PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This Section includes requirements for measurement and payment as they apply to the Work.
- B. This Work is the construction of the following new pipelines for the Monterey Peninsula Water Supply Project:

Bid Package	Project Title
1	Feed Water Pipeline
2	Brine Line and Salinas Valley Return Line
3	Transfer Pipeline
4	ASR Extension Pipelines
5	Monterey Pipeline

C. Measurement methods specified in the individual Sections of these Specifications shall govern if different from the methods specified herein.

1.02 MEASUREMENT OF QUANTITIES

- A. Measurement Standards: All Work to be paid for at a Contract price per unit of measurement will be measured by the Owner in accordance with United States Standard Measures.
- B. Measurement by Area: Measurement by area will be by the square dimension listed or indicated in the Schedule of Quantities and Prices.
- C. Linear Measurement: Linear Measurement will be by the linear dimension listed or indicated in the Schedule of Quantities and Prices. Unless otherwise indicated, items, components, or work to be measured will be measured at the centerline of the item in place.
- D. Lump-Sum Measurement:
 - 1. Lump-sum measurement will be for the entire item, unit of work, structure, or combination thereof, as specified and as listed or indicated in the Schedule of Quantities and Prices with pay limits for the item of work shown on the Plans.
 - 2. If Contractor requests progress payments for lump-sum items or amounts in the Schedule of Quantities and Prices, such progress payments will be made in

accordance with a well-balanced, detailed program of payment-apportioning, prepared by Contractor and submitted to the Owner for approval.

3. Such program for each applicable lump-sum item shall show fixed measurable quantities where possible and unit prices therefore as allocated by Contractor to the different features of the Work and major subdivisions thereof. The summation of extensions of quantities and unit prices and related costs shall equal the amount of the lump sum bid item indicated in the Schedule of Quantities and Prices.

1.03 ALLOWANCES

- A. All Allowance Work shall be directed by the Owner or Engineer to the Contractor in writing prior to the start of work. The work shall be billed by time and materials and shall not exceed the total approved by the Owner.
- B. Allowances specified in the Contract Documents shall cause the work so covered to be furnished and performed for such sums as acceptable to the Owner and shall include the cost to Contractor, less any applicable trade discounts, of materials and equipment to be delivered and installed.
- C. Contractor's costs for unloading, handling, labor, installation costs, overhead, profit and other expenses contemplated shall not be deducted from the Allowance but shall be included in the Contract Price.

1.04 SCOPE OF PAYMENT

A. The contract lump sum and unit prices paid for the various items and classifications of work shall include full compensation for furnishing all labor, materials, tools, equipment, transportation, services, and incidentals as specified in GC-56, "Compensation," and for performing all work necessary for completing the construction or installation of the item or work classification, unless stated otherwise.

1.05 MEASUREMENT AND PAYMENT

- A. Costs for conforming to the provisions of this section will receive no separate payment from the Owner, and the Contractor is presumed to have allocated such costs to the pay items deemed most appropriate.
- B. Contractor administrative costs for performing work in this contract will receive no separate payment from the Owner, and the Contractor is presumed to have allocated such costs to the pay items deemed most appropriates.

1.06 BID ITEM DESCRIPTIONS

A. Bid Item No. 1 – Preconstruction Activities (ALLOWANCE)

- 1. Payment for addressing preconstruction activities as directed by the OWNER. The CONTRACTOR shall assist the OWNER and ENGINEER with construction planning activities and coordination meetings with project stakeholders including but not limited to coordination, planning, resource development (local utilization, WMDVBE), and permitting activities necessary to start construction but prior to notice to proceed.
- 2. Measurement shall be in accordance with the requirements for allowance type work.

B. Bid Item No. 2 – Community Outreach (ALLOWANCE)

- 1. Payment for addressing community outreach activities as directed by the Owner. The Contractor shall assist the Owner and Engineer with community outreach activities including but not limited to meeting attendance, presentations and discussions of construction activities and methods; information development including printed materials and electronic materials suitable for publishing on the project website.
- 2. Measurement shall be in accordance with the requirements for allowance type work.

C. Bid Item No. 3 – Mobilization/Demobilization

- 1. The contract lump sum price paid for mobilization shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, for doing all the work involved in mobilization, demobilization, and setting up the Engineer's field trailer, complete in place, as shown on the Plans, and as specified in these technical specifications.
- 2. 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 said 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, will be included in said 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, will be included in said 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, will be included in said estimate for payment.
- e. After acceptance of the contract, 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 of the final estimate.
- f. Payment for demobilization will follow Final Completion and is assumed to be no more than 10% of the amount for mobilization.

