October 8 2025

To: All Plan Holders

From: Jeff van den Eikhof, PE
City Engineer

RE: Guadalupe Transit Hub Project

ADDENDUM NO. 2

NOTICE TO ALL CONTRACTORS SUBMITTING BIDS AND TO ALL PLANHOLDERS:
You are hereby notified of the following changes, clarifications or modifications to the contract documents. This addendum shall supersede the original contract documents and subsequent addenda. Wherein this addendum contradicts the original contract documents and previous addenda, this addendum shall take precedence. All other conditions shall remain unchanged. The change specified below shall become a legal part of the original contract documents.

A. CHANGES AND/OR CLARIFICATIONS TO THE BID DOCUMENTS AND PLANS

1. The Bid Schedule is replaced in its entirety with the attached Bid Schedule (See Attachment No. 1).

2. Bid Item No. 75 – Remove Tree in Caltrans Right-of-Way. The Contractor shall remove the City tree within the Caltrans right-of-way that is just south of the north entrance to the Transit Center. The work includes the removal and disposal of the tree and stump. The tree removal is to accommodate Frontier Fiber's relocation of its vault adjacent to the north entrance of the Transit Center to move it out of the new driveway approach (See Attachment No. 2).

3. Section 32 84 00 Planting Irrigation of the Technical Specifications is replaced with the attached (See Attachment No. 3).

4. Section 32 93 00 Plants of the Technical Specifications is replaced with the attached (See Attachment No. 4).

5. Plan Sheets T-1.1, LP-5.1, LI-1.1, and LI-5.1 are replaced by the attached plan sheets (See Attachment No. 5).

B. QUESTIONS RECEIVED

Q1: *Clarify the order of precedence between the bidding documents.*
A1: Specifications/Contracts, Construction Plans, Detailed drawings and written dimensions are the hierarchy of the construction documents from highest to lowest.

Q2: *Part 2.3 of specification section 32 93 00 shows that planting backfill for trees & shrubs will be a thoroughly blended mixture of site soil and soil amendments. However, planting notes 6D on sheet LP-5.1 shows that backfill mix shall be 60-70% loam topsoil thoroughly mixed with 30-40% fully composted organic material. Please clarify the material of backfill for planting pits.*

A2: Backfill mix in Specifications is correct. Planting notes and details have been updated accordingly

Q3: *Refer to part 2.1.I of specification section 32 93 00, provide the ratio for Prilled post-plant fertilizer (14-7-3) during maintenance period for bidding purposes.*

A3: NPK Ratio has been updated to 13-13-13 in specifications.

Q4: *Referring to reference notes schedule on sheet LP-1.1, which item is supposed to cover the cost of pea gravel?*

A4: New bid item added to list.

Q5: *The irrigation notes 11 on sheet LI-5.1 shows that all mainline, laterals, and control wires under pavement shall be installed in SCH 40 PVC sleeves. However, part 2.2A of specification section 32 84 00 and irrigation legend shows PVC schedule 80 with PVC solvent weld schedule 80 fittings for sleeve. Please clarify the material and fittings for irrigation sleeves.*

A5: Sleeves under road surfaces shall be schedule 80 PVC and Schedule 40 under pedestrian paving. Specifications, Irrigation Plan, Irrigation Schedule and Details updated

Q6: *The irrigation schedule on sheet LI-1.1 shows wall mounted controller. However, detail 4 on sheet LI-5.1 is for pedestal controller assembly. Please clarify.*

A6: Controller shall be pedestal mounted. Language edited on Schedule. Pedestal is purchased separately.

Q7: *Provide the installation detail for the brass shut off ball valve as shown on sheet LI-1.1.*

A7: Detail added to plan set.

Q8: *Clarify the type of irrigation system, potable or reclaimed?*

A8: System to be potable water.

Q9: *Provide the model and a detail for installation of 1" water meter shown on sheet LI-1.1.*

A9: The City of Guadalupe will supply the water meter. The water meter must be installed per City of Santa Maria Standard WA-14A.

Contractors shall note the acknowledgment of this addendum on page 4 of the Bid Documents (Bid Schedule).

The Bid Package can be found online at https://cityofguadalupe.org. On the Home page, scroll down to Bid Packages and follow the link.

Sincerely,
Jeff van den Eikhof, PE
City Engineer

ATTACHMENT NO. 1

REVISED BID SCHEDULE

PROPOSAL

TO

THE CITY OF GUADALUPE

FOR

GUADALUPE TRANSIT HUB PROJECT

CITY PROJECT NO. 2025-09-1

NAME OF BIDDER _____

BUSINESS P.O. BOX _____

CITY, STATE, ZIP _____

BUSINESS STREET ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE NO.: _____

FAX NO.: _____

EMAIL ADDRESS: _____

LICENSE NUMBER AND TYPE: _____

DIR NUMBER: _____

The work for which this Proposal is submitted is for construction in accordance with the Special Provisions (including the payment of not less than the State General Prevailing Wage Rates or the Federal minimum wage rates when set forth herein), the Plans described below, including any addenda thereto, the contract annexed hereto, and also in accordance with the Caltrans Standard Specifications dated 2018, and the City of Santa Maria Standard Specifications (adopted by the City of Guadalupe on June 23, 2009, pursuant to Resolution No. 2009-24) insofar as the same may apply, specifications which may be referred to in the Special Provisions or project plans, and the Labor Surcharge And Equipment Rental Rates in effect on the date the work is accomplished.

The Technical Specifications for the work to be done are entitled:

CITY OF GUADALUPE, CALIFORNIA;

GUADALUPE TRANSIT HUB PROJECT

The Bidder's attention is directed to Section 2, "Proposal Requirements and Conditions," of the Contract Documents.

The undersigned as Bidder declares that he/she has carefully examined the location of the proposed work above described, read and examined the Contract Documents, and Addendum/Addenda (List Addenda Received: ____, ____, ____, ____) therefore, read the Notice to Contractors, the Proposal Requirements, including the Caltrans Standard Specifications, and hereby proposes and agrees, if this Proposal is accepted by the City, to furnish all materials and services required to do all the work required to complete the said construction in accordance with the Contract Documents in the time stated herein, for the unit prices given below:

BASE BID SCHEDULE

ITEM NO.	BID ITEMS	TOTAL QUANTITIES	UNIT	UNIT PRICE	TOTAL COST
BASE BID					
SITE PREPARATION & DEMOLITION					
1	Mobilization/Demobilization	1	LS		
2	Clearing and Grubbing	1	LS		
3	Construction Staking	1	LS		
4	Earthwork (Cut 568 CY, Fill 231 CY)	337	CY		
5	Remove Existing Curb & Gutter	198	LF		
6	Remove Existing Curb & Gutter (offsite)	48	LF		
7	Remove Existing Curb	452	LF		
8	Remove Existing Concrete Sidewalk/Walkway & Aggregate Base	977	SF		
9	Remove Existing Concrete Sidewalk/Walkway & Aggregate Base (offsite)	166	SF		
10	Remove Existing Concrete Driveway & Aggregate Base (offsite)	187	SF		
11	Remove Existing Concrete Ramp & Aggregate Base	42	SF		
12	Remove Existing HMA Pavement & Aggregate Base	13,125	SF		
13	Remove Existing Concrete and Aggregate Base in Drive Aisle	306	SF		
14	Remove Existing Monument Sign	1	EA		
15	Remove Existing Sign	3	EA		
16	Remove Tree & Grind Stump	6	EA		
17	Remove Existing Wall and Pillars	60	LF		
18	Remove Existing Sanitary Sewer Lateral & Riser	1	LS		
19	Remove Existing Water Service, Hose Bib & Riser	1	LS		
20	Remove Existing Railroad Track & Stairs	1	LS		
21	Remove Existing Electrical/Utility Services, Risers & Lighting	1	LS		
22	Remove Existing Irrigation	1	LS		
23	Remove Existing Roof Drain/Curb Thru Drain	4	EA		
24	Remove and Relocate Existing Clock	1	LS		
CONCRETE/PAVEMENT WORK					
25	Concrete Curb & Gutter (Offsite)	48	LF		
26	Concrete Driveway (Offsite)	167	SF		

