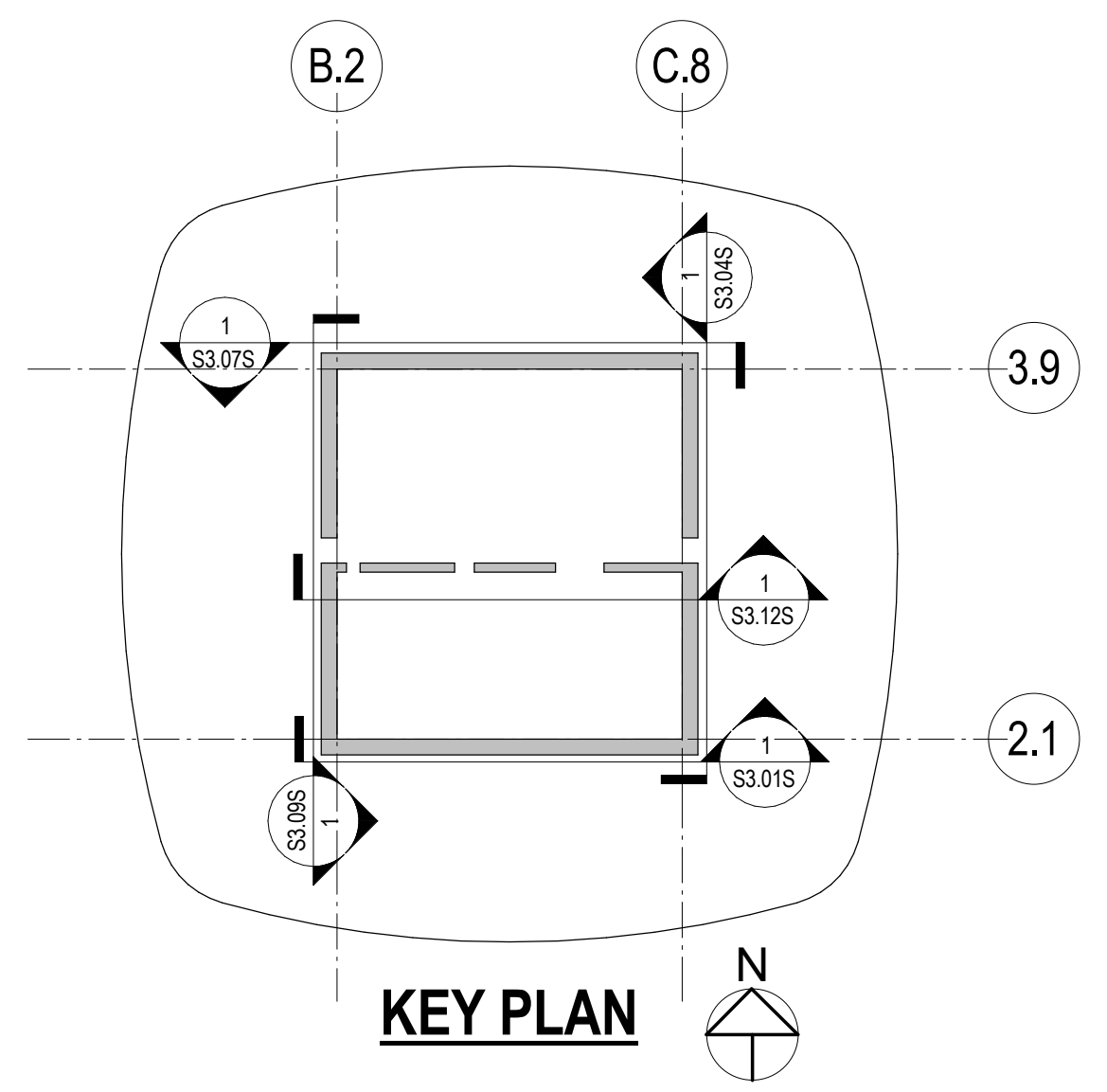
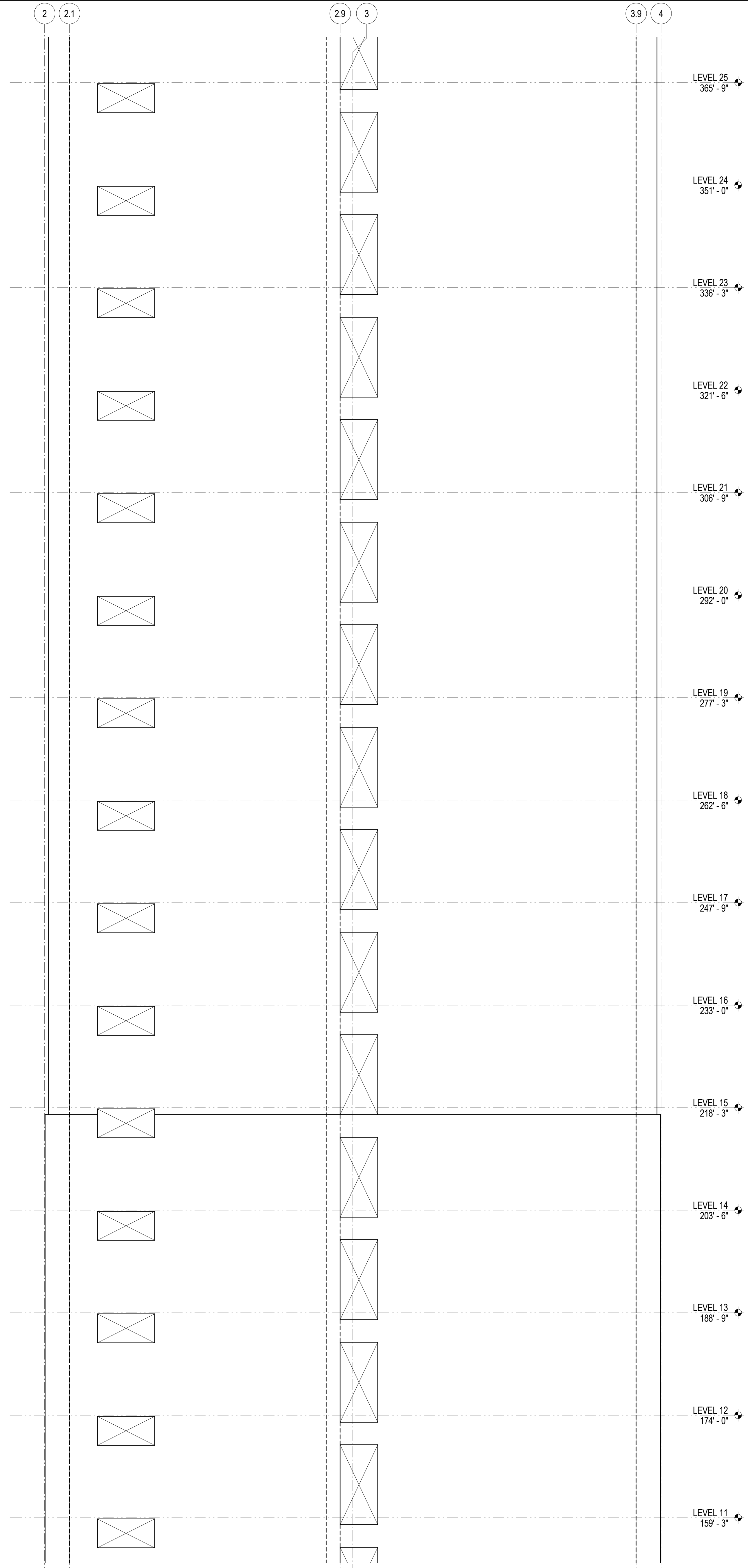
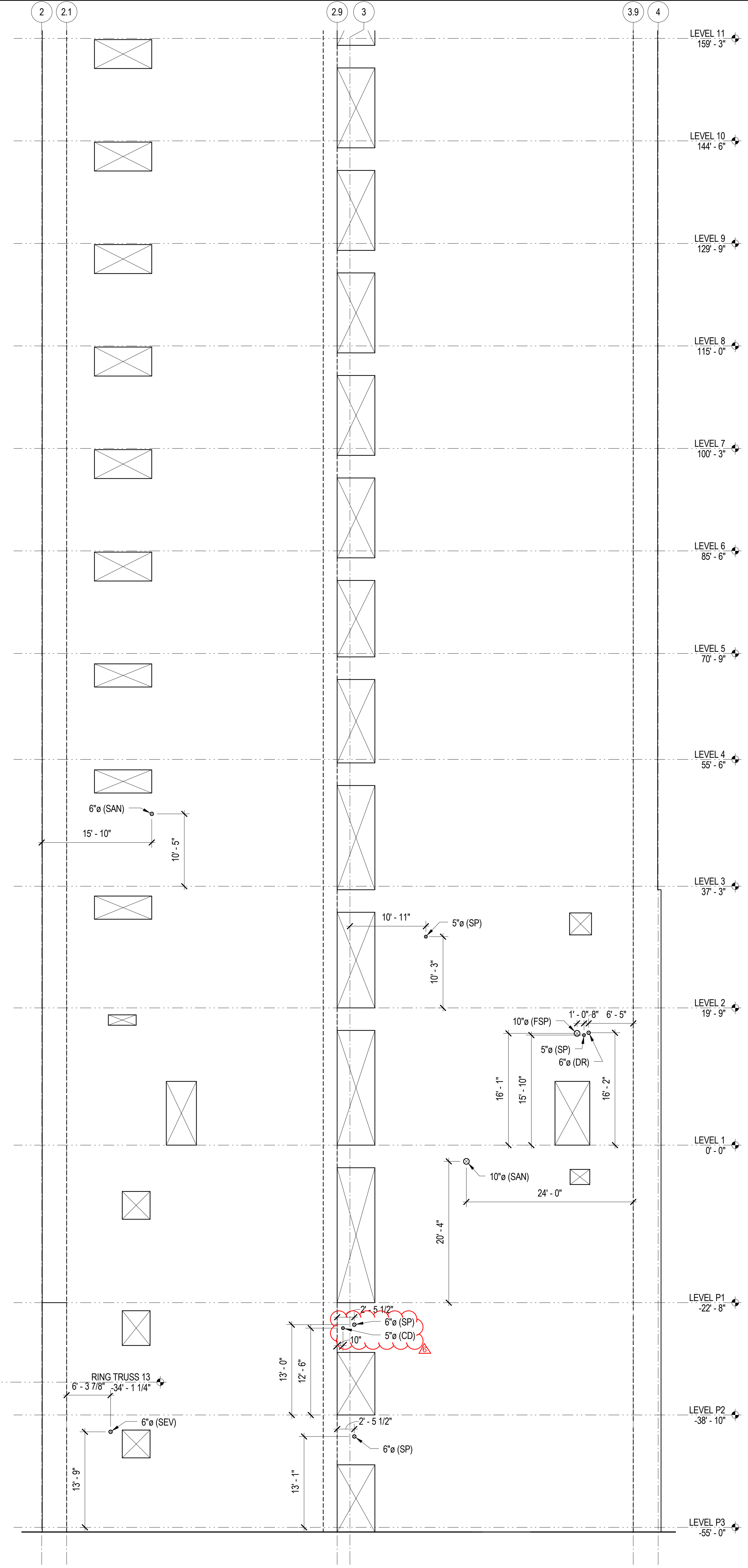
DRAWING TITLE: **SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER: **S3.04**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:06:13 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

1 SHEAR WALL ELEVATION - EAST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER **S3.04S**

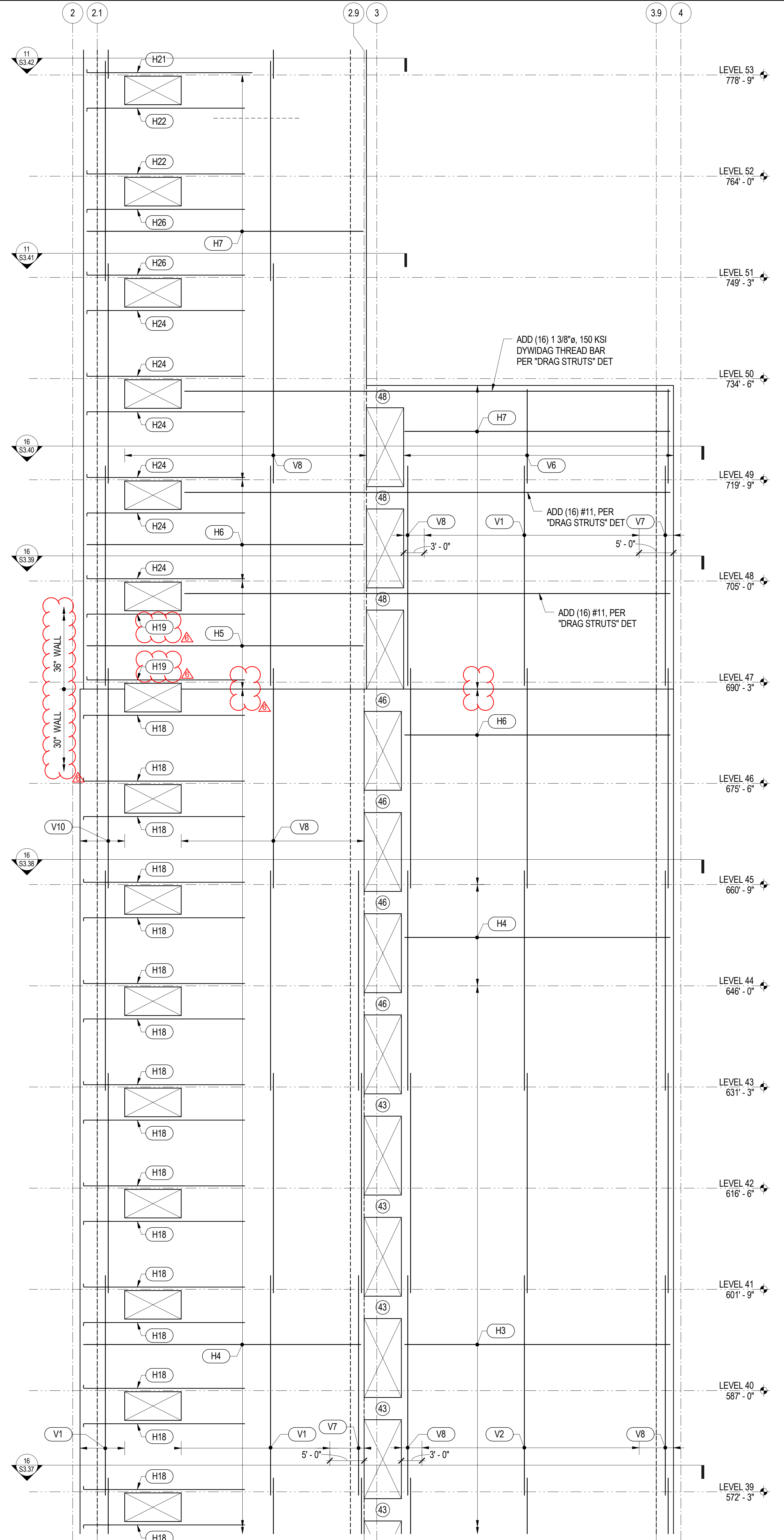
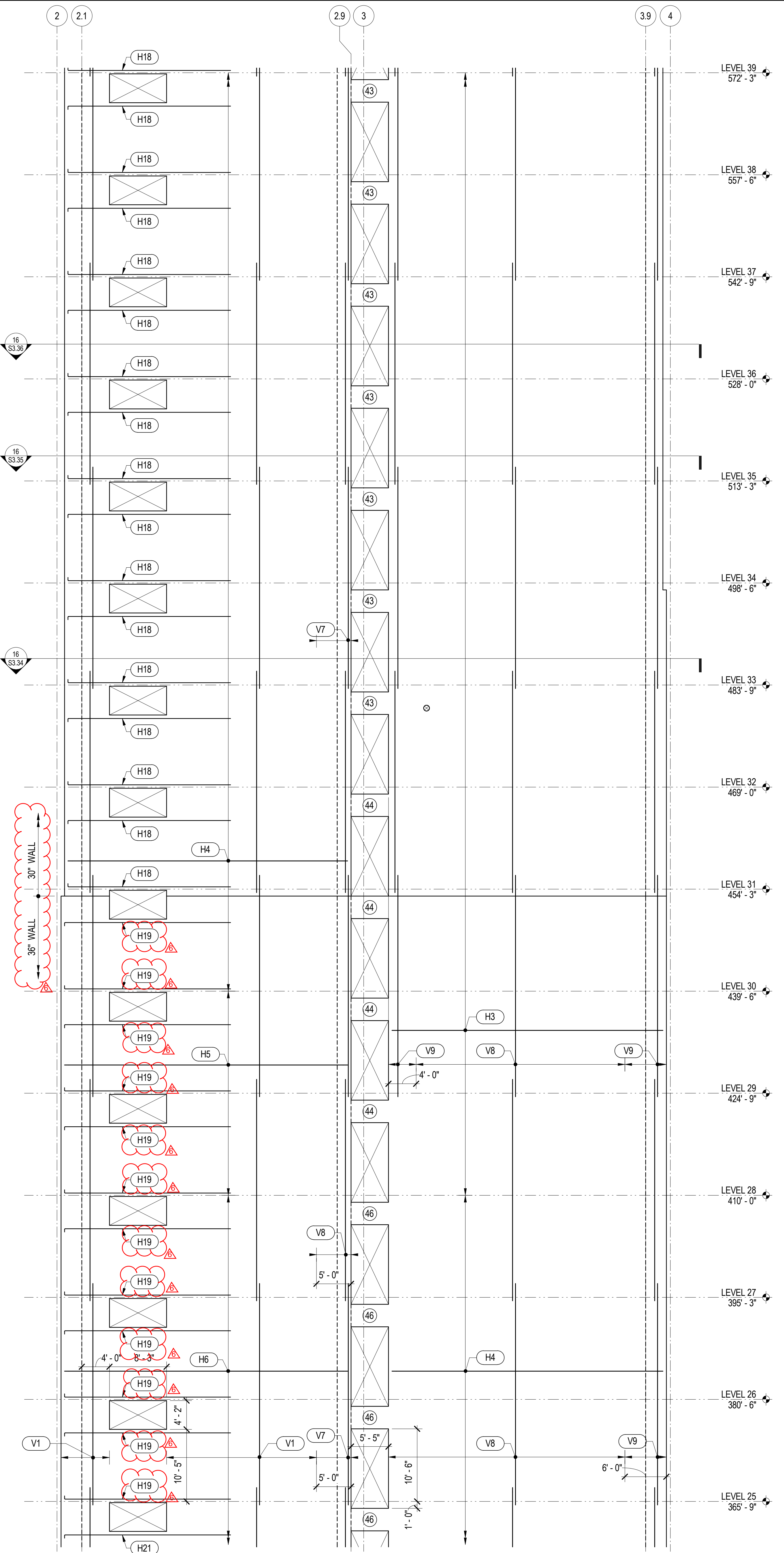
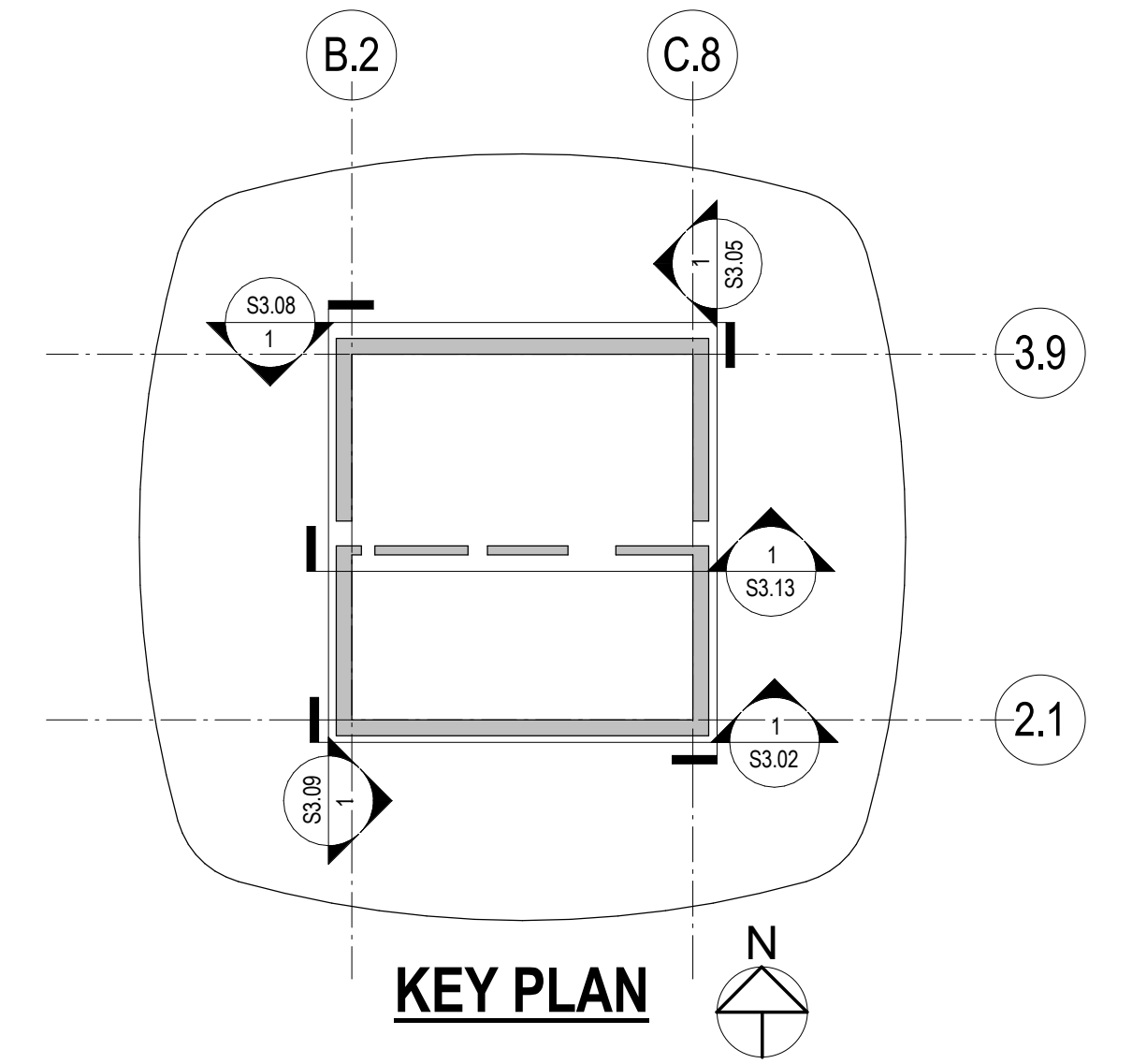


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1) A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |
- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
  - DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
  - FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE 4b AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

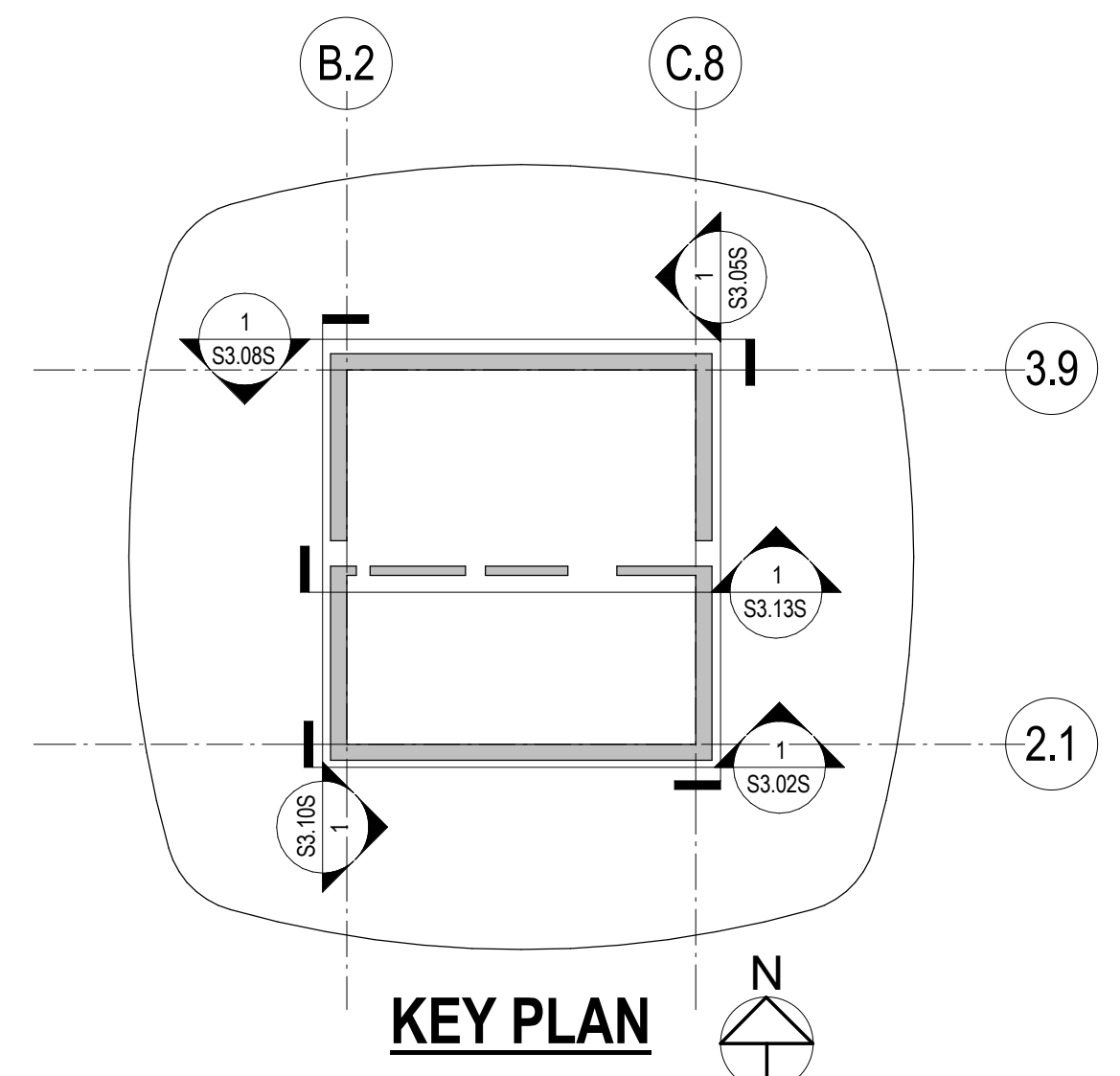
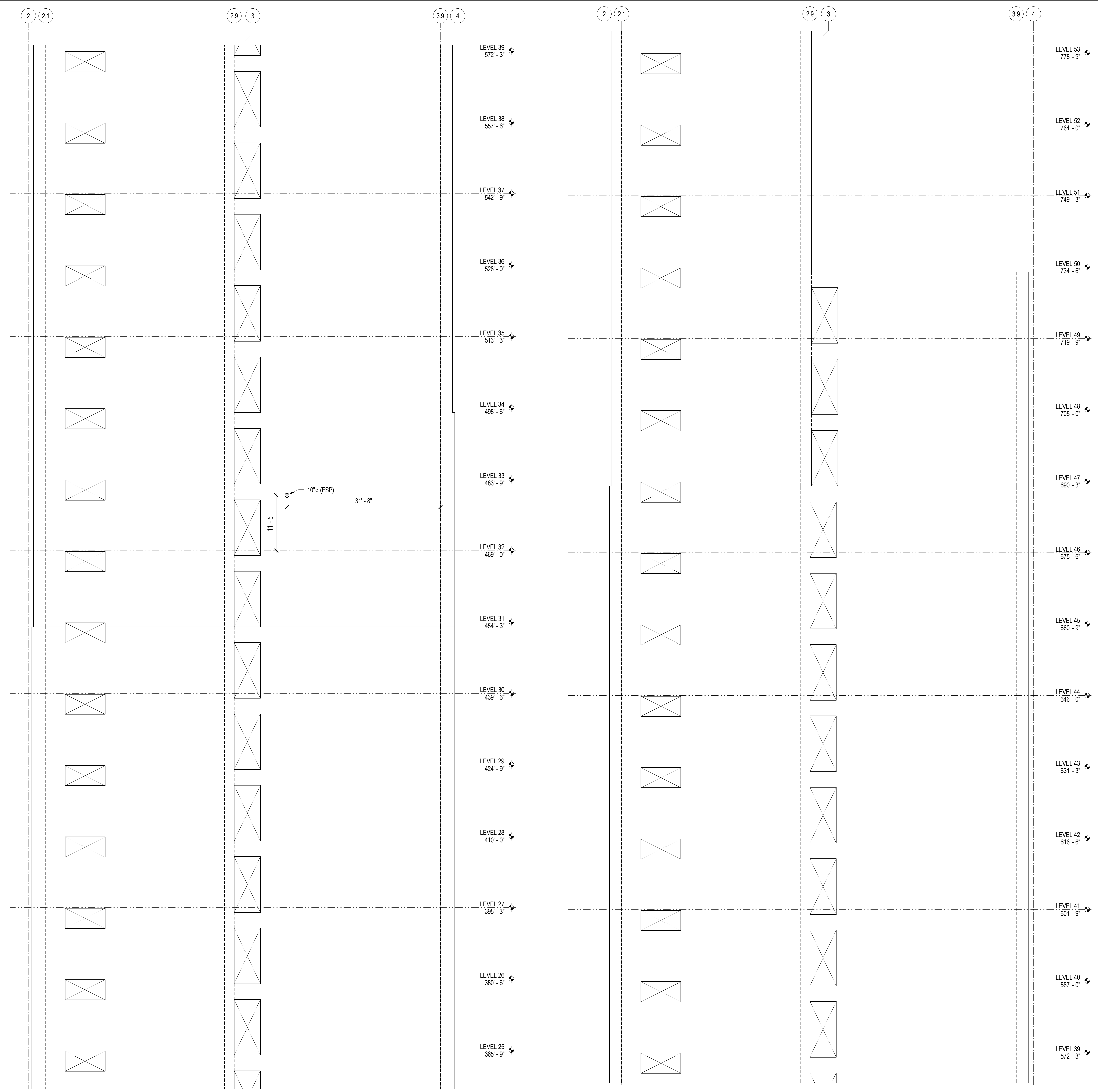
DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER  
**S3.05**

4/29/2014 7:06:18 PM C:\Revit\Transbay\Tw\_MS2013\_13e.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - EAST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER  
**S3.05S**

4/28/2014 7:06:21 PM C:\Revit\Transbay\Tw\_MS2013\_1\se.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

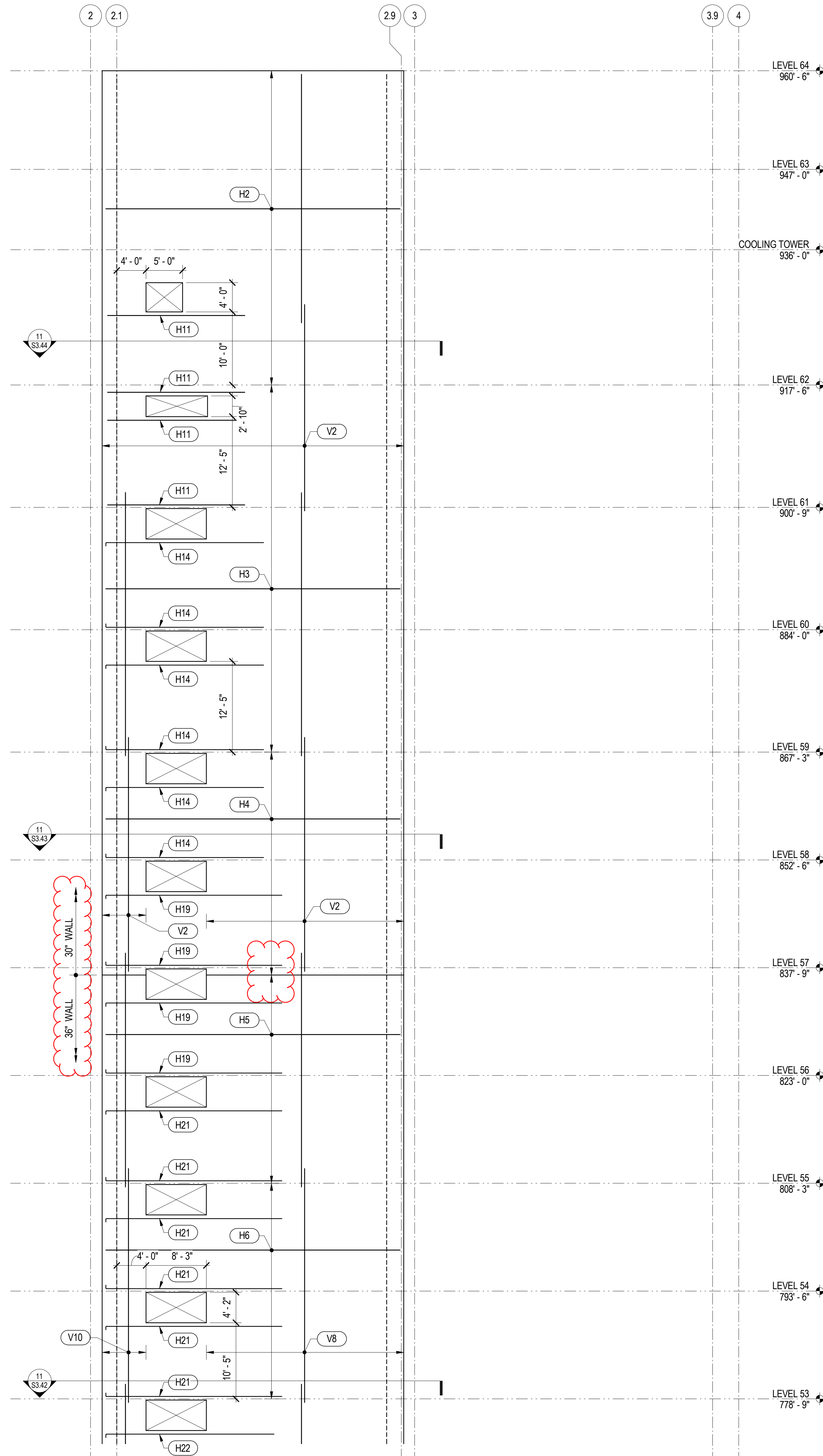
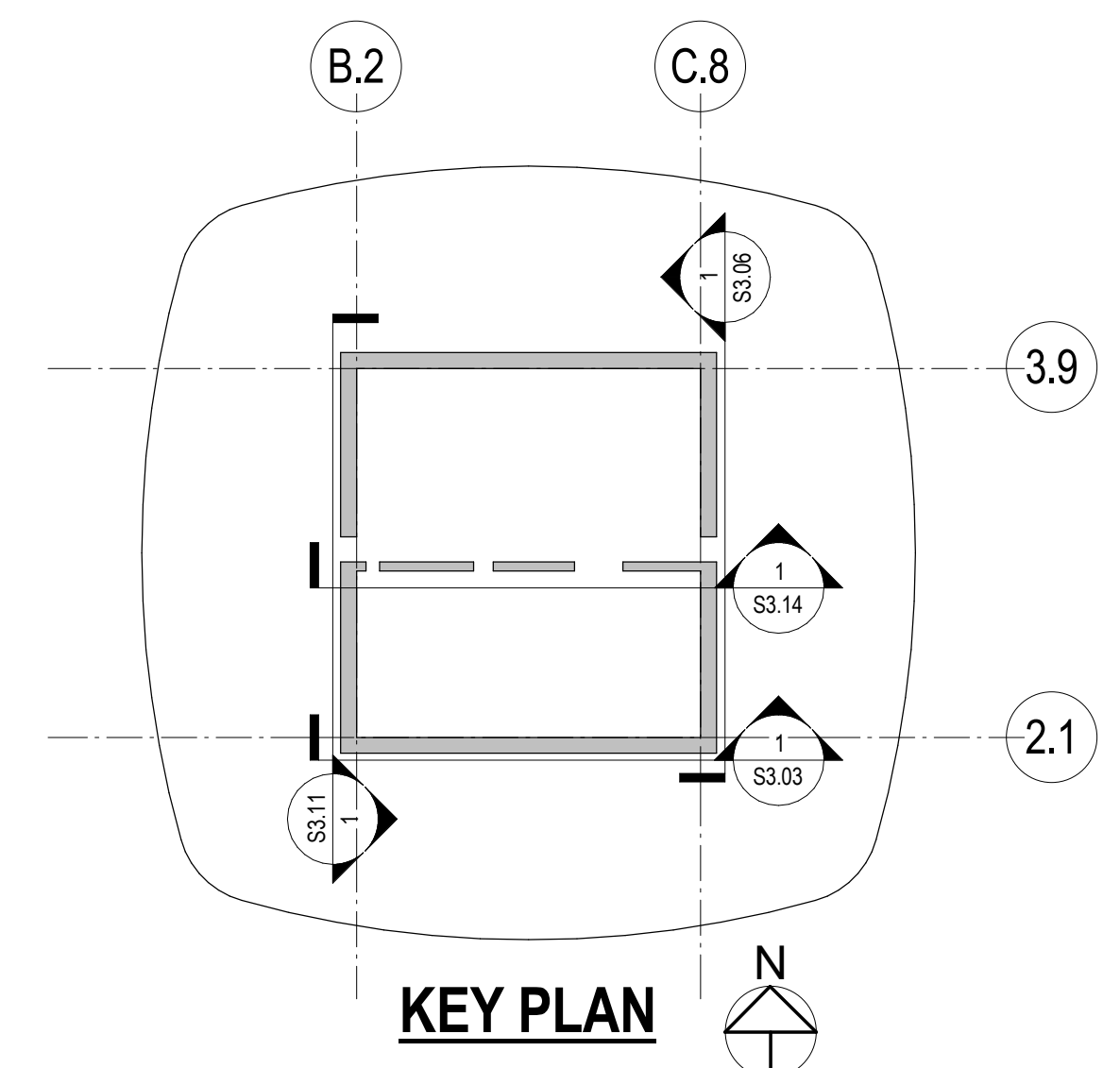
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $4b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - EAST  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL ELEVATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER **S3.06**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

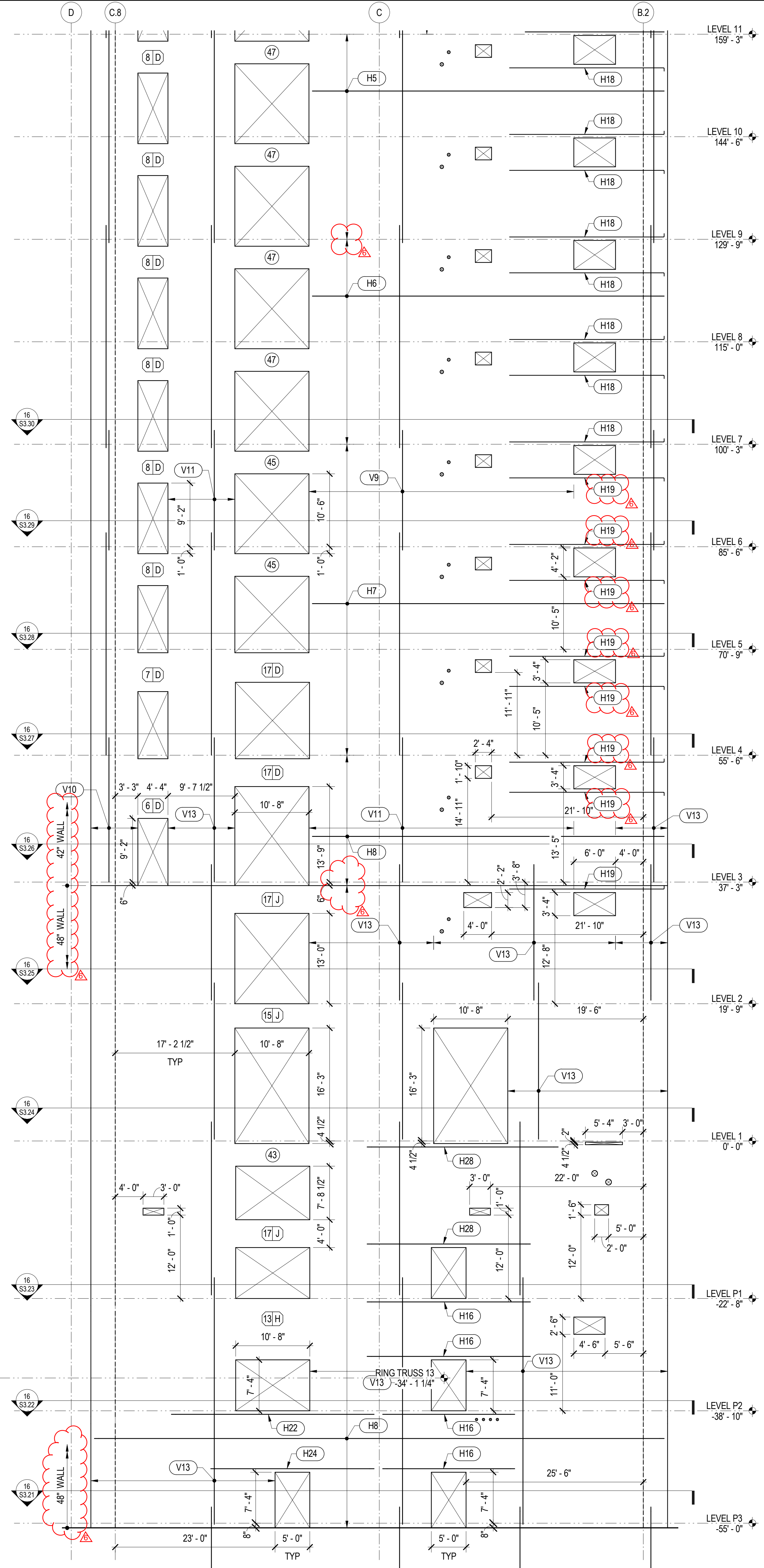
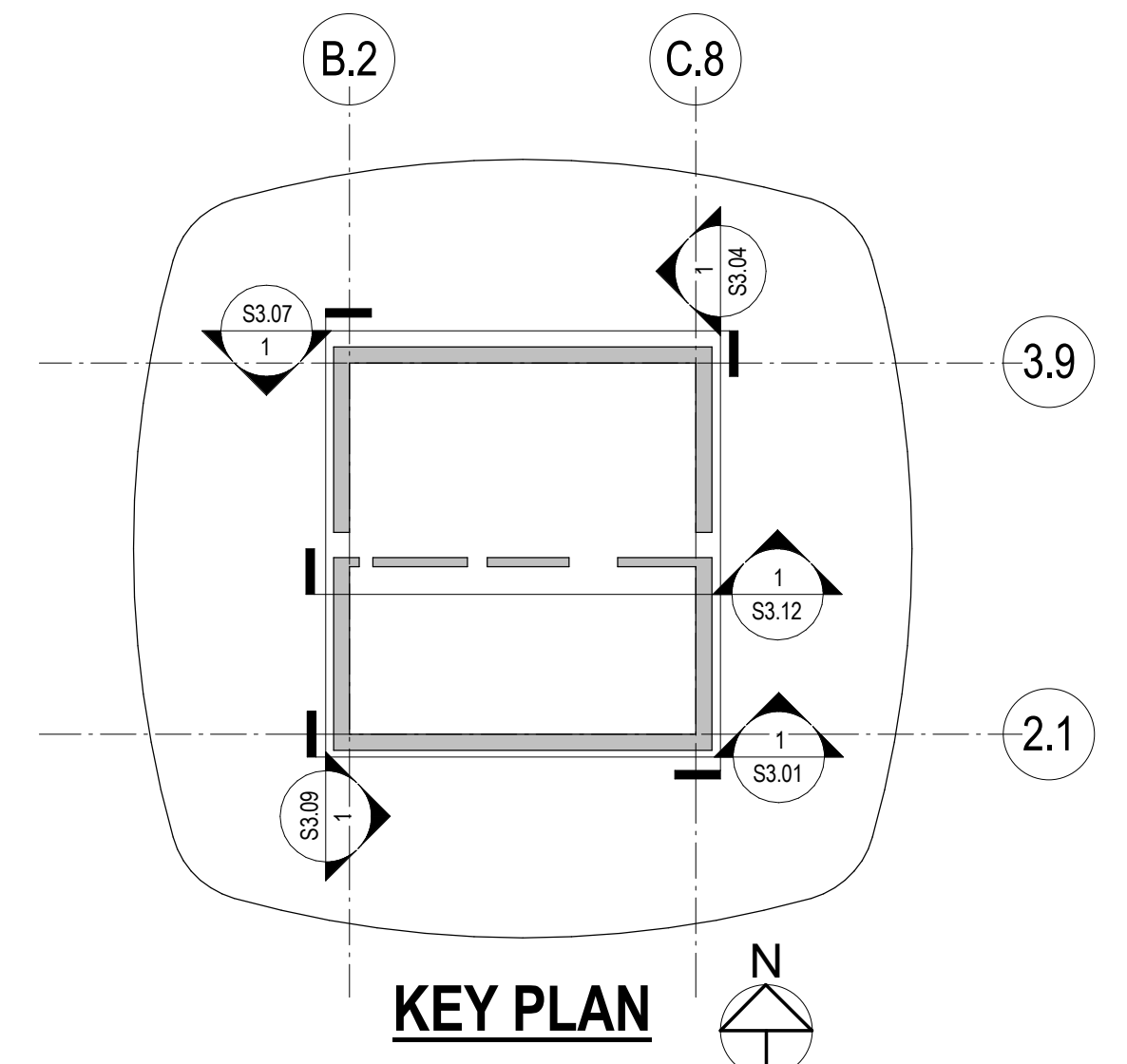
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $db$  AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - NORTH**  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS**

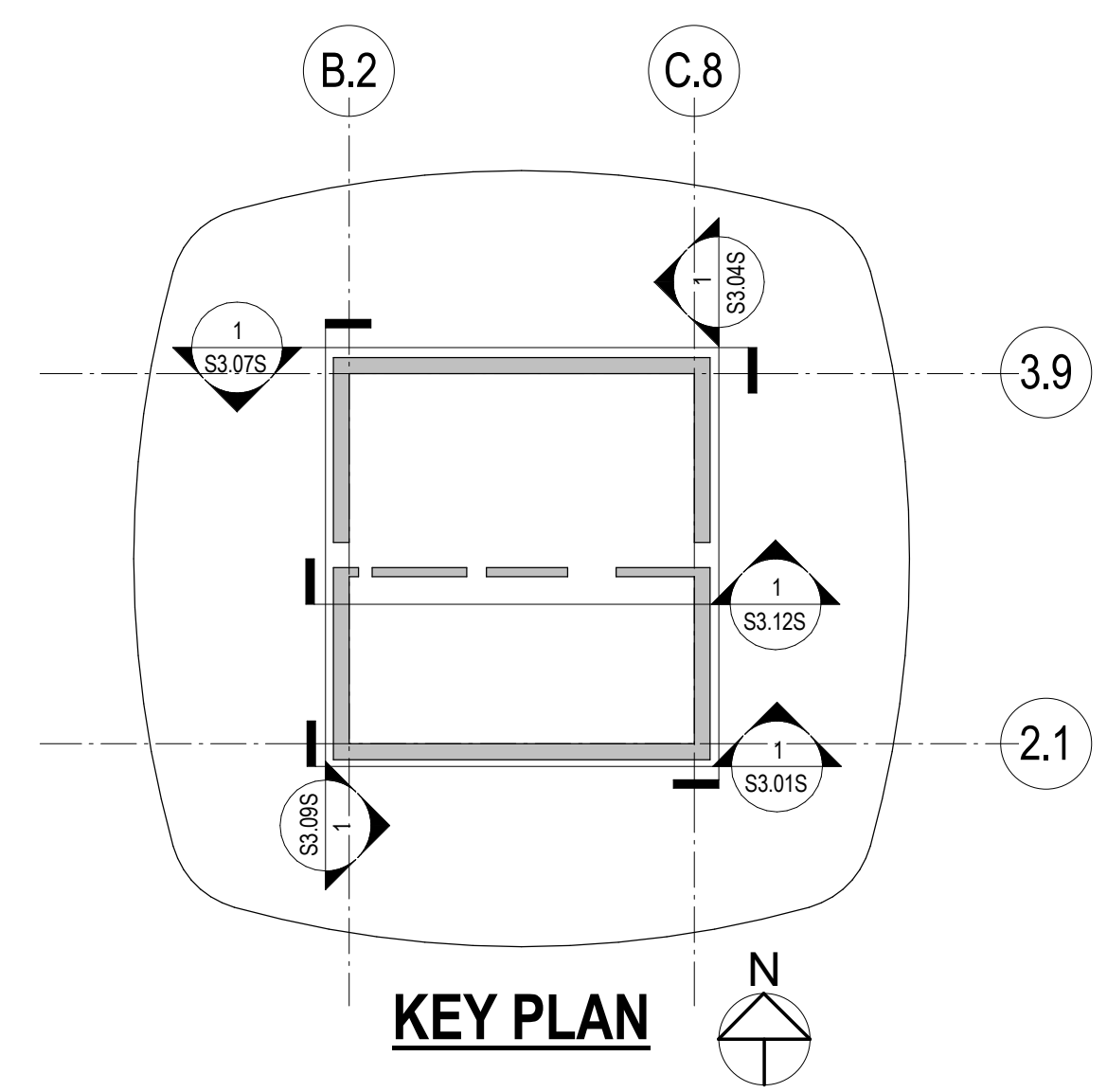
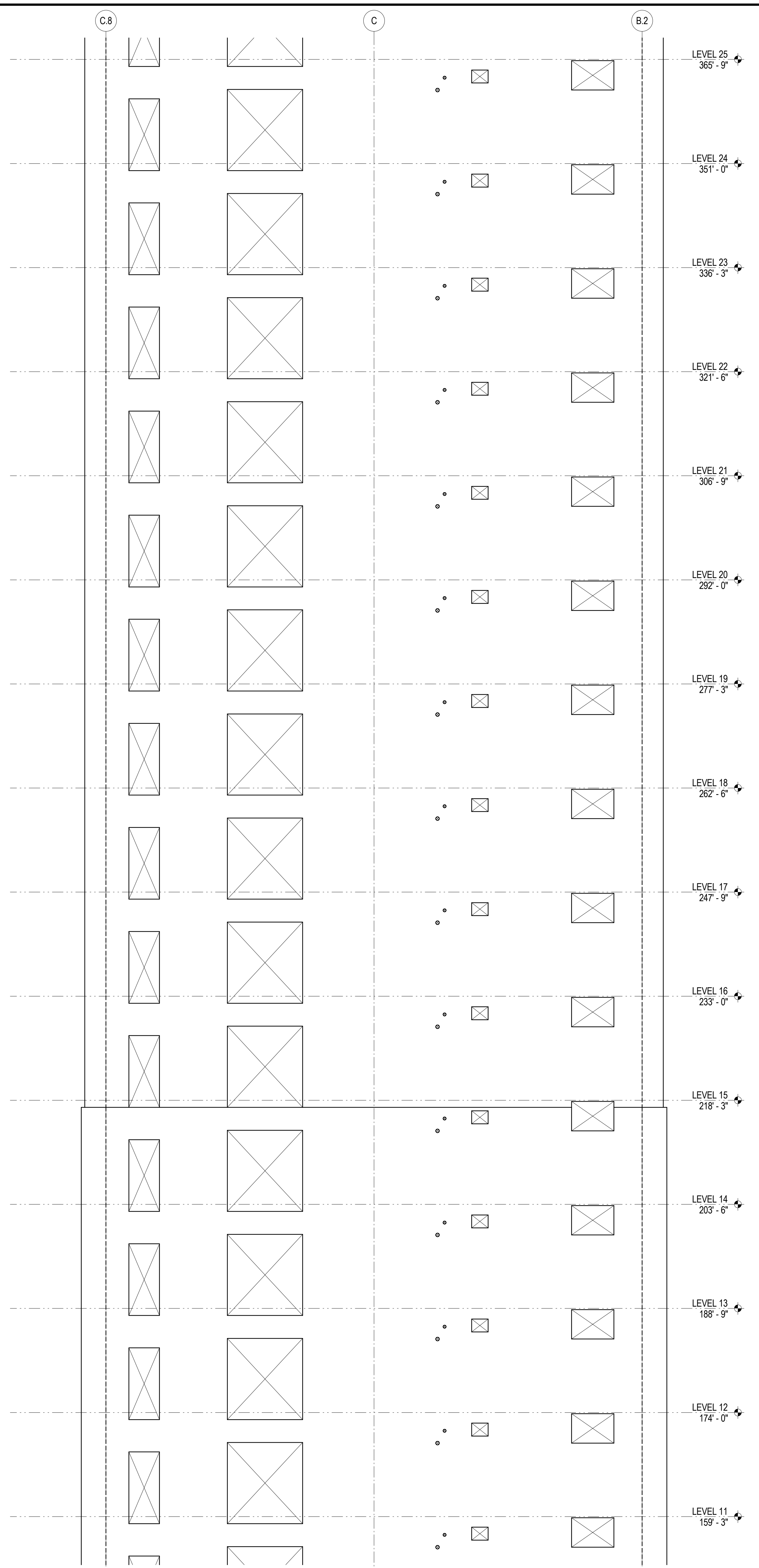
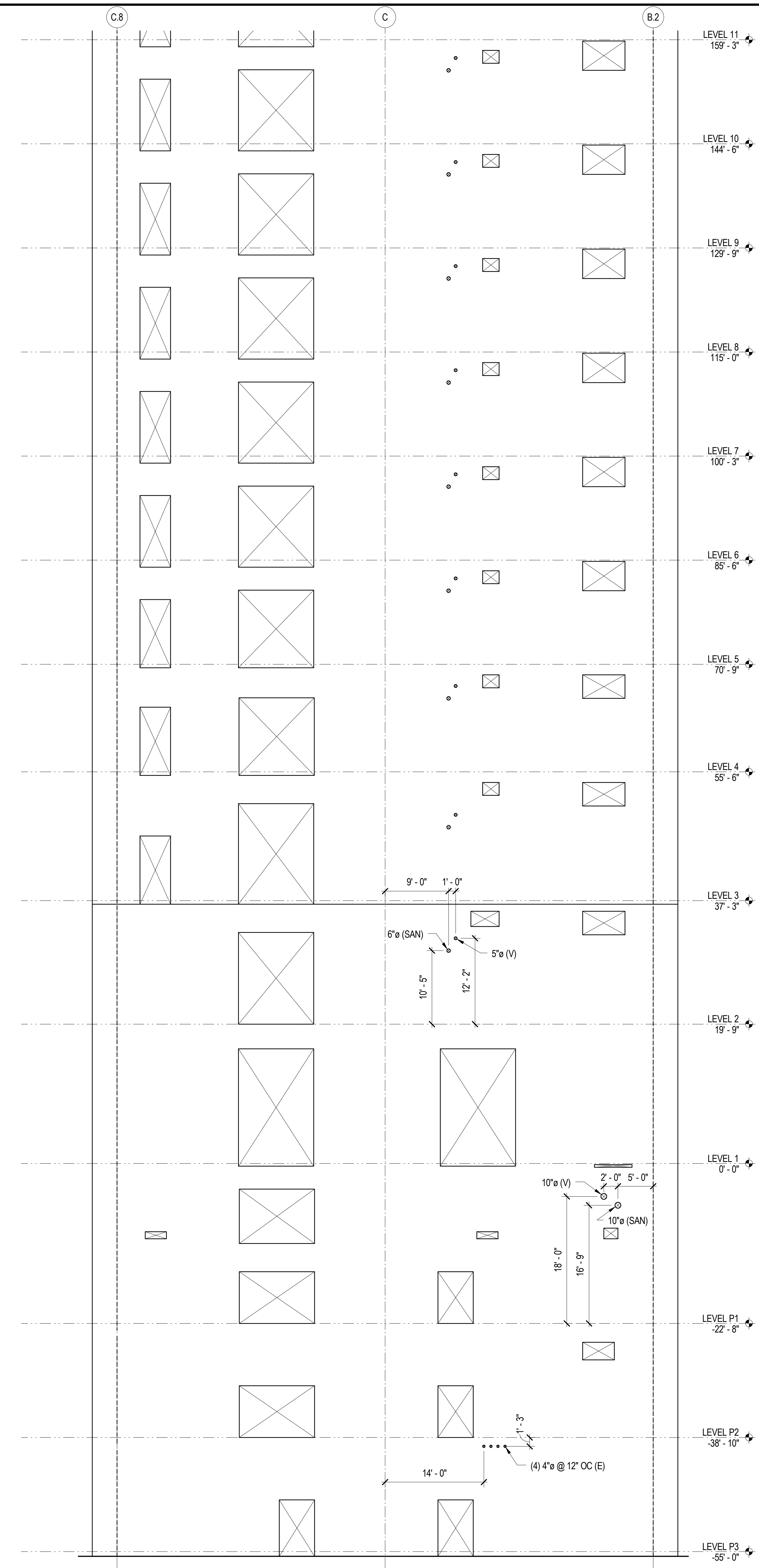
NO. DATE STRUCTURAL BID ISSUE

NO. PROJECT NO. DRAWING NUMBER  
08044 S3.07

4/29/2014 7:06:32 PM C:\Revit\Transbay\Tw\_MS2013\_13.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/30/2014 12:23:50 PM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

1 SHEAR WALL ELEVATION - NORTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.07S



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

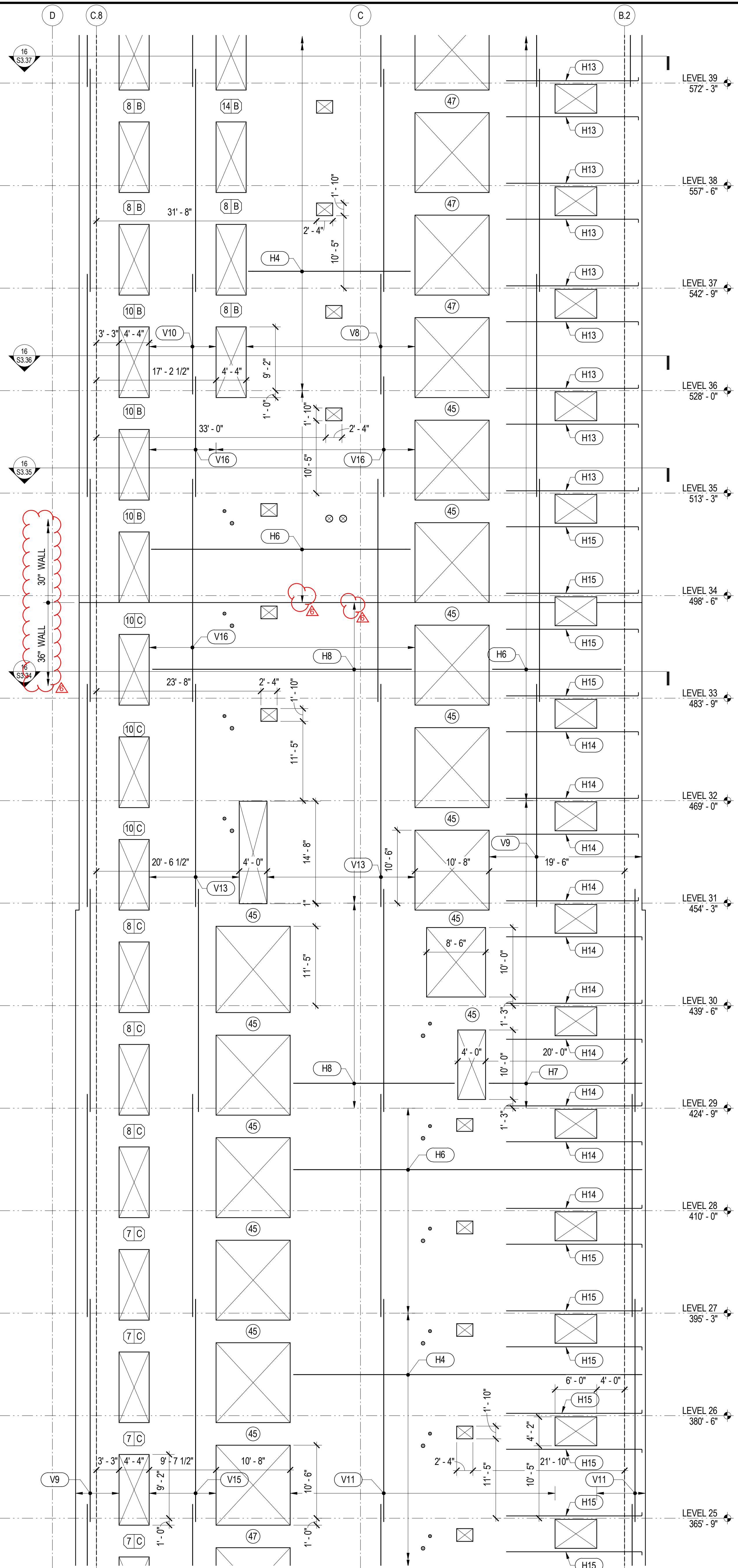
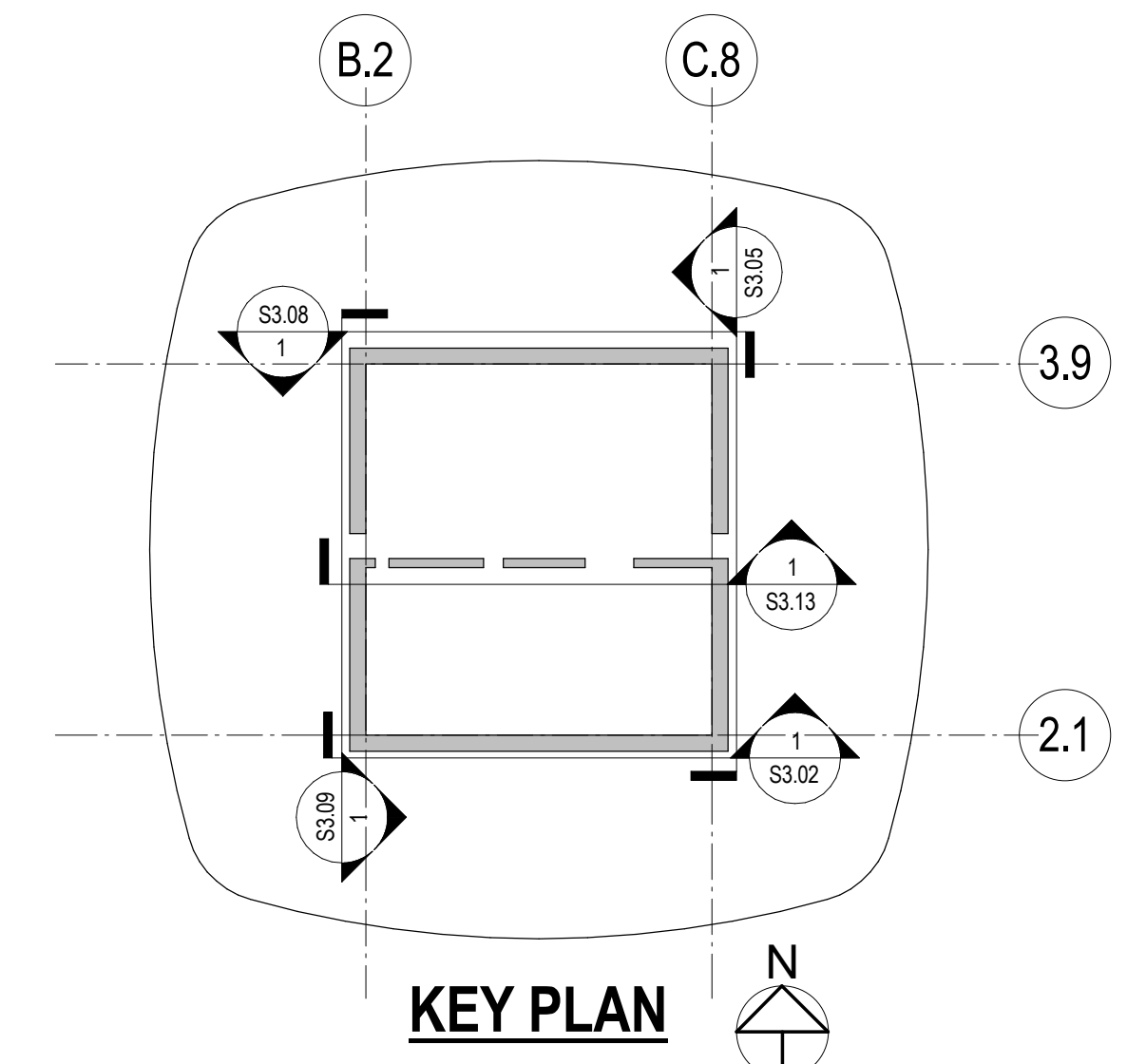
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

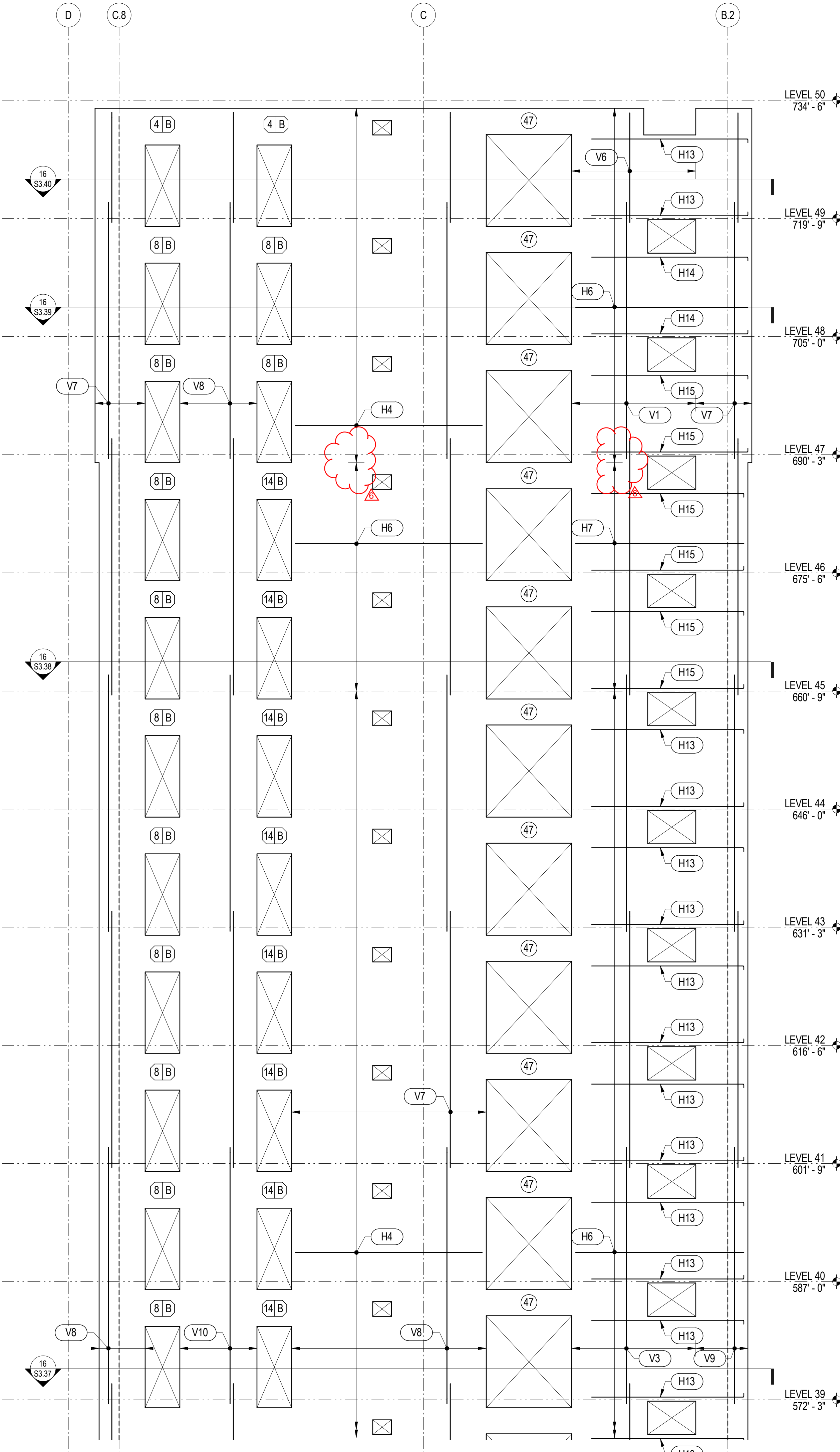
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1) A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) 1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - NORTH  
1/8" = 1'-0"



4/29/2014 7:06:40 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE: **SHEAR WALL ELEVATIONS**

NO. DATE STRUCTURAL BID ISSUE

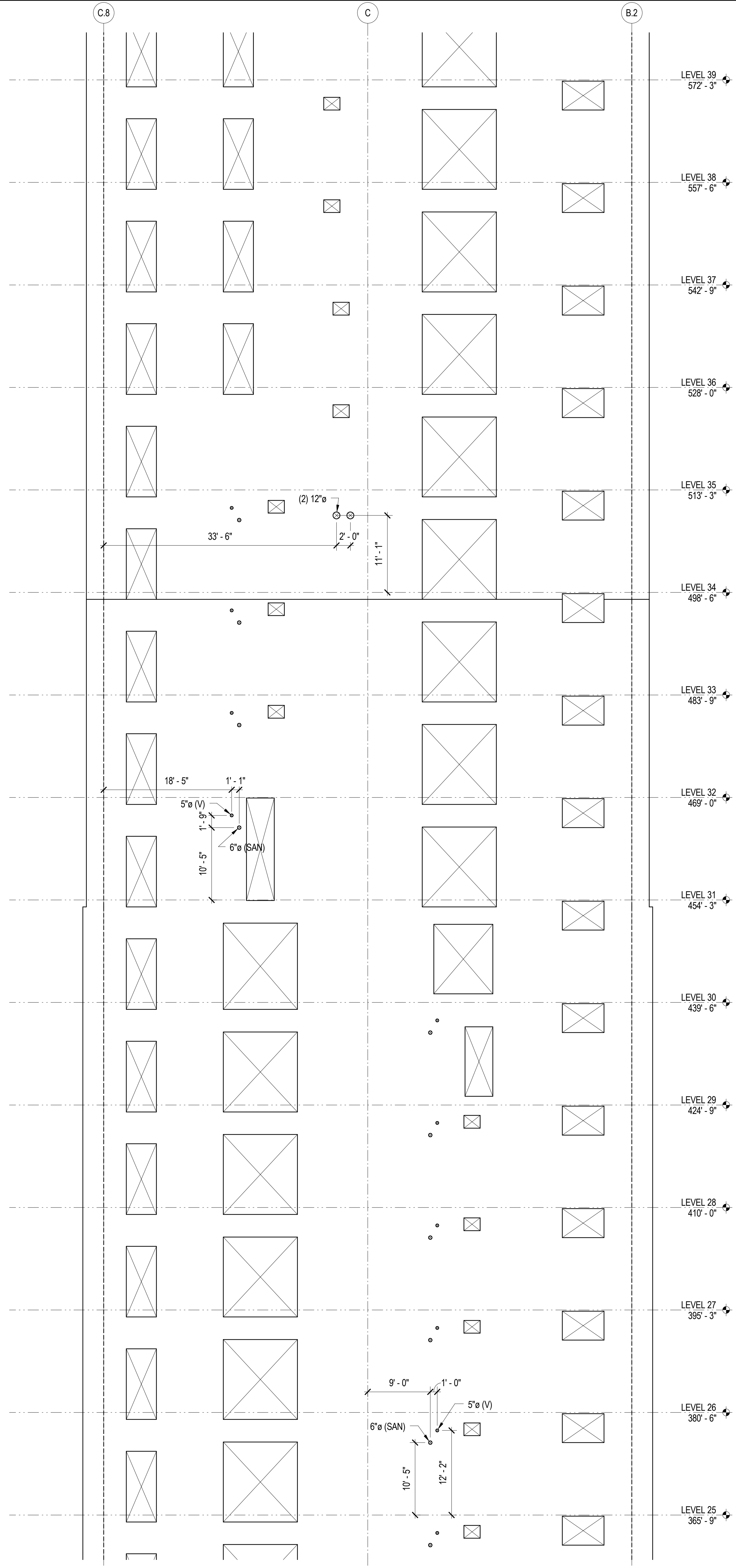
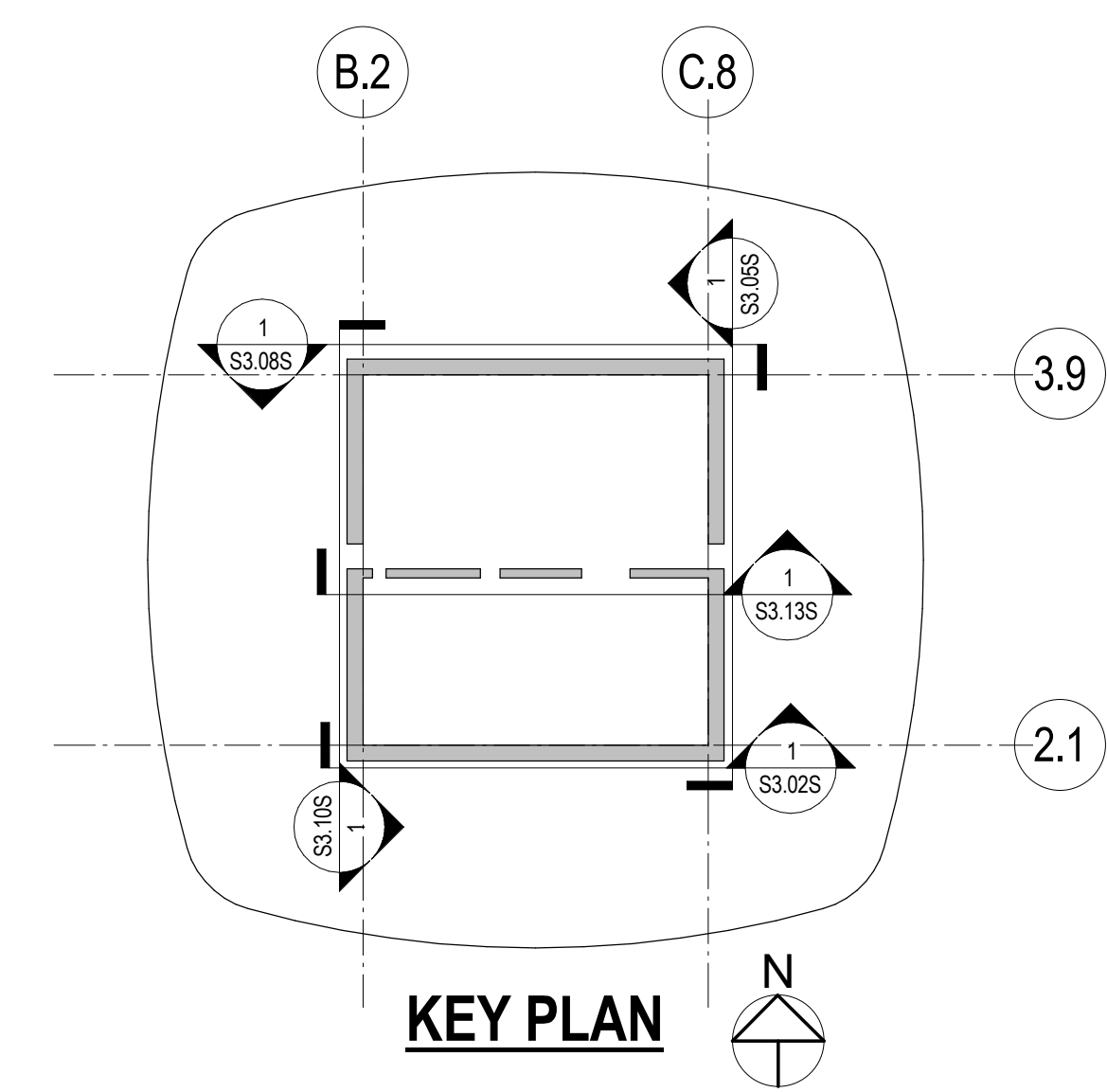
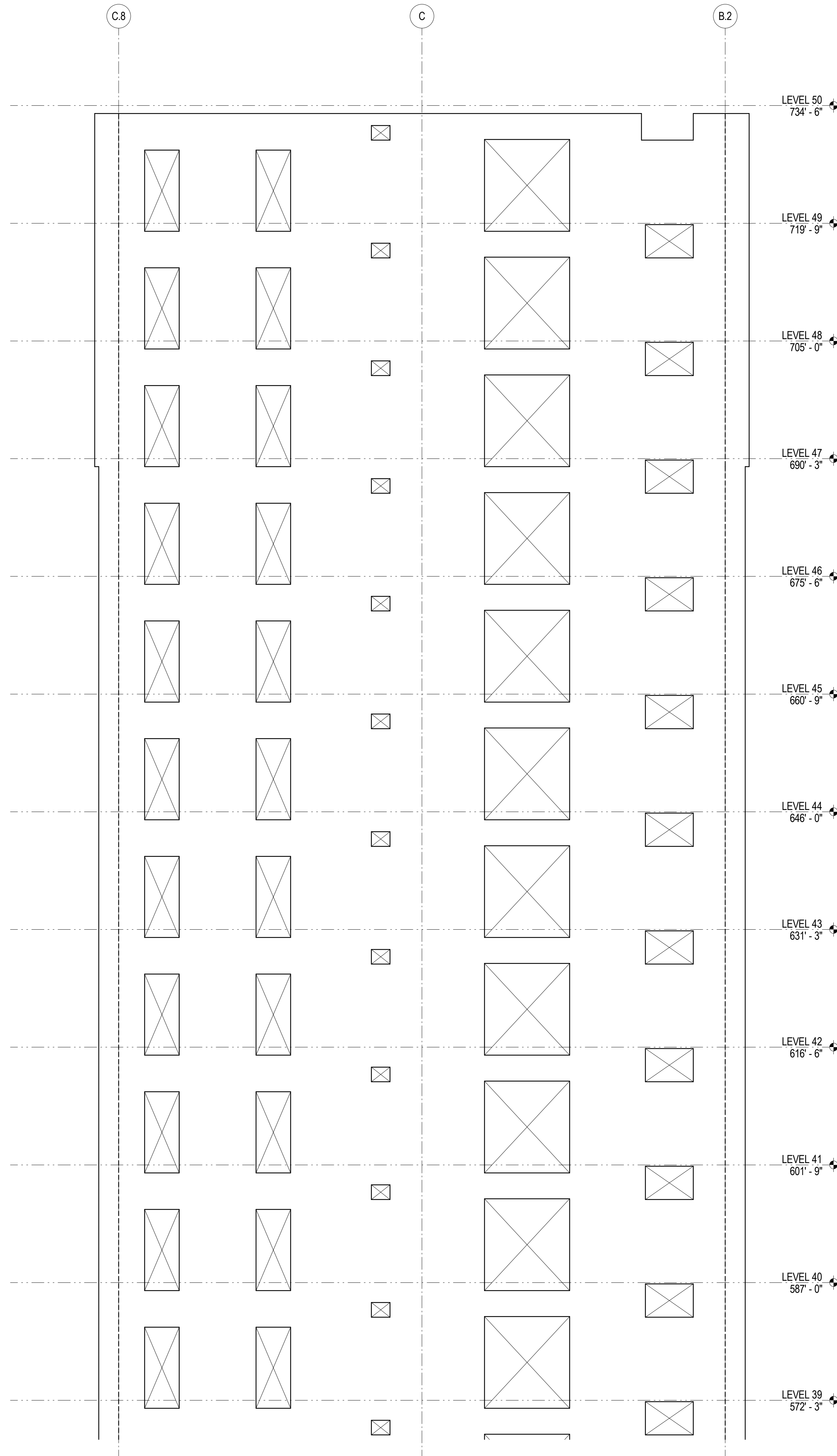
NO. PROJECT NO. DRAWING NUMBER

08044 S3.08





- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - NORTH - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE	DRAWING NUMBER
SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS	S3.08S
PROJECT NO.	08044

4/29/2014 7:06:43 PM C:\Revit\Transbay\Tw\_MS2013\_11s.rvt



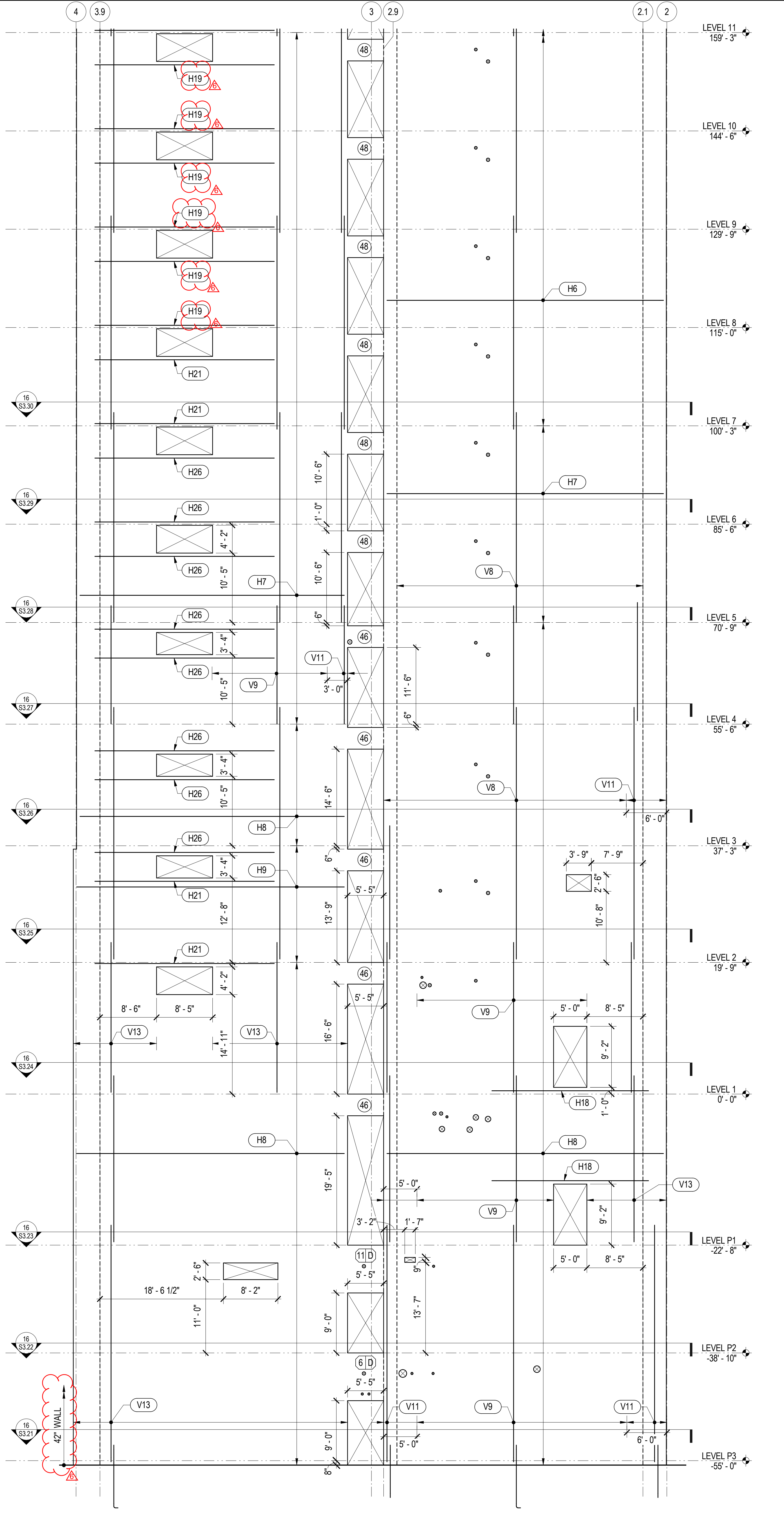
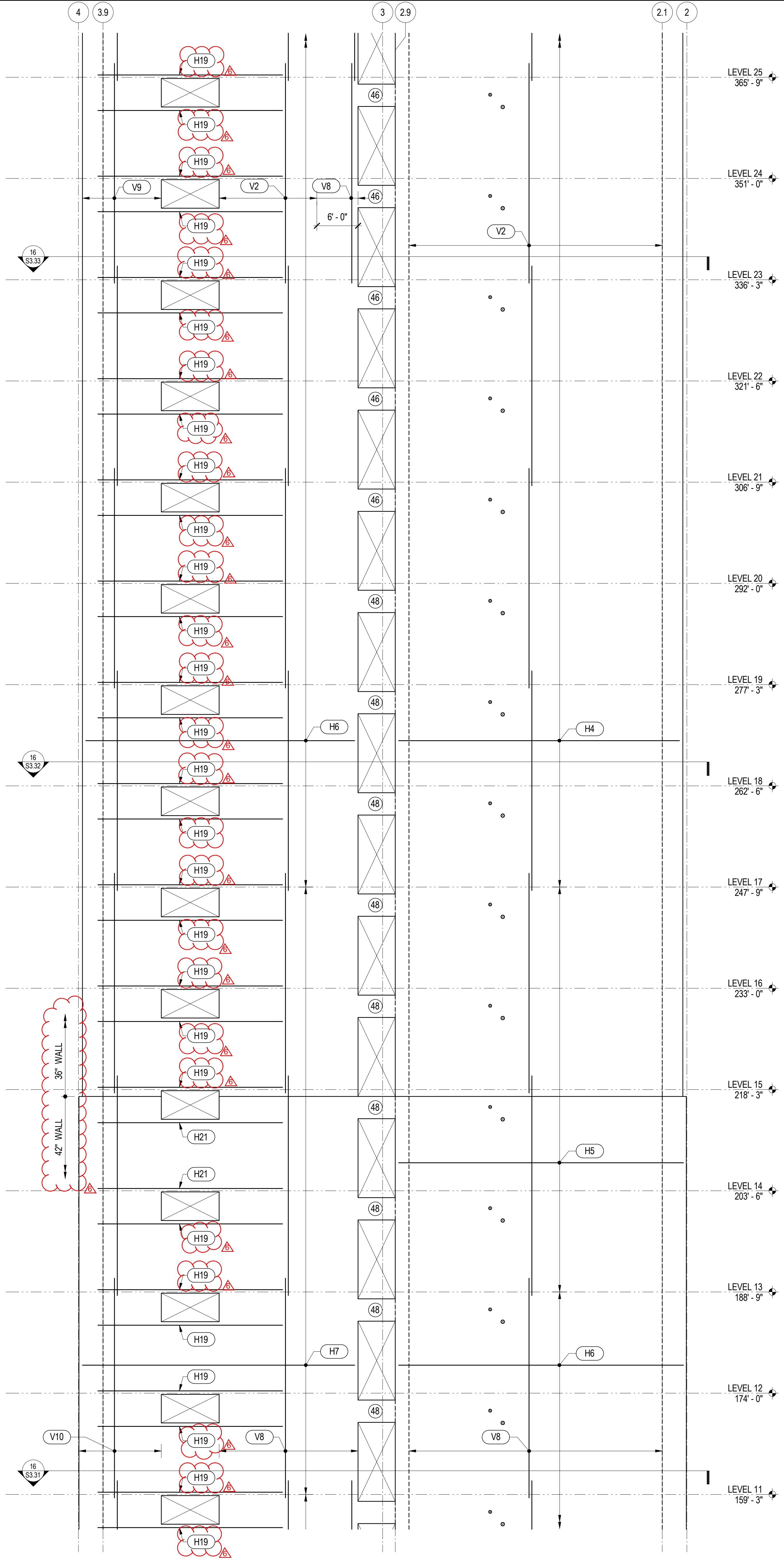
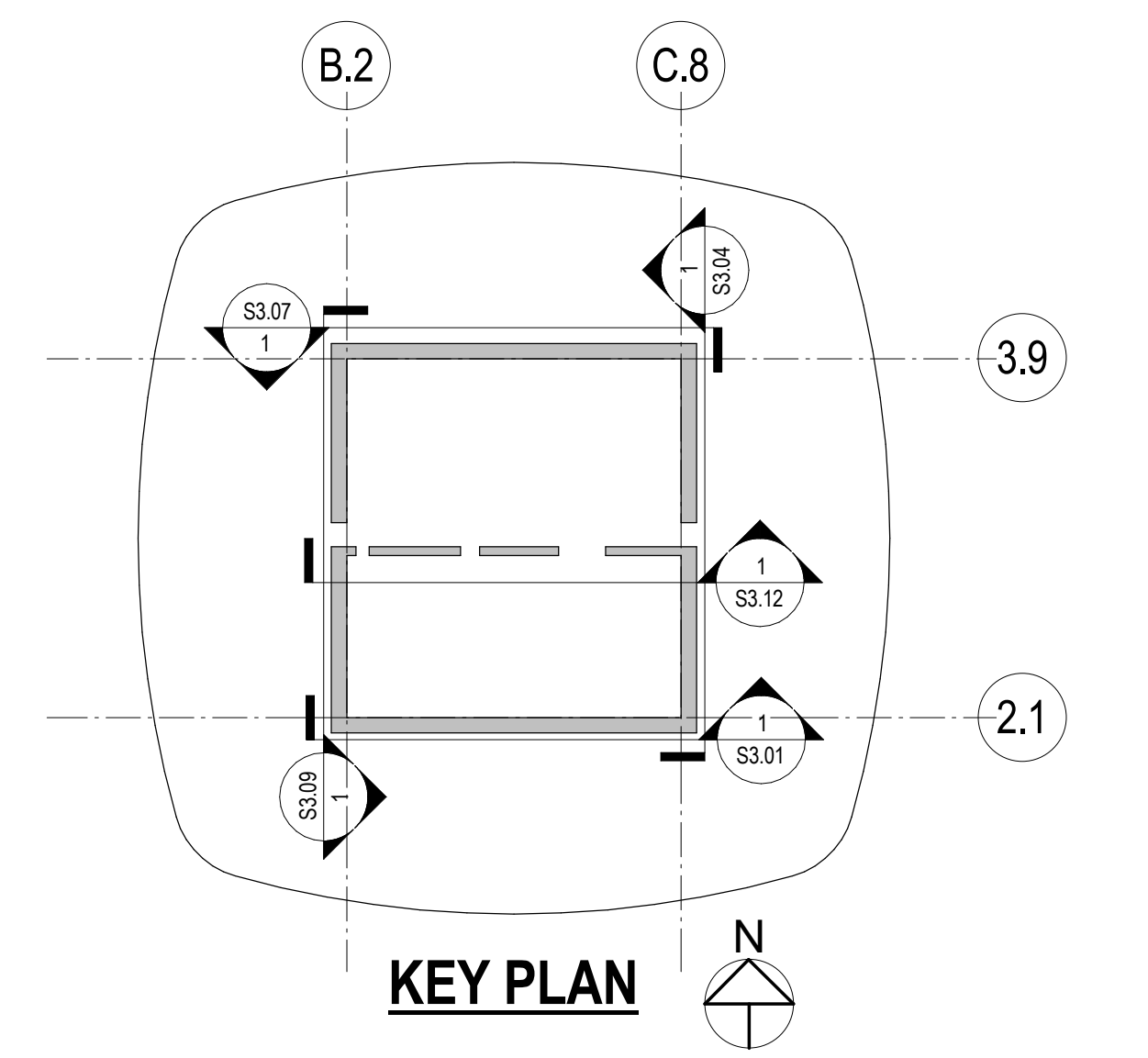
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $db$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - WEST  
1/8" = 1'-0"

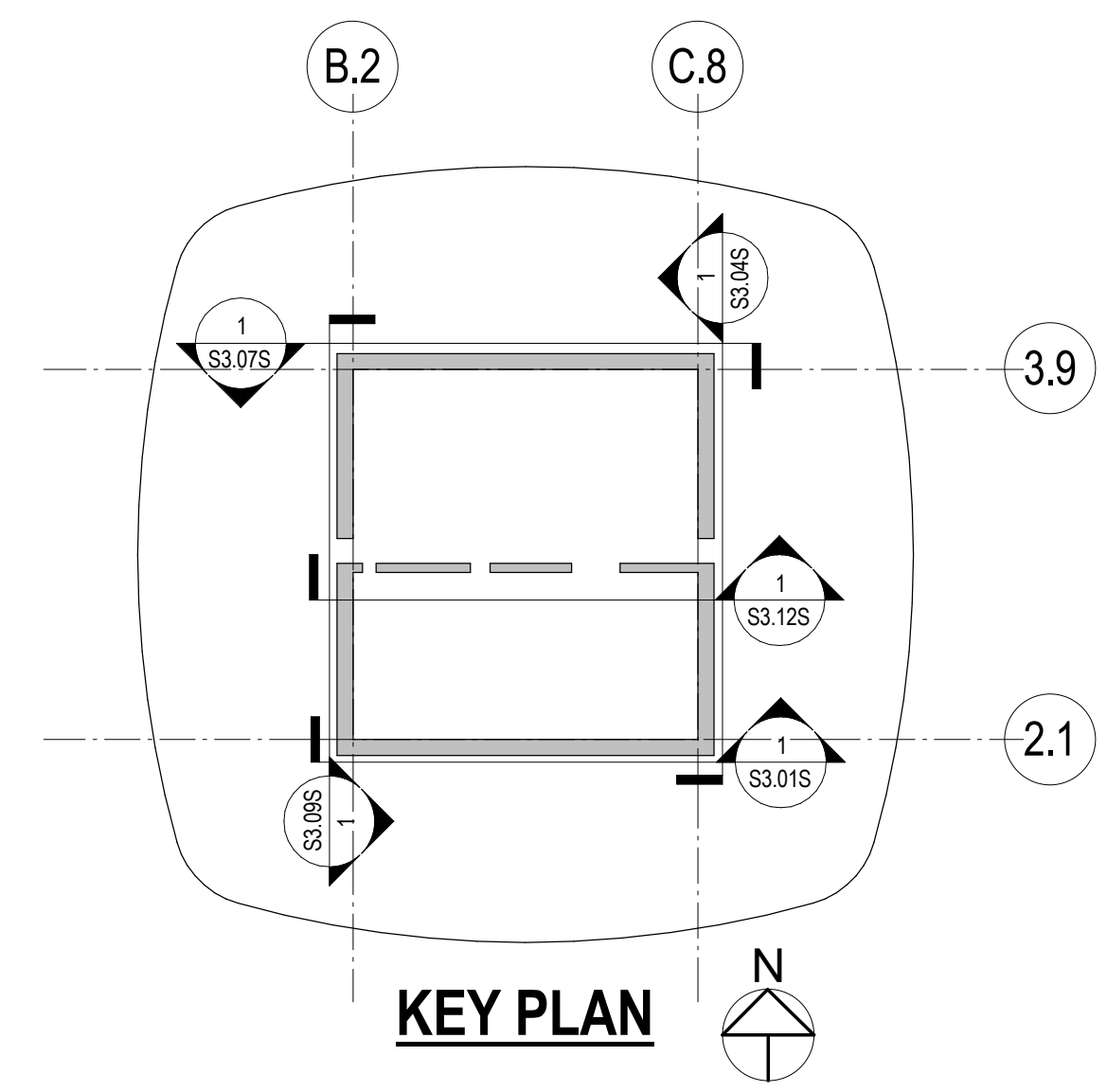
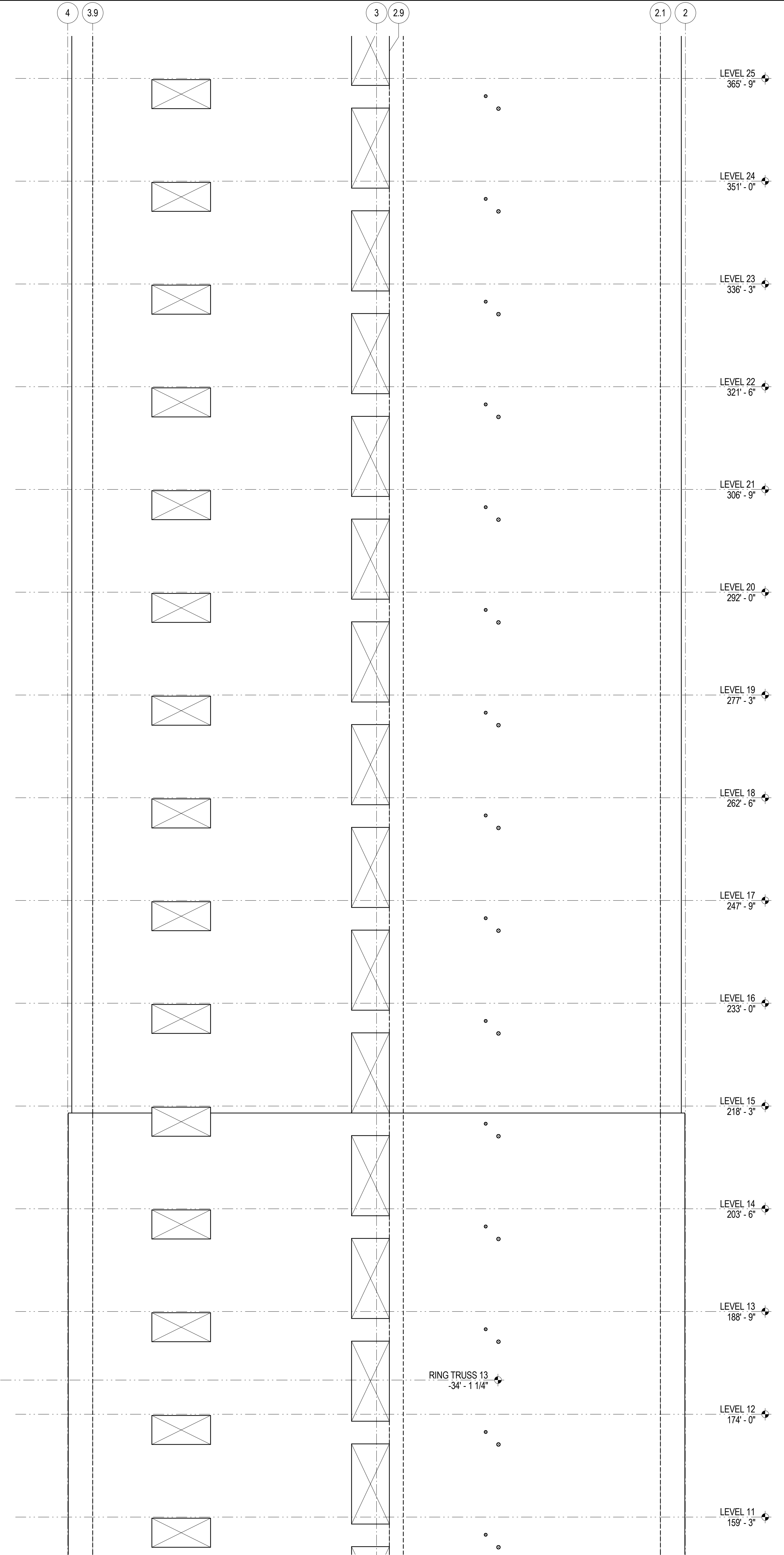
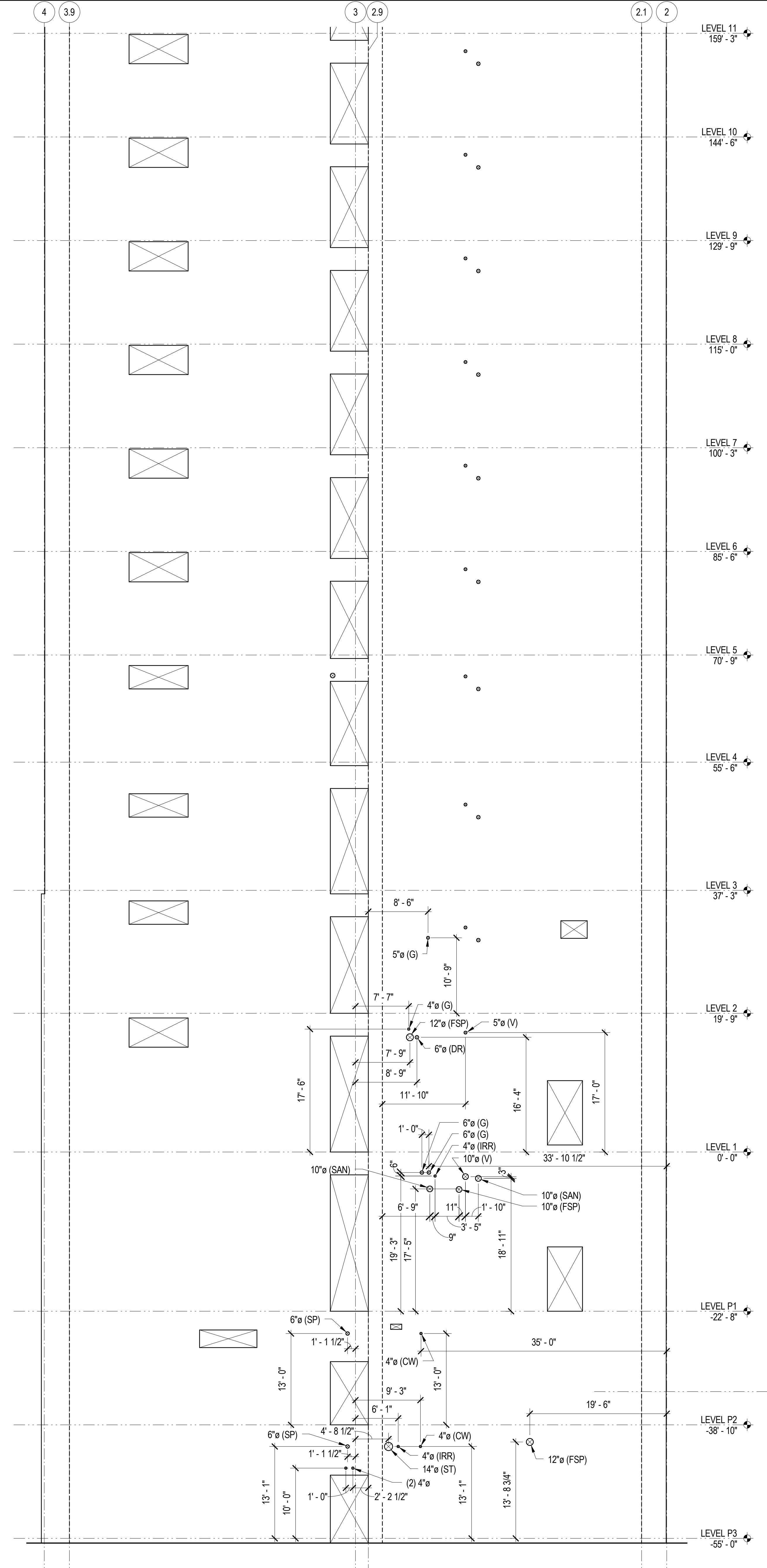
4/30/2014 12:23:56 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: PROJECT NO. DRAWING NUMBER: SHEAR WALL ELEVATIONS S3.09



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



4/29/2014 7:06:52 PM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

1 SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER  
**S3.09S**



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

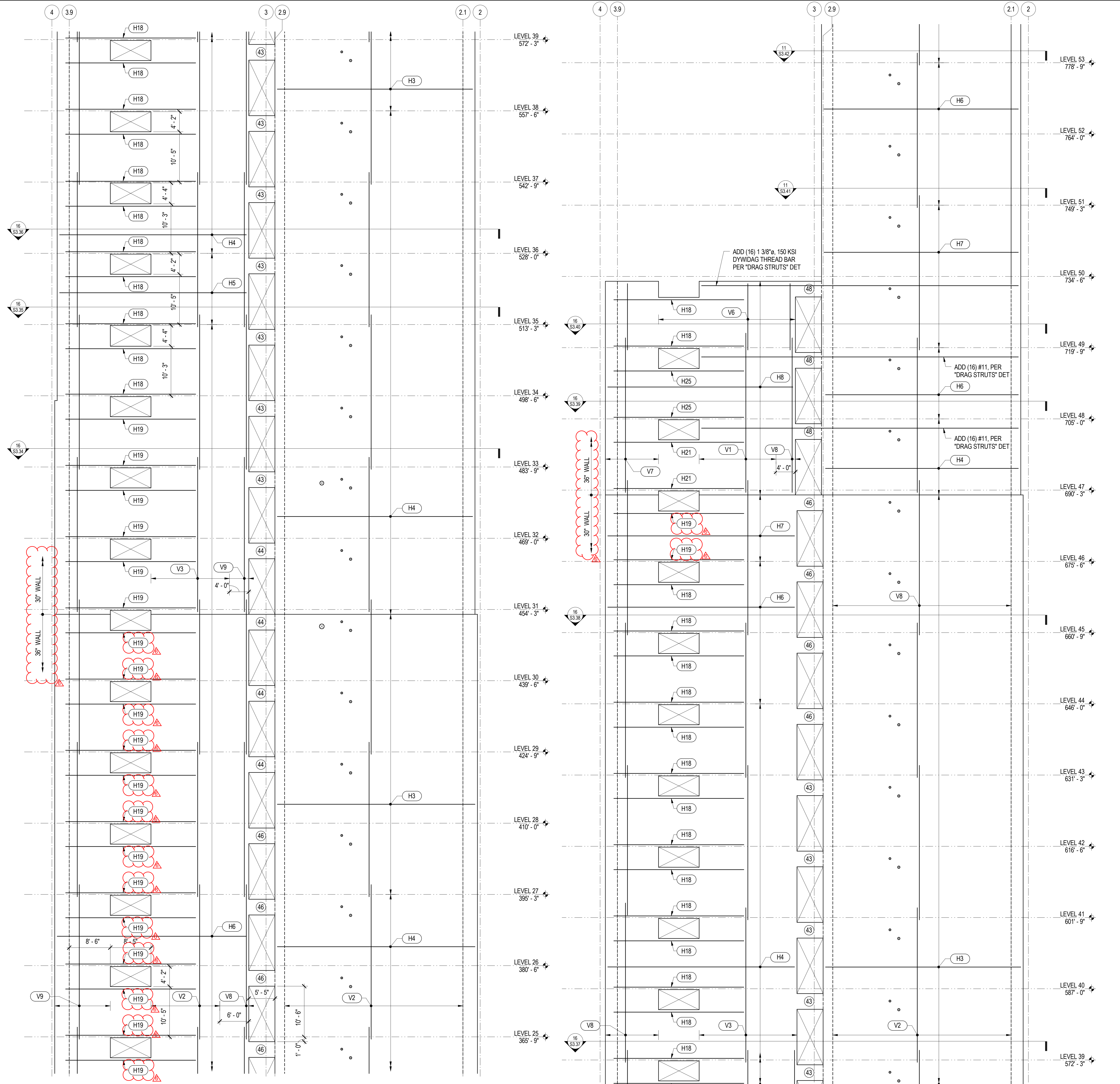
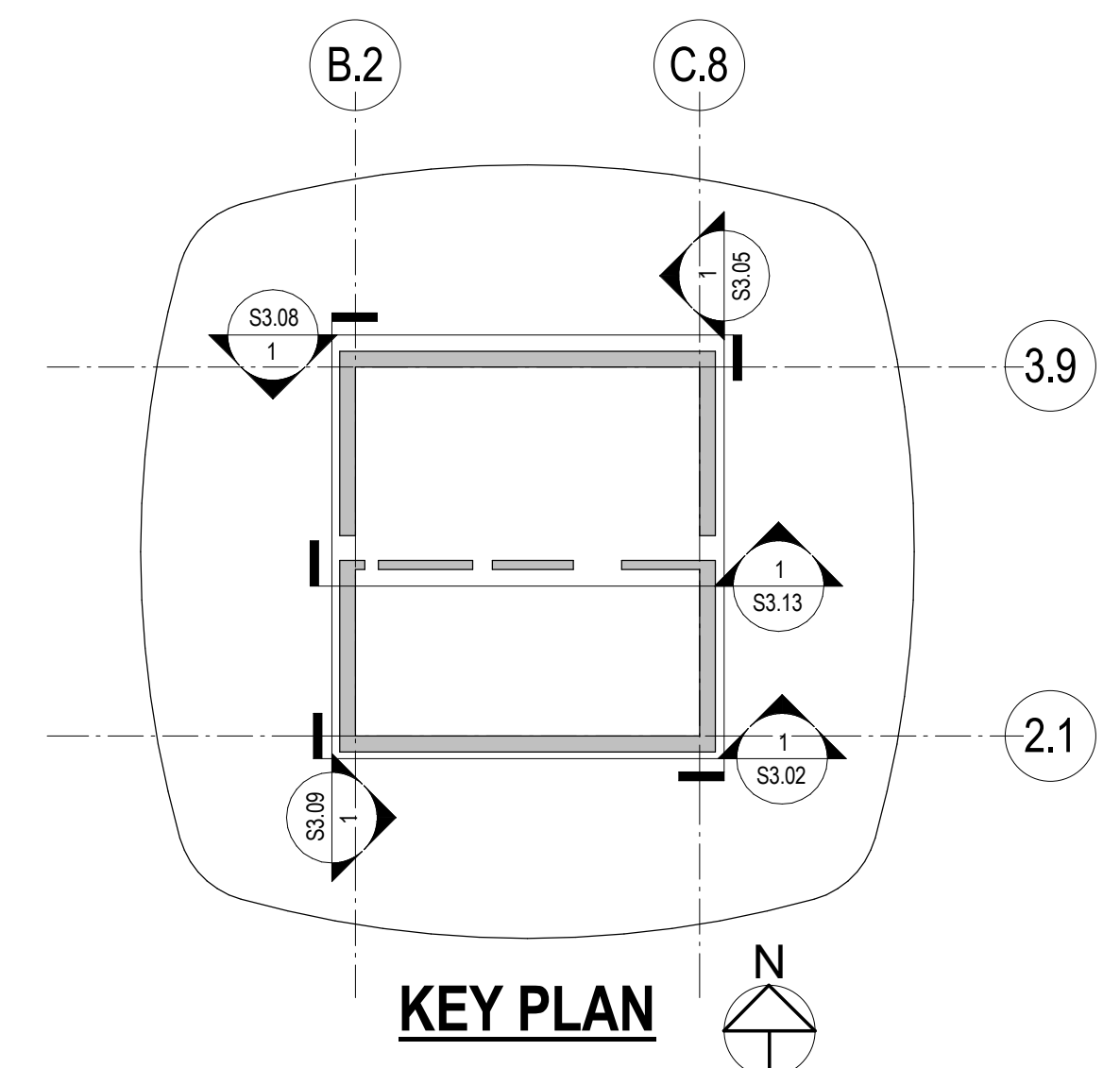
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H20	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H22	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H23	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE." WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - WEST  
1/8" = 1'-0"

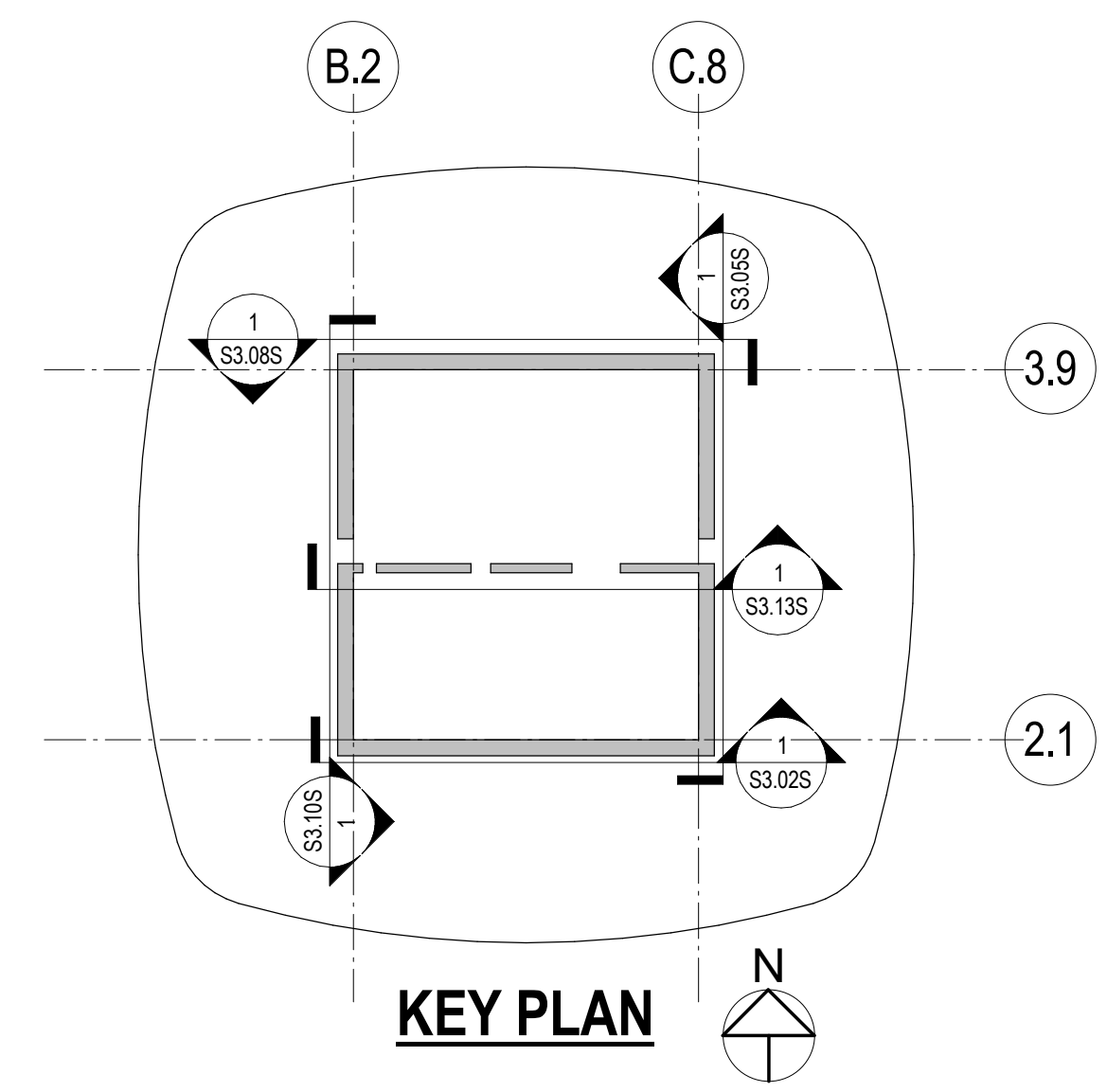
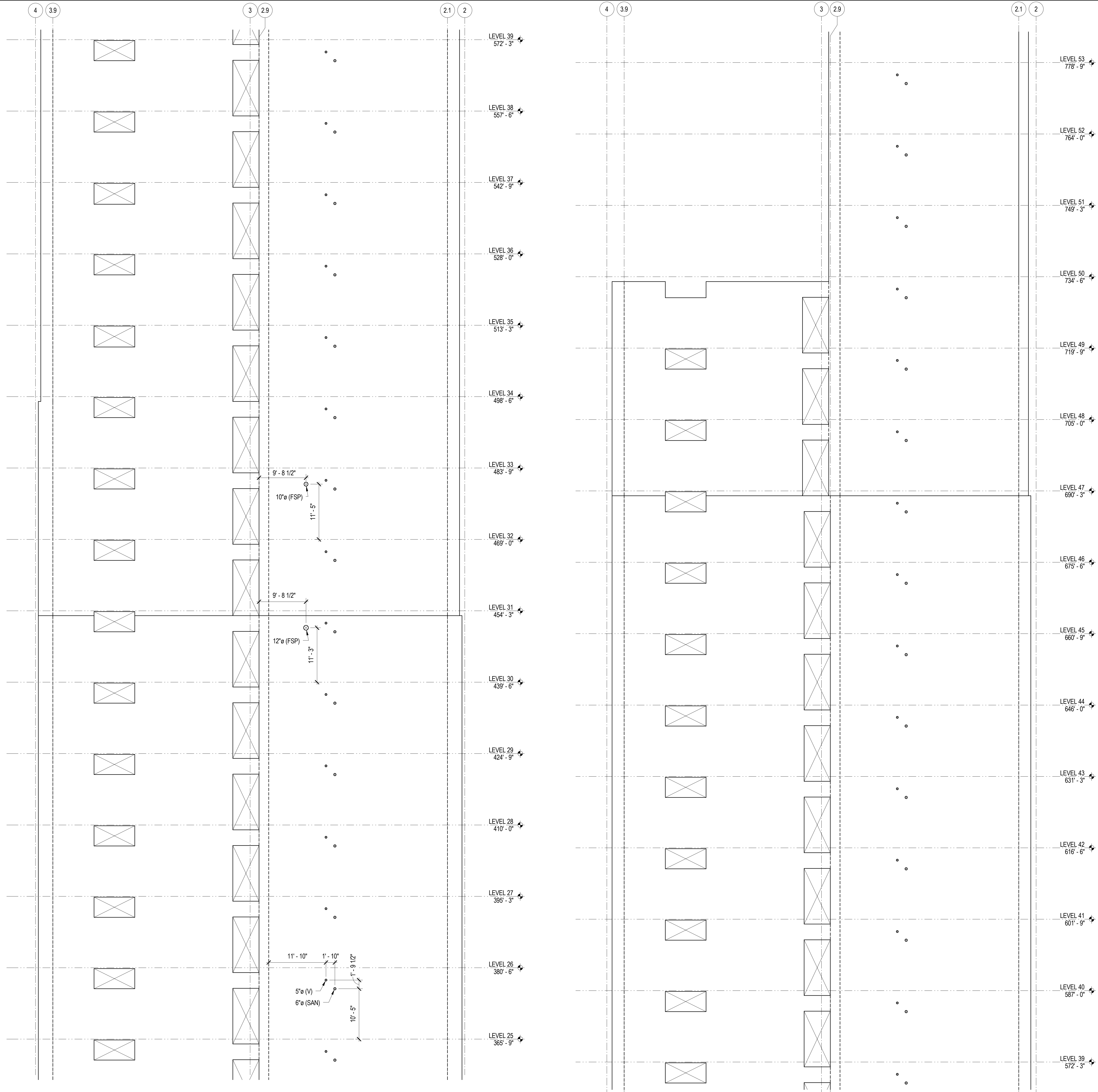
NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILE NAME: \_\_\_\_\_  
DRAWING TITLE: **SHEAR WALL ELEVATIONS**  
REV. PROJECT NO.: 08044  
DRAWING NUMBER: **S3.10**

4/29/2014 7:06:57 PM C:\Revit\Transbay\Tw\_MS2013\_13.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 7:07:30 PM C:\Revit\Transbay\Tw\_MS2013\_18.rvt

**1** SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER  
**S3.10S**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

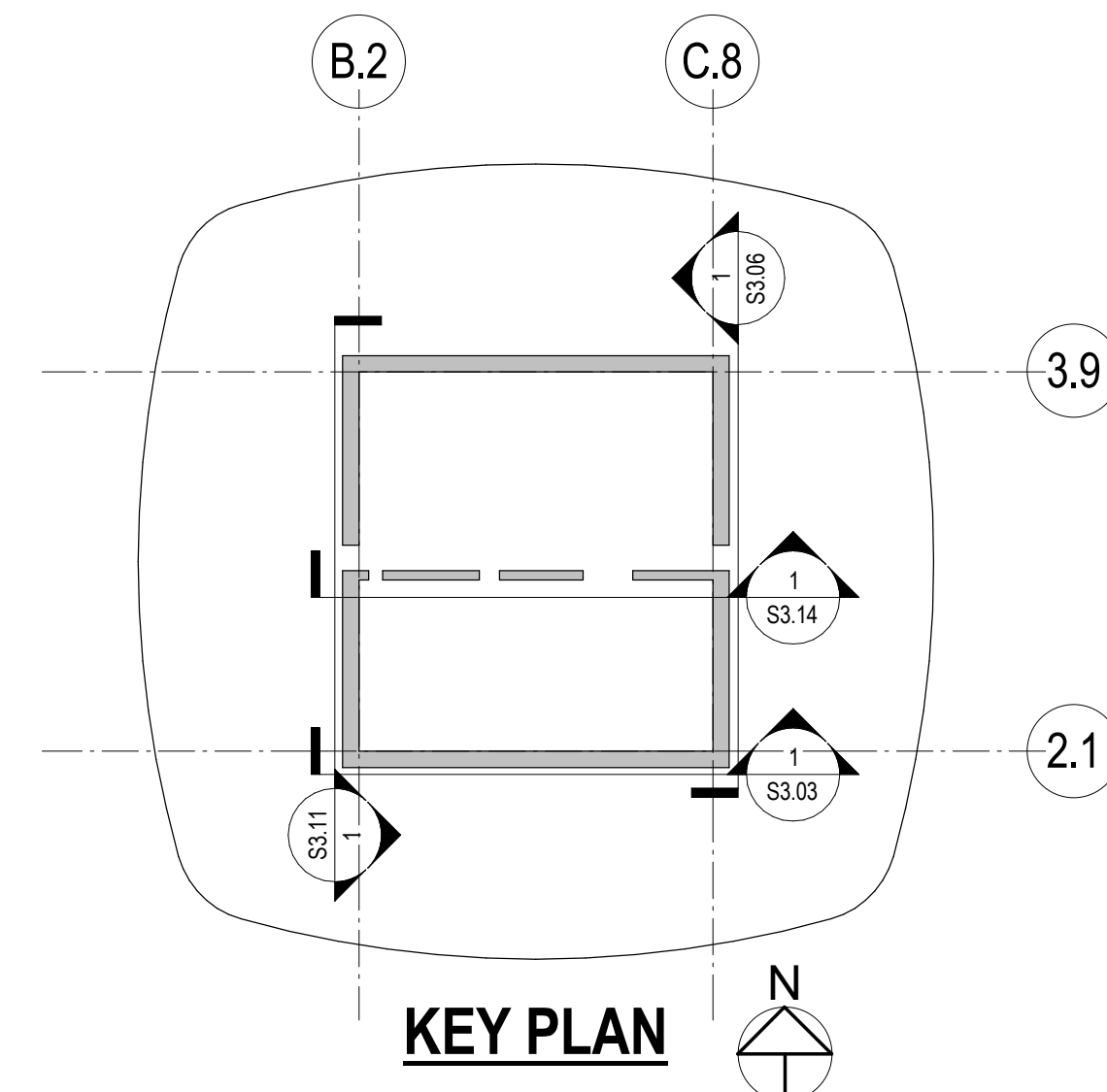
HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (1) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $L_{sb}$  UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $L_{sb1}$  WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - WEST  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL ELEVATIONS</b>	
NO. PROJECT NO. 08044	DRAWING NUMBER S3.11



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

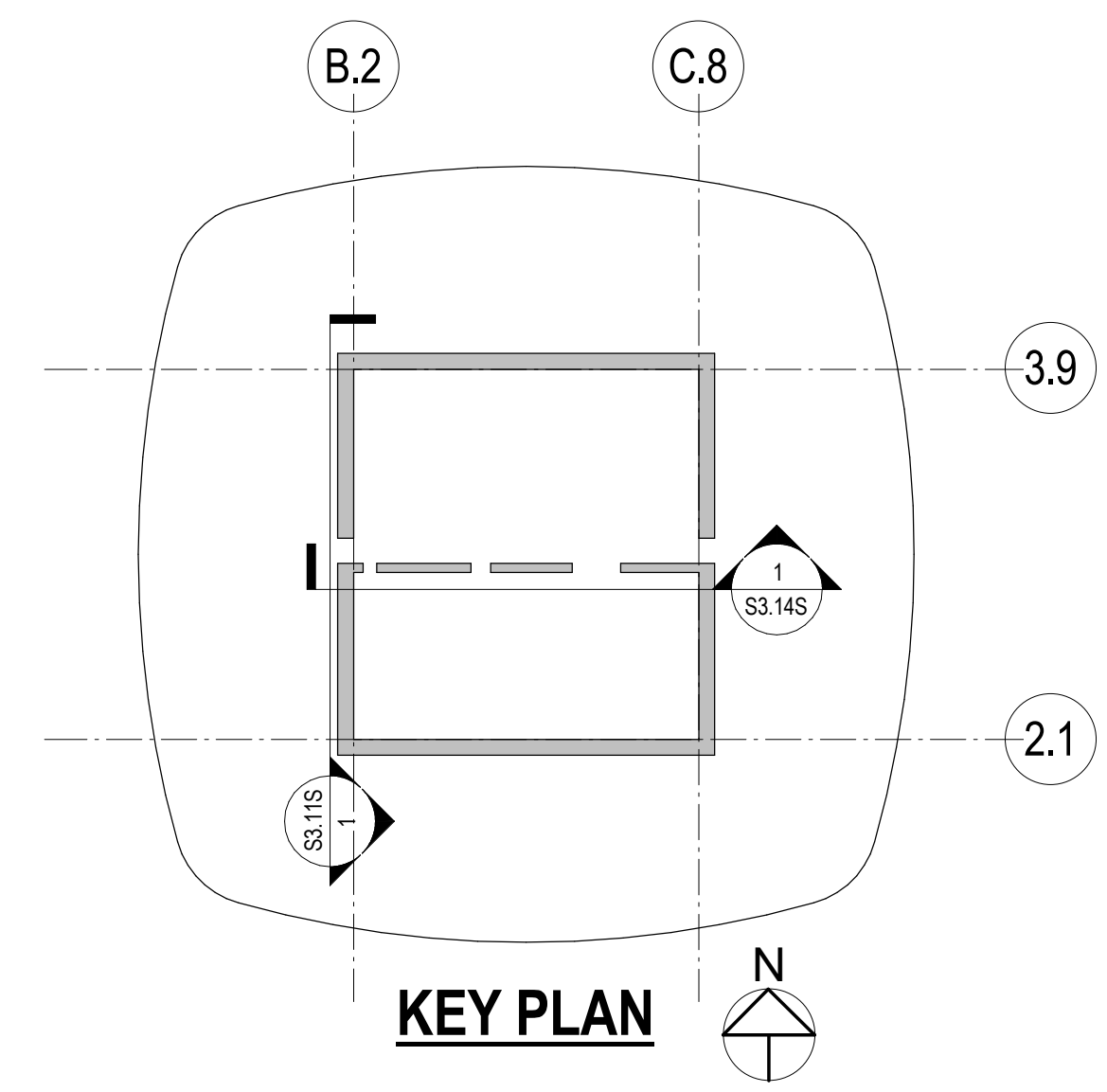
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - WEST - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE

**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.11S



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEPPP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Wasting Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

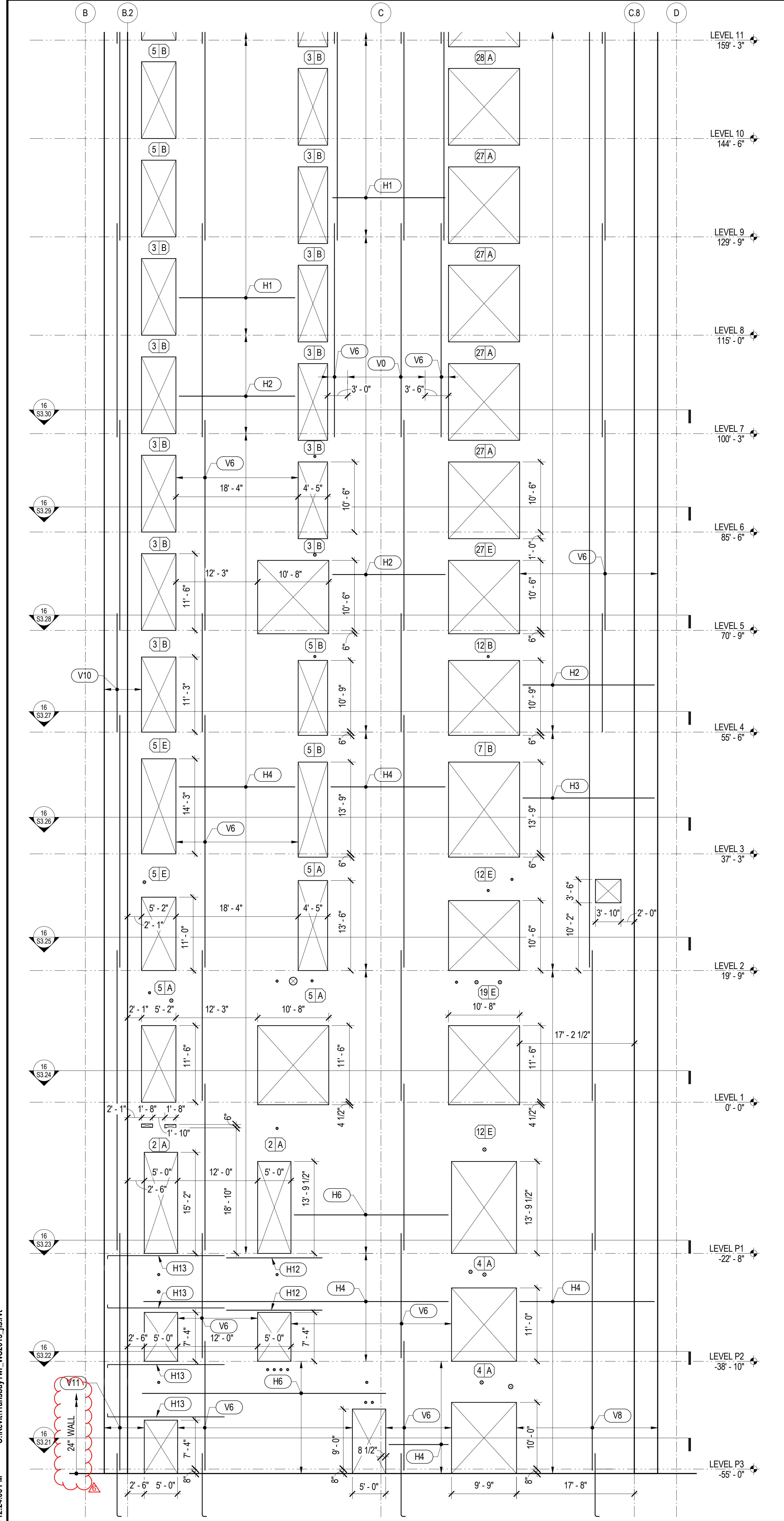
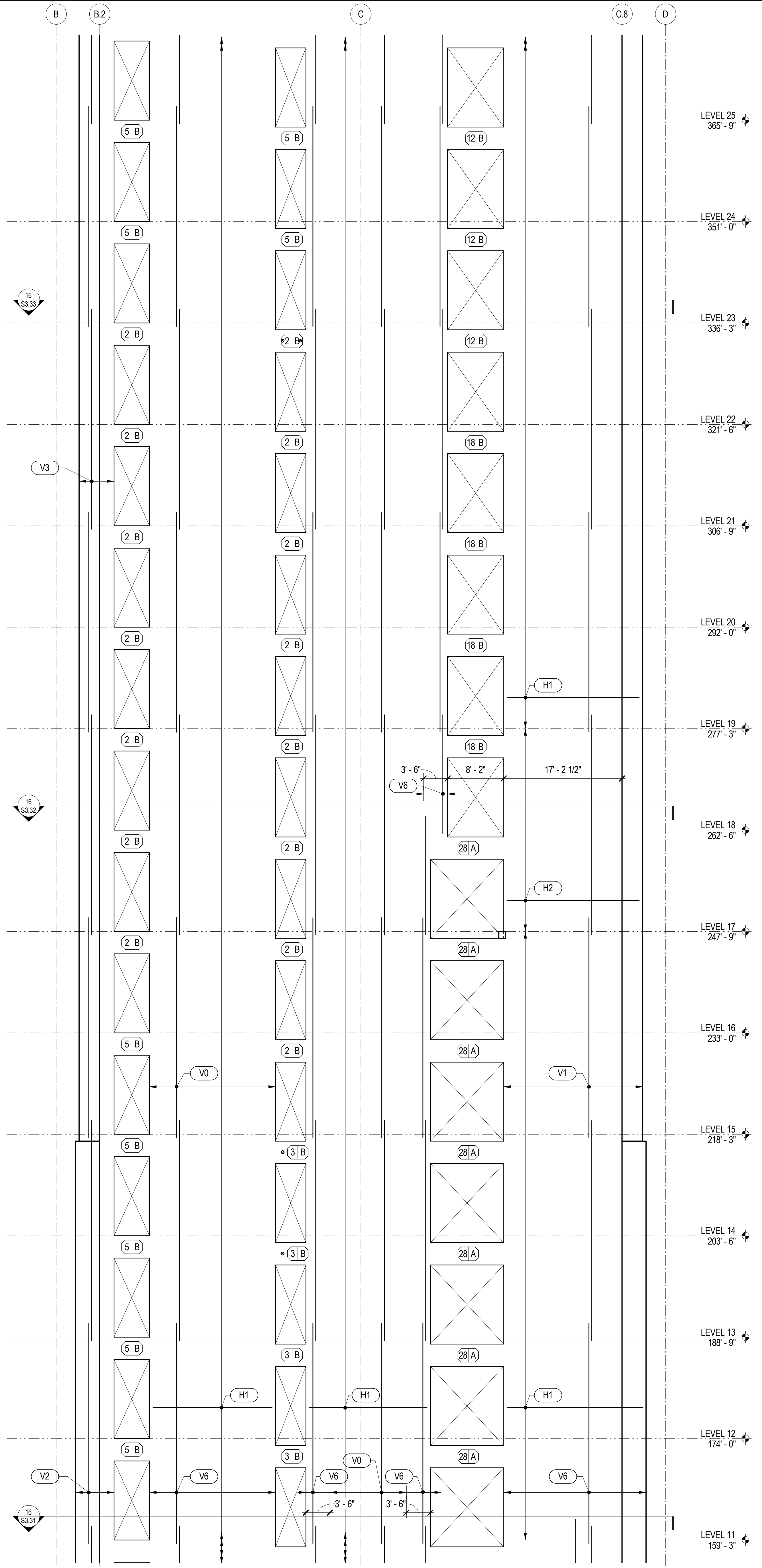
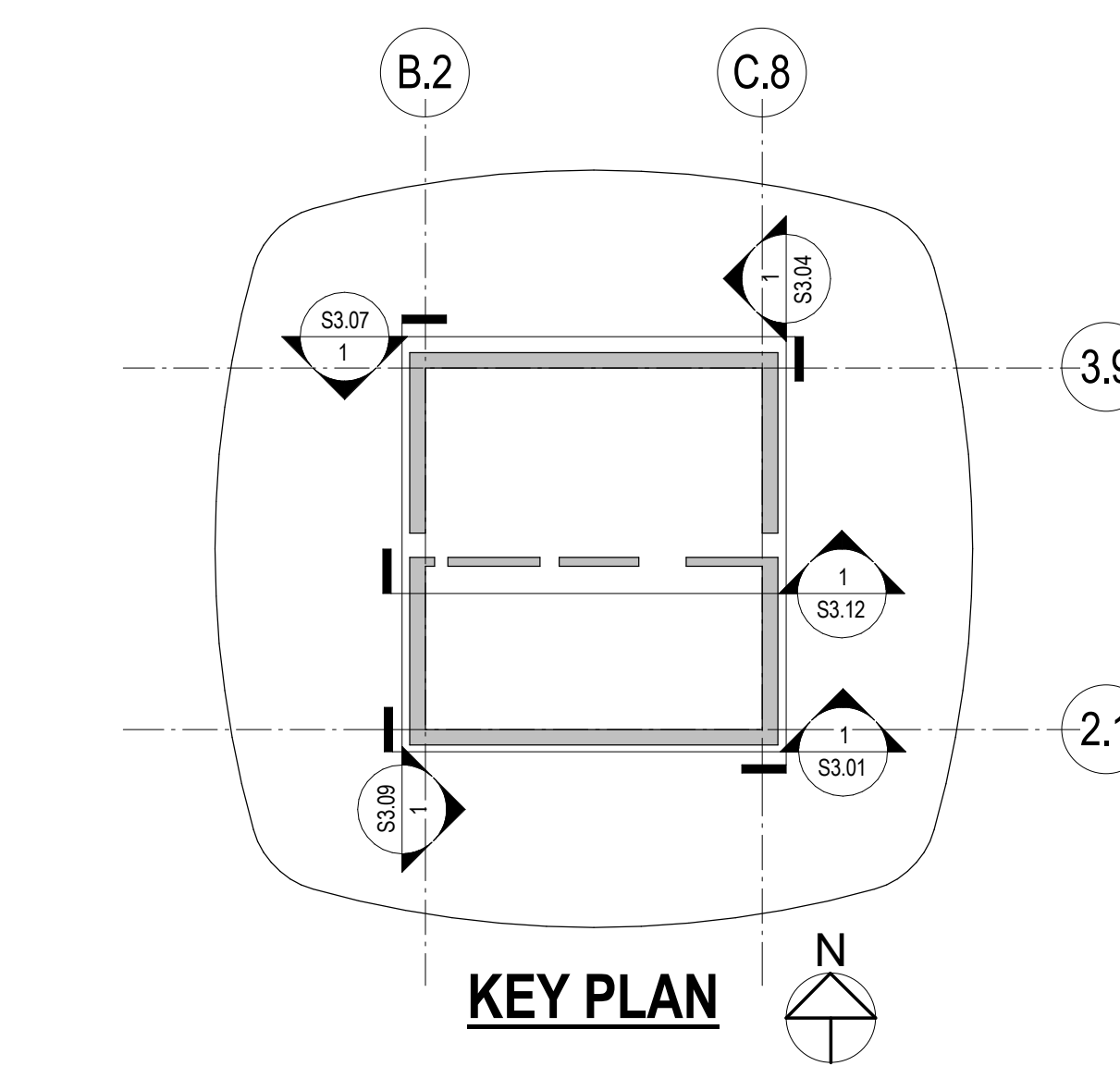
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

**NOTES:**

- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
- (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS".
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
- SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
- WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:

WALL THICKNESS	VERTICAL REINFORCEMENT
48"	#7 @ 6" EF
42"	#7 @ 6" EF
36"	#7 @ 12" EF
30"	#7 @ 12" EF
24"	#6 @ 12" EF

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS, CLEAR SPACING BETWEEN LAYERS TO BE  $d_b$  AND NOT LESS THAN 1 INCH.



**1** SHEAR WALL ELEVATION - INTERIOR  
1/8" = 1'-0"

4/30/2014 12:24:06 PM C:\Rev\IT\transbay\tw\_MS2013\_116.rvt

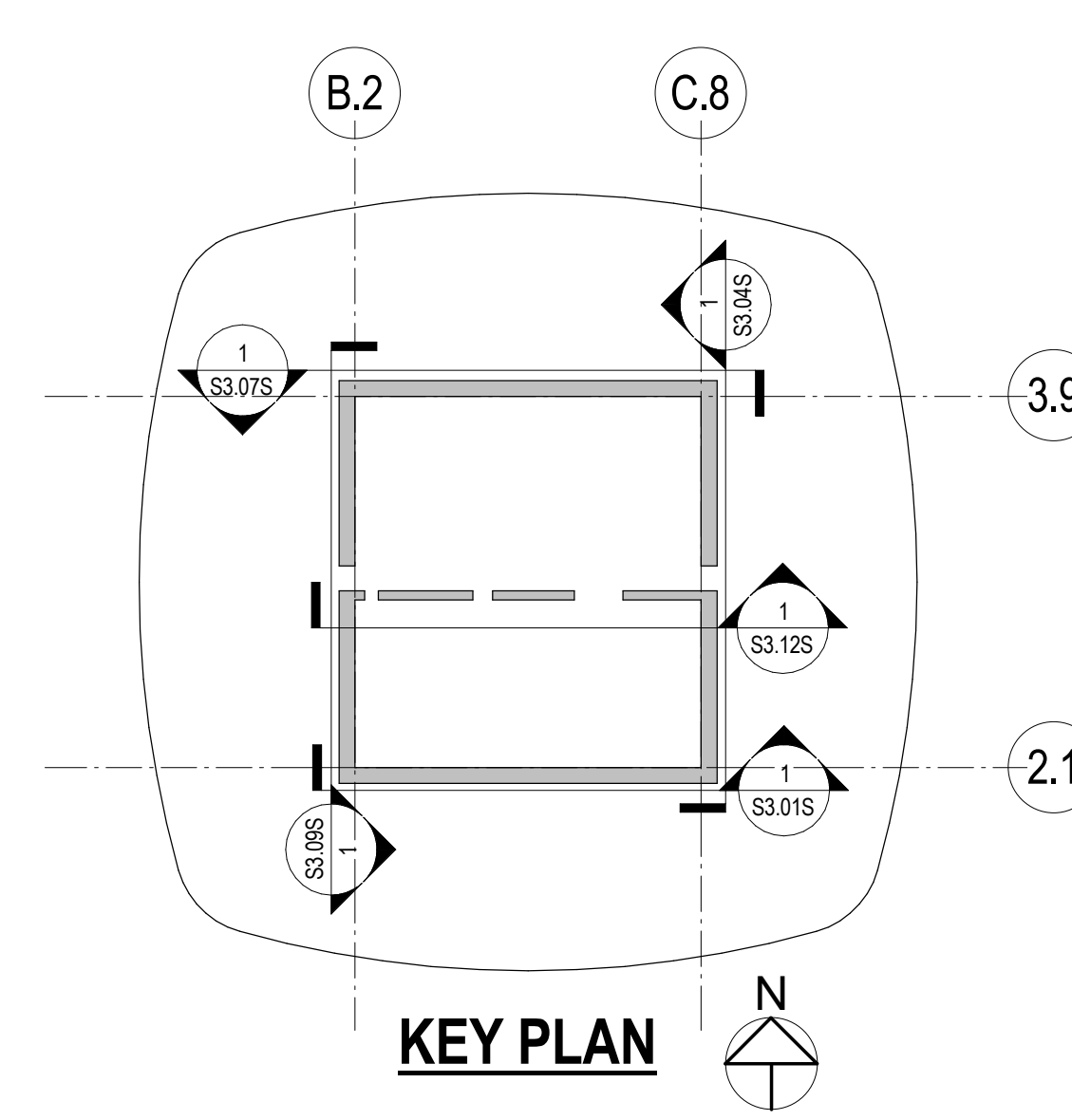
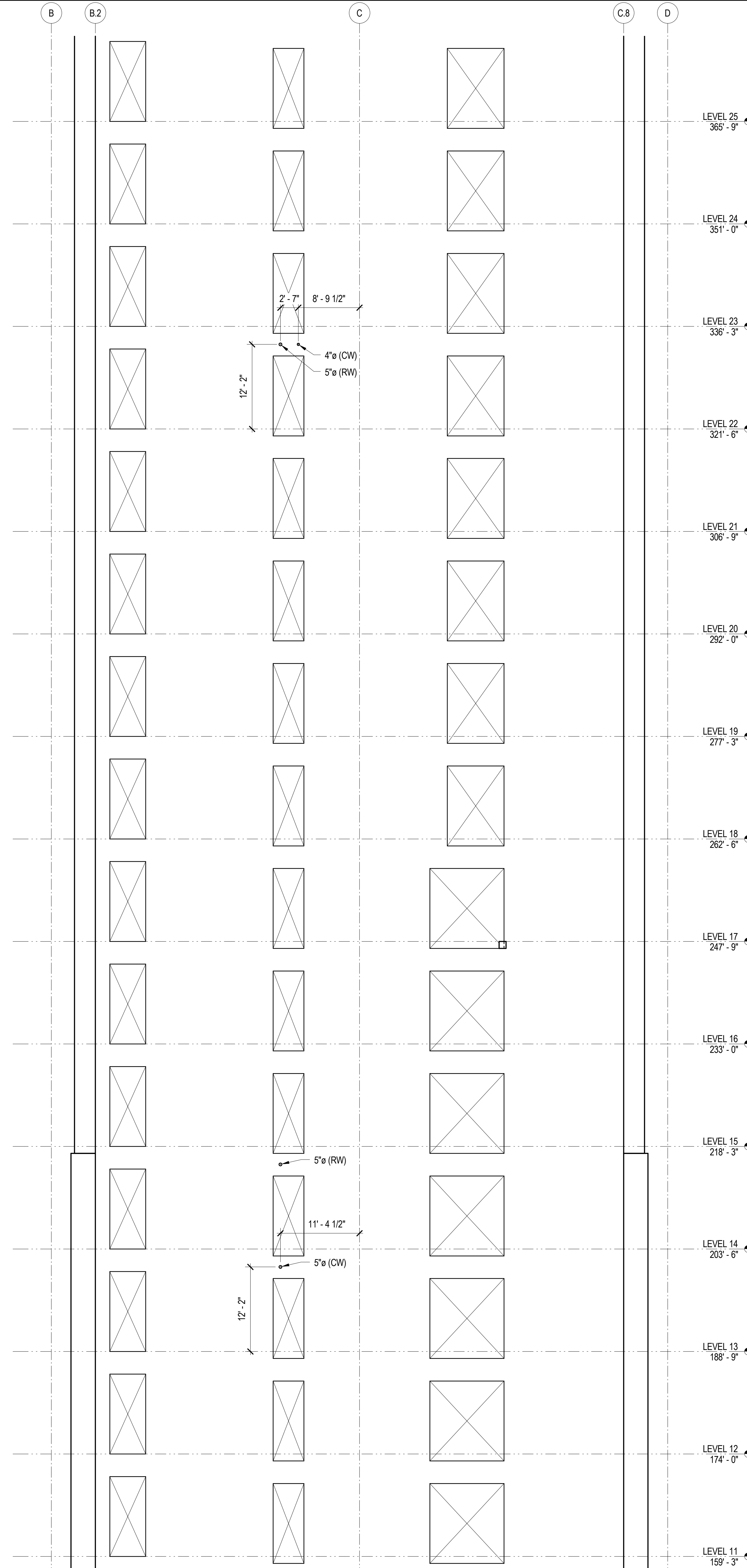
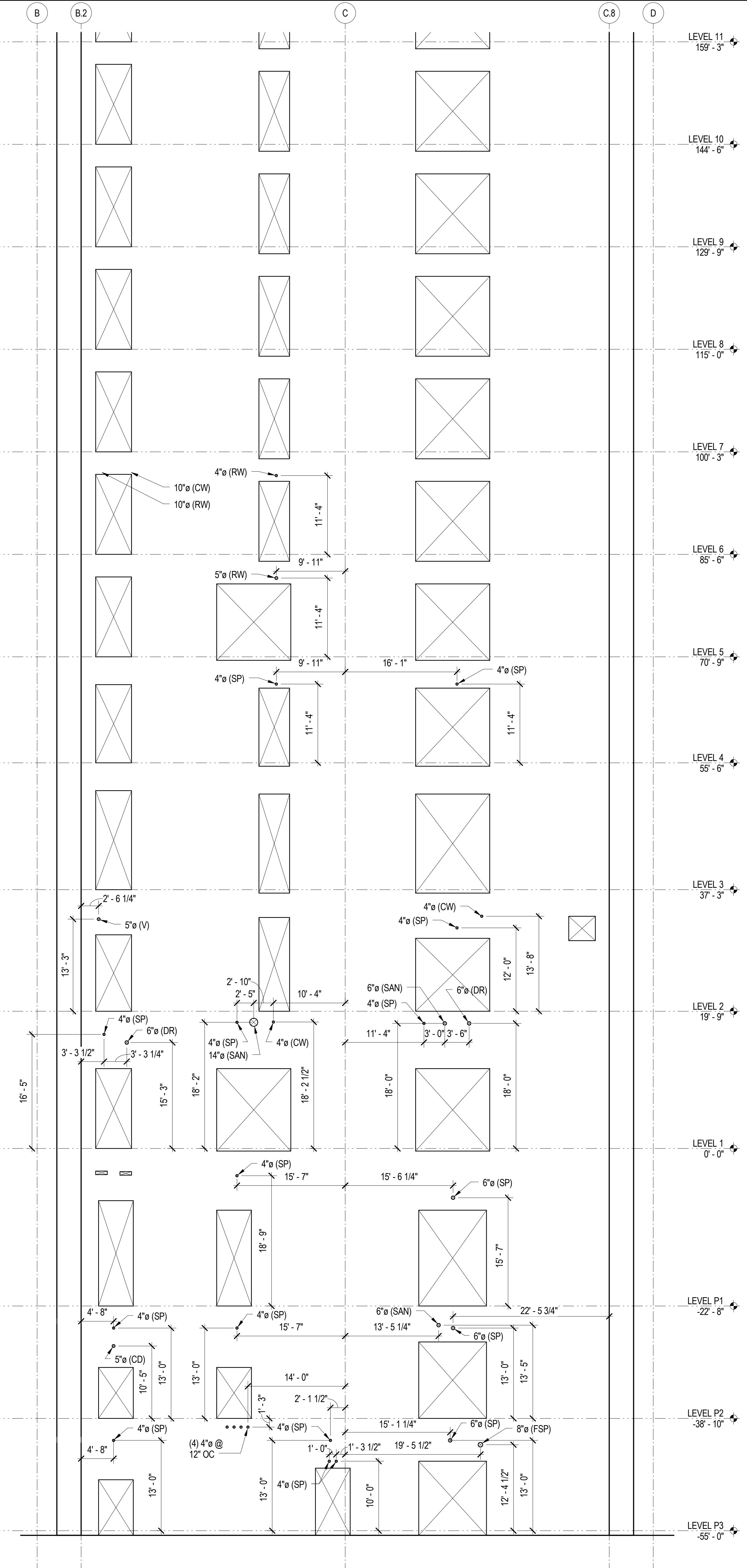
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME: PROJECT NO. 08044 DRAWING NUMBER: S3.12





- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

4/30/2014 12:24:09 PM C:\Revit\Transbay\wr\_MS2013\_11.rvt

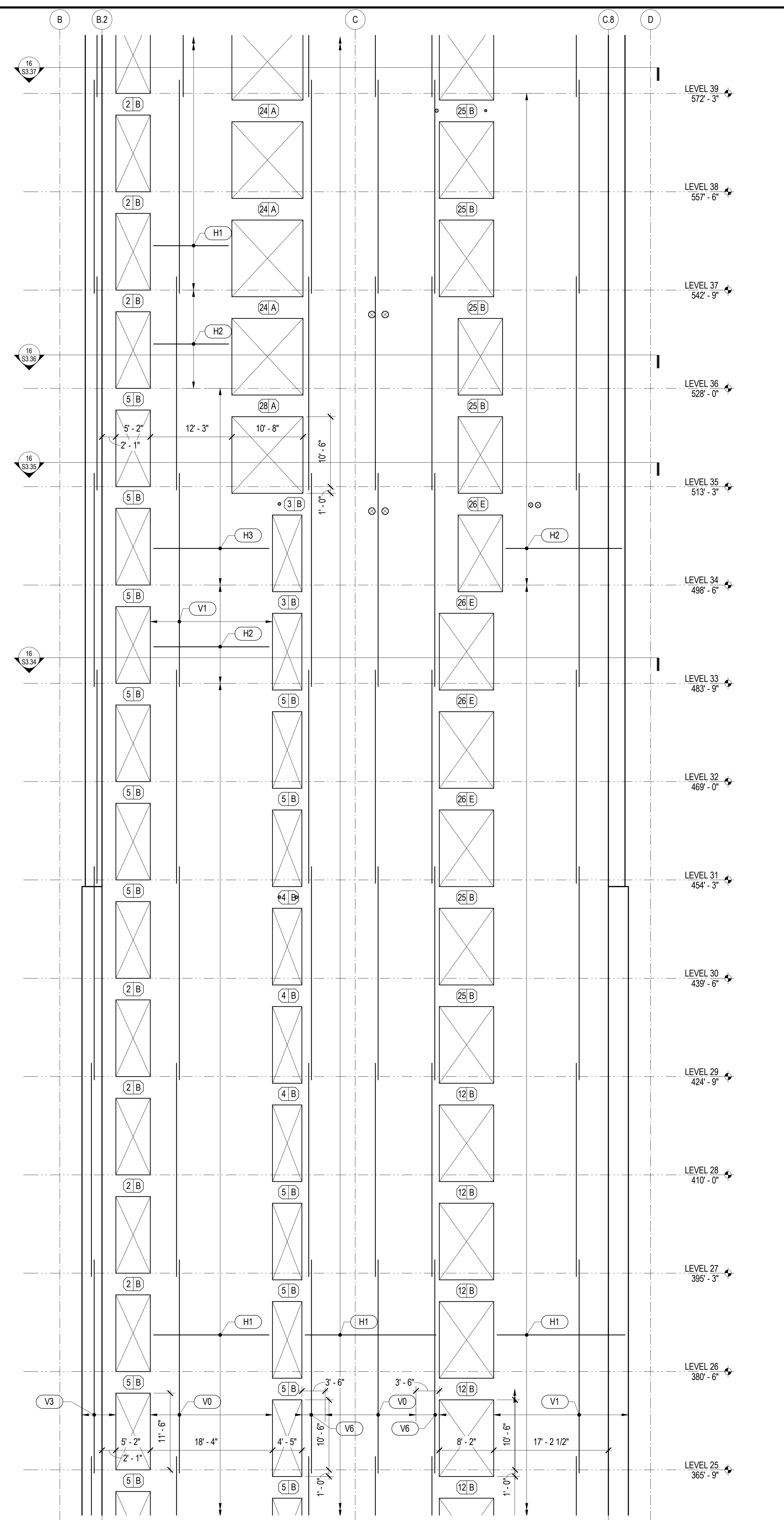
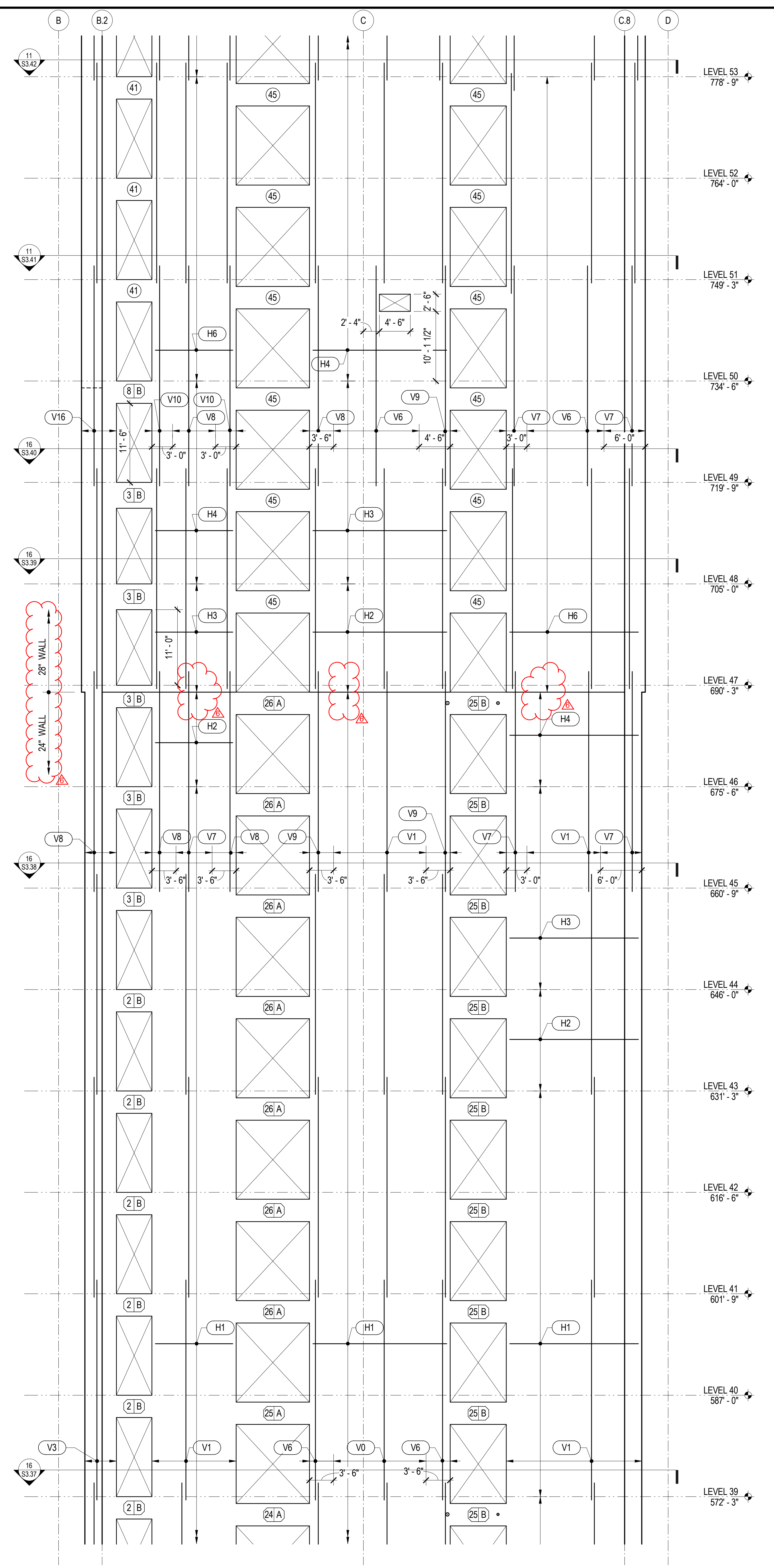
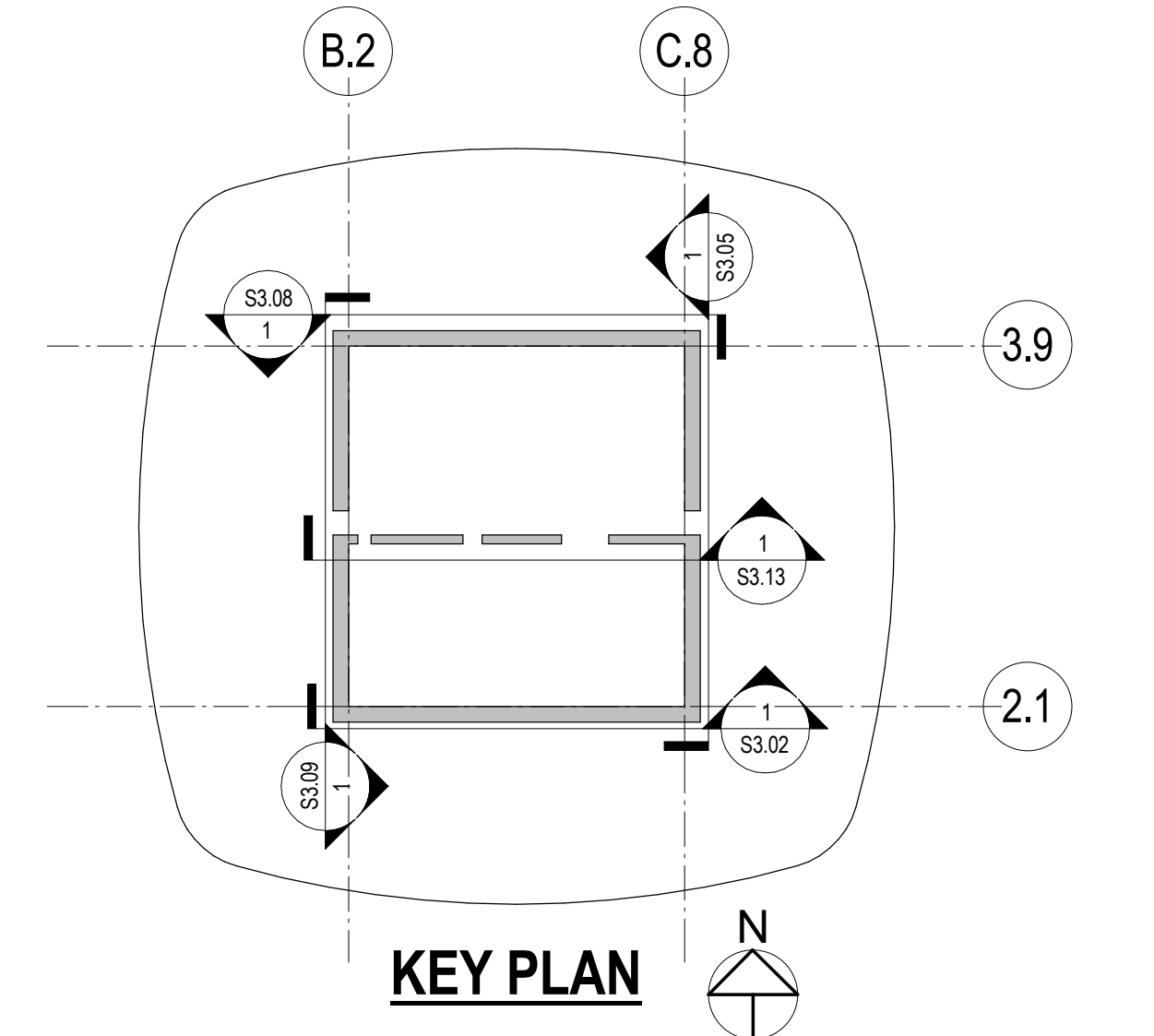


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

VERTICAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

HORIZONTAL REINFORCING SCHEDULE		
MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD L1 BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD L1 BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD L1 BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD L1 BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD L1 BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD L1 BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD L1 BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD L1 BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD L1 BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD L1 BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO S4:  $f_c = 10,000$  PSI  
LEVELS S4 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1)A INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (4)1 INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb1 WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |
- FOR H11-H28, EXTEND L1 PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED L1, PROVIDE A STANDARD HOOK AT WALL END.
  - DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
  - FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE db AND NOT LESS THAN 1 INCH.



**1 SHEAR WALL ELEVATION - INTERIOR**  
1/8" = 1'-0"

4/29/2014 7:07:22 PM C:\Revit\Transbay\TW\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

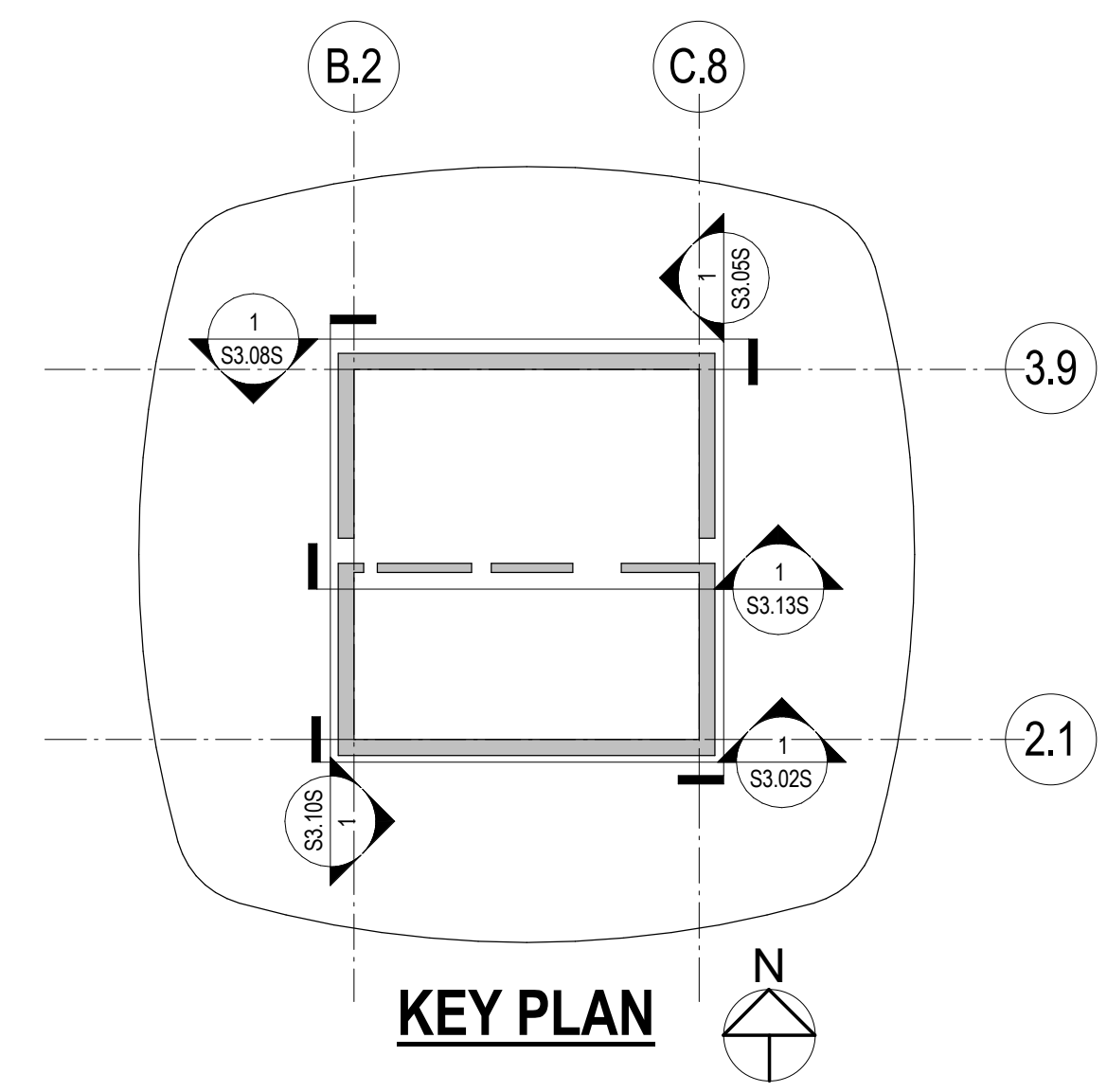
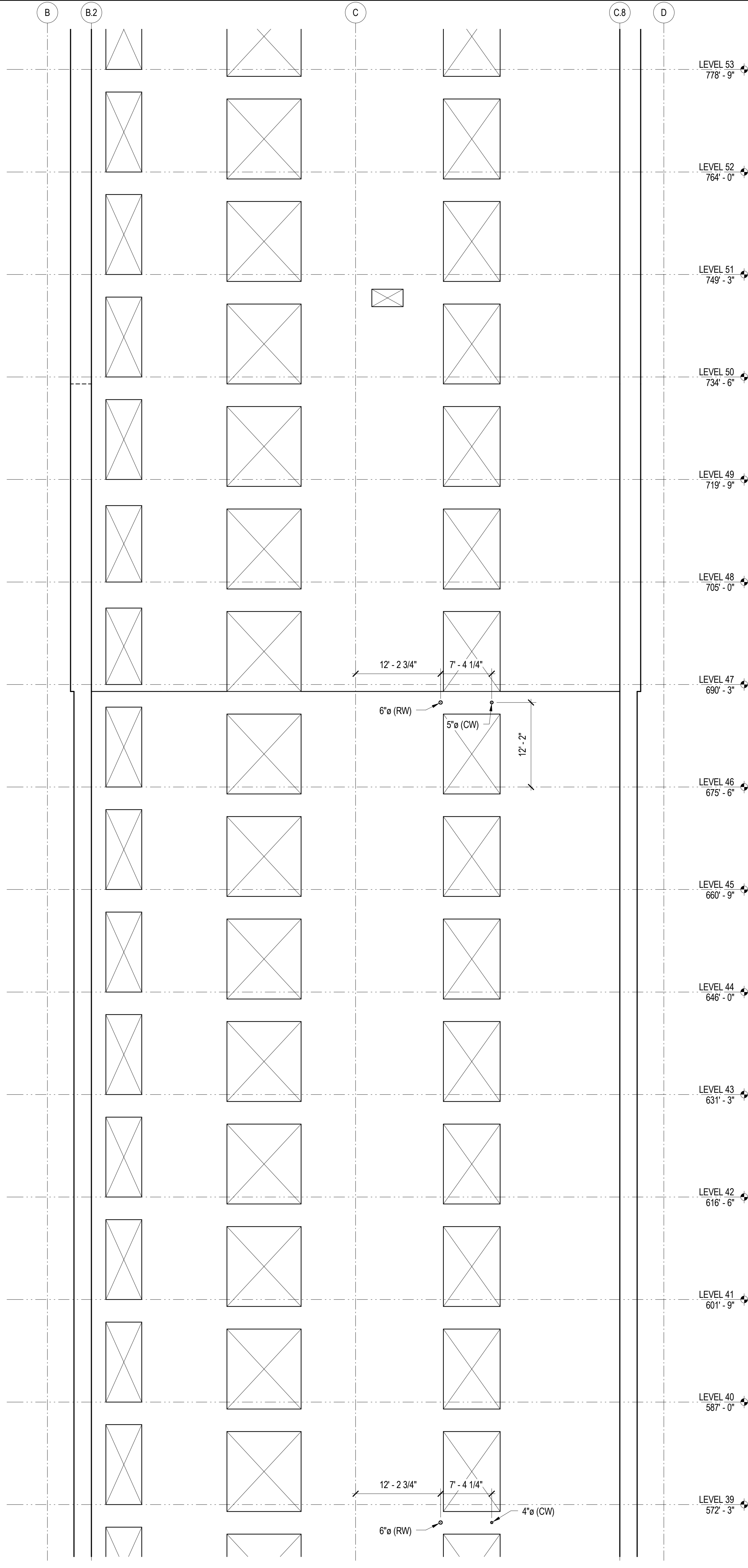
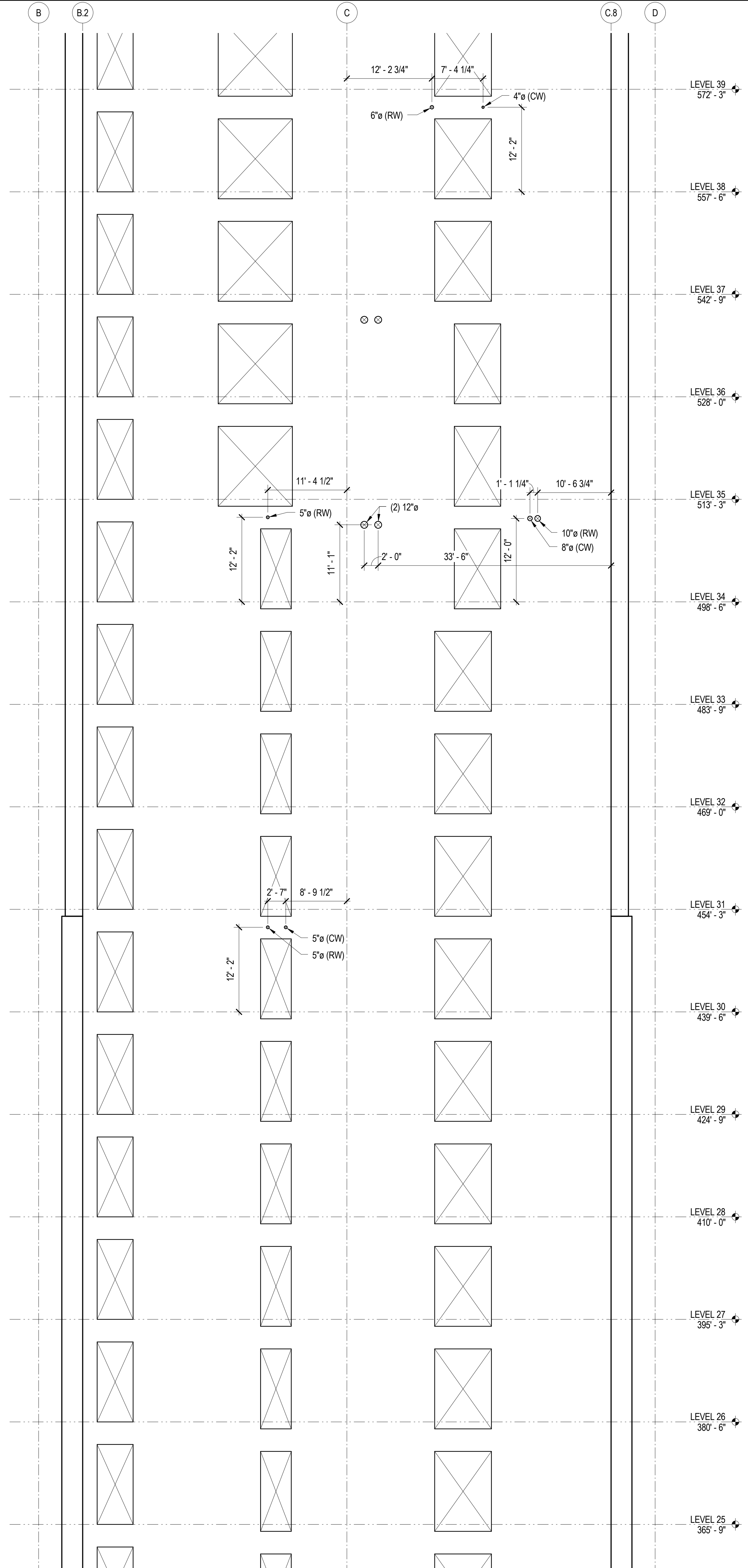
CAD FILENAME: \_\_\_\_\_

DRAWING TITLE: **SHEAR WALL ELEVATIONS**

PROJECT NO. 08044 DRAWING NUMBER **S3.13**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



4/29/2014 7:07:25 PM C:\Revit\Transbay\TW\_MS2013\_116.rvt

**1** SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE  
**SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS**

DRAWING NUMBER  
**S3.13S**

PROJECT NO.  
08044

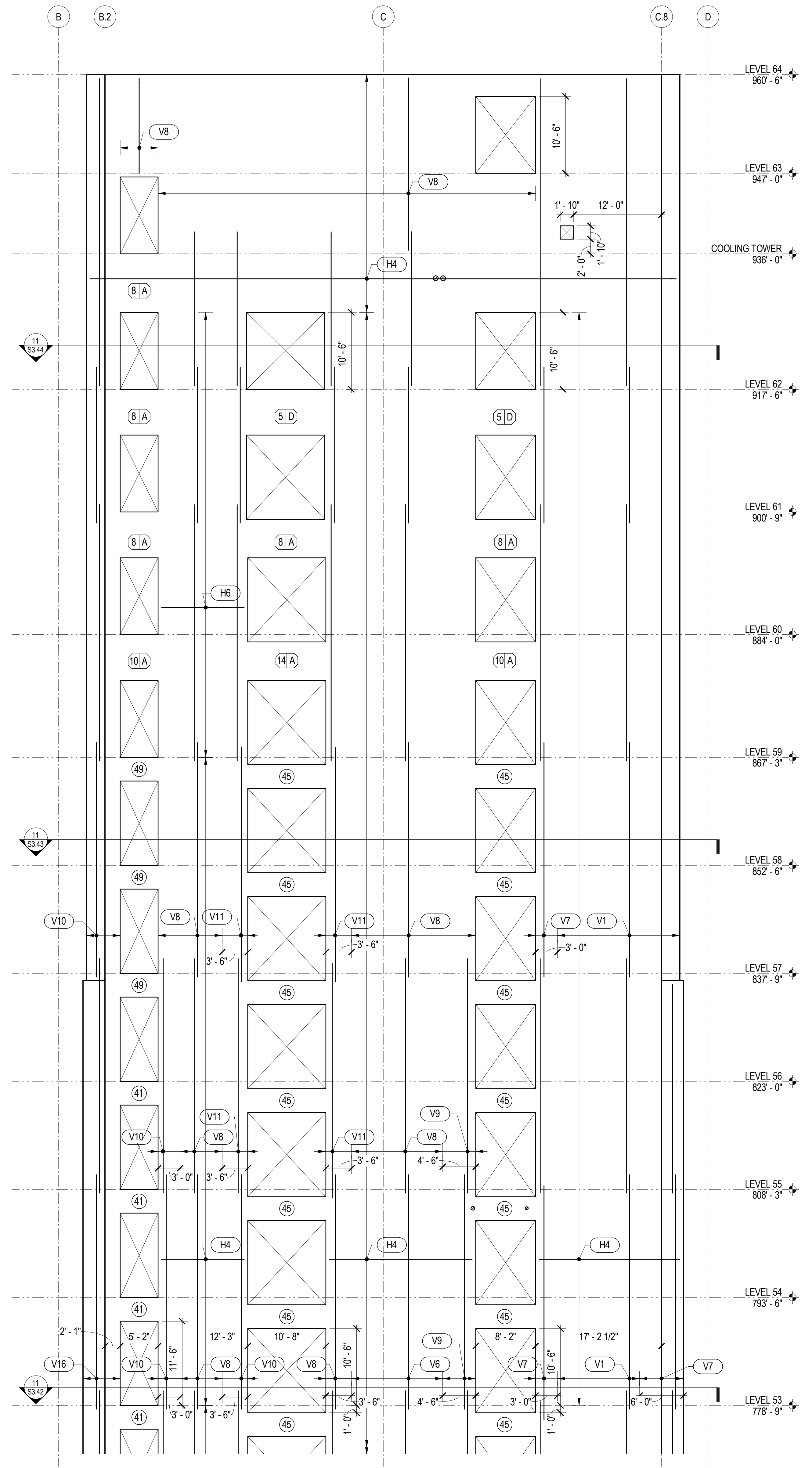
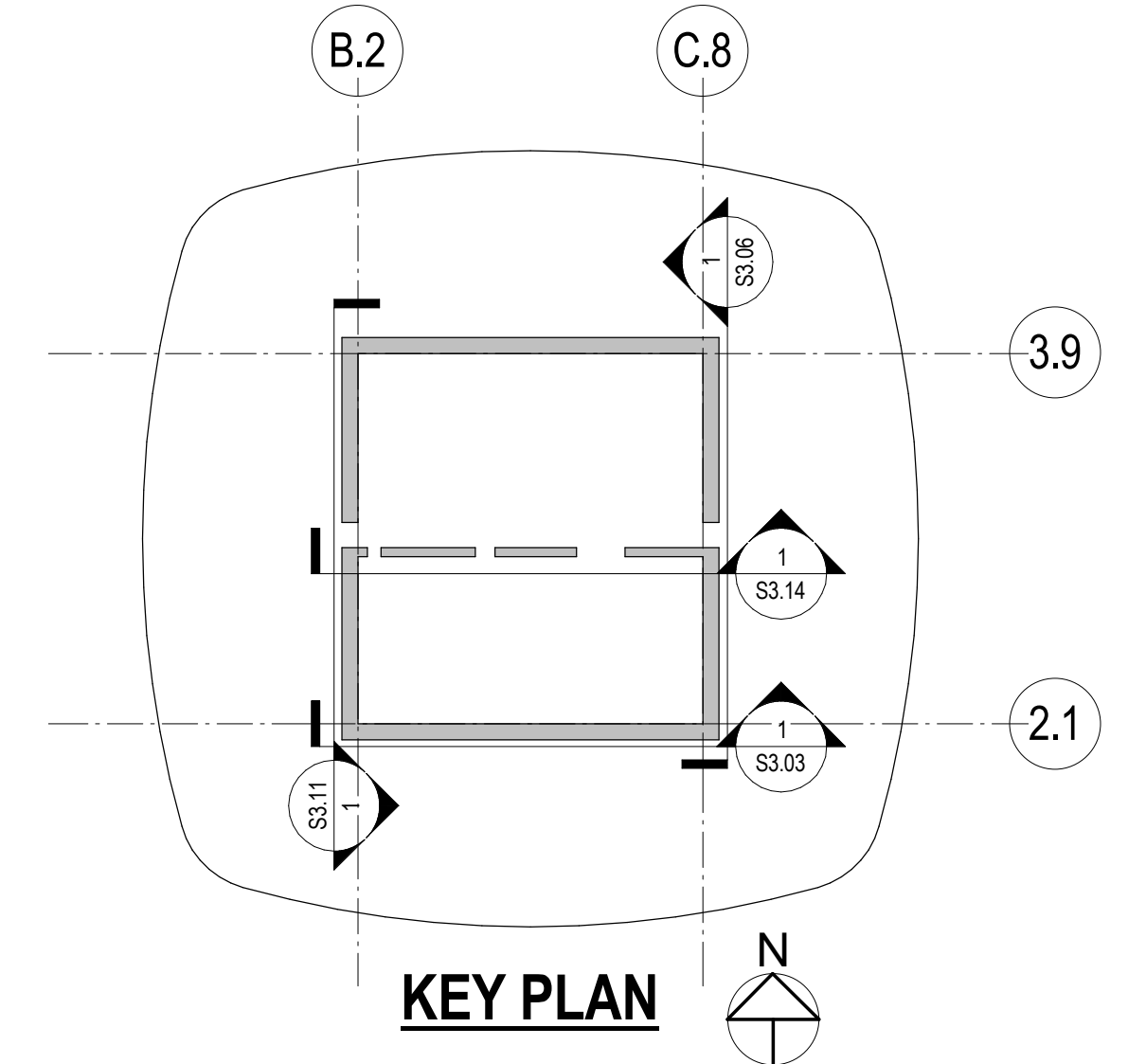


MARK	REINFORCING	REMARKS
V0	#6 @ 12" EF	
V1	#7 @ 12" EF	
V2	#8 @ 12" EF	
V3	#9 @ 12" EF	
V4	#10 @ 12" EF	
V5	#11 @ 12" EF	
V6	#6 @ 6" EF	
V7	#7 @ 6" EF	
V8	#8 @ 6" EF	
V9	#9 @ 6" EF	
V10	#10 @ 6" EF	
V11	#11 @ 6" EF	
V12	(3) #11 @ 12"	
V13	(3) #11 @ 6"	
V14	(3) #10 @ 12"	
V15	(3) #10 @ 6"	
V16	(3) #9 @ 6"	
V17	(4) #11 @ 6"	
V18	(4) #10 @ 6"	

MARK	REINFORCING	REMARKS
H1	#6 @ 12" EF	
H2	#7 @ 12" EF	
H3	#6 @ 6" EF	
H4	#7 @ 6" EF	
H5	#6 @ 6" (3) LAYERS	
H6	#7 @ 6" (3) LAYERS	
H7	#8 @ 6" (3) LAYERS	
H8	#9 @ 6" (3) LAYERS	
H9	#10 @ 6" (3) LAYERS	
H10	#11 @ 6" (3) LAYERS	
H11	(12) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H12	(14) #11	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H13	(10) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H14	(12) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H15	(14) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H16	(15) #14 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H17	(16) #14 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H18	(10) #18 GR75	ARRANGE IN (2) LAYERS, EXTD LI BEYOND OPNG
H19	(12) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H21	(15) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H22	(16) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H24	(18) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H25	(20) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H26	(21) #18 GR75	ARRANGE IN (3) LAYERS, EXTD LI BEYOND OPNG
H27	(24) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG
H28	(28) #18 GR75	ARRANGE IN (4) LAYERS, EXTD LI BEYOND OPNG

- NOTES:**
- CORE WALL CONCRETE STRENGTH:  
LEVELS P3 TO 54:  $f_c = 10,000$  PSI  
LEVELS 54 TO ROOF:  $f_c = 8,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE "TYPICAL SHEAR WALL DETAILS" FOR ADDITIONAL INFORMATION.
  - (1A) INDICATES A REINFORCED CONCRETE COUPLING BEAM MARK AND (41) INDICATES A STEEL COUPLING BEAM MARK. SEE COUPLING BEAM DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. CONCRETE STRENGTH OF COUPLING BEAM SHALL MATCH STRENGTH OF ADJACENT WALLS.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE "SHEAR WALL SECTIONS."
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb UNLESS NOTED OTHERWISE.
  - SHEAR WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.
  - WHERE NO COUPLING BEAM MARK IS SHOWN BETWEEN OPENINGS, PROVIDE VERTICAL REINFORCEMENT:
- | WALL THICKNESS | VERTICAL REINFORCEMENT |
|----------------|------------------------|
| 48"            | #7 @ 6" EF             |
| 42"            | #7 @ 6" EF             |
| 36"            | #7 @ 12" EF            |
| 30"            | #7 @ 12" EF            |
| 24"            | #6 @ 12" EF            |

- FOR H11-H28, EXTEND LI PER "SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE". WHERE BARS CANNOT BE EXTENDED LI, PROVIDE A STANDARD HOOK AT WALL END.
- DOWELS TO MATCH VERTICAL BARS AND EXTEND TO THE BOTTOM OF THE MAT WITH STANDARD HOOK.
- FOR HORIZONTAL BARS ARRANGED IN LAYERS: CLEAR SPACING BETWEEN LAYERS TO BE  $db$  AND NOT LESS THAN 1 INCH.



