

PERIMETER FENCING REPLACEMENT

AT

**BIRNEY ES, HERRERA ES, AND SMITH ES
(BID PACKAGE A)**

TABLE OF CONTENTS

SPECIAL PROVISIONS

PARTS 1 TO 12

TECHNICAL PROVISIONS/SPECIFICATIONS:

SECTION 1.	CLEARING, GRUBBING AND MISCELLANEOUS (as related to fencing)
SECTION 2.	DEMOLITION, EXCAVATION, REMOVAL AND HAULING (as related to fencing)
SECTION 3.	(NOT USED)
SECTION 4.	(NOT USED)
SECTION 5.	(NOT USED)
SECTION 6.	(NOT USED)
SECTION 7.	PAVING REPAIRS (as related to fencing)
SECTION 8.	(NOT USED)
SECTION 9.	PORTLAND CEMENT CONCRETE IMPROVEMENT (as related to fencing)
SECTION 10.	(NOT USED)
SECTION 11.	(NOT USED)
SECTION 12.	(NOT USED)
SECTION 13.	(NOT USED)
SECTION 14a.	CHAIN LINK FENCE AND GATES- BLACK POLYVINYL CHLORIDE (P.V.C.) COATED
SECTION 14b.	CHAIN LINK FENCE and GATES – METALLIC COATED
SECTION 15.	(NOT USED)
SECTION 16.	(NOT USED)
SECTION 17.	(NOT USED)
SECTION 18.	(NOT USED)
SECTION 19.	(NOT USED)
SECTION 20.	(NOT USED)
SECTION 21.	(NOT USED)
SECTION 22.	TRAFFIC CONTROL

APPENDICES:

APPENDIX A	SCOPE OF WORK - GENERAL
APPENDIX B	SCOPE OF WORK – BIRNEY ELEMENTARY SCHOOL
APPENDIX C	SCOPE OF WORK – HERRERA ELEMENTARY SCHOOL
APPENDIX D	SCOPE OF WORK – SMITH ELEMENTARY SCHOOL

SPECIAL PROVISIONS

FENCING REPLACEMENT

AT

BIRNEY ES, HERRERA ES, AND SMITH ES SCHOOLS

PART 1 – SCOPE OF WORK

The scope of Work includes all labor, materials, tools, appliances, equipment, and facilities necessary to do all of the Work noted in the specifications. All Work shall be done to the satisfaction and under the supervision of the Director of Maintenance or his duly authorized representative. The scope of Work for **PERIMETER FENCING at BIRNEY, HERRERA, AND SMITH SCHOOLS** includes but is not limited to the following:

Removal and replacement of portions of existing chain link fence system and gates where indicated; removal of chain link fabric, removal existing posts, and replacing chain link fabric and posts with new where indicated; and other related work as described in the plans, specifications, and contract documents, by the reference made a part hereof.

PART 2 – STANDARD SPECIFICATIONS

Except as otherwise provided in the Drawings, these Special Provisions and Technical Provisions/Specifications, the Work embraced herein shall be done in accordance with the appropriate provisions of the Standard Specifications for Public Works Construction, 2009 Edition, which are hereinafter referred to as the Standard Specifications, and all supplements to date.

PART 3 – DEFINITION

- | | | |
|----|----------|--|
| A. | District | The Long Beach Unified School District hereinafter called “District”. |
| B. | Engineer | The District’s Director of Maintenance or his authorized Representative. |
| C. | Director | The District’s Director of Maintenance or his authorized Representative. |
| D. | Work | All related work as outlined in the “Scope of Work”. |

PART 4 – CLEAN – UP

The Contractor shall at all times keep the premises and adjoining properties and public areas free from accumulation of Work materials or rubbish caused by his operations. At the completion of the Work, he shall remove all his waste materials and rubbish from and about the project site as well as his tools, construction equipment, machinery and surplus materials. Contractor shall not use District trash container for disposal of debris.

PART 5 – SUBMITTALS

The Contractor shall prepare and submit complete material lists indicating manufacturer, together with description literature and any other material requiring review and approval to the Director within ten (10) calendar days of award of contract.

PART 6 – CONSTRUCTION MEETINGS

The Contractor shall attend weekly job-related meetings as requested by the District.

PART 7 – SURVEY SERVICES (NOT USED)

PART 8 – RECORD DRAWINGS AND ANNOTATED SPECIFICATIONS

The Contractor will prepare and maintain on a current basis an accurate and complete set of Record Drawings showing clearly all changes, revisions to specifications and substitutions during construction, including, without limitation, field changes and the final location of all utility lines, concrete structures, and other significant features, and Annotated Specifications showing clearly all changes, revisions, and substitutions during construction. The Contractor will update the Record Drawings as often as necessary to keep them current, but no less often than weekly. The Record Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the District and its authorized Representative. On completion of the Work and prior to Application for Final Payment, the Contractor will provide one complete set up duplicate originals of Record Drawings and Annotated Specifications to the District, certifying them to be a complete and accurate reflection of the actual construction conditions of the Work.

PART 9 – STORM WATER DISCHARGE CONTROL

The Contractor shall be responsible for insuring compliance with all State and Local regulations relating to the EPA's National Pollutant Discharge Elimination System (NPDES).