ITEM NO.	BID ITEMS	TOTAL QUANTITIES	UNIT	UNIT PRICE	TOTAL COST
27	Concrete Vertical Curb at Paver Section (Drive Aisle)	67	LF		
28	Concrete Vertical Curb at Paver Section (Paver Parking Stalls)	231	LF		
29	Concrete Vertical Curb at Concrete Section	222	LF		
30	Concrete Flush Curb at Paver Section	362	LF		
31	Concrete Flush Curb at Concrete Section	44	LF		
32	Concrete Flatwork (Sidewalk)	1,581	SF		
33	Concrete Flatwork (Sidewalk - Offsite)	171	SF		
34	4" Class 2 Aggregate Base (Sidewalk)	65	CY		
35	6" Reinforced Concrete Pavement	8,014	SF		
36	12" Class 2 Aggregate Base	297	CY		
37	Permeable Roman Pavers	3,811	SF		
38	Geotextile Fabric	141	SY		
39	2" ASTM No. 8 Aggregate Base	24	CY		
40	4" ASTM No. 57 Aggregate Base	47	CY		
41	12" Class 2 Aggregate Base (Parking Stalls)	73	CY		
42	16.25" Class 2 Aggregate Base (Drive Aisle)	42	CY		
43	Concrete Accessible Ramp (Form)	124	SF		
44	Landscape Curb	17	LF		
45	Wheel Stops	11	EA		
46	Detectable Warning Surface	115	SF		
47	Signing and Striping	1	LS		
LANDSCAPE					
48	Bike Rack	1	EA		
49	Bike Repair Station	1	EA		
50	Bike Lockers	6	EA		
51	Tree/Shurb Planting - 1 Gallon	247	EA		
52	Planting - 5 Gallon	136	EA		
53	Groundcover	874	SF		
54	Trees - 24" Box	6	EA		
55	Wood Bark Mulch	41	CY		
56	Irrigation System	1	LS		
57	Soil Prep	4436	SF		
UTILITIES					
58	4" PVC Sewer Lateral	1	EA		
59	Sanitary Sewer Cleanout	1	EA		
60	1.5" PVC Water Lateral	1	EA		
61	1.5" Water Meter & Box	1	EA		
62	4" PVC Storm Drain	40	LF		
63	6" PVC Storm Drain	120	LF		

ITEM NO.	BID ITEMS	TOTAL QUANTITIES	UNIT	UNIT PRICE	TOTAL COST
64	12"x12" Catch Basin	2	EA		
65	Cobble Energy Dissipator	0.4	CY		
66	Connect to Existing 4" Roof Drain	4	EA		
67	Relocate Existing Telecommunications Vault	1	EA		
68	Electrical/Lighting	1	LS		
69	Transformer	1	EA		
MISCELLANEOUS					
70	Erosion and Sediment Control	1	LS		
71	Portland Loo Restroom	1	LS		
72	Bike Lockers, Bike Rack & Repair Station with Pump	1	LS		
73	Existing Building Upgrades & Pergola	1	LS		
74	Bollards	7	EA		
75	Remove Tree in Caltrans Right-of-Way	1	EA		
TOTAL BASE BID (ITEMS 1 THROUGH 75)					

TOTAL BASE BID IN WORDS:

_____

Total Base Bid Amount shall be shown in both words and figures.

BID ALTERNATIVE SCHEDULE

ITEM NO.	BID ITEMS	TOTAL QUANTITIES	UNIT	UNIT PRICE	TOTAL COST
BID ALTERNATIVE – CONCRETE/PAVEMENT WORK (ITEMS 27-42)					
BID ALTERNATIVE CREDIT (Unit Price and Total Cost for Bid Alternate Credit Item Number must match the corresponding Base Bid Item Number values)					
27	Concrete Vertical Curb at Paver Section (Drive Aisle)	-67	LF		
28	Concrete Vertical Curb at Paver Section (Paver Parking Stalls)	-231	LF		
29	Concrete Vertical Curb at Concrete Section	-222	LF		
30	Concrete Flush Curb at Paver Section	-362	LF		
31	Concrete Flush Curb at Concrete Section	-44	LF		
32	Concrete Flatwork (Sidewalk)	-1,581	SF		
33	Concrete Flatwork (Sidewalk - Offsite)	-171	SF		
34	4" Class 2 Aggregate Base (Sidewalk)	-65	CY		
35	6" Reinforced Concrete Pavement	-8,014	SF		
36	12" Class 2 Aggregate Base	-297	CY		
37	Permeable Roman Pavers	-3,811	SF		
38	Geotextile Fabric	-141	SY		
39	2" ASTM No. 8 Aggregate Base	-24	CY		
40	4" ASTM No. 57 Aggregate Base	-47	CY		
41	12" Class 2 Aggregate Base (Parking Stalls)	-73	CY		
42	16.25" Class 2 Aggregate Base (Drive Aisle)	-42	CY		
				Bid Alternate Credit Subtotal[(1)]	
BID ALTERNATIVE COST					
A27	Concrete Vertical Curb at Paver Section (Drive Aisle)	67	LF		
A28	Concrete Vertical Curb at Paver Section (Paver Parking Stalls)	231	LF		
A29	Concrete Vertical Curb at Concrete Section	222	LF		
A30	Concrete Flush Curb at Paver Section	362	LF		
A31	Concrete Flush Curb at Concrete Section	44	LF		
A32	Concrete Flatwork (Sidewalk)	1,581	SF		
A33	Concrete Flatwork (Sidewalk - Offsite)	171	SF		
A34	4" Class 2 Aggregate Base (Sidewalk)	65	CY		
A35	6" Reinforced Concrete Pavement	8,014	SF		
A36	12" Class 2 Aggregate Base	297	CY		
A37	Permeable Roman Pavers	3,811	SF		
A38	Geotextile Fabric	141	SY		
A39	2" ASTM No. 8 Aggregate Base	24	CY		
A40	4" ASTM No. 57 Aggregate Base	47	CY		
A41	12" Class 2 Aggregate Base (Parking Stalls)	73	CY		

ITEM NO.	BID ITEMS	TOTAL QUANTITIES	UNIT	UNIT PRICE	TOTAL COST
A42	16.25" Class 2 Aggregate Base (Drive Aisle)	488	CY		
				Bid Alternate Cost Subtotal(2)	
				BID ALTERNATIVE NET COST *	

*** Subtract Subtotal(1) from Subtotal(2)**

TOTAL BID ALTERNATE NET COST IN WORDS:

_____

Total Bid Alternate Net Cost shall be shown in both words and figures.

The award of the contract, if it is awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. Bids will be compared by the Total Mathematical Bid as determined by the Engineer. The Total Mathematical Bid is the summation of all required bid items, excluding bid alternates. The Total Cost of each Bid Item is calculated by multiplying the Total Quantities by the Unit Prices. In the case of a discrepancy between the Total Mathematical Bid and the total bid written above, the Total Mathematical Bid shall govern.