1 SHEAR WALL ELEVATION - INTERIOR  
1/8" = 1'-0"

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	DRAWING NUMBER
<b>SHEAR WALL ELEVATIONS</b>	<b>S3.14</b>



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

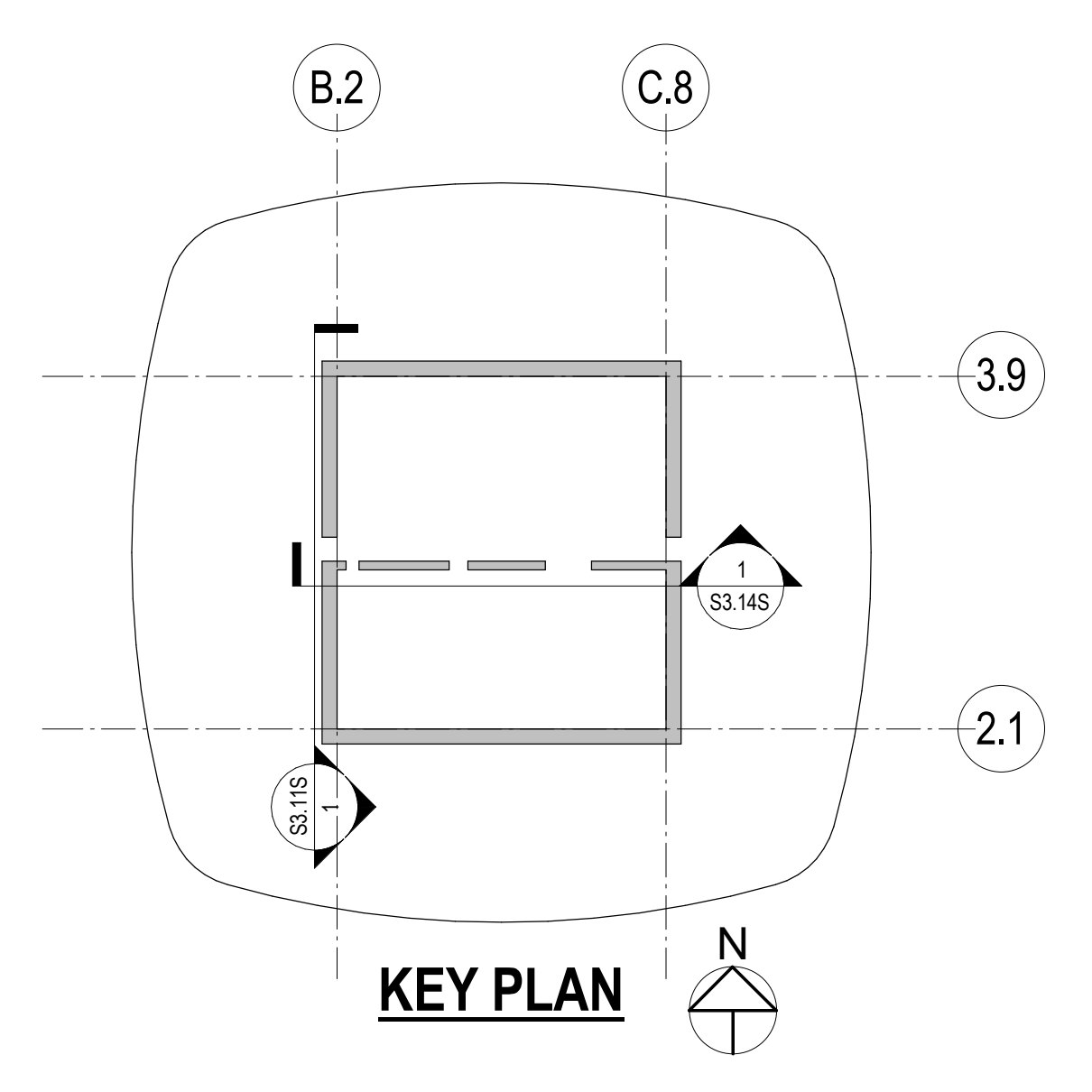
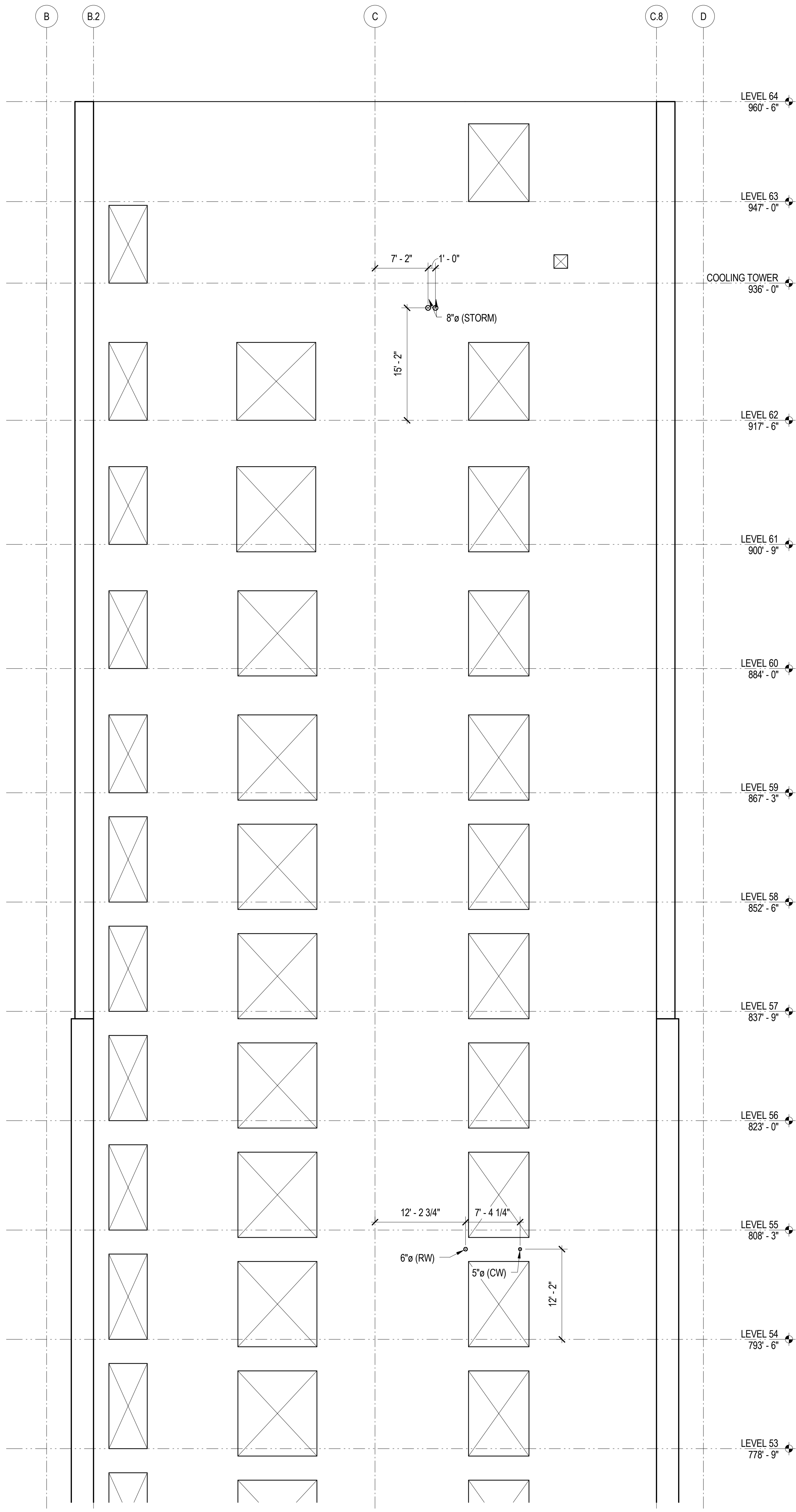
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



1 SHEAR WALL ELEVATION - INTERIOR - SLEEVE PENETRATIONS  
1/8" = 1'-0"

4/28/2014 7:07:33 PM C:\Revit\Transbay\Tw\_MS2013\_116.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

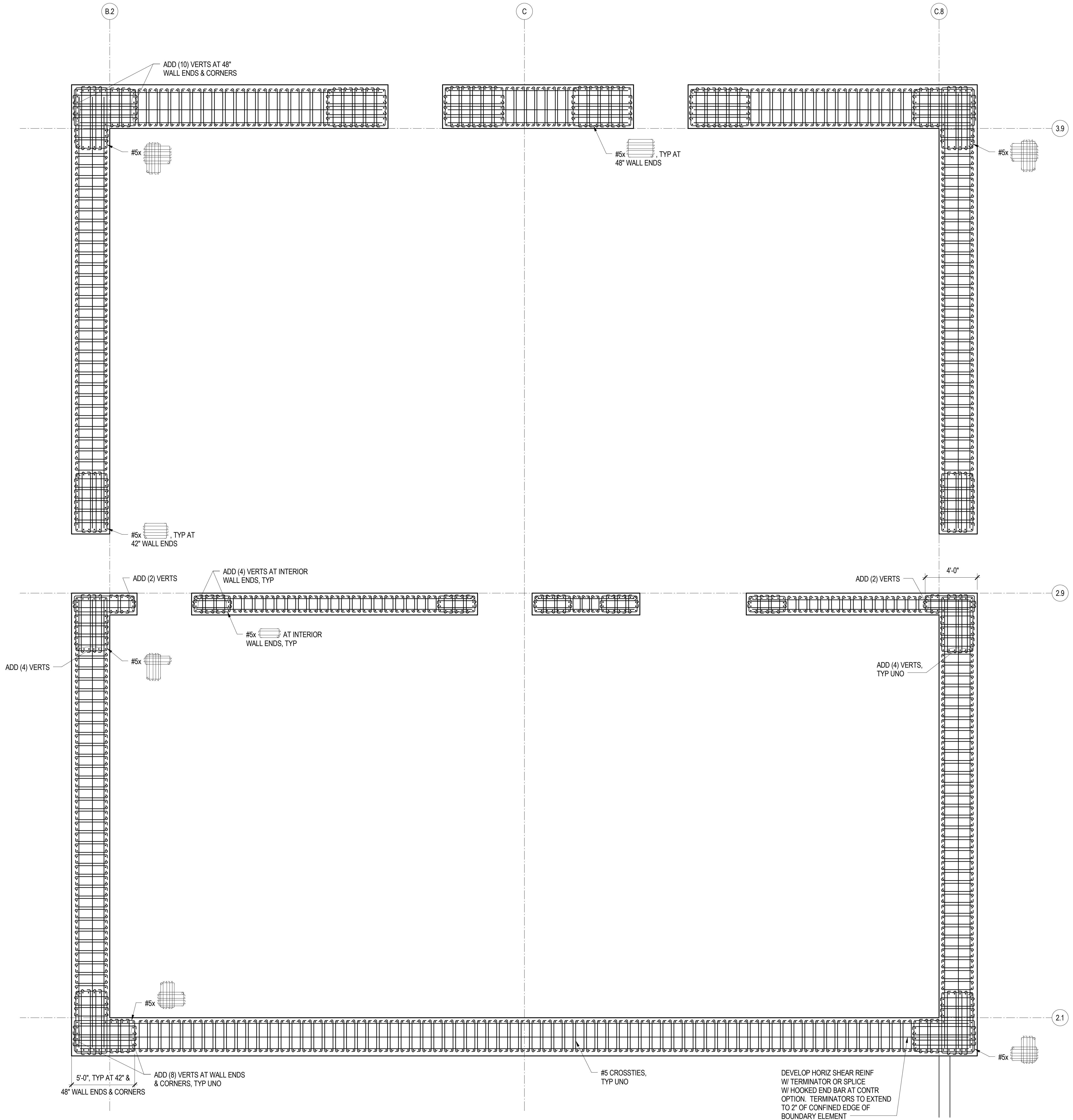
CAD FILENAME	DRAWING TITLE	PROJECT NO.	DRAWING NUMBER
	SHEAR WALL ELEVATIONS - SLEEVE PENETRATIONS	08044	S3.14S



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.21</b>



**NOTES:**  
1. ALL CROSSIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVEL P3  
1/4" = 1'-0"

4/28/2014 7:07:35 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

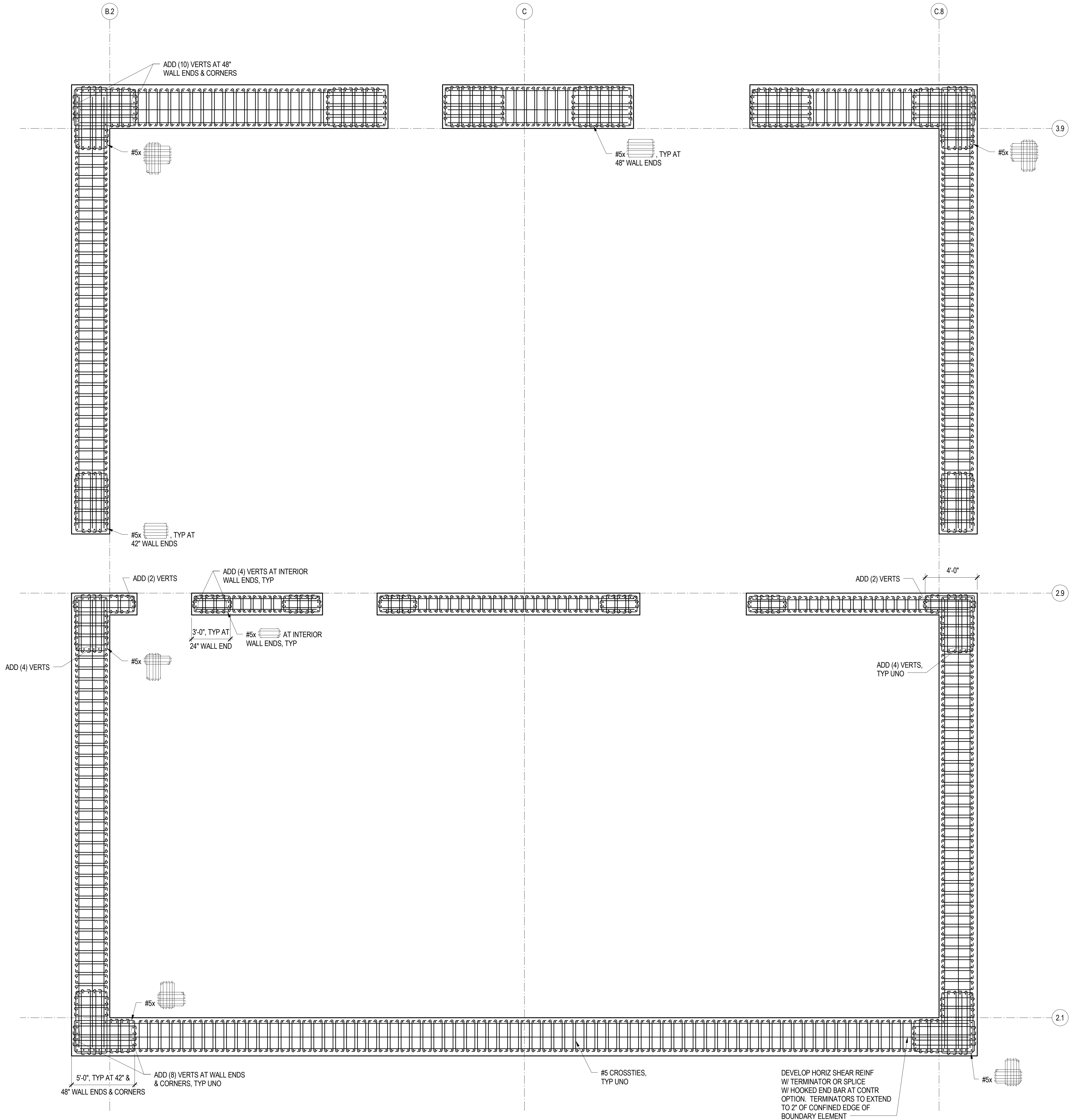
NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO.	DRAWING NUMBER
08044	S3.22



**NOTES:**  
1. ALL CROSSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:38 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

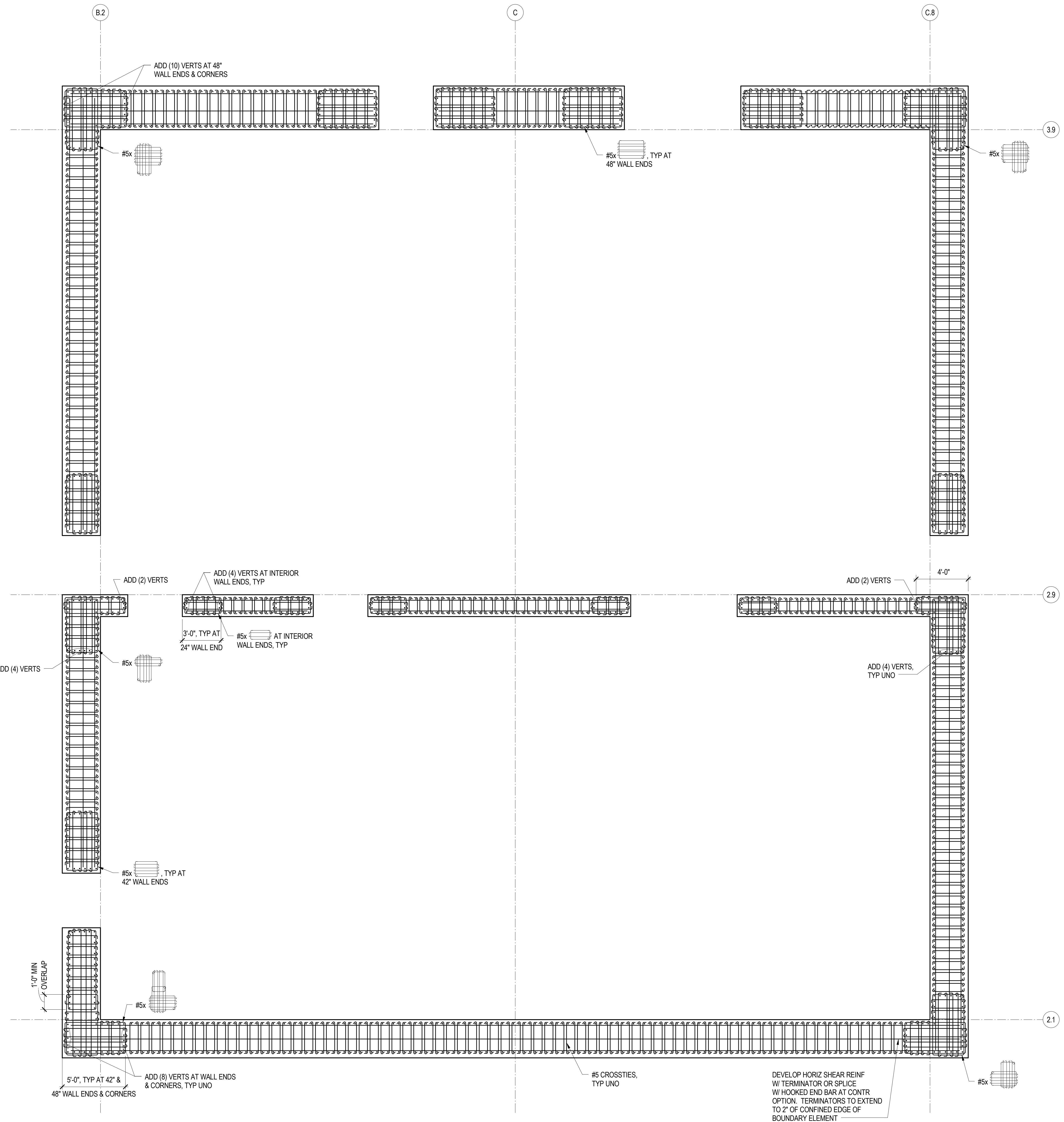
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



- NOTES:
- ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVEL P1  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE

**SHEAR WALL SECTIONS**

NO.	PROJECT NO.	DRAWING NUMBER
08044		<b>S3.23</b>

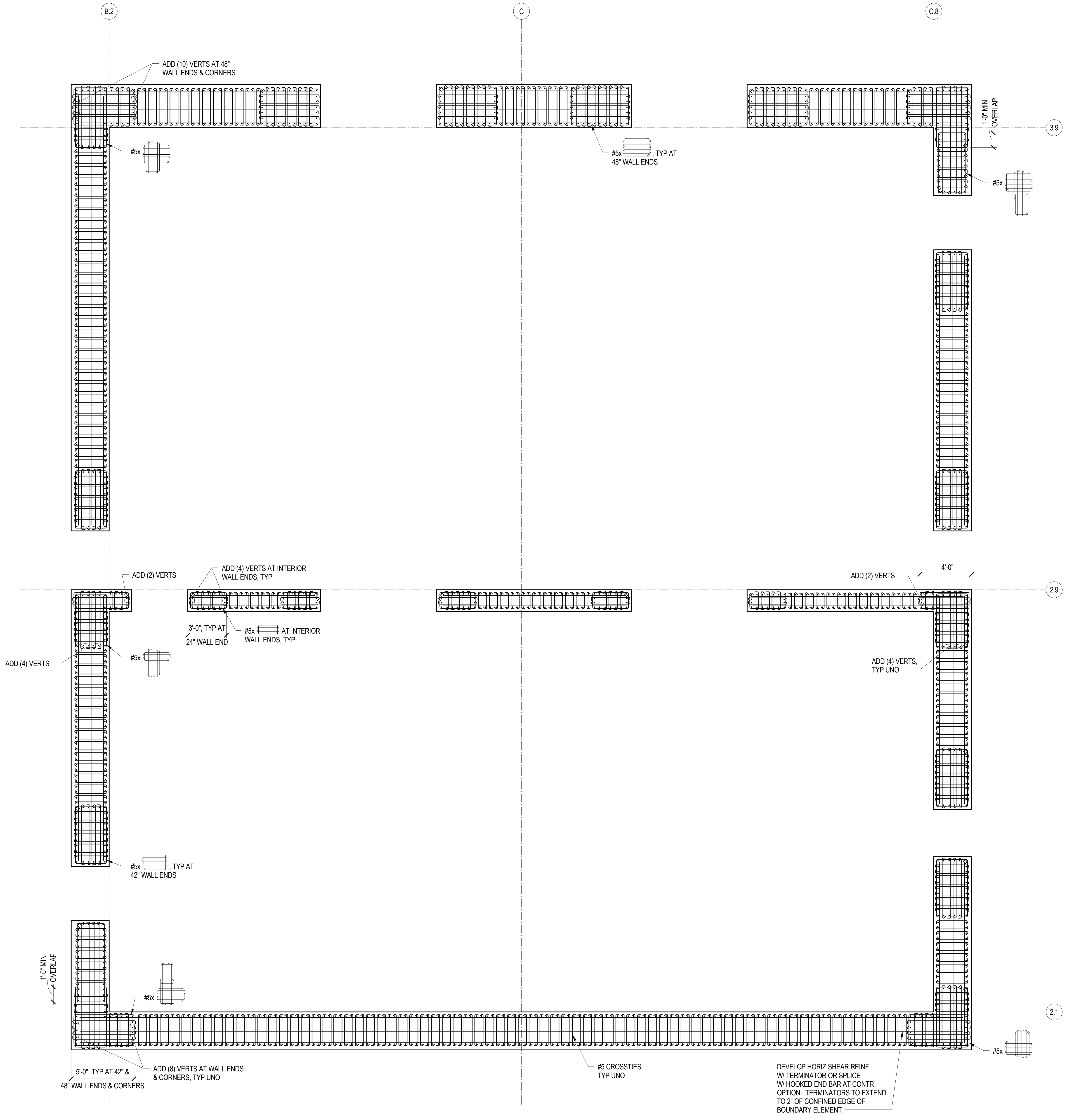




- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.24</b>



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

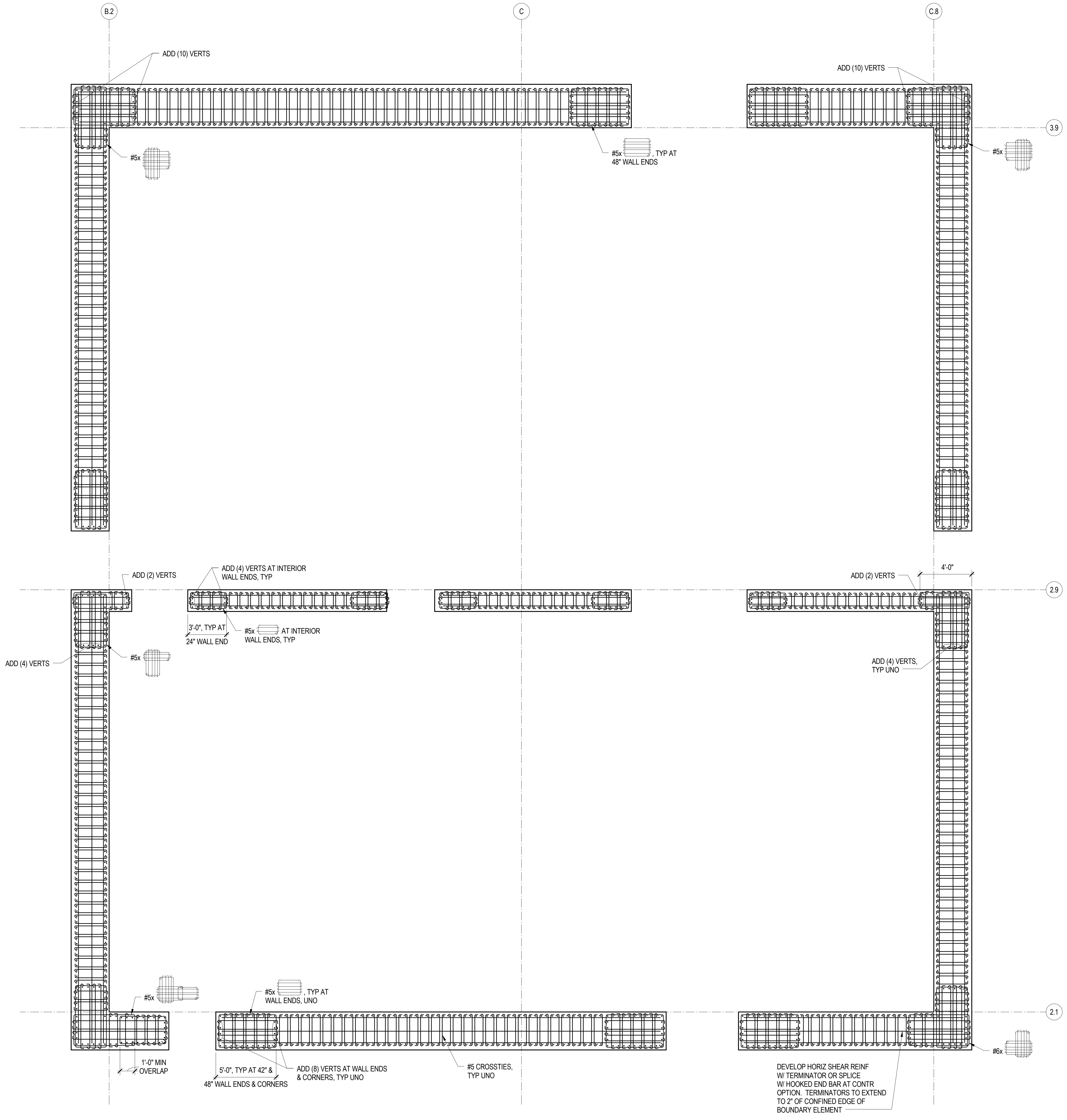
4/28/2014 7:07:44 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt  
**16** SHEAR WALL SECTION AT LEVEL 1  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.25



NOTES:  
1. ALL CROSSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:46 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt  
**16** SHEAR WALL SECTION AT LEVEL 2  
1/4" = 1'-0"



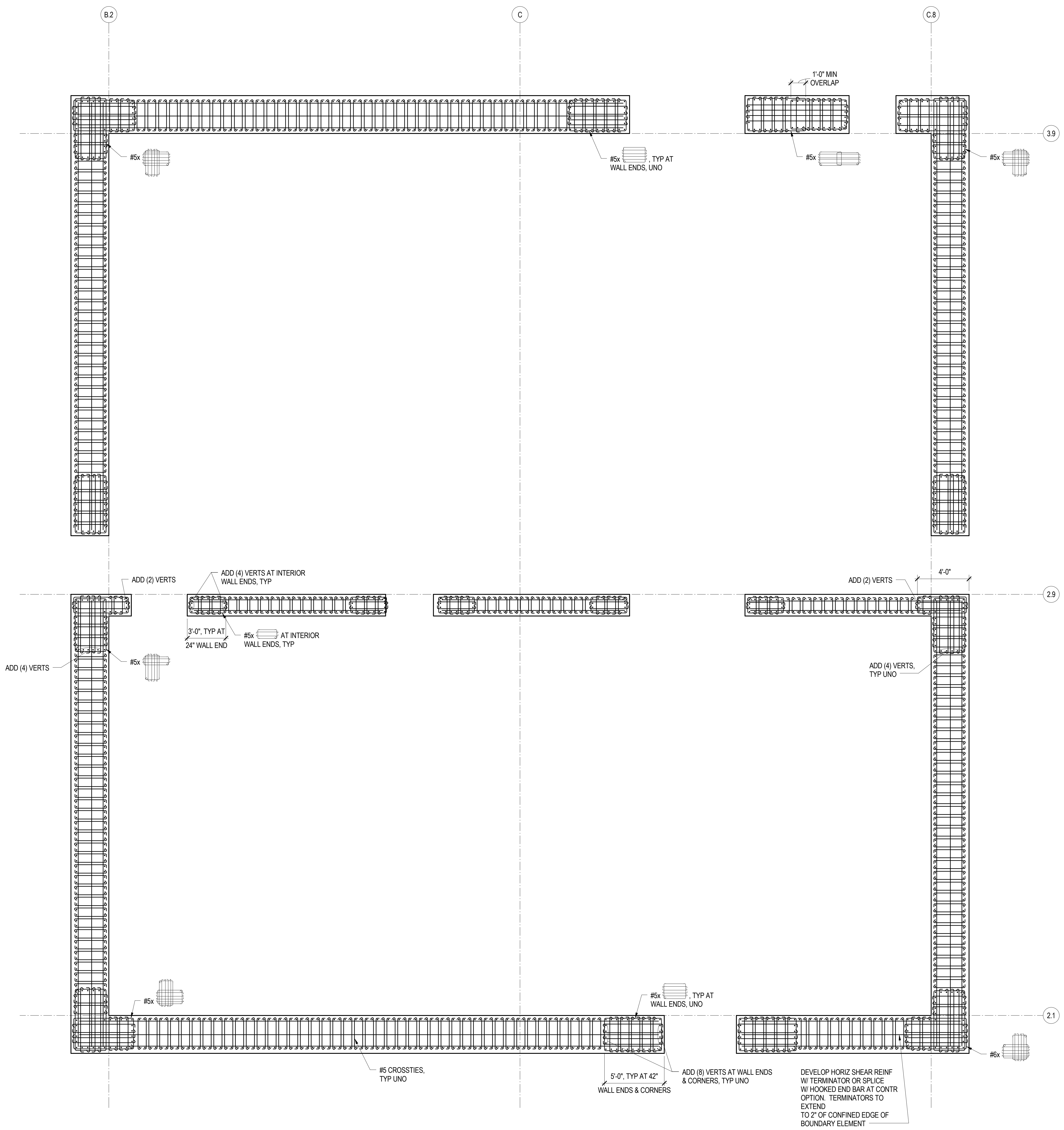
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE  
**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.26



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:49 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt  
**16** SHEAR WALL SECTION AT LEVEL 3  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

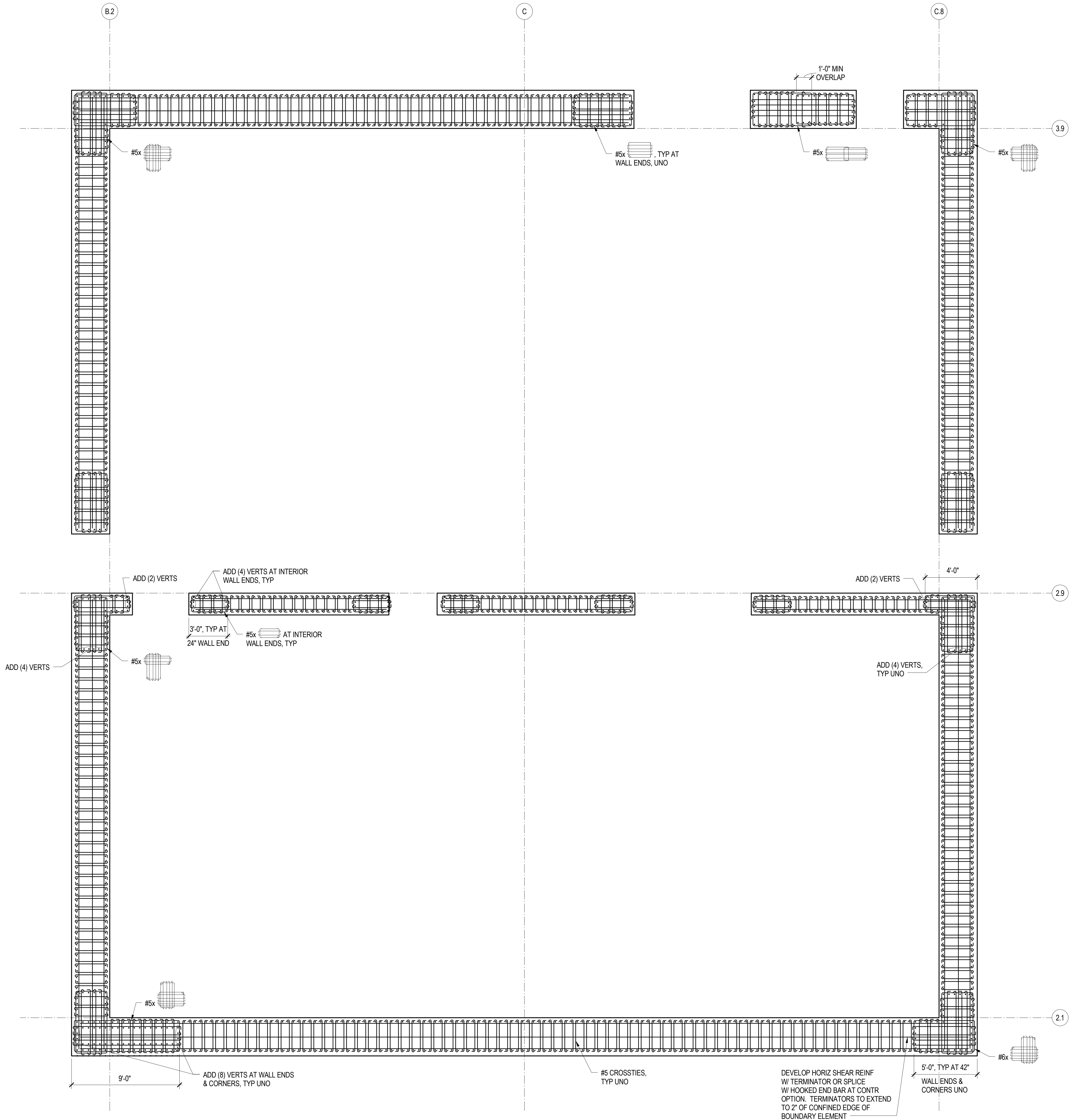
CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**

NO. PROJECT NO. DRAWING NUMBER

08044 S3.27



NOTES:  
1. ALL CROSSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

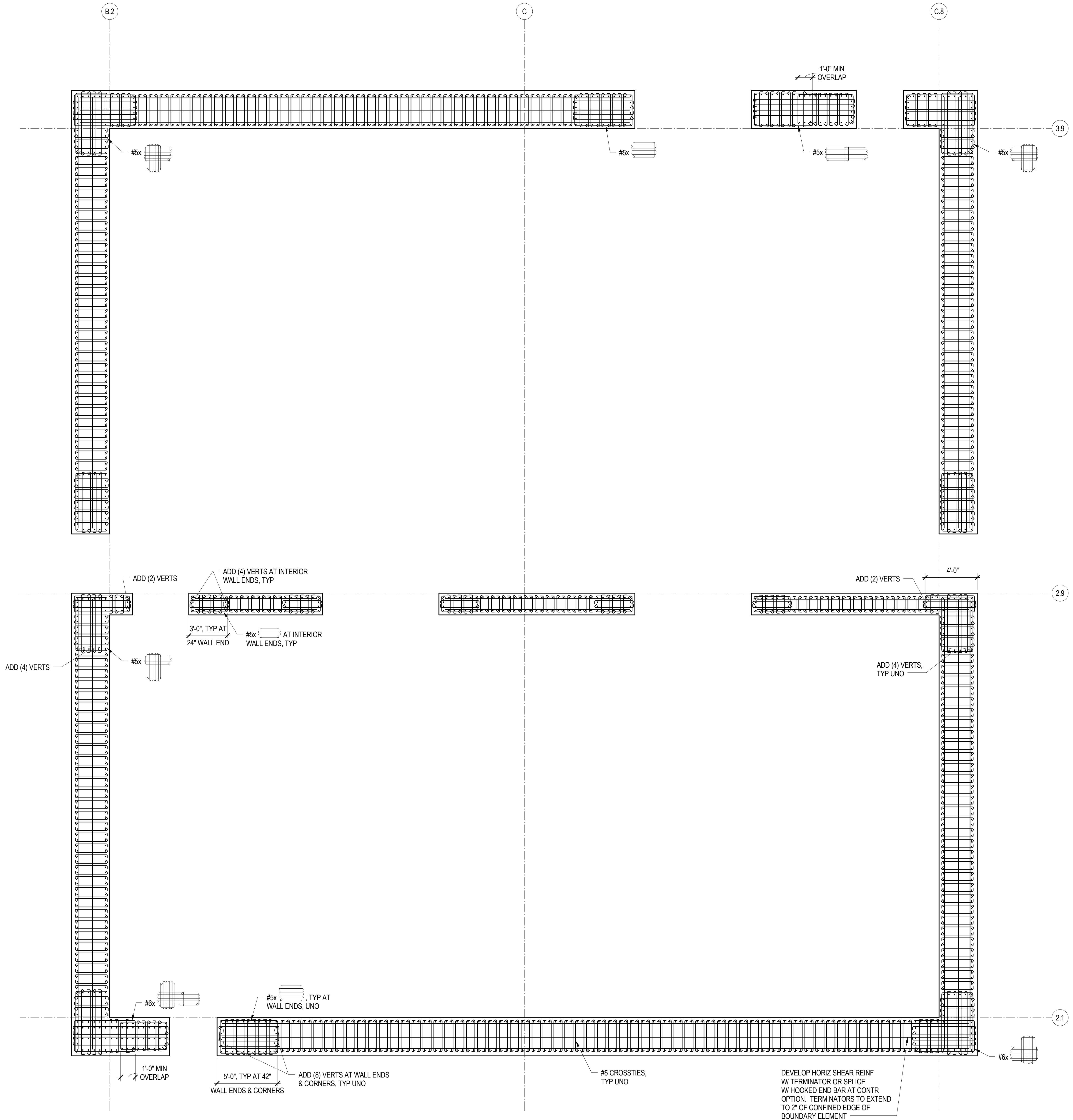
CAD FILENAME

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044

DRAWING NUMBER **S3.28**



**NOTES:**  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

**16** SHEAR WALL SECTION AT LEVEL 5  
1/4" = 1'-0"

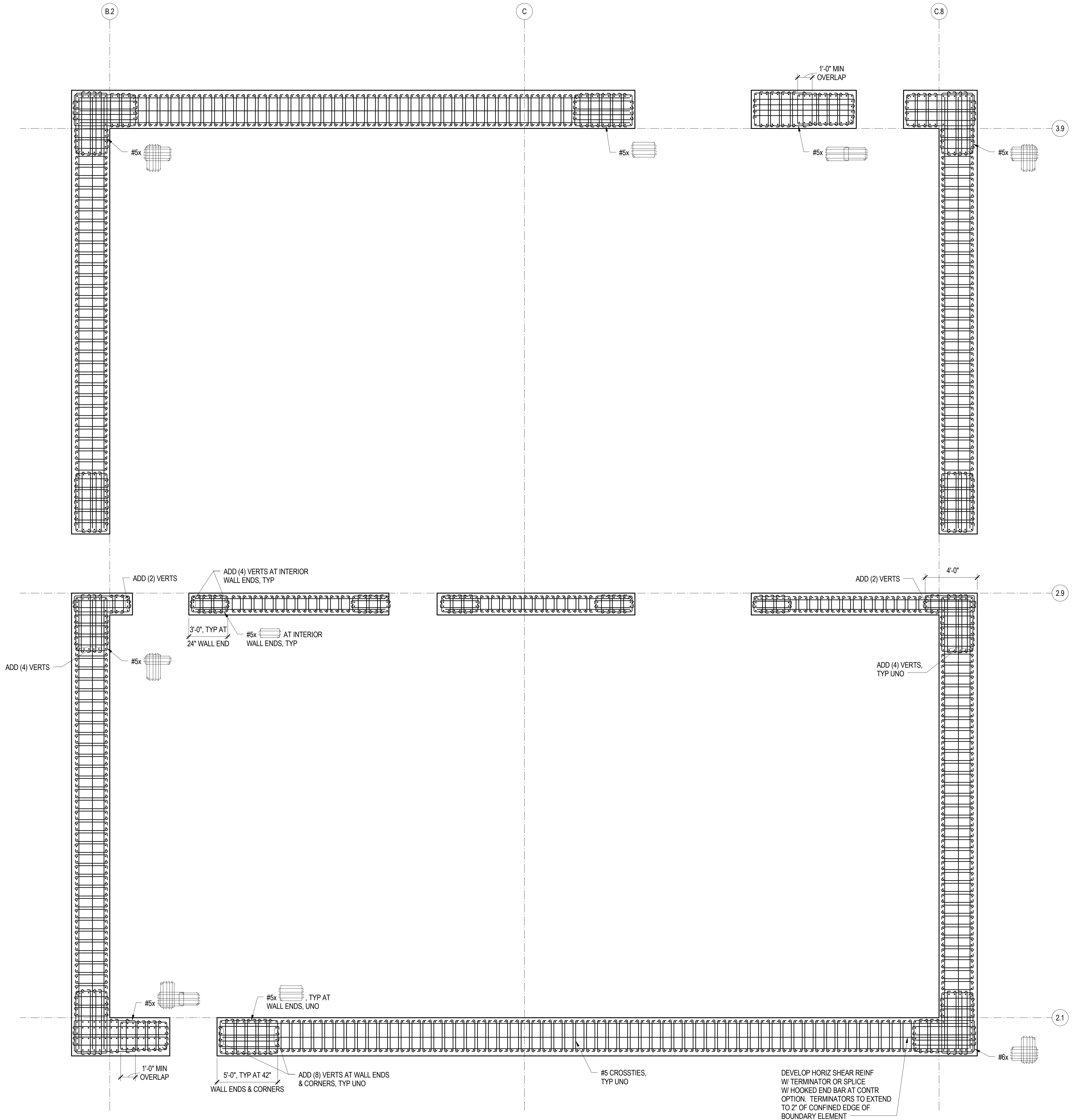
4/28/2014 7:07:54 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S3.29</b>



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

4/28/2014 7:07:57 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

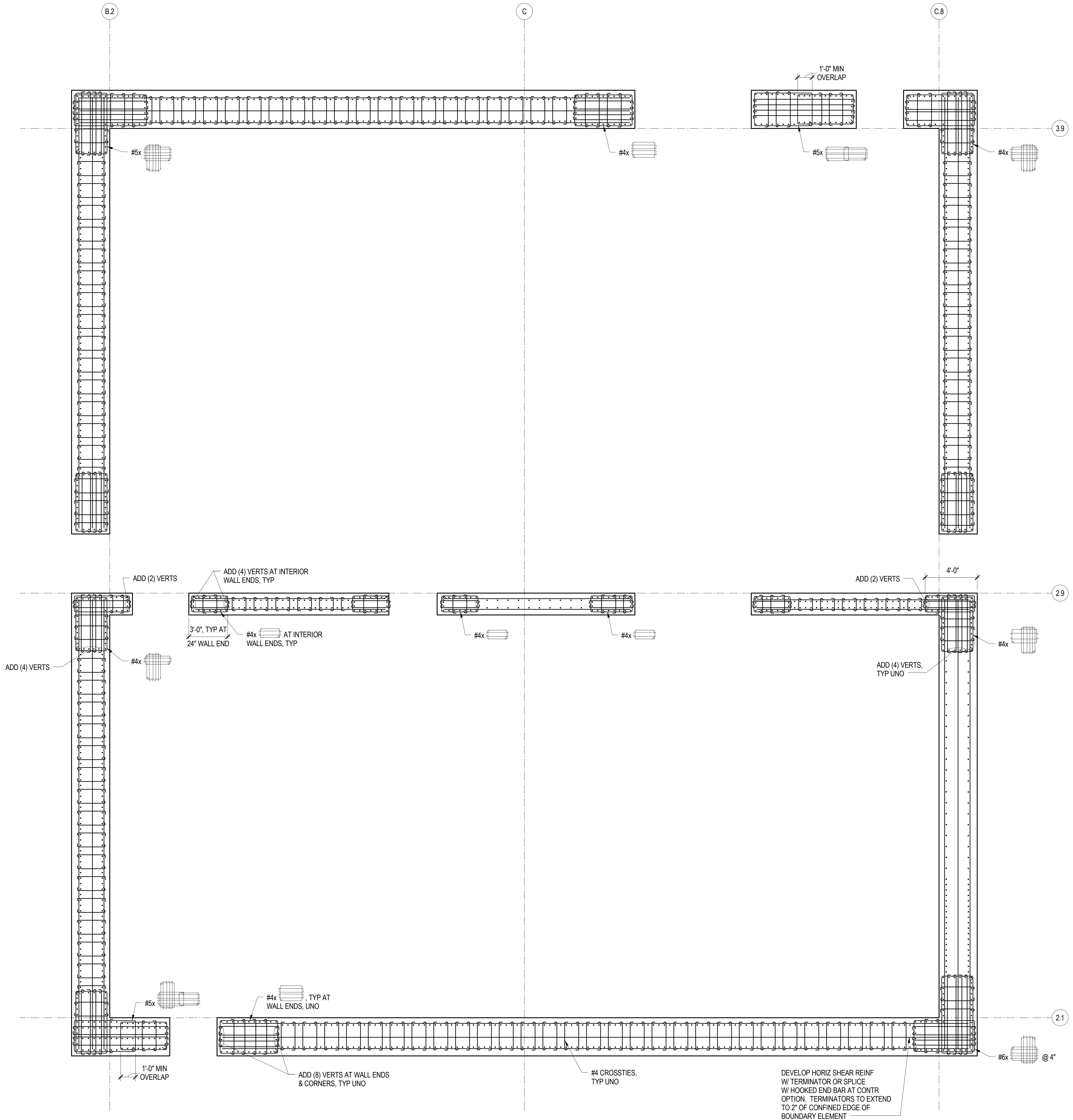
16 SHEAR WALL SECTION AT LEVEL 6  
1/4" = 1'-0"



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	<b>S3.30</b>



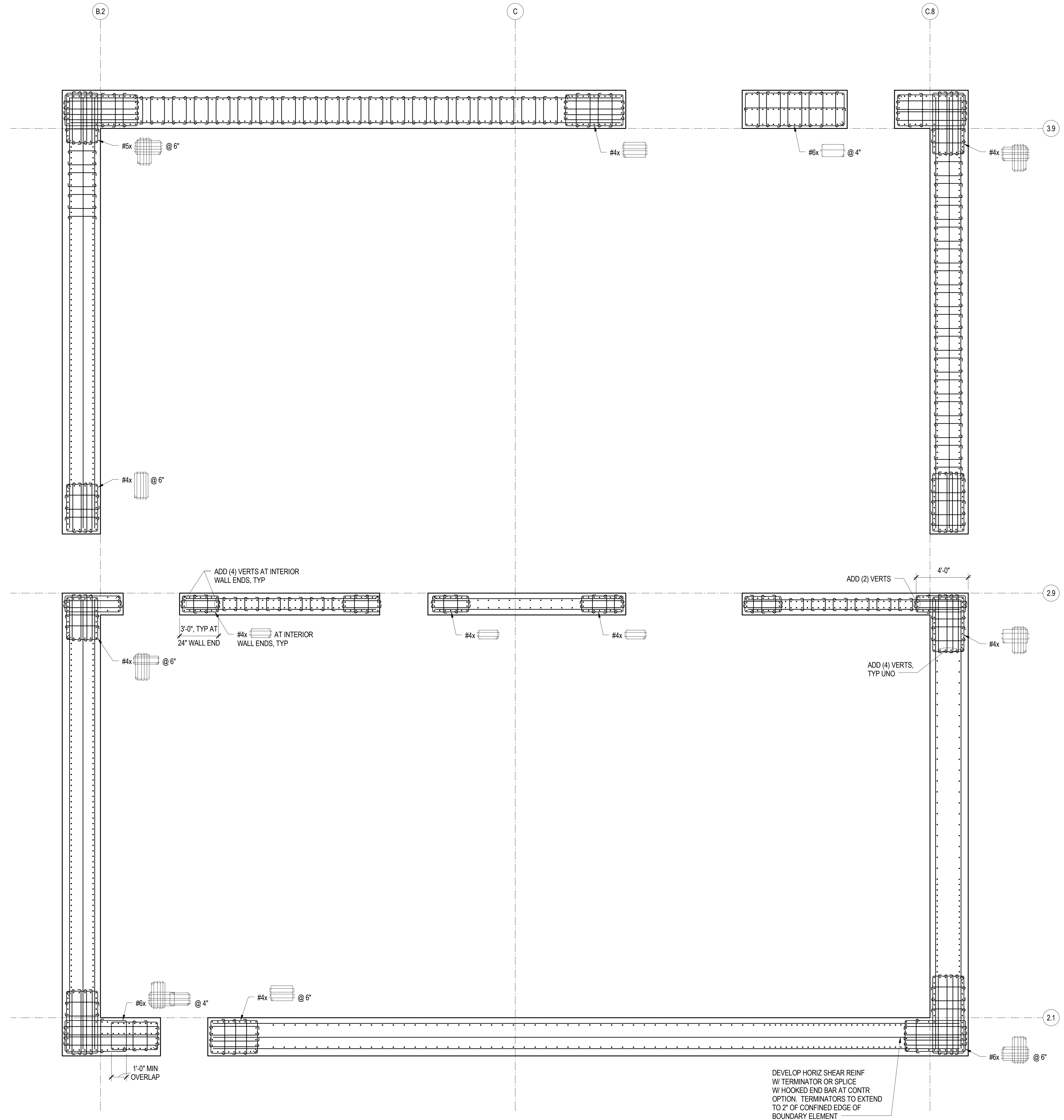
**NOTES:**  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

**16** SHEAR WALL SECTION AT LEVELS 7-10  
1/4" = 1'-0"

4/29/2014 7:08:00 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 11-14  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.31

4/29/2014 7:08:03 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

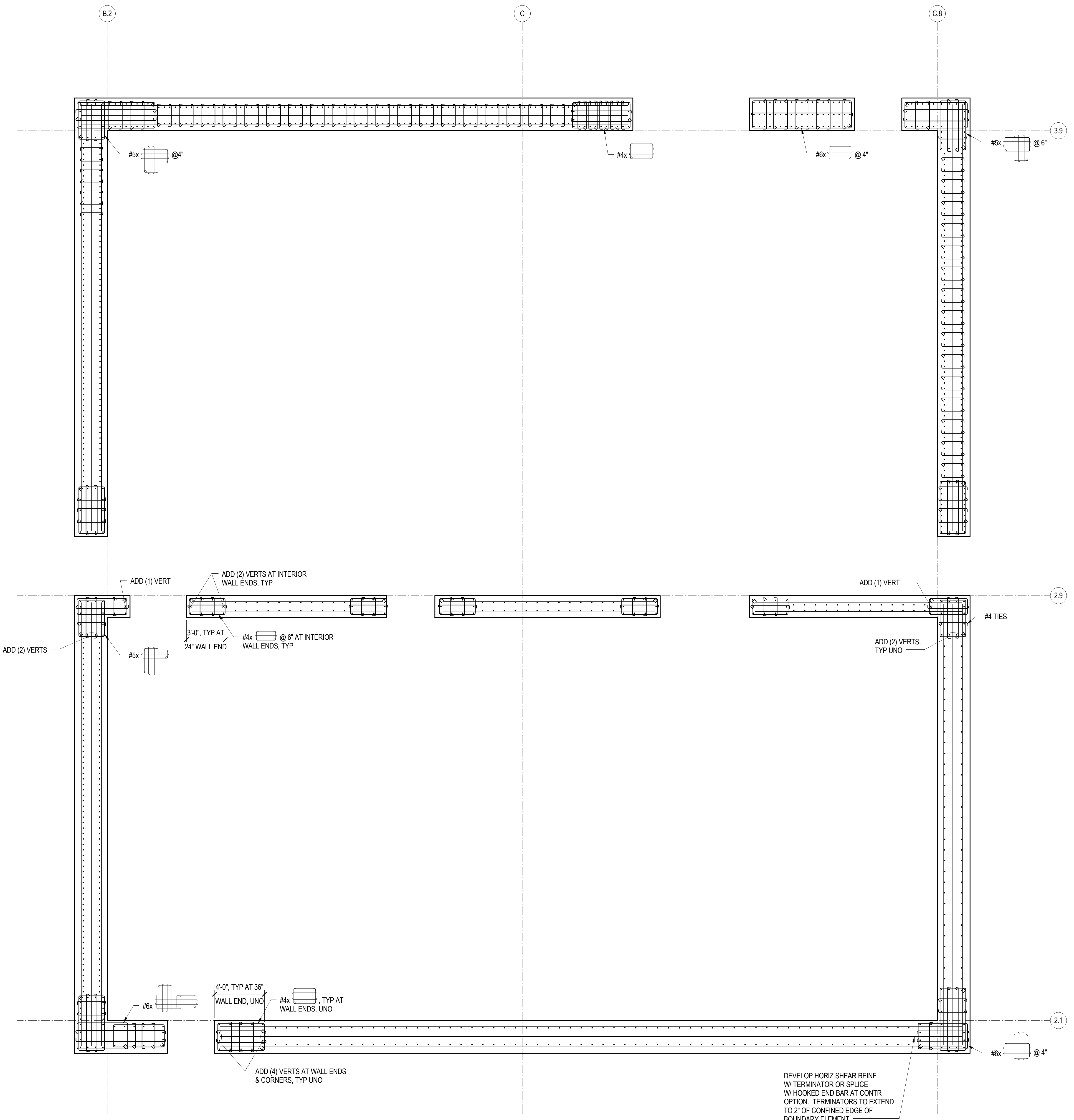
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. **08044** DRAWING NUMBER **S3.32**



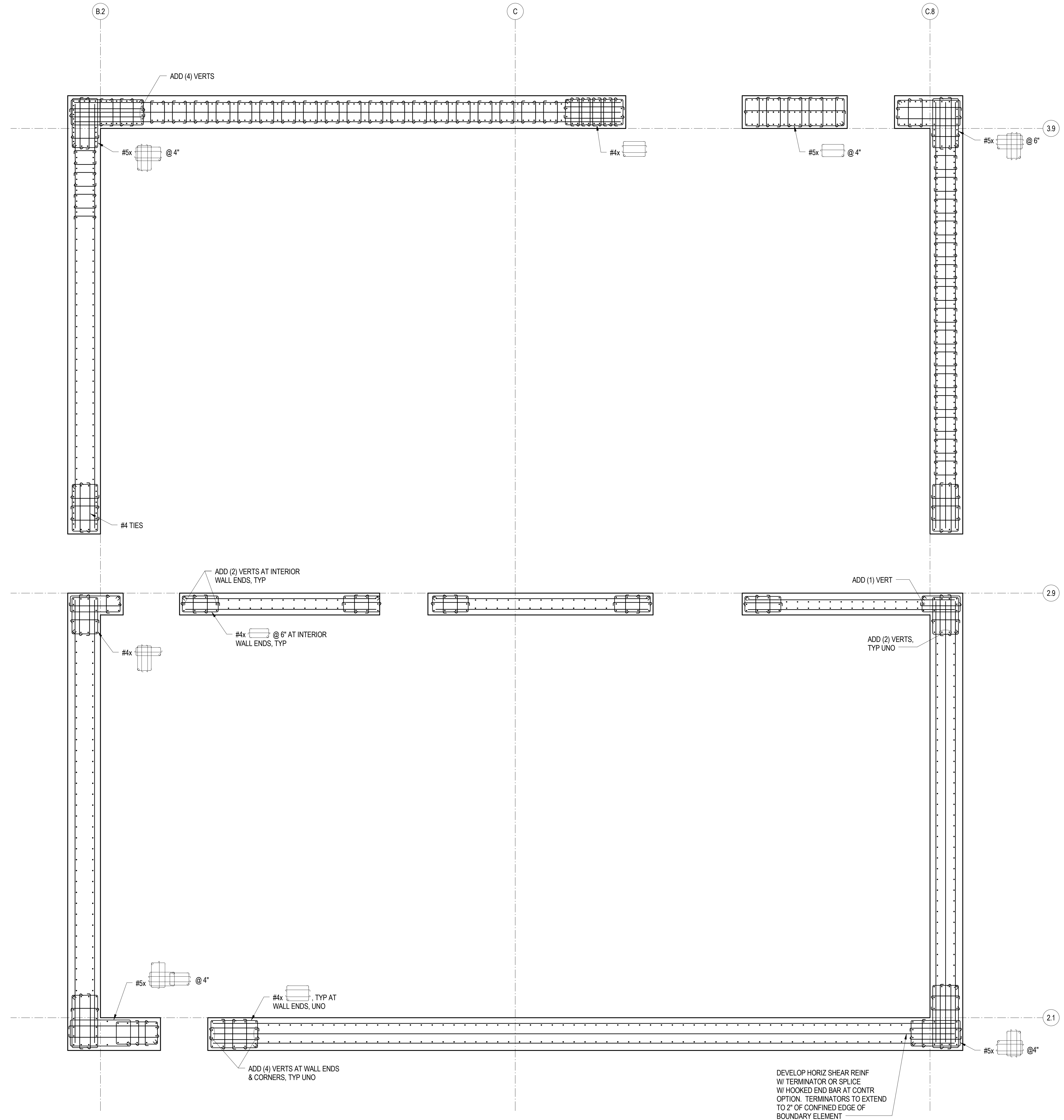
**NOTES:**  
1. ALL CROSSTIES AND HOOPS TO HAVE F<sub>y</sub>=60 KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

**16** SHEAR WALL SECTION AT LEVELS 15-22  
1/4" = 1'-0"

4/28/2014 7:08:05 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 23-30  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

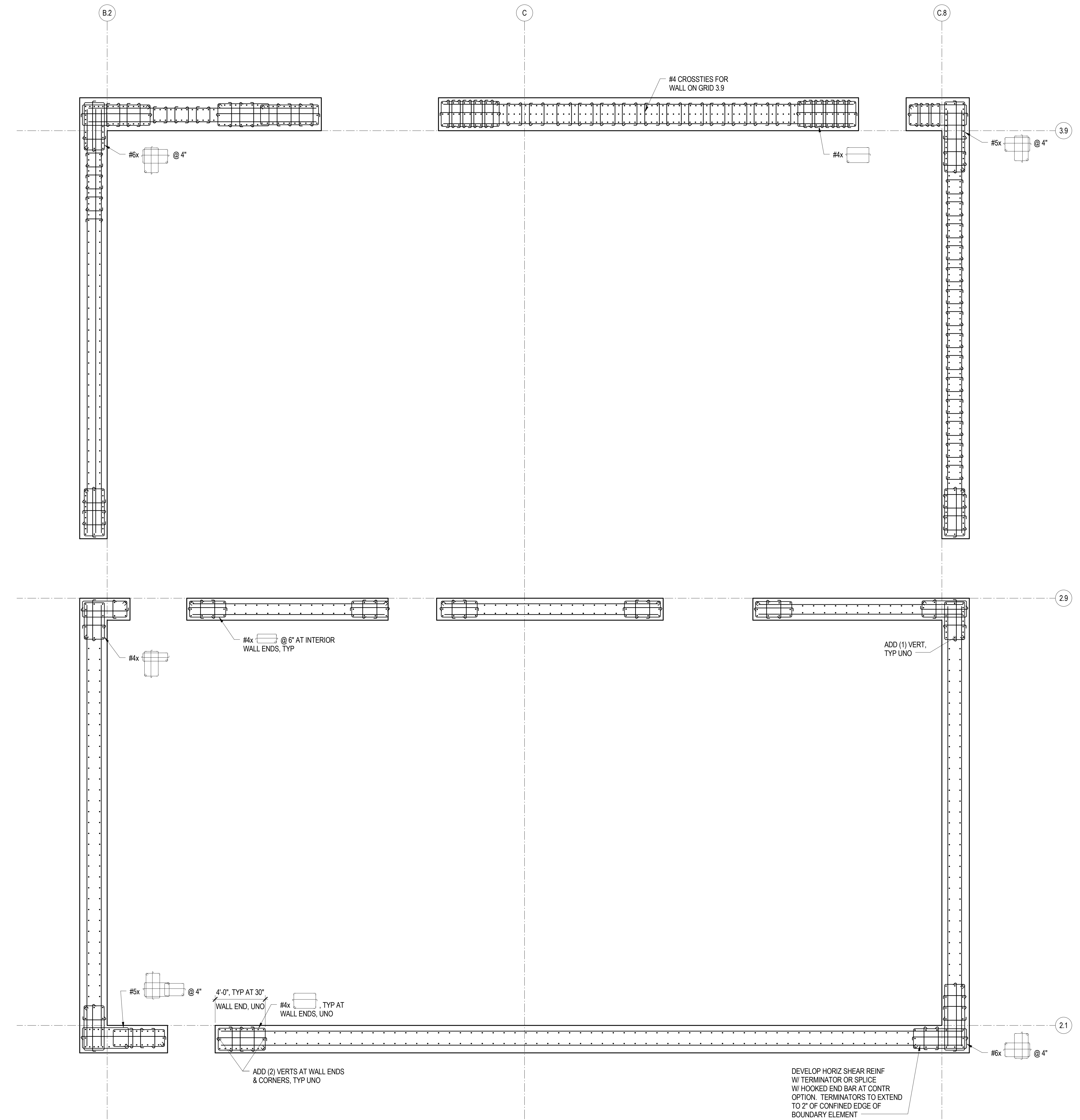
DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.33

4/28/2014 7:08:08 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 31-34  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

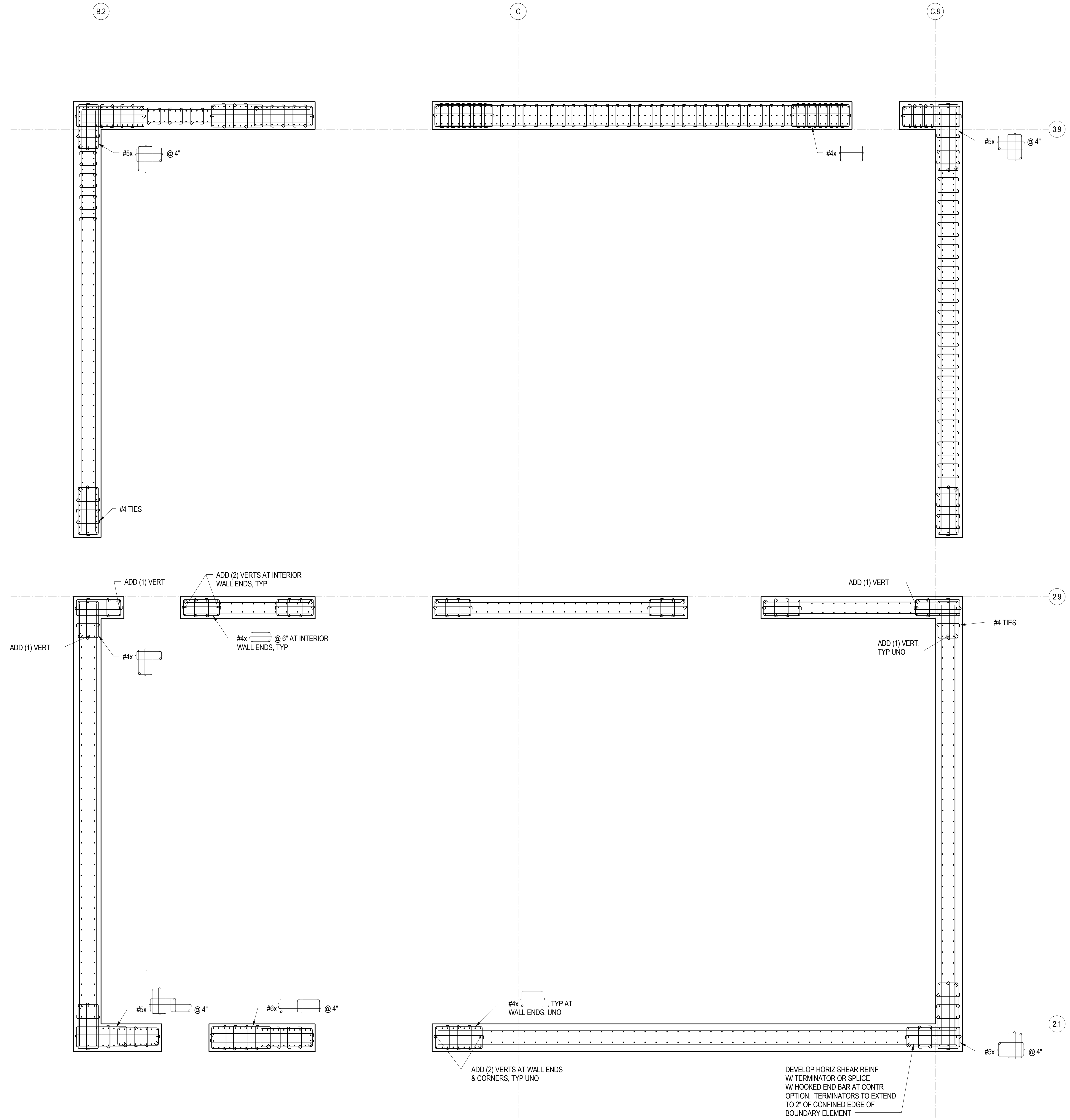
DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.34

4/28/2014 7:08:10 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y=60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVEL 35  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

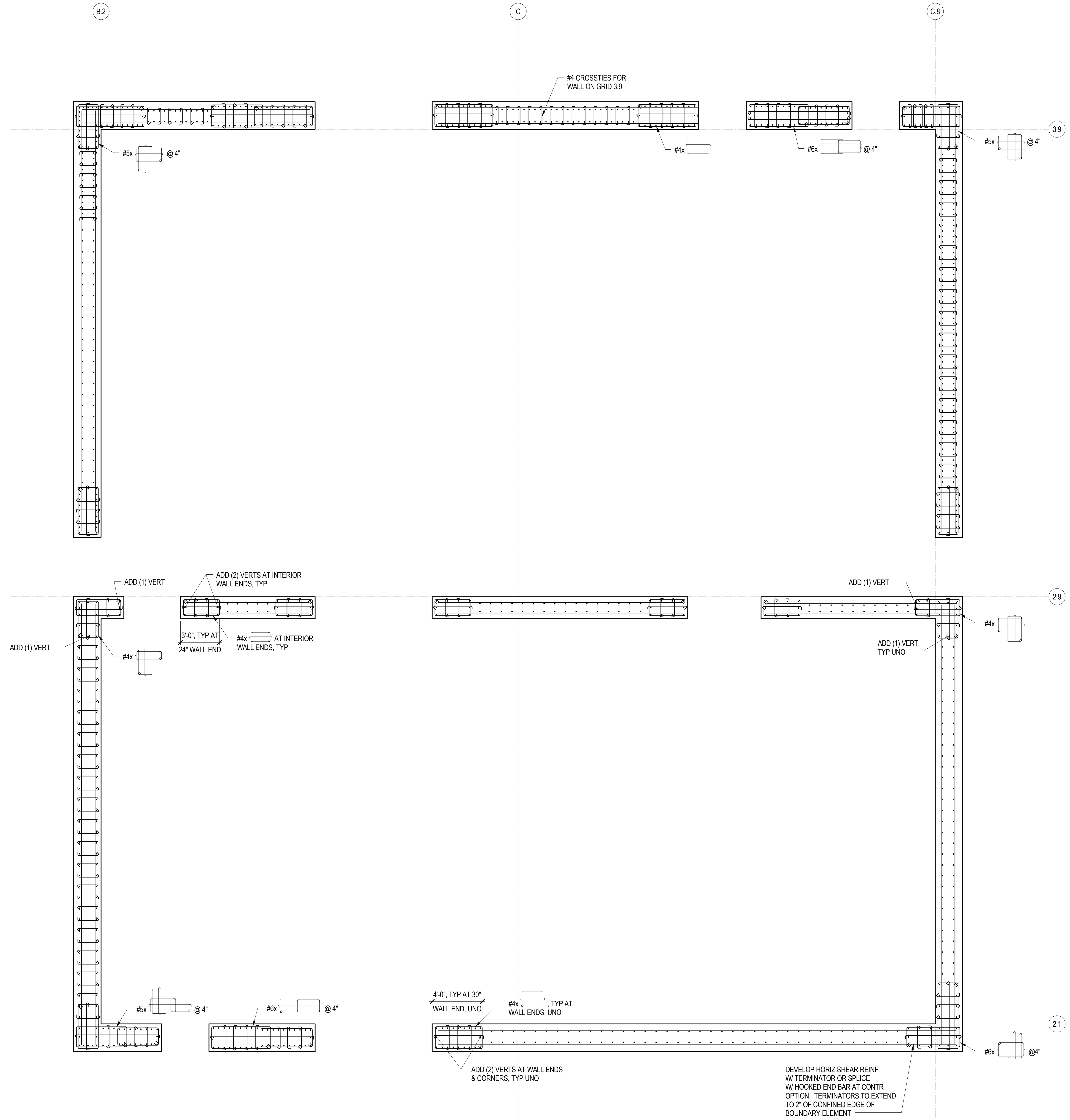
DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S3.35**

4/28/2014 7:08:13 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

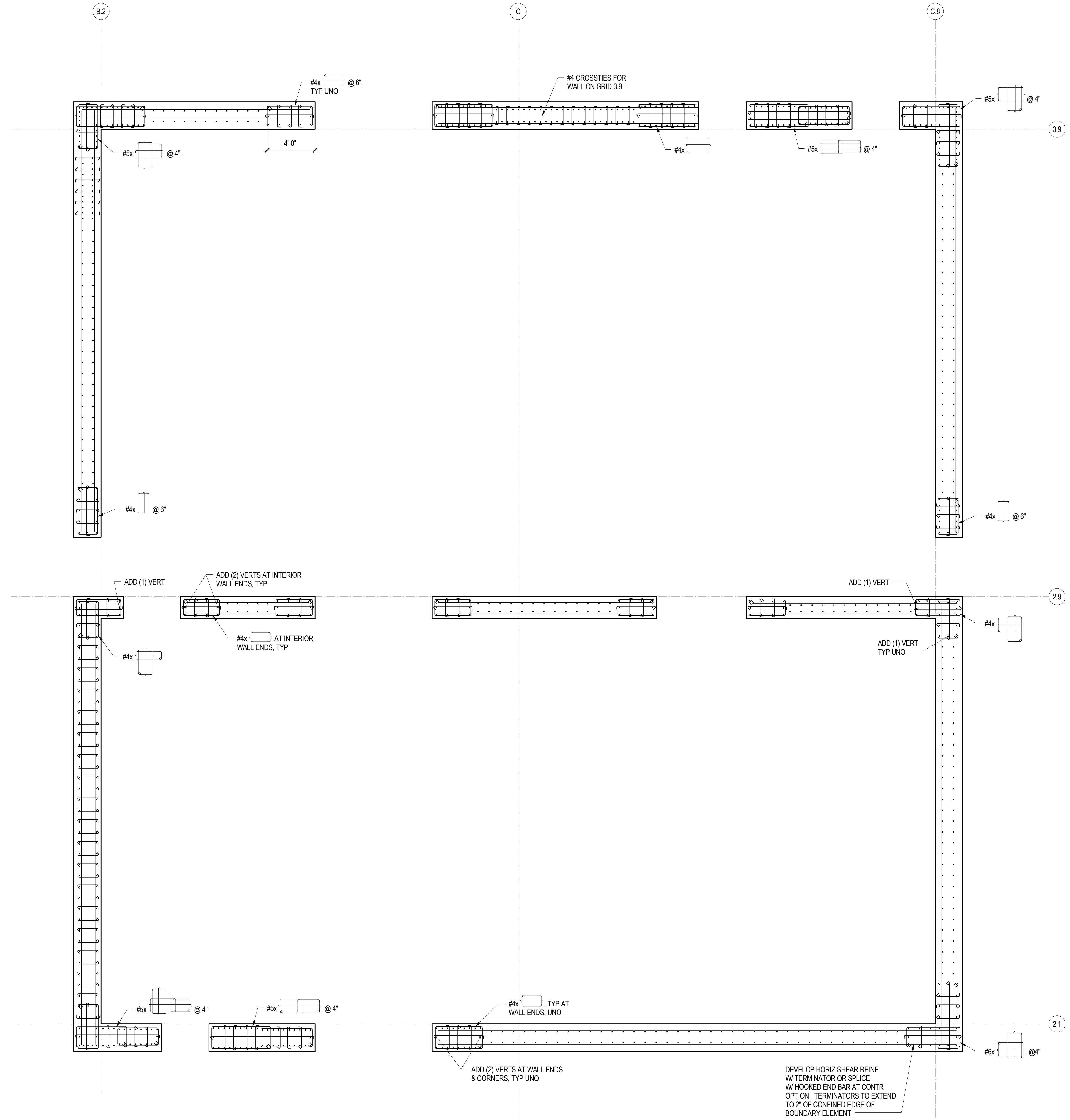


NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSS-TIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 39-44  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044

DRAWING NUMBER **S3.37**

4/29/2014 7:08:18 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

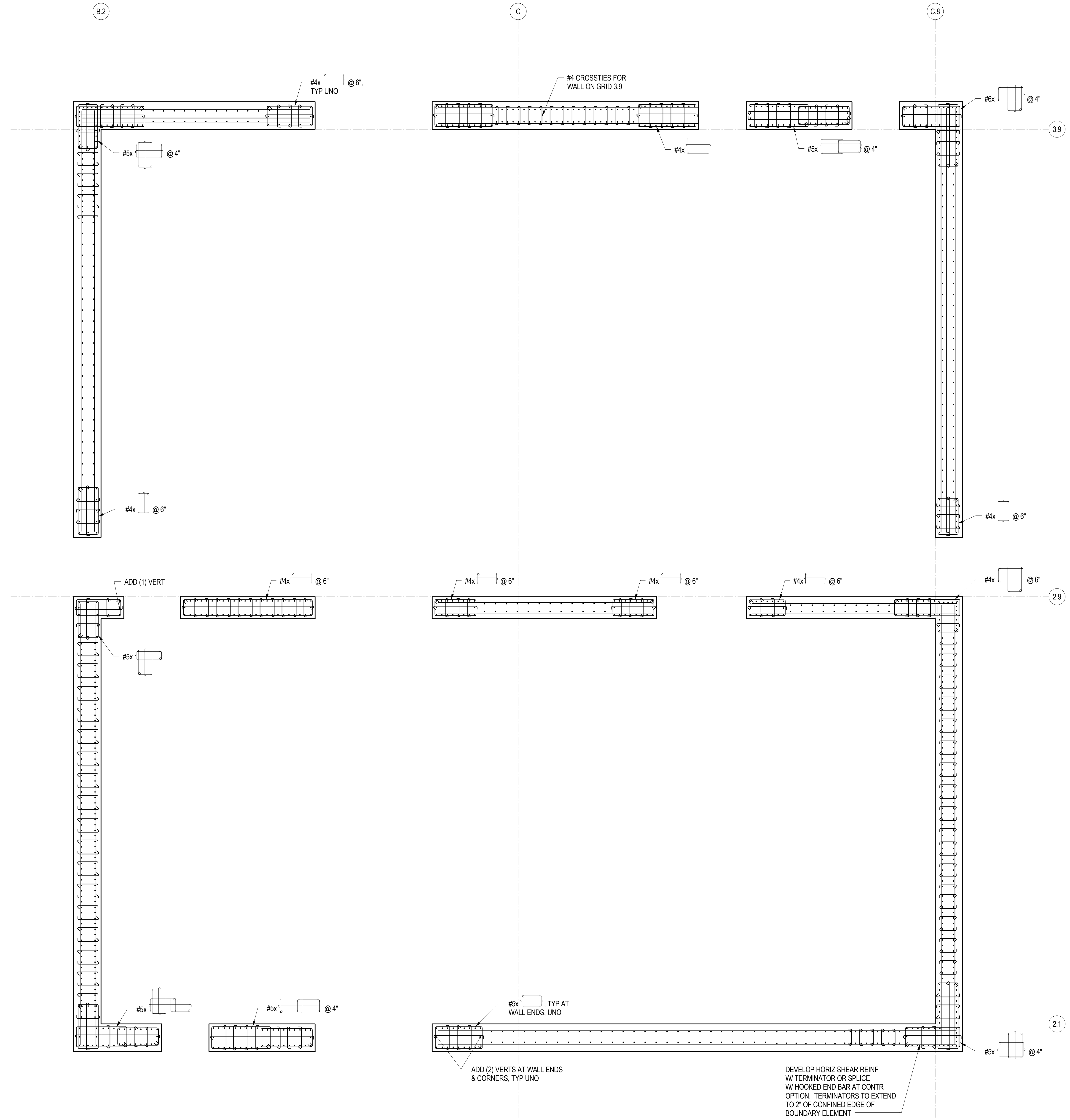
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 45-46  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S3.38**

4/28/2014 7:08:21 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

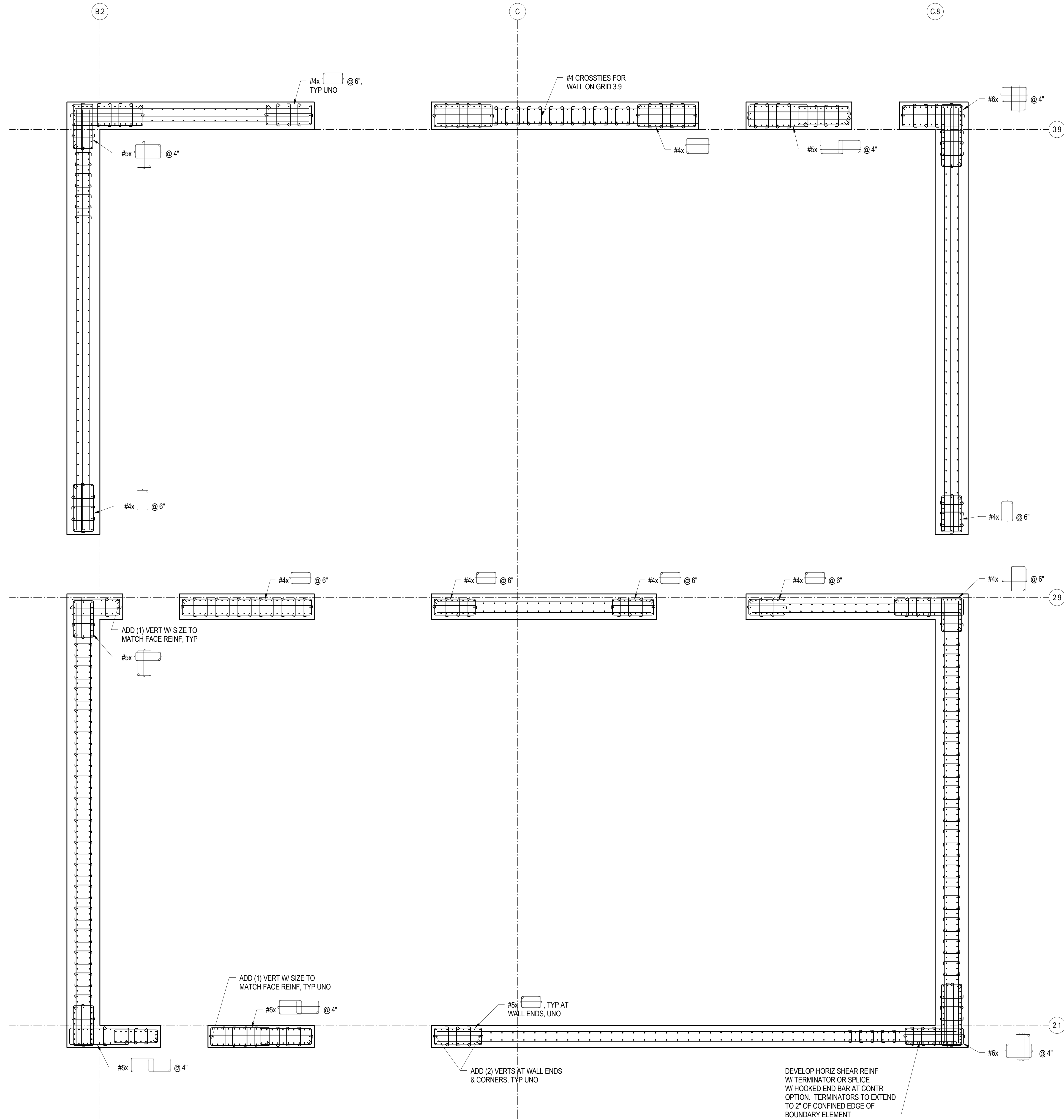
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSS-TIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING UNLESS NOTED OTHERWISE.

16 SHEAR WALL SECTION AT LEVELS 47-48  
1/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

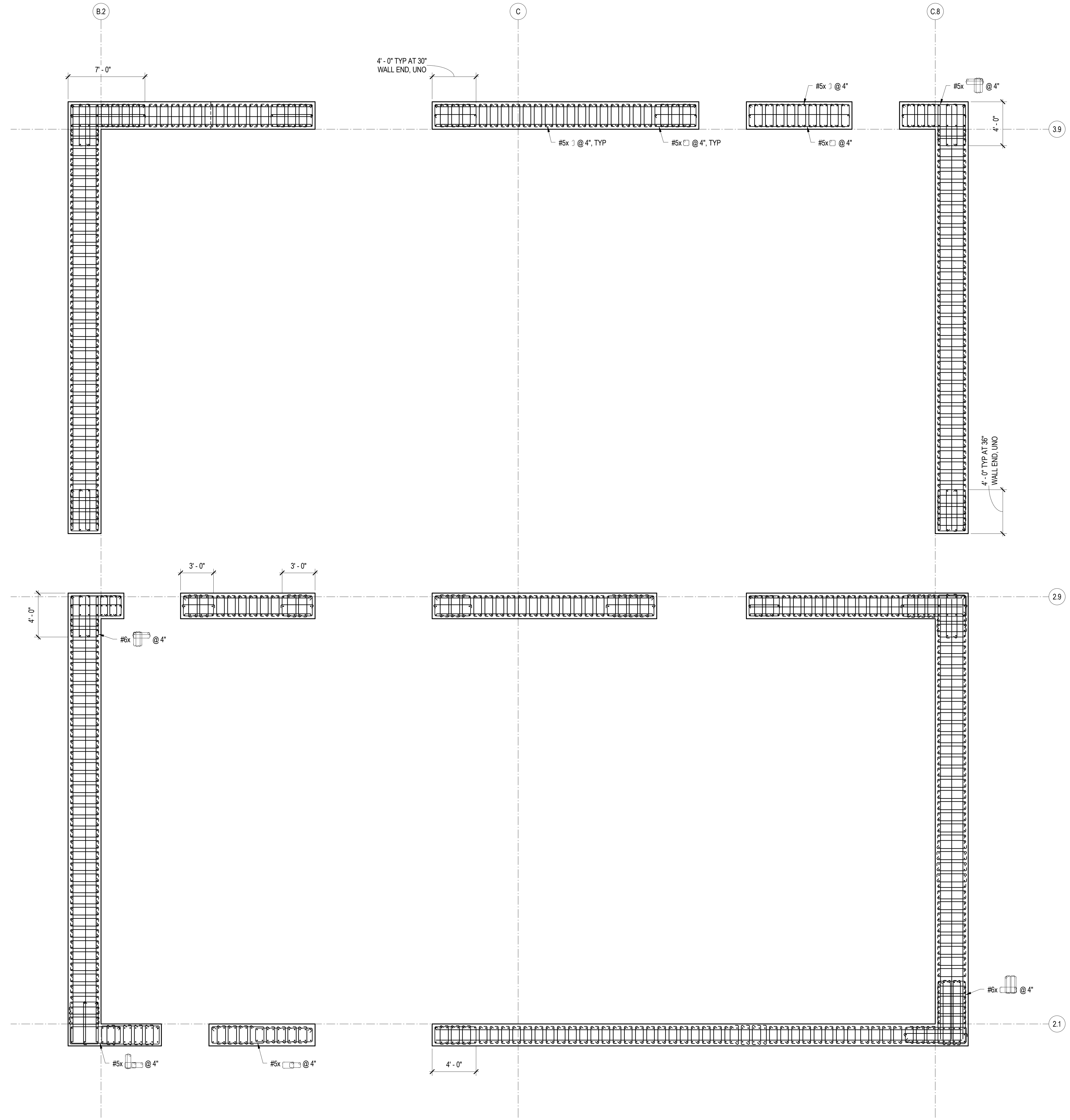
DRAWING TITLE	
<b>SHEAR WALL SECTIONS</b>	
PROJECT NO.	DRAWING NUMBER
08044	S3.39

C:\Revit\Transbay\Tw\_MS2013\_16.rvt 4/29/2014 7:08:23 PM





- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

16 SHEAR WALL SECTION AT LEVELS 49-50  
1/4" = 1'-0"

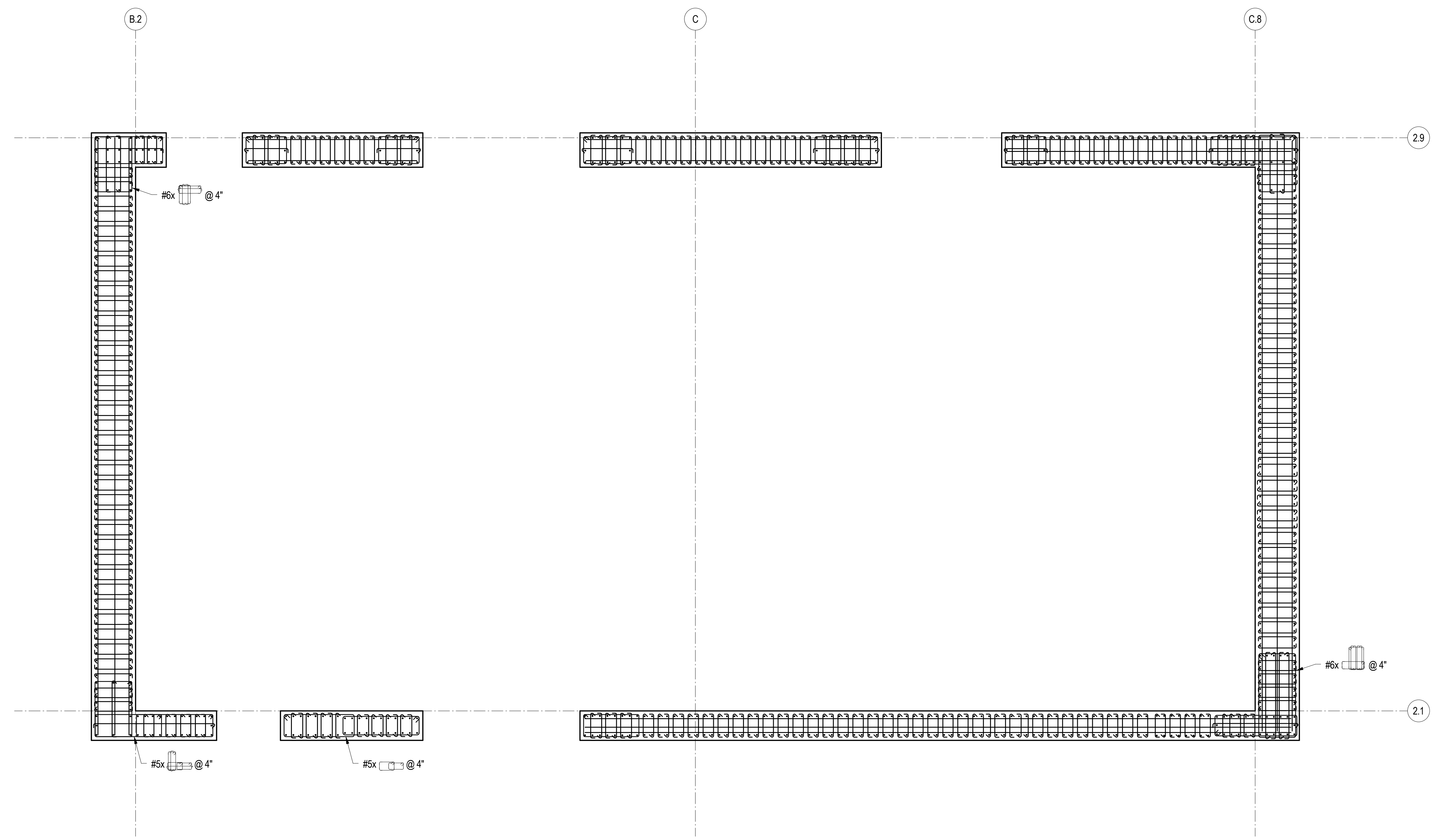
NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.40

4/28/2014 7:08:26 PM C:\Revit\Transbay\Tw\_MS2013\_16.rvt



**NOTES:**

1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 75$  KSI AT 4-INCH VERTICAL SPACING.

**11 SHEAR WALL SECTION AT LEVELS 51-52**  
1/4" = 1'-0"

- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

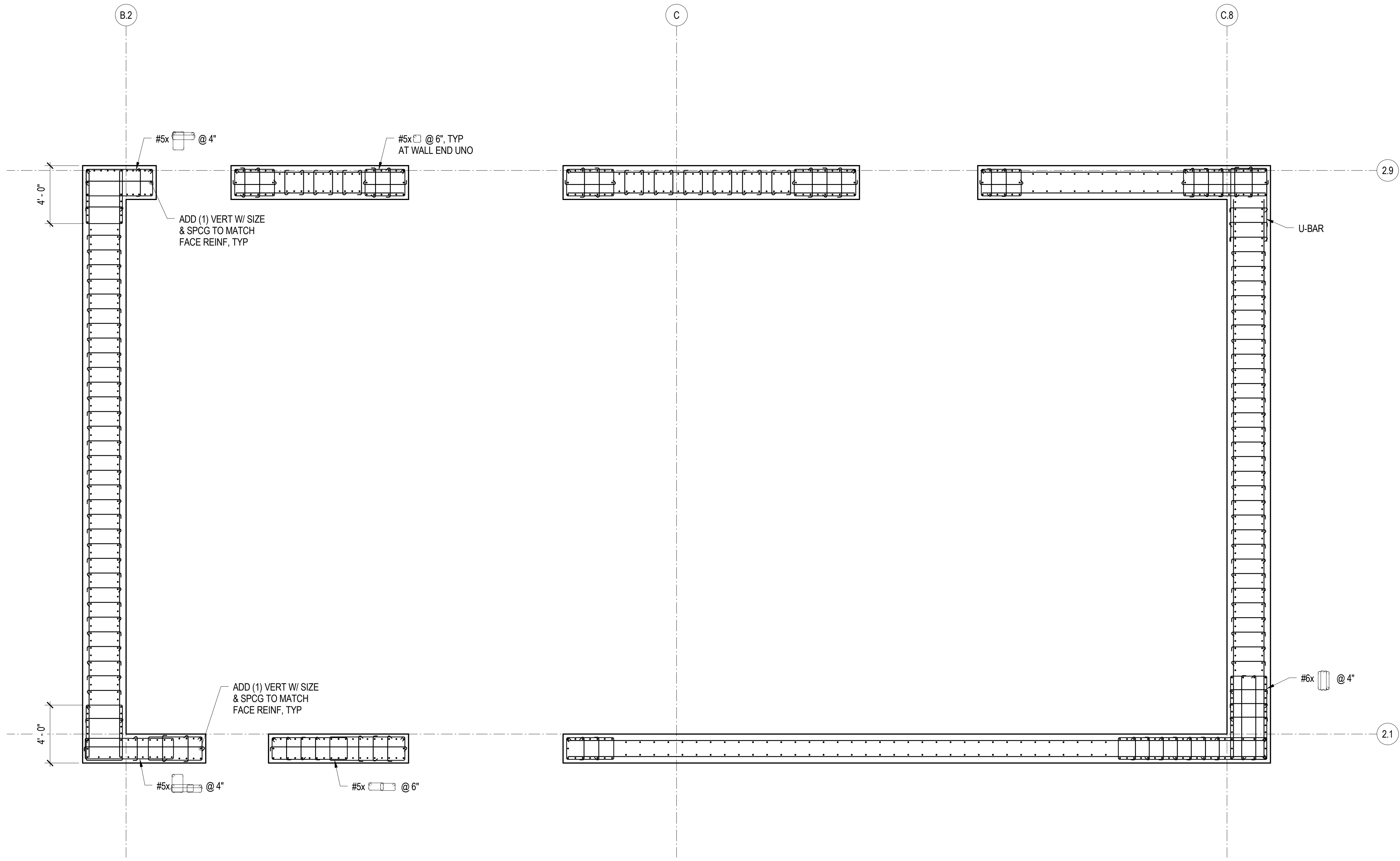
CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.41



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:  
1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

11 SHEAR WALL SECTION AT LEVELS 53-56  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

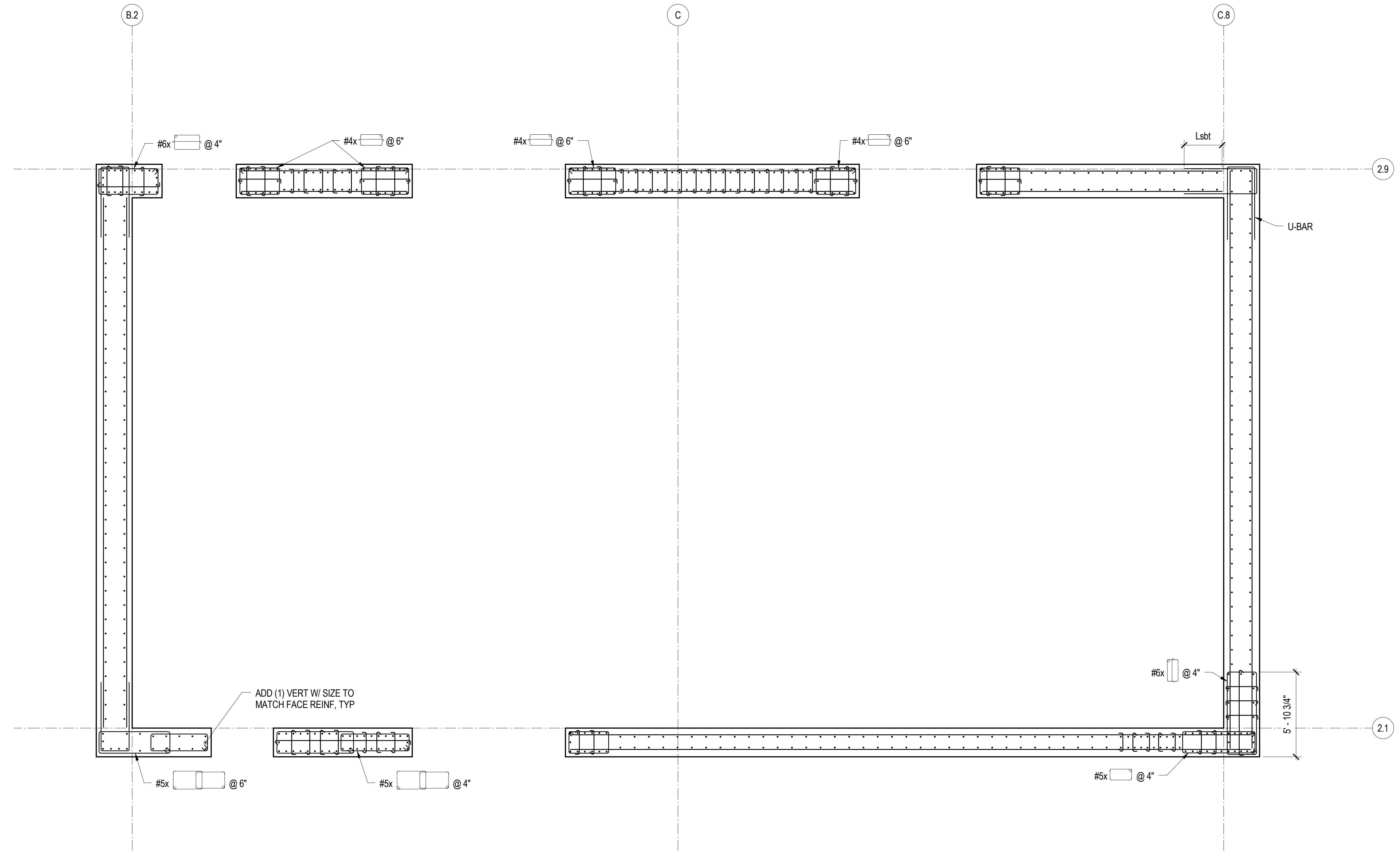
CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S3.42



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



**NOTES:**

1. ALL CROSSTIES AND HOOPS TO HAVE Fy = 60 KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

**11 SHEAR WALL SECTION AT LEVELS 57-61**  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

**SHEAR WALL SECTIONS**

PROJECT NO. 08044  
DRAWING NUMBER S3.43



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

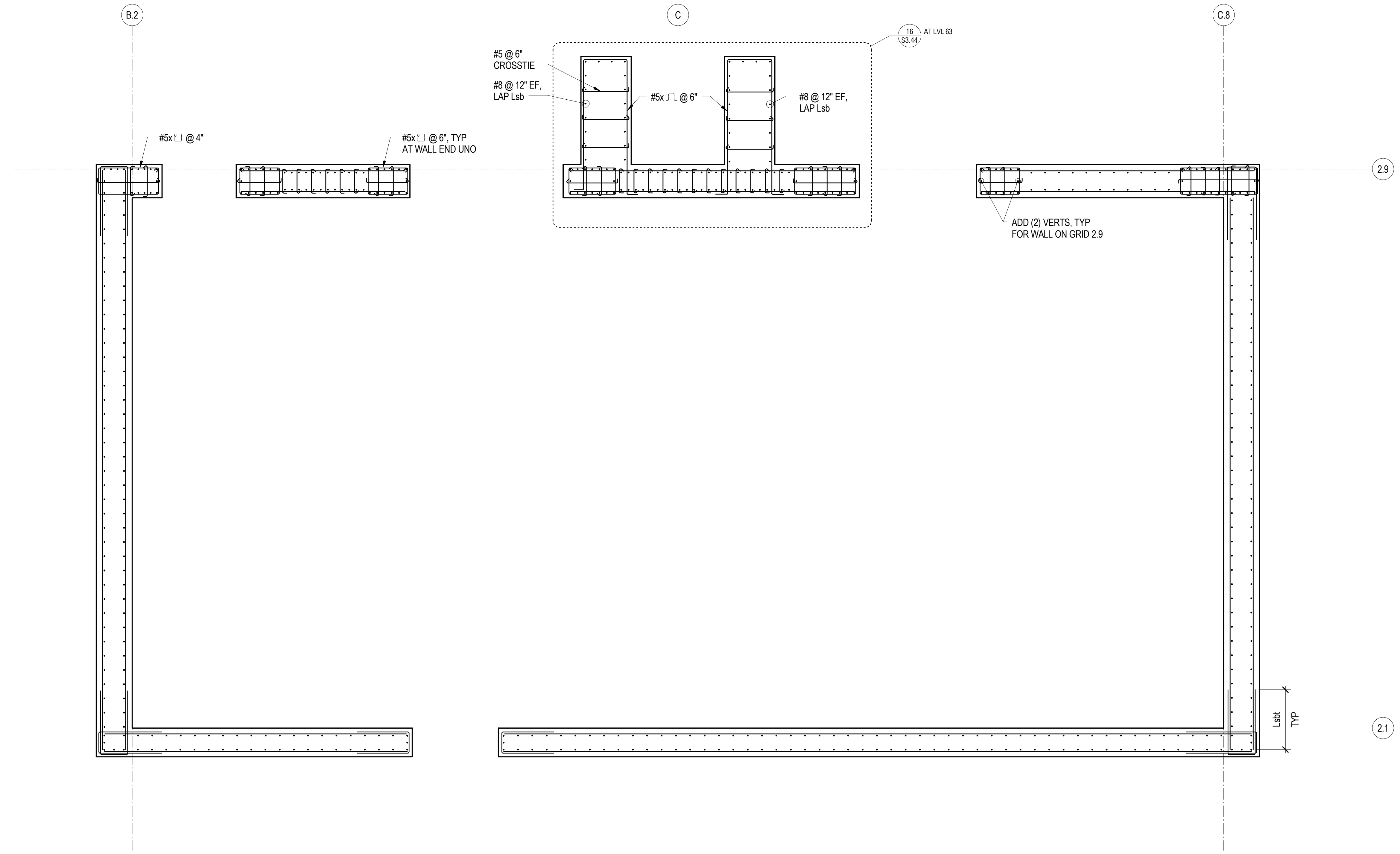
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

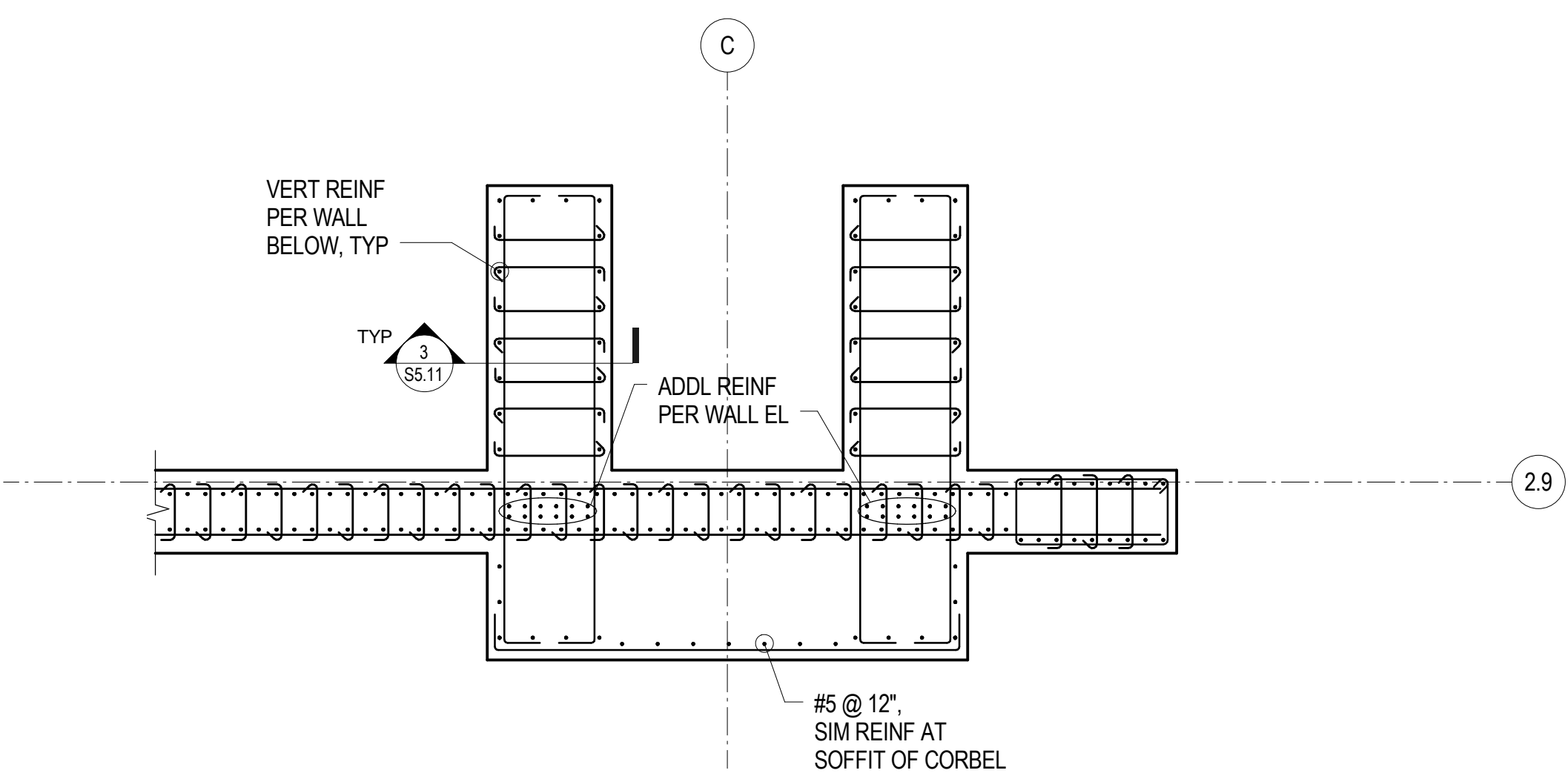
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:

1. ALL CROSSTIES AND HOOPS TO HAVE  $F_y = 60$  KSI AT 6-INCH VERTICAL SPACING, UNLESS NOTED OTHERWISE.

11 SHEAR WALL SECTION AT LEVEL 62  
1/4" = 1'-0"



16 PARTIAL PLAN AT LEVEL 63 TO LEVEL 64  
1/4" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME

DRAWING TITLE

SHEAR WALL SECTIONS

PROJECT NO. 08044 DRAWING NUMBER S3.44

4/28/2014 7:08:37 PM C:\Revit\Transbay\Twr\_MS2013\_16.rvt



BAR SIZE	EMBED LENGTH TABLE 1 (NON-ENCLOSED CONDITION)									
	f <sub>c</sub> = 4 KSI	f <sub>c</sub> = 5 KSI	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 7 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 9 KSI	f <sub>c</sub> = 10 KSI	f <sub>c</sub> = 11 KSI	f <sub>c</sub> = 12 KSI	f <sub>c</sub> = 13 KSI
4	24	22	20	18	17	16	15	15	14	14
5	30	27	25	23	21	20	19	18	18	18
6	36	32	30	27	26	24	23	22	21	21
7	42	38	36	33	31	29	28	27	26	26
8	48	44	42	39	37	35	34	33	32	32
9	54	50	48	45	43	41	40	39	38	38
10	60	56	54	51	49	47	46	45	44	44
11	66	62	60	57	55	53	52	51	50	50
12	72	68	66	63	61	59	58	57	56	56
13	78	74	72	69	67	65	64	63	62	62
14	84	80	78	75	73	71	70	69	68	68

- NOTES:**
- EMBED LENGTH IS CALCULATED AS 1.25 L<sub>d</sub>.
  - VALUES ABOVE ARE FOR "a" BAR WITH F<sub>y</sub> = 60 KSI REBAR.
  - SEE "TYPICAL WALL CONFINEMENT" DETAIL FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

**(NO HOOPS OR CROSS TIES ENCLOSE EMBED LENGTH)**

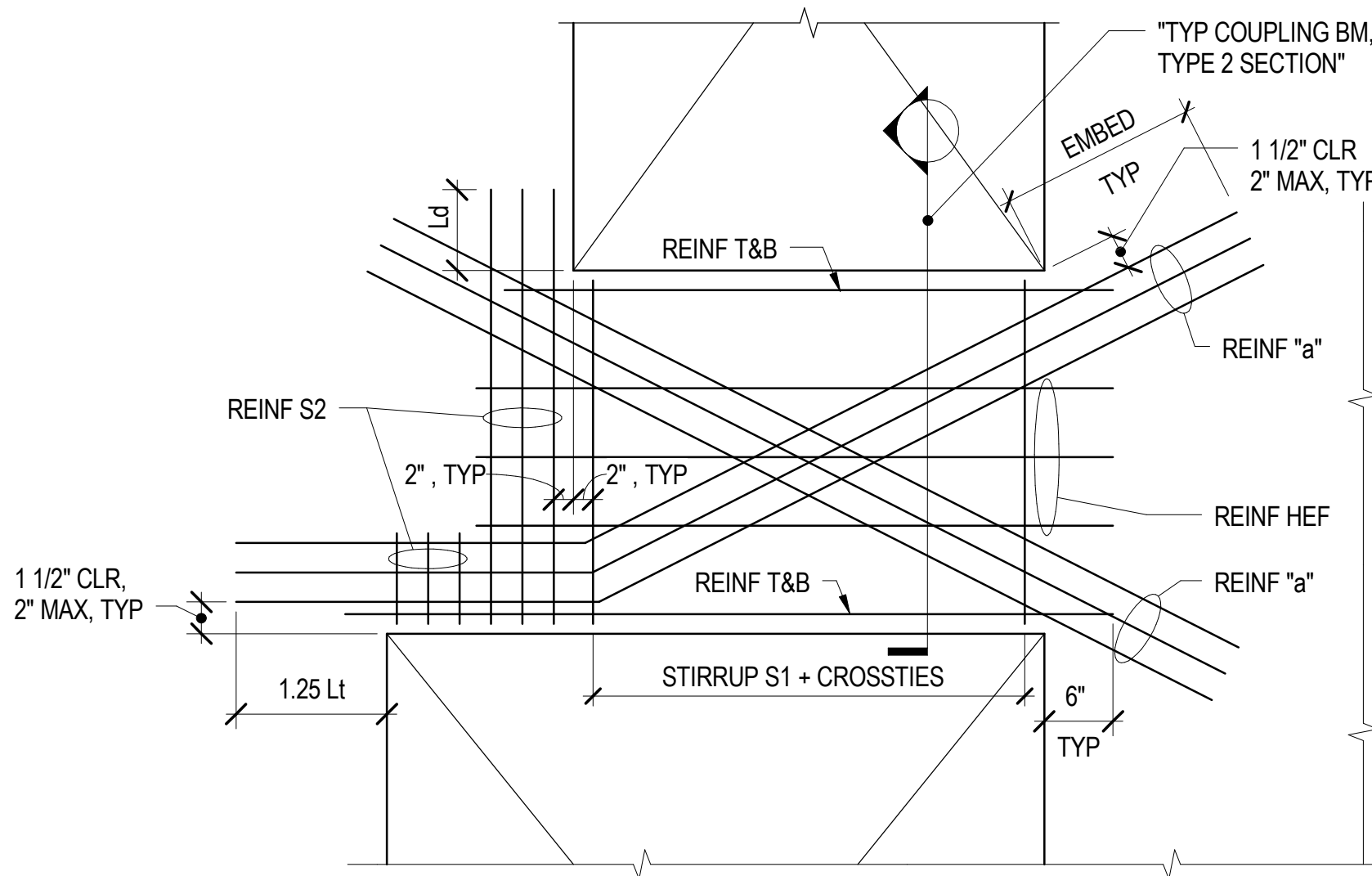
**7** EMBED TABLE 1

BAR SIZE	EMBED LENGTH TABLE 2 (ENCLOSED CONDITION)									
	f <sub>c</sub> = 4 KSI	f <sub>c</sub> = 5 KSI	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 7 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 9 KSI	f <sub>c</sub> = 10 KSI	f <sub>c</sub> = 11 KSI	f <sub>c</sub> = 12 KSI	f <sub>c</sub> = 13 KSI
4	18	16	15	14	13	12	12	12	12	12
5	23	20	19	17	16	15	15	14	13	13
6	27	24	22	21	19	18	17	17	16	16
7	32	28	26	24	23	21	20	19	18	18
8	36	32	30	27	26	24	23	22	21	21
9	41	36	33	31	29	27	26	25	24	24
10	46	41	37	35	32	31	29	28	27	27
11	51	45	41	38	36	34	32	31	29	29
12	56	50	46	43	41	39	37	36	34	34
13	61	55	51	48	46	44	42	41	39	39
14	66	60	56	53	51	49	47	46	44	44

- NOTES:**
- EMBED LENGTH IS CALCULATED AS 1.25 L<sub>d</sub> CONFINED.
  - VALUES ABOVE ARE FOR "a" BAR WITH F<sub>y</sub> = 60 KSI REBAR.
  - SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

**(HOOPS OR CROSS TIES ENCLOSE EMBED LENGTH)**

**7** EMBED TABLE 2



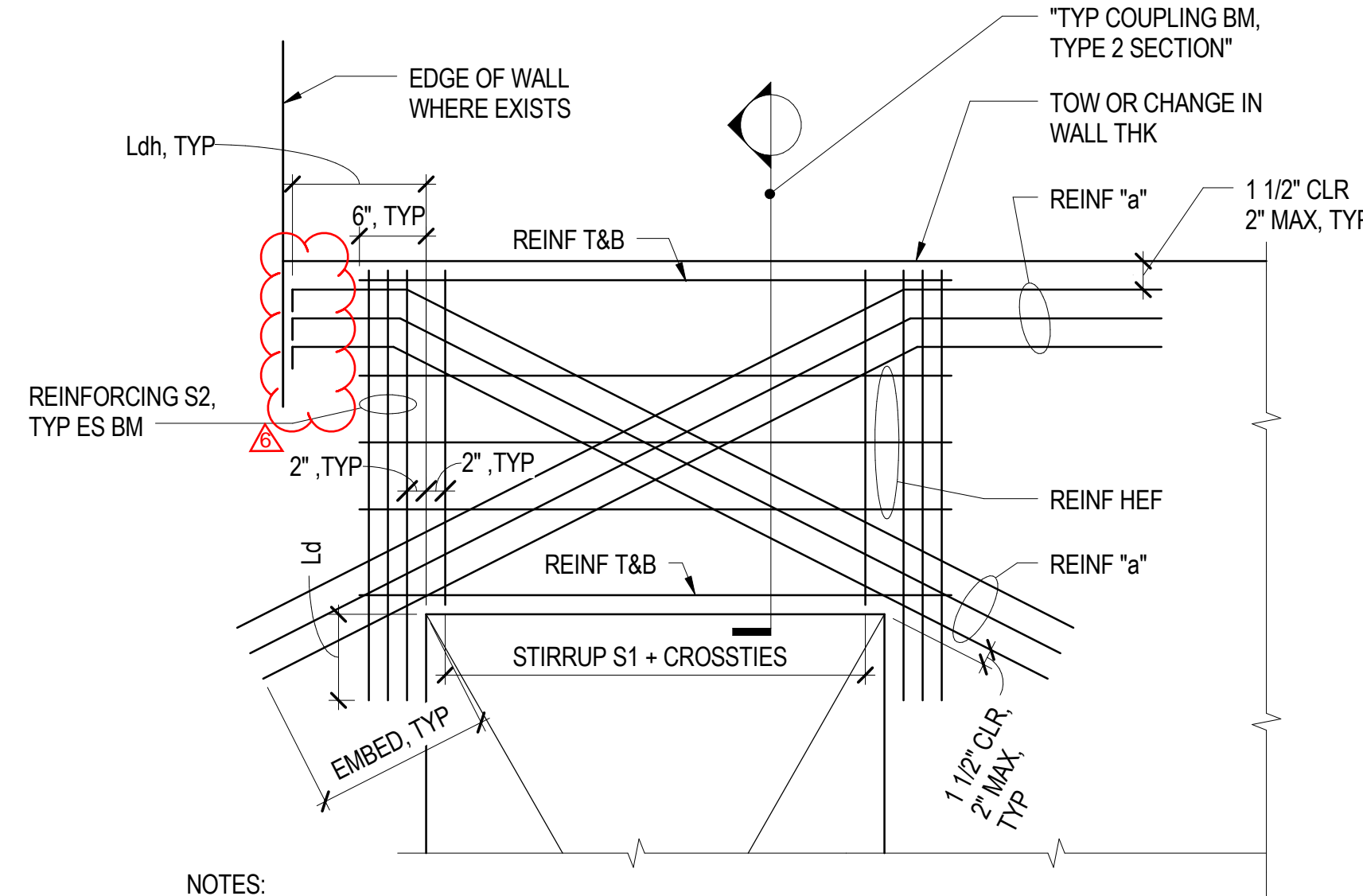
- NOTES:**
- SEE SECTION FOR REINFORCING NOT SHOWN.

**11** TYPE 2 COUPLING BEAM AT UNEQUAL OPENINGS

**NOTES:**

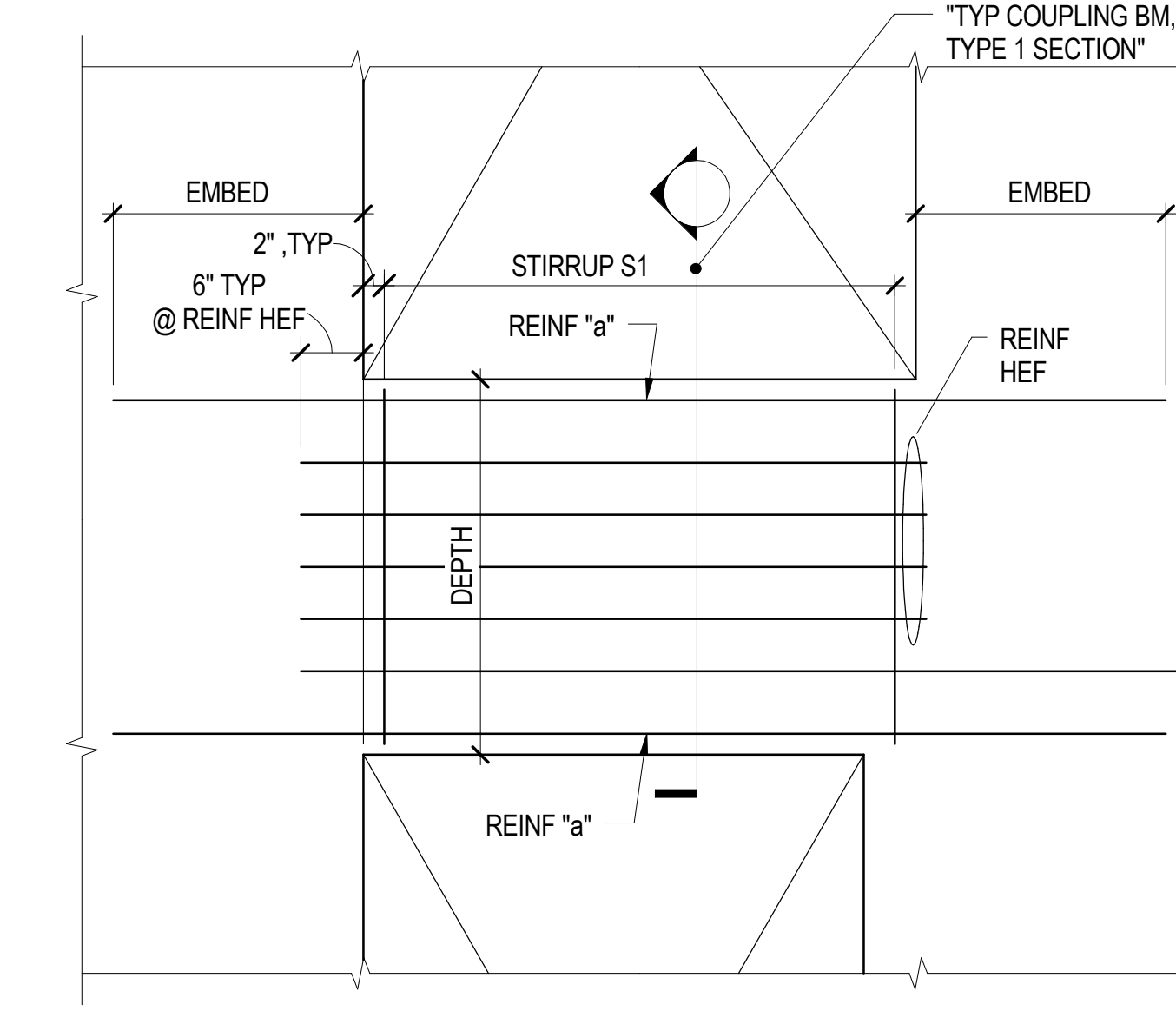
- CONCRETE STRENGTH OF ALL COUPLING BEAMS SHALL BE THE SAME AS THAT OF ADJACENT WALLS AT THAT LEVEL, INCLUDING THROUGH THE SLAB DEPTH.
- IF EMBED LENGTH OF BAR "a" CANNOT BE ACHIEVED DUE TO EDGE OF CORE WALL, PROVIDE L<sub>dh</sub> LENGTH BEYOND EDGE OF OPENING AND USE A STANDARD HOOK AT END OF REINFORCING.
- EMBED = LENGTH FROM "EMBED TABLE 1" OR "EMBED TABLE 2" DEPENDING ON WHETHER OR NOT THE WALL HOOPS AND CROSS TIES FULLY ENCLOSE THE REBAR EMBED LENGTH IN THE WALL.

**3** GENERAL NOTES FOR COUPLING BEAMS

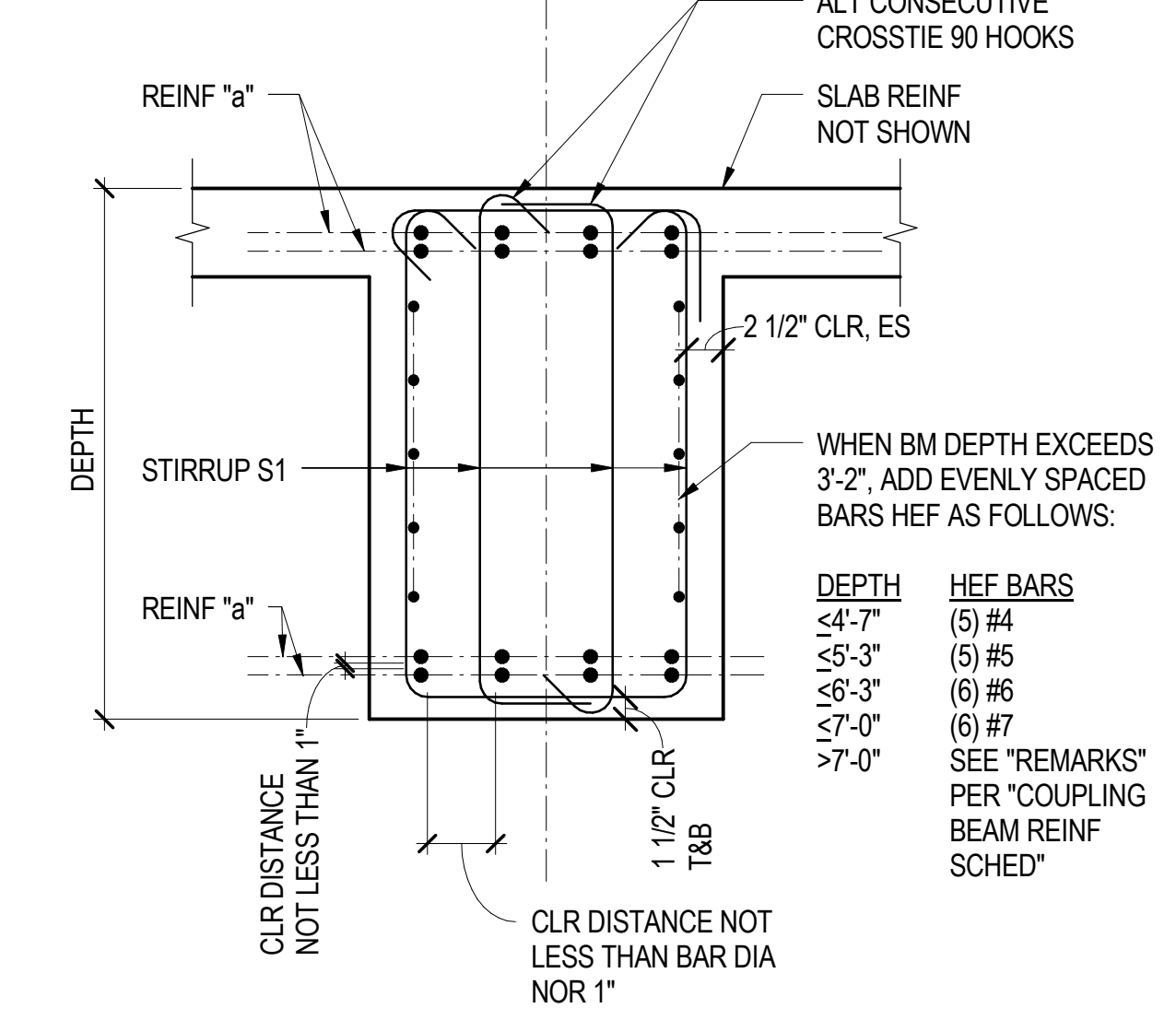


- NOTES:**
- SEE SECTION FOR REINFORCING NOT SHOWN.

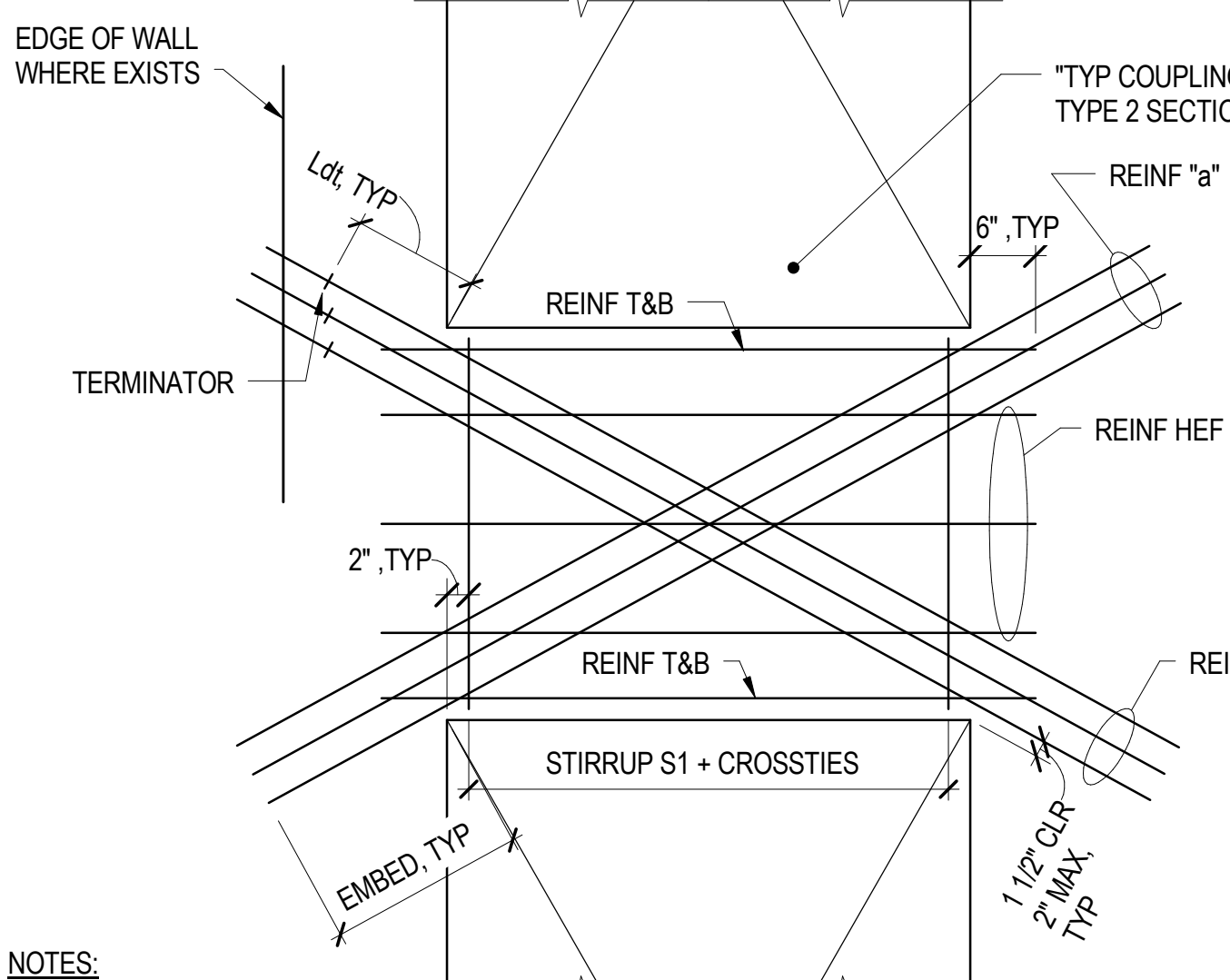
**8** TYPICAL COUPLING BEAM, TYPE 3



**4** TYPICAL COUPLING BEAM, TYPE 1

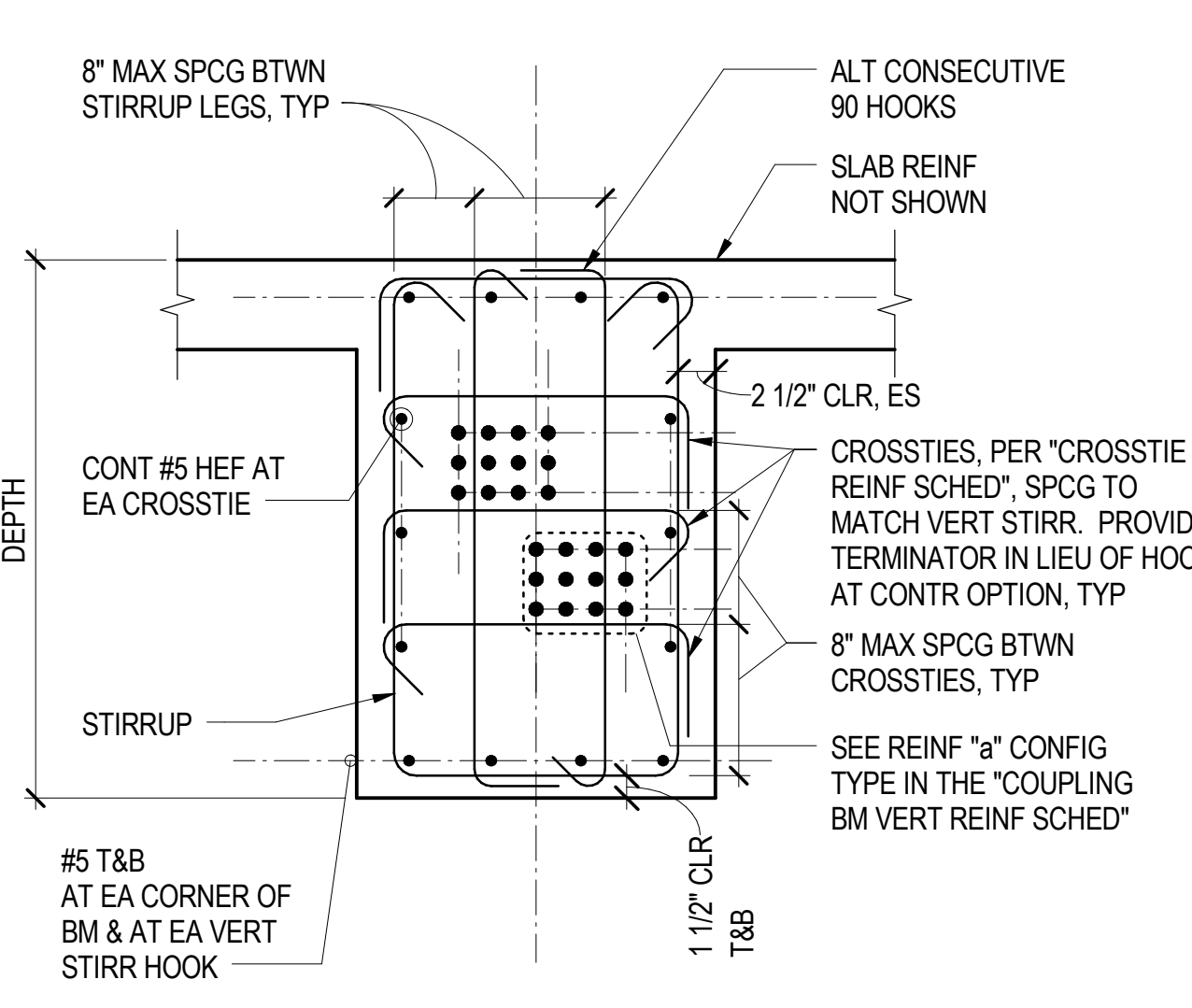


**5** TYPICAL COUPLING BEAM, TYPE 1 SECTION



- NOTES:**
- SEE SECTION FOR REINFORCING NOT SHOWN.

**9** TYPICAL COUPLING BEAM, TYPE 2

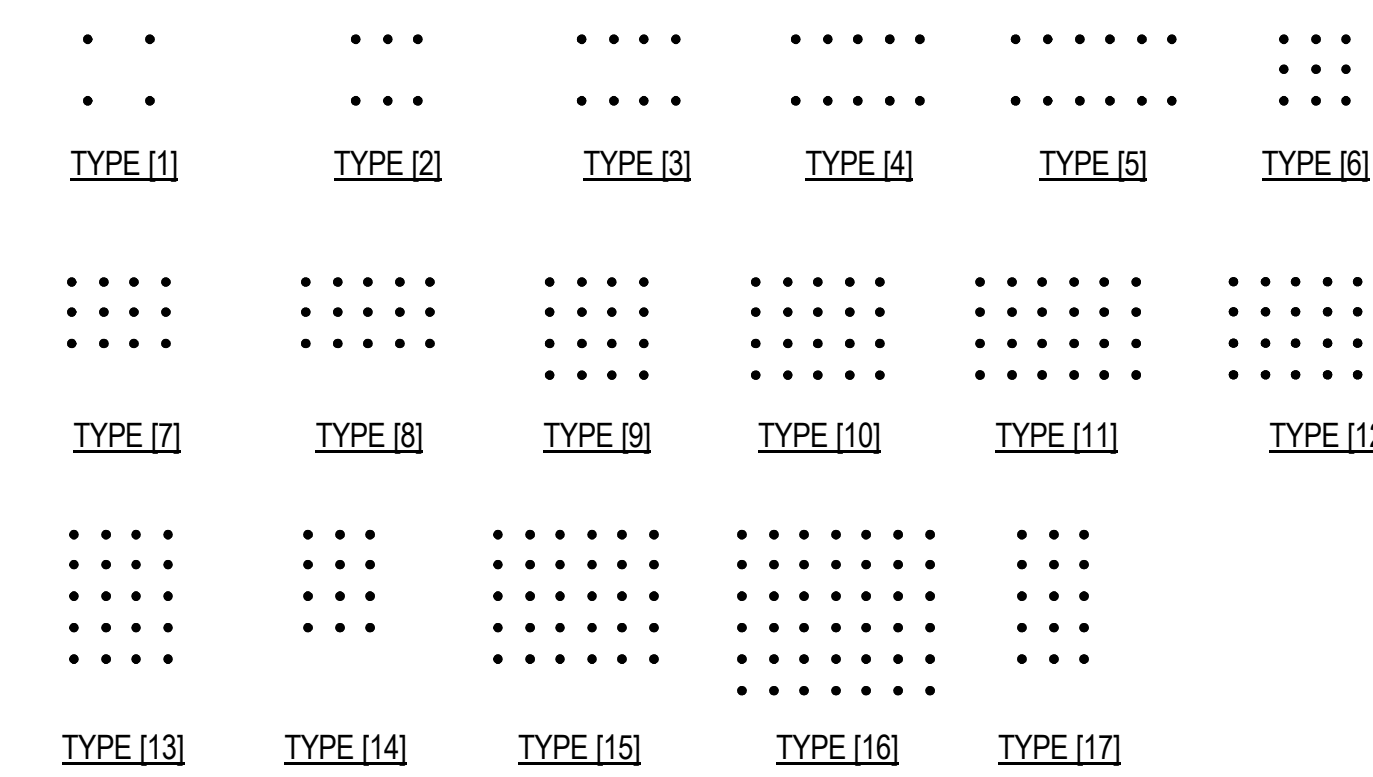


**10** TYPICAL COUPLING BEAM, TYPE 2 SECTION

COUPLING BEAM LONGITUDINAL REINFORCING SCHEDULE					
MARK	TYPE	CONFIGURATION DIM (HxW) (INCHES)	REIN "a"	REIN S2	REMARKS
2	2	4x12	(6) #10 [2]	(7) #6 @ 4" [3]	
3	2 OR 3	8x10	(9) #10 [6]	(8) #6 @ 4" [3]	TYPE 3 BM AT LVL 47
4	2 OR 3	4x8	(4) #11 [1]	(7) #6 @ 4" [2]	TYPE 3 BM AT LVL 50
5	2	4x12	(6) #11 [2]	(6) #6 @ 4" [3]	
6	2	4x16	(10) #11 [4]		
7	2	8x12	(9) #11 [6]		
8	2 OR 3	8x12	(12) #11 [7]	(9) #6 @ 4" [4]	TYPE 3 BM AT LVL 15
9	2 OR 3	8x16	(15) #11 [8]	(9) #6 @ 4" [5]	TYPE 3 BM AT LVL 31
10	2 OR 3	12x12	(16) #11 [9]	(12) #6 @ 4" [4]	TYPE 3 BM AT LVL 34
11	2 OR 3	12x16	(20) #11 [10]	(12) #6 @ 4" [5]	TYPE 3 BM AT LVL 15
12	2	12x8	(12) #11 [14]		
13	2	12x24	(28) #11 [12]		
14	2	16x12	(20) #11 [13]		
15	2	12x20	(24) #11 [11]		
16	2	20x24	(42) #11 [16]		
17	2 OR 3	17x30	(30) #14 [15]	(7) #6 @ 4" [6]	TYPE 3 BM AT LVL 3
18	2	8 1/2x12	(9) #14 [5]		
19	2	16x12	(15) #11 [17]		
22	1	-	(4) #9		
23	1	-	(5) #10		
24	1	-	(5) #11		
25	1	-	(10) #9 [4]		
26	1	-	(8) #10 [3]		
27	1	-	(8) #11 [3]		
28	1	-	(12) #9 [5]		
29	1	-	(12) #11 [5]		

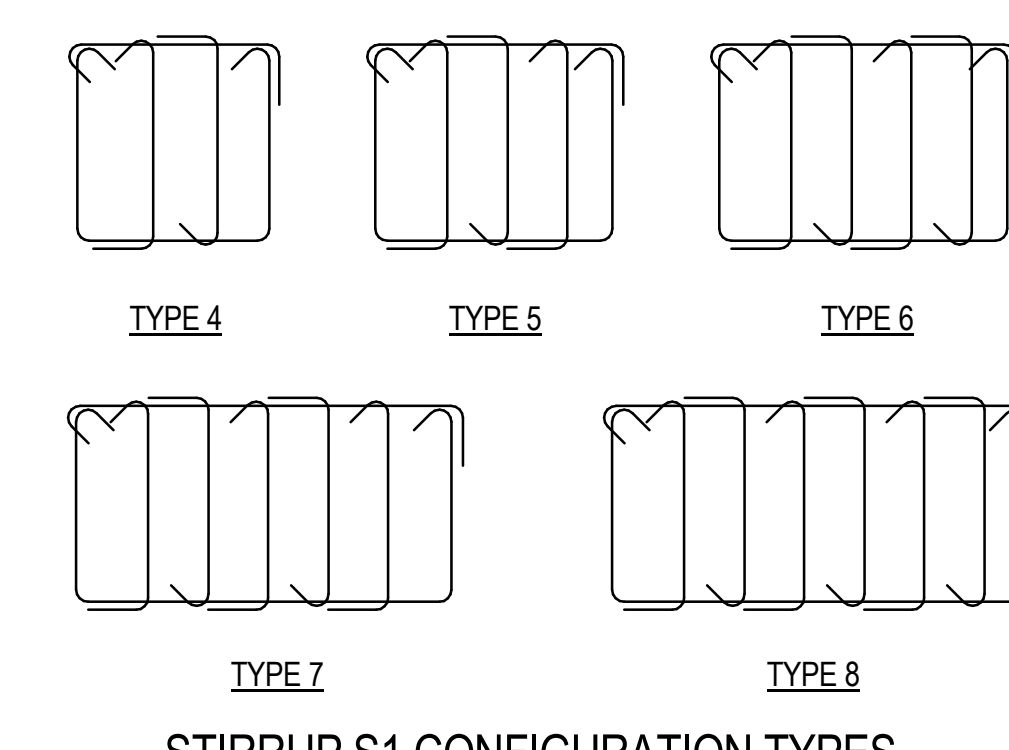
COUPLING BEAM VERTICAL REINFORCING SCHEDULE		
MARK	STIRRUPS S1	REMARKS
A	#5 @ 4" [4]	
B	#5 @ 4" [5]	
C	#5 @ 4" [6]	
D	#5 @ 4" [8]	
E	#6 @ 4" [5]	
F	#6 @ 4" [5]	
H	#6 @ 4" [7]	
J	#6 @ 4" [5]	

CROSSTIE REINFORCING SCHEDULE		
MAX BEAM DEPTH (INCH)	f <sub>c</sub> =8 KSI	f <sub>c</sub> =10 KSI
41"	(5) #5	(7) #5
59"	(8) #5	(10) #5
69"	(9) #5	(12) #5
77"	(10) #5	(13) #5
83"	(12) #5	(14) #5
86"	(12) #5	(15) #5
99"	(13) #5	(17) #5
102"	(18) #5	(18) #5
106"	(20) #5	(20) #5

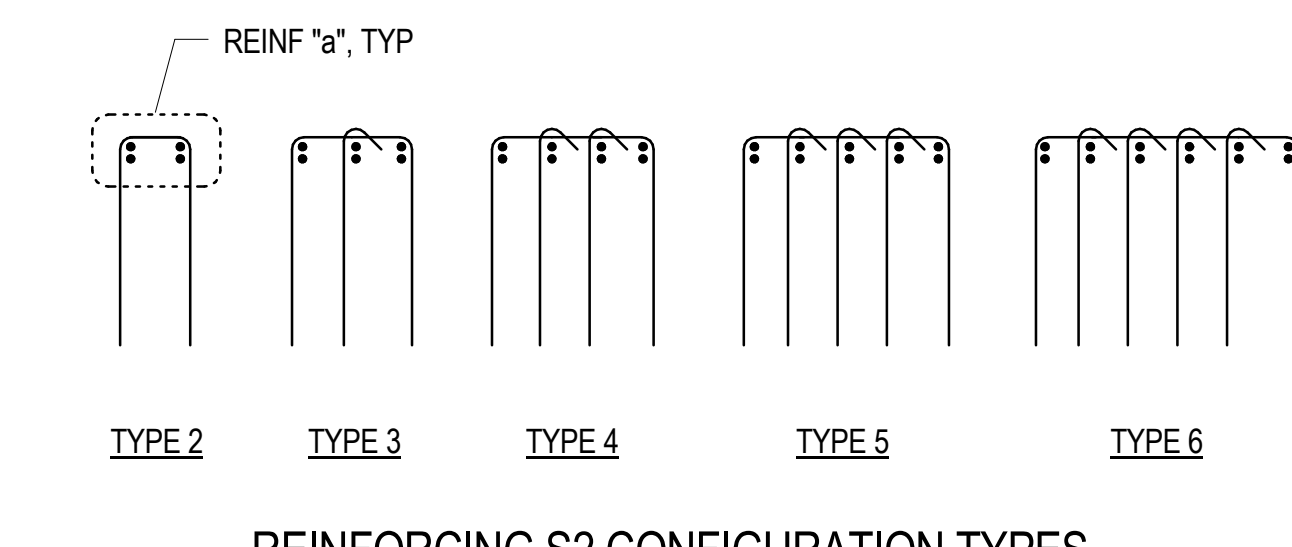


TYPICAL REINFORCING "a" CONFIGURATION

REINFORCING "a" CONFIGURATION TYPES



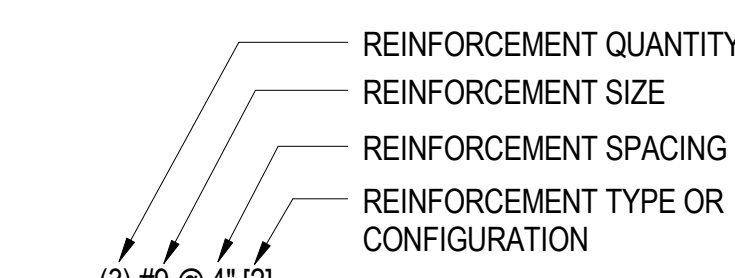
STIRRUP S1 CONFIGURATION TYPES



REINFORCING S2 CONFIGURATION TYPES

**NOTES:**

- DEPTH OF COUPLING BEAMS PER "SHEAR WALL ELEVATIONS" COUPLING BEAM WIDTH MATCHES ADJACENT SHEAR WALLS.
- ALTERNATE CONSECUTIVE CROSSTIES END FOR END.
- LONGITUDINAL REINFORCING SHALL BE SPECIAL DUCTILE QUALITY. SEE "GENERAL NOTES" FOR CRITERIA.
- REINFORCING CALLOUT NOMENCLATURE IS AS FOLLOWS:



**20** COUPLING BEAM REINFORCEMENT SCHEDULE

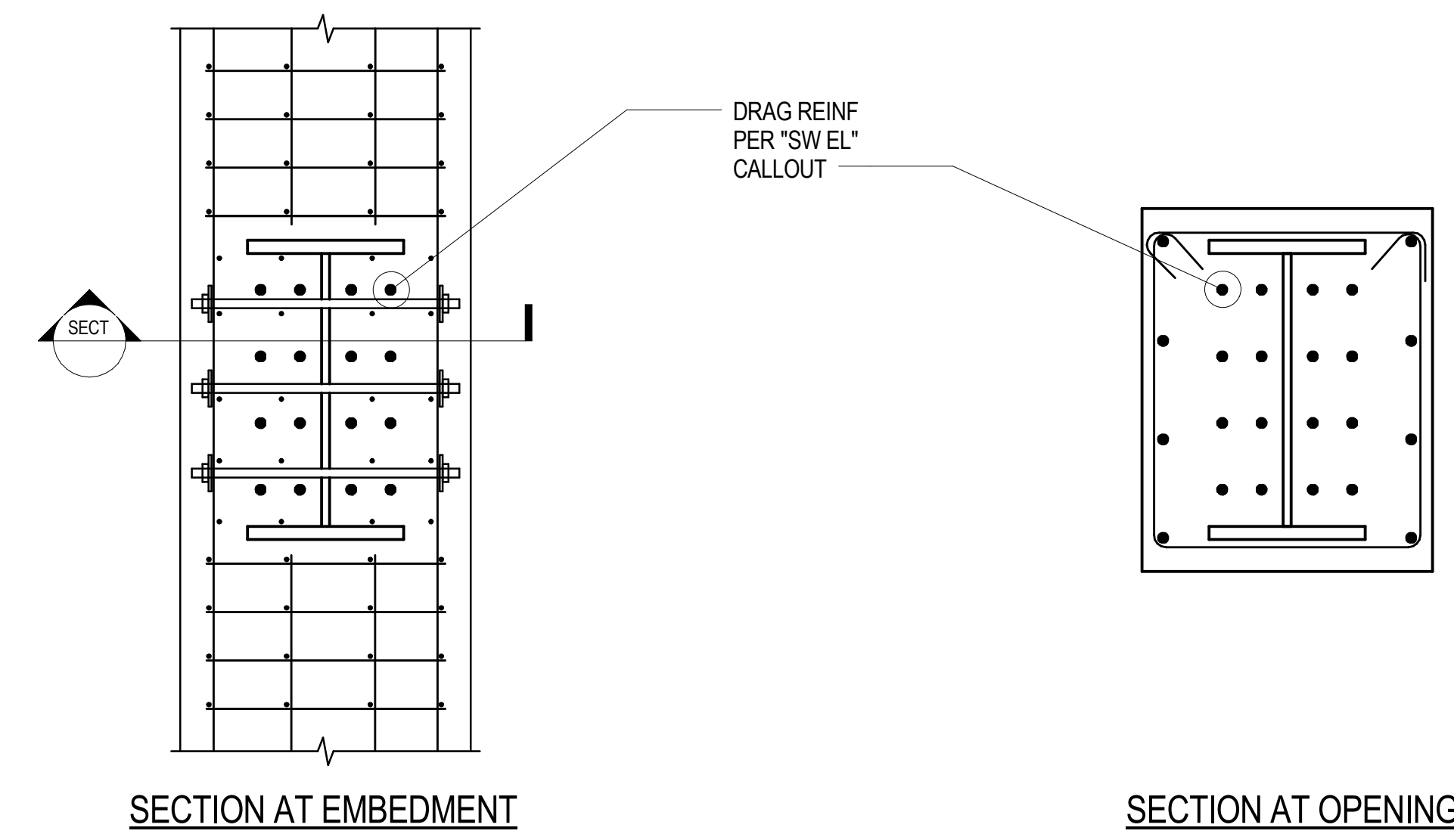
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPEP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13		STRUCTURAL BID
2	27 NOV 13		STRUCTURAL BID ADDENDUM NO. 1
3	12 DEC 13		ADDENDUM #2 PERMIT
4	10 FEB 14		BID ADDENDUM #2
5	11 FEB 14		ADDENDUM #2 PERMIT REVISION NO. 1
6	02 MAY 14	GMP	

DRAWING TITLE	DRAWING NUMBER
<b>COUPLING BEAM DETAILS AND SCHEDULES</b>	<b>S3.47</b>

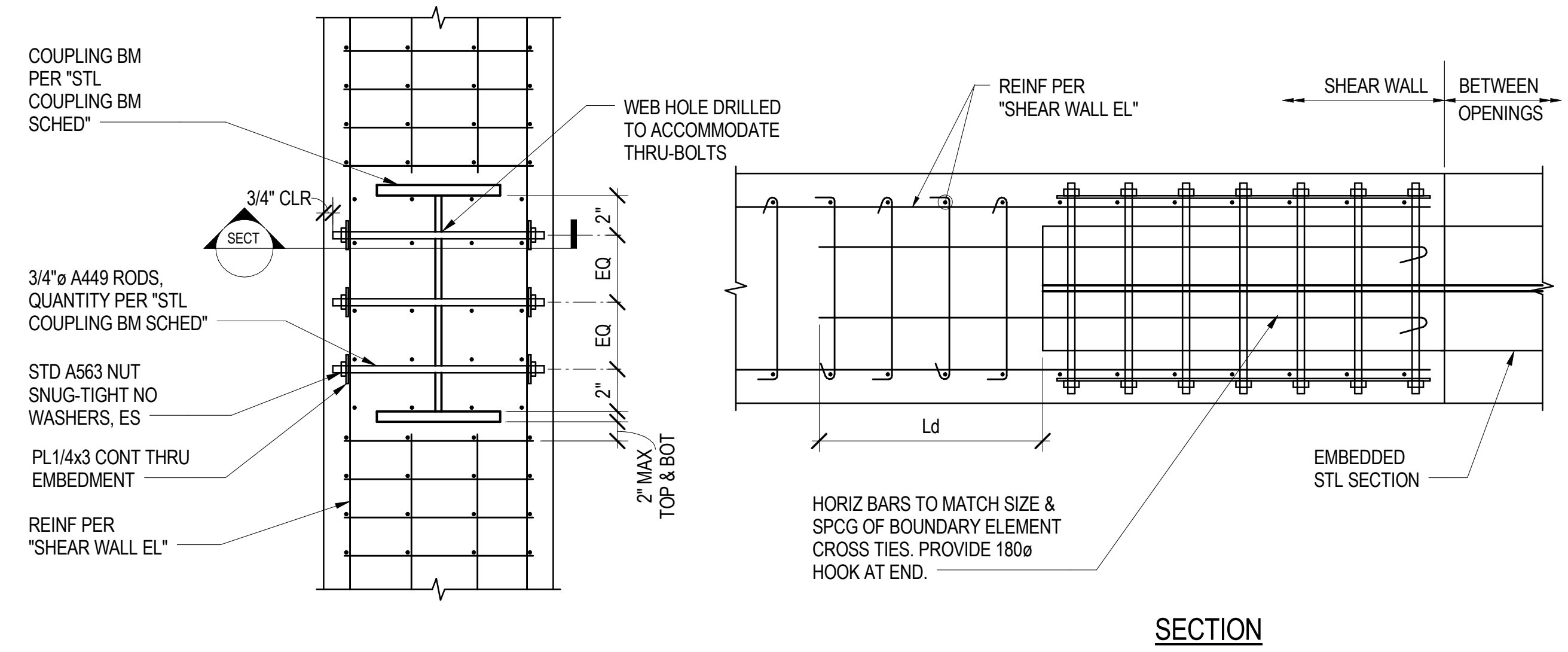


- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

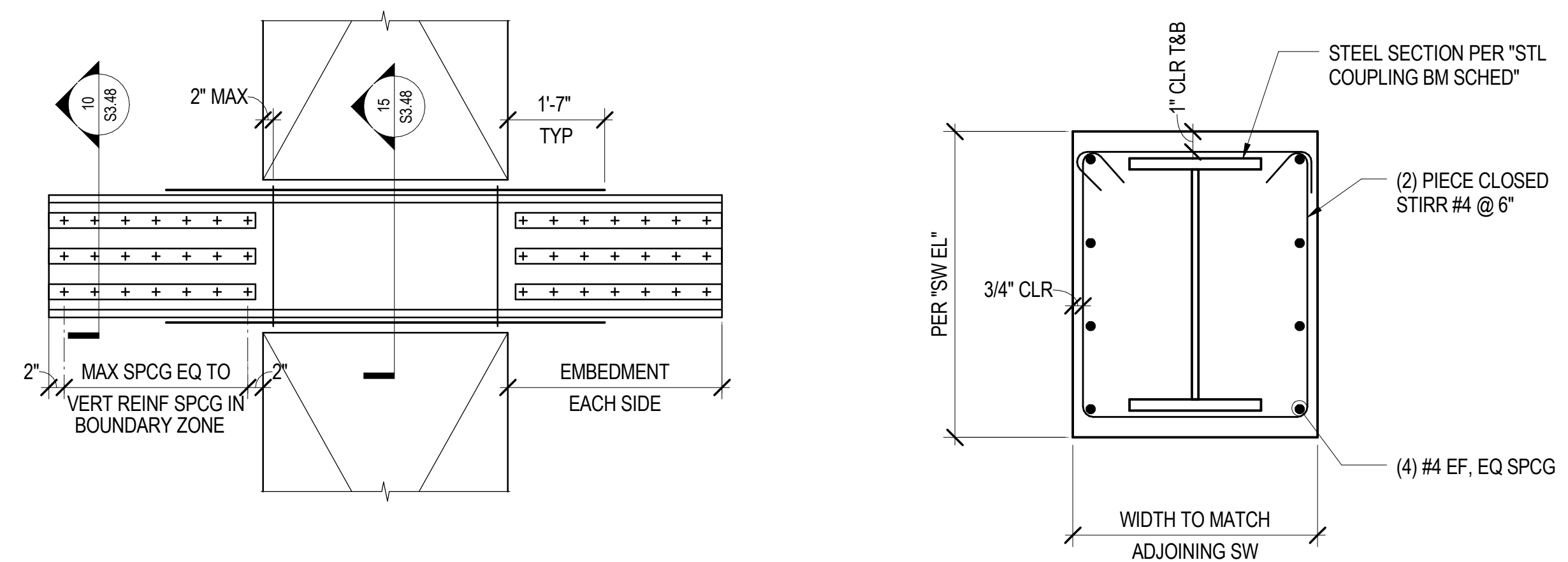


NOTES:  
SEE 10/S3.48 FOR INFORMATION NOT SHOWN.

5 DRAG STRUTS



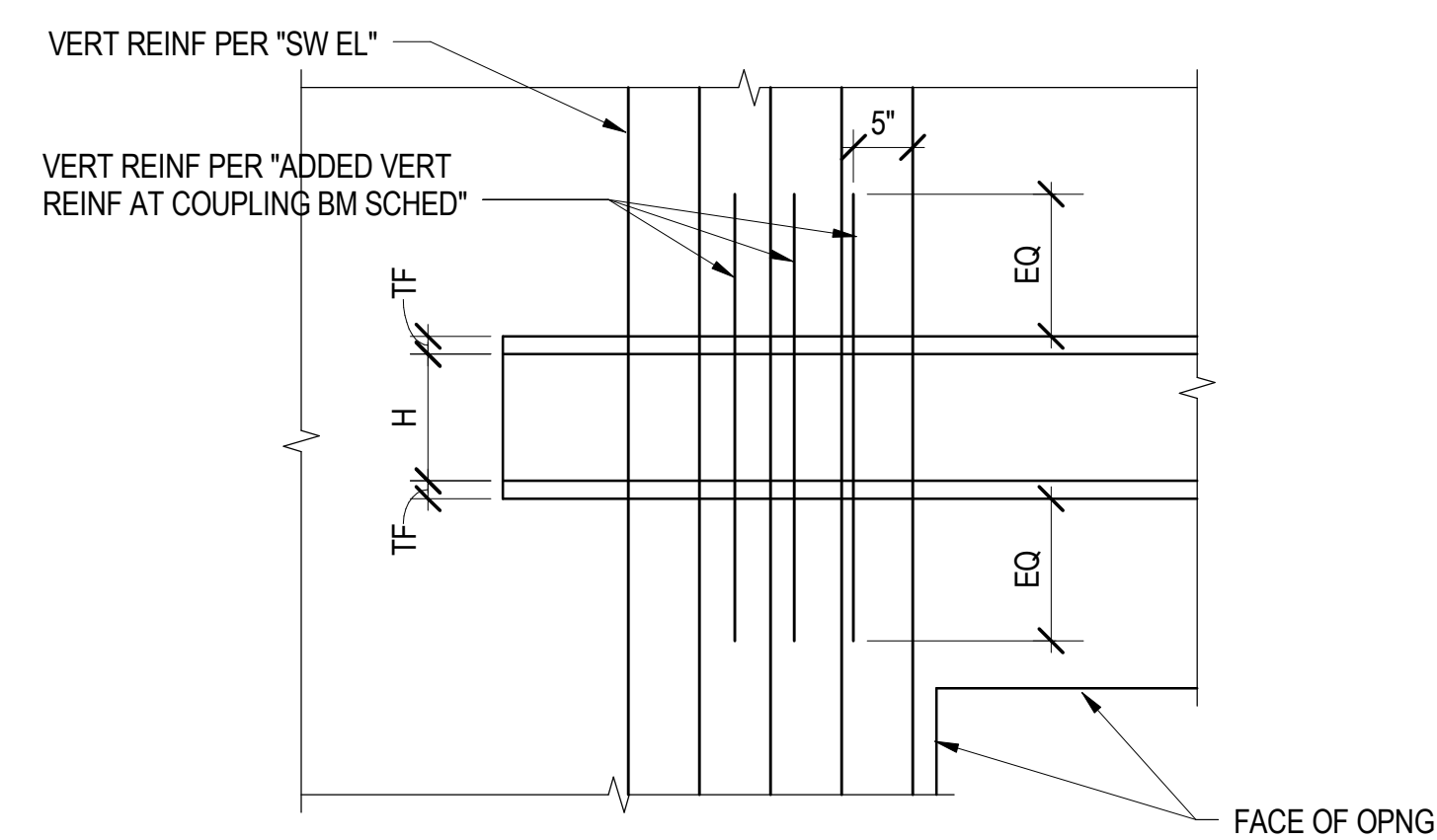
10 SECTION AT EMBEDMENT



NOTES:  
1. SHEAR WALL REINFORCING NOT SHOWN FOR CLARITY.

14 STEEL COUPLING BEAM

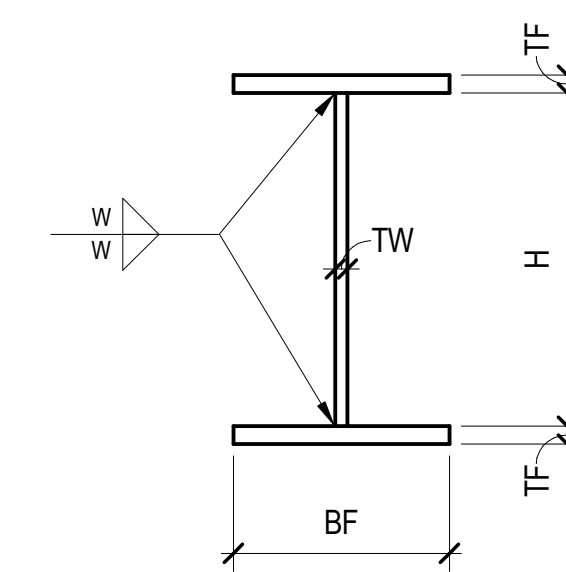
15 STEEL COUPLING BM SECTION AT OPENINGS



ADDED VERTICAL REINFORCING AT STEEL COUPLING BEAM SCHEDULE									
MARK	41	43	44	45	46	47	48	49	
V1	-	-	-	-	-	(5) #6x8-0" @ 6" EF	-	-	-
V2	-	-	-	-	(8) #8x8-0" @ 6" EF	(5) #7x7-6" @ 6" EF	(9) #9x9-0" @ 6" EF	-	-
V3	-	(5) #8x8-0" @ 6" EF	(5) #7x7-6" @ 6" EF	-	-	(5) #7x7-6" @ 6" EF	(9) #7x7-6" @ 6" EF	-	-
V6	-	-	-	-	-	(1) #6x6-0" @ 6" EF	(7) #7x7-6" @ 6" EF	-	-
V7	-	-	-	(3) #6x6-0" @ 6" EF	(7) #8x8-0" @ 6" EF	(3) #7x7-6" @ 6" EF	(7) #8x8-0" @ 6" EF	-	-
V8	-	(4) #7x7-6" @ 6" EF	(5) #8x8-0" @ 6" EF	-	(7) #7x7-6" @ 6" EF	(7) #7x7-6" @ 6" EF	(7) #8x8-0" @ 6" EF	-	-
V9	-	(4) #8x8-0" @ 6" EF	(3) #7x7-6" @ 6" EF	(3) #7x7-6" @ 6" EF	(3) #7x7-6" @ 6" EF	(2) #6x6-0" @ 6" EF	-	-	-
V10	-	-	-	-	(4) #7x7-6" @ 6" EF	-	(5) #7x7-6" @ 6" EF	-	-
V11	-	-	-	-	(2) #6x6-0" @ 6" EF	-	-	-	-

18 ADDED VERTICAL STEEL AT STEEL COUPLING BEAM SCHEDULE

STEEL COUPLING BEAM SCHEDULE									
MARK	BF (INCHES)	TF (INCHES)	H (INCHES)	TW (INCHES)	W	EMBED LENGTH	# RODS	REMARKS	
41	14	-	28	1/2	3/8	4'-10"	5	-	-
43	12	1	31	7/8	1/2	4'-11"	6	-	-
44	12	1 1/4	30 1/2	7/8	9/16	5'-5"	6	-	-
45	16	1 3/8	30 1/4	3/4	9/16	5'-8"	6	-	-
46	16	1 1/2	30	1 1/2	-	7'-0"	6	CJP WELD	-
47	18	2	29	1	3/4	5'-11"	6	-	-
48	16	1 3/4	29 1/2	1 3/4	-	7'-8"	6	CJP WELD	-
49	14	1	25	7/16	3/8	4'-5"	5	-	-



NOTES:  
1. STEEL COUPLING BEAMS TO HAVE F<sub>y</sub>=50 KSI.

20 STEEL COUPLING BEAM SCHEDULE

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**TYPICAL STEEL COUPLING BEAM DETAILS AND SCHEDULE**

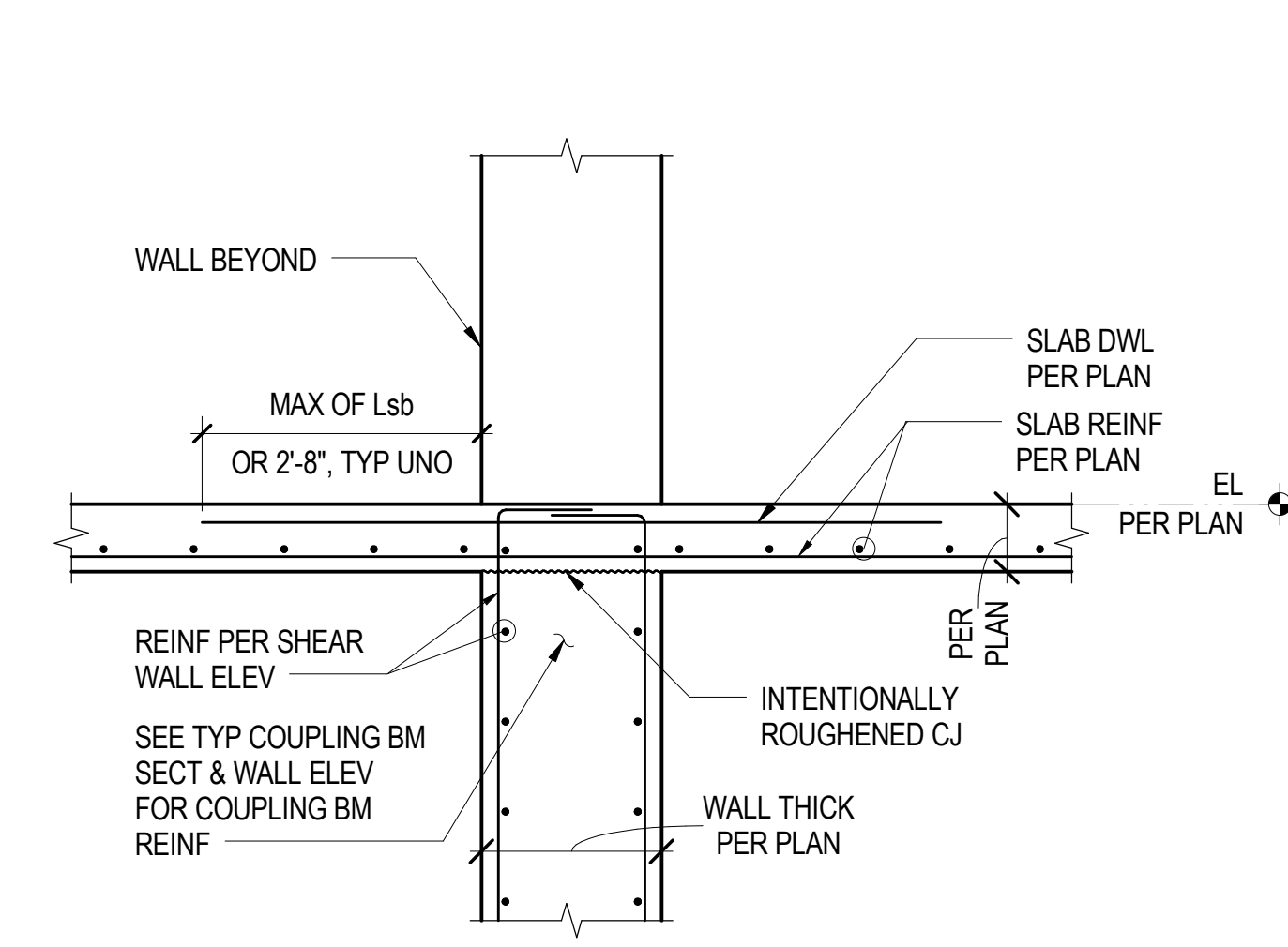
NO. PROJECT NO. 08044

DRAWING NUMBER

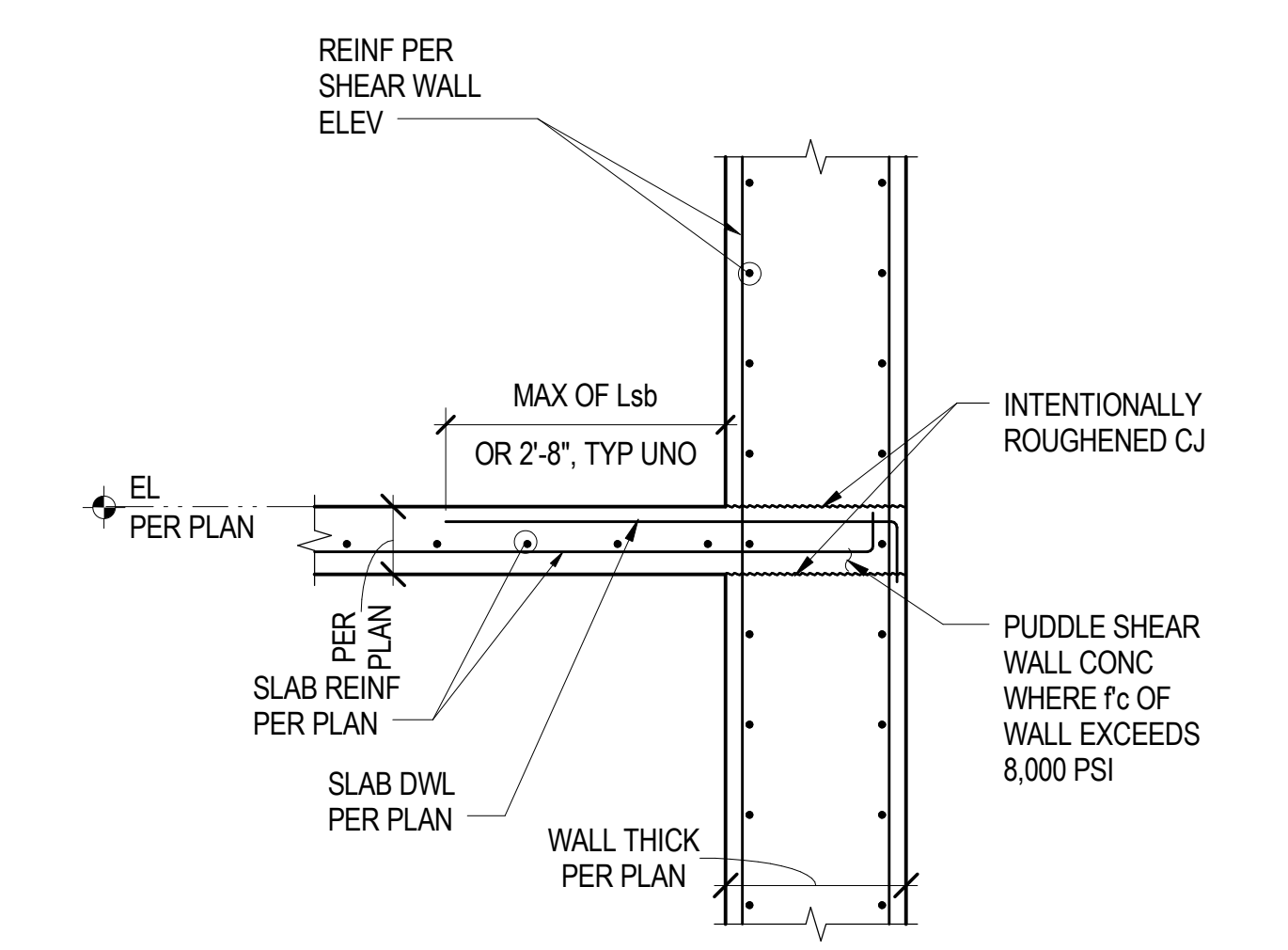
**S3.48**



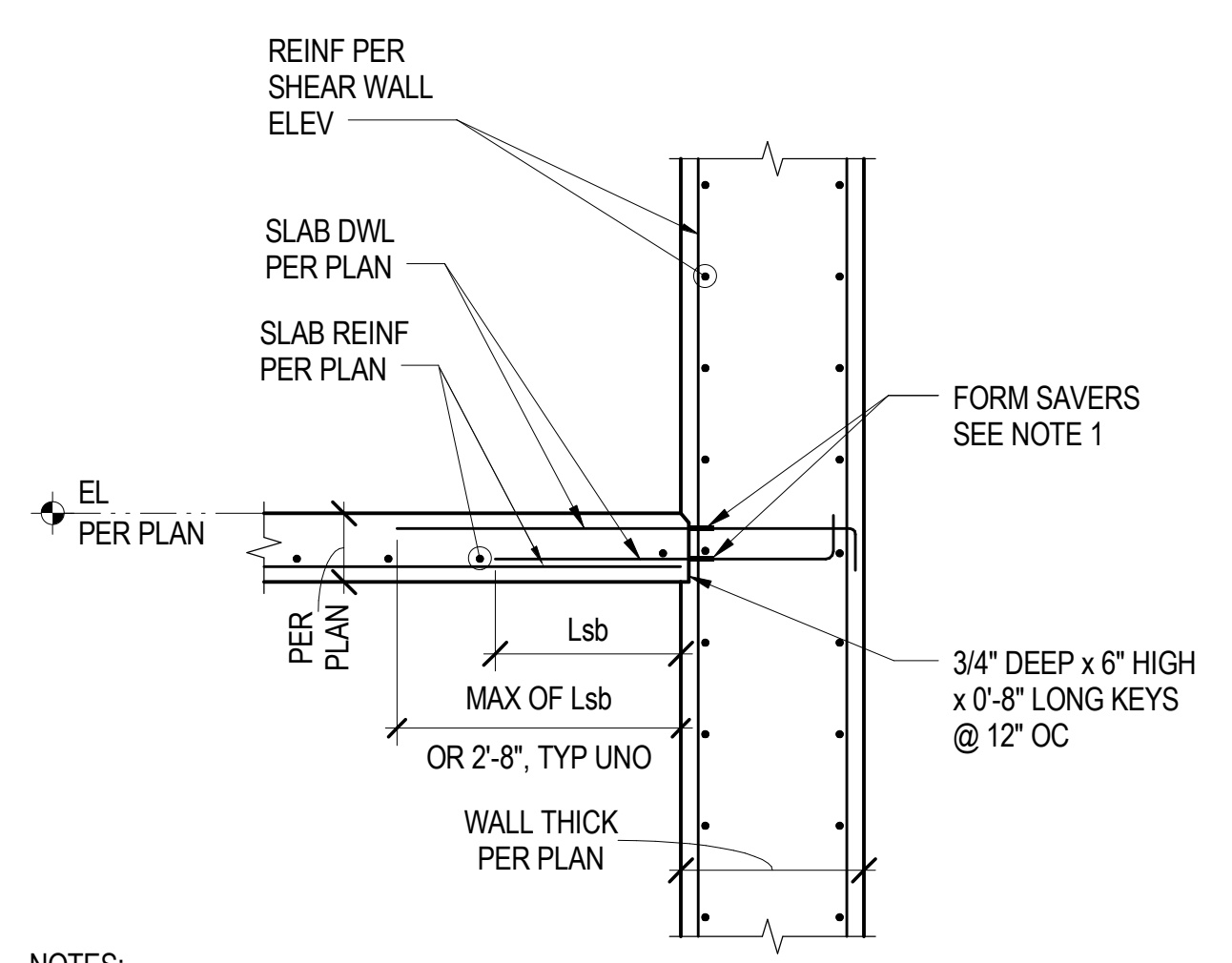
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



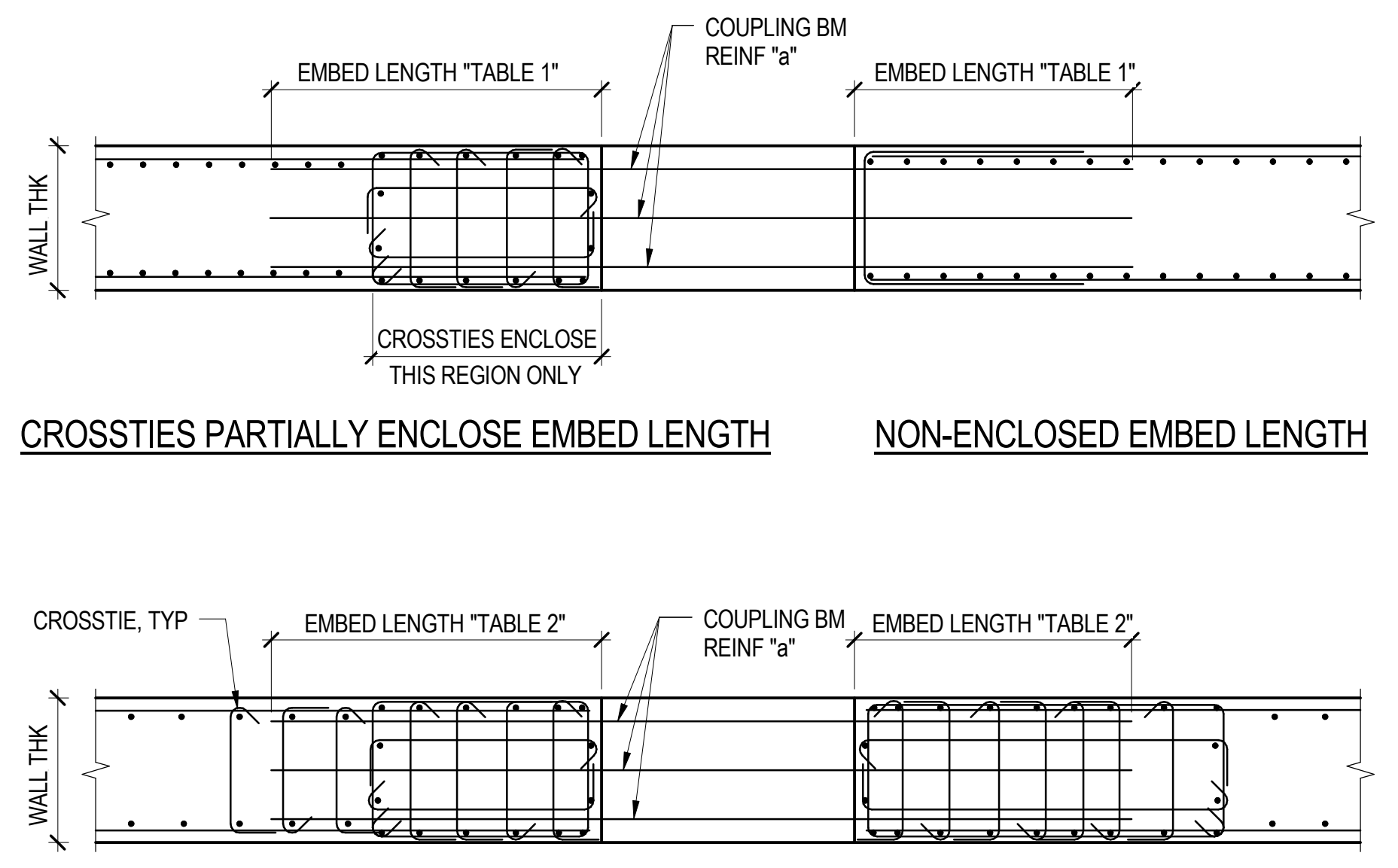
3 SHEAR WALL AT THRESHOLD



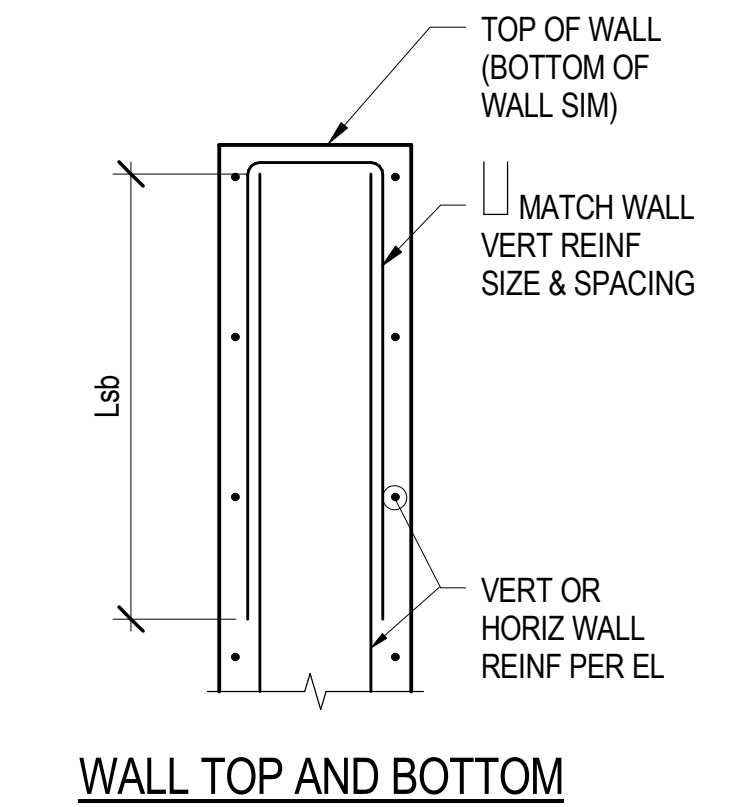
4 SHEAR WALL AT SLAB OPENING



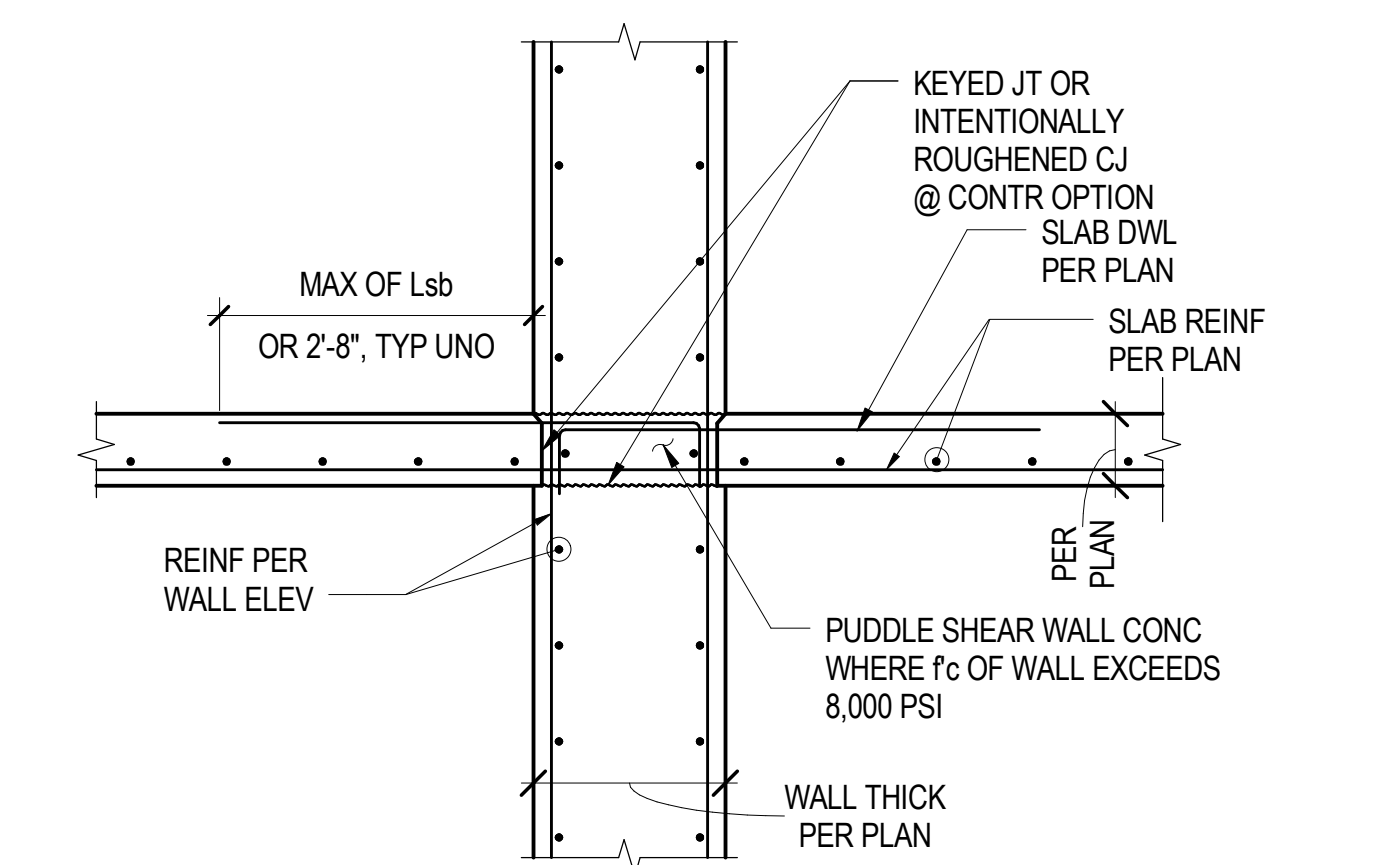
5 JUMP-FORMED WALL AT SLAB OPENING



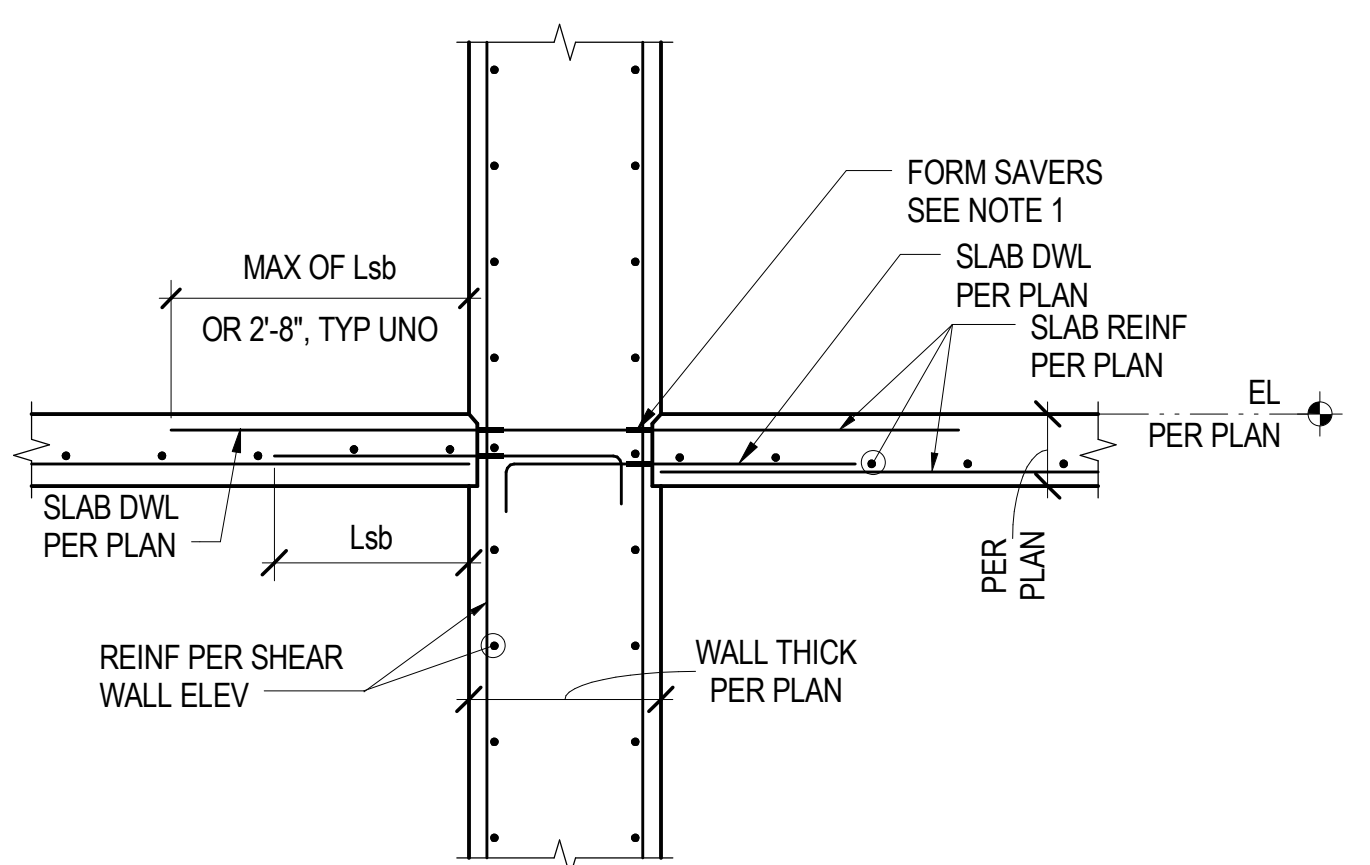
6 TYPICAL WALL CONFINEMENT AT COUPLING BEAMS



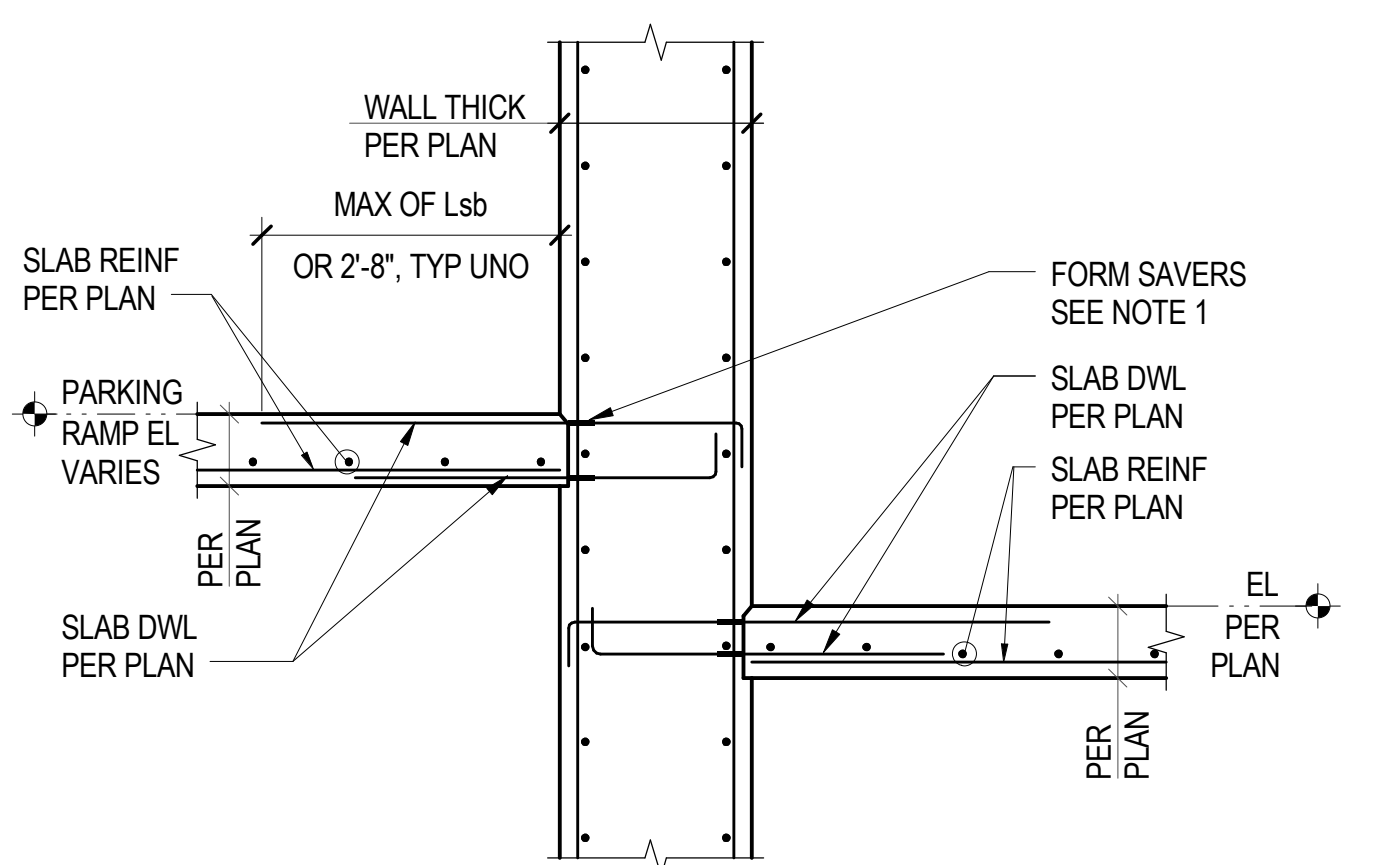
7 SHEAR WALL EDGE REINFORCING



8 SHEAR WALL AT CONTINUOUS SLAB



9 JUMP-FORMED WALL AT CONTINUOUS SLAB



10 JUMP-FORMED WALL WHERE SLAB EL VARIES

**NOTES:**  
1. WALL REINFORCING AND CROSSTIE DETAILING SHOWN IS GENERIC. SEE THE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

**NOTES:**  
1. DOOR OPENING OFFSETS SIMILAR TO WALL TOP AND BOTTOM.

**NOTES:**  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

**NOTES:**  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

**NOTES:**  
1. FORM SAVERS SHALL HAVE Ld STRAIGHT EMBED OR HOOK WITH Ldb EMBED WHERE WALL THICKNESS WILL NOT ALLOW FULL Ld DISTANCE.

**HORIZONTAL LAP LENGTH (L<sub>LAP</sub>) TABLE 1 (NON-ENCLOSED CONDITION)**

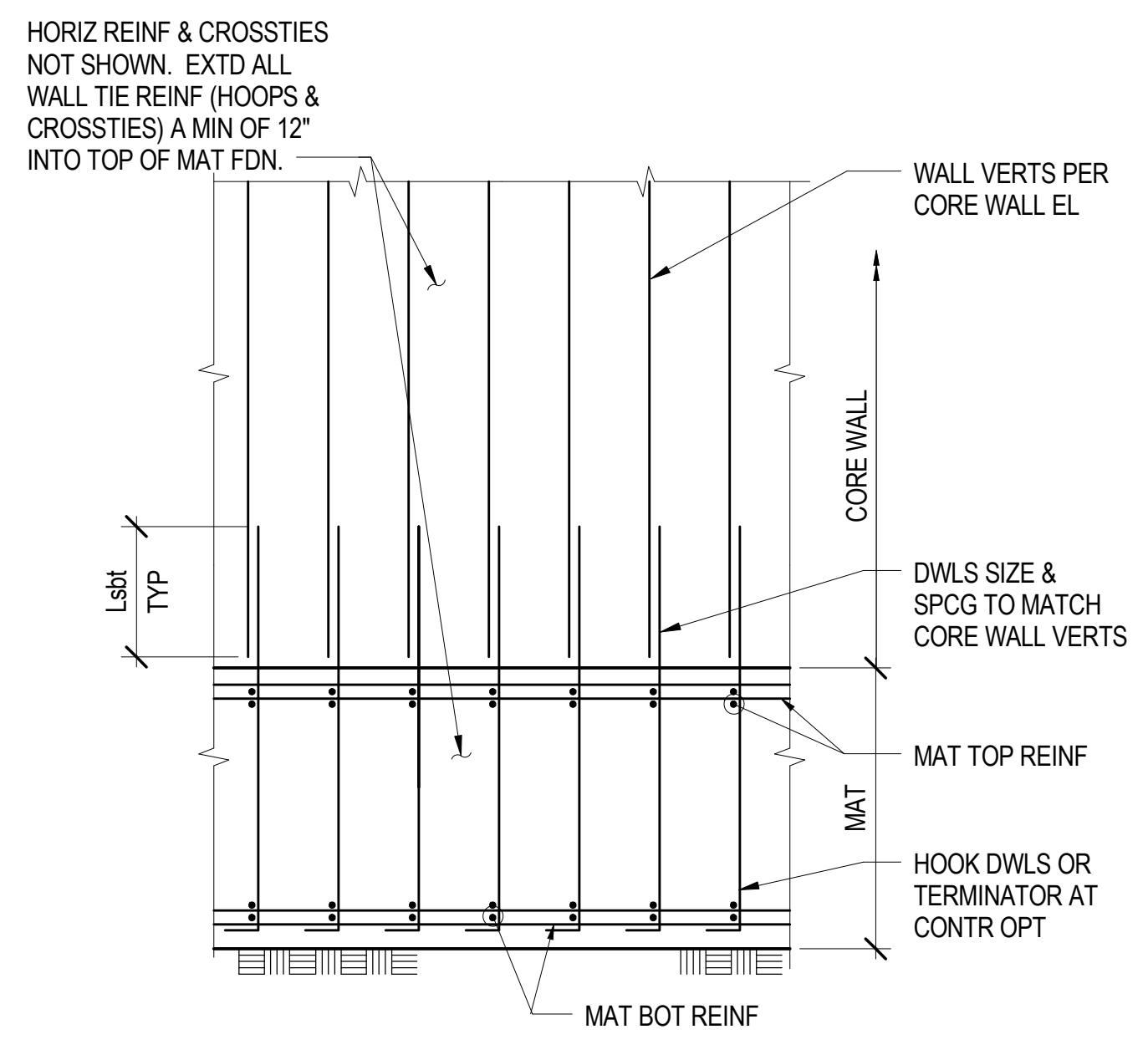
BAR SIZE	EMBED LENGTH (INCHES)		
	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 10 KSI
4	28	25	21
5	34	30	26
6	42	37	32
7	59	51	47
8	67	59	51
9	76	65	59
10	85	73	67
11	94	82	73

**NOTES:**  
1. LAP LENGTH IS CALCULATED AS 1.3x1.3xLd.  
2. SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.

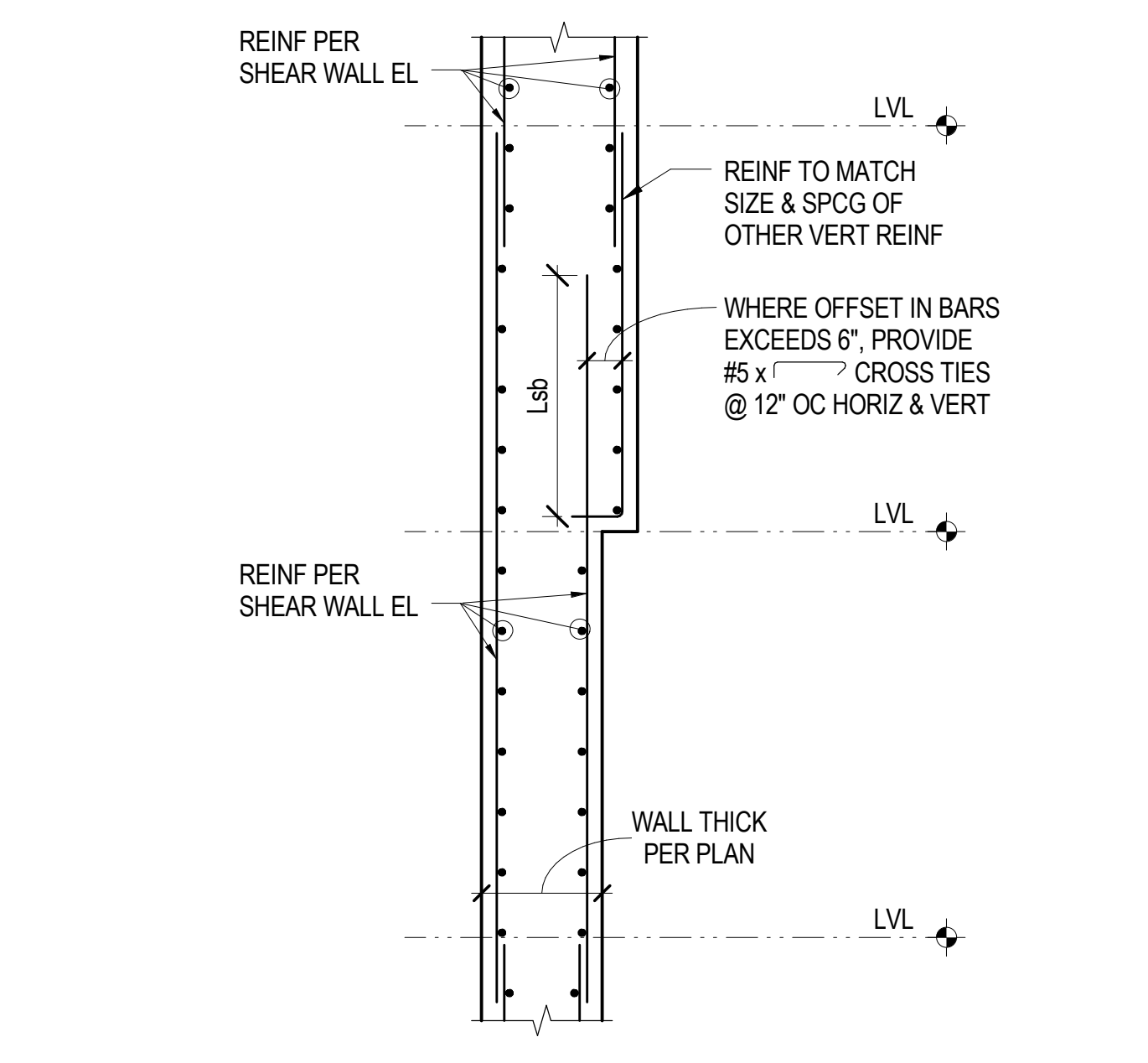
**HORIZONTAL LAP LENGTH (L<sub>LAP</sub>) TABLE 2 (ENCLOSED CONDITION)**

BAR SIZE	EMBED LENGTH (INCHES)		
	f <sub>c</sub> = 6 KSI	f <sub>c</sub> = 8 KSI	f <sub>c</sub> = 10 KSI
4	16	14	13
5	20	18	16
6	24	21	19
7	35	30	27
8	40	35	31
9	45	39	35
10	50	43	39
11	54	47	42

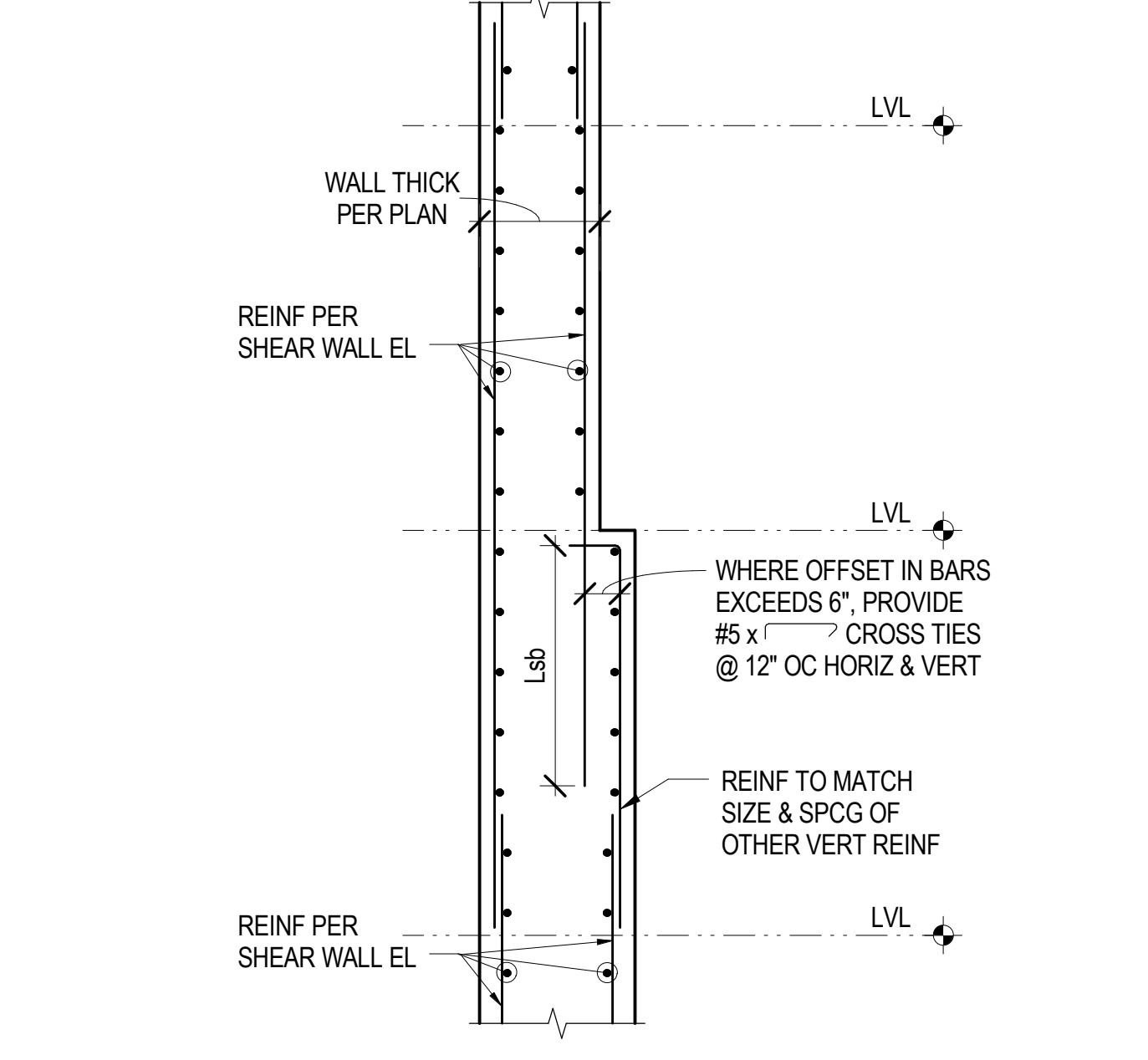
**NOTES:**  
1. LAP LENGTH IS CALCULATED AS 1.3x1.3x (Ld CONFINED).  
2. SEE "TYPICAL WALL CONFINEMENT" FOR DEFINITION OF ENCLOSED AND NON-ENCLOSED CONDITION.



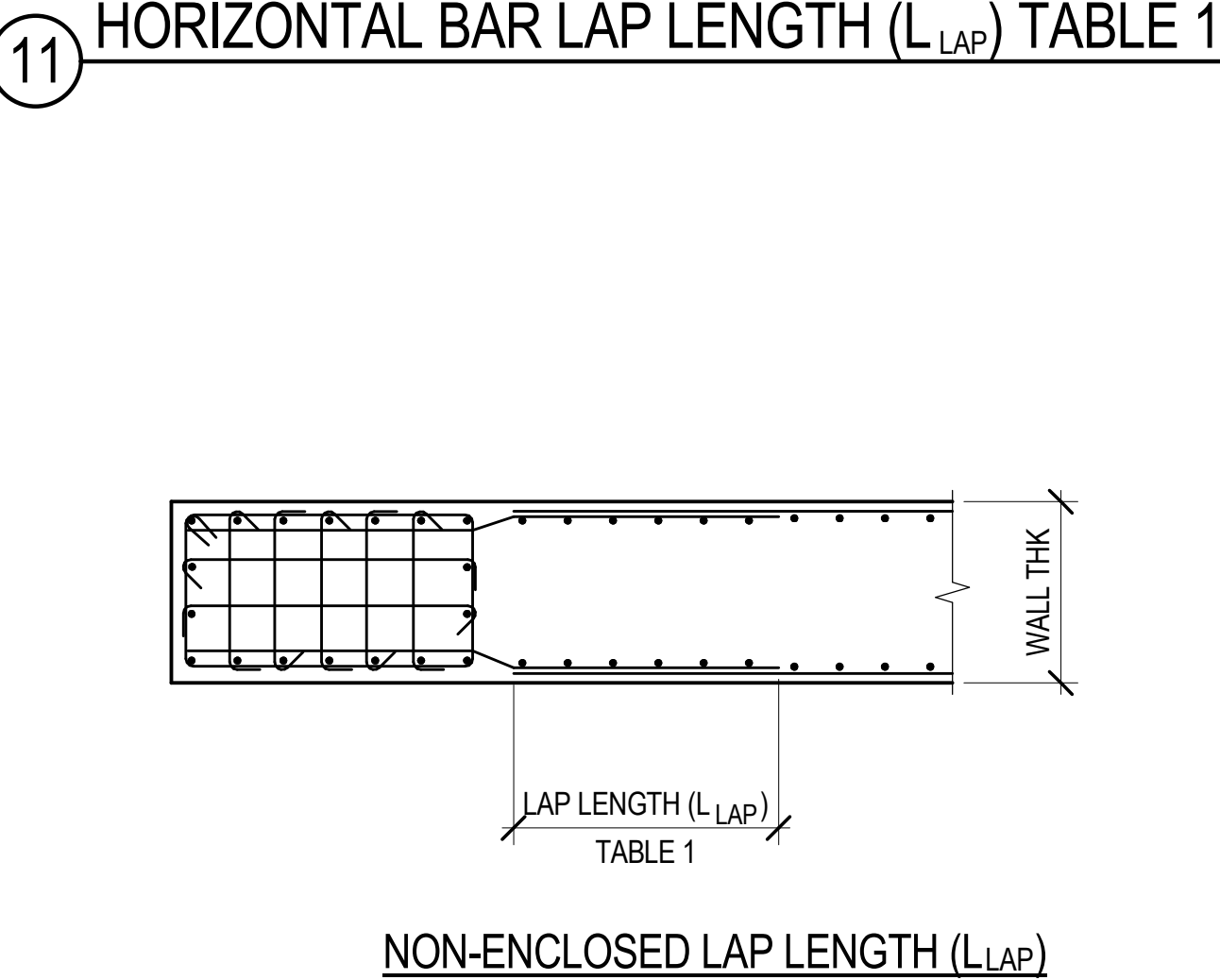
13 TYPICAL SHEAR WALL DOWEL



14 INCREASE IN WALL THICKNESS SECTION

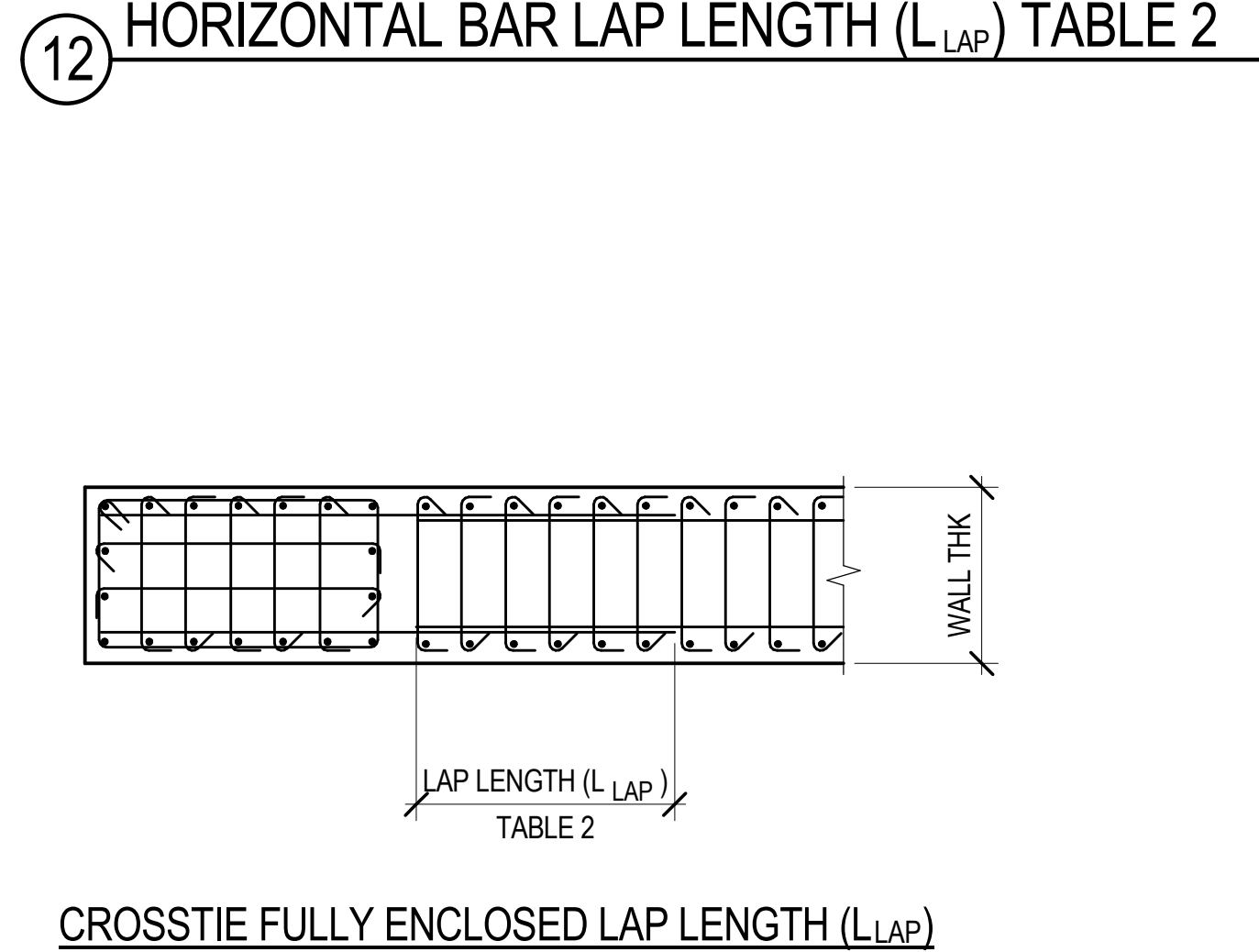


15 REDUCTION IN WALL THICKNESS SECTION

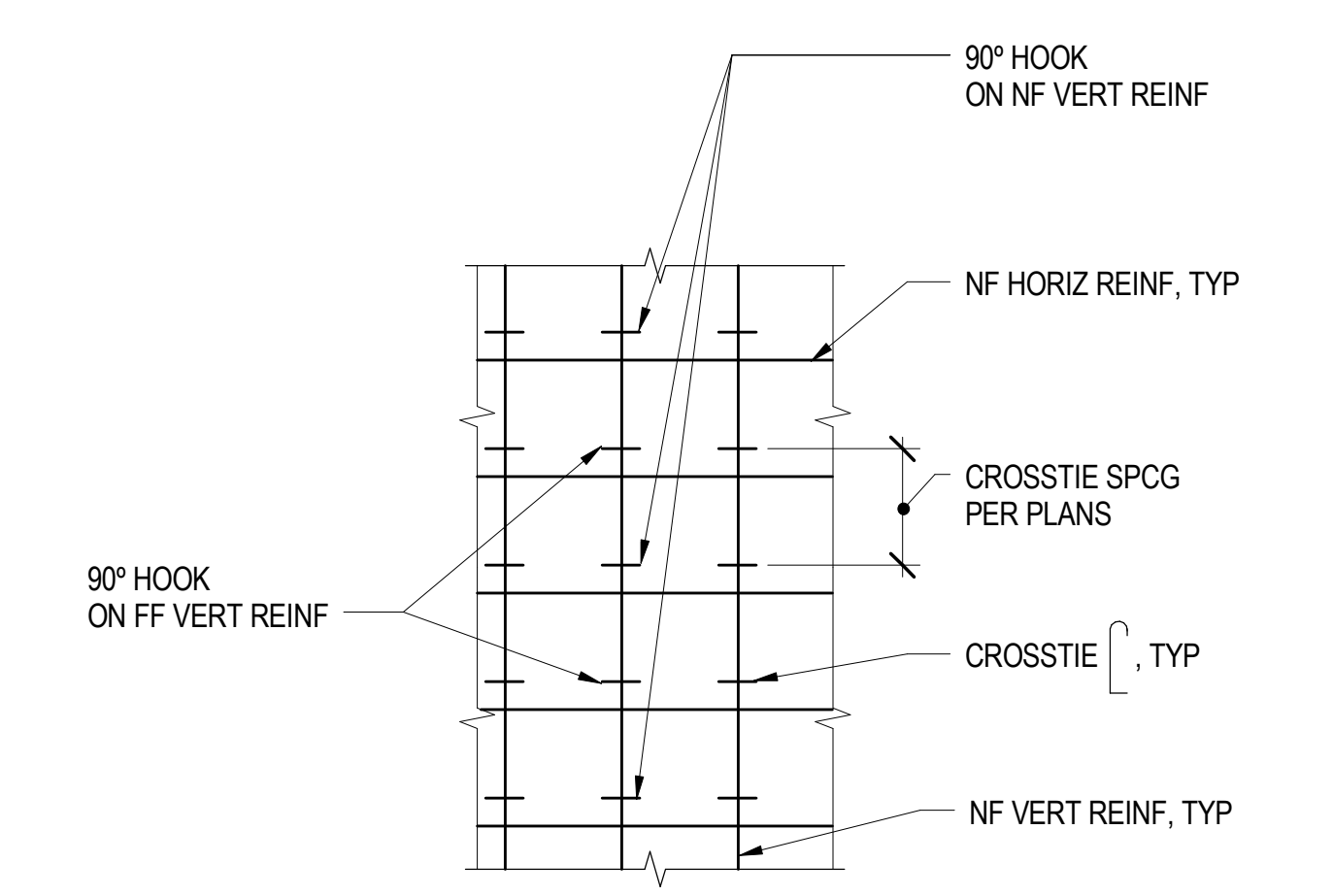


**NOTES:**  
1. WALL REINFORCING AND CROSSTIES SHOWN ARE GENERIC. SEE "SHEAR WALL ELEVATIONS" FOR WALL REINFORCING.

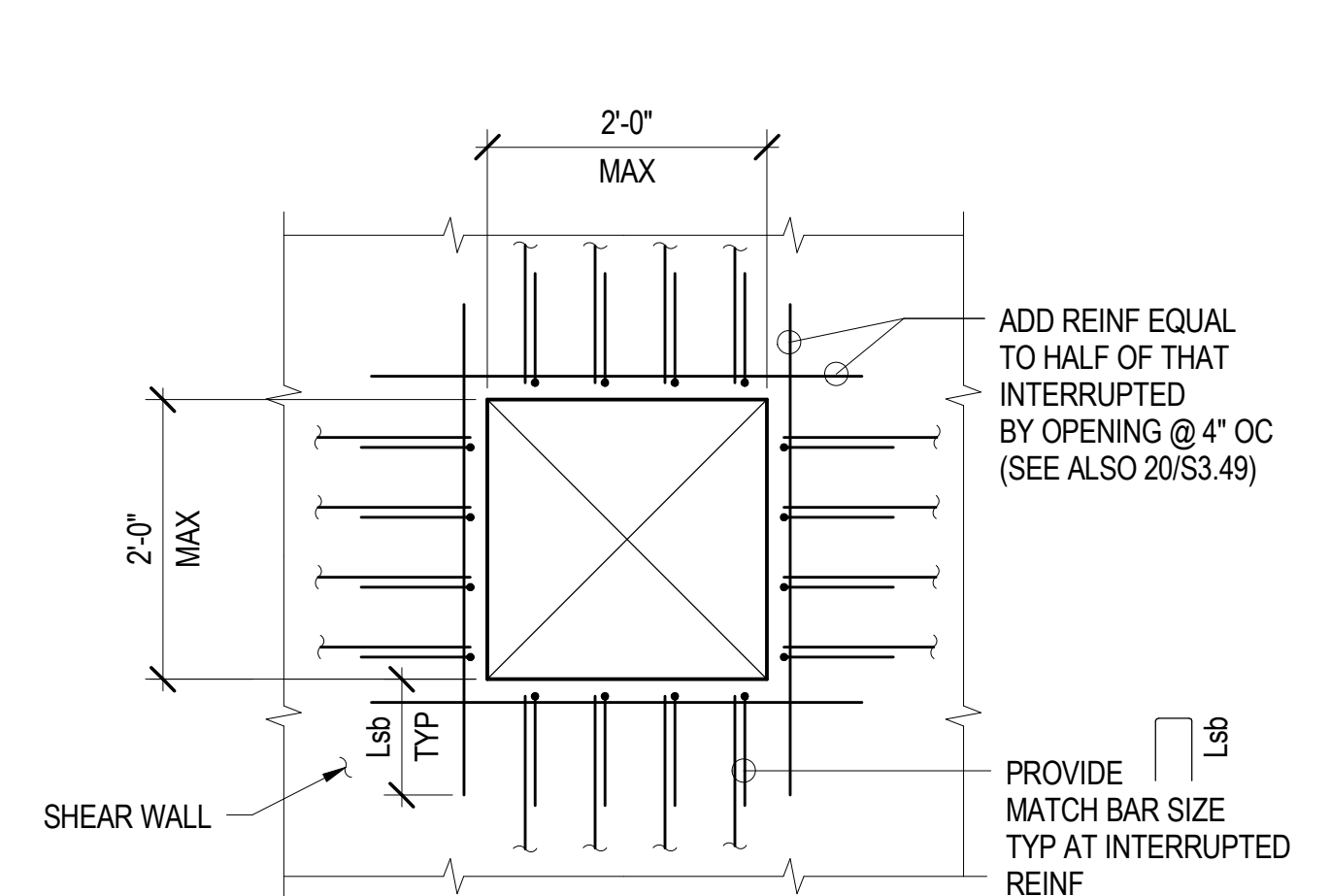
17 TYPICAL WALL CONFINEMENT



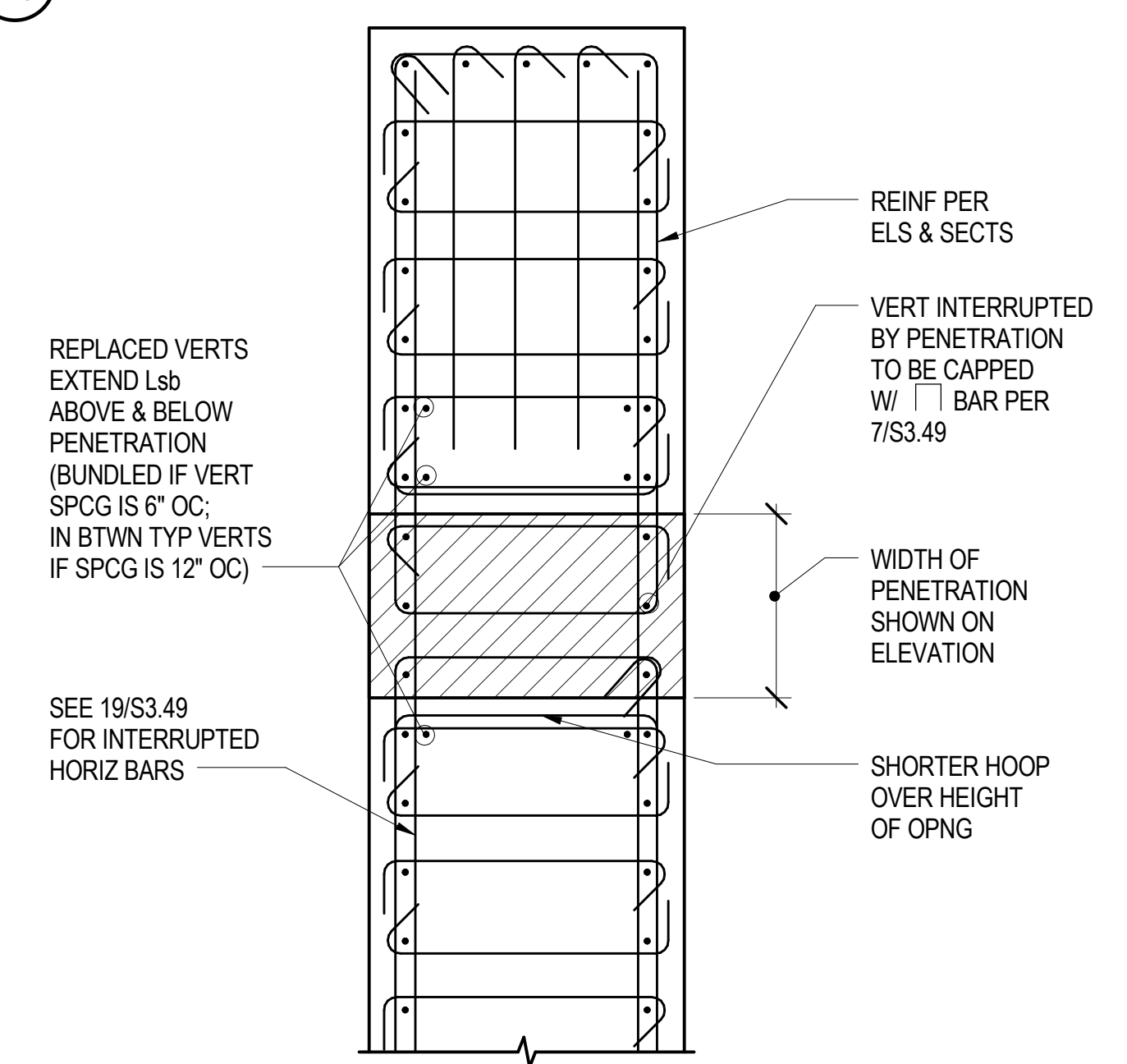
18 ELEVATION - CROSSTIE SPACING



18 ELEVATION - CROSSTIE SPACING



19 TYPICAL SMALL SHEAR WALL OPENING



20 PLAN AT SHEAR WALL PENETRATION

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**TYPICAL SHEAR WALL DETAILS**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE						
MARK	WALL THICKNESS	F <sub>c</sub> =8,000 PSI		F <sub>c</sub> =10,000 PSI		CROSSTIE CONFINEMENT
		Lt (INCH)	Ldh (INCH)	Lt (INCH)	Ldh (INCH)	
H11	30"	55	15	-	-	(3) #4
H12	24"	-	-	64	14	(3) #5
H13	24"	108	29	80	26	(3) #5
H13	>24"	-	-	72	26	(3) #4
H14	30"	99	29	87	26	(3) #4
H14	36"	-	-	69	26	(3) #4
H14	42"	-	-	55	26	(3) #5
H15	30"	-	-	107	26	(3) #4
H15	36"	-	-	82	26	(3) #4
H15	42"	-	-	64	26	(3) #5
H16	24"	110	29	99	26	(4) #4
H16	48"	-	-	58	26	(4) #4
H17	ALL	-	-	80	26	(3) #4
H18	30"	-	-	121	35	(3) #6
H18	>30"	-	-	100	35	(3) #4
H19	30"	109	39	98	35	(4) #4
H19	36"	-	-	98	35	(4) #4
H19	42"	-	-	92	35	(4) #4
H21	36"	111	39	104	35	(4) #4
H21	>36"	-	-	99	35	(4) #4
H22	ALL	-	-	98	35	(5) #4
H24	36"	-	-	127	35	(4) #4
H24	42"	-	-	108	35	(4) #4
H24	48"	-	-	74	35	(4) #5
H25	36"	-	-	104	35	(5) #4
H26	36"	-	-	116	35	(4) #5
H26	>36"	-	-	99	35	(4) #5
H27	42"	-	-	99	35	(5) #5
H28	48"	-	-	90	35	(5) #5

**NOTES:**

- CROSSTIE QUANTITY SPECIFIED TO BE PROVIDED AT EACH VERTICAL BAR FOR Lt LENGTH BEYOND OPENING.
- PLACE ONE CROSSTIE ABOVE AND BELOW THE GROUP AND BETWEEN EACH LAYER.
- WHERE CROSSTIES LISTED ABOVE COINCIDE WITH CROSSTIES SHOWN IN SHEAR WALL SECTIONS, THE GREATER QUANTITY SHALL BE USED.
- PROVIDE MINIMUM CLEAR COVER OF 2 1/2" AND MINIMUM END COVER OF 2".
- AT CONTRACTOR'S OPTION, INCREASED CONFINEMENT MAY BE PROVIDED TO ELIMINATE HOOKED ENDS AT LOCATIONS SPECIFIED IN "OPTIONAL CONFINEMENT" TABLE.

**10 SHEAR WALL HORIZONTAL REINFORCEMENT DEVELOPMENT LENGTH TABLE**

OPTIONAL CONFINEMENT			
WALL	LEVELS	CROSSTIE CONFINEMENT	MARKS
SOUTH	L31-L45	(3) #6	H18
EAST	L2-L6	PER SHEAR WALL SECTIONS	H26, H27
EAST	L7-L14	(4) #6	H24
EAST	L15	(5) #6	H22
EAST	L16-L22	(14) #6	H21
EAST	L23-L24	(14) #6	H21
EAST	L25-L30	(14) #5	H19
EAST	L31-L44	(12) #6	H19
EAST	L45-L46	(12) #5	H19
EAST	L47	(10) #6	H19
EAST	L52	PER SHEAR WALL SECTIONS	H22
EAST	L58-L60	(11) #6	H14
NORTH	L3-L6	PER SHEAR WALL SECTIONS	H19
NORTH	L7-L10	(7) #4	H18
NORTH	L15-L18	(7) #5	H18
NORTH	L19-L32	(3) #4	H14, H15
NORTH	L33	(3) #5	H15
NORTH	L34	(5) #6	H15
NORTH	L35-L44	(3) #4	H13
NORTH	L45-L47	(3) #6	H15
NORTH	L48-L49	PER SHEAR WALL SECTIONS	H13, H14
INTERIOR	P3-P2	PER SHEAR WALL SECTIONS	H13

**NOTES:**

- IN LIEU OF HOOKED END, EXTEND THE HORIZONTAL BARS AND PROVIDE SPECIFIED CROSSTIE CONFINEMENT AT EACH VERTICAL BAR BEYOND OPENING TO WALL END.
- PLACE ONE CROSSTIE ABOVE AND BELOW THE GROUP AND BETWEEN EACH LAYER. REMAINING NUMBER OF CROSSTIES TO BE DISTRIBUTED, SPACED NO MORE THAN 4" VERTICALLY, HALF ABOVE AND HALF BELOW THE GROUP.
- WHERE CROSSTIES LISTED ABOVE COINCIDE WITH CROSSTIES SHOWN IN SHEAR WALL SECTIONS, THE GREATER QUANTITY SHALL BE USED.

**15 OPTIONAL CONFINEMENT TABLE**

NO.	DATE	ISSUE
1	02 MAY 14	GMP

CAD FILENAME

DRAWING TITLE

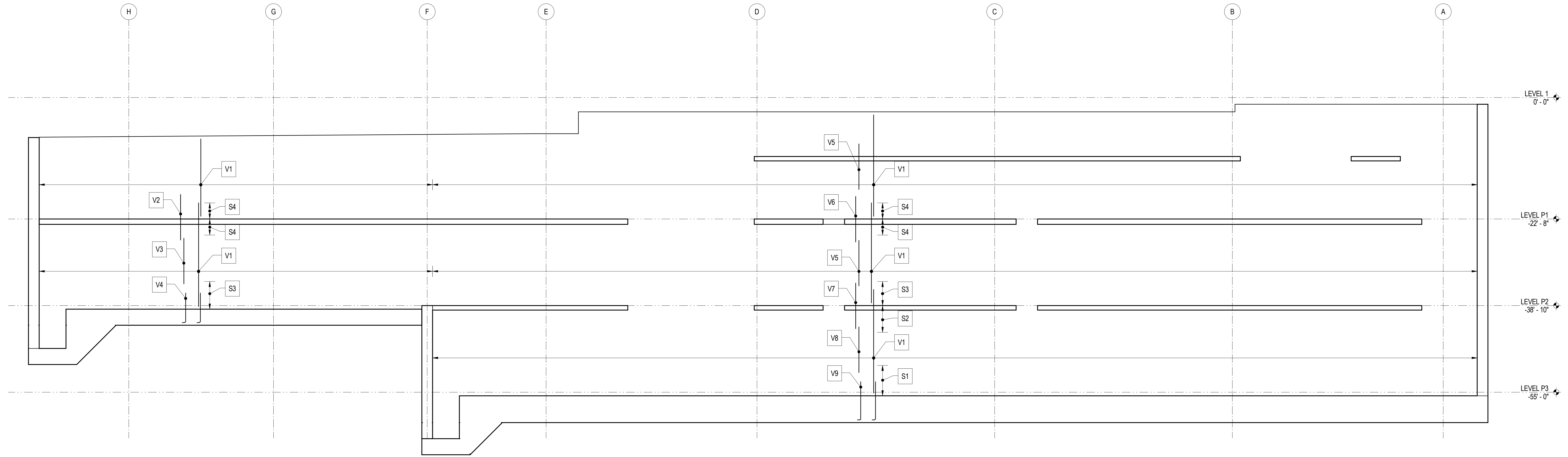
**TYPICAL SHEAR WALL DETAILS**

PROJECT NO. 08044

DRAWING NUMBER **S3.50**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

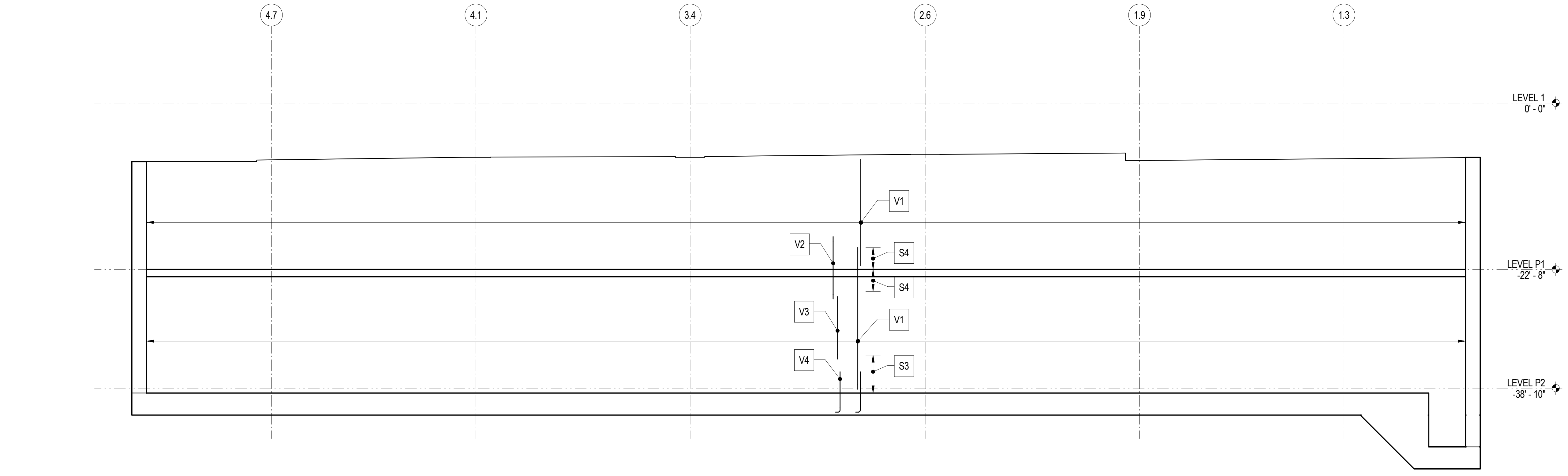


1 SOUTH BASEMENT WALL ELEVATION  
1/8" = 1'-0"

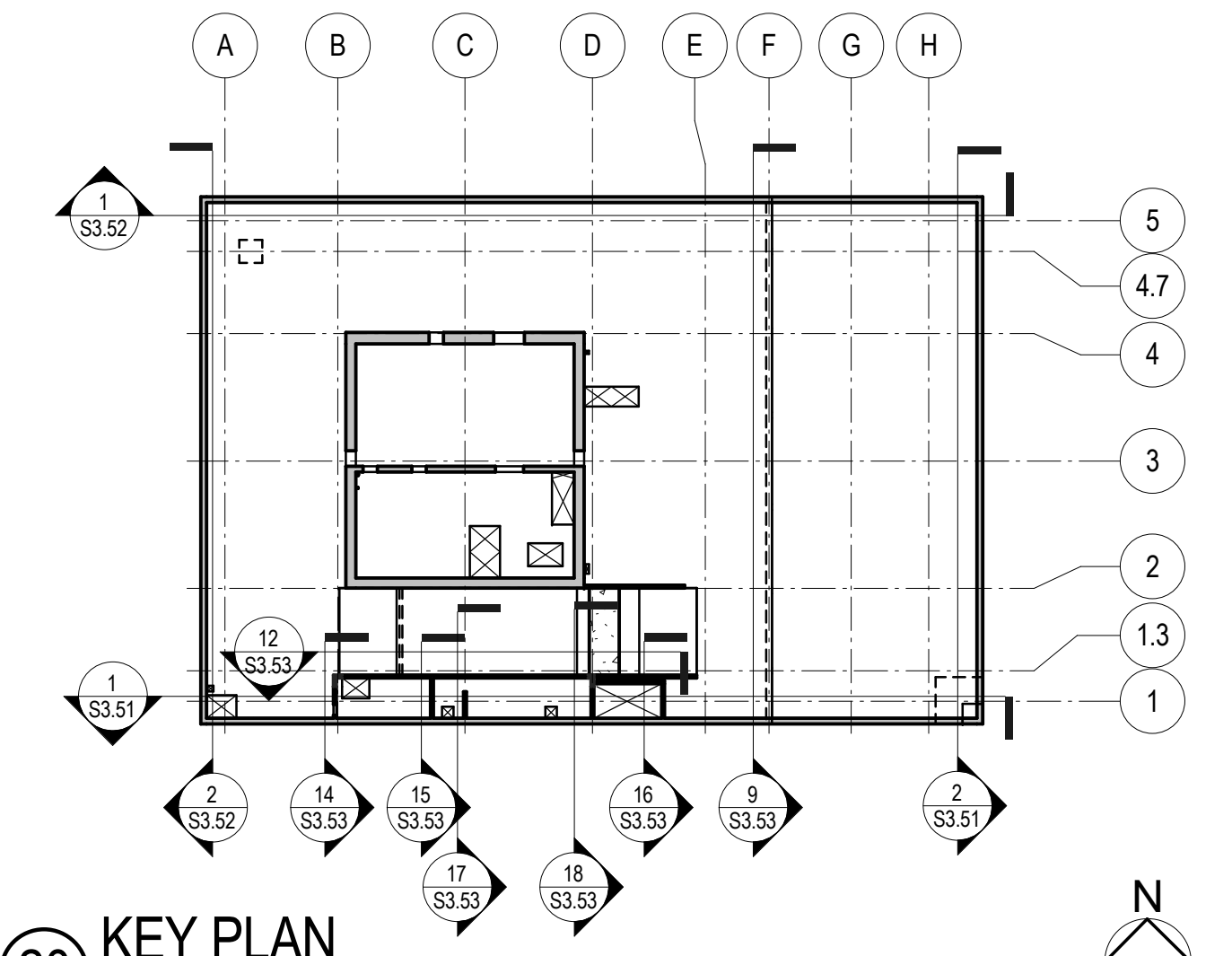
- NOTES:**
- BASEMENT WALL CONCRETE STRENGTH: LEVELS P3 TO 1:  $f_c = 6,000$  PSI
  - WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
  - FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
  - VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS Lsb, UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
  - FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
  - WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT Lsb WITHIN MIDDLE THIRD OF WALL LENGTH.

