

















TRENCH DRAIN DETAIL NTS

ROSA PARKS MIDDLE SCHOOL SURFACE & STORM DRAINAGE
IMPROVEMENTS
SHEET 09

Technical Specifications

1. Standards and Plans

- A. Unless shown or specified otherwise, all construction, materials, and workmanship shall be in accordance with the latest revision of the City of Sacramento Standard Specifications and Details, with the plans, the project specifications, and the latest editions of the "Caltrans" Standard Specifications and Standard Plans, Sign Specification sheets, and Traffic Manual and the 2006 California MUTCD (Manual on Uniform Traffic Control Devices). The Contractor shall obtain and use all applicable addenda.
- B. It is the Contractor's responsibility to make all necessary site inspections and determine all items of work not specifically shown as Bid Items, or otherwise indicated, prior to bidding. The Contractor is responsible for providing all items of work necessary to perform a complete and acceptable job.

2. Allowances

- A. An allowance of \$15,000.00 has been included in the base bid of this project to allow for unforeseen conditions. The Contractor cannot perform and/or bill for any work associated with this bid item without written authorization from the School District.
- B. Any work performed will be on a time and material basis or a negotiated lump sum price. Lump sum pricing shall be submitted by the Contractor and approved by the School District before the start of work.
- C. The contractor will only be paid for the work performed. Any amount remaining in the allowance will not be paid by the School District to the Contractor.
- D. When doing work on a time and material basis the Contractor must submit tags, for School District's signature, of each day's activities. Tags are required to have each crew member's title, hours, and wage rate; equipment is required to have type, hours, and equipment rate; and materials are required to be submitted with receipt and/or invoice.

3. Existing Utilities And Coordination of Work

A. The Contractor or any Subcontractor for this contract shall notify members of U.S.A. (Underground Service Alert) 48 hours in advance of performing excavation – work by calling the toll free number 1–800–227–2600. Excavation is defined as being more than 18 inches in depth below the existing surface.

4. Construction Staking

A. Construction staking shall be furnished by the Contractor and shall be provided by someone authorized to practice land surveying in the State of California.

5. Conflicts

A. The Contractor shall notify the School District prior to performing any corrective action required due to unforeseen conflicts.

6. Obstructions

- A. The Contractor shall remove and replace all irrigation lines that fall within the excavation area.
- B. All unsuitable and surplus materials shall become the property of the contractor and shall be removed from the site unless specified otherwise.

7. Public Safety And Traffic Control

A. Contractor agrees that in accordance with generally accepted construction practices, Contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours.

8. Earthwork

A. Earthwork shall conform to C.U.B.C. and City of Sacramento Standard Specifications.

9. Concrete

A. Concrete shall be Caltrans Class 2 Concrete (3,000 psi).

10. Paving

A. All Aggregate Base shall be Caltrans Class 2, ¾-inch maximum. Relative compaction of base materials shall not be less than 95% MRC in accordance with the ASTM D1557 test method.

- B. All existing pavement to be joined to new pavement shall be saw cut to a neat, straight line and the exposed edge of pavement shall be tacked with asphaltic emulsion prior to paving.
- C. Allowable grading tolerance of paving elevations shown are plus or minus ½-inch A.B. and plus or minus ¼-inch A.C.
- D. Asphalt planing shall be performed by a grinding process, cold planing machine which shall be operated so as not to produce fumes or smoke. The cold planing machine shall be capable of planing the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation. The contractor shall maintain all cutting teeth to insure a uniform and clean cut.
- E. In all cases, the cross-sectional planed surface shall not vary by more than ¼-inch when compared to a straight edge. The outside lines of the paved area shall be neat and uniform and the remaining surface shall not be damaged in any way. Where the cold planing machine leaves a "sliver" of un-ground pavement at concrete edges, that "sliver" shall be removed by hand prior to placement of the new asphalt concrete.
- F. The Contractor shall immediately remove all planed material from the work site and dispose of the material.
- G. The Contractor shall coordinate with all other work to ensure that all underground utilities are installed prior to A.B. placement and paving operations.
- H. The finished paving surface shall have a uniform slope from surface drainage high points and ridge lines to gutters and drain inlets.

11. Storm Drain System

- A. Unless noted otherwise, drain pipe material shall be reinforced concrete pipe, C-76 CL III, PVC SDR-35, or as specified on the plans. In all cases joints for concrete pipe shall be rubber gasketed joints.
 - 1. All reinforced concrete pipe (RCP) shall conform to ASTM C76 and agency standards unless noted otherwise.
 - 2. Joints for concrete pipe shall be tongue and groove, bell and spigot, or other approved type, and shall be of such a design that when properly laid, they shall have a smooth interior surface. Each joint shall be sealed to prevent leakage. Sealing materials shall rubber gasketed joints.

- 3. Joints for PVC pipes and fittings shall consist of an integral bell and spigot with an ASTM F477 Elastomeric Gasket. The joints shall have seal ring grooves or other approved means for positively holding the gaskets in place. The pipe shall have a stop mark indicated on the barrel or other approved means to accurately position the pipe end in the joint.
- 4. Connections to manholes, drainage inlets or other concrete structures shall be made by utilizing manhole adapters or elastomeric seal rings embedded in the concrete.
- 5. PVC pipe shall not be placed in any situation where it will be exposed to the sun's rays and/or possible vandalism.
- B. Trench Drain shall be FlowDrain F100, or approved equivalent. Grate shall be FlowDrain Perforated Steel Type 411Q-Galvanized Steel or Type 413Q-Galvanized Steel, or approved equivalent.

12. Striping

A. The Contractor shall replace all playground striping covered or removed during the course of construction. Striping shall match existing.

13. Preservation Of Property

A. Trees and shrubbery that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines, all street facilities, all playground structures, and any other improvements or facilities within or adjacent to the construction area shall be protected from injury or damage, and upon order by the owner, the Contractor shall provide, install and maintain safeguards such as protective fencing or other suitable barriers approved by the School District to protect such objects from injury or damage. If such objects are injured or damaged by reason of the contractor's operations, they shall be replaced or restored at the contractor's expense. The facilities shall be replaced or restored to a condition as good as when the Contractor entered upon the work, or as good as required by the specification accompanying the contract, if any such objects are a part of the work being performed under contract. The School District may make or cause to be made such temporary repairs as are necessary to restore to service any damaged facility. The cost of such repairs shall be borne by the contractor.