

PART C

SECTION 7 - GENERAL CONSTRUCTION

7-1.1 RELATIONS WITH PROPERTY OWNERS. Prior to beginning work, the Contractor shall send or deliver to the owner of each parcel within the project area written notification of the construction project. The Contractor's name, address, telephone number and name of a contact person with the company shall be included in the letter.

Access to abutting property shall be maintained at all times unless otherwise permitted by the Engineer.

Before storing equipment or stockpiling material outside the project site, the Contractor shall obtain a letter from the property owner authorizing the Contractor the use of his property. The letter shall be filed with the Engineer.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.2 OBSTRUCTIONS. The Contractor shall be required to work around public utility facilities and other improvements that are to remain in place within the construction area or that are to be relocated and relocation operations have not been completed. The Standard Specifications, the Contractor shall be liable to owners of such facilities and improvements for any damage or interference with service resulting from conducting his operations. The exact location of underground facilities and improvements within the construction area shall be ascertained by the Contractor before using equipment that may damage such facilities or interfere with the services. Other forces may be engaged in moving or removing utility facilities or other improvements or maintaining services or utilities. The Contractor shall cooperate with such forces and conduct his operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by other such forces.

Any delay to the Contractor due to utility relocation whether or not the utility is shown or correctly located on the plans will not be compensated for as idle time. However, additional contract time commensurate with such delays may be allowed.

Attention is directed to the fact that nuisance water may be present at any time along the project. It will be the responsibility of the Contractor to provide for handling of said water and any expense involved shall be considered as included in the prices paid for the various items of work and no additional allowance will be made therefor.

PAYMENT. Except in the case of extra work, full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.3 PROGRESS SCHEDULE. The Contractor shall prepare a progress schedule in accordance with these special provisions. The schedule shall be based on Critical Path Method scheduling techniques and shall be prepared with either Microsoft Project or Primavera software. When the schedule is first submitted and at each revision, the Contractor shall submit both a hard copy and an electronic copy of the schedule. The progress schedule shall be coordinated with relevant milestone dates from the project. The Contractor shall be responsible for coordinating with the District's other contractors on the project to determine those relevant milestone dates.

The Contractor shall submit bi-weekly progress reports indicating the completed and uncompleted tasks to date. If the Engineer determines that insufficient progress is being made, he will require the Contractor to revise his Progress Schedule to complete the project within the time frames established in these special provisions. The Contractor shall submit with the revised Progress Schedule a written description of the methods the Contractor will employ to complete the project within the time frames established in these special provisions.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as

included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.4 MOBILIZATION. Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

PAYMENT. Payments for mobilization will be made as follows:

- A. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is the lesser, will be included in the estimate for payment.
- B. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization or 7.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- C. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 95 percent of the contract item price for mobilization or 9.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- D. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization or 10 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- E. After acceptance of the contract pursuant to Section 5-1.46, "Final Inspection and Contract Acceptance," the amount, if any, of the contract item price for mobilization in excess of 10 percent of the original contract amount will be included for payment in the first estimate made in conformance with the provisions in Section 9-1.17.

The contract lump sum price paid for mobilization shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in mobilization as specified herein.

When other contract items are adjusted as provided in Section 4-1.05, "Changes and Extra Work" of the Standard Specifications, if the costs applicable to an item of work include mobilization costs, those mobilization costs will be deemed to have been recovered by the Contractor by the payments made for mobilization, and will be excluded from consideration in determining compensation under Section 4-1.05.

When the contract does not include a contract pay item for mobilization as above specified, full compensation for any necessary mobilization required shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

7-1.5 MAINTAINING TRAFFIC. The Contractor shall furnish, install and maintain signs, lights, flags and other warning and safety devices when performing work which interferes with or endangers the safe movement of traffic on any street or highway (specifically Highway 65).

Signs, lights, flags and other warning and safety devices and their use shall conform to the requirements set forth in the current Part 6, Temporary Traffic Control, of the "California Manual on Uniform Traffic Control Devices for Streets and Highways", published by the State of California, Department of

Transportation. Application and use of devices shall be as specified and as directed by the Engineer.

