

F. Method of shrub and tree planting:

- 1. No planting shall be done until all operations in conjunction with the installation of the sprinkler system have been completed...

G. Turf Planting (Sod):

- 1. Sod shall be prepared and graded as previously stated.
- 2. Spread turf fertilizer (16-20-0) onto the soil evenly at the rate of one pound per 100 square feet of lawn area...

2.7.5 INSPECTIONS

- A. All plant materials must have been previously inspected at the nursery by appropriate government agency if required by state or local code...

2.7.6 MAINTENANCE

- Landscape contractor shall maintain all landscaping areas and materials. Maintenance shall consist of applying water, weeding, caring for plants, mowing and edging lawns...

SECTION 2.8 IRRIGATION

2.8.1 SCOPE OF WORK

- The Contractor shall provide all work necessary to install and complete all irrigation systems shown on the plans and/or specified herein...

2.8.2 WORK SHALL INCLUDE

- A. Connections to services.
- B. Complete installation of pipe, lines and accessories for a complete sprinkler system including trenching, backfilling, valves, controllers, valve boxes, connections to existing electrical supply, cutting and patching as necessary.

2.8.3 WORK SHALL NOT INCLUDE

- A. Finish grading.
- B. Domestic water plumbing.

2.8.4 CONDUCT OF WORK

- A. The contractor shall maintain continuously a competent superintendent or foreman, satisfactory to OWNER, on the work during progress...

2.8.5 GENERAL REQUIREMENTS

- A. Verifications: All scaled dimensions are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions.

2.8.6 MATERIAL SPECIFICATIONS

- A. All material shall be new stock and best grade of its kind. It shall be as specified unless otherwise specifically approved, in writing, by OWNER.

F. Brass Pipe and Fittings:

- 1. Where indicated on the drawings, use red brass screwed pipe conforming to Federal Specification #WW_P_351.

G. Copper Pipe and Fittings:

- 1. Where indicated on the drawings, use copper pipe Type "K".

H. Automatic Controller:

- 1. Controller shall be Hunter PCC Series-Pro-C Conventional. Controller shall be installed as per manufacturer's specifications.

I. Remote Control Valves:

- 1. Remote control valves shall be as specified on drawing and installed in accordance with the details thereon.

J. Gate Valves:

- 1. Gate valves shall be as specified on drawings.

K. Control Wire for remote control valve operation:

- 1. Connection between the automatic irrigation sprinkler controller and the remote control valves shall be made with #14 UF direct burial wire.

L. Backflow preventer:

- 1. Backflow preventer shall be as specified on drawing.

M. Control Valve Boxes:

- 1. Gate Valve: Use 10" x 10-1/4" round box for all gate valves, Carson Industries #910_12B with green bolt down cover or approved equal.

N. Sprinkler Heads:

- 1. All sprinkler heads shall be Hunter MP Rotator as appropriate for spray design. Use Hunter Pressure Compensating Multi Stream Bubbleblers where bubbleblers are necessary and around menu boards, speaker post and preview board.

2.8.7 INSTALLATION SPECIFICATIONS

A. Excavations:

- 1. Depths of minimum cover unless otherwise specified.

a. Pressure main lines:

- 1) Main line - 18" deep.

b. Pressure main line under paving - 24" deep run in a Schedule 40 PVC sleeve.

c. Non Pressure lateral sprinkler lines - 12" deep.

d. Control wires - 18" deep.

e. Lateral line under paving - 18" deep.

f. Trenching:

- 1. Trenches shall be dug straight.
- 2. Trench bottoms shall be at a true gradient providing support to pipe through its entire length and shall be free from rocks, clods, debris and sharp edged objects.

g. Plastic Pipe and Fittings Installation:

- 1. Sprinkler head installation shall be as detailed on drawing.
- 2. Due to the nature of plastic pipe fittings, the Contractor shall exercise care in handling, loading, unloading and storing to avoid damage.

h. Welded joint shall be given at least 15 minutes set up curing time before moving or handling.

i. Cooling of the pipe can be accomplished by operating the system for a short time before the heat of the day.

j. Long runs of PVC pipe shall be snaked in the trench to allow for contraction.

D. Backflow Preventer:

- 1. All installation shall be per manufacturer's recommendation and per state and local code.

E. Automatic Controller & Rain Sensor:

- 1. Controller shall be mounted securely as per manufacturer's recommendations in an accessible location as shown on plans near utility box.

F. Controller Wire:

- 1. The control wire shall be buried alongside other pipe in trenches a minimum of 18" deep and bundled and taped at 10' on center.

G. Remote Control Valves:

- 1. Remote control valves shall be installed at sufficient depth to provide not more than 10" nor less than 6" cover from the very top of the valve to final grade.

H. Backfill of Trenches:

- 1. Trenches shall be backfilled with excavated dirt after it has been installed. Backfill shall be placed in layers, the thickness of which shall depend on the nature of the material and the use intended.