D. Bid Item No. 4 – Environmental Requirements and Restoration

- 1. Payment for addressing site specific environmental requirements and/or restoration as described in Section 01062 Environmental Requirements.
- 2. Payment for this item shall be made at the contract unit price of Lump Sum.

E. Bid Item No. 5 – Safety and Environmental Exclusion Fencing

- 1. Payment for installing the Exclusion Fencing, Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for installing and maintaining the fence. Once the Owner has determined that the exclusion fence in an area is no longer needed, it may be removed and reused if it is in suitable condition acceptable to the Owner. The Owner will only pay once for installing exclusion fencing at a location, unless it is for the purpose of change order work where the fencing had been previously removed.
- 2. Payment for this item shall be made at the contract unit price for each linear foot of exclusion fencing installed.

F. Bid Item No. 6 – SWPPP/Erosion Control

- 1. Payment for all materials, tools, labor, and equipment necessary for development and execution of a storm water pollution prevention plan and erosion control activities per Sections 01561 and 02270.
- 2. Payment for this item shall be made at the contract unit price of Lump Sum.

G. **Bid Item No. 7 – Utility Potholing**

- 1. Payment for locating, potholing, and if necessary backfilling and/or plating over the existing underground utilities as shown on the Plans or identified by USA markings. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for potholing including but not limited to location and protection of the utility, excavation, traffic control, backfill and compaction, and restoration of grade, pavement, curbs, gutters, sidewalks, and landscaped areas. Backfilling potholes along the trench is included in the Pipeline Installation.
- 2. Payment for this item shall be made at the contract unit price for each utility "main" requiring a pothole for installing the pipeline. Potholing for utility laterals is NOT included in this bid item and is included in the bid item for Pipeline Installation.

H. Bid Item No. 8 - Staking/Surveying/As-Builts Drawings

- 1. Payment for staking and surveying will be measured as a lump sum for all surveying and staking requirements, full compensation for furnishing all materials, tools, labor, and equipment necessary.
- 2. Payment for Staking and Surveying shall consist of:
 - a. Establishing or reestablishing the project centerline, invert of existing utilities, and top of pipeline.
 - b. Referencing or re-referencing all necessary control points.
 - c. Running a circuit of bench levels to check or reestablish plan benchmarks.
 - d. Setting other benchmarks as needed.
 - e. Staking right-of-way or re-staking right-of-way where needed if it has been previously staked and performing all construction layout and reference staking necessary for the proper control and satisfactory completion of all structures, grading, paving, drainage, and all other

appurtenances required for the completion of the construction work and acceptance of the project.

- 3. Contractor shall provide as-built drawings of all constructed improvements with surveyed coordinate locations for all pipeline features and appurtenances including bends, valves, CAVs, blow offs, etc.
- 4. Payment for this item shall be made at the contract unit price of Lump Sum.

I. Bid Item No. 9 - Traffic Control

1. Payment for Traffic Control will be measured as a lump sum for all labor, materials, tools, equipment, incidentals, and meeting all requirements, for doing all the work involved in providing traffic control, specified in Section 01570 – Traffic Control and in any project permits.

J. Bid Item No. 10 – Trench Shoring

- 1. Payment for excavation shoring, trench and manhole shoring in accordance with Section 02160 Excavation Support System and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, for installation and removal of the trench and structure shoring, bracing, and sheeting system for the pipeline. It shall include compensation for any and all engineering and permit fees incurred by the Contractor for the design of the shoring system, and no additional compensation will be allowed therefor.
- Payment for excavation shoring shall be measured as a lump sum, and include furnishing of all work required and specified in Section 02160 – Excavation Support System. Payment for shoring for jacking and receiving pits shall be made under a separate bid item.

K. **Bid Item No. 11 – Trench Dewatering**

- 1. Payment for providing materials, tools, equipment, facilities, and services as required for providing the necessary dewatering work and facilities as required and specified in Sections 02140 Dewatering and 01150 Water Treatment and Disposal. The Project Geology Report provides information about groundwater along the alignment. The Environmental Database/ Document Review Report
- 2. Payment for this item shall be made at the contract lump sum price for all dewatering required along this pipeline.