The bidder to whom the contract is awarded agrees to enter into a contract with the City of Guadalupe within **fifteen (15) days** after the date of the Notice of Award, and to commence work within **ten (10) working days** after the date of the Notice To Proceed, and to diligently prosecute the work to completion within the Time of Contract shown on the cover of the Project Manual.

The undersigned understands and agrees that the City of Guadalupe will not be responsible for any errors or omissions on the part of the undersigned in preparing and submitting this Proposal.

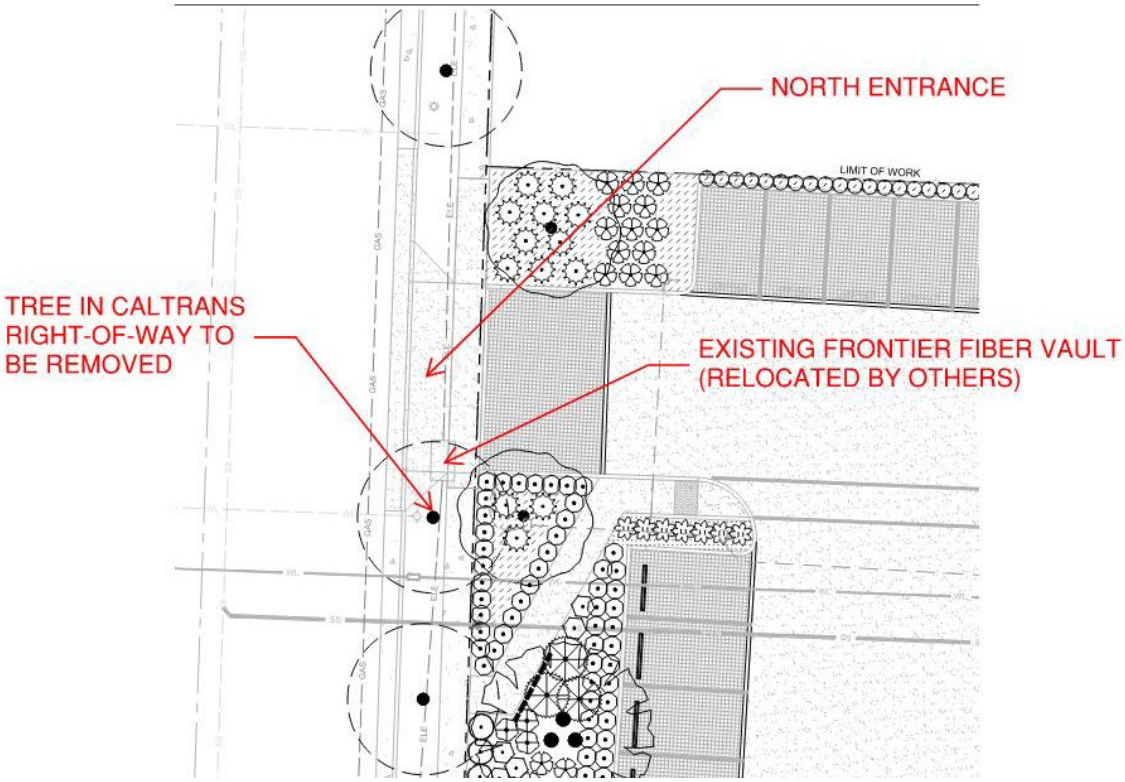
_____

Signature Title

_____

Date

ATTACHMENT NO. 2



Bid Item No. 75 – Remove Tree in Caltrans Right-of-Way

ATTACHMENT NO. 3

REVISED SECTION 32 84 00 PLANTING IRRIGATION

SECTION 32 84 00

PLANTING IRRIGATION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Pipe and fittings
2. Valves
3. Tree bubblers
4. Drip system
5. Control system
6. Warning Signs

1.2 SYSTEM DESCRIPTION

A. Provide a system that operates with a minimum water pressure of 70 PSI and has an automatic programmable electronic solenoid controlled underground irrigation system for exterior plantings and sod.

1.3 RELATED SECTIONS

A. Section 32 93 00 – Plants

1.4 DEFINITIONS

A. Lateral Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.

B. Mainline Piping: Downstream from point of connection (P.O.C.) to the water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

1.5 SUBMITTALS

A. Product Data: Include pressure ratings, rated capacities, and settings of selected models for the following:
1. Controller, control system and wiring diagram
2. Specialty valves
3. Valve Boxes
4. Tree bubblers
5. Drip irrigation components
6. Irrigations specialties and accessories
7. All other information related to the irrigation system

B. Field quality-control test reports.

C. As-Built Drawings: Include location, type, size and design data.
   1. Piping layout to point of connection, pipe types, and sizes
   2. Location of sleeves under pavement
   3. Location and coverage of sprinkler heads, nozzles, bubblers and drip systems
   4. All valves, hose bibs and other accessories
   5. Controller and wiring; show wire size and number of conductors for each control cable, grounding rods, and other accessories
   6. Plant and landscaping features, site structures
   7. Schedule of fittings to be used.

D. Operation and maintenance data.

1.6 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Work and materials shall be in accordance with requirements of the utility supplying water for backflow prevention and all applicable laws and regulations of governing authorities.

C. Installer's Qualifications: Engage an experienced installer who has installed irrigation systems for a minimum of 5 years and who has successfully completed irrigation systems similar in material, design, and extent to that indicated for this Project.

D. Company Specialization. Professional contractor must have at a minimum, a C-27 license, is a Certified Irrigation Contractor (by the Irrigation Association) or equivalent certified Contractor with CLCA (California Landscape Contractors Association), specializing in commercial irrigation system installation and maintenance. A review of a current copy of each bidder's license is required.

1.7 ORDINANCES AND REGULATIONS

A. All local, municipal, and state laws, rules and regulations governing any portion of this work are a part of these specifications and their provisions carried out.

B. When specifications or drawings describe materials, workmanship of construction of better quality or higher efficiency, it shall take precedence over such laws, rules, and regulations.

1.8 PROJECT CONDITIONS

A. Site Inspections: Verify Project site conditions and note irregularities affecting Work of this Section. Report irregularities to the Engineer prior to beginning work.
   1. Beginning work of this section implies acceptance of existing conditions. Preliminary site and soils report available at the Owner's Office are for informational purposes only. Data in reports are not intended as representations or warranties of accuracy or continuity of conditions between soil test locations.

2. The Owner assumes no responsibility for interpretations or conclusions drawn from this information.
3. Conduct all necessary site inspections and investigations for the proper installation of the specified work.

B. Utility Locations: Arrange for and coordinate with the Engineer the location of all underground utilities. Repair underground utilities damaged during construction.

1.9 SEQUENCING AND SCHEDULING

A. Maintain uninterrupted water and power service to the Project site during normal working hours. Arrange for any temporary water shutoffs with the Engineer.

B. Coordinate irrigation systems work with landscape plants and other site work.

1.10 SHIPPING, HANDLING AND STORAGE

A. Shipping: Components shall be packaged to protect against damage from shipping, handling, and transit. Cover all pipe openings to prevent the entry of foreign material. Isolate solvents from other system materials to avoid damage from spillage or leakage.

B. Handling:
1. Pipe and Fittings: Do not bump, scrape or drop. Do not use chains, hooks, cables, and other devices that can damage pipe and fittings.
2. Exercise caution in handling solvents.

C. Storage:
1. General: Provide proper storage of system materials. Environmental control shall be provided to maintain proper storage conditions as prescribed by the manufacturers of the irrigation system components.
2. Pipe: Store pipes supported off the ground for the full length of pipe and in a manner that will prevent pipe distortion and accidental motion.
3. Non-metallic Pipe and Fittings: Protect from exposure to direct sunlight during shipping and storage and minimize exposure to sunlight during installation.