MARK	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
	V1	#6 CONT @ 12"	
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#6x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#6x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--

MARK	BAR	SPACING	
		HORIZONTAL	VERTICAL
		S1	#5
S2	#5	9" OC	BELOW P2: (2) TIES @ 6", (4) TIES @ 12"
S3	#5	18" OC	ABOVE P2: (3) TIES @ 6", (3) TIES @ 12"
S4	#5	18" OC	BELOW / ABOVE P1: (3) TIES @ 12"



2 EAST BASEMENT WALL ELEVATION  
1/8" = 1'-0"



20 KEY PLAN

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**BASEMENT WALL ELEVATIONS**

NO. PROJECT NO. 08044

DRAWING NUMBER S3.51

4/30/2014 11:17:34 AM C:\Revit\Transbay\Twr\_MS2013\_116.rvt



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

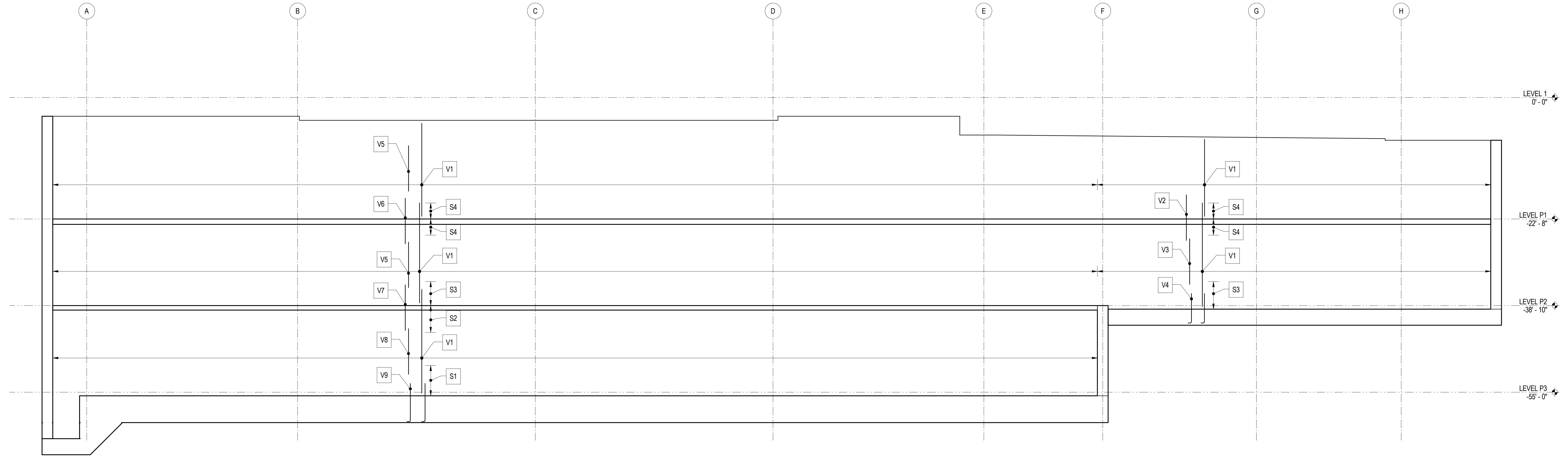
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



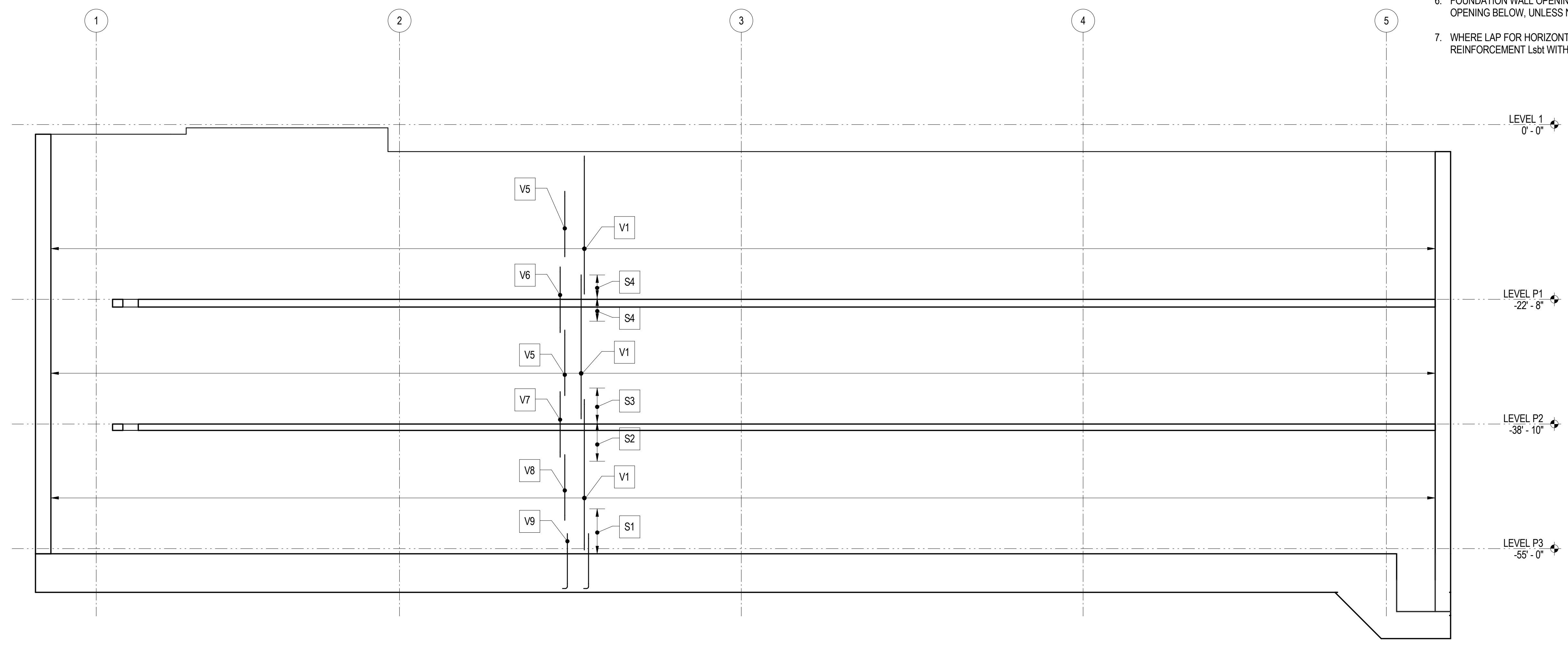
1 NORTH BASEMENT WALL ELEVATION  
1/8" = 1'-0"

NOTES:

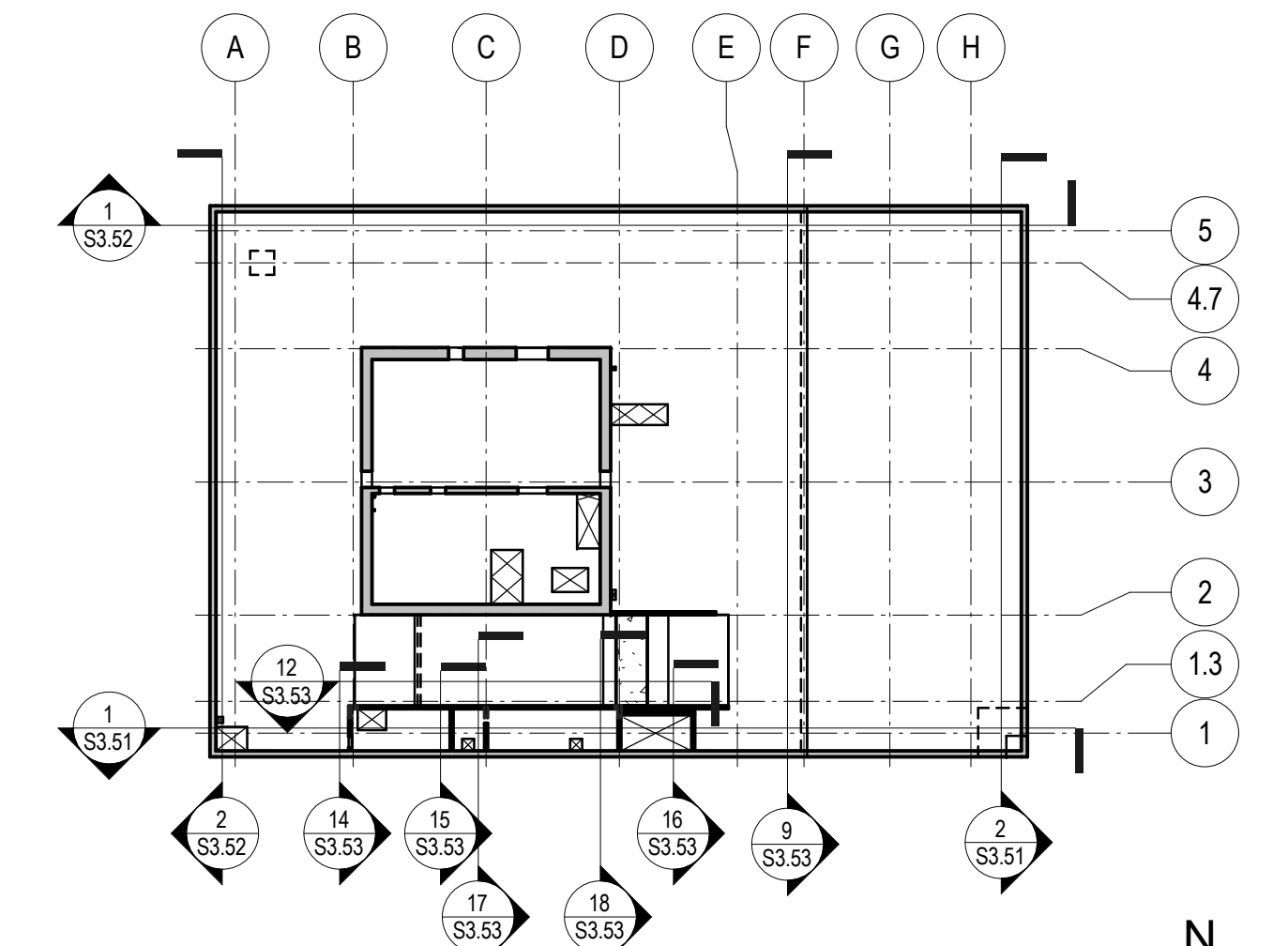
- BASEMENT WALL CONCRETE STRENGTH: LEVELS P3 TO 1:  $f_c = 6,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $L_{sb}$ , UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
- FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $L_{sb1}$  WITHIN MIDDLE THIRD OF WALL LENGTH.

MARK	REINFORCING SCHEDULE		
	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
V1	#6 CONT @ 12"	#6 CONT @ 12"	#6 @ 6"
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#6x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#8x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--

MARK	BAR	SHEAR TIE REINFORCING	
		HORIZONTAL	SPACING
			VERTICAL
S1	#5	9" OC	FROM BOT: (6) TIES @ 6", (3) TIES @ 12"
S2	#5	9" OC	BELOW P2: (2) TIES @ 6", (4) TIES @ 12"
S3	#5	18" OC	ABOVE P2: (3) TIES @ 6", (3) TIES @ 12"
S4	#5	18" OC	BELOW / ABOVE P1: (3) TIES @ 12"



2 WEST BASEMENT WALL ELEVATION  
1/8" = 1'-0"



20 KEY PLAN

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

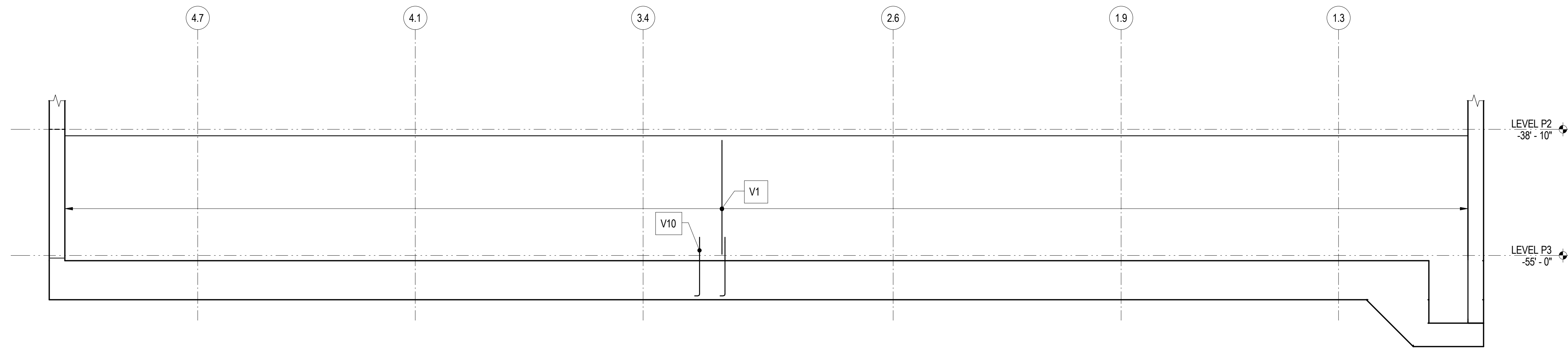
DRAWING TITLE  
**BASEMENT WALL ELEVATIONS**

NO. PROJECT NO. 08044  
DRAWING NUMBER **S3.52**

4/30/2014 11:17:37 AM C:\Revit\Transbay\Twr\_MS2013\_11s.rvt

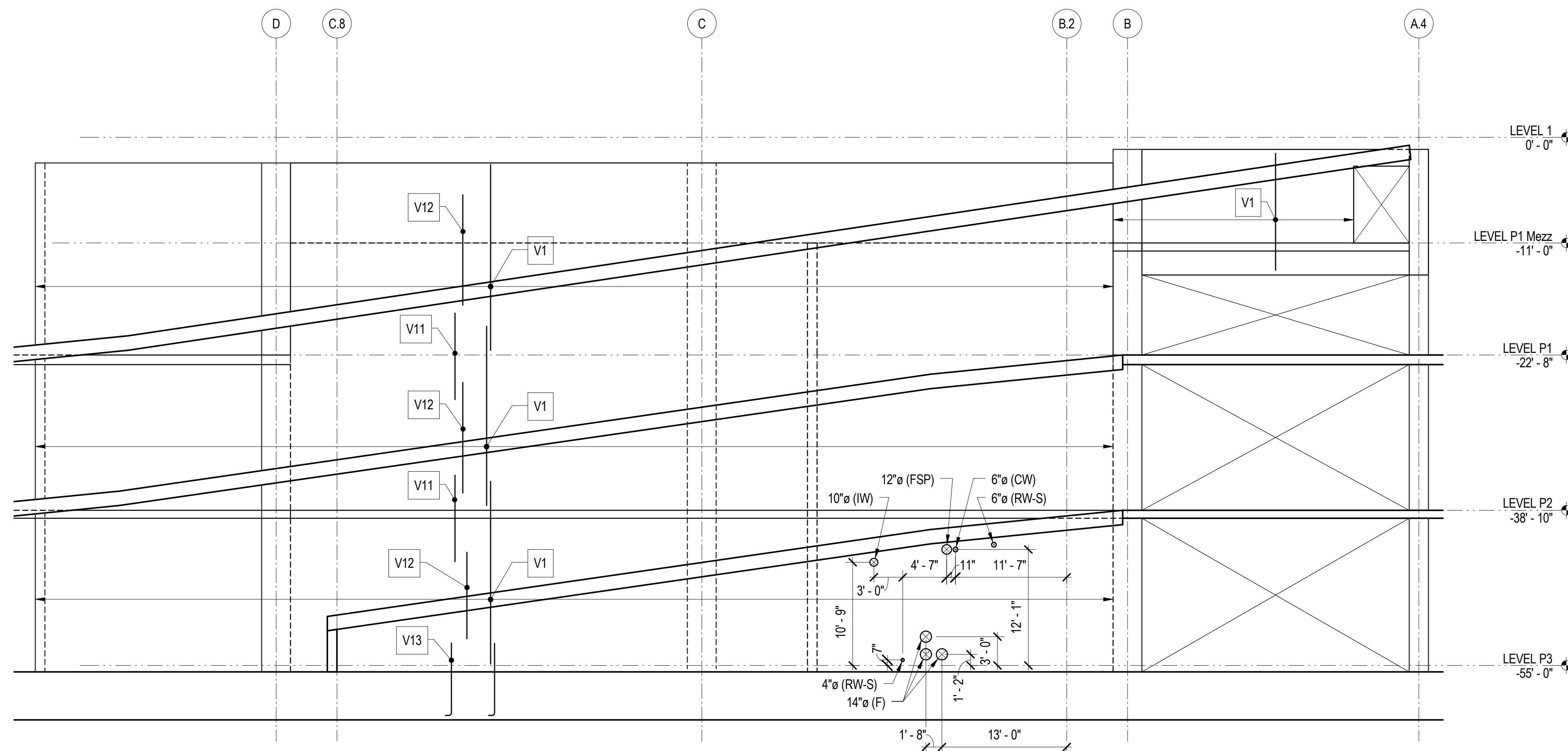


- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



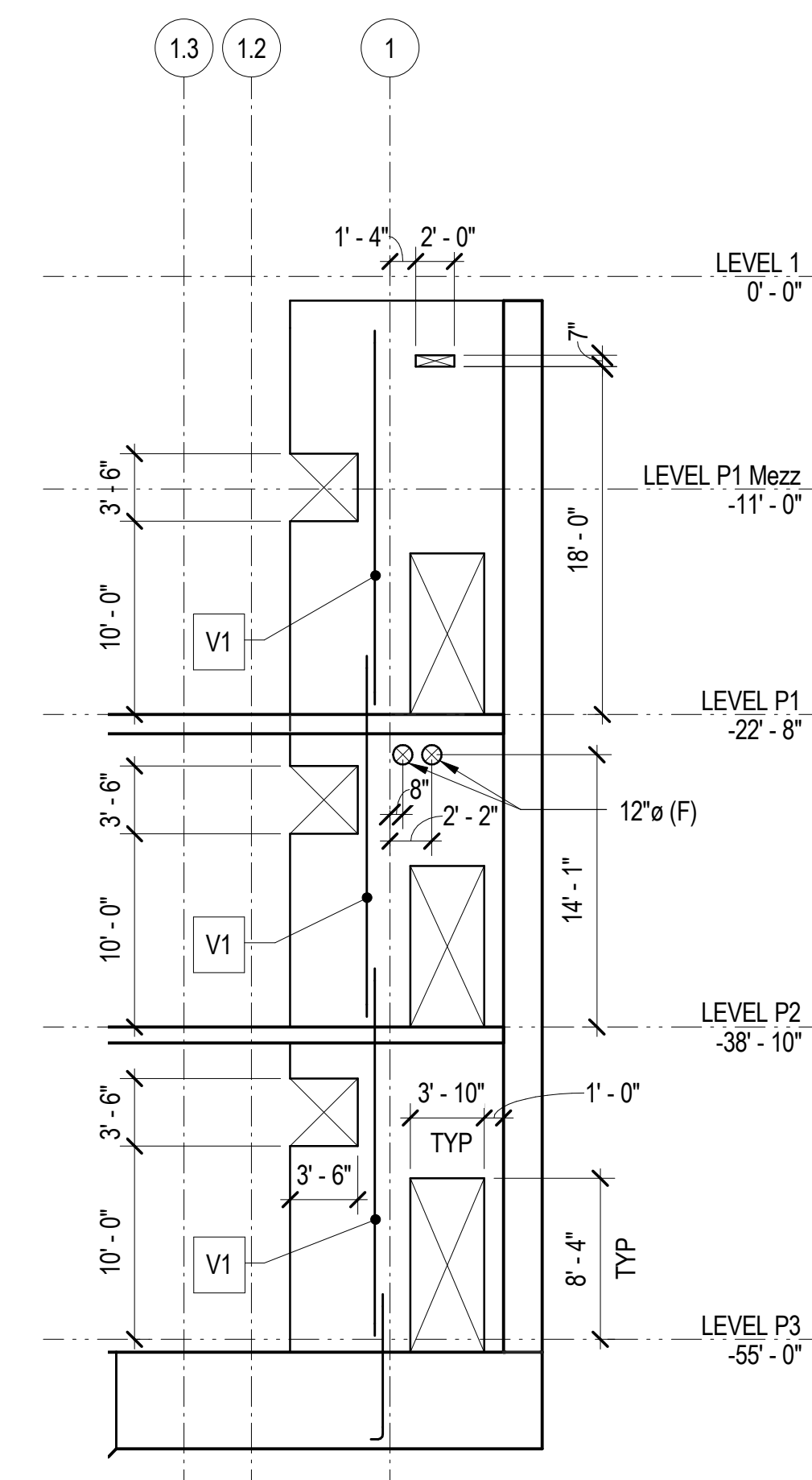
9 BASEMENT WALL ELEVATION ALONG GRID F

1/8" = 1'-0"



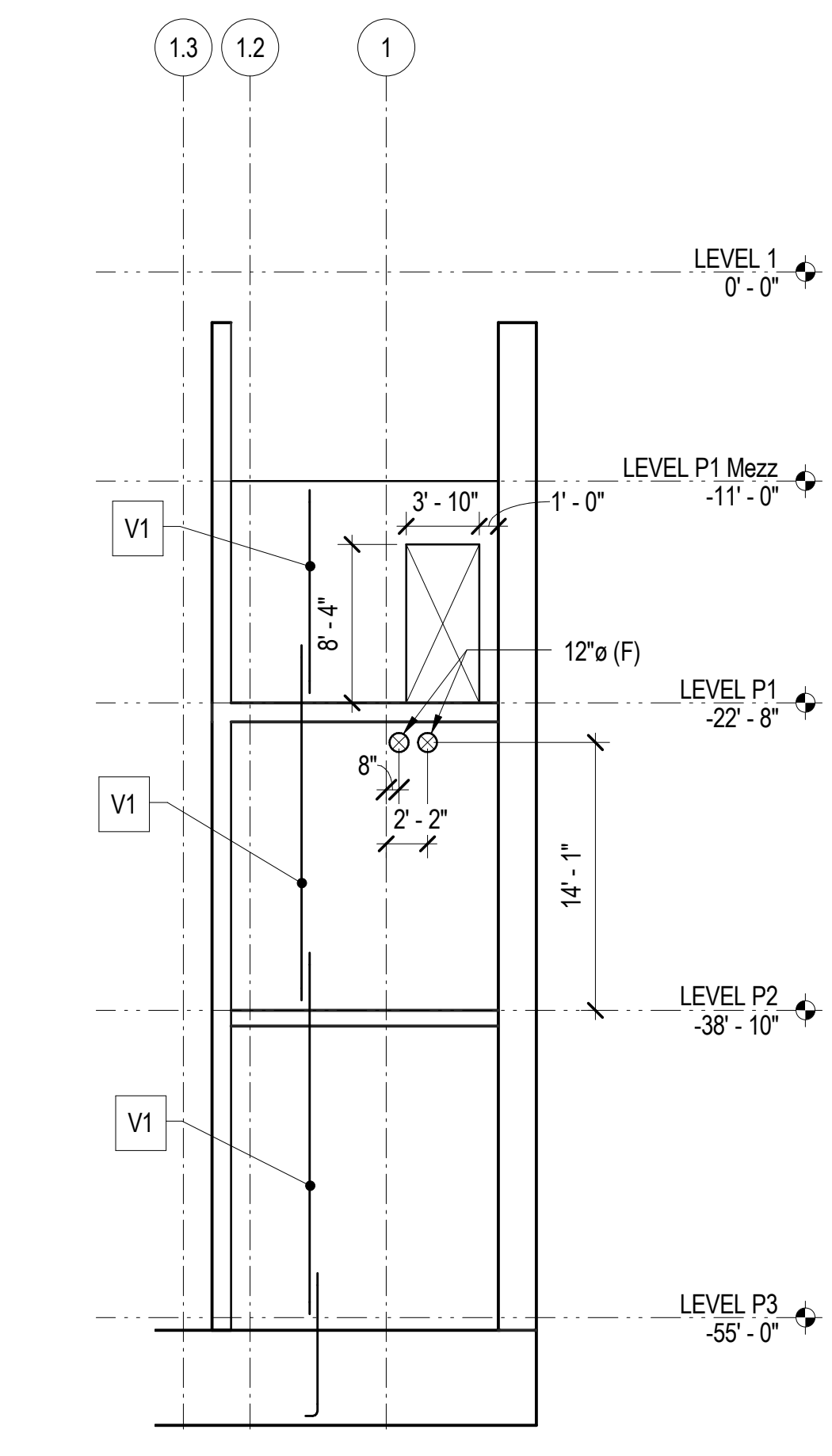
14 WALL ELEVATION AT GRID B

1/8" = 1'-0"



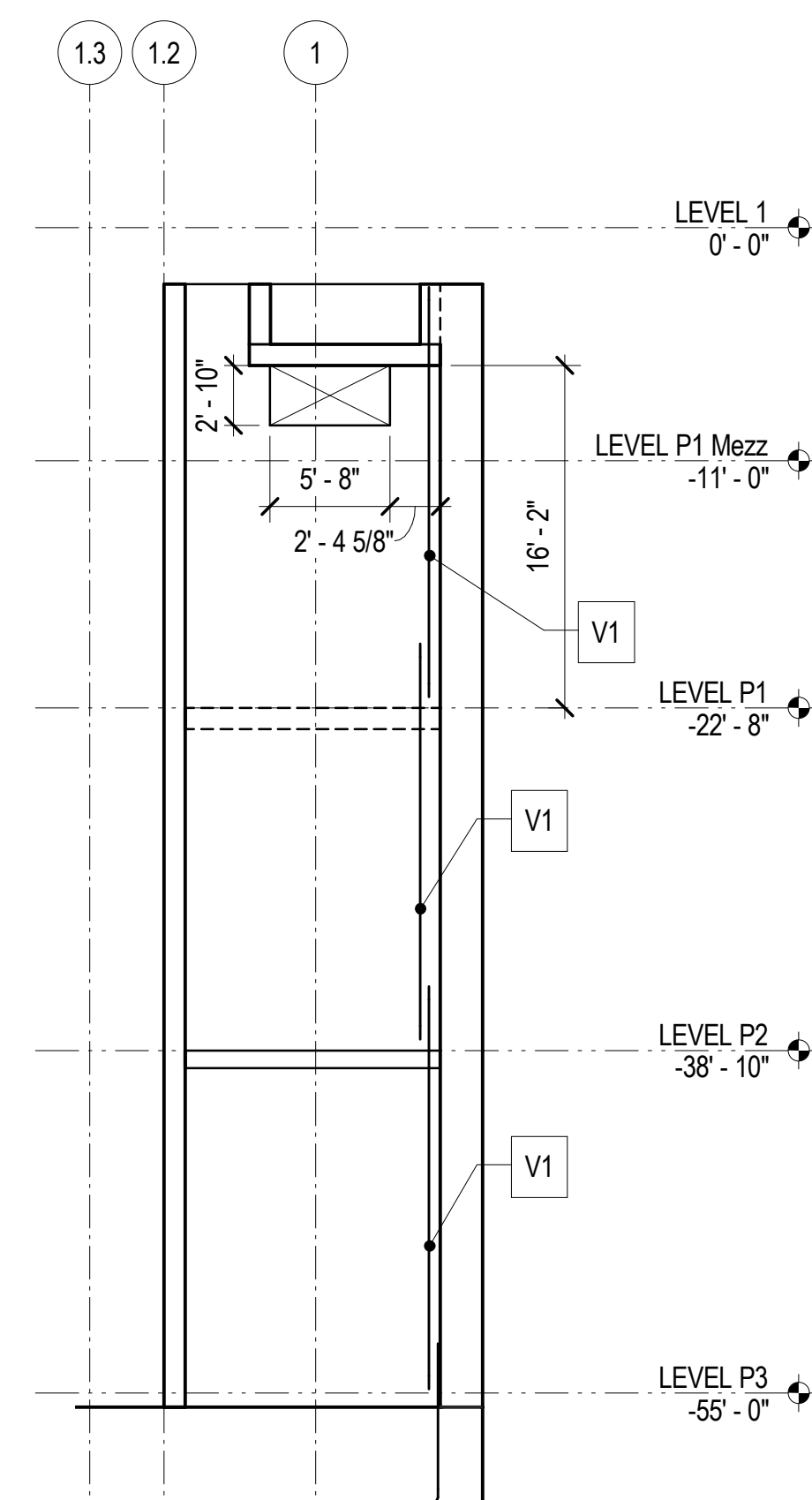
15 WALL ELEVATION NEAR GRID C

1/8" = 1'-0"



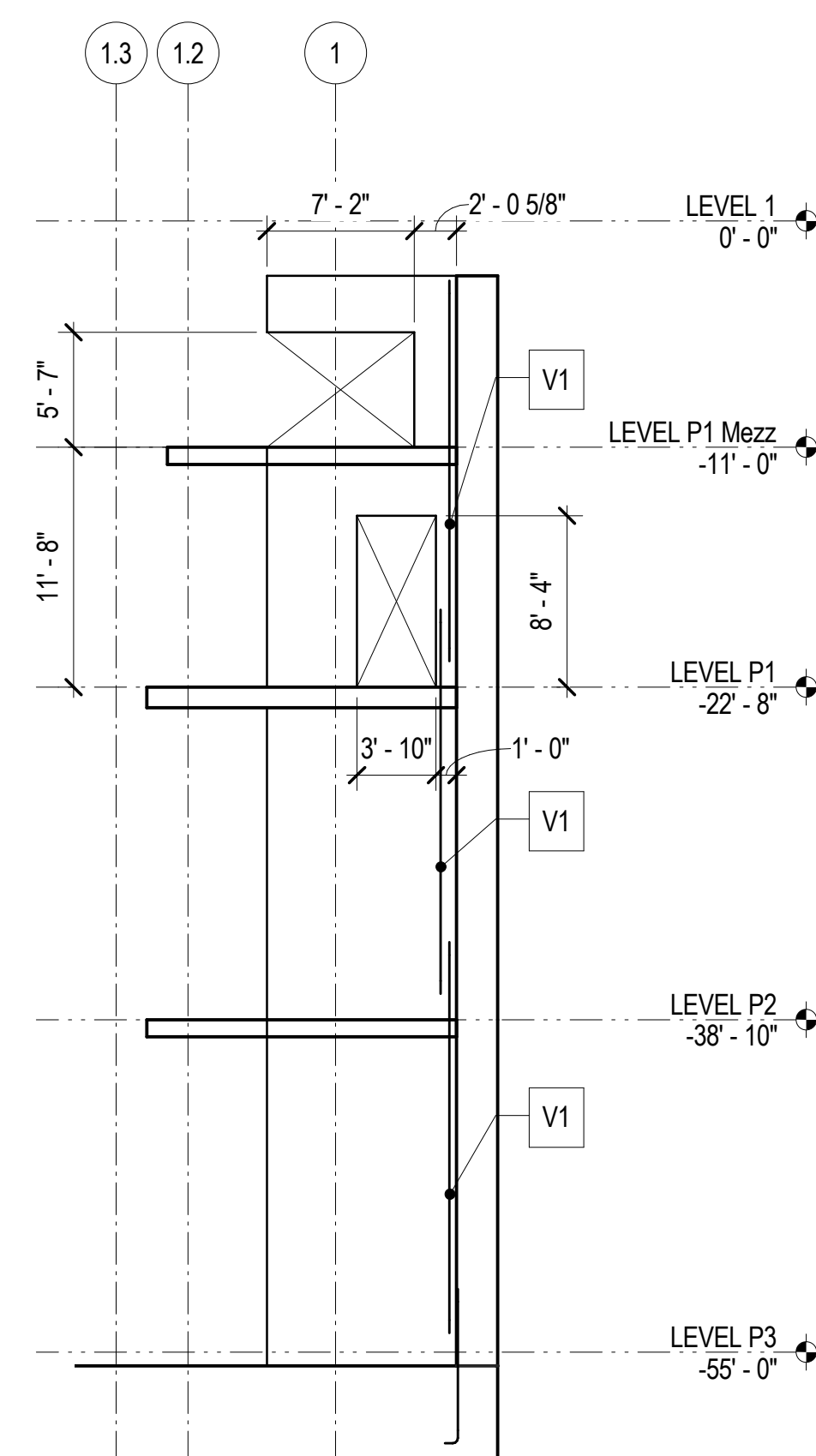
12 WALL ELEVATION AT GRID 1.3

1/8" = 1'-0"



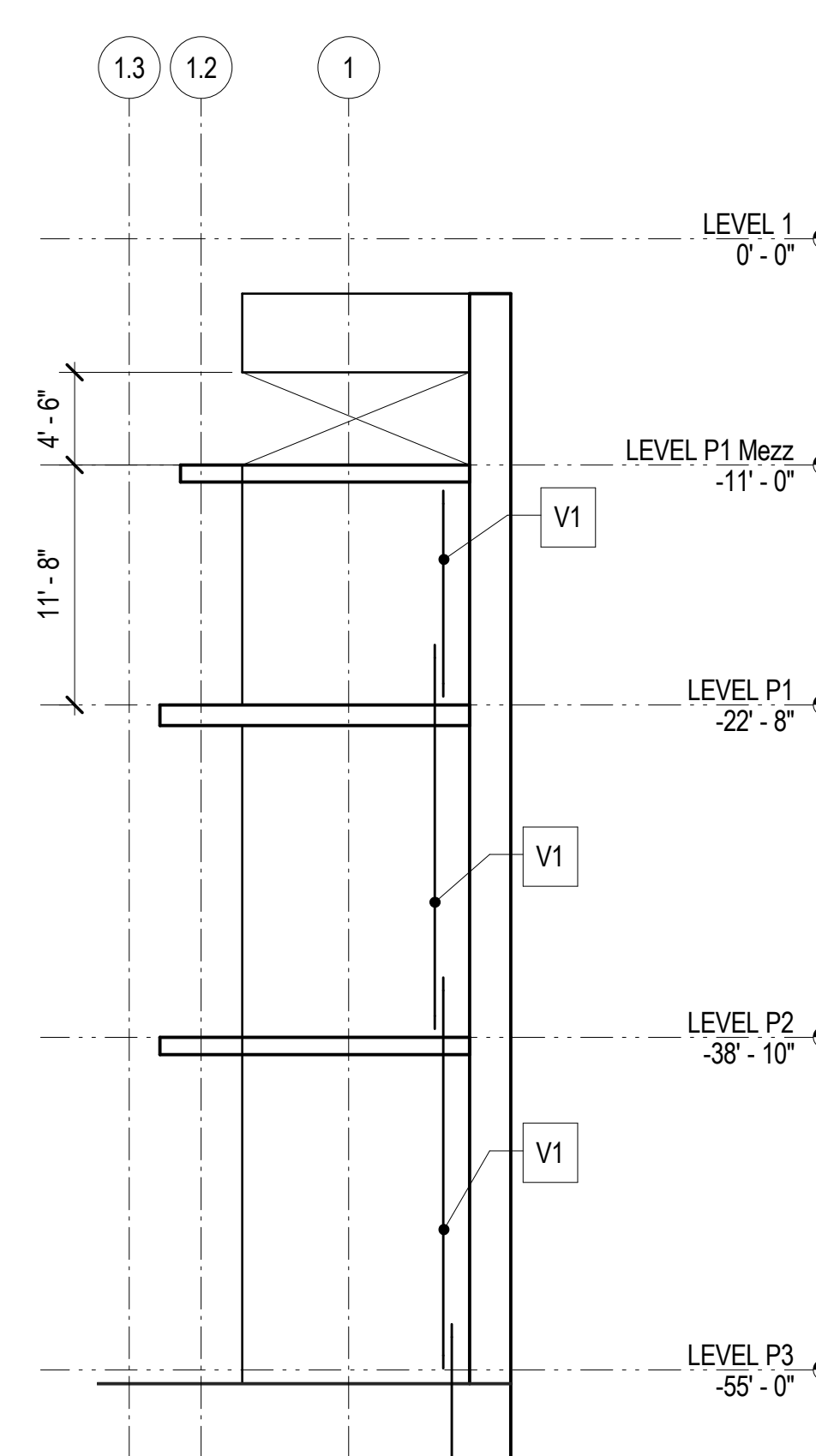
17 WALL ELEVATION AT GRID C

1/8" = 1'-0"



18 WALL ELEVATION AT GRID D

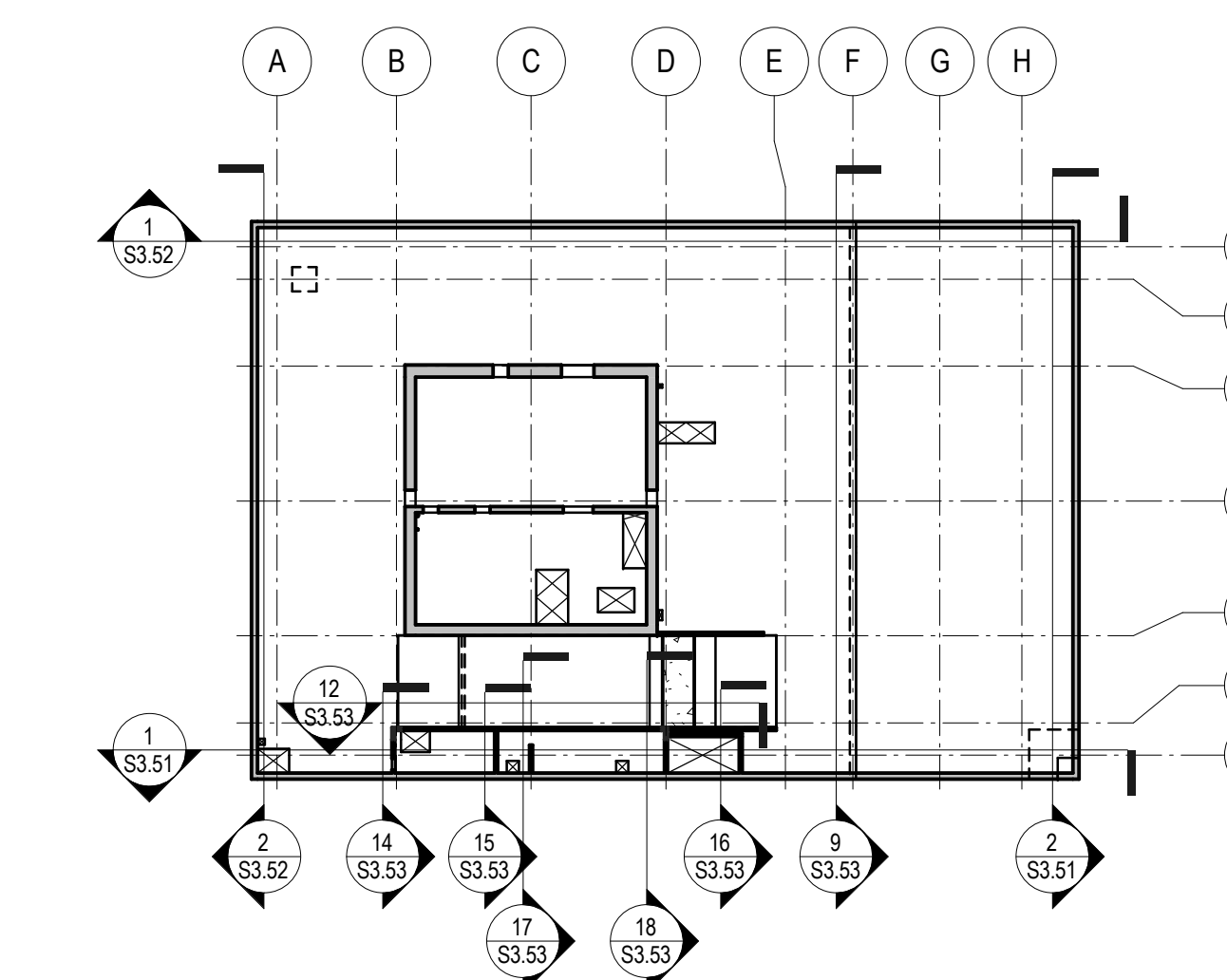
1/8" = 1'-0"



NOTES:

- BASEMENT WALL CONCRETE STRENGTH:  
LEVELS P3 TO 1:  $f_c = 6,000$  PSI
- WALL OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- SEE TYPICAL FOUNDATION DETAILS ON S4.02 FOR ADDITIONAL INFORMATION.
- FOR ADDED REINFORCEMENT NOT SHOWN ON ELEVATION, SEE FOUNDATION WALL SECTIONS.
- VERTICAL REINFORCEMENT RETAINS THE SAME MARK AS THE BAR BELOW, UNLESS NOTED OTHERWISE. LAP VERTICAL BARS  $1.6l_d$ , UNLESS NOTED OTHERWISE. BAR DOWELS TO MATCH SIZE AND SPACING OF BARS ABOVE, UNLESS NOTED OTHERWISE.
- FOUNDATION WALL OPENINGS REMAIN THE SAME SIZE AS THE DIMENSIONED OPENING BELOW, UNLESS NOTED OTHERWISE.
- WHERE LAP FOR HORIZONTAL REINFORCEMENT IS REQUIRED, SPLICE REINFORCEMENT  $1.6l_d$  WITHIN MIDDLE THIRD OF WALL LENGTH.

MARK	VERTICAL REINFORCING		HORIZONTAL REINFORCING EACH FACE
	OUTSIDE FACE	INSIDE FACE	
V1	#6 CONT @ 12"	#6 CONT @ 12"	#6 @ 6"
V2	#7x6'-0" @ 12" CENTER ON FLOOR	--	--
V3	--	#7x6'-0" @ 12" CENTER ON WALL	--
V4	#7x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V5	--	#6x10'-0" @ 12" CENTER ON WALL	--
V6	#7x6'-0" @ 6" CENTER ON FLOOR	--	--
V7	#8x6'-0" @ 6" CENTER ON FLOOR	--	--
V8	--	#8x6'-0" @ 6" CENTER ON WALL	--
V9	#9x4'-0" @ 6" EXTEND ABOVE FLOOR	--	--
V10	#6x4'-0" @ 12" EXTEND ABOVE FLOOR	--	--
V11	#5x6'-0" @ 12" CENTER ON FLOOR	#5x6'-0" @ 12" CENTER ON FLOOR	--
V12	#8x8'-0" @ 12" CENTER ON WALL	#8x8'-0" @ 12" CENTER ON WALL	--
V13	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	#9x5'-0" @ 12" EXTEND ABOVE FLOOR	--



20 KEY PLAN

16 WALL ELEVATION NEAR GRID D

1/8" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

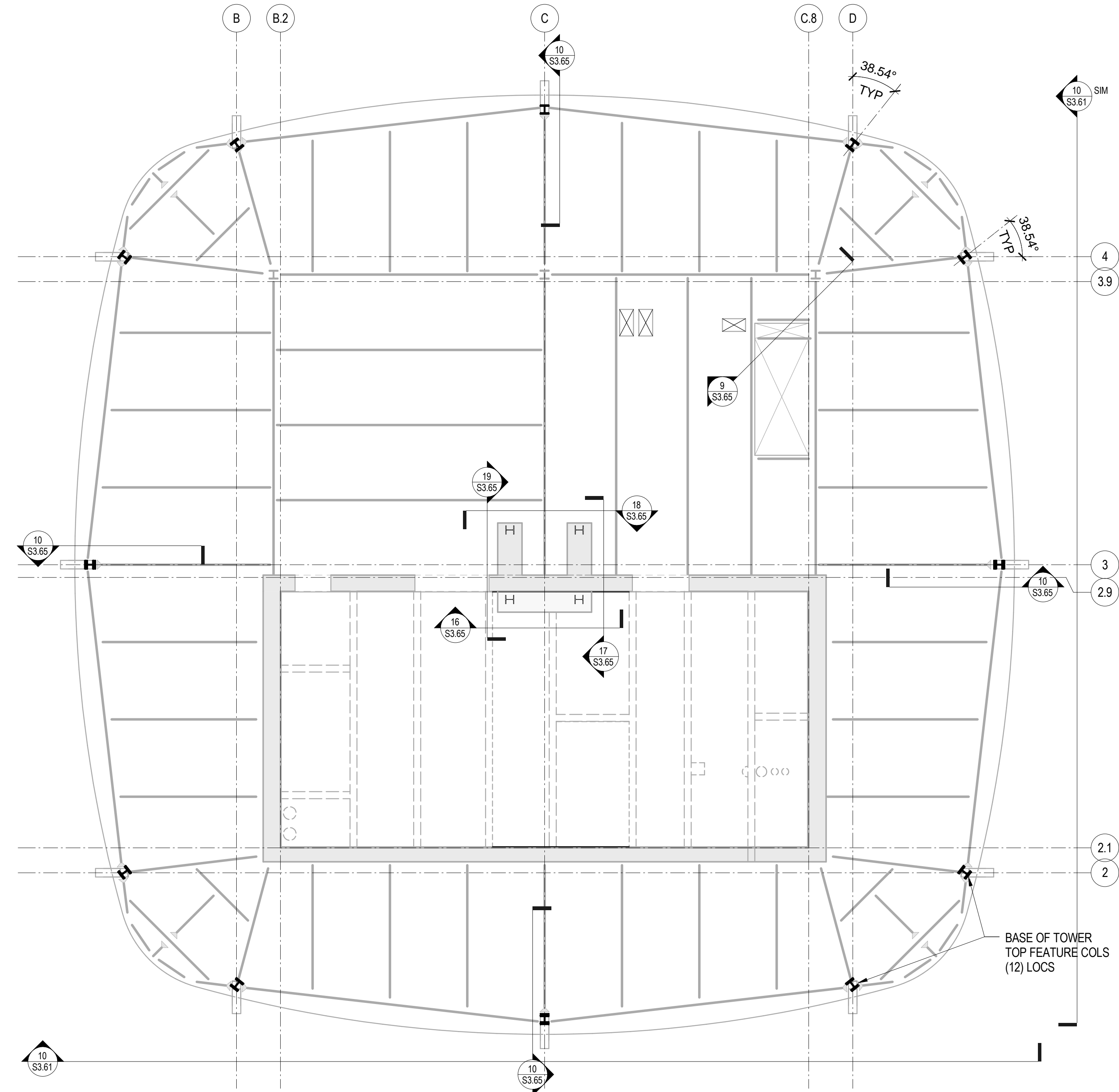
DRAWING TITLE  
**BASEMENT WALL ELEVATIONS**

PROJECT NO.  
08044

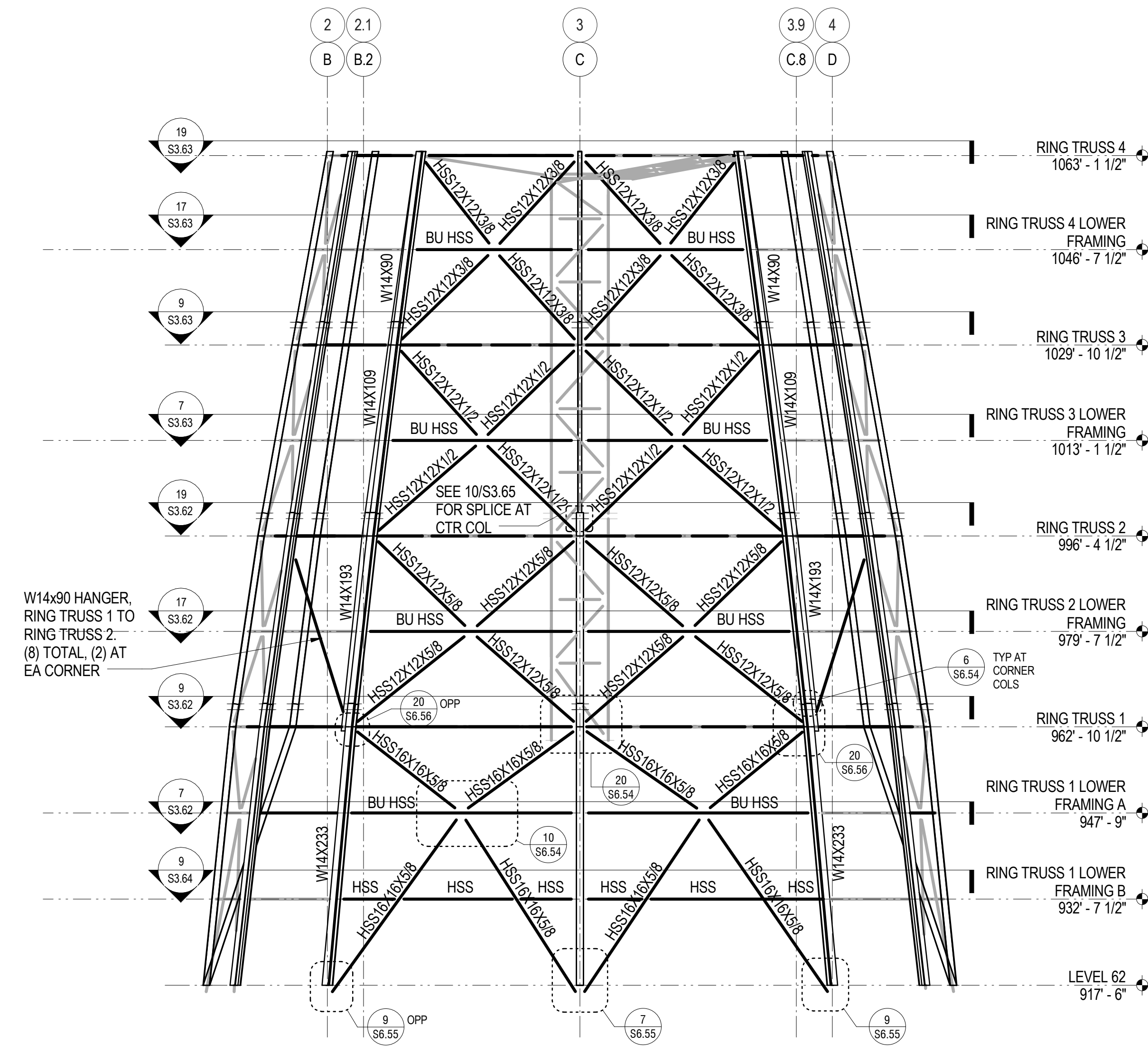
DRAWING NUMBER  
**S3.53**



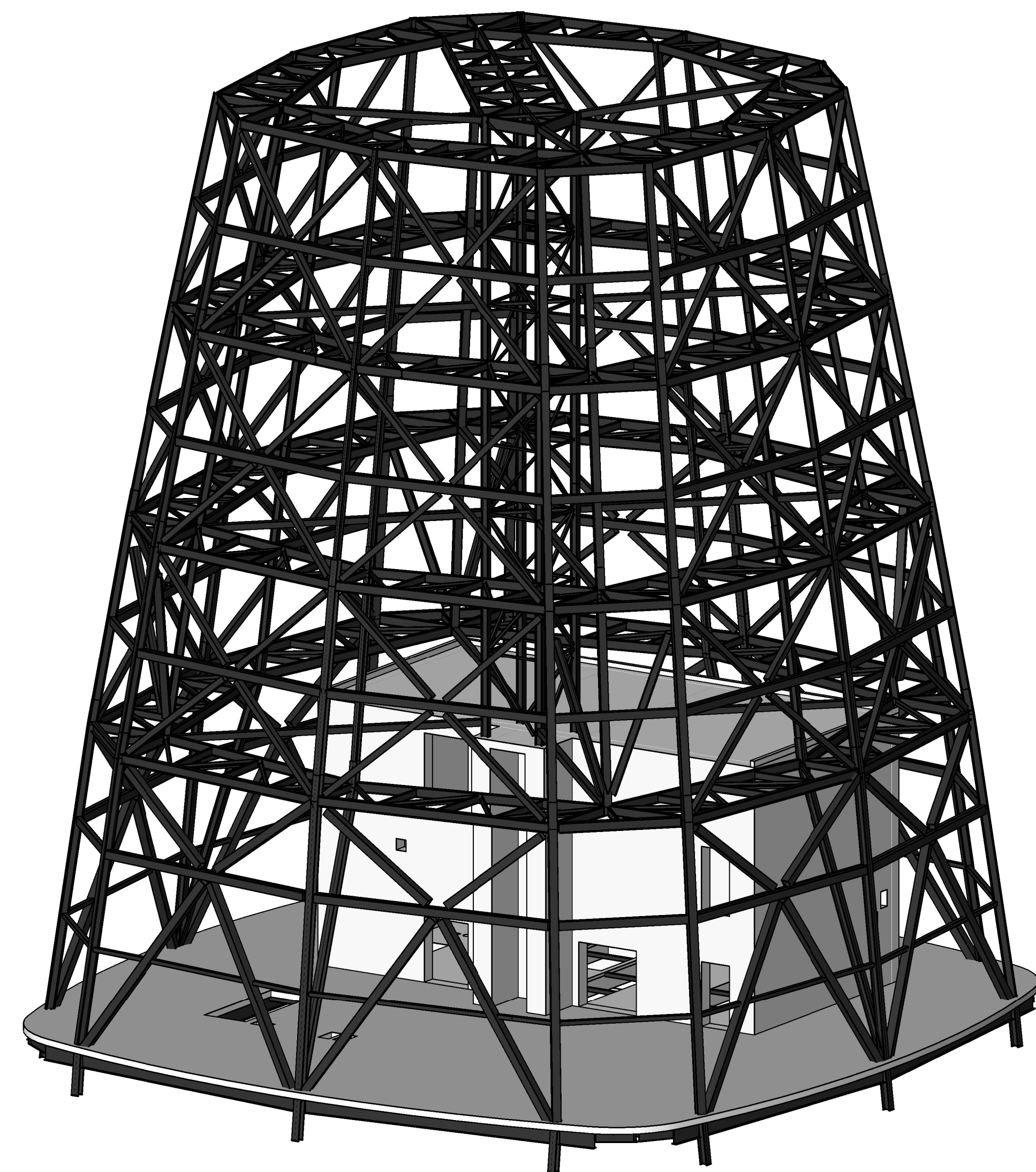
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



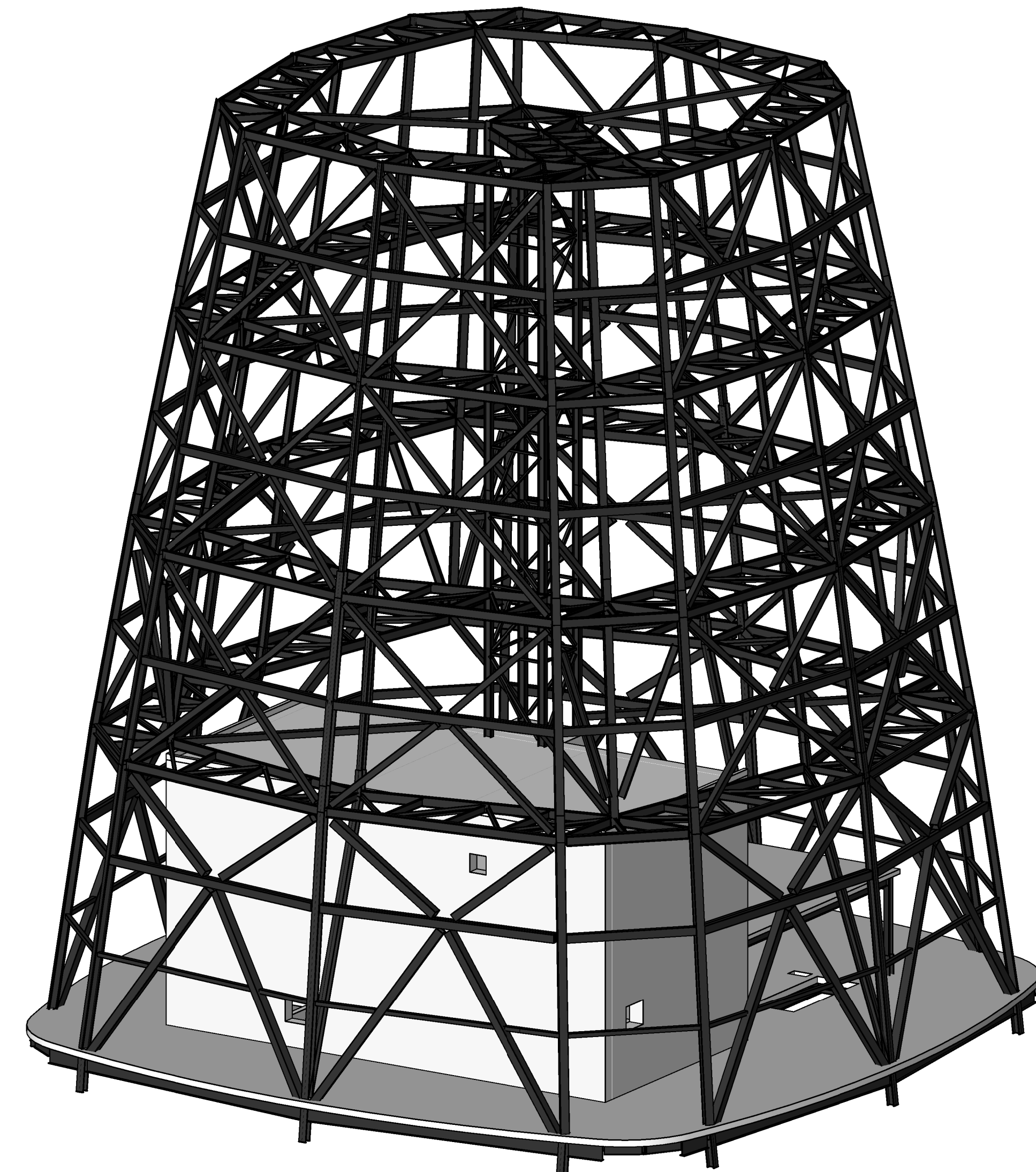
13 TOP FEATURE KEY PLAN  
3/32" = 1'-0"



10 TOWER TOP FEATURE ELEVATION  
1/16" = 1'-0"



16 3D - TOWER TOP FEATURE - NORTHWEST VIEW



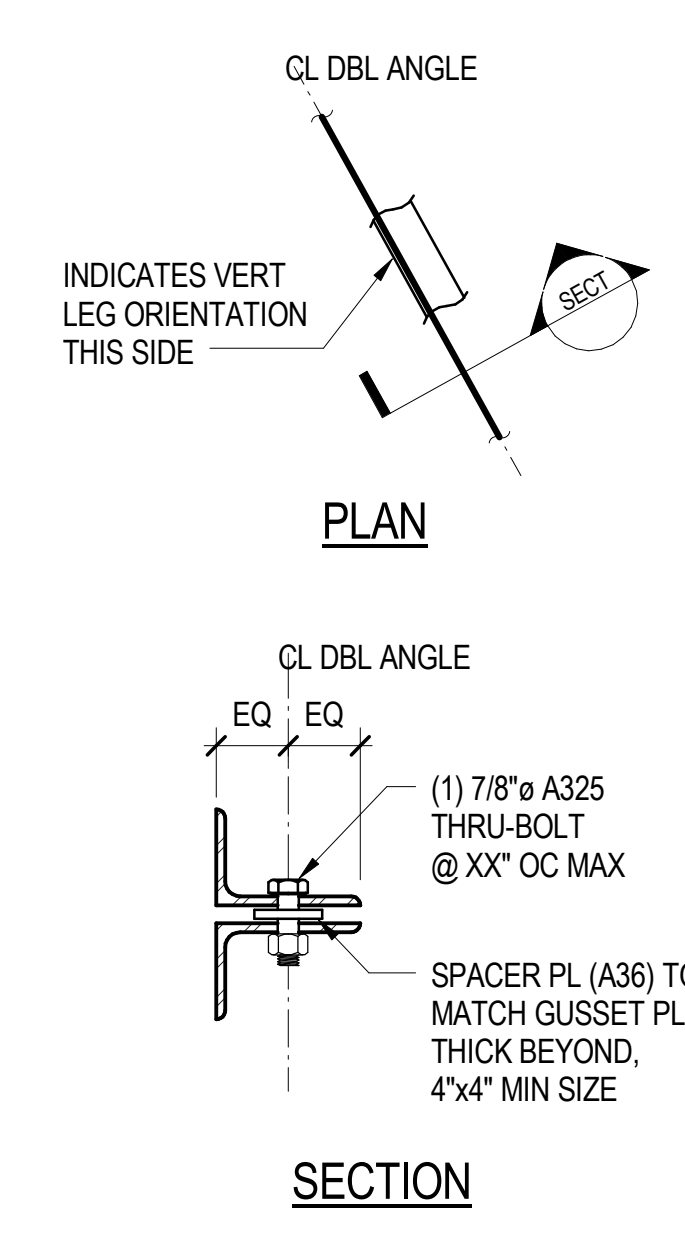
20 3D - TOWER TOP FEATURE - SOUTHEAST VIEW

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

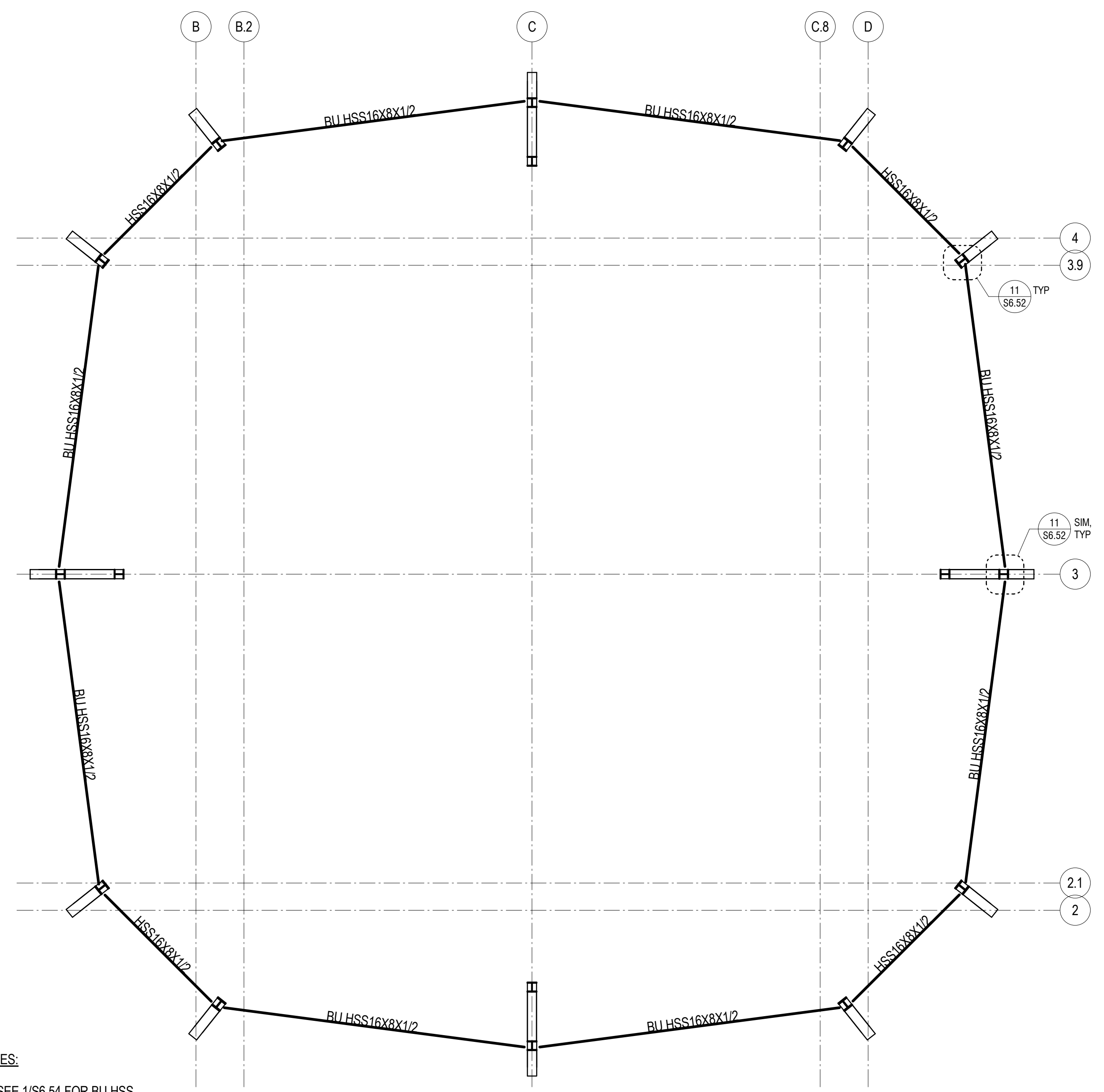
DRAWING TITLE	
<b>TOWER TOP FEATURE FRAMING</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S3.61</b>



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

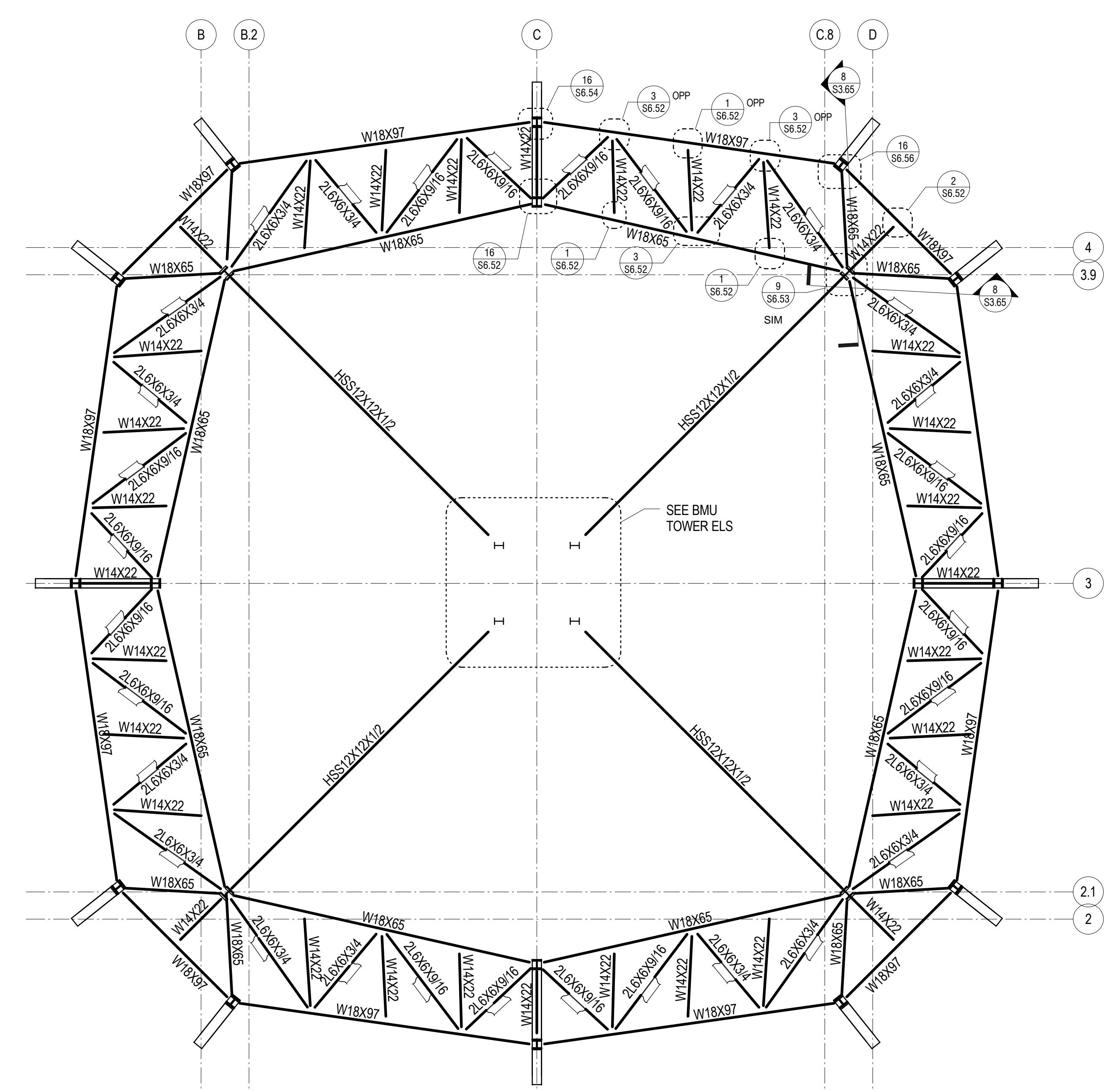


**5** TYPICAL HORIZONTAL DOUBLE ANGLE ORIENTATION

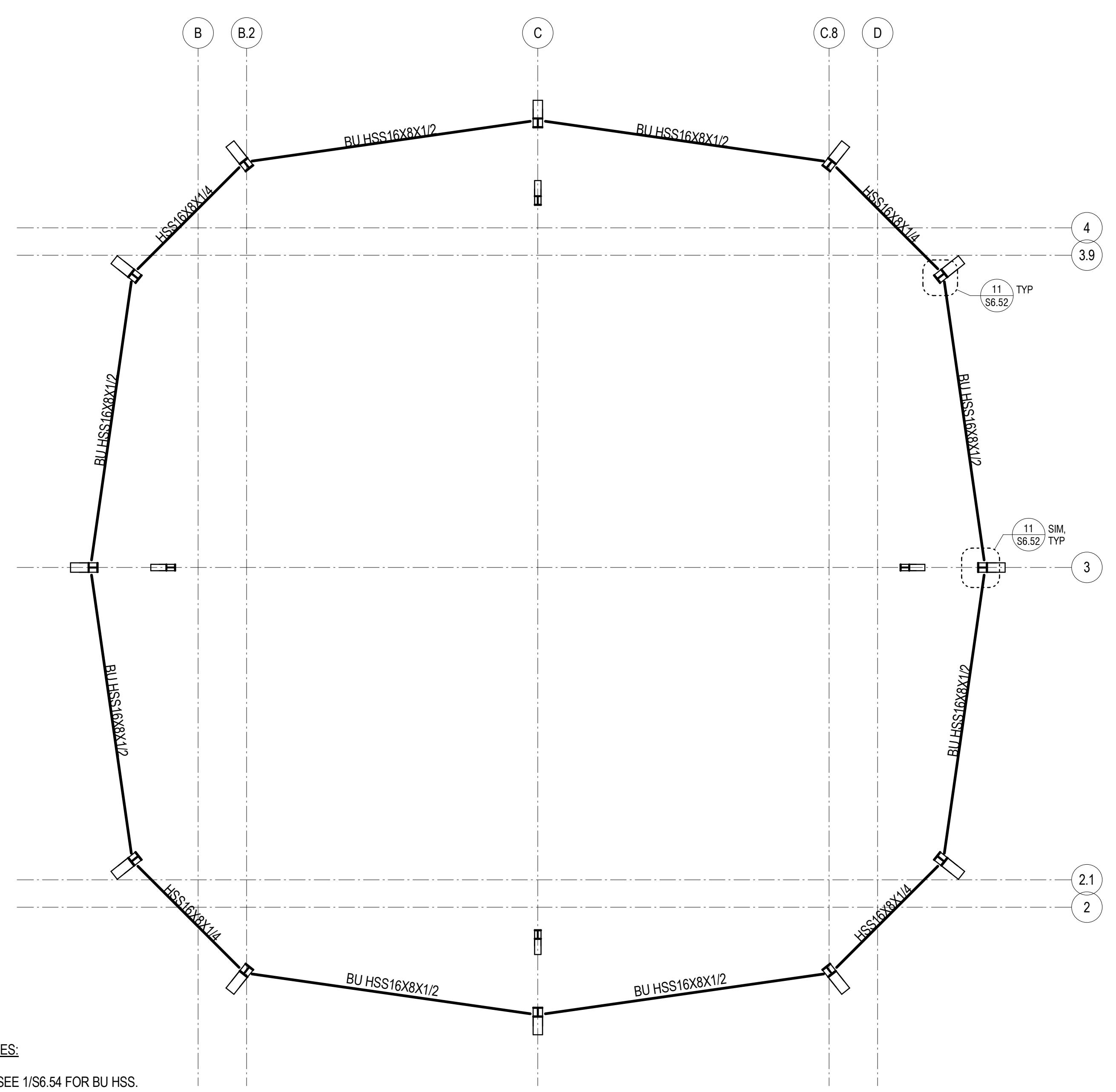


**NOTES:**  
1. SEE 1/S6.54 FOR BU HSS.

**7** RING TRUSS 1 LOWER FRAMING A  
3/32" = 1'-0"

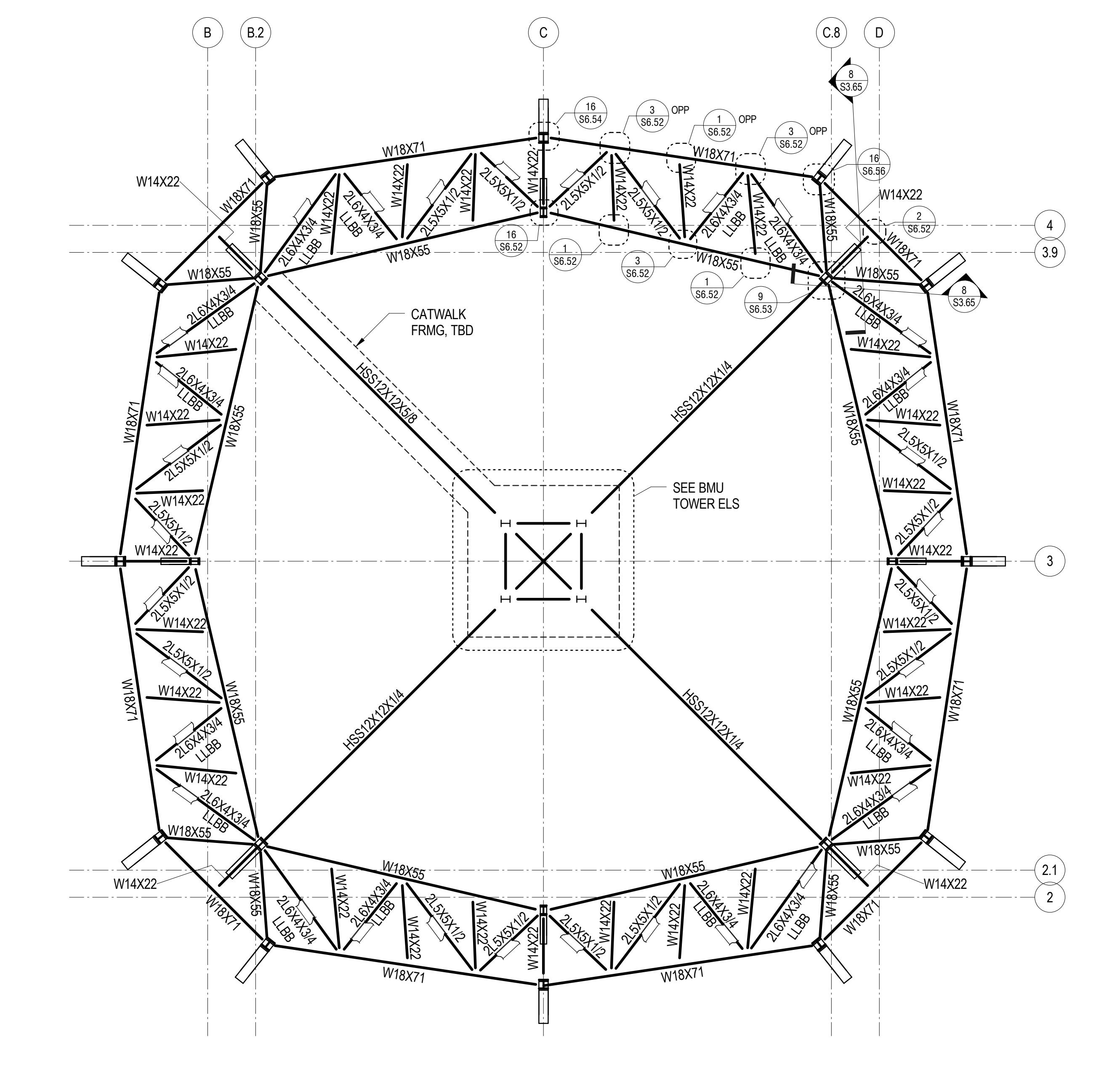


**9** RING TRUSS 1 FRAMING  
3/32" = 1'-0"



**NOTES:**  
1. SEE 1/S6.54 FOR BU HSS.

**17** RING TRUSS 2 LOWER FRAMING  
3/32" = 1'-0"



**19** RING TRUSS 2 FRAMING  
3/32" = 1'-0"

**REFERENCE DRAWINGS**

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

**NOTES:**

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
- REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
3. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TO S) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
4. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
5. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
6. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**TOWER TOP FEATURE FRAMING**

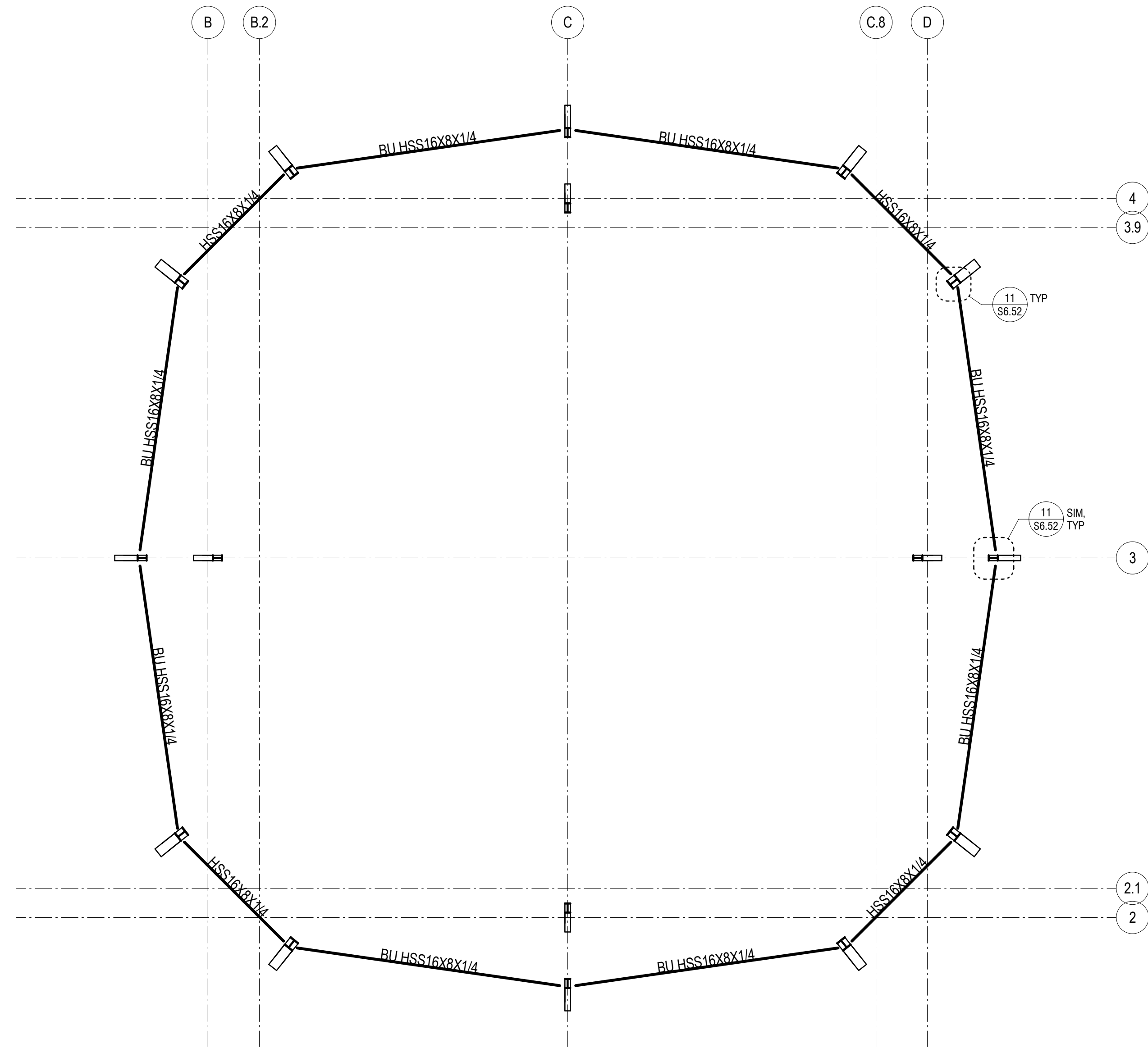
NO. PROJECT NO. 08044

DRAWING NUMBER S3.62

4/30/2014 12:24:24 PM C:\Revit\Transbay\Twr\_WIS2013\_116.rvt



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

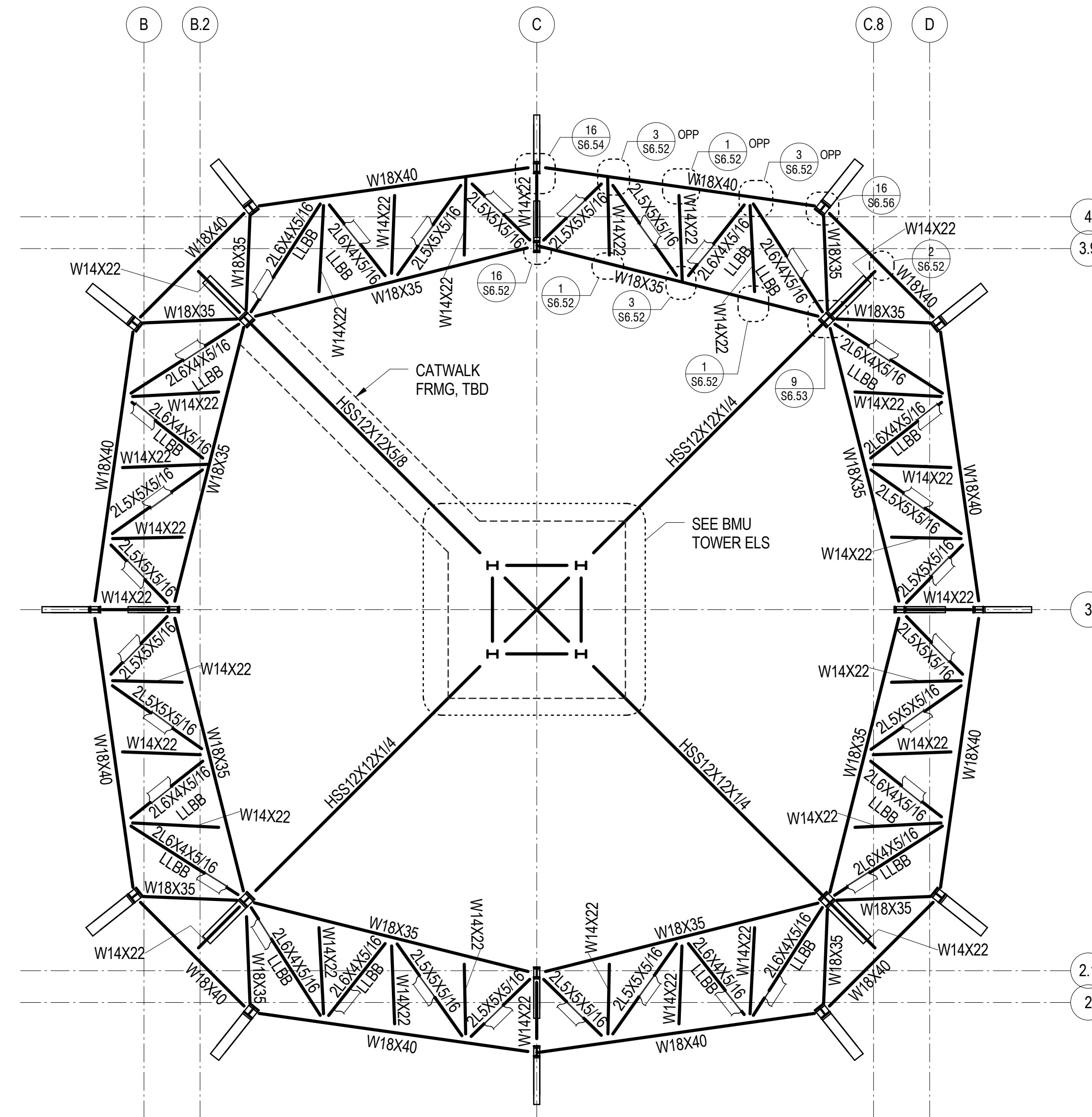


NOTES:

- SEE 1/S6.54 FOR BU HSS.

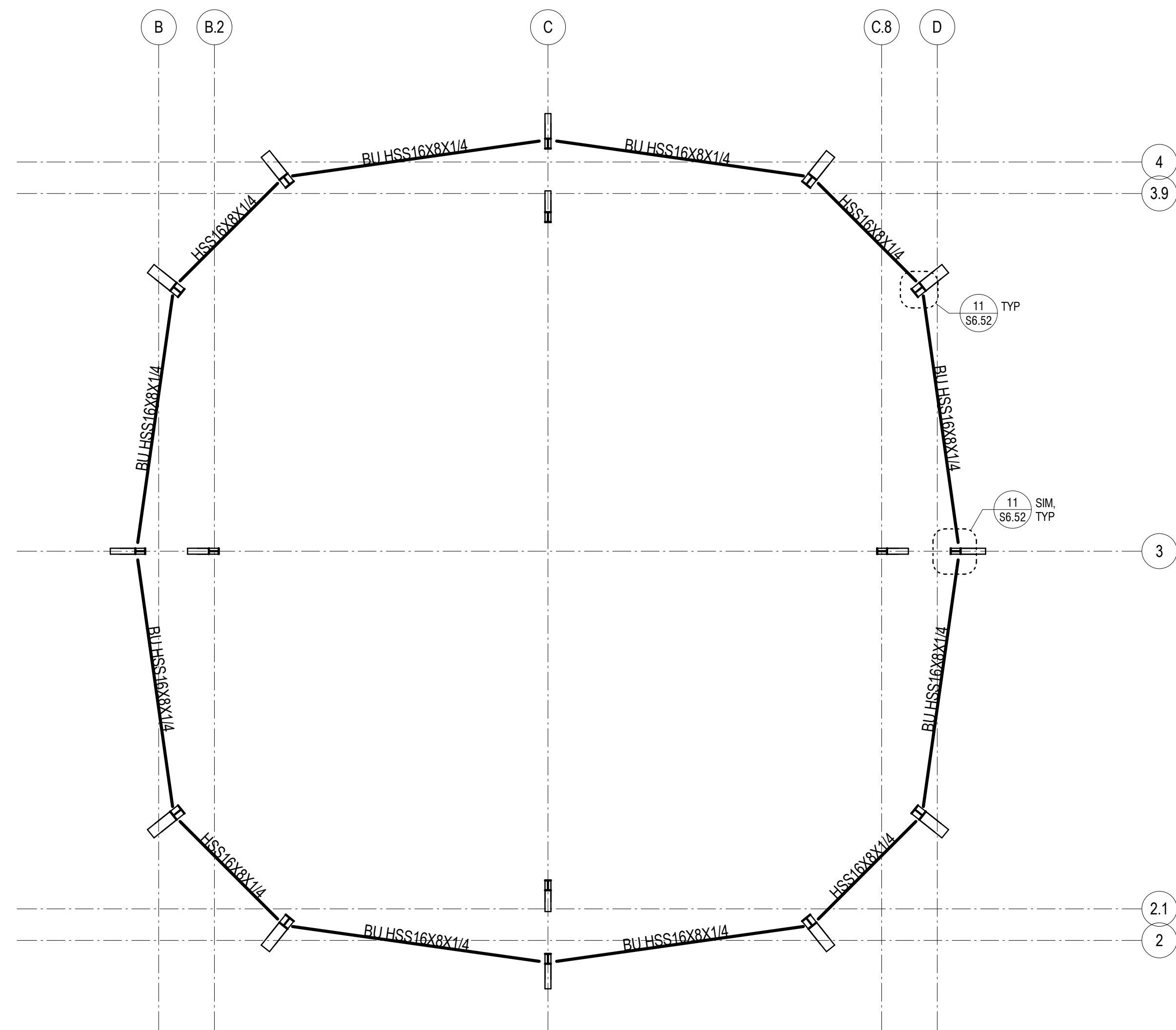
7 RING TRUSS 3 LOWER FRAMING

3/32" = 1'-0"



9 RING TRUSS 3 FRAMING

3/32" = 1'-0"

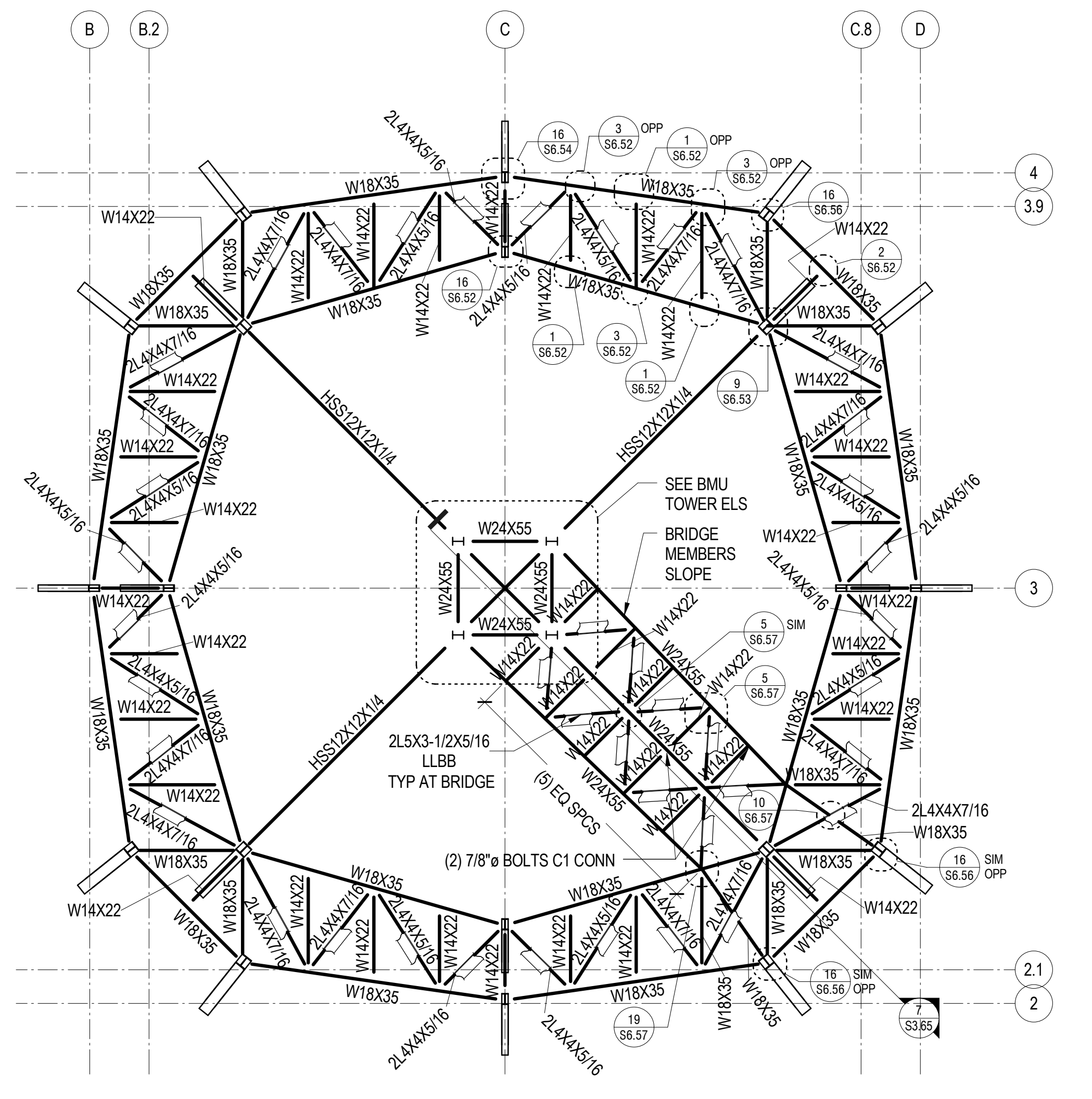


NOTES:

- SEE 1/S6.54 FOR BU HSS.

17 RING TRUSS 4 LOWER FRAMING

3/32" = 1'-0"



19 RING TRUSS 4 FRAMING

3/32" = 1'-0"

REFERENCE DRAWINGS

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

NOTES:

- REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
- REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
- STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
- WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
- ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
- ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	1	STRUCTURAL BID
2	27 NOV 13	1	STRUCTURAL BID ADDENDUM NO. 1
3	12 DEC 13	1	ADDENDUM #2 PERMIT
4	10 FEB 14	1	BID ADDENDUM #2
5	11 FEB 14	1	ADDENDUM #2 PERMIT REVISION NO. 1
6	02 MAY 14	1	GMP

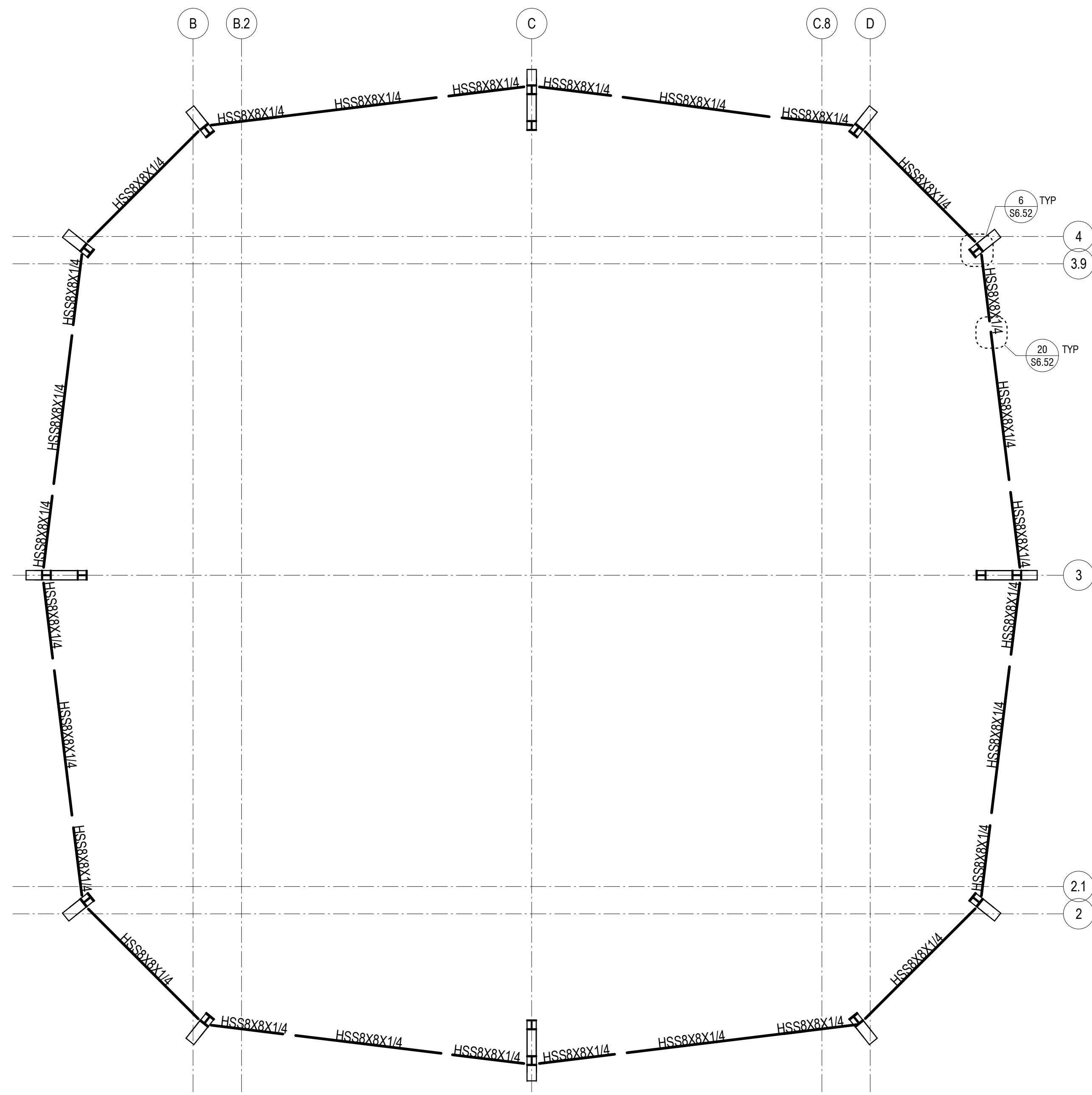
DRAWING TITLE

**TOWER TOP  
FEATURE FRAMING**

NO. 08044 PROJECT NO. DRAWING NUMBER **S3.63**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



9 RING TRUSS 1 LOWER FRAMING B  
3/32" = 1'-0"

REFERENCE DRAWINGS

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

NOTES:

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"  
  
REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
2. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
3. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
4. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
5. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
6. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

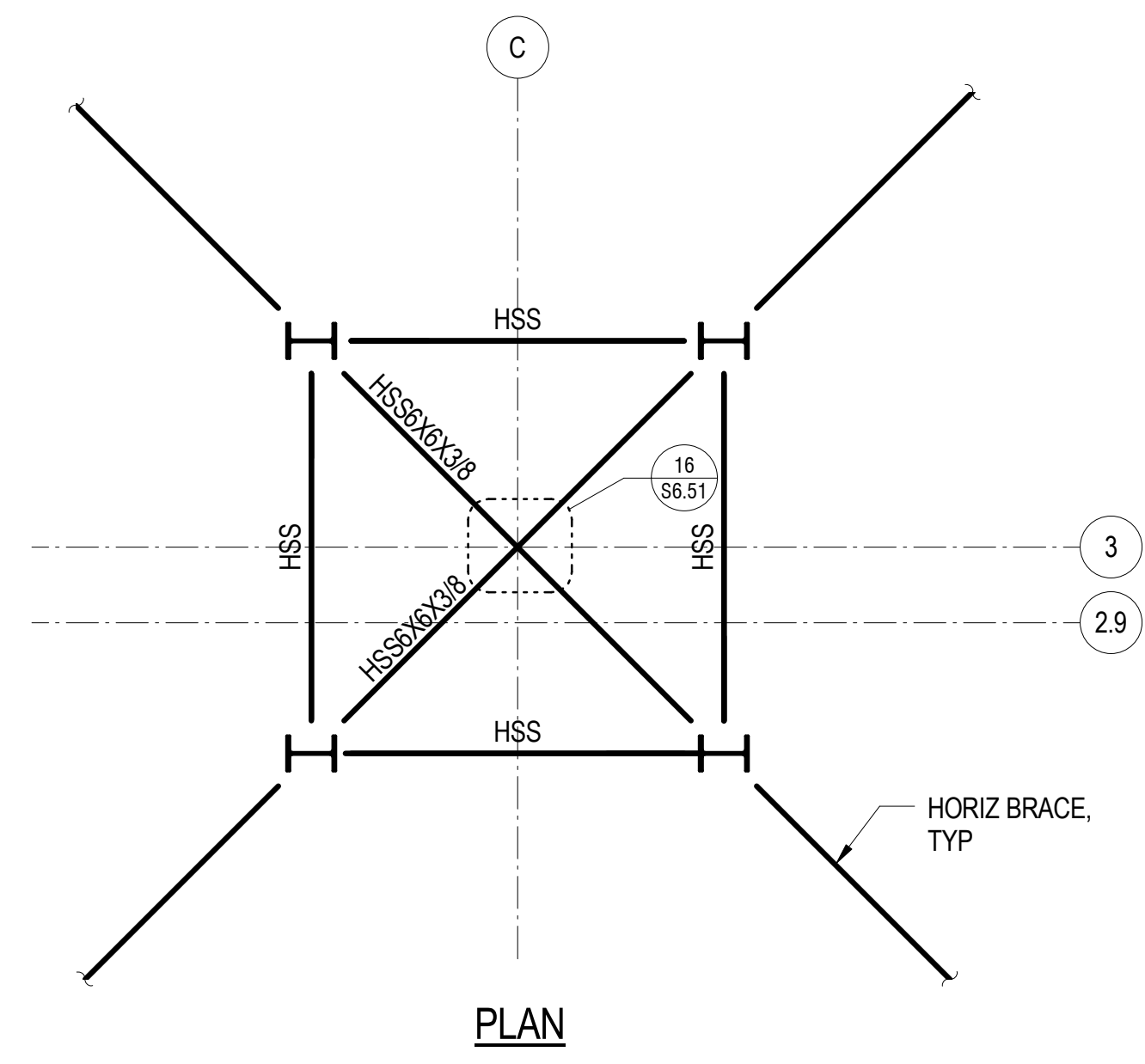
DRAWING TITLE  
**TOWER TOP  
FEATURE FRAMING**

NO. PROJECT NO. 08044  
DRAWING NUMBER S3.64

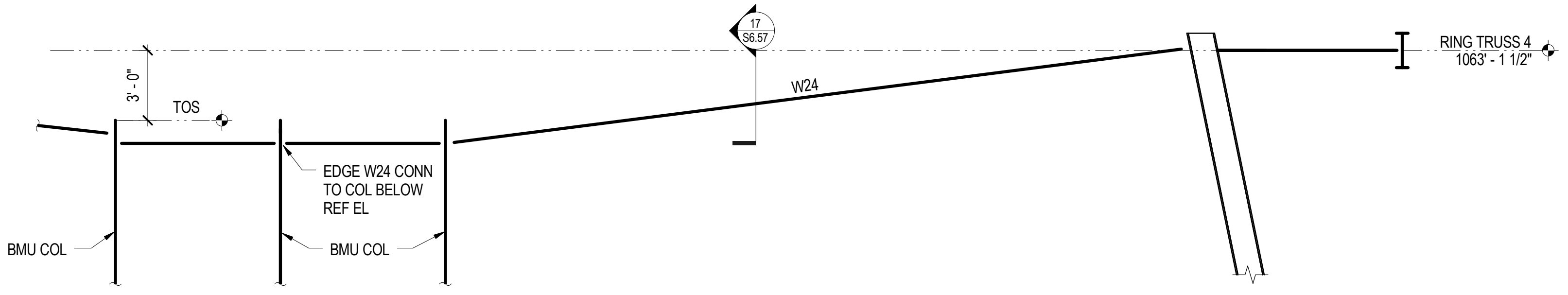




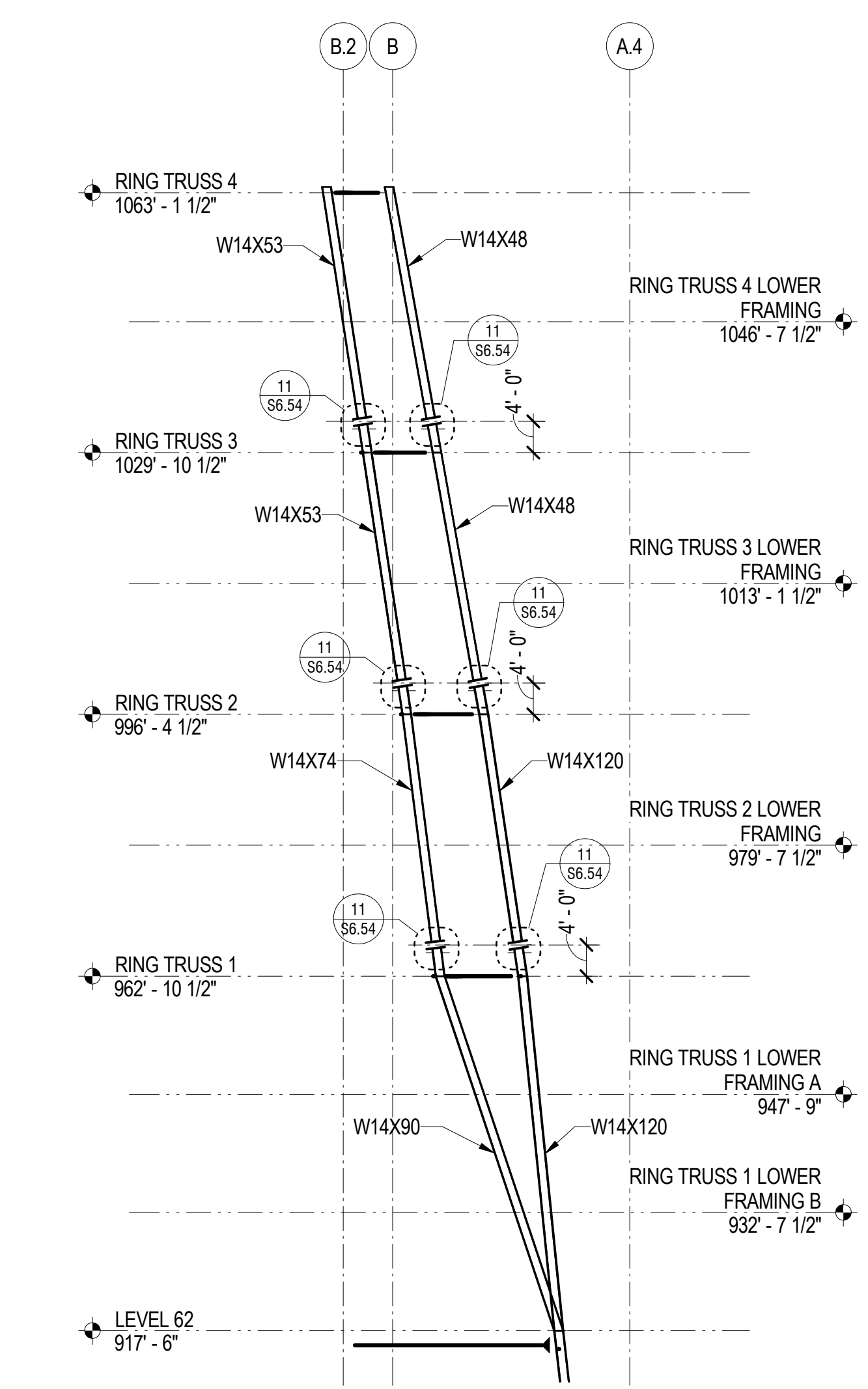
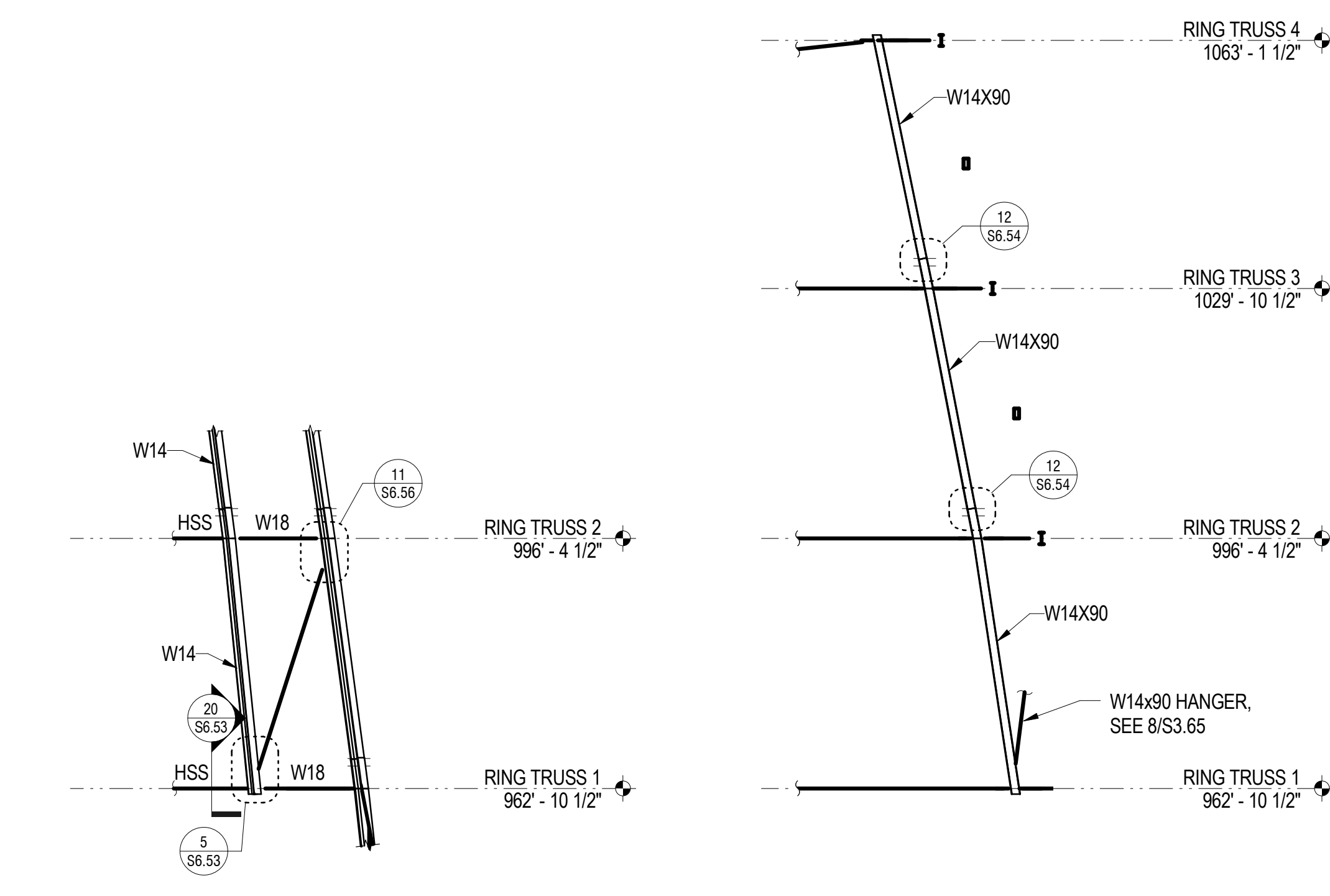
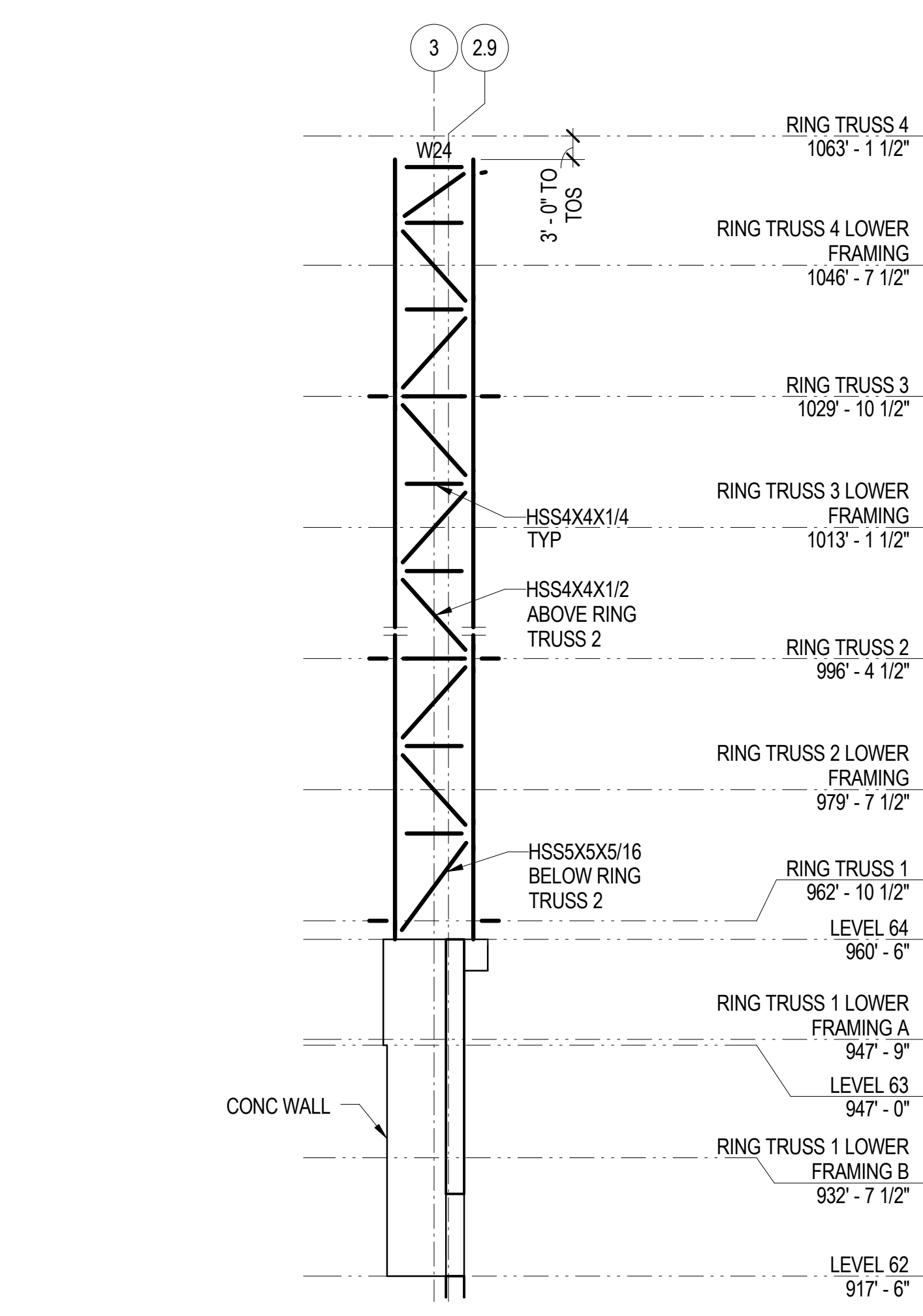
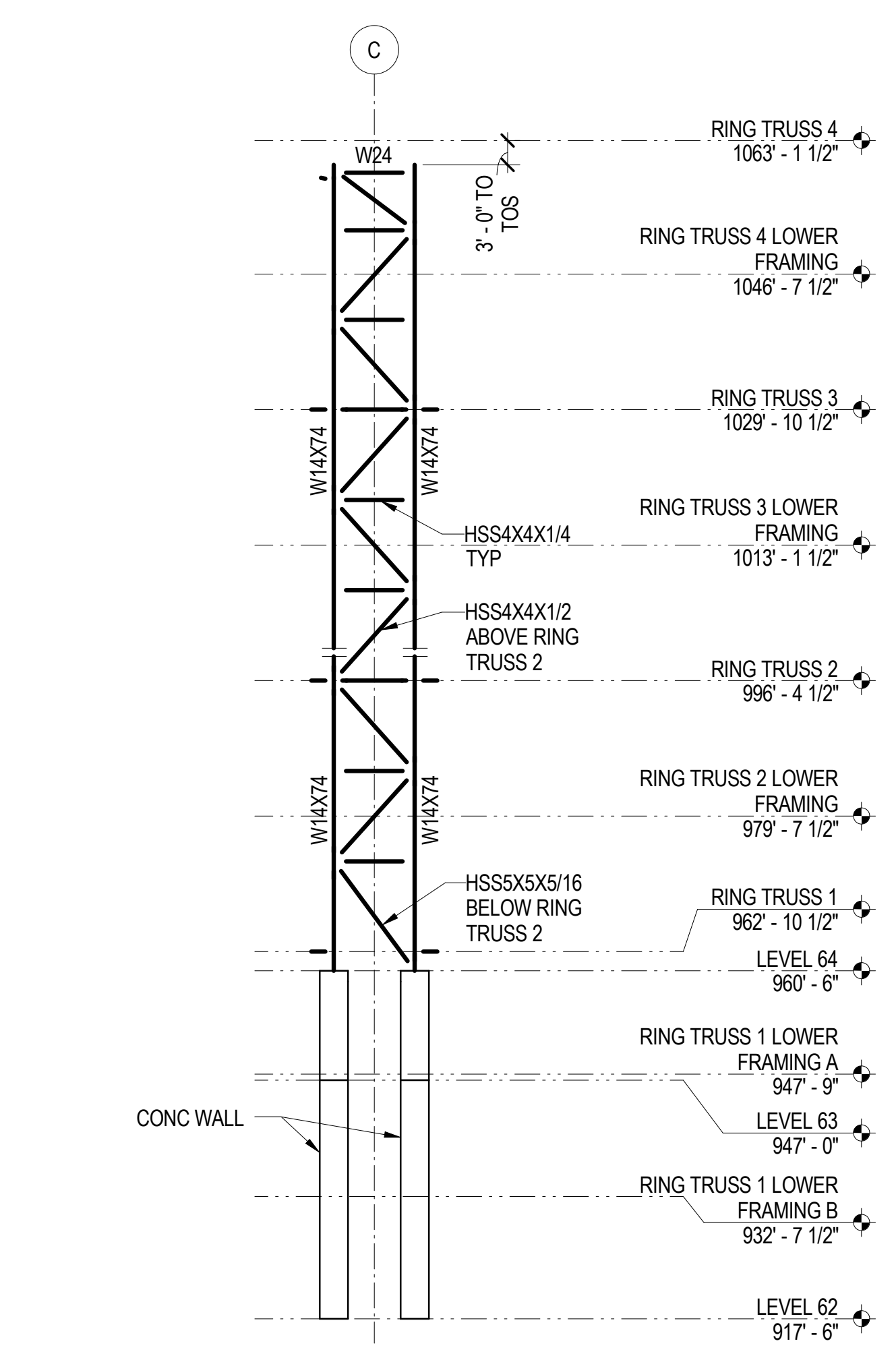
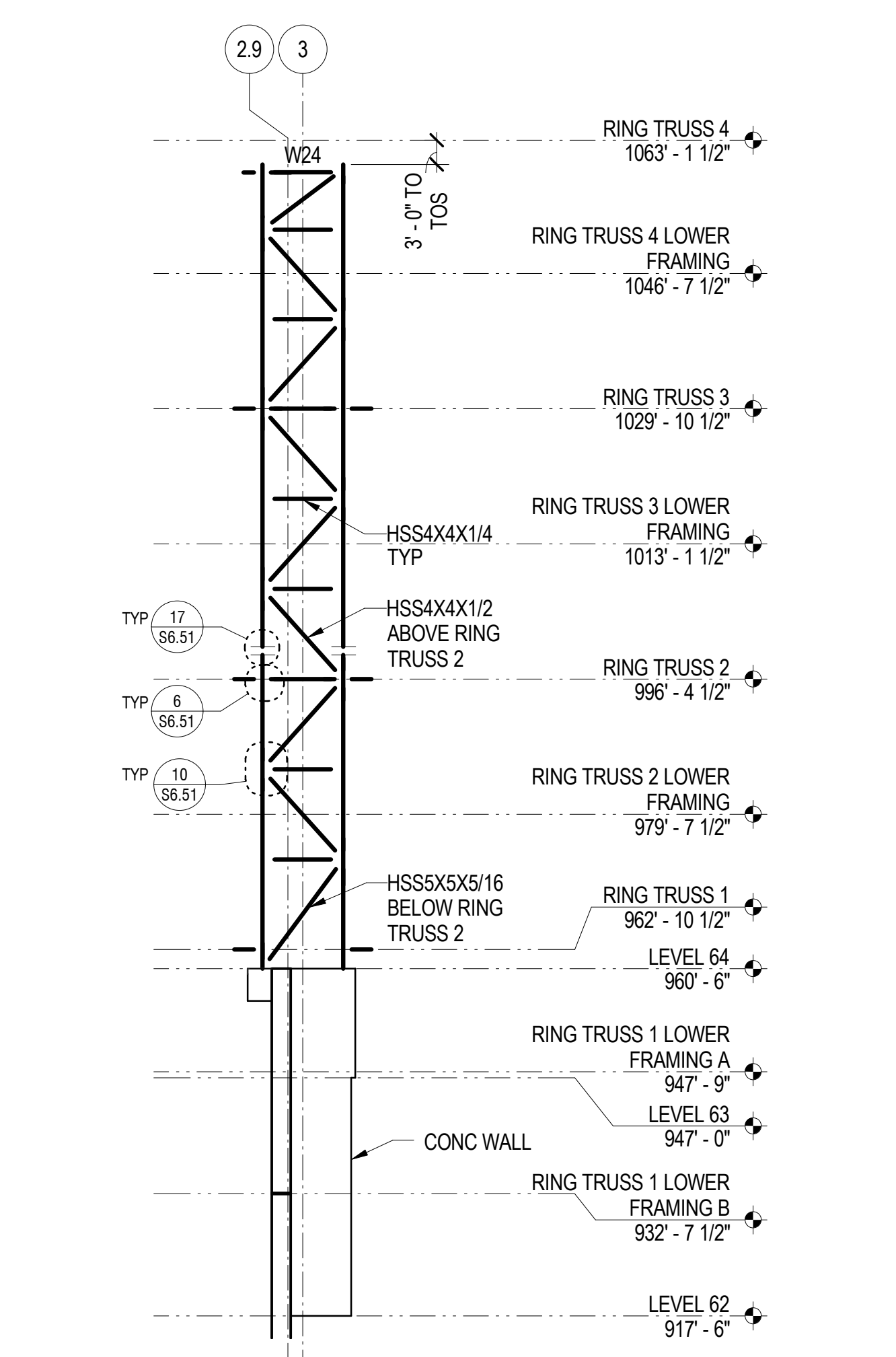
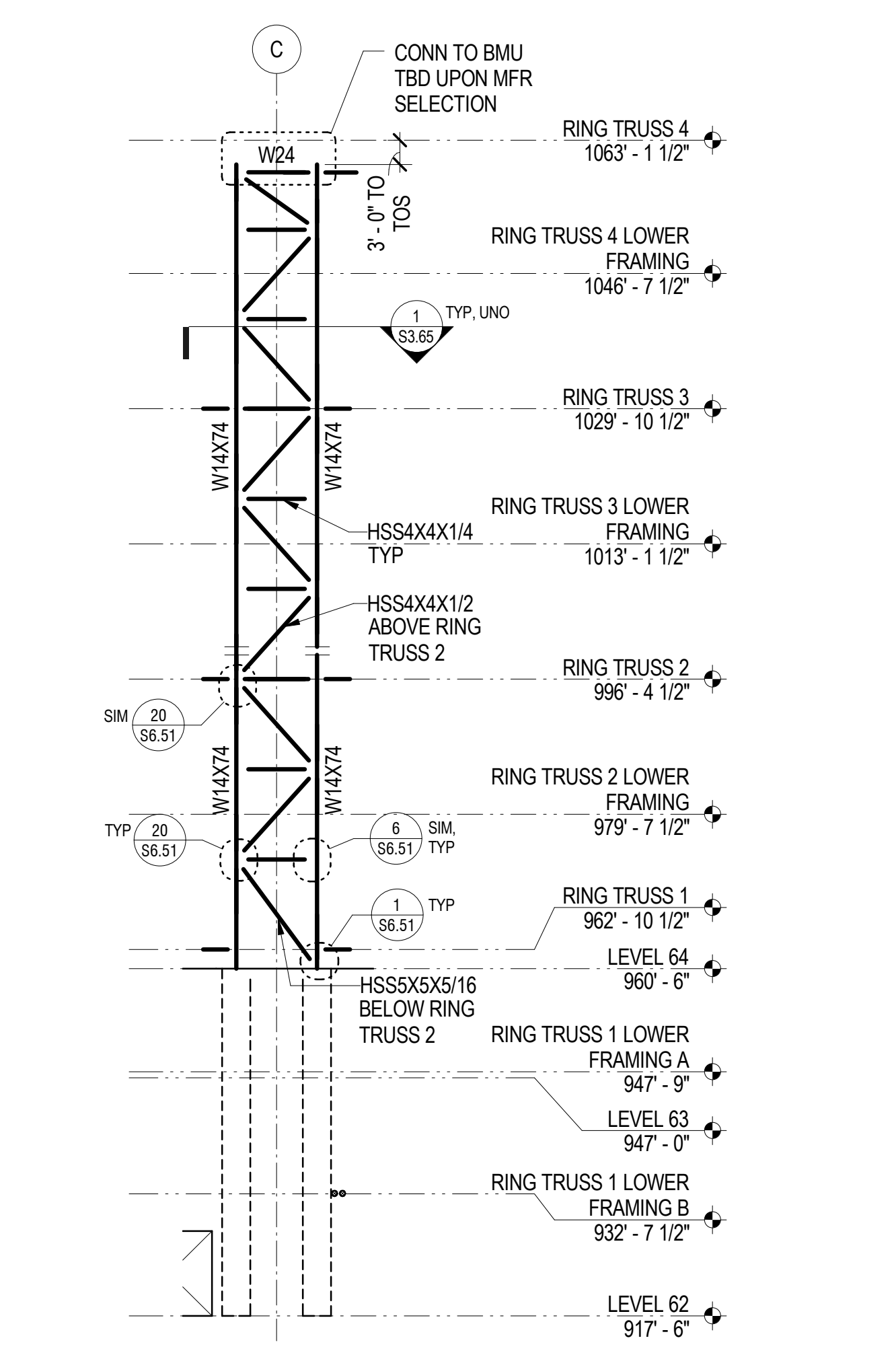
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**1 SECTION**  
1/4" = 1'-0"



**7 SECTION**  
1/4" = 1'-0"



**10 SECTION**  
1/16" = 1'-0"

**REFERENCE DRAWINGS**

- S0.XX ABBREVIATIONS, DRAWING SYMBOLS, GENERAL NOTES
- S1.XX LOAD MAPS
- S2.XX PLANS
- S3.XX ELEVATIONS
- S4.XX TYPICAL DETAILS AND SCHEDULES
- S5.XX CONCRETE SECTIONS AND DETAILS
- S6.XX STEEL SECTIONS AND DETAILS

**NOTES:**

1. REFERENCE FLOOR ELEVATIONS ARE AS FOLLOWS:  
RING TRUSS 1 = 962'-10 1/2"  
RING TRUSS 2 = 966'-4 1/2"  
RING TRUSS 3 = 1029'-10 1/2"  
RING TRUSS 4 = 1063'-1 1/2"
2. REFERENCE STRUCTURAL STEEL ELEVATION IS AT THE MEMBER MID-DEPTH CENTERLINE AND IS EQUAL TO THE REFERENCE FLOOR ELEVATION UNLESS NOTED OTHERWISE.
3. STEEL SLOPES UNIFORMLY BETWEEN GIVEN STEEL REFERENCE ELEVATIONS. WHERE BEAMS OR BEAMS AND COLUMNS INTERSECT, MATCH REFERENCE STEEL ELEVATION UNLESS NOTED OTHERWISE.
4. WHERE ELEVATION OFFSET DENOTED BY (X) IS PROVIDED, THE MEMBER SHALL BE OFFSET FROM REFERENCE STEEL ELEVATION BY THE AMOUNT NOTED. WHERE A TOP OF STEEL ELEVATION (EL TOS) IS NOTED, THE STEEL FRAMING SHALL BE PLACED WITH THE TOP OF STEEL AT THE SPECIFIED ELEVATION.
5. ALL TOP FEATURE STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED PER THE PROJECT SPECIFICATIONS.
6. CONTRACTOR SHALL COORDINATE CONNECTION OF CLADDING ELEMENTS TO THE PRIMARY STRUCTURE.
7. ASTM A490 BOLTS SHALL NOT BE HOT-DIP GALVANIZED. A490 BOLTS SHALL BE FURNISHED WITH A CORROSION PROTECTIVE COATING PER ASTM F1136 GRADE 3, OR APPROVED EQUAL COATING.

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	1

**TOWER TOP  
FEATURE PARTIAL  
PLANS AND  
ELEVATIONS**

4/29/2014 7:09:39 PM C:\Revit\Transbay\Twr\_MS2013\_116.rvt



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

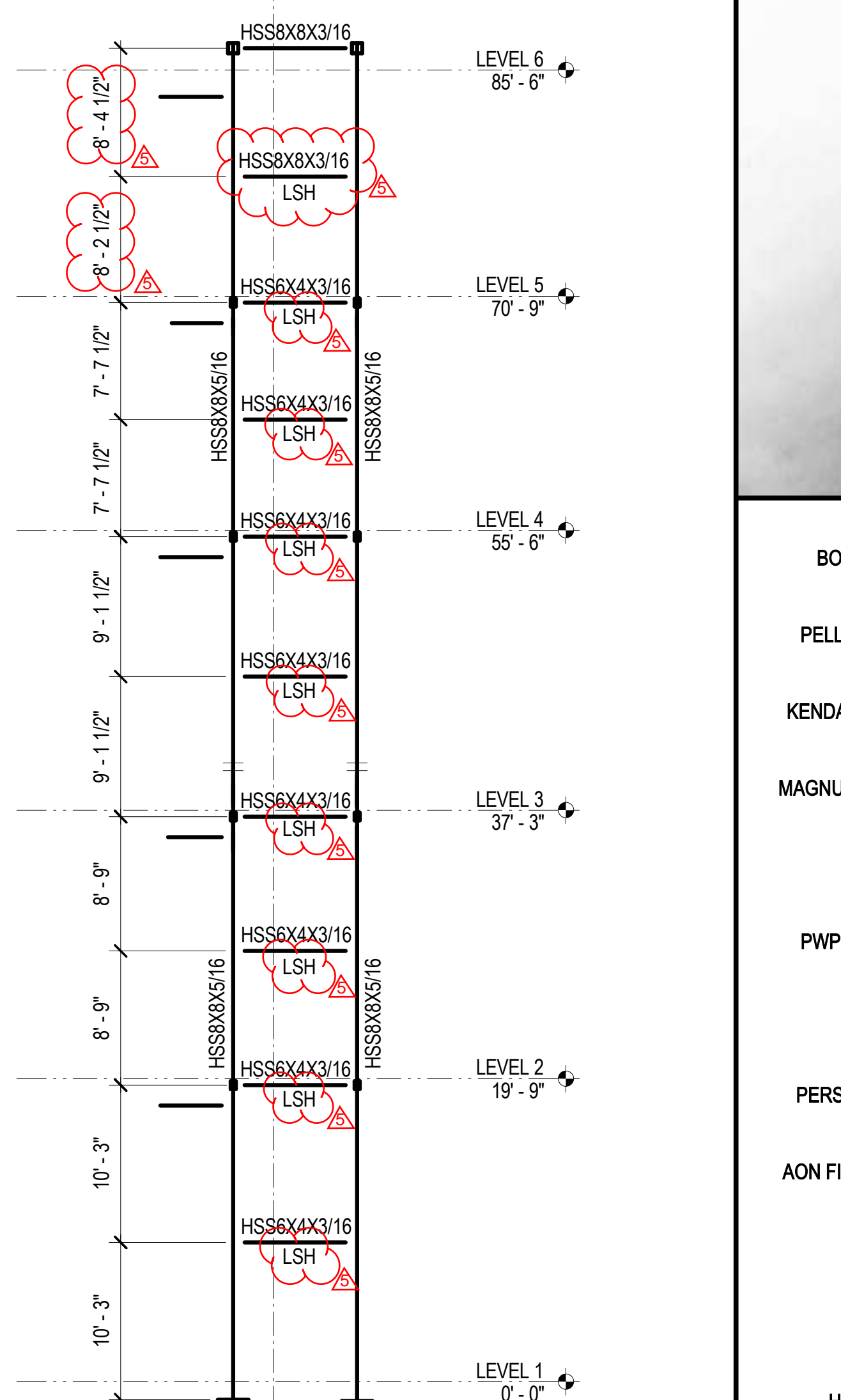
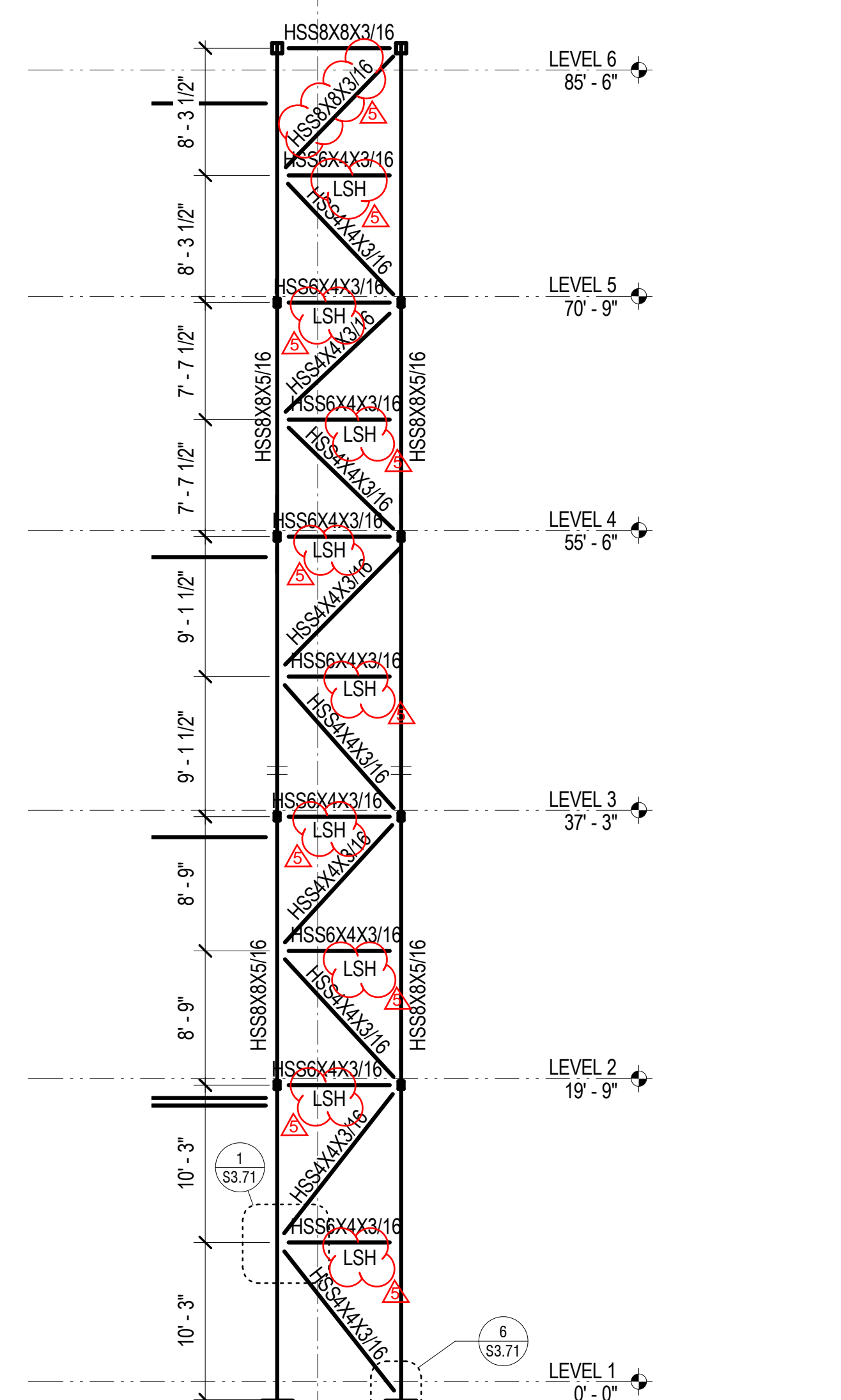
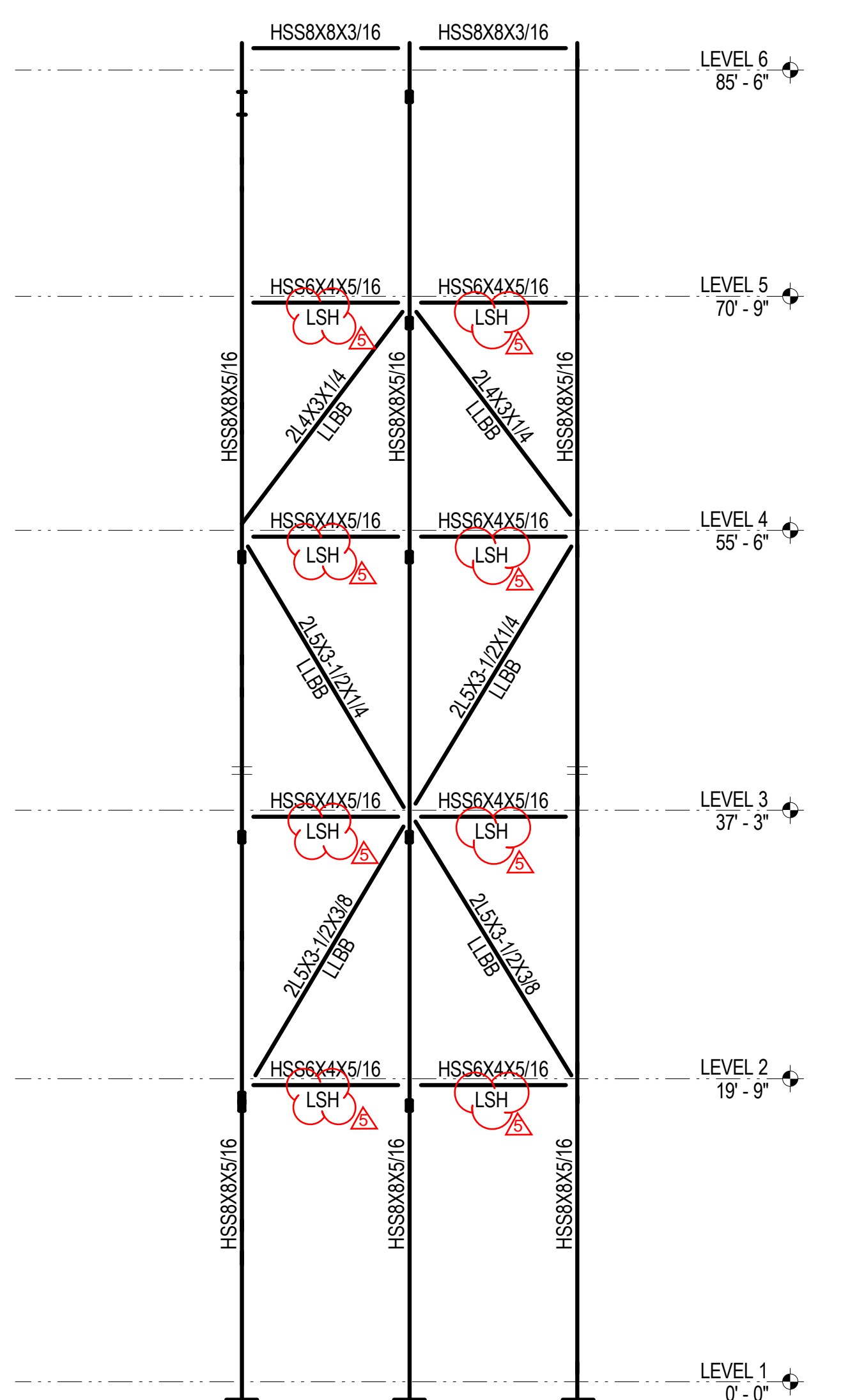
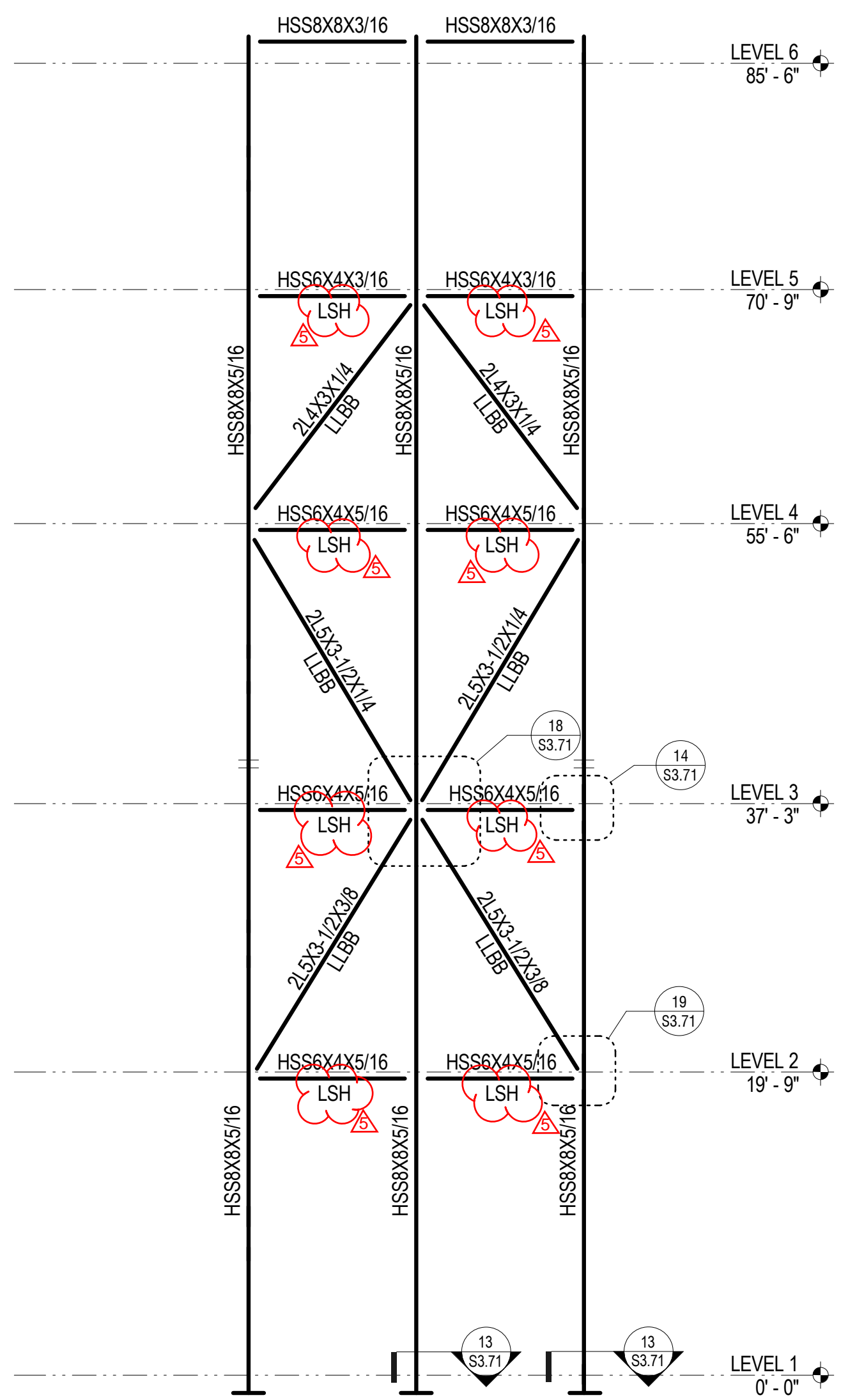
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**1** DETAIL  
3/4" = 1'-0"

**6** DETAIL  
3/4" = 1'-0"

**7** PLAZA ELEVATOR ELEVATION - SOUTH  
1/8" = 1'-0"

**8** PLAZA ELEVATOR ELEVATION - NORTH  
1/8" = 1'-0"

**9** PLAZA ELEVATOR ELEVATION - EAST AND WEST  
1/8" = 1'-0"

**10** PLAZA ELEVATOR ELEVATION - CENTER  
1/8" = 1'-0"

**11** ELEVATOR ROOF FRAMING  
1/4" = 1'-0"

**14** DETAIL  
3/4" = 1'-0"

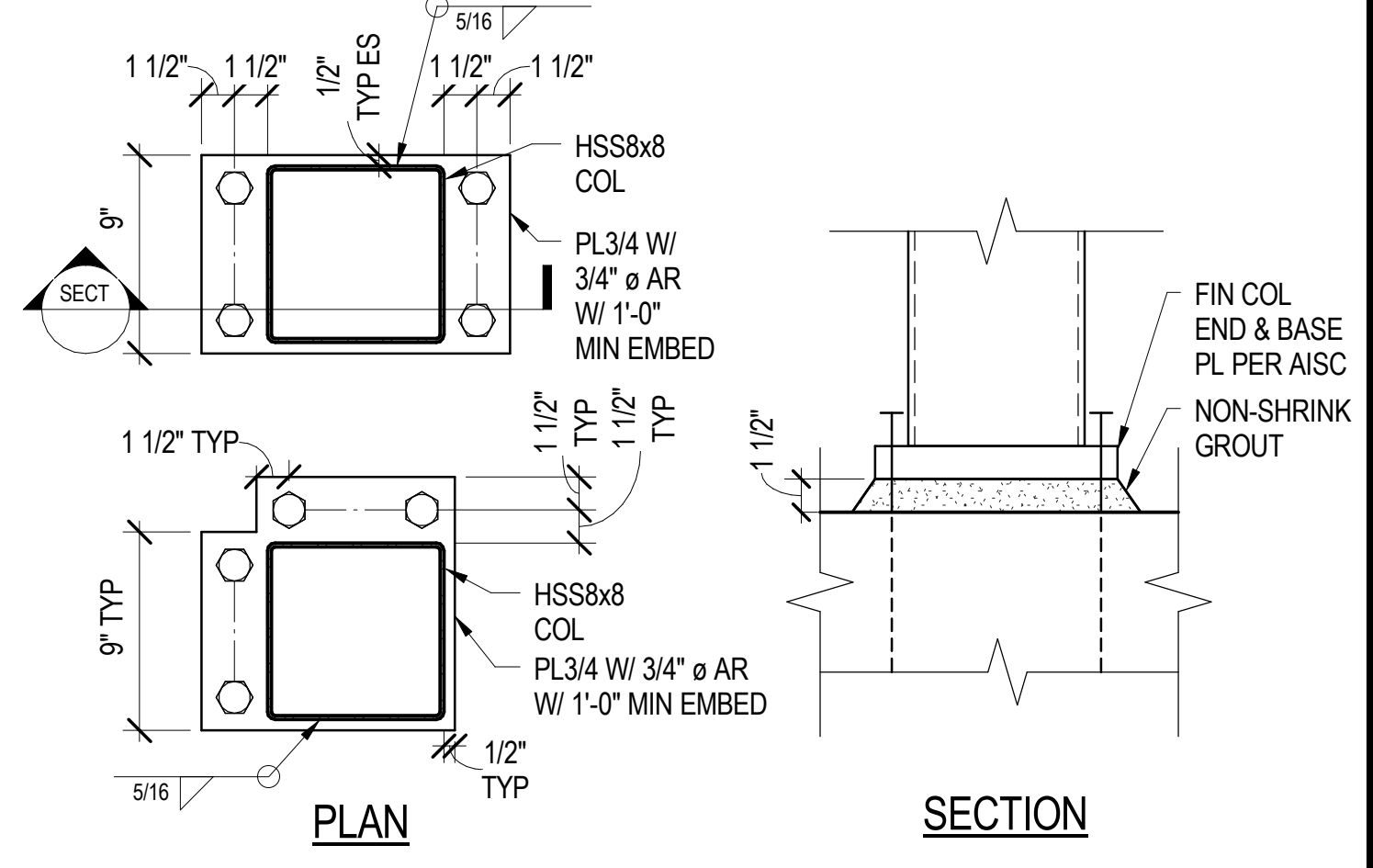
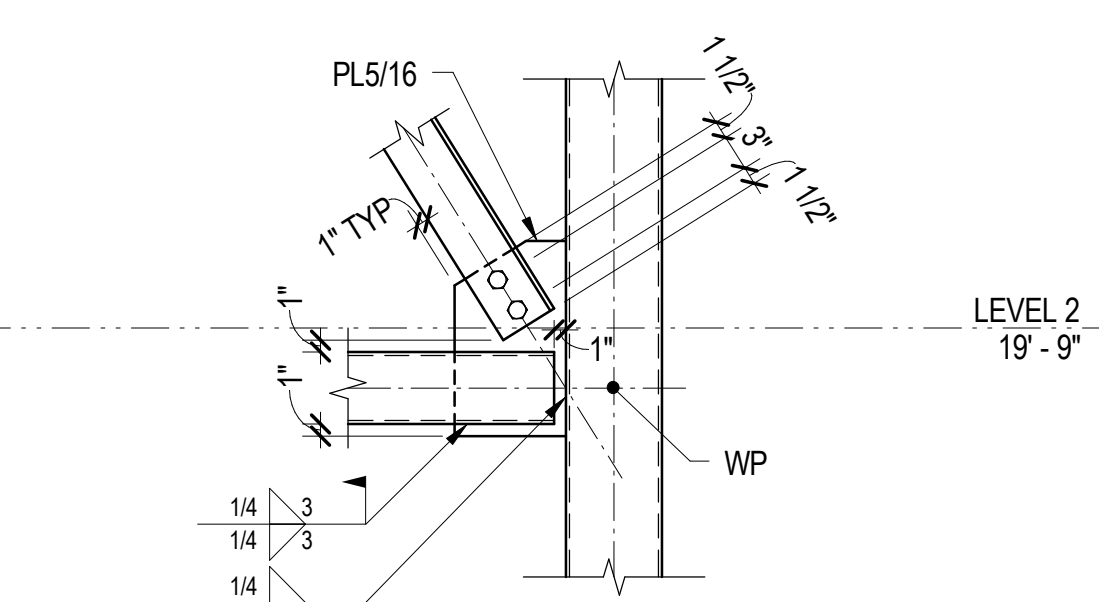
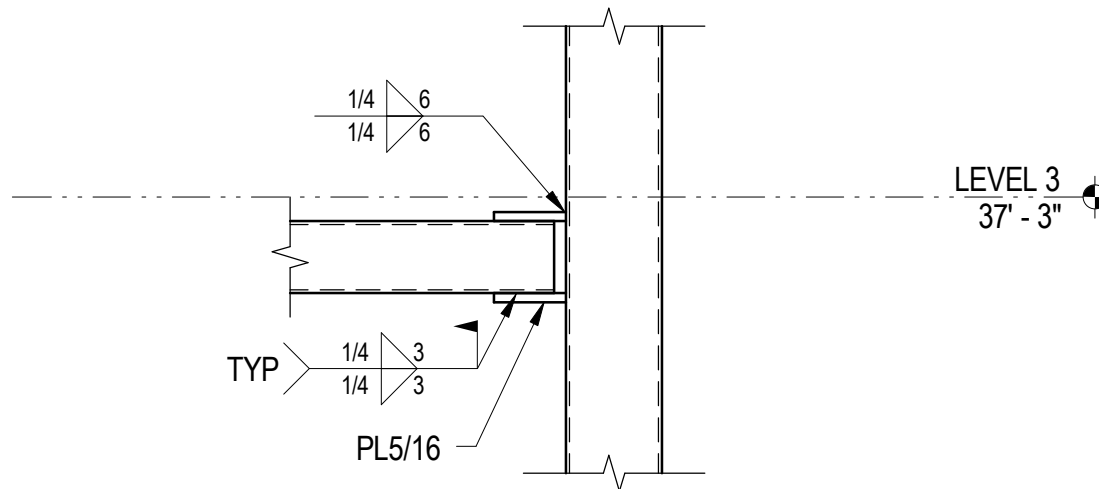
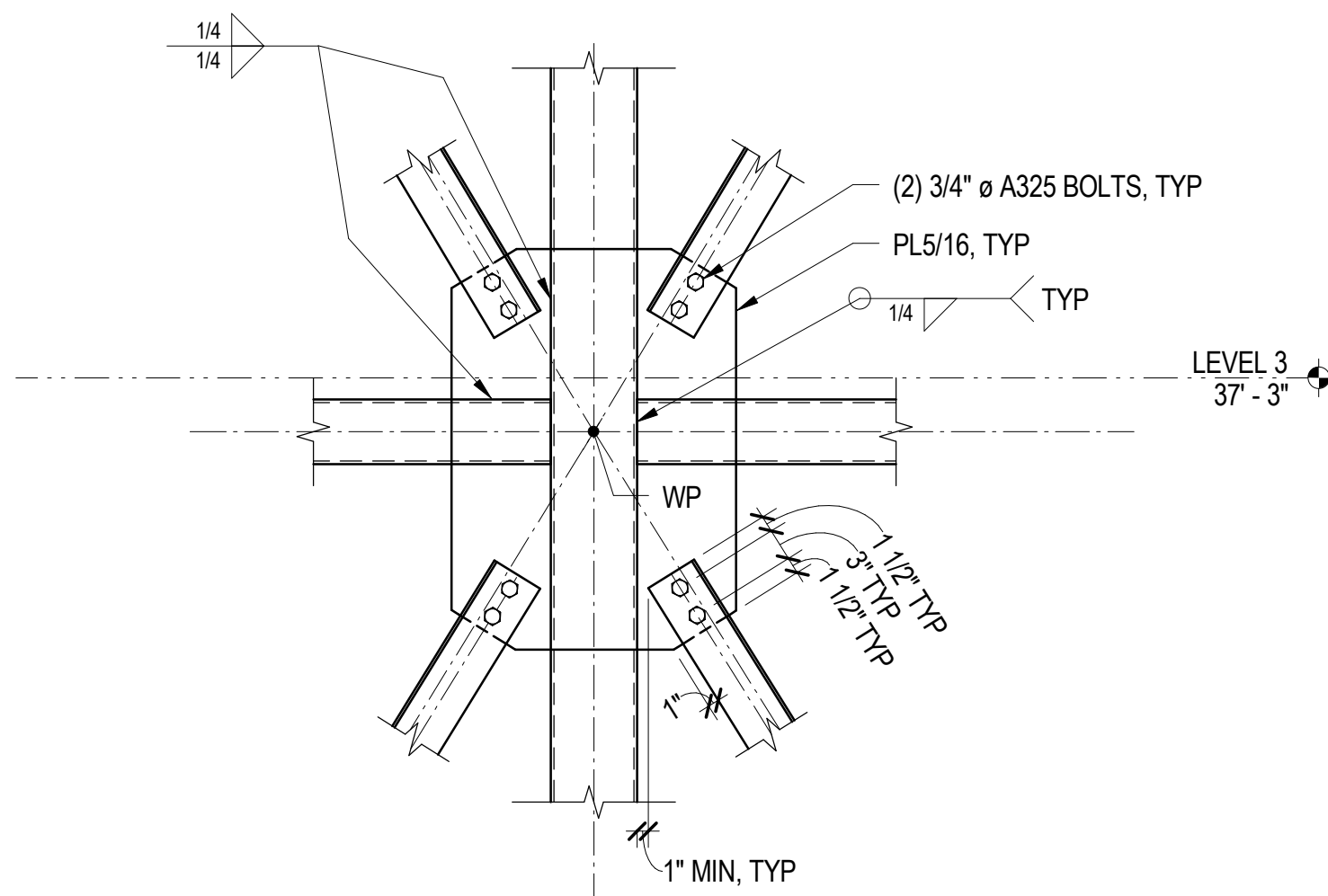
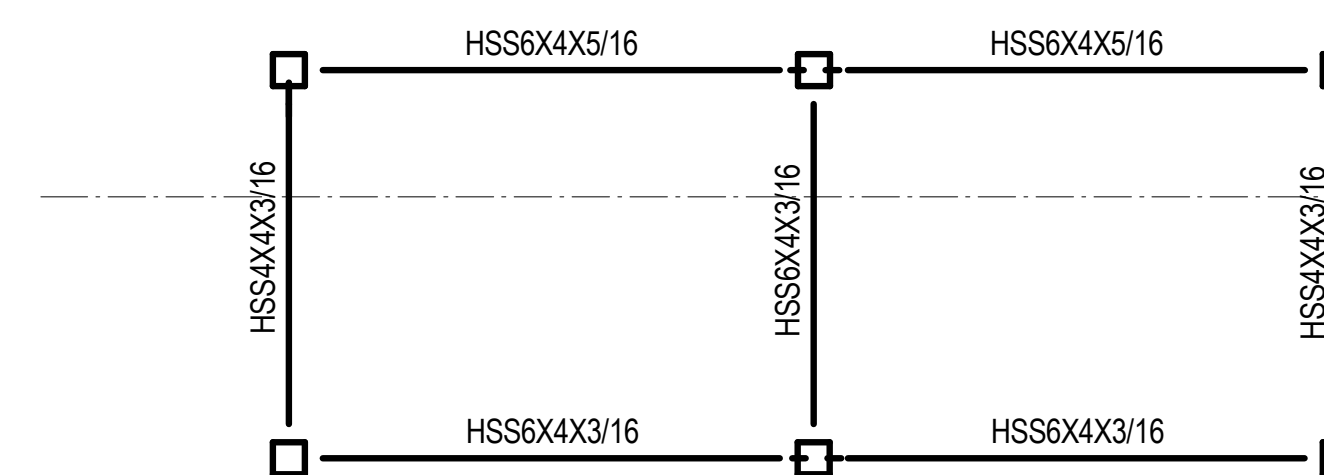
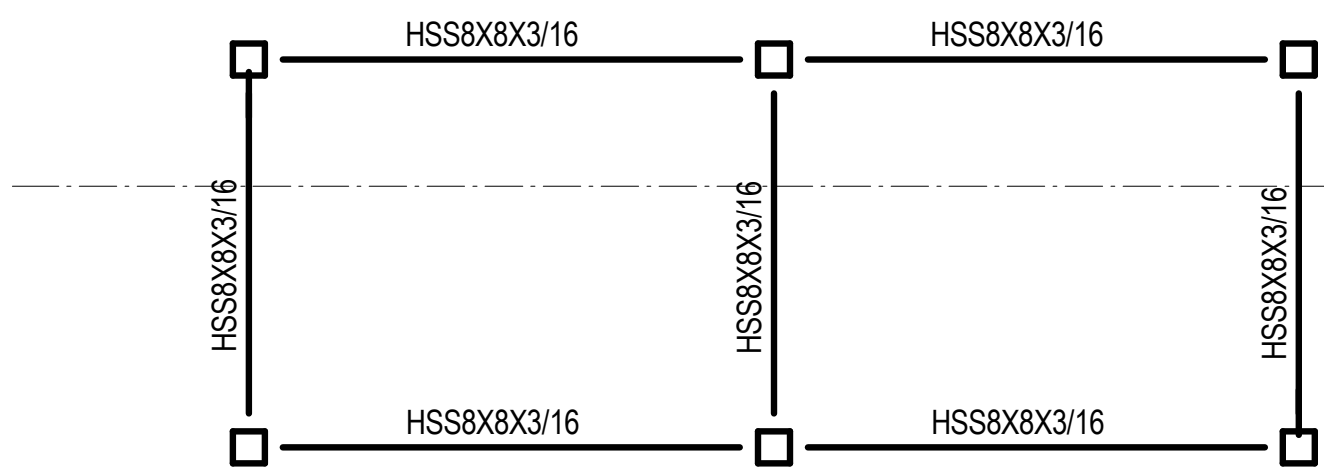
**13** DETAIL  
1 1/2" = 1'-0"

**16** LEVEL 5 ELEVATOR FRAMING  
1/4" = 1'-0"

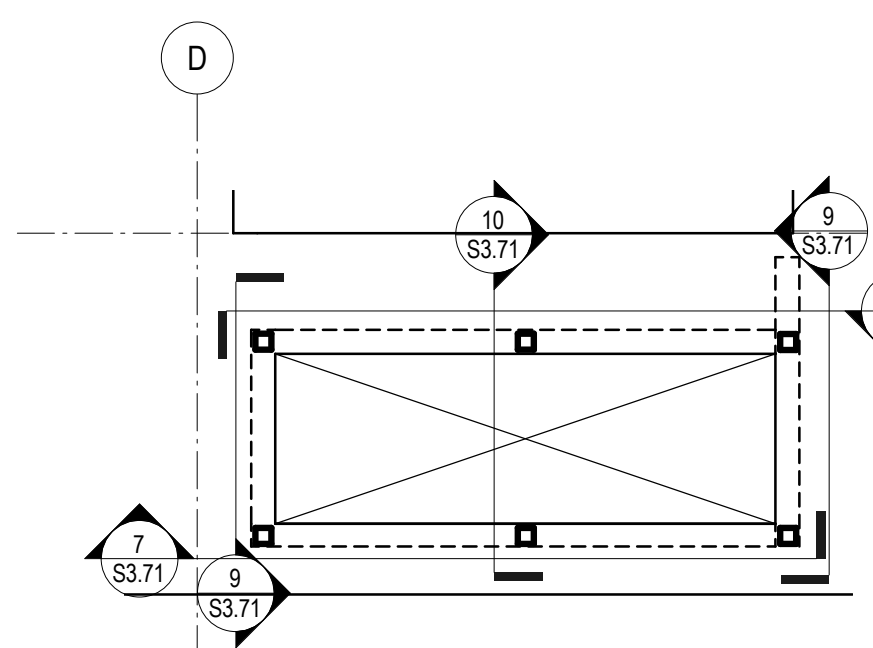
**18** DETAIL  
3/4" = 1'-0"

**19** DETAIL  
3/4" = 1'-0"

**20** KEY PLAN



- NOTES:**
- HOLD BASE PLATE RIGIDLY IN PLACE WHILE GROUTING.
  - TIGHTEN ANCHOR RODS TO SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE AND WASHER DIAMETER SHALL BE SIZED PER AISC AT CONTRS OPTION. OVERSIZED HOLES W/ A STD HARDENED WASHER MAY BE USED.

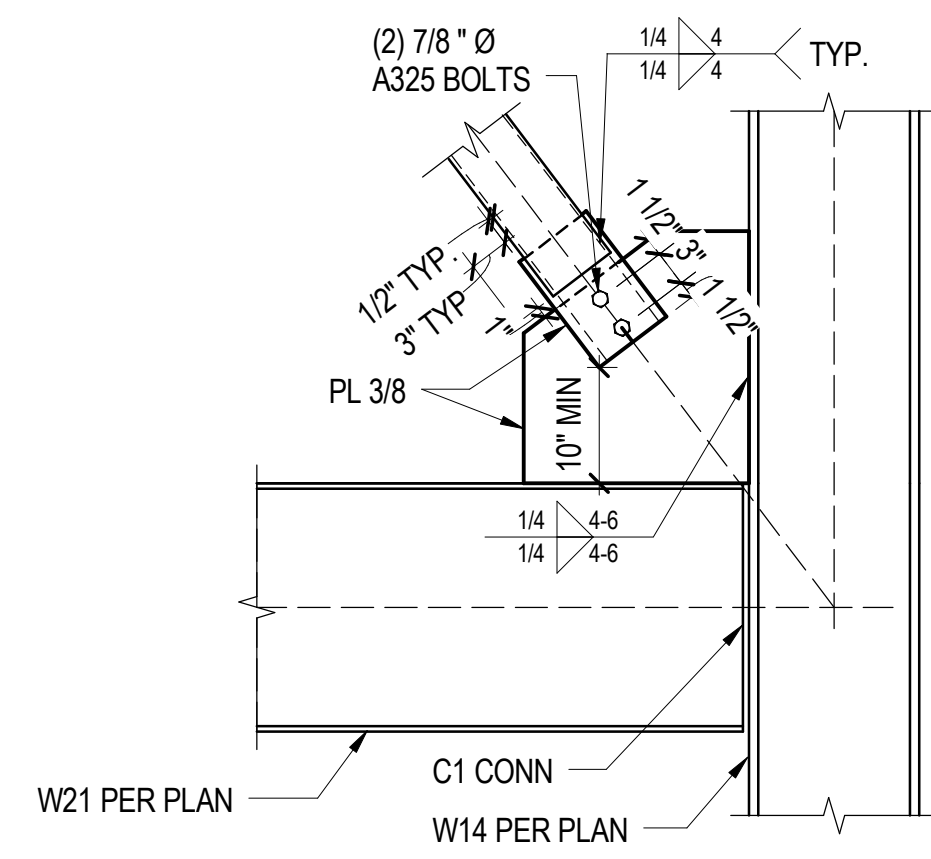


NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

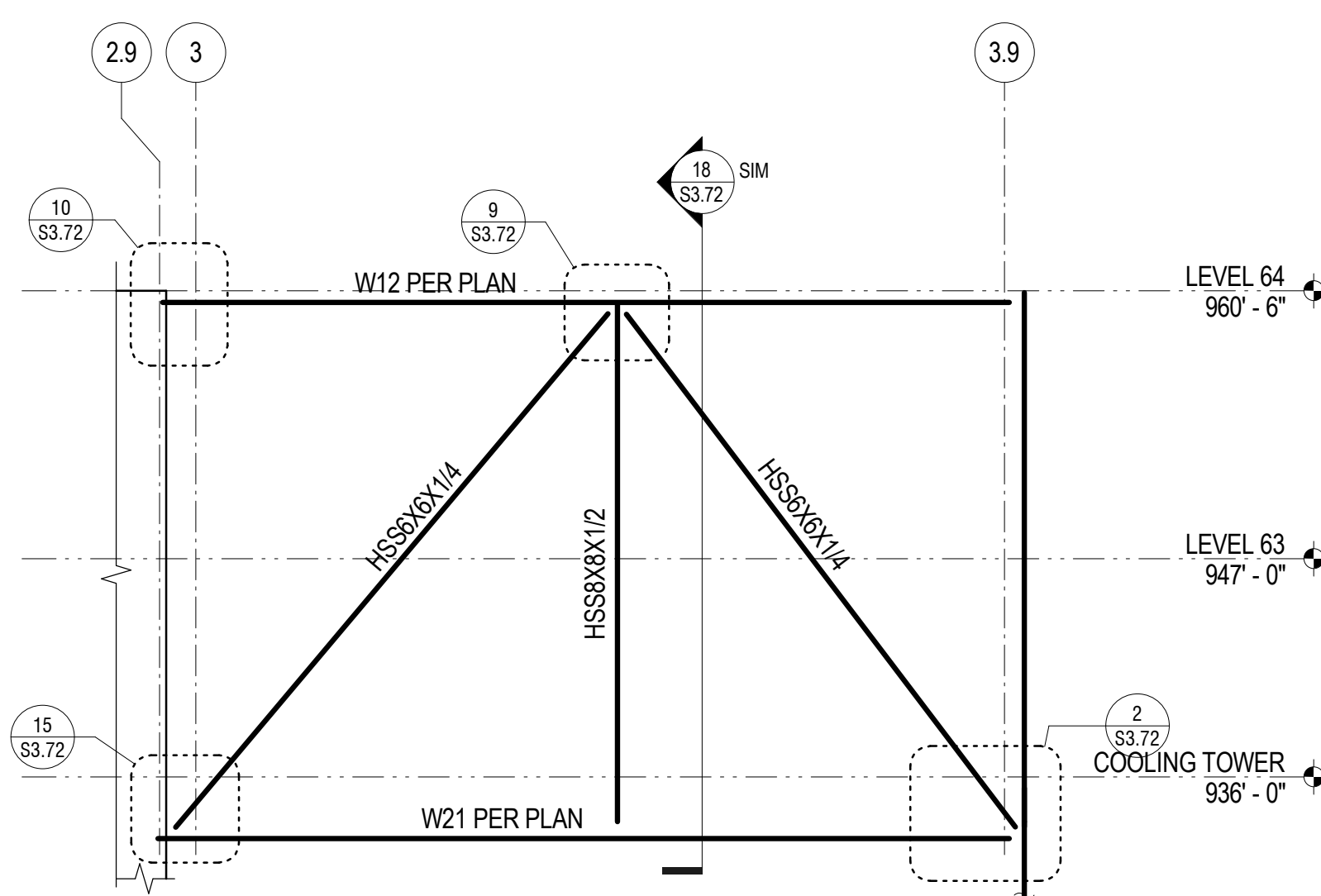
**PLAZA ELEVATOR FRAMING**



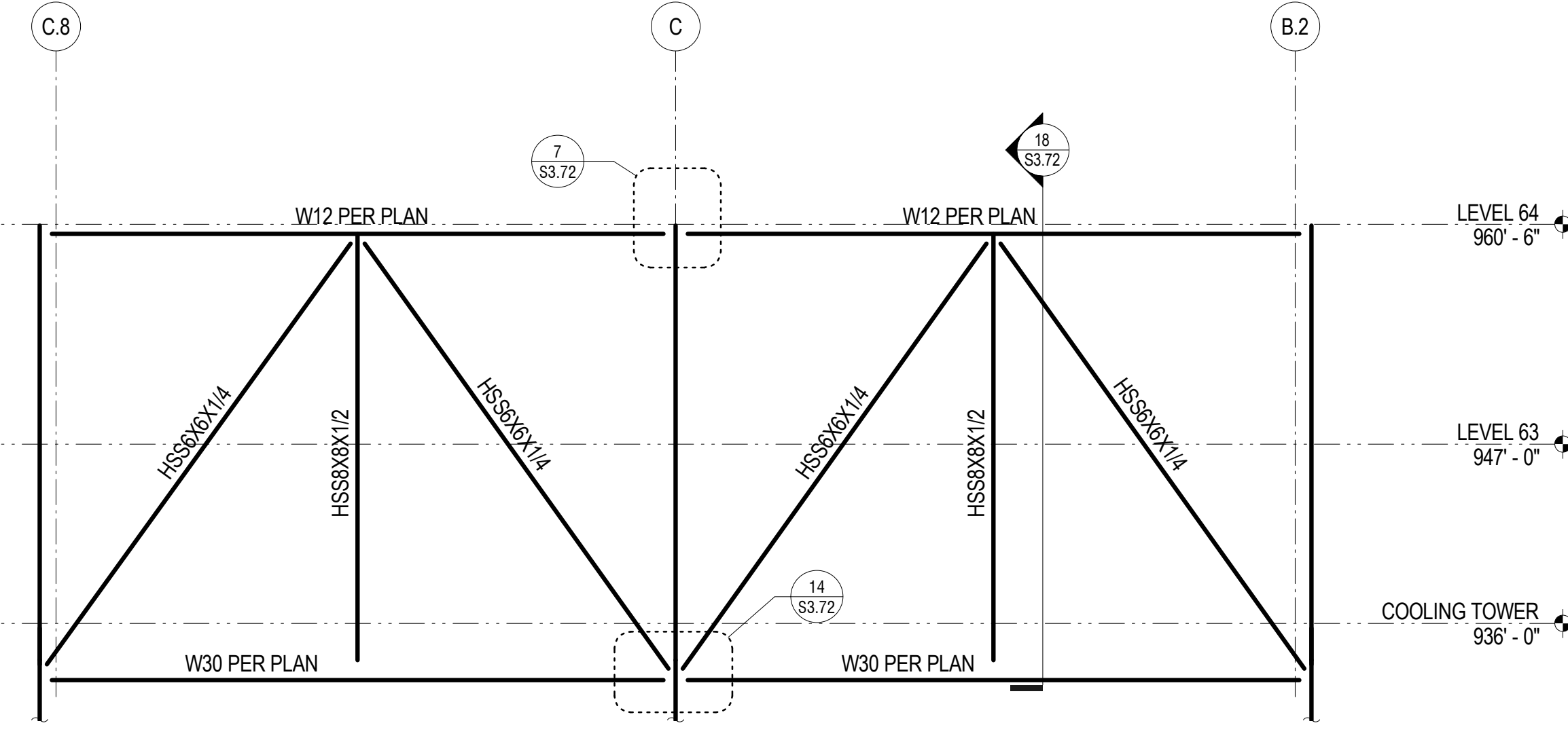
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



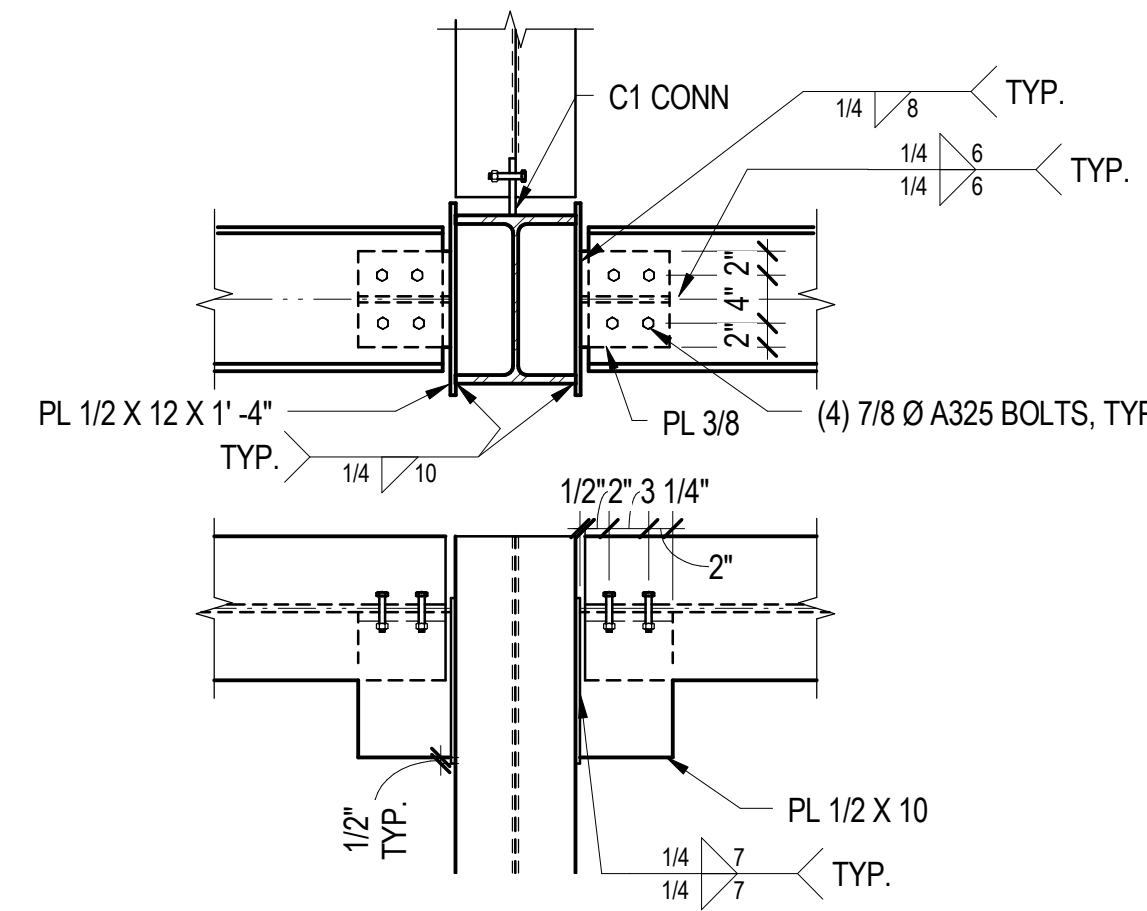
2 SCREENWALL BRACING CONNECTION TO W14 COL  
3/4" = 1'-0"



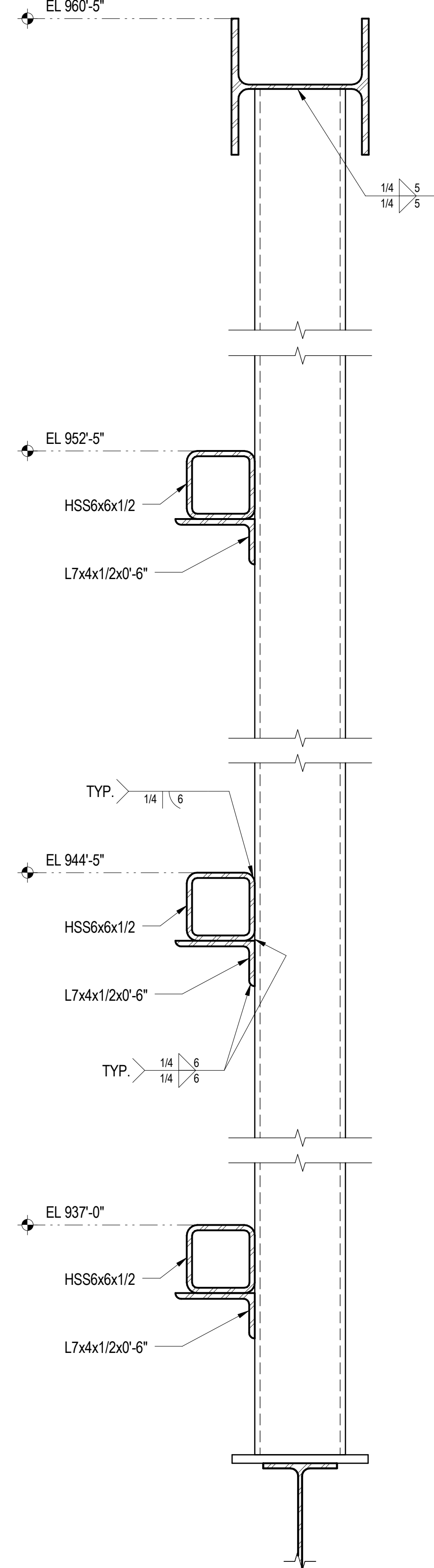
3 SCREENWALL BRACING ELEVATION - EAST  
1/8" = 1'-0"



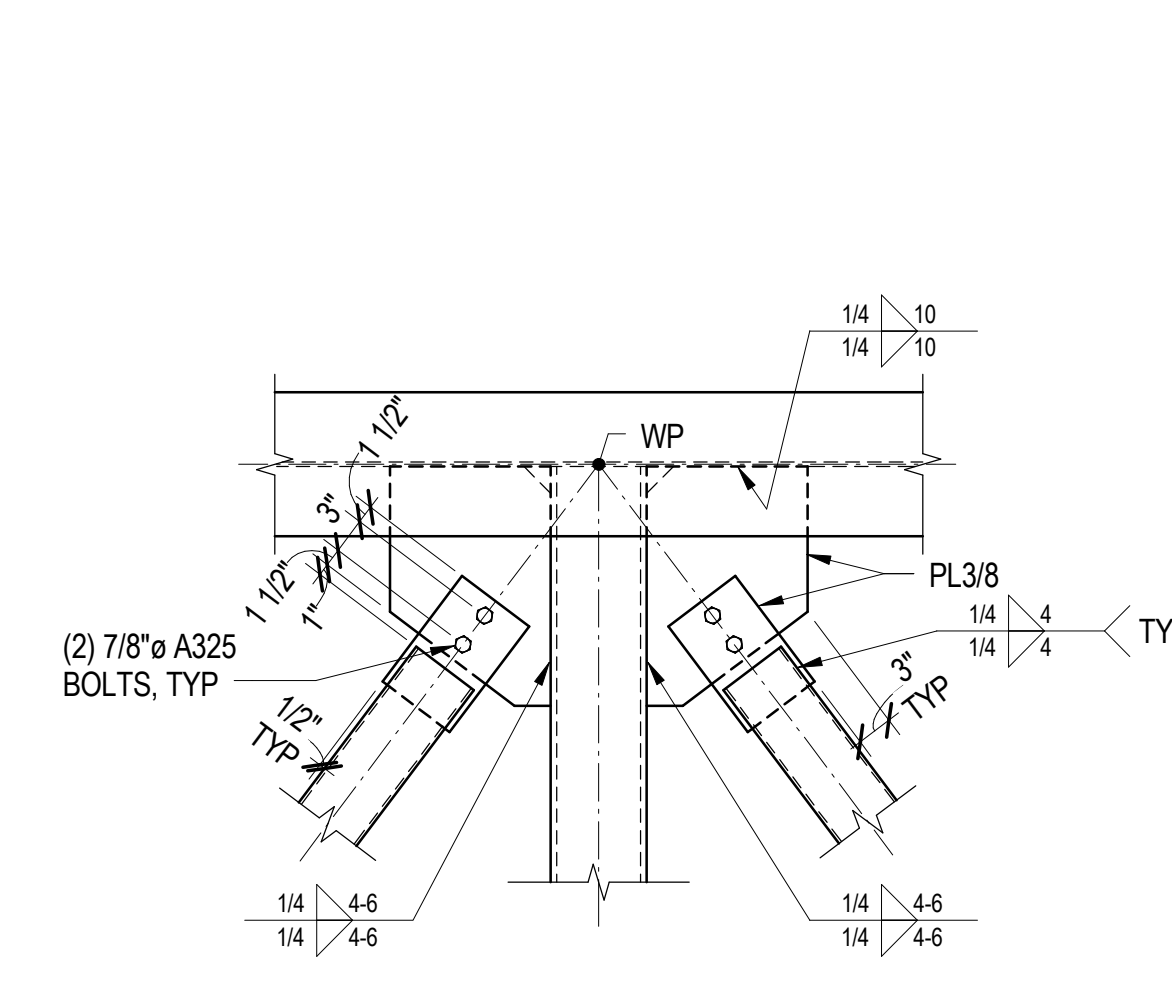
5 SCREENWALL BRACING ELEVATION - NORTH  
1/8" = 1'-0"



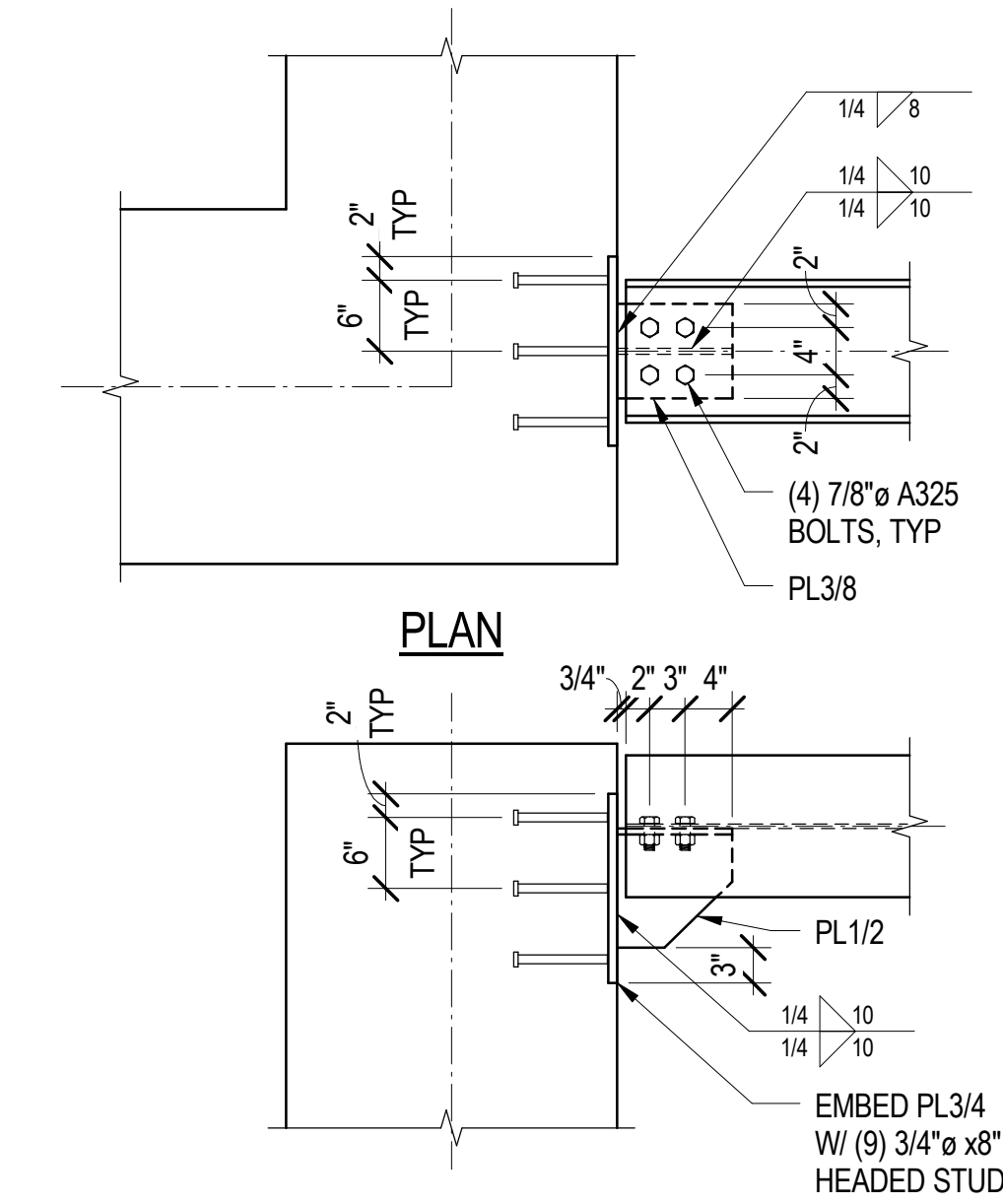
7 SCREENWALL BRACING CONNECTION TO W14 COL  
3/4" = 1'-0"



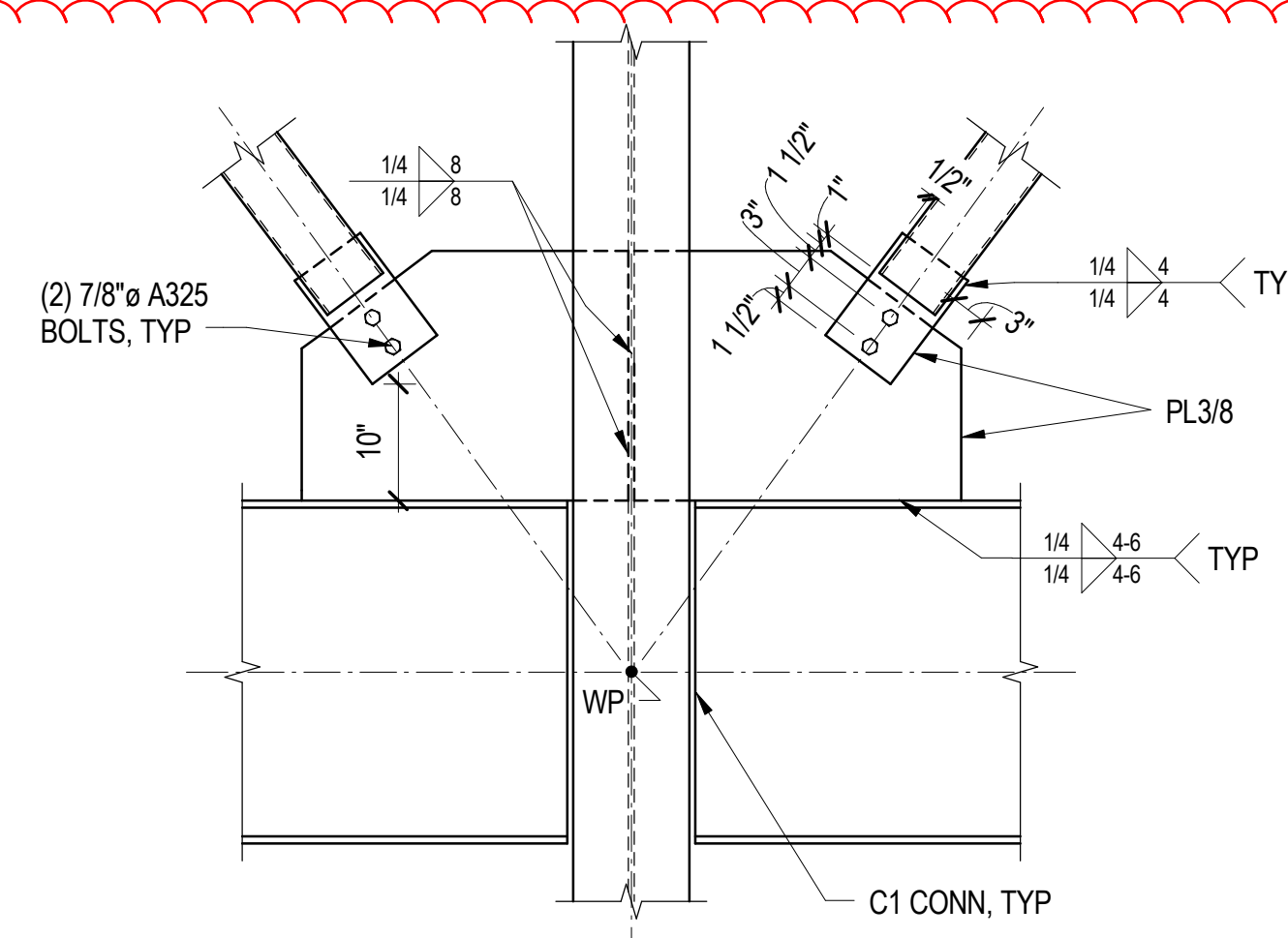
18 SCREENWALL BRACING DETAIL  
1 1/2" = 1'-0"



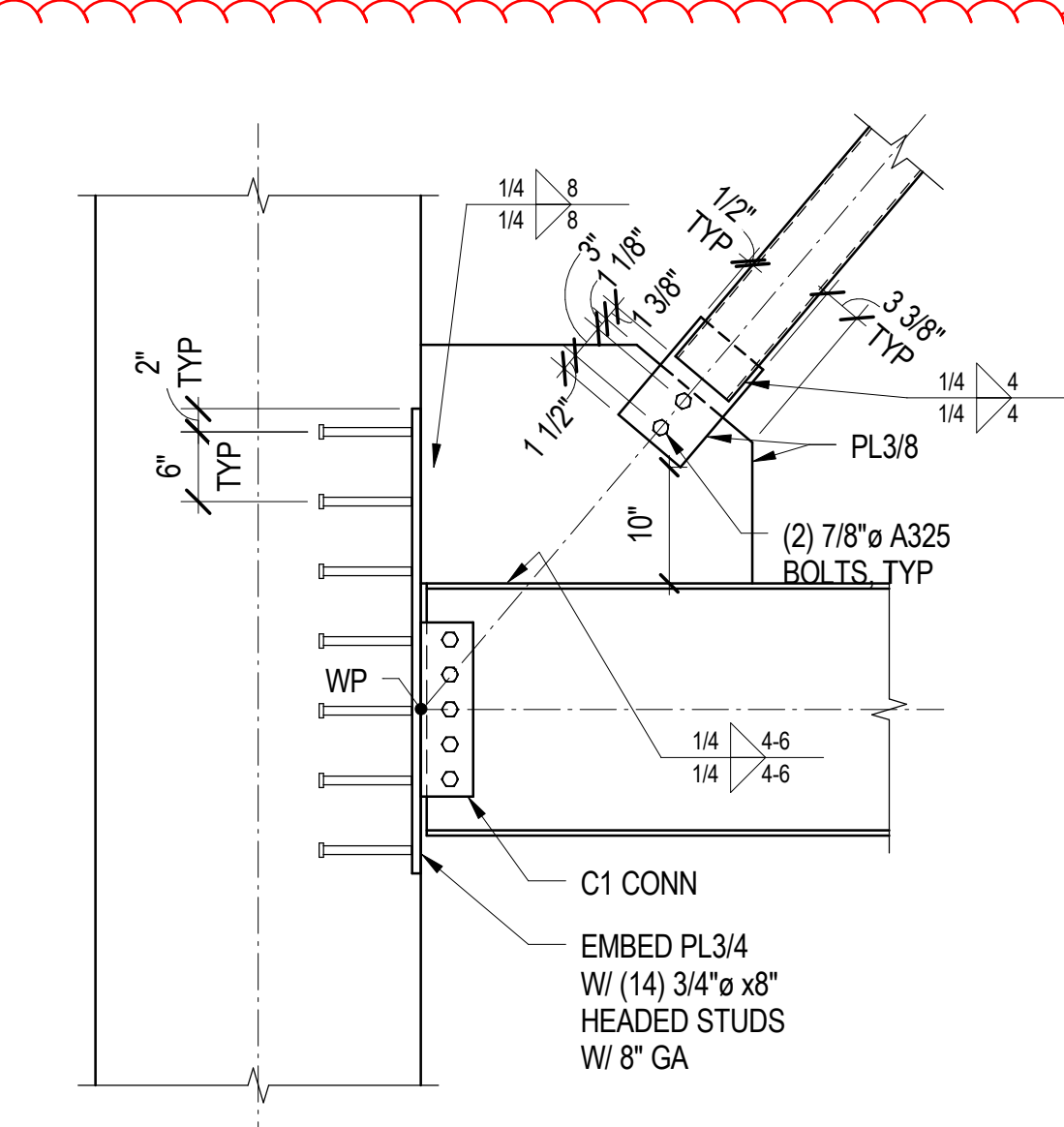
9 SCREENWALL BRACING CONNECTION TO HSS POST  
3/4" = 1'-0"



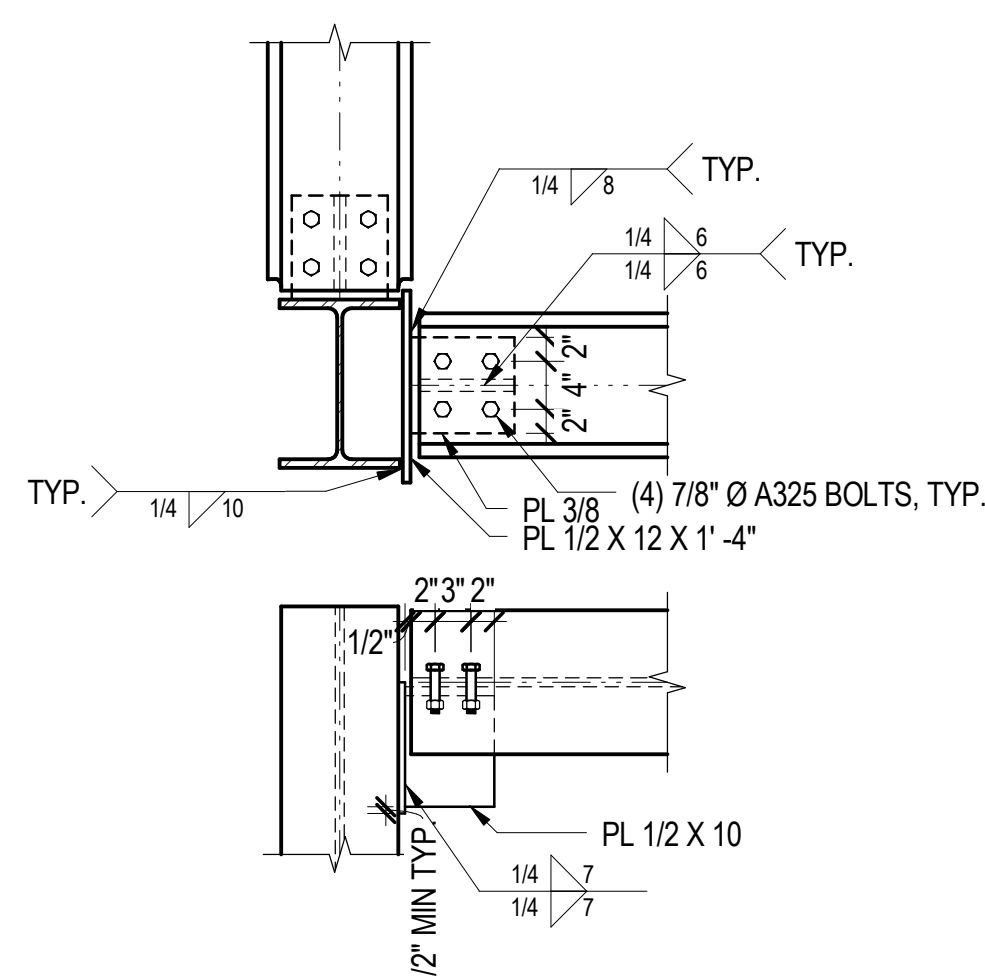
10 W12 CONNECTION TO CONCRETE WALL  
3/4" = 1'-0"



14 SCREENWALL BRACING CONNECTION TO W14  
3/4" = 1'-0"



15 W21 CONNECTION TO CONCRETE WALL  
3/4" = 1'-0"



17 ROTATED W12 CONNECTION TO W14 COLUMN  
3/4" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	IBID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

CAD FILENAME

DRAWING TITLE

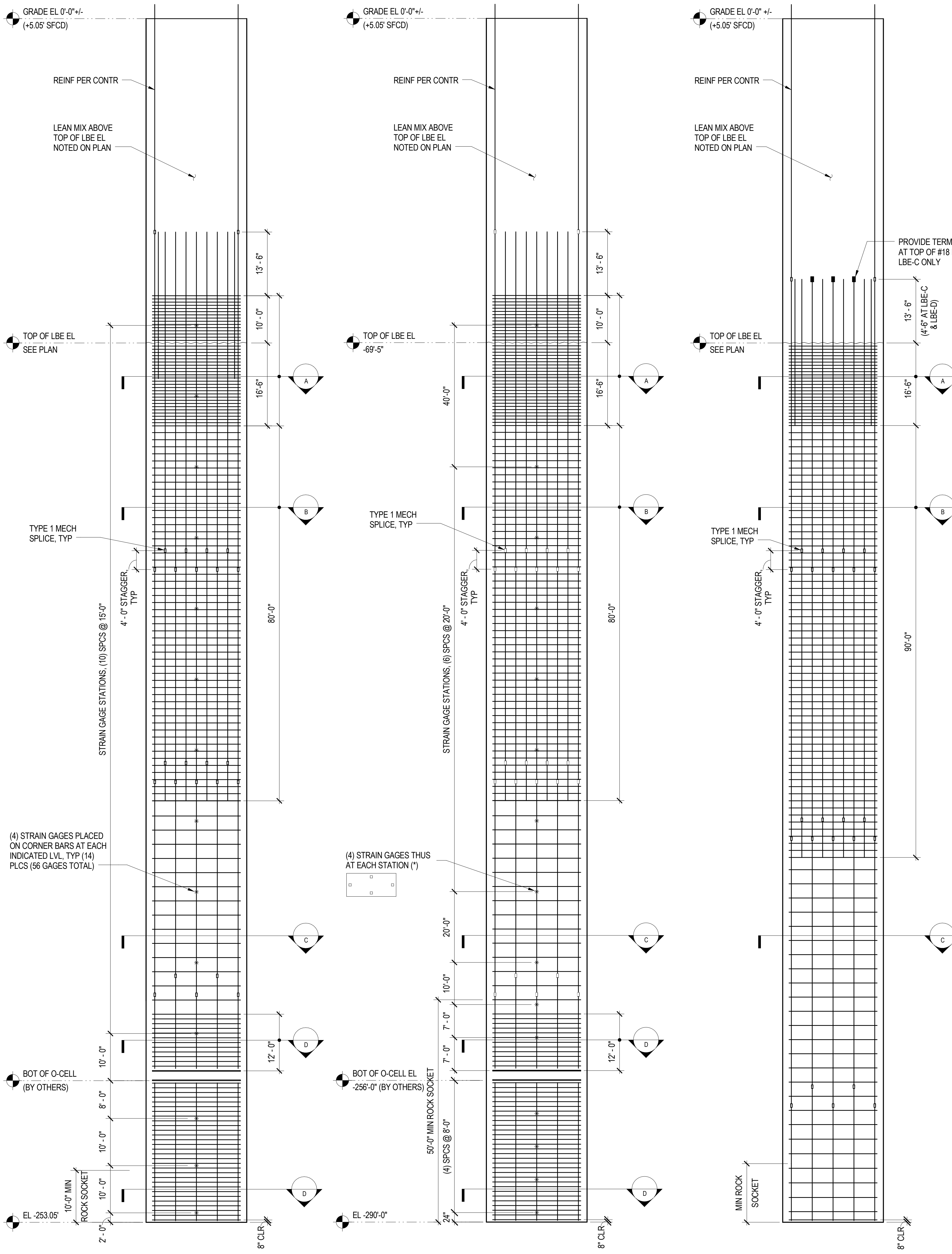
**SCREENWALL FRAMING**

PROJECT NO. 08044  
DRAWING NUMBER S3.72



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

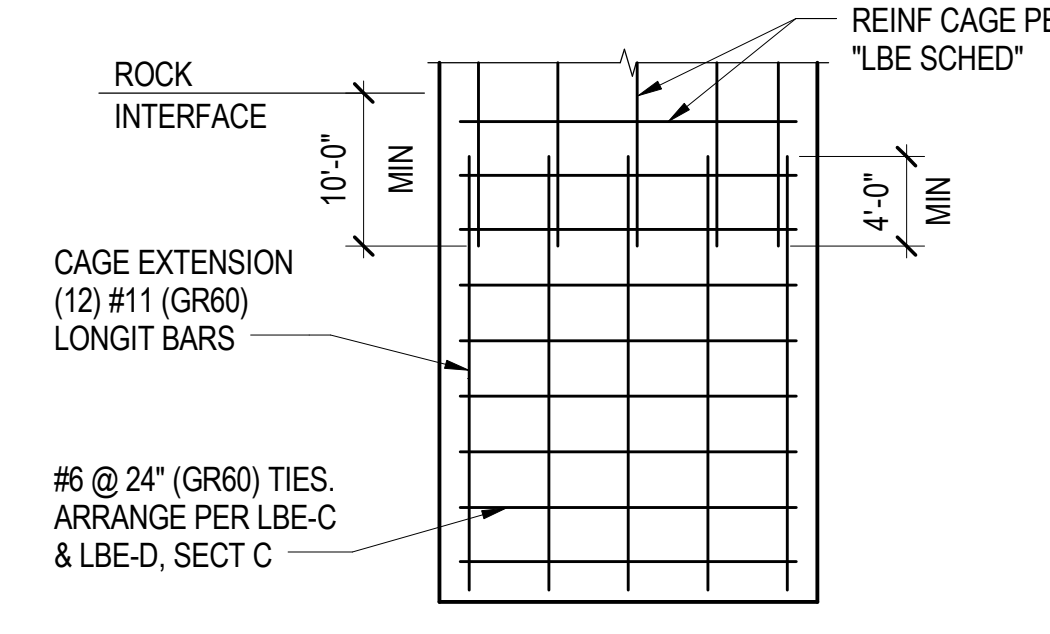
MARK	MINIMUM ROCK SOCKET (LBE #)	VERTICAL REINFORCEMENT	TRANSVERSE REINFORCEMENT				
			SECTION A	SECTION B	SECTION C	SECTION D	
LBE-A	25'-0" (1, 5) 30'-0" (26) 35'-0" (3, 11, 16, 30)	40'-0" (2, 4, 6, 10, 15, 20, 21, 25) 45'-0" (17, 28) 53'-0" (29)	(12) #18 x FULL LENGTH, GRADE 75, OUTER LAYER + (12) #18 x 120'-0", GRADE 75, OUTER LAYER + (6) #18 x 30'-0", GRADE 75, INNER LAYER	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-B	25'-0" (8) 30'-0" (12, 14) 35'-0" (17, 19, 23)	40'-0" (7, 9, 22) 45'-0" (24)	(12) #18 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-C	10'-0"		(12) #14 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-D	10'-0"		(12) #14 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-T	10'-0"		(12) #18 x FULL LENGTH, GRADE 75, OUTER LAYER + (12) #18 x 120'-0", GRADE 75, OUTER LAYER + (6) #18 x 30'-0", GRADE 75, INNER LAYER	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	#6 @ 12", GRADE 60
LBE-T2	50'-0"		(12) #18 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	#6 @ 12", GRADE 60



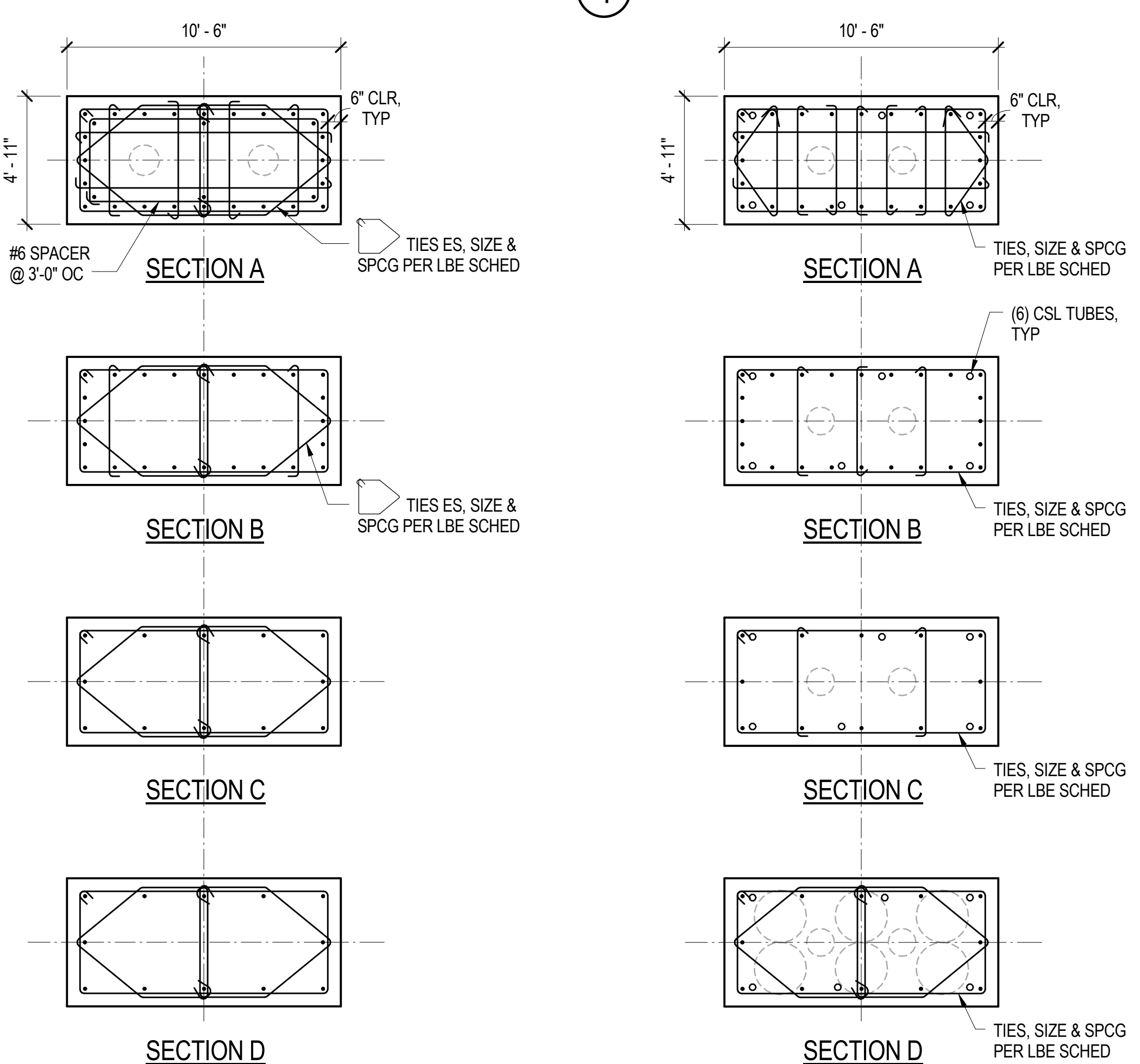
**NOTES:**  
1. THIS ELEMENT, CONSTRUCTED UNDER A SEPARATE PERMIT, IS BEING REPURPOSED AS A PRODUCTION ELEMENT IN THE PERMANENT CONSTRUCTION.

**NOTES:**  
1. THIS ELEMENT, CONSTRUCTED UNDER A SEPARATE PERMIT, IS BEING REPURPOSED AS A PRODUCTION ELEMENT IN THE PERMANENT CONSTRUCTION.

**17** LBE-T      **18** LBE-T2      **19** LBE-A, LBE-B, LBE-C, LBE-D

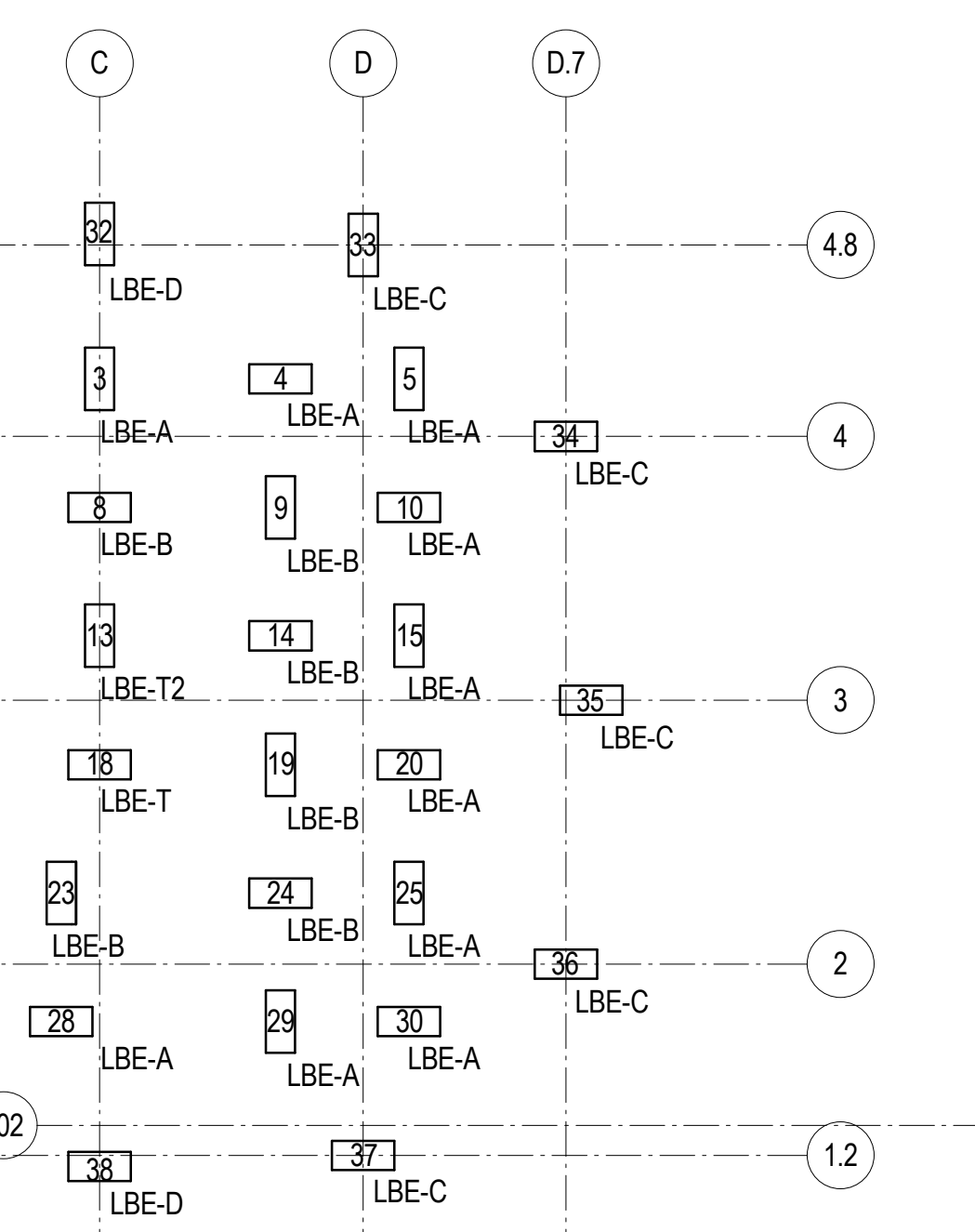


**4** ROCK SOCKET EXTENSION



**13** SECTION AT LBE-T      **14** SECTION AT LBE-T2      **15** SECTION AT LBE-B, LBE-C, LBE-D

- NOTES:**
- TIP ELEVATION FOR BIDDING PURPOSES SHALL BE COMPUTED USING THE MINIMUM ROCK SOCKET DEPTH INDICATED IN THE LBE SCHEDULE ASSUMING ROCK OCCURS AT ELEVATION -245'-0". FINAL TIP ELEVATION MAY VARY DEPENDING ON ACTUAL SOIL CONDITIONS AND SHALL BE ESTABLISHED BY THE GEOTECHNICAL ENGINEER OF RECORD AT THE TIME OF INSTALLATION. BEDROCK HAS BEEN DISCOVERED AS DEEP AS 260 FT BELOW GROUND SURFACE AND MAY BE DEEPER IN SOME PLACES. EXCAVATION EQUIPMENT SHALL BE PREPARED TO REACH THESE DEPTHS.
  - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI. ADDITIONALLY, FOR THE TEST LBE THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 7,000 PSI AT THE TIME OF O-CELL TESTING.
  - REINFORCEMENT SHALL BE OF THE SIZE, TYPE, AND GRADE SHOWN.
  - IN ACCORDANCE WITH SECTIONS 21.1.6.1 AND 12.14.3.2 OF ACI 318, TYPE 1 MECHANICAL COUPLERS SHALL DEVELOP IN TENSION AND COMPRESSION AT LEAST 1.25FY OF THE BAR.
  - LBE REINFORCEMENT SHALL BE ORIENTED AS SHOWN TO PERMIT PLACEMENT OF THE MAT REINFORCEMENT.
  - SPECIFIED CONSTRUCTION TOLERANCES APPLY FROM TOP OF LBE ELEVATION, NOT FROM THE GROUND SURFACE AT TIME OF INSTALLATION.
  - FOR EACH LBE, PROVIDE SIX (6) CROSS-HOLE SONIC LOGGING TUBES (1/2" SCH 40 STEEL) EXTENDING FROM 3 FEET ABOVE TOP OF LEAN MIX TO BOTTOM OF REINFORCING CAGE. PERFORM TESTING IN ACCORDANCE WITH ASTM D6780 AND REPORT RESULTS TO THE GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER PRIOR TO O-CELL TESTING.
  - THE CONTRACTOR SHALL COORDINATE LBE DETAILING AND CONSTRUCTION WITH LOADTEST USA, WHO IS PROVIDING O-CELL TEST EQUIPMENT AND SERVICES.
  - PERFORM POST-TEST GROUTING OF ANNULAR SPACE AND O-CELLS AS RECOMMENDED BY LOADTEST. GROUT SHALL COMPRISE WATER AND CEMENT (NO SAND) AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AT 28 DAYS.
  - WHERE LBE EXCAVATION EXTENDS MORE THAN 4'-0" BELOW THE BOTTOM OF THE SHOP-FABRICATED REINFORCEMENT, THE CAGE SHALL BE EXTENDED AS SHOWN IN DETAIL 4/S4.01.