The Contractor shall report all accidents to the Engineer.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.6 STORM WATER POLLUTION PREVENTION. The Contractor shall install and maintain Storm Water Pollution Prevention Plan requirements, hereafter referred to as a "SWPPP."

Contractor shall be aware that, as of September 9, 2009, the State Water Resources Control Board has adopted a new Construction Activities Storm Water General Permit (2009-0009-DWQ Permit), hereafter referred to as "General Permit". New projects commencing after July 1, 2010, must comply with the 2009-0009-DWQ Permit. State Water Resources Control Board requires the District to electronically submit Permit Registration Documents (PRDs) prior to commencement of construction activities in their online Storm Water Multi- Application Report Tracking System (SMARTS). PRDs consist of the Notice of Intent, Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, ATS System Design (if applicable), Soil Particle Size Analysis (if applicable), a signed certification statement by the DISTRICT, and the first annual fee. The District shall file all appropriate data online in the SMARTS system. Once these components have been submitted and are deemed complete by the SMARTS system, a WDID number will automatically be emailed to DISTRICT. More information on the SMARTS system is available at the following website:

<https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>.

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbooks. Copies are available from Caltrans or on the web at <http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm> and select Storm Water Quality Handbooks and Manuals. The Contractor shall use the SWPPP Template (New CGP 10-26-2011).doc or latest version, which can be located at the address listed above. The Contractor shall submit the necessary forms and pay necessary fees to the State Water Resources Control Board prior to the start of construction. The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section.

SUBMITTALS. Contractor shall provide submittal data for all SWPPP products intended for use on the project. The District Engineer shall approve the products prior to installation at the site.

EXECUTION. The District shall prepare and submit a Notice of Intent (NOI) to to be uploaded onto the SMARTS system.

The District shall provide a QSP (Qualified SWPPP Practitioner) to ensure the SWPPP implementation follows the requirements of the SWPPP document and the General Permit.

The Contractor shall be continuously responsible for erosion and sedimentation control and storm water pollution prevention throughout the contract period. All erosion and sedimentation control measures shall be installed prior to beginning ground-disturbing construction activities and shall remain in place until completion of ground disturbing activity or the contract. The BMP's previously listed in the SWPPP represent the minimum erosion and sedimentation control effort required by the contractor. The Contractor shall implement all SWPPP measures required to prevent erosion, pollutant discharge, and siltation of streams and dry washes at no additional cost to the District. The Contractor shall monitor, inspect, repair, and maintain erosion control measures routinely on a weekly basis, prior to a forecasted storm, after each storm, at 24-hour intervals during extended precipitation events and as directed by the Engineer. The SWPPP may be amended graphically and in narrative form by the District if it is not effectively achieving the objective of reducing pollutants in storm water discharges.

The Contractor shall keep a copy of the SWPPP and approved amendments at the project site. The SWPPP shall be made available upon request of a representative of the Regional Water Quality Control Board, State Water Resources Control Board or any other governmental agency.

PAYMENT. Storm Water Pollution Prevention will be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, tools, equipment and for doing all the work involved in implementing the requirements of the approved plan.

7-1.7 CLEARING AND GRUBBING. Clearing and grubbing shall be performed in accordance with the project plans.

Clearing and grubbing shall be limited to those areas actually affected by the planned construction as directed by the Engineer.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.8 DUST CONTROL. Contractor shall prepare a "Dust Control Plan" for approval by the San Joaquin Valley Air Pollution Control District and shall pay all fees associated with the Dust Control Plan. It shall be the Contractor's responsibility to prevent a dust nuisance from originating from the site of the work as a result of his operations, or the traveling public, during the effective period of this contract. Preventative measures to be taken by the Contractor shall include but shall not be limited to the following:

- A. *Water shall be applied to all unpaved areas as required to prevent the surface from becoming dry enough to prevent dust formation.*
- B. *Paved surfaces over which vehicular traffic is permitted to travel shall be kept free of dirt.*

Temporary suspension of the work, either as a result of order by the Engineer, or as a result of conditions beyond the control of the Contractor shall not relieve the Contractor from his responsibility for dust control as set forth herein.