1.11 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Deep Root Watering System: Ten of each body and nozzle type.
2. Drip Emitters: minimum of 20 of each size.
3. Operations and Maintenance Manual: Controller.
4. Keys to any locking enclosures.

1.12 WARRANTY

A. Complete all work in accordance with the Drawings and Specifications and warrant materials and workmanship to be free from defects for the period of one year from the Date of Acceptance.

B. Repair or replace all defects in material or workmanship, and any damage resulting from the repairing of such defects that may develop during the warranty period at no additional cost to the Owner.
   1. Make such repairs or replacements within three days of written notification by the Owner.
   2. Owner reserves the right to undertake repairs and replacement, at the Contractors expense, for repairs and replacement that are not complete within three days of notification.

1.13 DAMAGE TO PROPERTY

A. Repair property damaged by defective irrigation material, poor workmanship or negligence of Contractor and his employees at Contractor's expense and restore to its original condition and to the satisfaction of Owner.

1.14 MAINTENANCE SERVICE

A. Maintain the irrigation system for the Maintenance Period as stated in section 32 01 90

B. Maintenance Work:
   1. Maintain by applying standard industry practices, keeping the system fully operational including, but not limited to, the following:
      a. Program irrigation controller to match current reference ET and link to weather station for automatic weather-based adjustments.
      b. Adjust remote control valve pressure regulator and flow control as required.
      c. Adjust nozzles to maintain 100 percent coverage and adequate soil moisture.
   2. Water Conservation: Program and adjust equipment to apply water in an efficient and water conserving manner and to minimize waste from over watering and runoff.

PART 2 PRODUCTS

2.1 BACKFLOW PREVENTION

A. Backflow Prevention Device: See plans for backflow prevention device.

B. Backflow Prevention Device Enclosure:
   1. Furnish and install enclosure for existing backflow prevention devices.
   2. Guardian enclosure GE-2 lift-off enclosure or approved equal
   3. Color: Green

2.2 PIPE AND FITTINGS

A. Sleeving:
   1. Provide rigid, unplasticized polyvinyl chloride (PVC) 1120, Type 1, Grade 1, NSF approved pipe, extruded from material meeting the requirements of ASTM D 1785, white in color.

2. Provide Schedule 80 and Schedule 40 solvent weld pipe for sleeving as per plans.
3. Provide Schedule 80, Type 1, PVC solvent weld fittings and Schedule 40, Type 1 PVC solvent weld fittings respectively, conforming to ASTM D 2466 and ASTM D 1784.
4. Provide primer approved by pipe manufacturer and solvent cement conforming to ASTM D 2564.
5. Sleeve Size: Size per plans. Where size is not indicated on the Plans, sleeve diameter shall be such that a minimum of 1" clearance is provided all around irrigation/carrier pipe and the inner pipe wall of the sleeve.

B. Mainline Pipe and Fittings:
1. Provide rigid, unplasticized polyvinyl chloride (PVC) 1120, Type 1, Grade 1, NSF approved pipe, extruded from material meeting the requirements of ASTM D 2241.
2. See plans for solvent welded pipe for mainline piping type.
3. Provide Schedule 40, Type 1, PVC solvent weld fittings conforming to ASTM D 2466 and ASTM D 1784.
4. Provide primer approved by pipe manufacturer and solvent cement conforming to ASTM D 2564.

C. Lateral Pipe and Fittings:
1. Provide rigid, unplasticized polyvinyl chloride (PVC) 1120, Type 1, Grade 1, NSF approved pipe, extruded from material meeting the requirements of ASTM D 2241.
2. See plans for solvent welded pipe for lateral piping type.
3. Provide Schedule 40, Type 1, PVC solvent weld fittings conforming to ASTM D 2466 and ASTM D 1784.
4. Provide primer approved by pipe manufacturer and solvent cement conforming to ASTM D 2564.

D. Swing Joints and Risers:
1. Nipples:
   a. Provide rigid, unplasticized polyvinyl chloride (PVC) 1120, Type 1, Grade 1, NSF approved pipe, extruded from material meeting the requirements of ASTM D 1785, uniformly gray in color
   b. Provide Schedule 80 threaded nipples conforming to ASTM D 2464 and ASTM D 1784.
2. Fittings:
   a. Provide Schedule 40, Type 1, PVC solvent weld fittings conforming to ASTM D 2466 and ASTM D 1784.
   b. Provide Schedule 40, Type 1, PVC threaded, socket, or both type fittings conforming to ASTM D 2466 and ASTM D 1784.
   c. Provide primer approved by pipe manufacturer and solvent cement conforming to ASTM D 2564.

E. Copper Pipe:
1. Type K, conforming to ASTM B 42.

F. Galvanized Steel Pipe:

1. Standard weight, seamless or welded, galvanized, conforming to ASTM A 53.

2.3 REMOTE CONTROL VALVES (RCV)

A. Industrial-strength glass-filled nylon globe valves for commercial use, with pressure regulating module; manufacturer, model, size as shown on Drawings for drip irrigation.

B. Industrial-strength brass remote control valves for commercial use, manufacturer, model, size as shown on Drawings for spray areas and deep root tree bubblers.

C. Boxes for RCV:
1. Type: Rectangular plastic hinged cover with bolt down lock kit, Carson 1419-2 or approved equal.
2. Color: Green.

2.4 CONTROL SYSTEM

A. Controller:
1. Electronic, solid state, nonvolatile memory, with percentage adjustment, controller; manufacturer, model, number of stations as shown on Drawings.
2. Provide controller with satellite operational capability.

B. Control Wires:
1. Provide wire as shown on plans or approved equal.
2. Provide waterproof connectors as shown on plans or approved equal.

C. Boxes for Control Wire Splices:
1. Type: 10-inch round plastic, with bolt down lock kit, Carson 910-3 or approved equal.
2. Color: Green.

D. Controller Housing: Weatherproof, watertight, stainless-steel wall-mounted enclosure with lockable access door as shown on plans or approved equal.

2.5 BUBBLERS AND DRIP EMITTERS

A. Bubblers: Plastic, pressure compensating; manufacturer, model, size as shown on Drawings.

B. Drip Emitters: Plastic, pressure compensating diaphragm, self-flushing, manufacturer, model, size as shown on Drawings.

2.6 BALL VALVES

A. Manufacturer, model, size as shown on Drawings.

B. Boxes for Ball Valves:
1. Type: 10-inch round plastic, with bolt down lock kit, Carson 910-3 or approved equal.
2. Color: Green

2.7 QUICK-COUPLING VALVE

A. Manufacturer, model, size as shown on Drawings.

B. Boxes for Quick Coupling Valves:
   1. Type: 10-inch round plastic, with bolt down lock kit, Carson 910-3 or approved equal.
   2. Color: Green

2.8 FLOW SENSOR

A. Manufacturer, model, size as shown on Drawings.

B. Box for Flow Sensor:
   1. Type: 10-inch round plastic, with bolt down lock kit, Carson 910-3 or approved equal.
   2. Color: Green

2.9 MISCELLANEOUS INSTALLATION MATERIALS

A. Pipe Joint Compound: Teflon tape.

B. Pipe Coatings for Below Grade Steel Pipe and Fittings: Koopers Bitumastic 300-M coal tar epoxy, 50 mil polyethylene tape; wrap to 6 inches above grade.

C. Provide other ancillary materials and equipment necessary to install the assemblies and the systems to fully operational condition.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Verify field conditions and location of existing utilities are acceptable.