**20** LOAD BEARING ELEMENT KEY PLAN

4/29/2014 7:09:50 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

**LOAD BEARING ELEMENT SCHEDULE AND DETAILS**

NO. DATE ISSUE

11	02 MAY 14	GMP
10	20 FEB 14	BARRETTE/LOAD BEARING ELEMENT BULLETIN NO. 3 R1
9	14 FEB 14	BARRETTE/LOAD BEARING ELEMENT BULLETIN NO. 3
8	12 FEB 14	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 2
7	24 JAN 14	BARRETTE/LOAD BEARING ELEMENT BULLETIN NO. 2
6	25 NOV 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM REVISION NO. 1
5	25 SEP 13	BARRETTE/LOAD BEARING ELEMENT ADDENDUM
4	03 SEP 13	50% CONSTRUCTION DOCUMENTS
3	19 JUL 13	DESIGN DEVELOPMENT
2	03 JUN 13	50% DESIGN DEVELOPMENT
1	19 APR 13	100% SCHEMATIC DESIGN

DRAWING TITLE: **LOAD BEARING ELEMENT SCHEDULE AND DETAILS**

DRAWING NUMBER: **S4.01**

PROJECT NO: **08044**

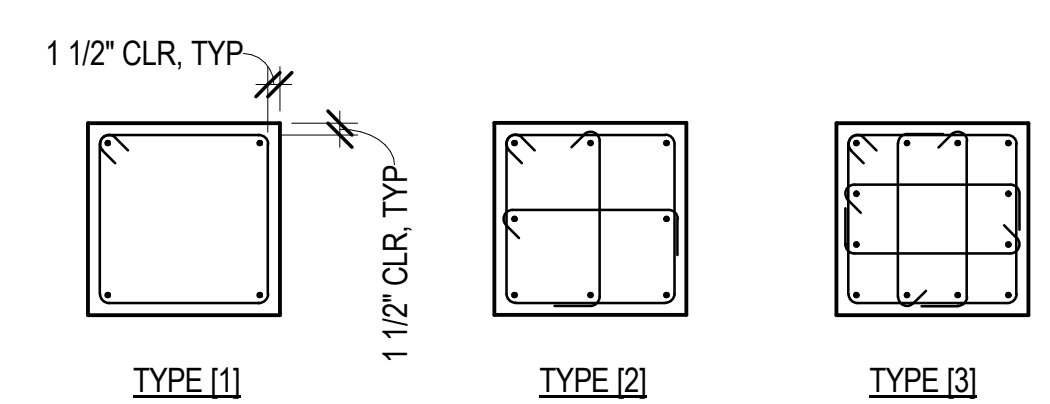


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

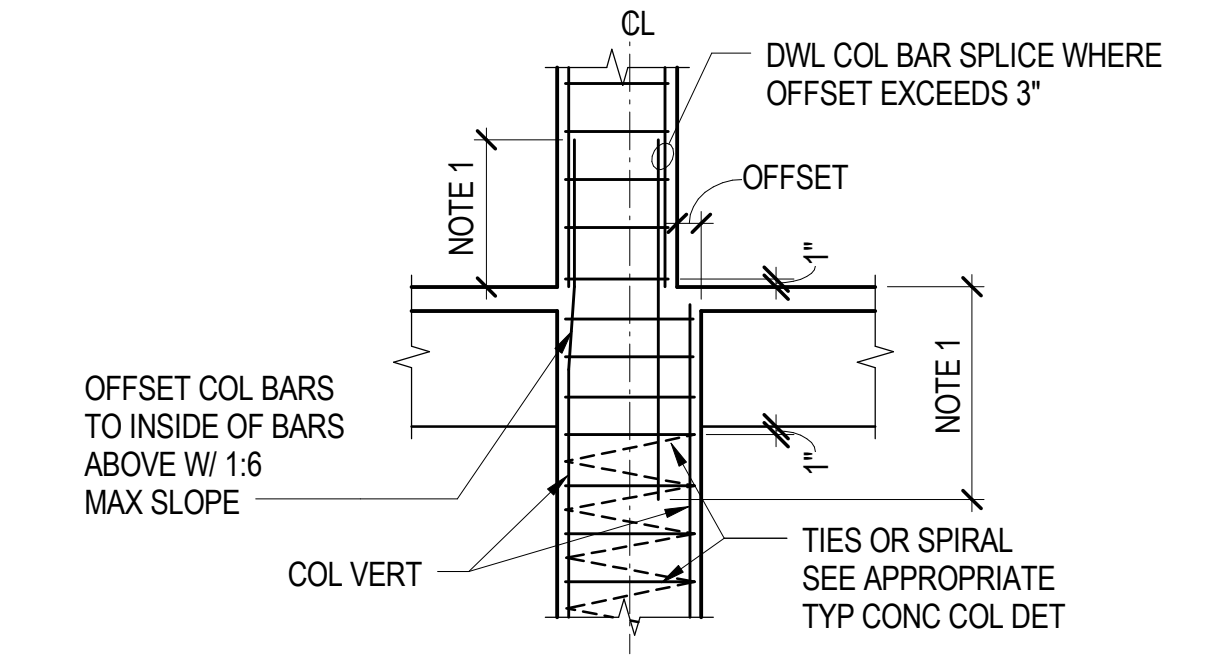
CONCRETE COLUMN SCHEDULE								
LEVEL	COLUMN MARK	C21	C22	C23	C24	C25	C26	C27
P1	SIZE							
	REINF							
	TIES							
	SPLICE				Lsb		Lsb	Lsb
P2	SIZE			24x24	24x24	24x24	24x24	24x24
	REINF			(12) #8	(12) #8	(12) #8	(12) #8	(12) #8
	TIES			#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]
	SPLICE	Lsb	Lsb					
P3	SIZE	24x24	24x24					
	REINF	(12) #8	(12) #8					
	TIES	#5 @ 6" [3]	#5 @ 6" [3]					
	DWL							

- NOTES:**
- SEE "TYPICAL CONCRETE COLUMN" DETAIL.
  - UNDER "TIES" [ ] DENOTES TYPE OF COLUMN REINFORCING CONFIGURATION. SEE "TYPICAL CONCRETE COLUMN REINFORCING CONFIGURATION" DETAIL.
  - COLUMN DETAILS REMAIN THE SAME AS THE LEVEL BELOW, UNLESS NOTED OTHERWISE.

**5 CONCRETE COLUMN SCHEDULE**

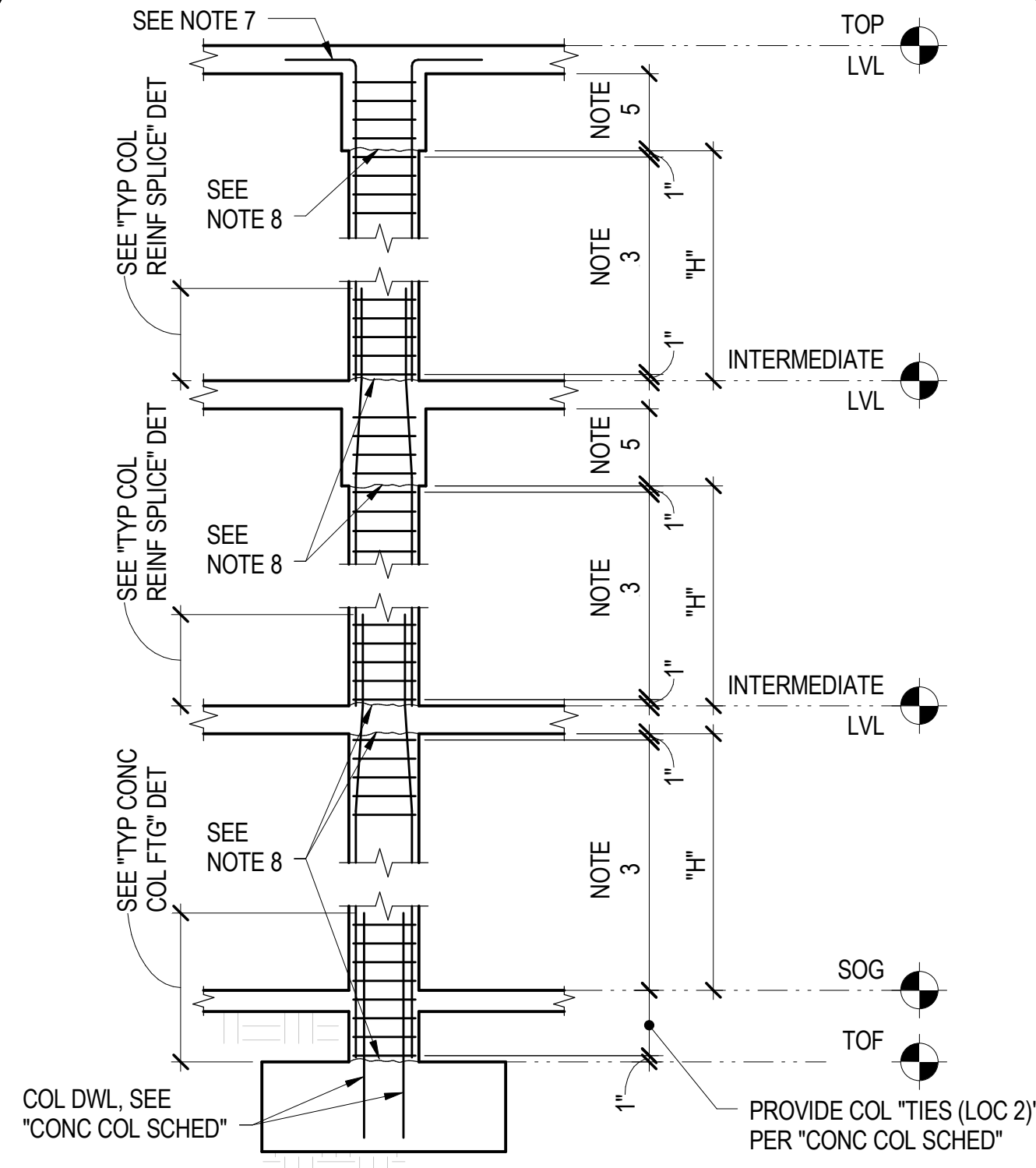


- NOTES:**
- SEE "CONCRETE COLUMN SCHEDULE" FOR TYPE OF REINFORCING CONFIGURATION DENOTED WITH [ ] UNDER "TIES."
  - A TYPICAL CROSSTIE SHALL HAVE A 135 DEGREE HOOK AT ONE END AND A 90 DEGREE HOOK AT THE OTHER END. AT CONTRACTOR'S OPTION, THE 135 DEGREE HOOK MAY BE REPLACED WITH A 180 DEGREE HOOK, AND THE 90 DEGREE HOOK MAY BE REPLACED WITH A 135 OR A 180 DEGREE HOOK.
  - CROSSTIES WITH 90 DEGREE HOOKS SHALL HAVE THE CONSECUTIVE CROSSTIES ALTERNATED END FOR END ALONG THE LONGITUDINAL REINFORCEMENT.



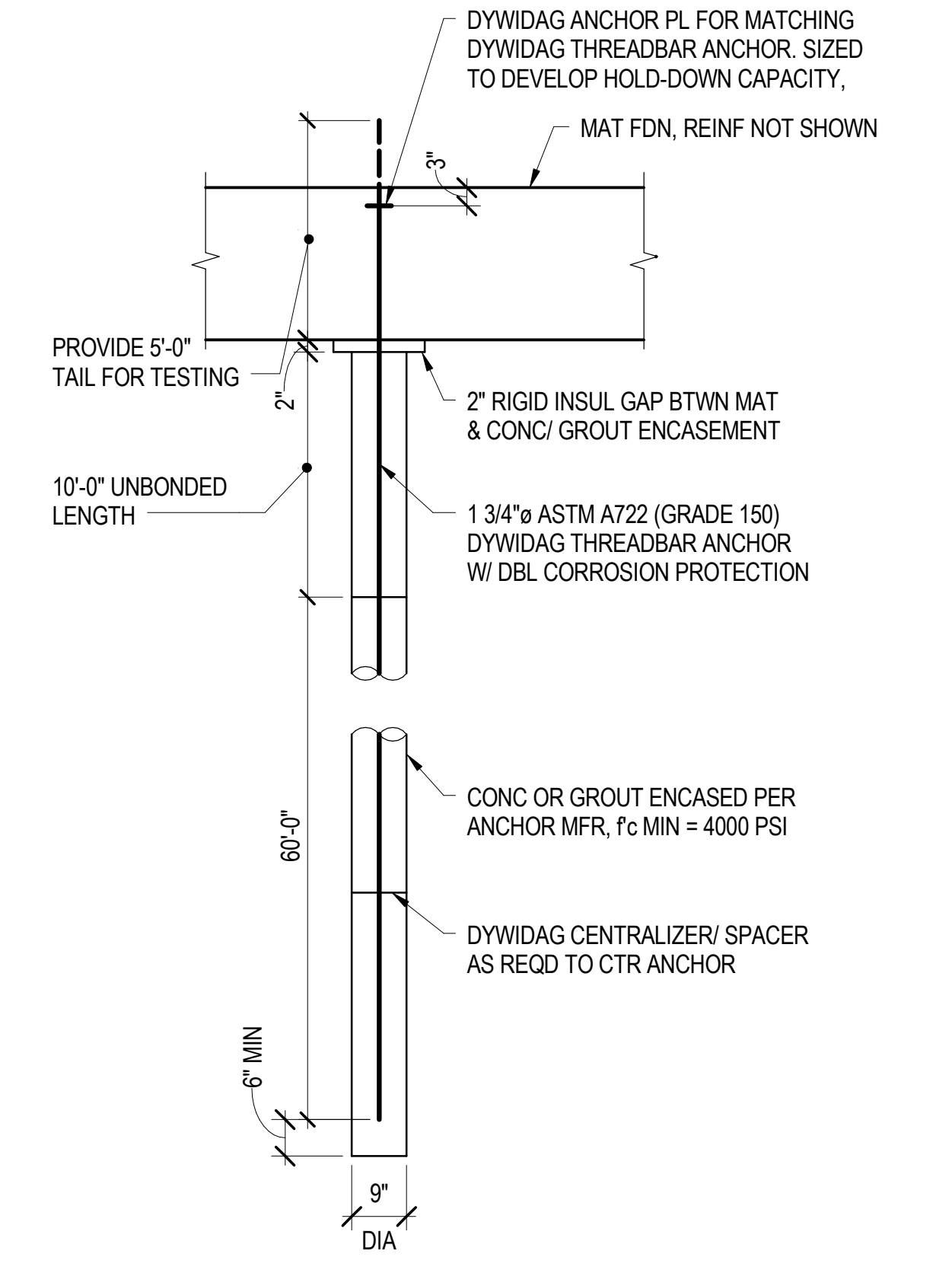
- NOTES:**
- SEE "CONCRETE COLUMN SCHEDULE" FOR SPLICE LENGTH. MECHANICALLY SPLICED OR WELDED TO DEVELOP 125% F<sub>y</sub> IN TENSION.
  - CLEAR DISTANCE BETWEEN THE TWO LAP SPLICE BARS AND ADJACENT BARS SHALL BE NOT LESS THAN 1.5 TIMES THE BAR DIA, NOR 1 1/2 INCHES.
  - IF OFFSET IN VERTICAL BARS OCCURS OUTSIDE THE HORIZONTAL FRAMING, PROVIDE ADDITIONAL SET OF TIES AT OFFSET LOCATION.
  - WHERE NOTED "MS" ON CONCRETE COLUMN, SEE "CONCRETE COLUMN SCHEDULE" FOR SPLICE. THE COLUMN VERTICAL BARS SHALL BE:
    - FULL PENETRATION BUTT WELDS, ADJACENT WELDS STAGGERED 6 INCHES ON CENTER.
    - EXOTHERMIC WELD SPLICES STAGGERED 30 INCHES ON CENTER VERTICALLY BETWEEN ADJACENT BARS.
    - MECHANICAL SPLICING STAGGERED 30 INCHES ON CENTER VERTICALLY.

**9 TYP CONC COL REINFORCING CONFIGURATIONS**

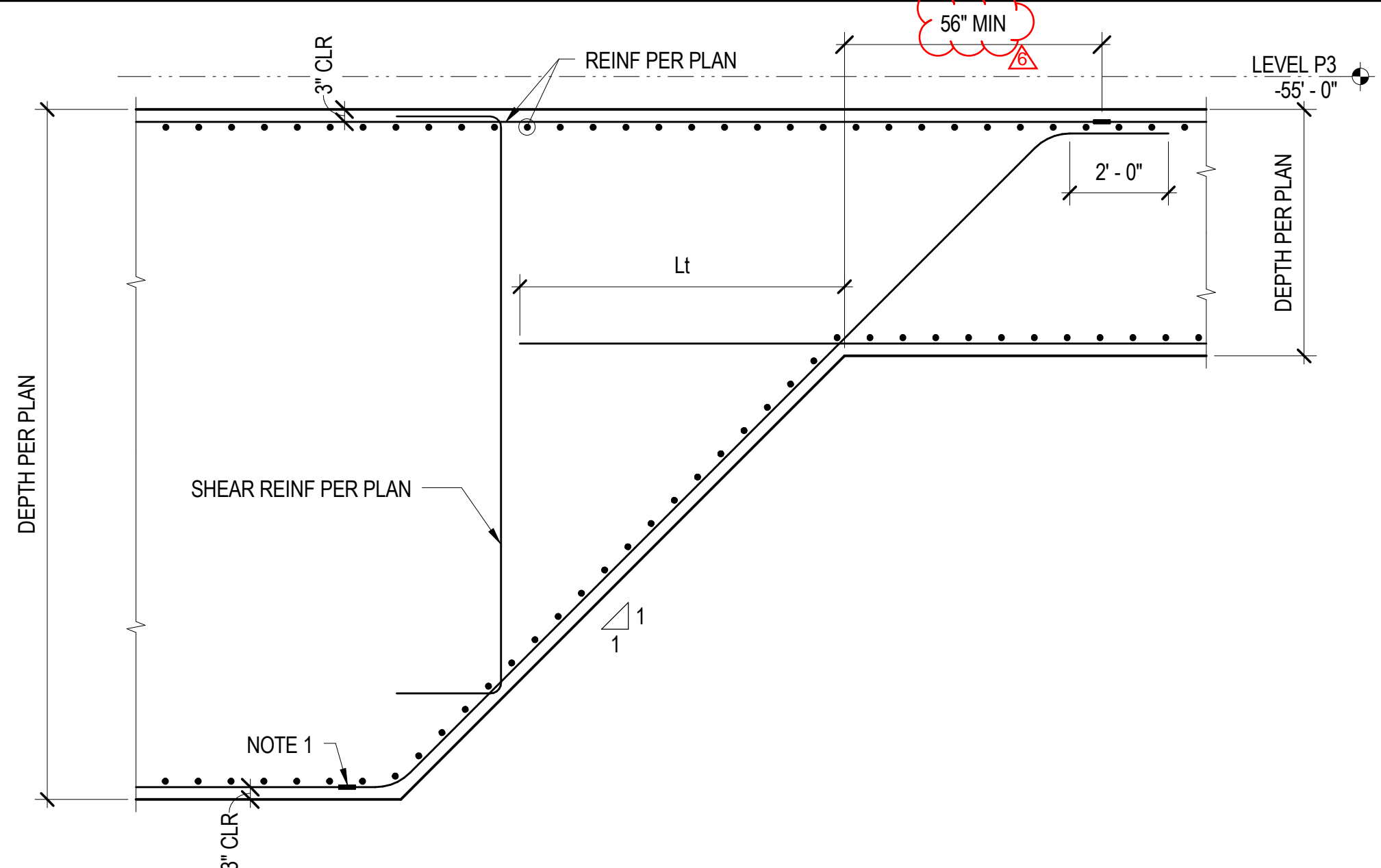


- NOTES:**
- SEE "CONCRETE COLUMN SCHEDULE" FOR COLUMN SIZE AND VERTICAL REINFORCING. FOR REINFORCING CONFIGURATION TYPE, SEE THE "CONCRETE COLUMN SCHEDULE", AND THE "TYPICAL CONCRETE COLUMN REINFORCING CONFIGURATION" DETAIL.
  - COLUMN VERTICAL REINFORCING SHALL BE SPECIAL DUCTILE QUALITY. SEE "GENERAL NOTES."
  - SEE "CONCRETE COLUMN SCHEDULE" UNDER "TIES" FOR TIE SIZE, SPACING, AND REINFORCING CONFIGURATION. REINFORCING CONFIGURATION TYPE IS NOTED IN [ ].
  - NOT USED.
  - PROVIDE "TIES (LOC 2)" THROUGHOUT THE BEAM AND SLAB DEPTH, EXCEPT THAT THE TIE SPACING MAY BE INCREASED TO 6" WHERE BEAMS FRAME INTO FOUR SIDES OF COLUMN FOR THE DEPTH OF THE MOST SHALLOW BEAM.
  - AT CONTRACTOR'S OPTION, COLUMN VERTICAL BARS MAY BE EXTENDED UP ADDITIONAL FLOOR LEVELS WITHOUT SPLICING AT FLOORS.
  - PLACE HORIZONTAL HOOKS DIRECTLY BELOW TOP BARS OF BEAMS OR SLABS. SPLAY HOOKS AS NECESSARY TO RELIEVE BAR CONGESTION. AT CONTRACTOR'S OPTION, HOOKS MAY BE PLACED TOWARD THE INSIDE OF THE COLUMN.
  - UNLESS NOTED OTHERWISE, COLUMN CONSTRUCTION JOINTS SHALL BE AT THE UNDERSIDE OF FLOOR SLABS, BEAMS, OR GIRDERS, AND AT THE TOPS OF FOOTINGS OR FLOOR SLABS. BEAMS, GIRDERS, BRACKETS, COLUMNS CAPITALS, HAUNCHES, AND DROP PANELS SHALL BE PLACED AT THE SAME TIME AS SLABS.

**10 TYP CONCRETE COLUMN REINFORCING SPLICE**

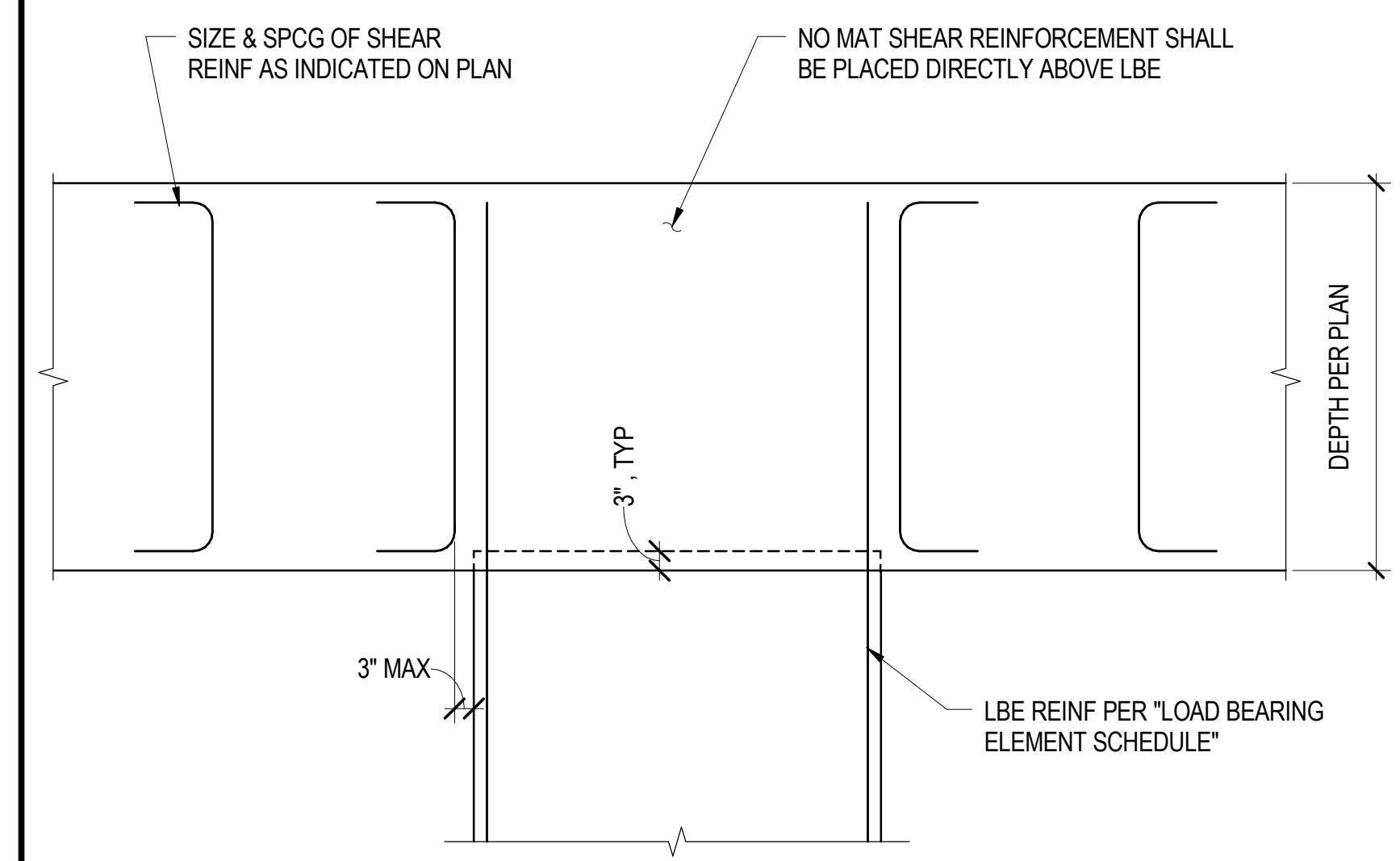


- NOTES:**
- THE DESIGN ASSUMES A WORKING LOAD CAPACITY BASED ON ALLOWABLE SKIN FRICTION PER THE ARUP GEOTECHNICAL REPORT DATED JULY 31, 2013.
  - THE SIZE AND QUANTITY OF HOLD-DOWN ANCHORS INDICATED ASSUMES A FACTOR OF SAFETY OF 2.0.
  - PROVIDE MATCHING DYWIDAG ANCHOR PLATES TO DEVELOP THE TENSION CAPACITY OF THE ANCHOR.
  - PERFORMANCE AND PROOF TESTING SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO CASTING THE MAT SLAB. DESIGN LOAD IS 110 KIPS.
  - HOLD-DOWNS SHALL BE INSTALLED WITHIN 3 INCHES OF THE SPECIFIED LOCATION. THE ANCHOR SHALL BE INSTALLED 3 INCH CLEAR (±1 INCH) FROM THE TOP OF THE FINISHED CONCRETE.
  - PROVIDE DOUBLE CORROSION PROTECTION FOR THE LENGTH OF STEEL ANCHORAGE PER THE ARUP GEOTECHNICAL REPORT.
  - HOLD-DOWNS ARE TO BE EQUALLY SPACED BETWEEN COLUMNS AND GRID LINES INDICATED ON PLAN.



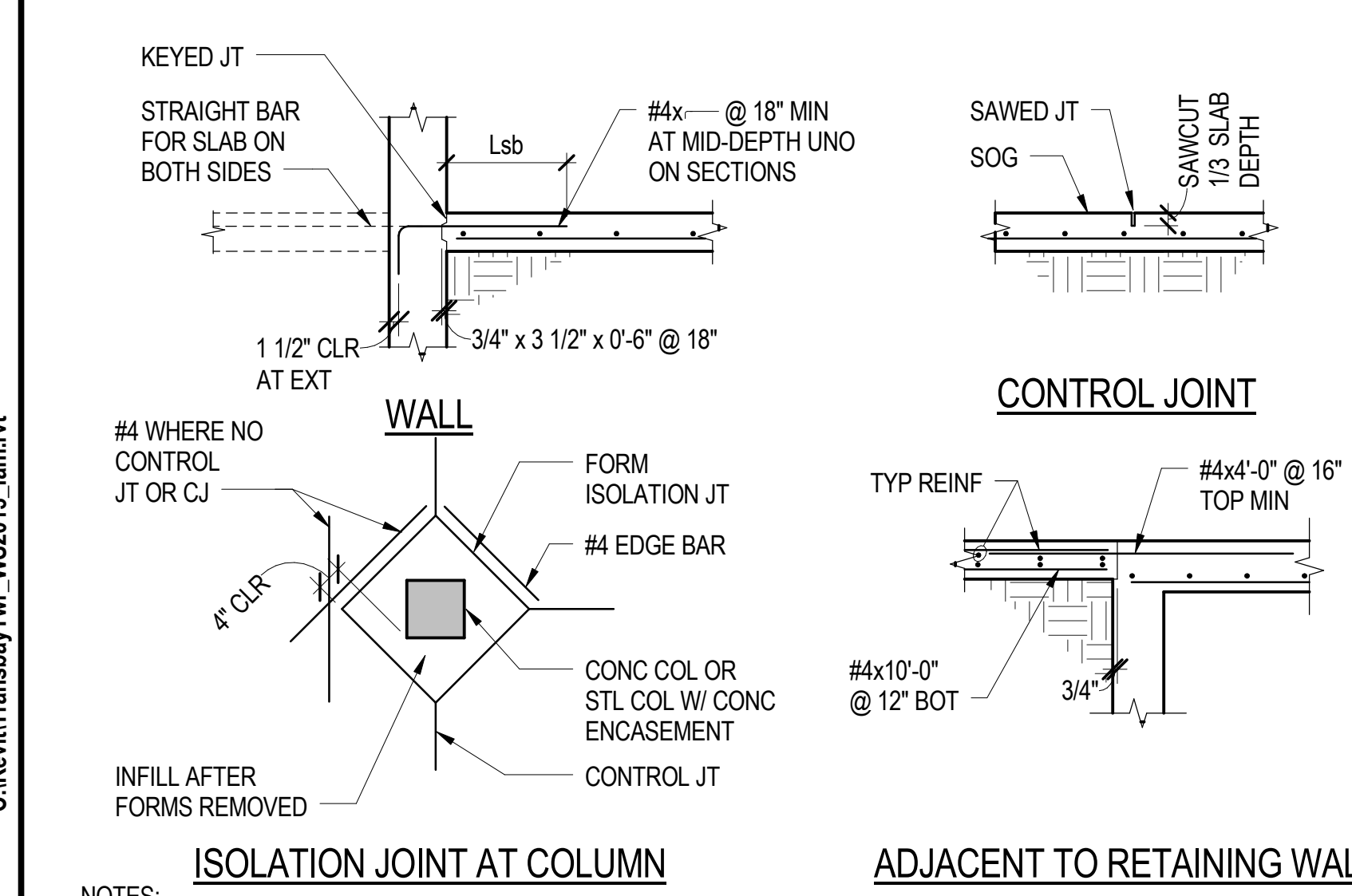
- NOTES:**
- STAGGER COUPLERS 2'-0".
  - SHEAR REINFORCING, ADDITIONAL FLEXURAL REINFORCING, AND OTHER STRUCTURAL ELEMENTS NOT SHOWN.

**2 TYPICAL MAT TRANSITION**



- NOTES:**
- MAT FLEXURAL REINFORCEMENT NOT SHOWN.

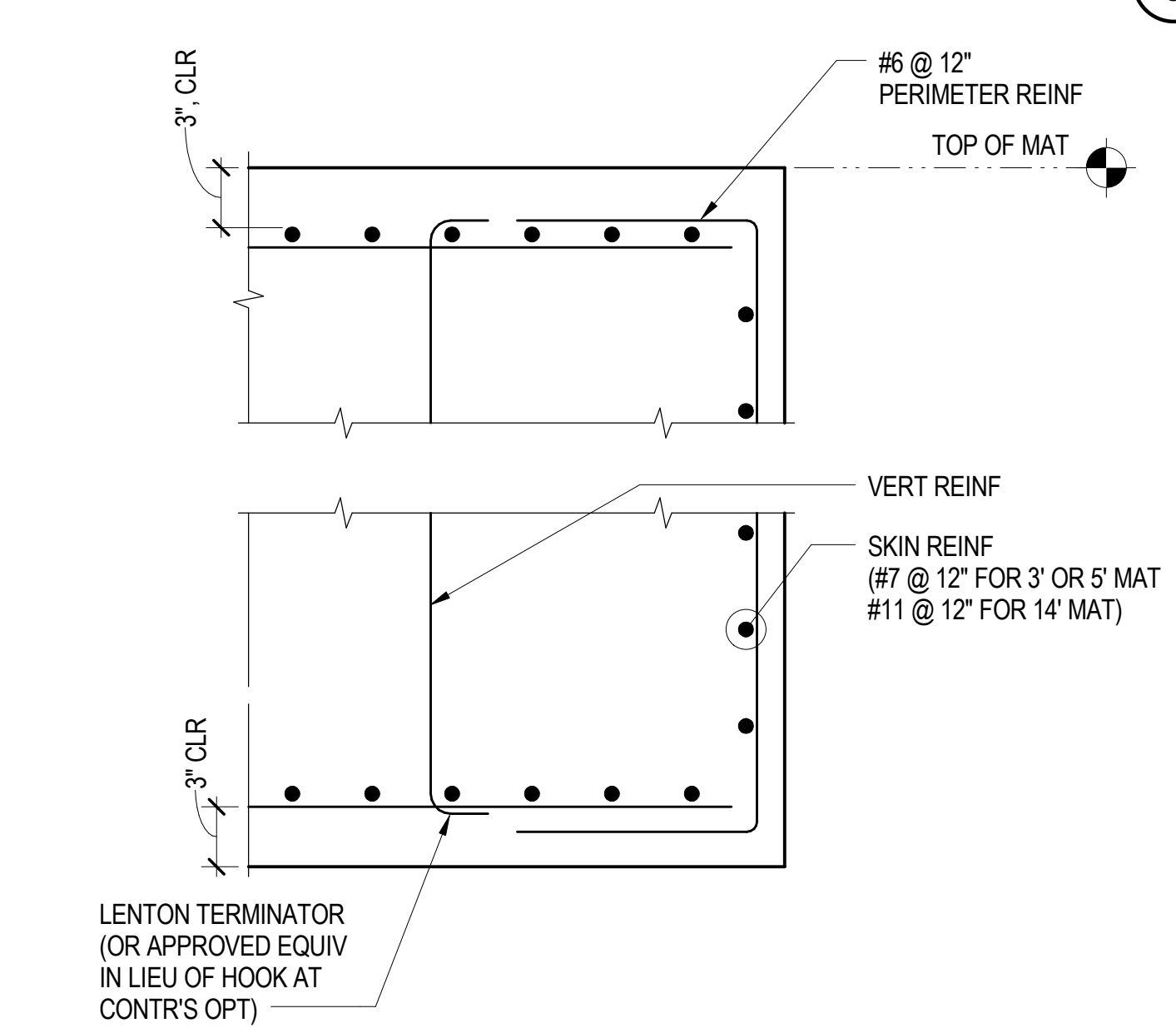
**11 TYPICAL MAT SHEAR REINF AT LOAD BEARING ELEMENT**



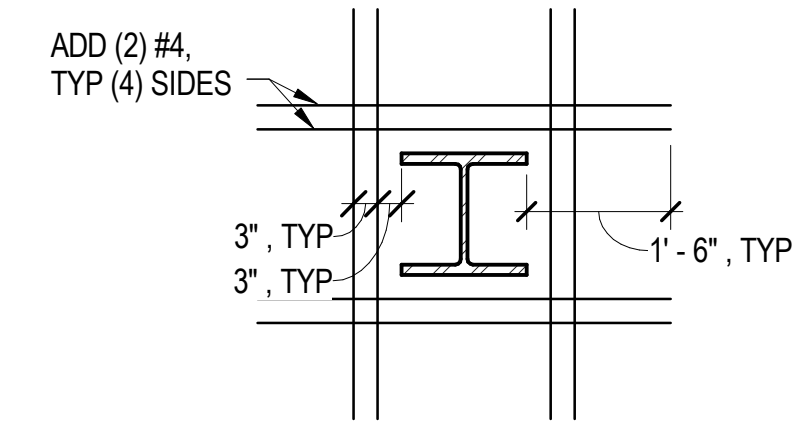
- NOTES:**
- SLAB ON GRADE IS 4 INCHES THICK UNLESS NOTED OTHERWISE.
  - LOCATE CONSTRUCTION JOINTS UNDER PARTITIONS OR ON COLUMN LINES. PROVIDE CONTROL JOINTS ON ALL COLUMN LINES AND AT A MAXIMUM SPACING OF 30' x SLAB THICKNESS EACH WAY IN BETWEEN. PROVIDE CONTROL JOINTS AT ALL RE-ENTRANT CORNERS. CONTRACTOR SHALL SUBMIT A JOINTING PLAN TO ARCHITECT FOR REVIEW.
  - SAWED JOINTS SHALL BE MADE AS SOON AS THE JOINT CAN BE CUT WITHOUT EDGES RAVELING AND WITHIN 24 HOURS OF SLAB PLACEMENT. SAWED JOINTS SHALL BE FILLED WITH SEALANT AS COORDINATED WITH THE ARCHITECT.
  - LOCATE REINFORCING AT ONE-THIRD OF DEPTH FROM TOP OF SLAB.
  - TYPICAL SLAB REINFORCING: #4 @ 24" EACH WAY FOR 4" SLAB #4 @ 24" EACH WAY FOR 6" SLAB

**18 TYPICAL SLAB ON GRADE**

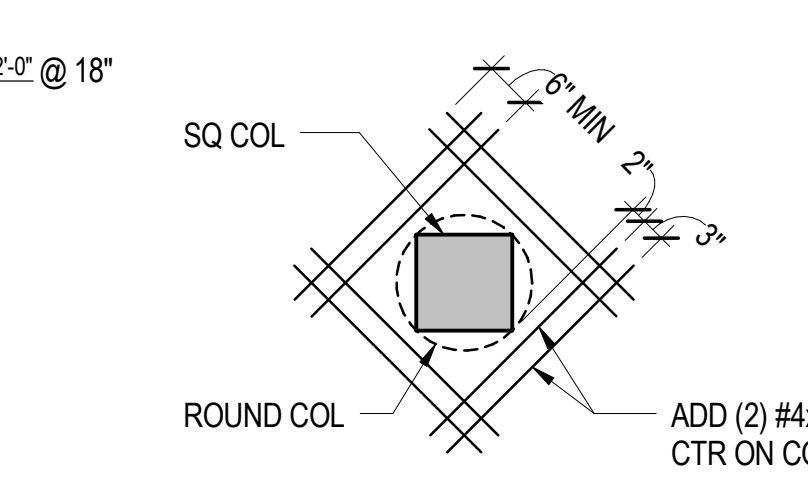
**13 MAT REINFORCEMENT DIAGRAM**



**REINFORCING AT STEEL COLUMN**



**REINFORCING AT CONCRETE COLUMN**



**19 TYPICAL CONCRETE COLUMN REINFORCING**

**20 TYPICAL HOLD-DOWN**

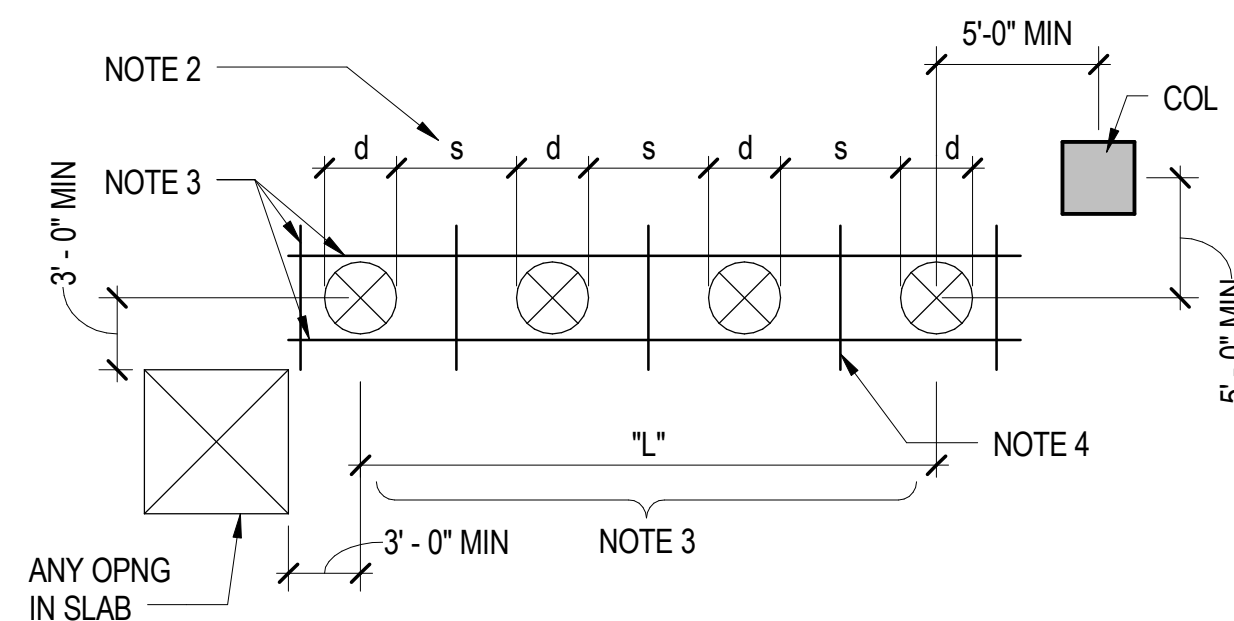
**TYPICAL FOUNDATION AND COLUMN DETAILS**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

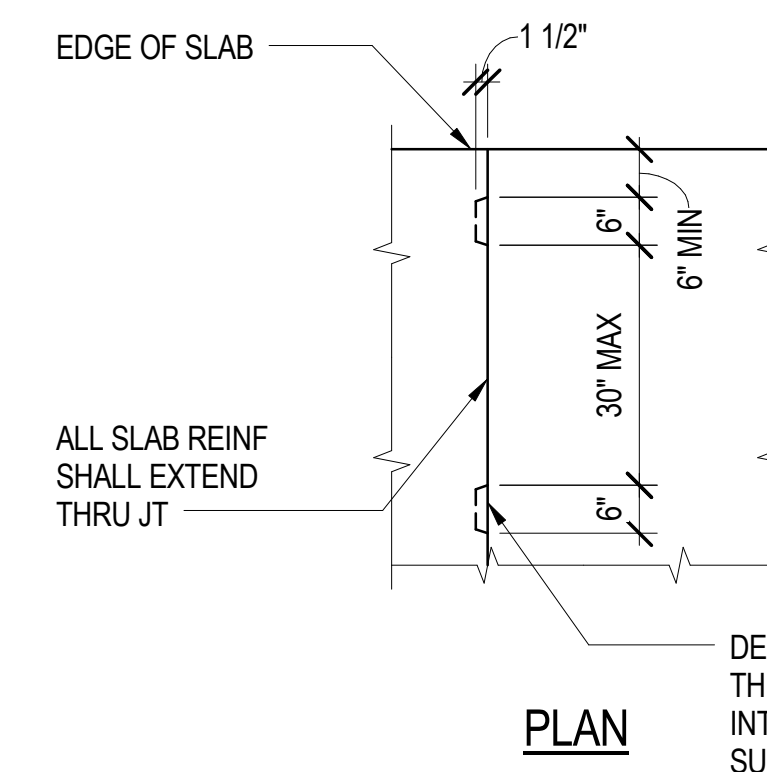
**NOTES:**

- ADDED REINFORCING SHOWN APPLIES TO GROUPS OF OPENINGS 8" OR SMALLER.
- "s" MUST BE GREATER THAN OR EQUAL TO THE SMALLEST "d" (OPENING) DIMENSION. "s" IS EQUAL TO OR GREATER THAN 3" IN ALL CASES.
- WHERE THERE ARE (3) OR MORE OPENINGS OR "L" IS GREATER THAN 1'-0", ADD #4 TOP AND BOTTOM. EXTEND 2'-0" BEYOND OPENING EACH SIDE.
- WHERE "s" IS LESS THAN OR EQUAL TO 1'-0", ADD #4 TOP AND BOTTOM BETWEEN OPENINGS. EXTEND 2'-0" BEYOND OPENING EACH SIDE.
- SEE THE "TYPICAL POST-TENSION CONCRETE SLAB DETAILS" FOR OTHER TENDON PLACEMENT AND REINFORCING REQUIREMENTS.
- OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED FOR REVIEW AT THE SAME TIME AS SLAB SHOP DRAWINGS. REINFORCING OTHER THAN THAT SHOWN MAY BE REQUIRED.
- WHERE A TENDON MUST PASS BETWEEN OPENINGS, "s," AT THAT LOCATION, SHALL BE INCREASED TO 6" MINIMUM.
- WHERE THESE CONDITIONS CANNOT BE MET, SUBMIT TO STRUCTURAL ENGINEER FOR REVIEW.



**OPENINGS IN SLAB**

**3 TYPICAL ADDED REINFORCEMENT AT GROUPED OPENINGS IN FLAT SLAB**

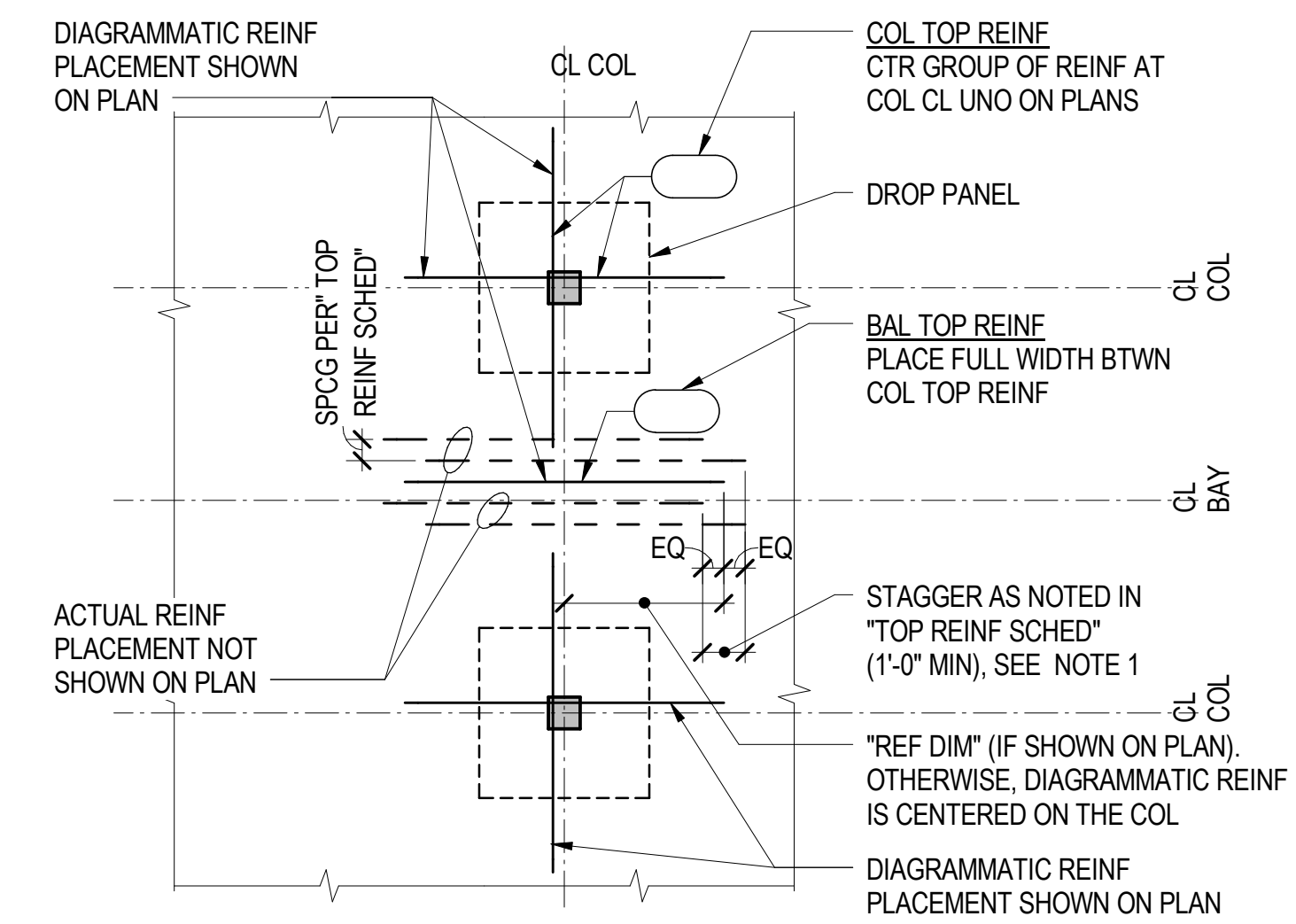


**PLAN**

**NOTES:**

- LOCATE ALL CONSTRUCTION JOINTS WITHIN THE MIDDLE THIRD OF THE SPAN. SUBMIT LOCATIONS OF ALL CONSTRUCTION JOINTS TO ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO FORMING.
- PROVIDE #4x5'-0" AT 24 INCHES ON CENTER AND CENTERED ACROSS CONSTRUCTION JOINT AT LOCATIONS WHERE TOP SLAB REINFORCING IS NOT SPECIFIED PER PLAN.

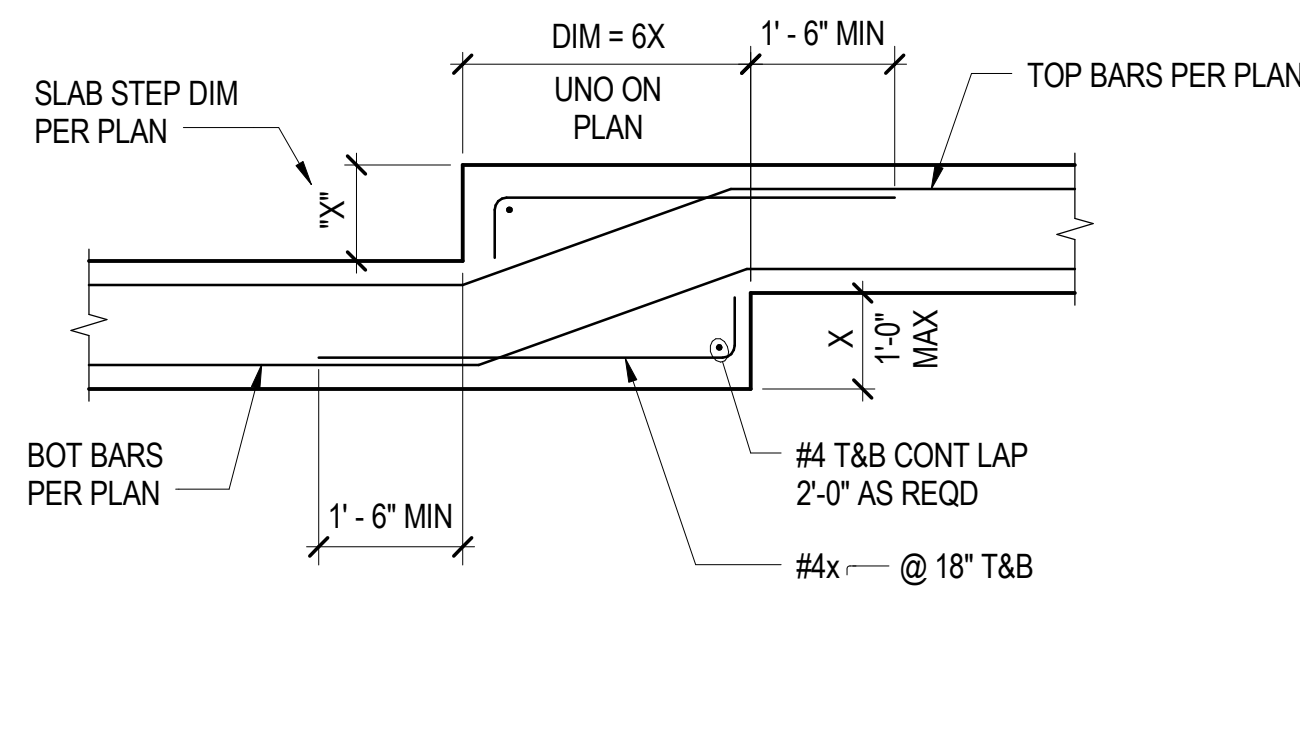
**4 TYPICAL SLAB CONSTRUCTION JOINT**



**NOTES:**

- STAGGERED CONDITION APPLIES TO ALL TOP BARS EXCEPT HOOKED BARS AT SLAB EDGES.

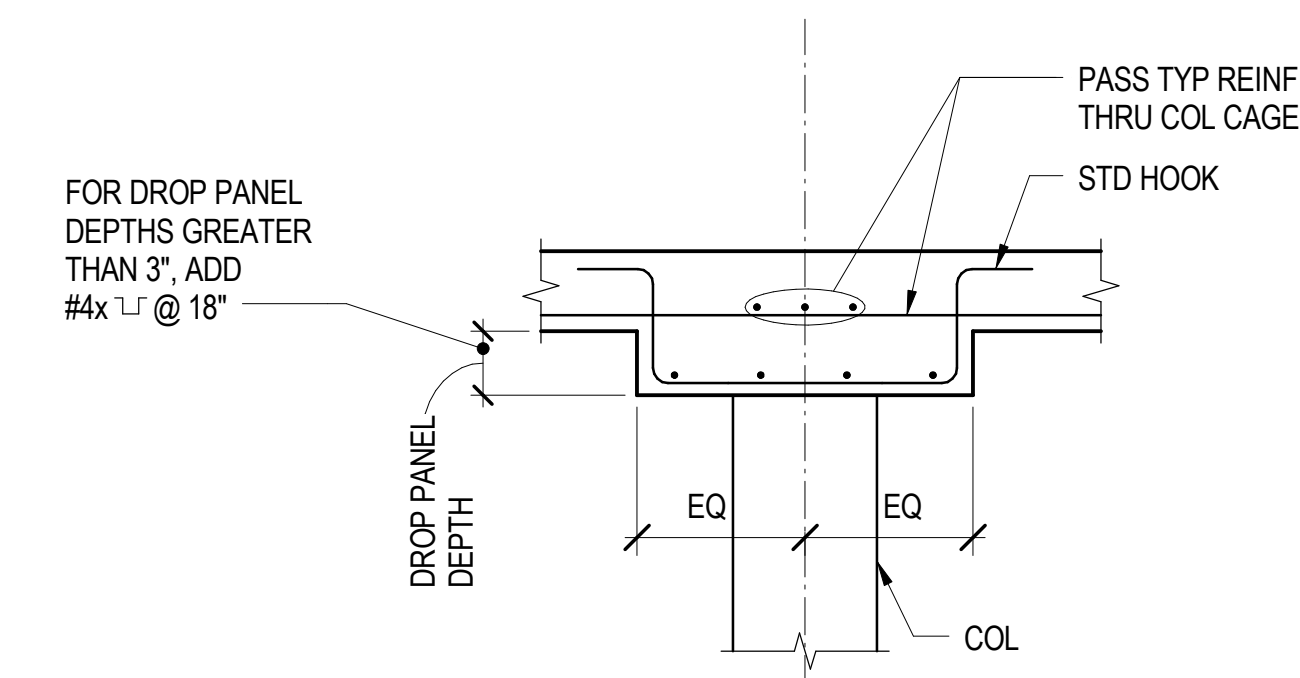
**5 TYP FLAT SLAB TOP REINFORCING PLACEMENT**



**NOTES:**

- THIS DETAIL ONLY APPLIES TO MILD REINFORCED SLABS.

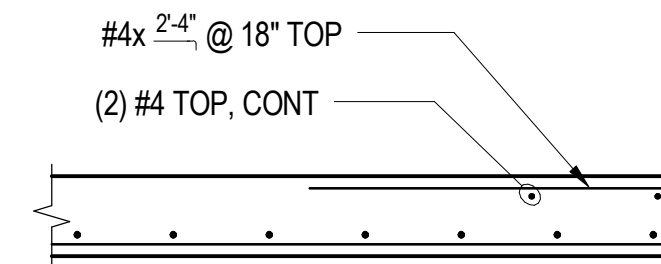
**6 TYPICAL MILD SLAB STEP REINFORCING**



**NOTES:**

- SEE PLAN FOR DIMENSIONS AND REINFORCING.

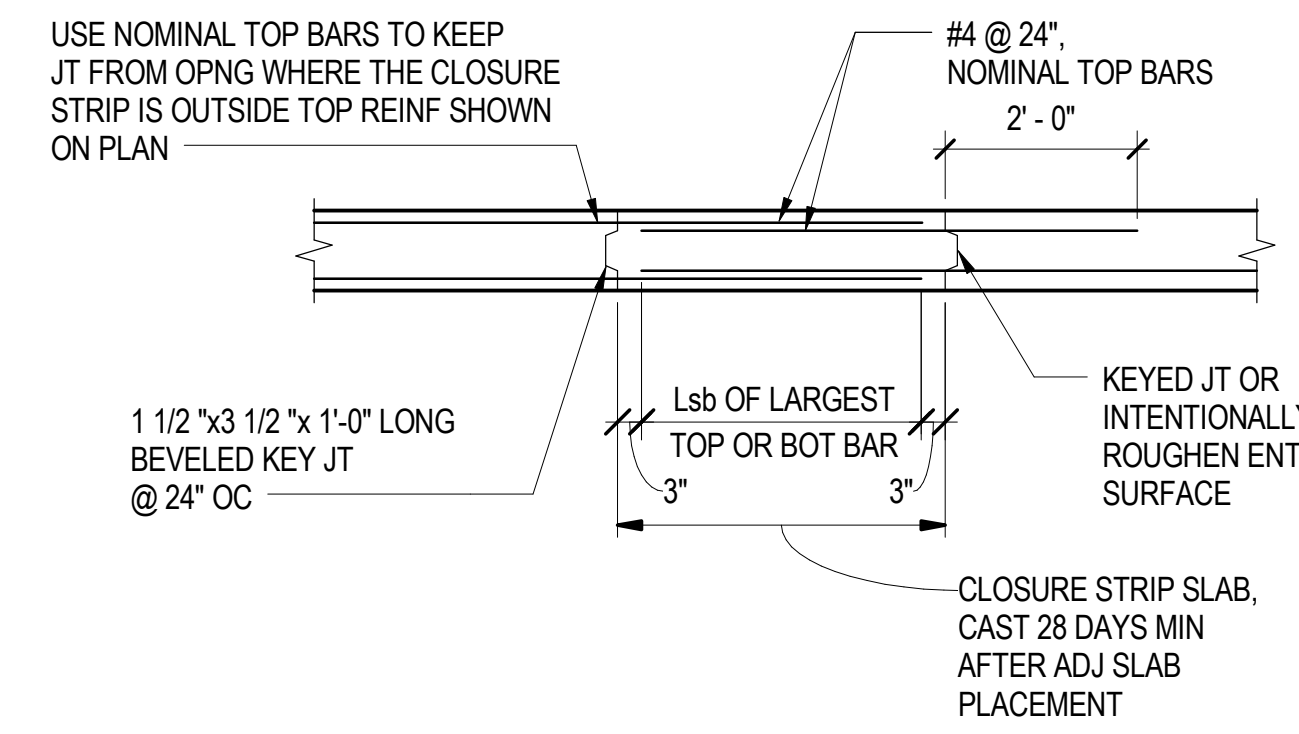
**7 TYPICAL DROP PANEL**



**NOTES:**

- THIS DETAIL APPLIES WHERE NO OTHER TOP REINFORCING IS CALLED OUT ON THE PLANS.

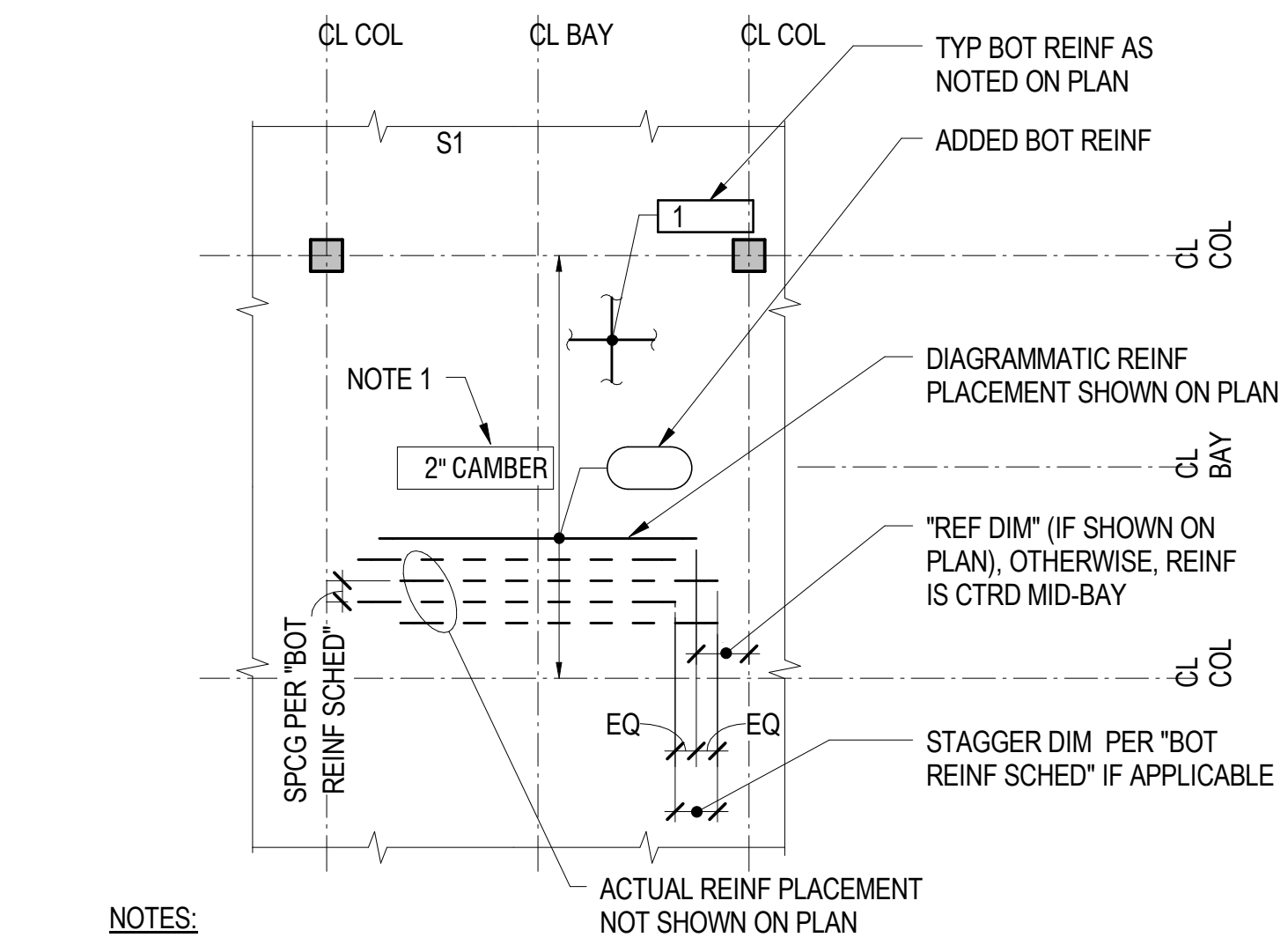
**8 TYPICAL EDGE OF FLAT SLAB**



**NOTES:**

- SHORE SLAB UNTIL CLOSURE STRIP REACHES 28 DAY DESIGN STRENGTH.
- REINFORCING IN OPPOSITE DIRECTION IS PER PLANS.

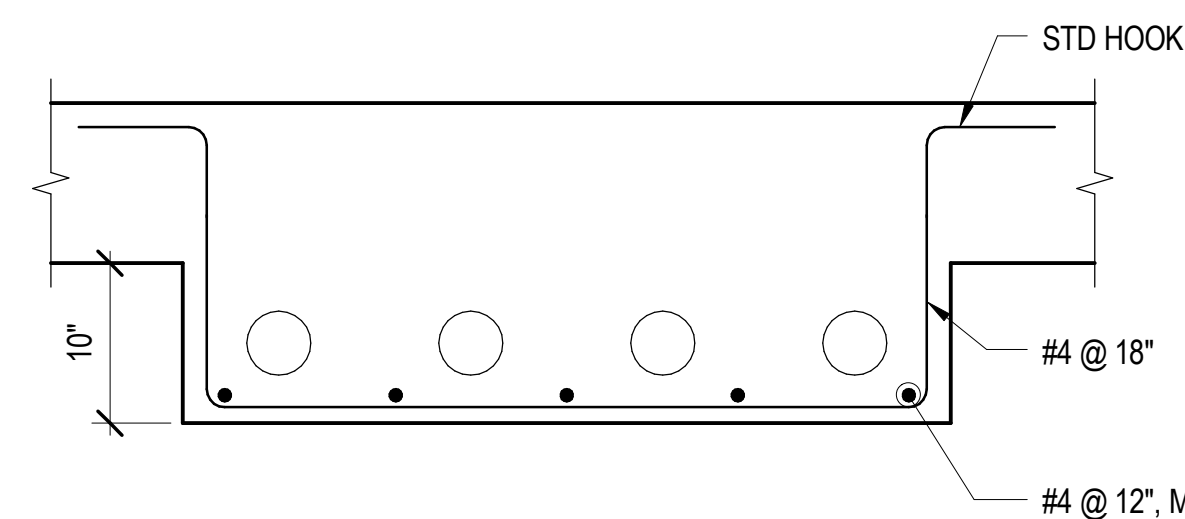
**9 TYPICAL MILD SLAB CLOSURE STRIP**



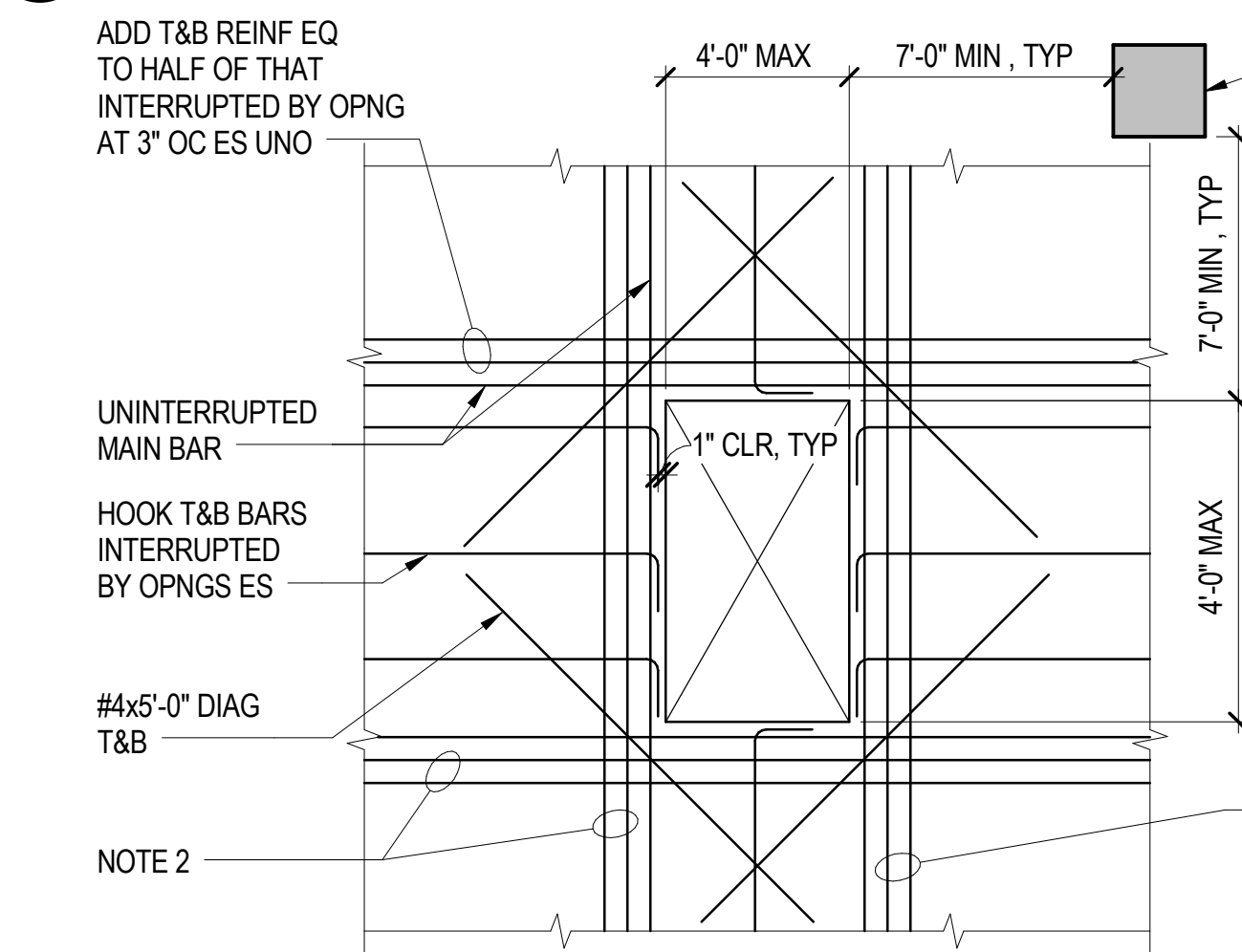
**NOTES:**

- WHEN NO EXTENT LINES EXIST AT FLAT SLAB CAMBER, A SINGLE HIGH POINT AT MID-BAY IS INDICATED. THE SURROUNDING SLAB SLOPES AWAY TOWARD THE ADJACENT COLUMNS OR WALLS.

**10 TYPICAL FLAT SLAB BOTTOM REINF PLACEMENT**



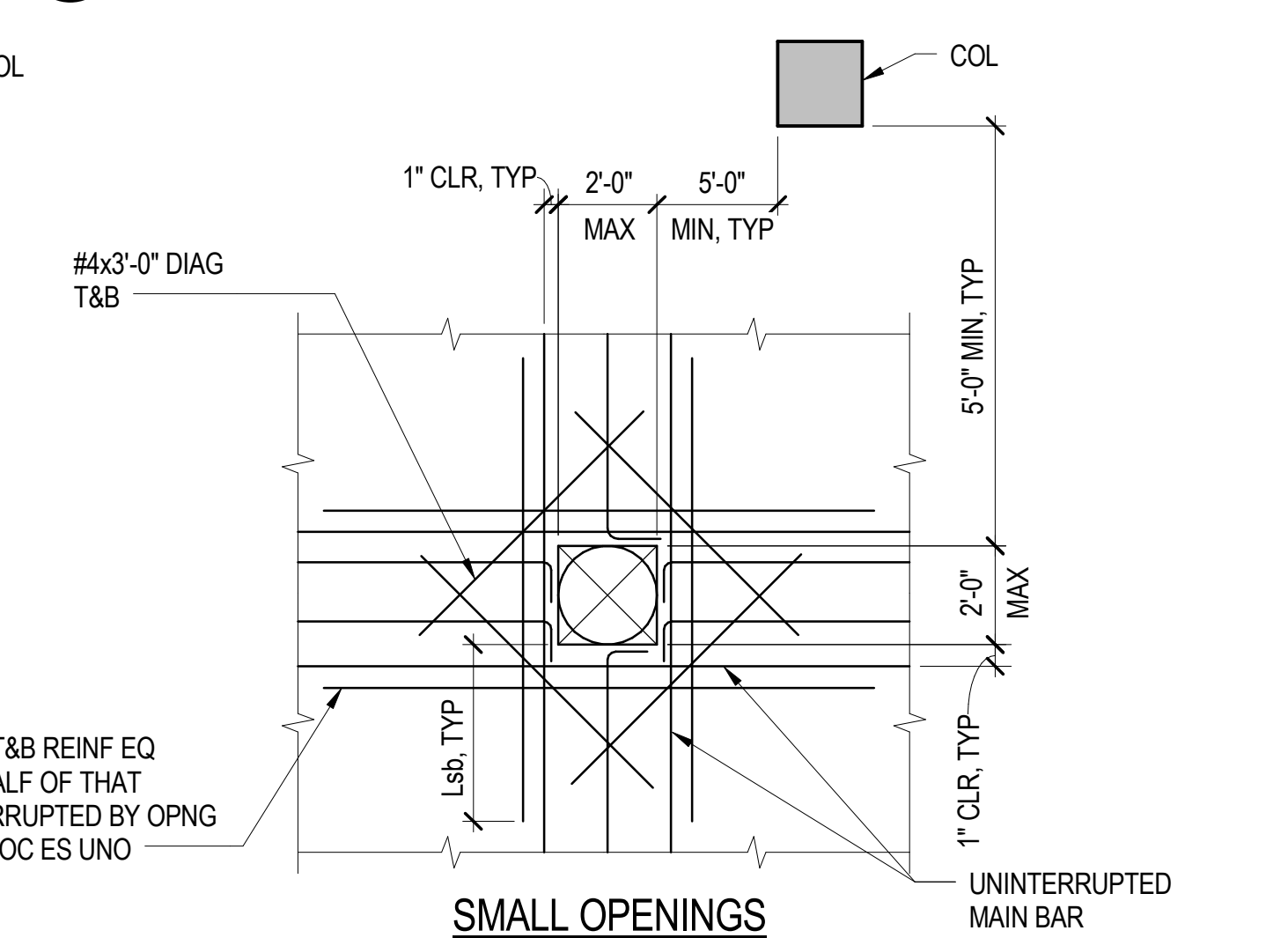
**13 UNDERSLAB CONC ENCASEMENT OF CONDUIT**



**NOTES:**

- IT IS ACCEPTABLE TO ADD SHORTER HOOKED BARS OF THE SAME SIZE TO INTERRUPTED REINFORCING AND LAP SPLICE THEM Lsb. ALL OTHER ADDED REINFORCING REQUIREMENTS REMAIN THE SAME.
- EXTEND ADDED REINFORCING TO THE END OF INTERRUPTED REINFORCING OR 10'-0" PAST OPENING, WHICHEVER IS SHORTER, TYPICAL EACH SIDE.
- FOR GROUPED OPENINGS, SEE "TYPICAL ADDED REINFORCEMENT AT GROUPED OPENINGS IN FLAT SLAB" DETAIL.

**15 TYPICAL FLAT SLAB OPENING REINFORCEMENT**



**SMALL OPENINGS**

5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

NO.	DATE	ISSUE
-----	------	-------

**TYPICAL CONCRETE SLAB DETAILS AND SCHEDULES**

NO.	PROJECT NO.	DRAWING NUMBER
08044		<b>S4.03</b>



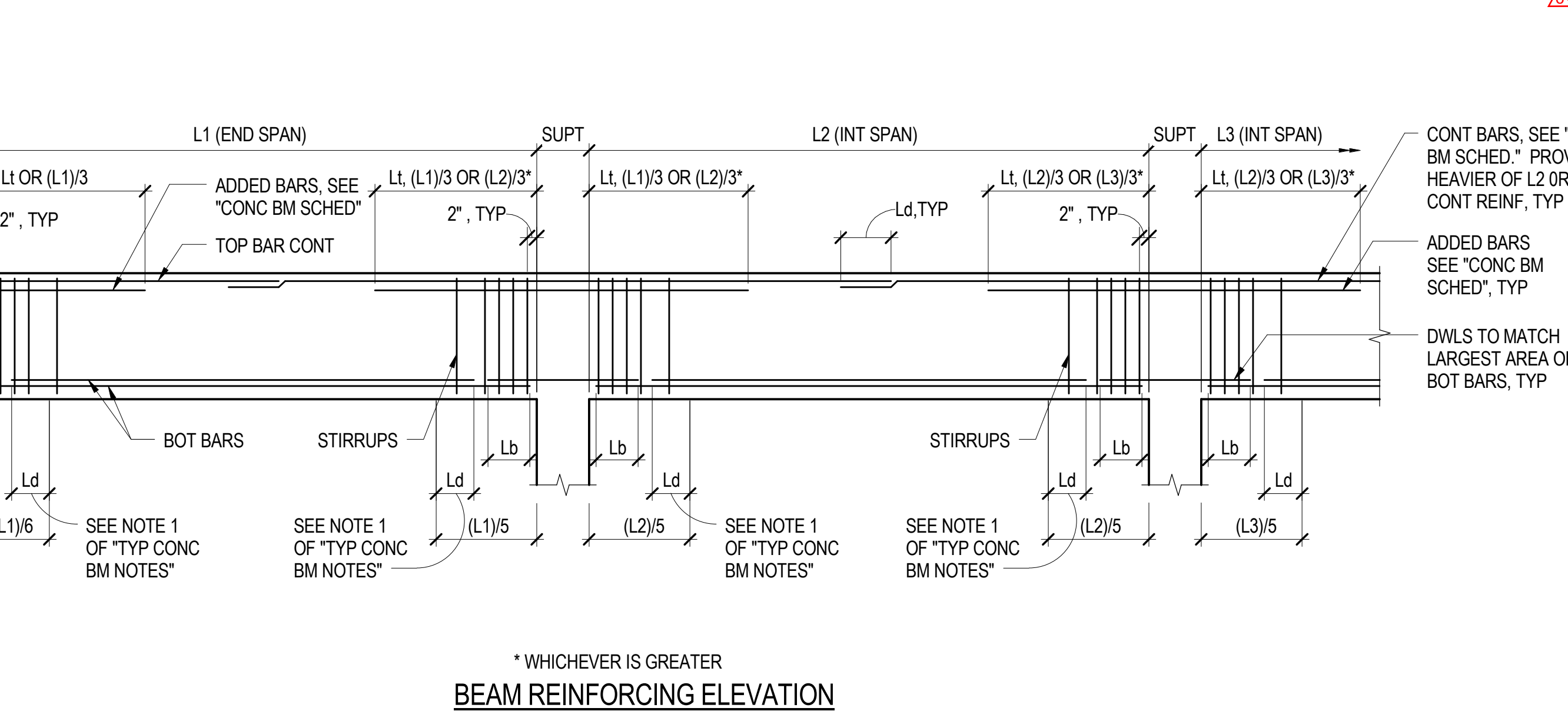
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Acoustical Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

MARK	SIZE (WIDTHxDEPTH) (INCH)	CAMBER	TOP BARS			STIRRUPS			REMARKS	
			BOTTOM BARS	LEFT	CONTINUOUS	RIGHT	LEFT	CONTINUOUS OR BALANCE		RIGHT
B1	12"x36"		(3) #8	(3) #10				#4 @ 12" [2C]		
B2	12"x36"		(6) #9	(6) #9				#4 @ 12" [2C]		
B3	12"x36"		(6) #9	(6) #11			(4) #4 @ 6" [2C]	#4 @ 12" [2C]	(4) #4 @ 6" [2C]	
B4	8"x18"		(2) #8	(2) #4						
B5	24"x36"		(12) #18 75ksi	(12) #18 75ksi						
B6	12"x36"		(9) #11	(6) #11				#4 @ 12" [2C]		
B7	102"x60"		(12) #11	(8) #11	(4) #11	(8) #11		#4 @ 12" [6C]		
B8	102"x72"		(14) #8	(10) #11	(4) #11	(10) #11		#4 @ 12" [6C]		
B9	48"x60"		(8) #14	(6) #14	(2) #14	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(8) #4 @ 6" [4C]	
B10	48"x72"		(10) #14	(6) #11	(4) #11	(6) #11	(8) #4 @ 6" [6C]	#4 @ 12" [4C]	(8) #4 @ 6" [6C]	
B11	24"x36"		(4) #8	(4) #8				#4 @ 12" [2C]		
B12	8"x18"		(2) #6	(2) #4				#4 @ 12" [2C]		
B13	12"x36"		(3) #10	(3) #10				#4 @ 12" [2C]		
B14	24"x22"		(3) #7	(3) #8				#4 @ 8" [2C]		
B15	12"x22"		(2) #6	(2) #6				#4 @ 8" [2C]		
B16	96"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 1/S5.03	
B17	96"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 2/S5.03	

- NOTES:**
1. SEE "TYPICAL CONCRETE BEAM" DETAIL.
  2. [ ] DENOTES TYPE OF REINFORCING CONFIGURATION. SEE "TYPICAL CONCRETE BEAM SECTION AND STIRRUPS" DETAIL FOR STIRRUP TYPE.

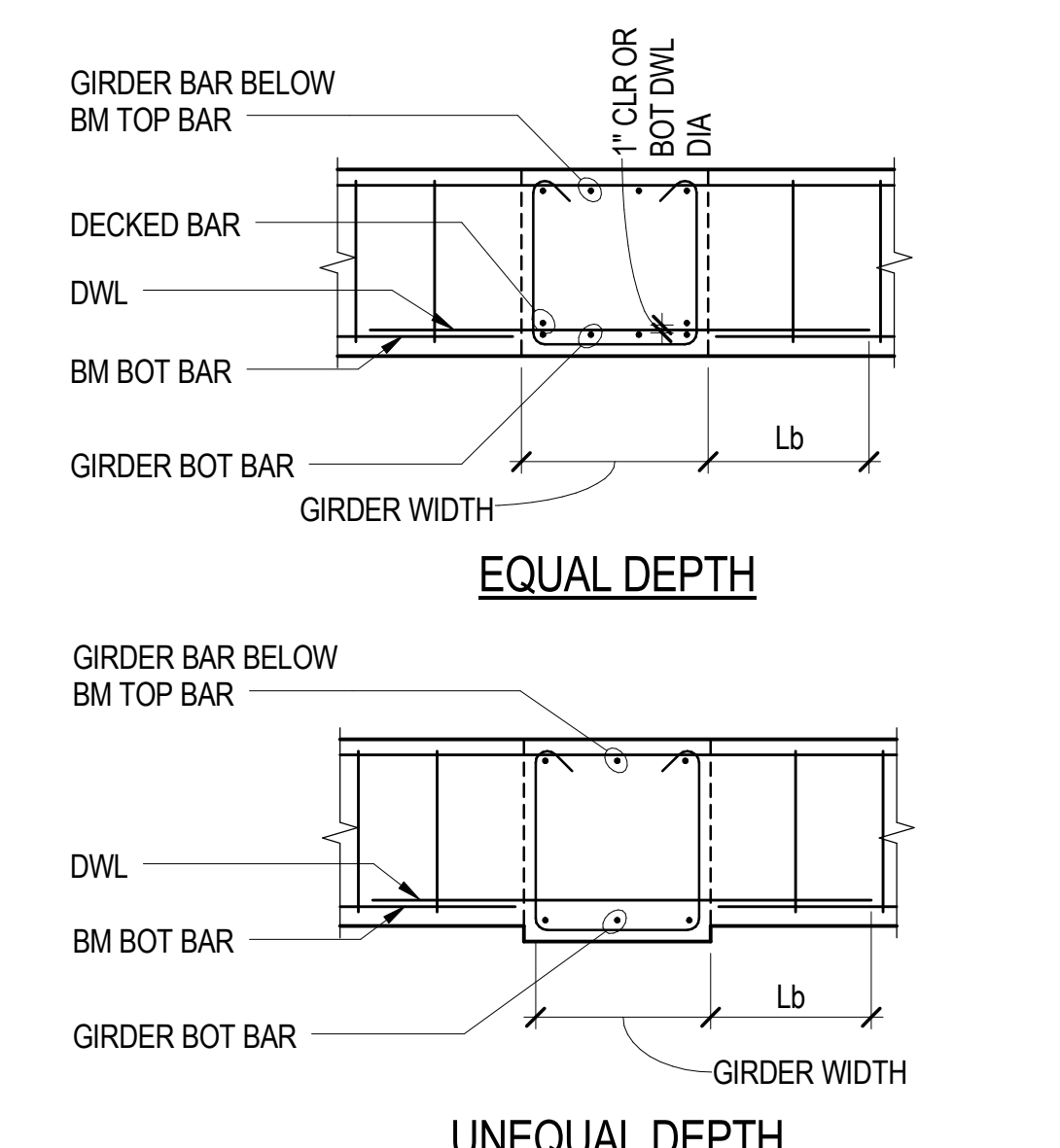
**5 CONCRETE BEAM SCHEDULE**

MARK	SIZE (WIDTHxDEPTH) (INCH)	CAMBER	TOP BARS			STIRRUPS			REMARKS	
			BOTTOM BARS	LEFT	CONTINUOUS	RIGHT	LEFT	CONTINUOUS OR BALANCE		RIGHT
B18A	48"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 4/S5.03	
B18B	48"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 4/S5.03	
B19	60"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 2/S5.03	
B20	36"x22"		(6) #6	(4) #7	(2) #7	(4) #5		#4 @ 8" [2C]		
B21	132"x22"		SEE PLANS	SEE PLANS				#4 @ 10"	SEE 3/S5.03	
B22	100"x22"		SEE PLANS	SEE PLANS				#4 @ 10"	SEE 3/S5.03	
B23	12"x48"		(3) #8	(3) #10				#4 @ 12" [2C]		
B24	96"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 6/S5.03	
B25	96"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 5/S5.03	
B26	102"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 5/S5.03	
B27	132"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 5/S5.03	
B28	132"x22"		SEE PLANS	SEE PLANS				SEE 10/S5.03	SEE 10/S5.03	
B29	96"x22"		SEE PLANS	SEE PLANS				#4 @ 18"	SEE 7/S5.03	
B30	36"x22"		(6) #6	(4) #6	(2) #6	(4) #5		#4 @ 8" [2C]		
B31	48"x60"		(8) #14+	(6) #14	(8) #14+	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(22) #4 @ 8" [6C] DECK #11 BARS T&B	
B32	24"x36"		(5) #9	(5) #9				#4 @ 8" [2C]		
B33	30"x36"		(5) #9	(5) #9				#4 @ 8" [2C]		
B34	150"x22"		SEE PLANS	SEE PLANS				SEE 10/S5.03	SEE 10/S5.03	
B35	24"x24"		(3) #7	(3) #6				#4 @ 12" [2C]		
B36	18"x24"		(3) #7	(3) #6				#4 @ 12" [2C]		
B37	48"x24"		(6) #8	(6) #8				#4 @ 12" [2C]	(5) #4 [3C] STIRRUPS UNDER SA BASE ISOLATOR PAD	
B38	48"x60"		(8) #14	(6) #14	(2) #14	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(8) #4 @ 6" [4C]	



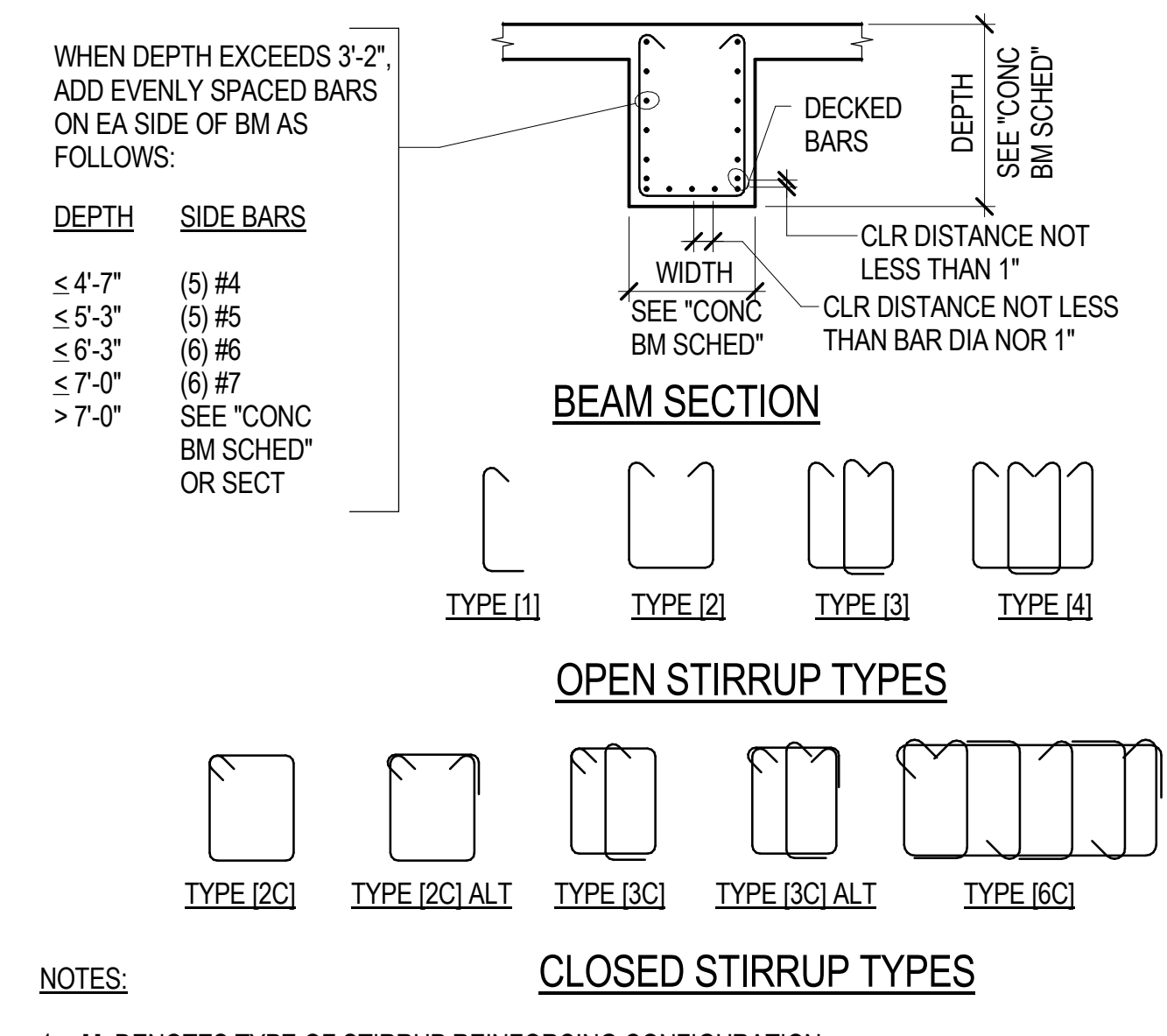
- NOTES:**
1. ALL BARS IN SAME LAYER UNLESS NOTED OTHERWISE.

**14 TYP CONC BEAM AND GIRDER INTERSECTION**



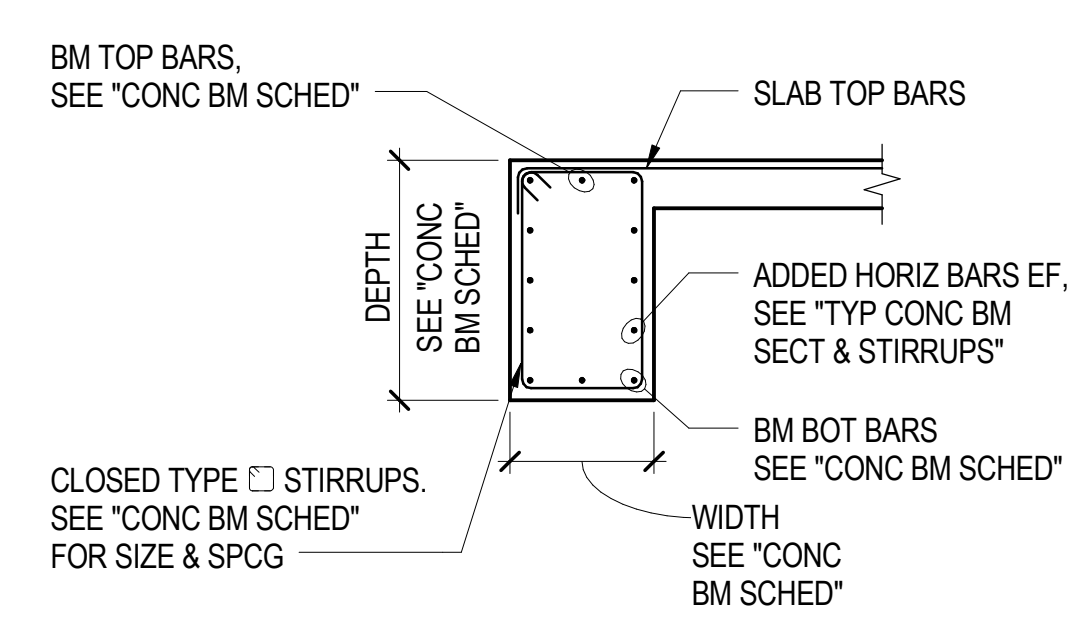
- NOTES:**
1. AT CONTRACTOR'S OPTION, WHERE REQUIRED TO RELIEVE BAR CONGESTION, NOT MORE THAN 50 PERCENT OF THE AREA OF THE STRAIGHT BOTTOM BARS MAY BE TERMINATED AS SHOWN UNLESS NOTED OTHERWISE.
  2. BEAM SCHEDULES DO NOT INDICATE REQUIREMENTS FOR ARRANGING BARS. THE CONTRACTOR SHALL DETAIL AND PLACE REINFORCING STEEL IN A SINGLE LAYER WHENEVER POSSIBLE. A SECOND LAYER MAY BE USED ONLY WHERE REQUIRED TO PROVIDE PROPER CLEARANCES BETWEEN BARS IN A LAYER AND WHERE REQUIRED IN ORDER TO PROPERLY CLEAR COLUMN VERTICALS AND SIMILAR REINFORCING.
  3. REFER TO "REINFORCING BAR DEVELOPMENT AND SPLICE LENGTH TABLES" FOR L<sub>d</sub>, L<sub>b</sub>, AND L<sub>d</sub>.
  4. EITHER 90 OR 180 DEGREE STANDARD HOOK BARS MAY BE USED FOR LONGITUDINAL BARS.
  5. WHERE TOP BARS ARE INDICATED AS CONTINUOUS AND RUN OVER 60 FEET IN LENGTH, BARS MAY BE LAPPED L<sub>d</sub> IN THE MIDDLE THIRD OF THE BEAM SPAN UNLESS NOTED OTHERWISE. CONTINUOUS TOP BARS SHALL NOT BE LAPPED IN THE SPAN ADJACENT TO A CANTILEVER, UNLESS NOTED OTHERWISE. WHERE BOTTOM BARS ARE SHOWN AS CONTINUOUS AND RUN IN EXCESS OF 60 FEET, A LAP SPLICE MAY BE USED EQUAL TO L<sub>b</sub> AND SHALL BE OUTSIDE THE MIDDLE THIRD OF THE BEAM SPAN. SIDE BAR SPLICES MAY BE MADE WHERE CONVENIENT.
  6. LOCATE ALL CONSTRUCTION JOINTS WITHIN THE MIDDLE THIRD OF SPAN. JOINTS SHALL BE OFFSET AT A MINIMUM DISTANCE OF TWO TIMES THE WIDTH OF INTERSECTING BEAMS. SUBMIT LOCATION OF ALL CONSTRUCTION JOINTS TO ENGINEER FOR REVIEW AND ACCEPTANCE BEFORE FORMING.
  7. STANDARD HOOKS FOR STIRRUPS MAY BE 135 DEGREE BEND PLUS 6db EXTENSION, BUT NOT LESS THAN 3 INCHES.

**15 TYPICAL CONCRETE BEAM NOTES**



- NOTES:**
1. [ ] DENOTES TYPE OF STIRRUP REINFORCING CONFIGURATION. SEE "CONCRETE BEAM SCHEDULE."

**19 TYPICAL CONCRETE EDGE BEAM**



**20 TYPICAL CONCRETE BEAM SECTION AND STIRRUPS**

- NOTES:**
1. [ ] DENOTES TYPE OF STIRRUP REINFORCING CONFIGURATION. SEE "CONCRETE BEAM SCHEDULE."

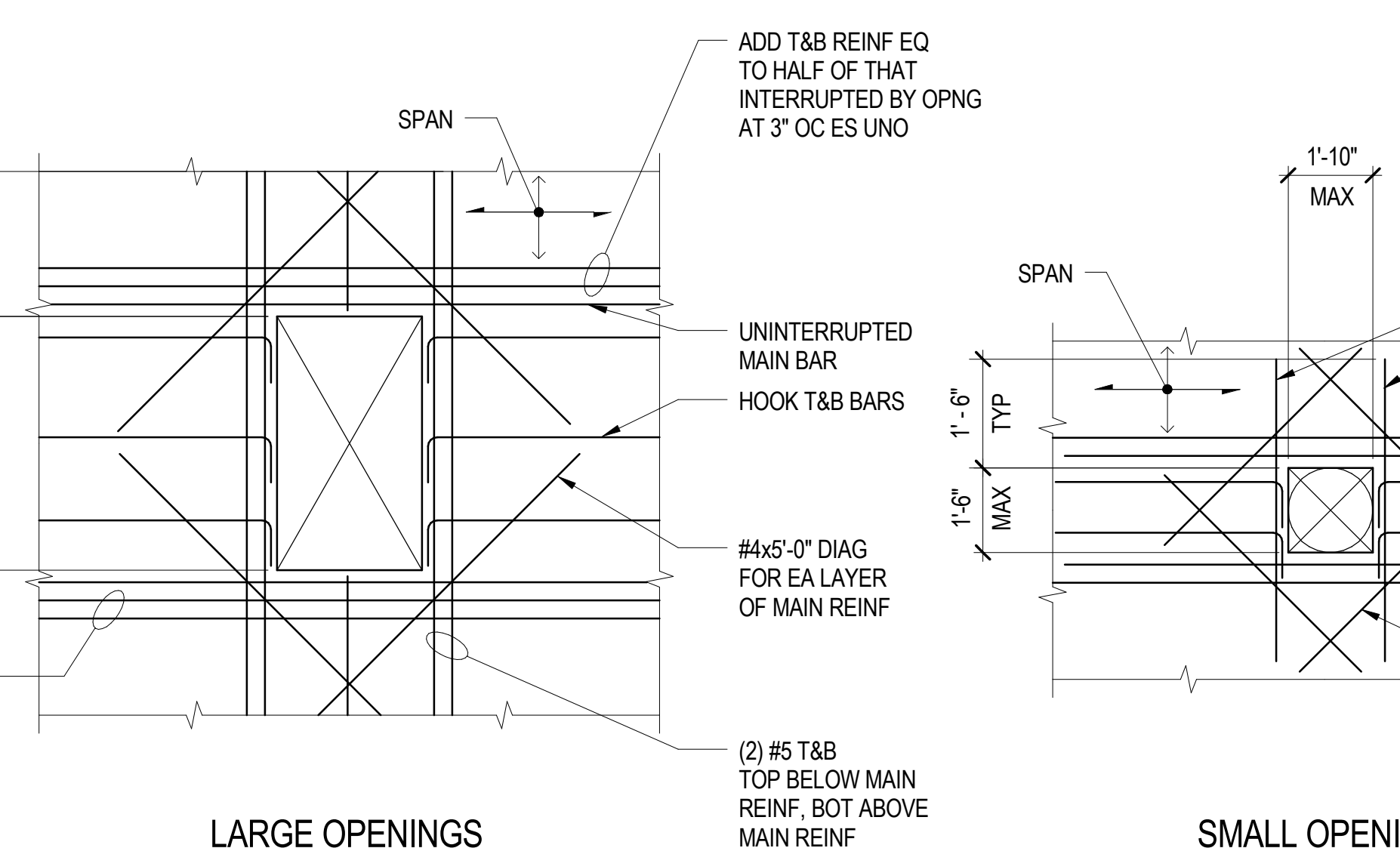
TYPE MARK	THICKNESS	CAMBER	TOP BARS			REMARKS
			BOTTOM BARS	LEFT	CONTINUOUS	
S1	6"		#4 @ 12"	#4 @ 12"		W/ STD HOOK
S2	6"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S3	8"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S4	12"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S5	8"		#5 @ 12" EW	#5 @ 12" EW		
S6	26"		#10 @ 12" EW	#10 @ 12" EW		
S7	36"		#9 @ 6"	#9 @ 6"		
S8	8"		#5 @ 12"	#5 @ 12"		
S9	36"		(2) #5 @ 4"	(2) #5 @ 4"		(2) LAYERS
S10	12"		#10 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S11	14"		#9 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S12	24"		#8 @ 6"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S13	27"		#8 @ 6"	#8 @ 6"		
S14	18"		#8 @ 12"	#8 @ 12"		
S15	12"		#6 @ 12"	#6 @ 12"		
S16	16"		#9 @ 12" EW	#5 @ 12"		W/STD HOOK
S17	18"		#9 @ 12"	#9 @ 9"		W/STD HOOK



**10 TYPICAL CONCRETE BEAM**

- NOTES:**
1. SEE NOTE 6 OF "TYPICAL CONCRETE BEAM NOTES."

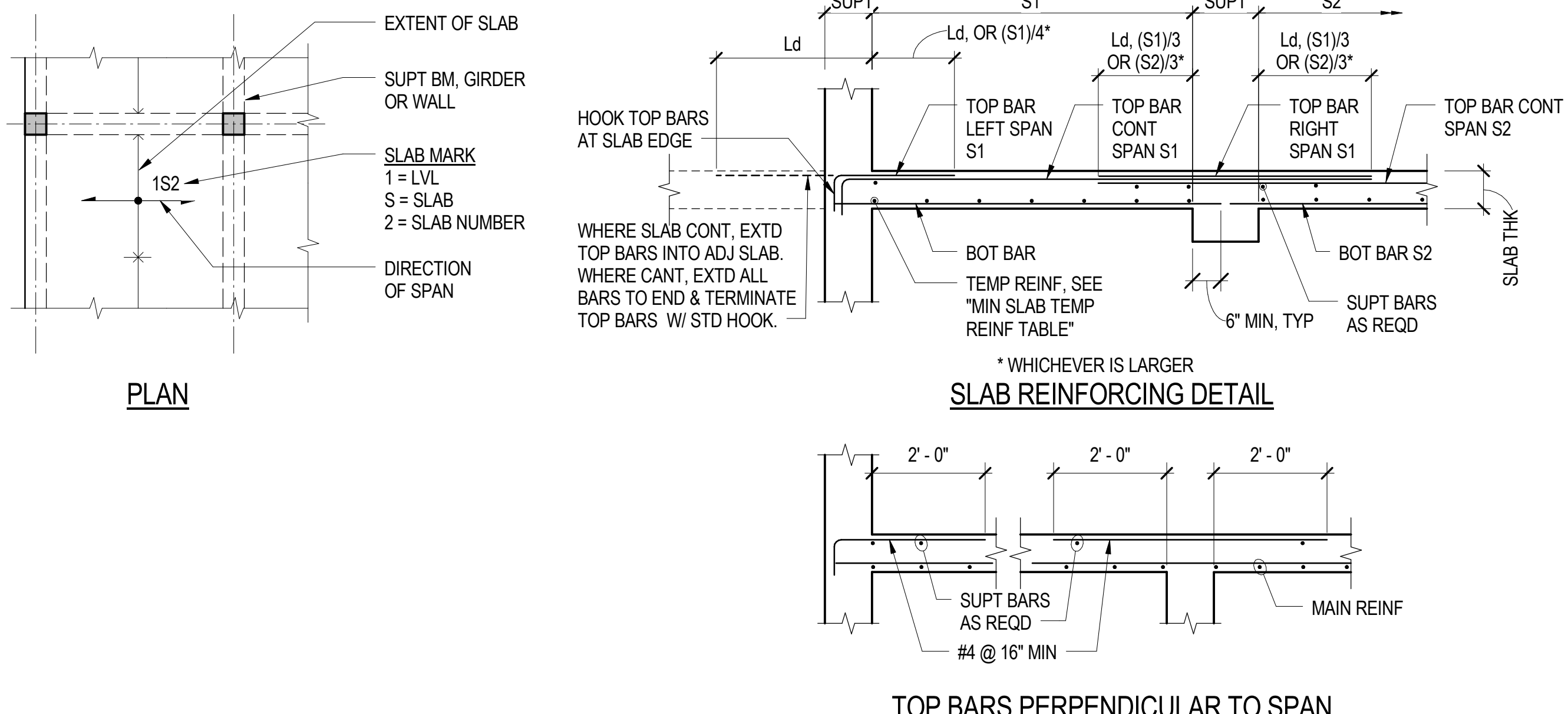
**7 ONE-WAY SLAB SCHEDULE**



**12 TYPICAL ONE-WAY SLAB OPENING REINFORCING**

MINIMUM SLAB TEMPERATURE REINFORCING	
THICKNESS	REINFORCING
5" OR LESS	#3 @ 12"
5 1/4" TO 6"	#4 @ 16"
6 1/4" TO 9"	#4 @ 12"
9 1/4" TO 12"	#5 @ 14"
OVER 12"	#6 @ 12"

- NOTES:**
1. LAP TEMPERATURE REINFORCING L<sub>b</sub> AT SPLICES.

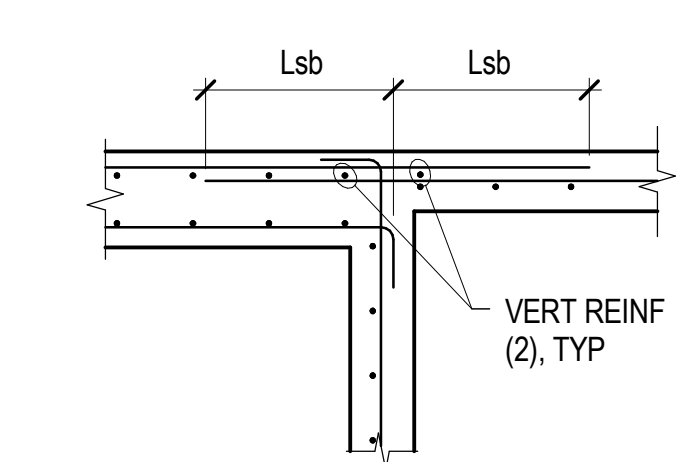


**18 TYPICAL ONE-WAY SLAB**

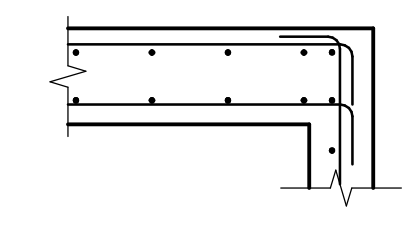
- NOTES:**
1. IF TOP BARS OVER SUPPORT ARE NOT SCHEDULED, PROVIDE EQUIVALENT TO 1/2 BOTTOM BARS OR #4 @ 16" MINIMUM.
  2. SUBSTITUTE L<sub>t</sub> FOR L<sub>d</sub> WHEN SLAB IS THICKER THAN 14".
  3. SEE "ONE-WAY SLAB SCHEDULE" FOR ADDITIONAL SLAB INFORMATION.



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



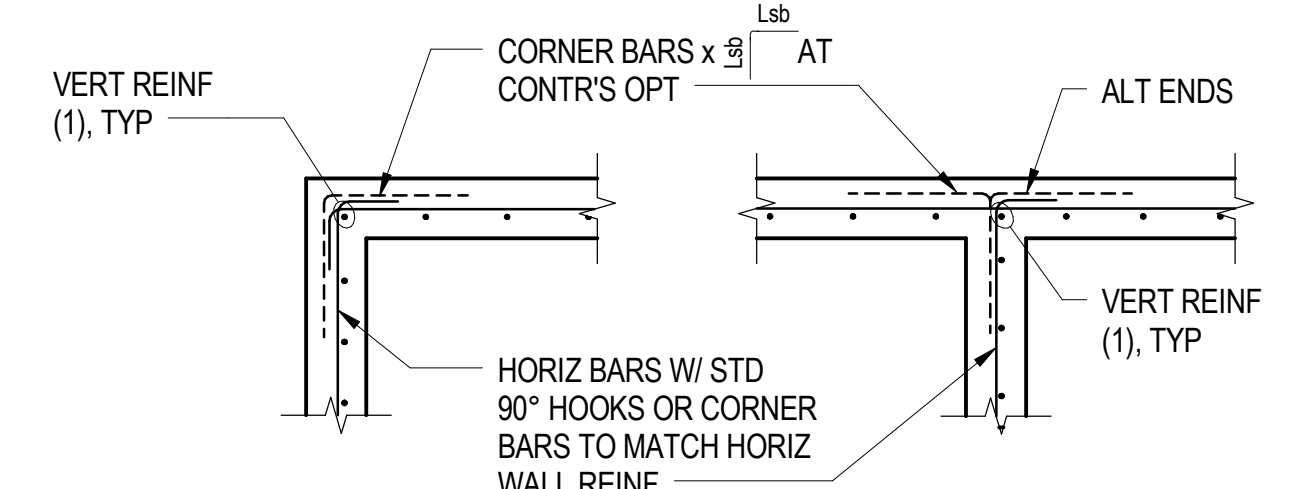
**WALL INTERSECTION OF SINGLE & DOUBLE LAYER REINFORCING**



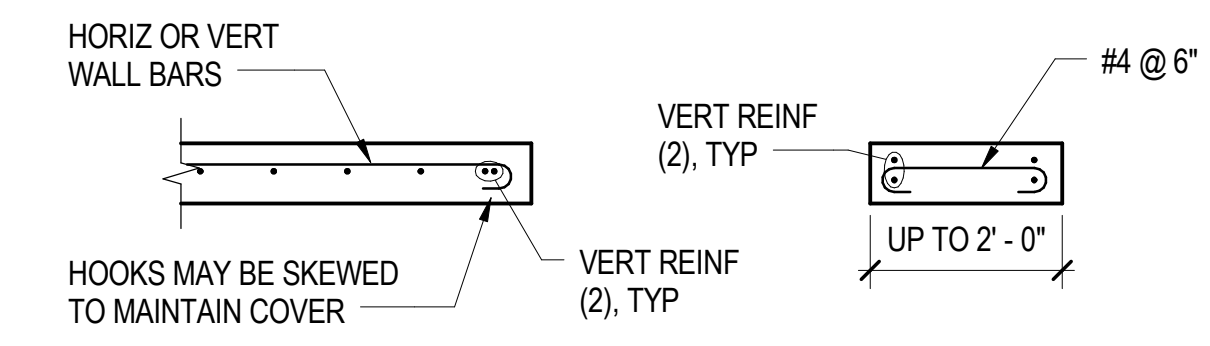
**WALL CORNER OF SINGLE & DOUBLE LAYER REINFORCING**

**NOTES:**  
1. SMALL WALL SECTION DETAILS APPLY BOTH IN HORIZONTAL AND VERTICAL DIRECTIONS.

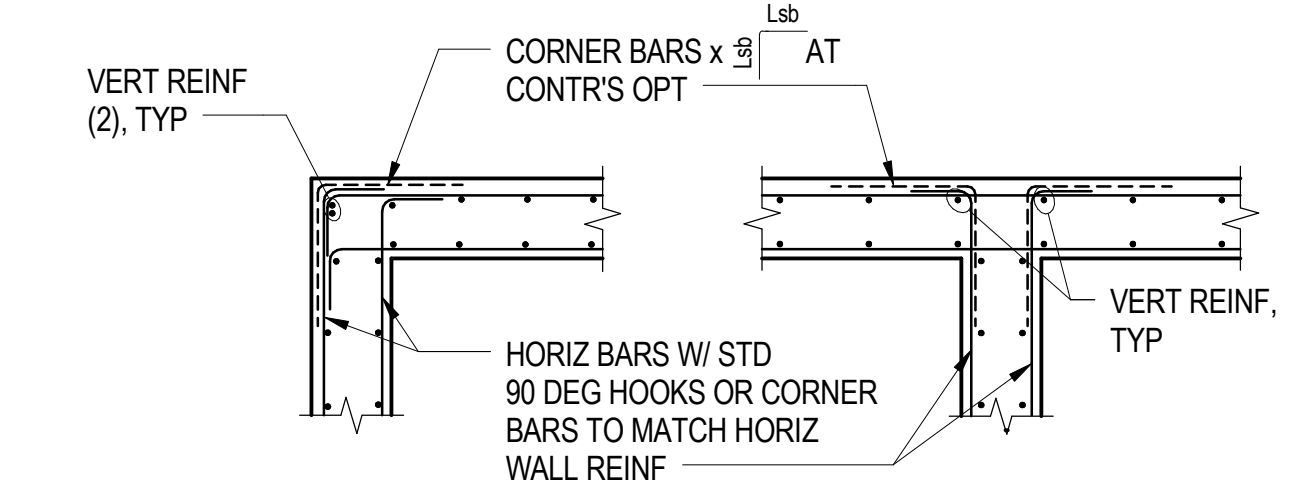
**3 TYPICAL CONCRETE WALL REINFORCING**



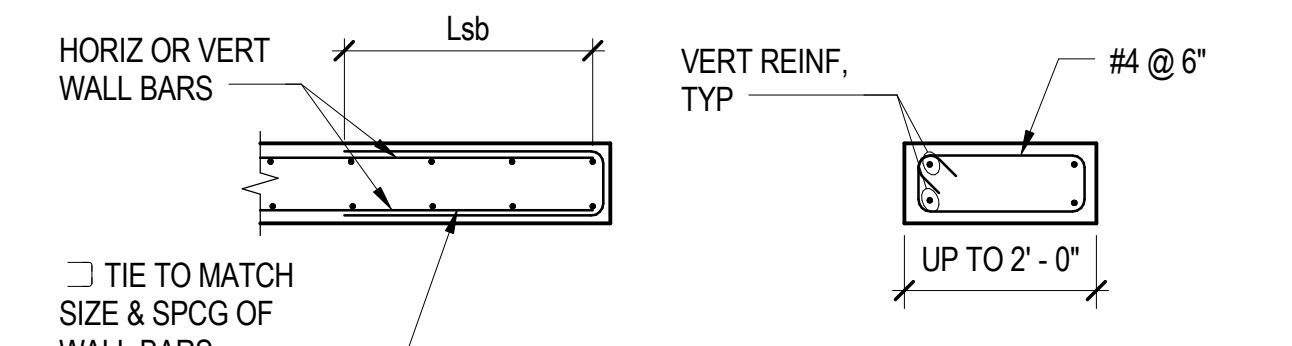
**WALL CORNER WALL INTERSECTION**



**WALL END SMALL WALL SECTION SINGLE LAYER REINFORCING**



**WALL CORNER WALL INTERSECTION DOUBLE LAYER REINFORCING**



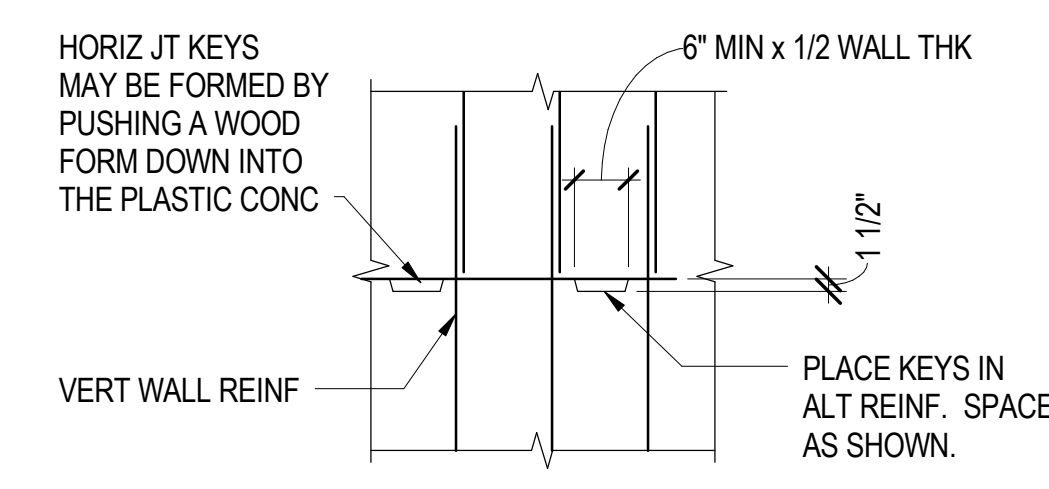
**WALL END SMALL WALL SECTION DOUBLE LAYER REINFORCING**

**NOTES:**  
1. UNLESS NOTED OR SHOWN OTHERWISE, ALL WALLS ARE TO BE REINFORCED WITH MINIMUM REINFORCEMENT AS SHOWN IN THE FOLLOWING TABLE:

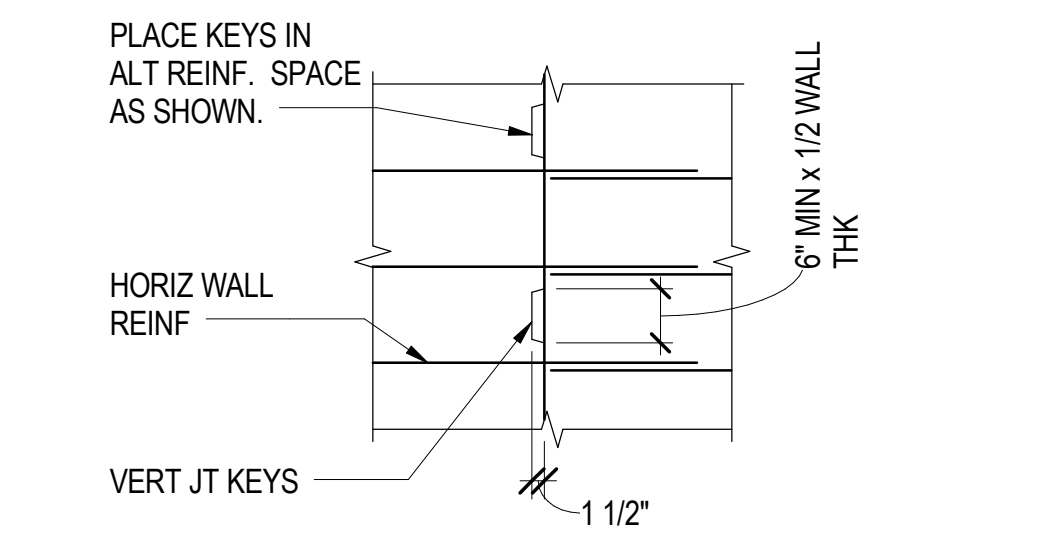
WALL THICKNESS	HORIZONTAL BARS	VERTICAL BARS	LOCATION
6" & UNDER	#4 @ 12"	#4 @ 12"	CENTERLINE CENTERLINE
OVER 6-8"	#5 @ 15"	#5 @ 15"	CENTERLINE CENTERLINE
OVER 8-10"	#5 @ 12"	#5 @ 12"	EACH FACE EACH FACE
OVER 10-12"	#4 @ 12"	#4 @ 12"	EACH FACE EACH FACE
OVER 12-14"	#5 @ 18"	#5 @ 18"	EACH FACE EACH FACE
OVER 14-16"	#5 @ 15"	#5 @ 15"	EACH FACE EACH FACE
OVER 16-20"	#5 @ 12"	#5 @ 12"	EACH FACE EACH FACE
OVER 20-24"	#5 @ 10"	#5 @ 10"	EACH FACE EACH FACE

2. LAP WALL REINFORCING Lsb AT SPLICES.  
3. ALL VERTICAL REINFORCING IN CONCRETE WALLS SHALL BE CONTINUOUS FROM STRUCTURAL FLOOR TO STRUCTURAL FLOOR, OR FROM FOOTING TO FIRST STRUCTURAL FLOOR ABOVE UNLESS NOTED OTHERWISE.  
4. START HORIZONTAL AND VERTICAL BARS 1 INCH CLEAR OF EDGE OF OPENINGS. SPACE REINFORCING BARS AT EQUAL SPACES NOT TO EXCEED REQUIRED SPACING.

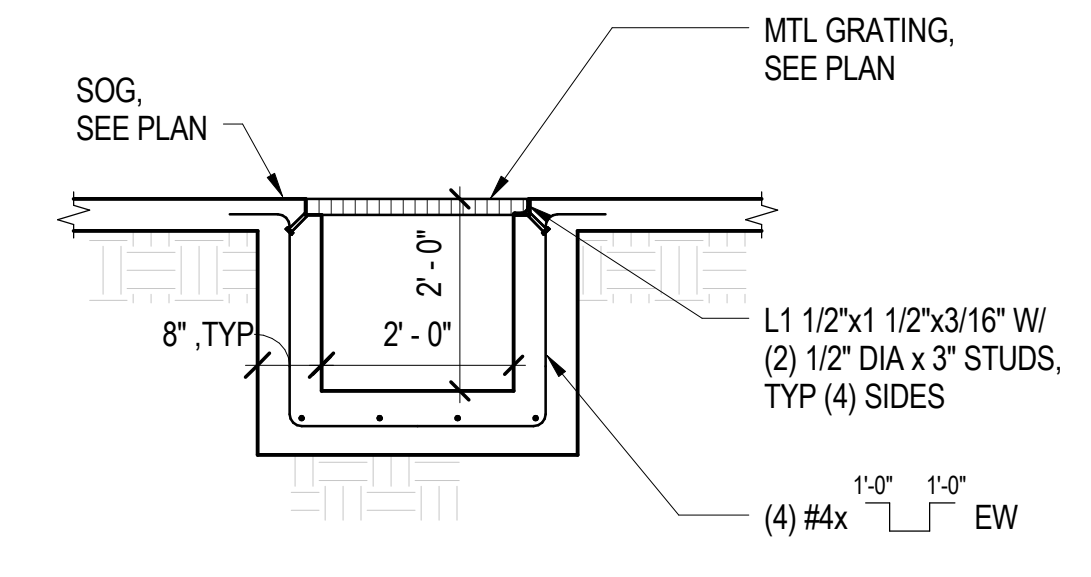
**5 TYPICAL CONCRETE WALL REINFORCING**



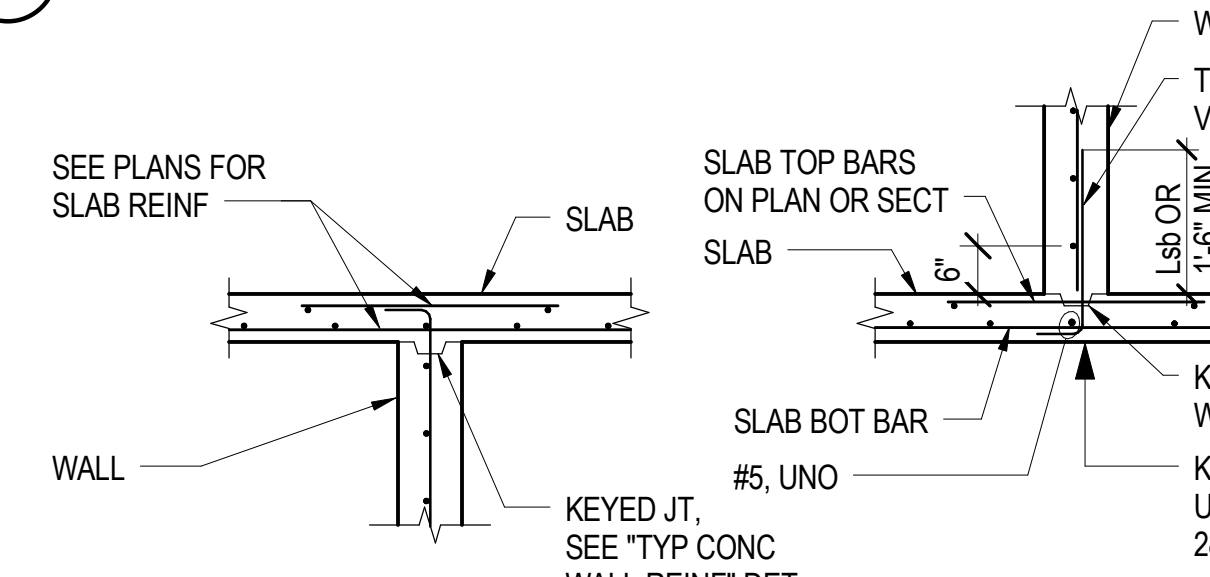
**HORIZONTAL JOINT ELEVATION**



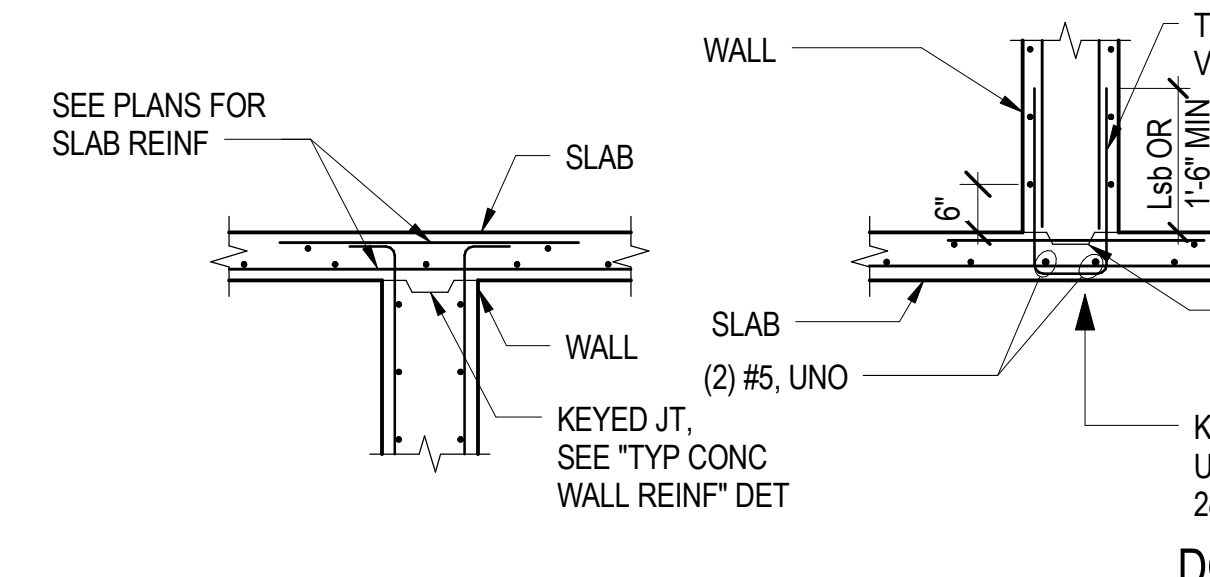
**VERTICAL JOINT ELEVATION**



**8 TYPICAL SUMP PIT**

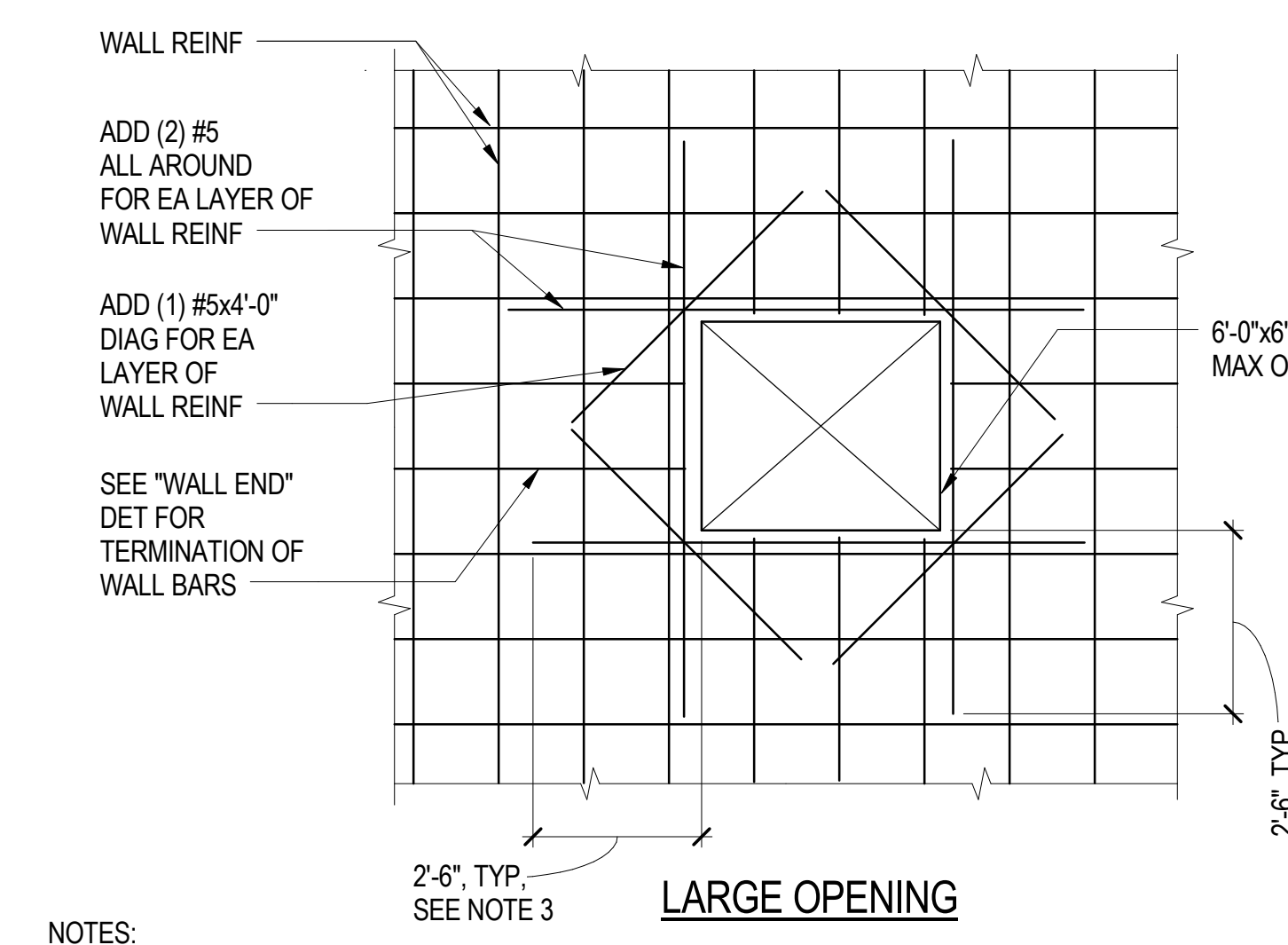


**SINGLE LAYER WALL REINFORCING**

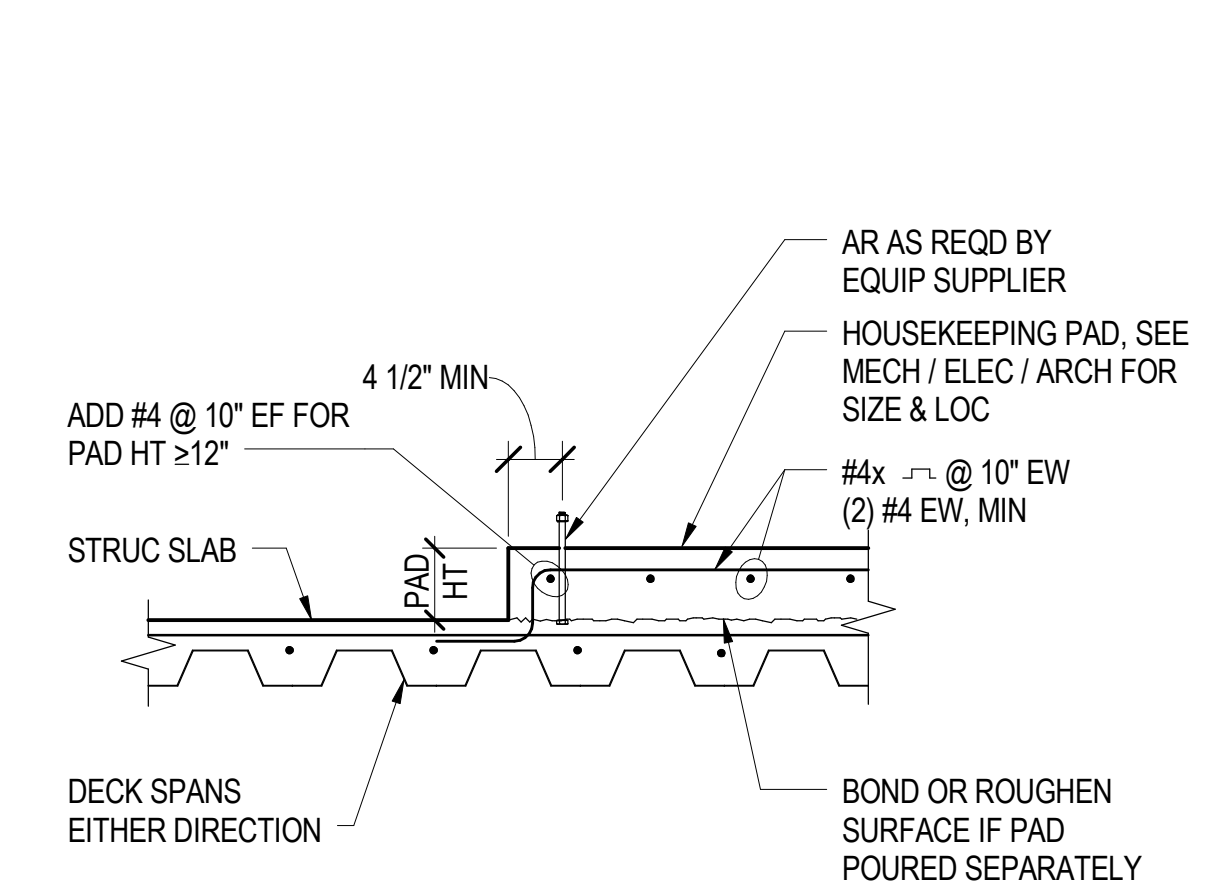
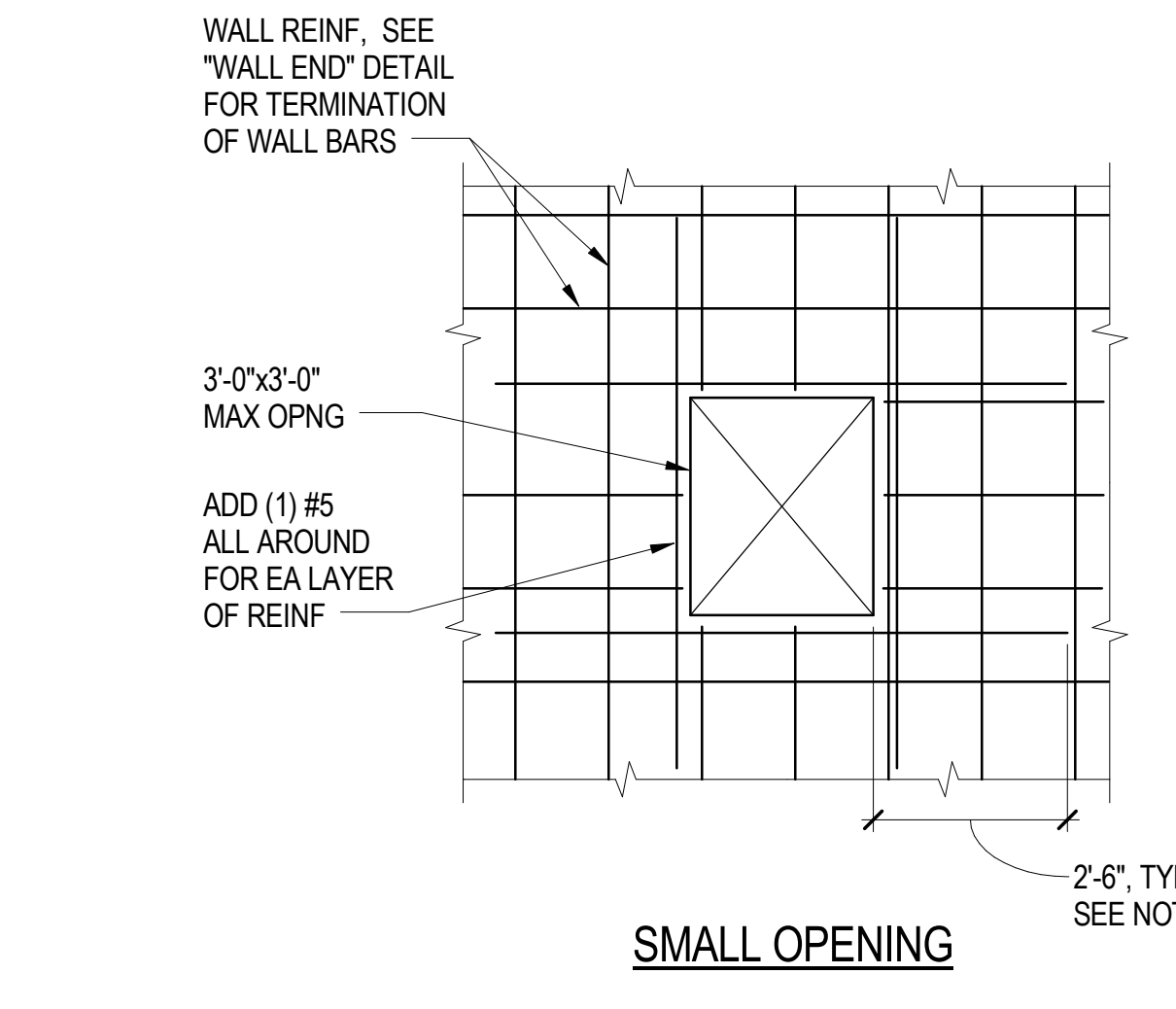


**DOUBLE LAYER WALL REINFORCING**

**10 TYPICAL CONCRETE REINFORCING AT INTERSECTION OF SLABS AND WALLS**

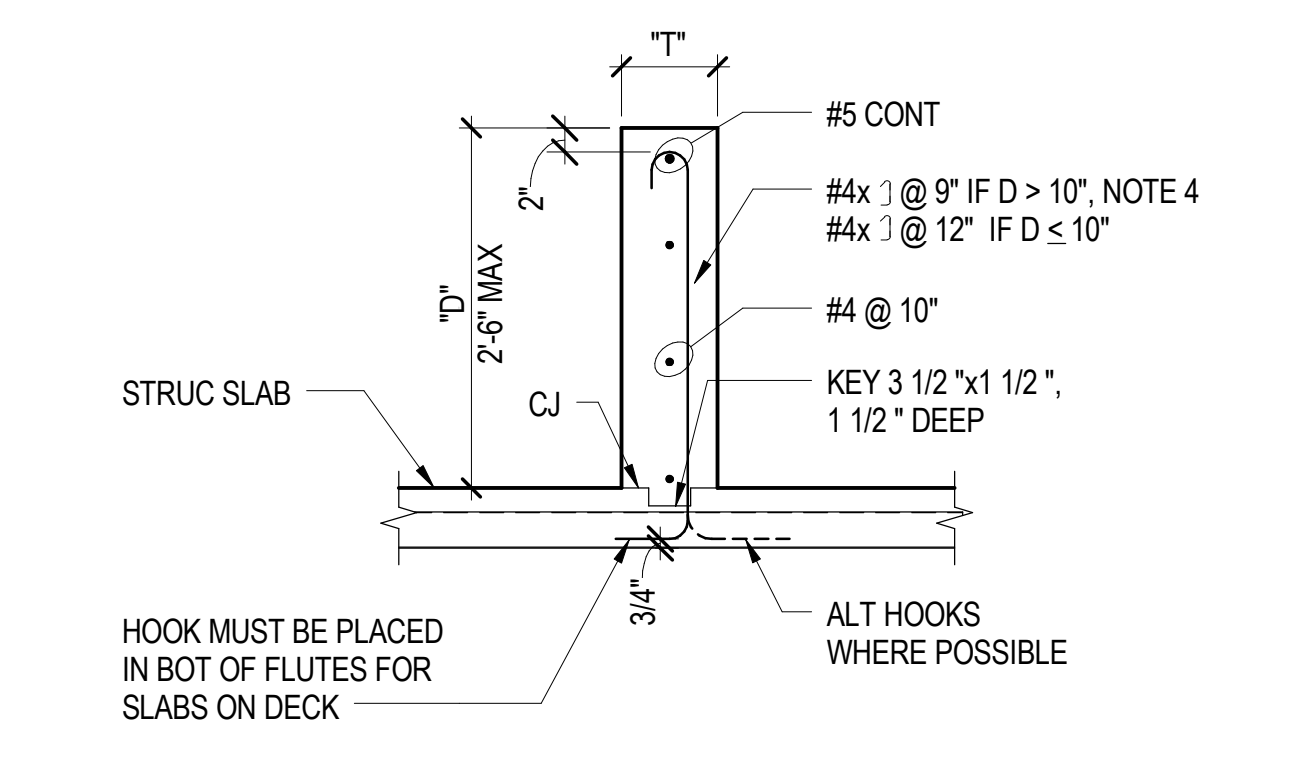


**NOTES:**  
1. OMIT ADDED REINFORCEMENT NOTED ABOVE WHEN SPECIAL REINFORCEMENT, INDICATED ON PLANS OR DETAILS, EXCEEDS THIS REINFORCEMENT.  
2. CONTRACTOR SHALL VERIFY ALL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS WITH THE STRUCTURAL ENGINEER BEFORE PLACEMENT.  
3. WHEN EDGE OF CONCRETE CLOSE TO OPENING WILL NOT ALLOW THIS LENGTH, CONSULT STRUCTURAL ENGINEER BEFORE CONSTRUCTION.



**NOTES:**  
1. HOUSEKEEPING PAD ON SLAB ON GRADE AND FORMED SLABS SIMILAR.

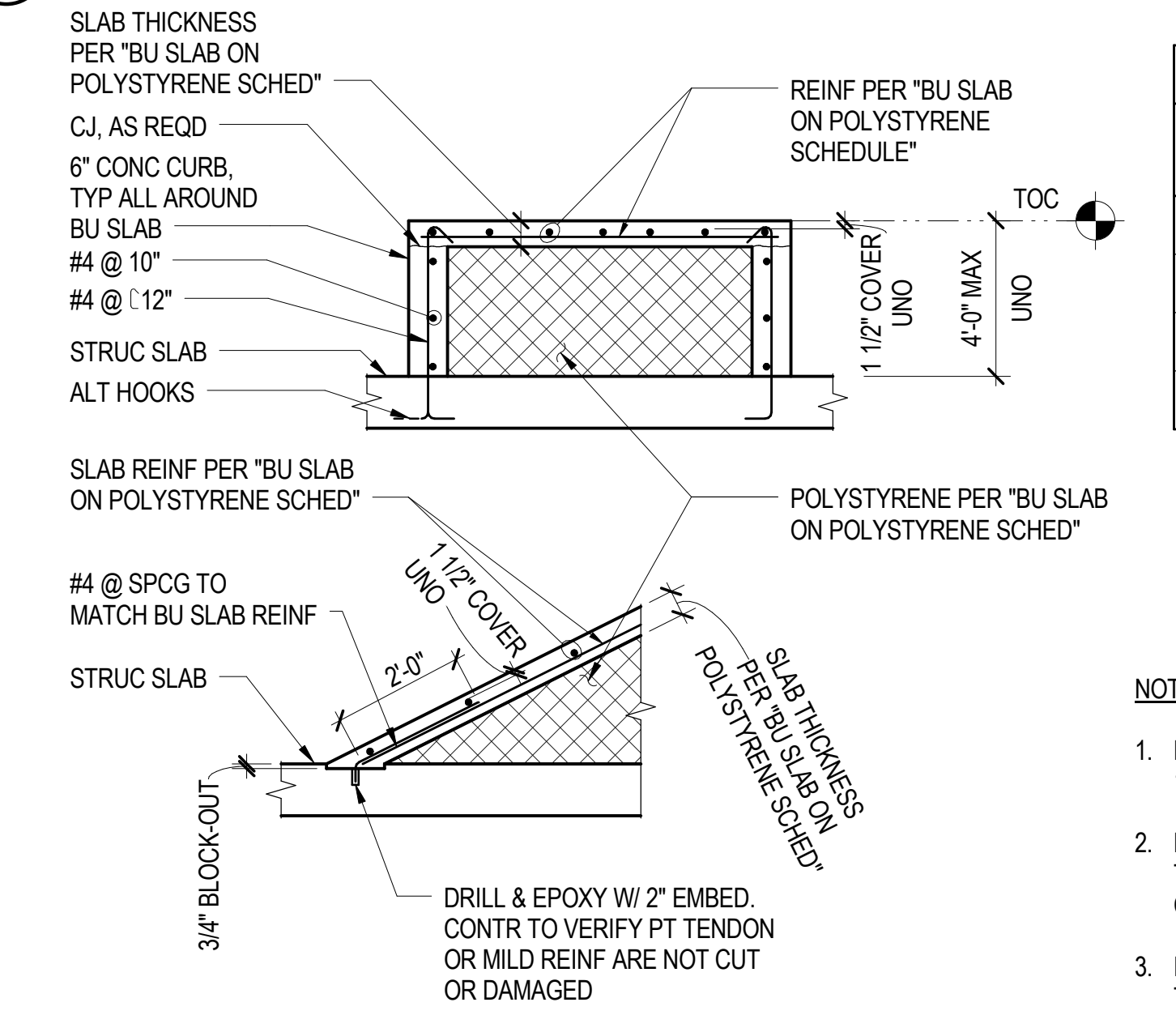
**12 TYPICAL HOUSEKEEPING PAD**



**NOTES:**  
1. T = 6" MINIMUM OR 10" MAXIMUM. IF T > 10", SEE 'TYPICAL HOUSEKEEPING PAD' DETAIL.  
2. SEE ARCHITECTURAL FOR T AND D DIMENSIONS AND CURB LOCATIONS.  
3. CONCRETE CURB ON SLAB ON GRADE AND FORMED SLABS ARE SIMILAR.  
4. AT SLABS ON DECK WHERE D > 10", PROVIDE (2) #4x 1 @ 12" TO FIT IN DECK FLUTES.

**13 TYPICAL CONCRETE CURB**

**15 TYPICAL CONCRETE WALL OPENING REINFORCEMENT**



BUILT-UP SLAB ON POLYSTYRENE SCHEDULE				
TYPE	SLAB THICKNESS (INCH)	REINFORCEMENT	POLYSTYRENE STRENGTH - NOTE 1	REMARKS
TYP	4	#4 @ 12" EW	3.6 PSI @ 1%	TYP UNO
V	6	#5 @ 12" EW	7.3 PSI @ 1%	PROVIDE AT ALL AREAS SUBJECT TO VEHICLE LOADS
R	2	WWF 6x6-W2.9xW2.9	PER ARCH	

**NOTES:**  
1. RIGID CELLULAR POLYSTYRENE WITH MINIMUM COMPRESSIVE RESISTANCE INDICATED AT 1% DEFORMATION CONFORMING TO ASTM D6817 OR ASTM C578 OR APPROVED EQUIVALENT.  
2. PROVIDE 3/4" DEEP SAWCUT CONTROL JOINTS AT MAXIMUM SPACING OF 30 TIMES THE SLAB THICKNESS ON CENTER EACH WAY. PROVIDE CONTROL JOINTS AT ALL RE-ENTRANT CORNERS. CONTRACTOR SHALL SUBMIT AT JOINTING PLAN TO THE ARCHITECT FOR REVIEW.  
3. FOR MECHANICAL EQUIPMENT EXCEEDING 1000 POUNDS SUPPORTED ON THE SLAB, CONTACT THE ENGINEER FOR APPROVAL.

**20 TYPICAL BUILT-UP SLAB ON POLYSTYRENE**

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

**TYPICAL CONCRETE DETAILS**





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

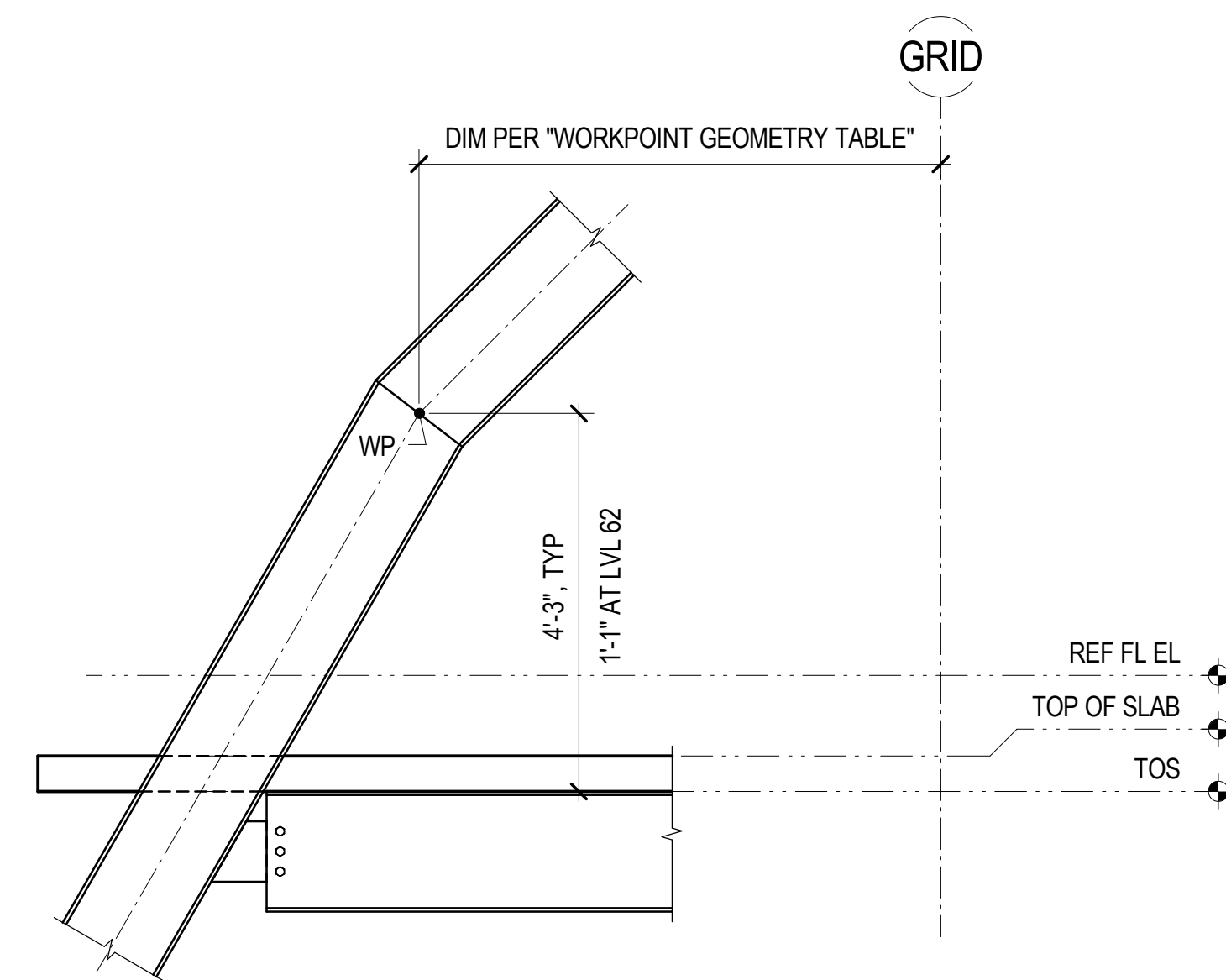
C.S. CAULKINS CO., INC.  
Window Wasting Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

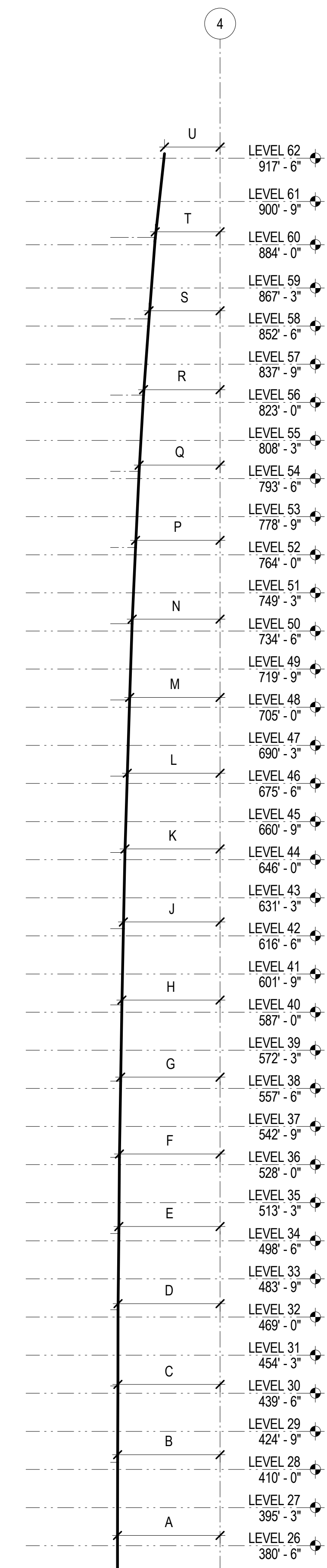
ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

MARK	C1	C2, C12	C3, C5	C4	C6, C8	C7	C9, C11	C10
GRID	4	4	D	D	2	2	B	B
DIM	4	4	D	D	2	2	B	B
62 U	21'-3"	15'-8 3/4"	15'-8 3/4"	21'-3"	15'-8 3/4"	21'-3"	15'-8 3/4"	21'-3"
60 T	24'-8 1/2"	19'-8 1/8"	19'-8 1/8"	24'-8 1/2"	19'-8 1/8"	24'-8 1/2"	19'-8 1/8"	24'-8 1/2"
58 S	27'-1 3/4"	22'-5 5/8"	22'-5 5/8"	27'-1 3/4"	22'-5 5/8"	27'-1 3/4"	22'-5 5/8"	27'-1 3/4"
56 R	29'-3 1/4"	24'-6 1/4"	24'-6 1/4"	29'-3 1/4"	24'-6 1/4"	29'-3 1/4"	24'-6 1/4"	29'-3 1/4"
54 Q	30'-11 1/2"	26'-3 3/4"	26'-3 3/4"	30'-11 1/2"	26'-3 3/4"	30'-11 1/2"	26'-3 3/4"	30'-11 1/2"
52 P	32'-4 3/8"	27'-9 3/4"	27'-9 3/4"	32'-4 3/8"	27'-9 3/4"	32'-4 3/8"	27'-9 3/4"	32'-4 3/8"
50 N	33'-8"	29'-2 1/4"	29'-2 1/4"	33'-8"	29'-2 1/4"	33'-8"	29'-2 1/4"	33'-8"
48 M	34'-7 1/2"	30'-2 3/8"	30'-2 3/8"	34'-7 1/2"	30'-2 3/8"	34'-7 1/2"	30'-2 3/8"	34'-7 1/2"
46 L	35'-6 3/8"	31'-1 7/8"	31'-1 7/8"	35'-6 3/8"	31'-1 7/8"	35'-6 3/8"	31'-1 7/8"	35'-6 3/8"
44 K	36'-5 3/8"	32'-1 1/2"	32'-1 1/2"	36'-5 3/8"	32'-1 1/2"	36'-5 3/8"	32'-1 1/2"	36'-5 3/8"
42 J	37'-0 5/8"	32'-9 1/8"	32'-9 1/8"	37'-0 5/8"	32'-9 1/8"	37'-0 5/8"	32'-9 1/8"	37'-0 5/8"
40 H	37'-7 3/4"	33'-4 5/8"	33'-4 5/8"	37'-7 3/4"	33'-4 5/8"	37'-7 3/4"	33'-4 5/8"	37'-7 3/4"
38 G	38'-1 1/2"	33'-10 3/4"	33'-10 3/4"	38'-1 1/2"	33'-10 3/4"	38'-1 1/2"	33'-10 3/4"	38'-1 1/2"
36 F	38'-7 1/4"	34'-4 3/4"	34'-4 3/4"	38'-7 1/4"	34'-4 3/4"	38'-7 1/4"	34'-4 3/4"	38'-7 1/4"
34 E	38'-9 5/8"	34'-7 1/4"	34'-7 1/4"	38'-9 5/8"	34'-7 1/4"	38'-9 5/8"	34'-7 1/4"	38'-9 5/8"
32 D	39'-1 1/2"	34'-11 3/8"	34'-11 3/8"	39'-1 1/2"	34'-11 3/8"	39'-1 1/2"	34'-11 3/8"	39'-1 1/2"
30 C	39'-2 3/8"	35'-0 1/4"	35'-0 1/4"	39'-2 3/8"	35'-0 1/4"	39'-2 3/8"	35'-0 1/4"	39'-2 3/8"
28 B	39'-3 1/2"	35'-1 1/2"	35'-1 1/2"	39'-3 1/2"	35'-1 1/2"	39'-3 1/2"	35'-1 1/2"	39'-3 1/2"
26 A	39'-4"	35'-2"	35'-2"	39'-4"	35'-2"	39'-4"	35'-2"	39'-4"



NOTES:  
1. SEE S2.P3 AND S4.20 FOR COLUMN LABELS.

19 WORKPOINT GEOMETRY DETAIL AND TABLE



NOTES:  
1. SEE 19/S4.19 FOR COLUMN TO GRID DIMENSIONS.

20 DISTANCE FROM COLUMN SPLICE  
WORKPOINT TO GRID  
1/32" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE

**SLOPED STEEL COLUMN GEOMETRY**

NO. PROJECT NO. 08044  
DRAWING NUMBER S4.19

STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 19						
LVL 18			W14X605*	W14X605*	W14X605*	W14X605*
LVL 17						
LVL 16						
LVL 15						
LVL 14	W14X605*	W14X605*				W14X605*
LVL 13						
LVL 12			W14X605*	W14X605*	W14X605*	
LVL 11						
LVL 10	W14X605*	W14X605*				
LVL 9						
LVL 8			W14X730*			W14X730*
LVL 7						
LVL 6	W14X730*	W14X730*	W14X808*	W14X730*	W14X730*	
LVL 5						
LVL 4						
LVL 3	W14X873*	W14X873*	W14X873*	W14X873*	W14X873*	W14X873*
LVL 2	BU COL1* W1 1/4" WALLX 5-0% CONC FILLED PIPE	W14X873* W1 1/4" WALLX 5-0% CONC FILLED PIPE	W14X873* W1 1/4" WALLX 5-0% CONC FILLED PIPE	BU COL1* W1 1/4" WALLX 5-0% CONC FILLED PIPE	W14X873* W1 1/4" WALLX 5-0% CONC FILLED PIPE	W14X873* W1 1/4" WALLX 5-0% CONC FILLED PIPE
LVL 1						
P1						
P2	W14X873* W1 3/4" WALLX CONC COL	W14X873* W1 3/4" WALLX CONC COL	W14X873* W1 3/4" WALLX CONC COL	W14X873* W1 3/4" WALLX CONC COL	W14X873* W1 3/4" WALLX CONC COL	W14X873* W1 3/4" WALLX CONC COL
P3						
BASE PLATE TXWL	PL7X36X3'-10"	PL7X36X3'-10"	PL7X36X3'-10"	PL7X36X3'-10"	PL7X36X3'-10"	PL7X36X3'-10"

NOTES:

- SPLICE COLUMNS PER TYPICAL COLUMN SPLICE DETAILS.
- \* INDICATES COLUMN IS 65 KSI.
- C1-C12 COLUMNS TO BE CONCRETE ENCASED FROM LEVELS P3-P1 PER "TOWER COLUMN ENCASEMENT" DETAIL.
- BASE PLATES IN THIS SCHEDULE ARE TYPE 2, A572 GR60 STEEL.
- SEE "TYPICAL BUILT-UP COLUMN" DETAIL FOR BU COL1 DEFINITION.
- SEE "LEVELS 1-3 CONCRETE ENCASEMENT" DETAIL FOR 5'-0" CONCRETE FILLED PIPE DETAILING.

STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 40						
LVL 39						
LVL 38						
LVL 37				W14X370	W14X370	W14X370
LVL 36						
LVL 35						
LVL 34						
LVL 33	W14X398*	W14X398*	W14X398*			
LVL 32						
LVL 31				W14X398*	W14X398*	W14X398*
LVL 30						
LVL 29						
LVL 28			W14X455*			
LVL 27	W14X455*	W14X455*		W14X455*	W14X455*	W14X455*
LVL 26			W14X500*			
LVL 25						
LVL 24						
LVL 23	W14X500*	W14X500*		W14X500*	W14X500*	W14X500*
LVL 22						
LVL 21	W14X550*	W14X550*	W14X605*	W14X550*	W14X550*	W14X605*
LVL 20						
LVL 19						

STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 62						
LVL 61						
LVL 60						
LVL 59	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120
LVL 58						
LVL 57						
LVL 56						
LVL 55						
LVL 54			W14X159	W14X132	W14X132	W14X132
LVL 53						
LVL 52	W14X176	W14X176				
LVL 51						
LVL 50			W14X233	W14X176	W14X176	W14X176
LVL 49						
LVL 48	W14X233	W14X233				
LVL 47						
LVL 46			W14X283	W14X211	W14X211	W14X211
LVL 45						
LVL 44	W14X283	W14X283				
LVL 43						
LVL 42	W14X370	W14X370	W14X370	W14X283	W14X283	W14X283
LVL 41						
LVL 40	W14X370	W14X370				



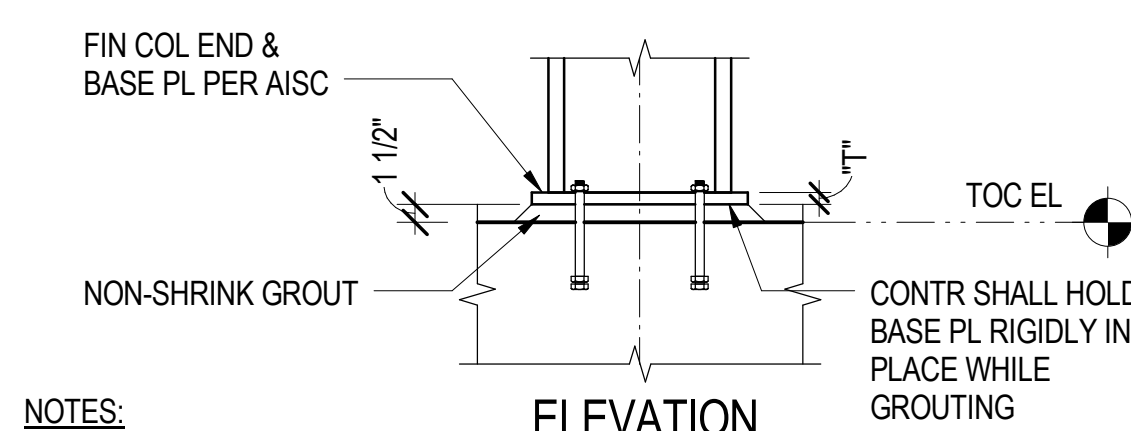
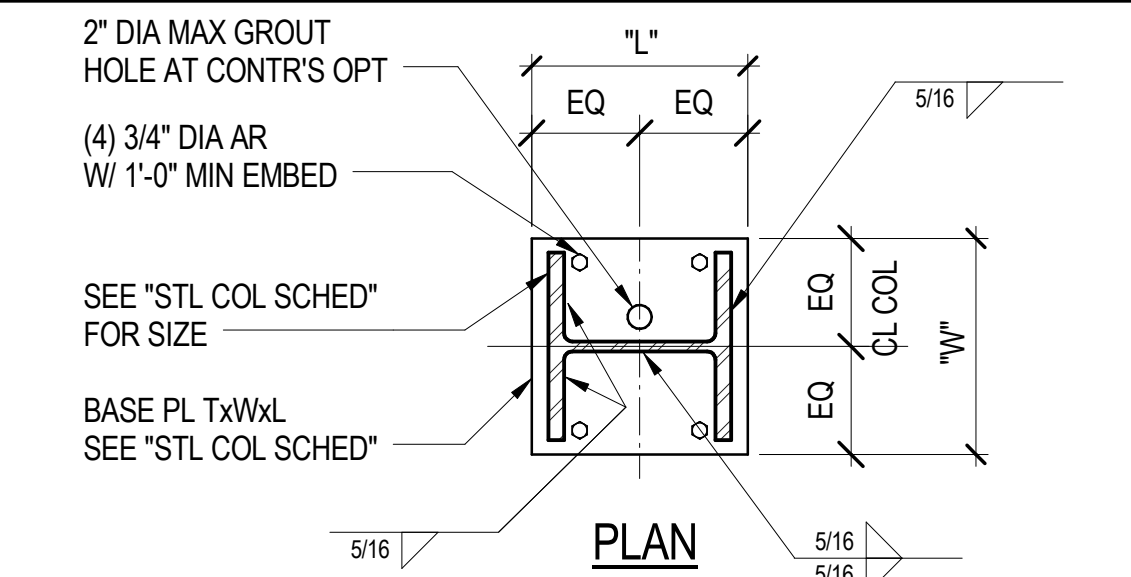
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION
3	10 FEB 14	ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

DRAWING TITLE  
**STEEL COLUMN SCHEDULE**

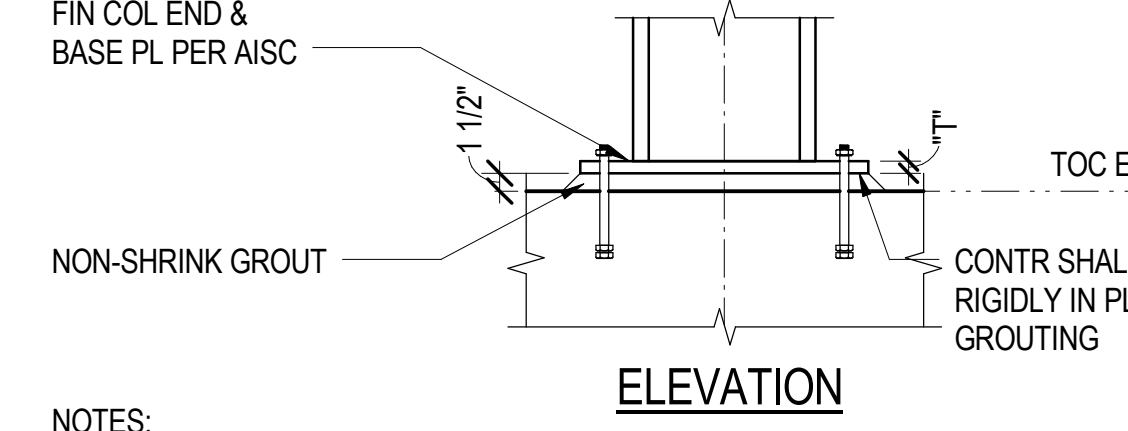
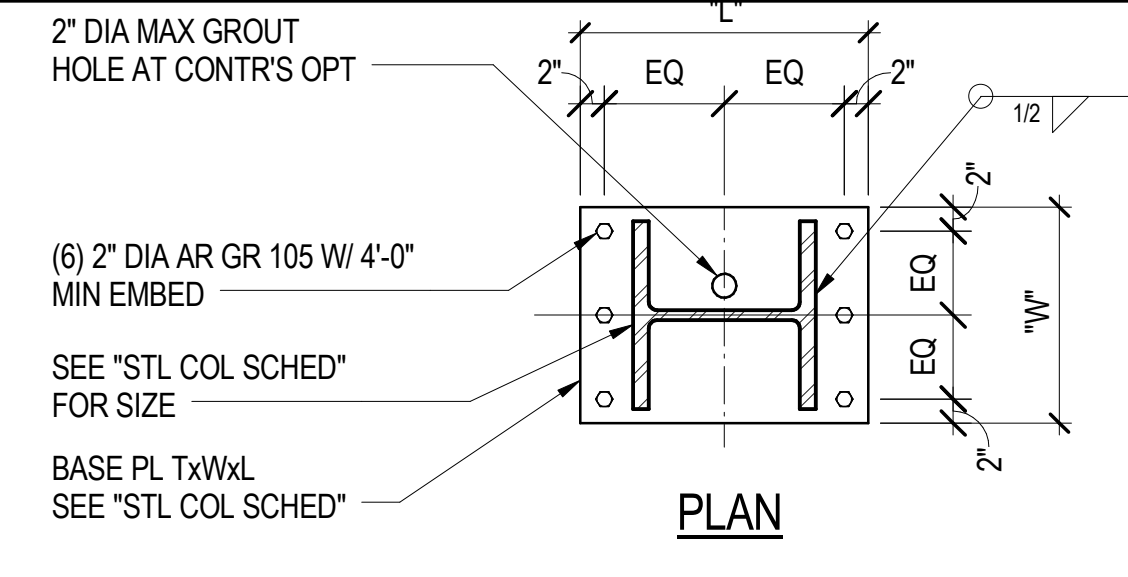


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



- NOTES:**
- TIGHTEN ANCHOR RODS SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE DIAMETER AND PLATE WASHER SHALL BE SIZED PER "AISC MANUAL - TABLE 14-2" UNLESS NOTED OTHERWISE.

**1** TYPICAL COLUMN BASE PLATE, TYPE 1

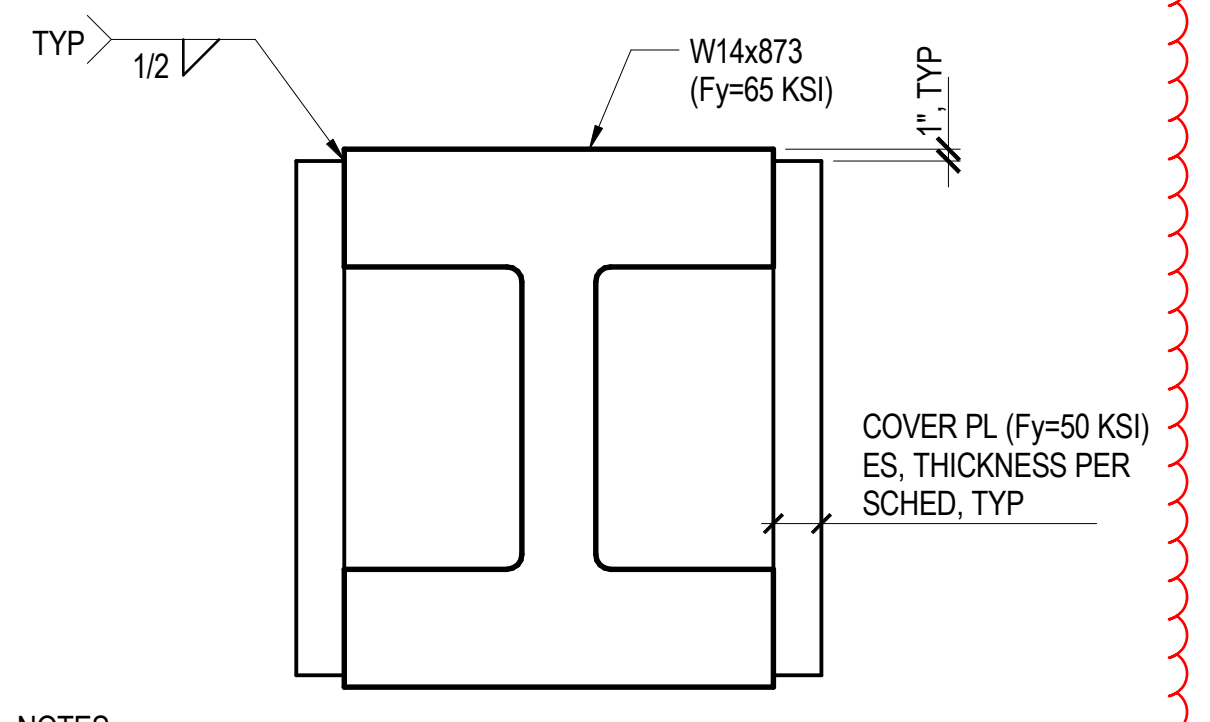


- NOTES:**
- TIGHTEN ANCHOR RODS SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE DIAMETER AND PLATE WASHER SHALL BE SIZED PER "AISC MANUAL - TABLE 14-2" UNLESS NOTED OTHERWISE.

**2** TYPICAL COLUMN BASE PLATE, TYPE 2

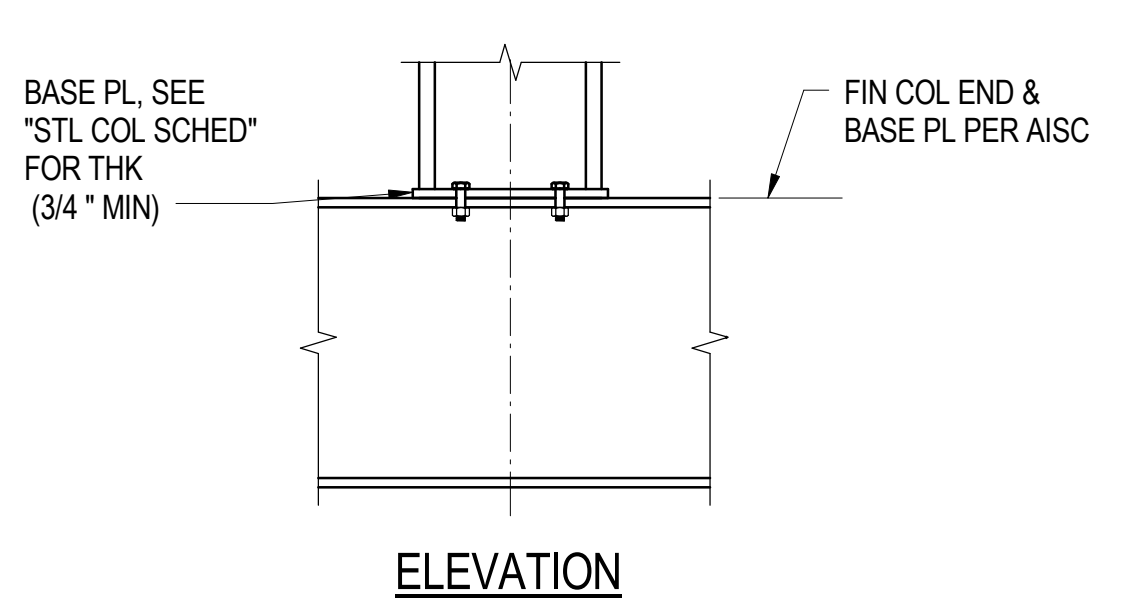
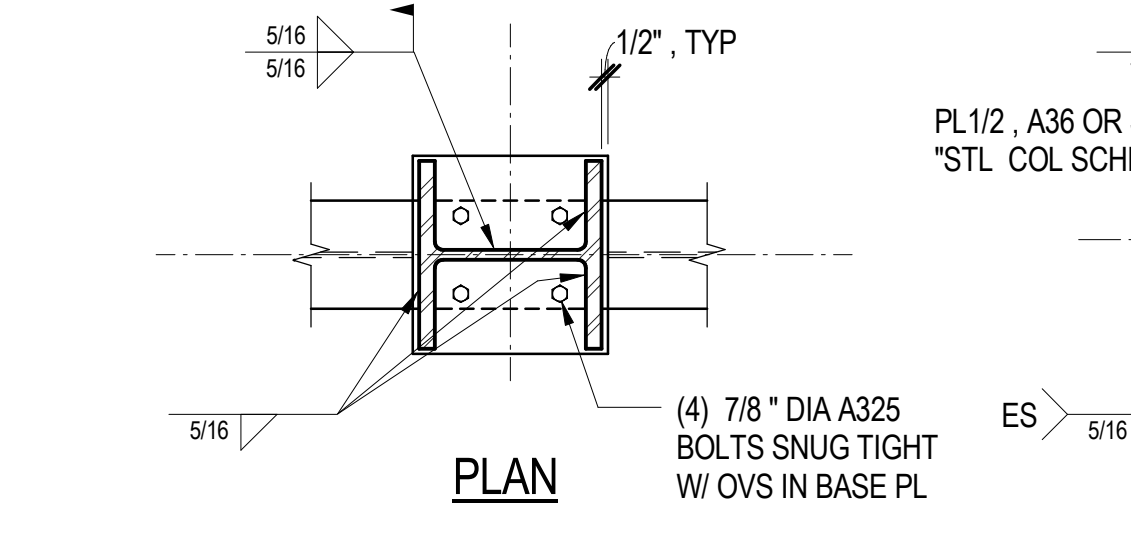
**BU COL SCHEDULE**

MARK	SIDE PL
BU COL 1	2"

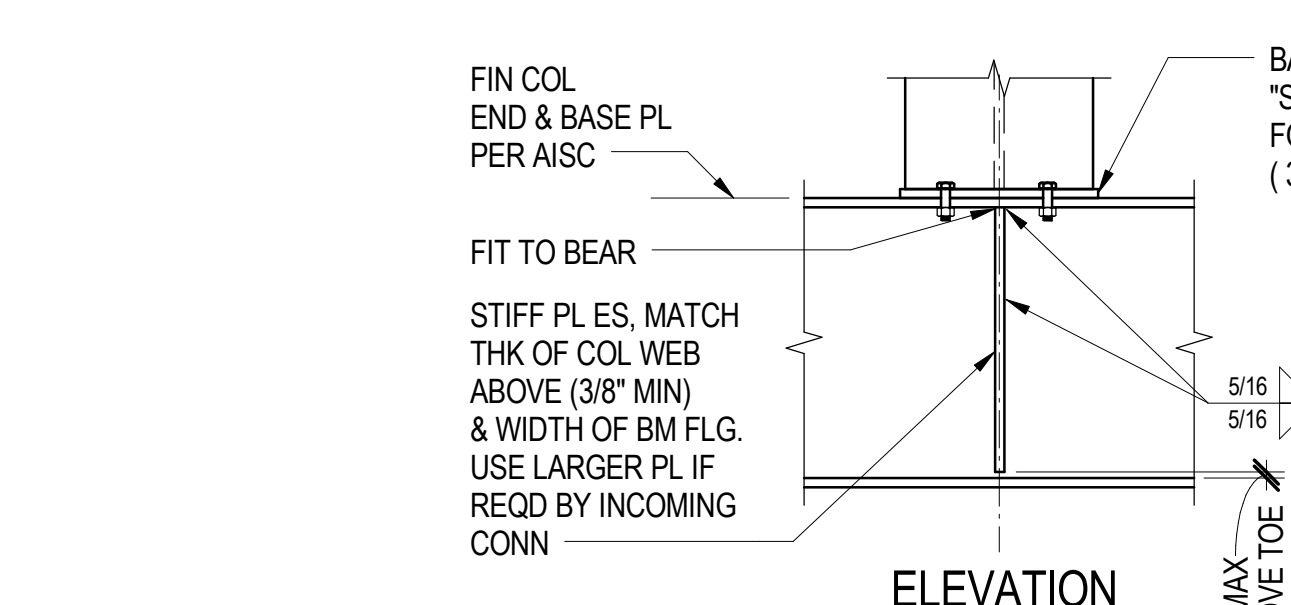
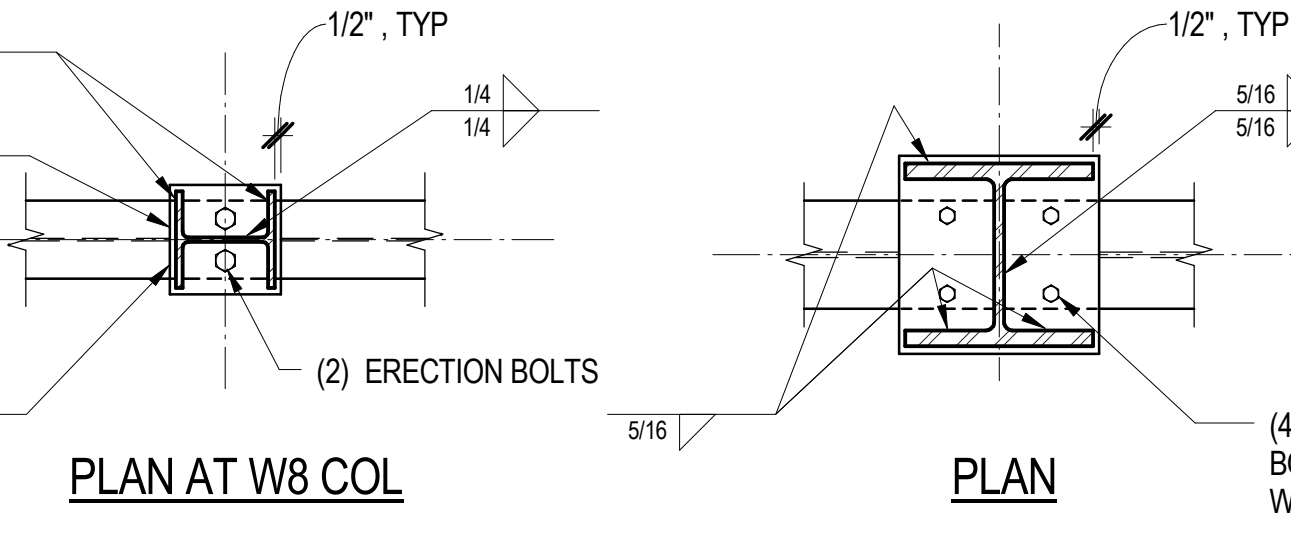


- NOTES:**
- COVER PL BEGINS 1" ABOVE LVL 1 TOS AND EXTENDS TO 1" BELOW LVL 3 TOS

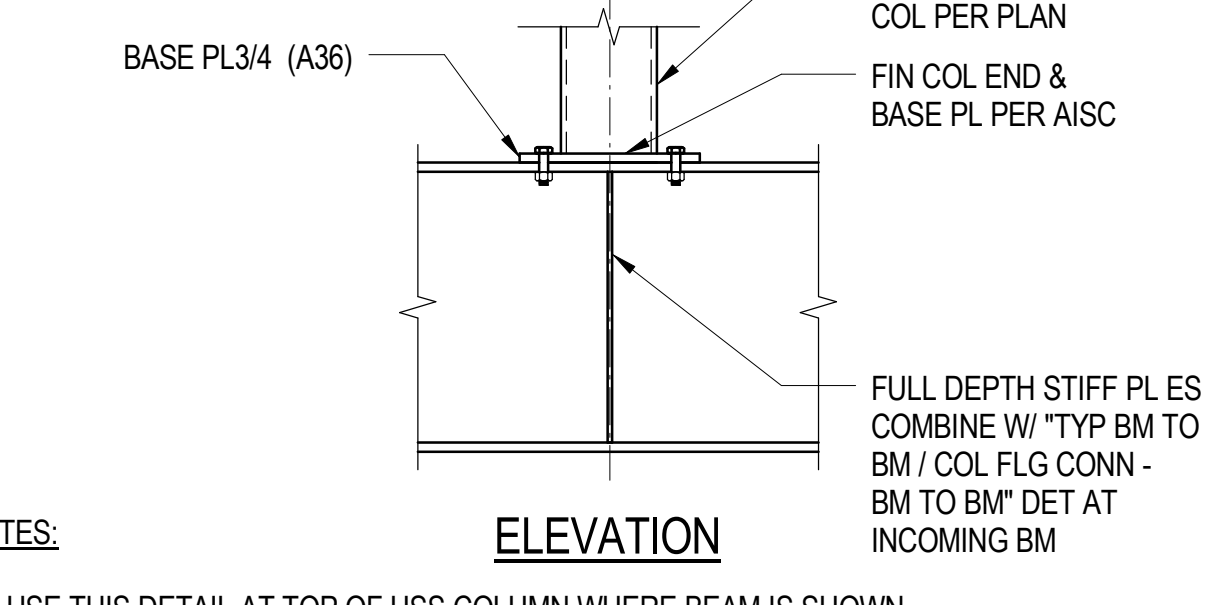
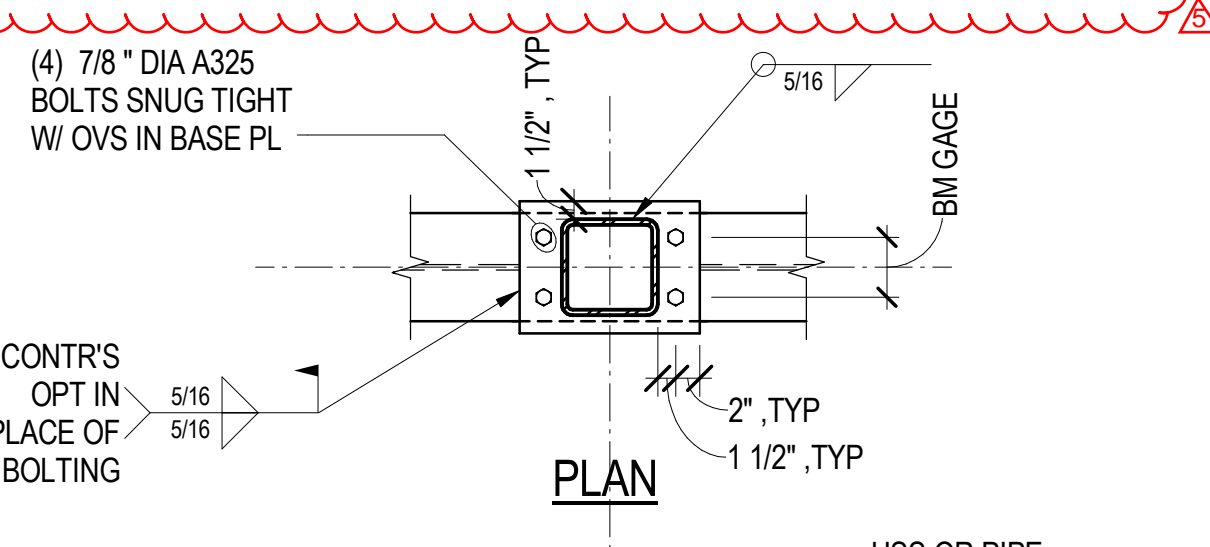
**3** TYPICAL BUILT-UP COLUMN



**7** TYPICAL COLUMN BASE PLATE, TYPE 3



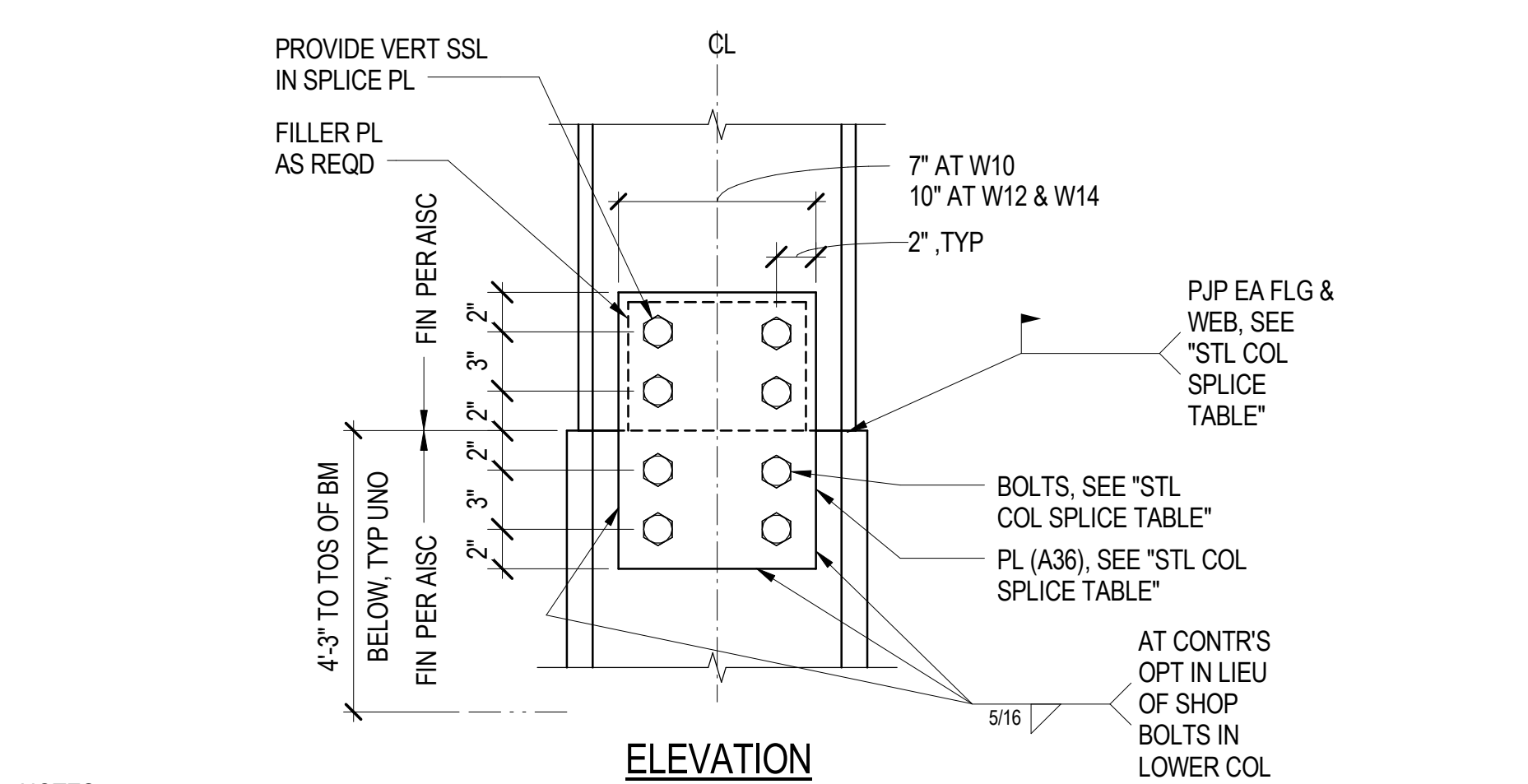
**8** TYPICAL HSS OR PIPE COLUMN ON STEEL BEAM



- NOTES:**
- USE THIS DETAIL AT TOP OF HSS COLUMN WHERE BEAM IS SHOWN RUNNING OVER COLUMN ON PLANS.

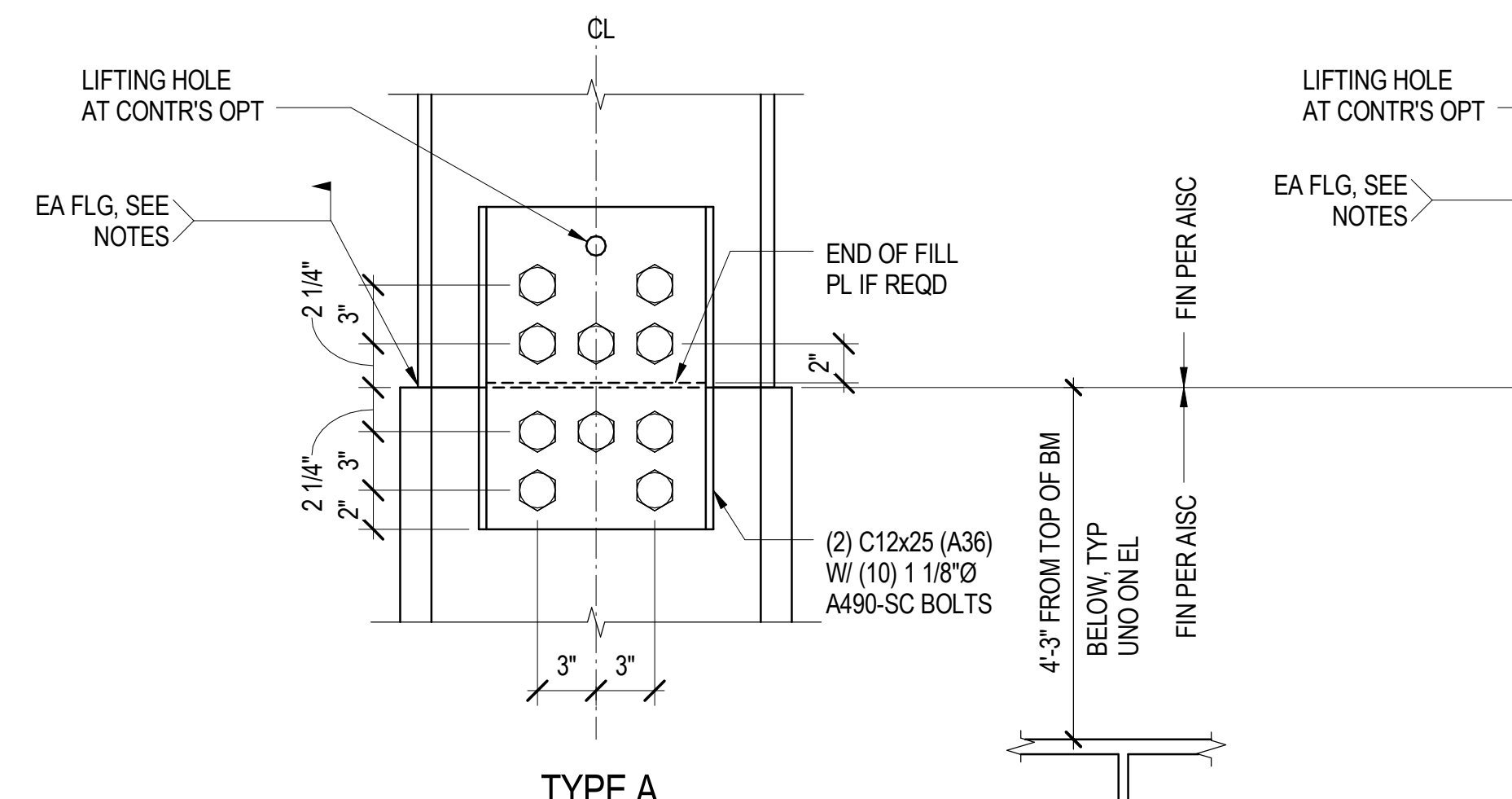
**STEEL COLUMN SPLICE TABLE**

COLUMN SIZE	WEB PLATE		BOLTS				REMARKS
	NUMBER	THICKNESS (INCH)	SIZE (INCH)	GRADE	NUMBER PER ROW	NUMBER OF ROWS	
W12x96 TO W12x170	2	5/8	7/8	A325-X	3	1	WELD FLGS MIN PJP
W14x90 TO W14x132	2	5/8	7/8	A325-X	3	1	WELD FLGS 1/2 PJP
W14x145 TO W14x211	2	3/4	1	A490-X	3	1	WELD FLGS 1/2 PJP
W14x233 TO W14x283	2	1	1	A490-X	3	2	WELD FLGS 1/2 PJP
W14x311 TO W14x550	1	1	1	A490-X	3	2	WELD WEB MIN PJP WELD FLGS 1/2 PJP
W14x605 TO W14x873	1	1	1	A490-X	3	2	WELD WEB & FLGS 5/8 PJP



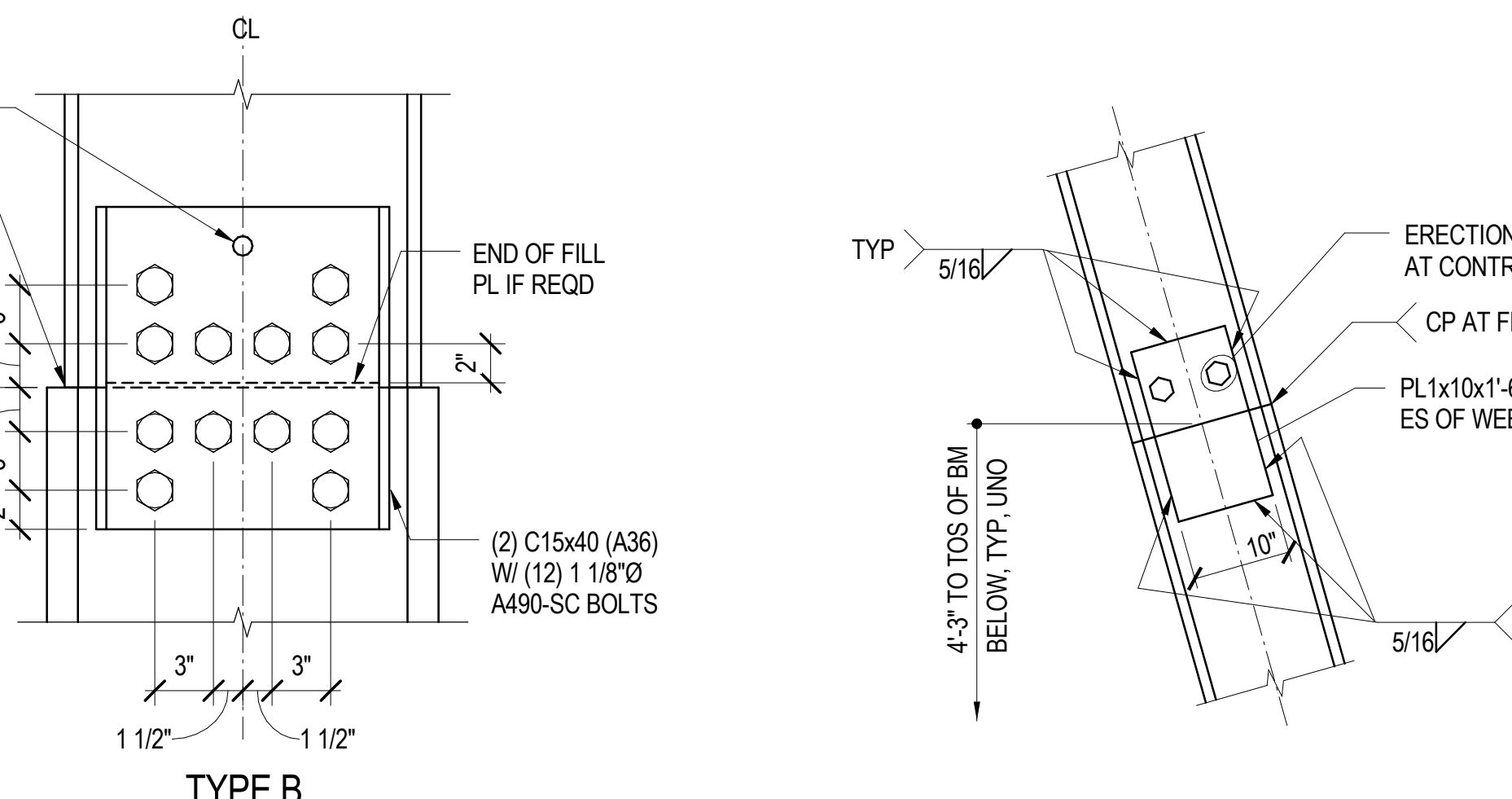
- NOTES:**
- CONTRACTOR SHALL PROVIDE ALL ERECTION AND STABILITY AIDS.
  - REFER TO AISC FOR SPLICE DETAIL WHERE NOMINAL DEPTH CHANGES.
  - ALL BOLTS ARE FULLY TENSIONED WITH THREADS EXCLUDED FROM THE SHEAR PLANE.

**13** TYPICAL COLUMN SPLICE, TYPE 1



- NOTES:**
- SEE FRAME ELEVATIONS FOR WELD REQUIRED AT EACH COLUMN SPLICE.
  - (3/8) SHOWN ON FRAME ELEVATIONS DENOTES A 3/8" EFFECTIVE THROAT PARTIAL JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPLICE.
  - "CJP" DENOTES A COMPLETE JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPLICE.

**17** TYPICAL COLUMN SPLICE, TYPE 2



- NOTES:**
- SEE FRAME ELEVATIONS FOR WELD REQUIRED AT EACH COLUMN SPLICE.
  - (3/8) SHOWN ON FRAME ELEVATIONS DENOTES A 3/8" EFFECTIVE THROAT PARTIAL JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPLICE.
  - "CJP" DENOTES A COMPLETE JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPLICE.

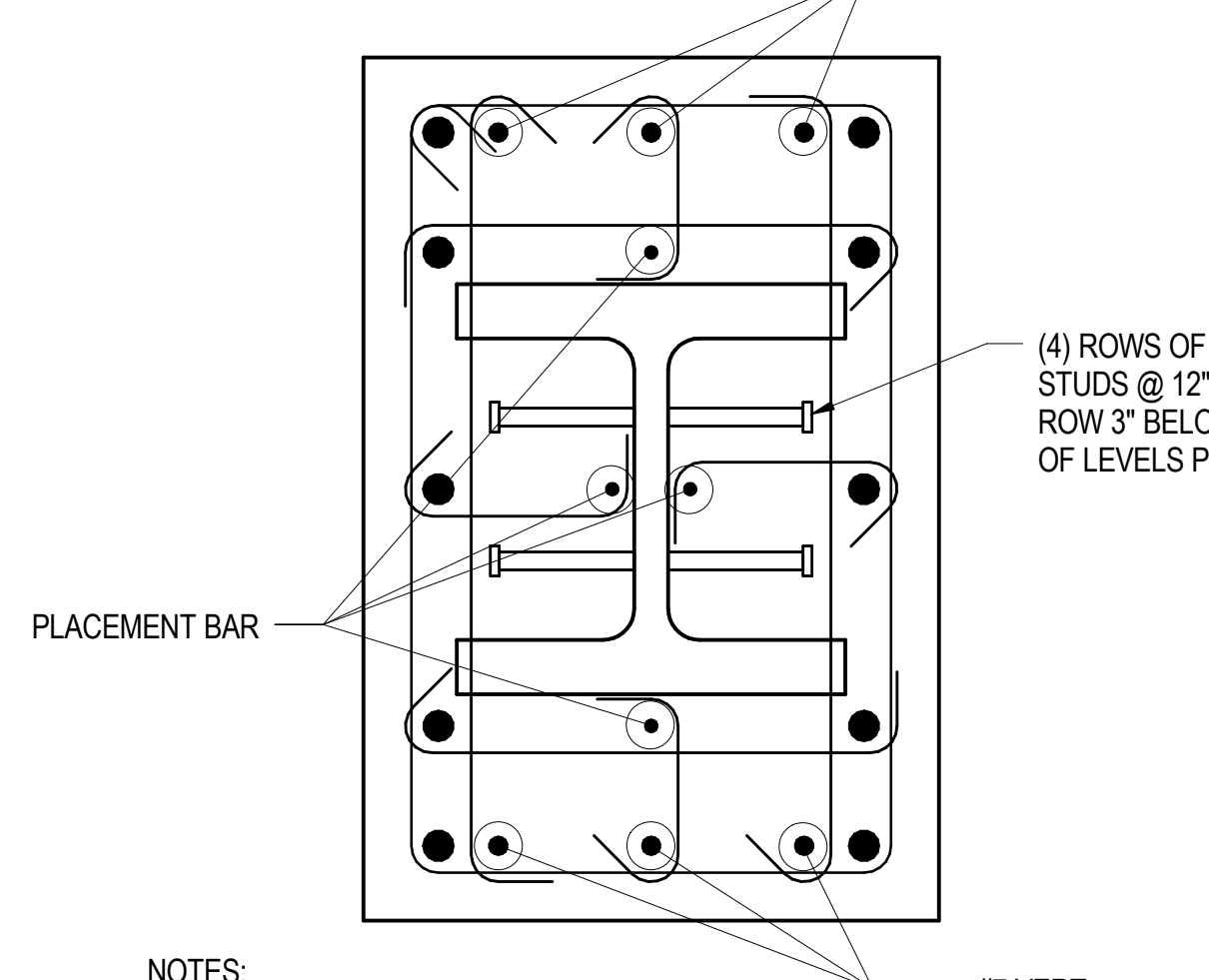
**18** TYPICAL COLUMN SPLICE, TYPE 3

**STEEL COLUMN SCHEDULE**

MARK	C13	C14	C15
LEVEL			
LVL 64			
LVL 63	W14X74	W14X82	W14X74
LVL 62			
LVL 61	W14X109	W14X132	W14X109
LVL 60			
LVL 59	W14X145	W14X159	W14X145
LVL 58			
LVL 57	W14X193	W14X193	W14X193
LVL 56			
LVL 55	W14X233	W14X233	W14X233
LVL 54			
LVL 53		W14X283	
LVL 52			
LVL 51	W14X283	W14X311	W14X283
LVL 50			
BASE PLATE TxDxWxL	PL3x20x1'-8"	PL3x20x1'-8"	PL3x20x1'-8"

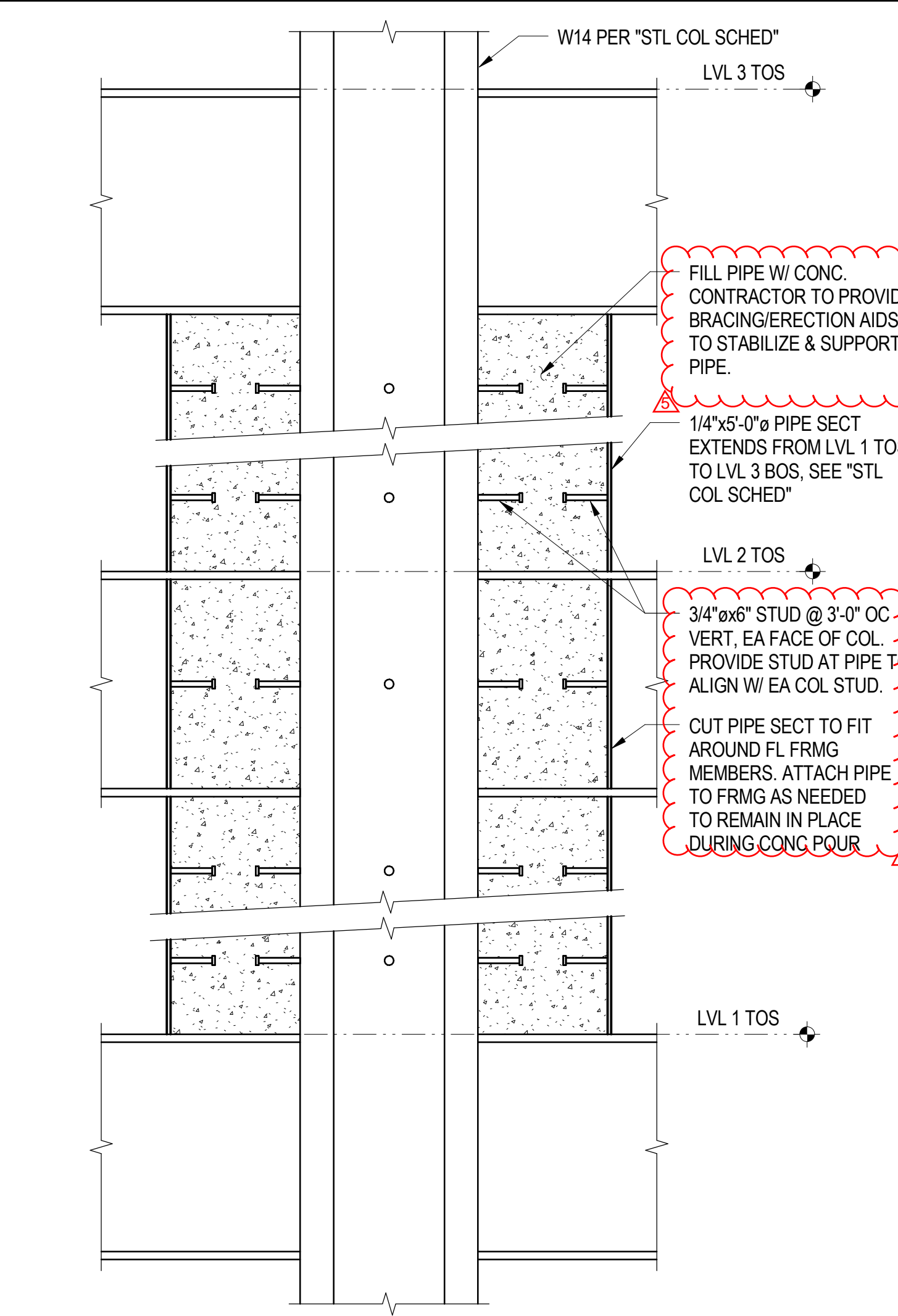
- NOTES:**
- SPLICE COLUMNS PER TYPICAL COLUMN SPLICE DETAILS.
  - C16 AND C17 COLUMNS TO BE CONCRETE ENCASED FULL HEIGHT PER "TYPICAL W12 COLUMN ENCASEMENT" DETAIL.
  - BASE PLATES SCHEDULED ARE TYPE 1, A36 STEEL.

**14** STEEL COLUMN SCHEDULE



- NOTES:**
- VERTICAL REINFORCING SHOWN IS #11, UNLESS NOTED OTHERWISE.
  - PROVIDE #4 @ 12" TIES AS SHOWN.
  - PROVIDE STANDARD HOOKS FOR SLAB REINFORCEMENT INTERRUPTED BY STEEL COLUMN.

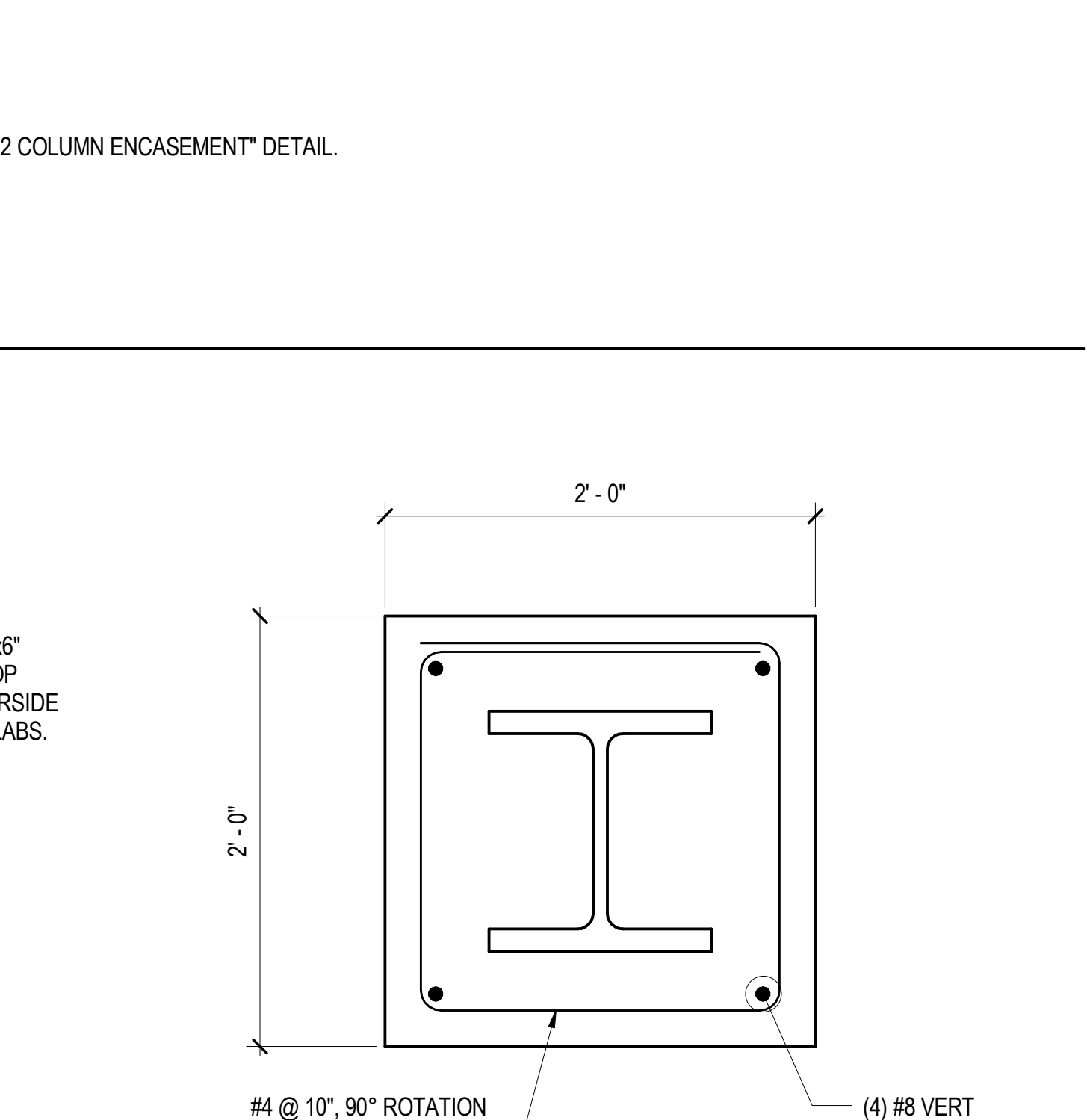
**19** TYPICAL TOWER COLUMN ENCASEMENT



**10** LEVELS 1-3 COLUMN ENCASEMENT

**STEEL COLUMN SCHEDULE**

MARK	C16, C17
LEVEL	
LVL 1	
P1	
P2	
P3	
BASE PLATE TxDxWxL	PL 1 1/2x15x1'-3"



- NOTES:**
- VERTICAL REINFORCING SHOWN IS #11, UNLESS NOTED OTHERWISE.
  - PROVIDE #4 @ 12" TIES AS SHOWN.
  - PROVIDE STANDARD HOOKS FOR SLAB REINFORCEMENT INTERRUPTED BY STEEL COLUMN.

**20** TYPICAL W12 COLUMN ENCASEMENT

**NO. DATE ISSUE**

6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

**TYPICAL STEEL COLUMN DETAILS AND SCHEDULE**



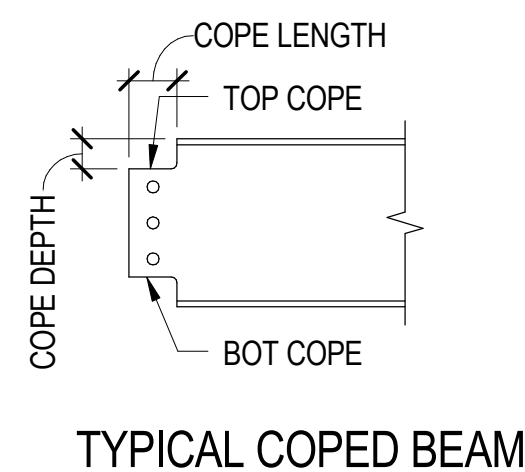
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

**NOTES:**

THESE NOTES APPLY TO ALL CONNECTIONS UNLESS NOTED OTHERWISE.