PART 10 – SCHOOL SPEED LIMIT

A. During performance of Work of this Contract and at all times, Contractor shall

observe the maximum speed limit of five (5) M.P.H. Contractor shall provide a ground man or walking escort for all vehicles and equipment being moved or operated at all times. All deliveries shall be coordinated so that an escort is present and available.

- B. If it is determined that the Contractor operations will endanger the students or others, all operations will be halted until it is determined that it is safe to proceed.

PART 11 – CONSTRUCTION COORDINATION

- A. All Work shall be performed so as not to interfere with the operation of the school. Planned disruptions or noisy operations must be coordinated with the Principal and or school site Administrator and IOR (Inspector-of-Record).
- B. The Contractor and his subcontractors shall schedule and coordinate with all other Contractors on site so as not to disrupt and interfere with each other's activity.
- C. The Contractor and his subcontractors shall schedule and coordinate with all adjacent property owners so as not to disrupt and interfere with each other's activity. The Contractor shall secure permission to access adjacent properties from the owners.

PART 12 – CONSTRUCTION SAFETY, PHASING AND SCHEDULING OF THE WORK

- A. BIRNEY, HERRERA and SMITH SCHOOLS follow a traditional school year calendar. During performance of Work of this Contract, school will remain in session and buildings will be occupied by students during regular school hours. Work outside buildings will be permitted during school hours, provided that safe access to and exits from buildings are maintained while school is in session and temporary barricades are erected around construction and Work areas.
- B. The school will be operational during the duration of this project. The Contractor shall maintain safe access to all classrooms and facilities at all times. The Work under this contract shall be built in a safe manner to accommodate the students, staff, and the public.
- C. When the school is in session during the course of project construction, the Work under this contract shall be phased, if necessary to safely accommodate the students, staff, and visitors.
- D. Contractor shall respect days devoted to SAT Testing and Stanford Testing as well as other critical testing of the students by not producing noisy or distracting functions or activities within the classroom or adjacent areas.
- E. The Contractor shall be responsible for providing and maintaining all traffic control, paths of travel, temporary building enclosures, temporary fencing,

temporary trench cover, and additional requirements associated with the safety of the project.

- F. Temporary fencing: The temporary fencing shall be chain link fence and/or chain link fence panels, minimum (six) 6 feet high, including fencing screens.
- G. Accessibility: The Contractor shall maintain safe access to all classrooms and facilities. Contractor shall install dust proof, temporary solid barricades separating Contractor's work areas from areas that must remain accessible.
- H. Phasing plan: The Contractor shall submit a phasing plan for approval 10 days prior to commencement of construction. The phasing plan shall indicate path of travel and exit and access areas. The plan shall include Contractor's lay-down areas based on availability of school sites and as directed by LBUSD.
- I. Work will be permitted in other areas when it cannot be done during its designated phase, upon approval of the District. Work shall not block exits, corridors or stairs, shall not create hazardous conditions or excessive noise and shall not adversely affect operation of the school. In areas affected by the above restrictions and upon request by the Contractor, the District will allow the Contractor to conduct the necessary operations after hours and on weekends.
- J. Utilities: Utilities serving occupied portions of a building including heating, air conditioning, plumbing and electrical shall not be disconnected or interrupted during regular school hours.

END OF SECTION

TECHNICAL PROVISIONS/SPECIFICATIONS

SECTION 1. CLEARING, GRUBBING AND MISCELLANEOUS (as related to fencing)

PART 1 - GENERAL

1.01 SUMMARY

- A. Clear the site as shown on the Drawings, as required for fencing replacement project Contractor operations, as specified in this Section and Section 300-1 of the Standard Specifications.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide materials not specifically described but required for proper completion of the Work of this Section, as selected by the Contractor subject to the approval of the District.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the Work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. When affected by Contractor operations, Contractor shall clean the dirt and debris from the existing catch basins and drains. The catch basins and drains consisting of under sidewalk pipes and channels shall be restored to original operating condition. Any dirt and debris removed from the catch basins and drains shall be disposed of away from the site in a legal manner.

3.02 PROTECTION

- A. Protect existing utilities indicated or made known. It is the Contractor's responsibility to locate all utilities around and inside the Work area.
- B. Provide sufficient protection so trees and shrubs will not be damaged in any way as part of this Work.

- C. Protection of persons and property:
 - 1. Barricade open depressions and holes occurring as part of this Work, and post warning lights on property adjacent to or with public access.
 - 2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.
 - 3. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout, drilling, and other hazards created by operations under this section.
 - 4. Contractor shall repair any damage caused by Contractor's operations during the performance of the Work.
- D. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.
- E. Maintain access to the site at all times.

3.03 CLEARING

- A. The Contractor shall temporarily remove and store interior chain link fences as necessary to accommodate the removal and construction of new work. Fences shall be reinstalled in their original location in conformance with District standards. Fences along school property lines shall be replaced in the same day during construction of this project. The Contractor shall insure that the site remains secured at all times. The Contractor shall coordinate with the District prior to removal of any fences or gates.

3.04 DISPOSAL

- A. General:
 - 1. Remove brush, grass, roots, trash, and other material from clearing operations.
 - 2. Dispose of debris away from the site in a legal manner.
 - 3. Do not store or permit debris to accumulate on the job site.
 - 4. Do not burn debris at the site.

3.05 UTILITIES

- A. Coordinate with utility companies and agencies as required.