B. Piping layout indicated is diagrammatic only. Route piping to avoid plants and structures.

3.2 LAYOUT OF WORK

A. Stake out the irrigation system. Items to be staked include mainline components, remote control valves, bubblers, and rotors.

B. Location of Piping, Valving and Water Emission Devices: Design location is diagrammatic and based on approximate location of irrigation rotor heads. Adjust irrigation components to avoid architectural features, and obstructions such as trees, signs, and light standards.

C. Install all mainline pipe and mainline components inside of Project limit of work lines.

D. Irrigation System Layout Review: Irrigation system layout review will occur after the staking has been completed. Notify the Engineer 7 days in advance of review. Modifications will be identified by the Engineer at this review. Obtain Engineer's approval before starting excavation.

3.3 EXCAVATION, TRENCHING, AND BACKFILLING

A. Trench in accordance with Technical Specifications.

B. Excavate to permit the pipes to be laid at intended elevations and to permit workspace for installing connections and fittings.

C. Minimum cover (distance from top of pipe or control wire to finish grade) as follows:
   1. 18 inches over mainline pipe.
   2. 18 inches over control wire and over electrical conduit.
   3. 12 inches over lateral pipe to rotors and bubblers.

D. Backfill only after lines have been inspected and tested.

E. Excavated material is generally satisfactory for backfill.
   1. Use only backfill free from rubbish, vegetative matter, and stones larger than 2 inches in maximum dimension.
   2. Use backfill free of sharp objects which may damage the pipe
   3. Remove material not suitable for backfill.

F. Backfill for pipe not in sleeve by one of the following methods:
   1. Backfill and puddle lower half of trench. Allow to dry 24 hours. Backfill remainder of trench in 6-in. layers. Compact each to density of surrounding soil.
   2. Backfill rest of trench by depositing the backfill material equally on both sides of pipe in 6-in. layers and compacting each to density of surrounding soil.

G. Enclose pipe and wiring beneath hardscape structures, walks, curbs, etc., in sleeves. Minimum compaction of backfill for sleeves shall be 95 percent Standard Proctor Density in accordance with ASTM D 698. Use of water for compaction around sleeves by "puddling" method is not acceptable.

H. Dress backfilled areas to original grade. Incorporate excess backfill into existing Project site grades.

I. Where utilities conflict with irrigation trenching and pipe work, contact the Engineer for trench depth adjustments.

3.4 ASSEMBLING PIPE AND FITTINGS

A. General:
   1. Keep pipe free from dirt and pipe scale. Cut pipe ends square and deburr. Clean pipe ends.

2. Keep ends of assembled pipe capped. Remove caps only when necessary to continue assembly.
3. Trenches may be curved to change direction or avoid obstructions within limits of curvature of pipe. Maximum offset per 20-foot pipe length: 7.5 feet for 2-in. diameter pipe and 2 feet for 2.5 and 3-in. diameter pipe. All curvature shall result from the bending of the pipe lengths. No deflection will be allowed at pipe joints.

B. Sleeving:
1. Install sleeving at a depth to allow encased pipe or wiring to remain at specified burial depth.
2. Extend sleeve ends 12 inches beyond edge of paved surface. Cover pipe ends and mark with stakes.
3. Bore for sleeves under obstructions that cannot be removed. Use equipment and methods designed for horizontal boring.

C. Mainline Pipe and Fittings:
1. Use only strap-type friction wrenches for threaded plastic pipe.
2. PVC Solvent Weld Pipe:
   a. Use primer and solvent cement. Join pipe as recommended by manufacturer and in accordance with accepted industry practices.
   b. Cure for 30 minutes before handling and 24 hours before allowing water in pipe.
   c. Snake pipe from side to side within trench.
   d. Fittings: The use of cross type fittings is not acceptable.

D. Lateral Pipe and Fittings:
1. Use only strap-type friction wrenches for threaded plastic pipe.
2. PVC Solvent Weld Pipe:
   a. Use primer and solvent cement. Join pipe as recommended by the manufacturer and in accordance with accepted industry practices.
   b. Cure for 30 minutes before handling and 24 hours before allowing water in the pipe.
   c. Snake pipe from side to side within trench.

E. Specialized Pipe and Fittings:
1. PVC Threaded Connections:
   a. Use only factory-formed threads. Field-cut threads are not acceptable.
   b. Use only Teflon-type tape or Teflon-based paste.
   c. When connection is plastic-to-metal, plastic component shall have male threads and metal component shall have female threads.

3.5 INSTALLATION OF MAINLINE COMPONENTS

A. Backflow Prevention Assembly: Install where indicated on the Drawings. Install assembly so that its elevation, orientation, access, and drainage conform to manufacturer's instructions and applicable health codes.

B. Quick Coupling Valve Assembly: Install where indicated on the Drawings

3.6 INSTALLATION OF ROTOR IRRIGATION COMPONENTS

A. Rotor Assembly:
   1. Flush lateral pipe before installing rotor assembly.
   2. Install in accordance with the installation details at locations shown on the Drawings.
   3. Locate rotors 2 inches from adjacent walls, fences, or edges of paved areas.
   4. Install rotors perpendicular to the finish grade.
   5. Supply appropriate nozzle and adjust arc of coverage of each rotor for best performance.
   6. Adjust radius of throw of each rotor for best performance.

3.7 INSTALLATION OF BUBBLER AND DRIP IRRIGATION COMPONENTS

A. Remote Control Valves for Bubbler and Drip Laterals:
   1. Flush mainline before installation of RCV.
   2. Install where indicated on the Drawings. Use wire connectors and waterproof sealant to connect control wires to remote control valve wires. Install connectors and sealant in accordance with manufacturer's instructions.
   3. Install only one RCV to a valve box. Locate valve box at least 12-inches from, and align with, nearby walls or edges of paved areas. Group RCV valves together where practical. Arrange grouped valve boxes in rectangular patterns. Allow at least 12-inches between valve boxes.
   4. Adjust RCV to regulate the downstream operating pressure.
   5. Attach ID tag with controller station number to control wiring inside valve box..

B. Bubbler Assembly:
   1. Flush lateral pipe before installing bubbler assembly.
   2. Install bubbler assembly in accordance with the installation details at locations shown on the Drawings.

C. Drip Assembly:
   1. Flush lateral pipe before installing above grade drip tubing.
   2. Install drip assembly in accordance with the installation details at locations shown on the Drawings.

3.8 INSTALLATION OF CONTROL SYSTEM COMPONENTS

A. Controller:
   1. Location of controller as shown on the Drawings is approximate. Location shall be as approved by the Owner during irrigation layout review.
   2. Install and test controller in accordance with manufacturer's instructions.
   3. Connect controller to power. See electrical plans for power source.

B. Power Wire:
   1. Route power wire along the mainline routes. Install a minimum number of field splices. All power wire splices shall be made with specified connectors and installed in accordance with manufacturer's instructions. Locate all splices in a separate 10-inch round valve box. Coil 24-inches of wire in valve box.

C. Control Wire:
   1. Bundle control wires where two or more are in the same trench. Bundle with pipe wrapping tape spaced at maximum 10-foot intervals.
   2. Provide a 24-inch excess length of wire in an 8-inch diameter loop at each 90-degree change of direction, at both ends of sleeves, and at 100 feet intervals along continuous runs of wiring. Do not tie wiring loop. Coil 30-inch length of wire within each remote-control valve box as shown on Drawings.
   3. Install common ground wire and one control wire for each remote-control valve. Multiple valves on a single control wire are not acceptable.
   4. All control wire splices shall be made with wire connectors and waterproof sealant and installed in accordance with the manufacturer's instructions. Locate splice in a valve box which contains an irrigation valve assembly, or in a separate 10-inch round valve box. Use same procedure for connection to valves as for inline splices.
   5. Unless otherwise shown, install wire parallel with and below mainline pipe.
   6. Protect wire not installed with PVC mainline pipe with a continuous run of warning tape placed in the backfill at 6-inches above the wiring.