L. Bid Item No. 12 – Relocate Water Service

 Payment for relocation of water services from demolished pipeline (see Bid Item 13) to adjacent secondary distribution pipeline. Services shall be reestablished to the Owner's requirements and includes, tapping the existing distribution pipe, corporation stops, copper pipe, compression fittings, testing, flushing and disinfection to AWWWA and NSF standards.

- 2. Contractor shall notify customers of any outages and arrange temporary services during the relocation procedure.
- 3. Payment for this item shall be made per each service relocated.

M. Bid Item No. 13a – Demolish Existing Distribution Pipelines

Bid Item No. 13b – Provide and Install 6" PVC Distribution Pipelines

Bid Item No. 13c – Provide and Install 12" PVC Distribution Pipelines

- 1. Payment for demolition and safe disposal of existing water pipelines on Sinex, Cypress, Madison, Hartnell, Webster, Fremont and Hilby. Work includes capping and sealing adjacent pipelines that will remain in service.
- 2. Payment for installation of new distribution mains at locations as shown on the plans. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications. Work also includes transportation, storage and security of materials until time needed for installation.
- 3. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

N. Bid Item No. 14a – Jack and Bore 42" Pipeline (Feed Water at RR)

Bid Item No. 14b – Jack and Bore 8" Pipeline (Cemex Return at RR)

Bid Item No. 14c – Jack and Bore 36" Pipeline (Transfer at Lightfighter)

Bid Item No. 14d – Jack and Bore 36" Pipeline (Transfer at RR Spur)

Bid Item No. 14e – Jack and Bore 36" Pipeline (Transfer, RR at Marina)

Bid Item No. 14f – Jack and Bore 36" Pipeline (Transfer, RR at Lapis)

- 1. Payment for installing pipeline in casing via Jack and Bore method as shown on the project plans.
- 2. Payment for this item shall be made at the contract unit price per lump sum (LS)

- 1. Payment for furnishing 48" Steel Casing pipe across Canyon Del Rey in the Caltrans ROW will be measured as a lump sum for all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified. Construction method is open cut trench.
- 2. Payment for this item shall be made at the contract unit price per linear foot.

P. Bid Item No. 16a – Provide 42" Feed Water Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Polyvinyl Chloride Pressure Pipe (AWWA C905)
 - b. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

Q. Bid Item No. 16b - Install 42" Pipeline (Feed Water)

- 1. Payment for installing Feed Water Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.

- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

R. Bid Item No. 17a – Provide 8" Cemex Return Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)
 - c. Polyvinyl Chloride Pressure Pipe (AWWA C900)
 - d. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

S. Bid Item No. 17b – Install 8" Cemex Return Pipeline

1. Payment for installing Cemex Return Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the

Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.

- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

T. Bid Item No. 18a – Provide 36" Brine Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Polyvinyl Chloride Pressure Pipe (Rubber Joints)
 - b. Polyvinyl Chloride Pressure Pipe (Fused Joints)
 - c. High Density Polyethylene Pipe (Fused Joints)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

U. Bid Item No. 18b - Install 36" Brine Pipeline

- Payment for installing Brine Pipeline in accordance with pipeline sections 2600, 02725, or 2725, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

V. Bid Item No. 19a – Provide 12" Salinas Valley Return Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)
 - c. Polyvinyl Chloride Pressure Pipe (AWWA C900)
 - d. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.

- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

W. Bid Item No. 19b – Install 12" Salinas Valley Return Pipeline

- 1. Payment for installing Salinas Valley Return Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

X. Bid Item No. 20a – Provide 8" Potable Water Pipeline (to PCA)

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)

- c. Polyvinyl Chloride Pressure Pipe (AWWA C900)
- d. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

Y. Bid Item No. 20b – Install 8" Potable Water Pipeline (to PCA)

- 1. Payment for installing Potable Water Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

Z. Bid Item No. 21a – Provide 3" Sanitary Force Main (to PCA)

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Polyvinyl Chloride Pressure Pipe (AWWA C900)
 - b. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

AA. Bid Item No. 21b – Install 3" Sanitary Force Main (to PCA)

- 1. Payment for installing Sanitary Force Main in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.

5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

BB. Bid Item No. 22a – Provide 36" Transfer Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)
 - c. Concrete Pipe (AWWA C300/303)
 - d. Polyvinyl Chloride Pipe (AWWA C900)
 - e. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

CC. Bid Item No. 22b – Install 36" Transfer Pipeline

- 1. Payment for installing Transfer Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.

- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

DD. Bid Item No. 23a – Provide 16" ASR Pipelines (3)

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)
 - c. Concrete Pipe (AWWA C300/303)
 - d. Polyvinyl Chloride Pipe (AWWA C900)
 - e. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.
- 4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

EE. Bid Item No. 23b – Install 16" ASR Pipelines (3)

1. Payment for installing three (3) ASR Pipelines as shown in the drawings: Extension, Pump-to-Waste, and Recirculation; in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.

- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

FF. Bid Item No. 24a – Provide 36" Monterey Pipeline

- 1. Payment for procuring and delivering to the project site one of the following pipe materials:
 - a. Ductile Iron Pipe (AWWA C151)
 - b. Steel Pipe (AWWA C200)
 - c. Concrete Pipe (AWWA C300/303)
 - d. Polyvinyl Chloride Pipe (AWWA C900)
 - e. High Density Polyethylene Pipe (AWWA C906)
- 2. The work includes procurement and delivery of all pipe and appurtenances including tees, bends, flanges and restraints as shown in the drawings and these specifications.
- 3. Work also includes transportation, storage and security of materials until time needed for installation.

4. Payment for pipe will be by the linear foot installed for diameter indicated and for each pipe strength designation measured horizontally over the pipe alignment centerline. Appurtenances are incidental to this bid item. Valves are addressed separately.

GG. Bid Item No. 24b – Install 36" Monterey Pipeline

- 1. Payment for installing Monterey Pipeline in accordance with the relevant pipeline technical specification, Section 01026 Environmental Requirements, Section 02200 Earthwork and shall include full compensation for furnishing all labor, equipment, tools, materials, including all fittings and pipe, and incidentals for doing all the work necessary within the standard width as defined in the Trench Details on the Project Plans, including saw-cutting, excavation, soil handling, stockpiling, segregation, placement of bedding, backfilling, compaction, tracer wire and tracer wire access boxes and temporary paving, as specified in the Technical Specifications, the Project Plans and all relevant permits . In addition, payment includes removal, and disposal /recycling of existing pavement.
- 2. Payment for restrained joints as shown in the project plans.
- 3. Payment for pipe will be by the linear foot for diameter indicated and for each pipe strength designation installed (including fittings and special sections) measured horizontally over the pipe centerline.
- 4. Payment for excavation, bedding, backfill and testing of native or imported materials, controlled density fill, trench plugs, and disposal of materials, equipment, tools, labor and materials within the trench width as defined in the Standard Details and the Project Plans and specifications shall be deemed included in the price paid for the pipe and no additional compensation will be allowed therefor.
- 5. Payment shall include pipe testing and disinfection in accordance with Section 01656 Pressure Pipe Testing and Disinfection.

HH. Bid Item No. 25a – Provide and Install 16" Butterfly Valves

Bid Item No. 25b – Provide and Install 36" Butterfly Valves

- 1. Payment for procuring and delivering to the project site AWWA C-504 Butterfly Valves in accordance with the Section 15202 Butterfly Valves and the project plans. The work includes procurement and delivery of the valve, valve box and iron cover, thrust blocks and/or mechanical restraints, riser, tracer wire, and all items recommended or specified by the valve manufacturer.
- 2. Work includes storage and security of materials until time needed for installation.

- 3. Payment shall be made on the contract unit price for butterfly valve assembly (AWWA C-504), installed complete in place as shown on the Plans and specified in the technical specifications.
- 4. Payment shall be deemed full compensation for all labor, equipment, materials, and incidentals for furnishing gate valve as sizes indicated, valve box and iron cover, thrust blocks and/or mechanical restraints, riser, tracer wire, and all items recommended or specified by the valve manufacturer, and all work required to install valve complete in place as specified.

II. Bid Item No. 26a – Provide and Install 3" Gate Valves

Bid Item No. 26b – Provide and Install 8" Gate Valves

Bid Item No. 26c – Provide and Install 12" Gate Valves

- 1. Payment shall be made on the contract unit price for furnishing gate valve assembly (AWWA C-509), installed complete in place as shown on the Plans and specified in the technical specifications.
- 2. Payment shall be deemed full compensation for all labor, equipment, materials, and incidentals for furnishing gate valve as sizes indicated, valve box and iron cover, thrust blocks and/or mechanical restraints, riser, tracer wire, and all items recommended or specified by the valve manufacturer, and all work required to install valve complete in place as specified.