- B. Where utility cutting, capping or plugging is required, perform such work in accordance with requirements of the utility or governmental agency having jurisdiction. The Contractor shall also notify the school office prior to performing such work.

PART 4 – PAYMENT

- 4.01 Payment for providing all required labor, materials, tools and equipment to clear the site as described in these technical provisions shall be included in the bid lump sum price and no further compensation shall be made.

END OF SECTION

SECTION 2. DEMOLITION, EXCAVATION, REMOVAL and HAULING (as related to fencing)

PART 1 - GENERAL

1.01 SUMMARY

- A. Demolish, excavate, remove and haul away from site those items so indicated on the drawings, as specified herein and in conformance with Section 300-1 of the Standard Specifications.
- B. Location and limits of removals shall be confirmed in the field and approved by the District representative prior to proceeding with the Work.

1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this section.

PART 2 - PRODUCTS

(No products are required in this section)

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 PROCEDURES

- A. Utilities:
 - 1. Protect utility facilities in place. If damaged, repair or replace at no additional cost to the District.
 - 2. If existing utilities are damaged or found to interfere with the permanent facilities being constructed, immediately notify the Director and secure his instructions.

3. Do not proceed with permanent relocation of utilities until written instructions are received from the District.

3.03 DEMOLITION

A. General:

1. Prior to start of demolition, carefully study the Drawings and these Technical Provisions/Specifications.
2. In company with the District representative, visit the site and verify the extent of demolition to be performed under this Contract.

B. Using only the means and equipment approved for this purpose by governmental agencies having jurisdiction, demolish and completely remove from the job site the existing construction designated to be removed.

1. Protect public utility lines in accordance with the requirements of the public agency or utility having jurisdiction.
2. Complete all necessary saw cutting of existing pavement, slabs and sidewalk and necessary related work to the lines and grades as shown on the plans and as required by the District and per Section 300-1.3.2 for the Standard Specifications
3. Upon removal of pavement, additional excavation of the base material or sub-surface material shall be made to a depth deficient for the new work. All such excavating shall be completed in accordance with Section 300-2 of the Standard Specifications.
4. Remove completely any posts and concrete footings designated to be replaced.

C. Demolished material shall be considered to be property of the Contractor and shall be completely removed from the job site.

D. Use means necessary to prevent dust from becoming a nuisance to the public, to neighbors and to other work being performed on or near the site.

E. Any buildings, fences, trees, utility facilities, site improvements, landscaping, playground equipment or games damaged by the Contractor during demolition shall be replaced in kind with new or repaired to the satisfaction of the District by the Contractor at his expense.

F. In excavating for footings and foundations, take care not to disturb bottom of excavation.

3.04 EXCAVATING

- A. Where required to perform the Work, the Contractor shall remove the existing asphalt concrete pavement and dispose of it from the site. Asphalt concrete pavement shall be saw-cut along the joint lines or as directed by the District representative. All work shall be performed as described in Section 300-1.3.2 (a) of the Standard Specifications.
- B. Upon removal of pavement, additional excavation as required within the limits of the Work to the lines, grades and elevations as specified on the Drawings and as indicated herein, shall be made. All such excavation shall be completed in accordance with Section 300-2 of the Standard Specification.
- C. Dispose of unsatisfactory excavated material away from the site at disposal areas arranged and paid for by the Contractor.
- D. Where rocks, boulders, granite or similar material is encountered, remove such material by means which will neither cause additional cost to the District nor endanger buildings or structures on or off the site.
- E. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.
- F. Correct unauthorized excavation at no additional cost to the District.

3.05 TOLERANCES

- A. Conform to elevations and dimensions shown within a tolerance of 0.10 feet, and extending a sufficient distance from footings and foundations to permit placing and removing concrete formwork, other required construction and inspection.
- B. In excavating for footings and foundations, take care not to disturb bottom of excavation.

PART 4 - PAYMENT

- 4.01 Payment for providing all labor, equipment and tools required to complete saw cutting, demolition, excavation, removal, hauling away and all related work shall be included in the bid lump sum price and no further compensation shall be made.

END OF SECTION

SECTION 7. PAVING REPAIRS (as related to fencing)

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide Asphaltic Concrete (A.C.) pavement where shown on the Drawings, as specified herein and in conformance with the Standard specification and District recommendations.
- B. Provide A.C. pavement in areas affected by the new improvements and by Contractor operations.

PART 2 - PRODUCTS FOR PARKING LOTS

2.01 AGGREGATES

- A. Provide asphalt concrete aggregates that comply with section 203-6.2 of the Standard Specifications.

2.02 ASPHALTS

- A. Asphalt shall comply with section 203-6.2 of the Standard Specifications.
- B. The aggregate for the Asphalt Concrete shall be type "C2" and shall comply with section 203-6.3 of the Standard Specifications.
- C. The asphalt shall be type AR-4000 and shall comply with section 203-1 of the Standard Specification.

2.03 MIXING ASPHALTIC CONCRETE MATERIALS

- A. Provide hot plant mixed asphaltic concrete paving materials.
 - 1. The said asphalt concrete shall comply with section 302-5 of Standard Specifications.

PART 3 - PRODUCTS FOR PLAYGROUND

3.01 AGGREGATES

- A. Provide Asphalt Concrete aggregates that comply with section 203-6.2 of the Standard Specifications.