3.9 INSTALLATION OF OTHER COMPONENTS

A. Provide other ancillary materials and equipment necessary to install the assemblies and systems to fully operational condition. Install in accordance with manufacturer’s instructions.

3.10 TESTING

A. Notify the Engineer 7 days in advance of testing.

B. Pipelines jointed with solvent-welded PVC joints shall be allowed to cure at least 24 hours before testing.

C. Furnish clean, clear water, pumps, labor, fittings, and equipment necessary to conduct tests.

D. Hydrostatic Pressure Test:
   1. Subject mainline pipe to a hydrostatic pressure equal to 1.5 times the anticipated operating pressure (min. 120 psi) for 2 hours. Test with mainline components installed.
   2. Subject lateral pipe to a hydrostatic pressure equal to anticipated operating pressure. Test with risers for sprinklers capped.
   3. Backfill to prevent pipe from moving under pressure. Expose couplings and fittings.
   4. Leakage will be detected by visual inspection. Replace defective pipes, fittings, joints, valves, or appurtenances. Repeat test until pipe passes test.
   5. Use of cement or caulking to seal leaks is prohibited.

E. Operational Test:
   1. Activate each remote-control valve in sequence from controller. The Engineer will visually observe operation, water application patterns, and leakage.
   2. Replace defective, wiring, or appurtenance to correct operational deficiencies.

3. Replace, adjust, or move water emission devices to correct operational or coverage deficiencies.
4. Replace defective pipes, fittings, joints, valves, sprinklers, or appurtenances to correct leakage problems. Cement or caulking to seal leaks is prohibited.
5. Repeat tests until each lateral passes all tests.

3.11 DEMONSTRATION

A. Demonstrate to the Owner's maintenance personnel the operation of equipment, water emission devices, specialties, and accessories. Review operating and maintenance information.

B. Notify the Engineer 7 days in advance of demonstration.

3.12 PROJECT RECORD (AS-BUILT) DRAWINGS

A. Maintain on the Project site and separate from documents used for construction, one complete set of Contract Documents as Project Documents. Keep documents current. Do not backfill trenches and excavations until as-built information is recorded.

B. Record pipe and wiring network alterations. Record work that is installed differently than shown on the Drawings. Record accurate reference dimensions, measured from at least two permanent reference points of each irrigation system valve, backflow prevention device, satellite controller, sleeve end, wiring connections, and other irrigation components enclosed within a valve box.

3.13 CLEAN UP

A. Upon completion of work, remove from the Project site all machinery, tools, excess materials, and rubbish.

3.14 MAINTENANCE

A. Interim Maintenance: Program and maintain the system in full operational condition for irrigating plantings until Date of Substantial Completion

B. Maintenance Period: In accordance with the Technical Specifications section 320190 Landscape Maintenance.

END OF SECTION 328400

ATTACHMENT NO. 4

REVISED SECTION 32 93 00 PLANTS

SECTION 32 93 00

PLANTS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Rough and finish grading
2. Soil testing
3. Preparation of planting soil with amendments
4. New trees, plants, ground cover, and sod turf
5. Mulch
6. Root barrier
7. Weed abatement

1.2 RELATED SECTIONS

A. Section 32 84 00 - Landscape Irrigation

B. Section 32 01 90 - Landscape Maintenance

1.3 REFERENCES

A. ANSI Z60.1 – American Standard for Nursery Stocks, 2004 edition

B. Aboriculture, 4th edition, by Harris, Clark, & Matheny, copyright 2004

C. Integrated Pest Management (IPM) publications, current editions, from University of California Cooperative Extension

1.4 SUBMITTALS

A. Product Data: For each type of product indicated that are not plants.

B. Samples for Verification:
1. 1-lb of organic mulch in labeled plastic bag.
2. Fertilizers, one small package in manufacturer’s packaging of each type.
3. Soil amendments.

C. Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the following:
1. Manufacturer's certified analysis for standard products and seed.
2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

D. Qualification Data: Current California Landscape Contractor’s License.

E. Soil Test Report:

1. Soil shall be tested from three (3) representative locations of planted areas on site. Representative samples shall be taken from random and varied locations of the project site that will receive landscaping installation. Samples should represent major conditions of exposed cut soils, fill soils, and native undisturbed soil. Sample from the top foot for ground cover and shrubs. Sample from the expected depth for large container stock. Label each sample for location/origin, type of soil condition visibly observed, and sampling depth. Laboratory report shall identify each sample with same information. All samples taken shall be split into two samples, one half will go to a qualified laboratory by the Contractor (at his or her expense) and the other half will be retained by the Owner. All samples shall be at least one pint in volume.
2. A copy of the soil test results shall be submitted to the Owner and Architect before work begins.
3. Testing methods should comply with the United States Department of Agriculture Handbook Publication No. 60, Methods of Soil Analysis published by the Soil Science Society of America and peer-viewed methods published in scientific journals. Evaluations and recommendations should be based on University of California publications and peer-viewed articles published in scientific journals.
4. The Owner shall appoint a representative to oversee soil sampling that may be required. The time, depth, location, and number of samples to be taken as per instructions from the Owner.
5. Soil report to include:
    a. pH measurement.
    b. Determination whether limestone is present or not.
    c. Percent water in saturation extract.
    d. Electrical conductivity of the saturated extract (salinity ECe) / soluble salts.
    e. Measurement of sodicity (Sodium Adsorption Ratio).
    f. Concentration of boron in saturation extract.
    g. Nutrients and elements:
        1) Measurement (low, medium, high) of: Boron, calcium, copper, iron, magnesium, manganese, molybdenum, phosphorus, potassium, sodium, sulfur, and zinc.
        2) Analyze saturation extract for: calcium, magnesium, sodium, boron, chloride, phosphorus, nitrate and sulfate.
        3) Trace metals: Aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, nickel, selenium, silver, strontium, tin and vanadium.
        4) The presence of calcium carbonate and/or magnesium carbonate.
    h. Soil Texture (gravel, sand, silt and clay). Determine organic matter content by the measurement of organic carbon. The quality of the organic matter shall be determined by measuring organic carbon and total nitrogen.
        1) Methods of Soil Analysis, Part 1, Physical and Mineralogical Methods, Soil Science Society of America, Inc., 1986, chapter 36, pgs 901-926 and Methods of Soil Analysis, Part 3 Chemical Methods, Soil Science Society of America, Inc, 1996, chapter 34, pgs 965-977 & pgs 1001-2 and chapter 37, pg 1088

i. Interpretation and recommendations for correction of nutritional deficiencies/ excesses and potential toxicities. These recommendations shall include:
   1) Volume of soil amendment per 1,000 sq.ft. and cu.yd. of backfill mix.
   2) Pounds of gypsum per 1,000 sq.ft. and cu.yd. of backfill mix.
   3) Pounds of soil sulfur per 1,000 sq .ft. and cu.yd. of backfill mix.
   4) Pounds of iron sulfate per 1,000 sq.ft. and cu.yd. of backfill mix.
   5) Pounds of pre-plant fertilizer per 1,000 sq.ft. and cu.yd. of backfill mix.
   6) Pounds of soil polymers per 1,000 sq.ft.
   7) Recommendation for soil leaching.
   8) Recommendation for tree drain installation.
   9) Pounds of maintenance fertilizer per 1,000 sq.ft. and analysis.
   10) Recommendation for soil wetting agent and application rate.
   11) Percent of site soil-to-soil amendment in backfill mix.
   12) Whether or not soil polymers need to be added to soil.