JJ. Bid Item No. 27a – Provide and Install 36"Plug Valves

Bid Item No. 27b – Provide and Install 42" Plug Valves

- 1. Payment shall be made on the contract unit price for furnishing plug valve assembly, installed complete in place as shown on the Plans and specified in the technical specifications. Plug valves shall be stainless steel suitable for service in corrosive environments on Feed Water (raw sea water) and Brine Pipelines per Section 15200.
- 2. Payment shall be deemed full compensation for all labor, equipment, materials, and incidentals for furnishing gate valve as sizes indicated, valve box and iron cover, thrust blocks and/or mechanical restraints, riser, tracer wire, and all items recommended or specified by the valve manufacturer, and all work required to install valve complete in place as specified.

KK. Bid Item No. 28a – Provide and Install 2" Combination ARVs in Cage (for wastewater service)

Bid Item No. 28b – Provide and Install 6" Combination ARVs in Cage (for brine/seawater service)

Bid Item No. 28c – Provide and Install 6" Combination ARVs in Manhole (for brine/seawater service)

Bid Item No. 28d – Provide and Install 2" Combination ARVs in Cage (for potable water service)

Bid Item No. 28e – Provide and Install 6" Combination ARVs in Cage (for potable water service)

Bid Item No. 28f – Provide and Install 6'' Combination ARVs in Manhole (for potable water service)

- 1. Payment shall be made on the contract unit price for each Combination ARV assembly (AWWA C-512), installed complete in place as shown on the Plans and specified in the technical specifications.
- 2. Combination ARVs in cages and manholes are shown in the project detail drawings.
- 3. Payment shall be deemed full compensation for all labor, equipment, incidentals, and materials for furnishing combination ARV valve, tubing connection with main, fittings, curb stop, cage, utility box, enclosure, concrete slab, and all items recommended or specified by the valve manufacturer, and all work required to install valve complete in place as specified.

LL. Bid Item No. 29a – Provide and Install 3" Blowoff, Pump Out Style

Bid Item No. 29b – Provide and Install 8" Blowoff, Pump Out Style

Bid Item No. 29c – Provide and Install 12" Blowoff, Pump Out Style

Bid Item No. 29d – Provide and Install 16" Blowoff, Pump Out Style

Bid Item No. 29e – Provide and Install 24" Blowoff, Pump Out Style

Bid Item No. 29f – Provide and Install 36" Blowoff, Pump Out Style

Bid Item No. 29g – Provide and Install 36" Blowoff, Hydrant Style

Bid Item No. 29h– Provide and Install 42" Blowoff, Pump Out Style

- 1. Payment shall be made on the contract unit price for furnishing blowoff assembly, installed complete in place as shown on the Plans and specified in the technical specifications.
- 2. Payment shall be deemed full compensation for all labor, equipment, materials, and incidentals for furnishing blowoff assembly as sizes indicated, pipes, valves, fittings, utility vault and cover, thrust blocks, tracer wire, and all items recommended or specified by the manufacturer, and all work required to install Pump Out Blowoffs complete in place as specified.

MM. Bid Item No. 30 – SVR Outlet Structure at Recharge Pond

- 1. Payment for furnishing an outlet structure on the Salinas Valley Return Pipeline at the recharge pond. Includes riprap, duckbill check valve and concrete pipe support at discharge to storage pond. Requires all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified.
- 2. Payment for this item shall be made at the contract unit price for Lump Sum.

NN. Bid Item No. 31 – Provide and Install 36" Flow Meter in Vault

- 1. Payment for installing magnetic flow meter in vault as shown in the plans and specifications.
- 2. Payment for this item shall be made at the contract unit price for each unit furnished.

OO. Bid Item No. 32a – System Connection at Coe Ave. (Transfer)

Bid Item No. 32b – System Connection at Yosemite (Monterey)

Bid Item No. 32c – System Connection at Pump Station (Monterey)

Bid Item No. 32d – System Connection at Eardley (Monterey)

- 1. Payment for connecting new pipelines to existing pipelines. Includes investigating existing conditions and determining connection requirements, scheduling system outage request (SOR) with Owner and facilitating shutdowns and startups with O&M staff. Requires demolishing existing pipe and vaults to accommodate new pipelines, providing flanges, couplings, welding required to make connection, and testing and disinfection to AWWA standards.
- 2. Payment for this item shall be made at the contract unit price as Lump Sum for each connection.