3.02 ASPHALTS

- A. Asphalt shall comply with section 203-6.2 of the Standard Specification.
- B. The aggregate for the asphalt concrete shall be type "D2" (3/8" maximum medium size mixed at optimum oil content) and type "D1" for berms and ramps and shall comply with section 203-6.3 of the Standard Specifications.
- C. The asphalt shall be type AR-4000 and shall comply with section 203-1.2 of the Standard Specifications.

3.03 MIXING ASPHALTIC CONCRETE MATERIALS

- A. Provide hot plant mixed asphaltic concrete paving materials.
 - 1. The said asphaltic concrete shall comply with section 302-5 of Standard Specifications.

PART 4 - EXECUTION

4.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the Work of this section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

4.01 PLACEMENT OF ASPHALTIC CONCRETE PAVING

- A. Install two (2) inches x six (6) inches pressure treated or Redwood headers and stakes two (2) inches x four (4) inches secured with galvanized nails as required to achieve the arrangement of pavement shown on the Drawings and in conformance with Section 302-5.5 of the Standard Specifications.
- B. Remove all loose materials from the compacted base.
- C. Do not accept material unless it is covered with a tarpaulin until unloaded and unless the material has a temperature of not less than 280 degrees F.
- D. Do not commence placement of asphaltic concrete materials when the atmospheric temperature is below 50 degrees F, nor during fog, rain or other unsuitable condition.
- E. Spread material in a manner, which requires the least handling. Where thickness of finished paving will be three (3) inches or less, spread in one (1) layer. Section 302-5.5, spreading equipment is amended and modified as follows: a self-propelled asphalt paver conforming to all requirements of their specifications is

required. The procedure whereby material is deposited in a windrow, then picked up and placed in the asphalt paver with loading equipment will not be permitted.

- F. Contractor to pave against base of existing temporary buildings (bungalows) and remove and reset ramps to accommodate paving.
- G. All downspout drains and splash boxes, utility boxes, vaults, valve boxes or hand holes must be adjusted to final grade prior to final paving.
- H. Rolling:
 - 1. After the material has been spread to the proper depth, roll until the surface is hard, smooth, unyielding and true to the thickness and elevations shown on the Drawings.
 - 2. Roll until no roller marks are visible.
- I. The construction shall comply with section 302-5 of Standard Specifications.
- J. A.C. berms shall be extruded from a self-propelled machine. The machine shall be capable of forming the cross-section of the berm as per plans and details. The A.C. material shall have a minimum temperature of 280° F. The berm shall be placed as per alignment shown on the plans and as per APWA Standard Plan No. 120-1, D1-6. Prior to placing the berm, the surface of the A.C. pavement shall be tack coated as per Section 302-5.4 of the Standard Specifications.
- K. A.C. ramps shall be constructed as shown on the plans. Ramps will be constructed, at the base of steps to make a safe transition from the pavement to the lowest step and vice versa by reducing the distance from the lowest step to the pavement surface, to a height difference of 5 (five) inches and then ramping down to the pavement surface. Slope shall meet current ADA requirements.

4.03 TOLERANCES

- A. Flatness: Maximum variation of one eighth (1/8) inch measured with a ten-foot straight edge.
- B. Compacted Schedule Thickness: Within one eighth (1/8) inch of design thickness.
- C. Variation from True Elevation: Within one eighth (1/8) inch.

4.04 PROTECTION

- A. Protect the asphaltic concrete paved areas from traffic until the sealer is set and cured and does not pick up under foot or wheeled traffic.

PART 5 - PAYMENT

- 5.01 Payment for asphalt concrete pavement as related to fencing shall be included in the bid lump sum price and no further compensation shall be made. Such payment shall include full compensation for providing all labor, material, tools and equipment required to construct the asphalt concrete pavement.

This item includes all necessary preparations prior to placement of paving material including installation as required and removal of headers and stakes, adjustment of valve boxes, pull boxes, hand holes and vaults to final grade as required by the District. Full compensation for preparation, including, labor, material, tools and equipment shall be included in the bid price and no further compensation shall be made.

END OF SECTION

SECTION 9. PORTLAND CEMENT CONCRETE IMPROVEMENTS (as related to fencing)

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide and construct Portland Cement Concrete (P.C.C.) fence post foundations where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- B. Provide P.C.C. pavement in areas affected by the new improvements and by Contractor operations.

1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section. Perform Work in accordance with sections 303-1 and 303-5 of the Standard Specifications.

PART 2 - PRODUCTS

2.01 FORMS

- A. Provide wood or metal formwork profiled to suit conditions, including adequate bracing to the lines and grades shown on the Drawings. Earth or pavement forms will not be permitted. Forms shall be provided per section 303-1.3 of the Standard Specifications.

2.02 CONCRETE MIX

- A. Provide concrete in accordance with section 201-1 of the Standard specifications and with the following characteristics:
 - 1. Compressive strength at twenty-eight (28) days: 2500 psi, or as required by Standard Specification Table 201-1.1.2(A), or as indicated in the drawings.
 - 2. Slump: Four (4) inches maximum.
 - 3. Water: Clean and potable.
- B. Use only such additives as are recommended in the mix design and approved by the District and governmental agencies having jurisdiction.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which Work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Complete all necessary excavation, removal, grading and compacting per Sections 1, 2, and 3 of these Technical Provisions/Specifications and per the Standard Specifications to allow for the proper placement of forms and concrete.
- C. New asphalt concrete pavement removed in connection with fencing system concrete footing construction shall be removed to neatly sawed edges by coring or saw cutting. Chipping of new surfaces shall not be allowed.
- D. Reconstruct pavement over concrete footings in accordance with Section 302 of the Standard Specifications.