- SEE PLANS FOR BEAM REACTIONS WHERE NO DETAIL IS NOTED. USE APPROPRIATE TYPICAL DETAIL.
- THE MINIMUM NUMBER OF BOLTS IN A BEAM WEB CONNECTION SHALL BE AS SHOWN IN "TABLE A."
- BEAMS SHALL HAVE STANDARD ROUND HOLES (STD), AND SHEAR TAB PLATES SHALL HAVE HORIZONTAL SHORT SLOTTED HOLES (SSL) UNLESS NOTED OTHERWISE.
- BOLTS IN CONNECTIONS OF BEAM TO BEAM / GIRDER MAY BE SNUG TIGHT UNLESS SPECIFICALLY CALLED OUT AS SLIP CRITICAL (SC).
- FOR EXTERIOR SPANDREL BEAMS, SEE "TYPICAL EDGE BEAM STIFFENER" DETAIL.
- WHEN CONDITIONS VARY FROM THOSE SHOWN IN THE TYPICAL STEEL DETAILS, OR WHEN THE CONTRACTOR WANTS TO USE ALTERNATE DETAILS, DETAIL CONSTRUCTION ACCORDING TO THE "AISC MANUAL OF STEEL CONSTRUCTION" SUBMIT CALCULATIONS FOR ENGINEER'S APPROVAL.
- CONTRACTOR SHALL COORDINATE THE BOLT SELECTION AND USE BETWEEN FABRICATOR AND ERECTOR.

TABLE A		
WIDE-FLANGE BEAM DEPTH	MINIMUM BEAM REACTION (KIPS)	MINIMUM NUMBER OF BOLTS REQUIRED
W8, W10	13	2
W12, W14, W16	27	3
W18	44	4
W21, W24	75	5
W27, W30	91	6
W33	100	6
W36	117	7
W40, W44	134	8

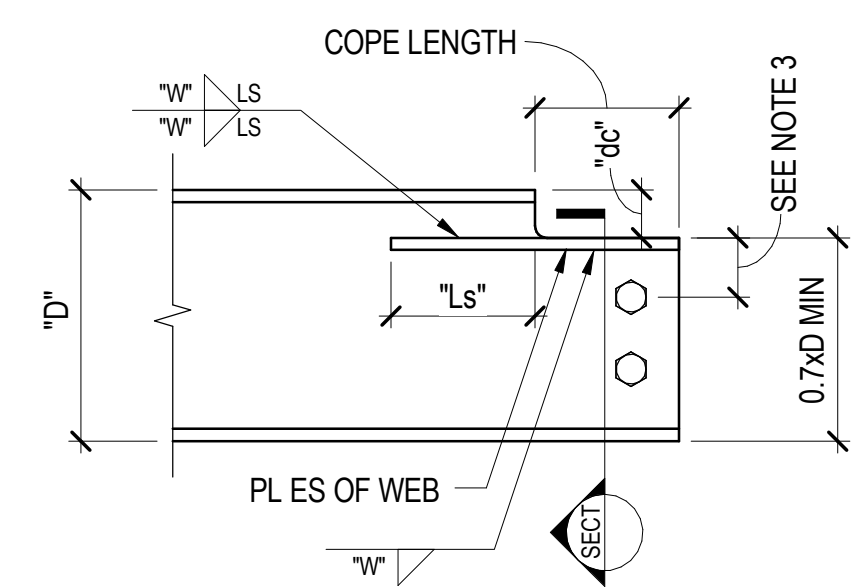


**NOTES:**

THESE NOTES APPLY TO ALL COPED BEAMS UNLESS NOTED OTHERWISE.

- COPED BEAMS SHALL BE CHECKED FOR MINIMUM WEB THICKNESS AND MAXIMUM COPE LENGTH PER "TABLE B" OR "TABLE C," WHICHEVER IS APPLICABLE. COPE LENGTH IS AS SHOWN IN THE CONNECTION DETAILS.
  - MAXIMUM TOP COPE DEPTH IS 2" FOR BEAM DEPTHS UP TO W18, 3" FOR BEAM W21 AND DEEPER. WHEN ACTUAL COPE DEPTH EXCEEDS MAXIMUM COPE DEPTH, ADD STIFFENERS PER "TYPICAL COPE WEB STIFFENER" DETAIL.
  - WHEN ACTUAL COPE LENGTH IS GREATER THAN SHOWN IN "TABLE B" OR "TABLE C," WHICHEVER IS APPLICABLE, SEE "TYPICAL COPE WEB STIFFENER" DETAIL OR REDUCE THE MAXIMUM REACTION BY THE RATIO OF MAXIMUM COPE LENGTH TO ACTUAL COPE LENGTH.
- THESE REDUCTIONS ARE NOT ALLOWED BELOW THE HEAVY LINES SHOWN IN THE TABLES.

**GENERAL NOTES FOR COPED BEAMS**



**NOTES:**

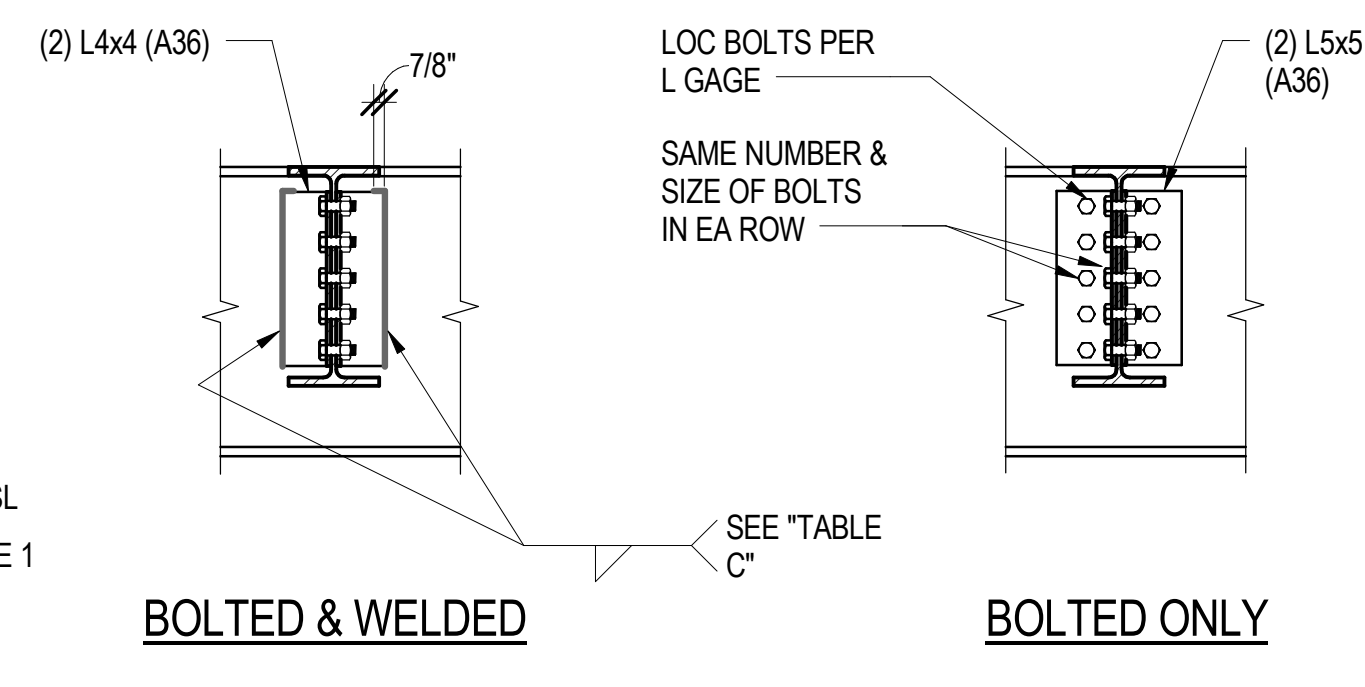
1. WELD W SHALL BE GREATER OF 0.35t OR AISC MINIMUM.

- Ls SHALL BE THE GREATER OF THREE TIMES THE PLATE WIDTH OR TWO TIMES THE COPE DEPTH (dc).
- ADJUST BOLT LOCATION AS REQUIRED.

AISC MINIMUM SIZE OF FILLET WELDS

THICKNESS OF THINNER PART JOINED (IN)	MINIMUM SIZE OF FILLET WELD (IN)
TO 1/2 INCLUSIVE	3/16
OVER 1/2 TO 3/4	1/4
OVER 3/4	5/16

**TYPICAL COPED WEB STIFFENER**



**SECTION**

TABLE C2	
MINIMUM SUPPORT THICKNESS WHEN WELDED TO SUPPORT	
BOLT DIAMETER	Fy=50KSI
7/8"	0.26"
1"	0.36"

- SEE "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.
- ONE ANGLE MAY BE FIELD WELDED AT CONTRACTOR'S OPTION.
- TOLERANCE ON RETURN WELD SHALL BE + 1/4" INCH, -0 INCHES.
- WHEN C2 CONNECTIONS LINE UP ON OPPOSITE SIDES OF A SUPPORT GIRDER AND WELDS ARE USED, THE MINIMUM SUPPORT THICKNESS MUST BE GREATER THAN OR EQUAL TO THE SUM OF THE MINIMUM SUPPORT THICKNESS FOR EACH INCOMING C2 CONNECTION.

**DOUBLE ANGLE SHEAR CONNECTIONS**

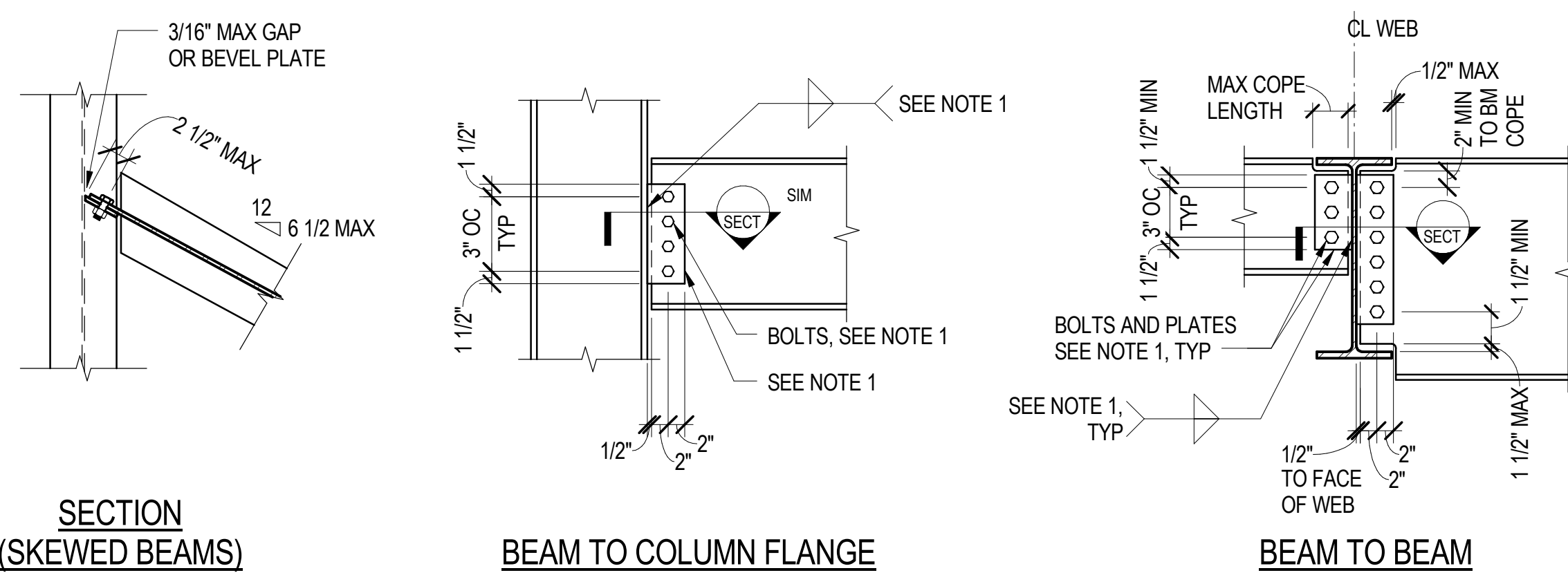
**TYPICAL STEEL CONNECTION, TYPE C2**

NUMBER OF BOLTS	MAXIMUM REACTION (KIPS)	ANGLE THICKNESS (A36) (IN)	WELD SIZE (IN)	NO COPE					
				TOP COPE ONLY			TOP & BOTTOM COPE		
				Fy (BEAM) = 50 KSI	Fy (BEAM) = 50 KSI	Fy (BEAM) = 50 KSI	Fy (BEAM) = 50 KSI	Fy (BEAM) = 50 KSI	Fy (BEAM) = 50 KSI
MINIMUM WEB THICKNESS (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)		
<b>7/8" DIA A325 BOLTS</b>									
2	21	3/8	5/16	0.16	0.18	3 1/2	0.24	2	
3	44	3/8	5/16	0.22	0.28	3 1/2	0.34	2 1/2	
4	71	3/8	5/16	0.27	0.36	6 1/2	0.42	4	
5	100	3/8	5/16	0.30	0.42	7	0.48	4 1/2	
6	130	3/8	5/16	0.32	0.47	7 1/2	0.52	6	
7	160	3/8	5/16	0.34	0.51	9 1/2	0.56	7	
8	190	3/8	5/16	0.35	0.53	11 1/2	0.58	8	
9	221	3/8	5/16	0.36	0.56	16	0.60	10	
10	250	3/8	5/16	0.37	0.57	17 1/2	0.61	10 1/2	
11	280	3/8	5/16	0.38	0.59	18	0.63	12	
12	310	3/8	5/16	0.38	0.60	18	0.63	14 1/2	
<b>1" DIA A490 BOLTS</b>									
2	29	5/8	7/16	0.20	0.26	3 1/2	0.36	2	
3	61	5/8	7/16	0.27	0.41	4	0.51	2 1/2	
4	99	5/8	7/16	0.32	0.52	6 1/2	0.63	4 1/2	
5	140	5/8	7/16	0.37	0.62	7 1/2	0.71	4 1/2	
6	182	5/8	7/16	0.40	0.69	8	0.78	6	
7	225	5/8	7/16	0.42	0.74	9 1/2	0.83	7 1/2	
8	267	5/8	7/16	0.43	0.78	12	0.86	8 1/2	
9	309	5/8	7/16	0.45	0.82	16 1/2	0.89	10 1/2	
10	351	5/8	7/16	0.46	0.84	17 1/2	0.91	11 1/2	
11	392	5/8	7/16	0.46	0.87	18	0.93	12 1/2	
12	434	5/8	7/16	0.47	0.88	18	0.94	13 1/2	

**NOTES:**

- SEE "GENERAL NOTES FOR COPED BEAMS."

**TYPICAL STEEL CONNECTION, TYPE C1**



**NOTES:**

- SEE "TABLE B" FOR ADDITIONAL CONNECTION REQUIREMENTS.
- WHEN REQUIRED NUMBER OF BOLTS DOES NOT FIT WITHIN BEAM DEPTH, OR WHEN THE REACTION IS MORE THAN THE MAXIMUM IN "TABLE B," USE "TYPICAL STEEL CONNECTION, TYPE C2" OR "TYPICAL STEEL CONNECTION, TYPE C10."
- FOR SKEWED BEAMS NOT MEETING THE LIMITS SHOWN IN SECTION, SEE "TYPICAL SKEWED BEAM CONNECTION, TYPE C8."

**TYPICAL STEEL CONNECTION, TYPE C1**

NUMBER OF BOLTS	MAXIMUM REACTION				TOP COPE ONLY		TOP & BOTTOM COPE	
	MAXIMUM REACTION (KIPS)	PLATE THICKNESS (A36) (IN)	WELD SIZE (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	
	Fy (BEAM) = 50 KSI				Fy (BEAM) = 50 KSI		Fy (BEAM) = 50 KSI	
<b>7/8" DIA A325 BOLTS</b>								
2	13	5/16	1/4	0.19	6	0.19	2 1/2	
3	27	5/16	1/4	0.20	4 1/2	0.21	2 1/2	
4	44	5/16	1/4	0.23	7	0.26	4	
5	56	5/16	1/4	0.24	9	0.27	5	
6	75	3/8	5/16	0.27	11	0.30	7	
7	83	3/8	5/16	0.27	14	0.29	10	
8	91	3/8	5/16	0.26	18	0.28	14	
9	100	1/2	3/8	0.25	18	0.27	18	
10	108	1/2	3/8	0.25	18	0.27	18	
11	116	1/2	3/8	0.25	18	0.26	18	
12	124	1/2	3/8	0.24	18	0.26	18	
<b>1" DIA A490 BOLTS</b>								
2	15	1/2	3/8	0.19	5	0.19	2	
3	31	1/2	3/8	0.21	4	0.26	2 1/2	
4	59	1/2	3/8	0.31	6 1/2	0.37	4 1/2	
5	84	1/2	3/8	0.37	7 1/2	0.43	5	
6	101	1/2	3/8	0.38	8 1/2	0.43	6	
7	117	1/2	3/8	0.36	10	0.44	7 1/2	
8	134	1/2	3/8	0.40	14	0.44	9	
9	151	1/2	3/8	0.40	18	0.44	13 1/2	
10	168	1/2	3/8	0.41	18	0.44	16	
11	185	1/2	3/8	0.41	18	0.44	18	
12	202	1/2	3/8	0.41	18	0.44	18	

**NOTES:**

- SEE "GENERAL NOTES FOR COPED BEAMS."

**TABLE B**

**TYPICAL WEB DOUBLER**

**NOTES:**

- USE FOLLOWING FORMULA TO DETERMINE DOUBLER PLATE THICKNESS: (MINIMUM WEB THICKNESS PER CONNECTION "TABLE B" OR "TABLE C") MINUS (BEAM WEB THICKNESS) PLUS (COEFFICIENT).
- MINIMUM PLATE THICKNESS SHALL BE 1/4 INCH; MINIMUM WIDTH 5 INCHES.
- PLATE SHALL BE SAME STEEL GRADE AS BEAM.
- WELD SIZE (w) SHALL BE 1/16 INCH LESS THAN PLATE THICKNESS.
- Ls SHALL BE THE GREATER OF TWO TIMES THE COPE DEPTH (dc) OR 2".

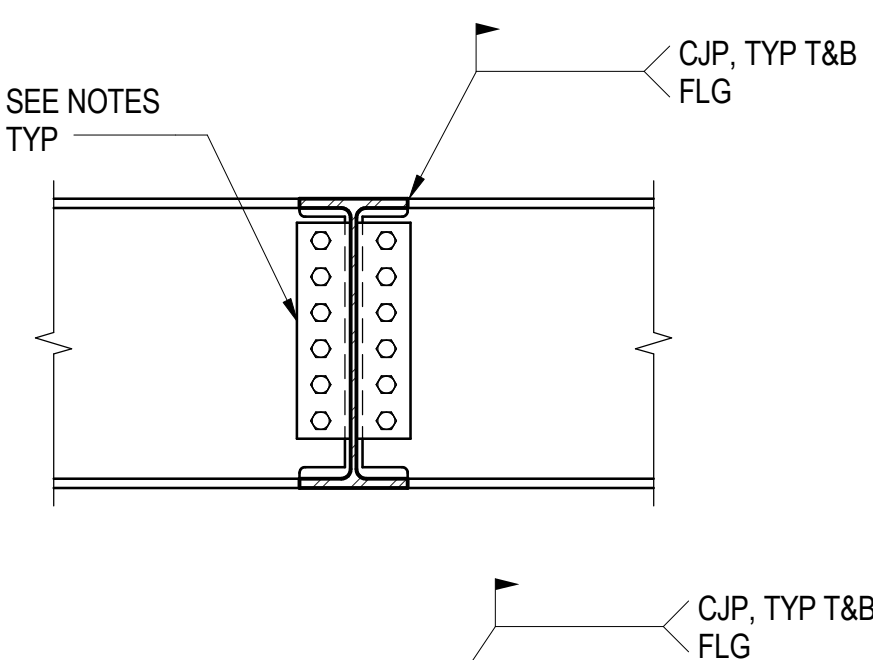
X (INCH)	COEFFICIENT
5	1/8"
5 1/4 - 7	1/4"
7 1/4 - 10 1/2	3/8"

**TYPICAL SHALLOW BEAM CONNECTION**

**NOTES:**

- PROVIDE THIS DETAIL FOR UP TO 8" DEEP BEAMS ONLY. USE "TYPICAL STEEL CONNECTION, TYPE C1" FOR DEEPER BEAMS.

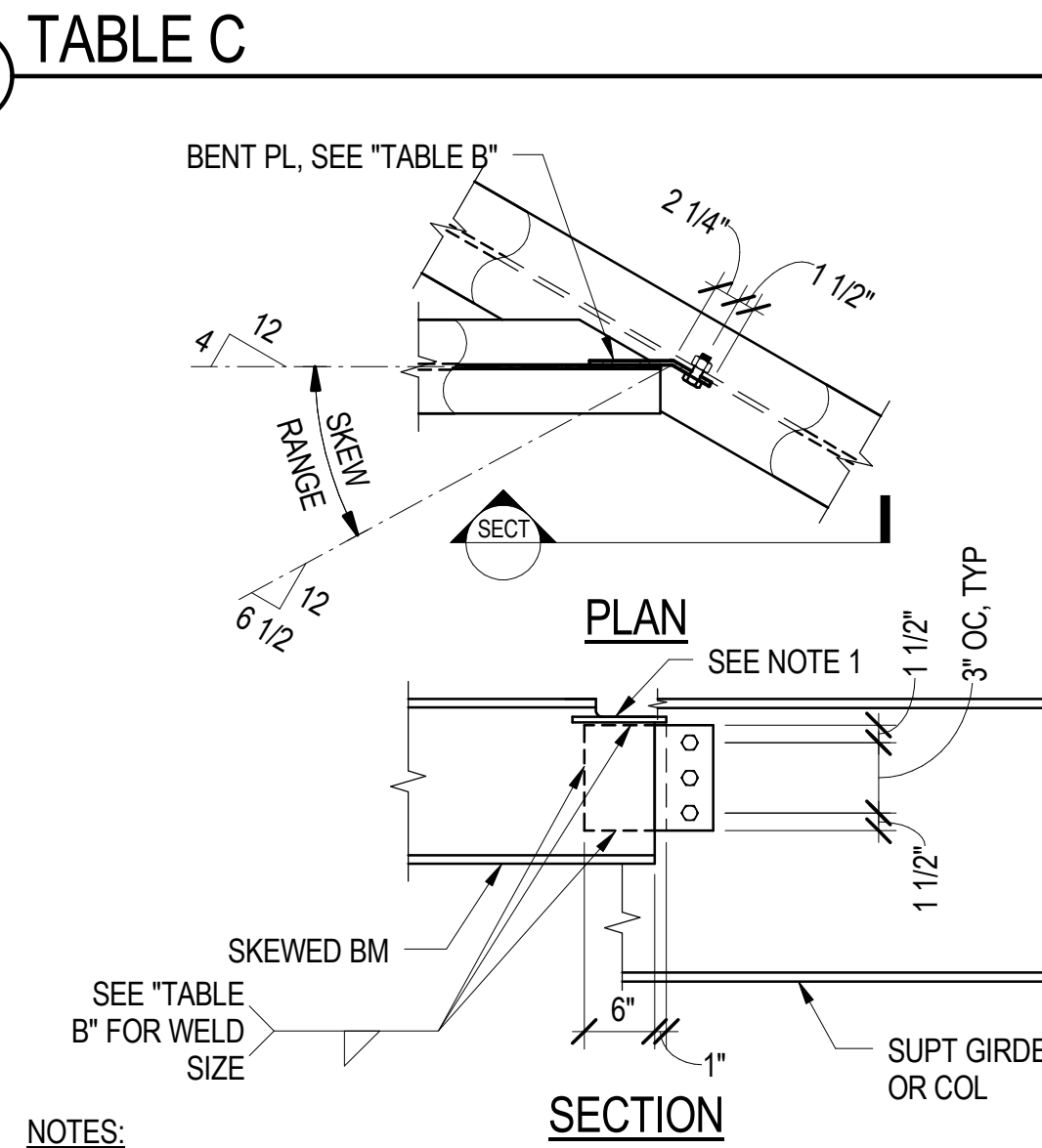
**TYPICAL SHALLOW BEAM CONNECTION**



**NOTES:**

- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" OR "TYPE C2" AND "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.
- COPED LENGTHS MAY EXCEED THE LIMITS SHOWN IN "TABLES B AND C."
- FOR SKEWED BEAMS, SEE "TYPICAL STEEL CONNECTION, TYPE C1" SECTION AND NOTE 3.

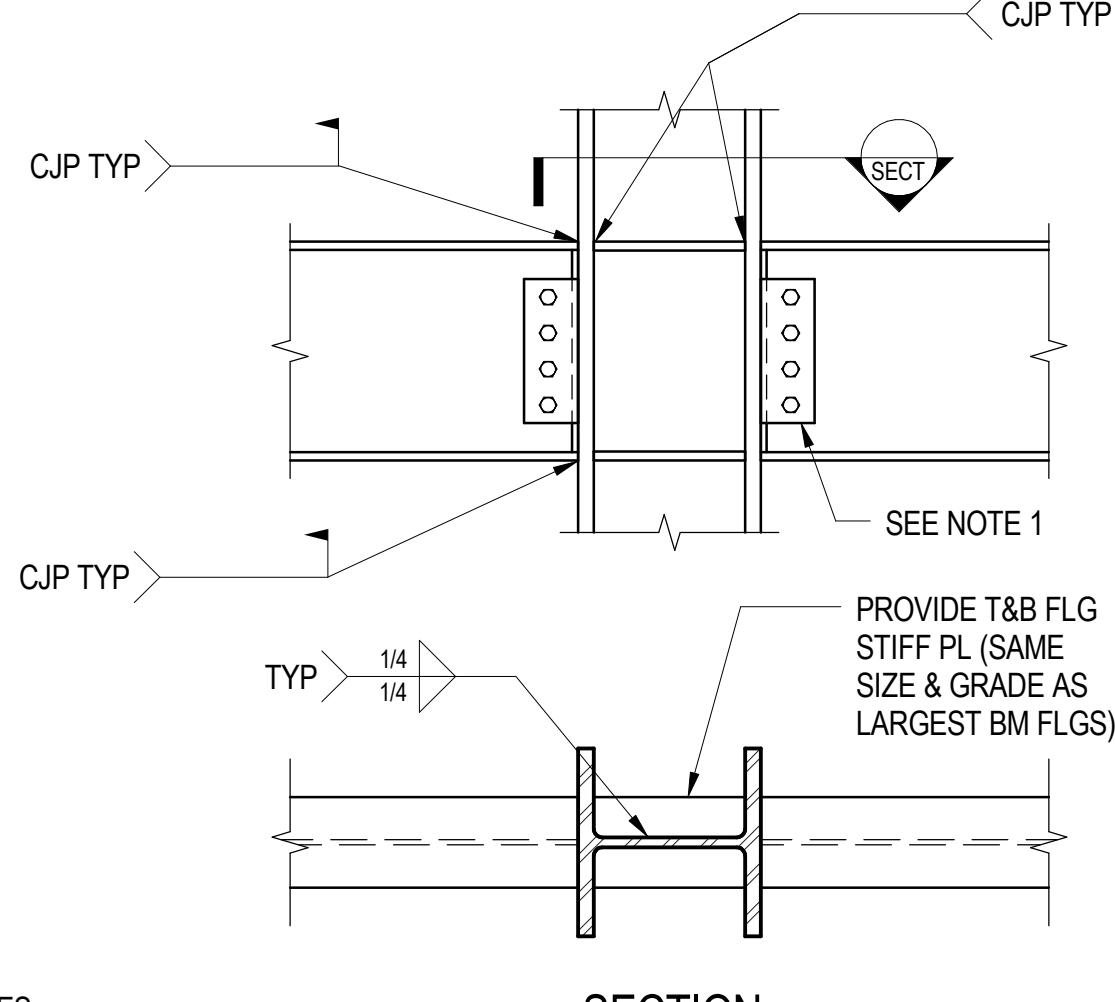
**TYPICAL STEEL CONNECTION, TYPE C3**



**NOTES:**

- SEE "TYPICAL COPED WEB STIFFENER" DETAIL FOR INFORMATION NOT SHOWN. CUT PLATE ONE SIDE AS REQUIRED FOR FIT UP.
- REFERENCE "TABLE B" FOR NUMBER OF BOLTS REQUIRED FOR MAXIMUM REACTION.

**TYPICAL STEEL CONNECTION, TYPE C8**

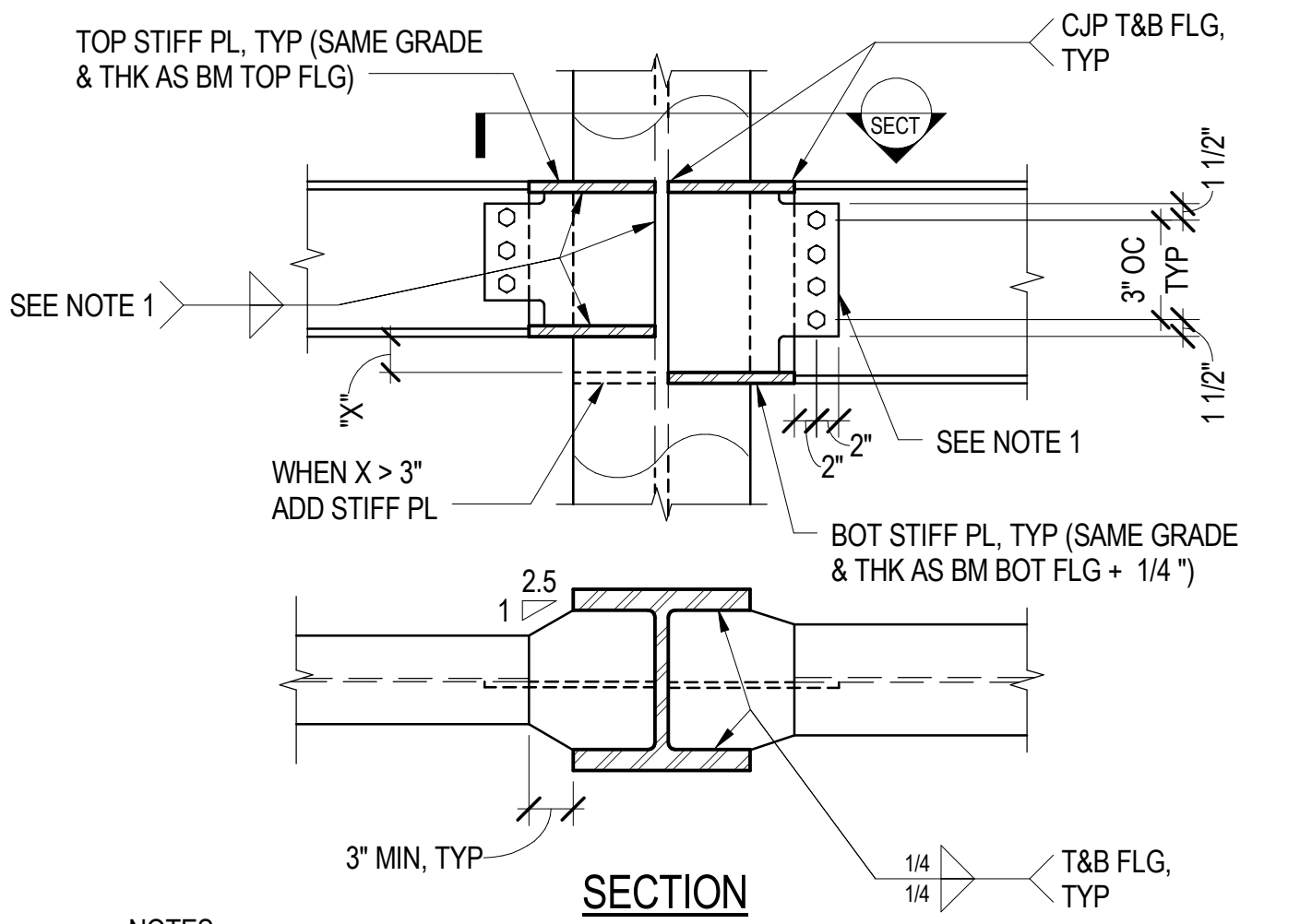


**NOTES:**

- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" OR "TYPE C2" AND "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.

**BEAM TO COLUMN FLANGE MOMENT CONNECTION**

**TYPICAL STEEL CONNECTION, TYPE C4**



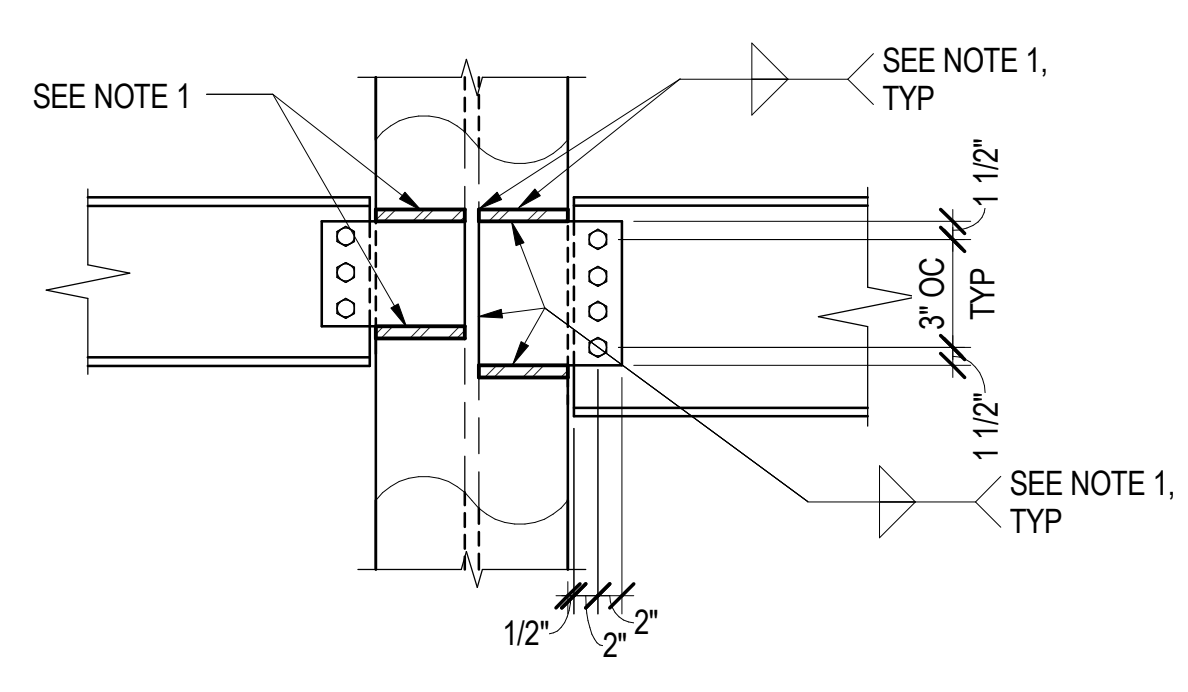
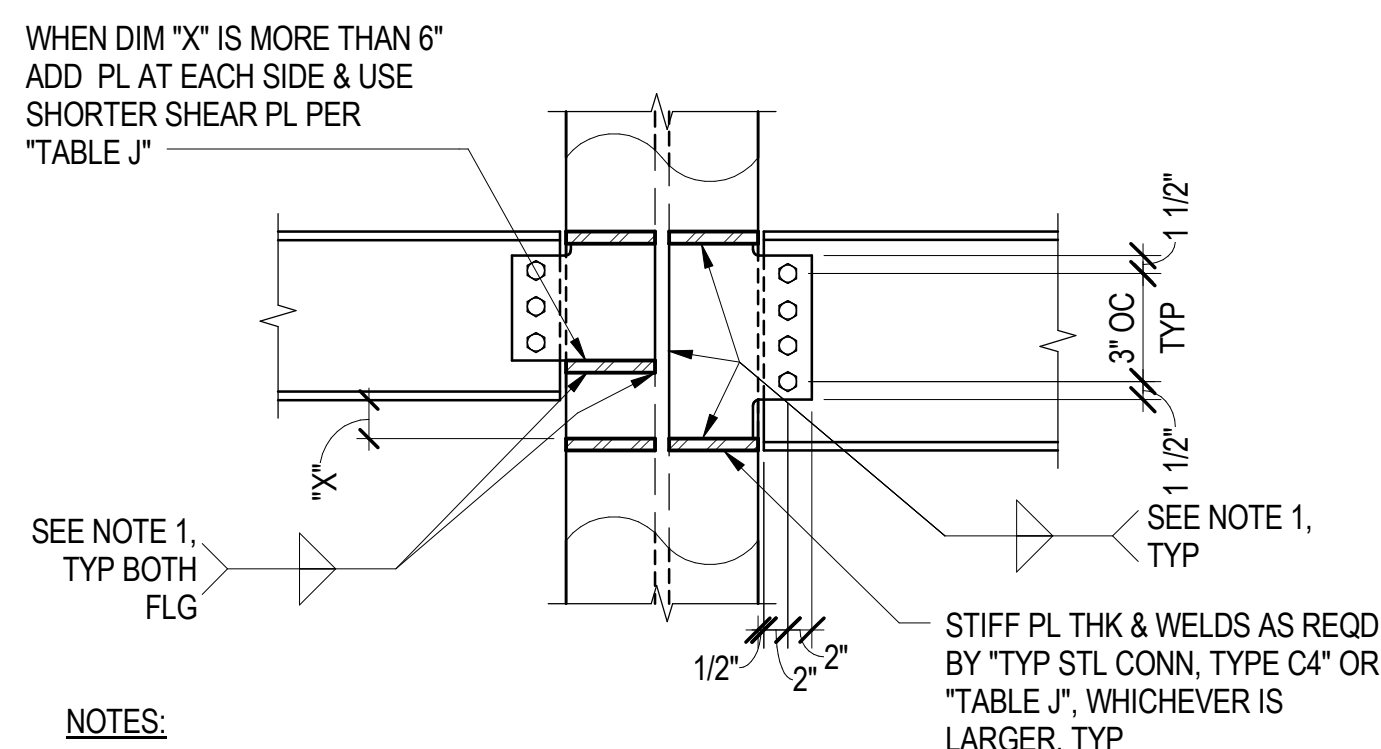
**NOTES:**

- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" FOR ADDITIONAL CONNECTION REQUIREMENTS.

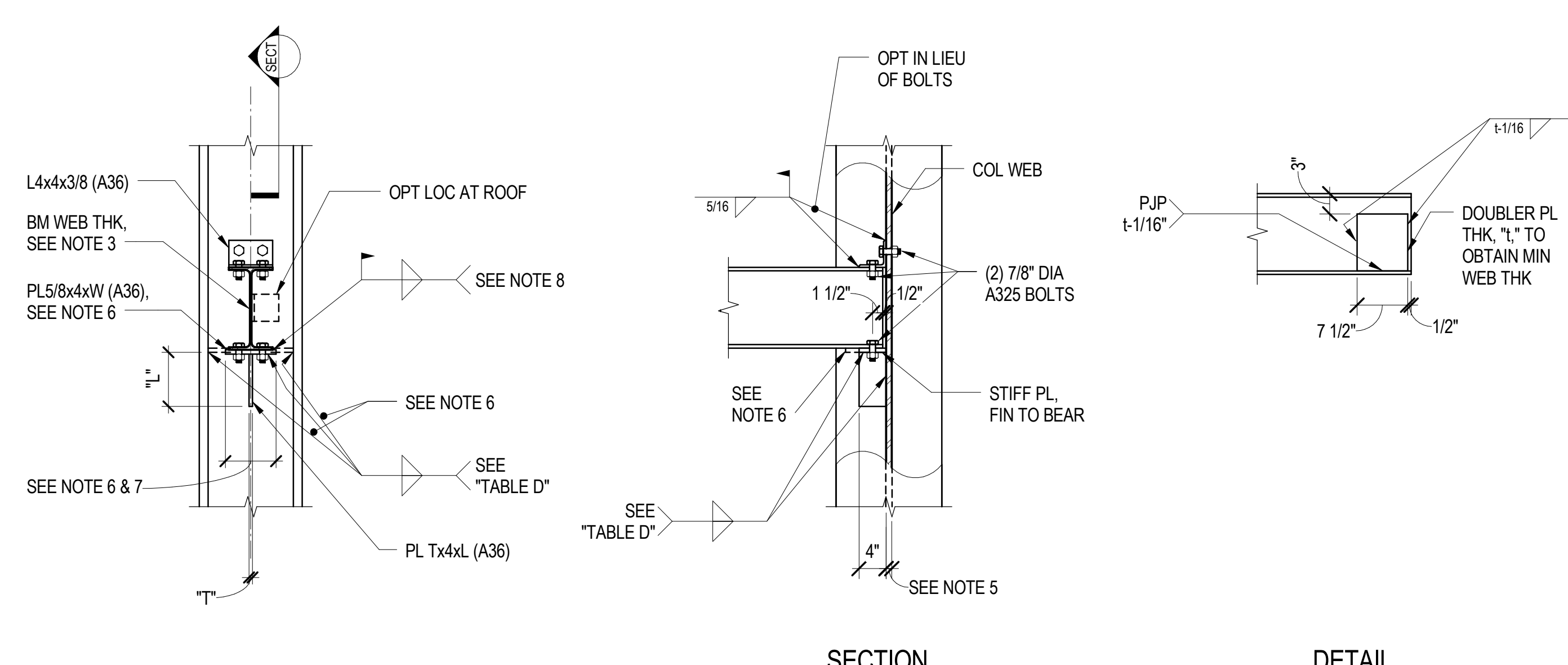
**BEAM TO COLUMN WEB MOMENT CONNECTION**

**TYPICAL STEEL CONNECTION, TYPE C5**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	NO. 1
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



	NUMBER OF BOLTS PER SIDE	MAXIMUM REACTION (KIPS)	PLATE THICKNESS (A36) (INCH)	WELD SIZE (INCH)
7/8" DIAMETER A325 BOLTS	2	13	3/8	1/4
	3	27	3/8	1/4
	4	44	1/2	5/16
	5	56	1/2	5/16
	6	75	1/2	5/16
	7	83	1/2	5/16
	8	91	1/2	5/16
1" DIAMETER A490 BOLTS	9	100	1/2	3/8
	10	108	1/2	3/8
	11	116	1/2	3/8
	12	124	1/2	3/8
	12	202	3/4	3/8



SECTION  
DETAIL  
SEATED BEAM TO COLUMN WEB NON-MOMENT CONNECTION

- NOTES:**
- SEE "TABLE J" FOR BOLTS, PLATES, AND WELDS FOR EACH SIDE OF CONNECTION.
  - BEAM FLANGES SHALL NOT BE COPEL.
  - CONNECTION TYPE CANNOT BE MIXED WITH OTHER BEAM TO COLUMN WEB CONNECTION.
  - BEAMS MAY BE SKEWED UP TO 30 DEGREES.
- BEAM TO COLUMN WEB NON-MOMENT CONNECTION (MOMENT CONNECTION AT FLANGES)**

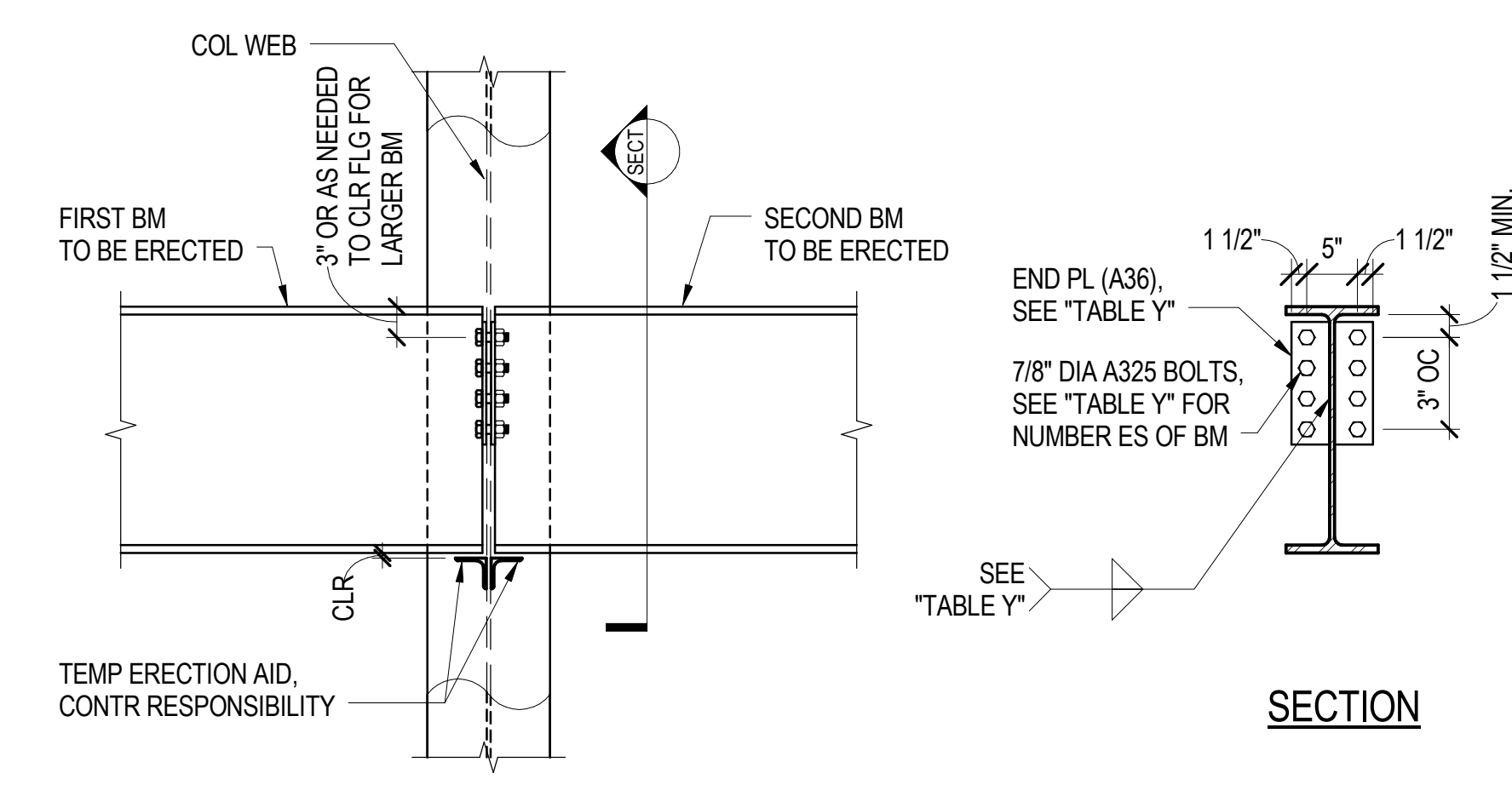
- NOTES:**
- SEE "TABLE J" FOR BOLTS, PLATES, AND WELDS FOR EACH SIDE OF CONNECTION.
  - BEAM FLANGES SHALL NOT BE COPEL.
  - CONNECTION TYPE CANNOT BE MIXED WITH OTHER BEAM TO COLUMN WEB CONNECTION.
  - BEAMS MAY BE SKEWED UP TO 30 DEGREES.
- BEAM TO COLUMN WEB NON-MOMENT CONNECTION (NON-MOMENT CONNECTION AT FLANGES)**

1 TYPICAL STEEL CONNECTION, TYPE C6

2 TYPICAL STEEL CONNECTION, TYPE C7

3 TABLE J

- NOTES:**
- WHEN THE BEAM WEB IS LESS THAN THE VALUE SHOWN, REDUCE ALLOWABLE REACTION BY THE RATIO WITH MINIMUM THICKNESS.
  - FOR BEAMS ON ONLY ONE SIDE, THE MINIMUM COLUMN WEB THICKNESS IS ONE HALF OF THE VALUE SHOWN.
  - WHEN COLUMN WEB IS LESS THAN VALUE SHOWN, REDUCE ALLOWABLE REACTION BY THE RATIO WITH THE MINIMUM THICKNESS.
  - MINIMUM NUMBER OF BOLTS PER SIDE SHALL CONFORM TO "TABLE A" IN "GENERAL NOTES FOR STEEL CONNECTIONS."
  - END PLATE SHALL FIT WITHIN BEAM DEPTH.
  - 1/4 INCH MAXIMUM SHIMS ALLOWED ON EACH BEAM END.
  - BLOCK BEAM FLANGES WHERE REQUIRED TO CLEAR COLUMN FLANGES, 1/4 INCH CLEAR MAXIMUM.
  - USE UNCOPEL FOR BEAM TO COLUMN FLANGE NON-MOMENT CONNECTION.
  - FOR BEAM TO BEAM CONNECTION, USE WITH "TYPICAL COPEL WEB STIFFENER" DETAIL.



7 TYPICAL STEEL CONNECTION, TYPE C10

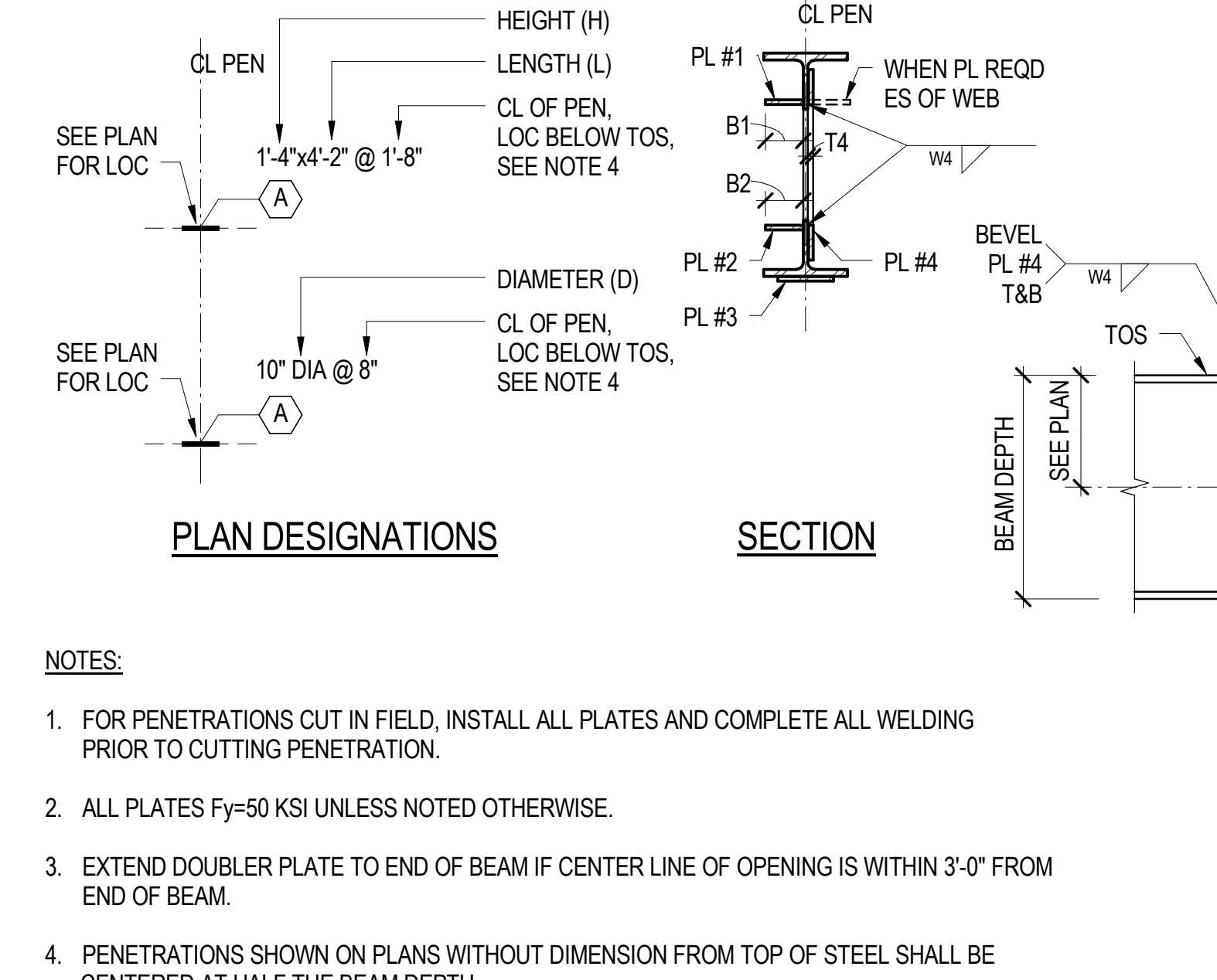
NUMBER OF BOLTS PER SIDE	7/8" DIA A325 BOLTS				Fy = 50 KSI	
	ALLOWABLE REACTION (KIPS)	END PLATE THICKNESS (INCH)	WELD SIZE (INCH)	MINIMUM BEAM WEB THICKNESS (INCH)	MINIMUM COLUMN WEB THICKNESS (INCH)	
2	18	1/4	3/16	0.19	0.13	
2	45	3/8	5/16	0.52	0.33	
3	29	1/4	3/16	0.20	0.14	
3	73	3/8	5/16	0.52	0.36	
4	50	1/4	3/16	0.25	0.18	
4	101	3/8	5/16	0.52	0.37	
5	75	5/16	1/4	0.30	0.22	
5	128	3/8	5/16	0.51	0.38	
6	107	5/16	1/4	0.35	0.26	
6	155	3/8	5/16	0.51	0.38	
7	182	3/8	5/16	0.51	0.38	
8	209	3/8	5/16	0.51	0.38	
9	236	3/8	5/16	0.51	0.38	
10	263	3/8	5/16	0.51	0.38	
11	290	3/8	5/16	0.50	0.39	
12	316	3/8	5/16	0.50	0.39	

8 TABLE Y

- NOTES:**
- SEE PLANS FOR BEAM REACTIONS.
  - SEE "TABLE D" FOR SEAT INFORMATION.
  - ADD DOUBLER PLATE PER THE DETAIL WHERE MINIMUM BEAM WEB THICKNESS REQUIREMENT PER "TABLE D" IS NOT SATISFIED. IN LIEU OF PROVIDING DOUBLER PLATE, THE "TABLE D" REACTION CAN BE SCALED BY THE RATIO OF THE ACTUAL WEB THICKNESS DIVIDED BY THE REQUIRED WEB THICKNESS.
  - THE CONNECTION MAY BE SKEWED A MAXIMUM OF 30 DEGREES BY SKEWING THE STIFFENER PLATE TO ALIGN WITH THE BEAM WEB.
  - WHERE "TYPICAL STEEL CONNECTION, TYPE C20" OCCURS ON BOTH SIDES OF THE COLUMN WEB, THE MINIMUM COLUMN WEB THICKNESS (Tweb) IS TO BE AS FOLLOWS OR THE "TABLE D" SEAT LENGTH (L) SHALL BE INCREASED BY MULTIPLYING THE LENGTHS BY CF AS FOLLOWS:
- | COLUMN STRENGTH | MINIMUM COLUMN WEB THICKNESS |            | CORRECTION FACTOR Cf |
|-----------------|------------------------------|------------|----------------------|
|                 | 1/4" WELD                    | 5/16" WELD |                      |
| Fy = 50 KSI     | 3/8                          | 1/2        | 1.5x(WELD/Tweb)      |
6. FOR COLUMNS WEIGHING MORE THAN 130 LB / FT WITH BEAMS FRAMING INTO ONE SIDE OF THE COLUMN WEB ONLY, EXTEND THE SEAT PLATE TO THE COLUMN FLANGES AND PROVIDE ADDITIONAL PLATE LENGTH TO ACCOMMODATE (2) ADDITIONAL 7/8 INCH DIAMETER A325 BOLTS AT 3 INCH SPACING.
7. W IS A MINIMUM WIDTH PER "TABLE D." ALL CONNECTIONS MUST BE FABRICATED WITH THE PROPER BOLT SPACING AND EDGE DISTANCES PER AISC.
8. WHERE THE FLANGE WIDTH IS LESS THAN 5 1/2 INCHES, WELD THE BEAM FLANGE TO THE SEAT PLATE IN LIEU OF BOLTING.

REACTION (KIPS)	SEAT (IN)		STEM PLATE (IN)		WELD SIZE (INCH)	MINIMUM BEAM WEB THICKNESS Fy=50 KSI (INCH)
	W	L	T	W		
20	6	6	1/2	1/4	1/4	0.25
28	6	7	1/2	1/4	1/4	0.30
36	6	8	1/2	1/4	1/4	0.34
46	6	9	1/2	1/4	1/4	0.39
55	6	10	5/8	1/4	1/4	0.40
64	6	11	5/8	1/4	1/4	0.45
73	6	12	3/4	1/4	1/4	0.48
83	6	13	3/4	1/4	1/4	0.54
115	6 1/2	14	1	3/4	5/16	0.66
127	7	15	1	3/4	5/16	0.67
139	7 1/2	16	1 1/8	5/16	5/16	0.69
151	8	17	1 1/4	5/16	5/16	0.71
163	8 1/2	18	1 3/8	5/16	5/16	0.74
175	9	19	1 3/8	5/16	5/16	0.75
187	9 1/2	20	1 1/2	5/16	5/16	0.76
200	10	21	1 5/8	5/16	5/16	0.77
212	10 1/2	22	1 3/4	5/16	5/16	0.81
224	11	23	1 3/4	5/16	5/16	0.83

15 TYPICAL STEEL CONNECTION, TYPE C20



NOTES:

- FOR PENETRATIONS CUT IN FIELD, INSTALL ALL PLATES AND COMPLETE ALL WELDING PRIOR TO CUTTING PENETRATION.
- ALL PLATES Fy=50 KSI UNLESS NOTED OTHERWISE.
- EXTEND DOUBLER PLATE TO END OF BEAM IF CENTER LINE OF OPENING IS WITHIN 3'-0" FROM END OF BEAM.
- PENETRATIONS SHOWN ON PLANS WITHOUT DIMENSION FROM TOP OF STEEL SHALL BE CENTERED AT HALF THE BEAM DEPTH.

15 TYPICAL BEAM WEB PENETRATION

MARK	HEIGHT (H)	LENGTH (L)	CENTER LINE OF PENETRATION LOCATION BELOW TOP OF STEEL	PLATE #1 T1 x B1 x L1 (INCH)	W1 (INCH)	PLATE #2 T2 x B2 x L2 (INCH)	W2 (INCH)	PLATE #3 T3 x B3 x L3 (INCH)	W3 (INCH)	DOUBLER PLATE #4 L4 x T4 (INCH)	W4 (INCH)	REMARKS
A	18"Ø		1'-6"									
B	18"Ø		1'-6"									
C	12"Ø		1'-6"									
D	1'-4"	3'-2"	1'-6"	1/2x3x12	1/4	1/2x3x12	1/4	1/2x3x12	1/4	1/2x3x12	1/4	
E	1'-8"	4'-4"	1'-6"	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	
F	1'-4"	1'-10"	1'-6"	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	
G	1'-4"	3'-6"	1'-6"	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	
H	15'Ø		1'-6"									

15 BEAM WEB PENETRATION SCHEDULE



- Transbay Tower**  
101 First Street  
San Francisco, CA
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT STRUCTURAL BID ADDENDUM NO. 1	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**TYPICAL STEEL BEAM CONNECTIONS**

PROJECT NO.  
08044

DRAWING NUMBER  
**S4.23**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

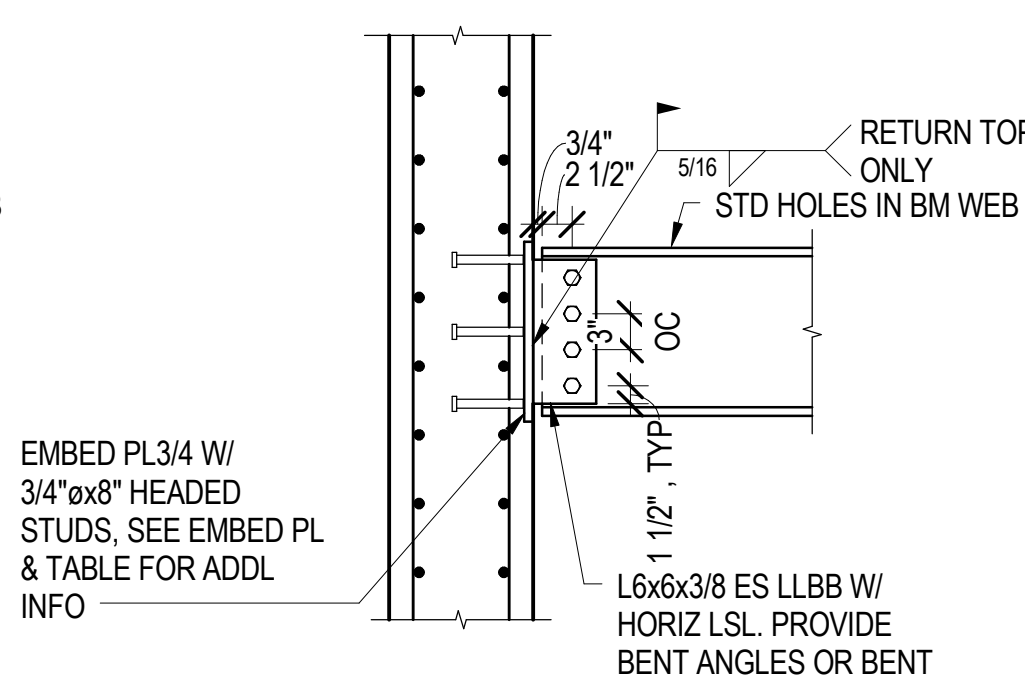
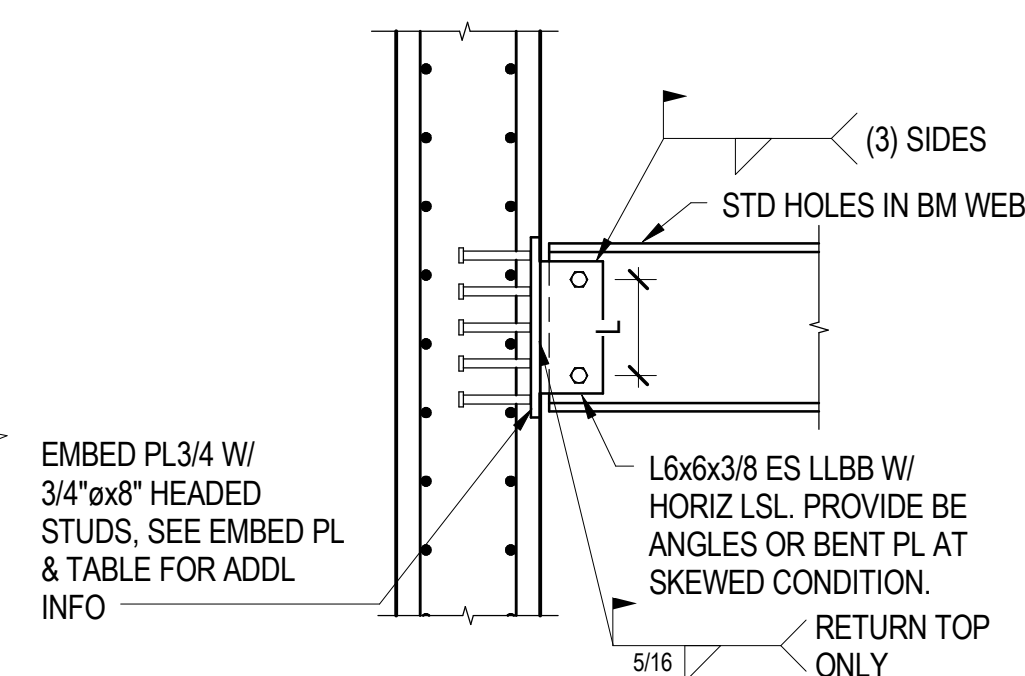
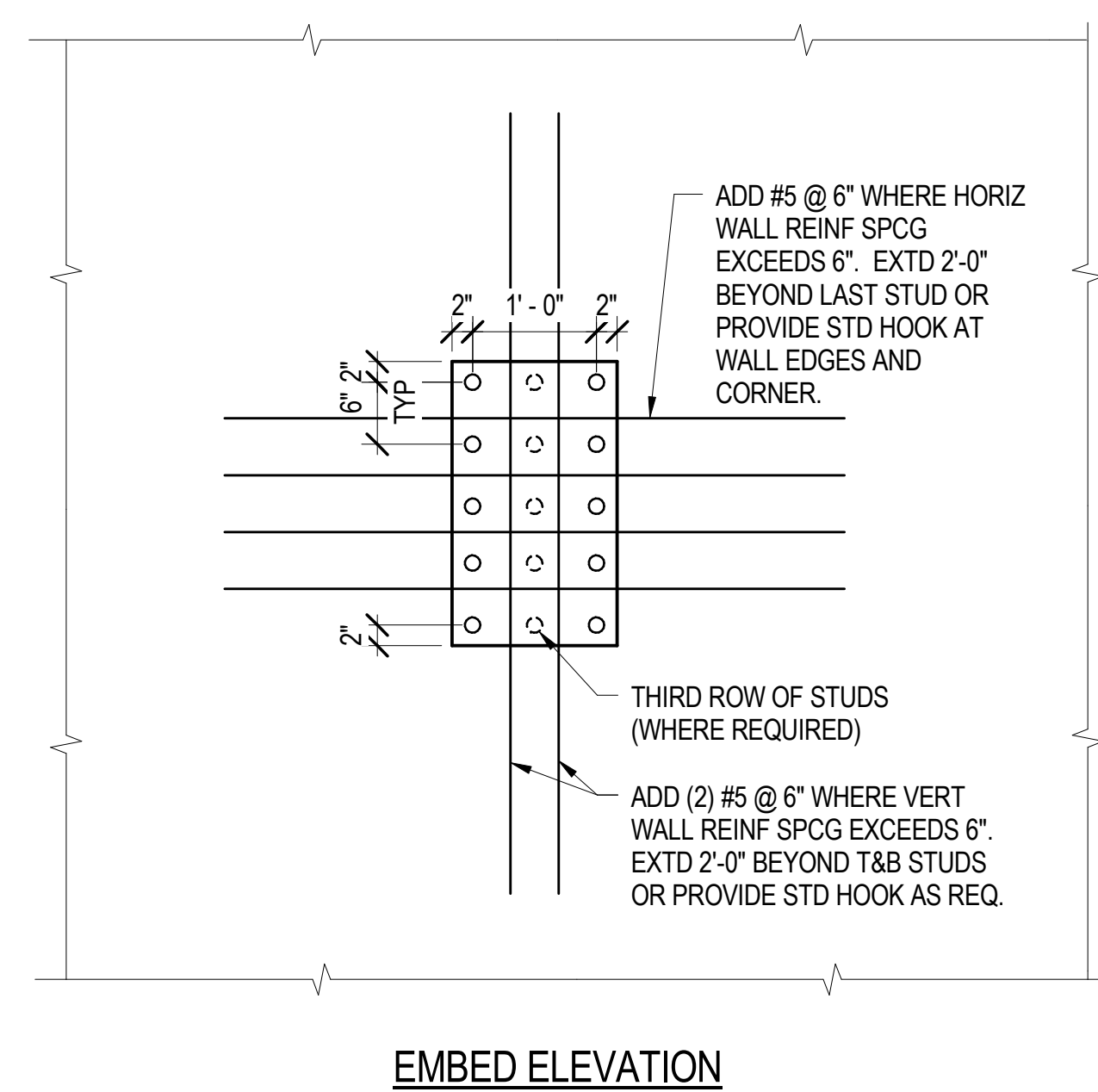
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



EMBED PLATE TABLE		
NUMBER HORIZ ROWS	NUMBER VERT ROWS	REACTIONS (KIPS)
2	2	42
3	2	63
4	2	84
3	3	95
4	3	126
5	3	158
6	3	189
7	3	221

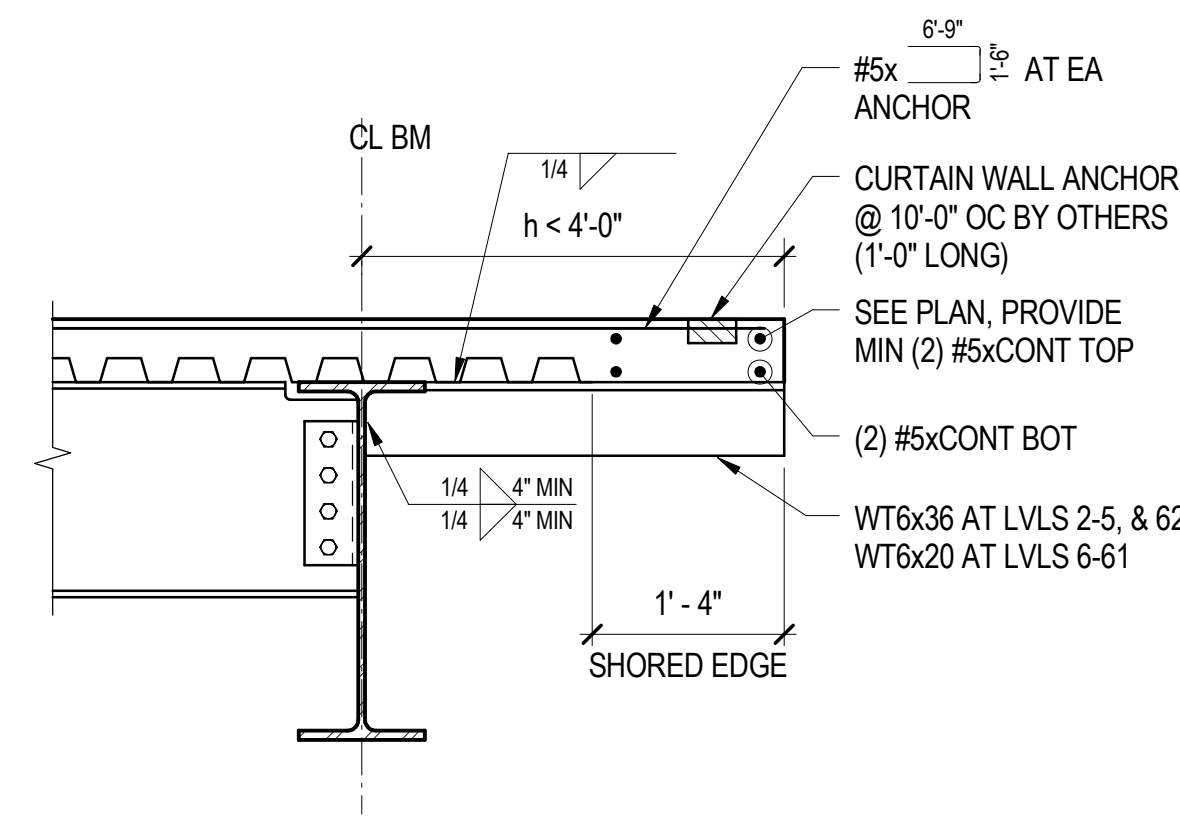
WELDED CONNECTION TABLE	
ANGLE LENGTH, L (INCHES)	REACTION (KIPS)
6	21
9	44
12	71
15	100
18	130
21	159
24	181
27	202

BOLTED CONNECTION TABLE			
7/8" A325 SC		1" A490 SC	
NUMBER OF BOLTS	REACTIONS (KIPS)	NUMBER OF BOLTS	REACTION (KIPS)
2	8	2	10
3	17	3	22
4	28	4	46
5	41	5	66
6	53	6	75
7	66	7	87
8	79	8	105
9	92	9	117
10	105	10	137

20 TYPICAL STEEL CONNECTION TO CONCRETE WALL, TYPE C24

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

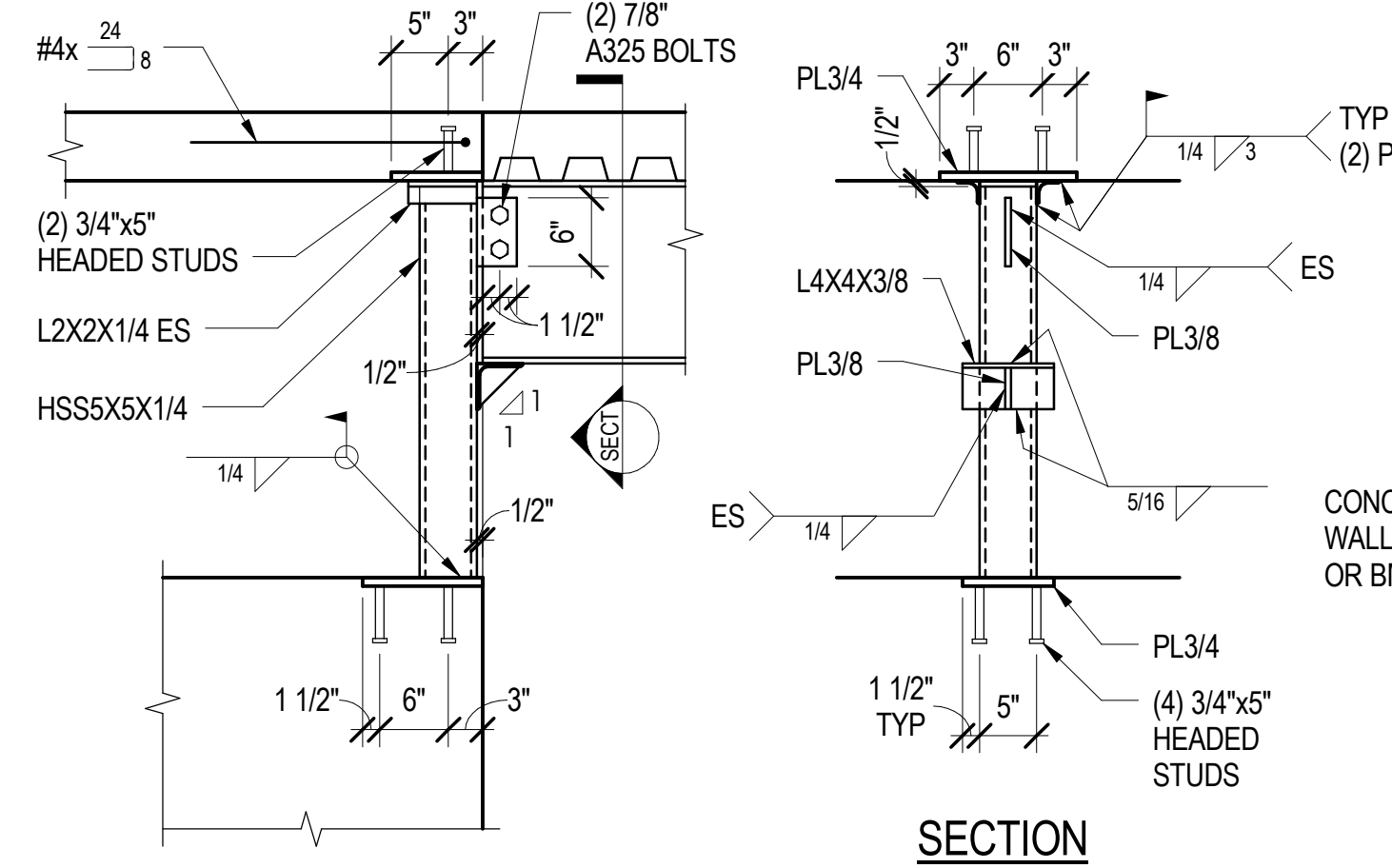
DRAWING TITLE  
**TYPICAL STEEL BEAM CONNECTIONS**



- NOTES:**
- CONTRACTOR OPTION: PROVIDE SLAB SUPPORT ABOVE LEVEL 6 PER "TYPICAL DECK EDGE CONDITIONS" IF SLAB EDGE "h" IS LESS THAN 1'-6".

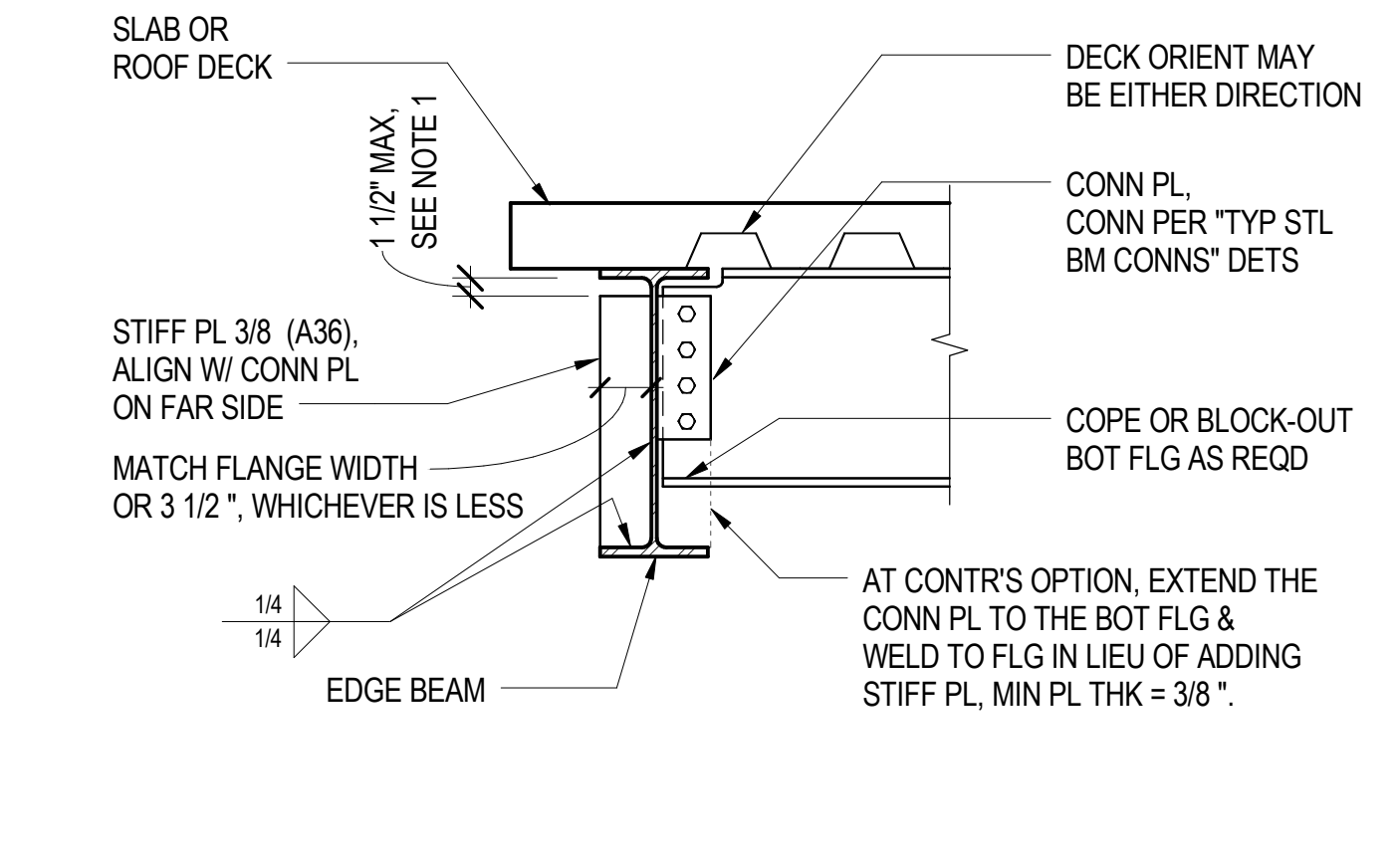
2 TYPICAL SLAB SUPPORT STUB

3 TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING

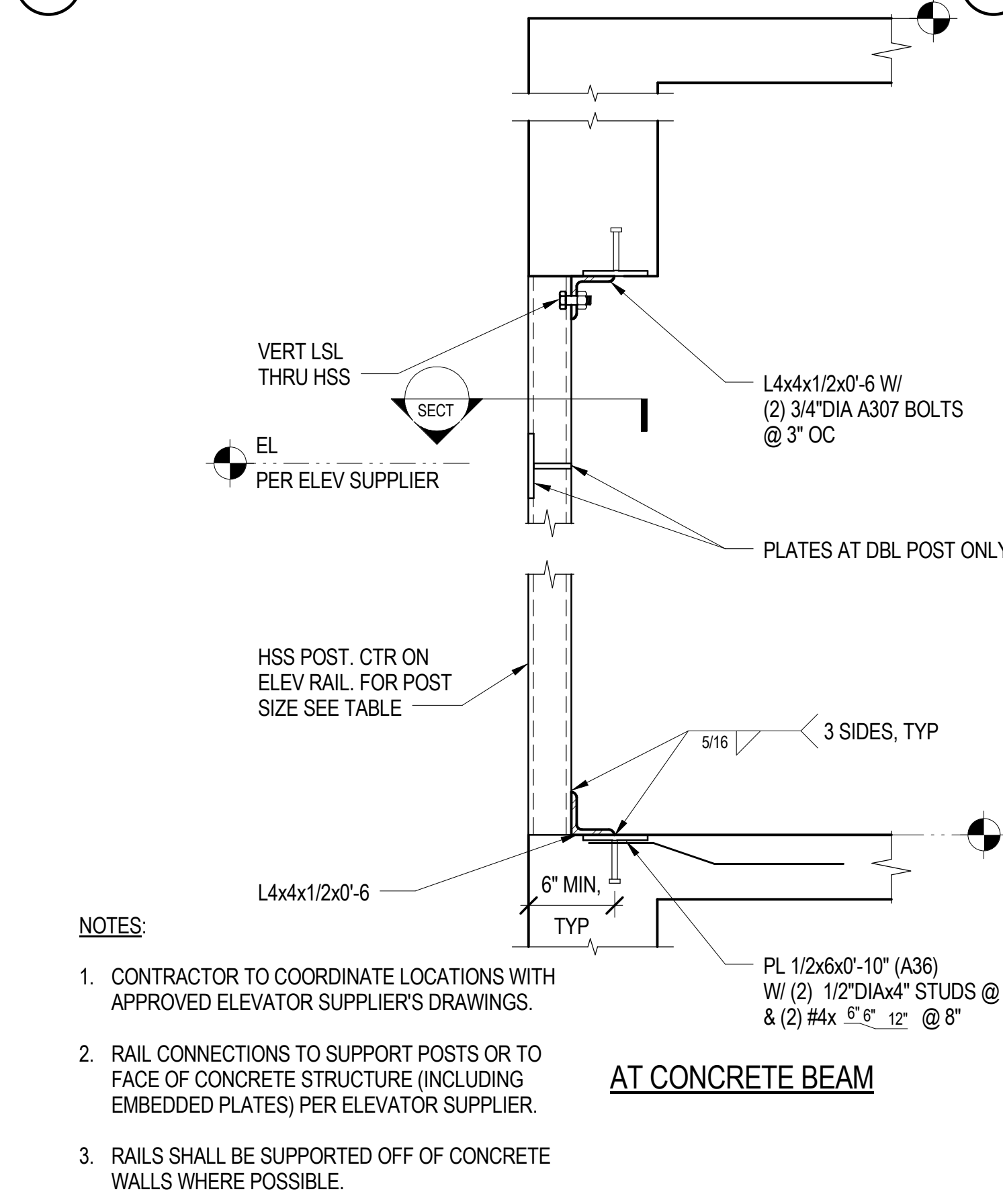


4 TYPICAL ELEVATOR SPREADER BEAM CONN

5 TYPICAL STEEL EDGE BEAM STIFFENER



- NOTES:**
- AT LOCATIONS WHERE A CONCRETE SLAB DOES NOT EXIST AT EDGE BEAM, THE STIFFENER PLATE OR CONNECTION PLATE SHALL BE EXTENDED TO FULL DEPTH AND WELDED ON THREE SIDES.
  - THIS DETAIL APPLIES AT ALL EDGE OF SLAB CONDITIONS.



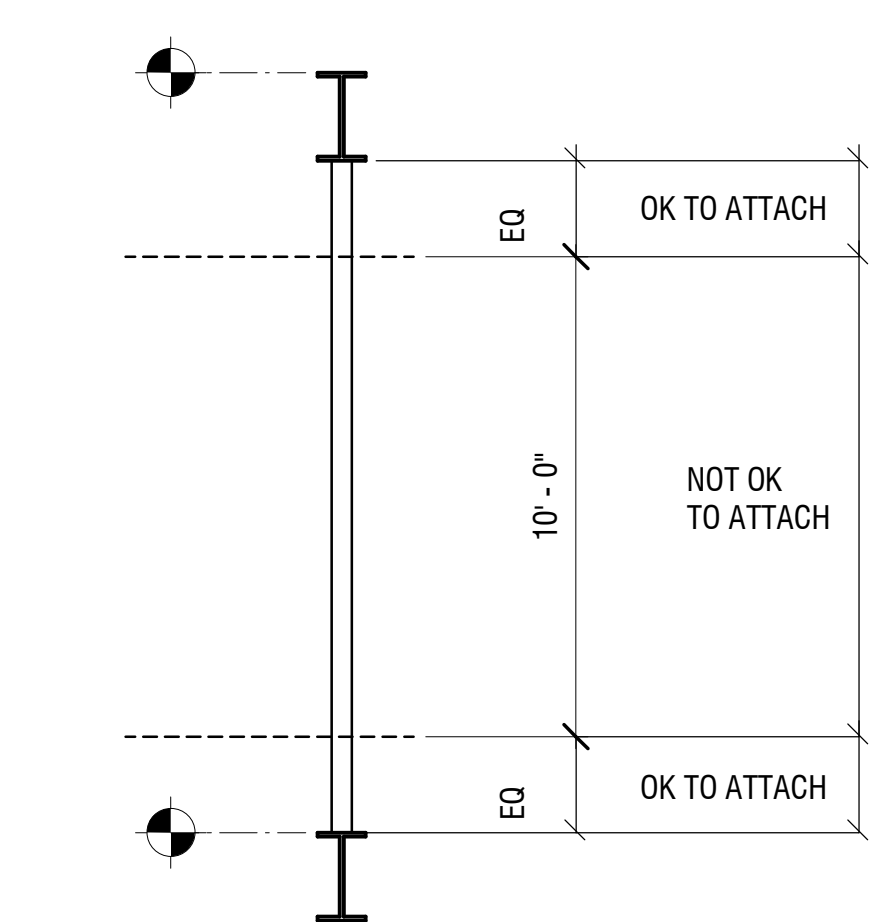
- NOTES:**
- CONTRACTOR TO COORDINATE LOCATIONS WITH APPROVED ELEVATOR SUPPLIER'S DRAWINGS.
  - RAIL CONNECTIONS TO SUPPORT POSTS OR TO FACE OF CONCRETE STRUCTURE (INCLUDING EMBEDDED PLATES) PER ELEVATOR SUPPLIER.
  - RAILS SHALL BE SUPPORTED OFF OF CONCRETE WALLS WHERE POSSIBLE.

9 TYPICAL ELEVATOR RAIL SUPPORT

POST LENGTH "L"	POST SIZE
UP TO 14'-0"	HSS12x4x1/2
14'-0" TO 17'-0"	(2) HSS14x4x1/2
17'-0" TO 20'-0"	(2) HSS16x4x1/2 w/ FIXITY AT BASE

ELEVATOR SPREADER BEAM SCHEDULE	
ELEVATORS	SPREADER BEAM
SE-1, SE-2	HSS10x4x1/2
ALL OTHERS	HSS6x4x1/2

10 ELEVATOR SPREADER BEAM SCHEDULE



15 TYPICAL ELEVATOR RAIL ATTACHMENT LOCATIONS

- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

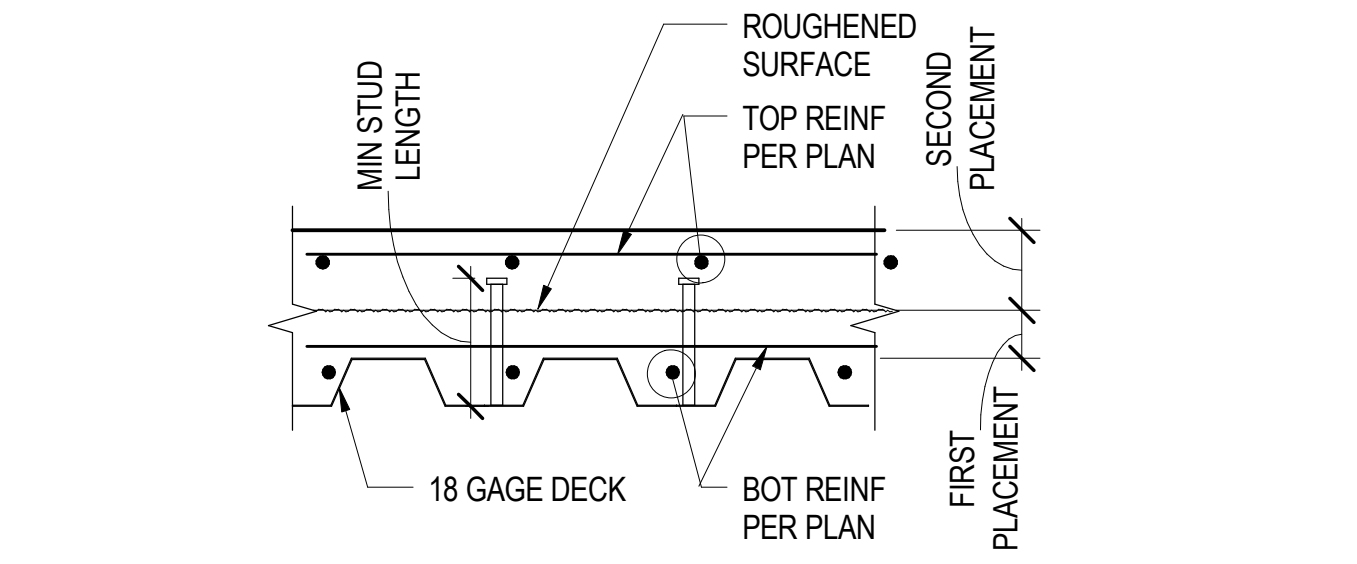
**TYPICAL STEEL DETAILS AND WINDOW WASHING DETAILS**

NO. PROJECT NO. DRAWING NUMBER  
08044 S4.25



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

CONCRETE THICKNESS NOTED ON PLAN (INCH)	THICKNESS OF FIRST PLACEMENT (INCH)	THICKNESS OF SECOND PLACEMENT (INCH)	MINIMUM STUD LENGTH (INCH)
8	3	5	8
10	3	7	8
18	6	12	12, MAY BE PIGGYBACKED

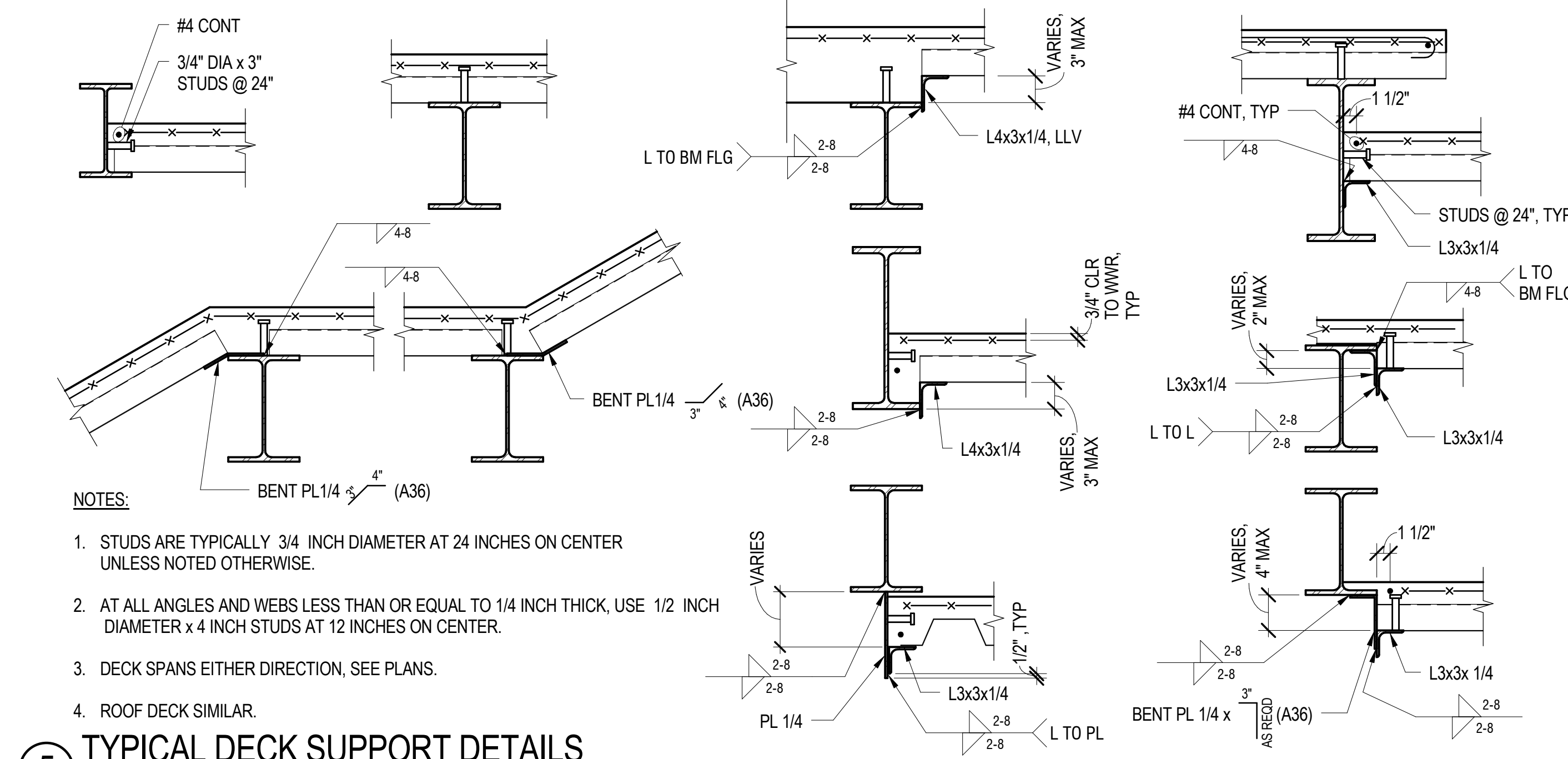
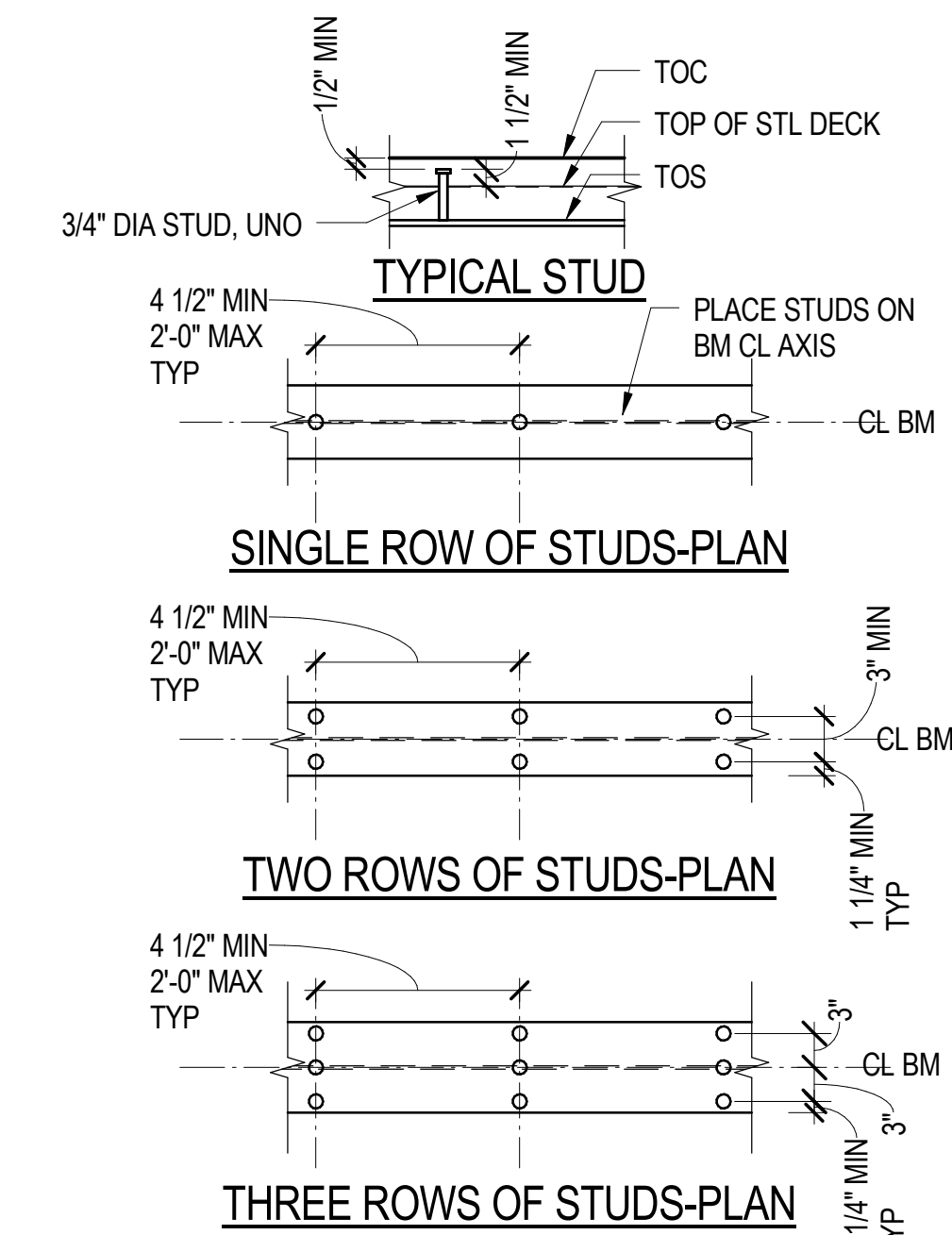


- NOTES:**
- ALLOW CONCRETE IN FIRST PLACEMENT TO ATTAIN DESIGN STRENGTH BEFORE MAKING SECOND PLACEMENT.
  - LOCATE BOTTOM REINFORCEMENT CALLED OUT IN PLAN IN FIRST PLACEMENT.
  - LOCATE TOP REINFORCEMENT CALLOUT IN PLAN IN SECOND PLACEMENT.
  - SEE TABLE ABOVE FOR DETAILING DIMENSIONS.

**1 TYPICAL THICK CONCRETE ON METAL DECK**

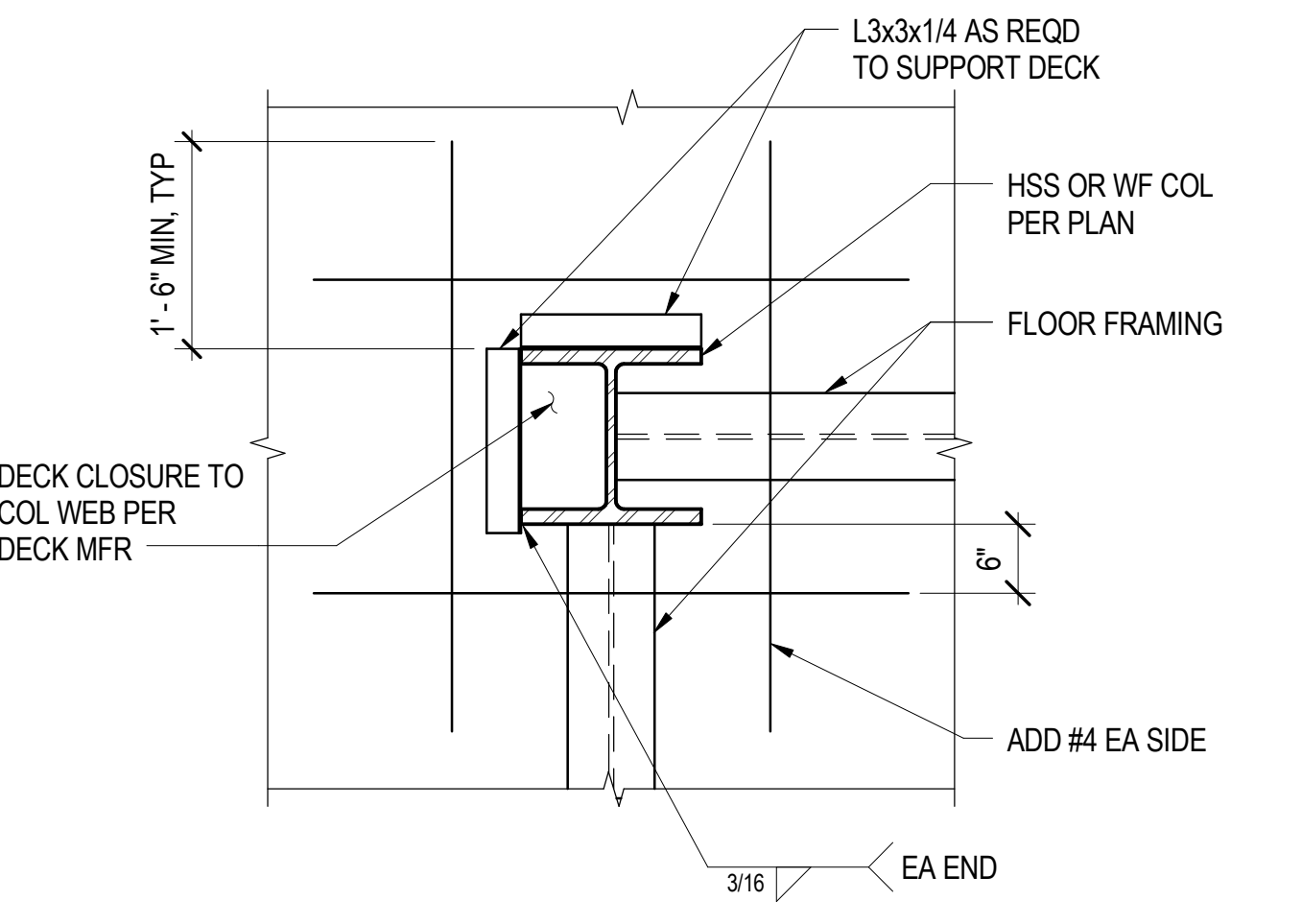
- NOTES:**
- SEE PLAN FOR REQUIRED NUMBER OF STUDS. STUDS SHALL BE PLACED AT A MAXIMUM SPACING OF 2'-0" ALONG THE BEAM AXIS UNLESS NOTED OTHERWISE ON PLAN. SEE "GENERAL NOTES" FOR MINIMUM NUMBER OF STUDS AND MINIMUM STEEL COMPOSITE DECK TO STEEL BEAM FASTENING REQUIREMENTS.
  - UNLESS NOTED OTHERWISE, STUDS ARE TO BE EQUALLY SPACED ALONG THE BEAM LENGTH AND PLACED SYMMETRICALLY ABOUT THE BEAM CENTERLINE AXIS. IF EQUAL SPACING IS NOT POSSIBLE DUE TO DECK CONFIGURATION, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED.
  - THE REQUIRED NUMBER OF STUD ROWS SHALL BE DETERMINED AS FOLLOWS (BEAM LENGTH IN FEET):
    - A. FOR DECK FLUTES PERPENDICULAR TO THE BEAM:  
# ROWS = # STUDS / BEAM LENGTH
    - B. FOR DECK FLUTES PARALLEL TO THE BEAM:  
# ROWS = (0.375 x # STUDS) / BEAM LENGTH
  - FOR DECK FLUTES PARALLEL TO THE BEAM, THE FIRST STUD (OR STUDS) SHALL BE PLACED 6" FROM THE BEAM ENDS. FOR DECK FLUTES PERPENDICULAR TO THE BEAM, THE FIRST STUD (OR STUDS) SHALL BE PLACED IN THE FLUTE CLOSEST TO THE BEAM ENDS.
  - FOR CANTILEVER SPANS, STUDS SHALL BE PLACED IN ONE ROW ALONG THE BEAM CENTERLINE AXIS AT A MAXIMUM SPACING OF 2'-0". STUDS PLACED ON THE CANTILEVER SPAN ARE NOT INCLUDED IN THE NUMBER OF STUDS SHOWN ON THE DRAWINGS.
  - WHERE WELDED WIRE REINFORCING IS USED AS SLAB REINFORCEMENT, ADDITIONAL REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE BEAM, ACROSS THE BEAM AND CANTILEVERED SPANS AS FOLLOWS:
    - 1 OR 2 STUDS / FT - ADD NONE
    - 3 STUDS / FT - ADD #4x5'-0" @ 12"
    - 4 OR MORE STUDS / FT - ADD #4x5'-0" @ 10"
  - IN ADDITION TO THE NUMBER OF STUDS SHOWN ON PLAN, WHERE A C2 OR C24 CONNECTION IS USED, PROVIDE (1) ADDITIONAL STUD WITHIN 1'-6" OF THE BEAM END WITH THAT CONNECTION.

**2 TYPICAL SHEAR STUD PLACEMENT AND ADDED REINFORCING**

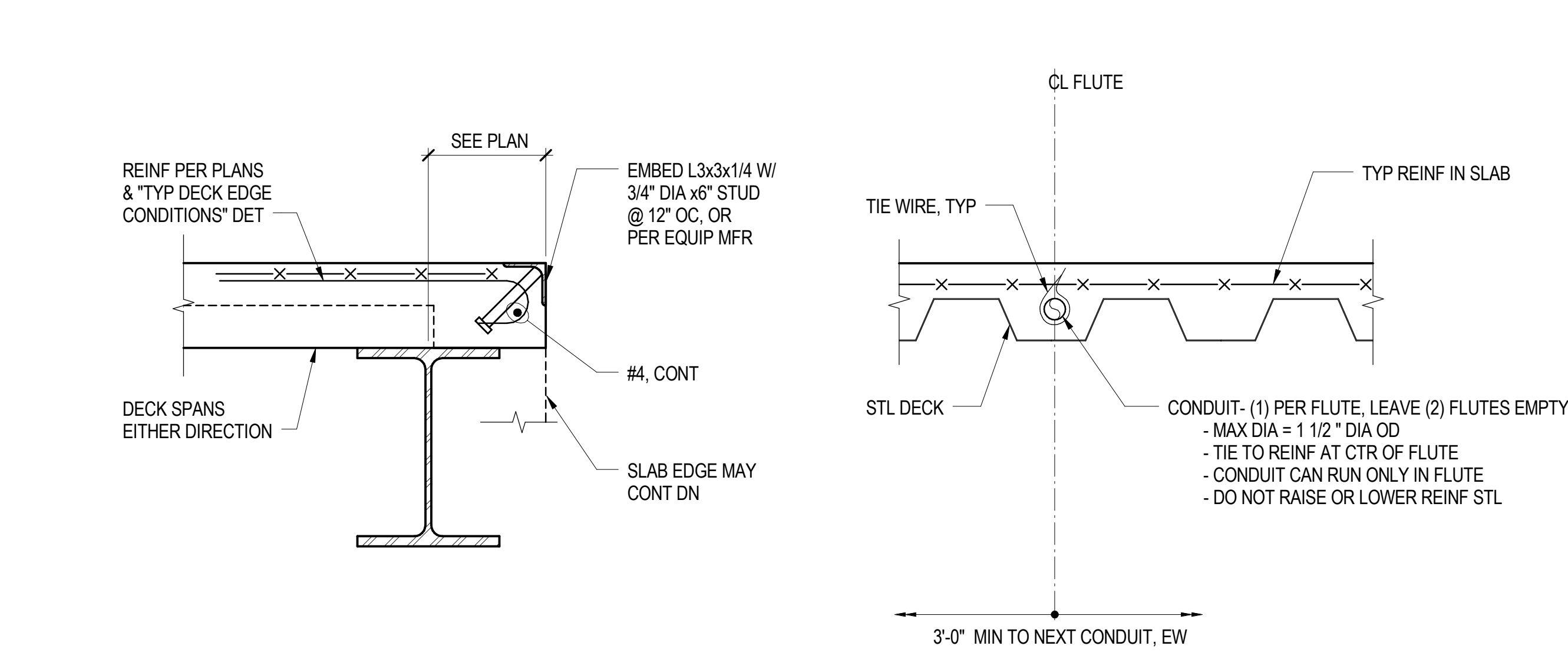


**5 TYPICAL DECK SUPPORT DETAILS**

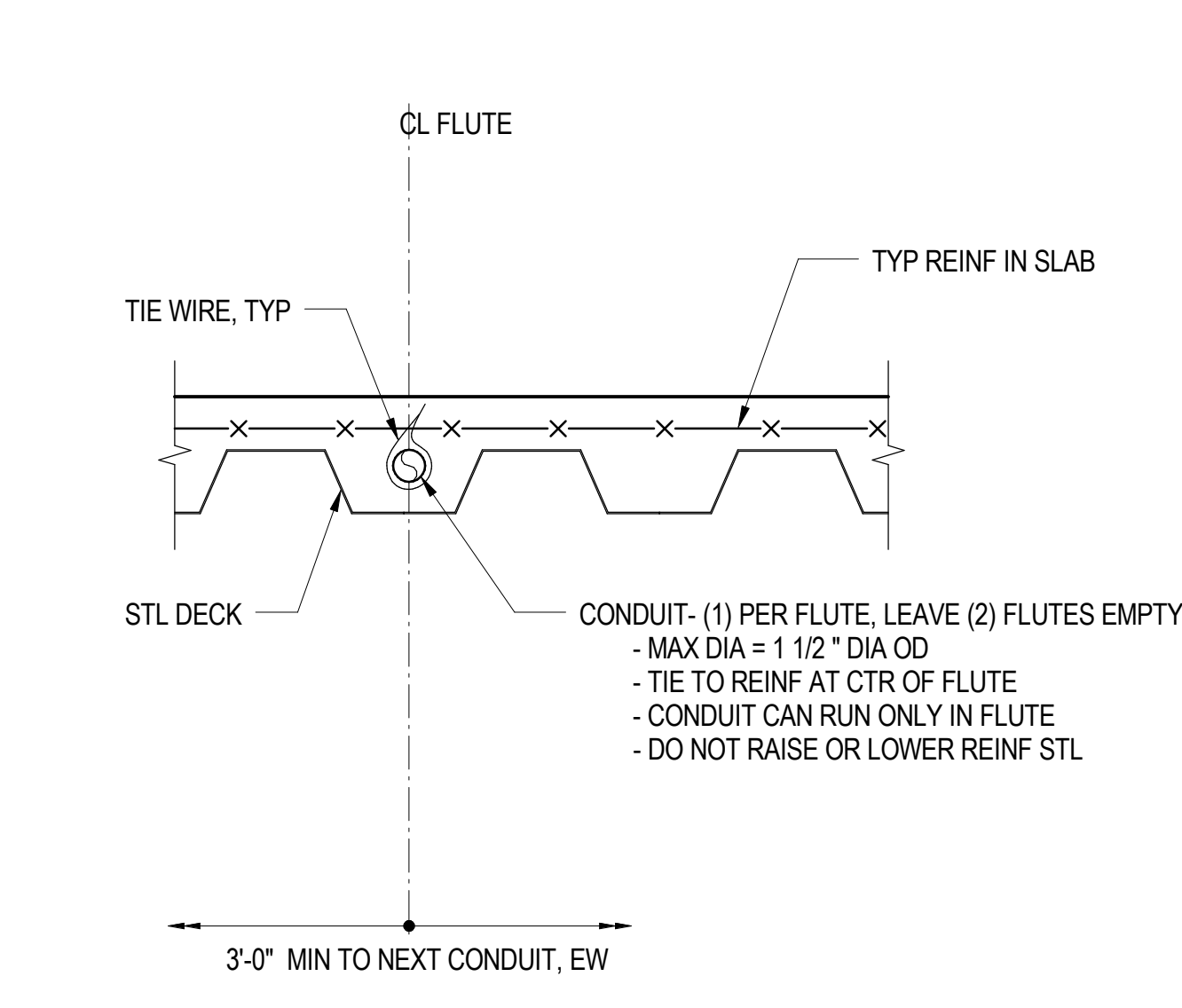
- NOTES:**
- STUDS ARE TYPICALLY 3/4" INCH DIAMETER AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.
  - AT ALL ANGLES AND WEBS LESS THAN OR EQUAL TO 1/4" INCH THICK, USE 1/2" INCH DIAMETER x 4" INCH STUDS AT 12 INCHES ON CENTER.
  - DECK SPANS EITHER DIRECTION, SEE PLANS.
  - ROOF DECK SIMILAR.



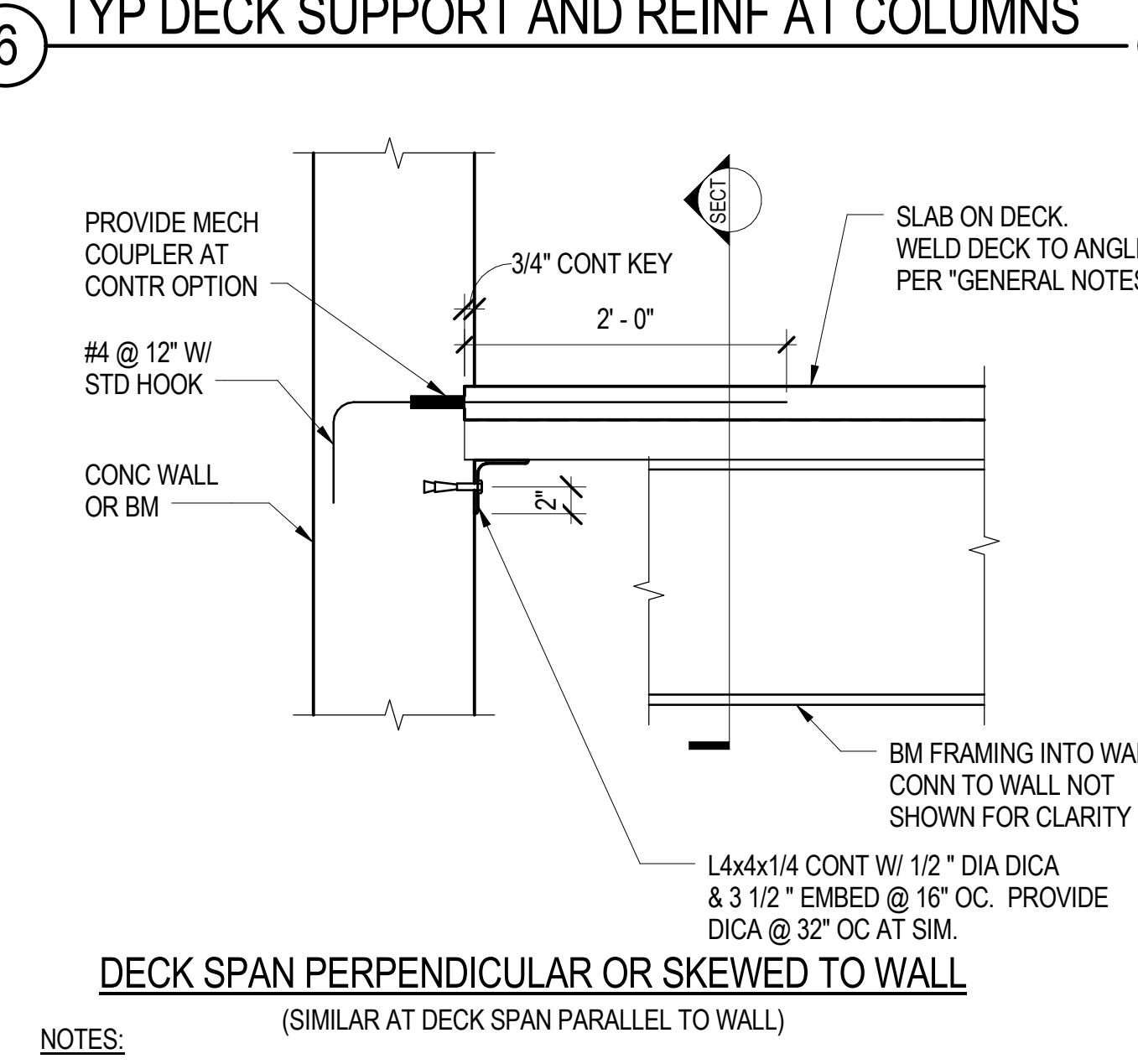
**6 TYP DECK SUPPORT AND REINF AT COLUMNS**



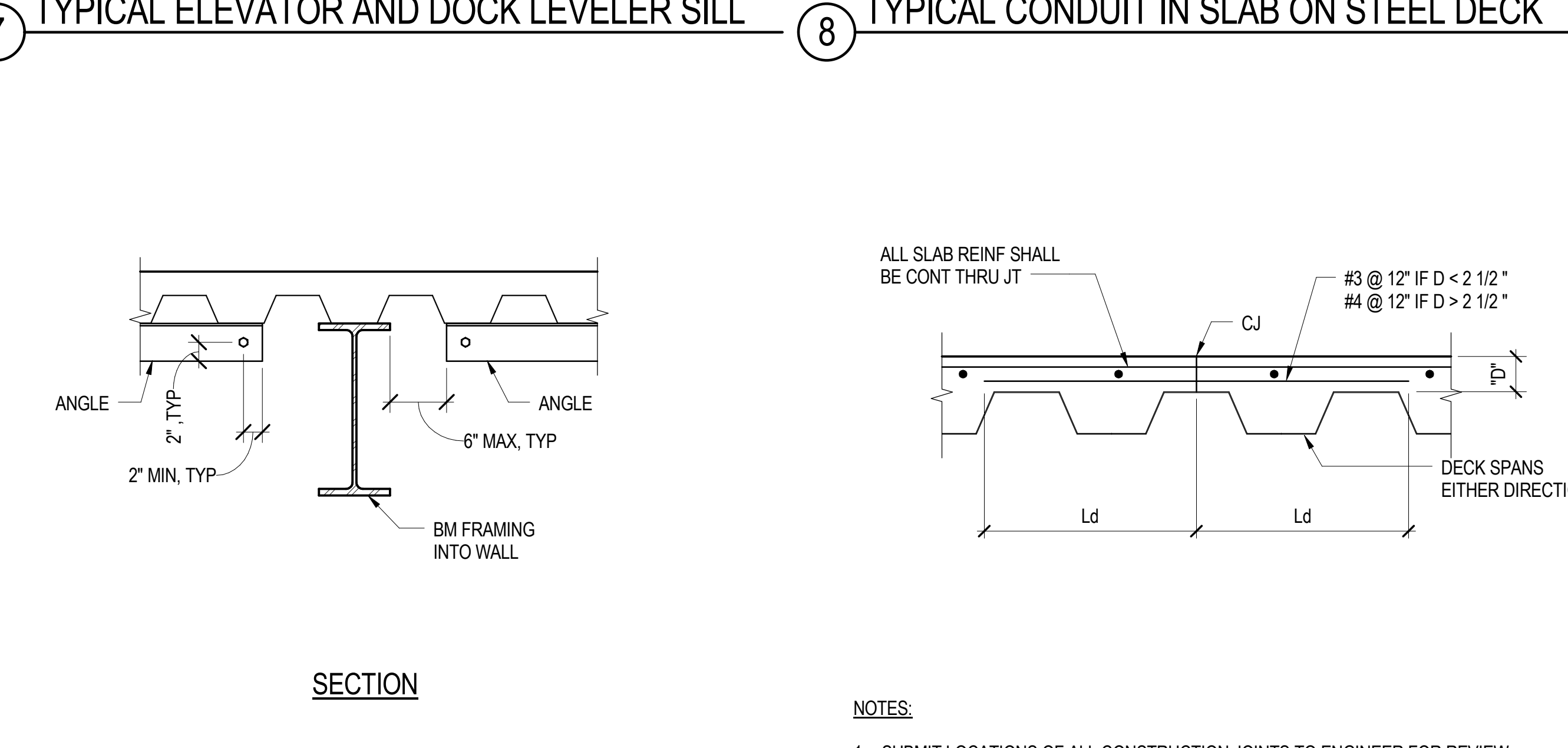
**7 TYPICAL ELEVATOR AND DOCK LEVELER SILL**



**8 TYPICAL CONDUIT IN SLAB ON STEEL DECK**



**12 TYPICAL DECK SUPPORT AT CONCRETE**



**13 TYPICAL SLAB ON DECK CONSTRUCTION JOINT**

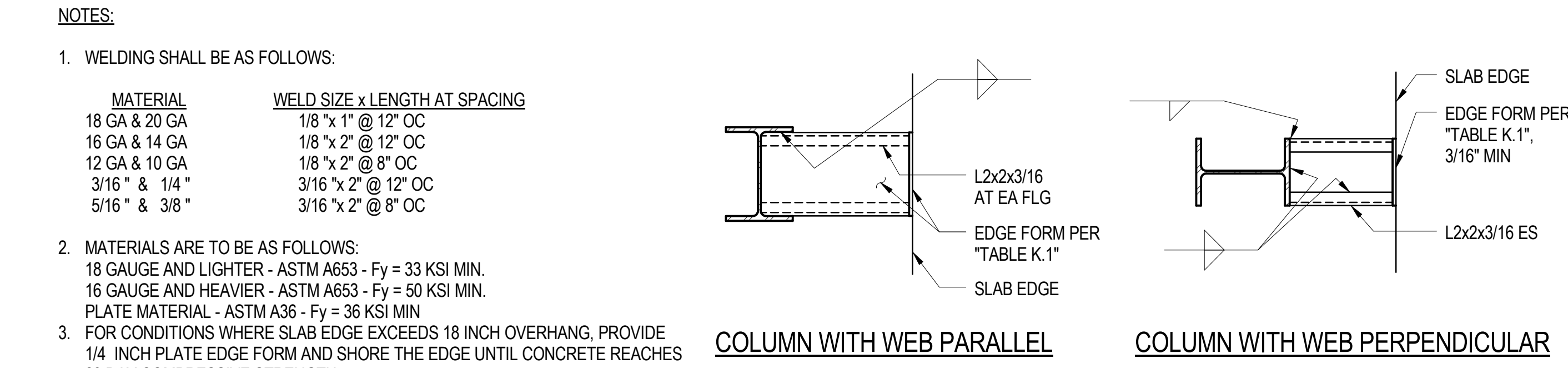
**TABLE K**

h	REINFORCING
0" TO 9"	#4 @ 18"
OVER 9" TO 1'-4"	#4 @ 12"
OVER 1'-4" TO 2'-0"	#4 @ 12"
OVER 2'-0" TO 2'-6"	#4 @ 8"

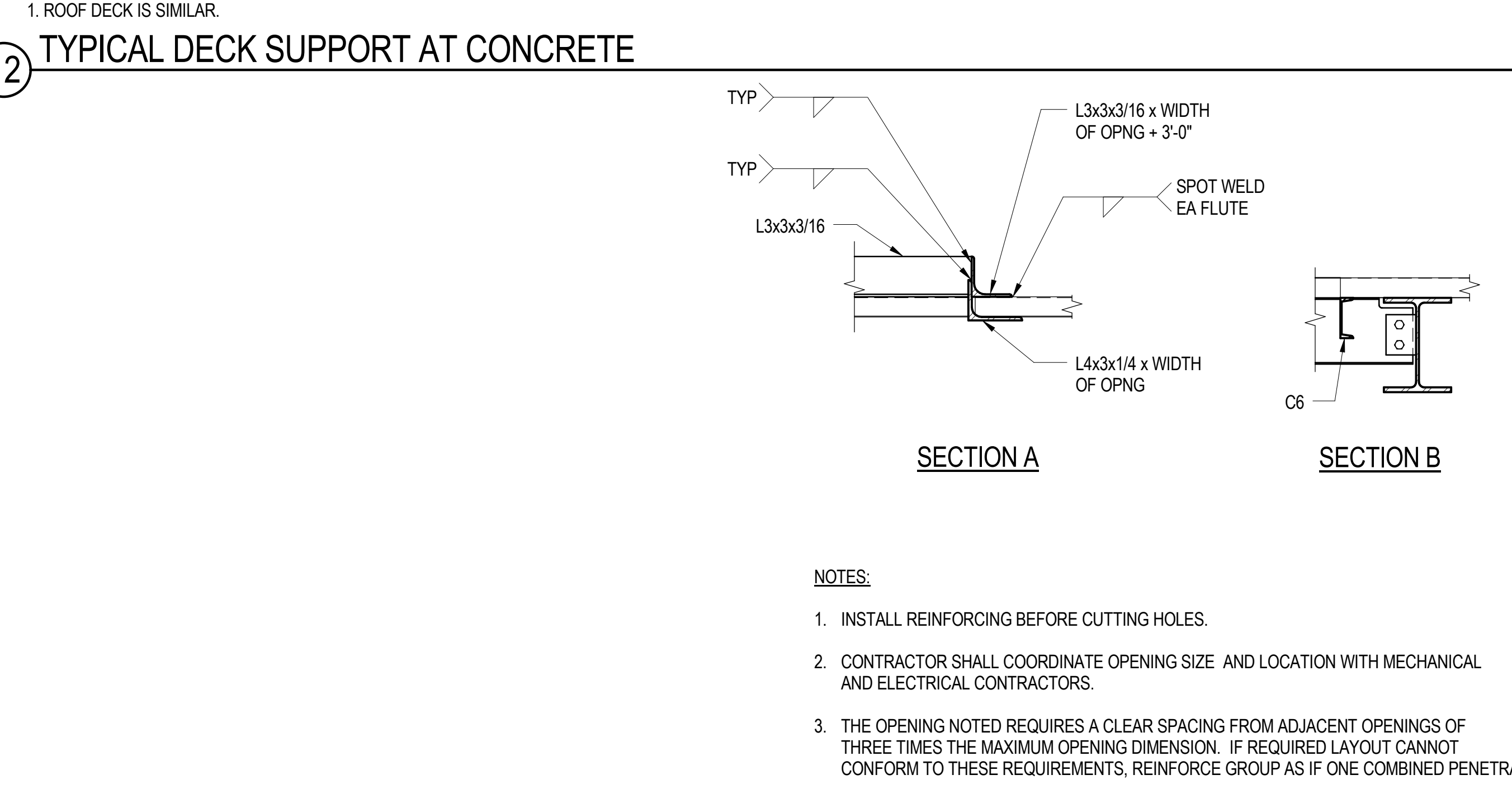
  

**TABLE K.1**

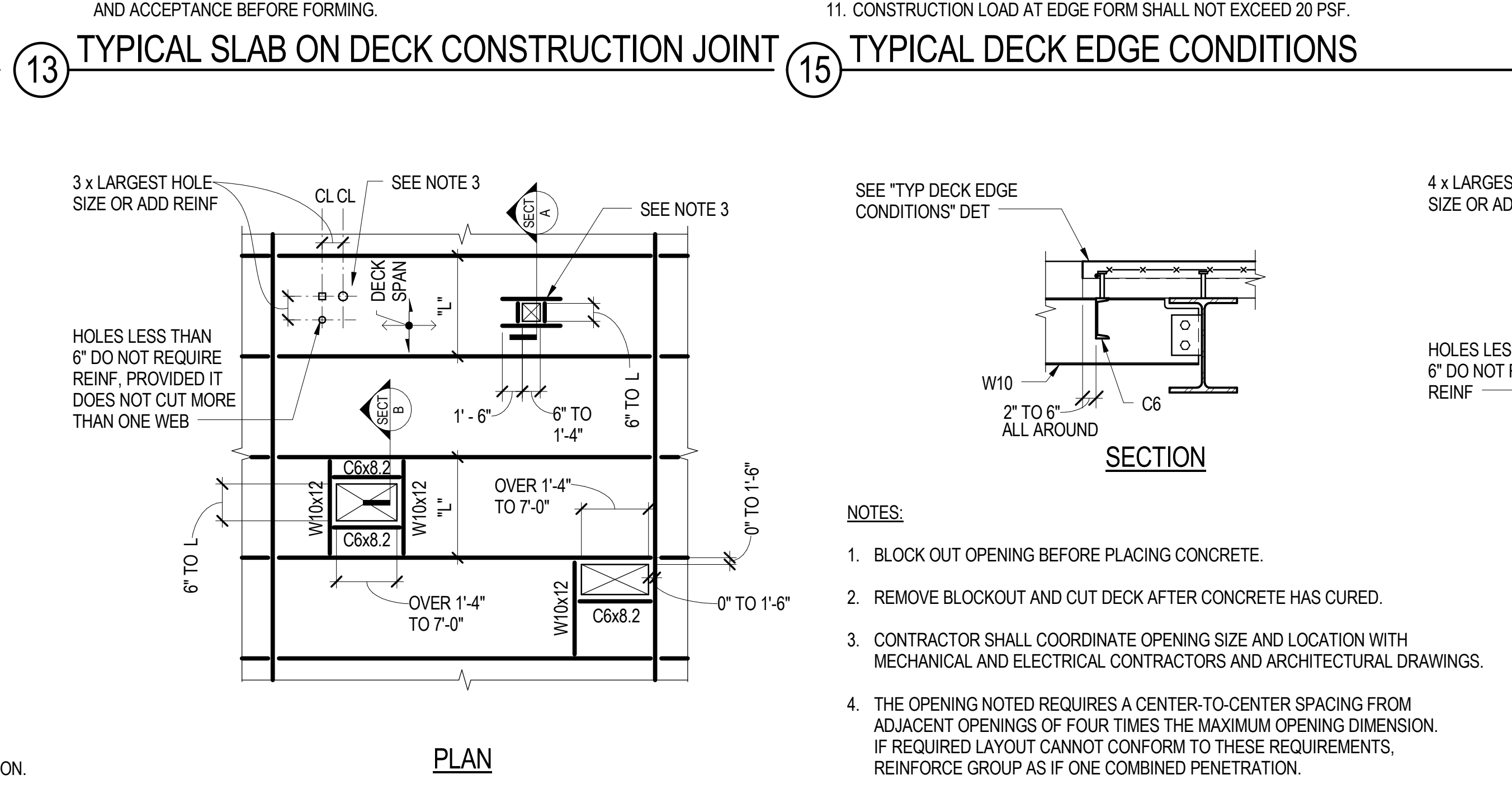
SLAB THICKNESS (INCHES)	SLAB EDGE CLOSURE PLATE GAUGE / THICKNESS AT DECK PARALLEL TO BEAM																	
	OVERHANG (INCH)																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	14	16	18		
4	20	20	20	20	18	18	16	14	12	12	12	10	10	3/16	1/4	5/16		
4.5	20	20	20	18	16	16	16	14	12	12	12	10	10	3/16	1/4	5/16		
5	20	20	18	16	16	16	14	14	12	12	10	10	3/16	1/4	1/4	5/16		
5.5	20	18	16	16	14	14	14	14	12	12	10	10	3/16	1/4	1/4	5/16		
6	18	16	14	14	14	14	12	12	12	10	10	10	3/16	1/4	1/4	5/16		
6.5	18	16	16	14	12	12	12	12	12	10	10	10	3/16	1/4	1/4	5/16	5/16	
7	16	16	14	12	12	12	12	10	10	10	10	10	3/16	1/4	1/4	5/16	3/8	
7.5	16	14	14	12	12	12	10	10	10	10	10	10	3/16	1/4	1/4	5/16	3/8	
8	14	14	12	12	12	10	10	10	10	10	10	10	3/16	1/4	1/4	5/16	3/8	



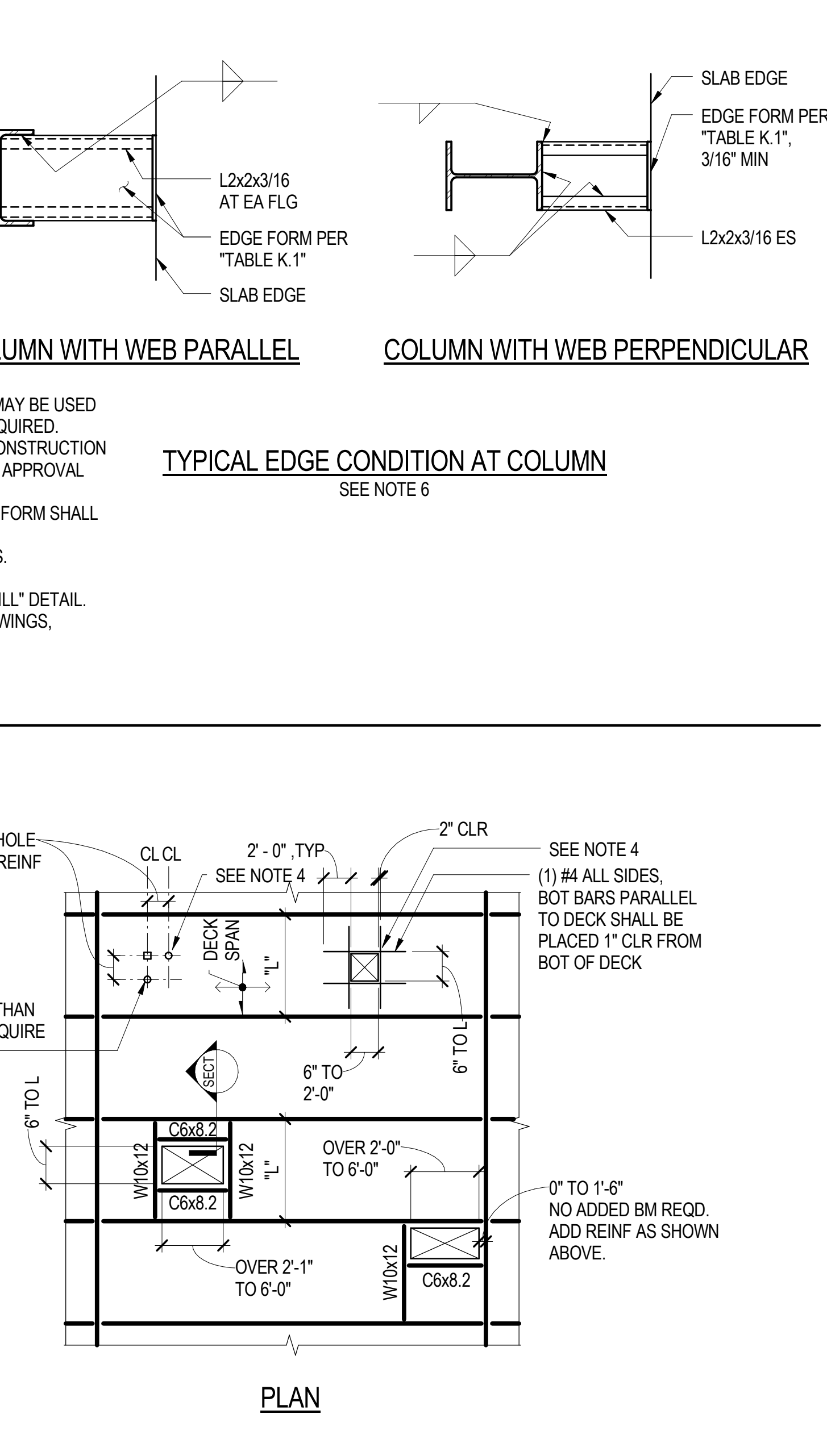
**15 TYPICAL DECK EDGE CONDITIONS**



**18 TYPICAL ROOF DECK - OPENING 7'-0" AND LESS**



**20 TYPICAL FLOOR DECK - OPENING 6'-0" AND LESS**



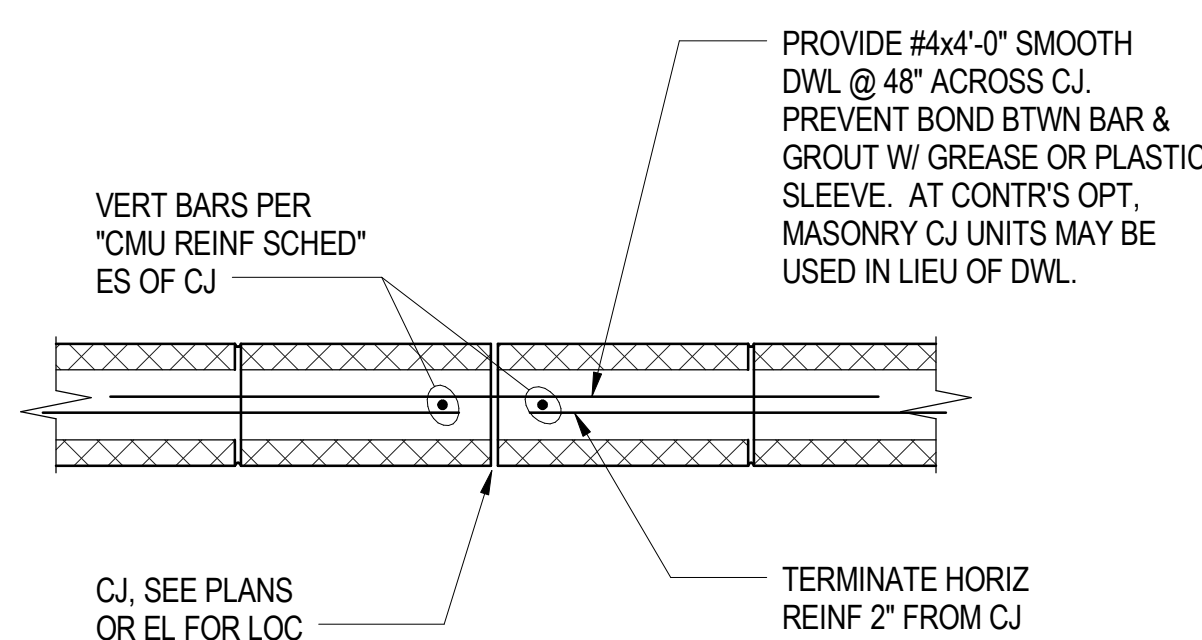
**TYPICAL STEEL DECK DETAILS**

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



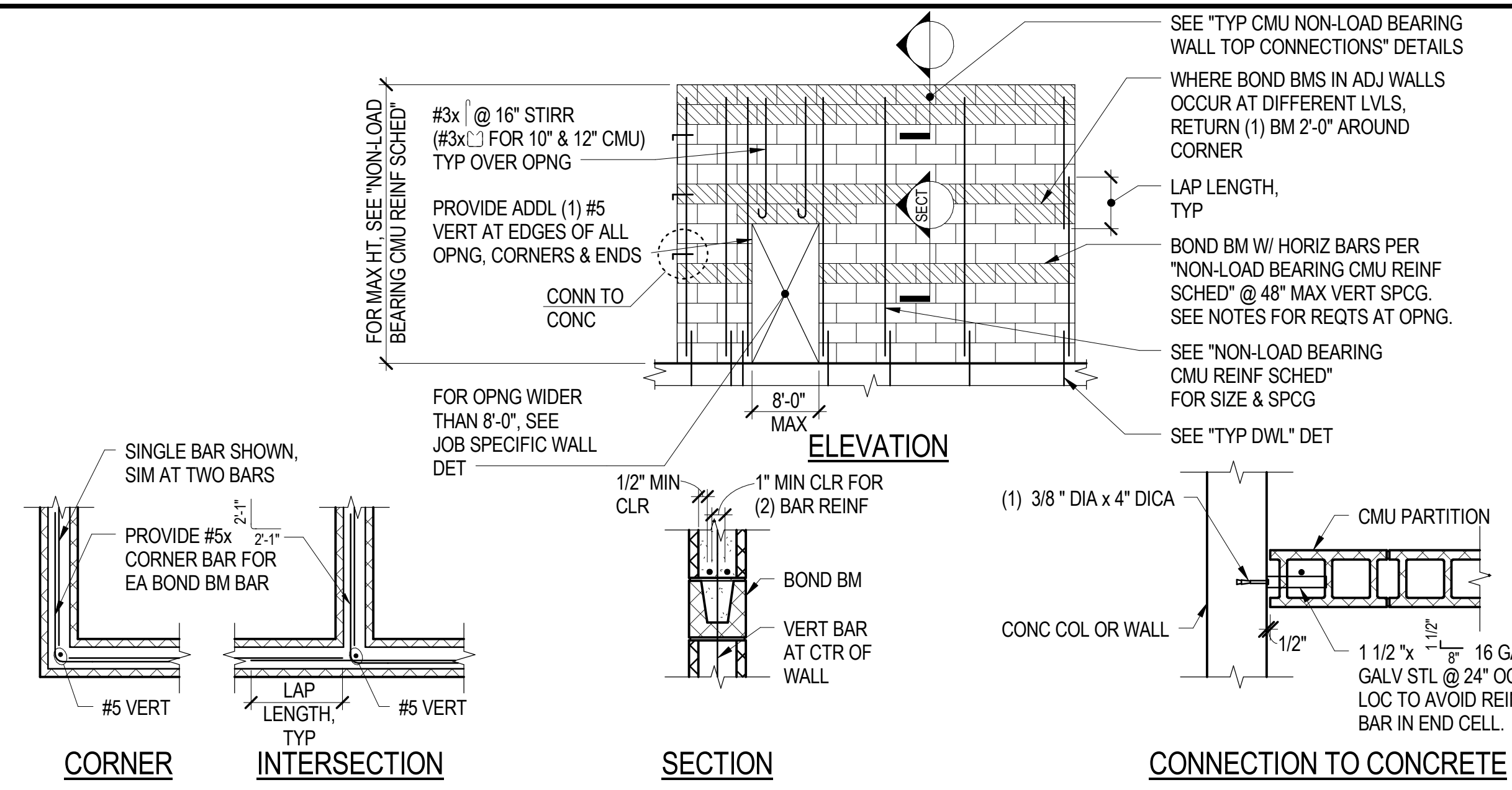


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHNHAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window W/ashing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

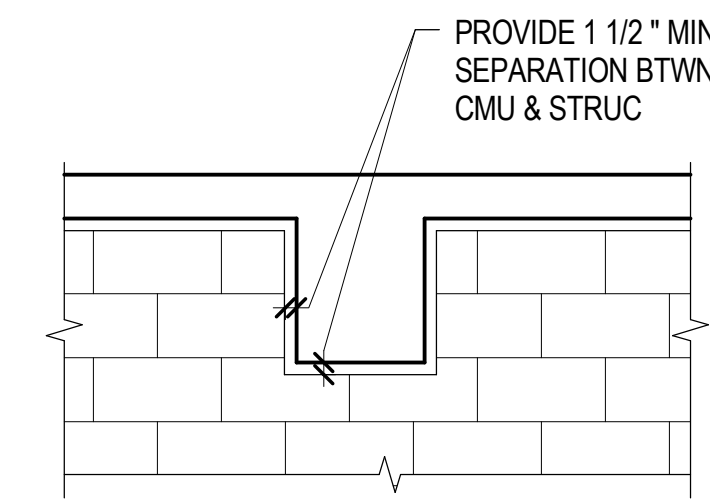


- NOTES:**
- CONTROL JOINT SHALL BE CONSTRUCTED AS CONTINUOUS VERTICAL HEAD JOINTS USING FULL AND HALF MASONRY UNITS.
  - MORTAR SHALL BE RAKED BACK AT LEAST 1 INCH IN DEPTH AND CAULKED PER ARCHITECTURAL DRAWINGS.

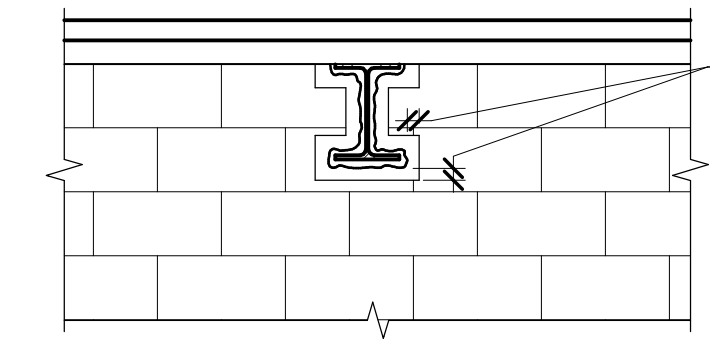
**3 TYPICAL CMU CONTROL JOINT**



**5 TYPICAL CMU NON-LOAD BEARING WALL ELEVATION**

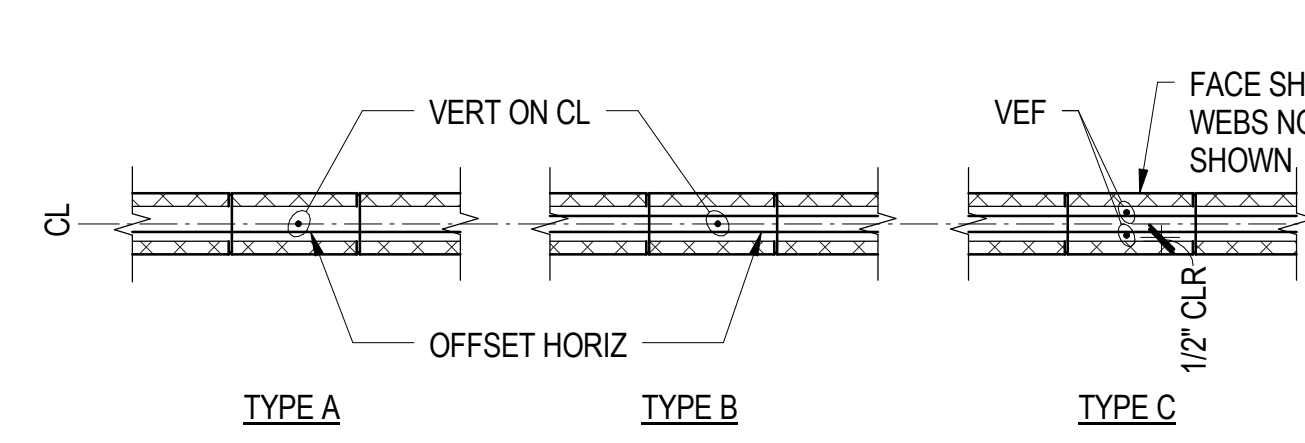


**CONCRETE BEAM THRU CMU WALL**



**STEEL BEAM THRU CMU WALL**

**8 TYP CMU NON-LOAD BRG WALL PENETRATIONS**



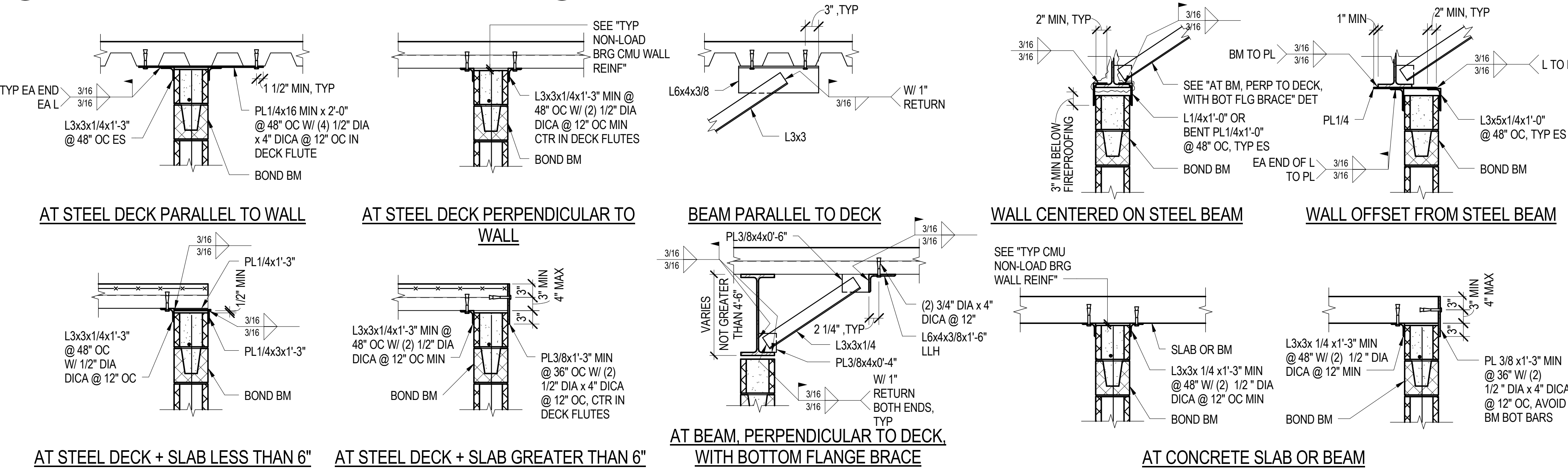
**BAR LOCATION TYPES**

- NOTES:**
- BOND BEAM REINFORCEMENT ABOVE AND BELOW OPENINGS SHALL BE CONTINUOUS (IE UNSPLICED) AND EXTENDED 2'-0" MINIMUM BEYOND OPENING.
  - WHERE BOND BEAM DOES NOT ALIGN WITH TOP OR BOTTOM OF OPENINGS, ADD A BOND BEAM COURSE EXTENDING 2'-0" BEYOND THE OPENING.
  - BOND BEAM BARS MAY BE USED TO ARRIVE AT TOTAL STEEL AREA REQUIRED BY REINFORCING SCHEDULE.
  - GROUT ALL CELLS THAT CONTAIN REINFORCEMENT OR EMBEDDED ITEMS.
  - PACK TOP COURSE CELLS SOLID WITH GROUT, TYPICAL.

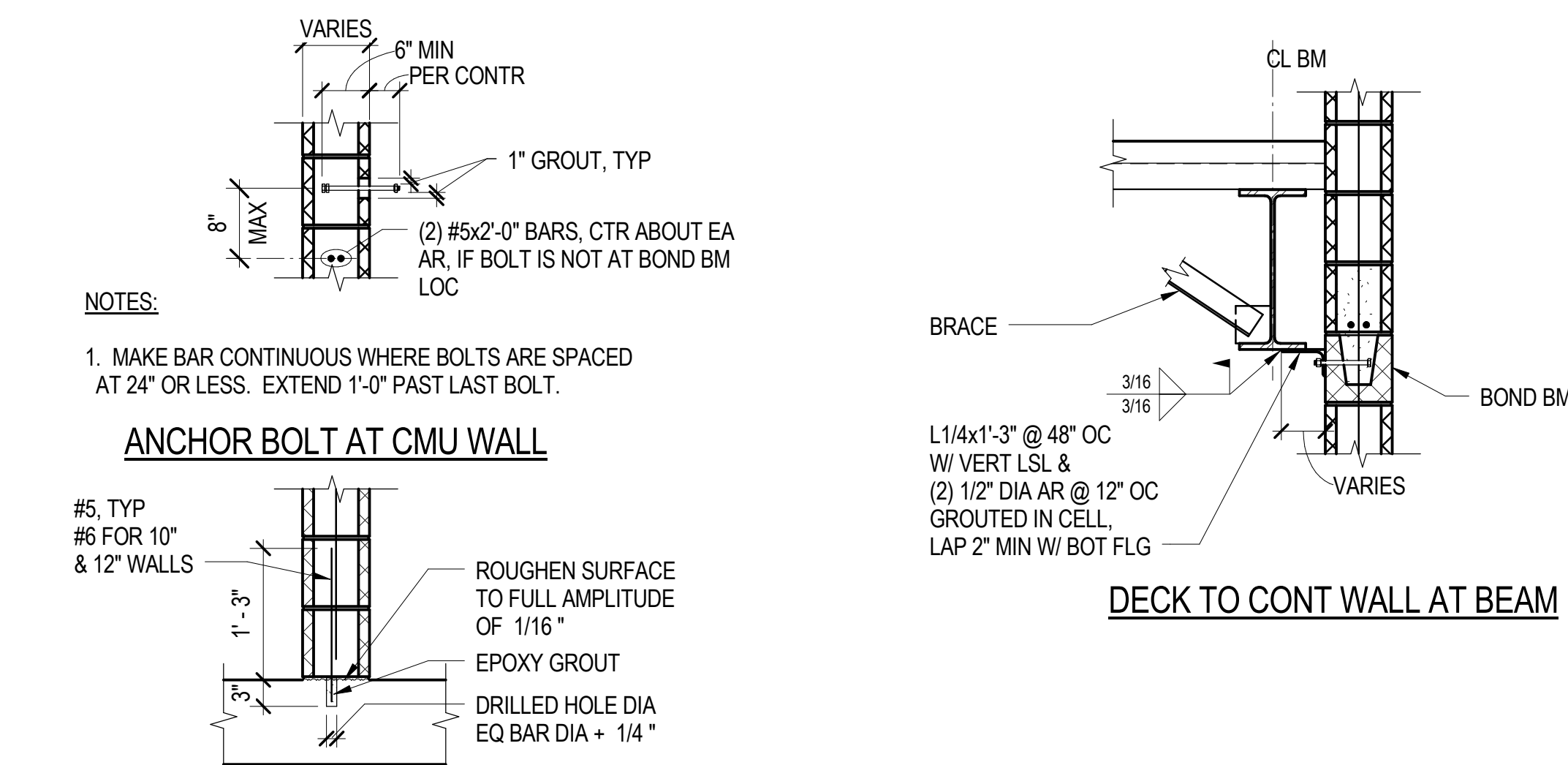
NOMINAL WALL THICKNESS	BOND BEAM		VERTICAL		BAR LOCATION TYPE	MAXIMUM WALL HEIGHT
	REINFORCING	LAP LENGTH	REINFORCING	LAP LENGTH		
8"	(2) #5	30"	(1) #5 @ 48"	30"	B	13'-0"
10"	(2) #5	30"	(2) #4 @ 48"	24"	C	16'-0"
12"	(2) #5	30"	(2) #5 @ 48"	30"	C	20'-6"

- PROVIDE 3/4" INCH MINIMUM, 1 1/2" INCH MAXIMUM CLEAR SPACE BETWEEN TOP WALL AND BOTTOM OF PLATE, DECK, OR FIREPROOFING ON BEAMS.
- FOR DRILLED-IN CONCRETE ANCHORS IN BOTTOM OF SLAB, EMBED SO THAT THEY EXTEND A MINIMUM OF 1 INCH ABOVE THE UPPER PART OF THE DECK FLUTES.
- PROVIDE SPECIAL INSPECTION FOR DRILLED-IN CONCRETE ANCHORS AT WALLS 16'-0" AND HIGHER.
- LOCATE BRACE FOR BEAM BOTTOM FLANGE, AT EACH CONCRETE MASONRY UNIT TOP SUPPORT, AT 48 INCHES ON CENTER MAXIMUM.

**10 TYPICAL CMU NON-LOAD BEARING WALL REINFORCING SCHEDULE AND NOTES**



**15 TYPICAL CMU NON-LOAD BEARING WALL TOP CONNECTIONS**



- NOTES:**
- MAKE BAR CONTINUOUS WHERE BOLTS ARE SPACED AT 24" OR LESS. EXTEND 1'-0" PAST LAST BOLT.
- ANCHOR BOLT AT CMU WALL**
- NOTES:**
- DOWEL SPACING TO MATCH VERTICAL REINFORCING.
- DOWEL TO CMU WALL AT SLAB**

**20 TYPICAL CMU NON-LOAD BEARING WALL DETAILS**

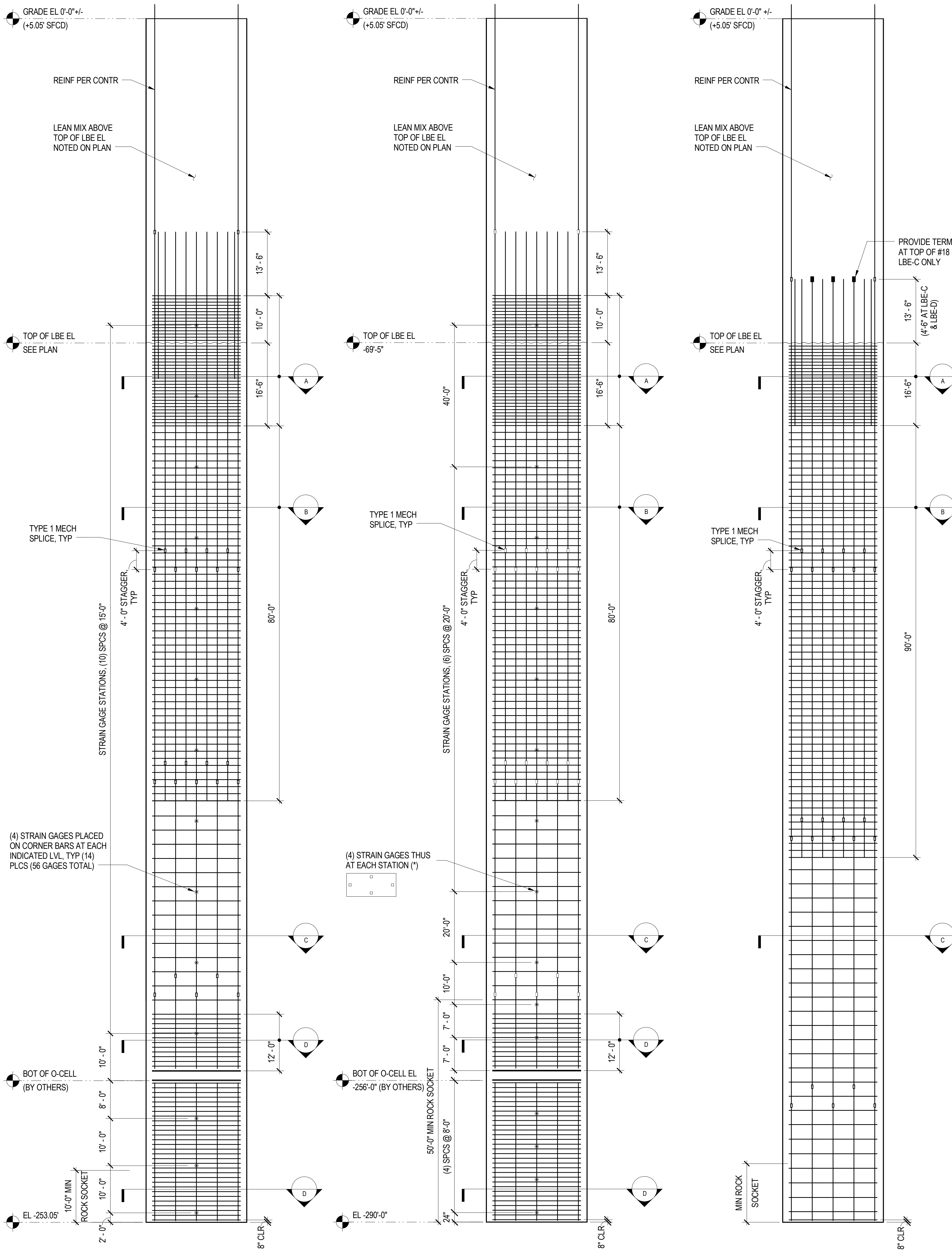
NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE	
<b>TYPICAL CMU WALL DETAILS AND SCHEDULES</b>	
NO. PROJECT NO.	DRAWING NUMBER
08044	<b>S4.31</b>



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

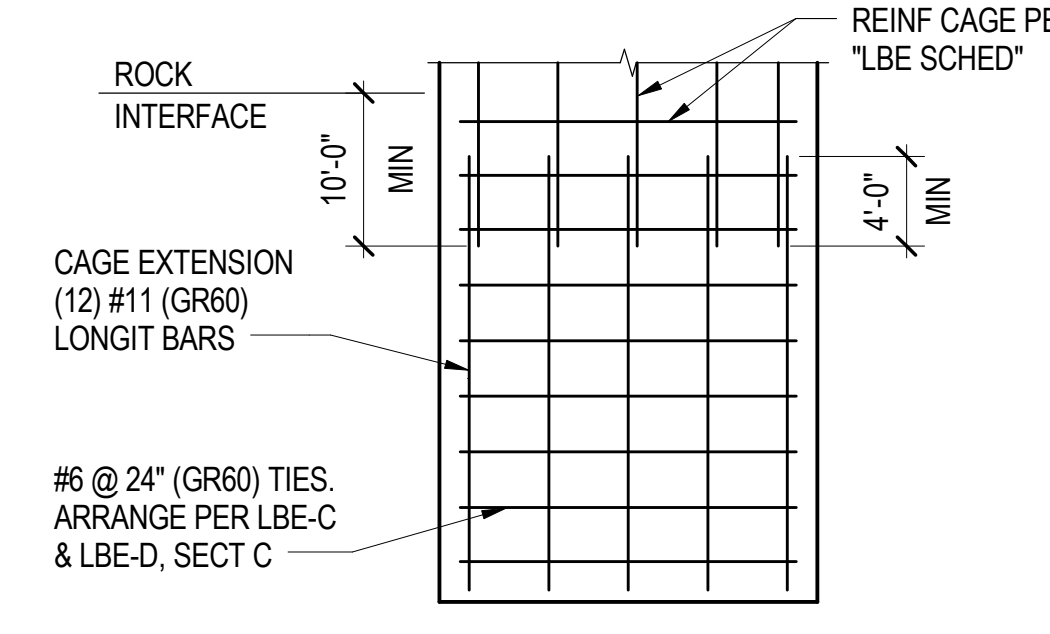
MARK	MINIMUM ROCK SOCKET (LBE #)	VERTICAL REINFORCEMENT	TRANSVERSE REINFORCEMENT				
			SECTION A	SECTION B	SECTION C	SECTION D	
LBE-A	25'-0" (1, 5) 30'-0" (26) 35'-0" (3, 11, 16, 30)	40'-0" (2, 4, 6, 10, 15, 20, 21, 25) 45'-0" (17, 28) 53'-0" (29)	(12) #18 x FULL LENGTH, GRADE 75, OUTER LAYER + (12) #18 x 120'-0", GRADE 75, OUTER LAYER + (6) #18 x 30'-0", GRADE 75, INNER LAYER	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-B	25'-0" (8) 30'-0" (12, 14) 35'-0" (17, 19, 23)	40'-0" (7, 9, 22) 45'-0" (24)	(12) #18 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-C	10'-0"		(12) #14 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-D	10'-0"		(12) #14 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	
LBE-T	10'-0"		(12) #18 x FULL LENGTH, GRADE 75, OUTER LAYER + (12) #18 x 120'-0", GRADE 75, OUTER LAYER + (6) #18 x 30'-0", GRADE 75, INNER LAYER	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	#6 @ 12", GRADE 60
LBE-T2	50'-0"		(12) #18 x FULL LENGTH, GRADE 75 + (12) #18 x 120'-0", GRADE 75	#7 @ 6", GRADE 60	#6 @ 12", GRADE 60	#6 @ 24", GRADE 60	#6 @ 12", GRADE 60



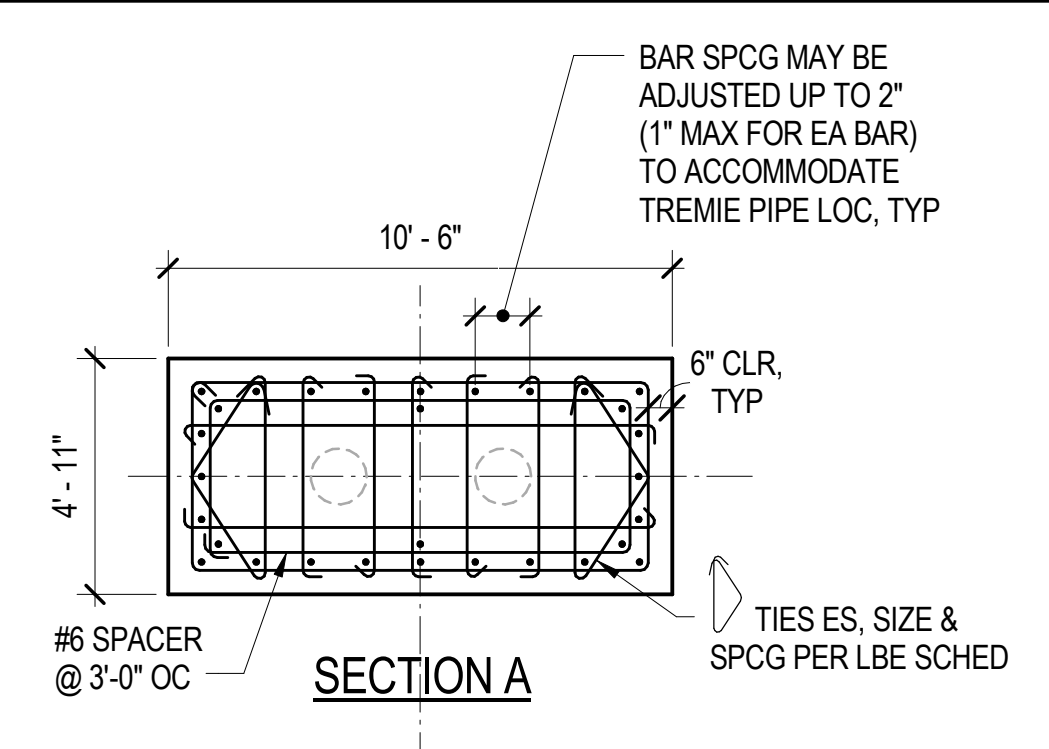
**NOTES:**  
1. THIS ELEMENT, CONSTRUCTED UNDER A SEPARATE PERMIT, IS BEING REPURPOSED AS A PRODUCTION ELEMENT IN THE PERMANENT CONSTRUCTION.

**NOTES:**  
1. THIS ELEMENT, CONSTRUCTED UNDER A SEPARATE PERMIT, IS BEING REPURPOSED AS A PRODUCTION ELEMENT IN THE PERMANENT CONSTRUCTION.

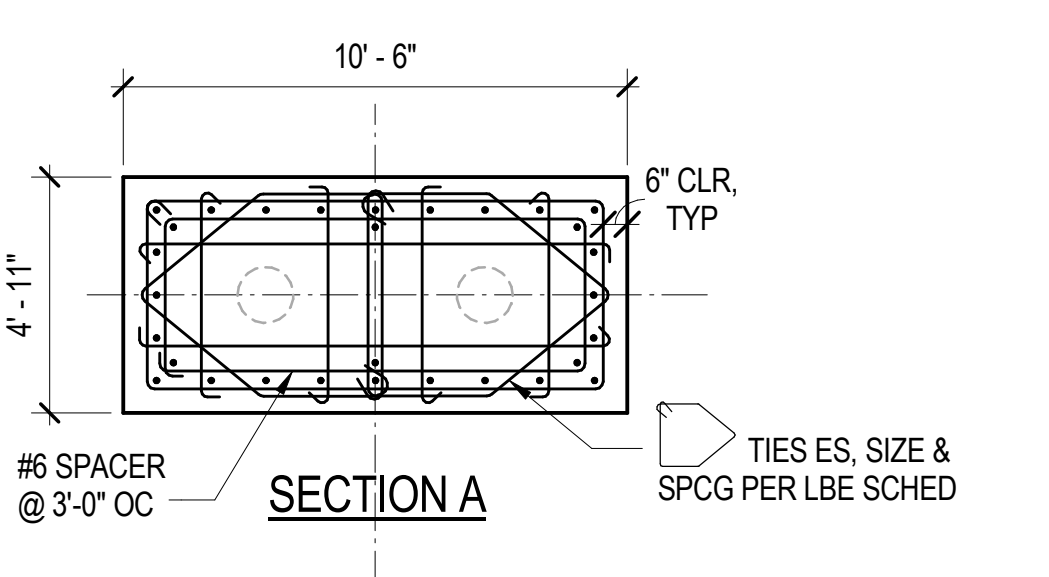
**17** LBE-T      **18** LBE-T2      **19** LBE-A, LBE-B, LBE-C, LBE-D



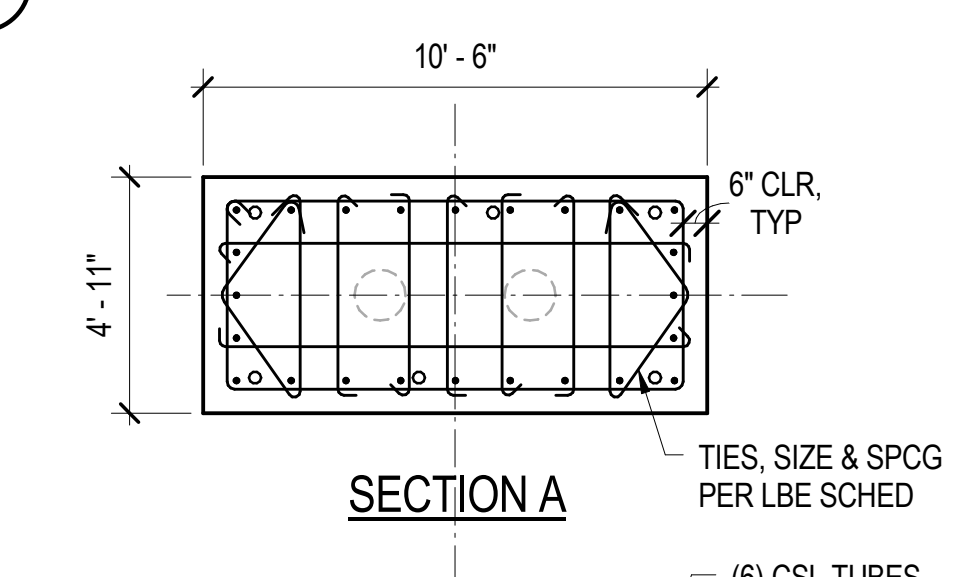
**4** ROCK SOCKET EXTENSION



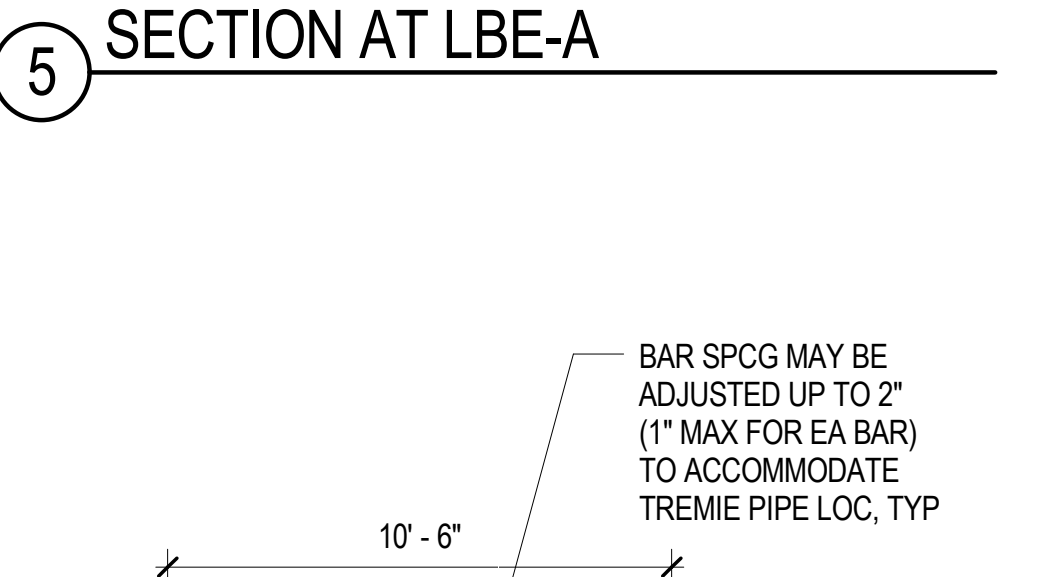
**5** SECTION AT LBE-A



**13** SECTION AT LBE-T

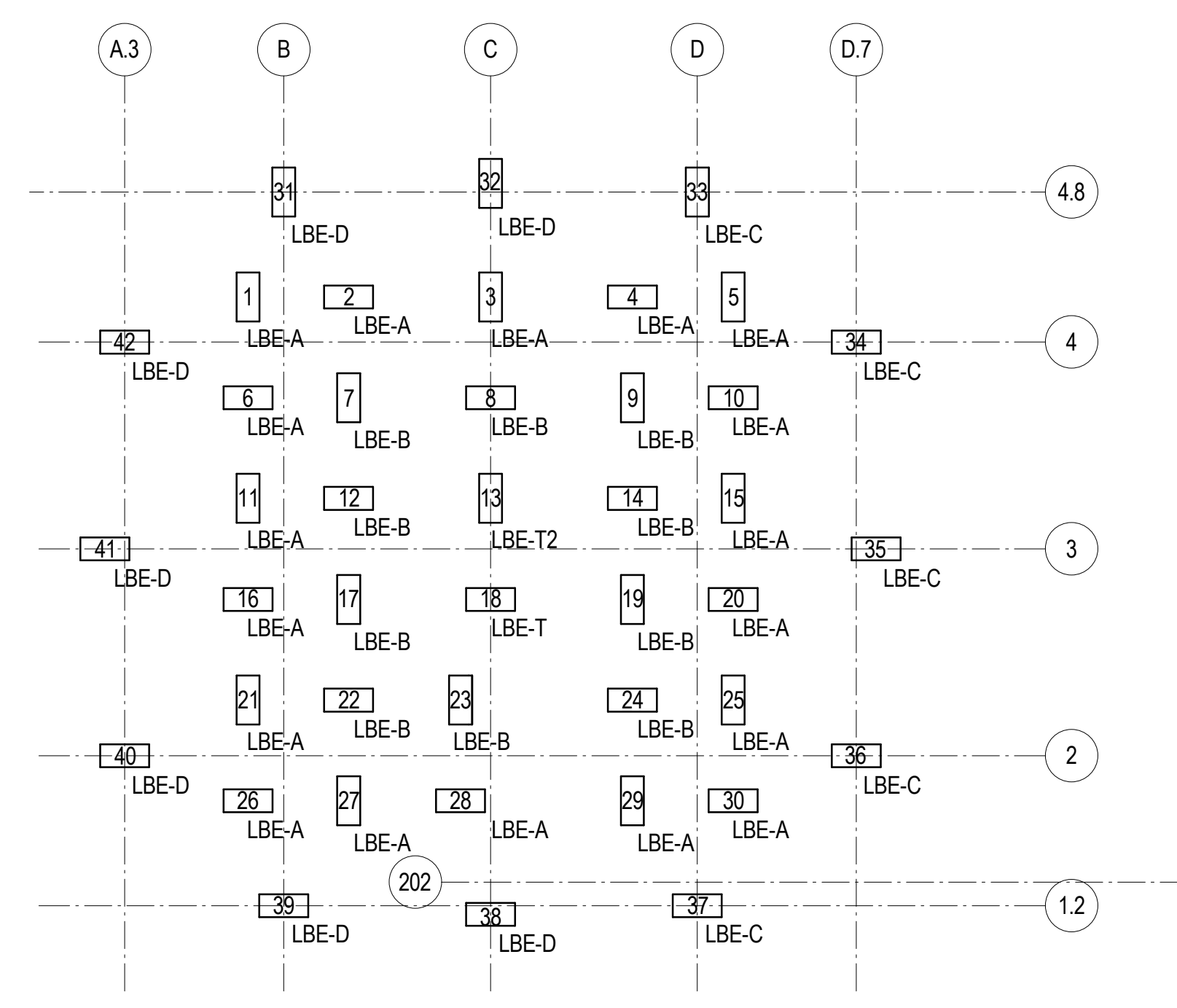


**14** SECTION AT LBE-T2



**15** SECTION AT LBE-B, LBE-C, LBE-D

- NOTES:**
- TIP ELEVATION FOR BIDDING PURPOSES SHALL BE COMPUTED USING THE MINIMUM ROCK SOCKET DEPTH INDICATED IN THE LBE SCHEDULE ASSUMING ROCK OCCURS AT ELEVATION -245'-0". FINAL TIP ELEVATION MAY VARY DEPENDING ON ACTUAL SOIL CONDITIONS AND SHALL BE ESTABLISHED BY THE GEOTECHNICAL ENGINEER OF RECORD AT THE TIME OF INSTALLATION. BEDROCK HAS BEEN DISCOVERED AS DEEP AS 260 FT BELOW GROUND SURFACE AND MAY BE DEEPER IN SOME PLACES. EXCAVATION EQUIPMENT SHALL BE PREPARED TO REACH THESE DEPTHS.
  - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI. ADDITIONALLY, FOR THE TEST LBE THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 7,000 PSI AT THE TIME OF O-CELL TESTING.
  - REINFORCEMENT SHALL BE OF THE SIZE, TYPE, AND GRADE SHOWN.
  - IN ACCORDANCE WITH SECTIONS 21.1.6.1 AND 12.14.3.2 OF ACI 318, TYPE 1 MECHANICAL COUPLERS SHALL DEVELOP IN TENSION AND COMPRESSION AT LEAST 1.25FY OF THE BAR.
  - LBE REINFORCEMENT SHALL BE ORIENTED AS SHOWN TO PERMIT PLACEMENT OF THE MAT REINFORCEMENT.
  - SPECIFIED CONSTRUCTION TOLERANCES APPLY FROM TOP OF LBE ELEVATION, NOT FROM THE GROUND SURFACE AT TIME OF INSTALLATION.
  - FOR EACH LBE, PROVIDE SIX (6) CROSS-HOLE SONIC LOGGING TUBES (1/2" SCH 40 STEEL) EXTENDING FROM 3 FEET ABOVE TOP OF LEAN MIX TO BOTTOM OF REINFORCING CAGE. PERFORM TESTING IN ACCORDANCE WITH ASTM D6780 AND REPORT RESULTS TO THE GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER PRIOR TO O-CELL TESTING.
  - THE CONTRACTOR SHALL COORDINATE LBE DETAILING AND CONSTRUCTION WITH LOADTEST USA, WHO IS PROVIDING O-CELL TEST EQUIPMENT AND SERVICES.
  - PERFORM POST-TEST GROUTING OF ANNULAR SPACE AND O-CELLS AS RECOMMENDED BY LOADTEST. GROUT SHALL COMPRISE WATER AND CEMENT (NO SAND) AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AT 28 DAYS.
  - WHERE LBE EXCAVATION EXTENDS MORE THAN 4'-0" BELOW THE BOTTOM OF THE SHOP-FABRICATED REINFORCEMENT, THE CAGE SHALL BE EXTENDED AS SHOWN IN DETAIL 4/S4.01.

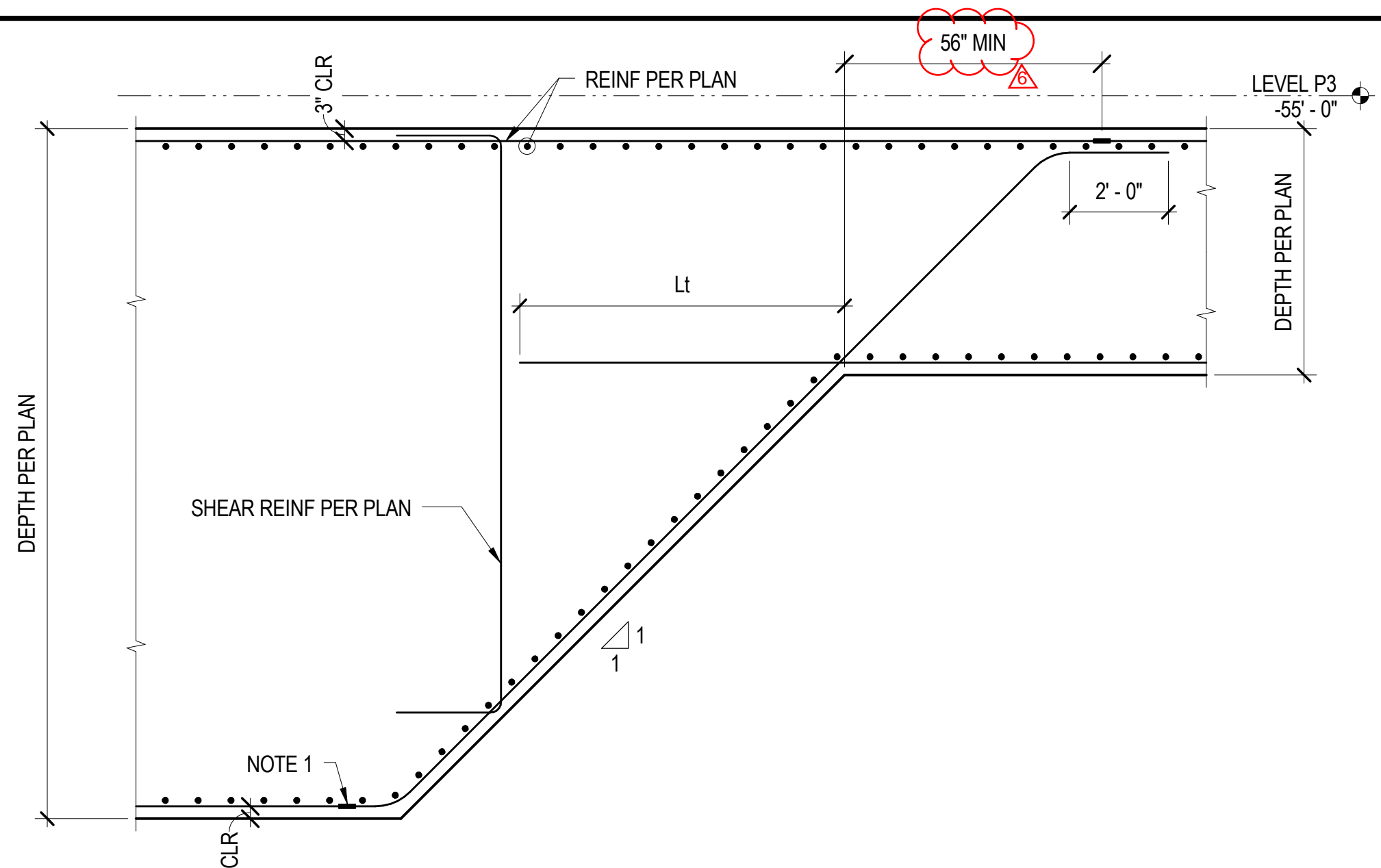


**20** LOAD BEARING ELEMENT KEY PLAN

4/29/2014 7:09:50 PM C:\Revit\Transbay\Twr\_MS2013\_18.rvt

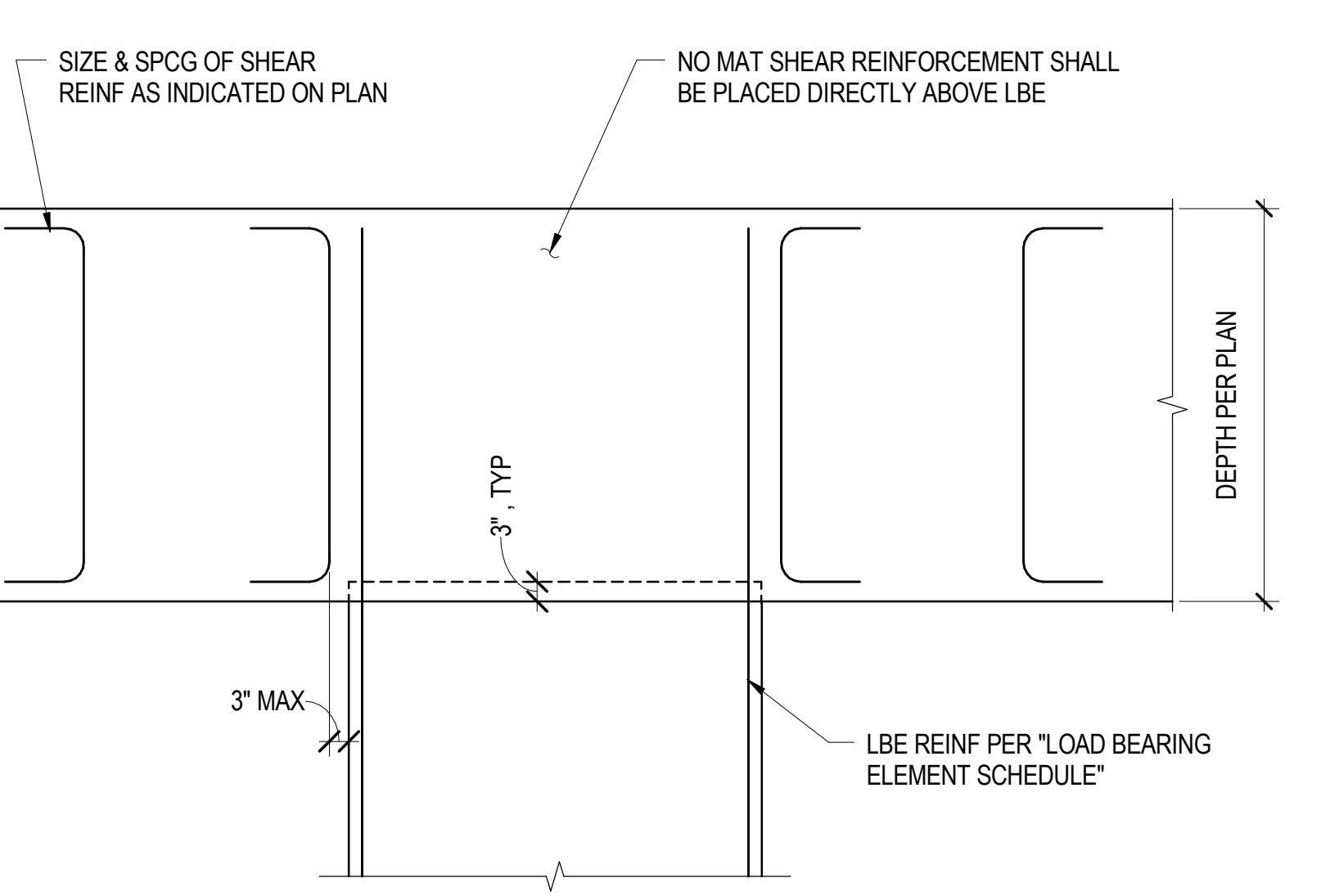
NO.	DATE	ISSUE
11	02 MAY 14	GMP
10	20 FEB 14	BARRETTELOAD BEARING ELEMENT BULLETIN NO. 3 R1
9	14 FEB 14	BARRETTELOAD BEARING ELEMENT BULLETIN NO. 3
8	12 FEB 14	BARRETTELOAD BEARING ELEMENT ADDENDUM REVISION NO. 2
7	24 JAN 14	BARRETTELOAD BEARING ELEMENT BULLETIN NO. 2
6	25 NOV 13	BARRETTELOAD BEARING ELEMENT ADDENDUM REVISION NO. 1
5	25 SEP 13	BARRETTELOAD BEARING ELEMENT ADDENDUM
4	03 SEP 13	50% CONSTRUCTION DOCUMENTS
3	19 JUL 13	DESIGN DEVELOPMENT
2	03 JUN 13	50% DESIGN DEVELOPMENT
1	19 APR 13	100% SCHEMATIC DESIGN

**LOAD BEARING ELEMENT SCHEDULE AND DETAILS**



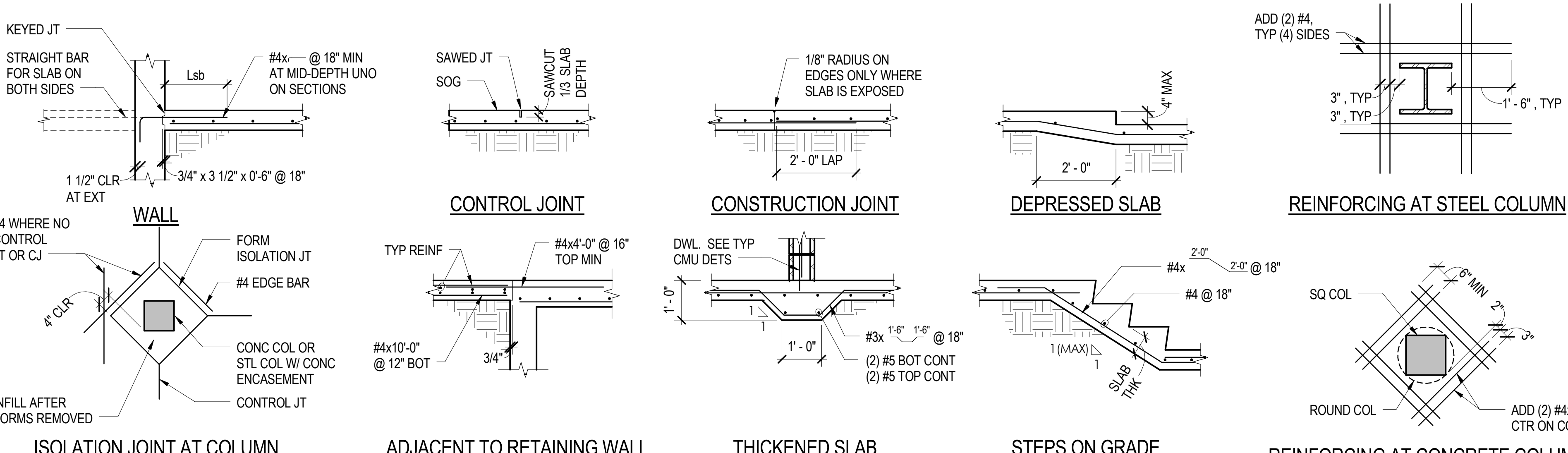
- NOTES:**
1. STAGGER COUPLERS 2'-0".
  2. SHEAR REINFORCING, ADDITIONAL FLEXURAL REINFORCING, AND OTHER STRUCTURAL ELEMENTS NOT SHOWN.

**2 TYPICAL MAT TRANSITION**

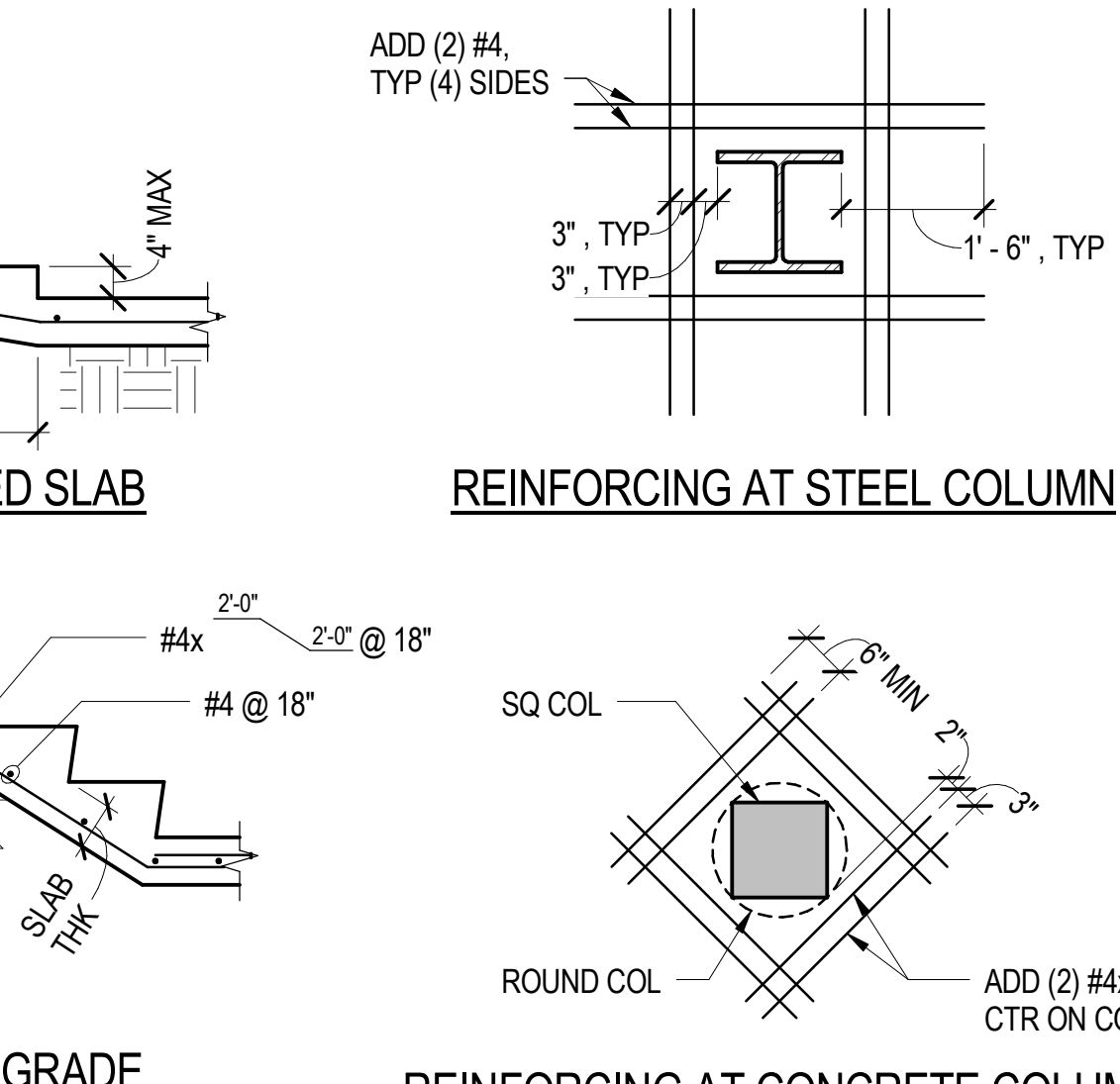


- NOTES:**
1. MAT FLEXURAL REINFORCEMENT NOT SHOWN.

**11 TYPICAL MAT SHEAR REINF AT LOAD BEARING ELEMENT**



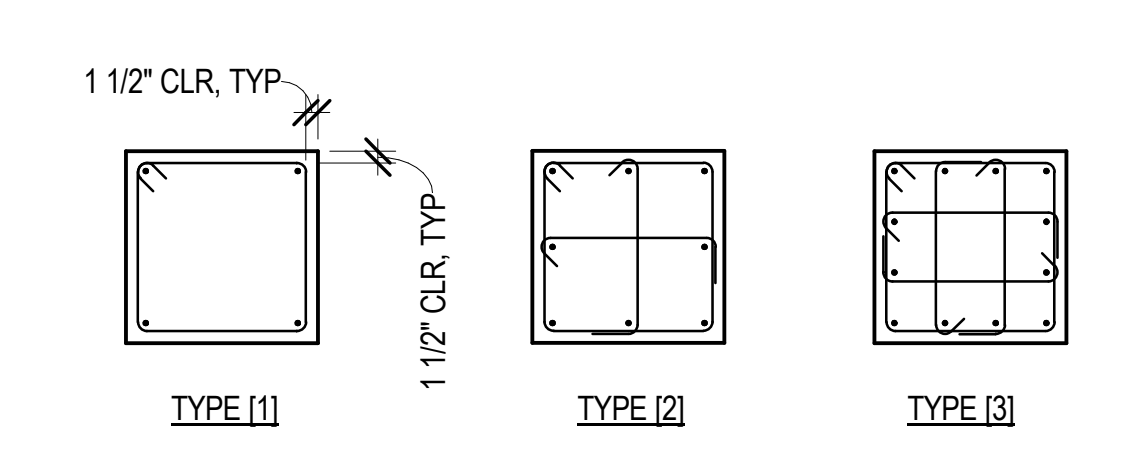
**13 MAT REINFORCEMENT DIAGRAM**



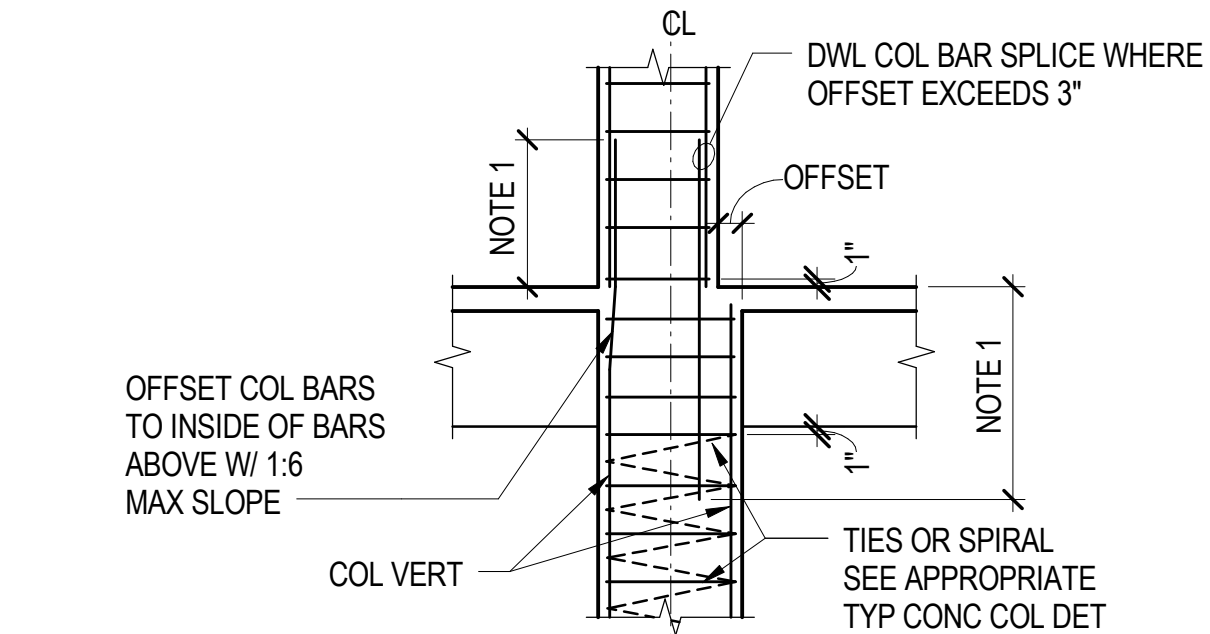
CONCRETE COLUMN SCHEDULE							
LEVEL	COLUMN MARK	C21	C23	C24	C25	C26	C27
P1	SIZE						
	REINF						
	TIES						
	SPLICE			Lsb		Lsb	Lsb
P2	SIZE	24x24	24x24	24x24	24x24	24x24	24x24
	REINF	(12) #8	(12) #8	(12) #8	(12) #8	(12) #8	(12) #8
	TIES	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]	#5 @ 6" [3]
	SPLICE	Lsb	Lsb				
P3	SIZE	24x24	24x24				
	REINF	(12) #8	(12) #8				
	TIES	#5 @ 6" [3]	#5 @ 6" [3]				
	DWL						

- NOTES:**
1. SEE "TYPICAL CONCRETE COLUMN" DETAIL.
  2. UNDER "TIES" [ ] DENOTES TYPE OF COLUMN REINFORCING CONFIGURATION. SEE "TYPICAL CONCRETE COLUMN REINFORCING CONFIGURATION" DETAIL.
  3. COLUMN DETAILS REMAIN THE SAME AS THE LEVEL BELOW, UNLESS NOTED OTHERWISE.

**5 CONCRETE COLUMN SCHEDULE**

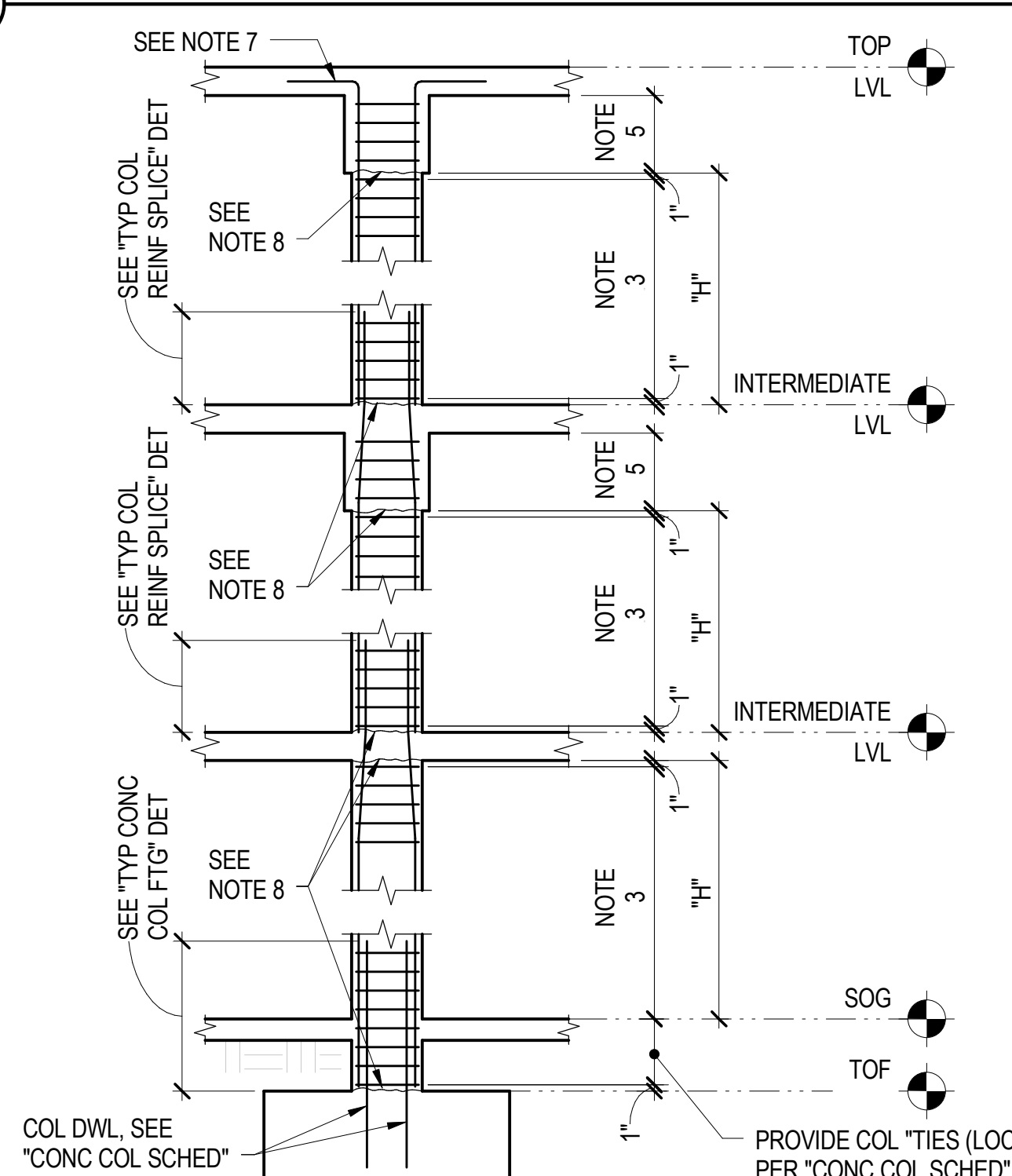


- NOTES:**
1. SEE "CONCRETE COLUMN SCHEDULE" FOR TYPE OF REINFORCING CONFIGURATION DENOTED WITH [ ] UNDER "TIES."
  2. A TYPICAL CROSS TIE SHALL HAVE A 135 DEGREE HOOK AT ONE END AND A 90 DEGREE HOOK AT THE OTHER END. AT CONTRACTOR'S OPTION, THE 135 DEGREE HOOK MAY BE REPLACED WITH A 180 DEGREE HOOK, AND THE 90 DEGREE HOOK MAY BE REPLACED WITH A 135 OR A 180 DEGREE HOOK.
  3. CROSS TIES WITH 90 DEGREE HOOKS SHALL HAVE THE CONSECUTIVE CROSS TIES ALTERNATED END FOR END ALONG THE LONGITUDINAL REINFORCEMENT.

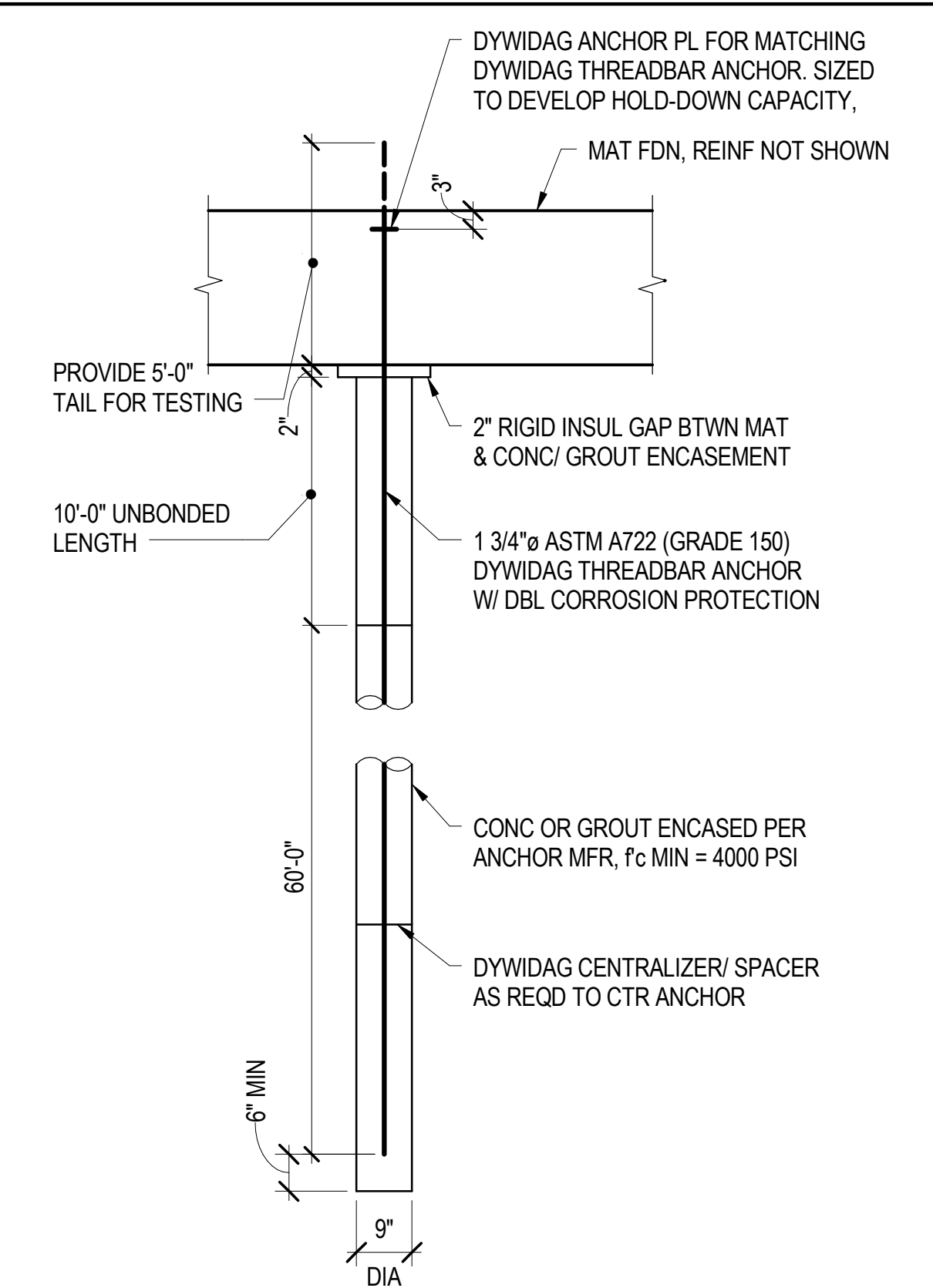


- NOTES:**
1. SEE "CONCRETE COLUMN SCHEDULE" FOR SPLICE LENGTH. MECHANICALLY SPLICED OR WELDED TO DEVELOP 125% F<sub>y</sub> IN TENSION.
  2. CLEAR DISTANCE BETWEEN THE TWO LAP SPLICE BARS AND ADJACENT BARS SHALL BE NOT LESS THAN 1.5 TIMES THE BAR DIA, NOR 1 1/2 INCHES.
  3. IF OFFSET IN VERTICAL BARS OCCURS OUTSIDE THE HORIZONTAL FRAMING, PROVIDE ADDITIONAL SET OF TIES AT OFFSET LOCATION.
  4. WHERE NOTED "MS" ON CONCRETE COLUMN, SEE "CONCRETE COLUMN SCHEDULE" FOR SPLICE. THE COLUMN VERTICAL BARS SHALL BE
  5. SPLICE #14 AND #18 BARS BY ONE OF THE FOLLOWING:
    - A. FULL PENETRATION BUTT WELDS, ADJACENT WELDS STAGGERED 6 INCHES ON CENTER.
    - B. EXOTHERMIC WELD SPLICES STAGGERED 30 INCHES ON CENTER VERTICALLY BETWEEN ADJACENT BARS.
    - C. MECHANICAL SPLICING STAGGERED 30 INCHES ON CENTER VERTICALLY.

**9 TYP CONC COL REINFORCING CONFIGURATIONS**



**10 TYP CONCRETE COLUMN REINFORCING SPLICE**



- NOTES:**
1. SEE "CONCRETE COLUMN SCHEDULE" FOR COLUMN SIZE AND VERTICAL REINFORCING. FOR REINFORCING CONFIGURATION TYPE, SEE THE "CONCRETE COLUMN SCHEDULE", AND THE "TYPICAL CONCRETE COLUMN REINFORCING CONFIGURATION" DETAIL.
  2. COLUMN VERTICAL REINFORCING SHALL BE SPECIAL DUCTILE QUALITY. SEE "GENERAL NOTES."
  3. SEE "CONCRETE COLUMN SCHEDULE" UNDER "TIES" FOR TIE SIZE, SPACING, AND REINFORCING CONFIGURATION. REINFORCING CONFIGURATION TYPE IS NOTED IN [ ].
  4. NOT USED.
  5. PROVIDE "TIES (LOC 2)" THROUGHOUT THE BEAM AND SLAB DEPTH, EXCEPT THAT THE TIE SPACING MAY BE INCREASED TO 6" WHERE BEAMS FRAME INTO FOUR SIDES OF COLUMN FOR THE DEPTH OF THE MOST SHALLOW BEAM.
  6. AT CONTRACTOR'S OPTION, COLUMN VERTICAL BARS MAY BE EXTENDED UP ADDITIONAL FLOOR LEVELS WITHOUT SPLICING AT FLOORS.
  7. PLACE HORIZONTAL HOOKS DIRECTLY BELOW TOP BARS OF BEAMS OR SLABS. SPLAY HOOKS AS NECESSARY TO RELIEVE BAR CONGESTION. AT CONTRACTOR'S OPTION, HOOKS MAY BE PLACED TOWARD THE INSIDE OF THE COLUMN.
  8. UNLESS NOTED OTHERWISE, COLUMN CONSTRUCTION JOINTS SHALL BE AT THE UNDERSIDE OF FLOOR SLABS, BEAMS, OR GIRDERS, AND AT THE TOPS OF FOOTINGS OR FLOOR SLABS. BEAMS, GIRDERS, BRACKETS, COLUMNS CAPITALS, HAUNCHES, AND DROP PANELS SHALL BE PLACED AT THE SAME TIME AS SLABS.

- NOTES:**
1. THE DESIGN ASSUMES A WORKING LOAD CAPACITY BASED ON ALLOWABLE SKIN FRICTION PER THE ARUP GEOTECHNICAL REPORT DATED JULY 31, 2013.
  2. THE SIZE AND QUANTITY OF HOLD-DOWN ANCHORS INDICATED ASSUMES A FACTOR OF SAFETY OF 2.0.
  3. PROVIDE MATCHING DYWIDAG ANCHOR PLATES TO DEVELOP THE TENSION CAPACITY OF THE ANCHOR.
  4. PERFORMANCE AND PROOF TESTING SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO CASTING THE MAT SLAB. DESIGN LOAD IS 110 KIPS.
  5. HOLD-DOWNS SHALL BE INSTALLED WITHIN 3 INCHES OF THE SPECIFIED LOCATION. THE ANCHOR SHALL BE INSTALLED 3 INCH CLEAR (±1 INCH) FROM THE TOP OF THE FINISHED CONCRETE.
  6. PROVIDE DOUBLE CORROSION PROTECTION FOR THE LENGTH OF STEEL ANCHORAGE PER THE ARUP GEOTECHNICAL REPORT.
  7. HOLD-DOWNS ARE TO BE EQUALLY SPACED BETWEEN COLUMNS AND GRID LINES INDICATED ON PLAN.