PP. Bid Item No. 33 – Provide and Install Crest PRV Station

- 1. Payment for installation of new pressure regulating station. Work is adjacent to Hilby/General Jim Moore, as shown in the plans.
- 2. Payment for this item shall be made at the contract unit price as Lump Sum for the furnished station.

QQ. Bid Item No. 34 – Install pipe above grade over 1st St. Tunnel (Transfer)

- 1. Payment for furnishing pipe above grade over 1st St Tunnels will be measured as a lump sum for all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified.
- 2. Payment for this item shall be made at the contract lump sum price.

RR. Bid Item No. 35 – Provide and Install ASR Crossover

- 1. Payment for installing 30" crossover pipe, isolation butterfly valves and magnetic flowmeter in vault at ASR Well #1, as shown in the Plans.
- 2. Payment for this item shall be made at the contract unit price as Lump Sum for the furnished crossover.

SS. Bid Item No. 36 – Pipe Bridge over Hwy 68 (Monterey)

- 1. Payment for furnishing Pipe Bridge over Hwy 68 on the Monterey Pipeline, as shown in the plans. Contractor shall design and furnish the pipe bridge. Components include pipe, couplings, restraints, bridge truss, abutments, support pier, foundation piles, security fencing, coatings, signage and connections to adjacent pipelines for a complete functioning system.
- 2. Payment for this item shall be made at the contract unit price as Lump Sum for the furnished pipe bridge.

TT. Bid Item No. 37a – Design and Provide Cathodic Protection System for Metallic Pipelines and Appurtenances

Bid Item No. 37b – Design and Provide Cathodic Protection System for Metallic Appurtenances on Plastic Pipelines

1. Payment for designing and furnishing a cathodic protection system for the metallic pipelines and appurtenances or the metallic appurtenances on plastic pipelines.

- 2. The cathodic protection system shall be designed and furnished as per Section 13110 and the plans.
- 3. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for potholing including but not limited to location and protection of the utility, excavation, traffic control, backfill and compaction, and restoration of grade, pavement, curbs, gutters, sidewalks, and landscaped areas.
- 4. Payment for this item shall be made at the contract unit price of Lump Sum for a fully furnished, functioning system.

UU. Bid Item No. 38 – Portland Concrete Paving

- 1. Full compensation for Portland concrete (PC) furnished and placed for pavement restoration in conjunction with trenching for underground facilities, removal and/or replacement of existing facilities, conforming PC paving for paneled crossings and driveway, embedded crossings and broken rail sections, shall be considered as included in the various contract items of work and no additional compensation will be allowed therefore. Removal of existing pavement and providing and compacting materials below the PC, such as base rock and tack seal, are included in the unit price for PC supplied.
- 2. Payment for this item shall be made at the contract unit price for each cubic yard (CY) of PC pavement installed as required for street paving.

VV. Bid Item No. 39 – Asphalt Concrete Paving

- 1. Full compensation for asphalt concrete (AC) furnished and placed for pavement restoration in conjunction with trenching for underground facilities, removal and/or replacement of existing facilities, conforming AC paving for paneled crossings and driveway, embedded crossings and broken rail sections, shall be considered as included in the various contract items of work and no additional compensation will be allowed therefore. Removal of existing pavement and providing and compacting materials below the AC, such as base rock and tack seal, are included in the unit price for AC supplied.
- 2. Payment for this item shall be made at the contract unit price for each cubic yard (CY) of AC pavement installed as required for street paving.

WW. Bid Item No. 40 - Rubberized Asphalt Concrete Pavement

1. Full compensation for rubberized asphalt concrete (RAC) pavement furnished and placed for pavement restoration in conjunction with trenching for underground facilities, removal and/or replacement of existing facilities, conforming RAC

paving for paneled crossings and driveway, embedded crossings and broken rail sections, shall be considered as included in the various contract items of work and no additional compensation will be allowed therefore. Removal of existing pavement and providing and compacting materials below the RP, such as base rock and tack seal, are included in the unit price for RP supplied.

2. Payment for this item shall be made at the contract unit price for each cubic yard (CY) of RP pavement installed as required for street paving.

XX. Bid Item No. 41 – Asphalt Milling and Overlay

- 1. Full compensation for milling existing asphalt cement pavement and installing a new overlay wearing course as described in the contract drawings. Each community has different requirements. See tables in contract drawings.
- 2. Payment for this item shall be made at the contract unit price for each Square Foot (SF) of milling and overlay.