3.02 FENCE POST FOUNDATIONS

- A. Post foundations shall be concrete with hole diameters dug or drilled a minimum of four times the largest cross section of the post and a minimum depth of 24 inches plus an additional 3 inches for each 1 foot increase in the fence height over 4 feet and/or as indicated in the project drawings and/or project scope.
- B. Gate post foundation shall be concrete. Size shall be as indicated in the project drawings and/or project scope.
- C. All post foundations shall conform to the requirements of the Chain Link Fence Manufacturers Institute. The contractor shall indicate all dimensions in shop drawings submittals.
- D. Sizes and dimensions shown are minimums.

3.03 FINAL PREPARATION OF SUBGRADES

- A. Thoroughly scarify and sprinkle the entire affected area. Compact to a smooth, hard, even surface of ninety (90) percent relative compaction.

3.04 FORMING

- A. Place and secure forms to correct location, dimension and profile, and per section 303-1.3 and 303-5.2 of the Standard Specifications.

- B. Do not use concrete that has stood over 30 minutes after leaving the mixer, or concrete that is not placed within 60 minutes after water is introduced into the mix.
- C. The pouring of concrete utilizing edges of pavement as formwork shall not be allowed.
- D. Placing concrete:
 - 1. Place concrete in accordance with Section 303-5.3 of the Standard Specifications.
 - 2. Remove rejected concrete from the site.
 - 3. Do not disturb reinforcement or formwork components during concrete placement.
- E. Deposit and consolidate concrete in a continuous operation within the limits of construction joints until the placing of a panel or section is completed.
 - 1. Bring surfaces to the correct level with a straightedge, and then strike off.
 - 2. Smooth the surface leaving it free from bumps and hollows.
 - 3. Do not sprinkle water on the plastic surface. Do not disturb the surfaces prior to start of finishing operations.
- F. Finishing:
 - 1. Extend footings 1 ½ inches above grade and crown at the top to shed water.
 - 2. With a bristle broom produce a textured finish, light, medium or coarse as directed by the District.

3.04 CURING AND PROTECTION

- A. Beginning immediately after placement, protect concrete from premature drying, excessively hot or cool temperatures and mechanical injury.

PART 4 –PAYMENT

4.01 A. Concrete foundation for fence posts:

1. Payment:

Payment for providing all necessary labor, material, tools and equipment for the installation of the fence post foundations shall be included in the bid lump sum price. Payment shall include full compensation for all related work such as construction and removal of forms, excavation, removal, grading, compacting and replacement of adjacent pavement to a minimum width of one (1) foot, and no further compensation shall be made.

END OF SECTION

SECTION 14a. CHAIN LINK FENCE and GATES – BLACK POLYVINYL CHLORIDE (P.V.C.) COATED

PART 1 – GENERAL

1.01 SUMMARY

- A. Provide and install black polyvinyl chloride (P.V.C.) coated chain link fence system as shown on the Drawings and per ASTM specifications and standards.
- B. Refurbish existing chain link fence with black P.V.C. coated chain link fence system as shown on the Drawings and per ASTM specifications and standards.
- C. Refurbish existing posts shown in the plan to remain with new black P.V.C coated fence post sleeves over existing posts.
- D. Remove, save and reinstall chain link fence to allow for proper grading and compaction operation where shown on plan and per Standard Specification.
- E. Remove existing fence and install new fence, posts and gates in same or new location, as shown in the drawings and per Standard Specification.
- F. Repair chain link fence or gates damaged during construction operations at the Contractor's expense.
- G. Provide and install Metallic Coated Chain Link Fence System per specification section 14a for backstops, and where indicated in the drawings.
- H. Refer to Appendix A for General Fencing Scope of Work.
- I. Refer to Appendix B for BIRNEY ELEMENTARY SCHOOL Scope of Work.
- J. Refer to Appendix C for HERRERA ELEMENTARY SCHOOL Fencing Scope of Work.
- K. Refer to Appendix D for SMITH ELEMENTARY SCHOOL Fencing Scope of Work.

1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of the Section.

- B. Provide and install black P.V.C. coated chain link fence system in accordance with Chain Link Fence Manufacturers Institute, and to sections 206-6 and 304-3 of the Standard Specifications.

1.03 REFERENCES

- A. Chain Link Fence Manufacturers Institute Product Manual.
- B. American Society for Testing and Materials (ASTM) Standards: Refer to Chain Link Fence Manufacturers Institute Product Manual for applicable ASTM specifications and standards.
- C. Standard Specifications for Public Works Construction.