   If any of the above-listed items are not recommended, the recommendation shall call for zero volume or zero poundage per 1,000 square feet. All soil test costs will be the responsibility of the Contractor.

F. Planting Schedule: Indicating anticipated planting dates for installing turf coordinated with overall project schedule.

G. Maintenance Period: 90 days maintenance of plantings from Date of Substantial Completion.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Schedule: Time, procedures and practices for maintenance of landscape plants spanning a full calendar year, covering irrigation frequency, fertilizer types and rates of application, lawn mowing frequency, disease and pest control, and other maintenance practices required by the plant types.

1.6 QUALIFICATIONS

A. Nursery: Company specializing in growing and cultivating trees, shrubs, groundcovers, and turf specified in this section.

1.7 QUALITY ASSURANCE

A. Landscape Contractor's Qualifications: A qualified landscape installer whose work has resulted in the successful establishment of exterior plants.
   1. Field Supervision: Maintain an experienced full-time supervisor on Project site when planting work is in progress.

B. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the California State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

1. Soil Analysis: Analysis shall include fertility, agricultural suitability, particle size analysis and fertilizer recommendations.
2. Soil Laboratory: A05 soil test as performed by Soil and Plant Laboratory, Inc., P.O. Box 11744, Santa Ana, CA 92711, (714) 558-8333 or equal laboratory tests approved by the engineer.

C. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver plants after preparations for planting have been completed. Install in approved locations in a timely manner whenever possible. If planting is delayed more than six hours after delivery, set plants in approved shade area, protect from weather and mechanical damage, and keep roots moist.
1. Transport plants and seeds under protective cover.
2. Water root systems of plants stored on-site with a fine-mist spray. Water as often as necessary to maintain root systems in a moist condition.

1.9 COORDINATION

A. Coordinate with other works in Contract, including but not limited to:

1. Irrigation System: Planting work shall proceed after testing and approval of the irrigation system.

2. Paving and other construction work: Coordinate planting area requirements with paving work, including irrigation sleeving, piping, and wiring.

1.10 MAINTENANCE

A. Maintenance Period is 90 days.

B. Maintenance Work:

1. Maintain by applying standard horticultural practices as prescribed by Arboriculture, 4th edition (2004), by Harris, Clark, & Matheny; including mowing, watering, weeding, fertilizing, as required to establish healthy, viable plants and turf.

2. Pest and Disease Control: Apply Integrated Pest Management (IPM) Practices as recommended by the University of California Cooperative Extension publications for pest control whenever possible to keep trees and shrubs free of insects and diseases.
a. Pesticides and herbicides may be used only when IPM practices have proved ineffective.
b. Application of pesticides and herbicides: In strict compliance with all applicable government codes and regulations.

PART 2 PRODUCTS

2.1 SOIL AMENDMENTS AND FERTILIZER

A. The following amendments and fertilizer information are for Bidding purposes only. Application rates, amendment types, and fertilizers shall follow soil report recommendations.

B. Soil Conditioner - shall be a product that aids the structure of the soil consisting of rapidly decaying, slowly decaying and non-decaying material. The rate of decomposition of this amendment is very important.

1. The humus material shall have an ash content of no less than 8% and no more than 50%.

2. The pH of the material shall be between 6 and 7.5.

3. The salt content shall be less than 10 millimho/cm @ 25° C. (ECe less than 10) on a saturated paste extract.

4. Boron content of the saturated extract shall be less than 1.0 parts per million.

5. Silicon content (acid-insoluble ash) shall be less than 30%.

6. Calcium carbonate shall not be present if to be applied on alkaline soils.

7. Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, sludges, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.

8. Composted wood products are conditionally acceptable (stable humus must be present). Wood-based products are not acceptable which are based on redwood or cedar.

9. Sludge-based materials are not acceptable if the soil already has a high level (toxic level) of zinc, copper or other heavy metals based on soil analysis.

10. Carbon: nitrogen ratio is less than 25: 1.

11. The compost shall be aerobic without malodorous presence of decomposition products.

12. The maximum particle size shall be 0.5 inch, 80% or more shall pass a NO. 4 screen.

Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis: arsenic: 20, cadmium: 15, chromium: 300, cobalt: 50, nickel: 100, copper: 150, lead: 200, mercury: 10, molybdenum: 60, selenium: 50, silver: 10, vanadium: 50, zinc: 300

The commercial grade product used shall be Loamex, or approved equal.

C. Mycorrhizal fungi shall be added in all planting areas, regardless of Soils Report. Mycorrhizal inoculum consists of a combination of:
   1. Innoculum shall contain a blend of eight top types of Endospores: Glomus aggregatum, G. clarum, G. deserticola, G. intraradices, G. monosporus, G. mosseae, Gigaspora margarita, and Paraglomus brasilianum, and seven top types of Ecto fungi spores:Lacarria laccata, Pisolithus tinctorius, Rhizopogon amylpogon, R. fulvigleba, R. rubescens, R. villosuli, and Scleroderma spp. The guaranteed Endo spore count shall be a minimum 50 spores/cc, and the Ecto spore count shall be a minimum 50,000 spores/cc
   2. Manufacturers:
      a. BioOrganics Mycorrhizae Inoculants, (888) 332-7676
      b. Mycorrhizal Applications, Inc, (866) 476-7800
      c. Tri-C Enterprises, LLC, (800) 927-3311
      d. Or equal.

D. Agricultural grade gypsum - shall be a (CaS04 - 2H20) calcium sulfate product minimum 92% grade. Ninety-percent (90%) shall pass a 50-mesh screen. Control of dust during application is mandatory. The commercial grade product used shall be U.S. Gypsum, Western Mining & Minerals, Sof'n'Soil, Dolmar, or approved equal.

E. Sulfur (soil sulfur) - shall be elemental sulfur (99.5%) commercially manufactured so that a pure sulfur product is used. Sulfur is a constituent of three amino acids (cystine, methionne and cysteine) and is essential for protein synthesis. The sulfur used shall be 99.5% elemental. Sizing on stacked screen shall be approximately: 8-mesh 4.3%; 20-mesh 7.8 %; 50-mesh 46.9 %; 100-mesh 39.3 %; 200-mesh 1.7%. The commercial grade product used shall be Wil-Gro; Union Chemicals, Baker Industries, or approved equal.

F. Iron sulfate - derived from sulfate-deep green (FeS04, 7H20), a minimum analysis of iron shall be expressed as metallic is 20.0%. The commercial grade product used shall be Wil-Gro, Bandini, Wilson & Geo. Meyer, Crown Technology, or approved equal.

G. Chelated iron shall be Becker Underwood Sprint 138 Fe or other approved equal commercial FeEDDHA for dicots and woody plants, and Becker Underwood Sprint 330 Fe or other commercial FeDTPA for grasses and monocots or approved equal.

H. Pre-plant starter fertilizer (10-10-10) analysis shall be a commercial grade flowable fertilizer with a 1 % nitrogen analysis; 10% phosphorous pentoxide and 10% potassium oxide. No potassium chloride is to be used. Organic nitrogen shall be from cottonseed meal and urea. Phosphorous. from superphosphate and cottonseed meal. Potassium (potash) from sulfate of potash and cottonseed meal. Screen analysis 74% to be retained on a 20-mesh screen. 0% to pass a 4-mesh screen, and 2 % to pass a 48-mesh screen. The commercial grade product used shall be Wil-Gro, Gro-Power, Bandini, Kellogg, or approved equal.