YY. Bid Item No. 42 – Restoration of Pavement Markings

- 1. Payment for restoration of traffic controls including striping, directions, signage, crosswalks, stop bars, and reflectors after AC pavement has been replaced. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for restoration of the traffic striping.
- 2. Traffic striping shall be restored to existing condition of better as documented in pre-construction survey (see Section 01532).
- 3. Payment for this item shall be made at the contract unit price of Lump Sum for complete replacement of traffic controls.

ZZ. Bid Item No. 43 – Repair of Traffic Control Loops

- 1. Payment for repairs to traffic control loops damaged by pipeline construction.
- 2. Payment for this item shall be made at the contract unit price for each traffic loop repaired.

AAA. Bid Item No. 44 – Additional Backfill Over Pipeline

1. Payment for additional backfill over/around pipeline as directed by the Engineer. These are low areas that need minor grading adjustments or fill required to meet the 4' minimum cover over the pipeline. Material may be clean excavated material from adjacent excavation approved by Engineer. Work will be measured in cubic yards for all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified.

2. Payment for this item shall be made at the contract unit price of Cubic Yards placed.

BBB. Bid Item No. 45 – Lead Testing and Abatement (Caltrans)

- 1. Payment for lead testing and abatement will be measured as a lump sum for all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified.
- 2. Lead testing and abatement are Caltrans requirements which are provided as an Appendix to these specifications. Contractor shall meet those requirements.

CCC. Bid Item No.46 – Soil Disposal (Non-hazardous)

- 1. Payment for Soil Disposal will be measured as a cubic yards (CY) for all materials, tools, equipment, facilities, and services as required and specified in Section 02111 Disposal of Excavated Materials.
- 2. Payment for Soil Disposal shall include furnishing of all work required and specified in Section 02111 Disposal of Excavated Materials.

DDD. Bid Item No. 47 - Cal-Hazardous Soil Disposal

- 1.Payment for Soil Disposal includes all materials, tools, equipment, facilities, and
services as required and specified in Section 02111 Disposal of Excavated
Materials.Materials.
- 1. Payment for locating and potholing the existing underground utilities as shown on the Plans. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for potholing including but not limited to location and protection of the utility, excavation, traffic control, backfill and compaction, and restoration of grade, pavement, curbs, gutters, sidewalks, and landscaped areas.
- 2. Payment for this item shall be made at the contract unit price for cubic yards (CY).

EEE. Bid Item No. 48 – Class 1 Hazardous Soil Disposal

1.Payment for Soil Disposal includes for all materials, tools, equipment, facilities,
and services as required and specified in Section 02111 – Disposal of Excavated
Materials.

1. Payment for locating and potholing the existing underground utilities as shown on the Plans. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for potholing including but not limited to location and protection of the utility, excavation, traffic control, backfill and compaction, and restoration of grade, pavement, curbs, gutters, sidewalks, and landscaped areas.

2. Payment for this item shall be made at the contract unit price for cubic yards (CY).

FFF. Bid Item No. 49 – Reseeding (CA Native Mix)

- 1.Payment for Reseeding includes all materials, tools, equipment, facilities, and
services as required and specified in Section 02930 Seeding.
- 1. Payment for locating and potholing the existing underground utilities as shown on the Plans. Payment for this item of work will be full compensation for furnishing all materials, tools, labor, and equipment necessary for potholing including but not limited to location and protection of the utility, excavation, traffic control, backfill and compaction, and restoration of grade, pavement, curbs, gutters, sidewalks, and landscaped areas.
- 2. Payment for this item shall be made at the contract unit price for square feet (SF).

GGG. Bid Item No. 50 - Restore Concrete Skate Ramp (Monterey)

- 1. Payment for restoration of concrete skate ramp at end of Spencer St. Requires all labor, equipment, materials, incidentals, and services as required, complete in place as shown on the Plans and specified.
- 2. Payment for this item shall be made at the contract unit price for Lump Sum.

HHH. M Bid Item No. 51 - Coordinate with US Army (Monterey)

- 1. Payment for Coordination with US Army for work within the Presidio of Monterey (POM). Includes acquiring staff security clearances and following work requirements prescribed by the POM.
- 2. Payment for this item shall be made at the contract unit price for Lump Sum.

PART 2 PRODUCTS

NOT USED.

PART 3 EXECUTION

NOT USED.

****END OF SECTION****