**19 TYPICAL CONCRETE COLUMN REINFORCING**

**20 TYPICAL HOLD-DOWN**



**Transbay Tower**  
101 First Street  
San Francisco, CA

**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	1	
2	27 NOV 13	1	
3	12 DEC 13	1	
4	10 FEB 14	1	
5	11 FEB 14	1	
6	02 MAY 14	1	
7	11 FEB 14	1	
8	12 DEC 13	1	
9	27 NOV 13	1	

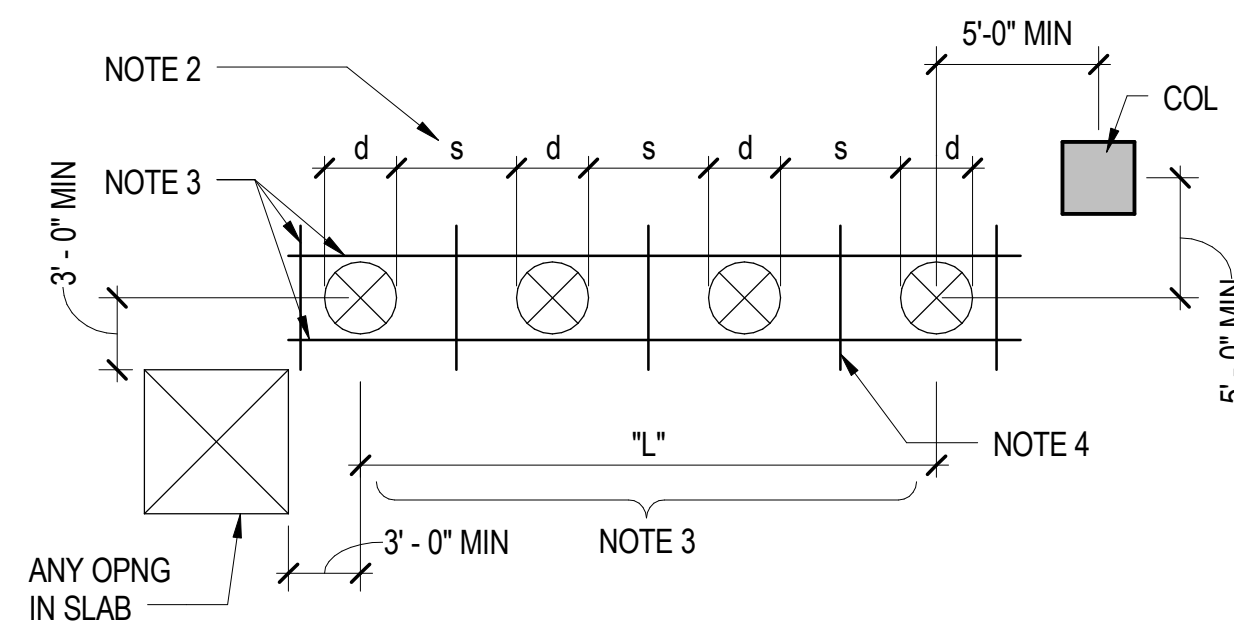
**TYPICAL FOUNDATION AND COLUMN DETAILS**



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

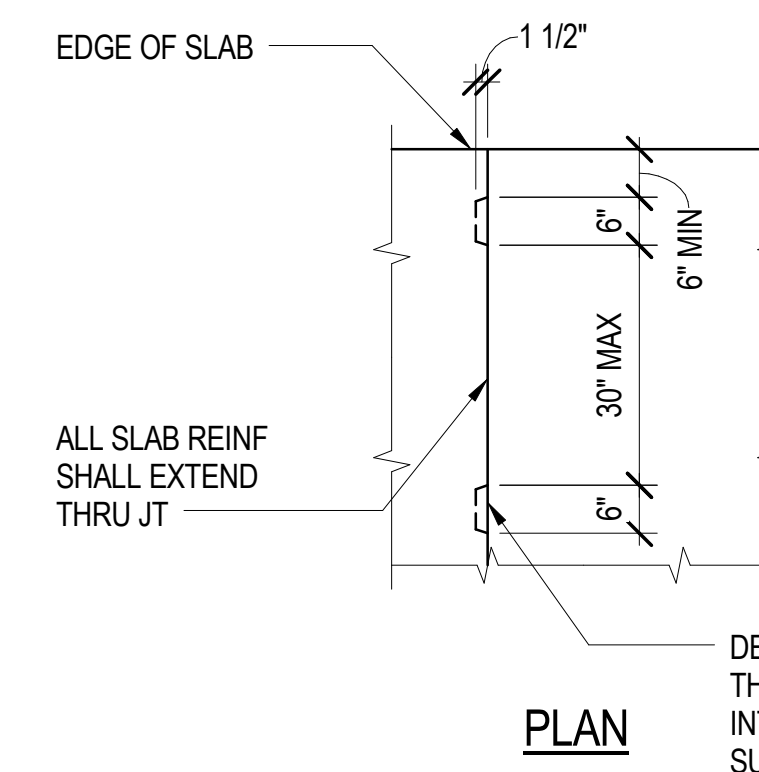
**NOTES:**

- ADDED REINFORCING SHOWN APPLIES TO GROUPS OF OPENINGS 8" OR SMALLER.
- "s" MUST BE GREATER THAN OR EQUAL TO THE SMALLEST "d" (OPENING) DIMENSION. "s" IS EQUAL TO OR GREATER THAN 3" IN ALL CASES.
- WHERE THERE ARE (3) OR MORE OPENINGS OR "L" IS GREATER THAN 1'-0", ADD #4 TOP AND BOTTOM. EXTEND 2'-0" BEYOND OPENING EACH SIDE.
- WHERE "s" IS LESS THAN OR EQUAL TO 1'-0", ADD #4 TOP AND BOTTOM BETWEEN OPENINGS. EXTEND 2'-0" BEYOND OPENING EACH SIDE.
- SEE THE "TYPICAL POST-TENSION CONCRETE SLAB DETAILS" FOR OTHER TENDON PLACEMENT AND REINFORCING REQUIREMENTS.
- OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED FOR REVIEW AT THE SAME TIME AS SLAB SHOP DRAWINGS. REINFORCING OTHER THAN THAT SHOWN MAY BE REQUIRED.
- WHERE A TENDON MUST PASS BETWEEN OPENINGS, "s," AT THAT LOCATION, SHALL BE INCREASED TO 6" MINIMUM.
- WHERE THESE CONDITIONS CANNOT BE MET, SUBMIT TO STRUCTURAL ENGINEER FOR REVIEW.



**OPENINGS IN SLAB**

**3 TYPICAL ADDED REINFORCEMENT AT GROUPED OPENINGS IN FLAT SLAB**

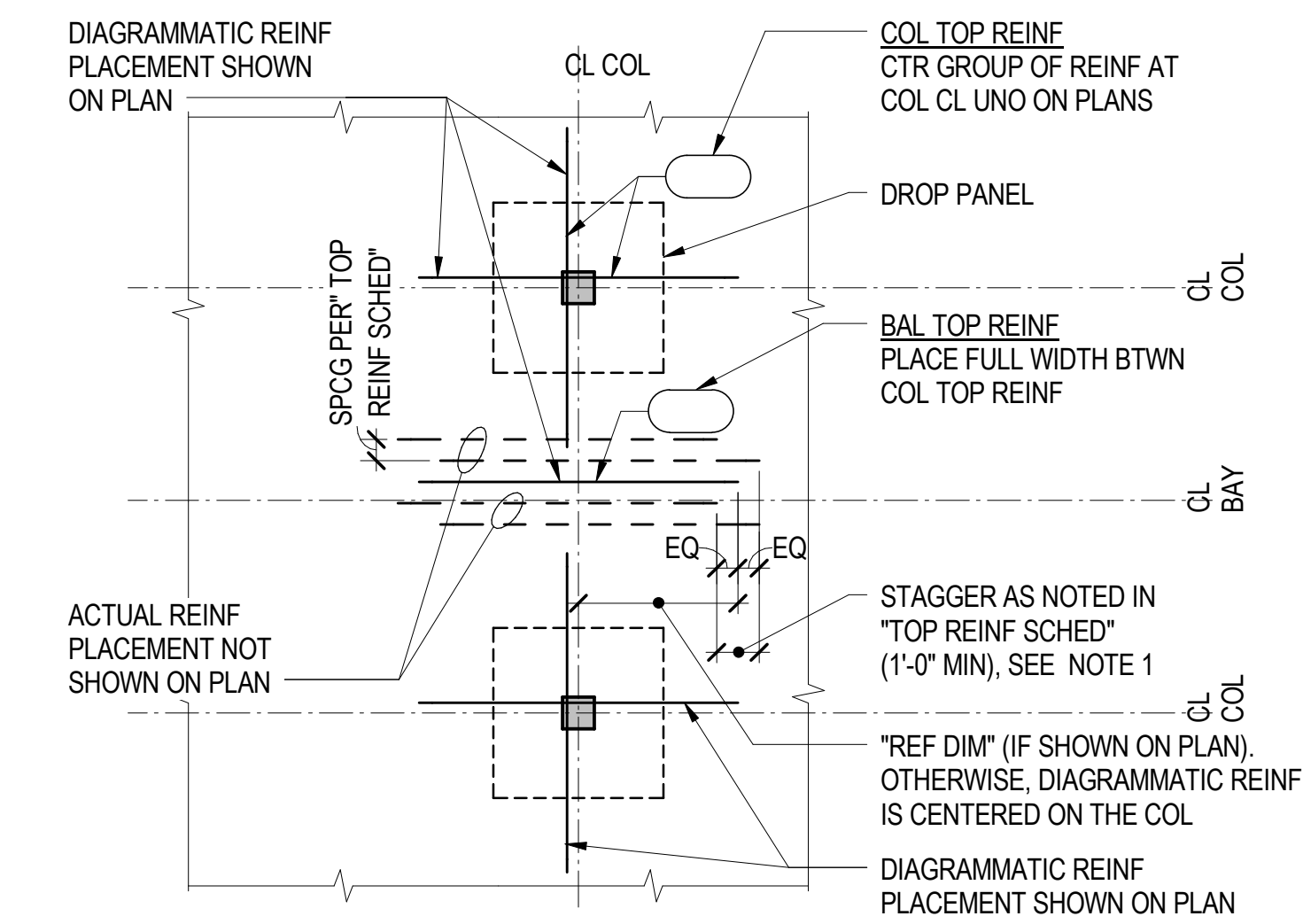


**PLAN**

**NOTES:**

- LOCATE ALL CONSTRUCTION JOINTS WITHIN THE MIDDLE THIRD OF THE SPAN. SUBMIT LOCATIONS OF ALL CONSTRUCTION JOINTS TO ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO FORMING.
- PROVIDE #4x5'-0" AT 24 INCHES ON CENTER AND CENTERED ACROSS CONSTRUCTION JOINT AT LOCATIONS WHERE TOP SLAB REINFORCING IS NOT SPECIFIED PER PLAN.

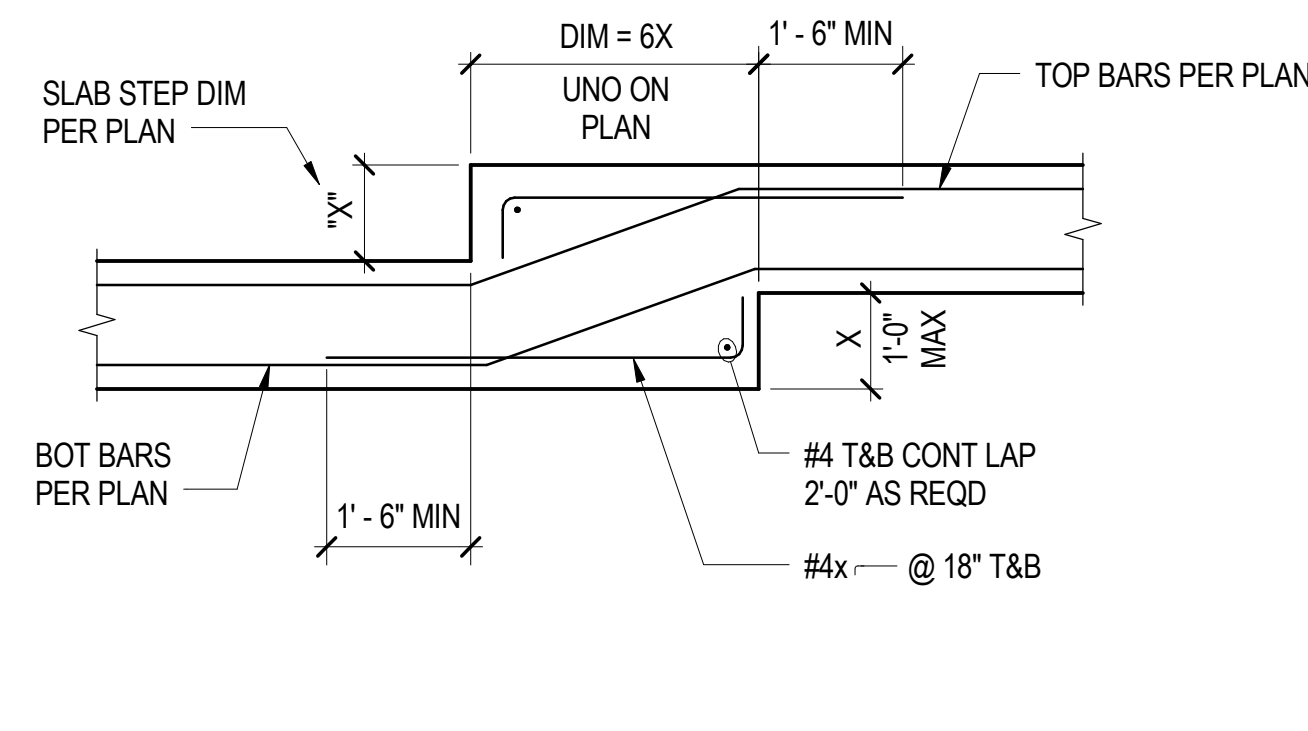
**4 TYPICAL SLAB CONSTRUCTION JOINT**



**NOTES:**

- STAGGERED CONDITION APPLIES TO ALL TOP BARS EXCEPT HOOKED BARS AT SLAB EDGES.

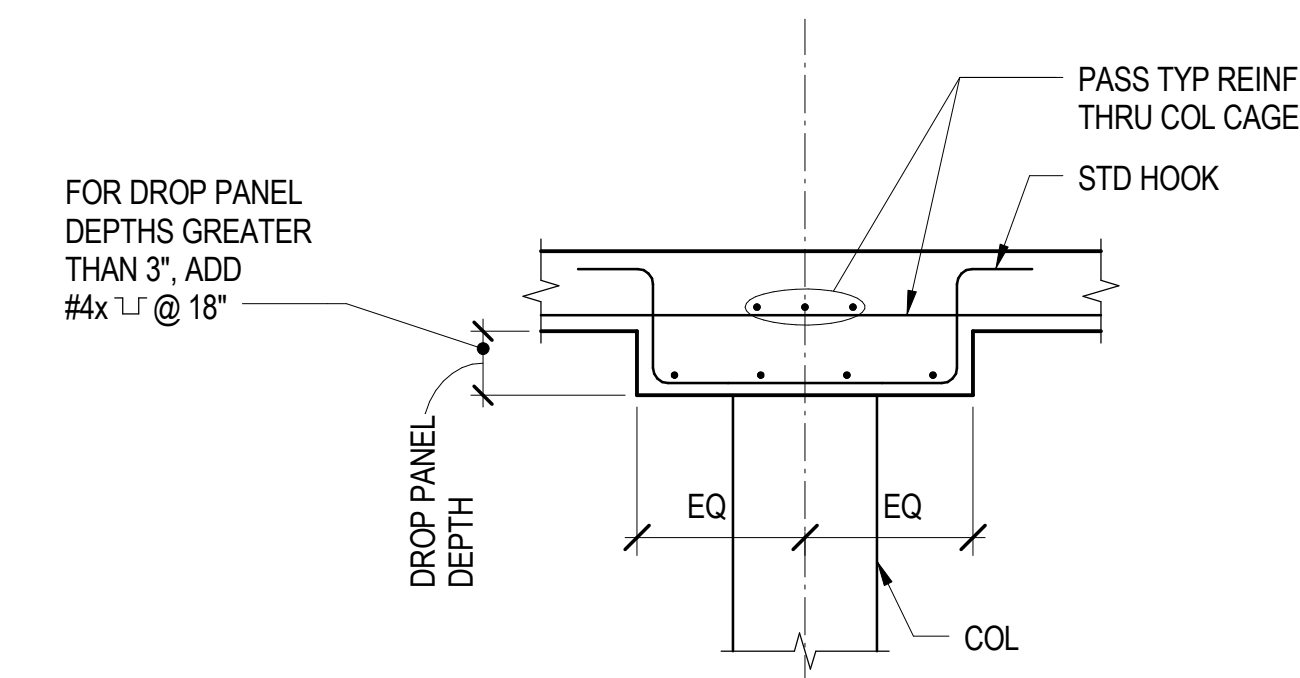
**5 TYP FLAT SLAB TOP REINFORCING PLACEMENT**



**NOTES:**

- THIS DETAIL ONLY APPLIES TO MILD REINFORCED SLABS.

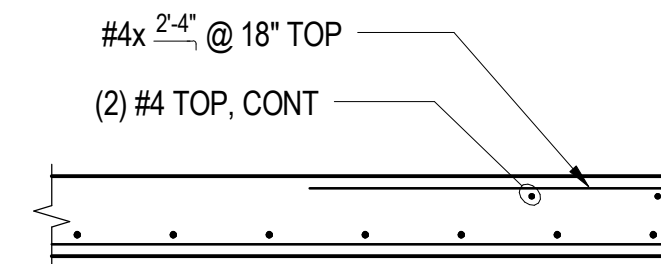
**6 TYPICAL MILD SLAB STEP REINFORCING**



**NOTES:**

- SEE PLAN FOR DIMENSIONS AND REINFORCING.

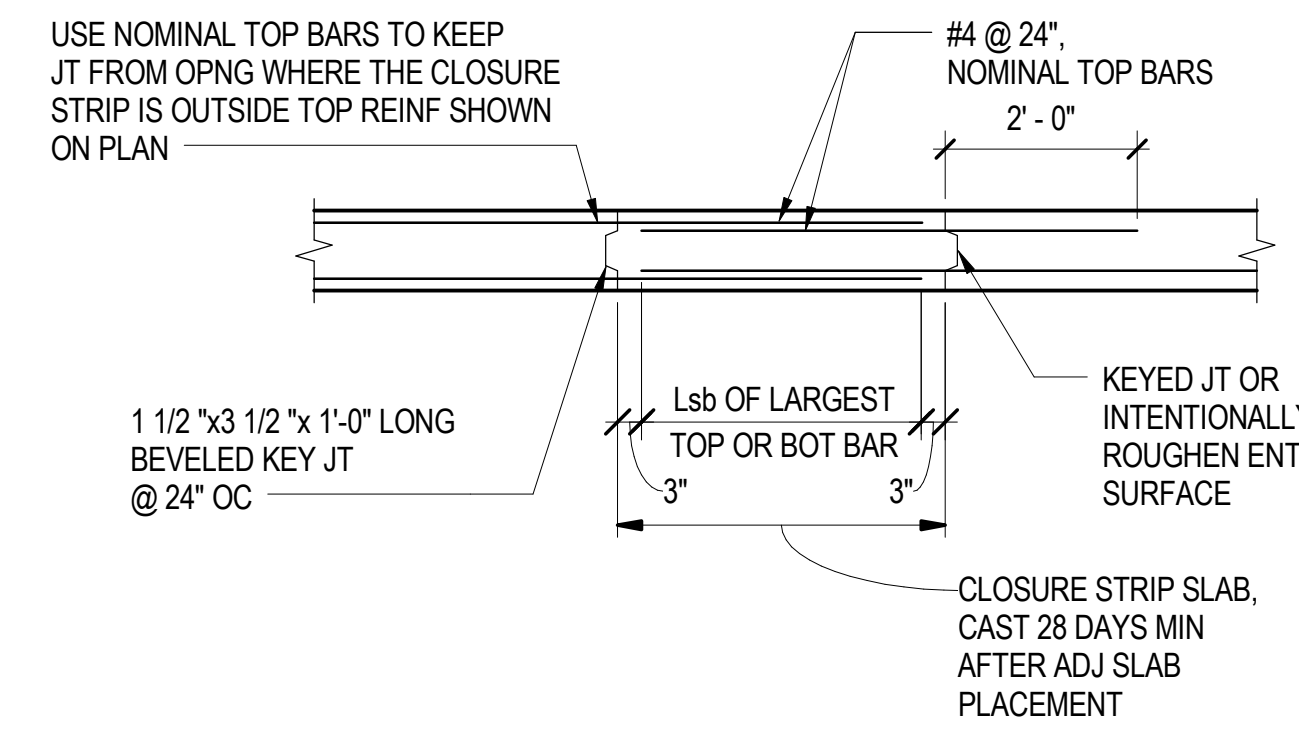
**7 TYPICAL DROP PANEL**



**NOTES:**

- THIS DETAIL APPLIES WHERE NO OTHER TOP REINFORCING IS CALLED OUT ON THE PLANS.

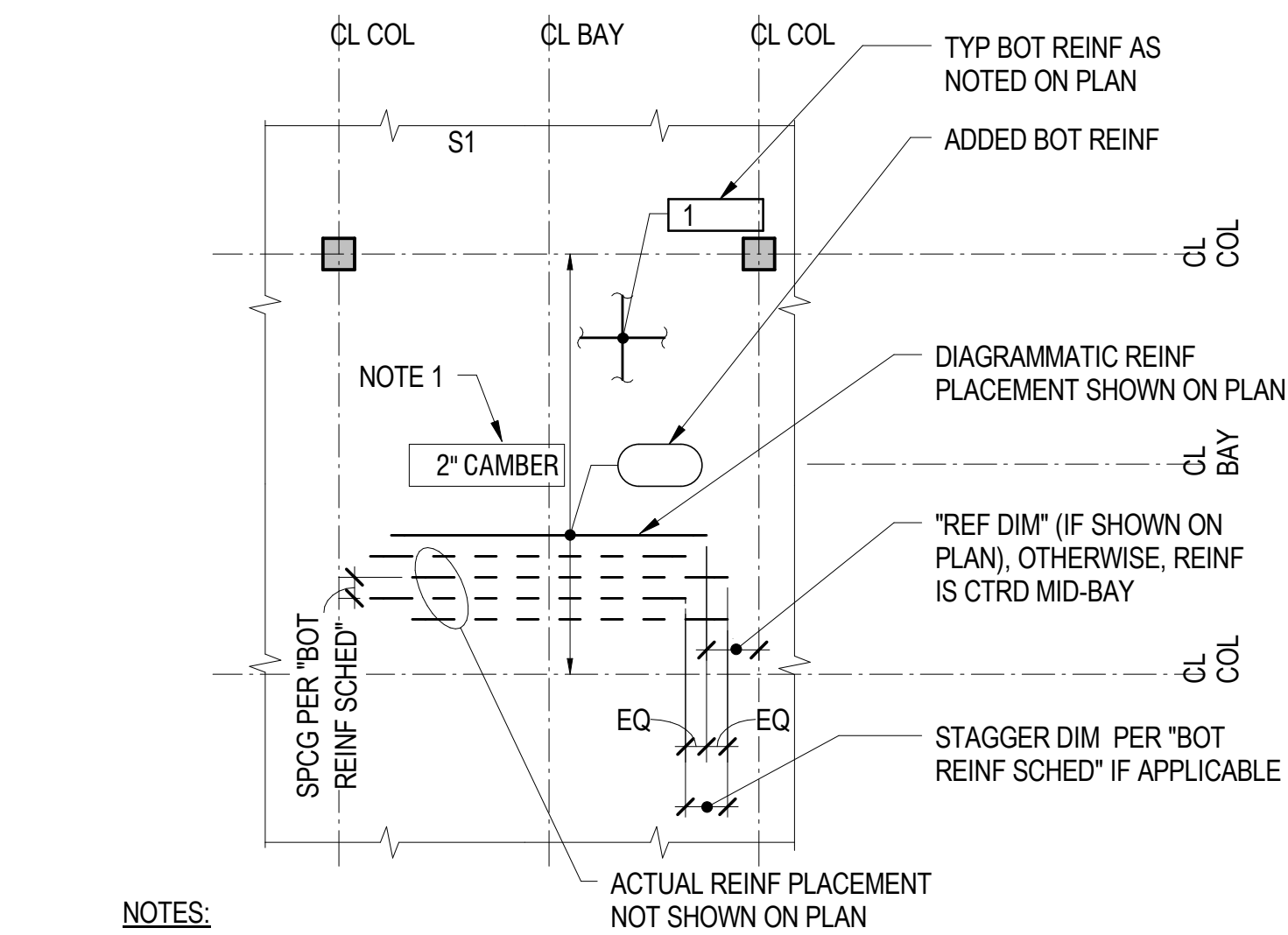
**8 TYPICAL EDGE OF FLAT SLAB**



**NOTES:**

- SHORE SLAB UNTIL CLOSURE STRIP REACHES 28 DAY DESIGN STRENGTH.
- REINFORCING IN OPPOSITE DIRECTION IS PER PLANS.

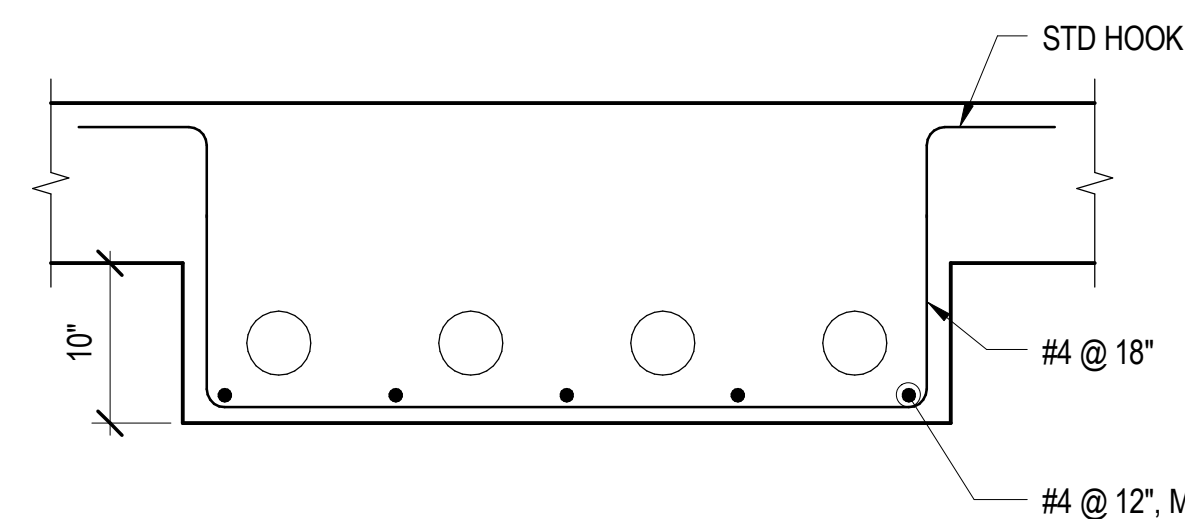
**9 TYPICAL MILD SLAB CLOSURE STRIP**



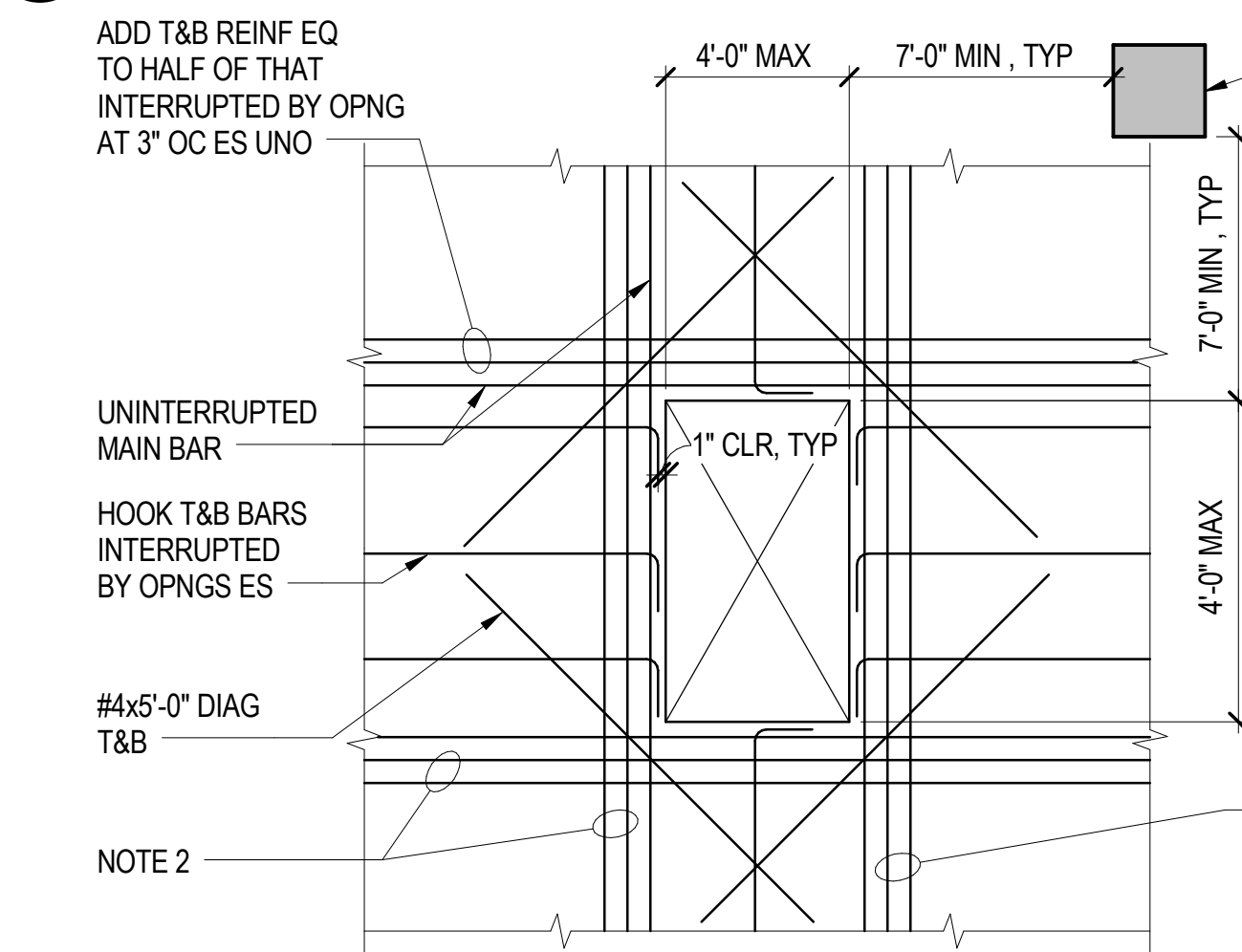
**NOTES:**

- WHEN NO EXTENT LINES EXIST AT FLAT SLAB CAMBER, A SINGLE HIGH POINT AT MID-BAY IS INDICATED. THE SURROUNDING SLAB SLOPES AWAY TOWARD THE ADJACENT COLUMNS OR WALLS.

**10 TYPICAL FLAT SLAB BOTTOM REINF PLACEMENT**



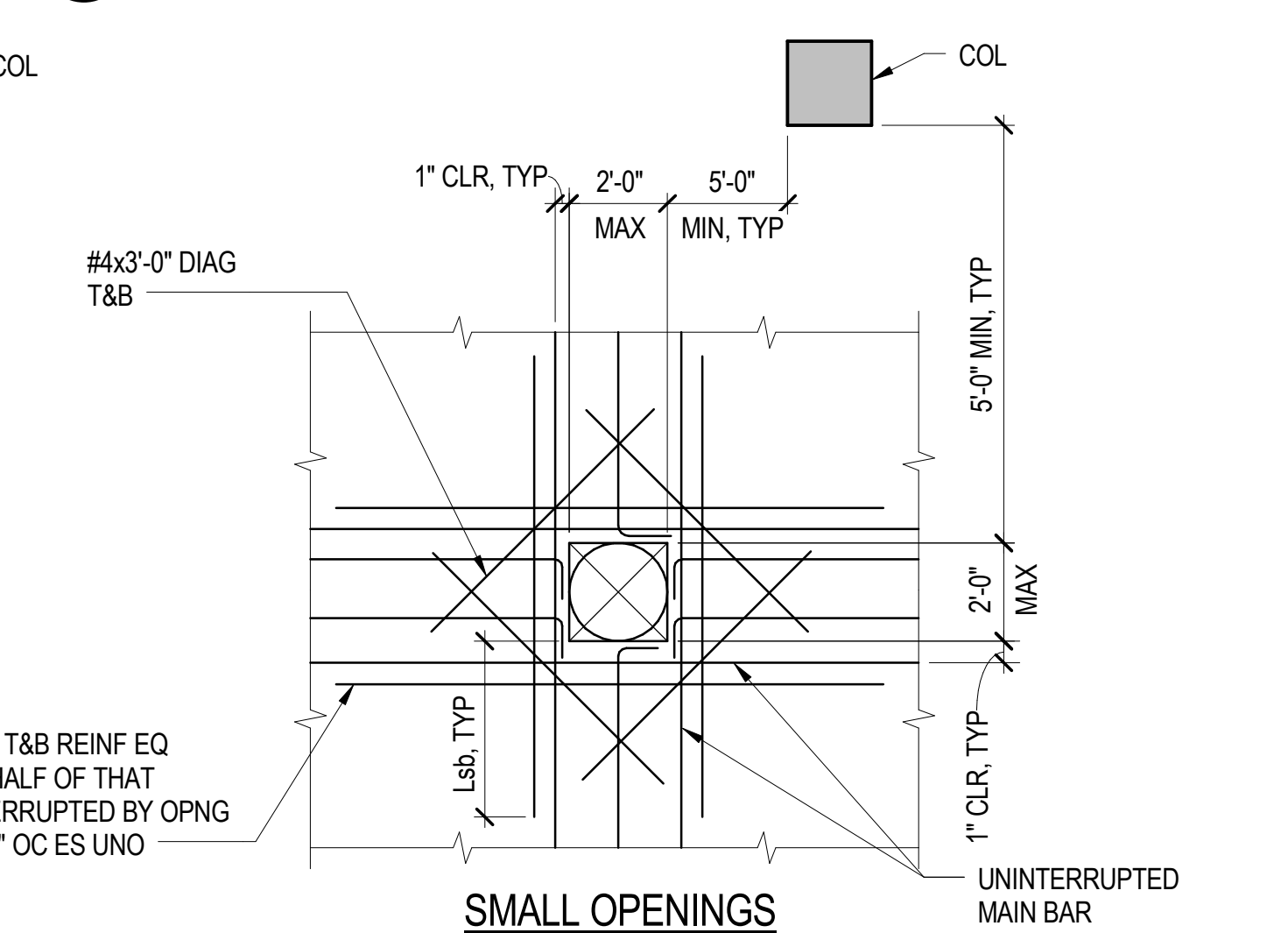
**13 UNDERSLAB CONC ENCASEMENT OF CONDUIT**



**NOTES:**

- IT IS ACCEPTABLE TO ADD SHORTER HOOKED BARS OF THE SAME SIZE TO INTERRUPTED REINFORCING AND LAP SPLICE THEM Lsb. ALL OTHER ADDED REINFORCING REQUIREMENTS REMAIN THE SAME.
- EXTEND ADDED REINFORCING TO THE END OF INTERRUPTED REINFORCING OR 10'-0" PAST OPENING, WHICHEVER IS SHORTER, TYPICAL EACH SIDE.
- FOR GROUPED OPENINGS, SEE "TYPICAL ADDED REINFORCEMENT AT GROUPED OPENINGS IN FLAT SLAB" DETAIL.

**15 TYPICAL FLAT SLAB OPENING REINFORCEMENT**



**SMALL OPENINGS**

5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

NO.	DATE	ISSUE
-----	------	-------

**TYPICAL CONCRETE SLAB DETAILS AND SCHEDULES**

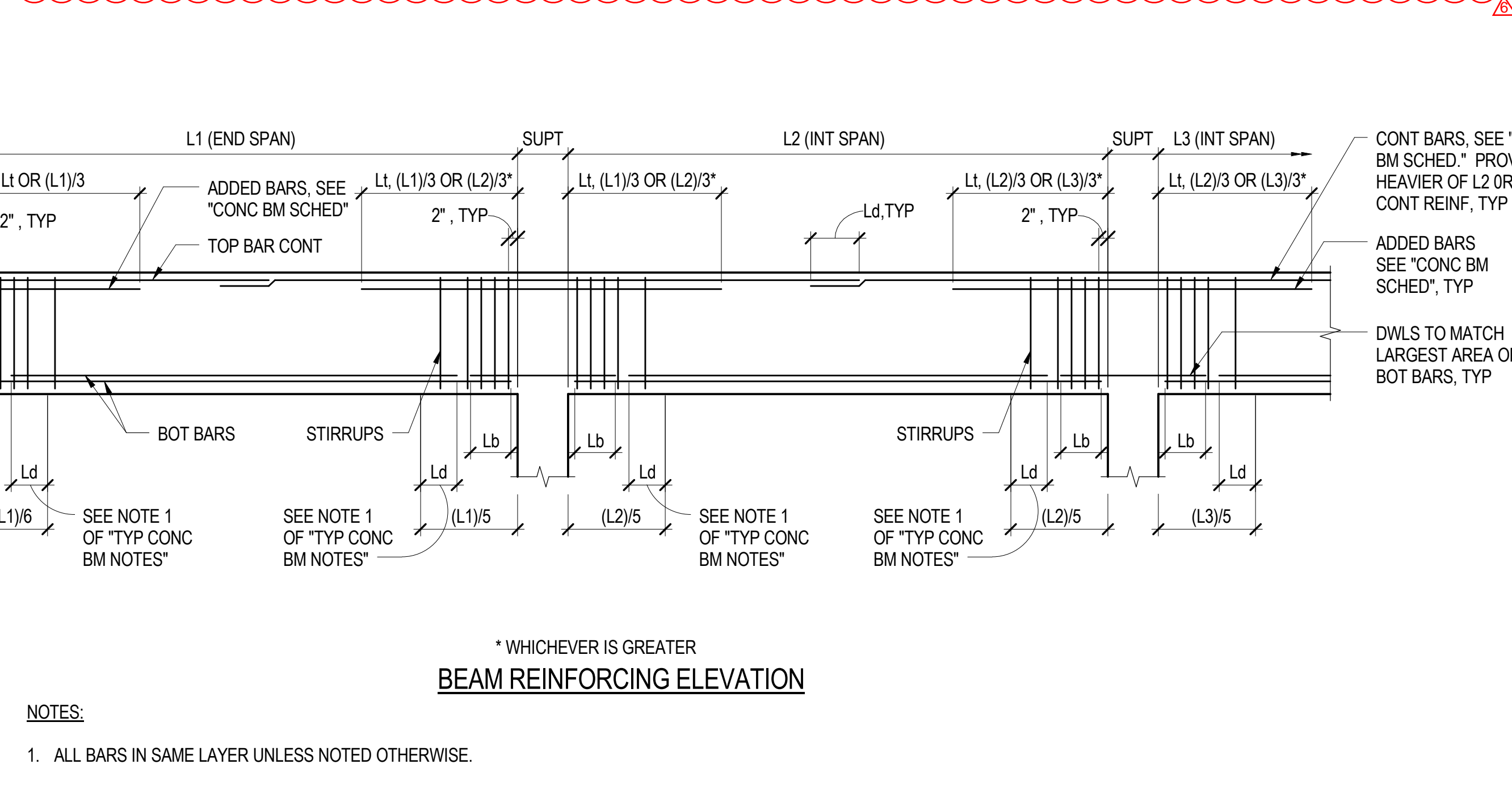
NO. PROJECT NO.	08044
DRAWING NUMBER	S4.03

MARK	SIZE (WIDTHxDEPTH) (INCH)	CAMBER	TOP BARS			STIRRUPS			REMARKS	
			BOTTOM BARS	LEFT	CONTINUOUS	RIGHT	LEFT	CONTINUOUS OR BALANCE		RIGHT
B1	12"x36"		(3) #8	(3) #10			#4 @ 12" [2C]			
B2	12"x36"		(6) #9	(6) #9			#4 @ 12" [2C]			
B3	12"x36"		(6) #9	(6) #11			(4) #4 @ 6" [2C]	#4 @ 12" [2C]	(4) #4 @ 6" [2C]	
B4	8"x18"		(2) #8	(2) #4						
B5	24"x36"		(12) #18 75ksi	(12) #18 75ksi						
B6	12"x36"		(9) #11	(6) #11			#4 @ 12" [2C]			
B7	102"x60"		(12) #11	(8) #11	(4) #11	(8) #11	#4 @ 12" [6C]			
B8	102"x72"		(14) #8	(10) #11	(4) #11	(10) #11	#4 @ 12" [6C]			
B9	48"x60"		(8) #14	(6) #14	(2) #14	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(8) #4 @ 6" [4C]	
B10	48"x72"		(10) #14	(6) #11	(4) #11	(6) #11	(8) #4 @ 6" [6C]	#4 @ 12" [4C]	(8) #4 @ 6" [6C]	
B11	24"x36"		(4) #8	(4) #8			#4 @ 12" [2C]			
B12	8"x18"		(2) #6	(2) #4			#4 @ 12" [2C]			
B13	12"x36"		(3) #10	(3) #10			#4 @ 12" [2C]			
B14	24"x22"		(3) #7	(3) #8			#4 @ 8" [2C]			
B15	12"x22"		(2) #6	(2) #6			#4 @ 8" [2C]			
B16	96"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 1/S5.03	
B17	96"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 2/S5.03	

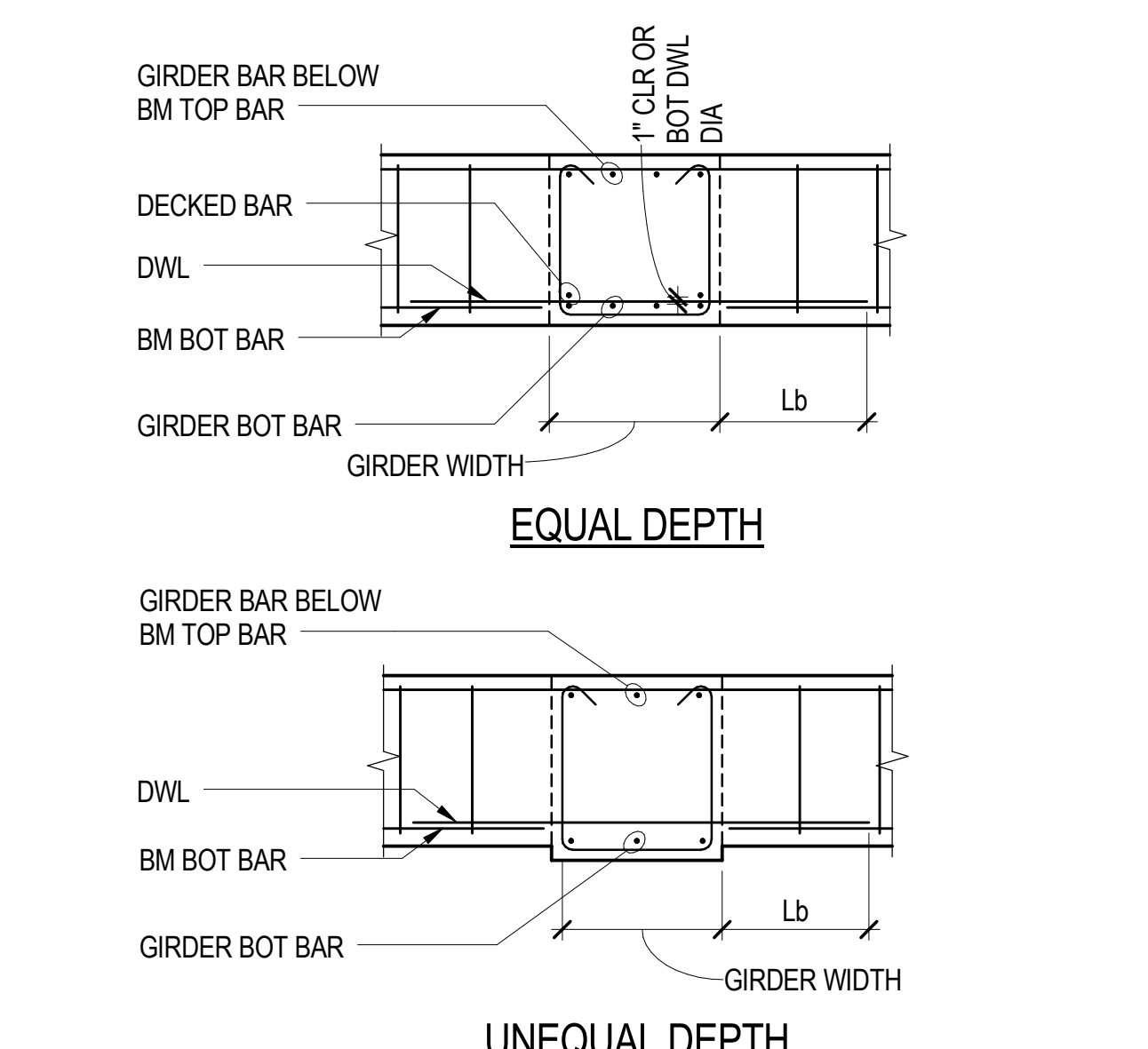
- NOTES:
1. SEE "TYPICAL CONCRETE BEAM" DETAIL.
  2. [ ] DENOTES TYPE OF REINFORCING CONFIGURATION. SEE "TYPICAL CONCRETE BEAM SECTION AND STIRRUPS" DETAIL FOR STIRRUP TYPE.

5 CONCRETE BEAM SCHEDULE

MARK	SIZE (WIDTHxDEPTH) (INCH)	CAMBER	TOP BARS			STIRRUPS			REMARKS	
			BOTTOM BARS	LEFT	CONTINUOUS	RIGHT	LEFT	CONTINUOUS OR BALANCE		RIGHT
B18A	48"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 4/S5.03	
B18B	48"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 4/S5.03	
B19	60"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 2/S5.03	
B20	36"x22"		(6) #6	(4) #7	(2) #7	(4) #5	#4 @ 8" [2C]			
B21	132"x22"		SEE PLANS	SEE PLANS			#4 @ 10"		SEE 3/S5.03	
B22	100"x22"		SEE PLANS	SEE PLANS			#4 @ 10"		SEE 3/S5.03	
B23	12"x48"		(3) #8	(3) #10			#4 @ 12" [2C]			
B24	96"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 6/S5.03	
B25	96"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 5/S5.03	
B26	102"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 5/S5.03	
B27	132"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 5/S5.03	
B28	132"x22"		SEE PLANS	SEE PLANS			SEE 10/S5.03		SEE 10/S5.03	
B29	96"x22"		SEE PLANS	SEE PLANS			#4 @ 18"		SEE 7/S5.03	
B30	36"x22"		(6) #6	(4) #6	(2) #6	(4) #5	#4 @ 8" [2C]			
B31	48"x60"		(8) #14+	(6) #14	(8) #14+	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(22) #4 @ 8" [6C] DECK #11 BARS T&B	
B32	24"x36"		(5) #9	(5) #9			#4 @ 8" [2C]			
B33	30"x36"		(5) #9	(5) #9			#4 @ 8" [2C]			
B34	150"x22"		SEE PLANS	SEE PLANS			SEE 10/S5.03		SEE 10/S5.03	
B35	24"x24"		(3) #7	(3) #6			#4 @ 12" [2C]			
B36	18"x24"		(3) #7	(3) #6			#4 @ 12" [2C]			
B37	48"x24"		(6) #8	(6) #8			#4 @ 12" [2C]		(5) #4 [3C] STIRRUPS UNDER SA BASE ISOLATOR PAD	
B38	48"x60"		(8) #14	(6) #14	(2) #14	(6) #14	(8) #4 @ 6" [4C]	#4 @ 12" [4C]	(8) #4 @ 6" [4C]	

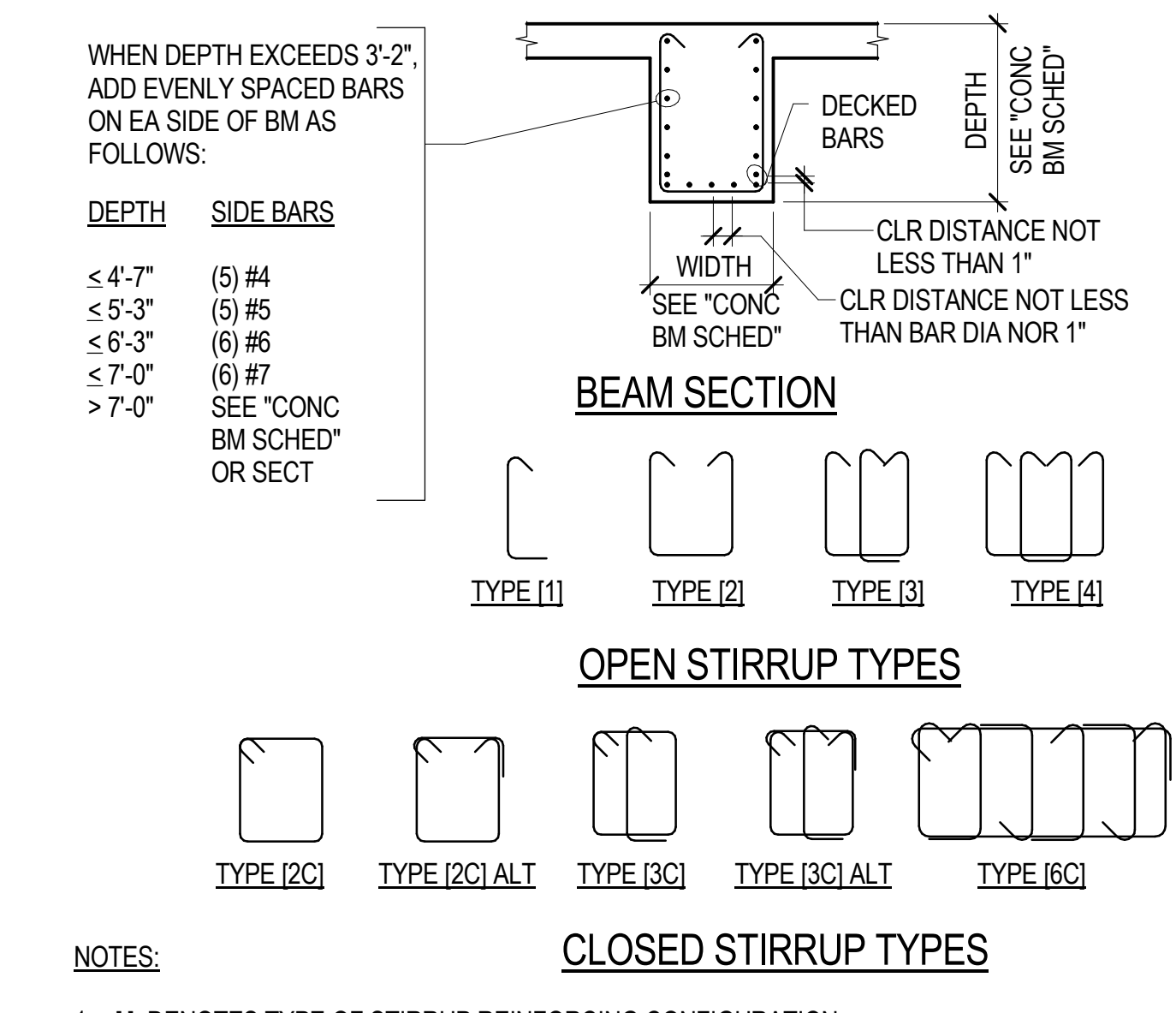


14 TYP CONC BEAM AND GIRDER INTERSECTION

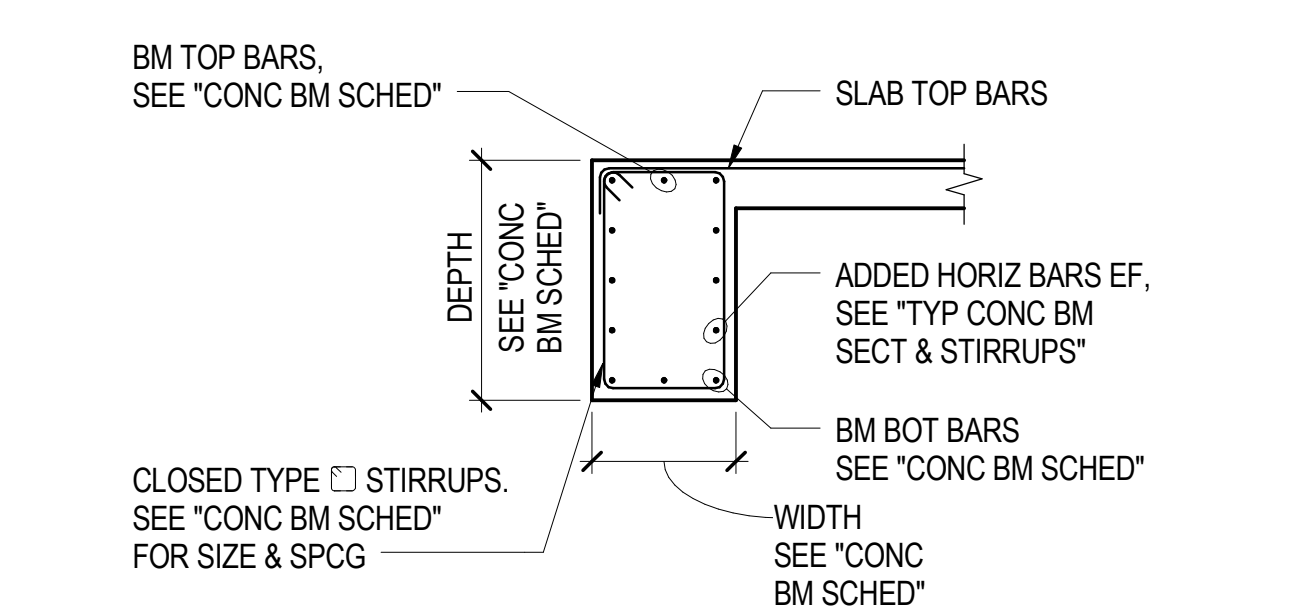


- NOTES:
1. AT CONTRACTOR'S OPTION, WHERE REQUIRED TO RELIEVE BAR CONGESTION, NOT MORE THAN 50 PERCENT OF THE AREA OF THE STRAIGHT BOTTOM BARS MAY BE TERMINATED AS SHOWN UNLESS NOTED OTHERWISE.
  2. BEAM SCHEDULES DO NOT INDICATE REQUIREMENTS FOR ARRANGING BARS. THE CONTRACTOR SHALL DETAIL AND PLACE REINFORCING STEEL IN A SINGLE LAYER WHENEVER POSSIBLE. A SECOND LAYER MAY BE USED ONLY WHERE REQUIRED TO PROVIDE PROPER CLEARANCES BETWEEN BARS IN A LAYER AND WHERE REQUIRED IN ORDER TO PROPERLY CLEAR COLUMN VERTICALS AND SIMILAR REINFORCING.
  3. REFER TO "REINFORCING BAR DEVELOPMENT AND SPLICE LENGTH TABLES" FOR L1, L2, AND L3.
  4. EITHER 90 OR 180 DEGREE STANDARD HOOK BARS MAY BE USED FOR LONGITUDINAL BARS.
  5. WHERE TOP BARS ARE INDICATED AS CONTINUOUS AND RUN OVER 60 FEET IN LENGTH, BARS MAY BE LAPPED Ld IN THE MIDDLE THIRD OF THE BEAM SPAN UNLESS NOTED OTHERWISE. CONTINUOUS TOP BARS SHALL NOT BE LAPPED IN THE SPAN ADJACENT TO A CANTILEVER, UNLESS NOTED OTHERWISE. WHERE BOTTOM BARS ARE SHOWN AS CONTINUOUS AND RUN IN EXCESS OF 60 FEET, A LAP SPLICE MAY BE USED EQUAL TO Ld AND SHALL BE OUTSIDE THE MIDDLE THIRD OF THE BEAM SPAN. SIDE BAR SPLICES MAY BE MADE WHERE CONVENIENT.
  6. LOCATE ALL CONSTRUCTION JOINTS WITHIN THE MIDDLE THIRD OF SPAN. JOINTS SHALL BE OFFSET AT A MINIMUM DISTANCE OF TWO TIMES THE WIDTH OF INTERSECTING BEAMS. SUBMIT LOCATION OF ALL CONSTRUCTION JOINTS TO ENGINEER FOR REVIEW AND ACCEPTANCE BEFORE FORMING.
  7. STANDARD HOOKS FOR STIRRUPS MAY BE 135 DEGREE BEND PLUS 6db EXTENSION, BUT NOT LESS THAN 3 INCHES.

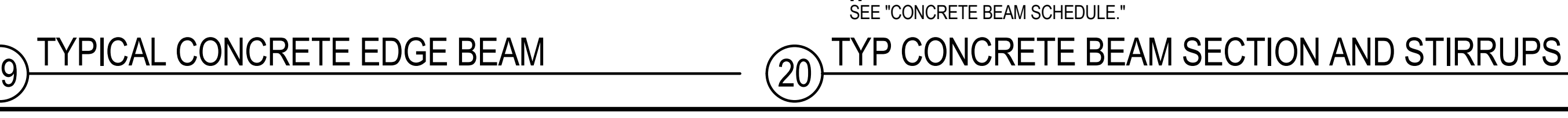
15 TYPICAL CONCRETE BEAM NOTES



19 TYPICAL CONCRETE EDGE BEAM



20 TYPICAL CONCRETE BEAM SECTION AND STIRRUPS



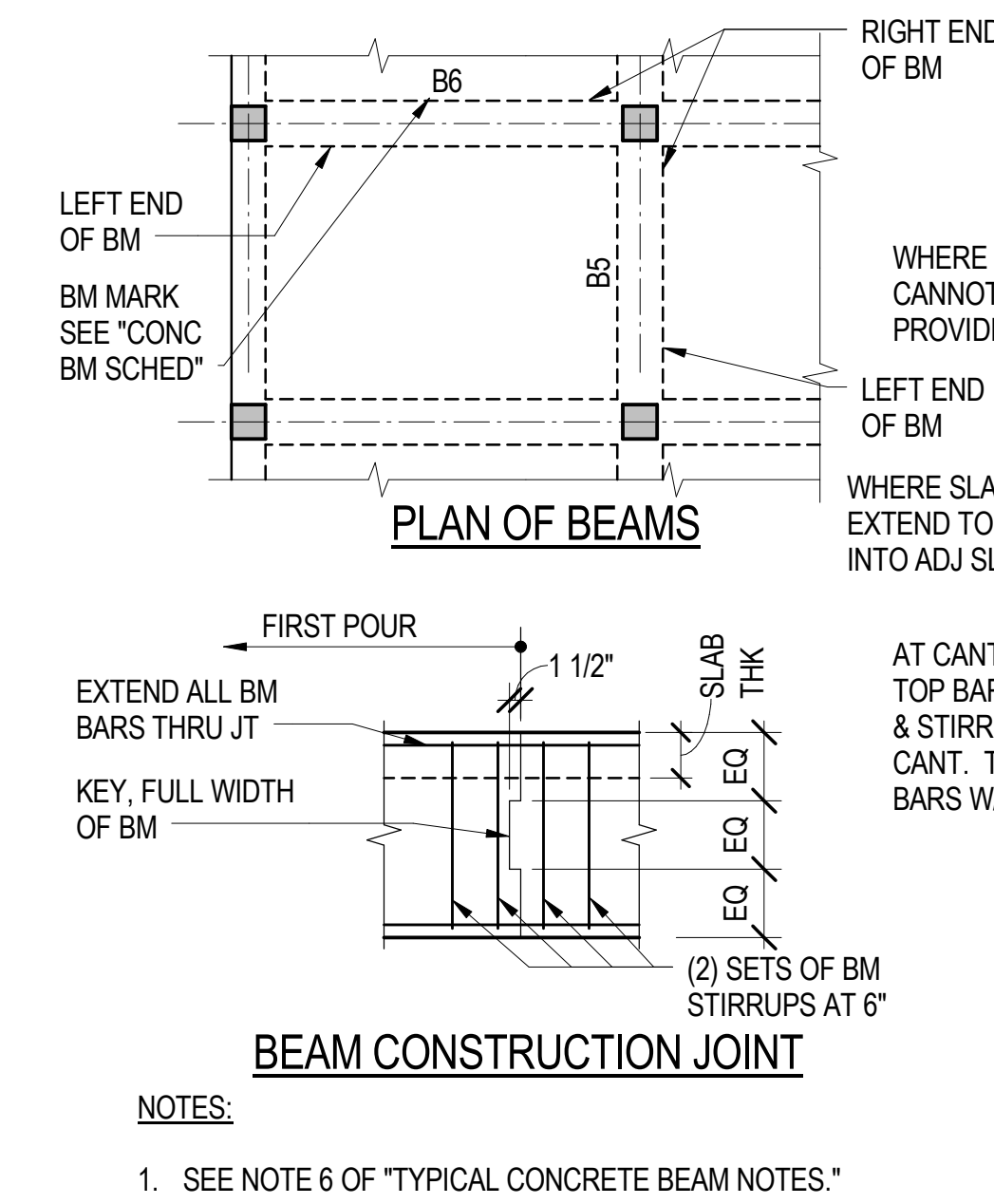
TYPE MARK	THICKNESS	CAMBER	TOP BARS			REMARKS
			BOTTOM BARS	LEFT	CONTINUOUS	
S1	6"		#4 @ 12"	#4 @ 12"		W/ STD HOOK
S2	6"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S3	8"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S4	12"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S5	8"		#5 @ 12" EW	#5 @ 12" EW		
S6	26"		#10 @ 12" EW	#10 @ 12" EW		
S7	36"		#9 @ 6"	#9 @ 6"		
S8	8"		#5 @ 12"	#5 @ 12"		
S9	36"		(2) #5 @ 4"	(2) #5 @ 4"		(2) LAYERS
S10	12"		#10 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S11	14"		#9 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S12	24"		#8 @ 6"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S13	27"		#8 @ 6"	#8 @ 6"		
S14	18"		#8 @ 12"	#8 @ 12"		
S15	12"		#6 @ 12"	#6 @ 12"		
S16	16"		#9 @ 12" EW	#5 @ 12"		W/STD HOOK
S17	18"		#9 @ 12"	#9 @ 9"		W/STD HOOK

7 ONE-WAY SLAB SCHEDULE

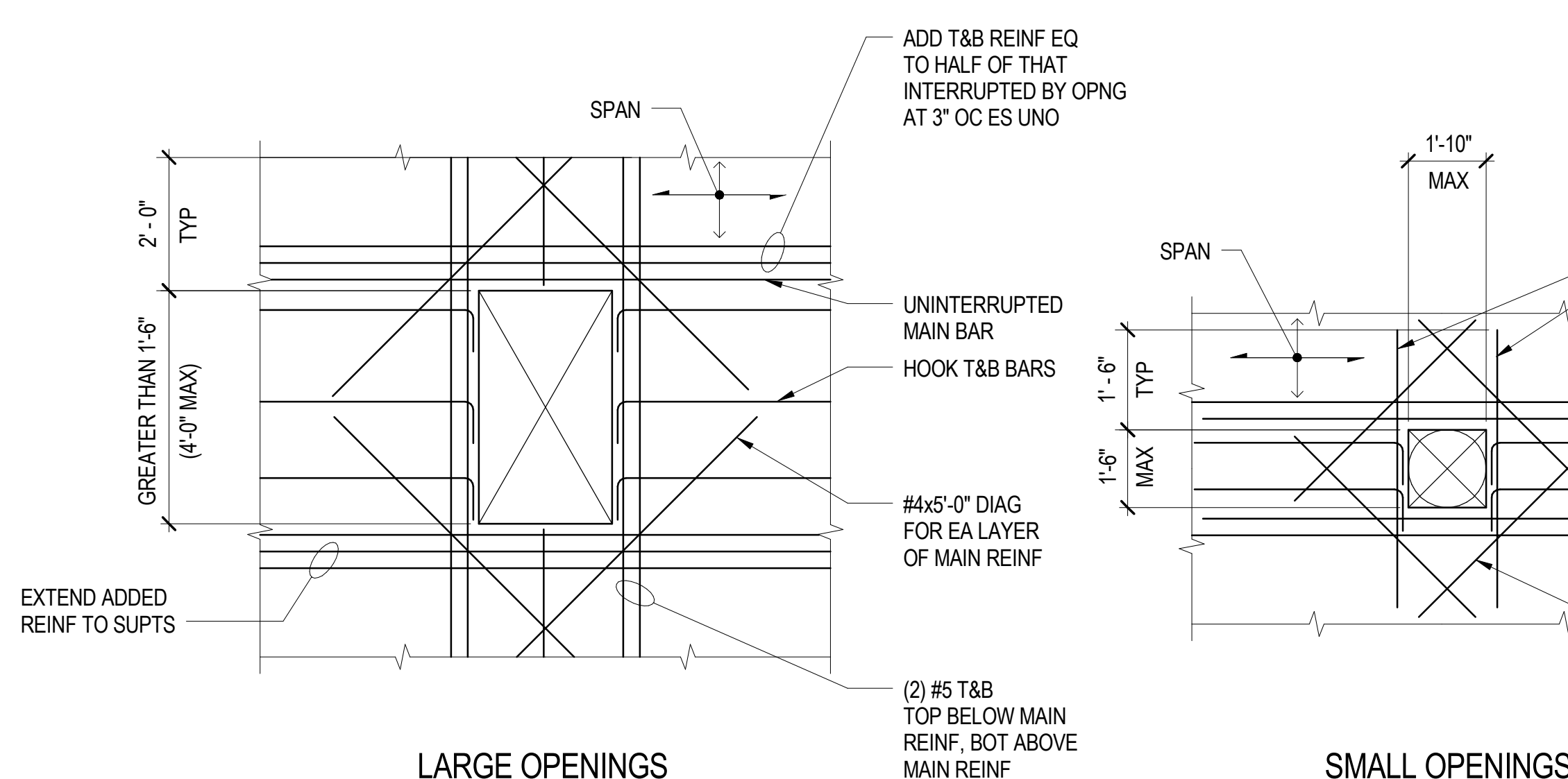
ONE-WAY SLAB SCHEDULE

TYPE MARK	THICKNESS	CAMBER	TOP BARS			REMARKS
			BOTTOM BARS	LEFT	CONTINUOUS	
S1	6"		#4 @ 12"	#4 @ 12"		W/ STD HOOK
S2	6"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S3	8"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S4	12"		#5 @ 12"	#5 @ 12"		W/ STD HOOK
S5	8"		#5 @ 12" EW	#5 @ 12" EW		
S6	26"		#10 @ 12" EW	#10 @ 12" EW		
S7	36"		#9 @ 6"	#9 @ 6"		
S8	8"		#5 @ 12"	#5 @ 12"		
S9	36"		(2) #5 @ 4"	(2) #5 @ 4"		(2) LAYERS
S10	12"		#10 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S11	14"		#9 @ 12"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S12	24"		#8 @ 6"	#7 @ 6"	#7 @ 12"	#7 @ 6"
S13	27"		#8 @ 6"	#8 @ 6"		
S14	18"		#8 @ 12"	#8 @ 12"		
S15	12"		#6 @ 12"	#6 @ 12"		
S16	16"		#9 @ 12" EW	#5 @ 12"		W/STD HOOK
S17	18"		#9 @ 12"	#9 @ 9"		W/STD HOOK

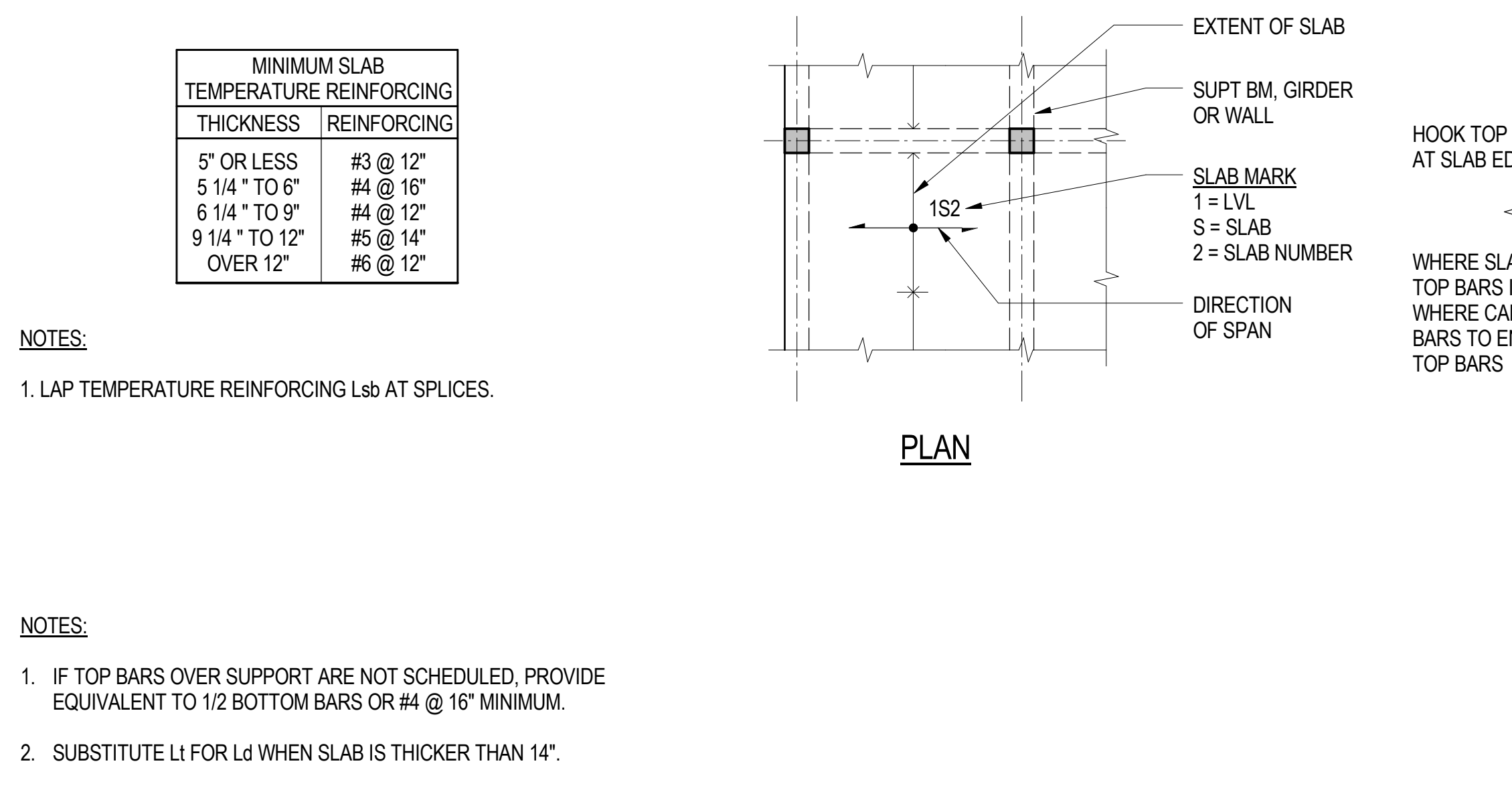
10 TYPICAL CONCRETE BEAM



12 TYPICAL ONE-WAY SLAB OPENING REINFORCING



18 TYPICAL ONE-WAY SLAB



C:\Revit\Transbay\Twr\_WS2013.lam.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

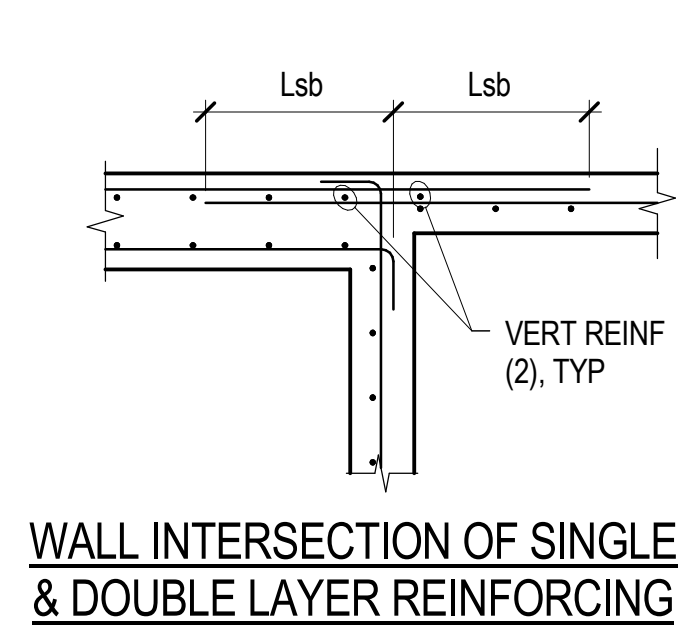
NO. DATE STRUCTURAL BID ISSUE

DRAWING TITLE: **TYP CONCRETE BEAM & ONE-WAY SLAB DETAILS & SCHEDULES**

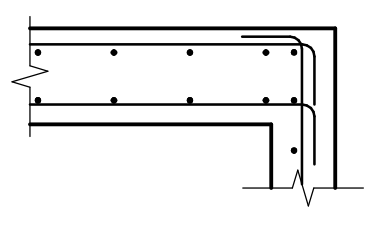
REV. PROJECT NO. DRAWING NUMBER: **S4.04**



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Wasting Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



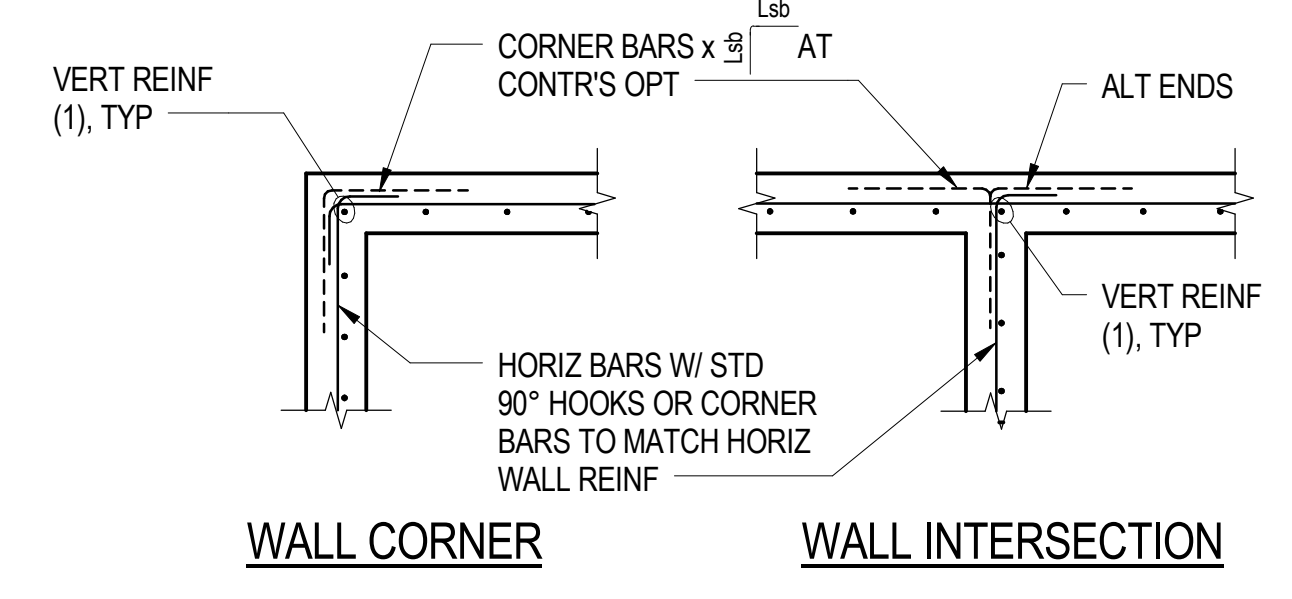
WALL INTERSECTION OF SINGLE & DOUBLE LAYER REINFORCING



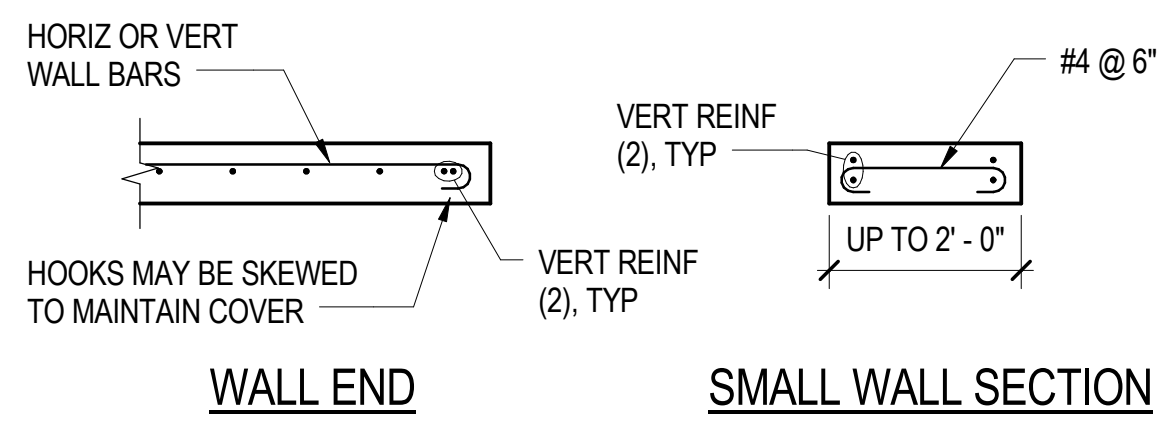
WALL CORNER OF SINGLE & DOUBLE LAYER REINFORCING

NOTES:  
1. SMALL WALL SECTION DETAILS APPLY BOTH IN HORIZONTAL AND VERTICAL DIRECTIONS.

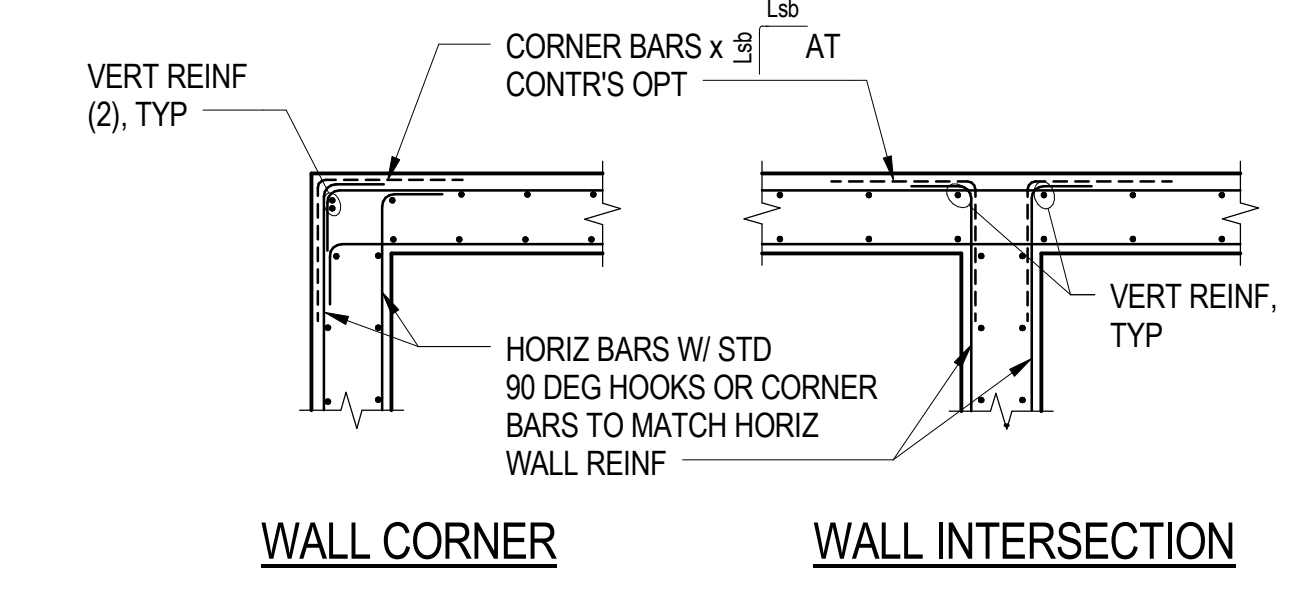
3 TYPICAL CONCRETE WALL REINFORCING



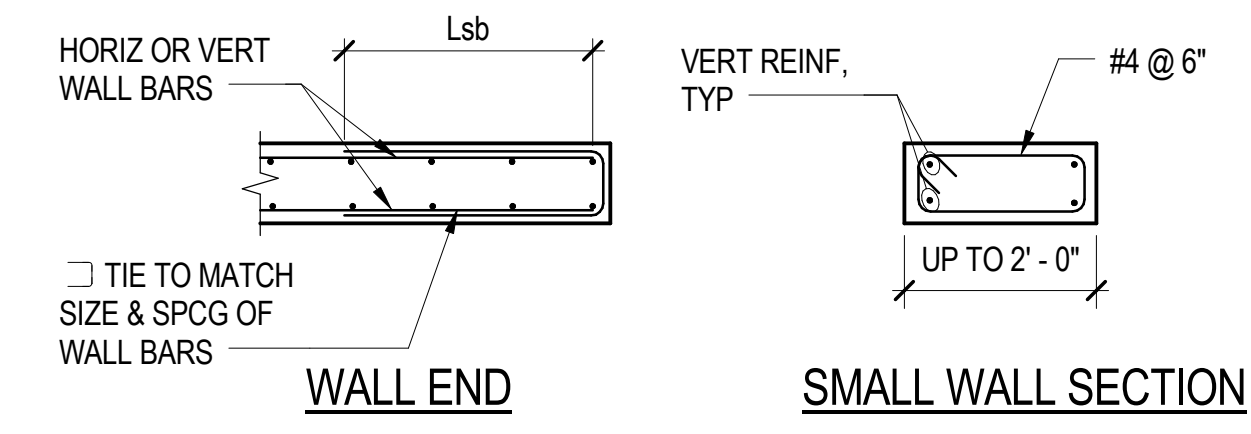
WALL CORNER WALL INTERSECTION SINGLE LAYER REINFORCING



WALL END SMALL WALL SECTION SINGLE LAYER REINFORCING



WALL CORNER WALL INTERSECTION DOUBLE LAYER REINFORCING



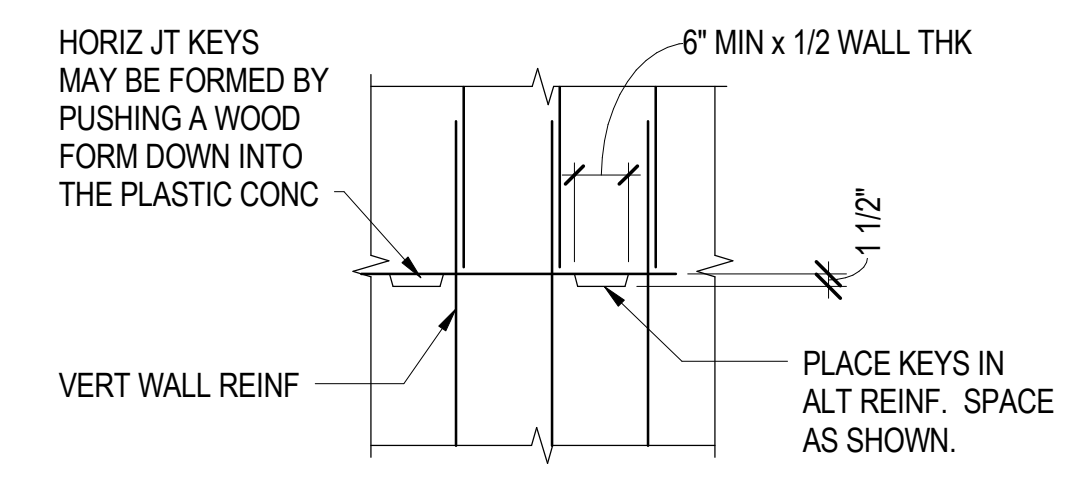
WALL END SMALL WALL SECTION DOUBLE LAYER REINFORCING

NOTES:  
1. UNLESS NOTED OR SHOWN OTHERWISE, ALL WALLS ARE TO BE REINFORCED WITH MINIMUM REINFORCEMENT AS SHOWN IN THE FOLLOWING TABLE:

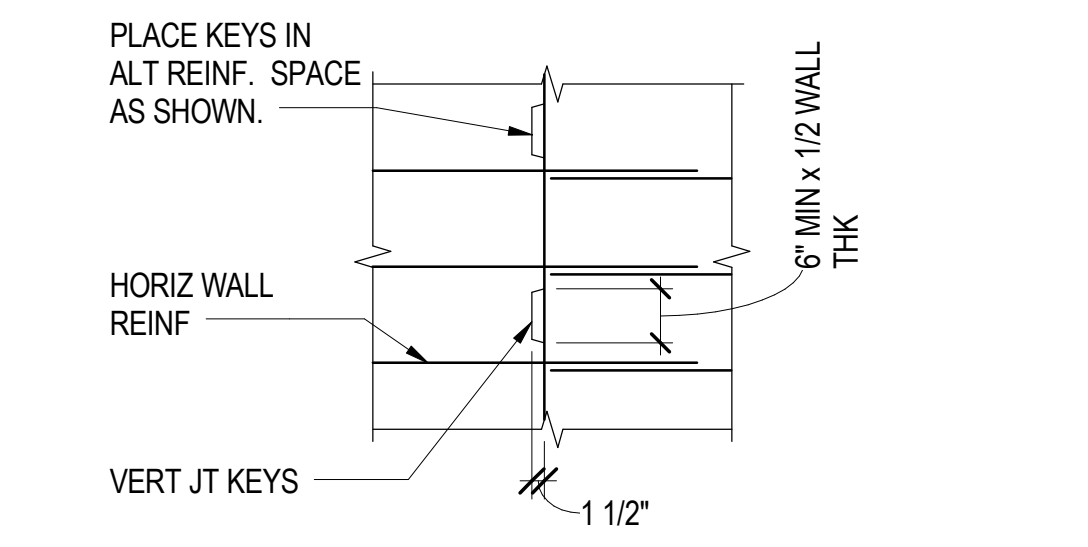
WALL THICKNESS	HORIZONTAL BARS	VERTICAL BARS	LOCATION
6" & UNDER	#4 @ 12"	#4 @ 12"	CENTERLINE CENTERLINE
OVER 6-8"	#5 @ 15"	#5 @ 15"	CENTERLINE CENTERLINE
OVER 8-10"	#5 @ 12"	#5 @ 12"	EACH FACE EACH FACE
OVER 10-12"	#4 @ 12"	#4 @ 12"	EACH FACE EACH FACE
OVER 12-14"	#5 @ 18"	#5 @ 18"	EACH FACE EACH FACE
OVER 14-16"	#5 @ 15"	#5 @ 15"	EACH FACE EACH FACE
OVER 16-20"	#5 @ 12"	#5 @ 12"	EACH FACE EACH FACE
OVER 20-24"	#5 @ 10"	#5 @ 10"	EACH FACE EACH FACE

2. LAP WALL REINFORCING Lsb AT SPLICES.  
3. ALL VERTICAL REINFORCING IN CONCRETE WALLS SHALL BE CONTINUOUS FROM STRUCTURAL FLOOR TO STRUCTURAL FLOOR, OR FROM FOOTING TO FIRST STRUCTURAL FLOOR ABOVE UNLESS NOTED OTHERWISE.  
4. START HORIZONTAL AND VERTICAL BARS 1 INCH CLEAR OF EDGE OF OPENINGS. SPACE REINFORCING BARS AT EQUAL SPACES NOT TO EXCEED REQUIRED SPACING.

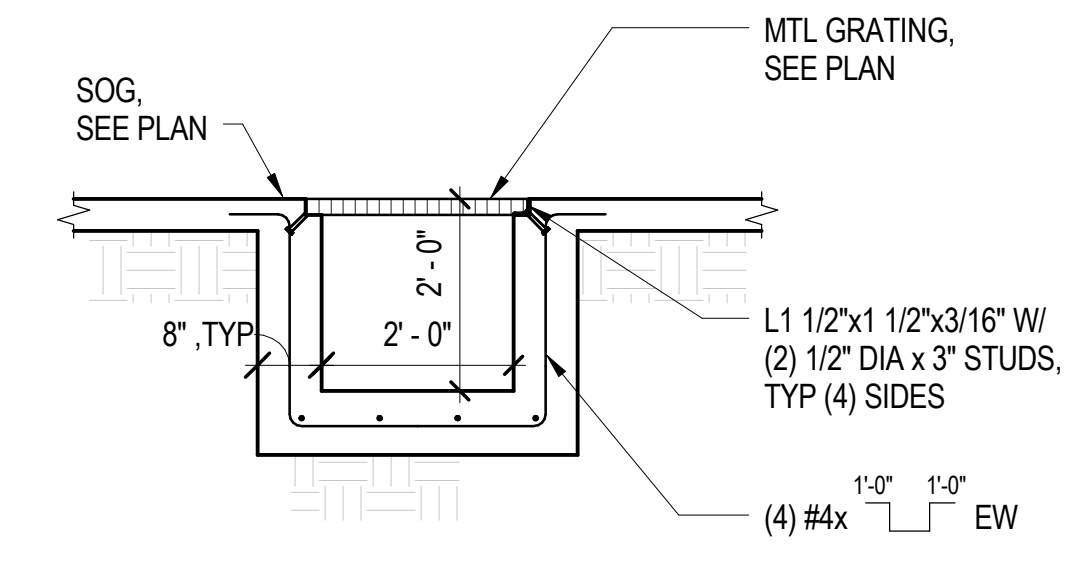
5 TYPICAL CONCRETE WALL REINFORCING



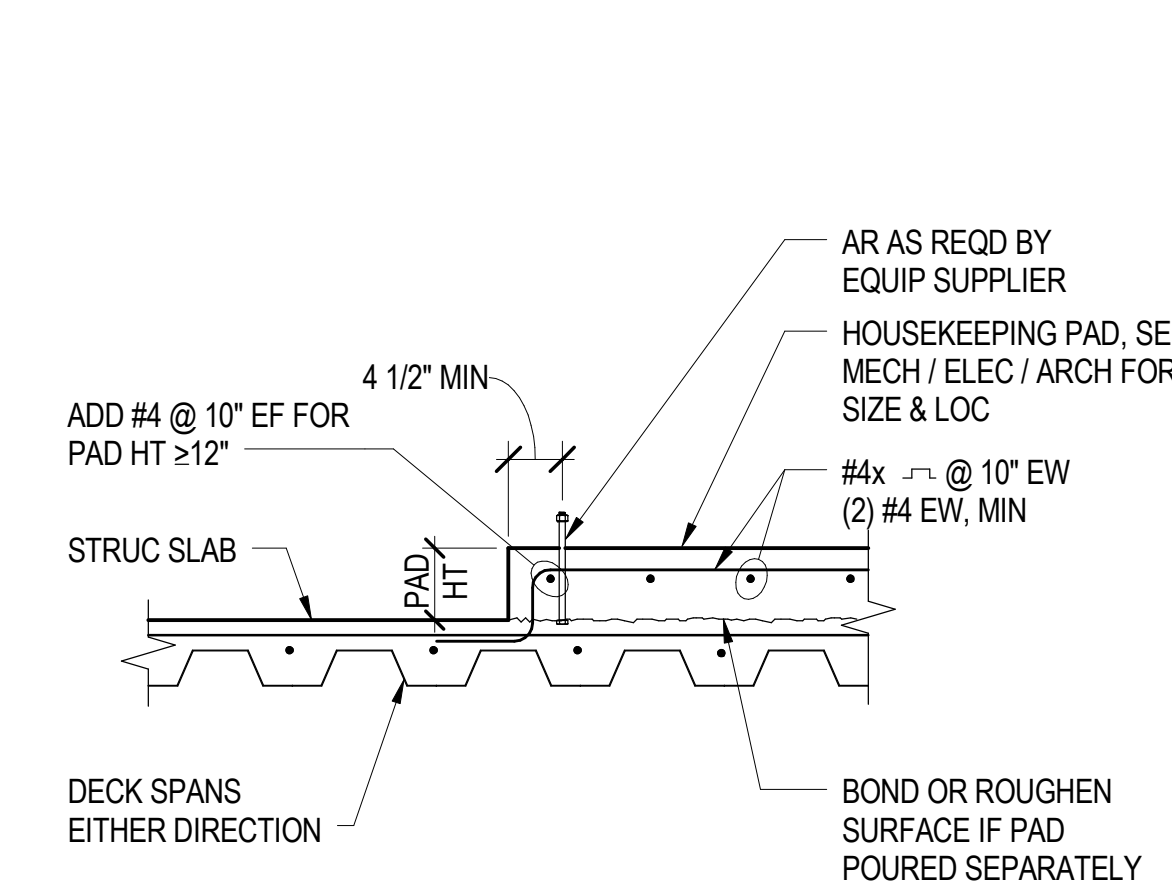
HORIZONTAL JOINT ELEVATION



VERTICAL JOINT ELEVATION

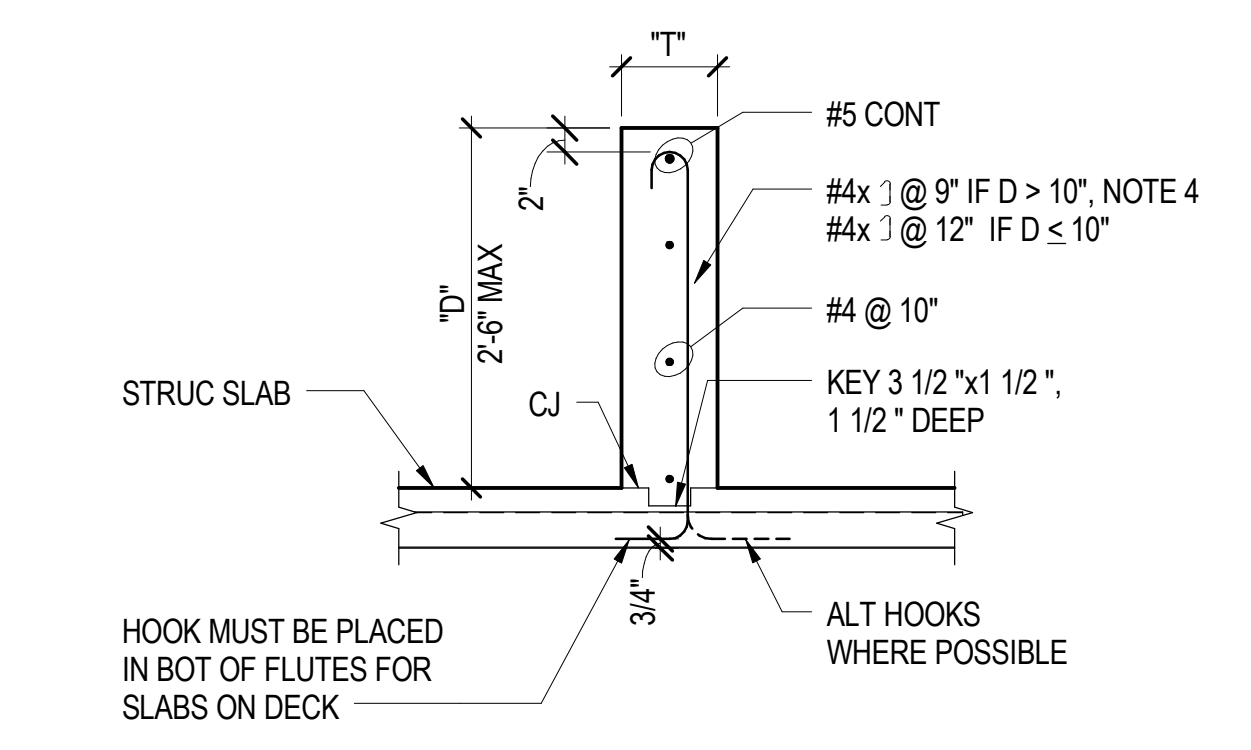


8 TYPICAL SUMP PIT



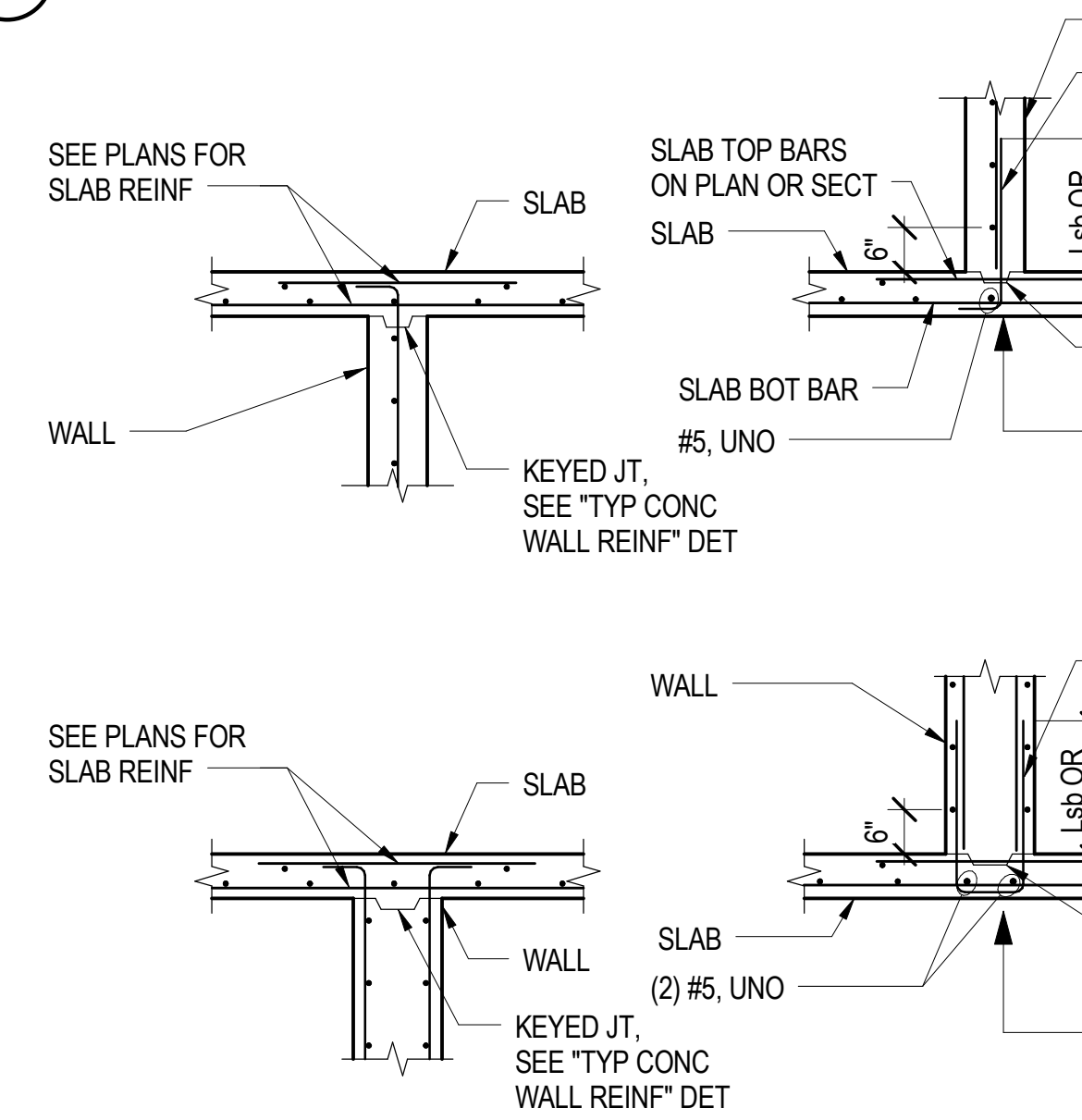
- NOTES:  
1. HOUSEKEEPING PAD ON SLAB ON GRADE AND FORMED SLABS SIMILAR.

12 TYPICAL HOUSEKEEPING PAD

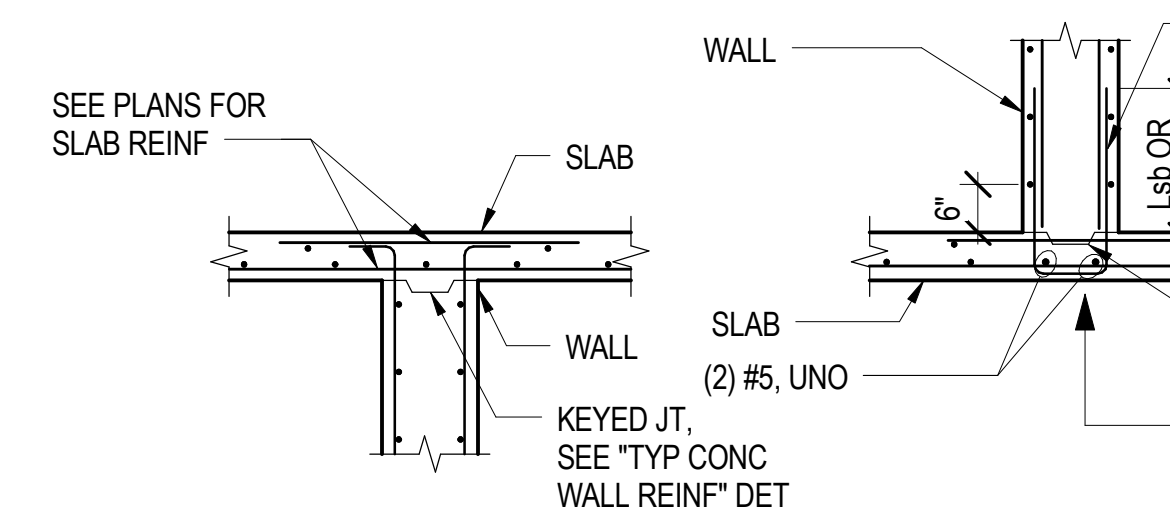


- NOTES:  
1. T = 6" MINIMUM OR 10" MAXIMUM. IF T > 10", SEE "TYPICAL HOUSEKEEPING PAD" DETAIL.  
2. SEE ARCHITECTURAL FOR T AND D DIMENSIONS AND CURB LOCATIONS.  
3. CONCRETE CURB ON SLAB ON GRADE AND FORMED SLABS ARE SIMILAR.  
4. AT SLABS ON DECK WHERE D > 10", PROVIDE (2) #4 @ 12" TO FIT IN DECK FLUTES.

13 TYPICAL CONCRETE CURB

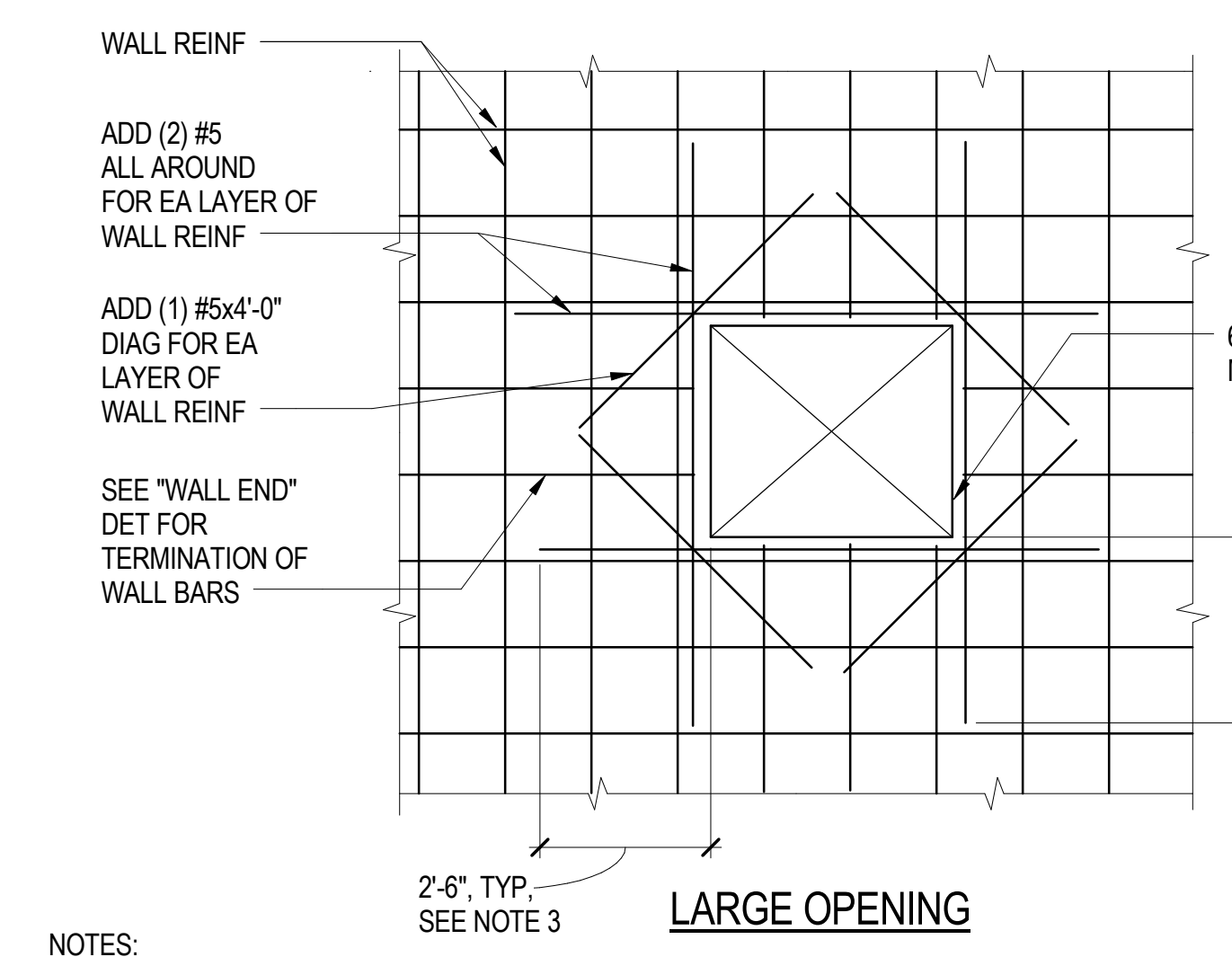


SINGLE LAYER WALL REINFORCING

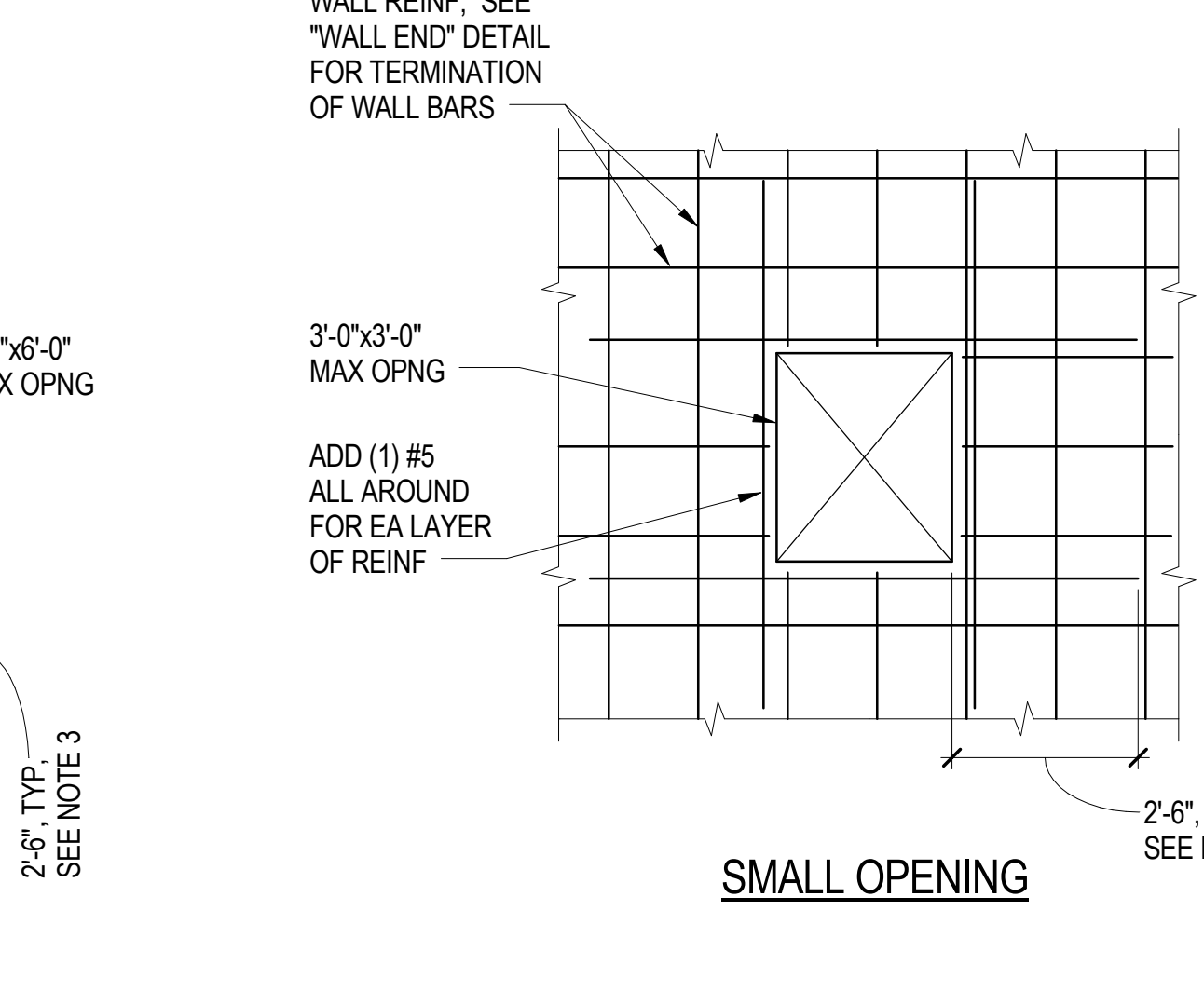


DOUBLE LAYER WALL REINFORCING

10 TYPICAL CONCRETE REINFORCING AT INTERSECTION OF SLABS AND WALLS



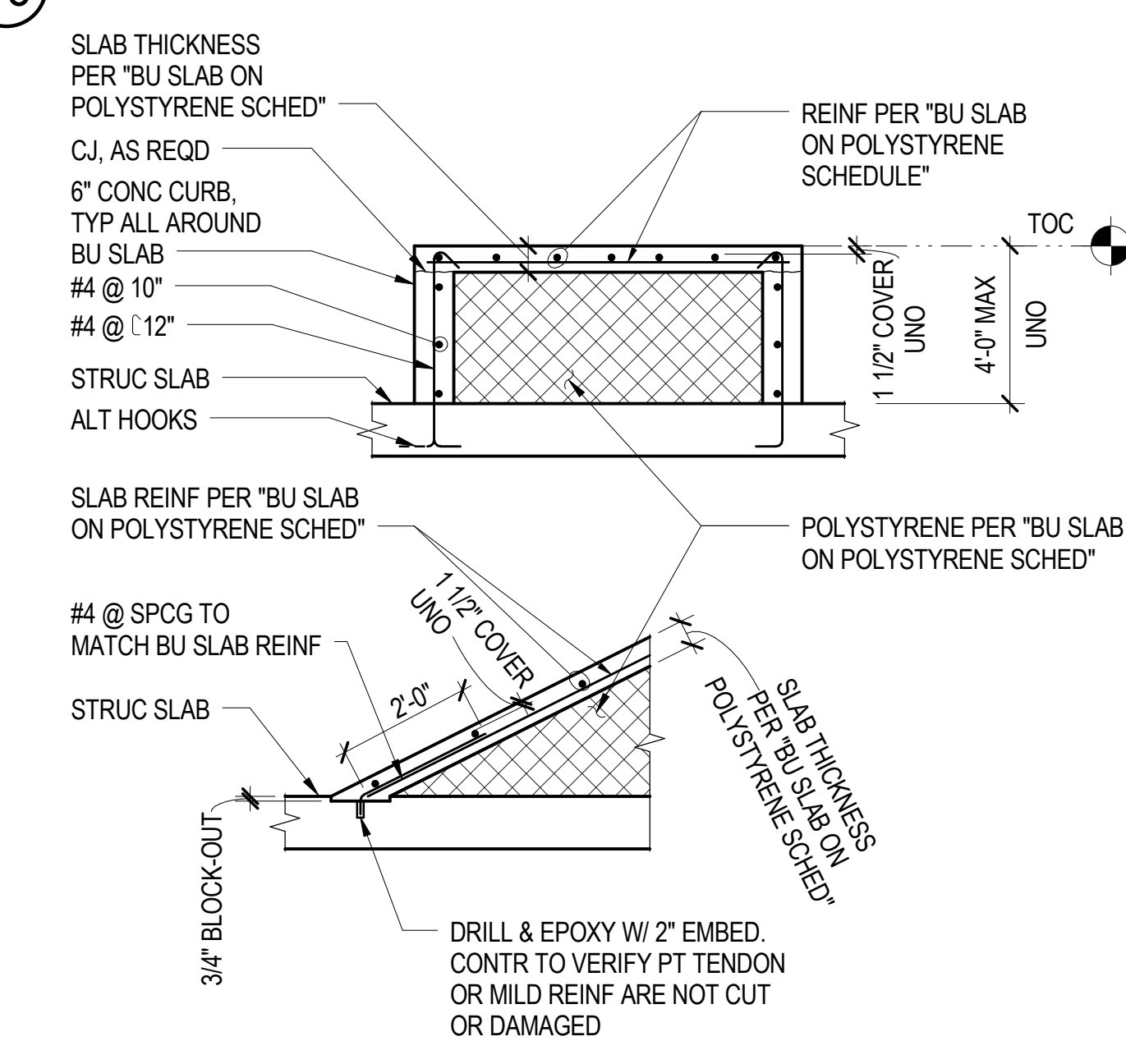
LARGE OPENING



SMALL OPENING

- NOTES:  
1. OMIT ADDED REINFORCEMENT NOTED ABOVE WHEN SPECIAL REINFORCEMENT, INDICATED ON PLANS OR DETAILS, EXCEEDS THIS REINFORCEMENT.  
2. CONTRACTOR SHALL VERIFY ALL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS WITH THE STRUCTURAL ENGINEER BEFORE PLACEMENT.  
3. WHEN EDGE OF CONCRETE CLOSE TO OPENING WILL NOT ALLOW THIS LENGTH, CONSULT STRUCTURAL ENGINEER BEFORE CONSTRUCTION.

15 TYPICAL CONCRETE WALL OPENING REINFORCEMENT



20 TYPICAL BUILT-UP SLAB ON POLYSTYRENE

BUILT-UP SLAB ON POLYSTYRENE SCHEDULE				
TYPE	SLAB THICKNESS (INCH)	REINFORCEMENT	POLYSTYRENE STRENGTH - NOTE 1	REMARKS
TYP	4	#4 @ 12" EW	3.6 PSI @ 1%	TYP UNO
V	6	#5 @ 12" EW	7.3 PSI @ 1%	PROVIDE AT ALL AREAS SUBJECT TO VEHICLE LOADS
R	2	WWF 6x6-W2.9xW2.9	PER ARCH	

- NOTES:  
1. RIGID CELLULAR POLYSTYRENE WITH MINIMUM COMPRESSIVE RESISTANCE INDICATED AT 1% DEFORMATION CONFORMING TO ASTM D6817 OR ASTM C578 OR APPROVED EQUIVALENT.  
2. PROVIDE 3/4" DEEP SAWCUT CONTROL JOINTS AT MAXIMUM SPACING OF 30 TIMES THE SLAB THICKNESS ON CENTER EACH WAY. PROVIDE CONTROL JOINTS AT ALL RE-ENTRANT CORNERS. CONTRACTOR SHALL SUBMIT AT JOINTING PLAN TO THE ARCHITECT FOR REVIEW.  
3. FOR MECHANICAL EQUIPMENT EXCEEDING 1000 POUNDS SUPPORTED ON THE SLAB, CONTACT THE ENGINEER FOR APPROVAL.

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**TYPICAL CONCRETE DETAILS**



STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 19						
LVL 18			W14X605*	W14X605*	W14X605*	W14X605*
LVL 17						
LVL 16						
LVL 15						
LVL 14	W14X605*	W14X605*				W14X605*
LVL 13						
LVL 12			W14X605*	W14X605*	W14X605*	
LVL 11						
LVL 10	W14X605*	W14X605*				
LVL 9						
LVL 8			W14X730*			W14X730*
LVL 7						
LVL 6	W14X730*	W14X730*	W14X808*	W14X730*	W14X730*	
LVL 5						
LVL 4	W14X873*	W14X873*	W14X873*	W14X873*	W14X873*	W14X873*
LVL 3						
LVL 2	BU COL1* W/ 1/4" WALLY 5-0% CONC FILLED PIPE	W14X873* W/ 1/4" WALLY 5-0% CONC FILLED PIPE	W14X873* W/ 1/4" WALLY 5-0% CONC FILLED PIPE	BU COL1* W/ 1/4" WALLY 5-0% CONC FILLED PIPE	W14X873* W/ 1/4" WALLY 5-0% CONC FILLED PIPE	W14X873* W/ 1/4" WALLY 5-0% CONC FILLED PIPE
LVL 1	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL
P1						
P2						
P3	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL	W14X873* W/ 3-0"x4-0" CONC COL
BASE PLATE TXWL	PL7x36x3'-10"	PL7x36x3'-10"	PL7x36x3'-10"	PL7x36x3'-10"	PL7x36x3'-10"	PL7x36x3'-10"

- NOTES:
- SPLICE COLUMNS PER TYPICAL COLUMN SPLICE DETAILS.
  - \* INDICATES COLUMN IS 65 KSI.
  - C1-C12 COLUMNS TO BE CONCRETE ENCASED FROM LEVELS P3-P1 PER "TOWER COLUMN ENCASEMENT" DETAIL.
  - BASE PLATES IN THIS SCHEDULE ARE TYPE 2, A572 GR60 STEEL.
  - SEE "TYPICAL BUILT-UP COLUMN" DETAIL FOR BU COL1 DEFINITION.
  - SEE "LEVELS 1-3 CONCRETE ENCASEMENT" DETAIL FOR 5-0% CONCRETE FILLED PIPE DETAILING.

STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 40						
LVL 39						
LVL 38						
LVL 37				W14X370	W14X370	W14X370
LVL 36						
LVL 35						
LVL 34						
LVL 33	W14X398*	W14X398*	W14X398*			
LVL 32						
LVL 31				W14X398*	W14X398*	W14X398*
LVL 30						
LVL 29						
LVL 28			W14X455*			
LVL 27	W14X455*	W14X455*		W14X455*	W14X455*	W14X455*
LVL 26			W14X500*			
LVL 25						
LVL 24						
LVL 23	W14X500*	W14X500*		W14X500*	W14X500*	W14X500*
LVL 22						
LVL 21	W14X550*	W14X550*	W14X605*	W14X550*	W14X550*	W14X605*
LVL 20						
LVL 19	W14X500*	W14X500*				

STEEL COLUMN SCHEDULE						
MARK	C1	C7	C4, C10	C2, C12	C6, C8	C3, C5, C9, C11
LVL 62						
LVL 61						
LVL 60						
LVL 59	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120
LVL 58						
LVL 57						
LVL 56						
LVL 55						
LVL 54			W14X159	W14X132	W14X132	W14X132
LVL 53	W14X176	W14X176				
LVL 52						
LVL 51			W14X233	W14X176	W14X176	W14X176
LVL 50						
LVL 49	W14X233	W14X233				
LVL 48						
LVL 47						
LVL 46			W14X283	W14X211	W14X211	W14X211
LVL 45						
LVL 44	W14X283	W14X283				
LVL 43	W14X370	W14X370	W14X370	W14X283	W14X283	W14X283
LVL 42						
LVL 41	W14X370	W14X370				
LVL 40						



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION
3	10 FEB 14	ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	15 OCT 13	STRUCTURAL BID

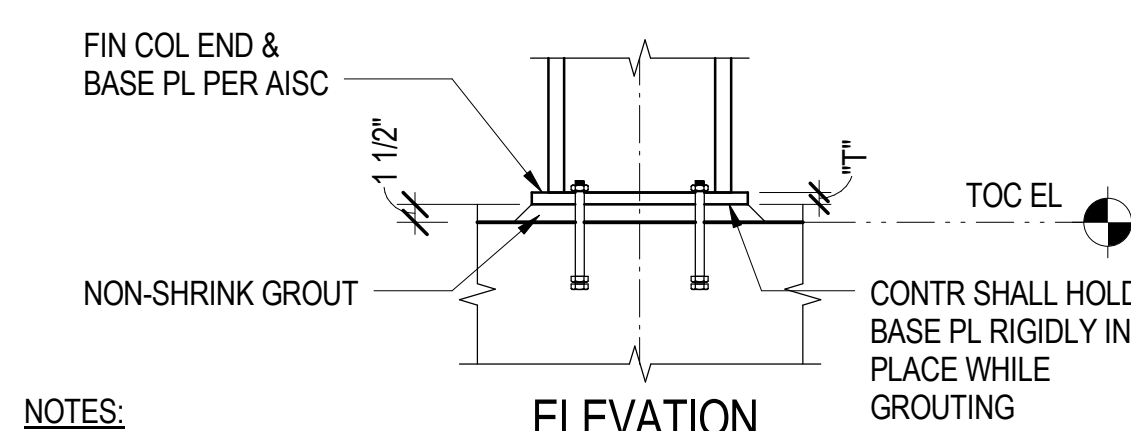
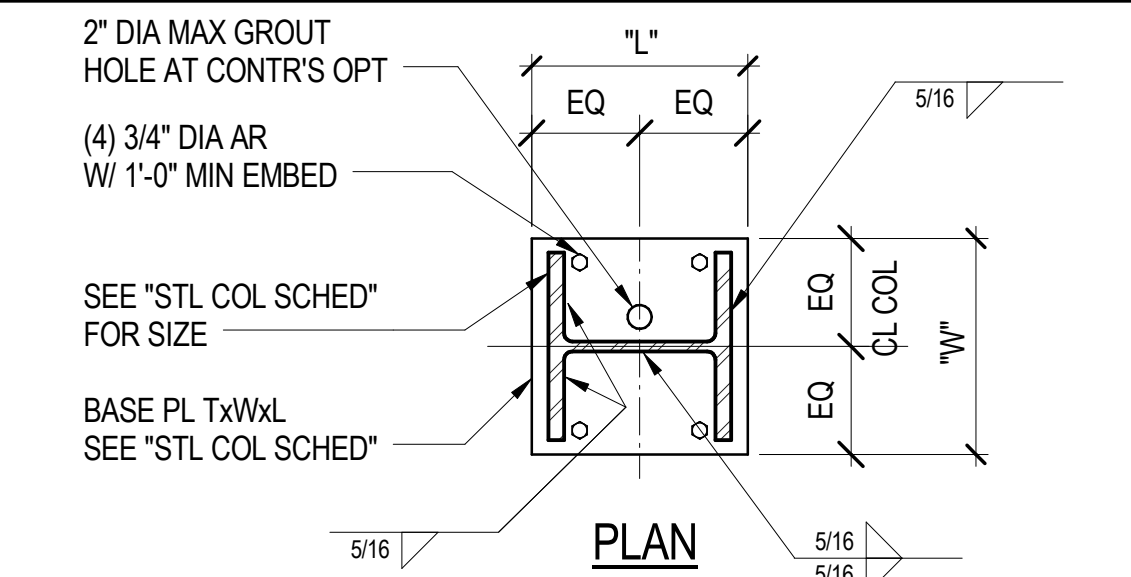
DRAWING TITLE

## STEEL COLUMN SCHEDULE



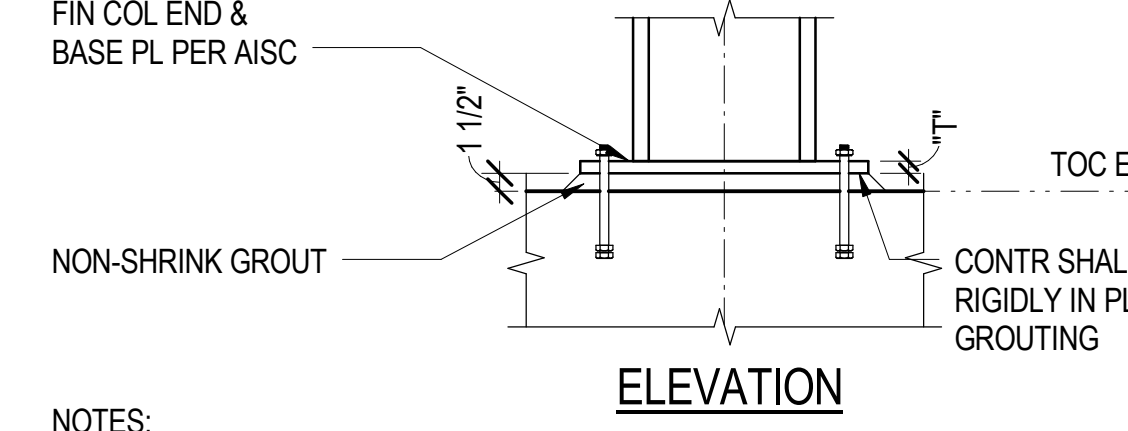
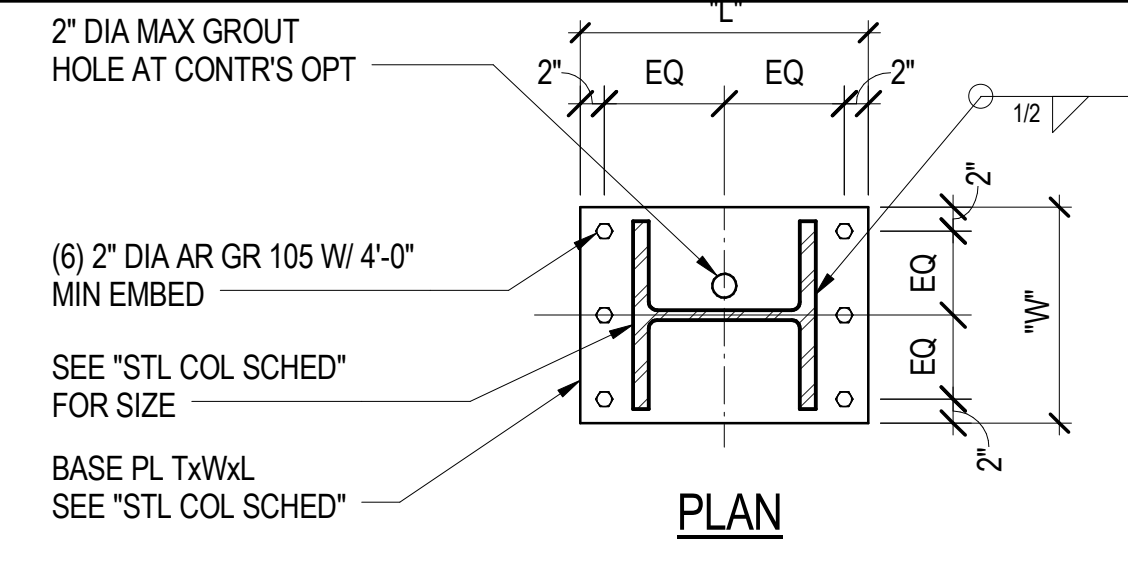


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



- NOTES:**
- TIGHTEN ANCHOR RODS SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE DIAMETER AND PLATE WASHER SHALL BE SIZED PER "AISC MANUAL - TABLE 14-2" UNLESS NOTED OTHERWISE.

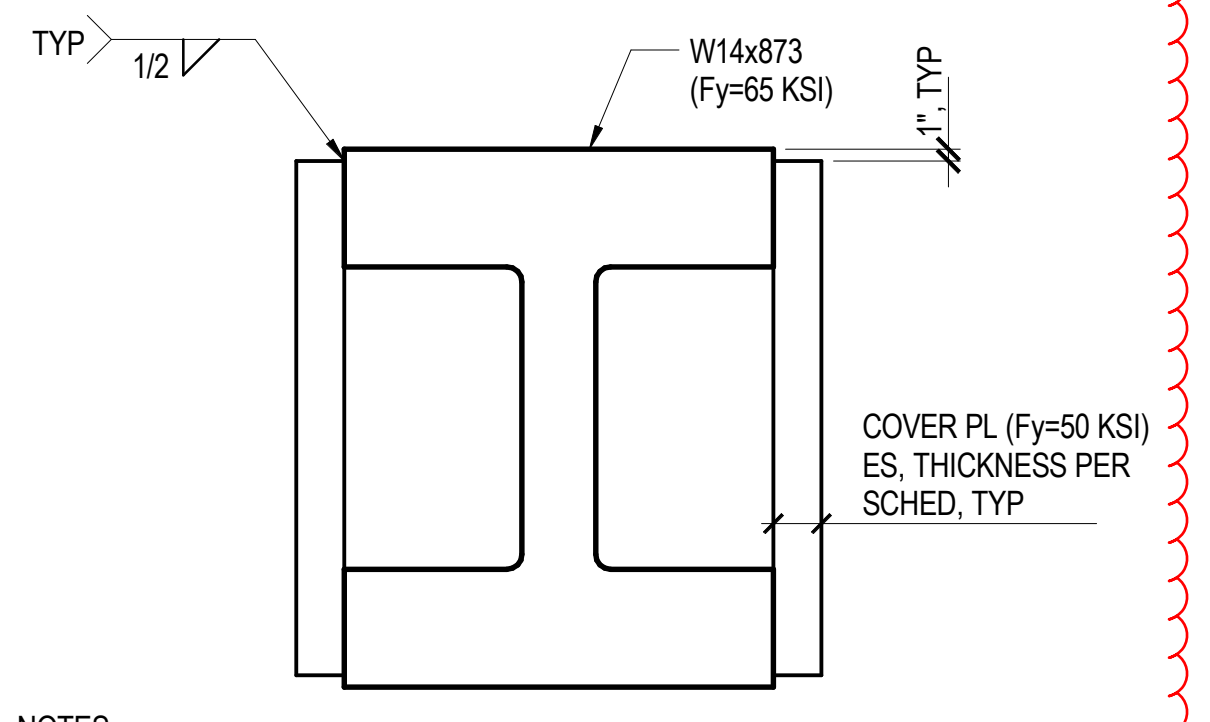
**1** TYPICAL COLUMN BASE PLATE, TYPE 1



- NOTES:**
- TIGHTEN ANCHOR RODS SNUG TIGHT AND TACK WELD NUT TO ROD TO PREVENT LOOSENING.
  - BASE PLATE HOLE DIAMETER AND PLATE WASHER SHALL BE SIZED PER "AISC MANUAL - TABLE 14-2" UNLESS NOTED OTHERWISE.

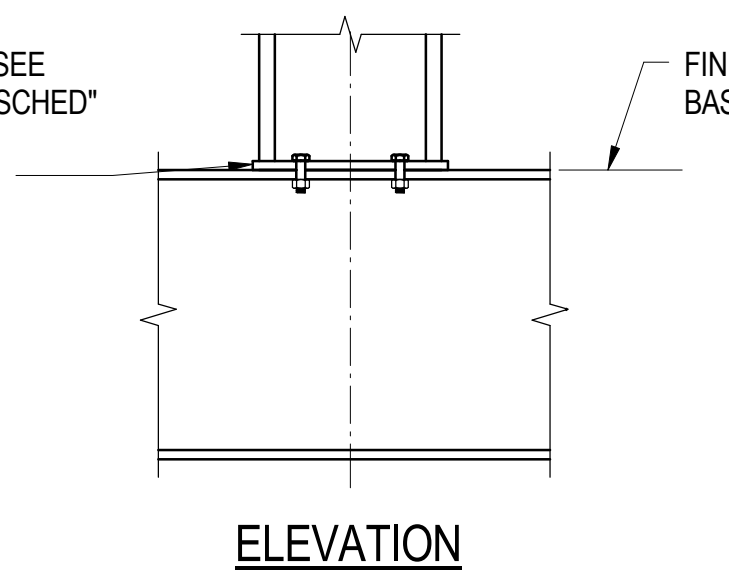
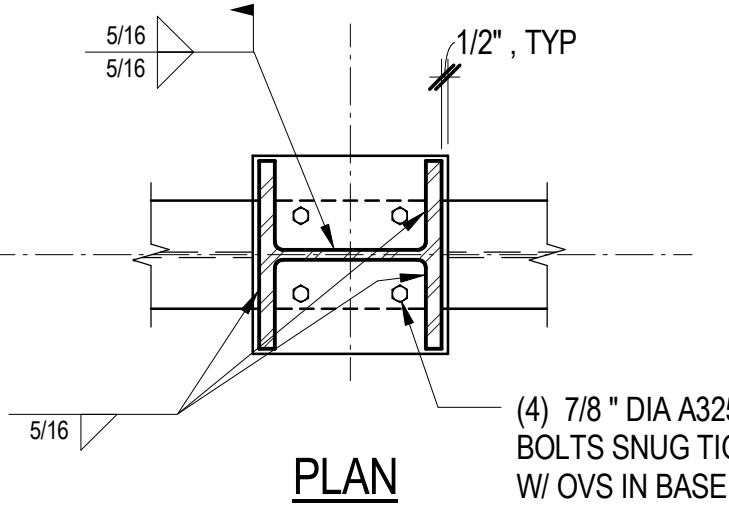
**2** TYPICAL COLUMN BASE PLATE, TYPE 2

BU COL SCHEDULE	
MARK	SIDE PL
BU COL 1	2"

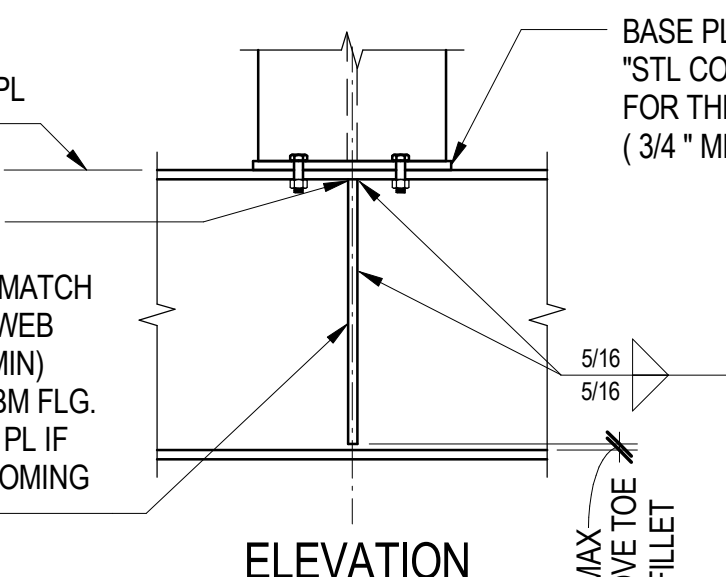
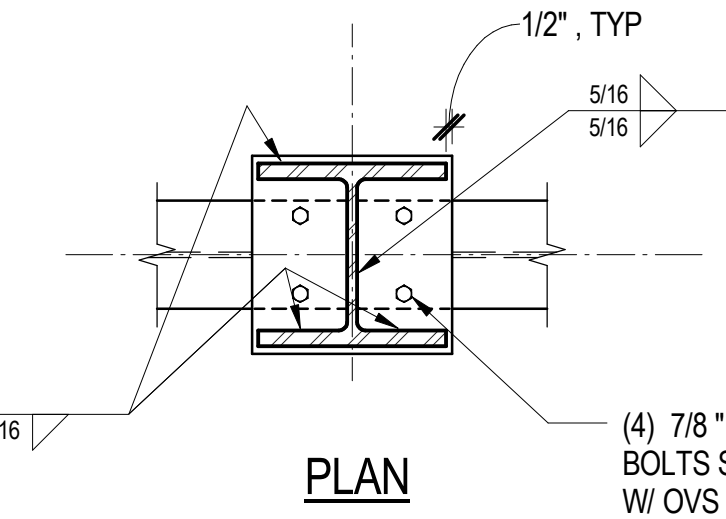
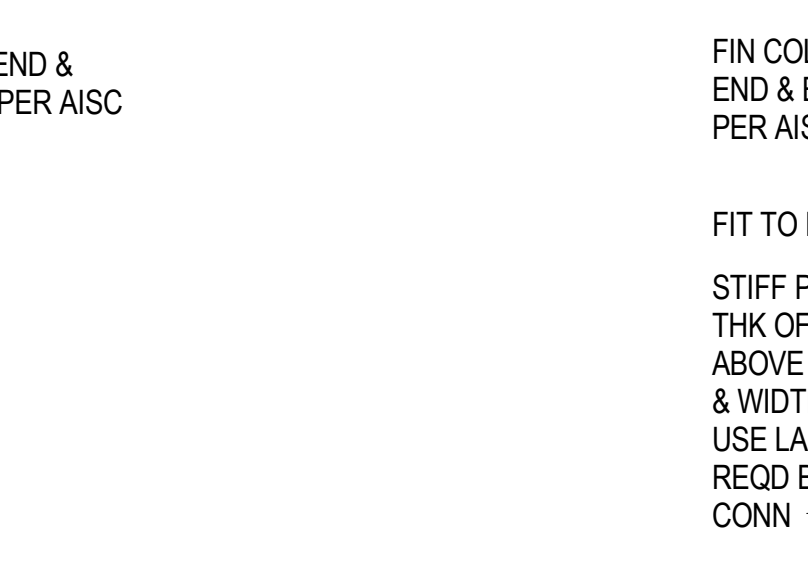
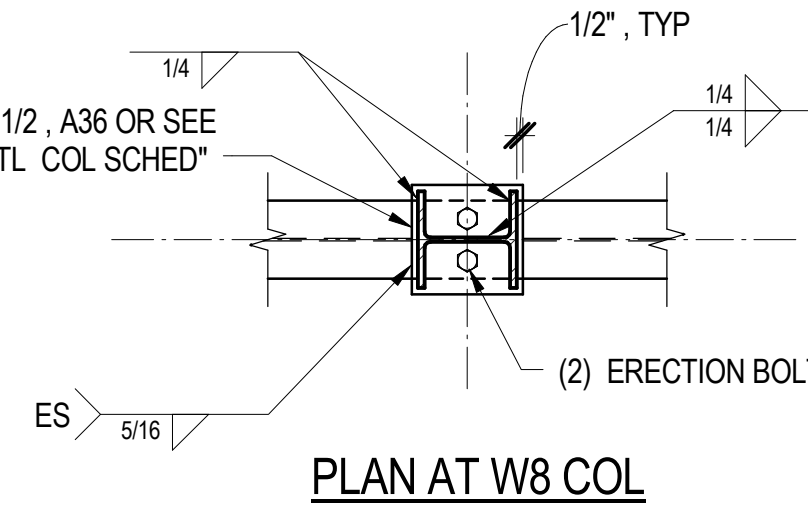


- NOTES:**
- COVER PL BEGINS 1" ABOVE LVL 1 TOS AND EXTENDS TO 1" BELOW LVL 3 TOS

**3** TYPICAL BUILT-UP COLUMN



**7** TYPICAL COLUMN BASE PLATE, TYPE 3



**8** TYPICAL HSS OR PIPE COLUMN ON STEEL BEAM

COLUMN SIZE	WEB PLATE		BOLTS			REMARKS	
	NUMBER	THICKNESS (INCH)	SIZE (INCH)	GRADE	NUMBER PER ROW		
W12x96 TO W12x170	2	5/8	7/8	A325-X	3	1	WELD FLGS MIN PJP
W14x90 TO W14x132	2	5/8	7/8	A325-X	3	1	WELD FLGS 1/2 PJP
W14x145 TO W14x211	2	3/4	1	A490-X	3	1	WELD FLGS 1/2 PJP
W14x233 TO W14x283	2	1	1	A490-X	3	2	WELD FLGS 1/2 PJP
W14x311 TO W14x550	1	1	1	A490-X	3	2	WELD WEB MIN PJP WELD FLGS 1/2 PJP
W14x605 TO W14x873	1	1	1	A490-X	3	2	WELD WEB & FLGS 5/8 PJP

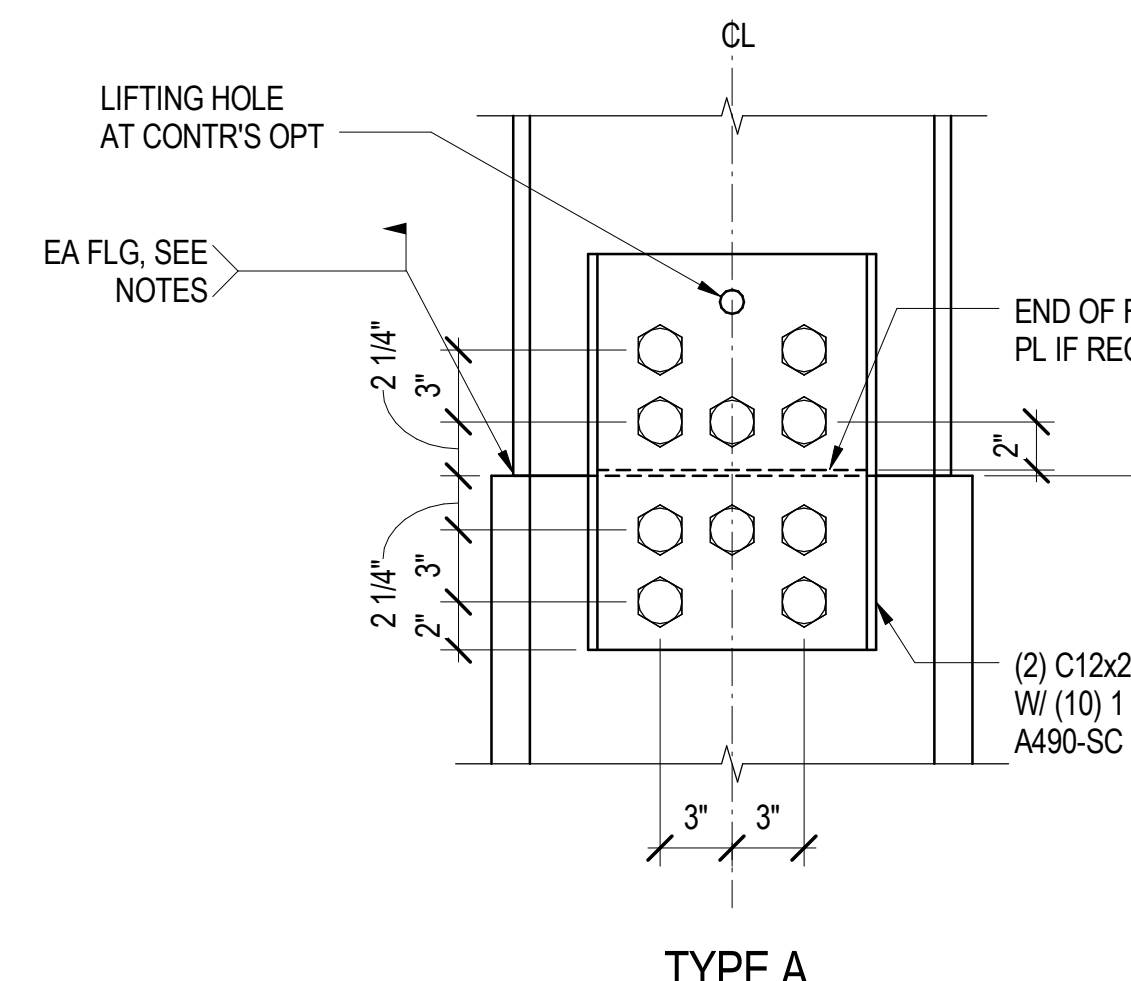
- NOTES:**
- USE THIS DETAIL AT TOP OF HSS COLUMN WHERE BEAM IS SHOWN RUNNING OVER COLUMN ON PLANS.

STEEL COLUMN SCHEDULE			
MARK	C13	C14	C15
LVL 64			
LVL 63	W14X74	W14X82	W14X74
LVL 62			
LVL 61	W14X109	W14X132	W14X109
LVL 60			
LVL 59	W14X145	W14X159	W14X145
LVL 58			
LVL 57	W14X193	W14X193	W14X193
LVL 56			
LVL 55	W14X233	W14X233	W14X233
LVL 54			
LVL 53		W14X283	
LVL 52			
LVL 51	W14X283	W14X311	W14X283
LVL 50			
BASE PLATE T&W&L	PL3x20x1'-8"	PL3x20x1'-8"	PL3x20x1'-8"

- NOTES:**
- SPlice COLUMNS PER TYPICAL COLUMN SPlice DETAILS.
  - C16 AND C17 COLUMNS TO BE CONCRETE ENCASED FULL HEIGHT PER "TYPICAL W12 COLUMN ENCASEMENT" DETAIL.
  - BASE PLATES SCHEDULED ARE TYPE 1, A36 STEEL.

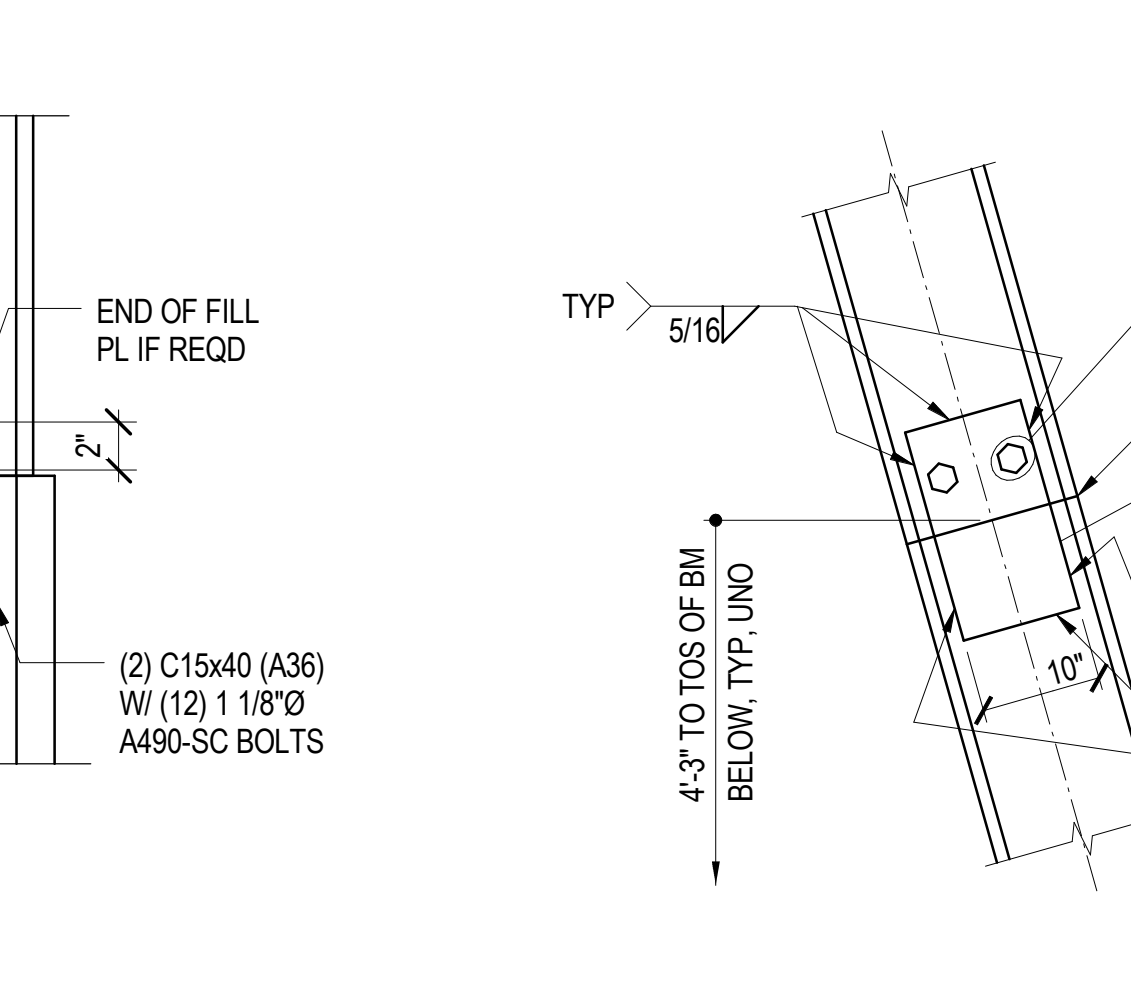
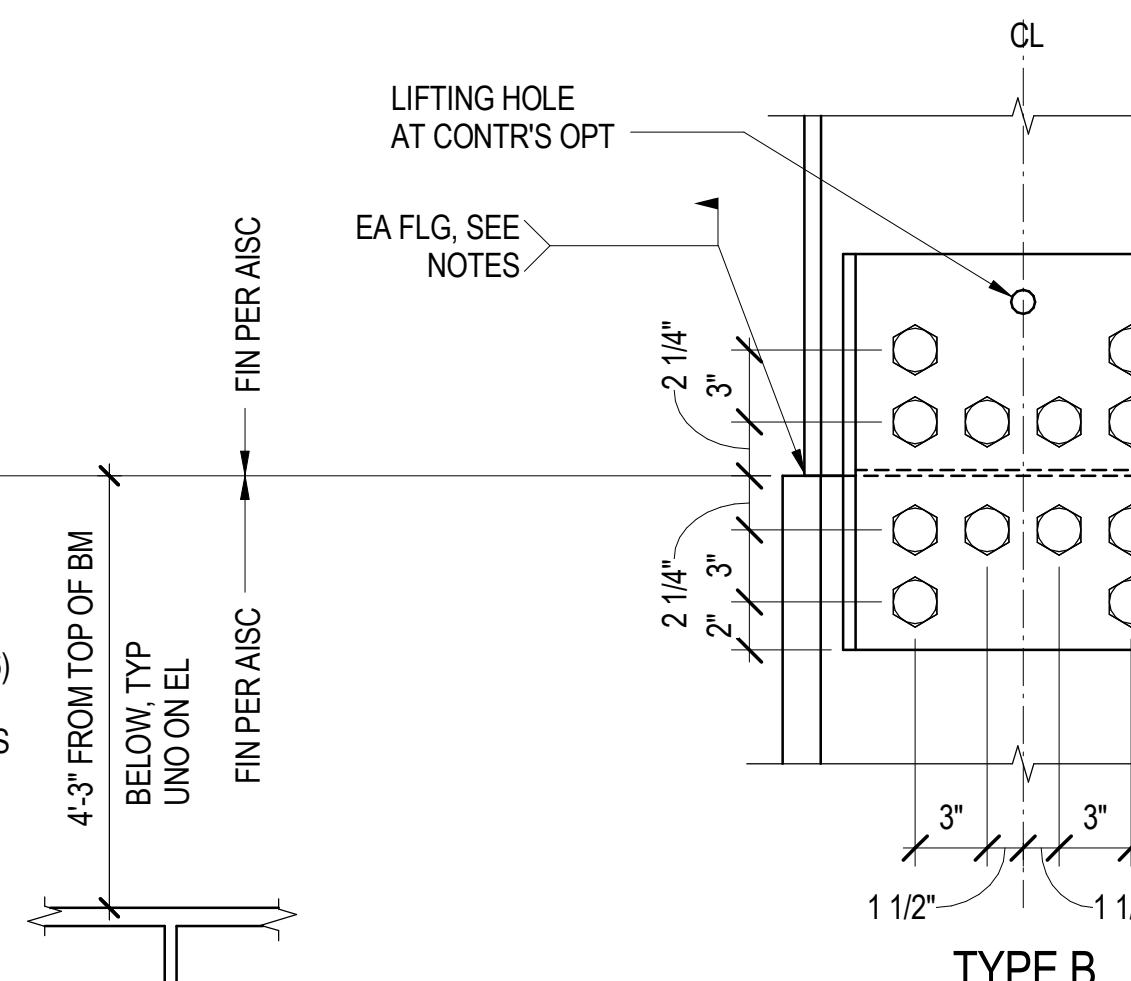
**14** STEEL COLUMN SCHEDULE

**13** TYPICAL COLUMN SPlice, TYPE 1

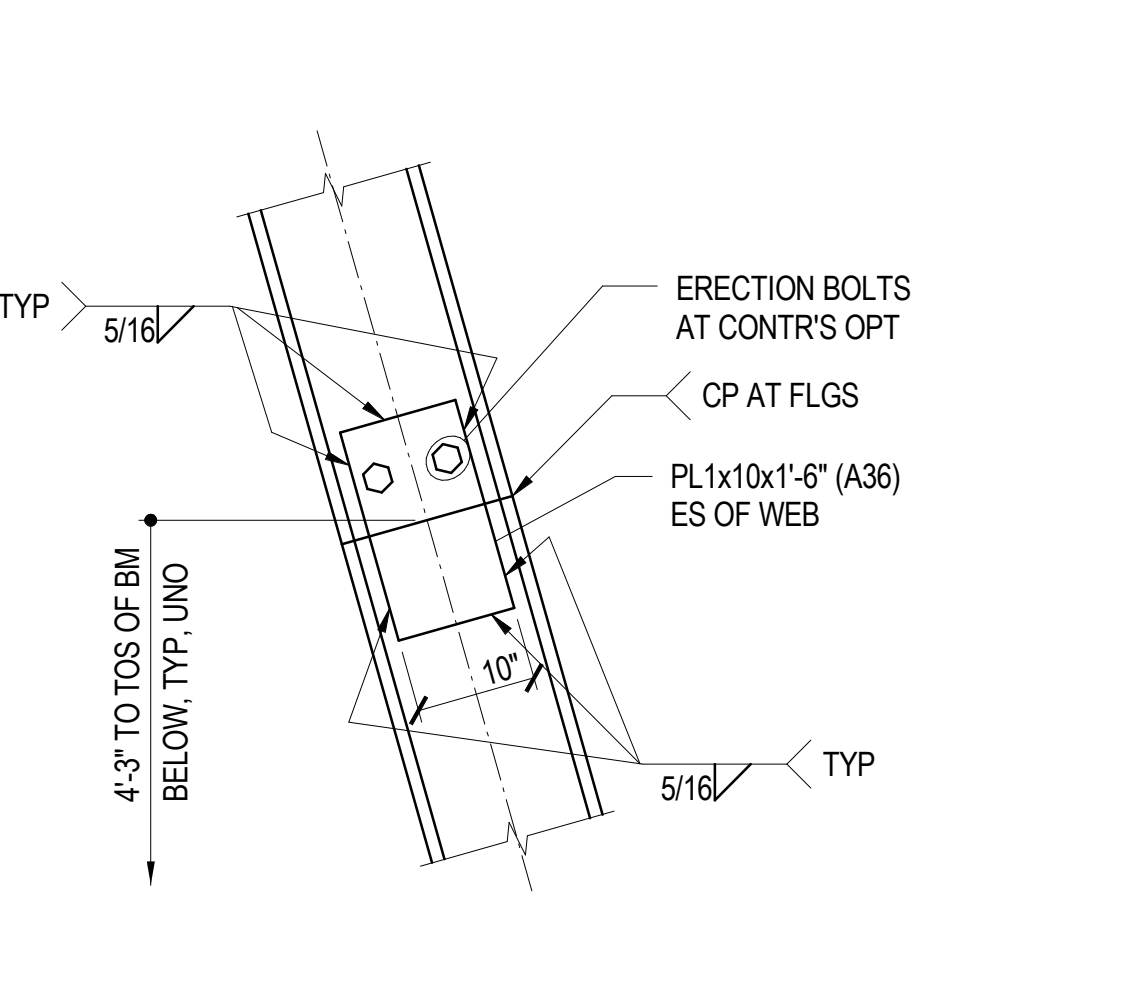


- NOTES:**
- SEE FRAME ELEVATIONS FOR WELD REQUIRED AT EACH COLUMN SPlice.
  - (3/8) SHOWN ON FRAME ELEVATIONS DENOTES A 3/8" EFFECTIVE THROAT PARTIAL JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPlice.
  - "CJP" DENOTES A COMPLETE JOINT PENETRATION WELD IS REQUIRED AT EACH FLANGE FOR THAT PARTICULAR SPlice.

**17** TYPICAL COLUMN SPlice, TYPE 2

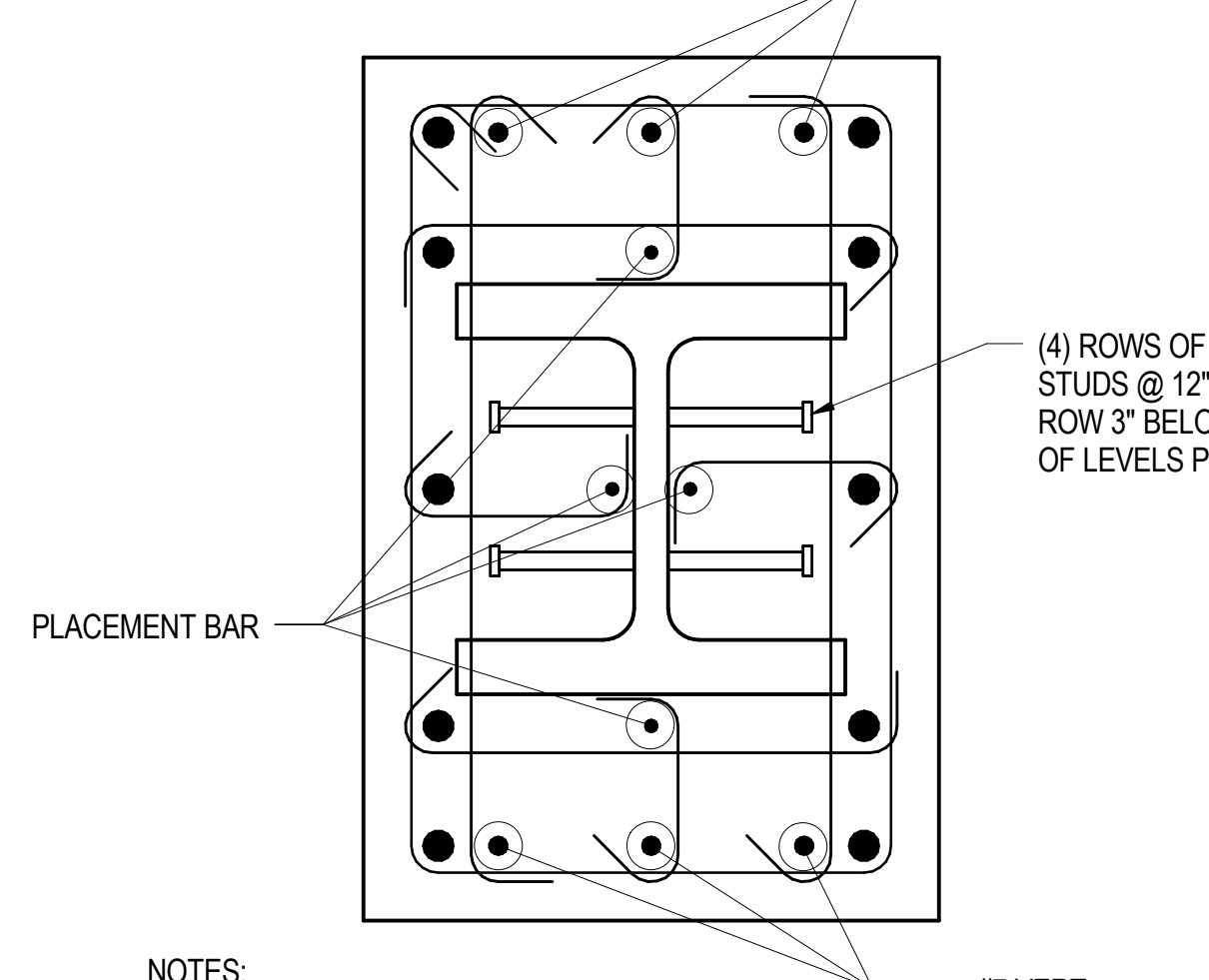


**18** TYPICAL COLUMN SPlice, TYPE 3

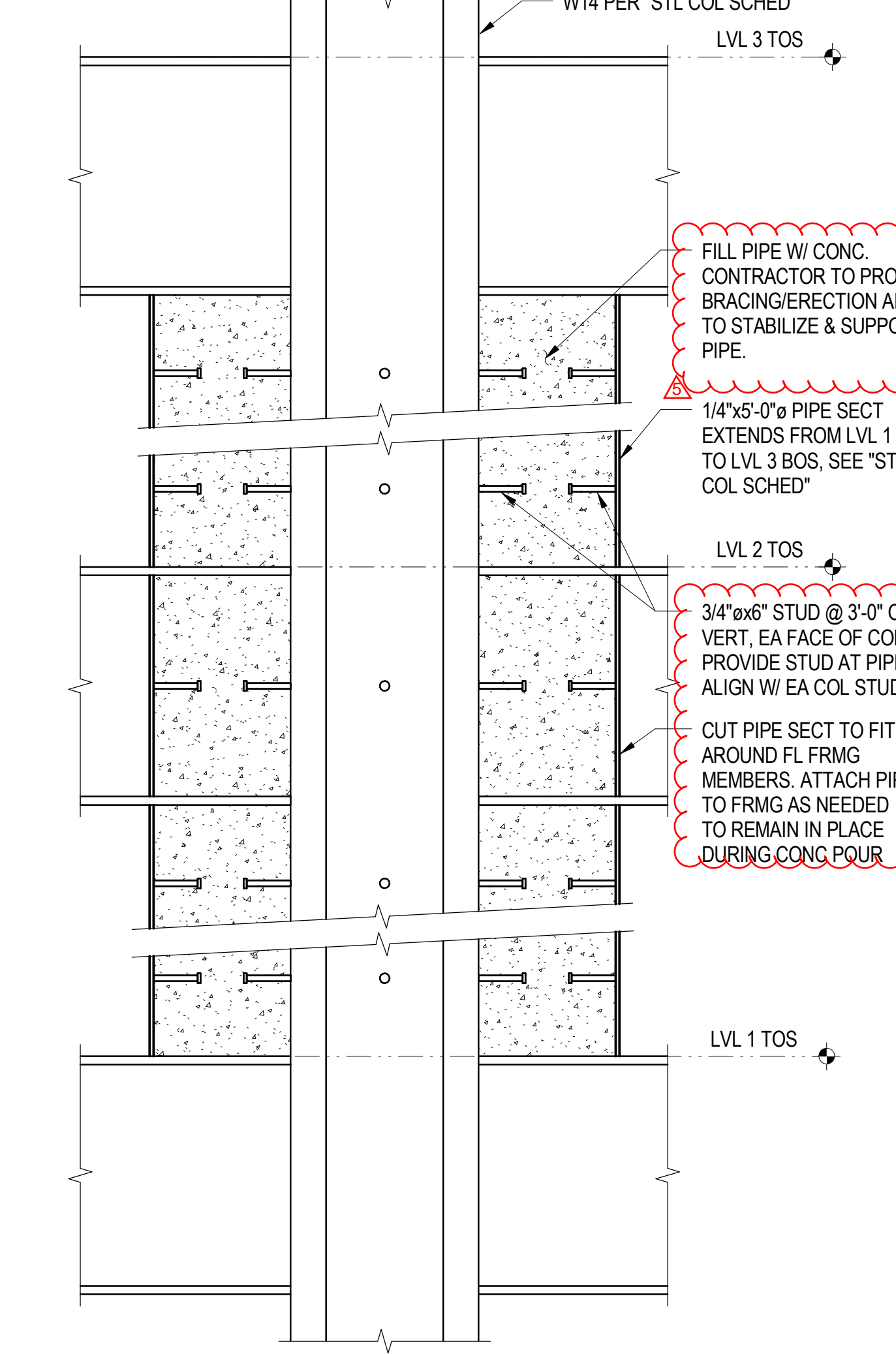


SLOPED WF COLUMN SPlice

**19** TYPICAL TOWER COLUMN ENCASEMENT



- NOTES:**
- VERTICAL REINFORCING SHOWN IS #11, UNLESS NOTED OTHERWISE.
  - PROVIDE #4 @ 12" TIES AS SHOWN.
  - PROVIDE STANDARD HOOKS FOR SLAB REINFORCEMENT INTERRUPTED BY STEEL COLUMN.



**10** LEVELS 1-3 COLUMN ENCASEMENT

MARK	C16, C17
LVL 1	
P1	
P2	W12X136
P3	
BASE PLATE T&W&L	PL 1 1/2x15x1'-3"

- NOTES:**
- SPlice COLUMNS PER TYPICAL COLUMN SPlice DETAILS.
  - C16 AND C17 COLUMNS TO BE CONCRETE ENCASED FULL HEIGHT PER "TYPICAL W12 COLUMN ENCASEMENT" DETAIL.
  - BASE PLATES SCHEDULED ARE TYPE 1, A36 STEEL.

**20** TYPICAL W12 COLUMN ENCASEMENT

**TYPICAL STEEL COLUMN DETAILS AND SCHEDULE**

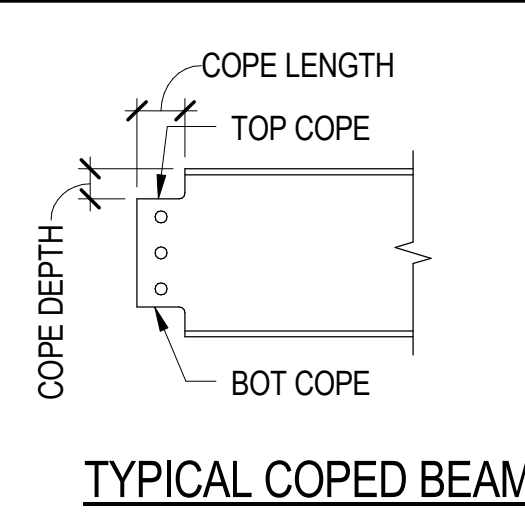
NO.	DATE	STRUCTURAL BID ADDENDUM NO.	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	



- BOSTON PROPERTIES / HINES**  
 Owner
- PELLI CLARKE PELLI ARCHITECTS**  
 Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
 Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
 Structural Engineer
- WSP**  
 MEPFP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
 Landscape Architect
- BKF ENGINEERS**  
 Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
 Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
 Building Security
- HWA PARKING**  
 Parking Consultant
- ARUP**  
 Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
 Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
 Acoustical Consultant
- MORRISON HERSHFIELD**  
 Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
 LEED Consultant
- HMA CONSULTING**  
 Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
 Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
 Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
 Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
 Landscape Architect of Record

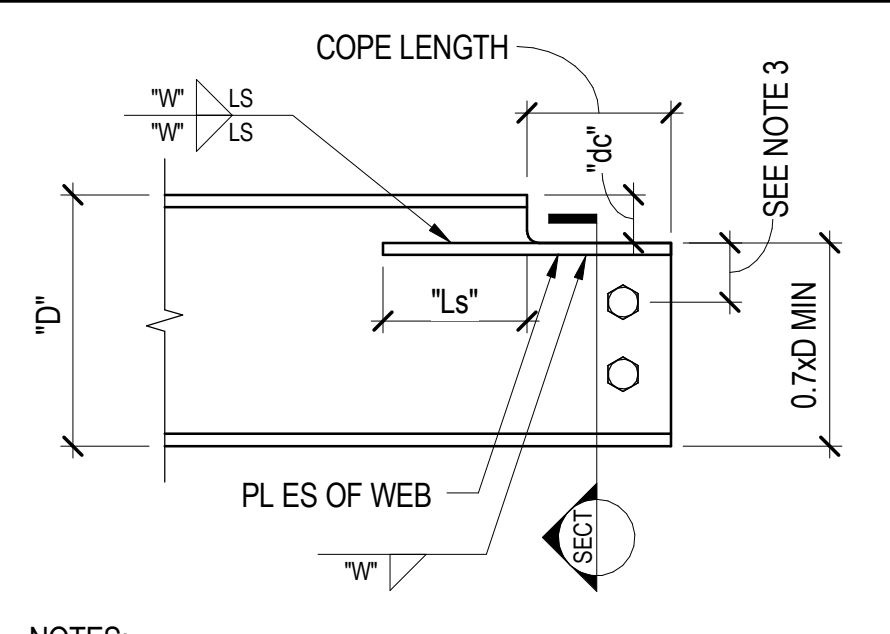
- NOTES:**
- THESE NOTES APPLY TO ALL CONNECTIONS UNLESS NOTED OTHERWISE.
- SEE PLANS FOR BEAM REACTIONS WHERE NO DETAIL IS NOTED. USE APPROPRIATE TYPICAL DETAIL.
  - THE MINIMUM NUMBER OF BOLTS IN A BEAM WEB CONNECTION SHALL BE AS SHOWN IN "TABLE A."
  - BEAMS SHALL HAVE STANDARD ROUND HOLES (STD), AND SHEAR TAB PLATES SHALL HAVE HORIZONTAL SHORT SLOTTED HOLES (SSL) UNLESS NOTED OTHERWISE.
  - BOLTS IN CONNECTIONS OF BEAM TO BEAM / GIRDER MAY BE SNUG TIGHT UNLESS SPECIFICALLY CALLED OUT AS SLIP CRITICAL (SC).
  - FOR EXTERIOR SPANDREL BEAMS, SEE "TYPICAL EDGE BEAM STIFFENER" DETAIL.
  - WHEN CONDITIONS VARY FROM THOSE SHOWN IN THE TYPICAL STEEL DETAILS, OR WHEN THE CONTRACTOR WANTS TO USE ALTERNATE DETAILS, DETAIL CONSTRUCTION ACCORDING TO THE "AISC MANUAL OF STEEL CONSTRUCTION" SUBMIT CALCULATIONS FOR ENGINEER'S APPROVAL.
  - CONTRACTOR SHALL COORDINATE THE BOLT SELECTION AND USE BETWEEN FABRICATOR AND ERECTOR.

WIDE-FLANGE BEAM DEPTH	MINIMUM BEAM REACTION (KIPS)	MINIMUM NUMBER OF BOLTS REQUIRED
W8, W10	13	2
W12, W14, W16	27	3
W18	44	4
W21, W24	75	5
W27, W30	91	6
W33	100	6
W36	117	7
W40, W44	134	8

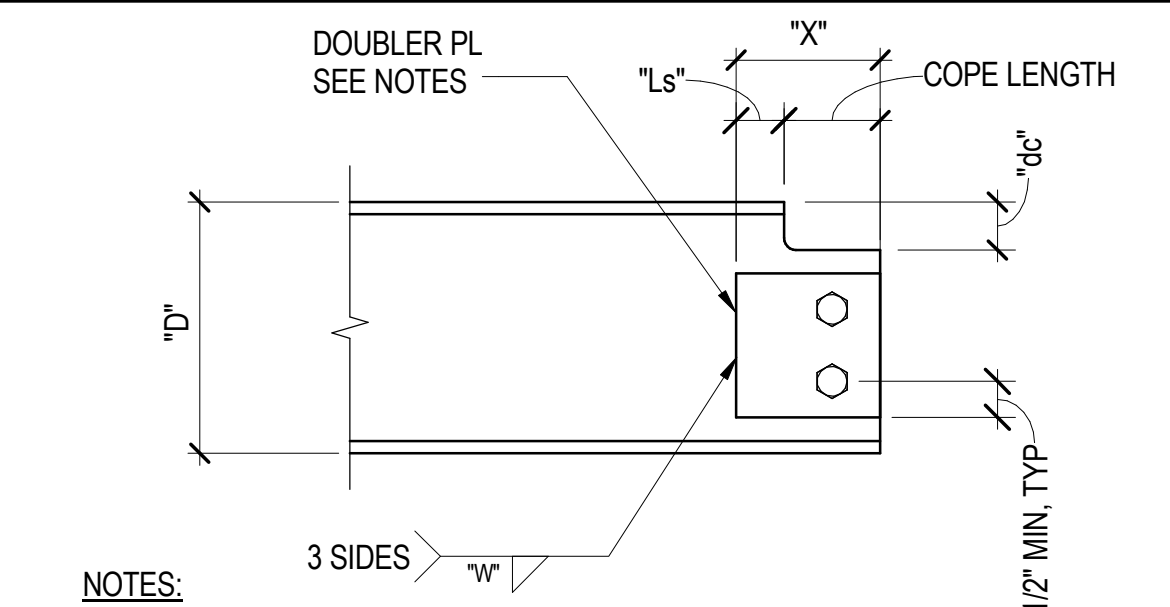
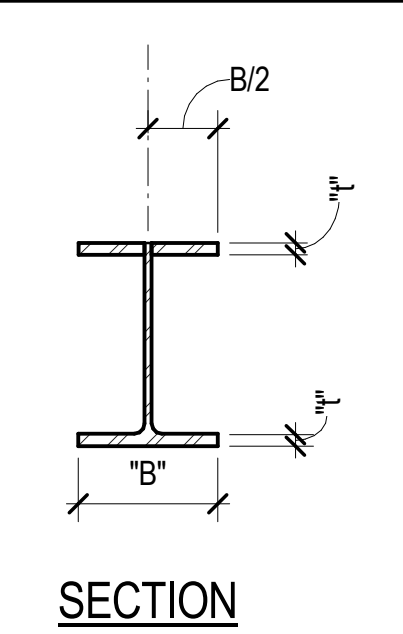


- NOTES:**
- THESE NOTES APPLY TO ALL COPED BEAMS UNLESS NOTED OTHERWISE.
- COPED BEAMS SHALL BE CHECKED FOR MINIMUM WEB THICKNESS AND MAXIMUM COPE LENGTH PER "TABLE B" OR "TABLE C," WHICHEVER IS APPLICABLE. COPE LENGTH IS AS SHOWN IN THE CONNECTION DETAILS.
  - MAXIMUM TOP COPE DEPTH IS 2" FOR BEAM DEPTHS UP TO W18, 3" FOR BEAM W21 AND DEEPER. WHEN ACTUAL COPE DEPTH EXCEEDS MAXIMUM COPE DEPTH, ADD STIFFENERS PER "TYPICAL COPE WEB STIFFENER" DETAIL.
  - WHEN ACTUAL COPE LENGTH IS GREATER THAN SHOWN IN "TABLE B" OR "TABLE C," WHICHEVER IS APPLICABLE, SEE "TYPICAL COPE WEB STIFFENER" DETAIL OR REDUCE THE MAXIMUM REACTION BY THE RATIO OF MAXIMUM COPE LENGTH TO ACTUAL COPE LENGTH.
- THESE REDUCTIONS ARE NOT ALLOWED BELOW THE HEAVY LINES SHOWN IN THE TABLES.

**3** GENERAL NOTES FOR COPED BEAMS



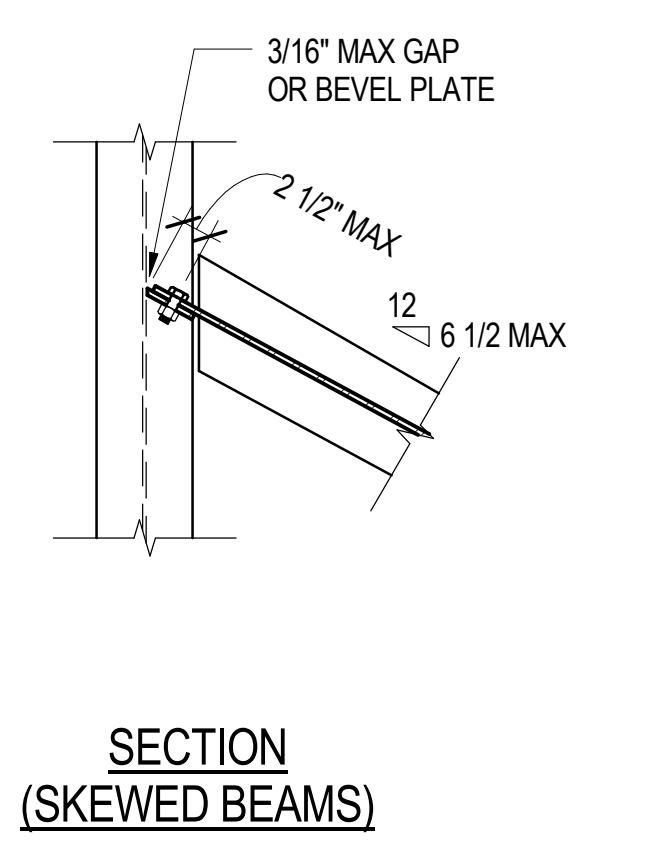
- NOTES:**
- WELD W SHALL BE GREATER OF 0.35I OR AISC MINIMUM.
  - Ls SHALL BE THE GREATER OF THREE TIMES THE PLATE WIDTH OR TWO TIMES THE COPE DEPTH (dc).
  - ADJUST BOLT LOCATION AS REQUIRED.



- NOTES:**
- USE FOLLOWING FORMULA TO DETERMINE DOUBLER PLATE THICKNESS: (MINIMUM WEB THICKNESS PER CONNECTION "TABLE B" OR "TABLE C") MINUS (BEAM WEB THICKNESS) PLUS (COEFFICIENT).
- | X (INCH)       | COEFFICIENT |
|----------------|-------------|
| 5              | 1/8"        |
| 5 1/4 - 7      | 1/4"        |
| 7 1/4 - 10 1/2 | 3/8"        |
- MINIMUM PLATE THICKNESS SHALL BE 1/4 INCH; MINIMUM WIDTH 5 INCHES.
  - PLATE SHALL BE SAME STEEL GRADE AS BEAM.
  - WELD SIZE (W) SHALL BE 1/16 INCH LESS THAN PLATE THICKNESS.
  - Ls SHALL BE THE GREATER OF TWO TIMES THE COPE DEPTH (dc) OR 2".

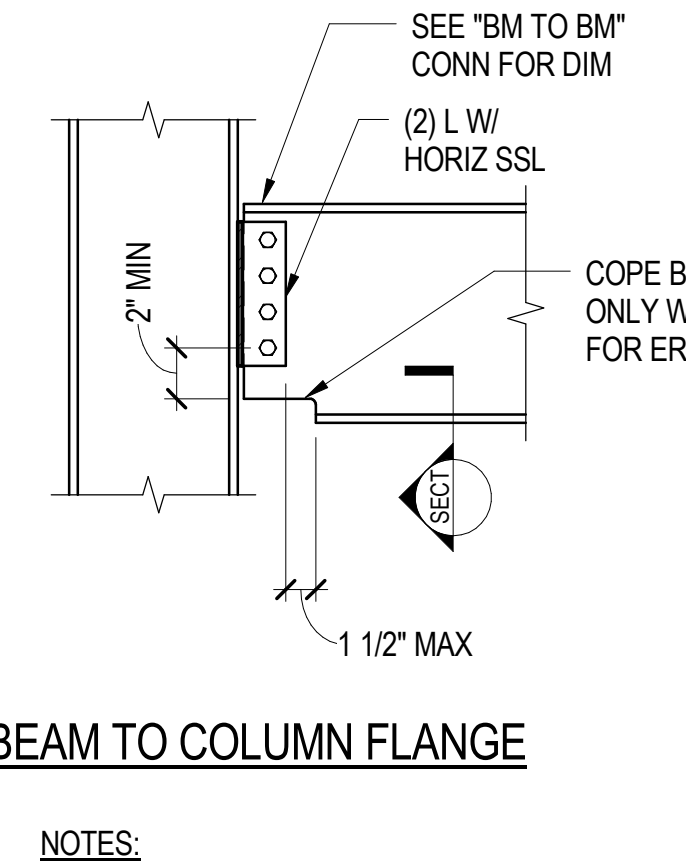
**5** TYPICAL WEB DOUBLER

**2** GENERAL NOTES FOR STEEL CONNECTIONS



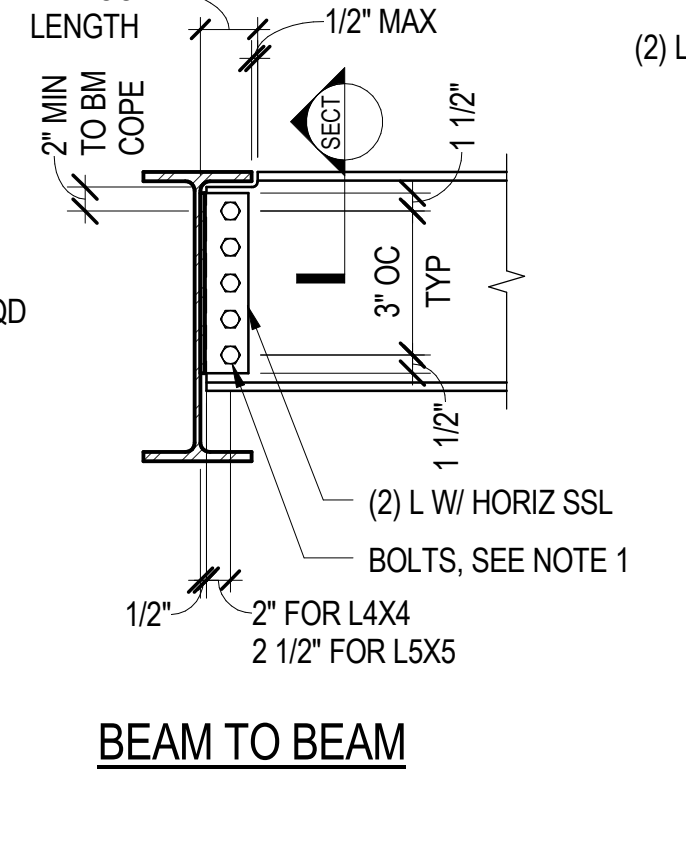
- NOTES:**
- SEE "TABLE B" FOR ADDITIONAL CONNECTION REQUIREMENTS.
  - WHEN REQUIRED NUMBER OF BOLTS DOES NOT FIT WITHIN BEAM DEPTH, OR WHEN THE REACTION IS MORE THAN THE MAXIMUM IN "TABLE B," USE "TYPICAL STEEL CONNECTION, TYPE C2" OR "TYPICAL STEEL CONNECTION, TYPE C10."
  - FOR SKEWED BEAMS NOT MEETING THE LIMITS SHOWN IN SECTION, SEE "TYPICAL SKEWED BEAM CONNECTION, TYPE C8."

**7** TYPICAL STEEL CONNECTION, TYPE C1



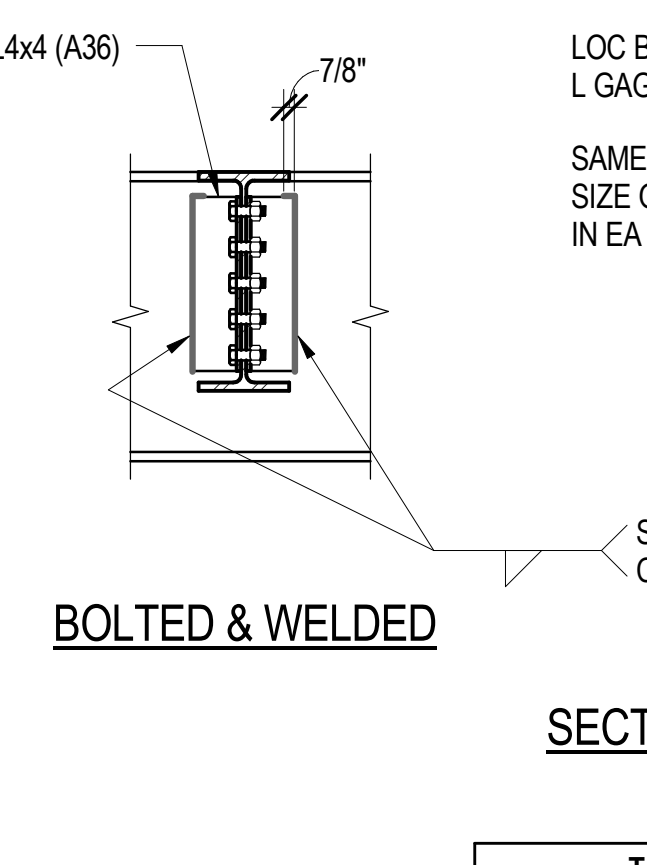
- NOTES:**
- SEE "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.
  - ONE ANGLE MAY BE FIELD WELDED AT CONTRACTOR'S OPTION.
  - TOLERANCE ON RETURN WELD SHALL BE + 1/4 INCH, -0 INCHES.

**9** TYPICAL STEEL CONNECTION, TYPE C2



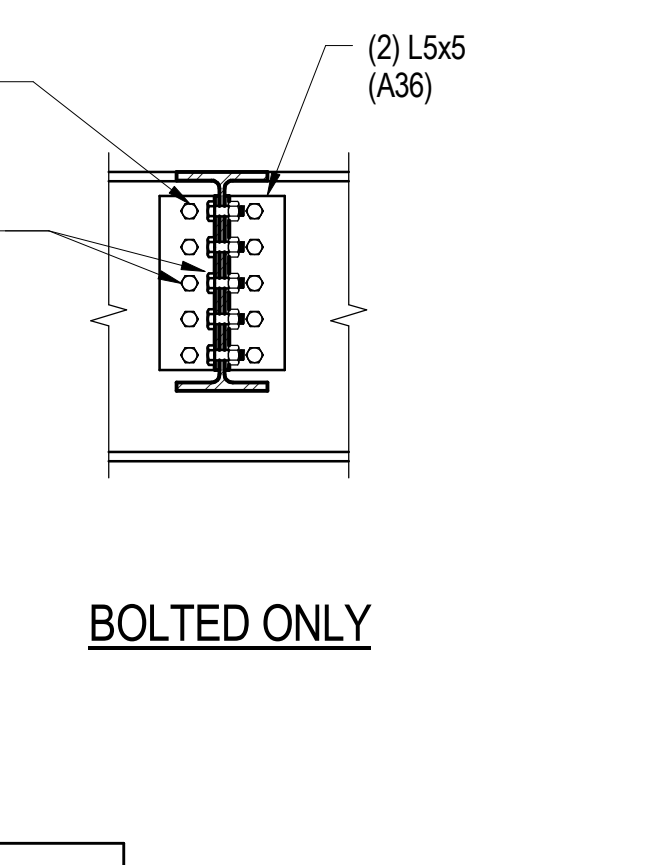
- NOTES:**
- WHEN C2 CONNECTIONS LINE UP ON OPPOSITE SIDES OF A SUPPORT GIRDER AND WELDS ARE USED, THE MINIMUM SUPPORT THICKNESS MUST BE GREATER THAN OR EQUAL TO THE SUM OF THE MINIMUM SUPPORT THICKNESS FOR EACH INCOMING C2 CONNECTION.

**4** TYPICAL COPED WEB STIFFENER



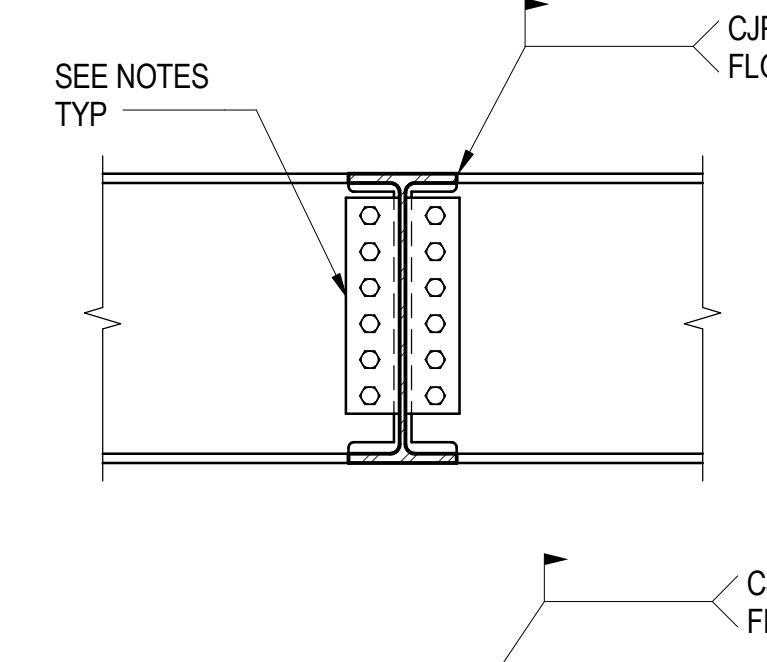
BOLT DIAMETER	MINIMUM SUPPORT THICKNESS WHEN WELDED TO SUPPORT	
	Fy=50KSI	
7/8"	0.26"	0.36"
1"	0.26"	0.36"

**SECTION**



- NOTES:**
- PROVIDE THIS DETAIL FOR UP TO 8" DEEP BEAMS ONLY. USE "TYPICAL STEEL CONNECTION, TYPE C1" FOR DEEPER BEAMS.

**10** TYPICAL SHALLOW BEAM CONNECTION



- NOTES:**
- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" OR "TYPE C2" AND "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.
  - COPE LENGTHS MAY EXCEED THE LIMITS SHOWN IN "TABLES B AND C."
  - FOR SKEWED BEAMS, SEE "TYPICAL STEEL CONNECTION, TYPE C1" SECTION AND NOTE 3.

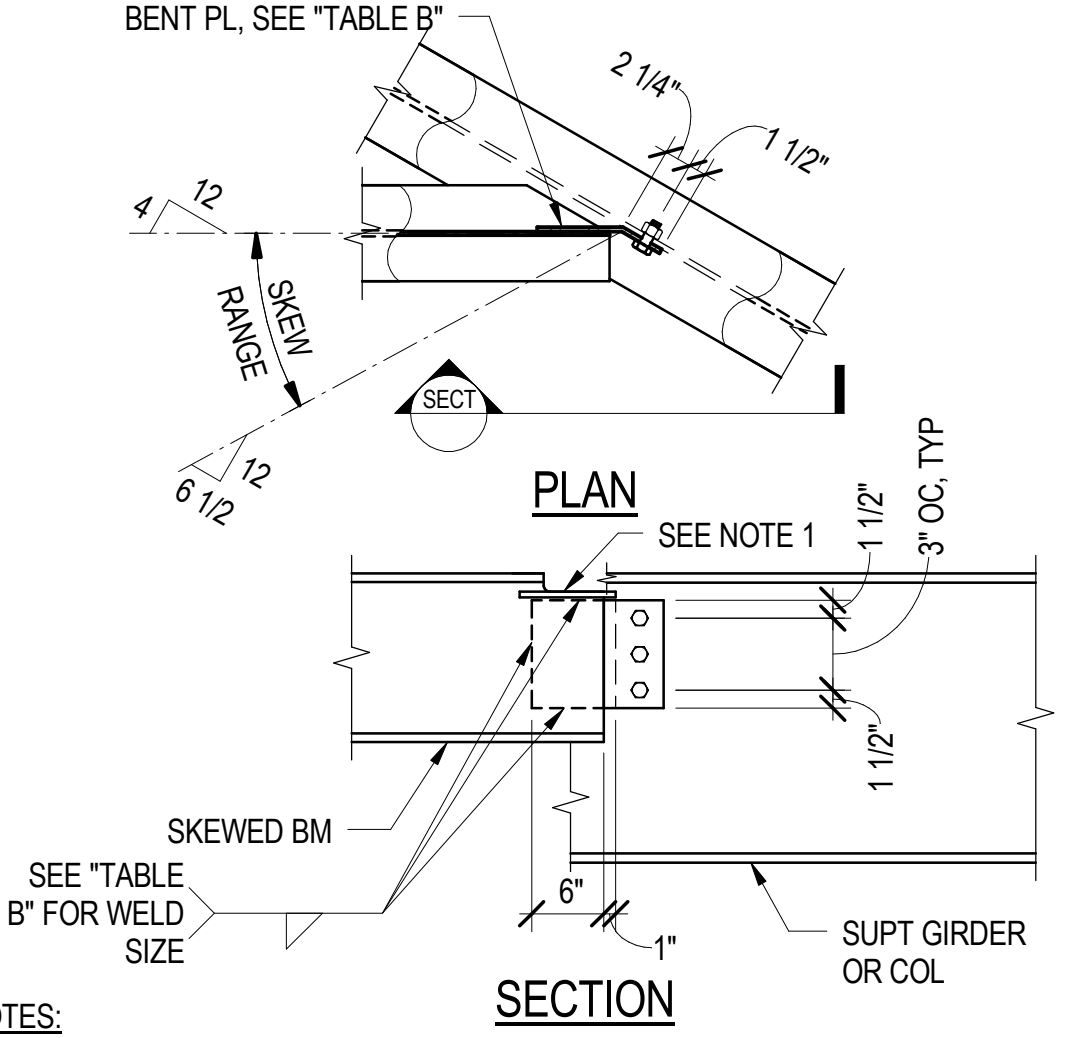
**15** TYPICAL STEEL CONNECTION, TYPE C3

NUMBER OF BOLTS	MAXIMUM REACTION				TOP COPE ONLY		TOP & BOTTOM COPE	
	MAXIMUM REACTION (KIPS)	PLATE THICKNESS (A36) (IN)	WELD SIZE (IN)	Fy (BEAM) = 50 KSI		Fy (BEAM) = 50 KSI		
				MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	
<b>7/8" DIA A325 BOLTS</b>								
2	13	5/16	1/4	0.19	6	0.19	2 1/2	
3	27	5/16	1/4	0.20	4 1/2	0.21	2 1/2	
4	44	5/16	1/4	0.23	7	0.26	4	
5	56	5/16	1/4	0.24	9	0.27	5	
6	75	3/8	5/16	0.27	11	0.30	7	
7	83	3/8	5/16	0.27	14	0.29	10	
8	91	3/8	5/16	0.26	18	0.28	14	
9	100	1/2	3/8	0.25	18	0.27	18	
10	108	1/2	3/8	0.25	18	0.27	18	
11	116	1/2	3/8	0.25	18	0.26	18	
12	124	1/2	3/8	0.24	18	0.26	18	
<b>1" DIA A490 BOLTS</b>								
2	15	1/2	3/8	0.19	5	0.19	2	
3	31	1/2	3/8	0.21	4	0.26	2 1/2	
4	59	1/2	3/8	0.31	6 1/2	0.37	4 1/2	
5	84	1/2	3/8	0.37	7 1/2	0.43	5	
6	101	1/2	3/8	0.38	8 1/2	0.43	6	
7	117	1/2	3/8	0.39	10	0.44	7 1/2	
8	134	1/2	3/8	0.40	14	0.44	9	
9	151	1/2	3/8	0.40	18	0.44	13 1/2	
10	168	1/2	3/8	0.41	18	0.44	16	
11	185	1/2	3/8	0.41	18	0.44	18	
12	202	1/2	3/8	0.41	18	0.44	18	

**13** TABLE B

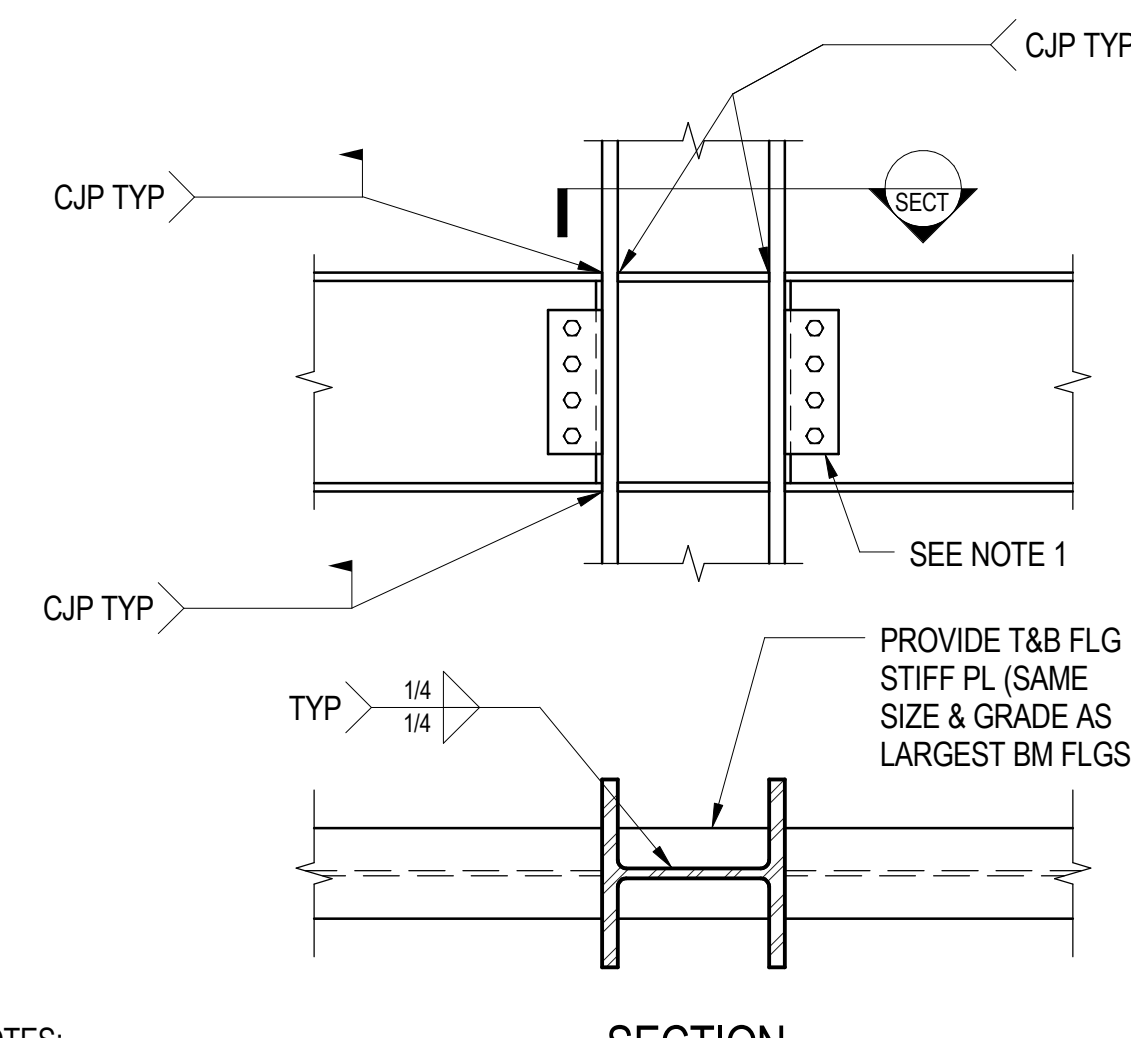
NUMBER OF BOLTS	MAXIMUM REACTION				NO COPE		TOP COPE ONLY		TOP & BOTTOM COPE	
	MAXIMUM REACTION (KIPS)	ANGLE THICKNESS (A36) (IN)	WELD SIZE (IN)	Fy = 50 KSI		Fy (BEAM) = 50 KSI		Fy (BEAM) = 50 KSI		
				MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	MINIMUM WEB THICKNESS (IN)	MAXIMUM COPE LENGTH (IN)	
<b>7/8" DIA A325 BOLTS</b>										
2	21	3/8	5/16	0.16	3 1/2	0.16	0.24	2	2	
3	44	3/8	5/16	0.22	3 1/2	0.28	0.34	2 1/2	2 1/2	
4	71	3/8	5/16	0.27	6 1/2	0.36	0.42	4	4	
5	100	3/8	5/16	0.30	7	0.42	0.48	4 1/2	4 1/2	
6	130	3/8	5/16	0.32	9 1/2	0.51	0.56	7	7	
7	160	3/8	5/16	0.34	9 1/2	0.56	0.60	7	7	
8	190	3/8	5/16	0.35	11 1/2	0.53	0.58	8	8	
9	221	3/8	5/16	0.36	16	0.56	0.60	10	10	
10	250	3/8	5/16	0.37	17 1/2	0.57	0.61	10 1/2	10 1/2	
11	280	3/8	5/16	0.38	18	0.59	0.63	12	12	
12	310	3/8	5/16	0.38	18	0.60	0.63	14 1/2	14 1/2	
<b>1" DIA A490 BOLTS</b>										
2	29	5/8	7/16	0.20	3 1/2	0.26	0.36	2	2 1/2	
3	61	5/8	7/16	0.27	6 1/2	0.41	0.51	4 1/2	4 1/2	
4	99	5/8	7/16	0.32	6 1/2	0.52	0.63	4 1/2	4 1/2	
5	140	5/8	7/16	0.37	7 1/2	0.62	0.71	4 1/2	4 1/2	
6	182	5/8	7/16	0.40	8	0.69	0.78	6	6	
7	225	5/8	7/16	0.42	9 1/2	0.74	0.83	7 1/2	7 1/2	
8	267	5/8	7/16	0.43	12	0.78	0.86	8 1/2	8 1/2	
9	309	5/8	7/16	0.45	16 1/2	0.82	0.89	10 1/2	10 1/2	
10	351	5/8	7/16	0.46	17 1/2	0.84	0.91	11 1/2	11 1/2	
11	392	5/8	7/16	0.46	18	0.87	0.93	12 1/2	12 1/2	
12	434	5/8	7/16	0.47	18	0.88	0.94	13 1/2	13 1/2	

**14** TABLE C



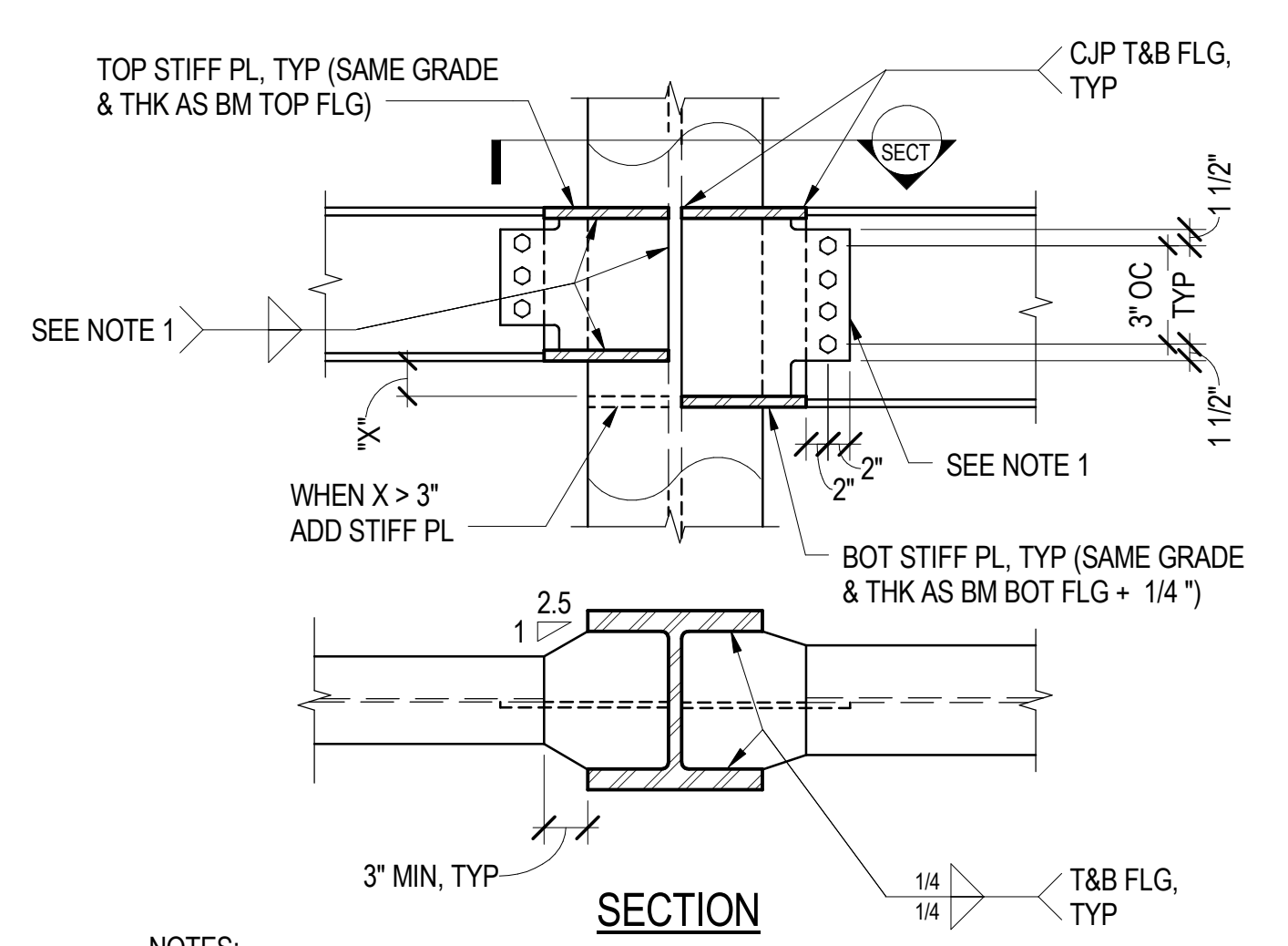
- NOTES:**
- SEE "TYPICAL COPED WEB STIFFENER" DETAIL FOR INFORMATION NOT SHOWN. CUT PLATE ONE SIDE AS REQUIRED FOR FIT UP.
  - REFERENCE "TABLE B" FOR NUMBER OF BOLTS REQUIRED FOR MAXIMUM REACTION.

**8** TYPICAL STEEL CONNECTION, TYPE C4



- NOTES:**
- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" OR "TYPE C2" AND "TABLE C" FOR ADDITIONAL CONNECTION REQUIREMENTS.

**19** TYPICAL STEEL CONNECTION, TYPE C5

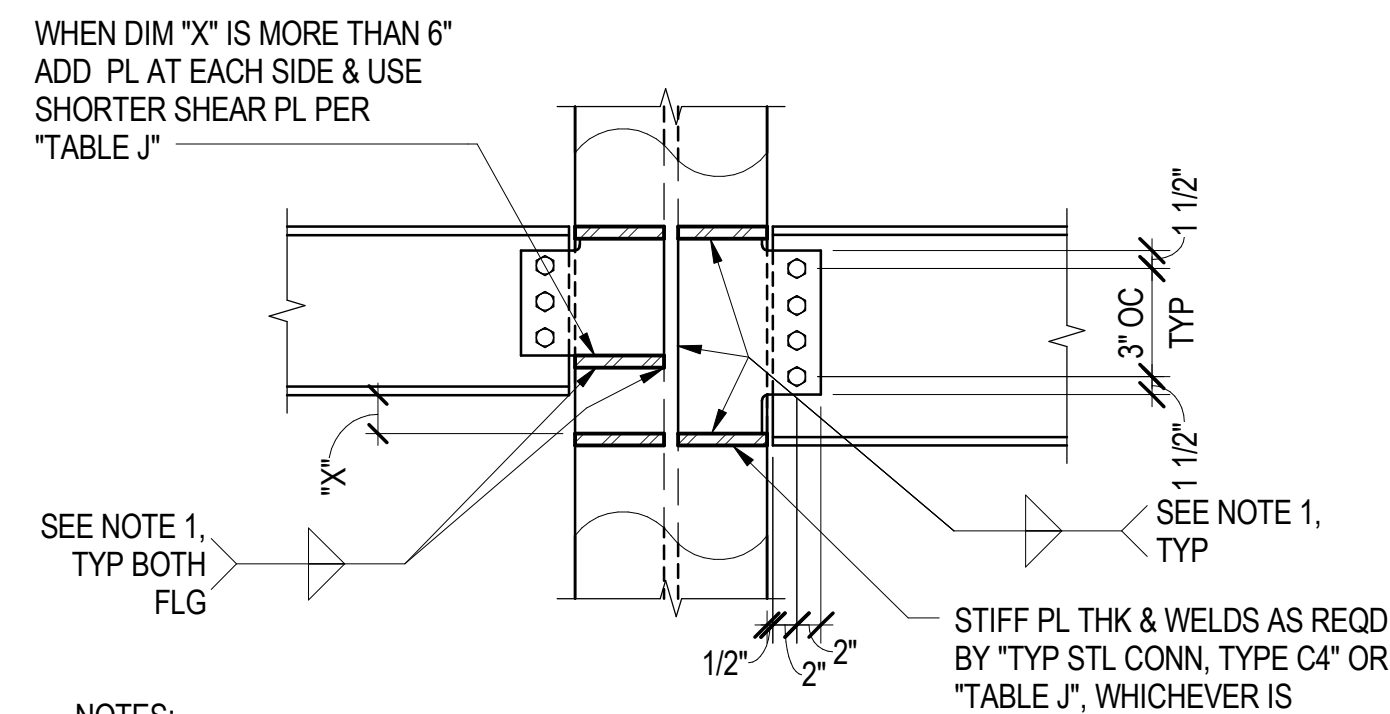


- NOTES:**
- SEE "TYPICAL STEEL CONNECTION, TYPE C1" AND "TABLE B" FOR ADDITIONAL CONNECTION REQUIREMENTS.

**20** TYPICAL STEEL CONNECTION, TYPE C5

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	1	STRUCTURAL BID ADDENDUM NO. 1
2	27 NOV 13	2	STRUCTURAL BID ADDENDUM NO. 2
3	12 DEC 13	3	ADDENDUM #2 PERMIT
4	10 FEB 14	4	BID ADDENDUM #2
5	11 FEB 14	5	ADDENDUM #2 PERMIT REVISION
6	02 MAY 14	6	GMP

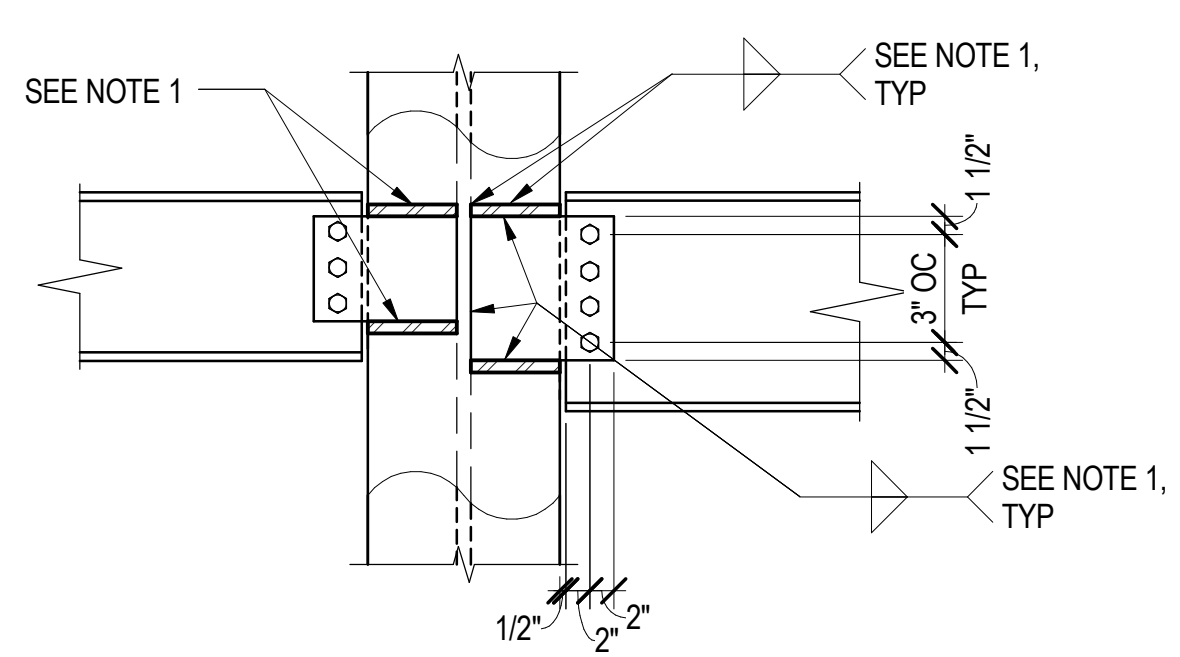
CAD FILENAME  
 DRAWING TITLE  
**TYPICAL STEEL BEAM CONNECTIONS**  
 REV. PROJECT NO. 08044  
 DRAWING NUMBER **S4.22**



- NOTES:**
- SEE "TABLE J" FOR BOLTS, PLATES, AND WELDS FOR EACH SIDE OF CONNECTION.
  - BEAM FLANGES SHALL NOT BE COPEd.
  - CONNECTION TYPE CANNOT BE MIXED WITH OTHER BEAM TO COLUMN WEB CONNECTION.
  - BEAMS MAY BE SKEWED UP TO 30 DEGREES.

**BEAM TO COLUMN WEB NON-MOMENT CONNECTION (MOMENT CONNECTION AT FLANGES)**

**1 TYPICAL STEEL CONNECTION, TYPE C6**



- NOTES:**
- SEE "TABLE J" FOR BOLTS, PLATES, AND WELDS FOR EACH SIDE OF CONNECTION.
  - BEAM FLANGES SHALL NOT BE COPEd.
  - CONNECTION TYPE CANNOT BE MIXED WITH OTHER BEAM TO COLUMN WEB CONNECTION.
  - BEAMS MAY BE SKEWED UP TO 30 DEGREES.