The Contractor shall submit a complete Dust Control Plan to the DISTRICT for consideration. Upon the DISTRICT's approval, Contractor shall transmit the Dust Control Plan to the SJVAPCD for their approval. The complete Dust Control Plan approved by the SJVAPCD shall be submitted to the DISTRICT prior to construction. Completed Dust Control Plan approved by the SJVAPCD and accepted by DISTRICT shall be fully binding on the Contractor. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the Dust Control Plan to the Engineer. The Contractor shall keep a copy of the Dust Control Plan and approved amendments at the project site. The Dust Control Plan shall be made available upon request of a representative of the SJVAPCD or any other governmental agency.

The Contractor shall be fully informed of the requirements of the Dust Control Plan and all other rules, regulations, plans and conditions that may govern the Contractor's operation in these areas and shall conduct the work accordingly.

The provisions of this section and SJVAPCD approved Dust Control Plan shall be made a part of every subcontract executed pursuant to this contract.

The Contractor shall submit the necessary forms and pay necessary fees to the SJVAPCD related to, prior to the start of construction. The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section.

PAYMENT. Dust Control will be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, tools, equipment and for doing all the work involved in preparing, obtaining the SJVAPCD's review and approval of the plan, and implementing the requirements

of the approved plan.

7-1.9 EARTHWORK. Earthwork shall conform to the provisions in the Project Construction Plans and Geotechnical Report.

PAYMENT. Earthwork will be paid for at the contract unit cost. The estimated quantity for “Earthwork-Dam Construction” and “OX and Recompect Reservoir Bottom” shall be final pay quantities.

7-1.10 TRENCH EXCAVATION. The excavation of trenches for piping laid in the ground shall be in open-cut from the surface of the ground except where boring is required. The trenches shall be of width as shown on the construction plans for proper pipe installation.

The holes for bells and fittings shall be excavated by hand, to a width providing uniform bearing of at least sixty percent (60%) of the pipe I.D. It is the intention of these requirements to provide firm, uniform bearing for the pipe.

When additional gravel, crushed rock, or imported backfill material is required to stabilize a soft, wet, or spongy foundation, such gravel, crushed rock, or imported backfill material shall be furnished at the Contractor's expense.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.11 BRACING AND SHORING. Excavation shall be supported as set forth in the rules, orders, and regulations of the State Division of Industrial Safety. If the Contractor desires to deviate from the safety orders, he shall submit data by a registered civil engineer to the State Division of Industrial Safety, justifying the alternate procedures to be used. Failure to comply with any of these rules, orders and regulations shall be sufficient cause for the State Division to immediately suspend all work. Compensation for losses incurred by the Contractor by such an emergency suspension shall not be allowed. During backfilling, the bottom of the shoring shall be kept above the level of the backfill at all times.

Per Section 6705 of the California Labor Code, the Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made by the Contractor for the purpose of worker protection from the hazard of caving ground during the excavation of trenches necessary for the construction of the project. If such plan varies from the shoring system standard established by the Construction Safety Orders, the plans shall be prepared and certified by a registered civil or structural engineer; however, use of systems that are less effective than those required by the Construction Safety Orders is prohibited on this project.

Nothing in this requirement, or within Section 6705 of the Labor Code, shall be construed to impose tort liability to the Owner, District, or Employees.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.12 TRENCH BACKFILL. Trenches shall not be left open farther than three hundred (300) feet in advance of pipe laying operations or two hundred (200) feet to the rear thereof, unless otherwise permitted by the Engineer.

BEDDING AND BACKFILL.

Backfill materials in the pipe zone shall be placed in accordance with the Construction Plans and Specifications.

Backfill material above the pipe zone shall be free of deleterious materials and lumps or stones exceeding three (3) inches in greatest dimension and shall be placed in layers not exceeding six (6) inches. Each layer shall be thoroughly compacted by vibratory or mechanical tamping, or by a combination of these methods. Flooding and jetting shall not be allowed. There must be at least one foot of cover over the pipe before compaction above the pipe zone will be allowed.

ACHIEVING FIRM BEDDING BELOW PIPE SPRINGLINE. Bedding below the springline shall be a slurry mix per the construction plans.