PART 2 – PRODUCTS

2.01 CHAIN LINK FENCE and GATES – POLYVINYL CHLORIDE (PVC) COATED

- A. All materials by ASTM specifications and standards.
- B. Materials shall conform to Chain Link Fence Manufacturers Institute and Standard Specification for Public Works Construction, Section 206-6.3.2 Polyvinyl Chloride (PVC) Coated Fabric.
- C. PVC coated chain link fabric shall be coated before weaving. PVC coated fabric shall conform to ASTM F 668. PVC coated fabric shall be Class 2b and shall consist of polymer coating fused and adhered to zinc-coated steel wire. All fences core wire shall be #9 gauge galvanized wire chain link two (2) inch mesh selvedge edge double knuckled, PVC coated before weaving to an eight (8) gauge finish. **The specified diameter is the metallic core wire diameter and the PVC coating shall not be considered when determining the diameter.** Use one (1) inch mesh only in those portions where indicated in the drawings.
- D. When indicated in the drawings, use existing materials for reinstallation.
- E. Furnish and install black polyvinyl chloride top rail where none exists.
- F. Finishing coating material for existing galvanized metal posts, rails, gates, etc. shall be Z.R.C. Cold Galvanizing Compound or approved equal, black color.
- G. Finishing coating material for new galvanized metal posts, rails, gates, accessories, etc., shall be Polyvinyl Chloride, Class 2b, consisting of a polymer coating fused and adhered to zinc-coated steel. Standard color for Polymer-coated chain link fence materials shall be black, in accordance to ASTM F934.

2.02 FENCING NOTES

- A. All materials by ASTM specifications and latest standards.
- B. All fences to be #9 gage black polyvinyl chloride (P.V.C.) coated, class 2b, fused and adhered to zinc-coated steel wire chain link, two (2) inch mesh, selvage edge, top and bottom knuckled, fastened to pipe spreaders where used, with #9 gage black P.V.C. coated galvanized tie wires 18 inch O.C. Fasten mesh to tension bars and to all line posts, without tension bar, with #9 gage black P.V.C. coated galvanized tie wires 14 inch O.C. Same fastenings and spacing to apply in gate frames. All mesh to be installed on outside of posts, except as noted.
- C. All members and fittings of fence to be black P.V.C. coated galvanized.
- D. Paint all welded areas with approved black P.V.C. coated galvanized paint.
- E. All concrete bases to have tops trowel finished with one and one-half (1 ½) inch crown to assure drainage.
- F. All gates shall swing in toward playground. Provide stops as per detail to prevent double swinging gate.
- G. Where #7 gage black P.V.C. coated galvanized wire is used at top and/or bottom, it shall be tied to each line post with #9 gage black P.V.C. coated tie wires.
- H. Hog rings 14 inch to 18 inch O.C. on top and bottom tension wires in all fences.
- I. Curved fences: in fences located on a curve, strut braces of one and five eights (1 5/8) inch O. D. pipe shall be installed as needed by the Contractor at no additional expense to the District.
- J. Compliance with Chain Link Fence Manufacturer's Institute is mandatory.
- K. Contractor shall remove all debris resulting from his Work.
- L. All lumber shall be pressure treated to reject wood rot.
- M. All post, spreaders and gates shall be standard weight black P.V.C. coated galvanized steel pipe.

PART 3 – EXECUTION

3.01 EXISTING CONDITIONS

- A. Examine the areas and conditions under which Work of this Section will be

performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Install posts, fabric and all related parts for high chain link fence and gates in accordance with Chain Link Fence Manufacturer Institute and in accordance with section 304-3 of the Standard Specifications.
- B. Remove the fabric and all related parts using extreme care to handle and store the material in such a way to prevent damage. Where required, reinstall the fabric and parts to match the original conditions. Damaged and/or missing material shall be replaced at no cost to the District.
- C. Finishing: When indicated in the drawings, paint existing galvanized metal posts, rails, gates, etc with one coat of primer and one coat of finish paint. Prepare surfaces and apply coatings in accordance with the manufacturer's recommendations.

PART 4 – PAYMENT

4.01 PAYMENT

- A. Payment for new and/or refurbished chain link fence system: Payment for providing and installing all materials, labor, equipment and tools required to install new and/or refurbished chain link fence system shall be included in the unit price per lump sum (LS) and no further compensation shall be made.
- B. Payment for providing all labor, equipment and tools required to remove, store and reinstall fencing fabric and parts shall be included in other items of Work and no further payment shall be made.

END OF SECTION

SECTION 14b. CHAIN LINK FENCE and GATES – METALLIC COATED (as related to existing fence indicated to remain or protect in place, or where indicated in the drawings)

PART 1 – GENERAL

1.01 SUMMARY

- A. Provide and install chain link fence system as shown on the Drawings and per ASTM specifications and standards.
- B. Refurbish existing chain link fence as shown on the Drawings and per ASTM specifications and standards.
- C. Remove, save and reinstall chain link fence to allow for proper grading and compaction operation as shown on plan and per Standard Specification.
- D. Remove existing fence and install new fence, posts and gates in same or new location, as shown in the drawings and per Standard Specification.
- E. Repair chain link fence or gates damaged during construction operations at the Contractor's expense
- F. Refer to Appendix A for General Fencing Scope of Work.
- G. Refer to Appendix B for BIRNEY ELEMENTARY SCHOOL Fencing Scope of Work.
- H. Refer to Appendix C for HERRERA ELEMENTARY SCHOOL Fencing Scope of Work.
- I. Refer to Appendix D for SMITH ELEMENTARY SCHOOL Fencing Scope of Work.

1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of the Section.
- B. Provide and install chain link fence system in accordance with Chain Link Fence Manufacturers Institute, and to sections 206-6 and 304-3 of the Standard Specifications.