**BEAM TO COLUMN WEB NON-MOMENT CONNECTION (NON-MOMENT CONNECTION AT FLANGES)**

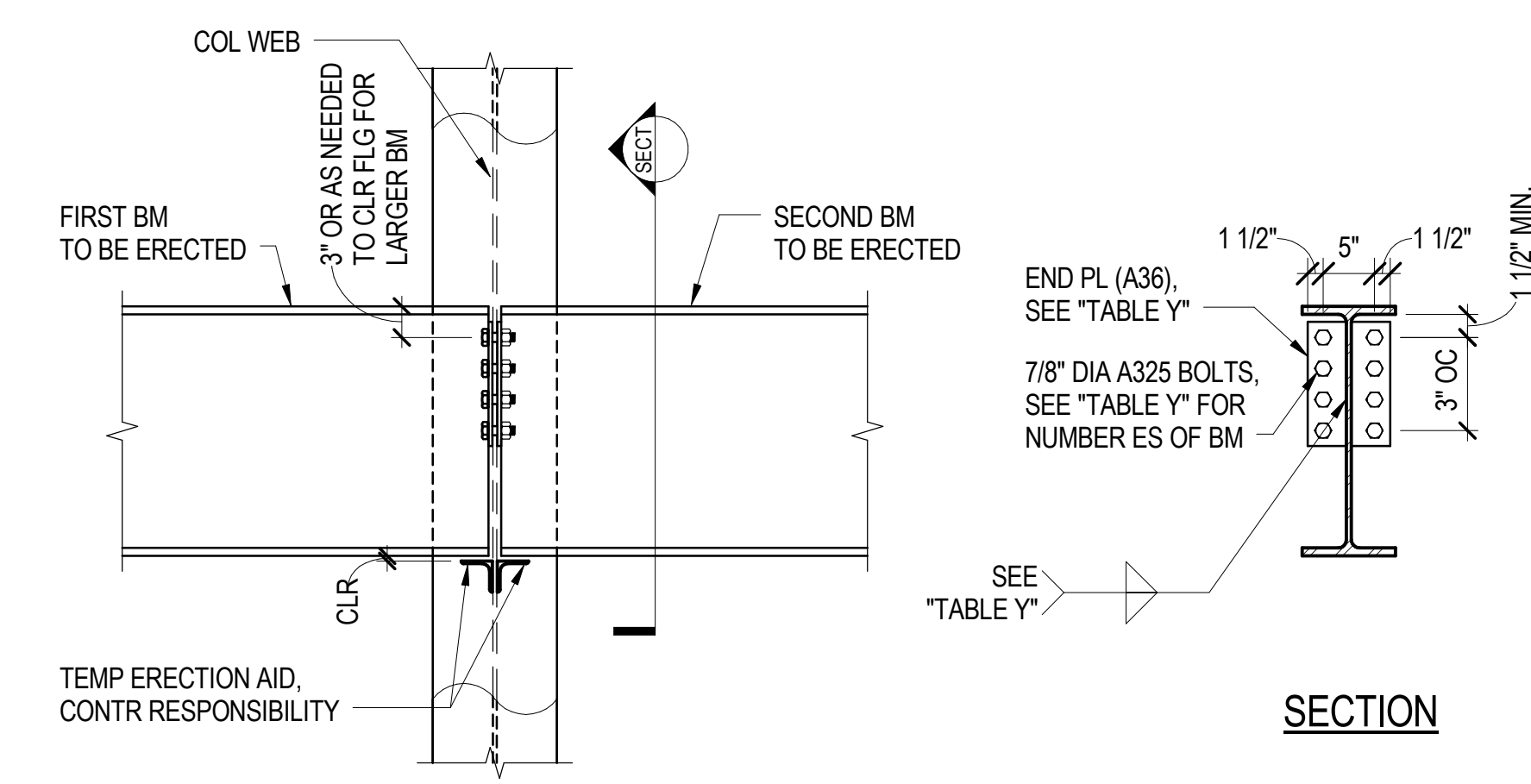
**2 TYPICAL STEEL CONNECTION, TYPE C7**

**TABLE J**

	NUMBER OF BOLTS PER SIDE	MAXIMUM REACTION (KIPS)	PLATE THICKNESS (A36) (INCH)	WELD SIZE (INCH)
7/8" DIAMETER A325 BOLTS	2	13	3/8	1/4
	3	27	3/8	1/4
	4	44	1/2	5/16
	5	56	1/2	5/16
	6	75	1/2	5/16
	7	83	1/2	5/16
	8	91	1/2	5/16
	9	100	1/2	3/8
	10	108	1/2	3/8
	11	116	1/2	3/8
	12	124	1/2	3/8
	1" DIAMETER A490 BOLTS	2	15	1/2
3		31	1/2	3/8
4		59	5/8	3/8
5		84	3/4	3/8
6		101	3/4	3/8
7		117	3/4	3/8
8		134	3/4	3/8
9		151	3/4	3/8
10		168	3/4	3/8
11		185	3/4	3/8
12		202	3/4	3/8

**3 TABLE J**

- NOTES:**
- WHEN THE BEAM WEB IS LESS THAN THE VALUE SHOWN, REDUCE ALLOWABLE REACTION BY THE RATIO WITH MINIMUM THICKNESS.
  - FOR BEAMS ON ONLY ONE SIDE, THE MINIMUM COLUMN WEB THICKNESS IS ONE HALF OF THE VALUE SHOWN.
  - WHEN COLUMN WEB IS LESS THAN VALUE SHOWN, REDUCE ALLOWABLE REACTION BY THE RATIO WITH THE MINIMUM THICKNESS.
  - MINIMUM NUMBER OF BOLTS PER SIDE SHALL CONFORM TO "TABLE A" IN "GENERAL NOTES FOR STEEL CONNECTIONS."
  - END PLATE SHALL FIT WITHIN BEAM DEPTH.
  - 1/4 INCH MAXIMUM SHIMS ALLOWED ON EACH BEAM END.
  - BLOCK BEAM FLANGES WHERE REQUIRED TO CLEAR COLUMN FLANGES, 1/4 INCH CLEAR MAXIMUM.
  - USE UNCOPEd FOR BEAM TO COLUMN FLANGE NON-MOMENT CONNECTION.
  - FOR BEAM TO BEAM CONNECTION, USE WITH "TYPICAL COPEd WEB STIFFENER" DETAIL.



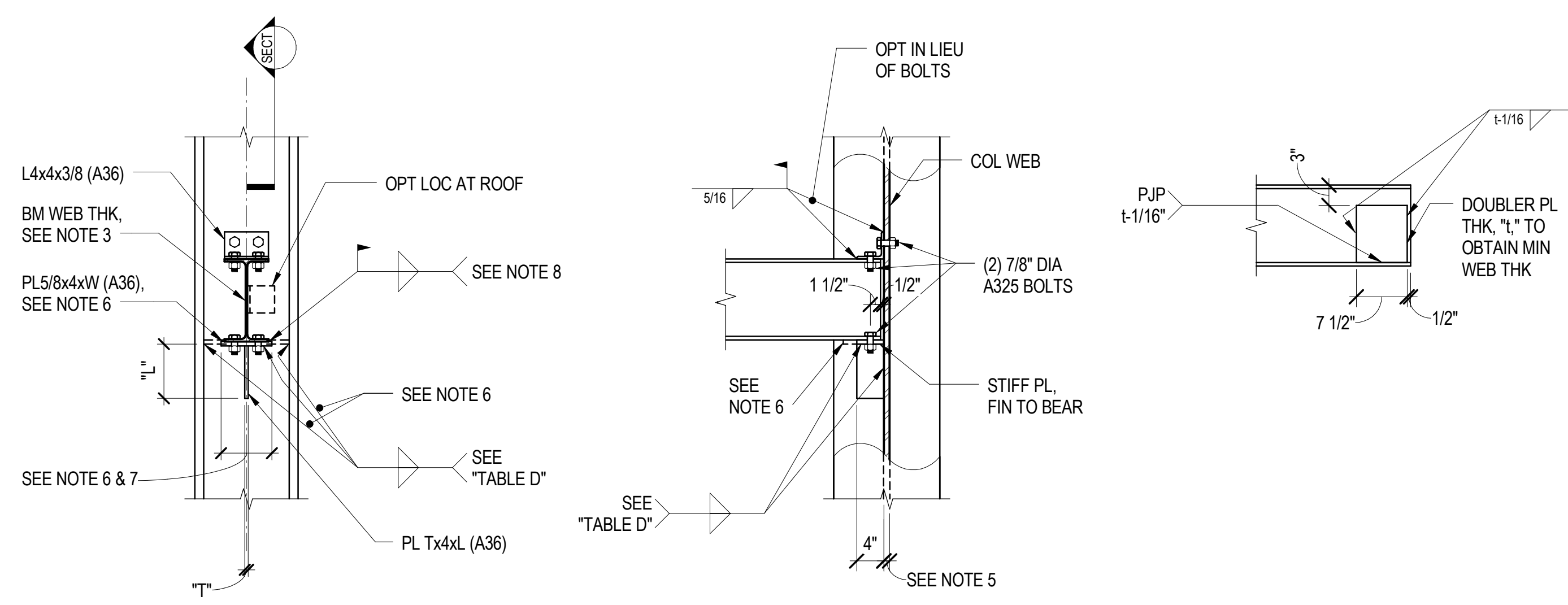
**BEAM TO COLUMN WEB NON-MOMENT CONNECTION**

**7 TYPICAL STEEL CONNECTION, TYPE C10**

**TABLE Y**

NUMBER OF BOLTS PER SIDE	7/8" DIA A325 BOLTS				Fy = 50 KSI	
	ALLOWABLE REACTION (KIPS)	END PLATE THICKNESS (INCH)	WELD SIZE (INCH)	MINIMUM BEAM WEB THICKNESS (INCH)	MINIMUM COLUMN WEB THICKNESS (INCH)	
2	18	1/4	3/16	0.19	0.13	
2	45	3/8	5/16	0.52	0.33	
3	29	1/4	3/16	0.20	0.14	
3	73	3/8	5/16	0.52	0.36	
4	50	1/4	3/16	0.25	0.18	
4	101	3/8	5/16	0.52	0.37	
5	75	5/16	1/4	0.30	0.22	
5	128	3/8	5/16	0.51	0.38	
6	107	5/16	1/4	0.35	0.26	
6	155	3/8	5/16	0.51	0.38	
7	182	3/8	5/16	0.51	0.38	
8	209	3/8	5/16	0.51	0.38	
9	236	3/8	5/16	0.51	0.38	
10	263	3/8	5/16	0.51	0.38	
11	290	3/8	5/16	0.50	0.39	
12	316	3/8	5/16	0.50	0.39	

**8 TABLE Y**



**SECTION**

**DETAIL**

**SEATED BEAM TO COLUMN WEB NON-MOMENT CONNECTION**

- NOTES:**
- SEE PLANS FOR BEAM REACTIONS.
  - SEE "TABLE D" FOR SEAT INFORMATION.
  - ADD DOUBLER PLATE PER THE DETAIL. WHERE MINIMUM BEAM WEB THICKNESS REQUIREMENT PER "TABLE D" IS NOT SATISFIED, IN LIEU OF PROVIDING DOUBLER PLATE, THE "TABLE D" REACTION CAN BE SCALED BY THE RATIO OF THE ACTUAL WEB THICKNESS DIVIDED BY THE REQUIRED WEB THICKNESS.
  - THE CONNECTION MAY BE SKEWED A MAXIMUM OF 30 DEGREES BY SKEWING THE STIFFENER PLATE TO ALIGN WITH THE BEAM WEB.
  - WHERE "TYPICAL STEEL CONNECTION, TYPE C20" OCCURS ON BOTH SIDES OF THE COLUMN WEB, THE MINIMUM COLUMN WEB THICKNESS (Tweb) IS TO BE AS FOLLOWS OR THE "TABLE D" SEAT LENGTH (L) SHALL BE INCREASED BY MULTIPLYING THE LENGTHS BY CF AS FOLLOWS:

**TABLE D1**

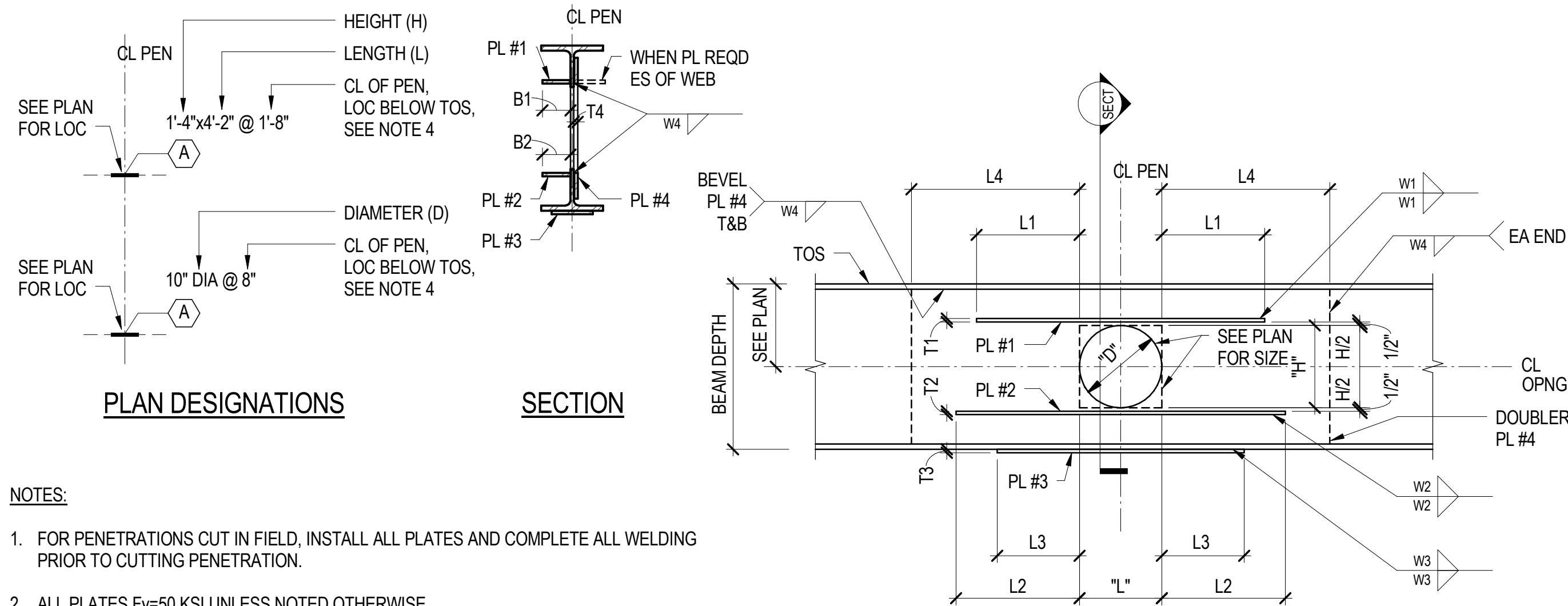
COLUMN STRENGTH	MINIMUM COLUMN WEB THICKNESS		CORRECTION FACTOR Cf
	1/4" WELD	5/16" WELD	
Fy = 50 KSI	3/8	1/2	1.5(WELD/Tweb)

- FOR COLUMNS WEIGHING MORE THAN 130 LB / FT WITH BEAMS FRAMING INTO ONE SIDE OF THE COLUMN WEB ONLY, EXTEND THE SEAT PLATE TO THE COLUMN FLANGES AND PROVIDE ADDITIONAL PLATE LENGTH TO ACCOMMODATE (2) ADDITIONAL 7/8 INCH DIAMETER A325 BOLTS AT 3 INCH SPACING.
- W IS A MINIMUM WIDTH PER "TABLE D." ALL CONNECTIONS MUST BE FABRICATED WITH THE PROPER BOLT SPACING AND EDGE DISTANCES PER AISC.
- WHERE THE FLANGE WIDTH IS LESS THAN 5 1/2 INCHES, WELD THE BEAM FLANGE TO THE SEAT PLATE IN LIEU OF BOLTING.

**TABLE D**

REACTION (KIPS)	SEAT (IN)	STEM PLATE (IN)			WELD SIZE (INCH)	MINIMUM BEAM WEB THICKNESS Fy=50 KSI (INCH)
		W	L	T		
20	6	6	1/2	1/4	0.25	
28	6	7	1/2	1/4	0.30	
36	6	8	1/2	1/4	0.34	
46	6	9	1/2	1/4	0.39	
55	6	10	5/8	1/4	0.40	
64	6	11	5/8	1/4	0.45	
73	6	12	3/4	1/4	0.48	
83	6	13	3/4	1/4	0.54	
115	6 1/2	14	1	5/16	0.66	
127	7	15	1	5/16	0.67	
139	7 1/2	16	1 1/8	5/16	0.69	
151	8	17	1 1/4	5/16	0.71	
163	8 1/2	18	1 3/8	5/16	0.74	
175	9	19	1 3/8	5/16	0.75	
187	9 1/2	20	1 1/2	5/16	0.76	
200	10	21	1 5/8	5/16	0.77	
212	10 1/2	22	1 3/4	5/16	0.81	
224	11	23	1 3/4	5/16	0.83	

**15 TYPICAL STEEL CONNECTION, TYPE C20**



- NOTES:**
- FOR PENETRATIONS CUT IN FIELD, INSTALL ALL PLATES AND COMPLETE ALL WELDING PRIOR TO CUTTING PENETRATION.
  - ALL PLATES Fy=50 KSI UNLESS NOTED OTHERWISE.
  - EXTEND DOUBLER PLATE TO END OF BEAM IF CENTER LINE OF OPENING IS WITHIN 3'-0" FROM END OF BEAM.
  - PENETRATIONS SHOWN ON PLANS WITHOUT DIMENSION FROM TOP OF STEEL SHALL BE CENTERED AT HALF THE BEAM DEPTH.

**15 TYPICAL BEAM WEB PENETRATION**

**BEAM WEB PENETRATION SCHEDULE**

MARK	HEIGHT (H)	LENGTH (L)	CENTER LINE OF PENETRATION LOCATION BELOW TOP OF STEEL	PLATE #1 T1 x B1 x L1 (INCH)	W1 (INCH)	PLATE #2 T2 x B2 x L2 (INCH)	W2 (INCH)	PLATE #3 T3 x B3 x L3 (INCH)	W3 (INCH)	DOUBLER PLATE #4 L4 x T4 (INCH)	W4 (INCH)	REMARKS
A	18"Ø		1'-6"									
B	18"Ø		1'-6"									
C	12"Ø		1'-6"									
D	1'-4"	3'-2"	1'-6"	1/2x3x12	1/4	1/2x3x12	1/4	1/2x3x12	1/4	1/2x3x12	1/4	
E	1'-8"	4'-4"	1'-6"	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	
F	1'-4"	1'-10"	1'-6"									
G	1'-4"	3'-6"	1'-6"	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	1x4x18	5/16	
H	15"Ø		1'-6"									

**20 BEAM WEB PENETRATION SCHEDULE**

**Transbay Tower**  
101 First Street  
San Francisco, CA



- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**TYPICAL STEEL BEAM CONNECTIONS**

PROJECT NO. 08044 DRAWING NUMBER S4.23



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

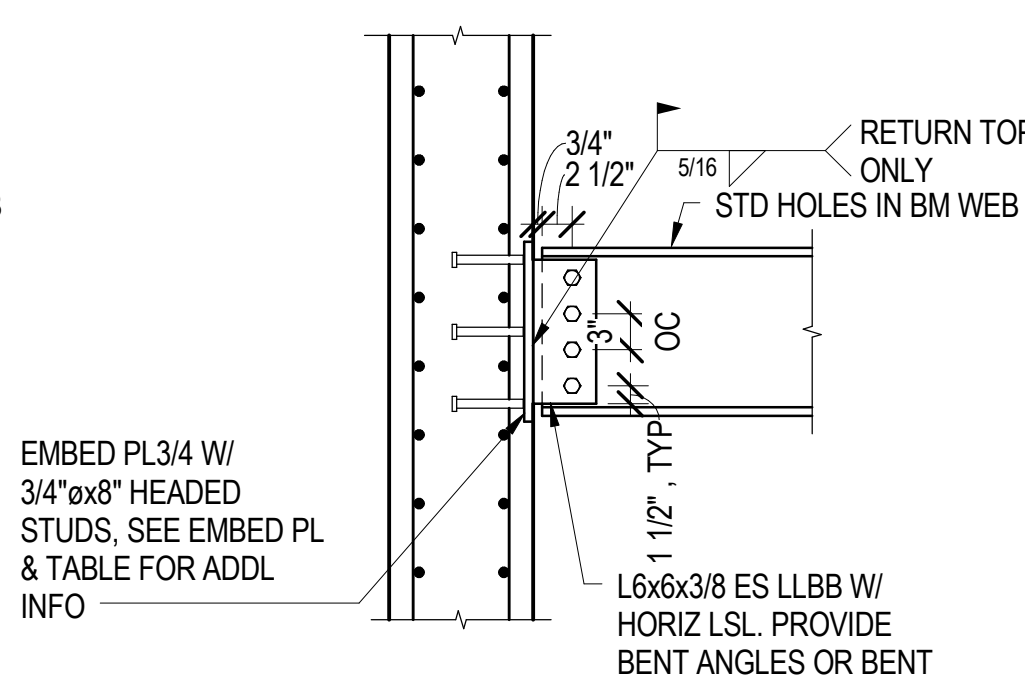
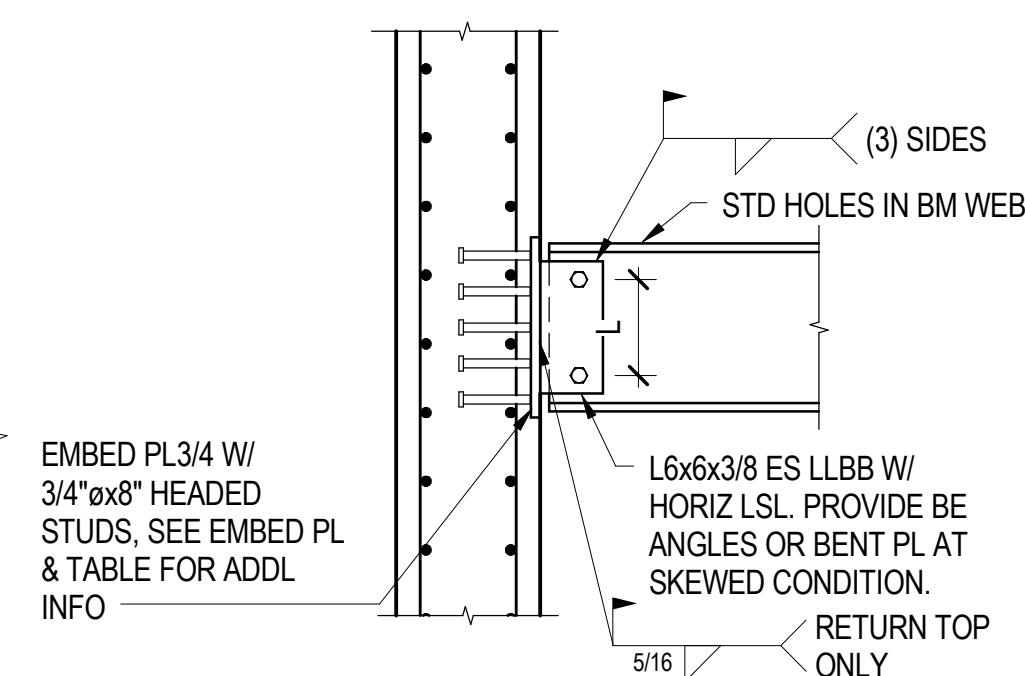
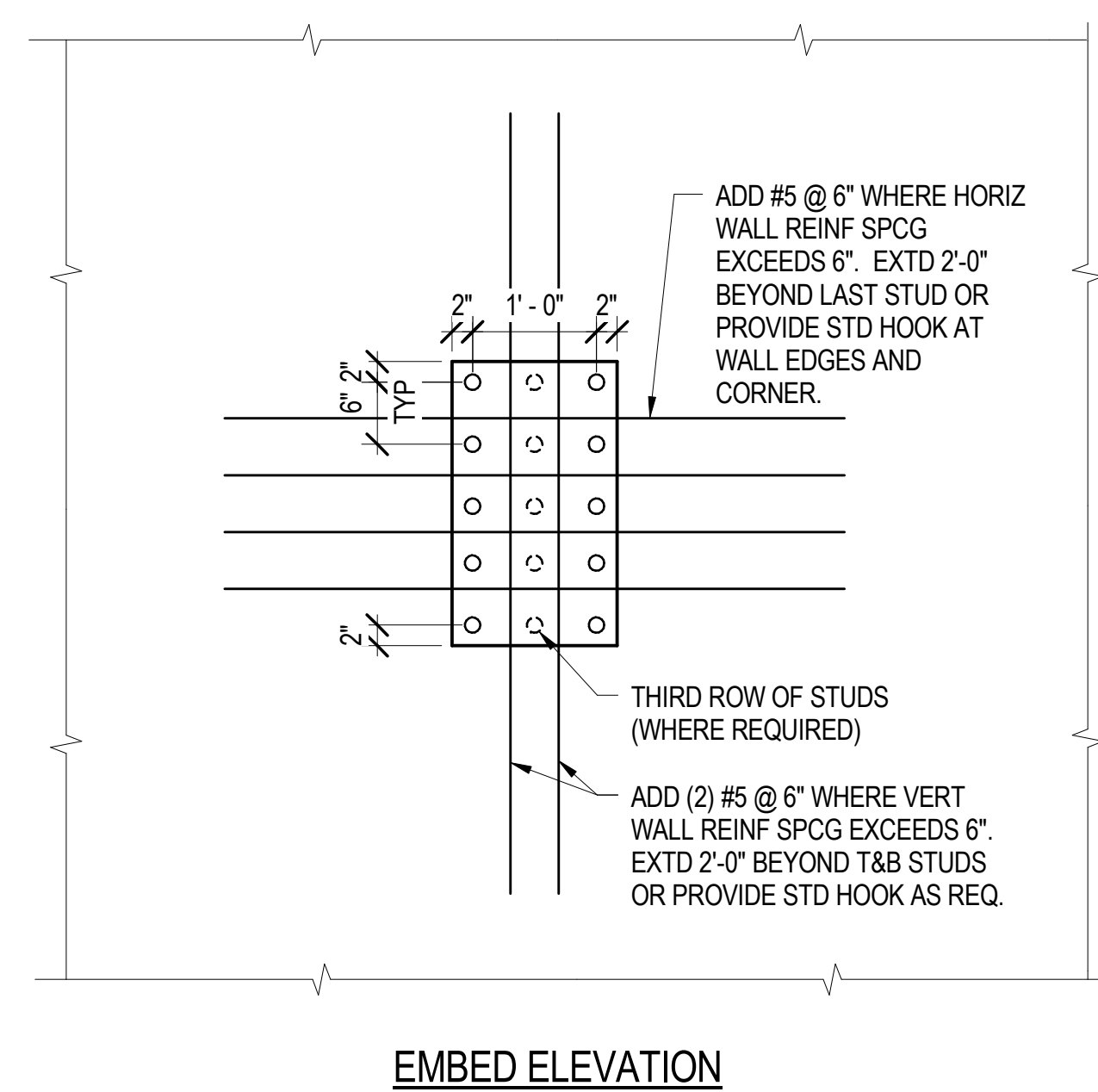
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



EMBED PLATE TABLE		
NUMBER HORIZ ROWS	NUMBER VERT ROWS	REACTIONS (KIPS)
2	2	42
3	2	63
4	2	84
3	3	95
4	3	126
5	3	158
6	3	189
7	3	221

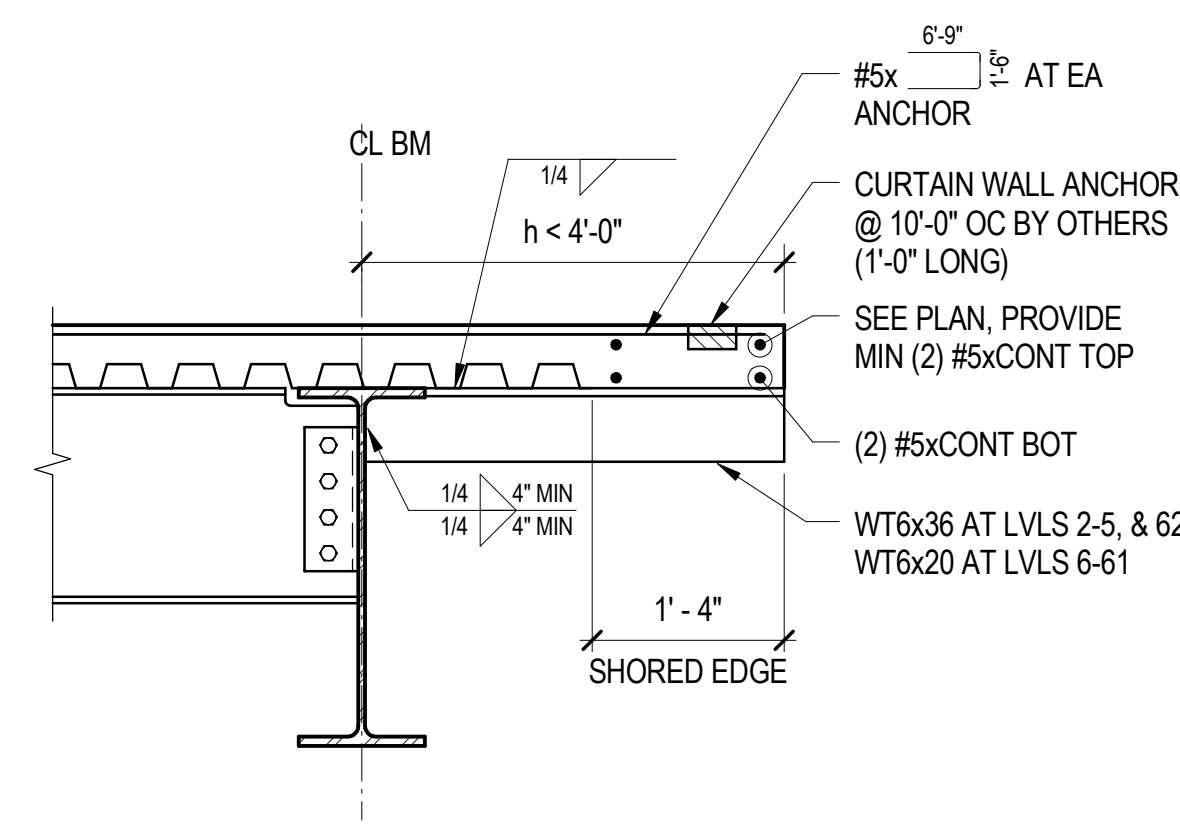
WELDED CONNECTION TABLE	
ANGLE LENGTH, L (INCHES)	REACTION (KIPS)
6	21
9	44
12	71
15	100
18	130
21	159
24	181
27	202

BOLTED CONNECTION TABLE			
7/8" A325 SC		1" A490 SC	
NUMBER OF BOLTS	REACTIONS (KIPS)	NUMBER OF BOLTS	REACTION (KIPS)
2	8	2	10
3	17	3	22
4	28	4	46
5	41	5	66
6	53	6	75
7	66	7	87
8	79	8	105
9	92	9	117
10	105	10	137

20 TYPICAL STEEL CONNECTION TO CONCRETE WALL, TYPE C24

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

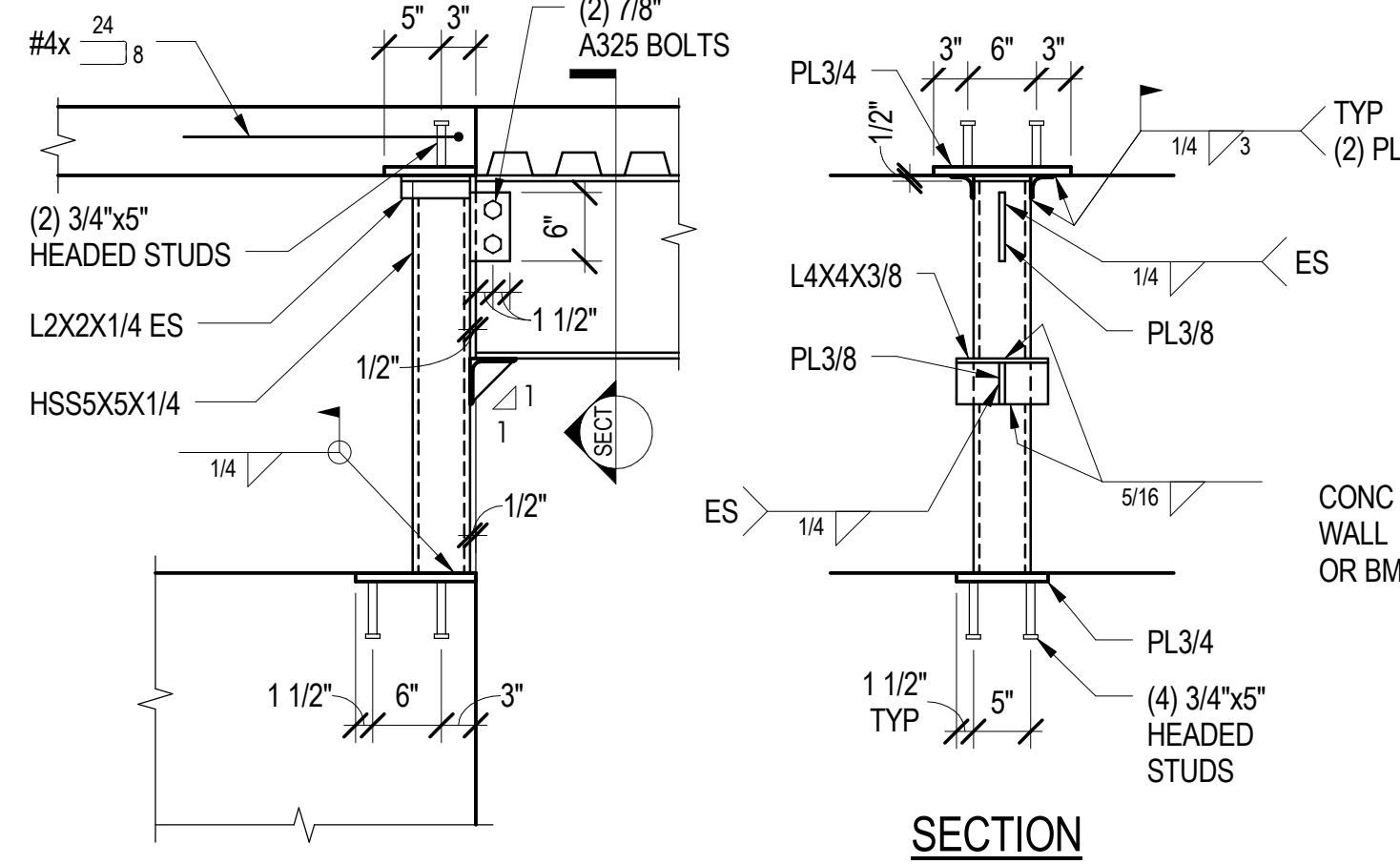
TYPICAL STEEL BEAM CONNECTIONS



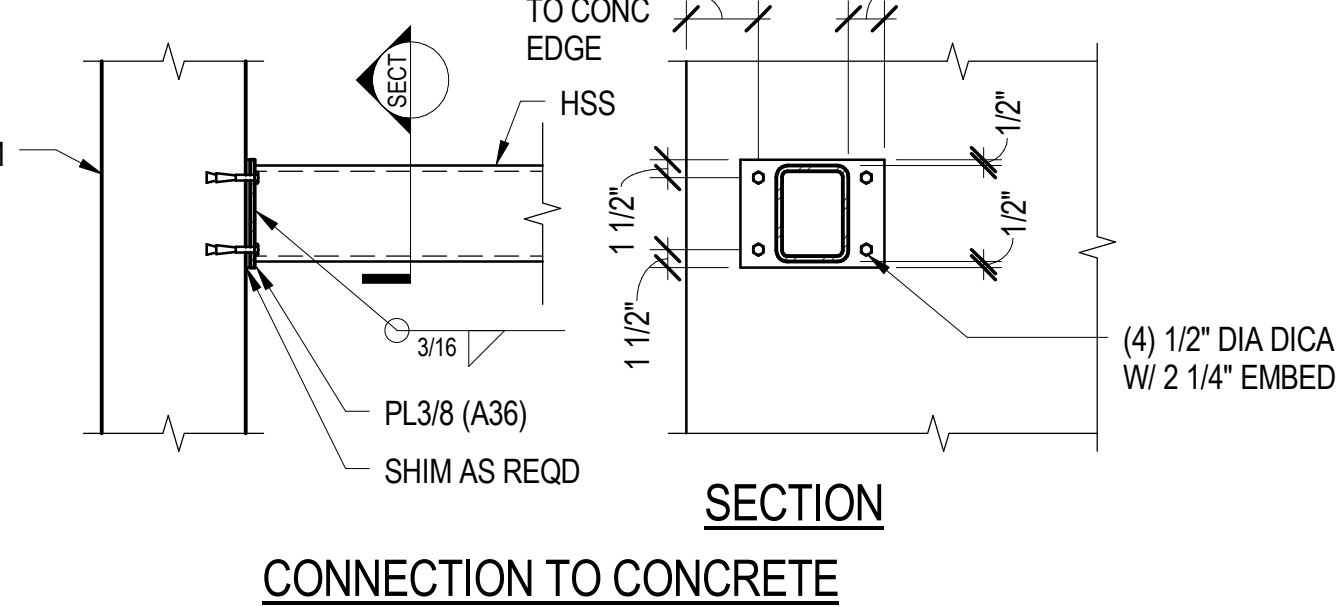
**NOTES:**  
1. CONTRACTOR OPTION: PROVIDE SLAB SUPPORT ABOVE LEVEL 6 PER "TYPICAL DECK EDGE CONDITIONS" IF SLAB EDGE "h" IS LESS THAN 1'-6".

**2 TYPICAL SLAB SUPPORT STUB**

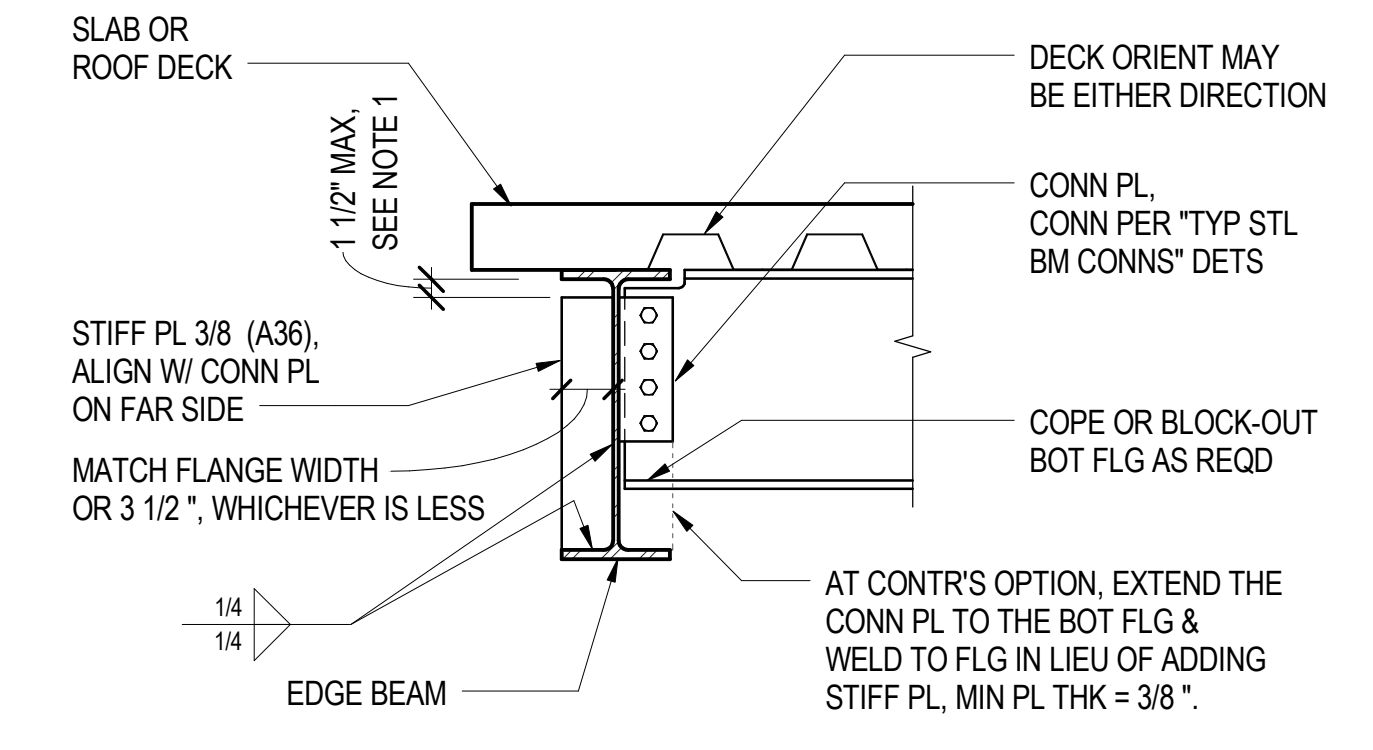
**3 TYPICAL STL BEAM POST SUPPORT AT CORE WALL OPENING**



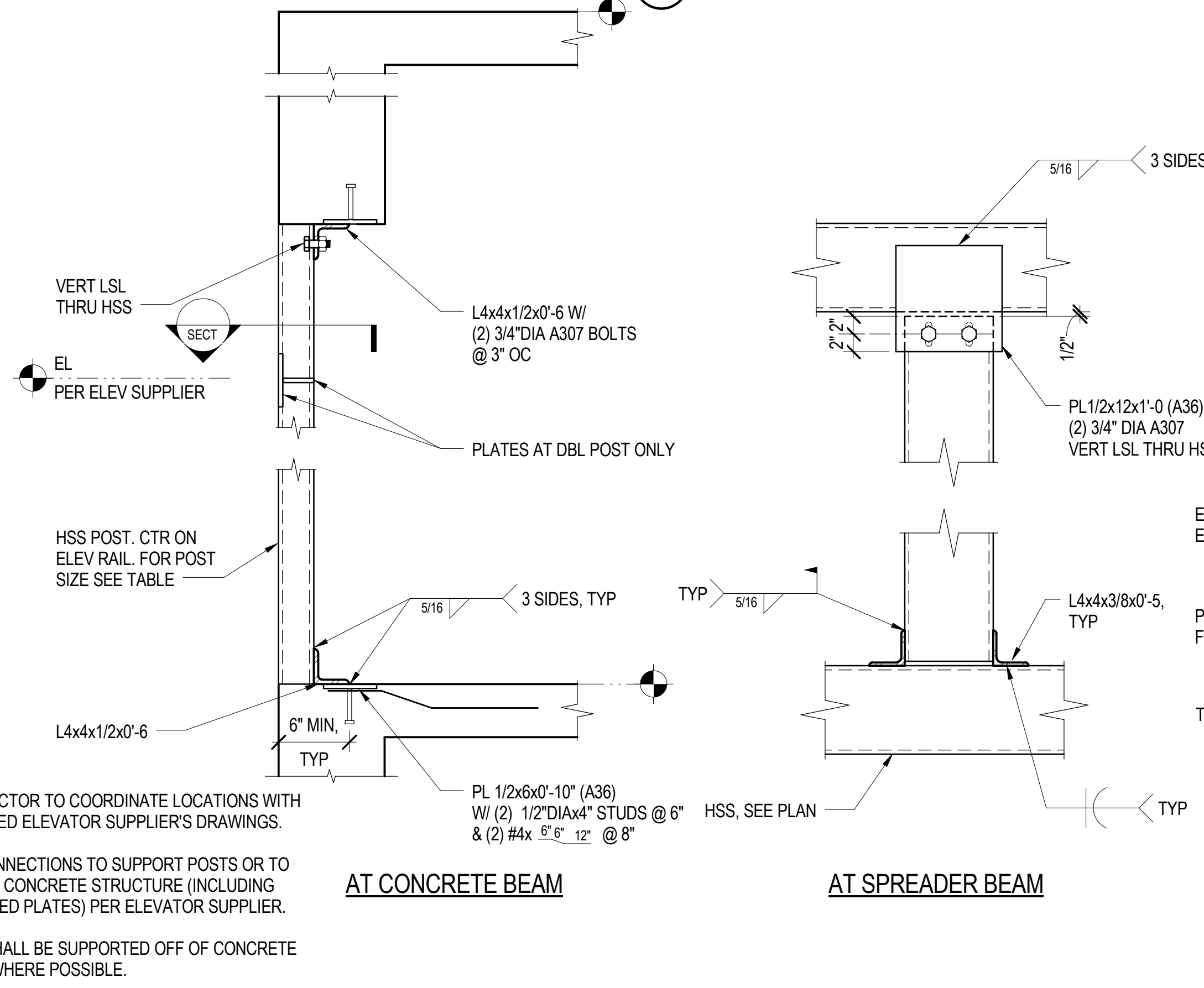
**4 TYPICAL ELEVATOR SPREADER BEAM CONN**



**5 TYPICAL STEEL EDGE BEAM STIFFENER**



**NOTES:**  
1. AT LOCATIONS WHERE A CONCRETE SLAB DOES NOT EXIST AT EDGE BEAM, THE STIFFENER PLATE OR CONNECTION PLATE SHALL BE EXTENDED TO FULL DEPTH AND WELDED ON THREE SIDES.  
2. THIS DETAIL APPLIES AT ALL EDGE OF SLAB CONDITIONS.



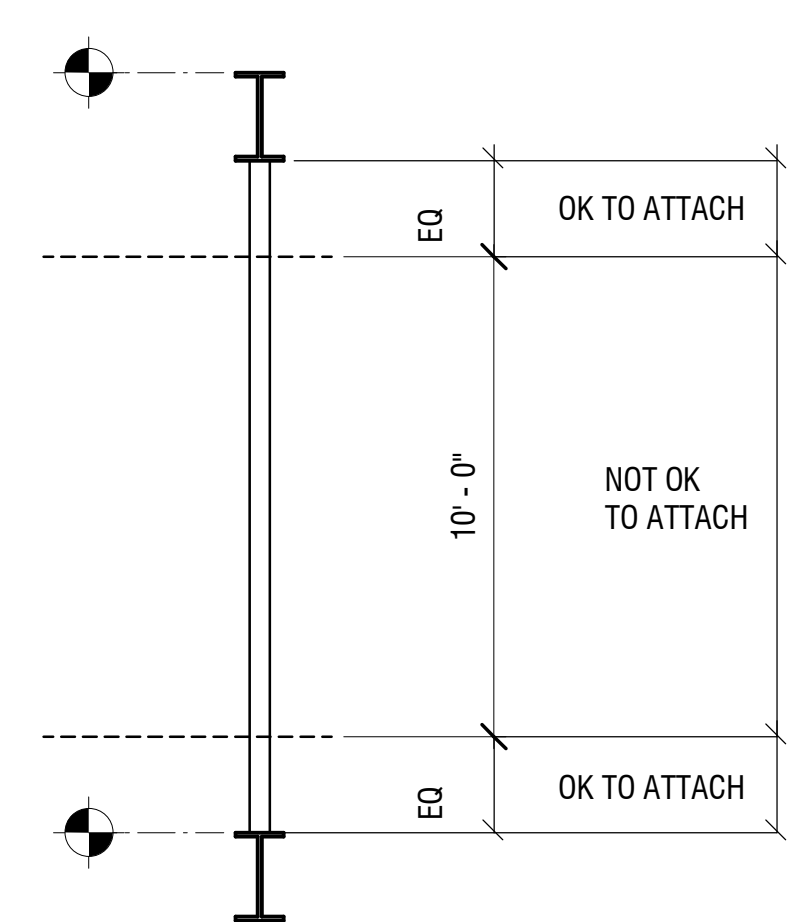
**NOTES:**  
1. CONTRACTOR TO COORDINATE LOCATIONS WITH APPROVED ELEVATOR SUPPLIER'S DRAWINGS.  
2. RAIL CONNECTIONS TO SUPPORT POSTS OR TO FACE OF CONCRETE STRUCTURE (INCLUDING EMBEDDED PLATES) PER ELEVATOR SUPPLIER.  
3. RAILS SHALL BE SUPPORTED OFF OF CONCRETE WALLS WHERE POSSIBLE.

**9 TYPICAL ELEVATOR RAIL SUPPORT**

POST LENGTH "L"	POST SIZE
UP TO 14'-0"	HSS12x4x1/2
14'-0" TO 17'-0"	(2) HSS14x4x1/2
17'-0" TO 20'-0"	(2) HSS16x4x1/2 w/ FIXITY AT BASE

ELEVATORS	SPREADER BEAM
SE-1, SE-2	HSS10x4x1/2
ALL OTHERS	HSS6x4x1/2

**10 ELEVATOR SPREADER BEAM SCHEDULE**



**15 TYPICAL ELEVATOR RAIL ATTACHMENT LOCATIONS**

- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

**TYPICAL STEEL DETAILS AND WINDOW WASHING DETAILS**

NO. PROJECT NO. 08044 DRAWING NUMBER S4.25



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

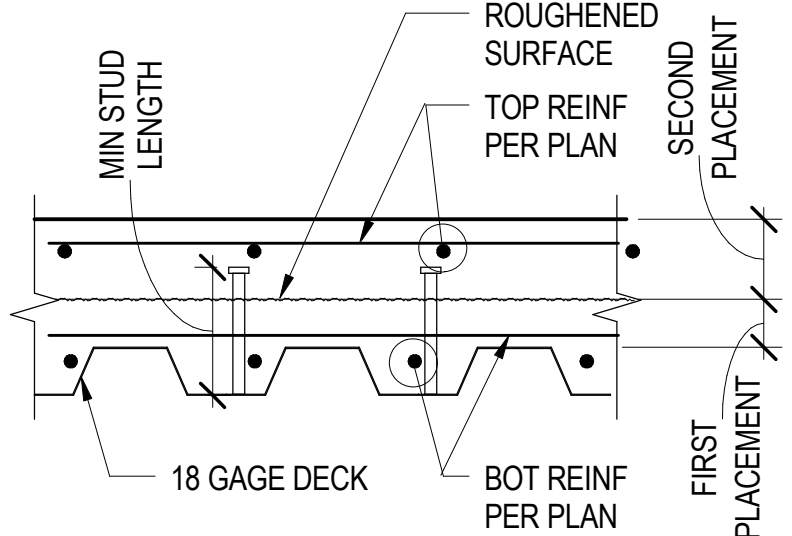
C.S. CAULKINS CO., INC.  
Window W/ashing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

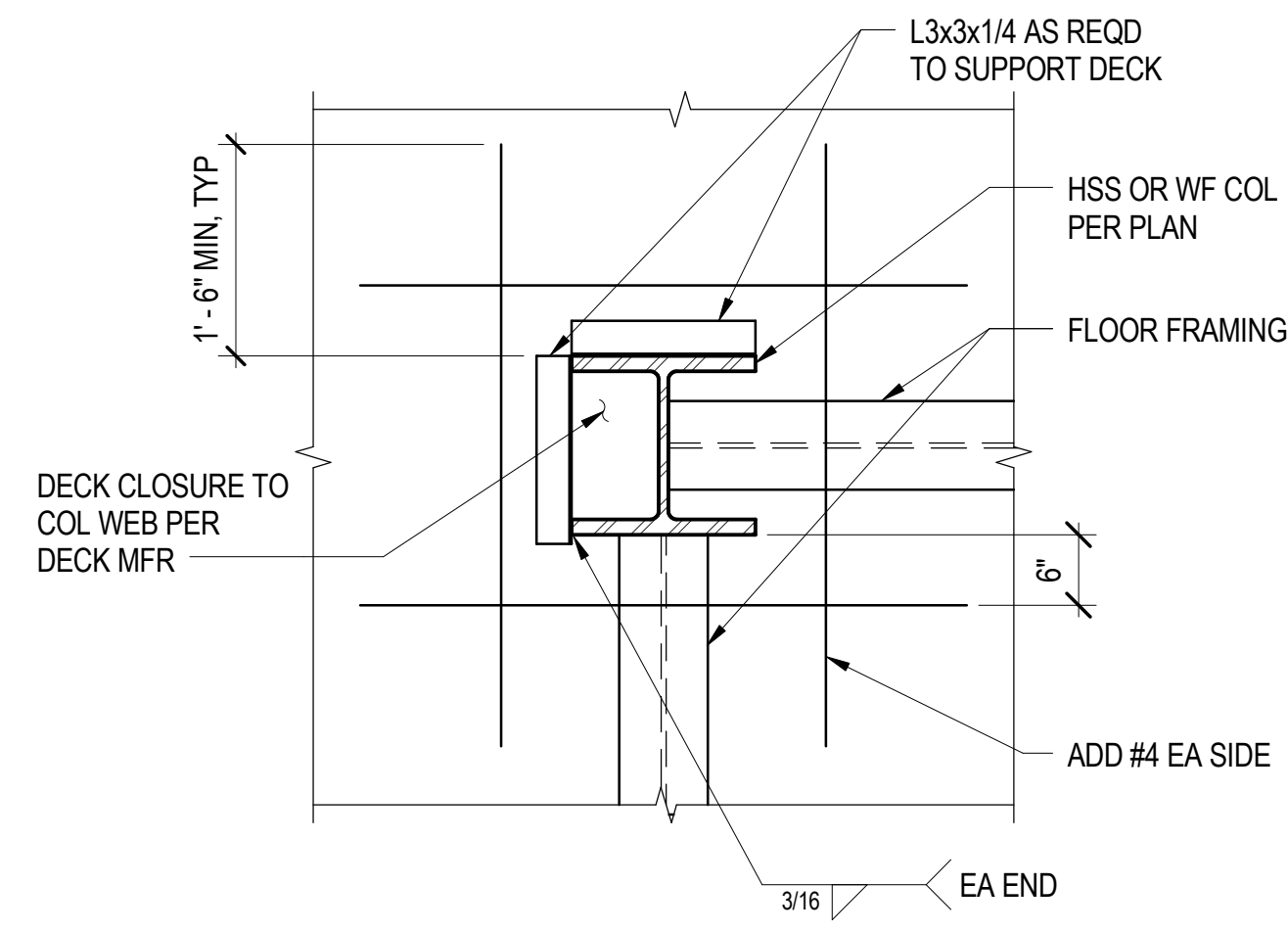
Table with 4 columns: CONCRETE THICKNESS NOTED ON PLAN (INCH), THICKNESS OF FIRST PLACEMENT (INCH), THICKNESS OF SECOND PLACEMENT (INCH), MINIMUM STUD LENGTH (INCH). Rows: 8, 10, 18.



NOTES:

- 1. ALLOW CONCRETE IN FIRST PLACEMENT TO ATTAIN DESIGN STRENGTH BEFORE MAKING SECOND PLACEMENT.
2. LOCATE BOTTOM REINFORCEMENT CALLED OUT IN PLAN IN FIRST PLACEMENT.
3. LOCATE TOP REINFORCEMENT CALLOUT IN PLAN IN SECOND PLACEMENT.
4. SEE TABLE ABOVE FOR DETAILING DIMENSIONS.

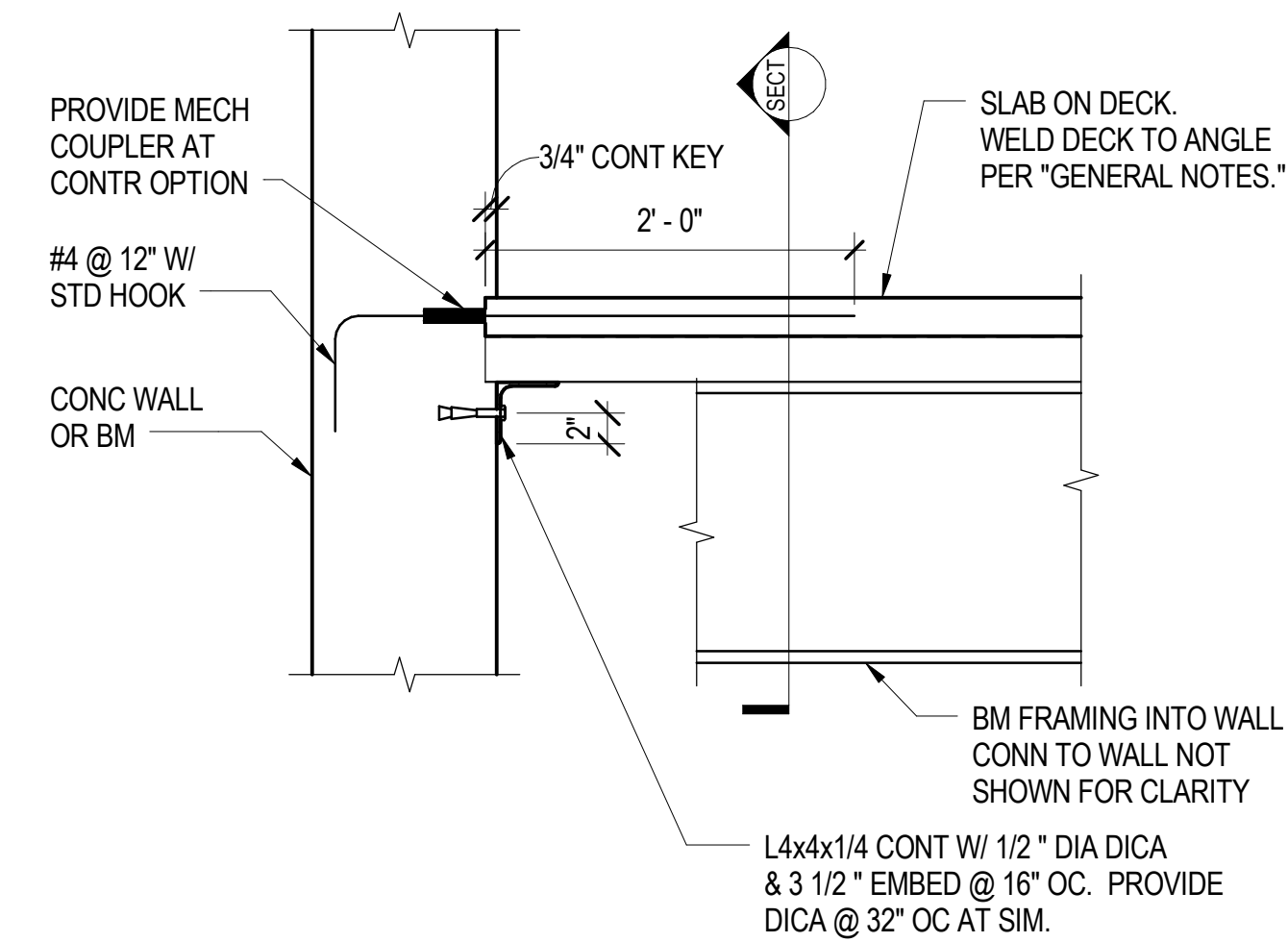
1 TYPICAL THICK CONCRETE ON METAL DECK



NOTES:

- 1. SEE "TYPICAL DECK EDGE CONDITIONS" FOR DECK EDGE SUPPORT AT COLUMNS.

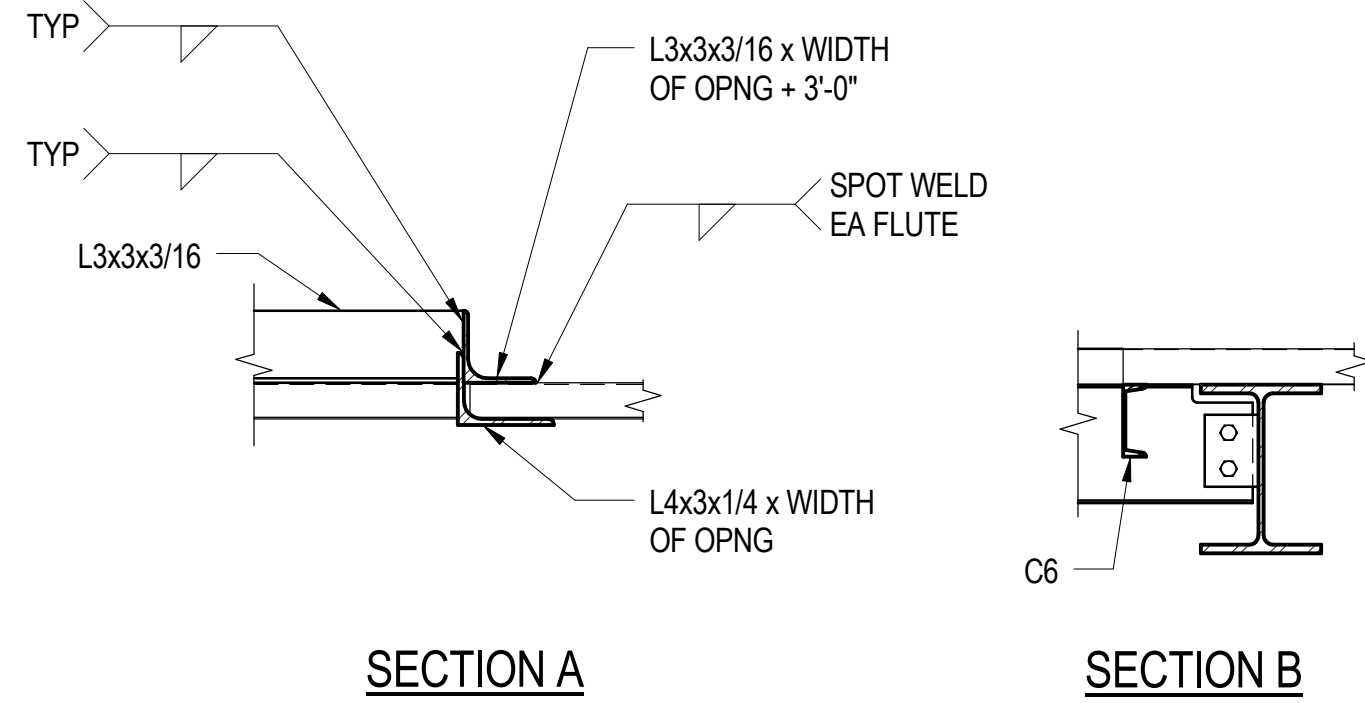
6 TYP DECK SUPPORT AND REINF AT COLUMNS



NOTES:

- 1. ROOF DECK IS SIMILAR.

12 TYPICAL DECK SUPPORT AT CONCRETE



NOTES:

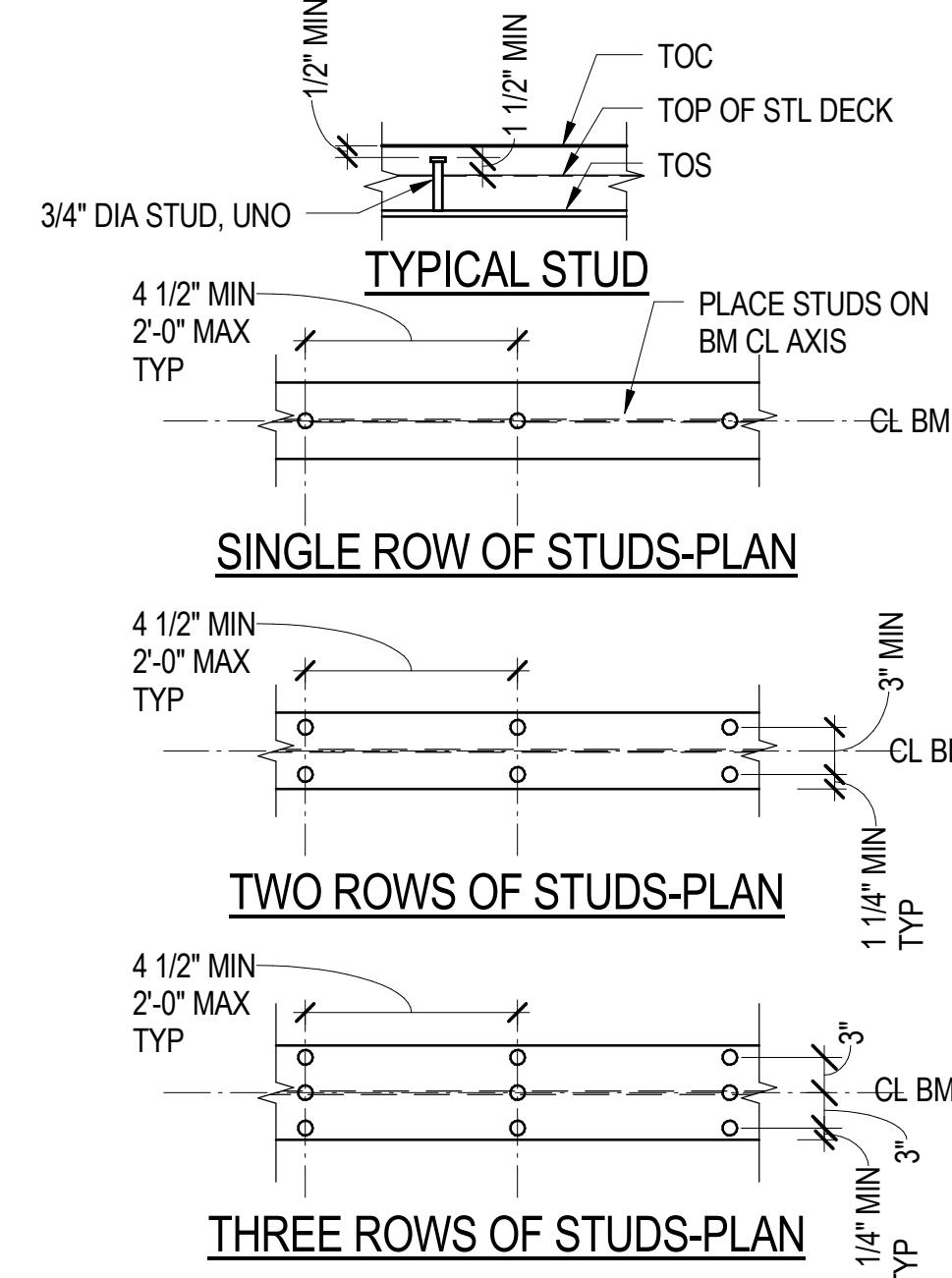
- 1. INSTALL REINFORCING BEFORE CUTTING HOLES.
2. CONTRACTOR SHALL COORDINATE OPENING SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
3. THE OPENING NOTED REQUIRES A CLEAR SPACING FROM ADJACENT OPENINGS OF THREE TIMES THE MAXIMUM OPENING DIMENSION. IF REQUIRED LAYOUT CANNOT CONFORM TO THESE REQUIREMENTS, REINFORCE GROUP AS IF ONE COMBINED PENETRATION.

18 TYPICAL ROOF DECK - OPENING 7'-0" AND LESS

NOTES:

- 1. SEE PLAN FOR REQUIRED NUMBER OF STUDS. STUDS SHALL BE PLACED AT A MAXIMUM SPACING OF 2'-0" ALONG THE BEAM AXIS UNLESS NOTED OTHERWISE ON PLAN.
2. UNLESS NOTED OTHERWISE, STUDS ARE TO BE EQUALLY SPACED ALONG THE BEAM LENGTH AND PLACED SYMMETRICALLY ABOUT THE BEAM CENTERLINE AXIS.
3. THE REQUIRED NUMBER OF STUD ROWS SHALL BE DETERMINED AS FOLLOWS (BEAM LENGTH IN FEET):
A. FOR DECK FLUTES PERPENDICULAR TO THE BEAM: # ROWS = # STUDS / BEAM LENGTH
B. FOR DECK FLUTES PARALLEL TO THE BEAM: # ROWS = (0.375 x # STUDS) / BEAM LENGTH
4. FOR DECK FLUTES PARALLEL TO THE BEAM, THE FIRST STUD (OR STUDS) SHALL BE PLACED 6" FROM THE BEAM ENDS.
5. FOR CANTILEVER SPANS, STUDS SHALL BE PLACED IN ONE ROW ALONG THE BEAM CENTERLINE AXIS AT A MAXIMUM SPACING OF 2'-0".
6. WHERE WELDED WIRE REINFORCING IS USED AS SLAB REINFORCEMENT, ADDITIONAL REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE BEAM, ACROSS THE BEAM AND CANTILEVERED SPANS AS FOLLOWS:
1 OR 2 STUDS / FT - ADD NONE
3 STUDS / FT - ADD #4x5'-0" @ 12"
4 OR MORE STUDS / FT - ADD #4x5'-0" @ 10"
7. IN ADDITION TO THE NUMBER OF STUDS SHOWN ON PLAN, WHERE A C2 OR C24 CONNECTION IS USED, PROVIDE (1) ADDITIONAL STUD WITHIN 1'-6" OF THE BEAM END WITH THAT CONNECTION.

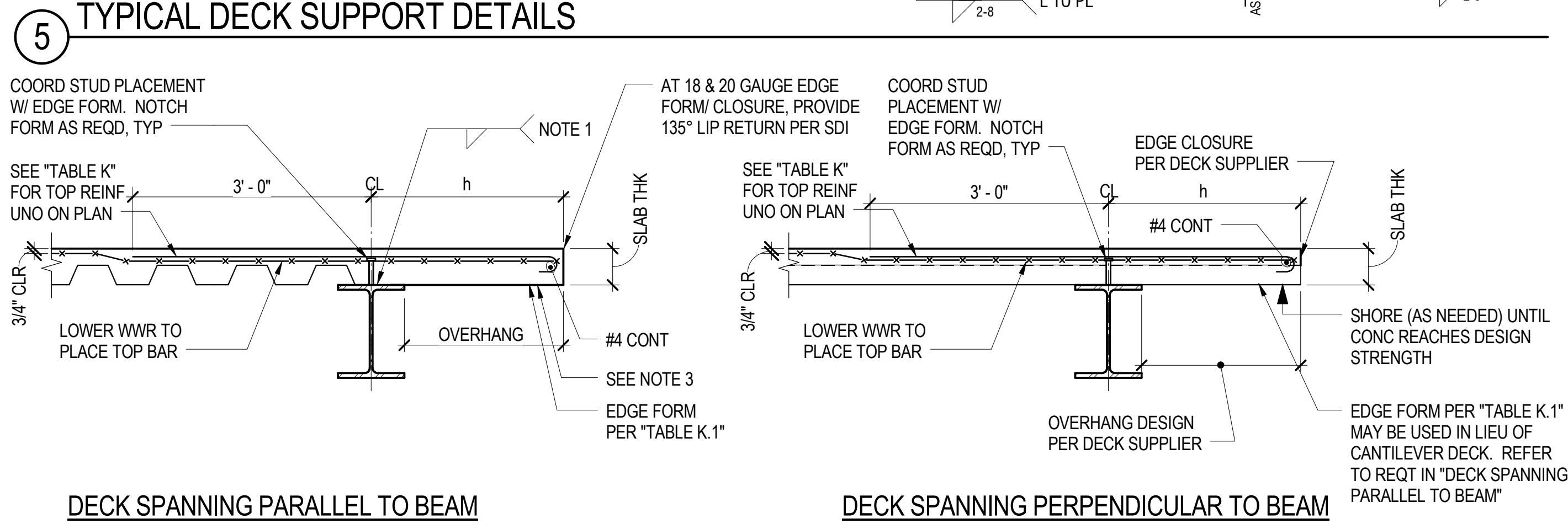
3 TYPICAL SHEAR STUD PLACEMENT AND ADDED REINFORCING



5 TYPICAL DECK SUPPORT DETAILS

NOTES:

- 1. STUDS ARE TYPICALLY 3/4" INCH DIAMETER AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.
2. AT ALL ANGLES AND WEBS LESS THAN OR EQUAL TO 1/4" INCH THICK, USE 1/2" INCH DIAMETER x 4 INCH STUDS AT 12 INCHES ON CENTER.
3. DECK SPANS EITHER DIRECTION, SEE PLANS.
4. ROOF DECK SIMILAR.



DECK SPANNING PARALLEL TO BEAM

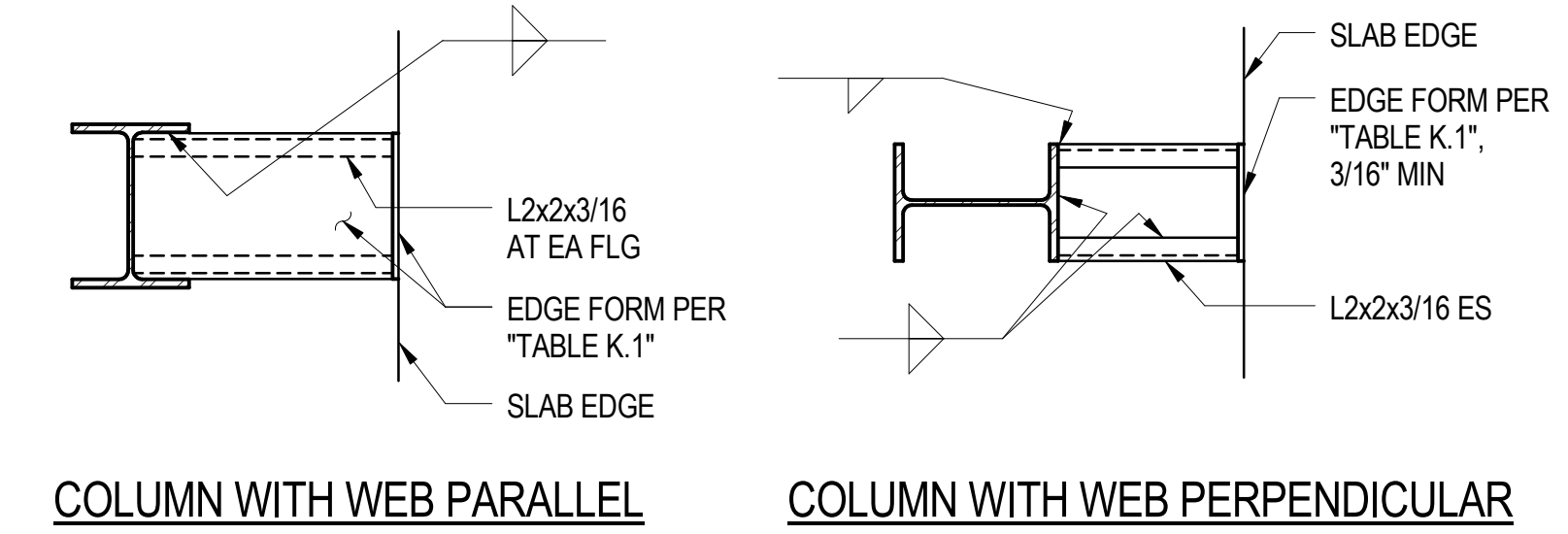
TABLE K: Reinforcement table with columns h and REINFORCING. Values for h from 0 to 8 and reinforcement from #4 to #8.

DECK SPANNING PERPENDICULAR TO BEAM

TABLE K.1: Slab edge closure plate gauge/thickness table with columns for slab thickness and overhang dimensions.

NOTES:

- 1. WELDING SHALL BE AS FOLLOWS:
MATERIAL WELD SIZE x LENGTH AT SPACING
18 GA & 20 GA 1/8" x 1" @ 12" OC
16 GA & 14 GA 1/8" x 2" @ 12" OC
12 GA & 10 GA 1/8" x 2" @ 8" OC
3/16" x 1/4" 3/16" x 2" @ 12" OC
5/16" x 3/8" 3/16" x 2" @ 8" OC
2. MATERIALS ARE TO BE AS FOLLOWS:
18 GAUGE AND LIGHTER - ASTM A653 - Fy = 33 KSI MIN.
16 GAUGE AND HEAVIER - ASTM A653 - Fy = 50 KSI MIN.
PLATE MATERIAL - ASTM A36 - Fy = 36 KSI MIN.
3. FOR CONDITIONS WHERE SLAB EDGE EXCEEDS 18 INCH OVERHANG, PROVIDE 1/4" INCH PLATE EDGE FORM AND SHORE THE EDGE UNTIL CONCRETE REACHES 28 DAY COMPRESSIVE STRENGTH.
4. AT CONTRACTOR'S OPTION, ALTERNATE METHODS OF PROVIDING EDGE CONSTRUCTION MAY BE USED AS DESIGNED BY THE CONTRACTOR. PROVIDE SHORING AND FRAMING MATERIALS AS REQUIRED.
5. THE SLAB EDGE CLOSURE PLATE IS ONLY DESIGNED TO SUPPORT WET CONCRETE AND CONSTRUCTION LOAD. DO NOT USE THE PLATE TO DIRECTLY SUPPORT CLADDING LOADS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
6. AT CORNER COLUMNS, USE BOTH "TYPICAL EDGE CONDITION AT COLUMN DETAILS. EDGE FORM SHALL BE MITERED AND WELDED.
7. AT BLOCKOUTS FOR CLADDING CONNECTIONS, EDGE REINFORCING IS TO BE CONTINUOUS.
8. AT RECESS CONDITIONS, EDGE PLATE HEIGHT TO MATCH THE SLAB HEIGHT AT RECESS.
9. FOR ELEVATOR AND DOCK LEVELER SILLS SEE "TYPICAL ELEVATOR AND DOCK LEVELER SILL" DETAIL.
10. COORDINATE EDGE ANGLE INSERTS FOR CLADDING SUPPORT WITH ARCHITECTURAL DRAWINGS. SUBSTITUTE FOR EDGE FORM WHEN SHOWN ON ARCHITECTURAL.
11. CONSTRUCTION LOAD AT EDGE FORM SHALL NOT EXCEED 20 PSF.



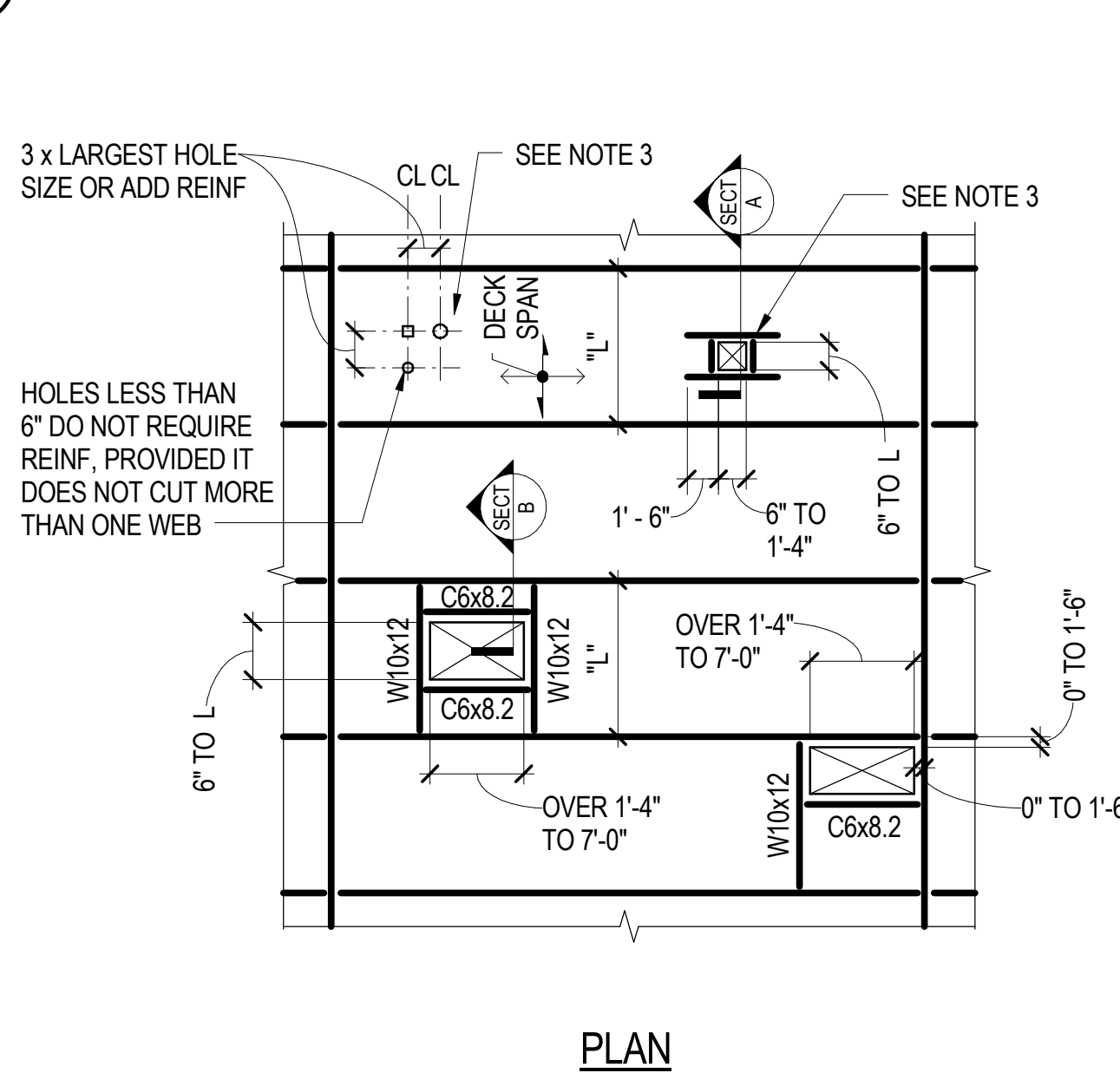
TYPICAL EDGE CONDITION AT COLUMN

SEE NOTE 6

NOTES:

- 1. SUBMIT LOCATIONS OF ALL CONSTRUCTION JOINTS TO ENGINEER FOR REVIEW AND ACCEPTANCE BEFORE FORMING.

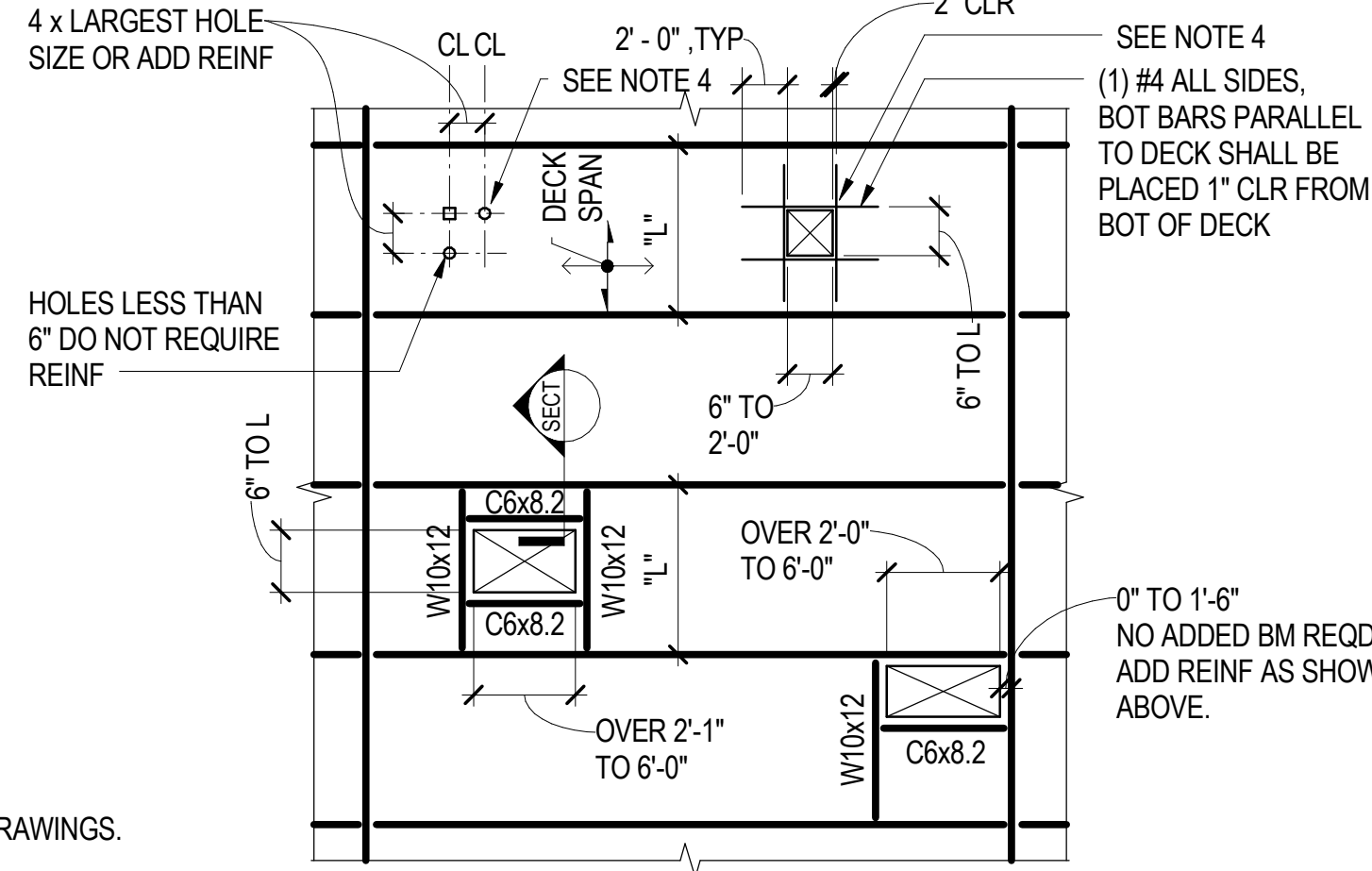
13 TYPICAL SLAB ON DECK CONSTRUCTION JOINT



15 TYPICAL DECK EDGE CONDITIONS

NOTES:

- 1. BLOCK OUT OPENING BEFORE PLACING CONCRETE.
2. REMOVE BLOCKOUT AND CUT DECK AFTER CONCRETE HAS CURED.
3. CONTRACTOR SHALL COORDINATE OPENING SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL CONTRACTORS AND ARCHITECTURAL DRAWINGS.
4. THE OPENING NOTED REQUIRES A CENTER-TO-CENTER SPACING FROM ADJACENT OPENINGS OF FOUR TIMES THE MAXIMUM OPENING DIMENSION. IF REQUIRED LAYOUT CANNOT CONFORM TO THESE REQUIREMENTS, REINFORCE GROUP AS IF ONE COMBINED PENETRATION.



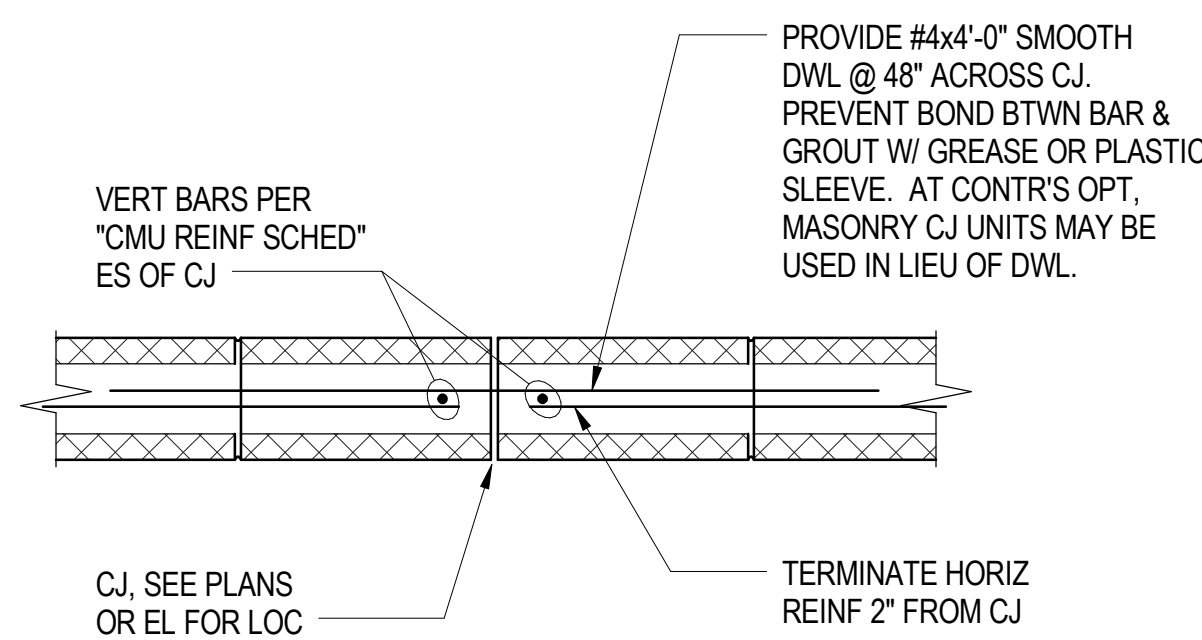
20 TYPICAL FLOOR DECK - OPENING 6'-0" AND LESS

Table with 3 columns: NO., DATE, ISSUE. Rows 1-6 detailing permit revisions and structural bid addendums.

TYPICAL STEEL DECK DETAILS

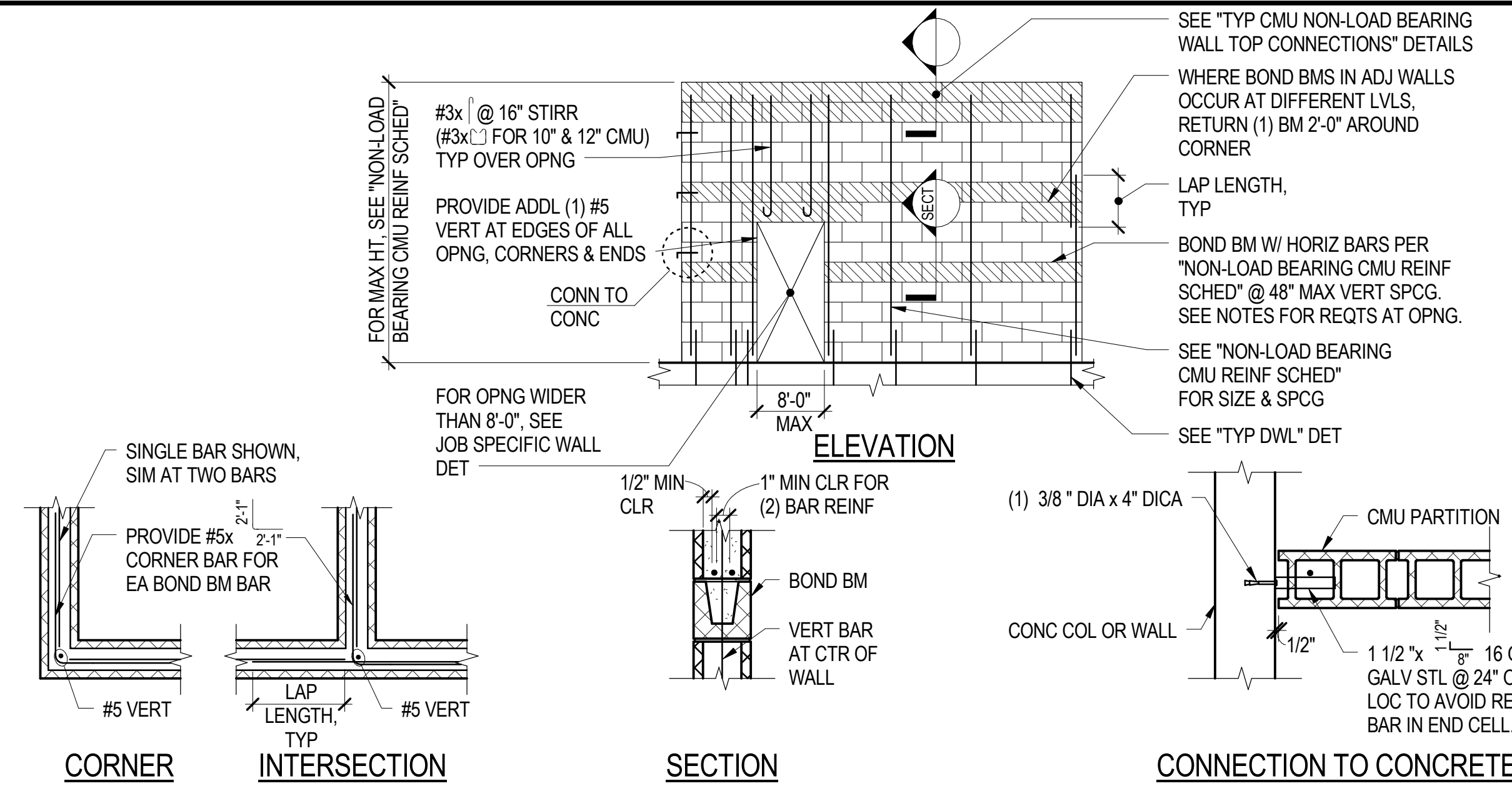


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHNHAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window W/ashing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record

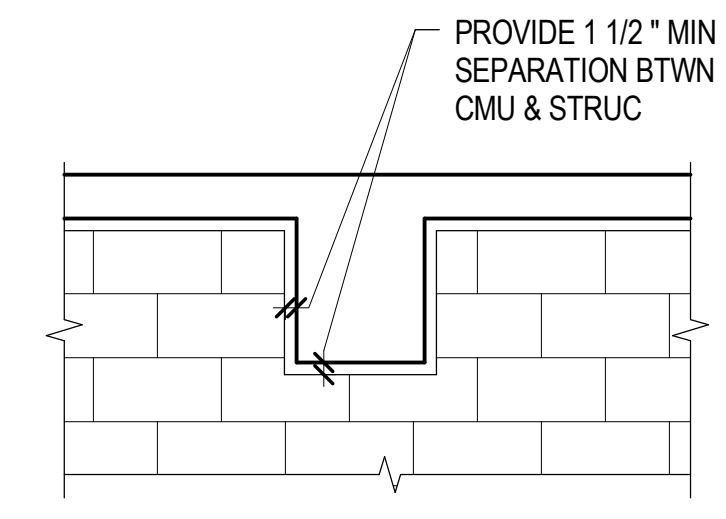


- NOTES:**
- CONTROL JOINT SHALL BE CONSTRUCTED AS CONTINUOUS VERTICAL HEAD JOINTS USING FULL AND HALF MASONRY UNITS.
  - MORTAR SHALL BE RAKED BACK AT LEAST 1 INCH IN DEPTH AND CAULKED PER ARCHITECTURAL DRAWINGS.

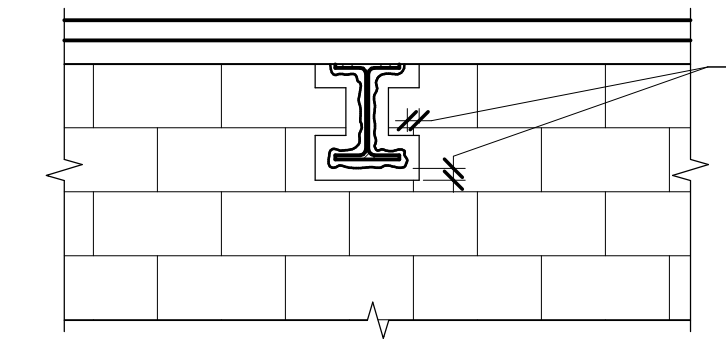
**3 TYPICAL CMU CONTROL JOINT**



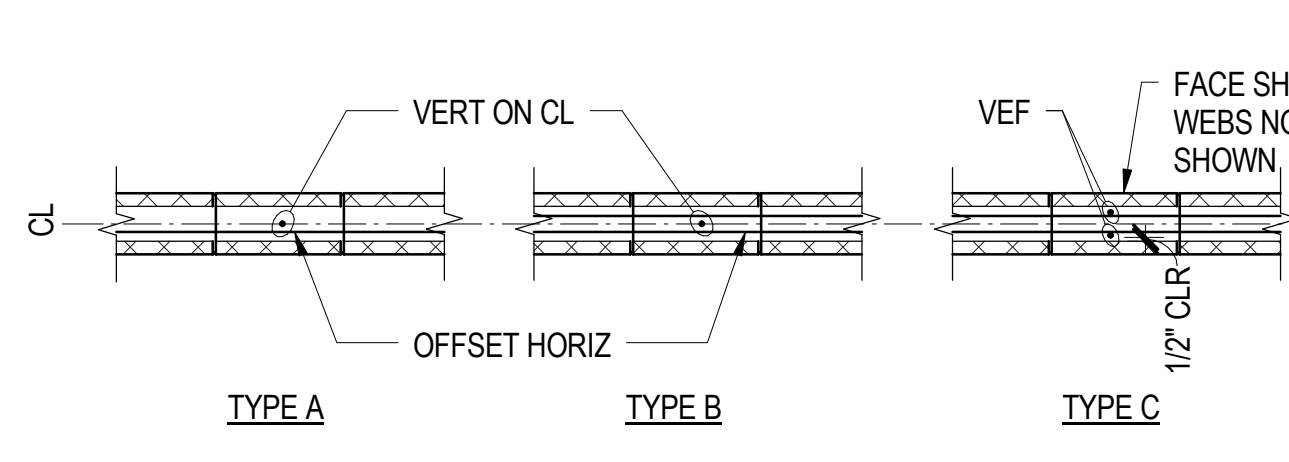
**5 TYPICAL CMU NON-LOAD BEARING WALL ELEVATION**



**CONCRETE BEAM THRU CMU WALL**



**STEEL BEAM THRU CMU WALL**



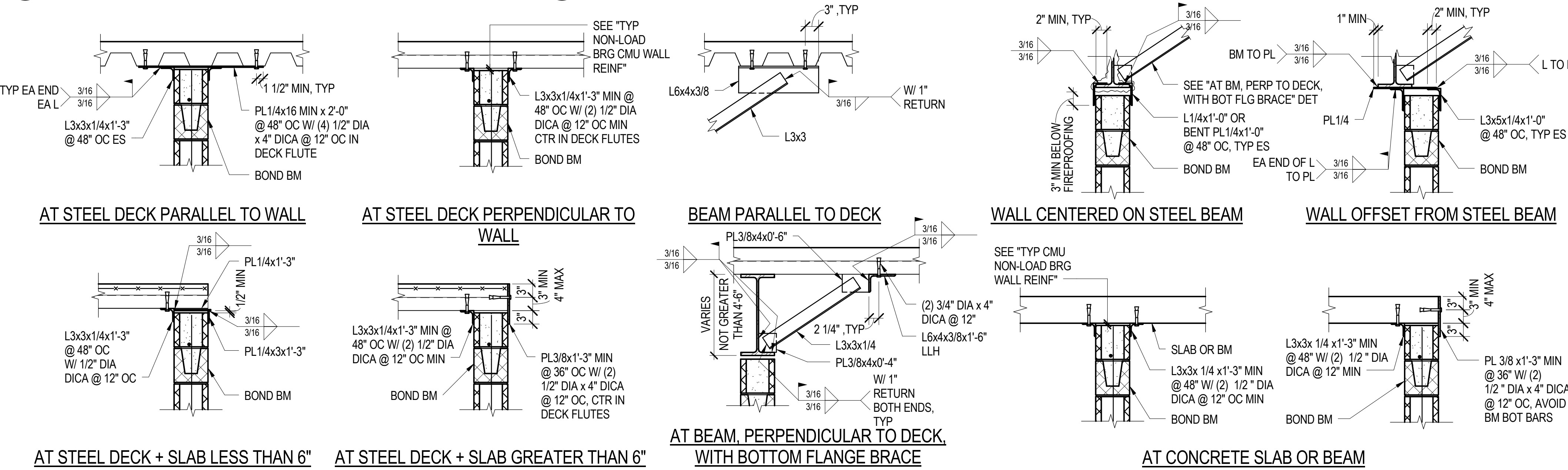
**BAR LOCATION TYPES**

NOMINAL WALL THICKNESS	BOND BEAM		VERTICAL		BAR LOCATION TYPE	MAXIMUM WALL HEIGHT
	REINFORCING	LAP LENGTH	REINFORCING	LAP LENGTH		
8"	(2) #5	30"	(1) #5 @ 48"	30"	B	13'-0"
10"	(2) #5	30"	(2) #4 @ 48"	24"	C	16'-0"
12"	(2) #5	30"	(2) #5 @ 48"	30"	C	20'-6"

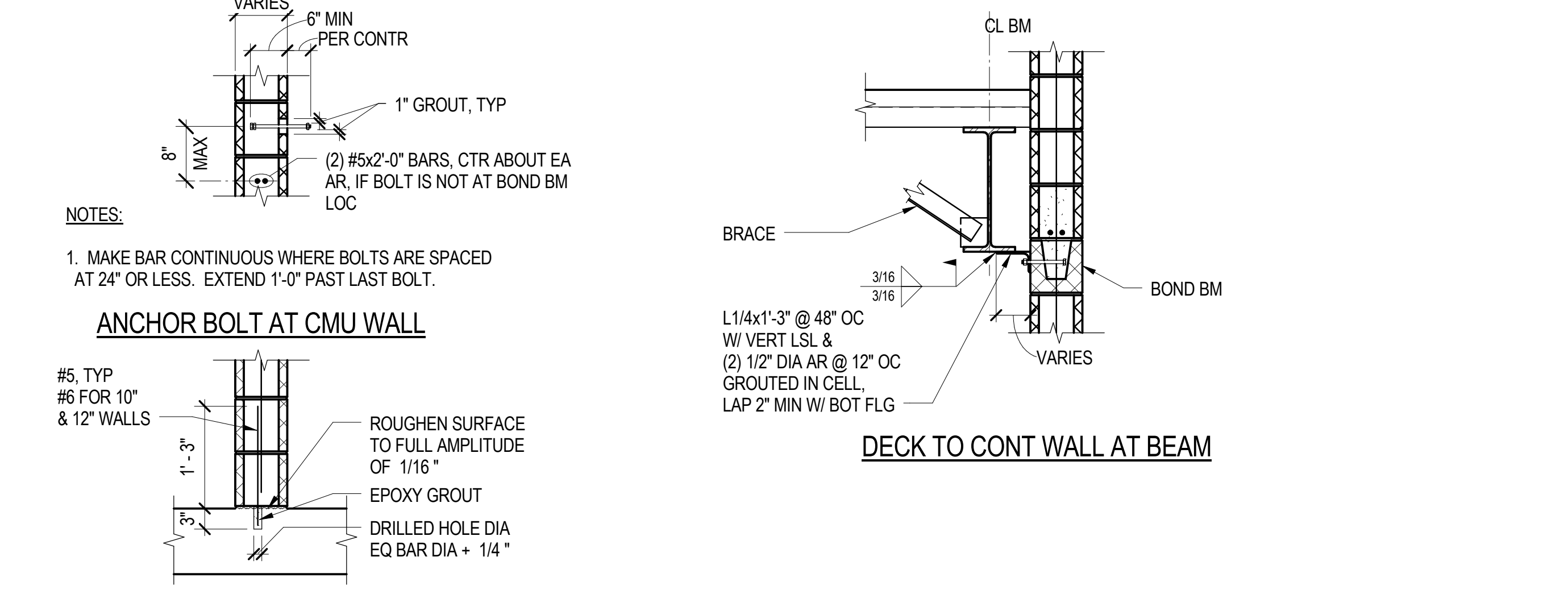
- NOTES:**
- BOND BEAM REINFORCEMENT ABOVE AND BELOW OPENINGS SHALL BE CONTINUOUS (IE UNSPLICED) AND EXTENDED 2'-0" MINIMUM BEYOND OPENING.
  - WHERE BOND BEAM DOES NOT ALIGN WITH TOP OR BOTTOM OF OPENINGS, ADD A BOND BEAM COURSE EXTENDING 2'-0" BEYOND THE OPENING.
  - BOND BEAM BARS MAY BE USED TO ARRIVE AT TOTAL STEEL AREA REQUIRED BY REINFORCING SCHEDULE.
  - GROUT ALL CELLS THAT CONTAIN REINFORCEMENT OR EMBEDDED ITEMS.
  - PACK TOP COURSE CELLS SOLID WITH GROUT, TYPICAL.
  - PROVIDE 3/4 INCH MINIMUM, 1 1/2 INCH MAXIMUM CLEAR SPACE BETWEEN TOP WALL AND BOTTOM OF PLATE, DECK, OR FIREPROOFING ON BEAMS.
  - FOR DRILLED-IN CONCRETE ANCHORS IN BOTTOM OF SLAB, EMBED SO THAT THEY EXTEND A MINIMUM OF 1 INCH ABOVE THE UPPER PART OF THE DECK FLUTES.
  - PROVIDE SPECIAL INSPECTION FOR DRILLED-IN CONCRETE ANCHORS AT WALLS 16'-0" AND HIGHER.
  - LOCATE BRACE FOR BEAM BOTTOM FLANGE, AT EACH CONCRETE MASONRY UNIT TOP SUPPORT, AT 48 INCHES ON CENTER MAXIMUM.

**8 TYP CMU NON-LOAD BRG WALL PENETRATIONS**

**10 TYPICAL CMU NON-LOAD BEARING WALL REINFORCING SCHEDULE AND NOTES**



**15 TYPICAL CMU NON-LOAD BEARING WALL TOP CONNECTIONS**



- NOTES:**
- MAKE BAR CONTINUOUS WHERE BOLTS ARE SPACED AT 24" OR LESS. EXTEND 1'-0" PAST LAST BOLT.
- ANCHOR BOLT AT CMU WALL**
- #5, TYP  
#6 FOR 10" & 12" WALLS
- ROUGHEN SURFACE TO FULL AMPLITUDE OF 1/16"
- EPOXY GROUT
- DRILLED HOLE DIA EQ BAR DIA + 1/4"
- NOTES:**
- DOWEL SPACING TO MATCH VERTICAL REINFORCING.
- DOWEL TO CMU WALL AT SLAB**
- 20 TYPICAL CMU NON-LOAD BEARING WALL DETAILS**
- 3/4" = 1'-0"

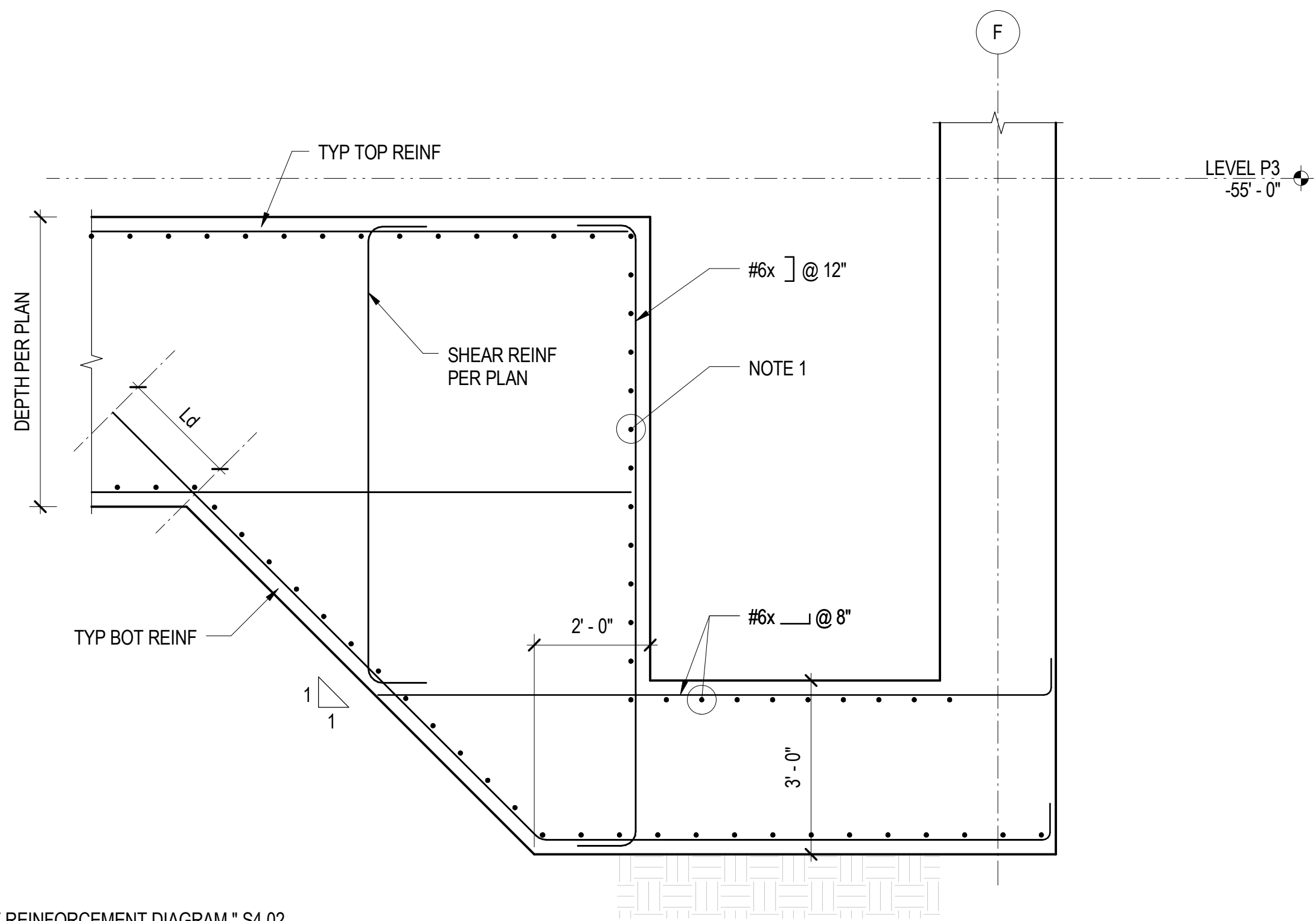
NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

NO.	DATE	STRUCTURAL BID	ISSUE
5	02 MAY 14	GMP	
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION	
3	10 FEB 14	BID ADDENDUM #2	
2	12 DEC 13	ADDENDUM #2 PERMIT	
1	15 OCT 13	STRUCTURAL BID	

**TYPICAL CMU WALL DETAILS AND SCHEDULES**

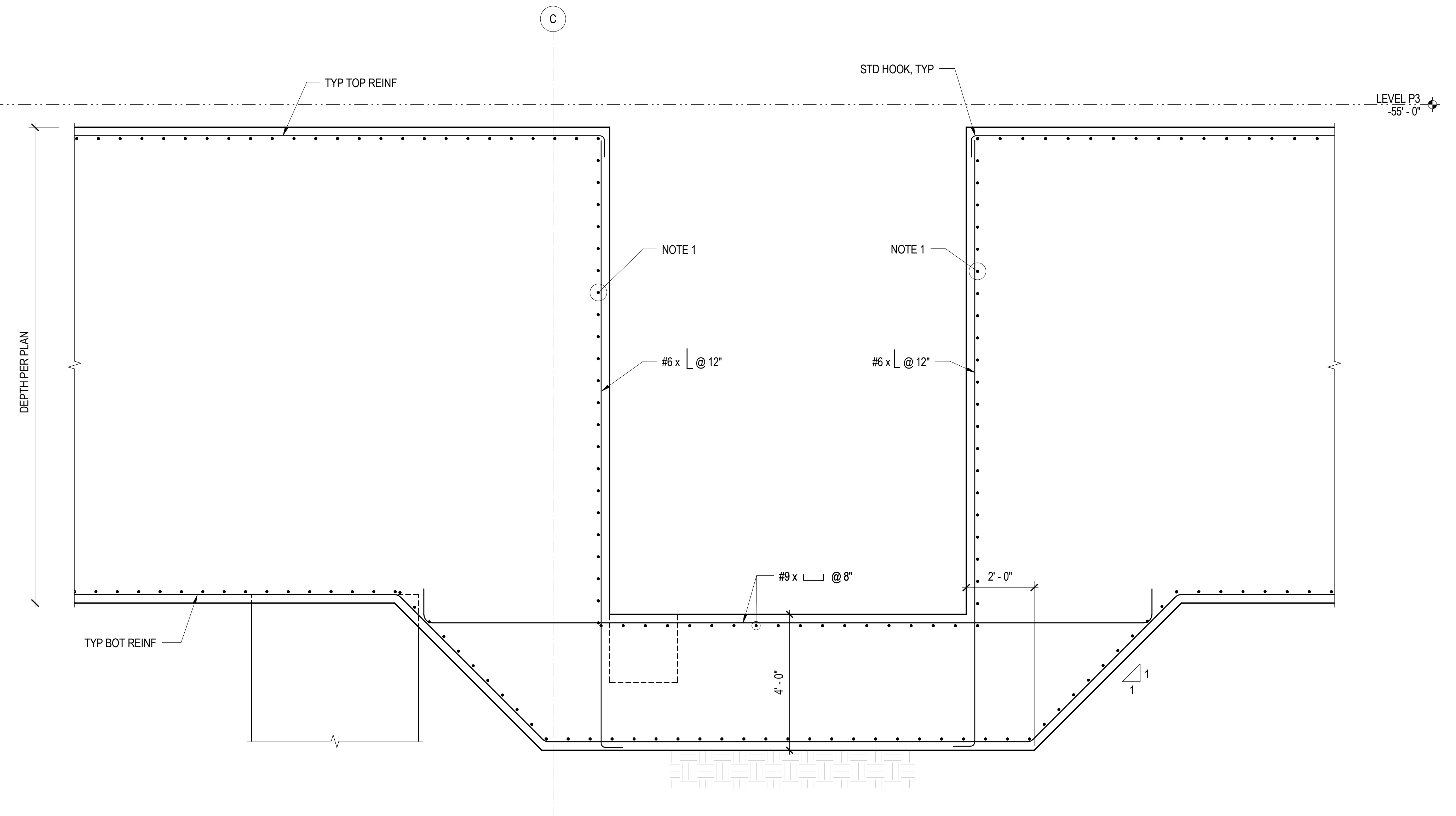


- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEPPP Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



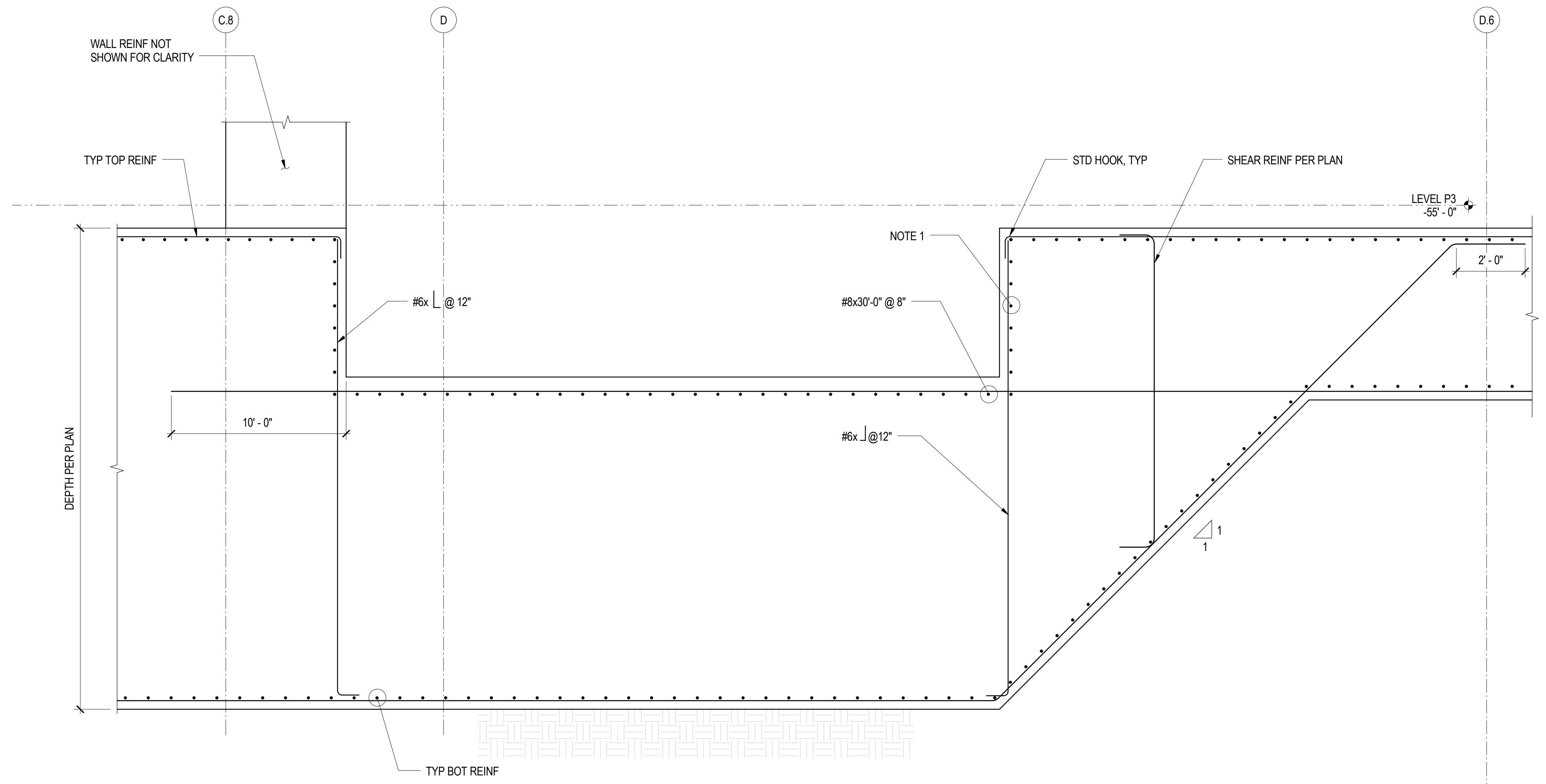
NOTES:  
1. SEE "MAT REINFORCEMENT DIAGRAM," S4.02.

7 SECTION  
1/2" = 1'-0"



NOTES:  
1. SEE "MAT REINFORCEMENT DIAGRAM," S4.02.

10 SECTION  
1/2" = 1'-0"



NOTES:  
1. SEE "MAT REINFORCEMENT DIAGRAM," S4.02.

20 SECTION  
1/2" = 1'-0"

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

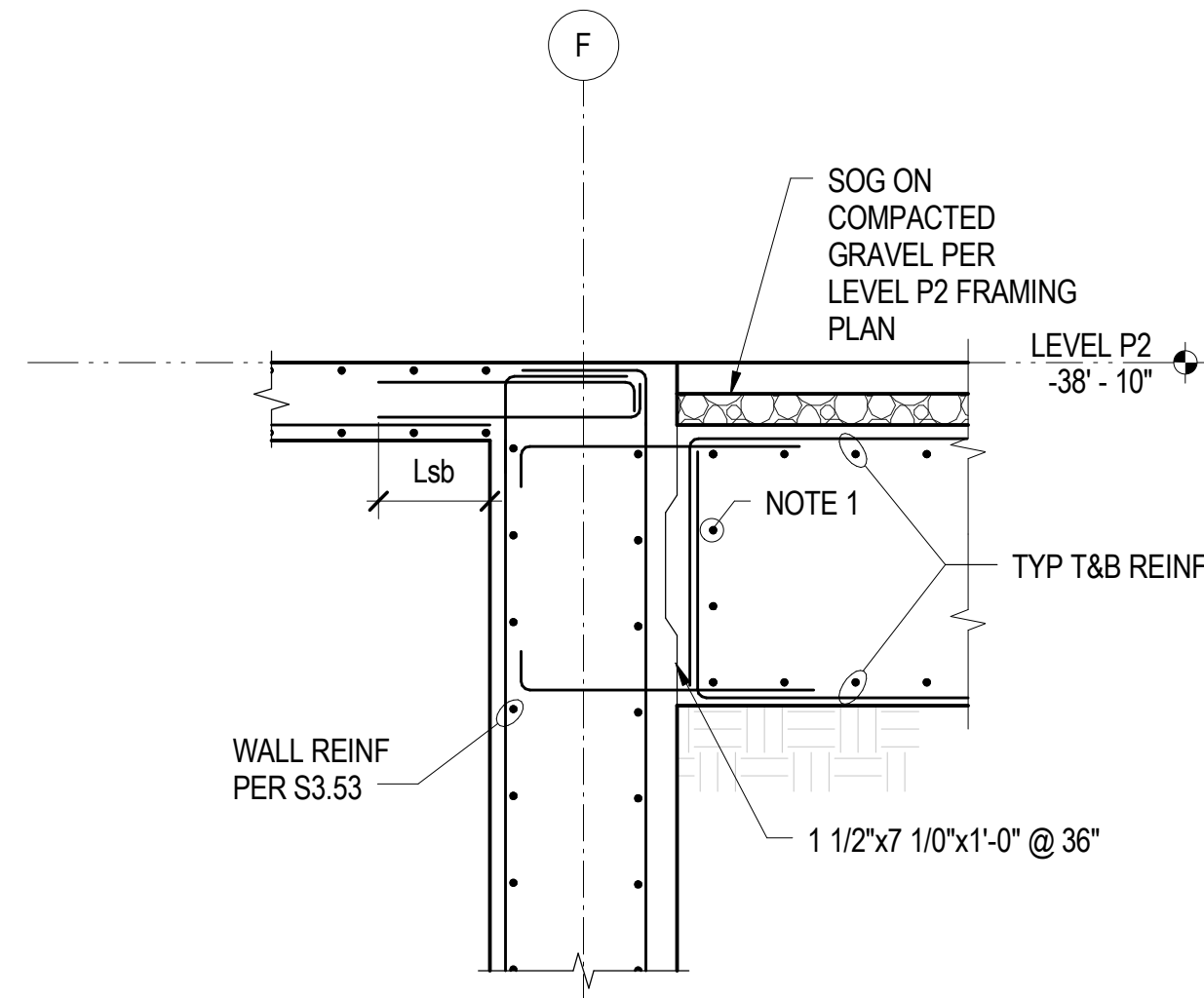
**CONCRETE SECTIONS AND DETAILS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S5.01





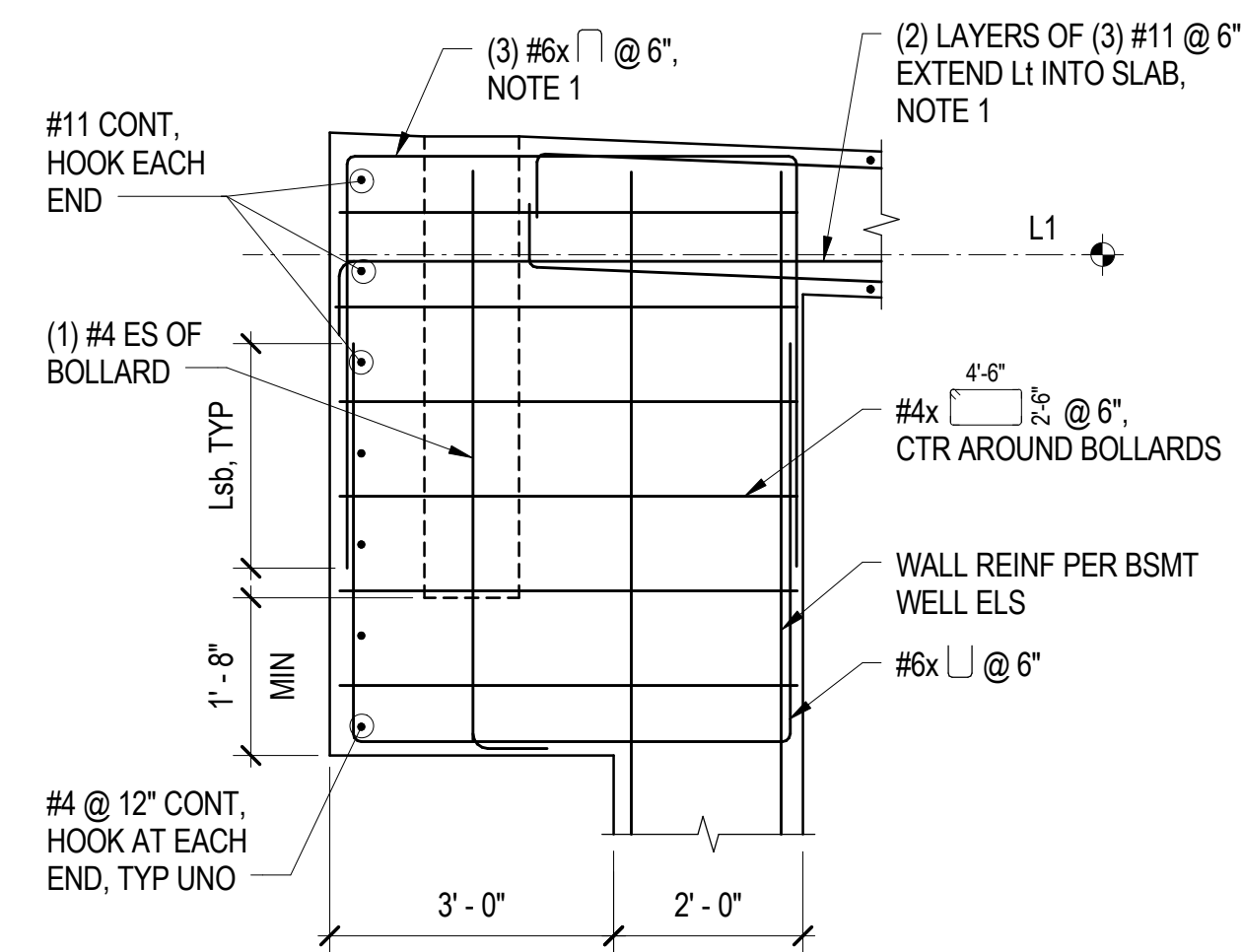
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



NOTES:

1. SEE "MAT REINFORCEMENT DIAGRAM"

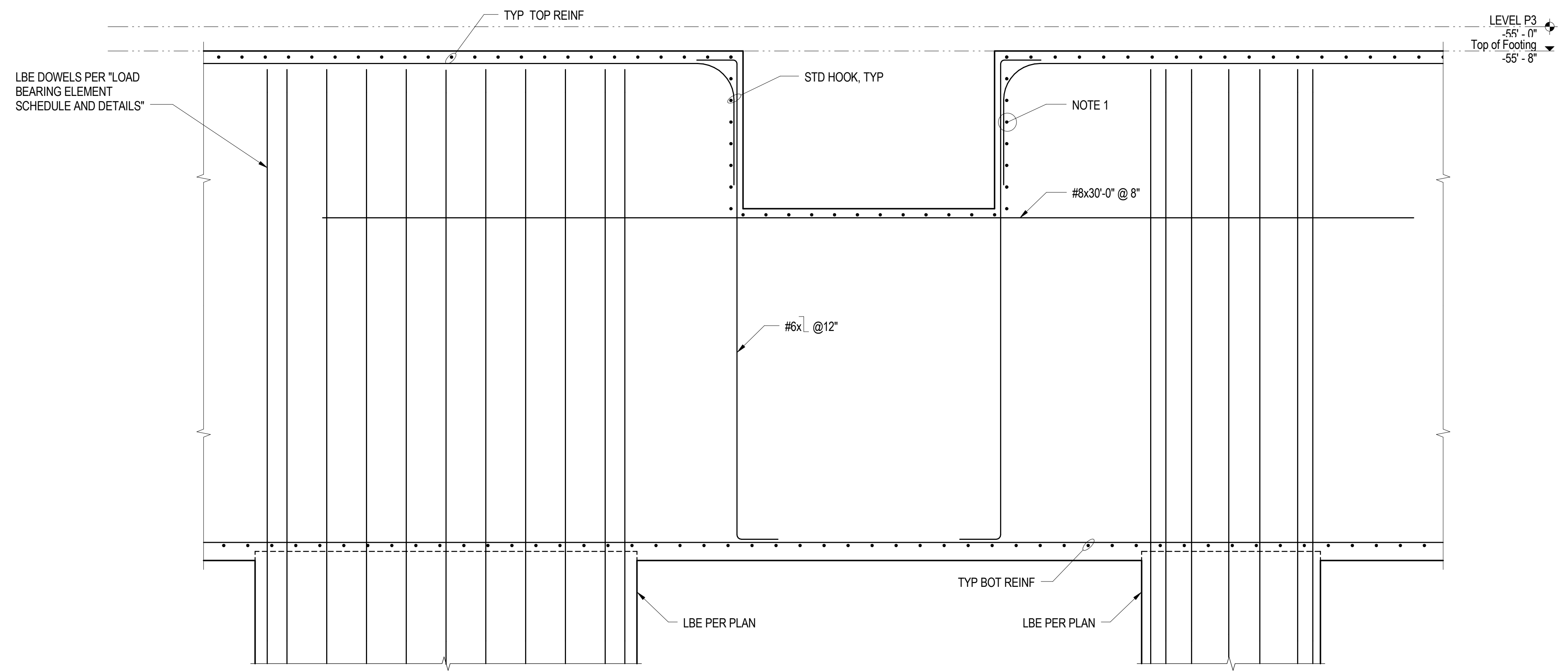
**2** P2 MAT TO WALL CONNECTION AT GRID F  
1/2" = 1'-0"



NOTES:

- REINFORCEMENT TO BE PLACED BETWEEN BOLLARDS.
- SOME WALL REINFORCEMENT OMITTED FOR CLARITY.

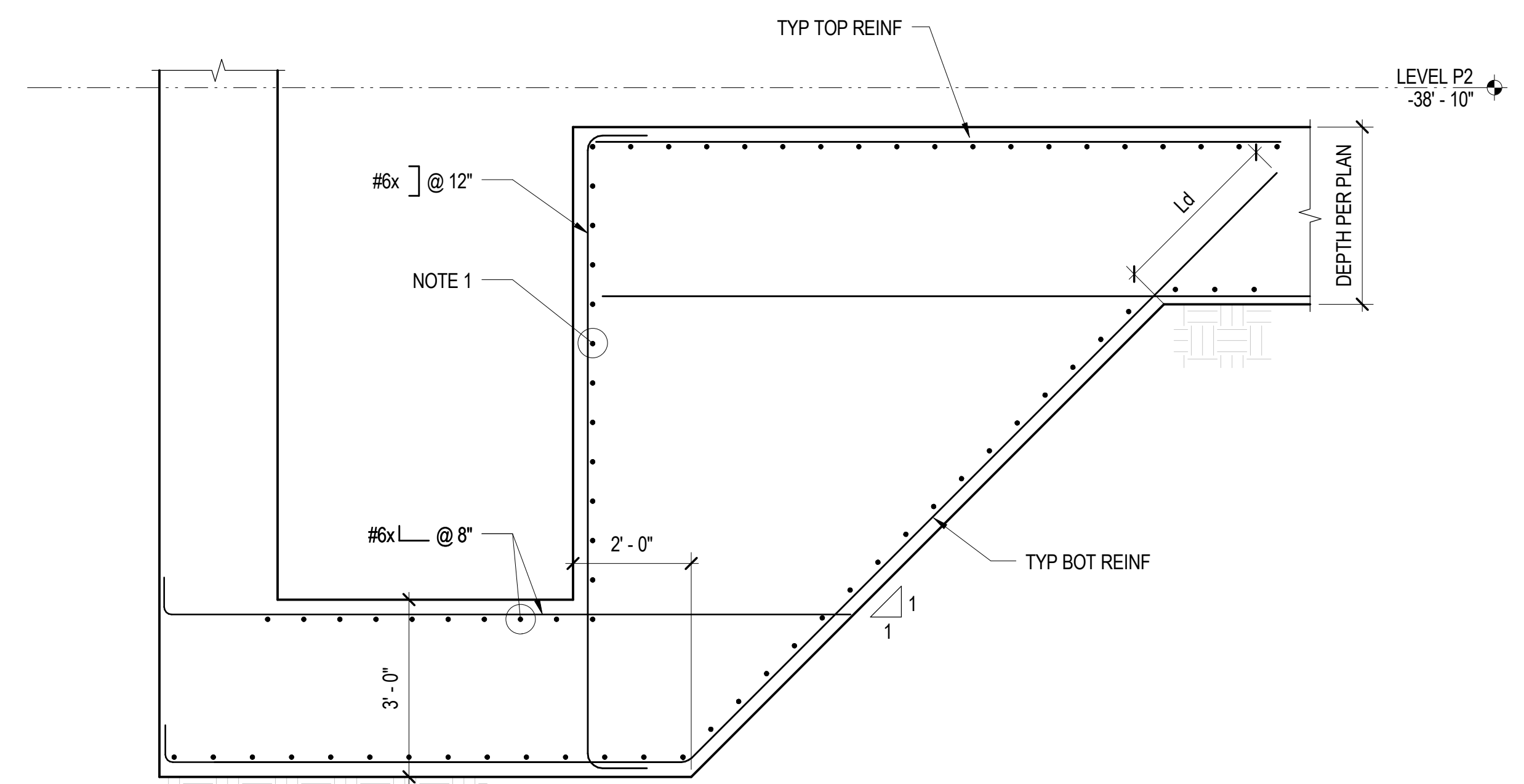
**7** CORBEL DETAIL AT RETRACTABLE BOLLARD  
1/2" = 1'-0"



NOTES:

1. SEE "MAT REINFORCEMENT DIAGRAM," S4.02.

**10** SECTION  
1/2" = 1'-0"



NOTES:

- SEE "MAT REINFORCEMENT DIAGRAM," S4.02.
- WALL REINF NOT SHOWN FOR CLARITY.

**20** SECTION  
1/2" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

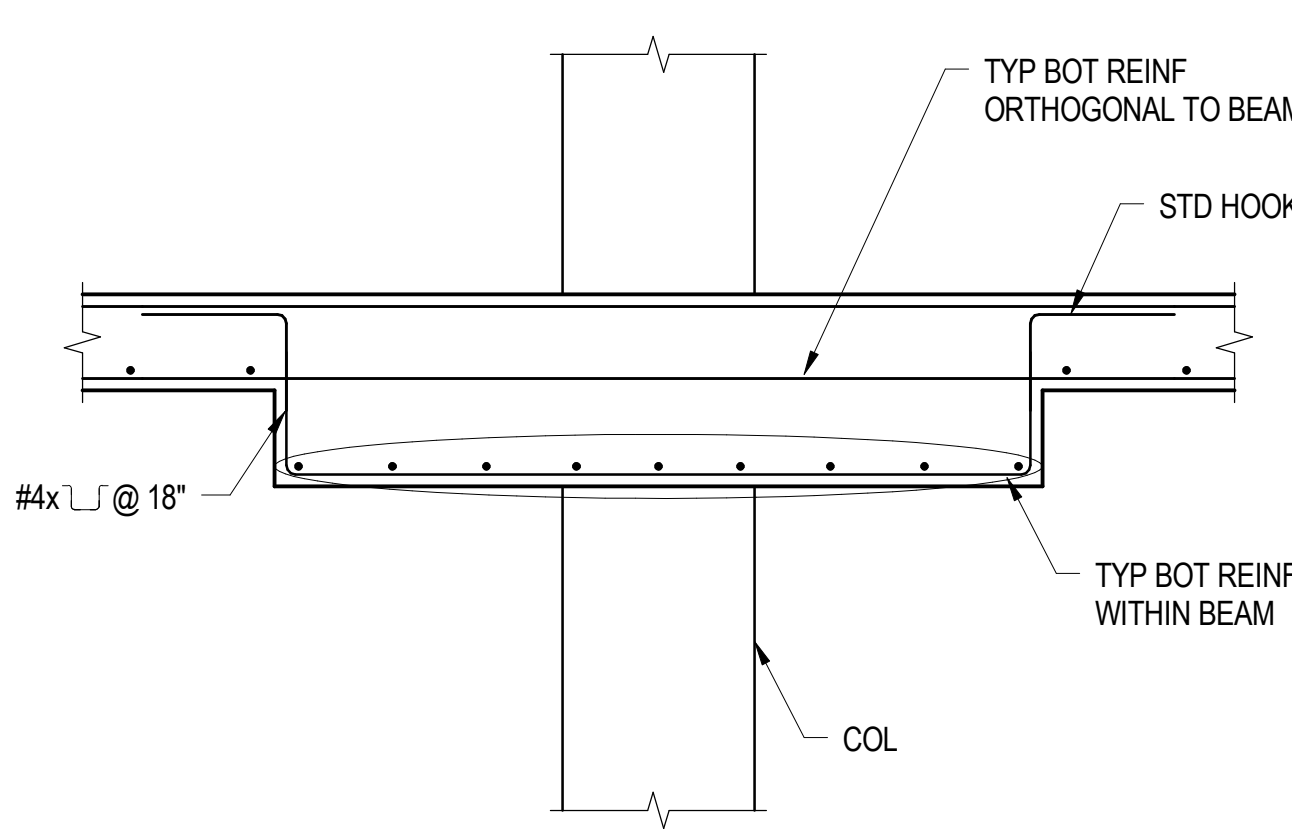
CAD FILENAME  
DRAWING TITLE

**CONCRETE SECTIONS AND DETAILS**

NO. PROJECT NO. 08044  
DRAWING NUMBER S5.02

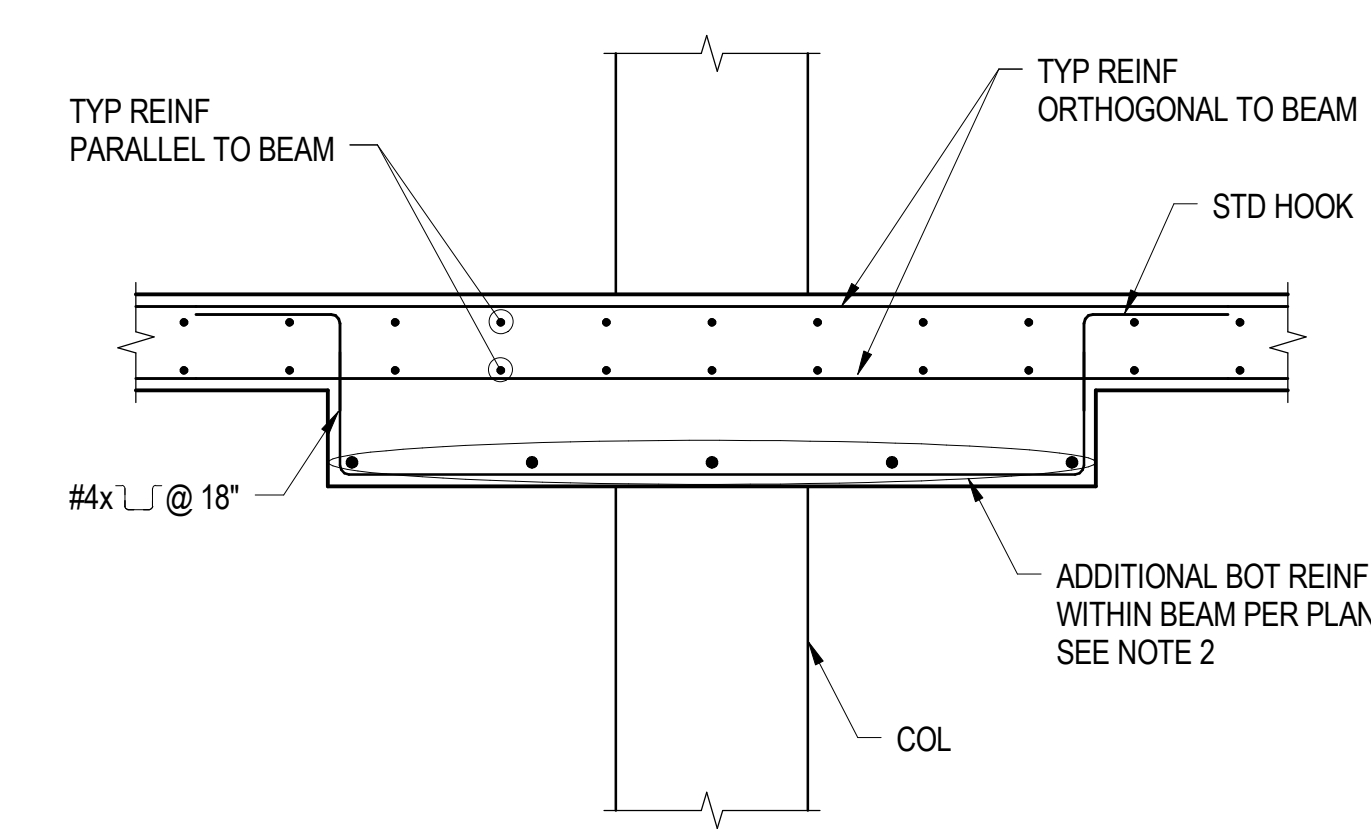


- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



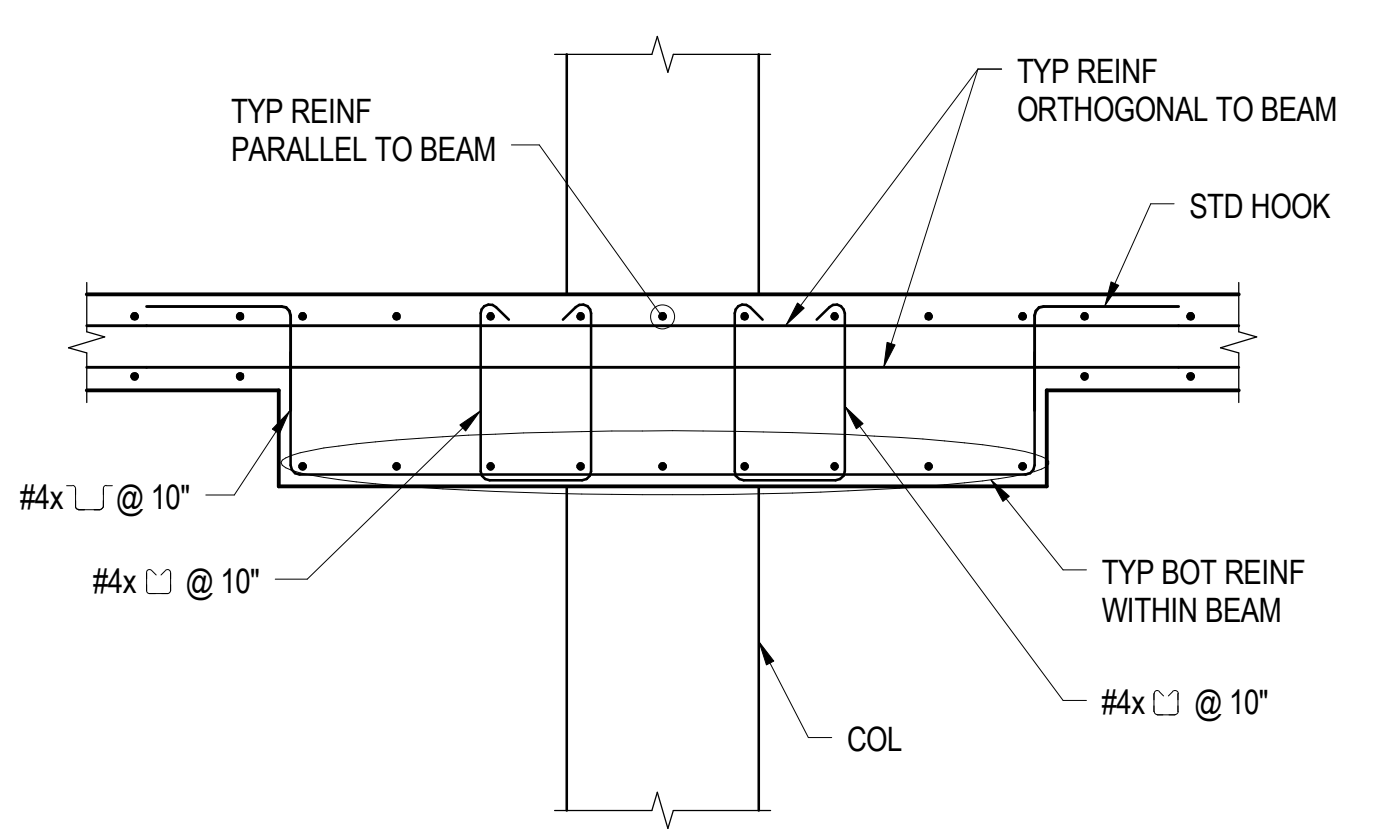
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.

1 TYP WIDE SHALLOW BM AT P1, EAST OF GRID E



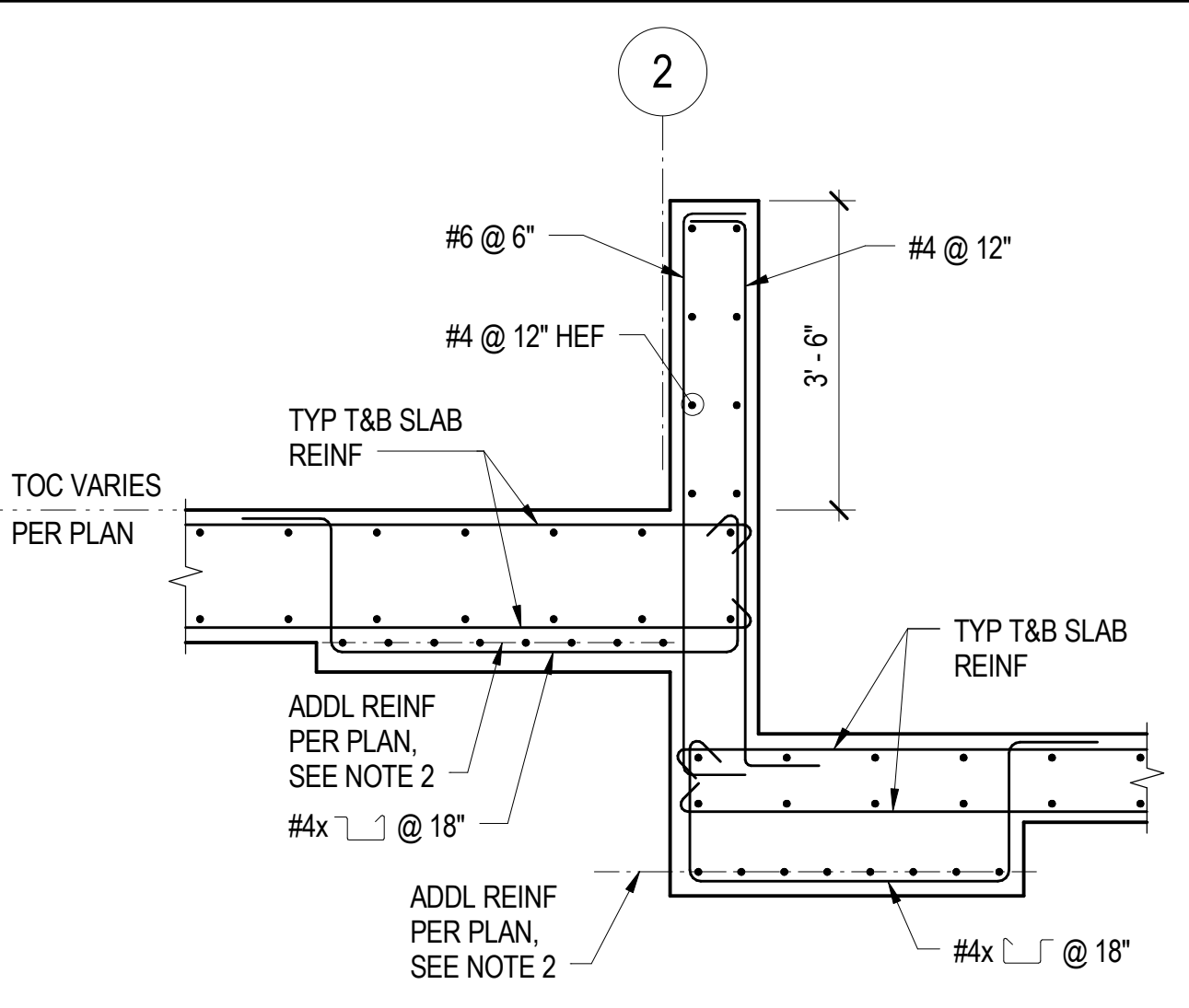
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

2 TYP WIDE SHALLOW BM AT P1, WEST OF GRID E



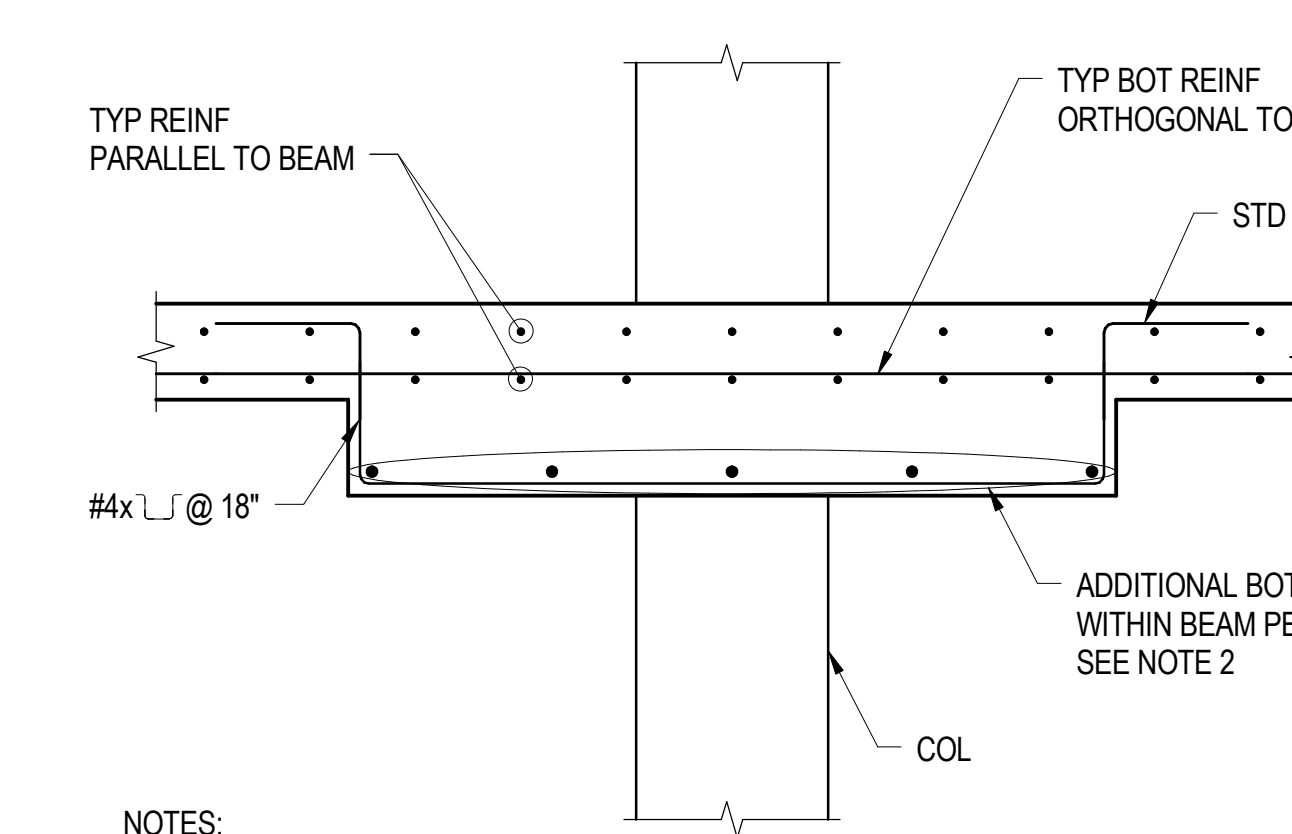
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.

3 WIDE SHALLOW BEAM AT P1, ON GRID D.8



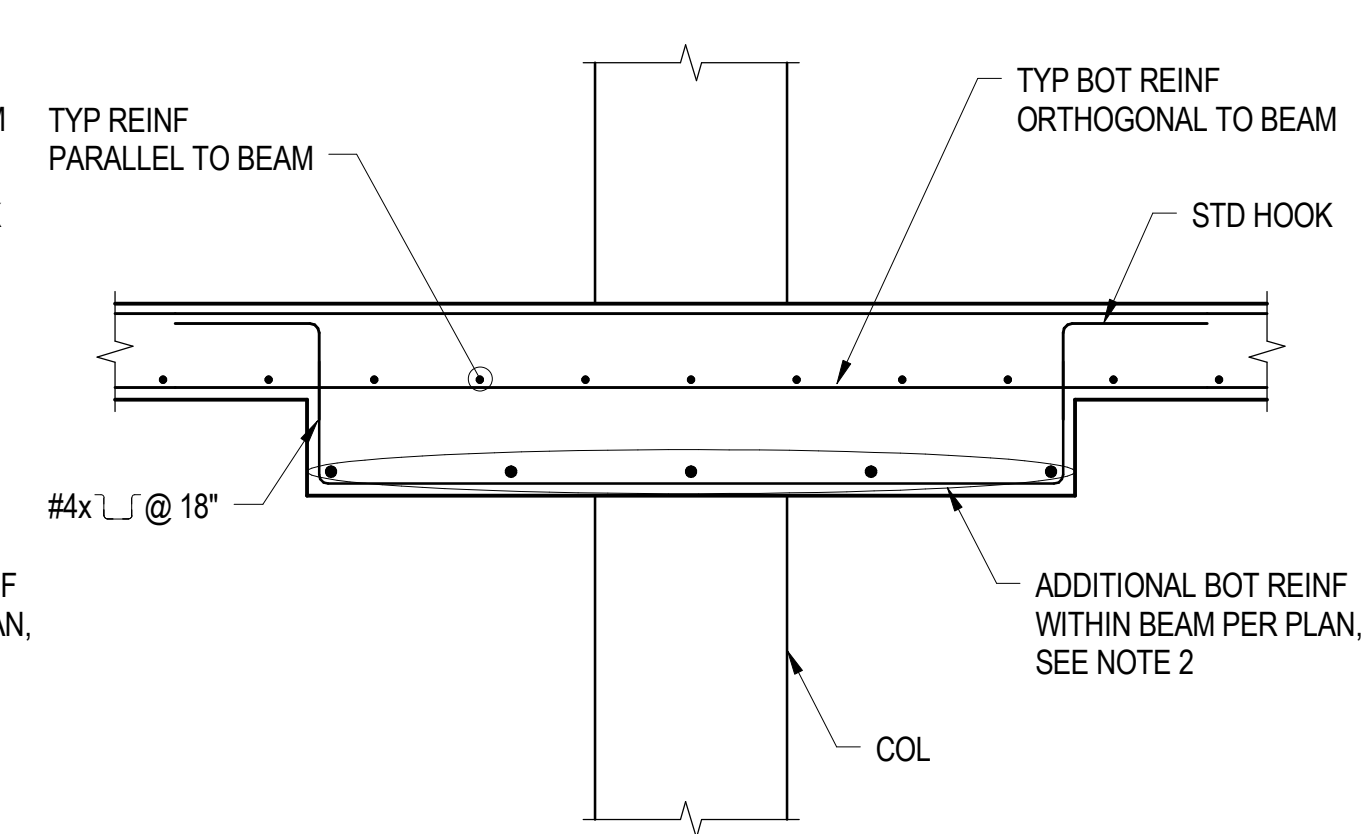
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

4 RAMP AND CRASH WALL ON GRID 2



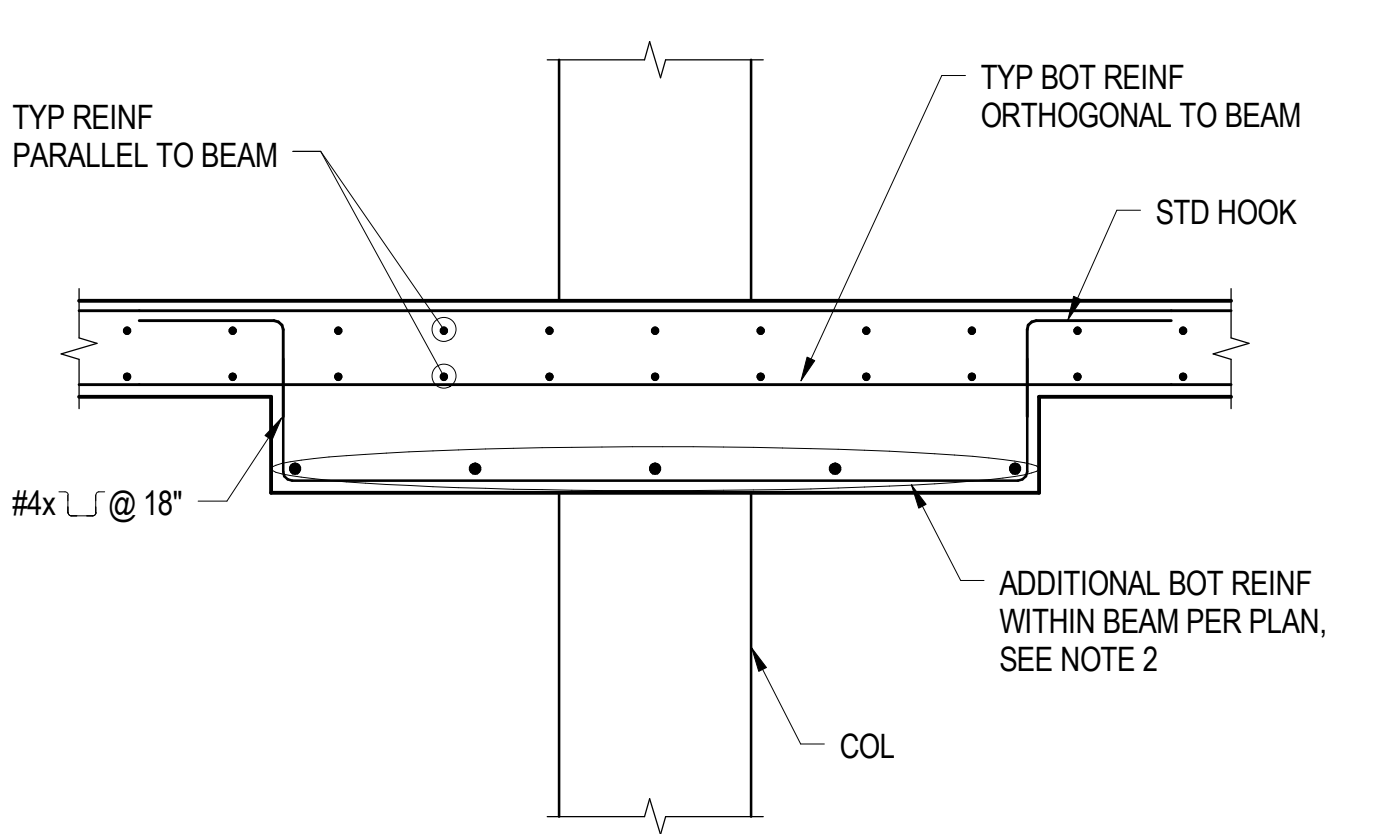
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

6 TYPICAL WIDE SHALLOW BEAM AT P2, ON GRID D.8



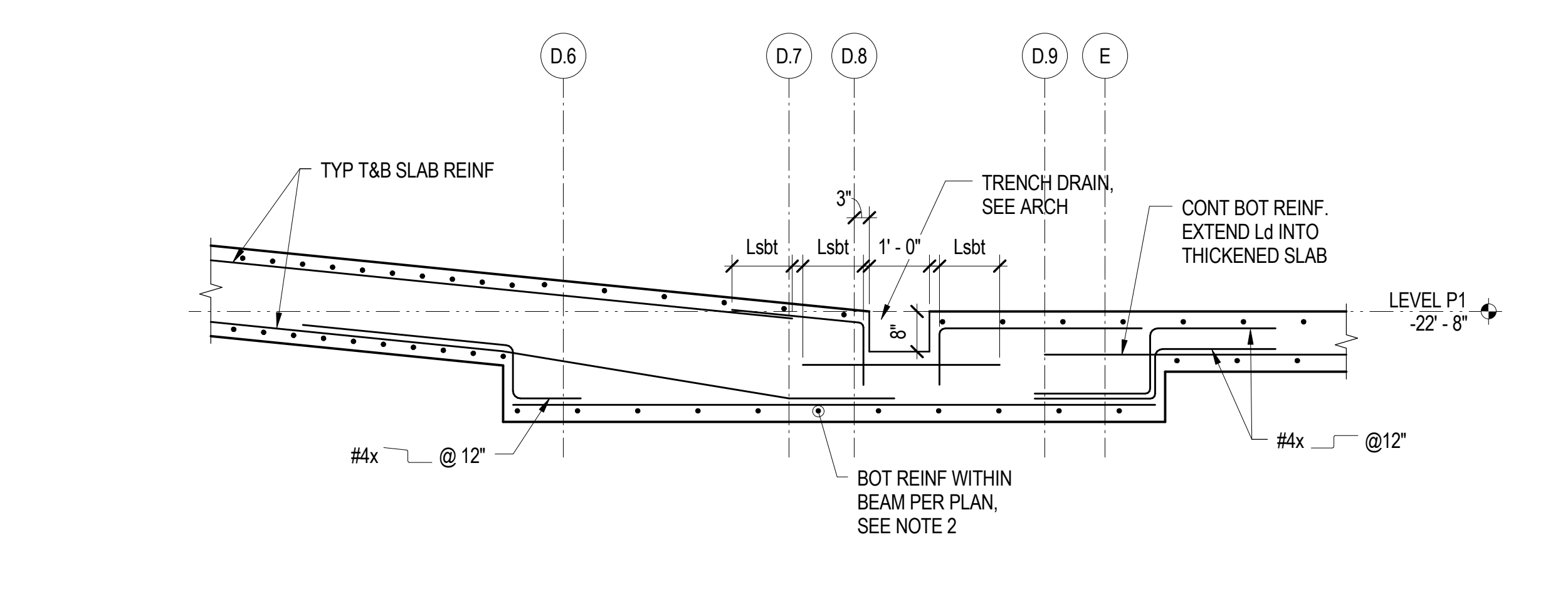
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

7 TYPICAL WIDE SHALLOW BEAM AT P2



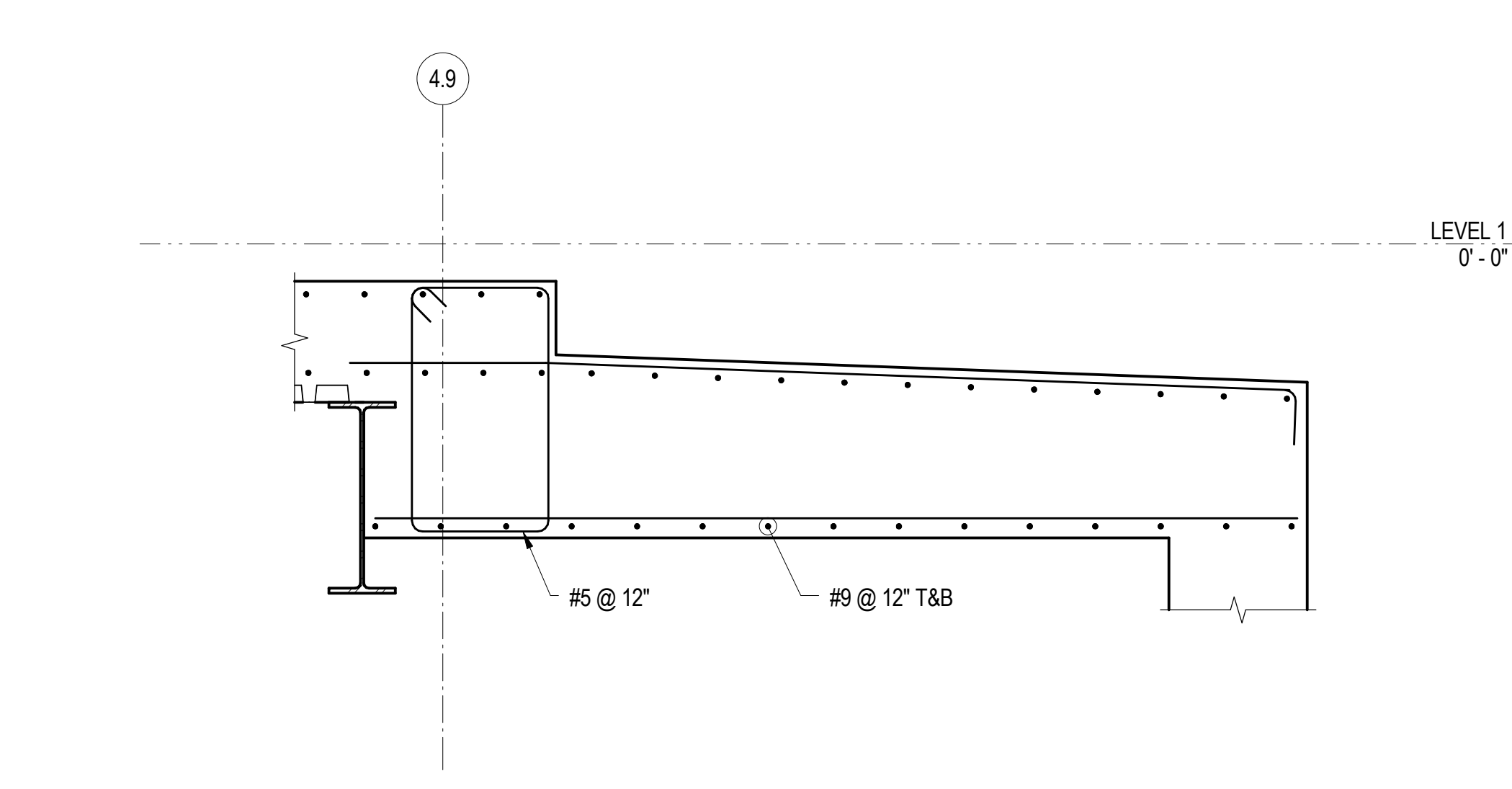
NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

8 TYPICAL WIDE SHALLOW BEAM AT P2

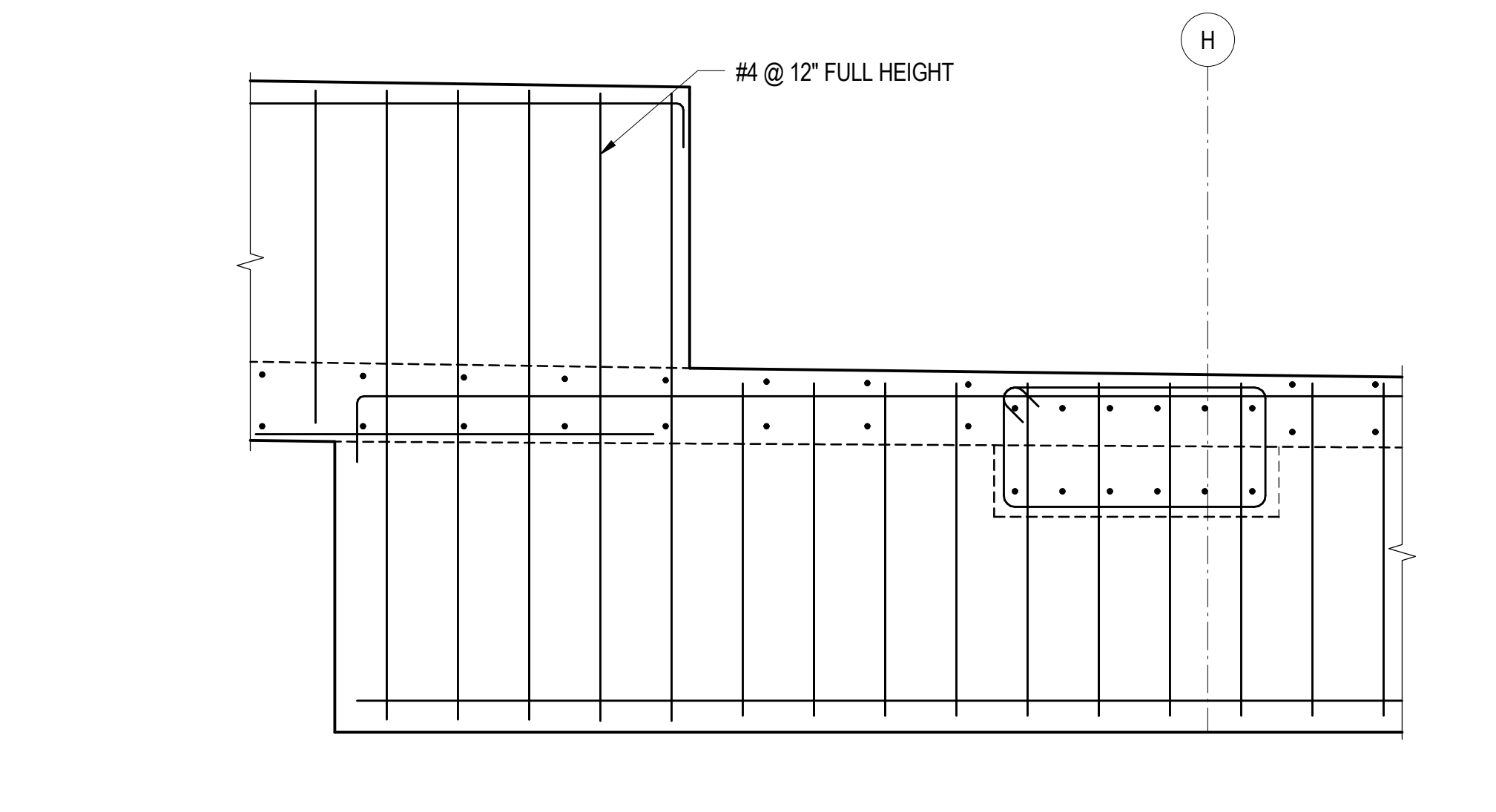


NOTES:  
1. SEE PLAN FOR DIMENSIONS AND REINFORCING.  
2. #4 @ 18" WHERE NO OTHER REINF PRESENT.

10 RAMP SLAB BASE

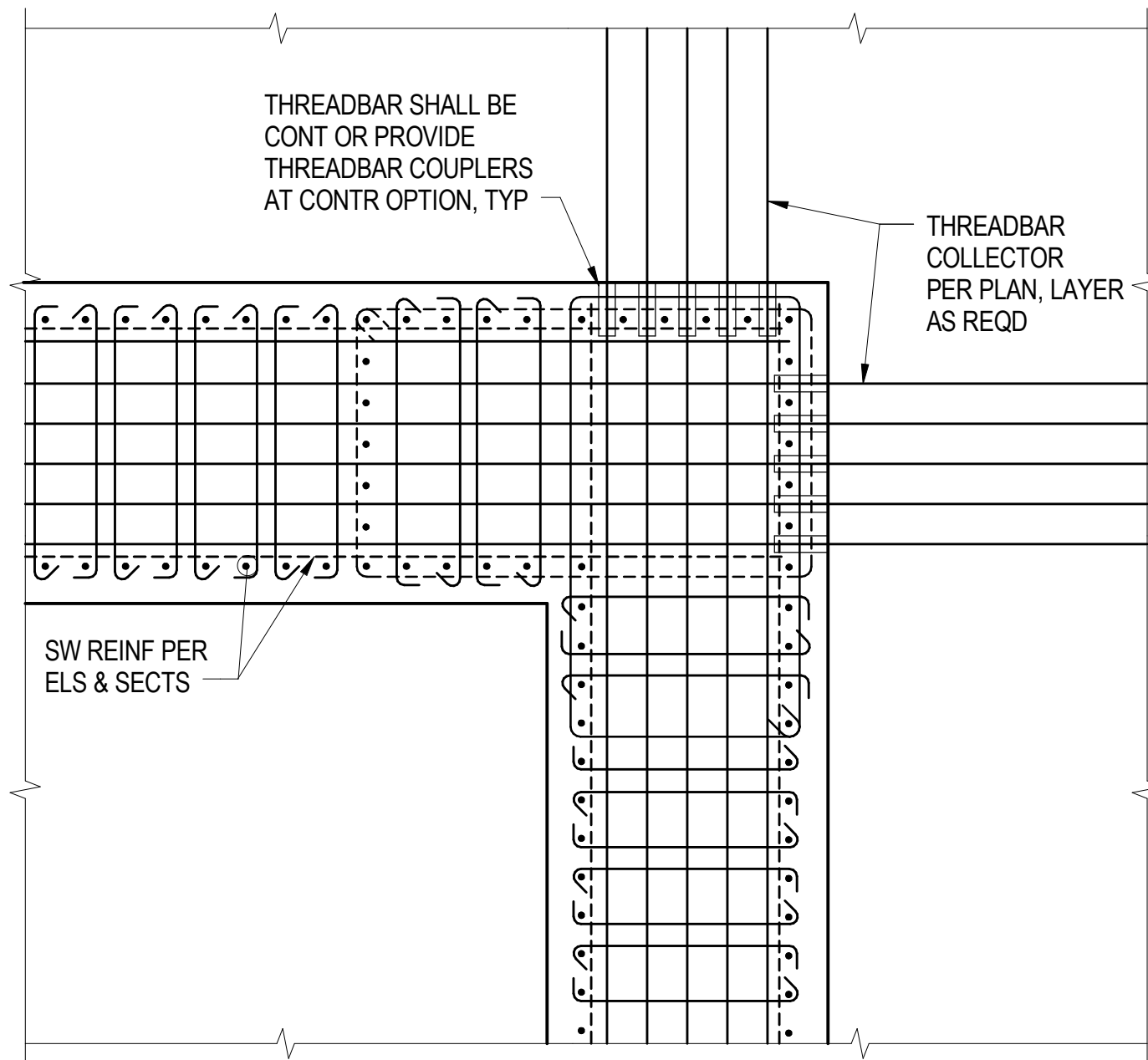


12 SECTION

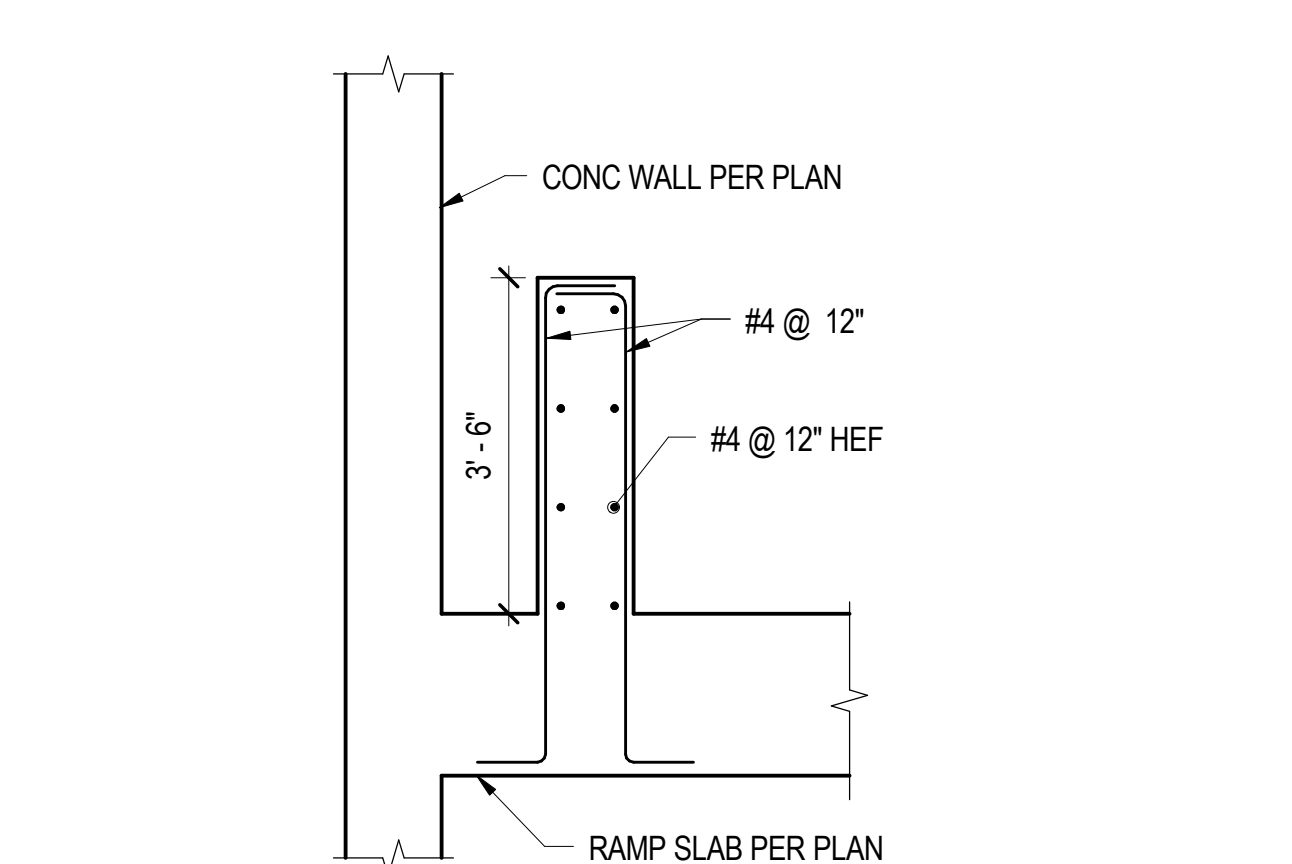


14 SECTION

THREADBAR COLLECTOR MARK	EMBEDMENT LENGTH IN WALL
(6) BARS	8'-0"
(15) BARS	12'-0"
(24) OR (25) BARS	20'-0"



15 LEVEL 1 CORE WALL-SLAB CONNECTION  
1/2" = 1'-0"



NOTES:  
1. WALL AND SLAB REINFORCEMENT NOT SHOWN FOR CLARITY

16 SECTION

5/1/2014 12:04:32 PM C:\Revit Projects\Transbay\Twr\Transbay\Twr\_WS2013.rvt

NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

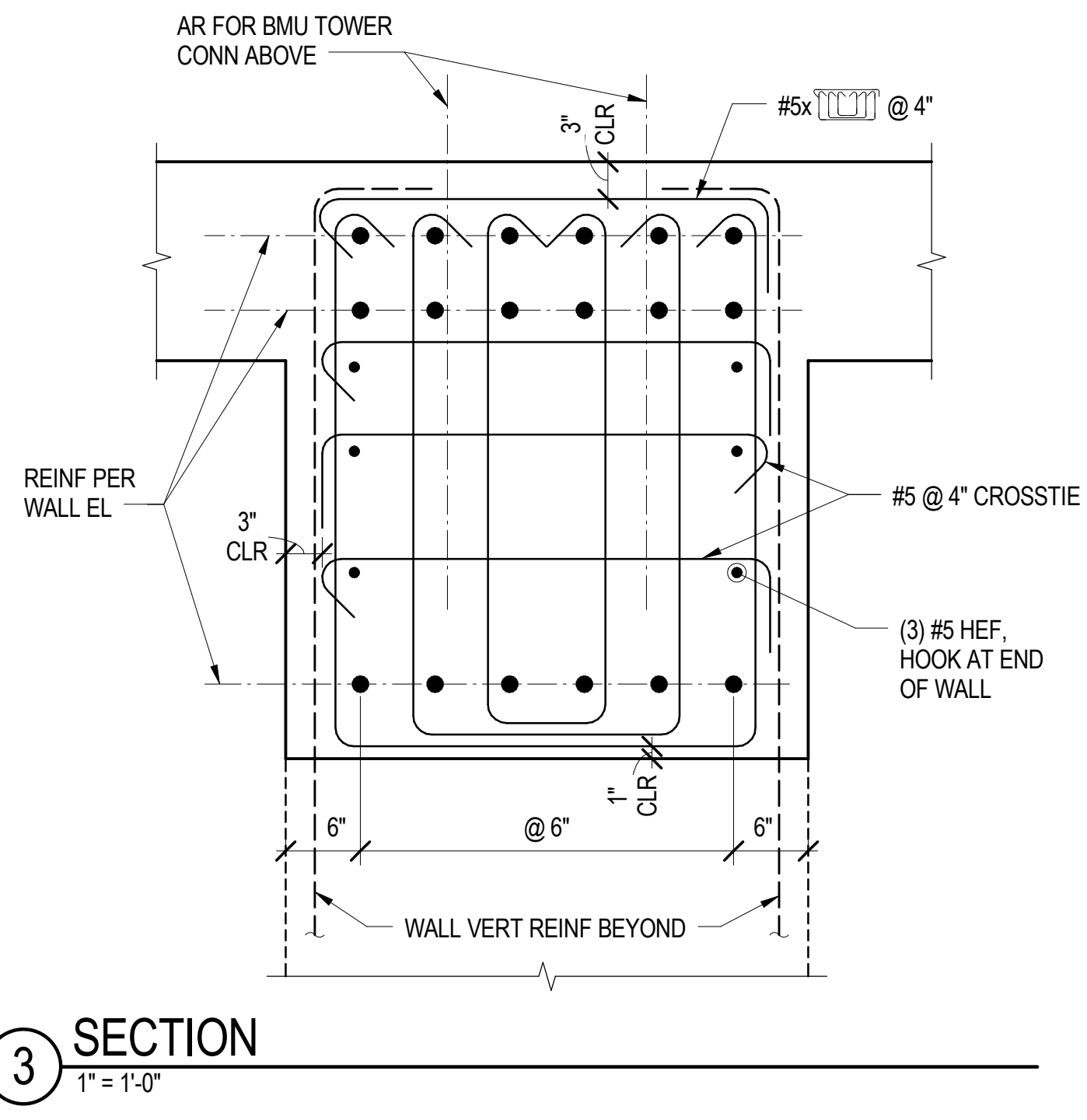
DRAWING TITLE

**CONCRETE SECTIONS AND DETAILS**

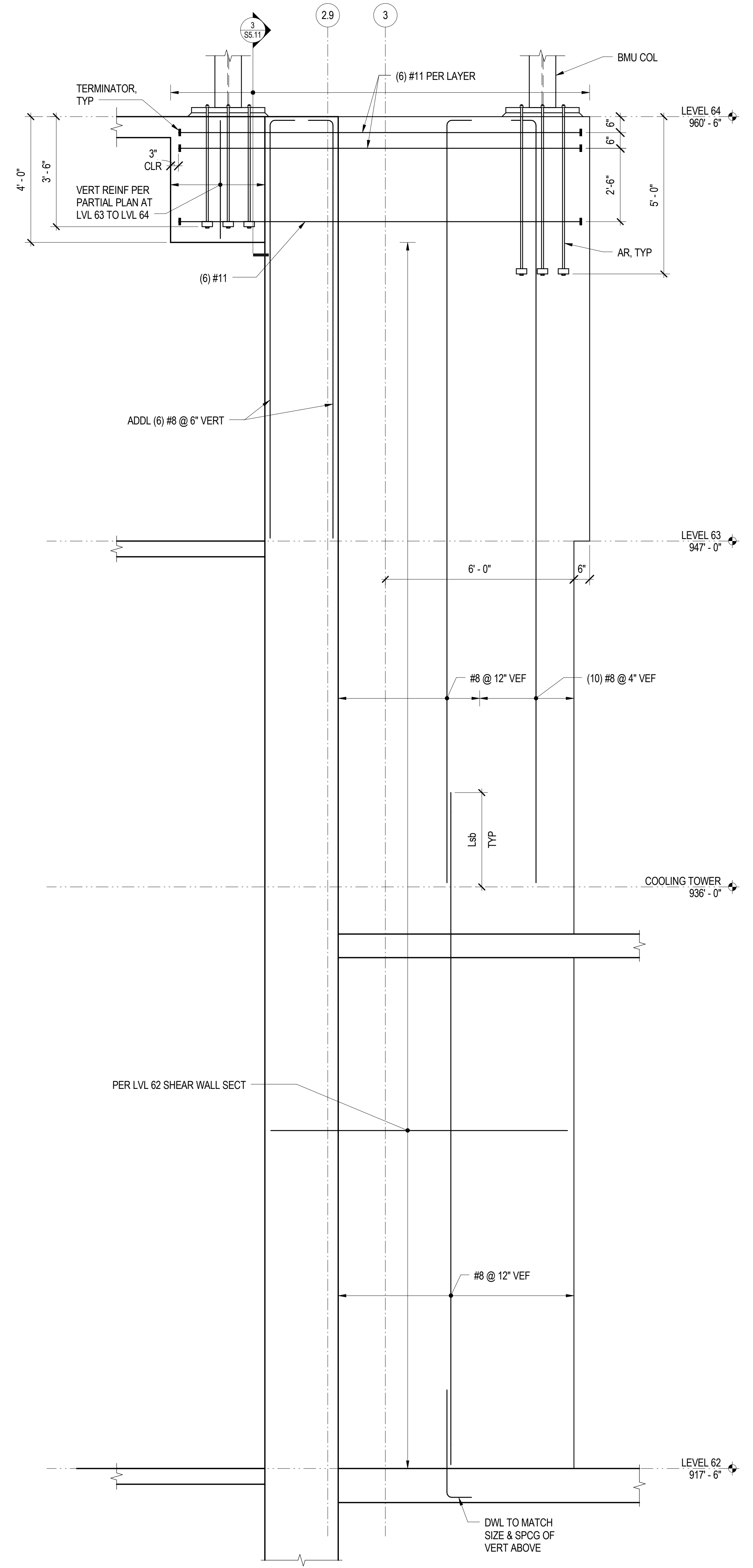
NO. PROJECT NO. 08044 DRAWING NUMBER S5.03



- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSON/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



**3 SECTION**  
1/2" = 1'-0"



**10 SECTION**  
1/2" = 1'-0"

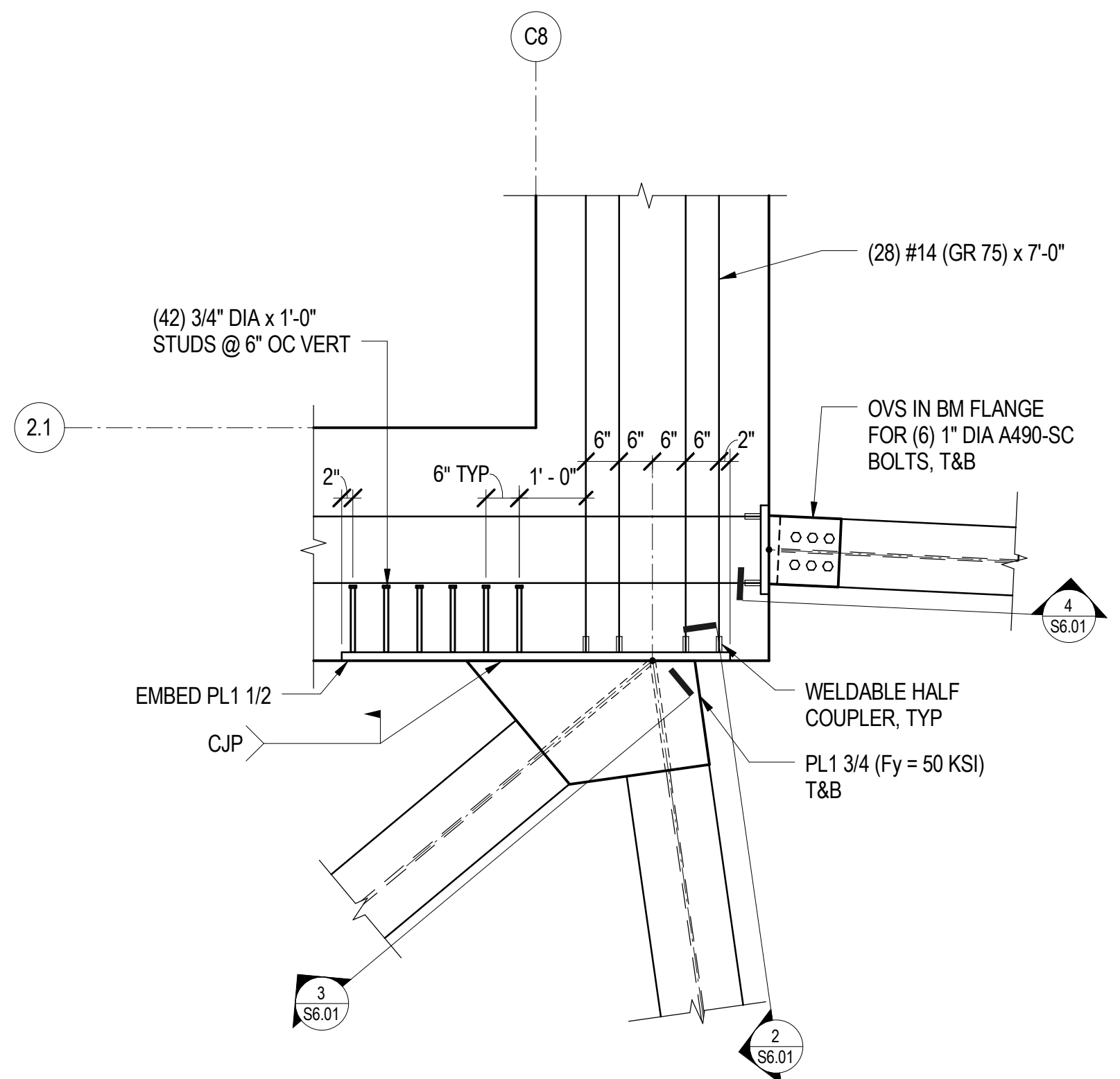
NO.	DATE	ISSUE
6	02 MAY 14	GMP
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
4	10 FEB 14	BID ADDENDUM #2
3	12 DEC 13	ADDENDUM #2 PERMIT
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1
1	15 OCT 13	STRUCTURAL BID

CAD FILENAME  
DRAWING TITLE

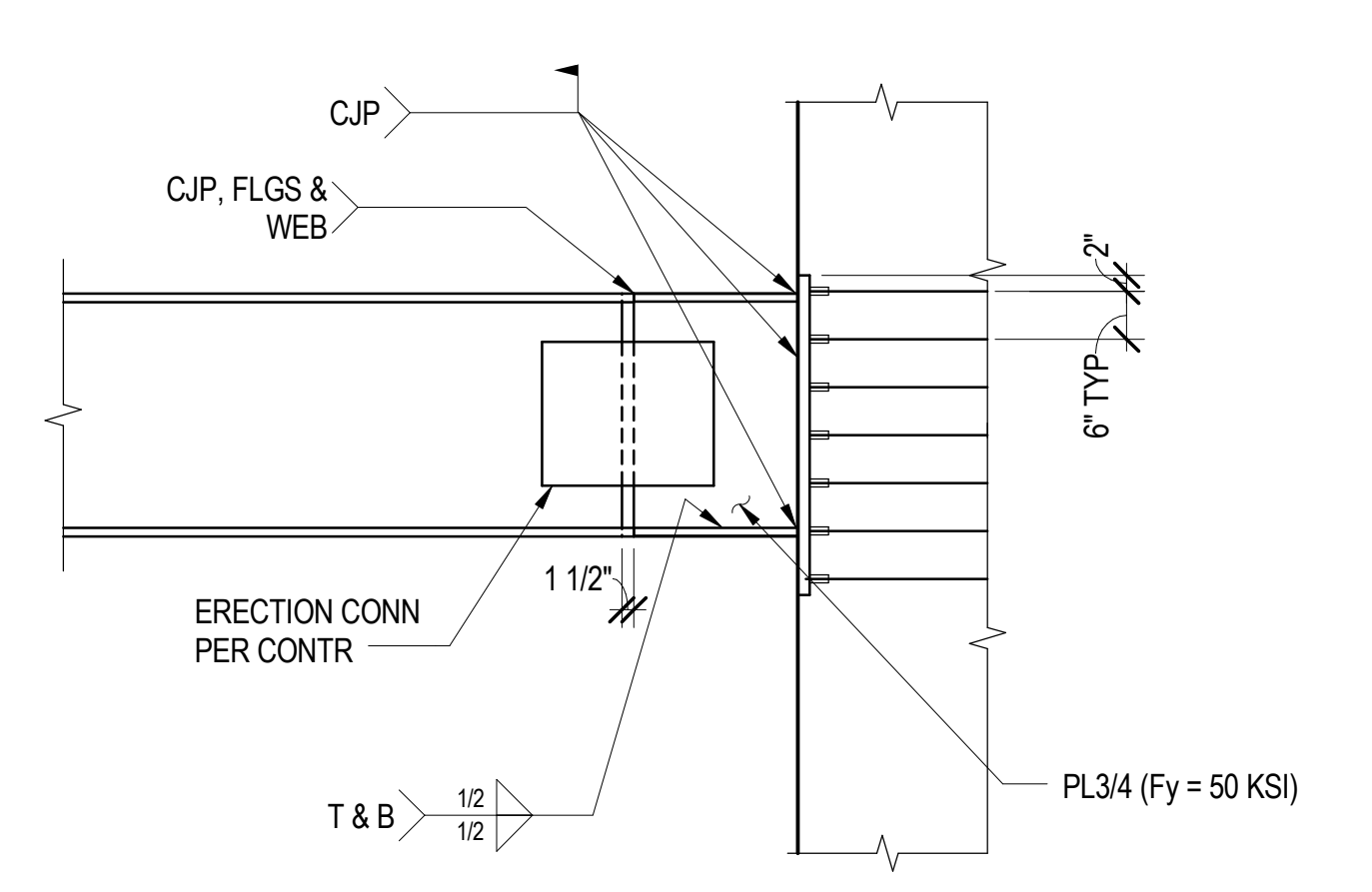
**CONCRETE SECTIONS AND DETAILS**



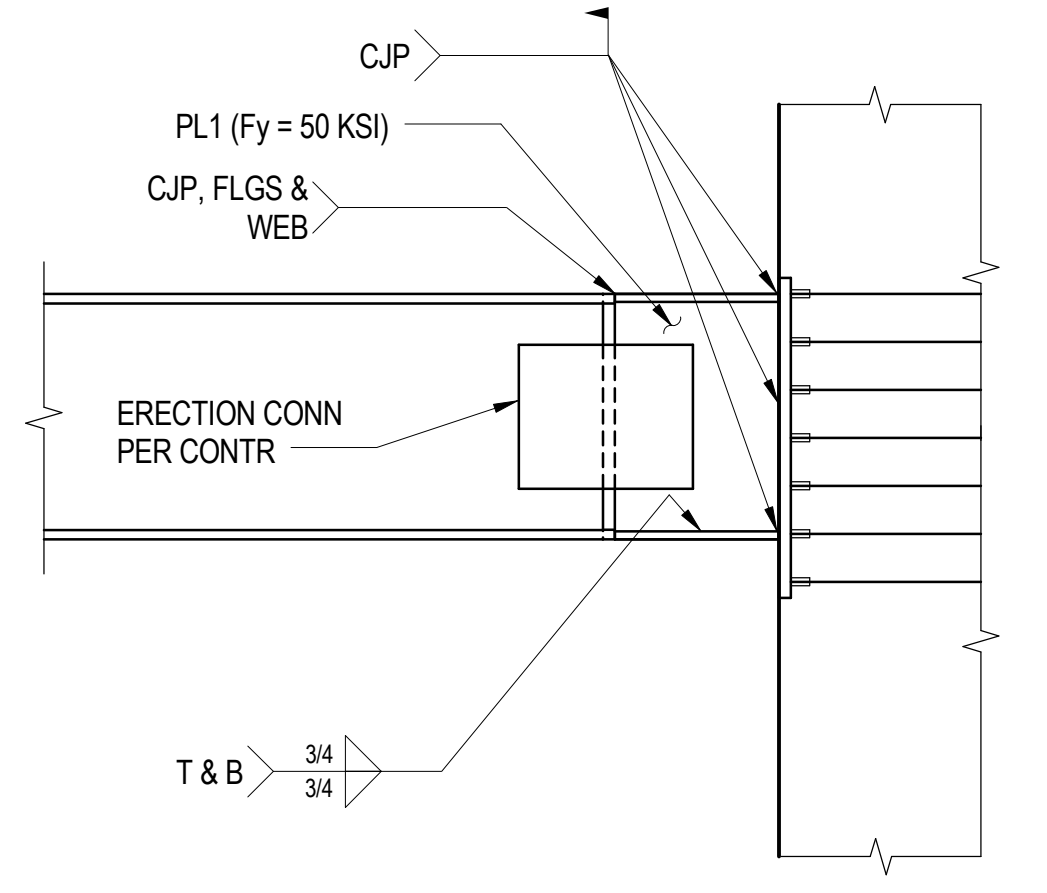
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



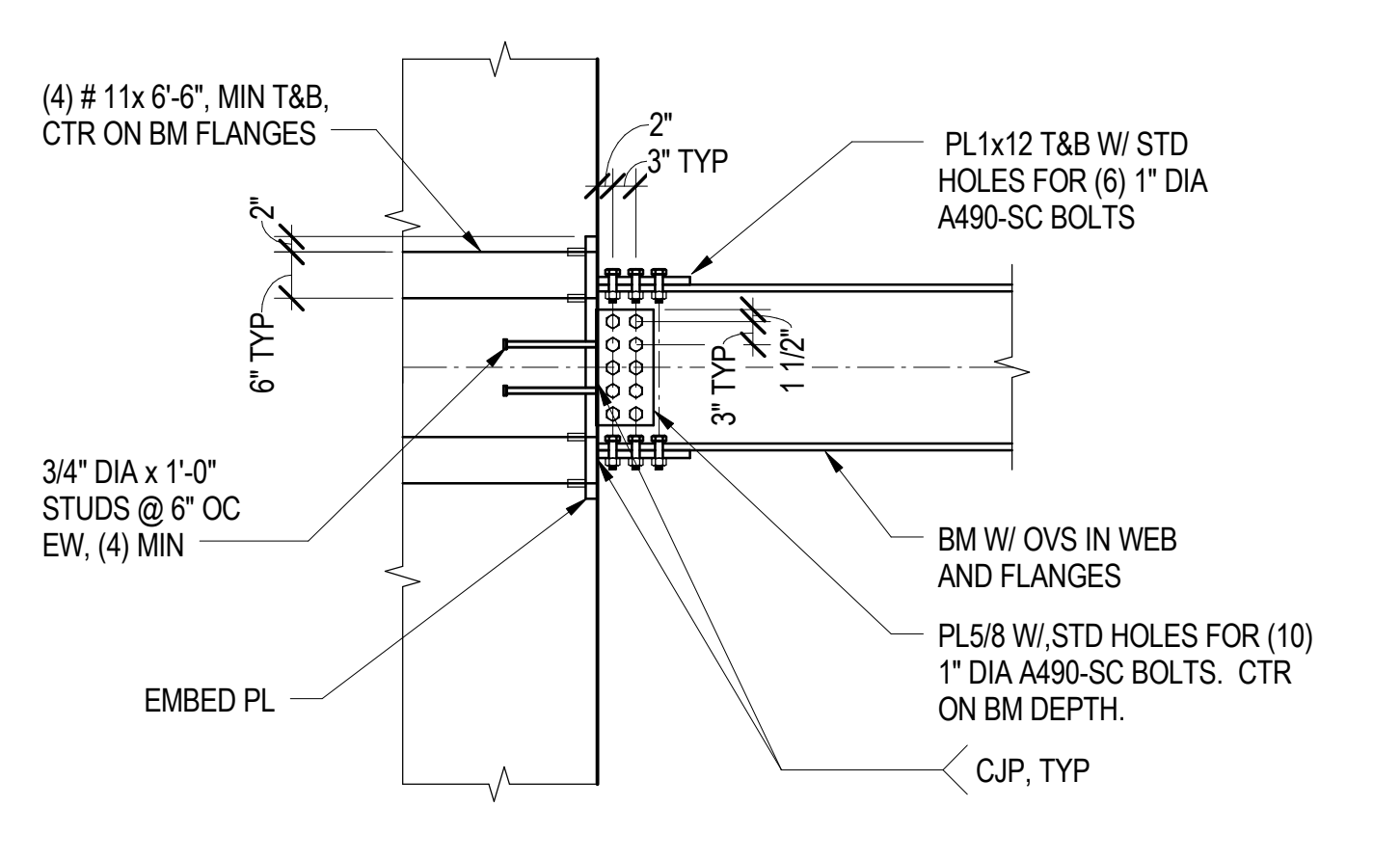
1 STRUT TO CORE CONNECTION, LEVEL 3 & 5  
1/2" = 1'-0"



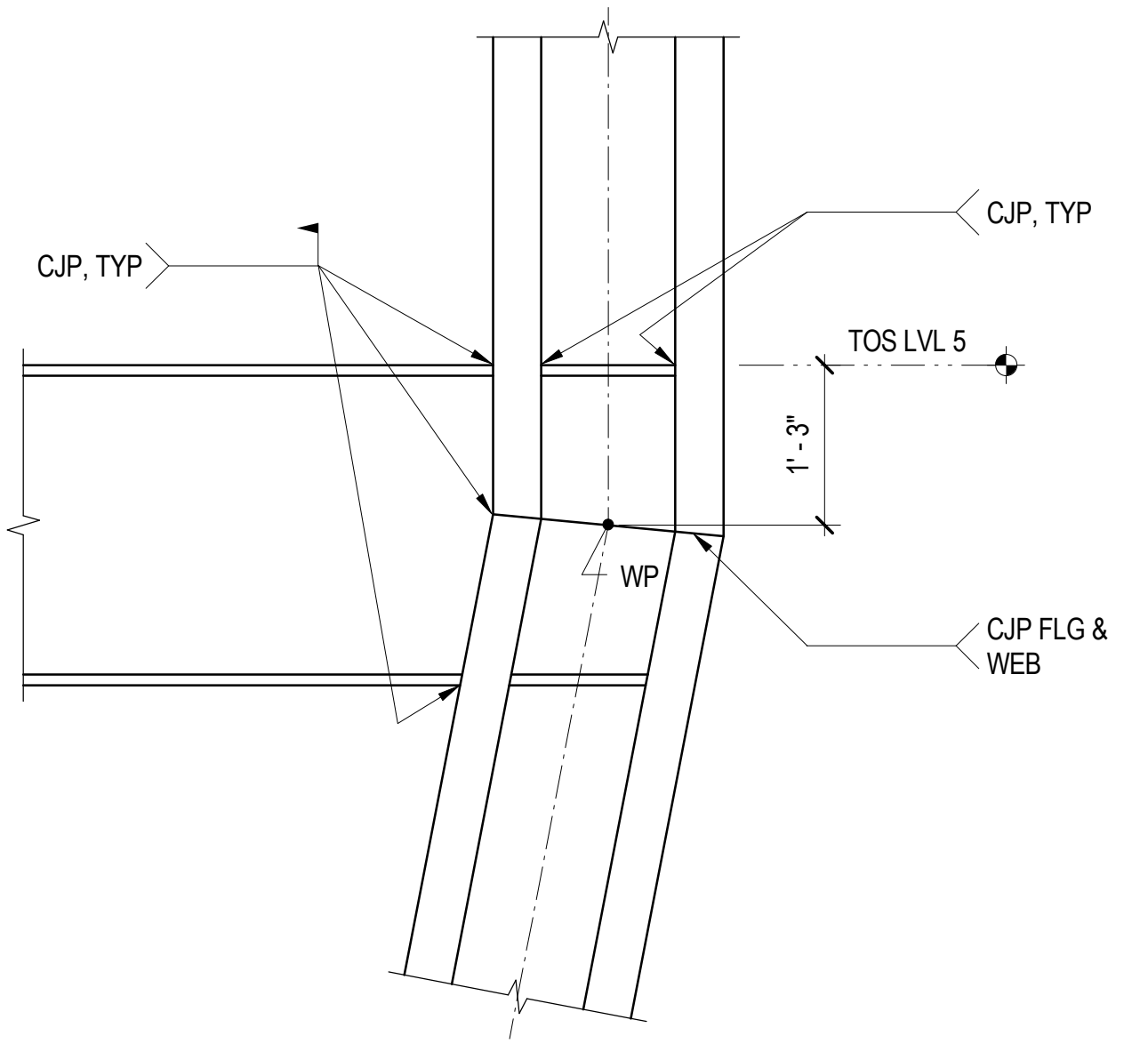
2 SECTION  
1/2" = 1'-0"



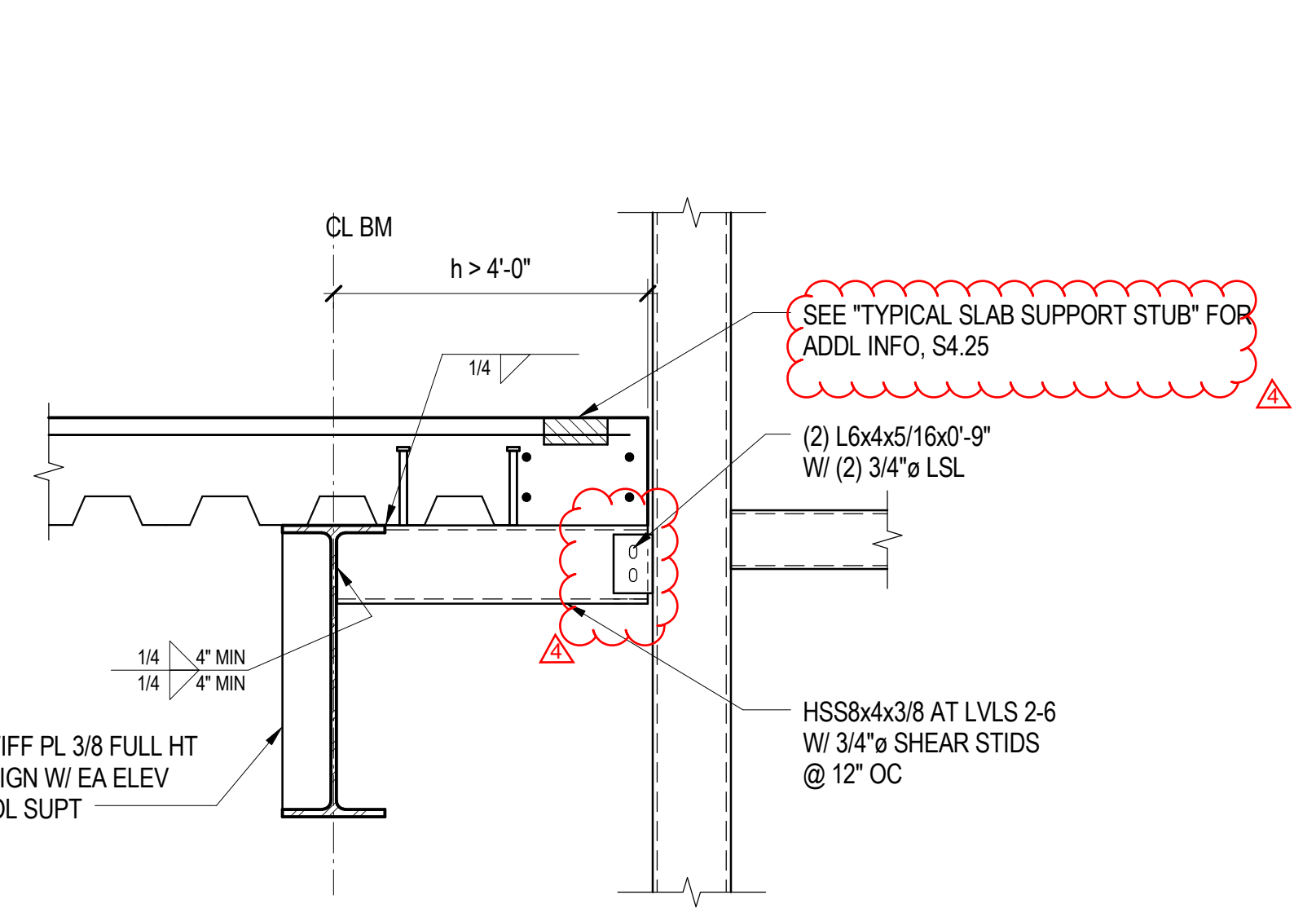
3 SECTION  
1/2" = 1'-0"



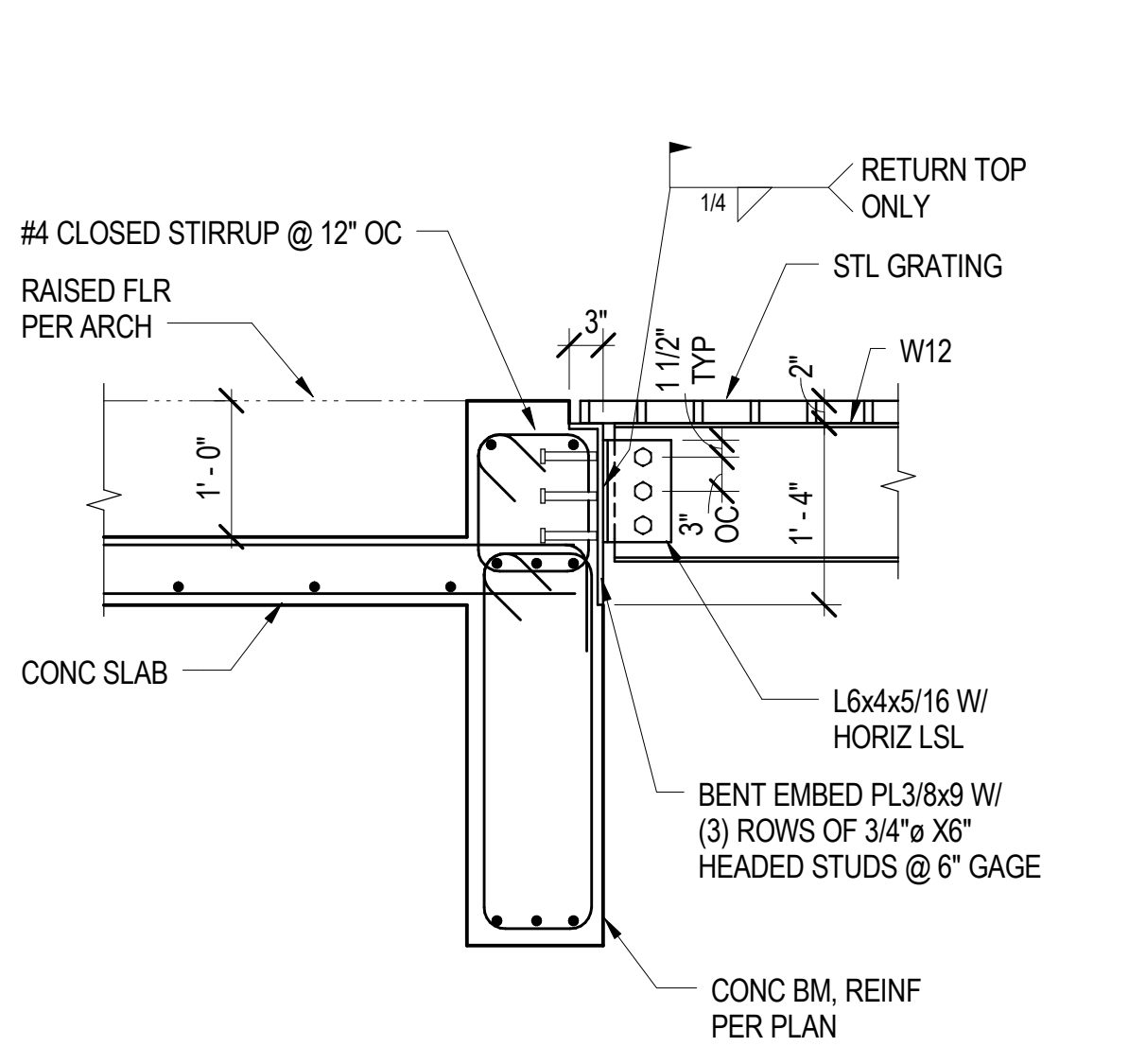
4 SECTION  
1/2" = 1'-0"



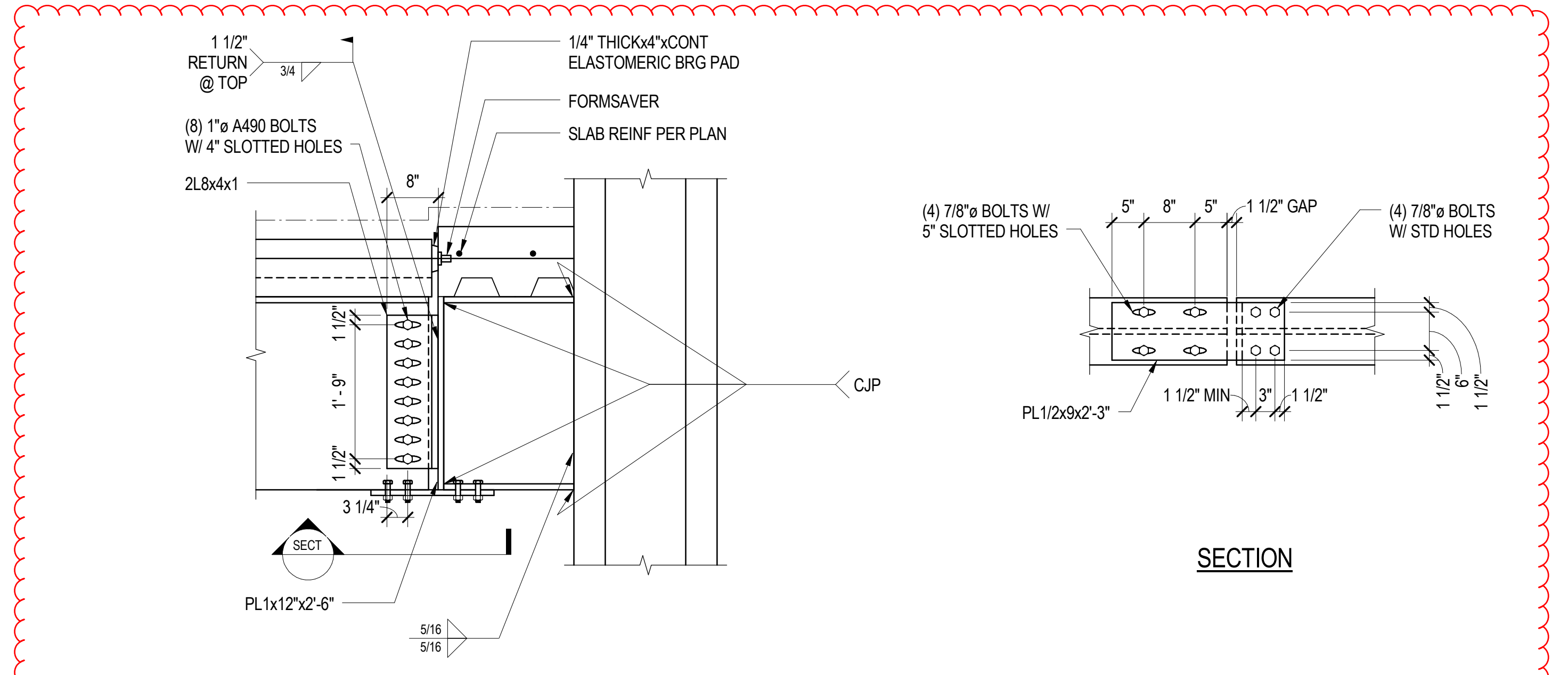
7 BEAM TO COLUMN CONN AT LEVEL 5 (SIMILAR AT LEVEL 3)  
3/4" = 1'-0"