I. Test of Irrigation System:

- 1. The Contractor shall test the presence of OWNER's authorized representative at least 48 hours in advance of testing.

J. Guarantee:

- 1. The entire irrigation system shall be guaranteed by the Contractor to give complete and satisfactory service as to material and workmanship for a period of one year from the date of final acceptance of the work by OWNER.

SECTION 2.9 DETECTABLE WARNING PAVERS

2.9.1 SCOPE

- 1. Install yellow detectable warning pavers in prepared recessed slab areas as located on the plans. Pavers to be installed per manufacturers recommendations.

2.9.2 MATERIALS

- A. Tile Tech Tie Pavers - 12" x 12" x 2" Yellow color. Contact Information: Tile Tech Pavers, 1914 W. Pico Blvd., Los Angeles, CA 90006 - Phone (213) 390-5560.

2.9.3 EXECUTION

- A. Tie Pavers and concrete shall be prepared as recommended by manufacturer for permanent installation. Pavers shall be placed level and flush with adjacent concrete.

DIVISION-3 CONCRETE

SECTION 3.1 GENERAL

3.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.

SECTION 3.2 CONCRETE

3.2.1 SCOPE

- A. All concrete work, including all conduit and/or piping encasement, concrete surface or sub-surface drainage structures, and all concrete light bases shown on electrical drawings.

3.2.2 MATERIALS

- A. Portland Cement: ASTM C-150, Cement type or as specified on the structural drawings.

3.2.3 CONCRETE

- A. Concrete ultimate compressive strength at 28 days shall be as specified on structural drawings. Concrete slump 3" to 4".

3.2.4 LAYOUT

- Layout of buildings shall be by a registered civil engineer. Contractor shall be responsible for all layout work, and shall install butt boards in permanent layout.

3.2.5 PLACEMENT OF MATERIALS

- A. Concrete shall be prepared from the mixer to the place of final deposit by methods that will not separate the materials. Concrete shall be deposited in the forms within one hour after the concrete has been placed.

3.2.6 PROTECTION OF CONCRETE

- A. Hot Weather Requirements: 1. At periods of hot weather, suitable precautions shall be taken to avoid drying of the concrete prior to finishing operations.

3.2.7 FINISHING OF WORK

- A. Vapor barrier may be omitted at exterior slabs, unless specifically shown on plans or drawings.

3.2.8 STORAGE

- Cement and aggregates shall be stored in such a manner as to prevent their deterioration or the intrusion of foreign matter.

3.2.9 CLEANING

- Upon completion of all other work in building, concrete floors shall be swept clean, and plaster, paint and oil removed and cleaned thoroughly.

3.2.10 CLEARANCE ARM AT DRIVE-THRU

- Contractor shall provide and install clearance arm and install footing per Section 10.6 of this specifications.

DIVISION-4 MASONRY

SECTION 4.1 GENERAL

4.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.

SECTION 4.2 MASONRY

4.2.1 SCOPE

- Includes all masonry work, reinforcing steel and miscellaneous metals needed for same.

4.2.2 MATERIALS

- A. Masonry Units: Where indicated on plans. Refer to Color/Materials Schedule and site details for color, type, and size.

4.2.3 MIXES

- A. Mortar proportions by volume: Type S, 1800 p.s.i. at these specifications and conform to ASTM C-270.

4.2.4 PLACEMENT OF MATERIALS

- A. Laying of Masonry Units and Grouting: 1. Use "running bond" with all masonry joints unless otherwise noted on the drawings.

DIVISION 5 METALS

SECTION 5.1 GENERAL

5.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.

SECTION 5.2 STRUCTURAL & MISCELLANEOUS METALS

5.2.1 SCOPE

- A. Includes bolts, washers, anchors, straps, rods, bars, etc., used in connection with the miscellaneous steel and iron work, where indicated on plans.

5.2.2 MATERIALS

- A. Conform to these standards: 1. Structural Steel: ASTM A_36

5.2.3 FABRICATION

- A. Fabricator shall clean, degrease, and remove all rust, dirt or other foreign matter before laying up steel.

5.2.4 ERECTION

- A. Temporary bracing shall be maintained as required, including provision for loads resulting from erection operations, wind, etc.

5.2.5 REINFORCING STEEL

- A. Coordinate work of this section with work of other trades. Expedite materials and labor to avoid omissions and delay.

5.2.6 MATERIALS

- 1. Reinforcing Bars: ASTM A_615.

5.2.7 PLACEMENT OF REINFORCING STEEL

- A. Coordinate work of this section with work of other trades. Expedite materials and labor to avoid omissions and delay.

5.2.8 MORTAR

- A. Mortar proportions by volume: Type S, 1800 p.s.i. at these specifications and conform to ASTM C-270.

5.2.9 PLACEMENT OF MASONRY

- A. Cement plaster backing surface shall be clean and damp (but not wet) prior to beginning placement.

5.2.10 LIGHT GAUGE STEEL FRAMING

- A. Erect steel studs per details on drawings using sufficient fasteners to obtain required rigidity and strength.

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