PART 2 – PRODUCTS

2.01 CHAIN LINK FENCE and GATES

- A. All materials by ASTM specifications and standards. All fences to be #9 gage. galvanized wire chain link 2 inch mesh selvage edge double knuckled.
- B. When indicated in the Drawings, use existing materials for reinstallation.
- C. Finishing coating material for existing galvanized metal posts, rails, gates, etc shall be Z.R.Z. Cold Galvanizing Compound or approved equal.

2.02 FENCING NOTES

- A. All materials by ASTM specifications and latest standards.
- B. All fences to be #9 gage galvanized wire chain link 2 inch mesh, selvage edge, top and bottom knuckled, fastened to pipe spreaders where used, with #9 gage galvanized tie wires 18 inch O.C. Fasten mesh to tension bars and to all line posts, without tension bar, with #9 gage galvanized tie wires 14 inch O.C. Same fastenings and spacing to apply in gate frames. All mesh to be installed on outside of posts, except as noted.
- C. All members and fittings of fence to be galvanized.
- D. Paint all welded areas with approved galvanized paint.
- E. All concrete bases to have tops trowel finished with one and one-half (1 ½) inch crown to assure drainage.
- F. All gates shall swing in toward playground. Provide stops as per detail to prevent double swinging gate.
- G. Where #7 gage wire is used at top and/or bottom, it shall be tied to each line post with #9 gage tie wires.
- H. Hog rings 14 inch to 18 inch O.C. on top and bottom tension wires in all fences.
- I. Curved fences: in fences located on a curve, strut braces of one and five eights (1 5/8) inch O. D. pipe shall be installed as needed by the Contractor at no additional expense to the District.
- J. Compliance with Chain Link Fence Manufacturer’s Institute is mandatory.
- K. Contractor shall remove all debris resulting from his Work.
- L. All lumber shall be pressure treated to reject wood rot.

- M. All post, spreaders and gates shall be standard weight galvanized steel pipe.

PART 3 – EXECUTION

3.01 EXISTING CONDITIONS

- A. Examine the areas and conditions under which Work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Install posts, fabric and all related parts for high chain link fence and gates in accordance with Chain Link Fence Manufacturer Institute and in accordance with section 304-3 of the Standard Specifications.
- B. Remove the fabric and all related parts using extreme care to handle and store the material in such a way to prevent damage. Reinstall the fabric and parts to match the original conditions. Damaged and/or missing material shall be replaced at no cost to the District.
- C. Finishing: When indicated in the drawings, paint existing galvanized metal posts, rails, gates, etc. with one coat of primer and one coat of finish paint. Prepare surfaces and apply coatings in accordance with the manufacturer's recommendations.

PART 4 – PAYMENT

4.01 PAYMENT

- A. Payment for new and/or refurbished chain link fence system: Payment for providing and installing all materials, labor, equipment and tools required to install new and/or refurbished chain link fence system shall be included in the unit price per lump sum (LS) and no further compensation shall be made.
- B. Payment for providing all labor, equipment and tools required to remove, store and reinstall fencing fabric and parts shall be included in other items of Work and no further payment shall be made.

END OF SECTION

SECTION 22. TRAFFIC CONTROL

PART 1 – GENERAL

1.01 SUMMARY

The Contractor shall install and maintain traffic control devices in such a manner to ensure the safe movement of motorist and pedestrians through or around the construction Work area and provide maximum protection to construction workers, protect the existing and new improvements.

PART 2 – PRODUCTS

2.02 All traffic control and detour signs used in this project shall be in accordance with the current edition of “W.A.T.C.H. Manual” and as directed by the District representative. All signs shall be illuminated or reflectorized when they are used during hours of darkness. All cones, pylons, barricades, or posts used in the diversion of traffic shall be provided with flashers or other satisfactory illumination if in place during hours of darkness.

PART 3 – EXECUTION

3.01 CONSTRUCTION TRAFFIC CONTROL NOTES

- A. The Contractor is instructed to conduct his construction operations in such a manner to prevent damage to the existing pavement, which is to be preserved and overlaid with asphalt concrete.
- B. Hauling vehicles loaded or unloaded, are not to make short radius turns on the parking lot and/or playground surface. Hauling vehicles are to enter the site in one direct backward or forward motion directly to the point of loading or unloading. Where repetitive trips are to be made over an area to be resurfaced, the hauling path will be delineated by the Contractor with paint, delineators, barricades, flagging or other devices so as to limit the haul vehicles passageway to a width of fourteen (14) feet.
- C. Transfer rigs, trucks and pumps, or other multi trailer combinations are required to effect their transfer on adjacent public streets or on-site project areas which have already received a new aggregate base section. This provision is intended to limit truck turns on the project site on areas proposed for resurfacing.
- D. During resurfacing operations haul vehicles shall enter and leave the site with one backing motion to the paving machine and one straight-line departure motion to the maximum degree practical.
- E. Any damage caused to the existing surface by violation of these construction

traffic control notes will be repaired by the Contractor at his expense as directed by the District. Surplus material will be disposed of off-site.

- F. The Contractor shall provide a telephone number at which the Contractor's representative can be reached in case of an emergency requiring replacement or relocation of the required traffic devices.

PART 4 – PAYMENT

- 4.01 Payment to provide all necessary labor, material, tools and equipment to set-up, mount and collect all required traffic control measures is included in other items of Work and no additional compensation shall be made.