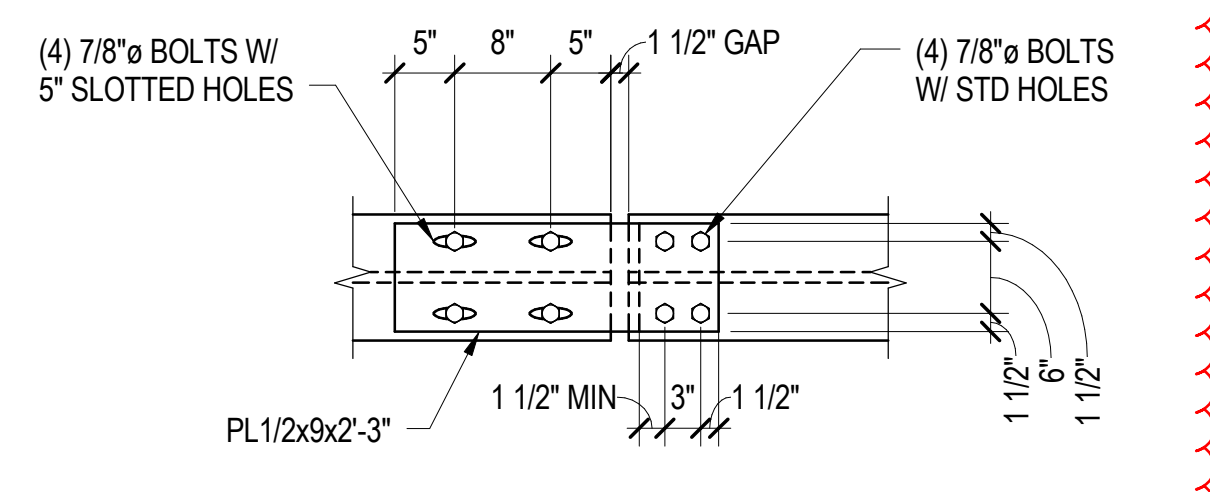
9 SECTION OF TYP CONN AT PLAZA ELEV COLUMNS, LEVELS 2-6  
3/4" = 1'-0"



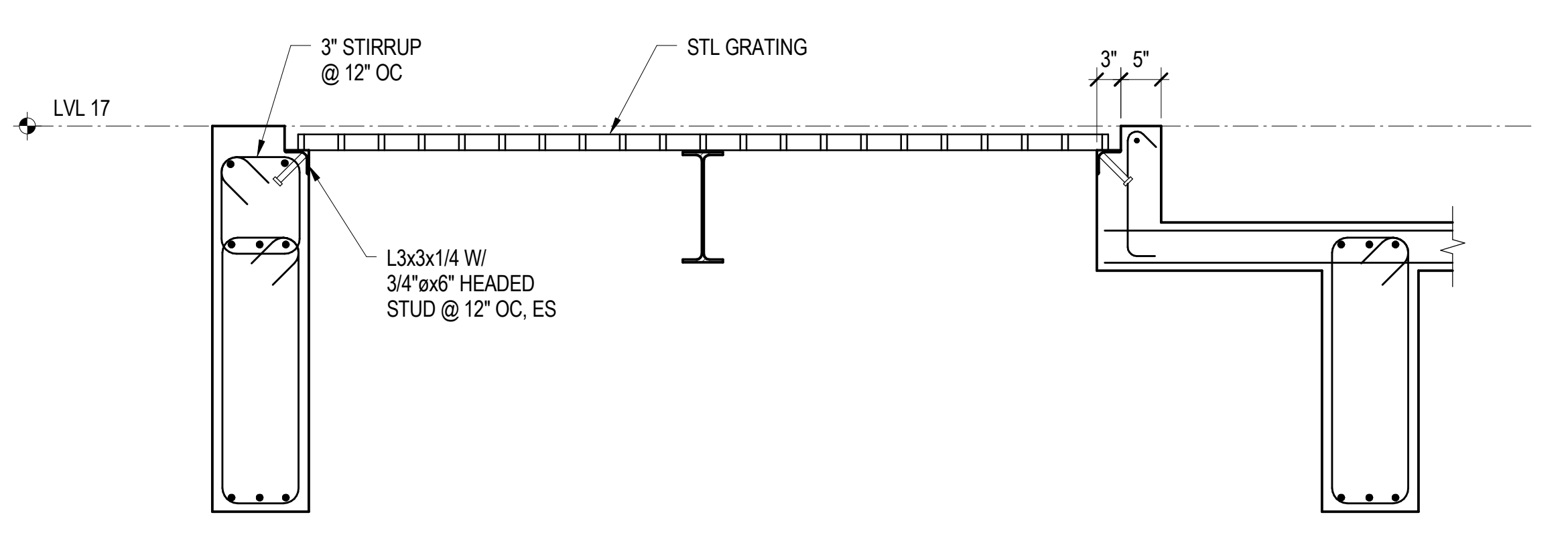
10 SECTION  
3/4" = 1'-0"



13 BRIDGE TO TOWER CONN DETAIL  
3/4" = 1'-0"



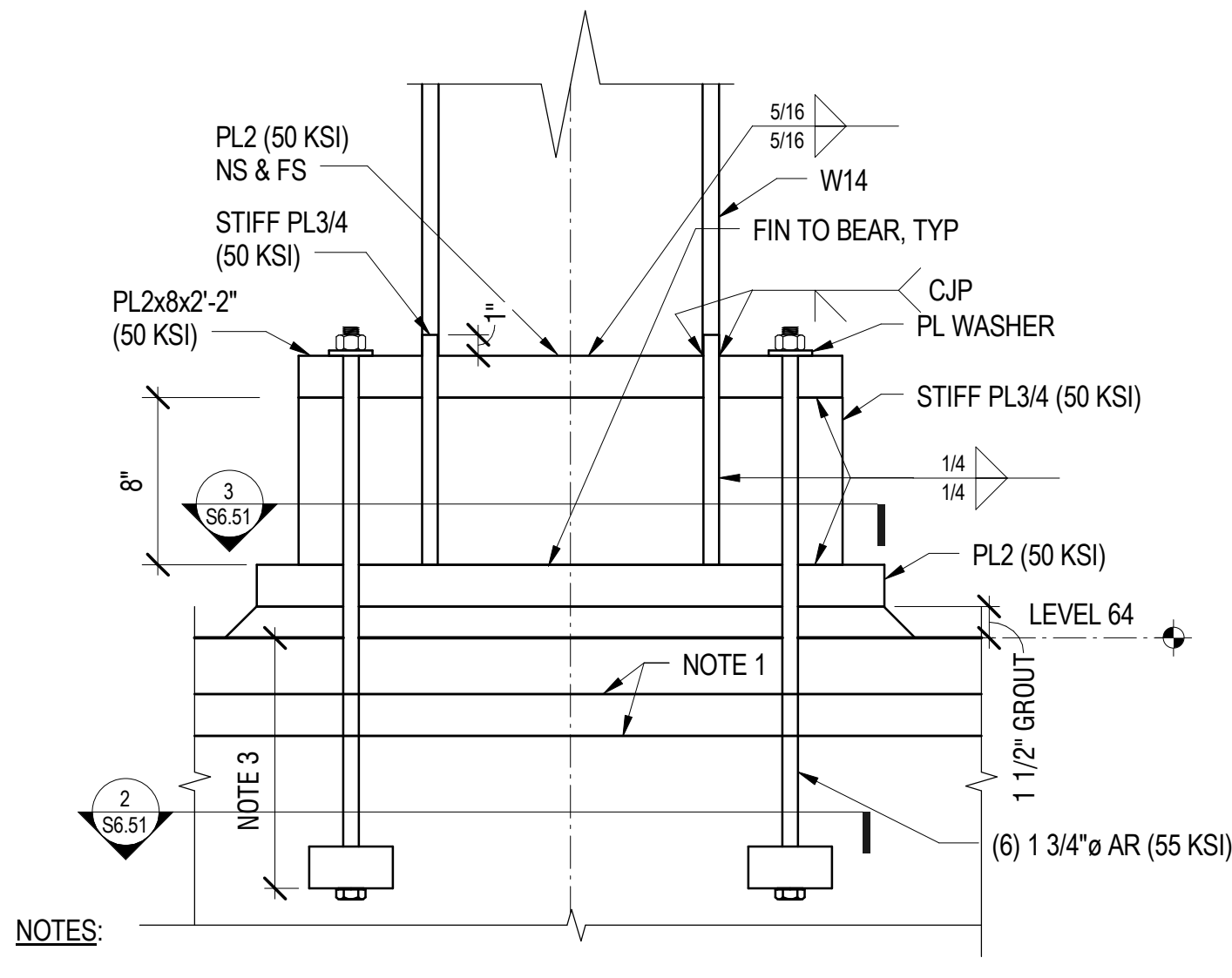
15 SECTION  
3/4" = 1'-0"



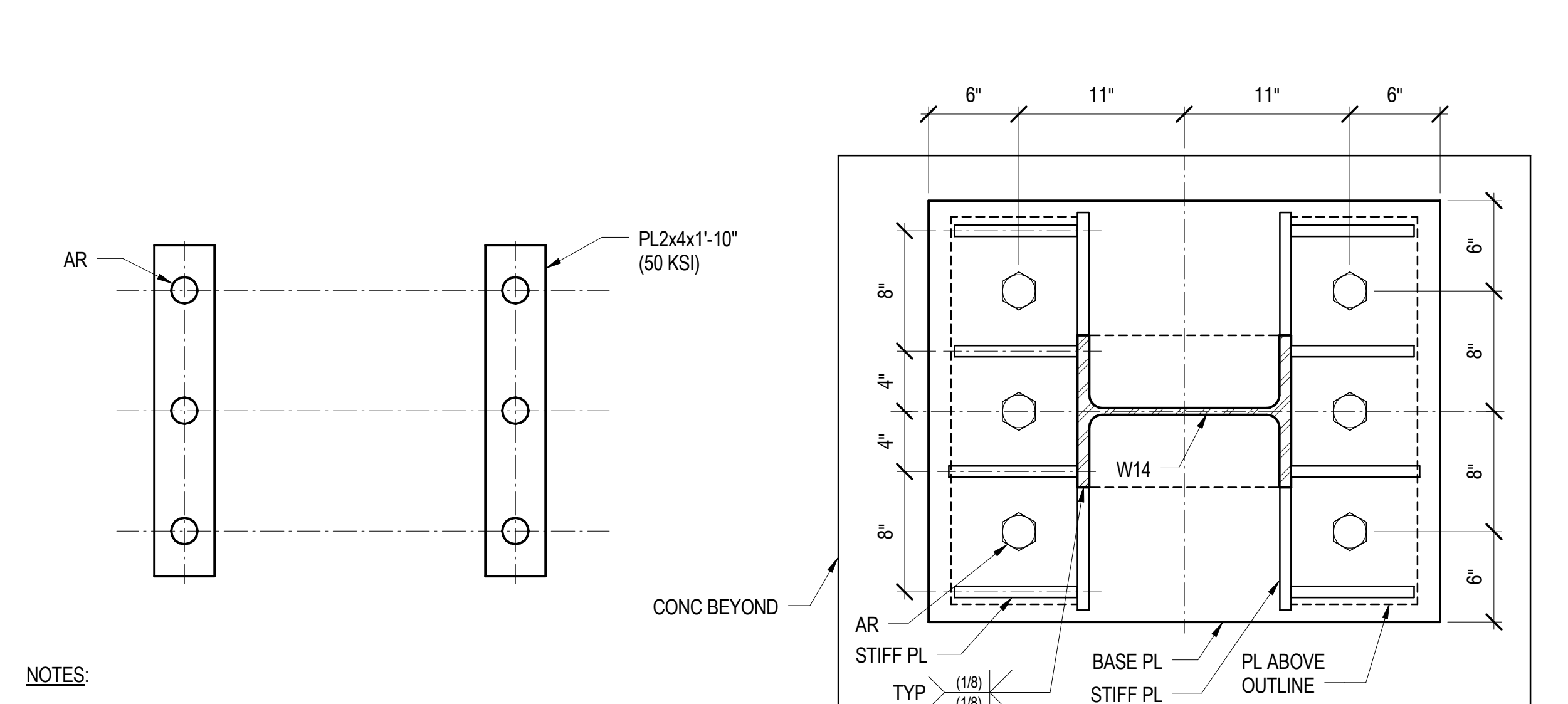
NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	13 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1



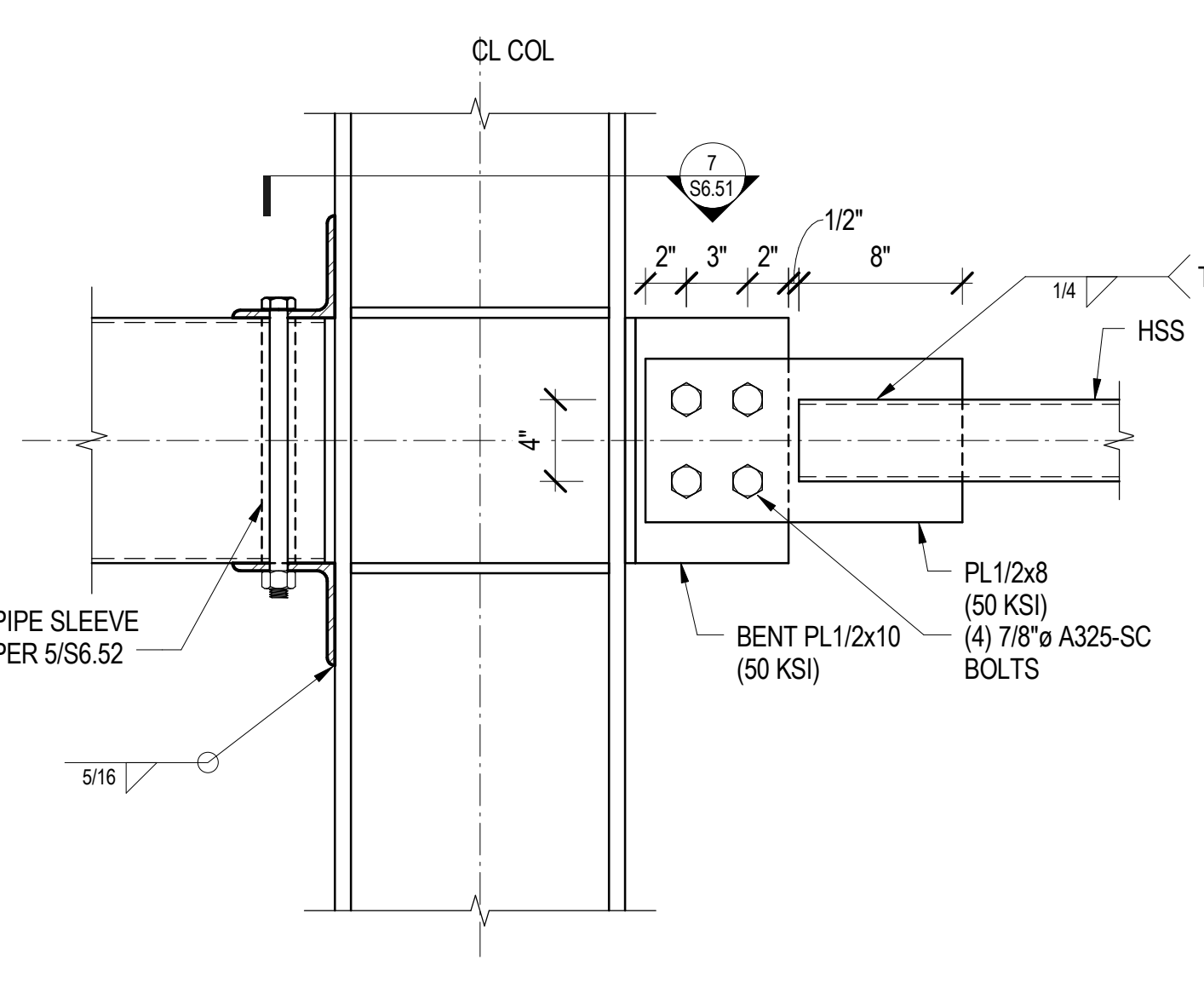
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



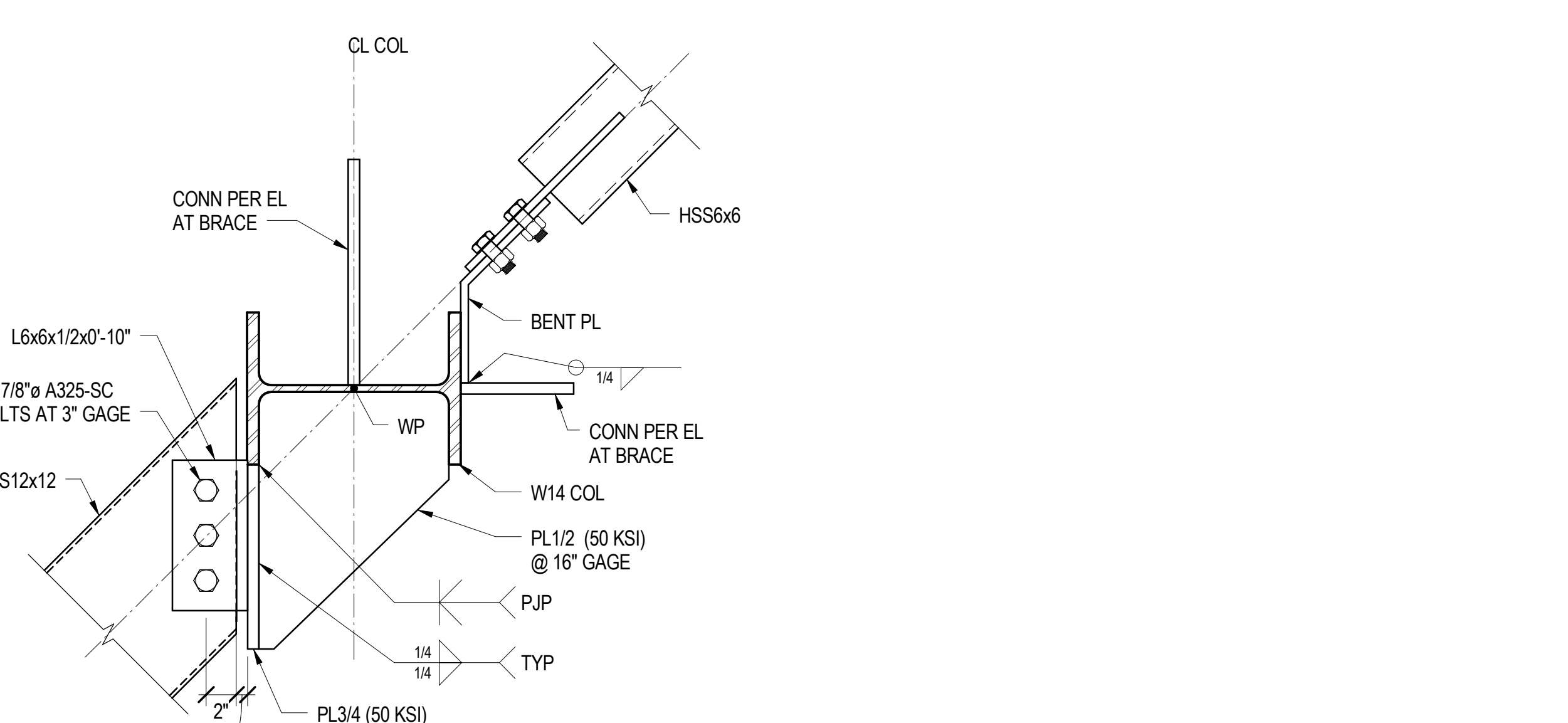
1 DETAIL  
1 1/2" = 1'-0"



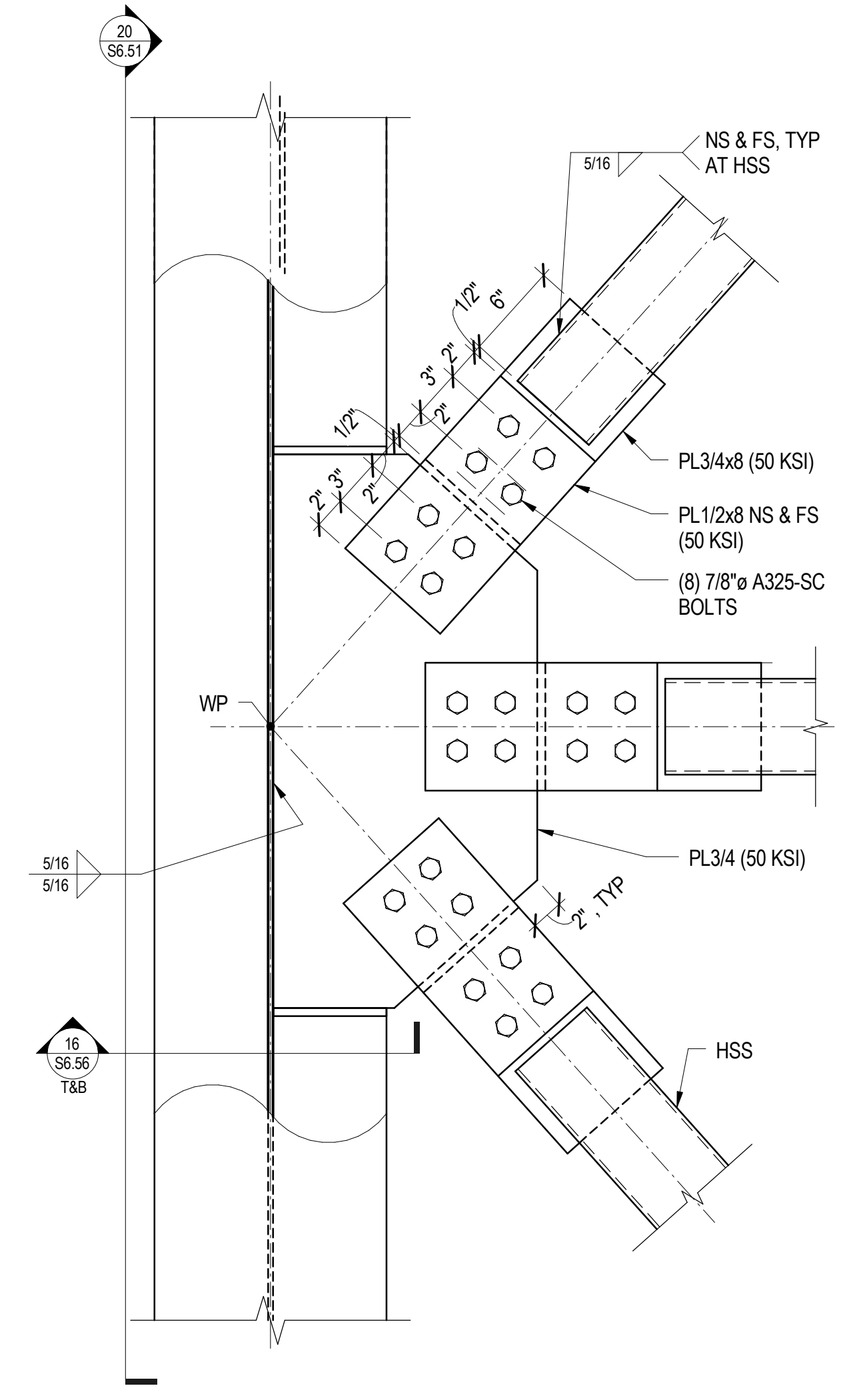
3 SECTION  
1 1/2" = 1'-0"



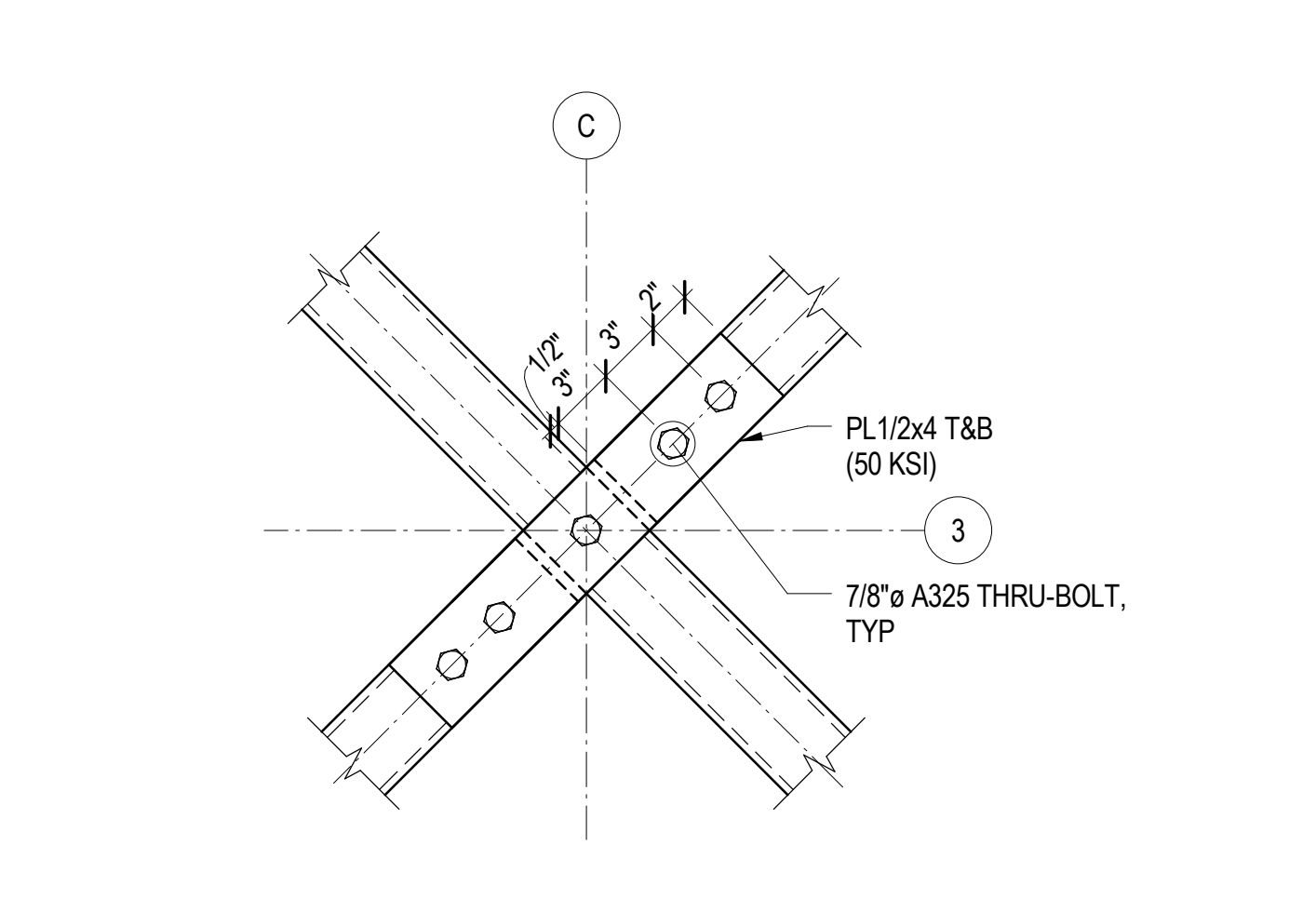
6 DETAIL  
1 1/2" = 1'-0"



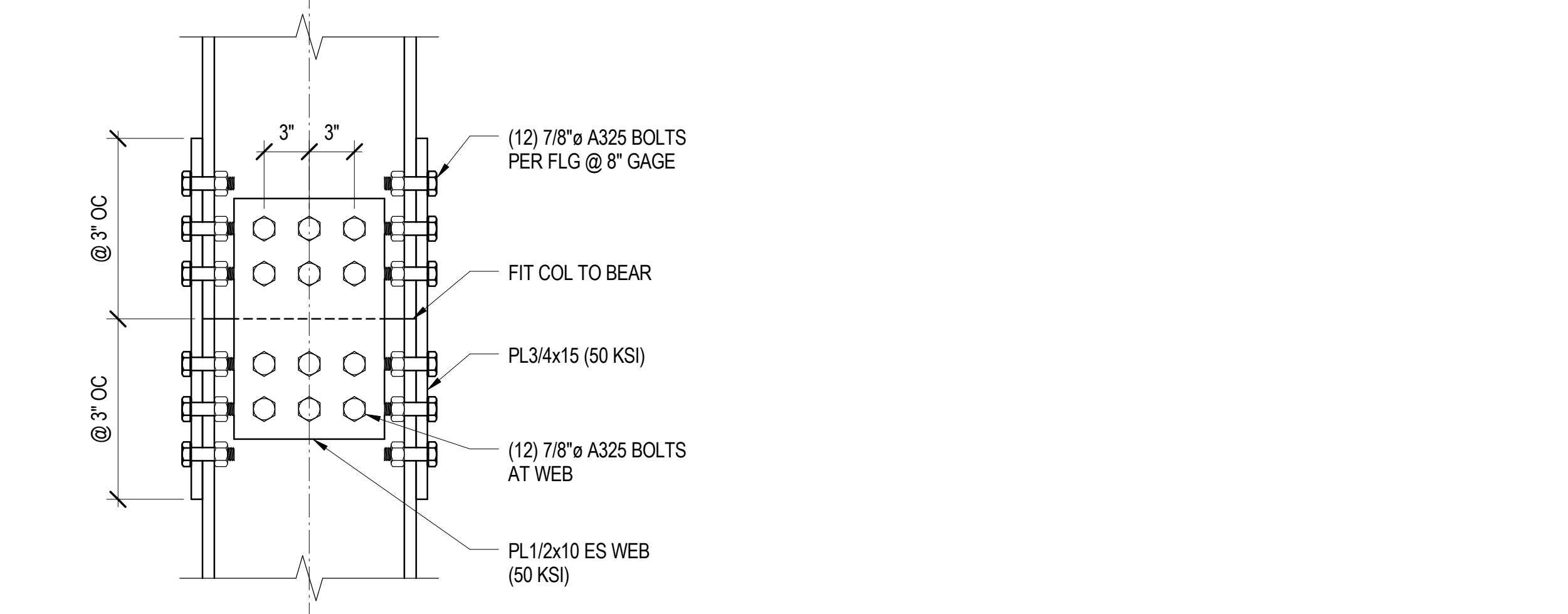
7 SECTION  
1 1/2" = 1'-0"



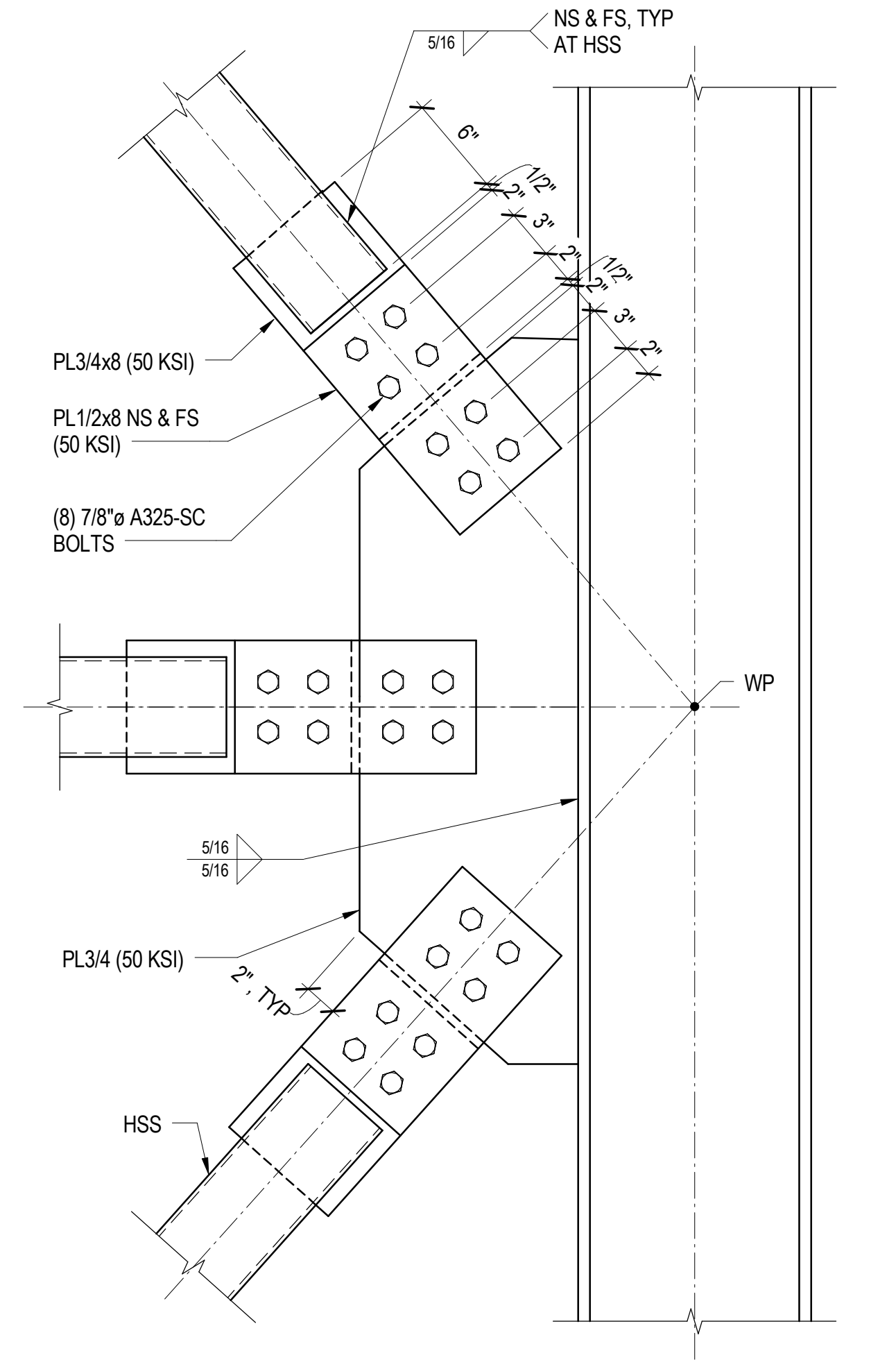
10 DETAIL  
1 1/2" = 1'-0"



16 DETAIL  
1 1/2" = 1'-0"



17 DETAIL  
1 1/2" = 1'-0"



20 SECTION  
1 1/2" = 1'-0"

5/1/2014 12:04:33 PM C:\Revit Projects\Transbay Tower\Transbay Tower - WS2013.rvt

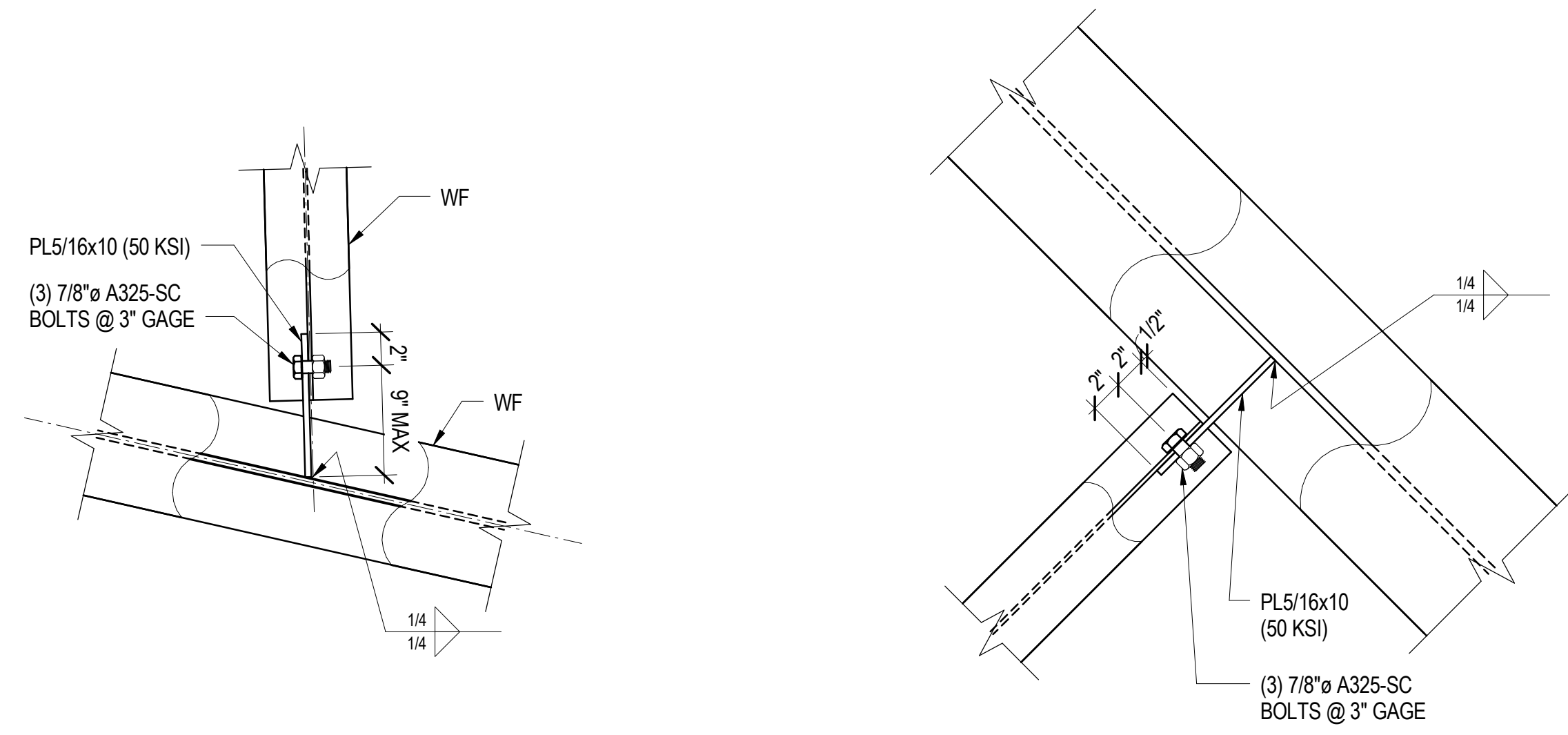
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

DRAWING TITLE  
**TOP FEATURE SECTIONS AND DETAILS**

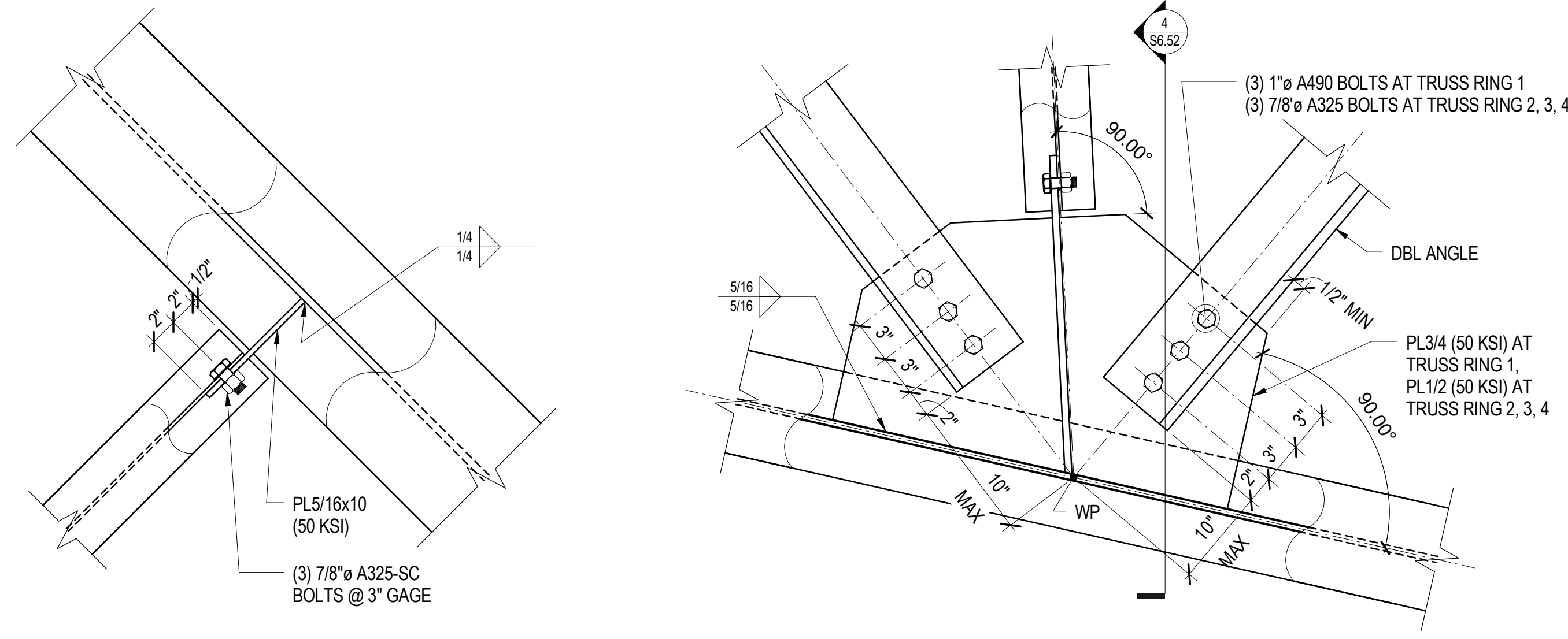
NO. PROJECT NO. 08044  
DRAWING NUMBER S6.51



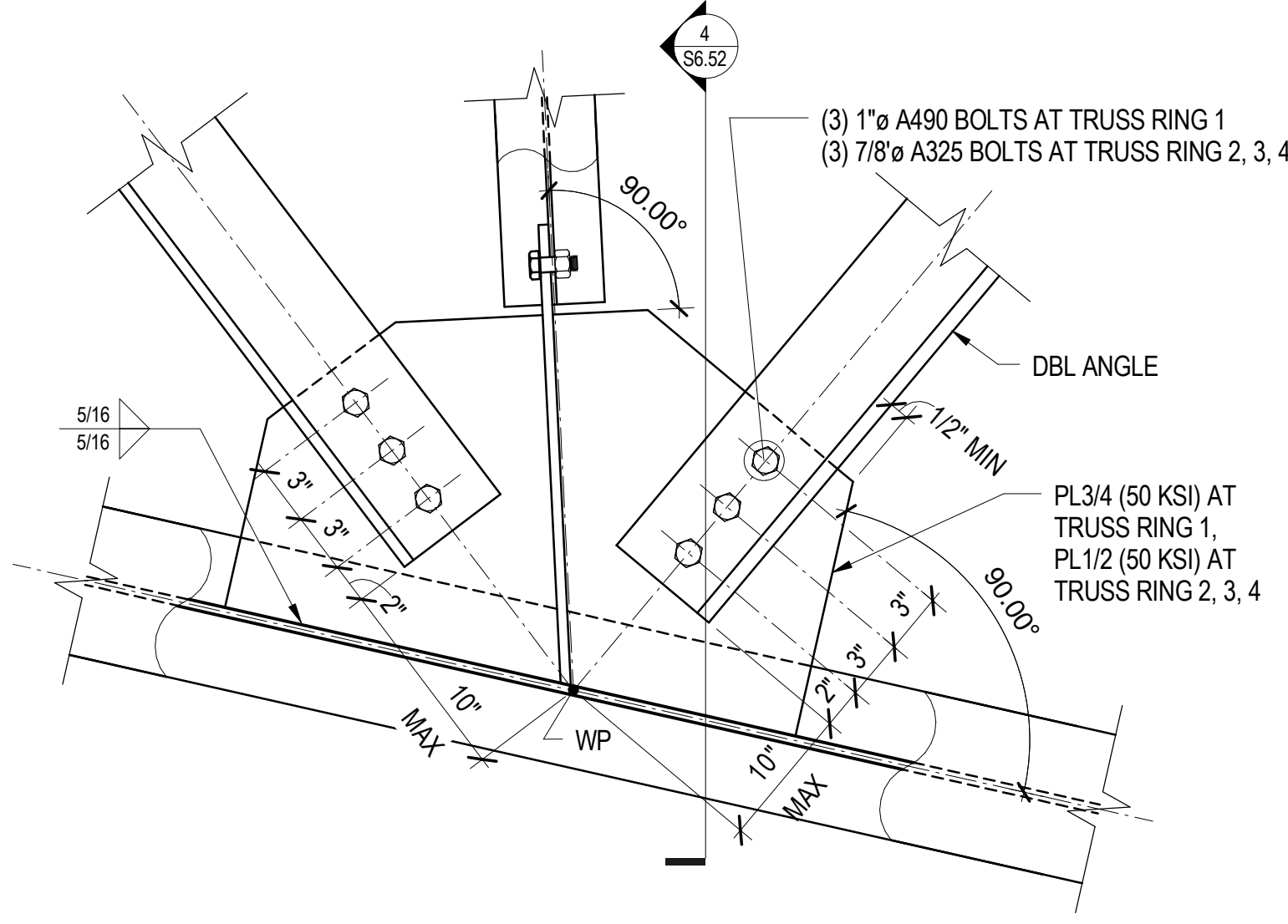
- BOSTON PROPERTIES / HINES**  
Owner
- PELLI CLARKE PELLI ARCHITECTS**  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer
- WSP**  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect
- BKF ENGINEERS**  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING**  
Building Security
- HWA PARKING**  
Parking Consultant
- ARUP**  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.**  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant
- MORRISON HERSHFIELD**  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant
- HMA CONSULTING**  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.**  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN**  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



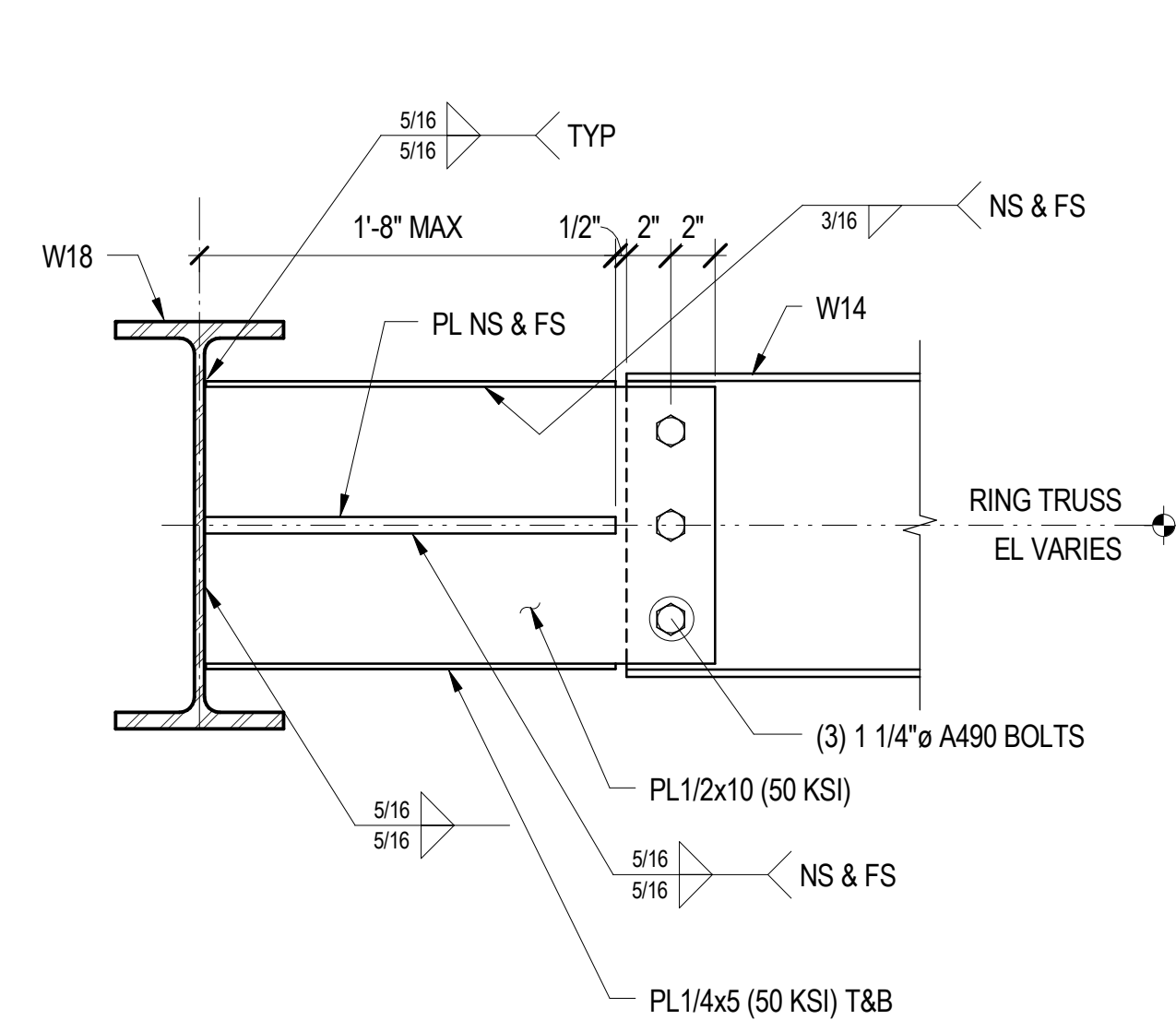
1 1 1/2" = 1'-0"



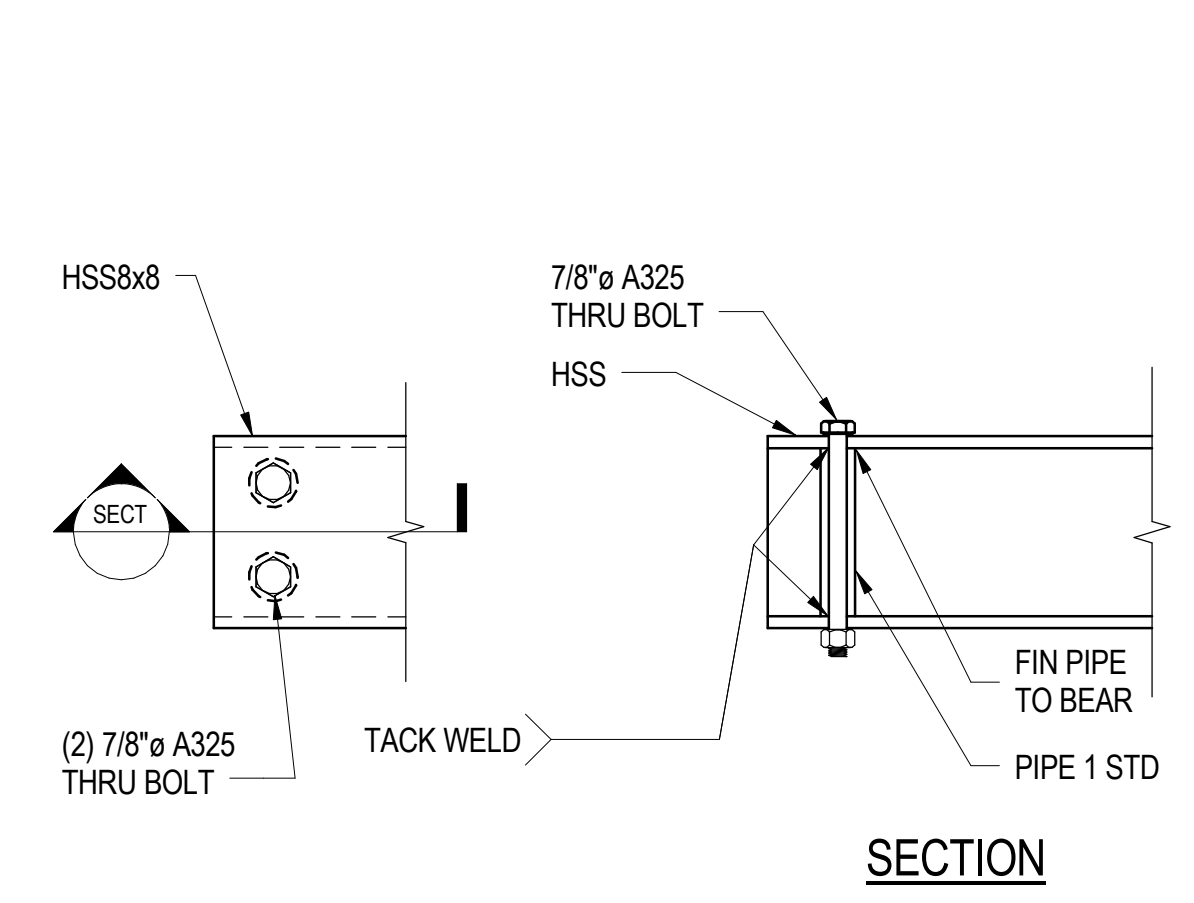
2 1 1/2" = 1'-0"



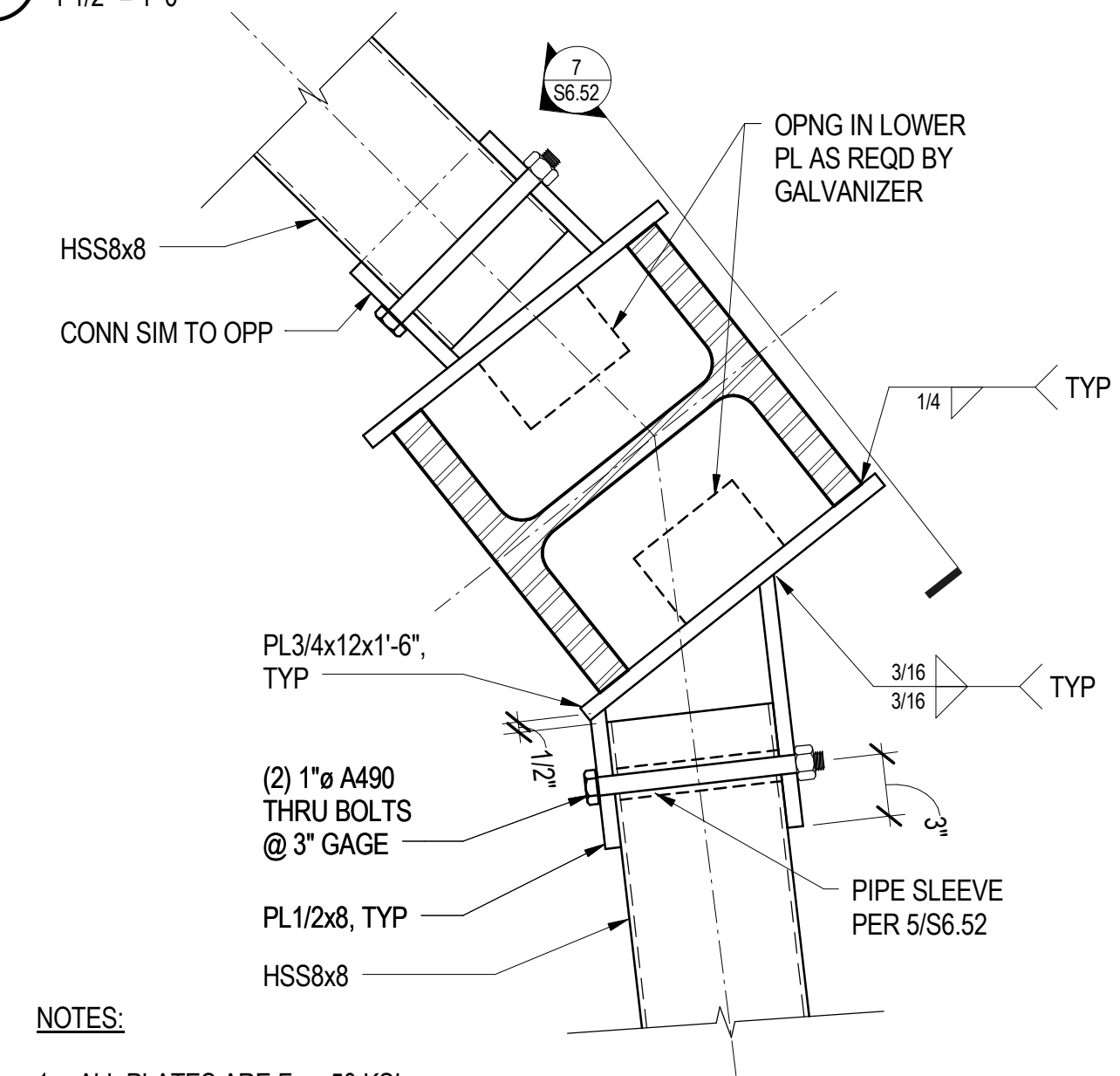
3 1 1/2" = 1'-0"



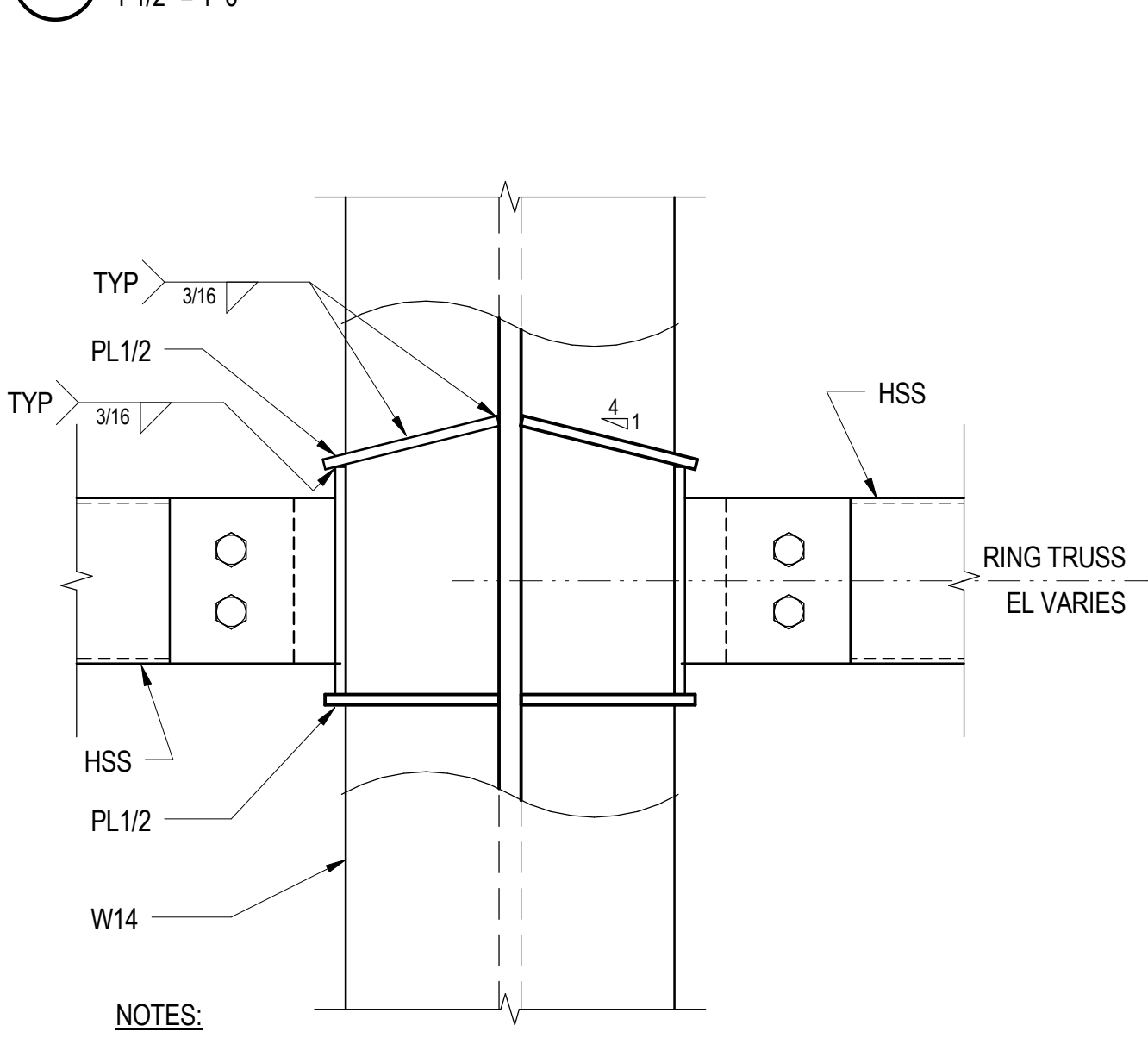
4 1 1/2" = 1'-0"



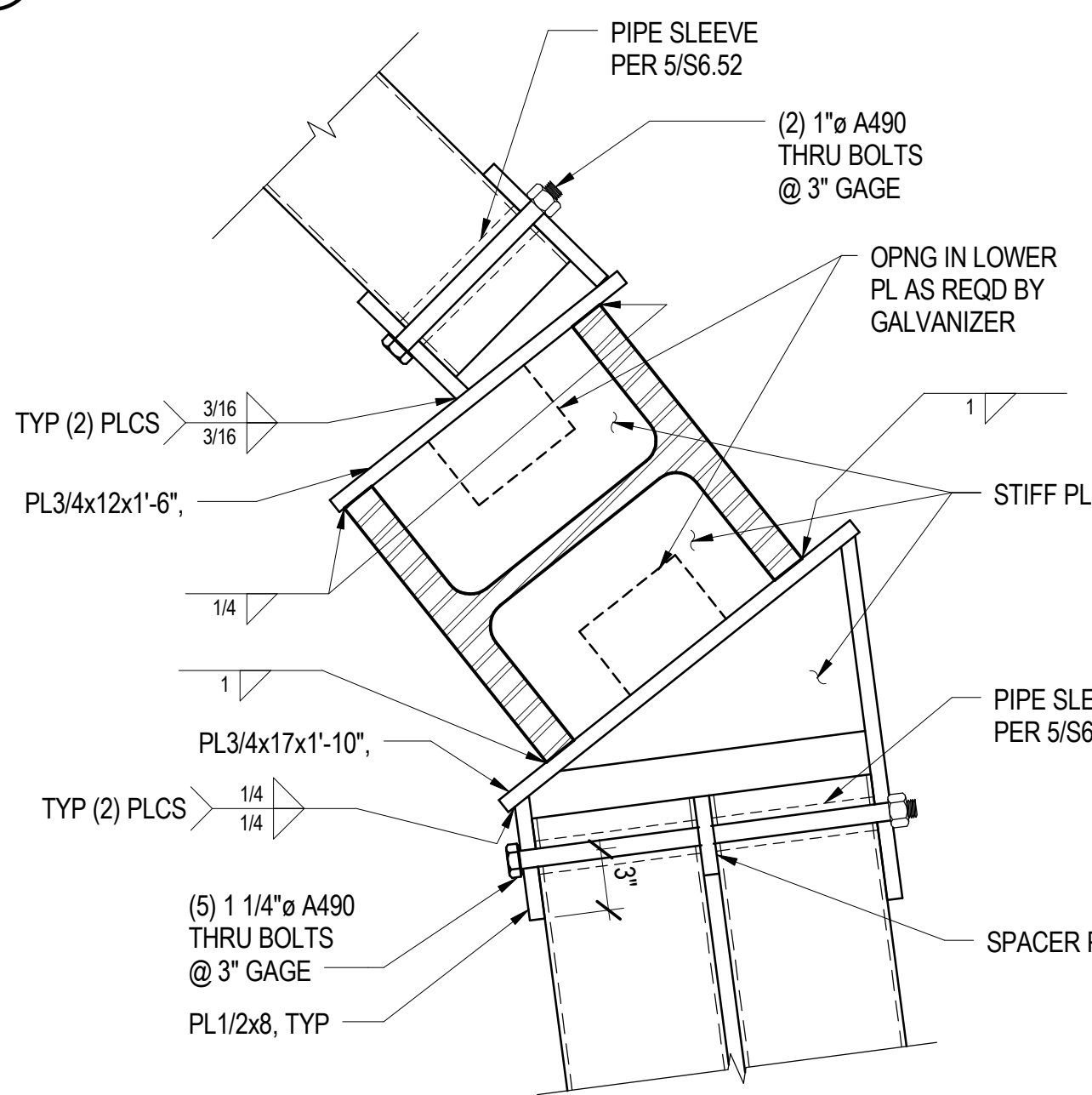
5 1 1/2" = 1'-0"



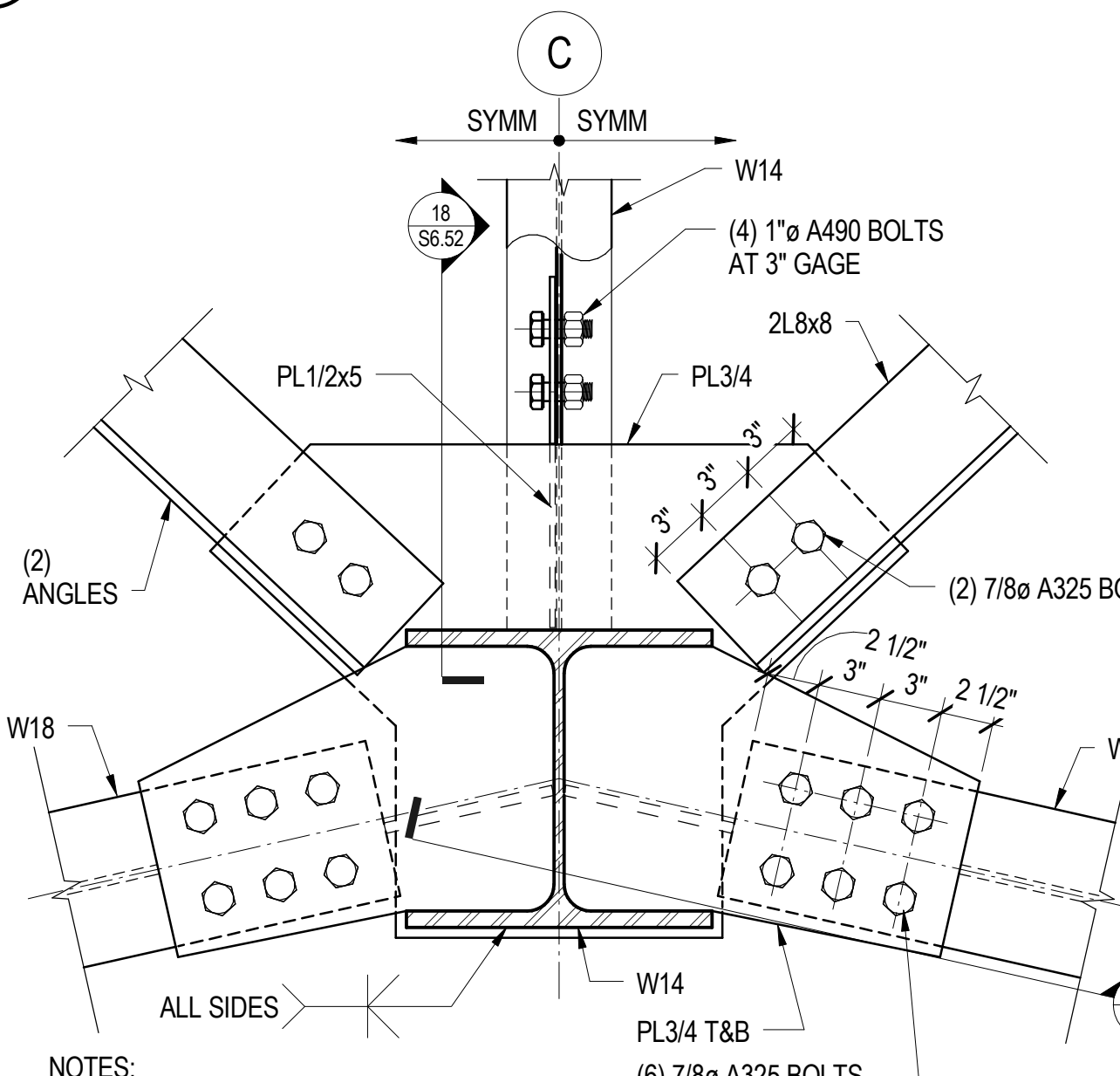
6 1 1/2" = 1'-0"



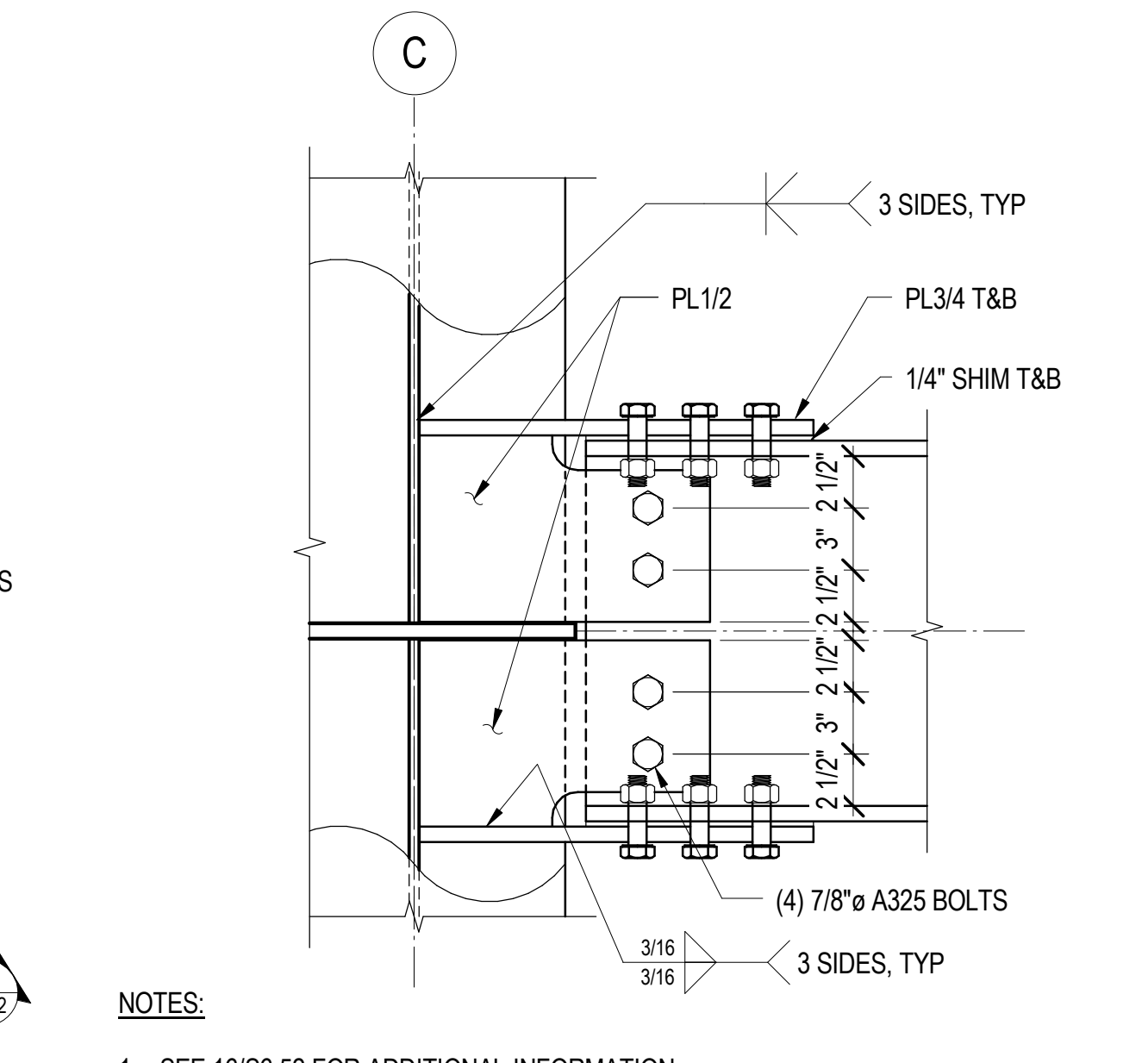
7 1 1/2" = 1'-0"



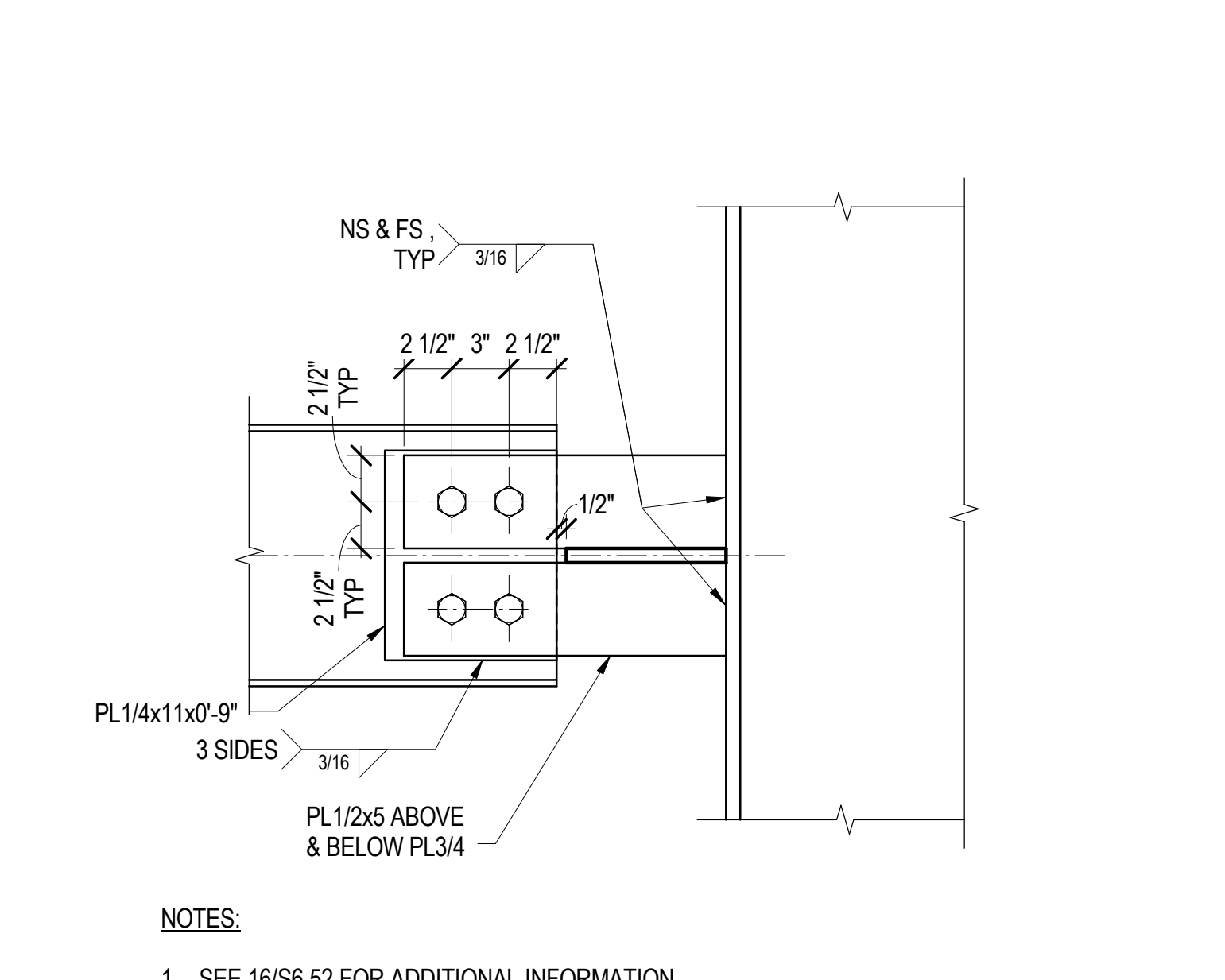
8 1 1/2" = 1'-0"



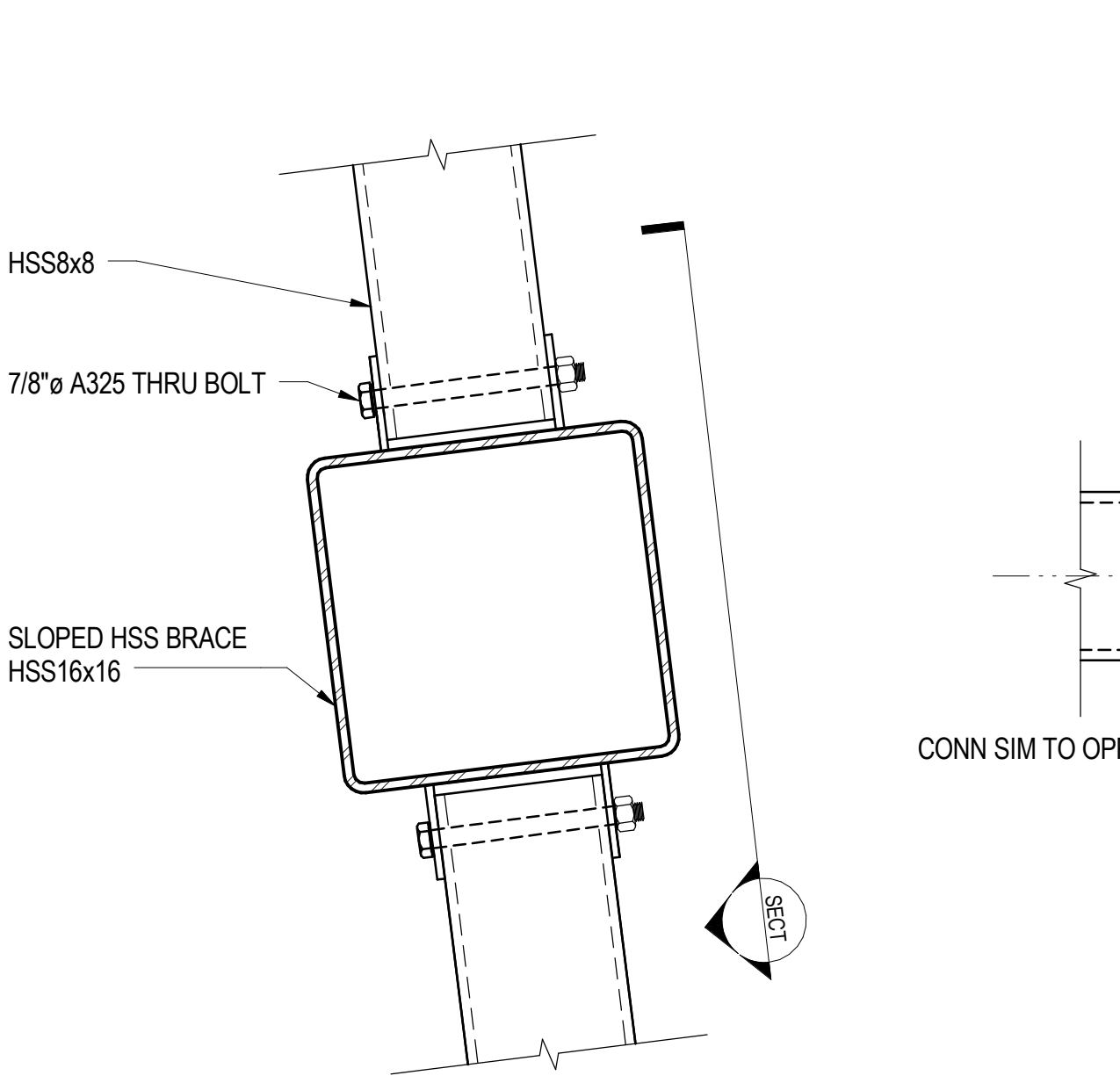
9 1 1/2" = 1'-0"



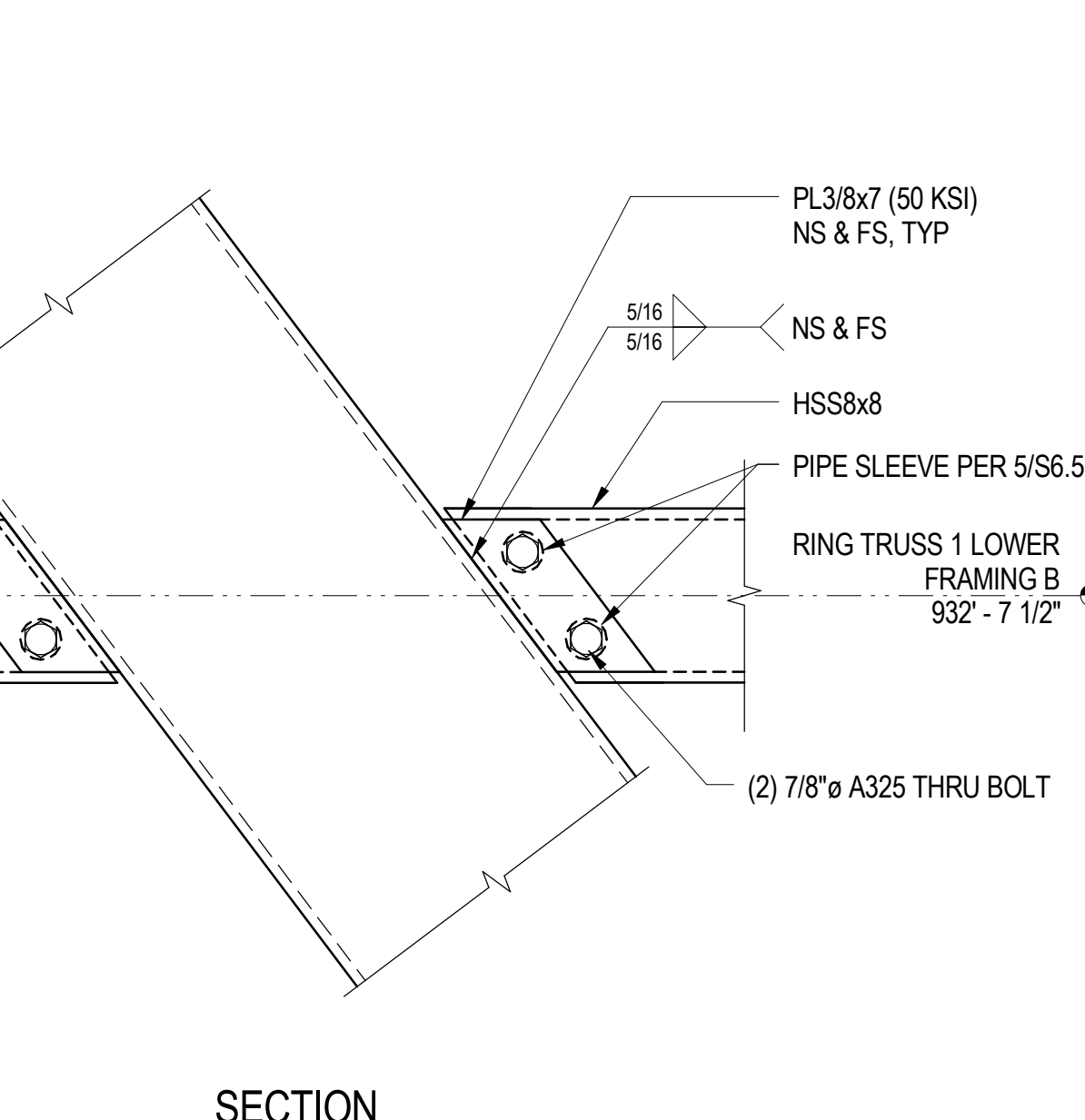
10 1 1/2" = 1'-0"



11 1 1/2" = 1'-0"



12 1 1/2" = 1'-0"



13 1 1/2" = 1'-0"

5/1/2014 12:04:34 PM C:\Revit Projects\Transbay Tower\Transbay Tower - WS2013.rvt

NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

**TOP FEATURE SECTIONS AND DETAILS**



BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEFPF Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record

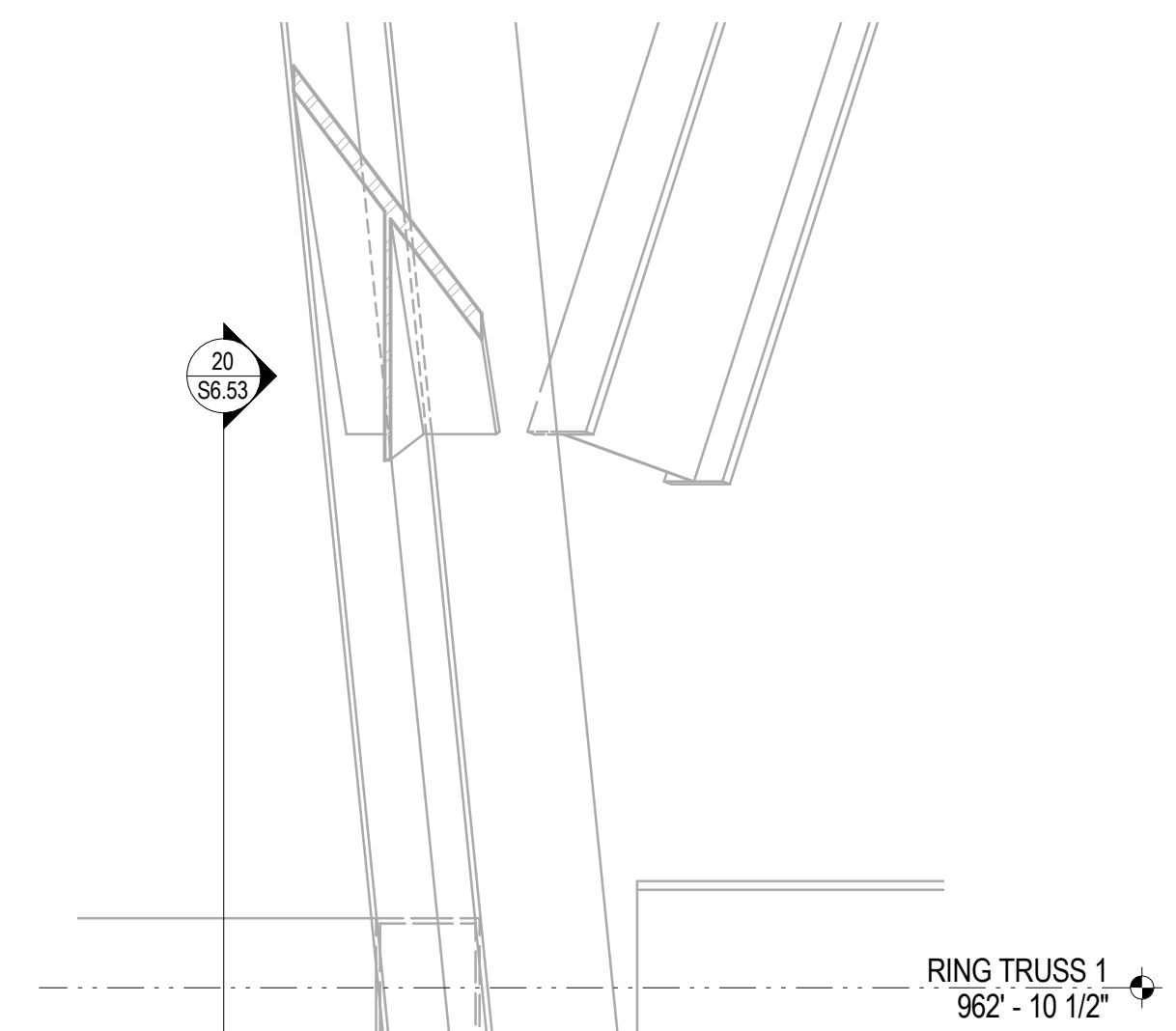
NO.	DATE	STRUCTURAL BID	ISSUE
6	02 MAY 14	GMP	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
4	10 FEB 14	BID ADDENDUM #2	
3	12 DEC 13	ADDENDUM #2 PERMIT	
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
1	15 OCT 13	STRUCTURAL BID	

CAD FILENAME

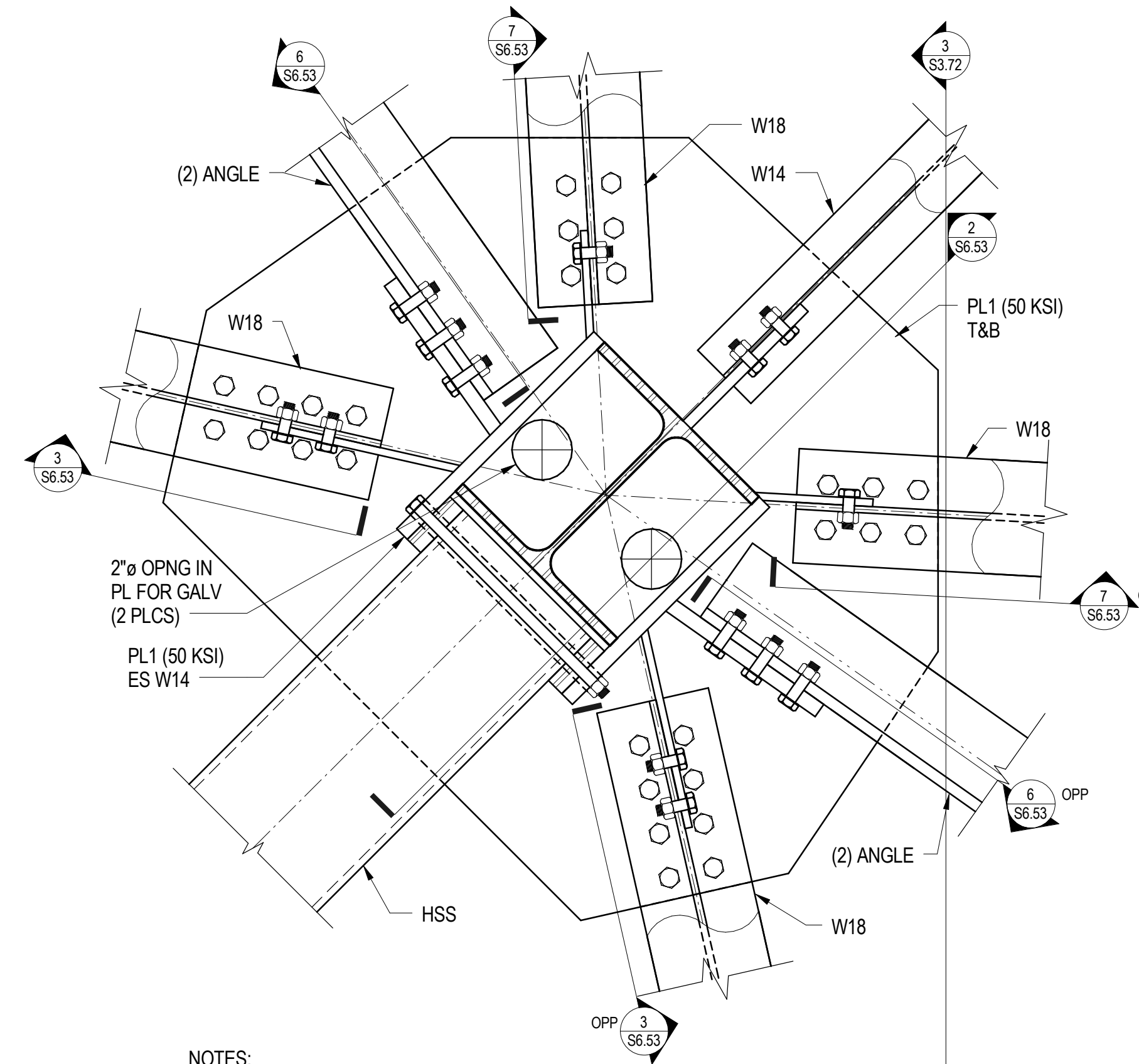
DRAWING TITLE

**TOP FEATURE SECTIONS AND DETAILS**

PROJECT NO. 08044 DRAWING NUMBER S6.53

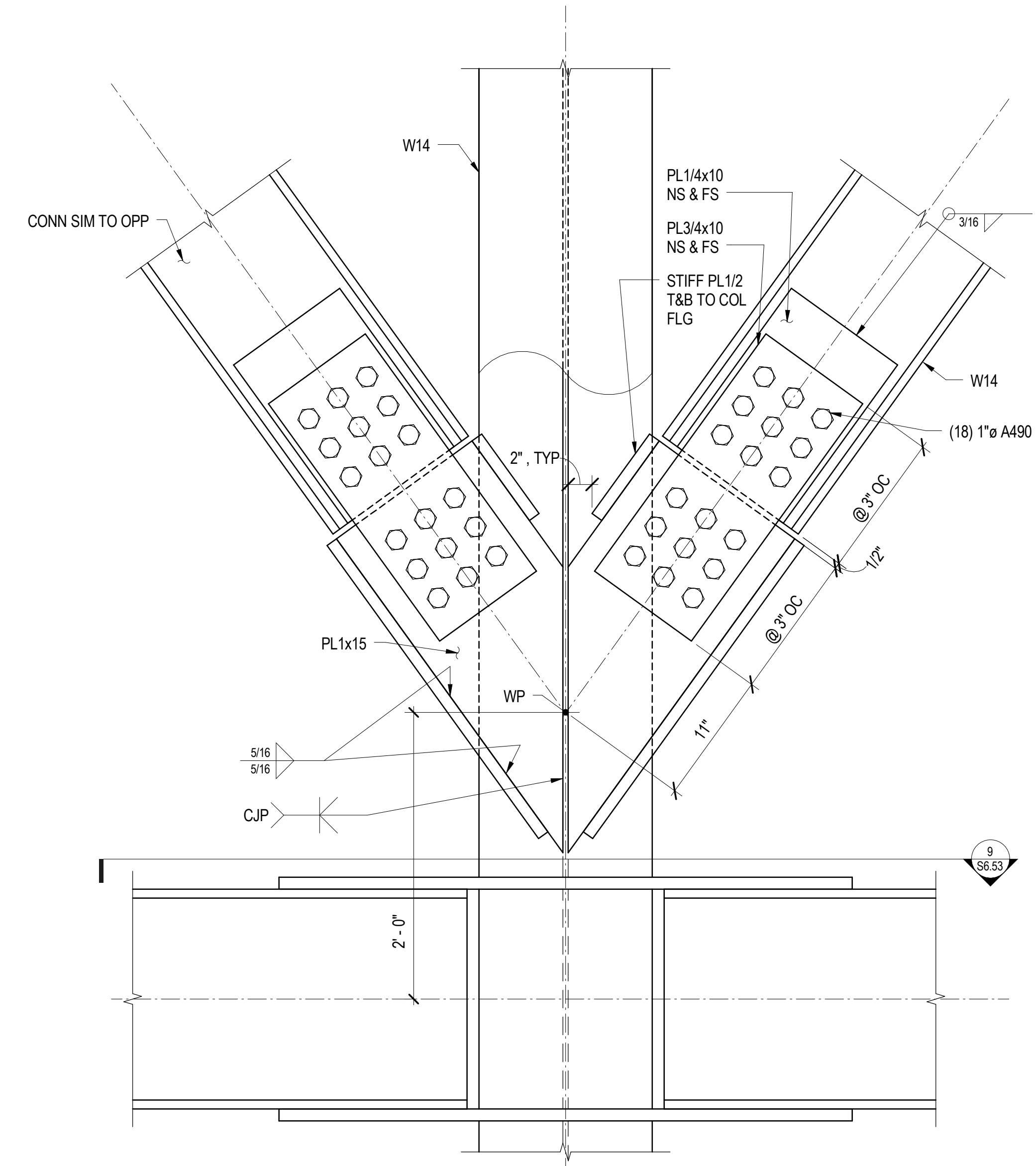


5 DETAIL  
3/4" = 1'-0"



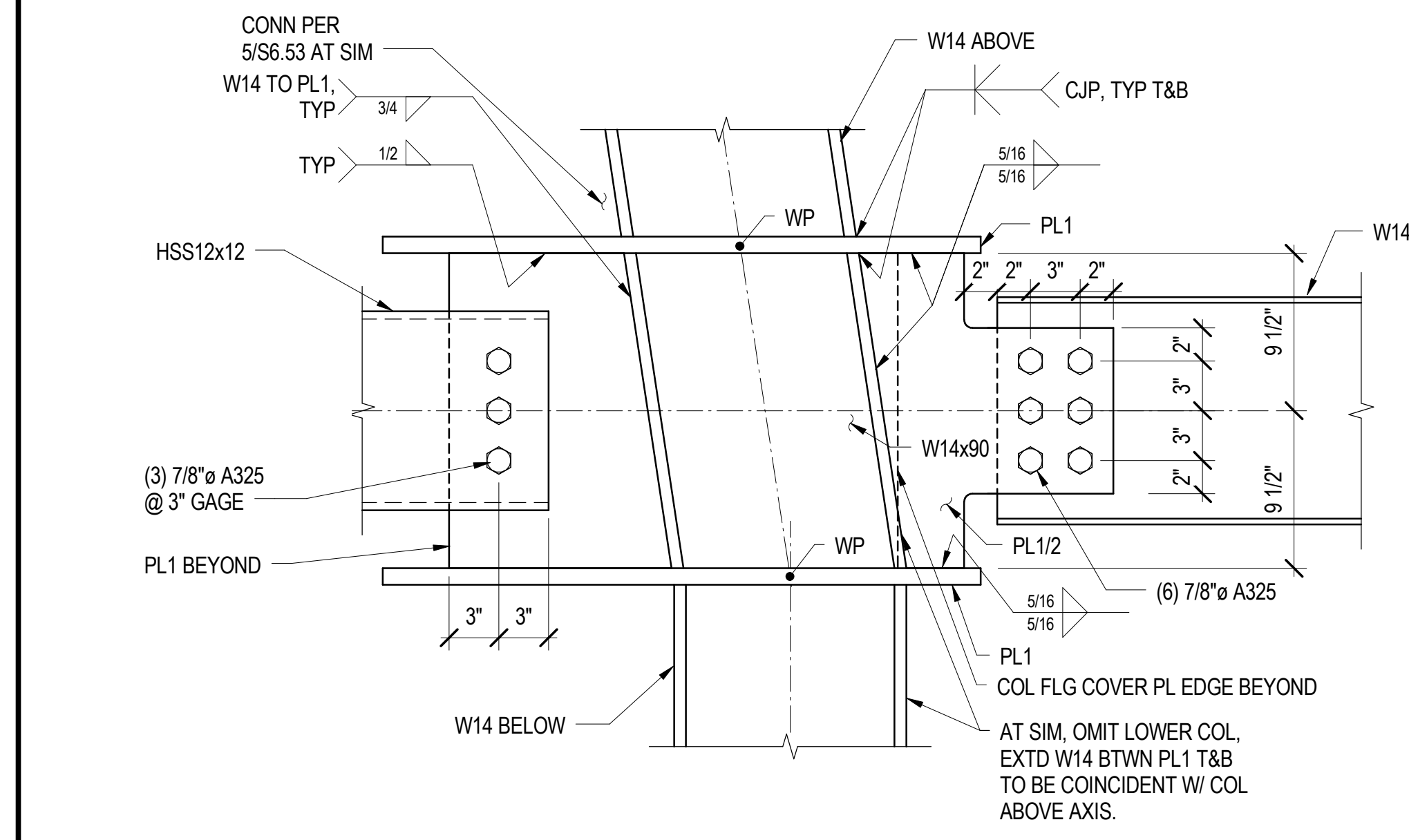
9 DETAIL  
1 1/2" = 1'-0"

NOTES:  
1. ALL PLATES IN THIS CONNECTION, SHOWN HERE OR IN SECTION ARE Fy= 50 KSI.



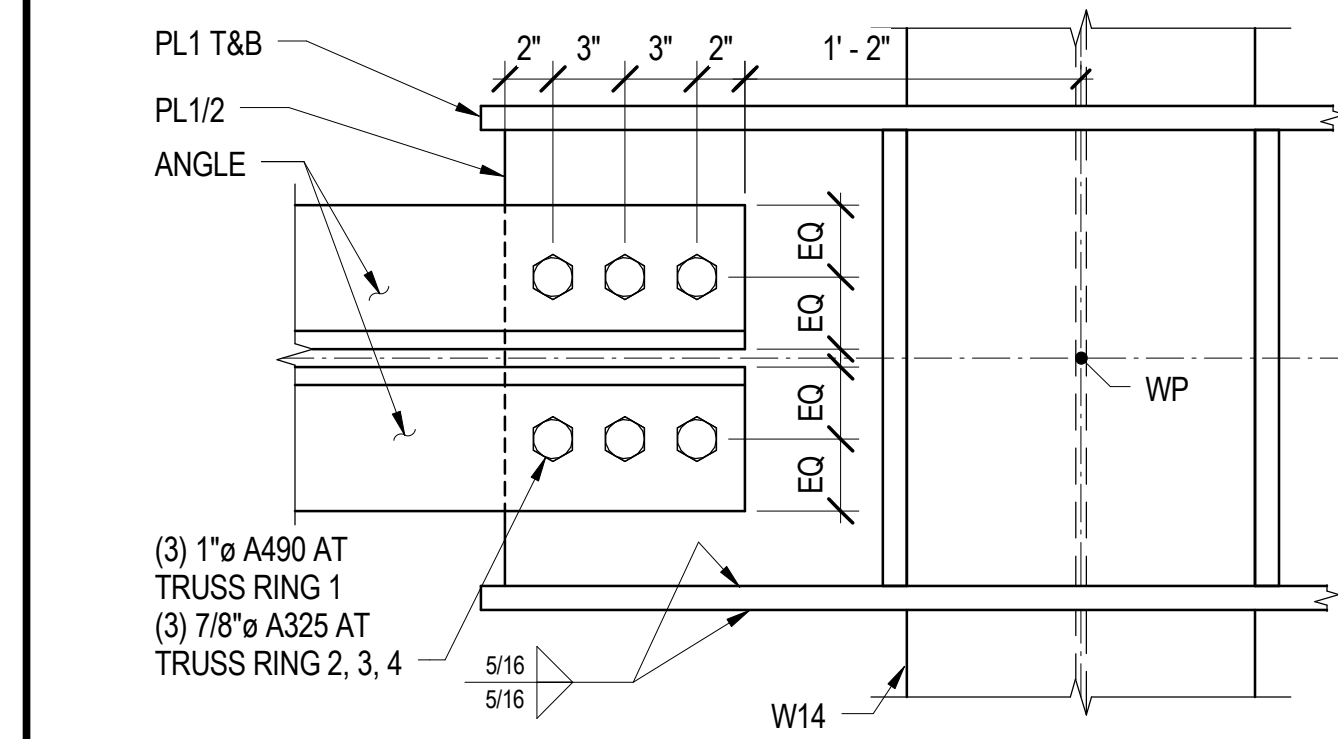
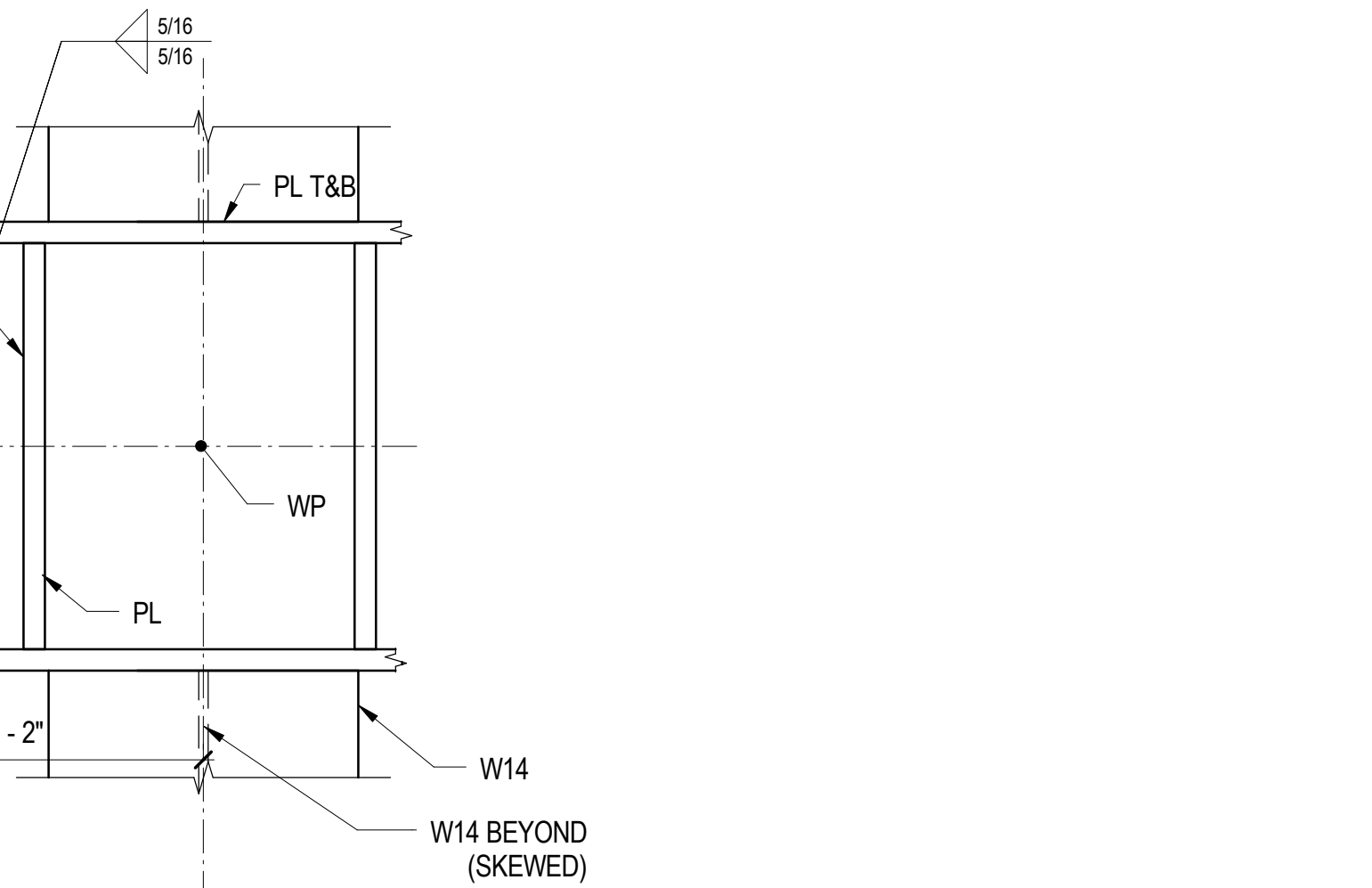
20 SECTION  
1 1/2" = 1'-0"

NOTES:  
1. ALL PLATES Fy = 50 KSI.



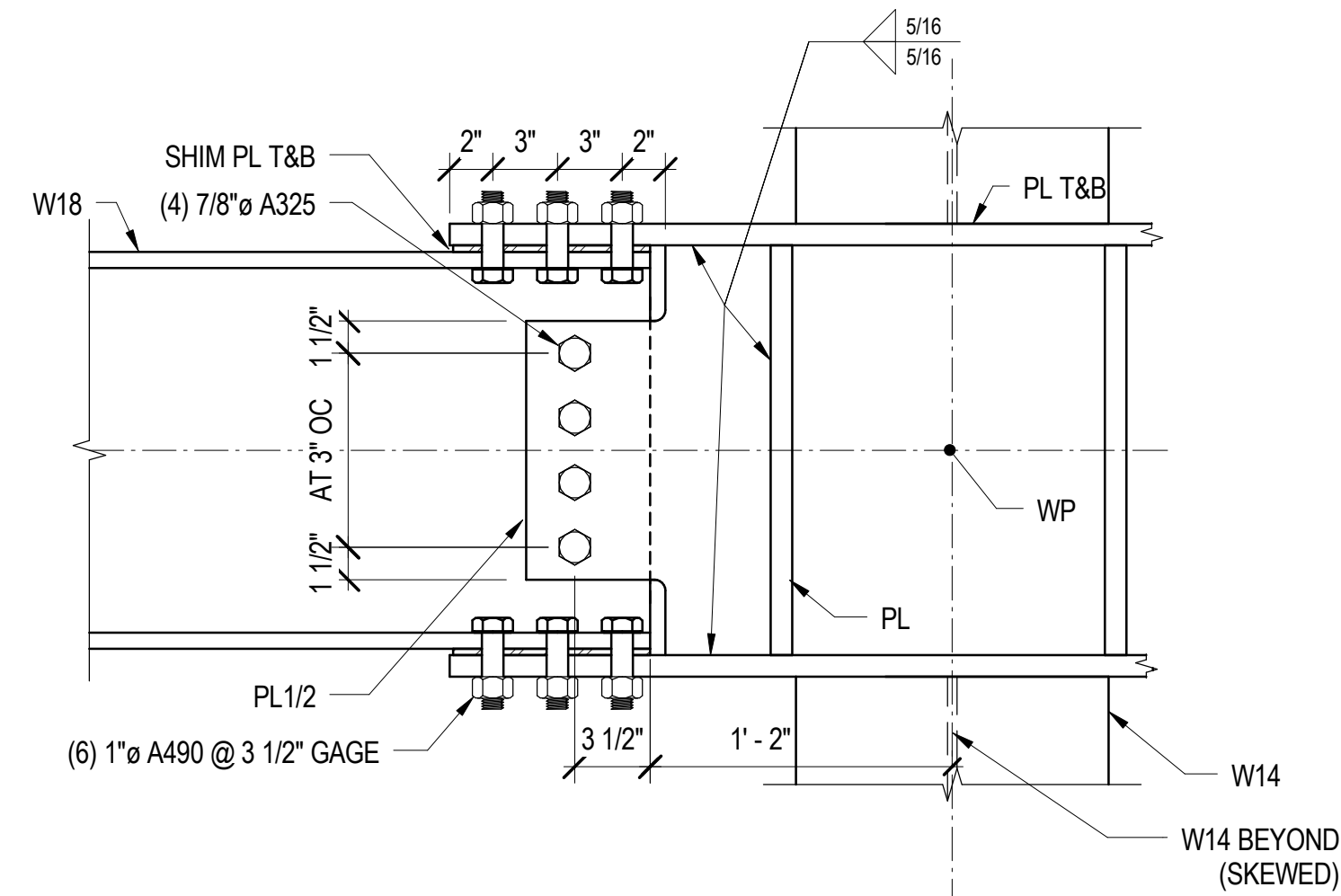
2 SECTION  
1 1/2" = 1'-0"

3 SECTION  
1 1/2" = 1'-0"



6 SECTION  
1 1/2" = 1'-0"

7 SECTION  
1 1/2" = 1'-0"





BOSTON PROPERTIES / HINES  
Owner

PELLI CLARKE PELLI ARCHITECTS  
Design Architect

KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record

MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer

WSP  
MEPPP Engineer

PWP LANDSCAPE ARCHITECTURE  
Landscape Architect

BKF ENGINEERS  
Civil Engineer

PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant

AON FIRE PROTECTION ENGINEERING  
Building Security

HWA PARKING  
Parking Consultant

ARUP  
Geotechnical Consultant

HLB LIGHTING DESIGN, INC.  
Lighting Consultant

CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant

MORRISON HERSHFIELD  
Curtain Wall Consultant

ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant

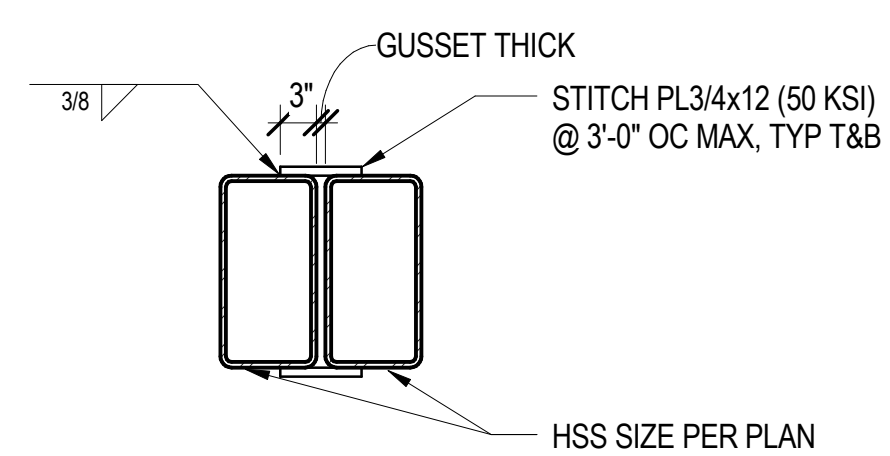
HMA CONSULTING  
Building Management and Controls Engineer

C.S. CAULKINS CO., INC.  
Window Washing Consultant

ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant

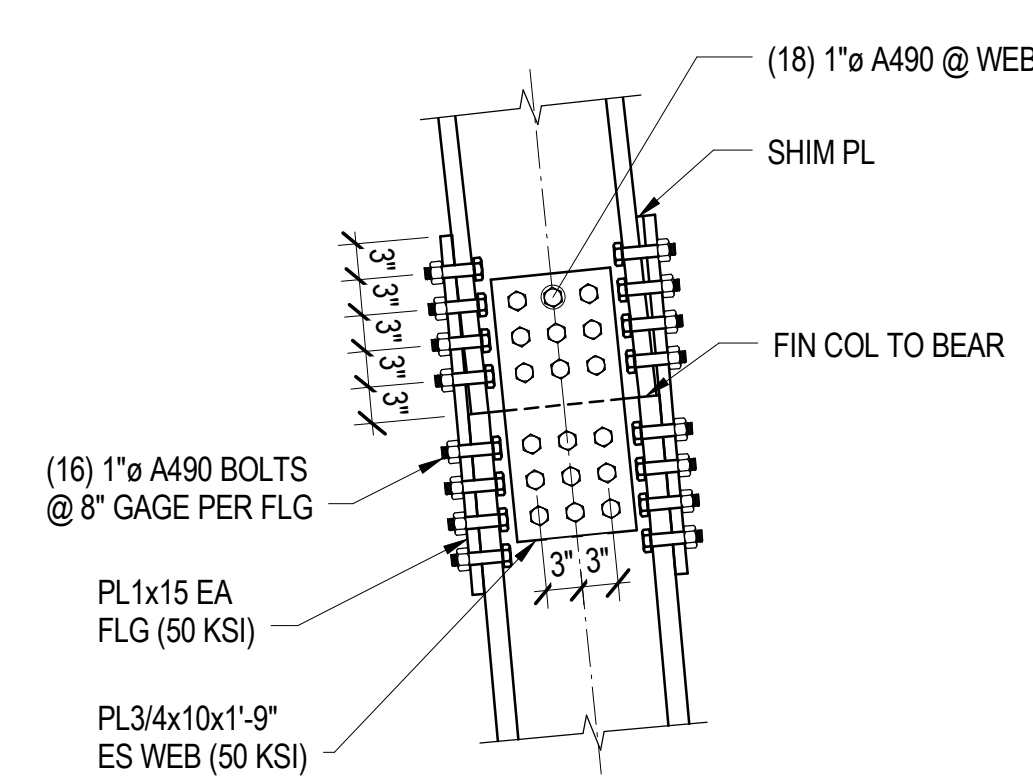
DEBRA NICHOLS DESIGN  
Graphic Design Consultant

ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



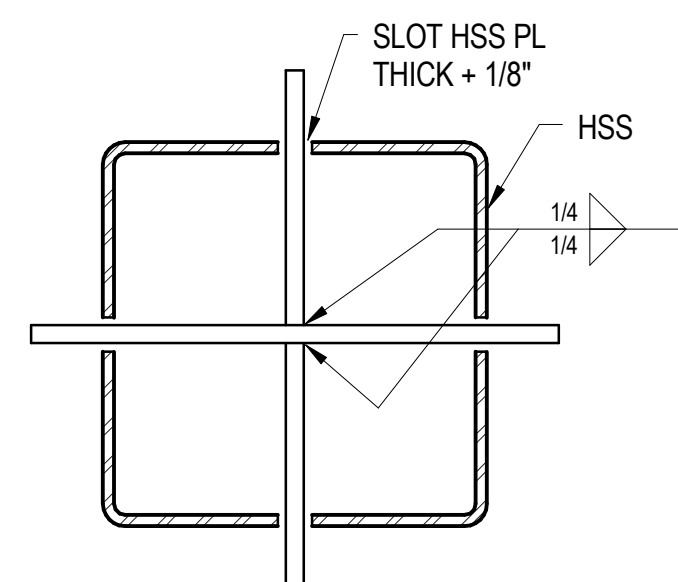
NOTES:  
1. EDGE OF FIRST STITCH PLATE SHALL BE WITHIN 3'-0" OF THE END OF HSS OR GUSSET PLATE CONNECTION.

1 SECTION  
3/4" = 1'-0"

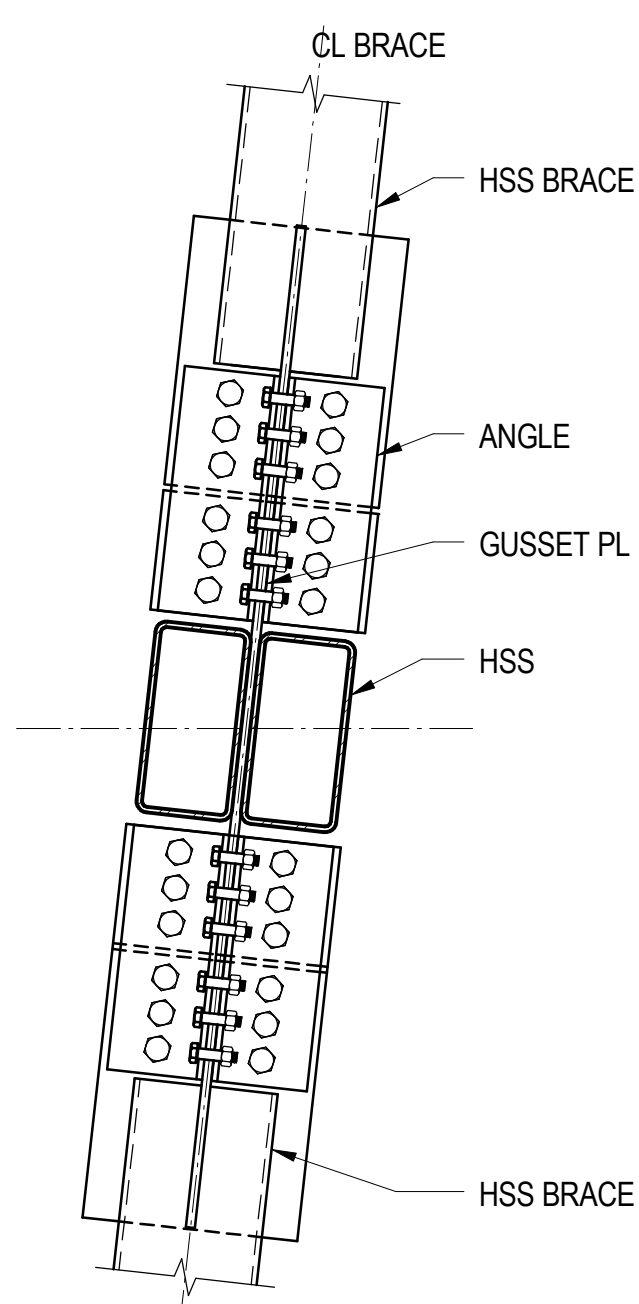


NOTES:  
1. ALL PLATES ARE Fy = 50 KSI.

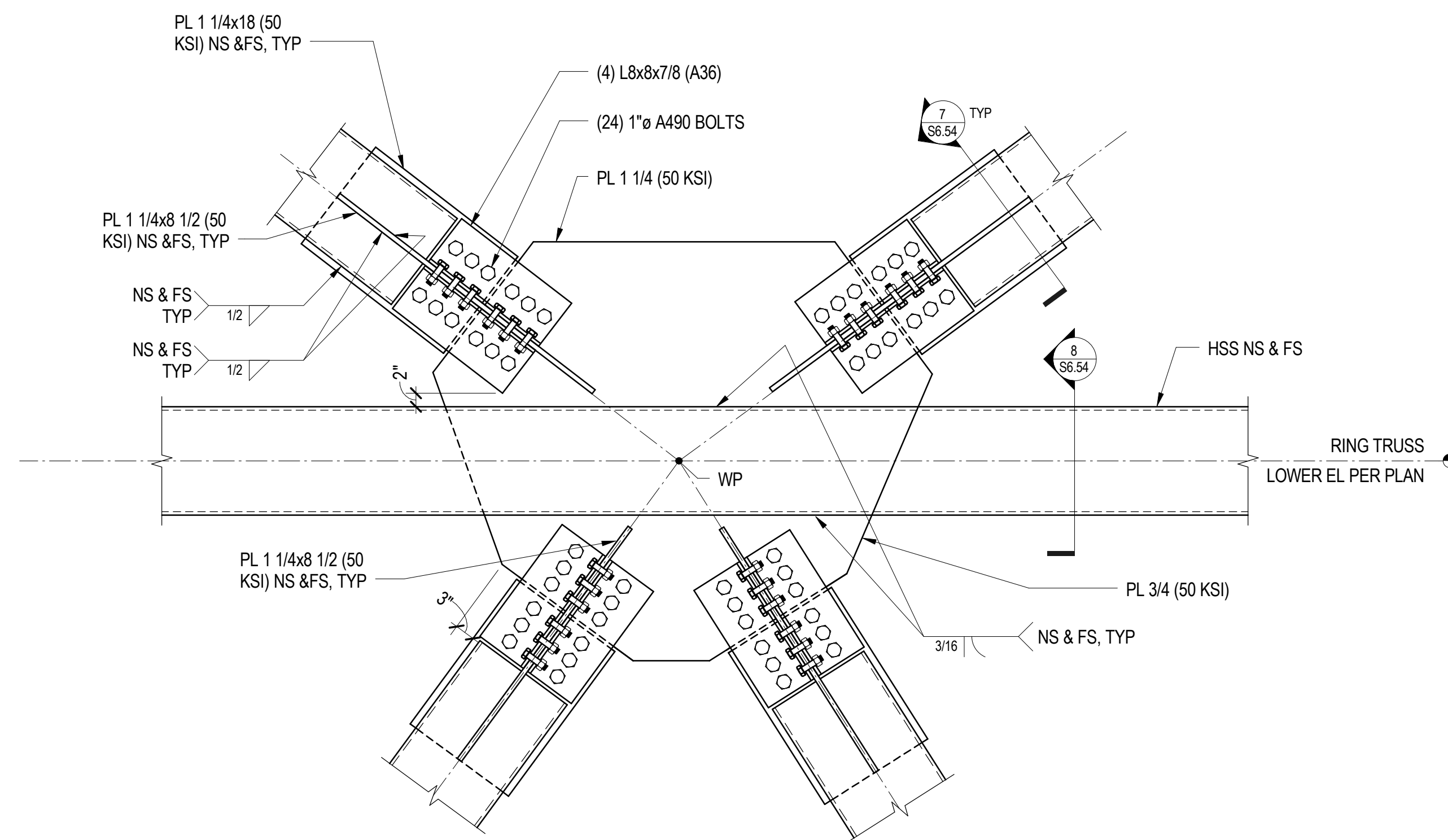
6 DETAIL  
3/4" = 1'-0"



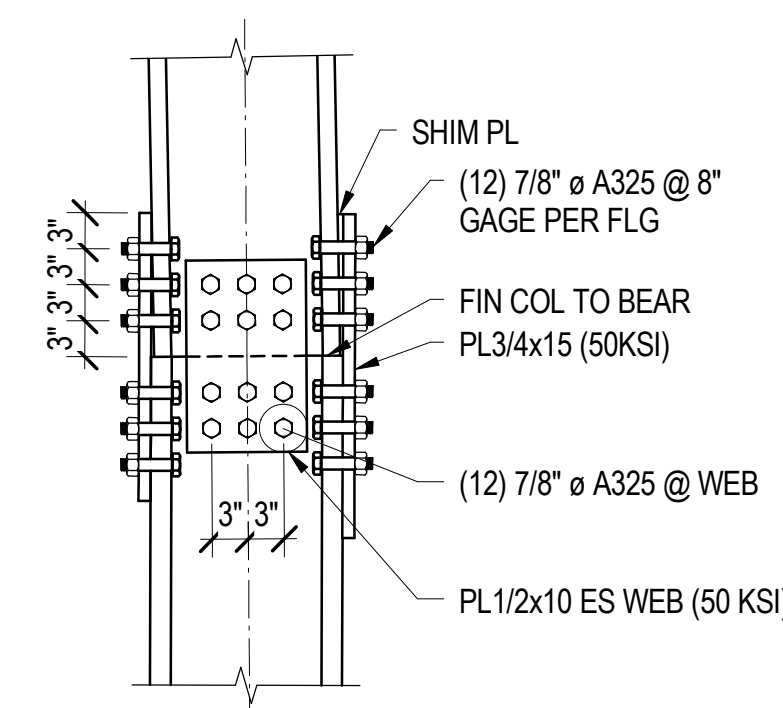
7 SECTION  
1 1/2" = 1'-0"



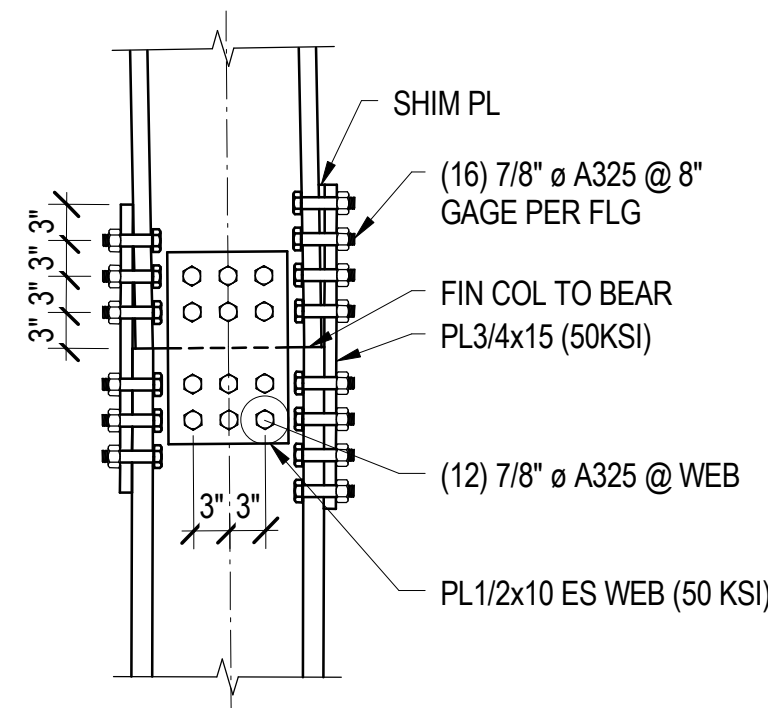
8 SECTION  
3/4" = 1'-0"



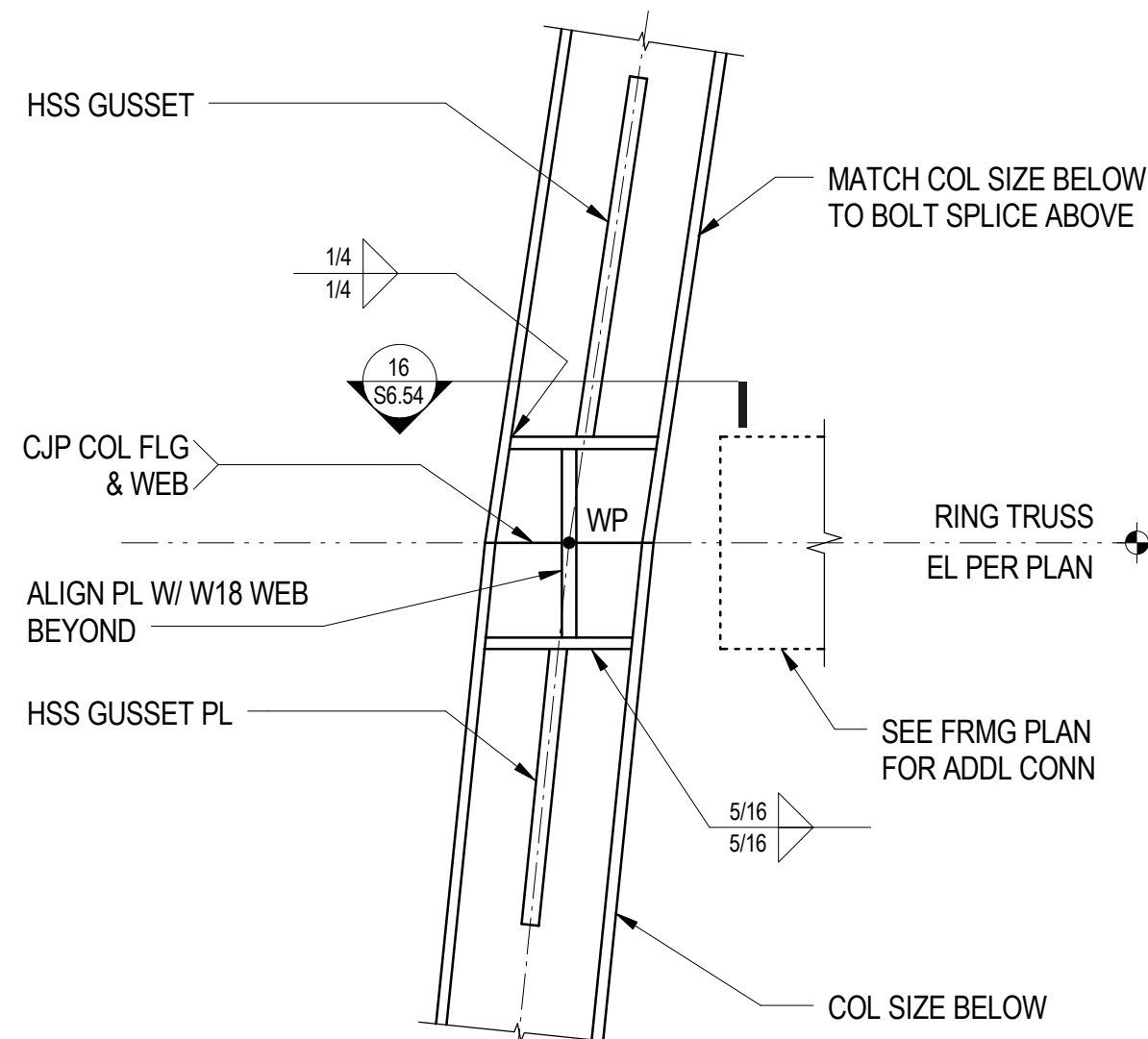
10 DETAIL  
3/4" = 1'-0"



11 DETAIL  
3/4" = 1'-0"

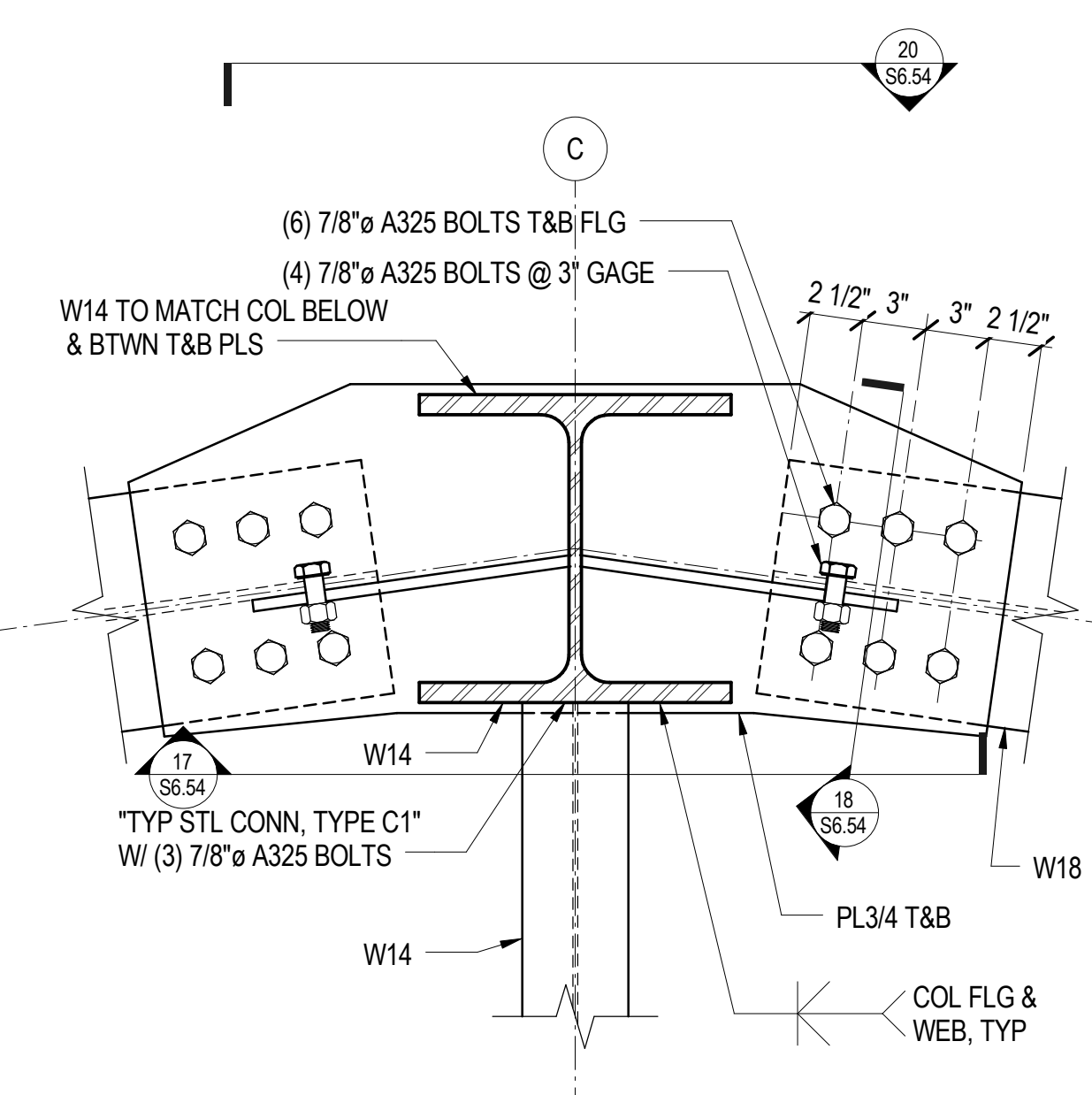


12 DETAIL  
3/4" = 1'-0"

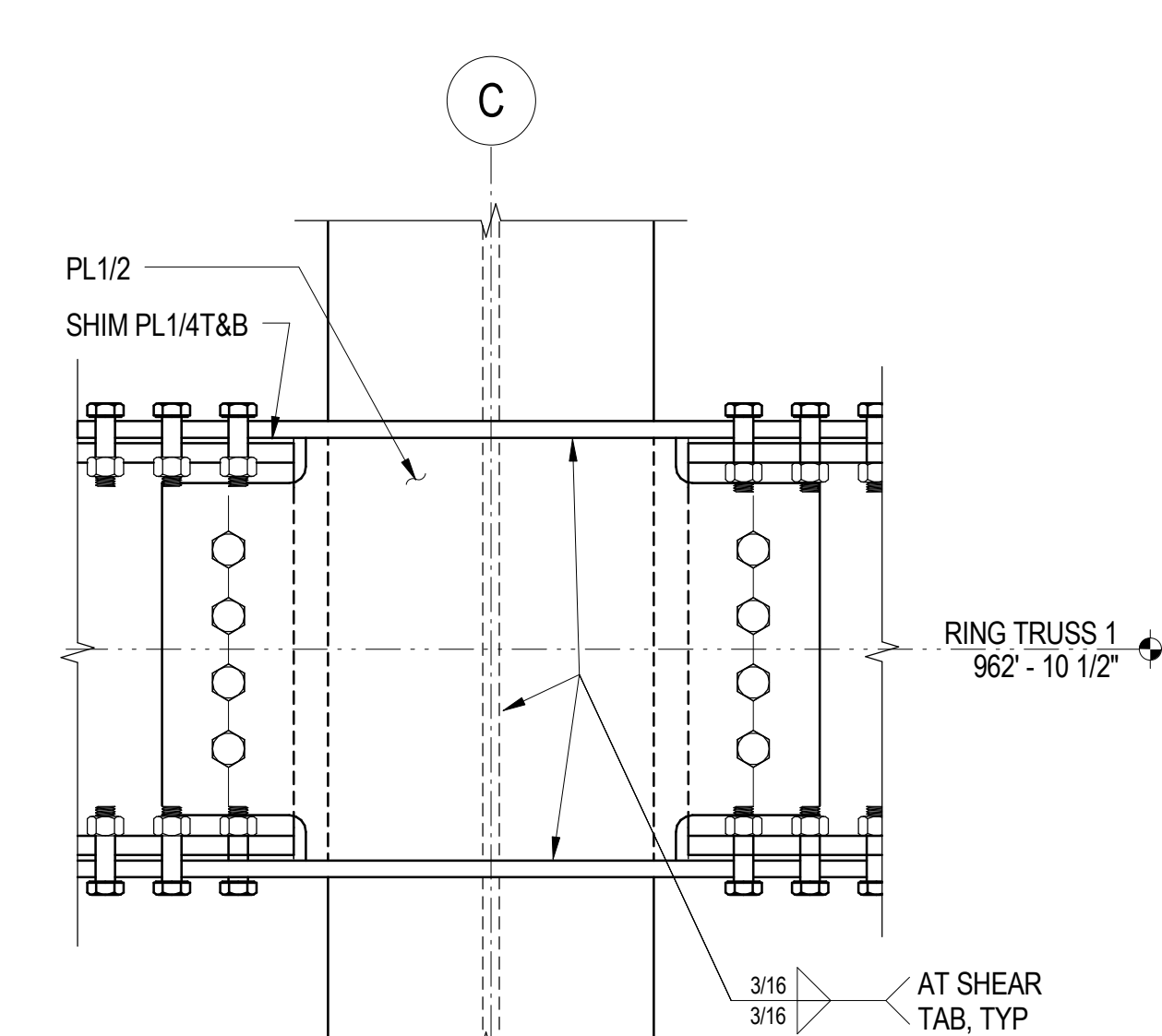


NOTES:  
1. AT TOP CONDITION. EXTEND COLUMN BELOW TO TOP OF STEEL AND OMIT HSS GUSSET PLATE ABOVE.

18 SECTION  
3/4" = 1'-0"

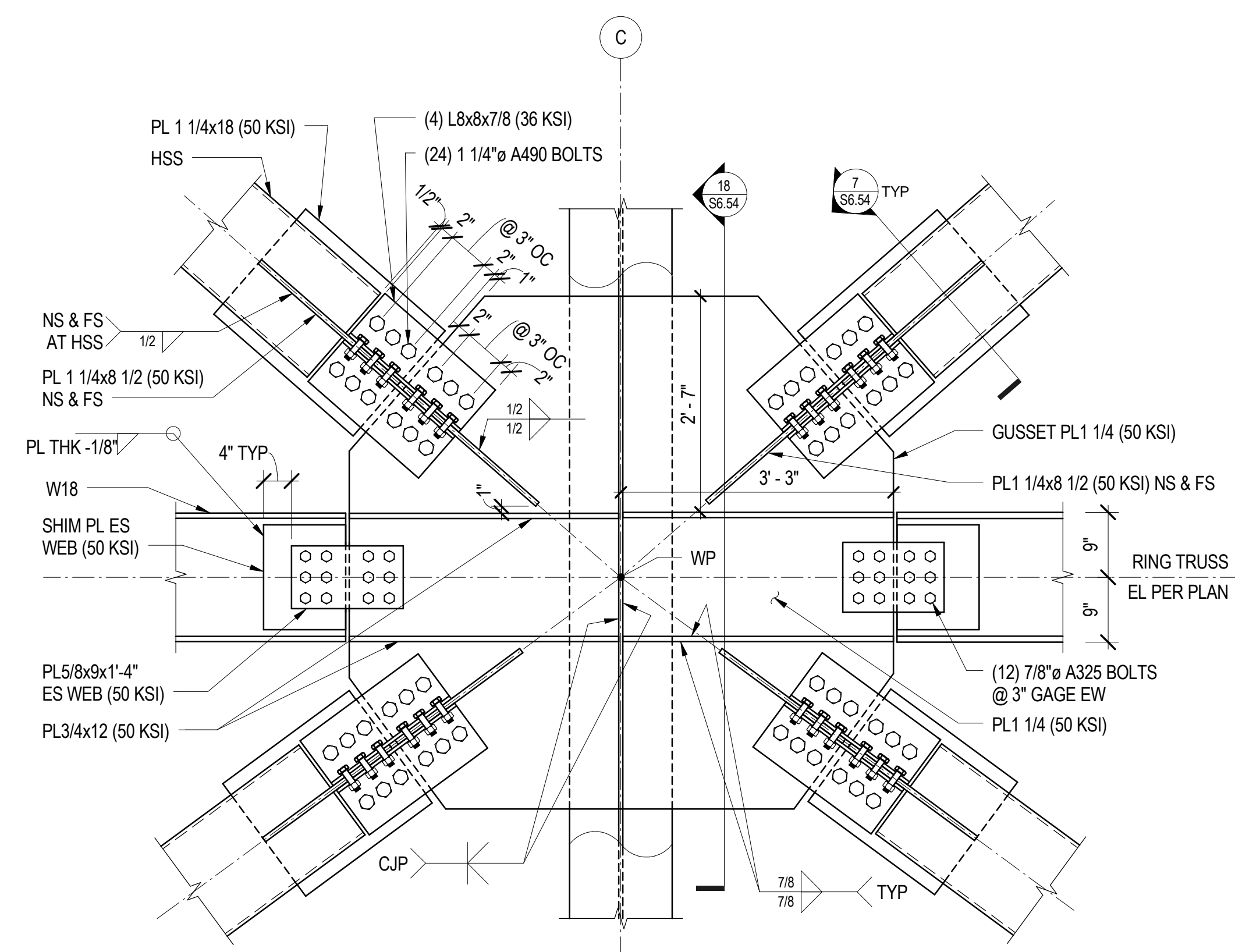


16 DETAIL  
1 1/2" = 1'-0"



NOTES:  
1. SEE 16/S6.54 FOR INFORMATION NOT SHOWN.

17 SECTION  
1 1/2" = 1'-0"



20 DETAIL  
3/4" = 1'-0"

NO.	DATE	STRUCTURAL BID	ISSUE
1	15 OCT 13	STRUCTURAL BID	1
2	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1	
3	12 DEC 13	ADDENDUM #2 PERMIT	
4	10 FEB 14	BID ADDENDUM #2	
5	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1	
6	02 MAY 14	GMP	

DRAWING TITLE

**TOP FEATURE SECTIONS AND DETAILS**





**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFP Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

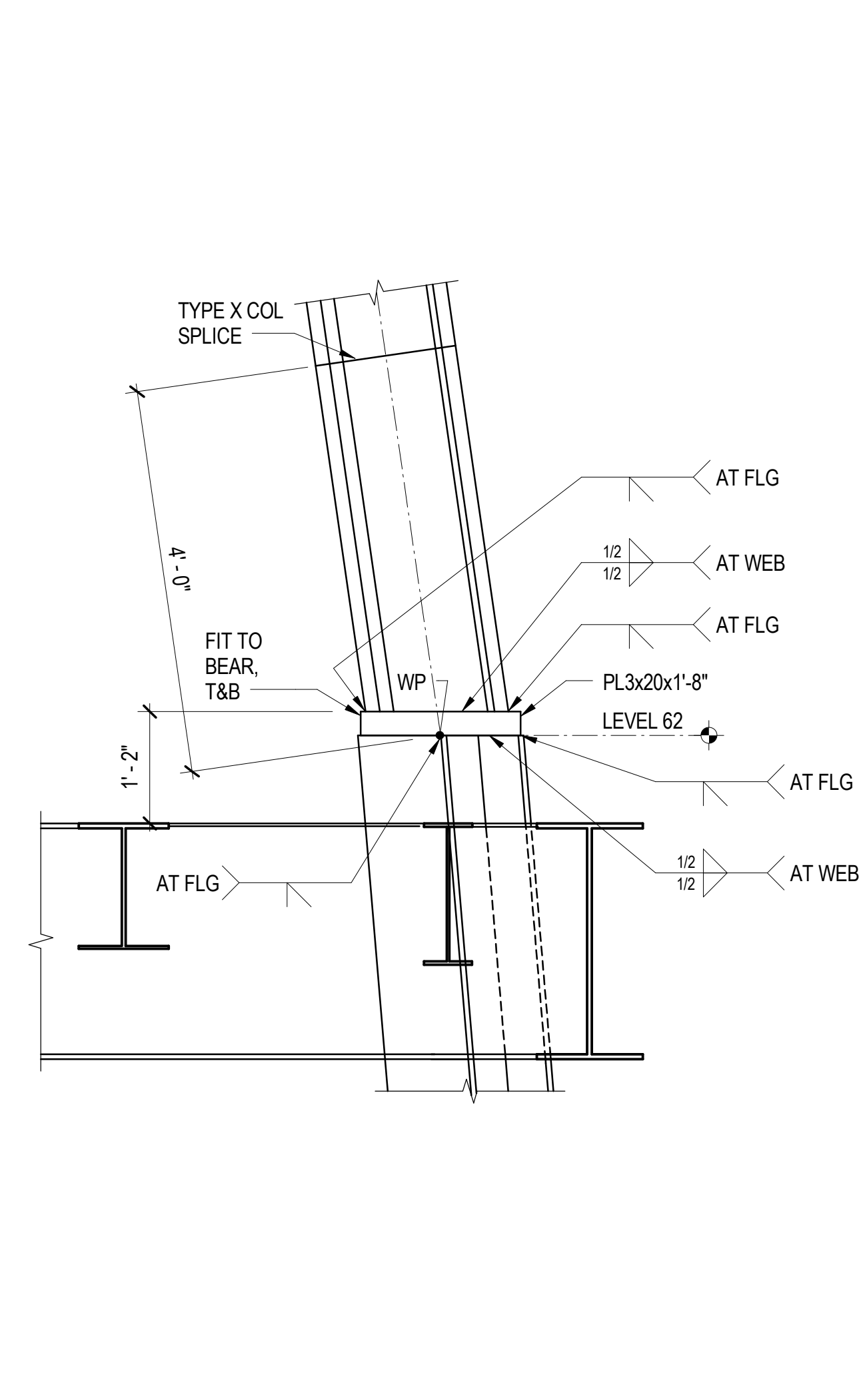
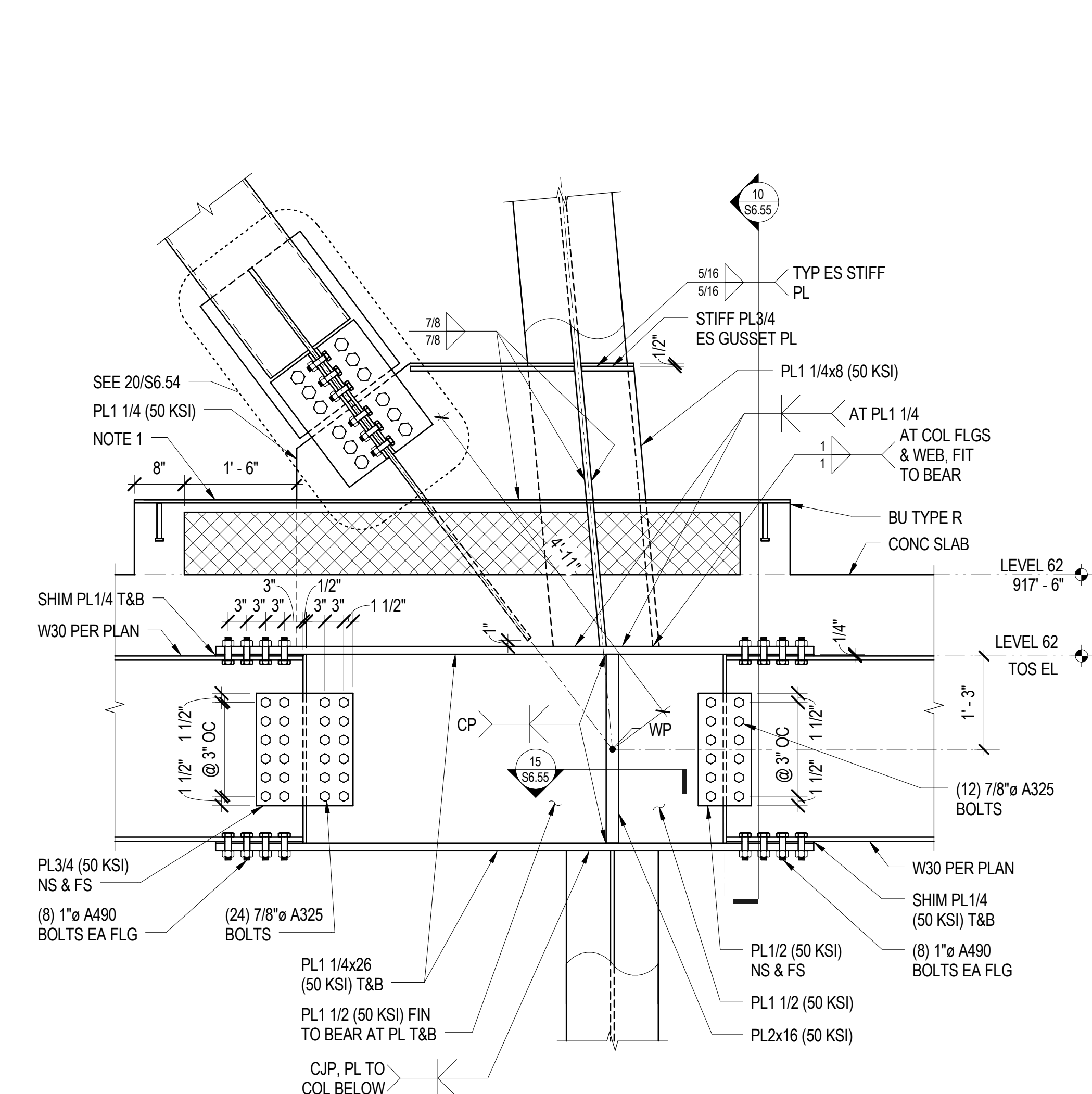
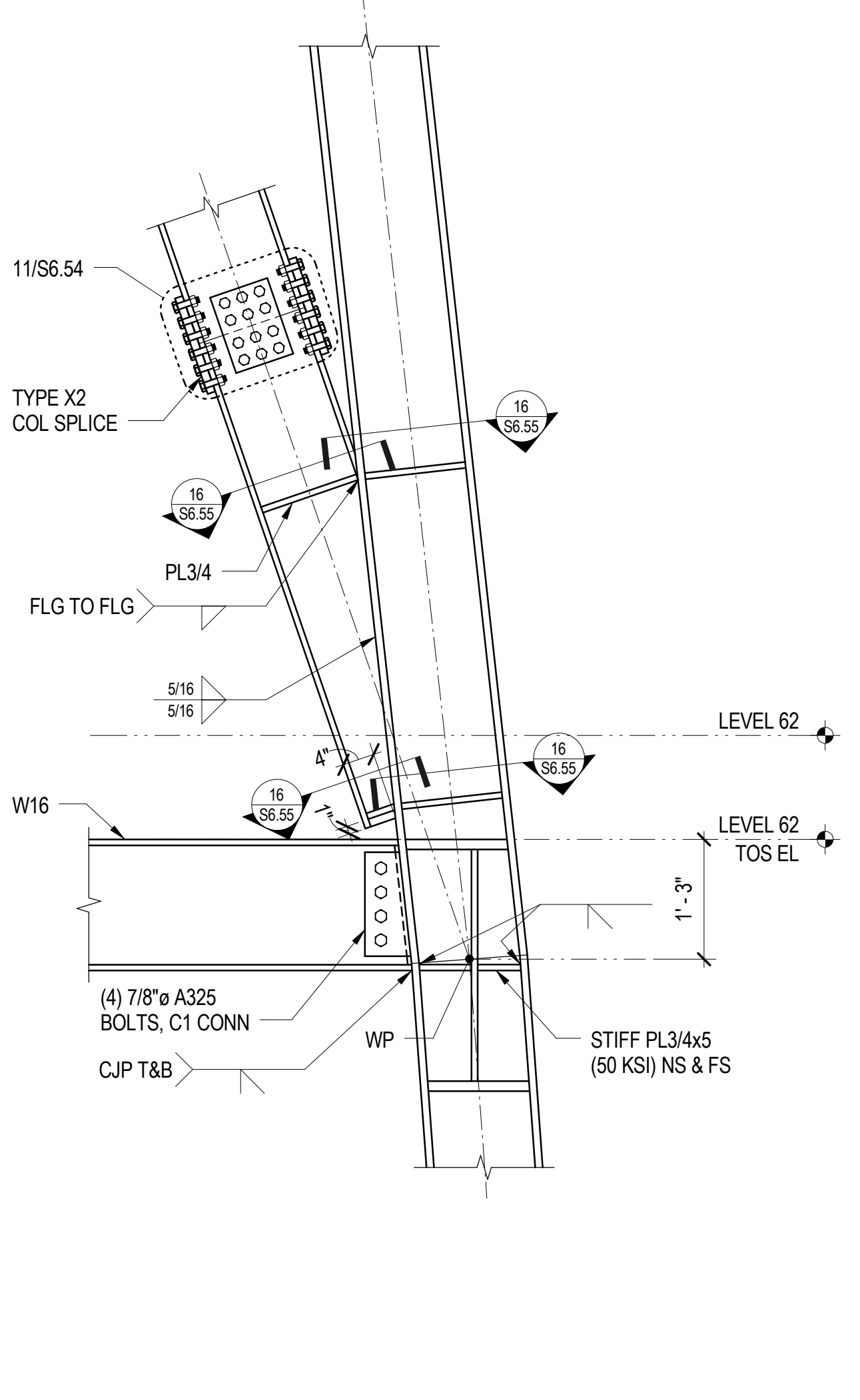
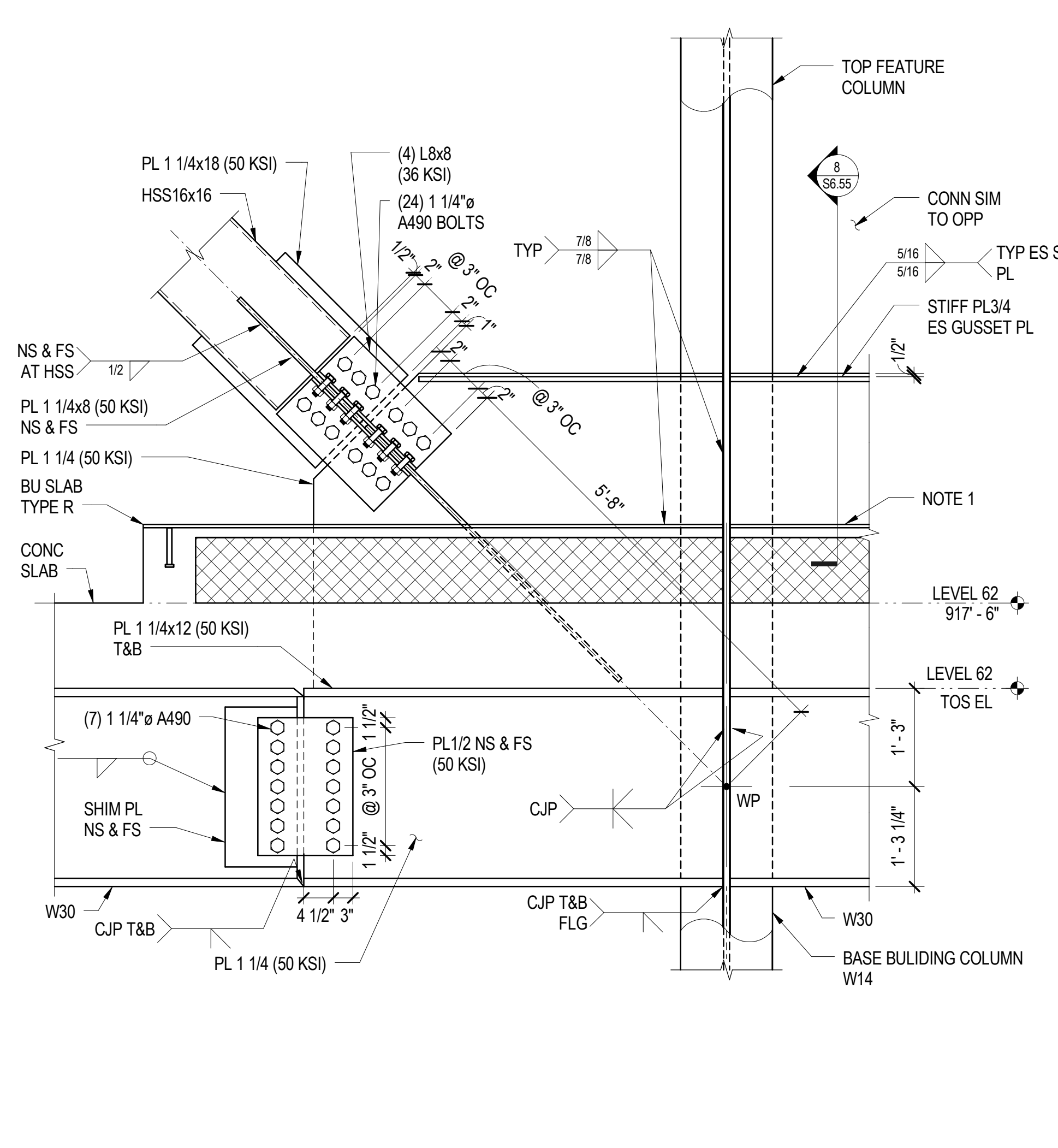
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



**NOTES:**

1. PL3/16 FOR WATERPROOFING CLOSURE. FIELD CUT TO FIT. WELD ALL SEAMS AND JOINTS. PROVIDE 1/2\"/>

**NOTES:**

1. PL3/16 FOR WATERPROOFING CLOSURE. FIELD CUT TO FIT. WELD ALL SEAMS AND JOINTS. PROVIDE 1/2\"/>

**NOTES:**

1. PL3/16 FOR WATERPROOFING CLOSURE. FIELD CUT TO FIT. WELD ALL SEAMS AND JOINTS. PROVIDE 1/2\"/>

**NOTES:**

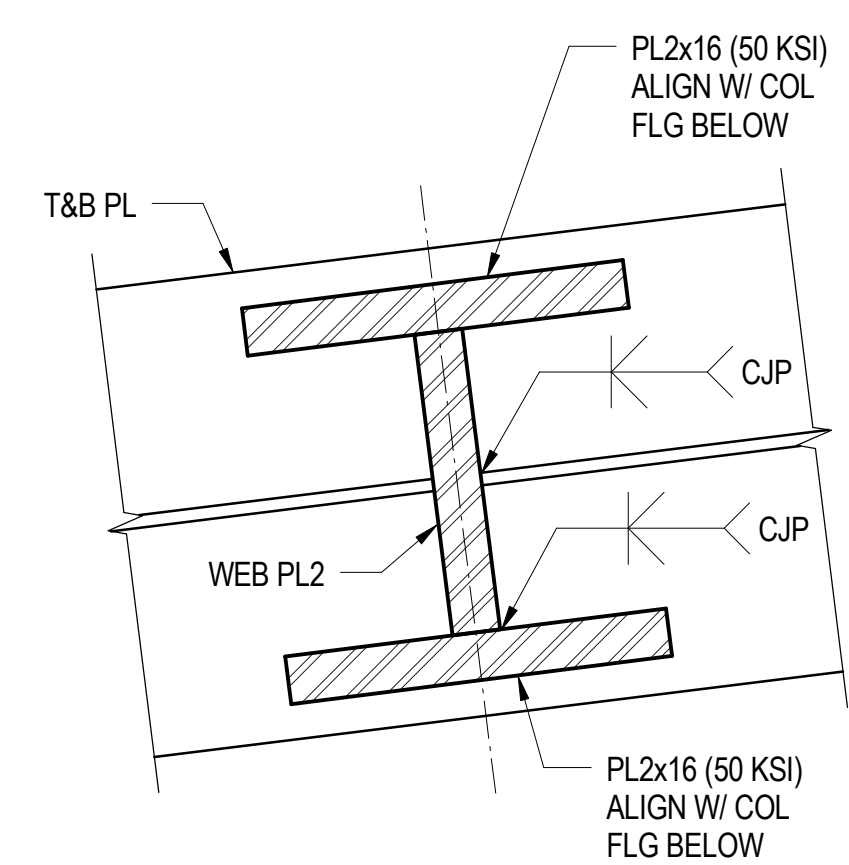
1. PL3/16 FOR WATERPROOFING CLOSURE. FIELD CUT TO FIT. WELD ALL SEAMS AND JOINTS. PROVIDE 1/2\"/>

7  
3/4" = 1'-0"

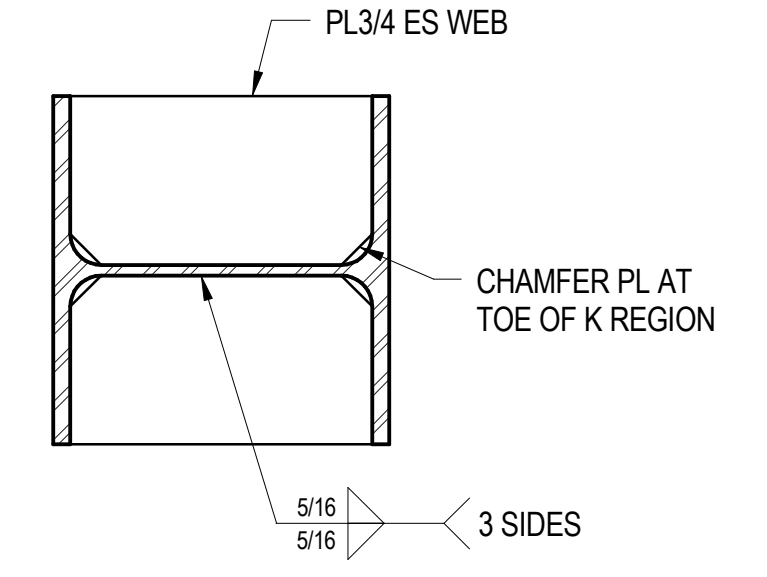
8  
3/4" = 1'-0"

9  
3/4" = 1'-0"

10  
3/4" = 1'-0"



15  
1 1/2" = 1'-0"



16  
1 1/2" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	IBID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

CAD FILENAME: \_\_\_\_\_  
DRAWING TITLE: \_\_\_\_\_

**TOP FEATURE SECTIONS AND DETAILS**

PROJECT NO. 08044  
DRAWING NUMBER S6.55



**BOSTON PROPERTIES / HINES**  
Owner

**PELLI CLARKE PELLI ARCHITECTS**  
Design Architect

**KENDALL/HEATON ASSOCIATES, INC.**  
Architect of Record

**MAGNUSON KLEMENCIC ASSOCIATES**  
Structural Engineer

**WSP**  
MEFPF Engineer

**PWP LANDSCAPE ARCHITECTURE**  
Landscape Architect

**BKF ENGINEERS**  
Civil Engineer

**PERSOHN/HAHN ASSOCIATES, INC.**  
Elevator Consultant

**AON FIRE PROTECTION ENGINEERING**  
Building Security

**HWA PARKING**  
Parking Consultant

**ARUP**  
Geotechnical Consultant

**HLB LIGHTING DESIGN, INC.**  
Lighting Consultant

**CERAMI AND ASSOCIATES, INC.**  
Acoustical Consultant

**MORRISON HERSHFIELD**  
Curtain Wall Consultant

**ENVIRONMENTAL BUILDING STRATEGIES**  
LEED Consultant

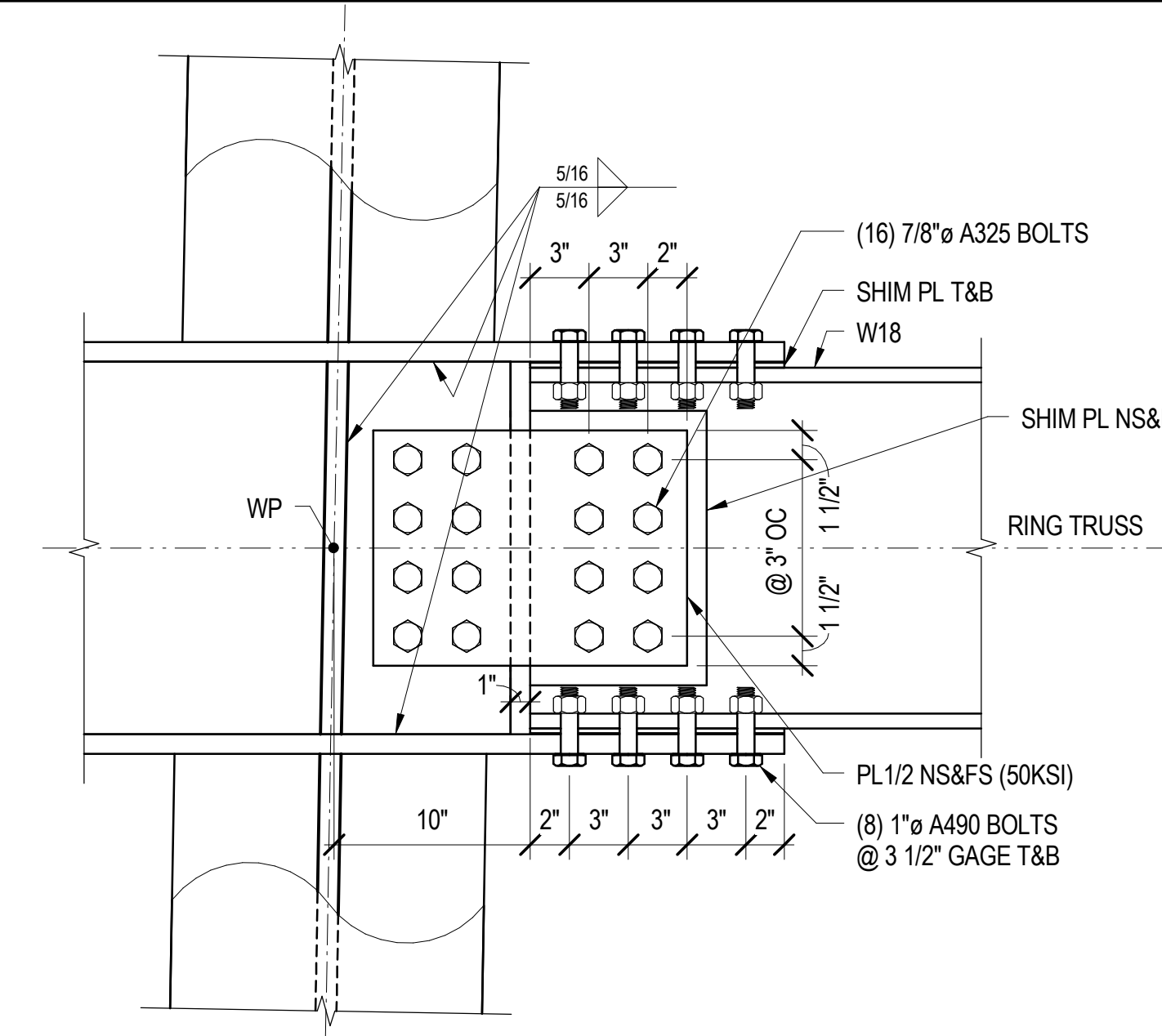
**HMA CONSULTING**  
Building Management and Controls Engineer

**C.S. CAULKINS CO., INC.**  
Window Washing Consultant

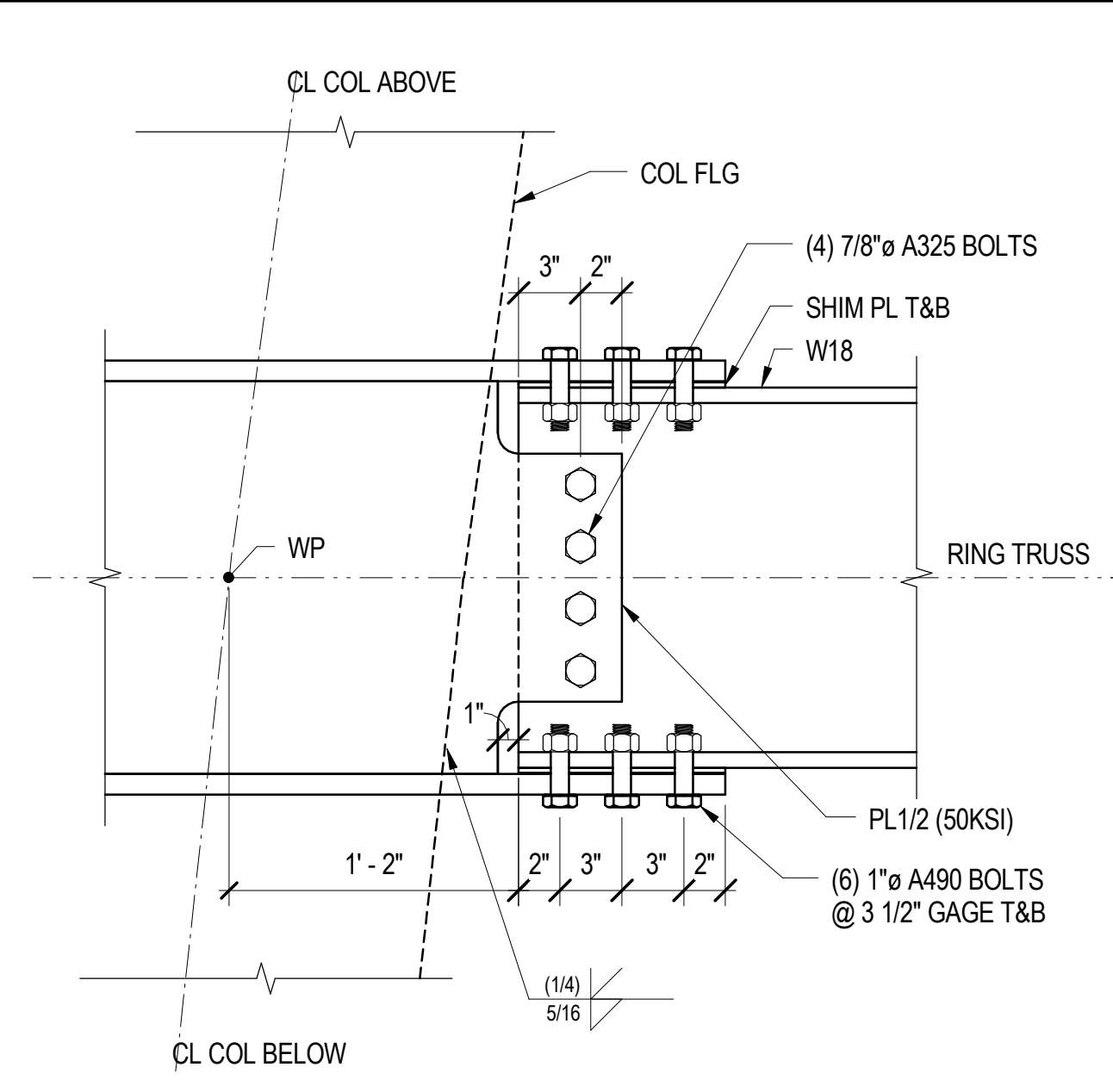
**ENGINEERING SPECIALTIES GROUP**  
Aerial Tram Consultant

**DEBRA NICHOLS DESIGN**  
Graphic Design Consultant

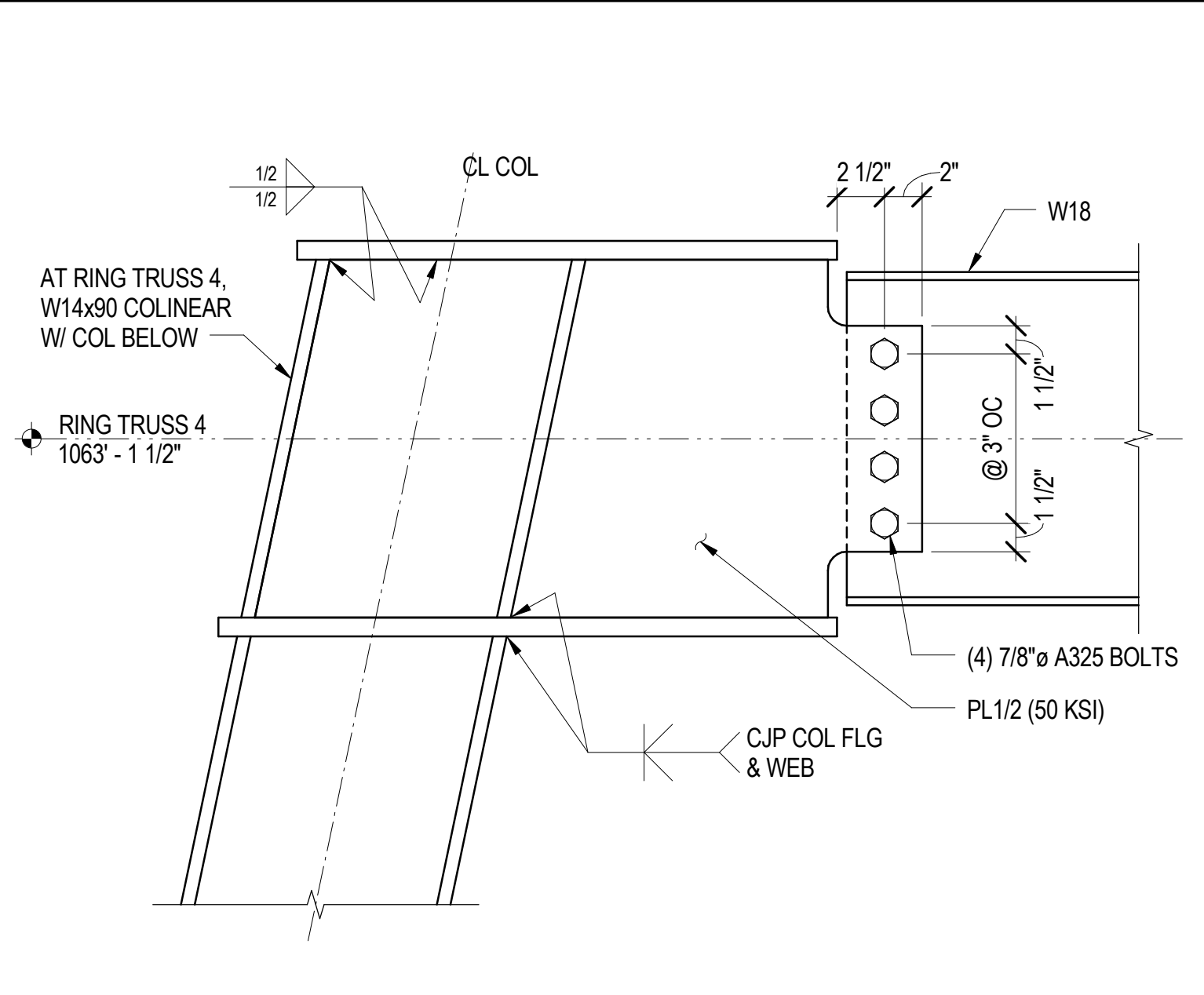
**ROYSTON HANAMOTO ALLEY & ABEY**  
Landscape Architect of Record



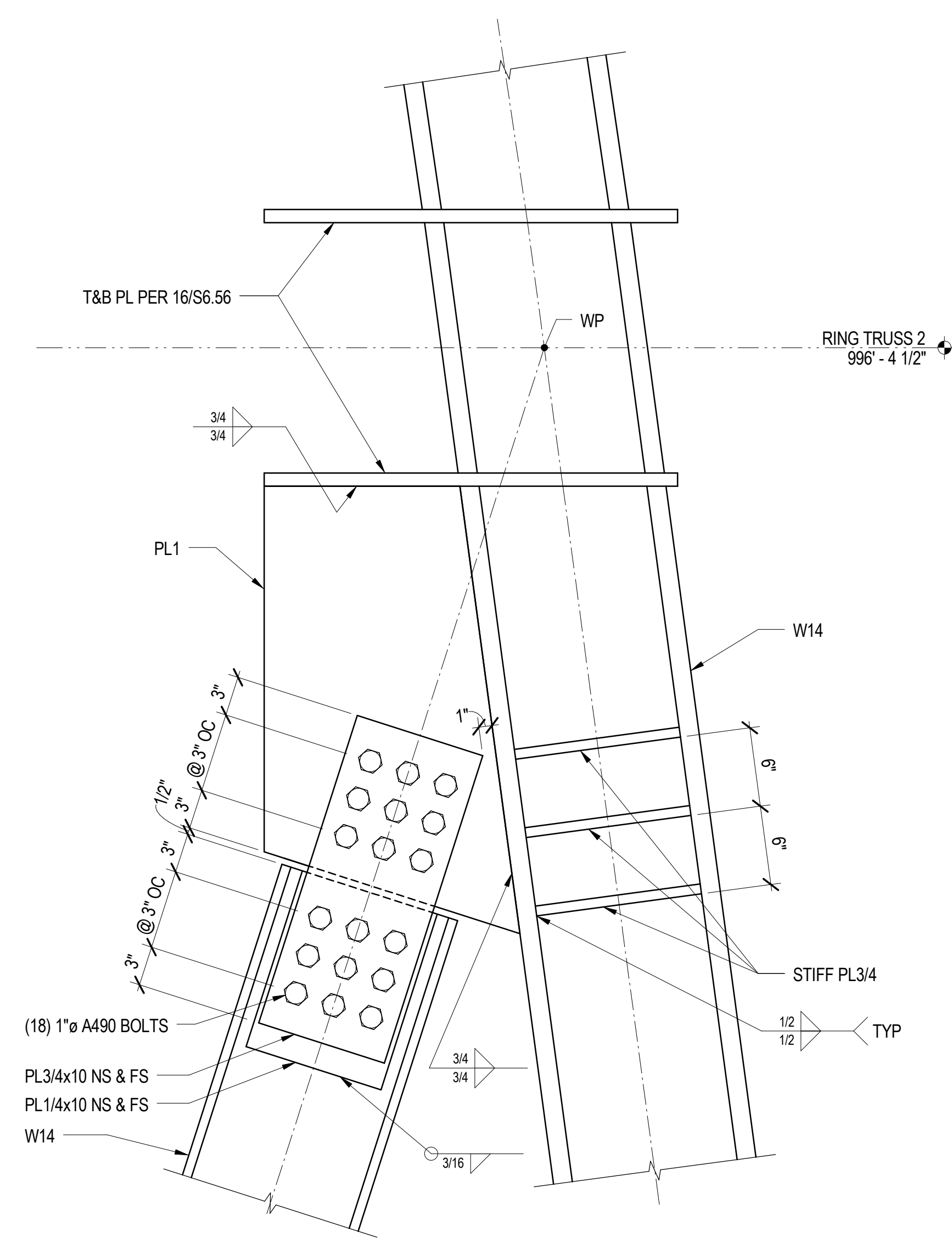
**3 SECTION**  
1 1/2" = 1'-0"



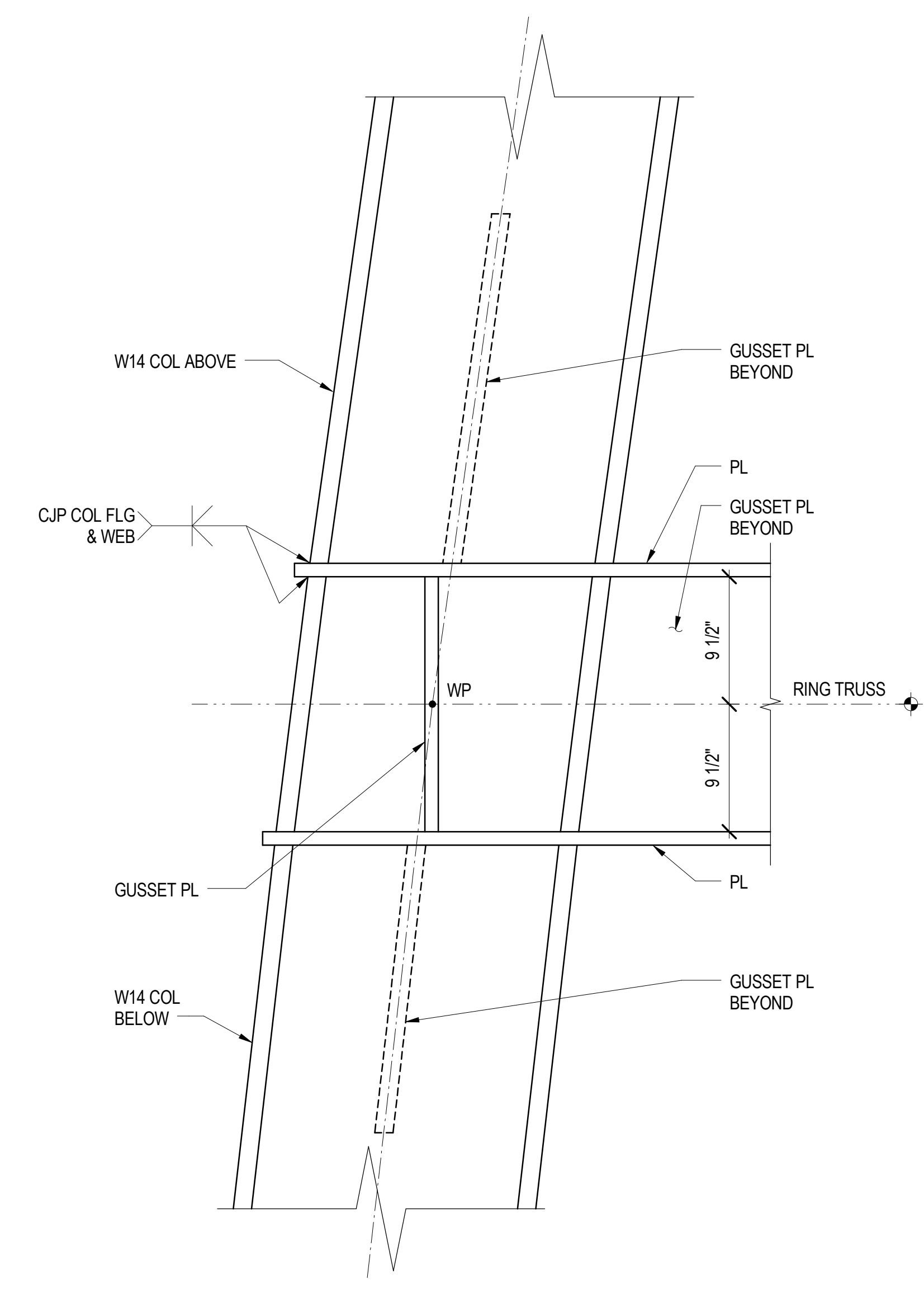
**4 SECTION**  
1 1/2" = 1'-0"



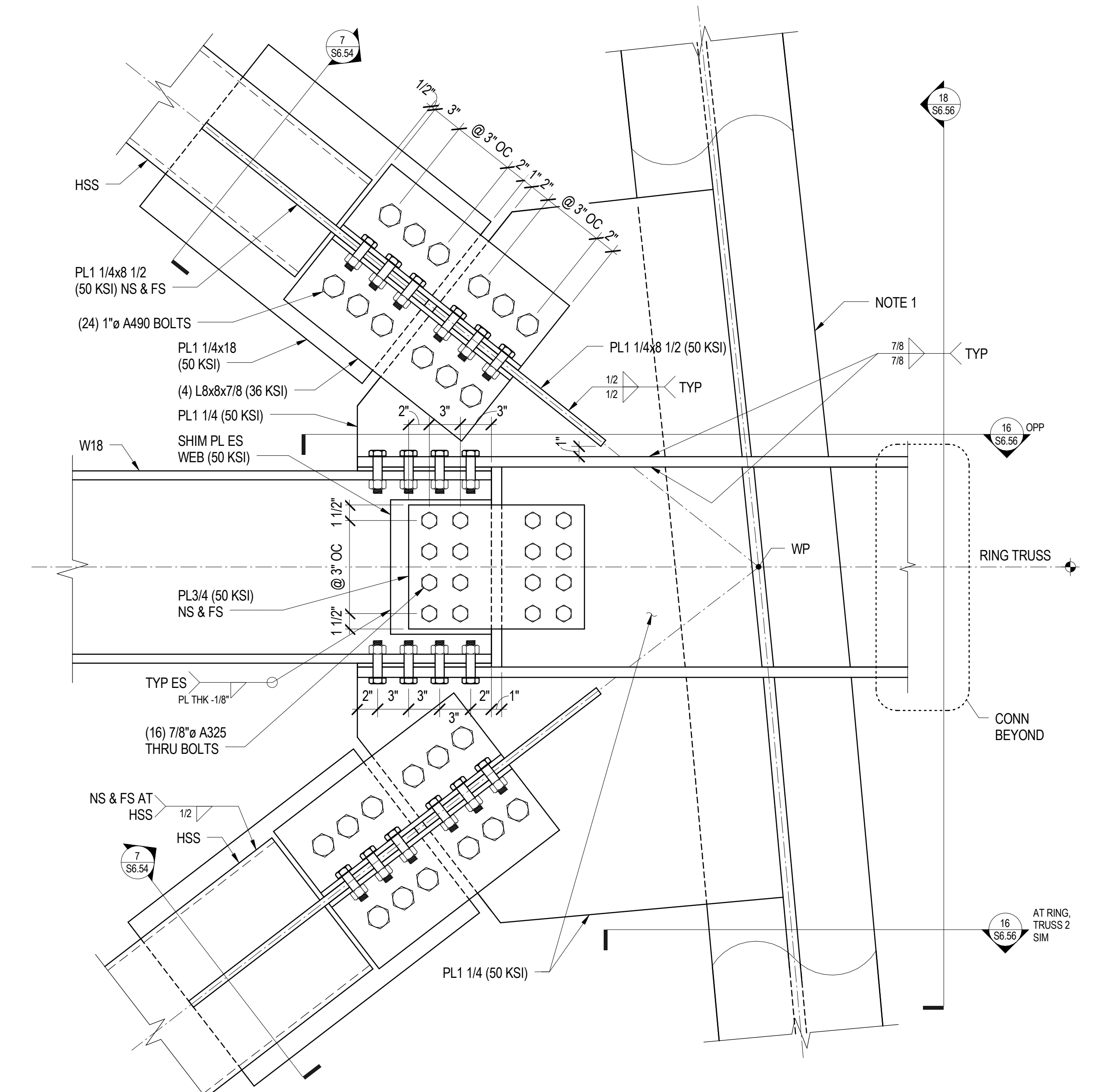
**5 SECTION**  
1 1/2" = 1'-0"



**11 DETAIL**  
1 1/2" = 1'-0"



**18 SECTION**  
1 1/2" = 1'-0"



**20 DETAIL**  
1 1/2" = 1'-0"

**NOTES:**  
1. AT TOP CONNECTION, EXTEND COLUMN BELOW TOP OF STEEL AND OMIT HSS GUSSET ABOVE.

5/1/2014 12:04:36 PM C:\Revit Projects\Transbay\Twr\Transbay\Twr\_WS2013.rvt

**16 DETAIL**  
1 1/2" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

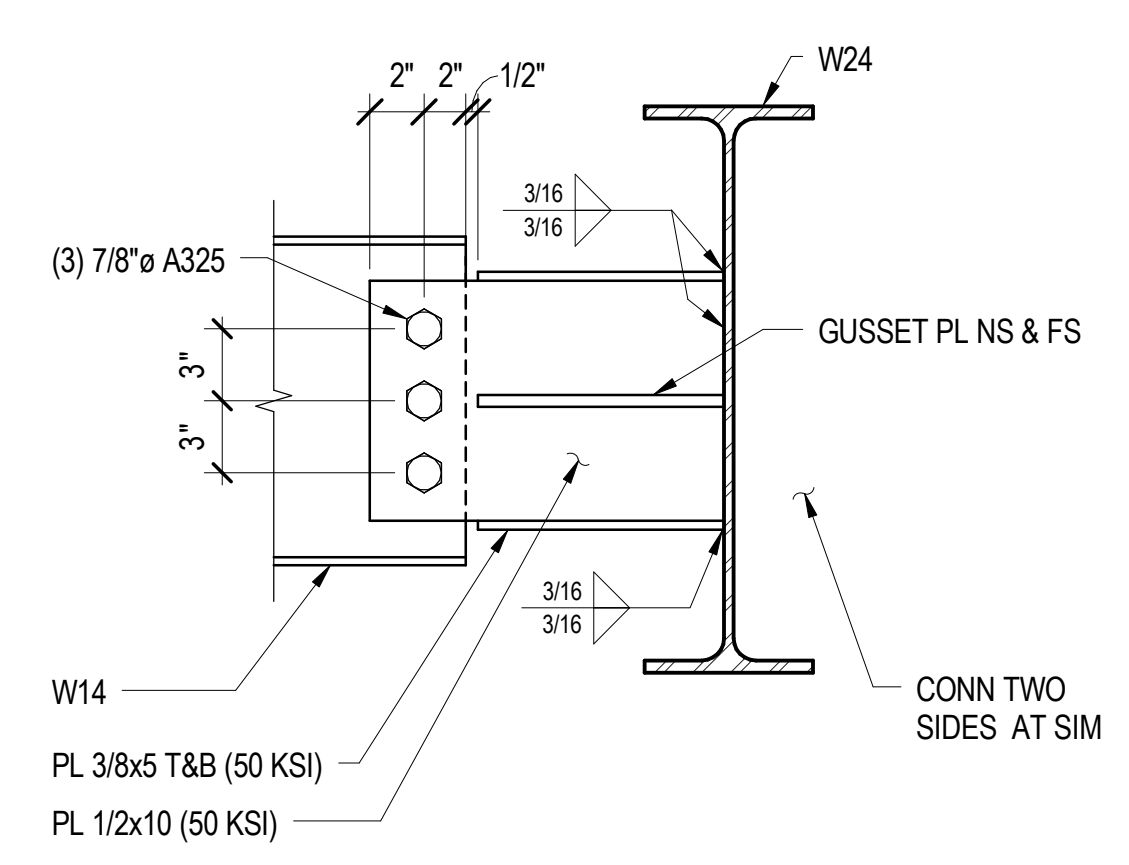
DRAWING TITLE

**TOP FEATURE SECTIONS AND DETAILS**

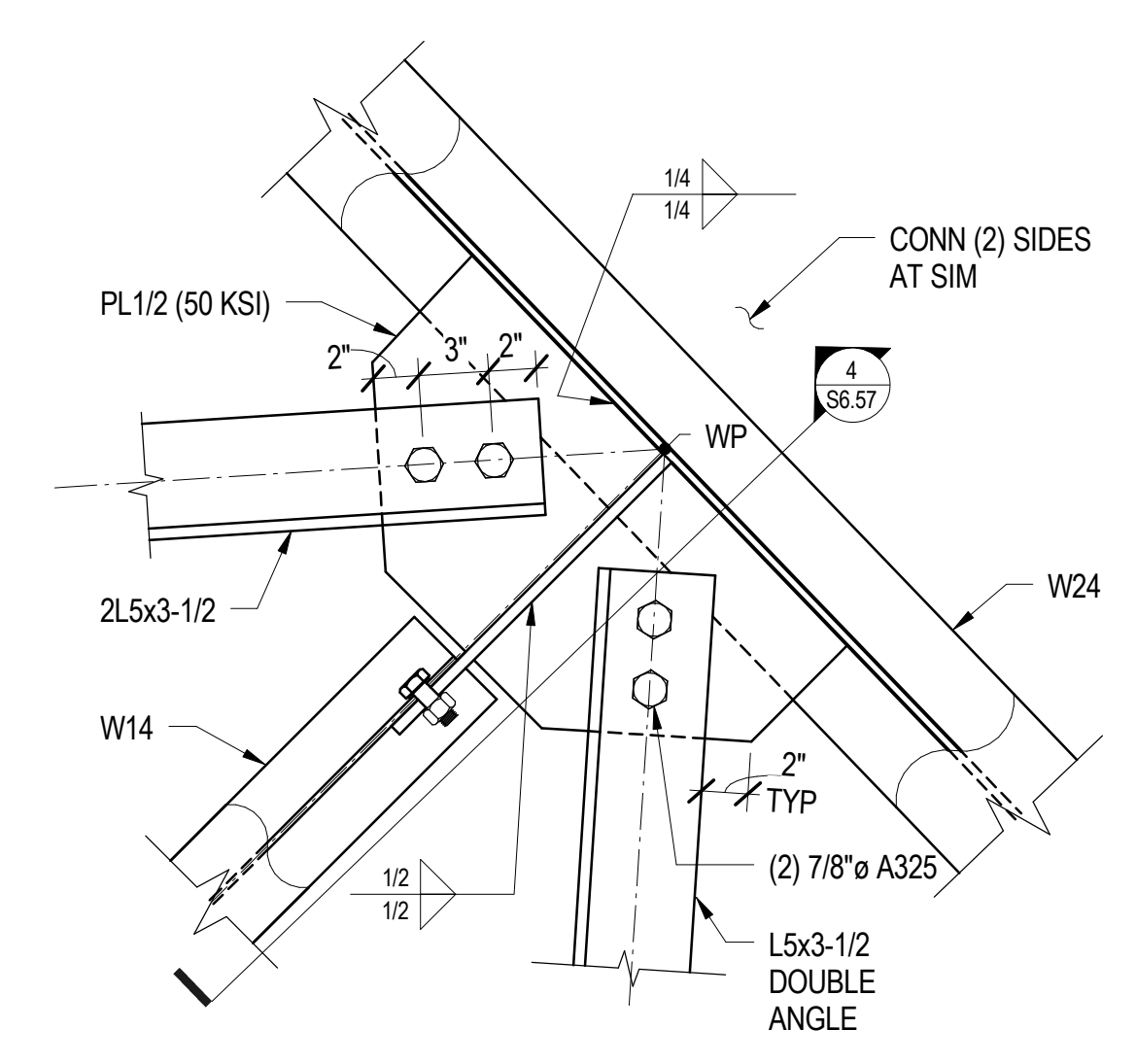
NO. PROJECT NO. 08044 DRAWING NUMBER S6.56



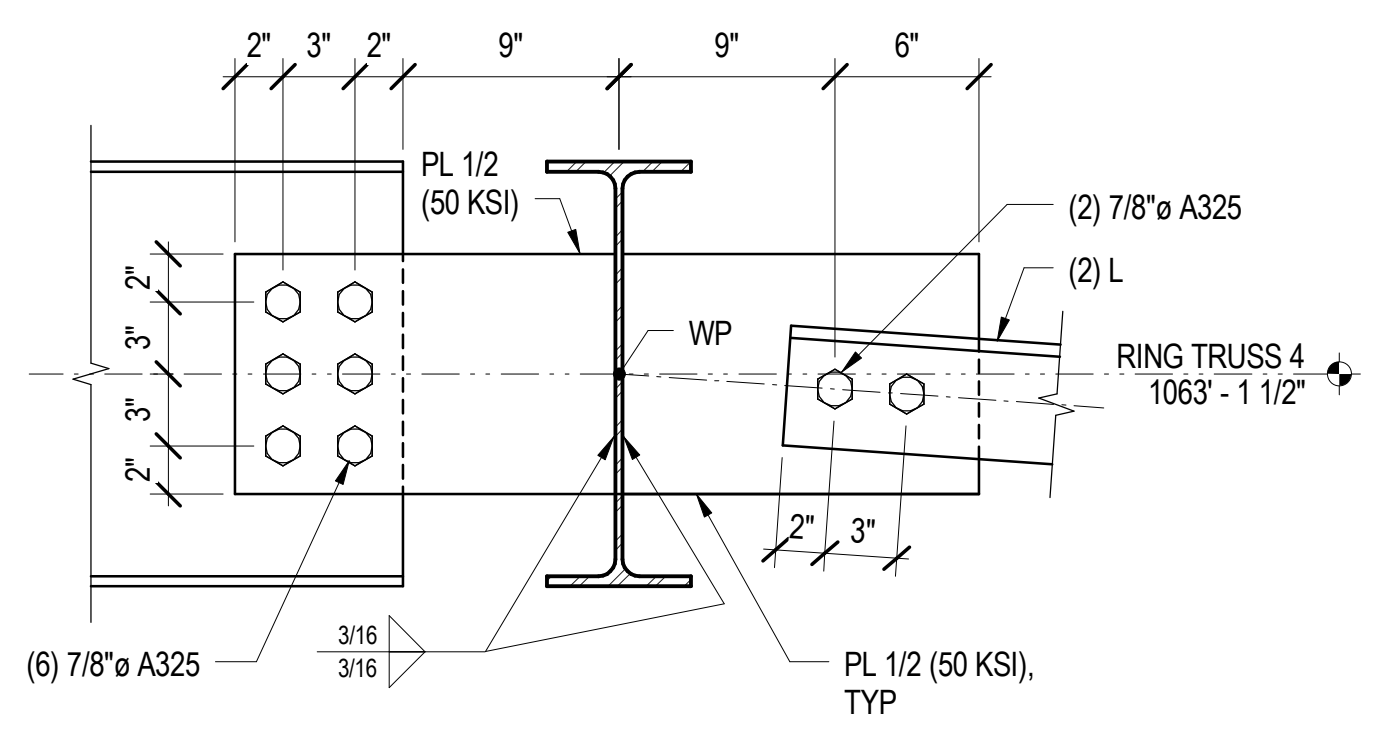
- BOSTON PROPERTIES / HINES  
Owner
- PELLI CLARKE PELLI ARCHITECTS  
Design Architect
- KENDALL/HEATON ASSOCIATES, INC.  
Architect of Record
- MAGNUSON KLEMENCIC ASSOCIATES  
Structural Engineer
- WSP  
MEFPF Engineer
- PWP LANDSCAPE ARCHITECTURE  
Landscape Architect
- BKF ENGINEERS  
Civil Engineer
- PERSOHN/HAHN ASSOCIATES, INC.  
Elevator Consultant
- AON FIRE PROTECTION ENGINEERING  
Building Security
- HWA PARKING  
Parking Consultant
- ARUP  
Geotechnical Consultant
- HLB LIGHTING DESIGN, INC.  
Lighting Consultant
- CERAMI AND ASSOCIATES, INC.  
Acoustical Consultant
- MORRISON HERSHFIELD  
Curtain Wall Consultant
- ENVIRONMENTAL BUILDING STRATEGIES  
LEED Consultant
- HMA CONSULTING  
Building Management and Controls Engineer
- C.S. CAULKINS CO., INC.  
Window Washing Consultant
- ENGINEERING SPECIALTIES GROUP  
Aerial Tram Consultant
- DEBRA NICHOLS DESIGN  
Graphic Design Consultant
- ROYSTON HANAMOTO ALLEY & ABEY  
Landscape Architect of Record



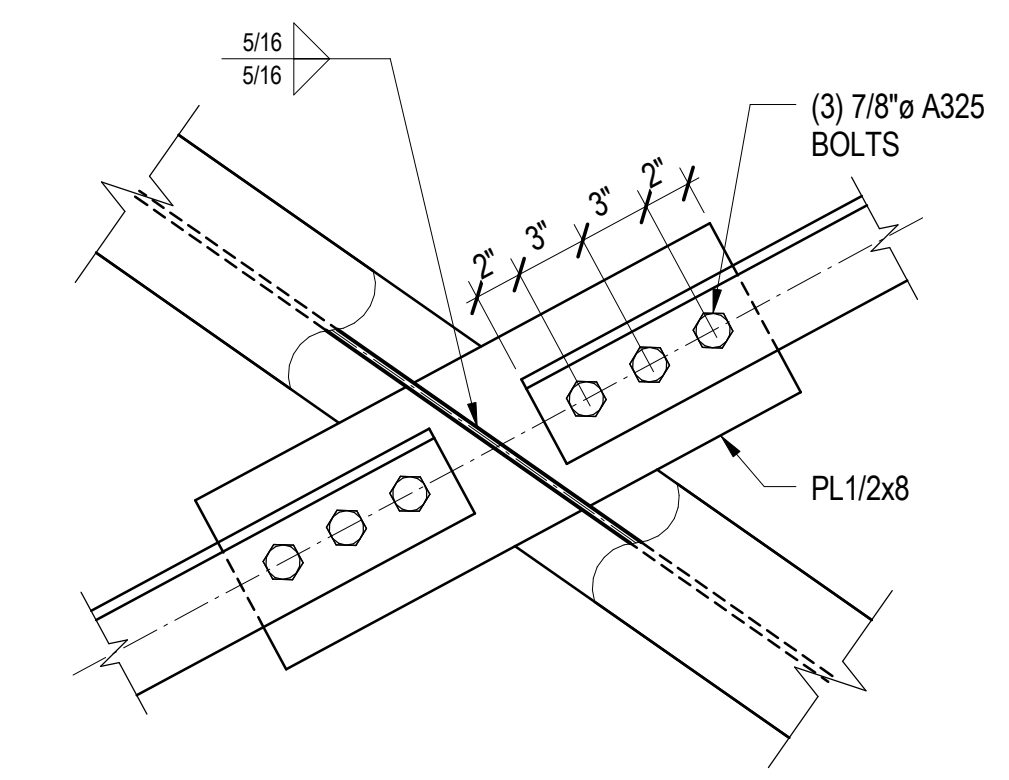
4 SECTION  
1 1/2" = 1'-0"



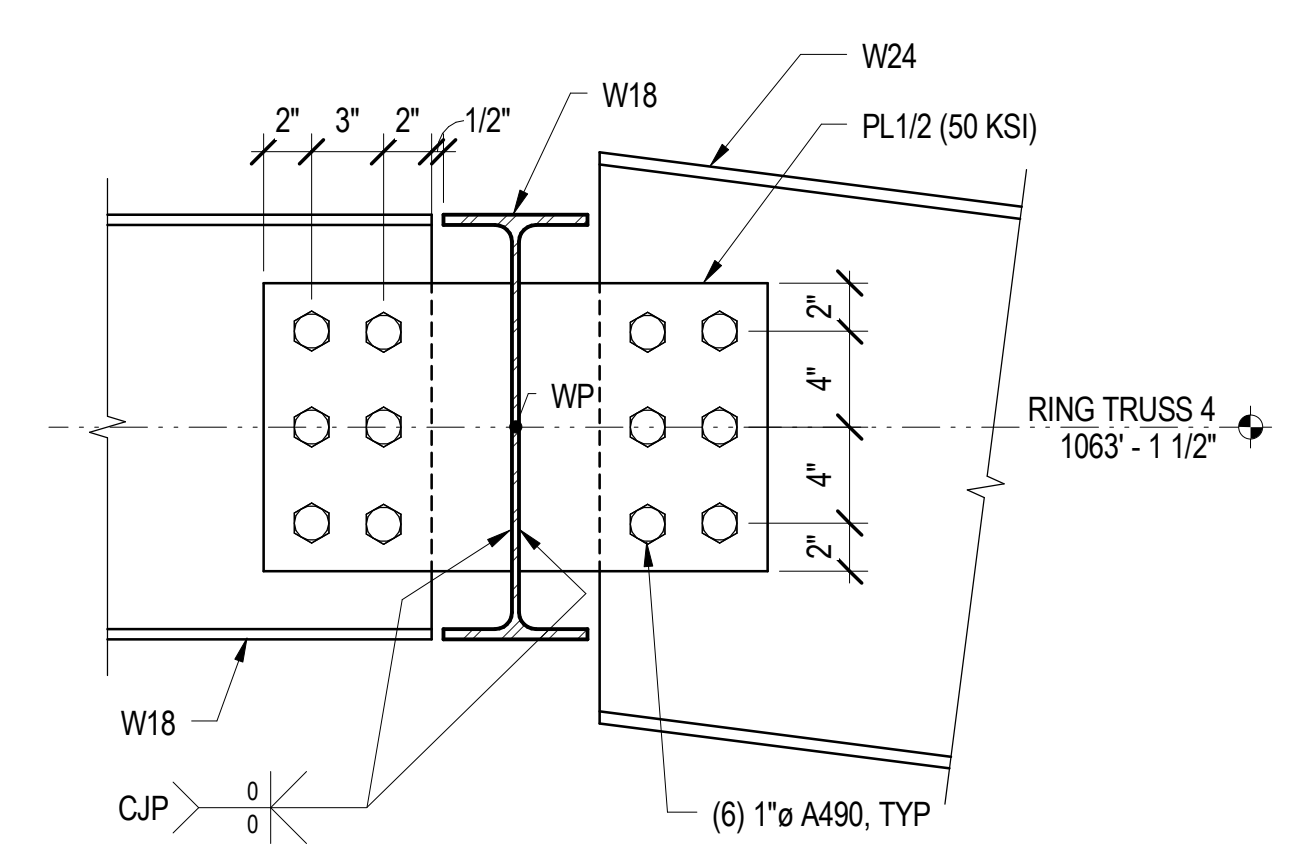
5 DETAIL  
1 1/2" = 1'-0"



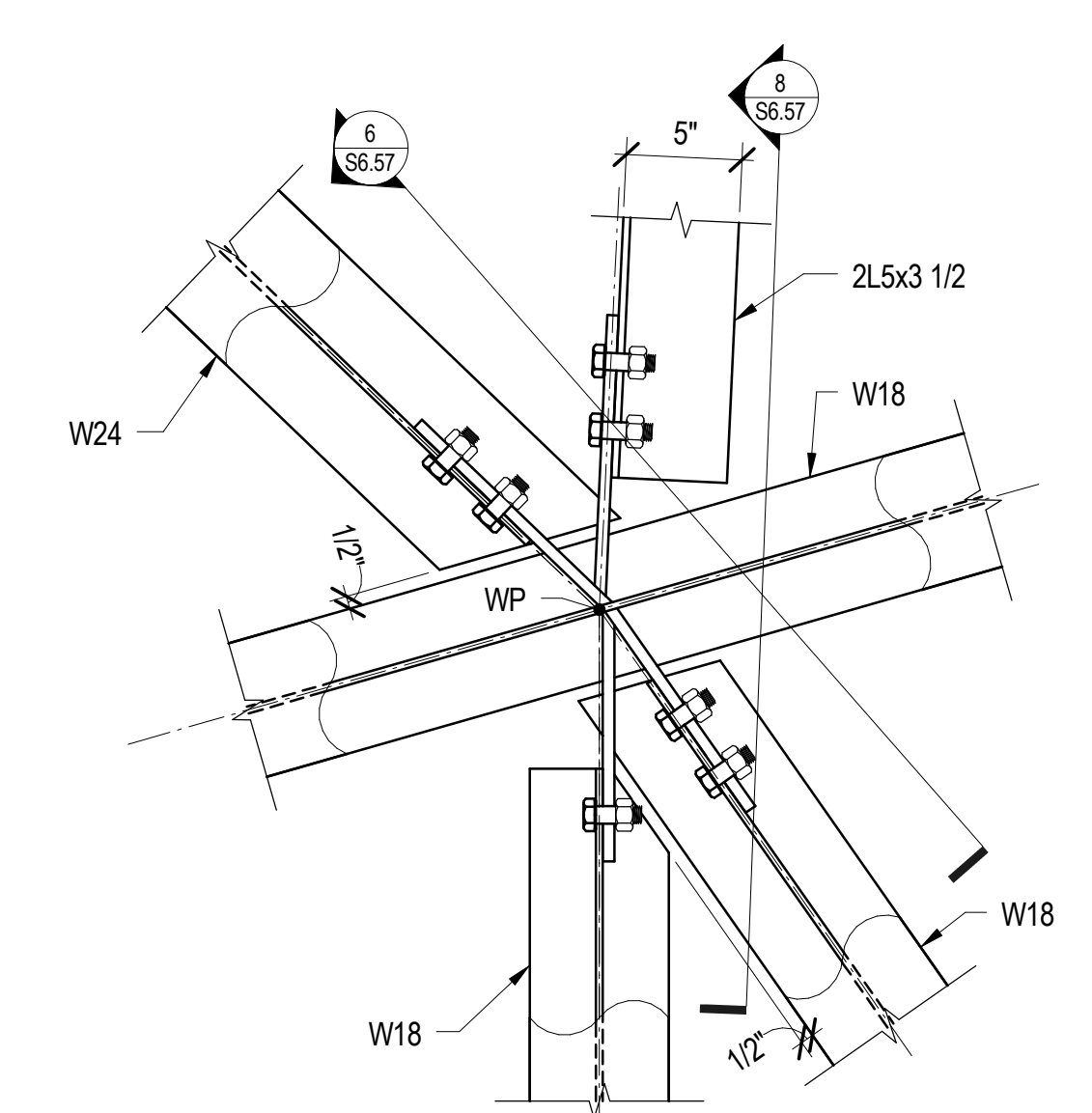
8 SECTION  
1 1/2" = 1'-0"



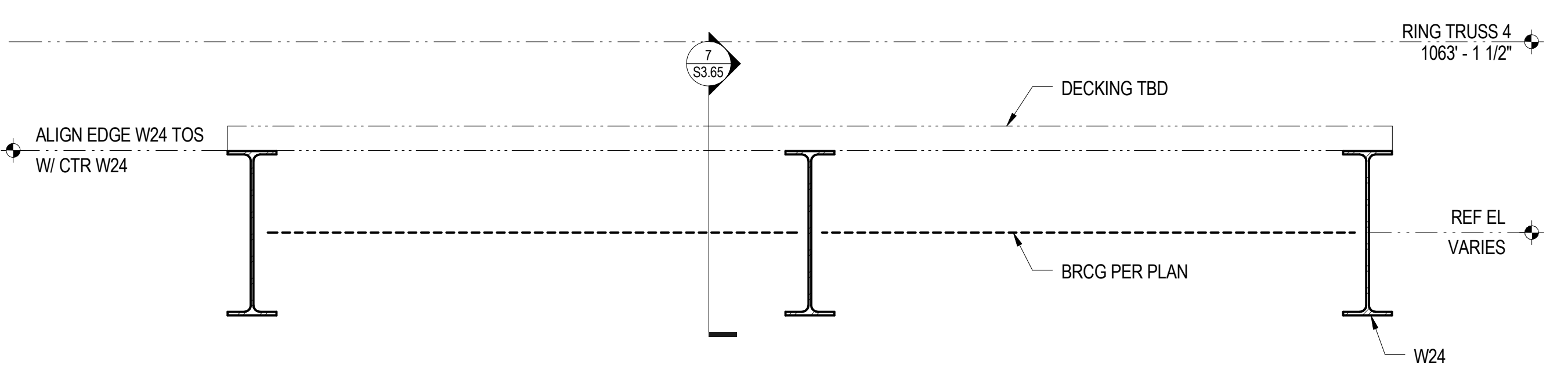
10 DETAIL  
1 1/2" = 1'-0"



6 SECTION  
1 1/2" = 1'-0"



19 DETAIL  
1 1/2" = 1'-0"



17 SECTION  
3/4" = 1'-0"

NO.	DATE	ISSUE
5	02 MAY 14	GMP
4	11 FEB 14	ADDENDUM #2 PERMIT REVISION NO. 1
3	10 FEB 14	BID ADDENDUM #2
2	12 DEC 13	ADDENDUM #2 PERMIT
1	27 NOV 13	STRUCTURAL BID ADDENDUM NO. 1

DRAWING TITLE	
<b>TOP FEATURE SECTIONS AND DETAILS</b>	
NO. PROJECT NO. 08044	DRAWING NUMBER S6.57

5/1/2014 12:04:37 PM C:\Revit\Projects\Transbay\Twr\Transbay\Twr\_W62013\_1.plt