INITIAL BACKFILL. "Bedding Material" as specified by ASTM 2321-8 shall be used in the pipe zone for initial backfill. After the pipe has been properly laid and inspected, initial backfill shall be placed on both sides and over the pipe to such a depth that, after thorough consolidation, the final depth shall be at least to the elevation shown on the plans. The material shall be consolidated by vibratory or mechanical tamping and the equipment and manner of tamping must be approved in writing by the Engineer prior to commencing operation. Impact equipment may be allowed under the direction of the Engineer. However, the Contractor is responsible for any damage resulting from the use of this equipment. Hydra-Hammer will not be permitted.

SUBSEQUENT BACKFILL. Above the level of initial backfill, the trench may be backfilled with native material with native material resulting from trench excavation, or at the option of the Contractor, select imported materials may be used. Native material or imported material may be compacted by tamping and/or rolling, using equipment and methods approved by the Engineer.

When the Contractor compacts by tamping and/or rolling, the backfill material shall be placed in layers not exceeding six (6) inches in loose depth, each layer being thoroughly compacted by tamping and/or rolling before succeeding layers are placed.

BACKFILL TESTING AND COMPACTION.

Each layer of backfill shall be thoroughly compacted to the relative compaction as shown on the Construction Plans. Each layer of backfill material shall meet the compaction requirements before the next layer is placed.

If the relative compaction, as determined by testing, fails to meet the specified percentage, the trench shall be re-excavated and re-compacted.

The initial compaction test and one retest, for each location, will be paid for by the District. The Contractor shall pay for any subsequent tests.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.13 GRADE TOLERANCE.

The grading plane shall comply with the following:

1. at the dam crest the top of the grading plane will be at or 0.1' above the final crest elevation.
2. All other grading plane surfaces shall be within 0.1' of the final design grade.

PAYMENT. Full compensation for conforming to the requirements of this article shall be considered as

included in the unit prices paid for various items of work and no additional compensation will be allowed therefor.

7-1.14 RIP-RAP. Rip-Rap installation shall conform to the line, grade and provisions of the project construction plans.

PAYMENT. Rip-Rap shall be paid for at the contract unit price per ton, which price shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, in constructing the Rip-Rap slope protection, complete in place, as shown on the plans, and as specified and as directed by the Engineer. The estimated quantity for "Rip-Rap" shall be the final pay quantity.

7-1.15 DRAINAGE LAYER, PIPE AND OUTLET. Drainage Layer, pipe and outlet installation shall conform to the line, grade and provisions of the project construction plans.

PAYMENT. Drainage Layer, pipe and outlet shall be paid for at the contract unit price per ton of drainage layer sand, which price shall include full compensation for furnishing all labor, materials, tools, equipment, grading, and incidentals, and for doing all the work involved, in constructing the drainage layer, toe drain and outlet structure, complete in place, as shown on the plans, and as specified and as directed by the Engineer. The estimated quantity for "Drainage Layer" shall be the final pay quantity.

7-1.16 GRADE SOUTH RESERVOIR. Grading the south reservoir shall conform to the line, grade and provisions of the project construction plans.

PAYMENT. Grading the south reservoir shall be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, tools, equipment, grading, and incidentals, and for doing all the work involved, in constructing and repairing the existing irrigation reservoir located just south of the west dam (on the Guzman Property), as shown on the plans, and as specified and as directed by the Engineer.

7-1.17 OVERFLOW SPILLWAY STRUCTURE. Installation of the Overflow Spillway Structure shall conform to the line, grade, details and provisions of the project construction plans.

PAYMENT. Installation of the Overflow Spillway Structure shall be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, tools, equipment, grading, and incidentals, and for doing all the work involved, in constructing the entire outflow structure (inlet, pipe and outfall) complete and in place, as shown on the plans, and as specified and as directed by the Engineer.

7-1.17 LOW LEVEL OUTLET STRUCTURE. Installation of the Low Level Outlet Structure shall conform to the line, grade, details and provisions of the project construction plans.

PAYMENT. Installation of the Low Level Outlet Structure shall be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, tools, equipment, grading, and incidentals, and for doing all the work involved, in constructing the entire Low Level Outlet structure (intake, pipe and outlet) complete and in place, as shown on the plans, and as specified and as directed by the Engineer.