END OF SECTION

APPENDIX A

GENERAL SCOPE OF WORK

APPENDIX A

GENERAL SCOPE OF WORK

1. **REFURBISH EXISTING CHAIN LINK FENCE SYSTEM:** Refurbish existing chain link fence system including gates in accordance with the **Chain Link Fence Manufacturers Institute** and the project drawings:
 - A. Remove and haul away existing chain link fence fabric.
 - B. Remove, store, and reinstall all existing fence mounted signage, art work, etc.
 - C. Remove, store and reinstall privacy screens and/or slats, where required. Dispose of damaged privacy screens. Install new privacy screens and/or slats where indicated in the drawings and Appendices B, C, D and E.
 - D. Modify fence height where indicated in the drawings.
 - E. Prepare, sand, prime and paint existing posts, gates, rails, braces, accessories, etc.
 - F. Straighten all bent or misaligned posts and appurtenances. Replace posts, rail and appurtenances as required for proper installation.
 - G. Provide and install any missing bracing, rails, truss rods, post caps, etc.
 - H. Repair or replace damaged appurtenances.
 - I. Refurbish existing gates: Realign gate as necessary. Change gate swing as necessary. Replace gate missing or damaged parts for a fully functional and secure gate.
 - J. Install new chain link fence fabric. Refer to drawings for additional fencing scope of work.
 - K. The dimensions given are approximate measurements. Contractor is responsible for taking actual field measurements.
 - L. Refer to drawing “F” for Fencing Details. However, if **Chain Link Fence Manufacturers Institute** requirements are more stringent, they shall govern.
 - M. Refer to Appendices B, C, D and E for specific school scope.

APPENDIX A – cont.

GENERAL SCOPE OF WORK

1. **REPLACE EXISTING CHAIN LINK FENCE SYSTEM:** Remove and replace existing chain link fence system in accordance with the **Chain Link Fence Manufacturers Institute** and the project drawings:
 - A. Remove and replace existing chain link fence system and gates where indicated in the drawings.
 - B. Relocate gates where indicated in the drawings. Remove existing gates, and install gates in new location. Include required additional bracing on adjacent fence sections. Replace transom as required. Replace posts as required.
 - C. Where removal of fence posts is required, saw cut existing pavement, remove old posts and footings, patch asphalt and/or concrete pavement in accordance with the specifications.
 - D. Where replacement of gates is indicated, remove and haul away existing gates, furnish and install new gates. Include required additional bracing on adjacent fence sections. Replace transom as required. Replace posts as required.
 - H. Where removal of existing utilities or other items attached to the existing fencing system is indicated, remove and haul away indicated items. Coordinate all work with the District and the adjacent property owners.
 - F. Where new post installation is required at sloped areas or graded areas, excavate and form top of foundation a minimum of two (2) foot deep.

APPENDIX B

SCOPE OF WORK

BIRNEY ELEMENTARY SCHOOL

APPENDIX B

SCOPE OF WORK

**Birney Elementary School
710 W. Spring St.
Long Beach, CA 90806**

The dimensions given in the table below are approximate measurements. Contractor is responsible for taking chain link fence (CLF) actual field measurements. Refer to Drawings for plan, details, detailed scope, additional scope of work, and gate sizes.

Description	Length (Ft.)
Refurbish/ Replace existing Chain Link Fence system with black PVC coated Chain Link Fence system including gates, posts, bracing and slats and Install Top and Bottom Rails where none exists per specifications	2,085
	2,085

Notes:

1. Refer to Appendix A for General Scope of Work.
2. All gates are included in the CLF quantity estimate. Refer to drawings for gate width and type.

APPENDIX C

SCOPE OF WORK

HERRERA ELEMENTARY SCHOOL

APPENDIX C

SCOPE OF WORK

**HERRERA ELEMENTARY SCHOOL
1620 Temple Ave.
Long Beach, CA 90804**

The dimensions given in the table below are approximate measurements. Contractor is responsible for taking chain link fence (CLF) actual field measurements. Refer to Drawings for plan, details, detailed scope, additional scope of work, and gate sizes.

Description	Approximate Length (Ft.)
Refurbish/ Replace existing Chain Link Fence system with black PVC coated Chain Link Fence system including gates, posts, bracing and slats and Install Top and Bottom Rails where none exists per specifications	1550
South East Corner Fence High 16' Approx. 378 LF	1550

Notes:

1. Refer to Appendix A for General Scope of Work.
2. All gates are included in the CLF quantity estimate. Refer to drawings for gate width and type.

APPENDIX D

SCOPE OF WORK

SMITH ELEMENTARY SCHOOL

APPENDIX D

SCOPE OF WORK

**Smith Elementary School
565 E, Hill St.
Long Beach, CA 90806**

The dimensions given in the table below are approximate measurements. Contractor is responsible for taking chain link fence (CLF) actual field measurements. Refer to Drawings for plan, details, detailed scope, additional scope of work, and gate sizes.

Description	Approximate Length (Ft.)
Refurbish/ Replace existing Chain Link Fence system with black PVC coated Chain Link Fence system including gates, posts, bracing and slats and Install Top and Bottom Rails where none exists per specifications	2,387
Ornamental Fencing in front of campus Approx. 113 LF	2,500

Notes:

1. Refer to Appendix A for General Scope of Work.
2. All gates are included in the CLF quantity estimate. Refer to drawings for gate width and type.