I. Prilled post-plant fertilizer (13-13-13) for all planting areas. A maintenance fertilizer shall be used that is granular, homogeneous, and resin-coated for

controlled nutrient release. All nutrients shall be encapsulated to ensure gradual availability over an 8–9 month period at 70°F. A regular maintenance program using this product for at least the first year is recommended. The homogeneous fertilizer granules used shall contain a fertilizer analysis of 13% nitrogen, 13% available phosphorous pentoxide, and 13% potassium oxide. Nitrogen shall be derived from ammonium nitrate, ammonium phosphate, and urea, with 7.5% as ammoniacal nitrogen and 5.5% as nitrate nitrogen, both of which are water-soluble. Phosphate shall be derived from ammonium phosphate. Potash shall be derived from potassium sulfate. No potassium chloride is to be used. All nutrients shall be coated with a polymer resin to ensure consistent release and minimize leaching. Micronutrients are not included in this formulation but may be supplemented with compatible products such as Micromax® as needed. The commercial grade product used shall be Osmocote® 13-13-13 (8–9 Month Release) by ICL Growing Solutions, or approved equal including Nutricote Total Blend 13-13-13 T100 by Arysta LifeScience, or Florikan 13-13-13.

J. Planting tablets shall be tightly compressed chip type commercial grade planting tablets, of varying sizes with the following available percentages by weight of plant food:

Nitrogen	20.0 % min.
Phosphoric acid	10.0% min.
Potash	5.0 % min.

The commercial grade product used shall be Agriform, Gro-power, or approved equal.

2.2 WETTING AGENT

A. An adjuvant (helping agent) is needed to make water penetrate difficult to wet soils. Also, organic soil amendments are more receptive to increased water holding capacity.

B. Soil water repellence resulting from compaction will be overcome with multiple applications of a soil penetrant in the irrigation water.

C. Product used shall have the following functioning agents: 2- hydroxyethyl ammoniumalkyl benzene sulfonate = 8.77%; alkyl phenoxy poly - (ethylene oxy) ethanol= 4.49%; di (2 hydroxy ethyl)- ammonium cis-9 otadecenoate-octyl alkyldiamide = 2.50 %; dimethyl silicone = 1. 00 %; carrier= 83.24 %. Adjuvant used shall be a commercial grade product and manufactured by Naiad/Wil-Gro, Dow, Dupont, or approved equal.

2.3 PLANTING BACKFILL FOR TREES AND SHRUBS

A. (For Bidding purposes only. Application rates shall be per soil analysis recommendation). Planting backfill shall be a thoroughly blended mixture of site soil and soil amendments at the following rates:

soil conditioner	30%
site soil from excavated planting pit	70%

gypsum	10 lbs. per cu. yd. of mix
iron sulfate	5 lbs. per cu. yd. of mix
pre-plant (1-10-10)	5 lbs. per cu. yd. of mix

2.4 PLANT TABLETS

A. Agriform (or approved equal) 20-10-5, three 20-gram tablets for 15 gallon or larger size trees, two 10-gram tablets for 5-gallon size plants, one 10-gram tablet for 1 gallon size.

2.5 TREE STAKING MATERIALS

A. Tree stakes shall be of non-pressure-treated Lodgepole Pine. Stakes shall have straight shafts, shaved and cut clean, and bare of branches and stubs. Stakes shall be of uniform thickness throughout length, with a minimum diameter of 2- inches, free of loose knots, splits, or bends. One end tip shall be tapered to allow ease of installation.

B. Tree ties shall be manufactured of virgin, flexible vinyl meeting ASTM-D-412 standards for tensile and elongation strength. Material shall be black for ultraviolet resistance. Tree ties shall be manufactured with a double-back locking configuration. Tree ties shall be of sizes required to adequately support tree and shall elongate with the tree growth, thus preventing damage to the tree. Tree ties shall be "Cinch Tie," or approved equal.

2.6 MULCH:

A. Hardwood Bark Mulch:
1. Small Fir Bark Mulch as supplied by Central Coast Landscape Products, telephone: (805) 595-3478, or approved equal.
2. Bark mulch shall be small sized (1/2”) chipped fir bark and wood chip blend, 3” deep unless otherwise stated on plans.
3. No chipped lumber products, dyes, animal waste, or C&D wood by-products will be accepted.

2.7 ROOT BARRIER:

A. Polyethylene (0.08-inch-thick walls) or polypropylene (2.032 - 2.16 mm thick), with stiffening ribs, bottom edge attached to vertical root deflecting ribs and self-locking joiners. Root deflecting ribs shall be ½” raised 90-degree molded root deflecting ribs. Panels shall have an integral zipper joining system for panel connections. Panel material shall have added ultraviolet inhibitors. Use 24" barrier unless otherwise stated. Root barrier by Deep Root, 530 Washington Street, San Francisco, CA 94111, 800-458-7668, www.deeproot.com or approved equal.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Examine areas to receive plants and turf for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Planting work shall proceed only after testing and approval of the irrigation system.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, and existing exterior plants from damage by planting operations.

B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 ROOT BARRIER

A. Install root barrier as per manufacturer's recommendations.

A. Root barriers shall be installed where trees are planted within five feet (5') of paving or other hardscape elements (such as walls, curbs, walkways, etc.).

B. Root barrier shall be aligned vertically and run in a linear fashion, along and directly adjacent to paving or other hardscape elements to be protected.

C. Install root barrier along the edge of paving or hardscape element for a distance of five feet (5') in each direction from the tree trunk, for a total of ten feet (10') per affected tree. Where trees are ten feet (10') apart or less, a single continuous piece of root barrier shall be used.

D. Root barrier shall not surround root ball of tree at any time.

E. Tops of root barriers are to be flush with finish grade of soil, with no portion visible above chipped bark mulch.

F. Do not distort or bend root barrier during construction activities.

G. Use manufacturer's integral zipper joining system at all splices.

3.4 GENERAL MAINTENANCE WORK

A. Irrigation Systems: Maintain the irrigation systems for the planting areas in full operational condition.

1. Adjust controller program once a week or as needed, to provide sufficient water to plantings according to evapotranspiration (ET) rates and weather conditions.

2. Inspect all portions of the irrigation system once a week for repair needs to prevent damage to plantings.

a. Visually check for distressed plants as sign of potential irrigation problems and inspect for leaks and any other damages and malfunctions in the system, including all control components.

3. Check spray heads, sprinklers, rotors and bubblers during operation immediately after mowing of lawns. Check for water coverage and damage from mowing equipment. Adjust sprinklers to ensure uniform and adequate application of water to entire lawn areas.

4. Restore, repair, or replace components promptly as required by trained, experienced personnel.

5. In the event of failure of the automatic irrigation systems for longer than 3 days, manually water plantings until automatic system is restored to full operation.

B. Fertilization: In accordance with approved Maintenance Program.

C. Weeding:

1. Keep sod, planting areas and hardscape areas free of weeds.

2. Where practicable weed by hand.

3. Where infestation is extensive, apply appropriate pre-emergent and selective herbicides by a Pest Control Applicator, as recommended by Pest Control Advisor in strict accordance with manufacturer's instructions and local codes and regulations.

D. Pest and Disease Control:

1. Inspections: Vigilantly check for diseases and pests during routine maintenance activities, in addition to regularly scheduled inspections by Pest Control Advisor.

2. Control diseases and vertebrate and invertebrate pests promptly to prevent spreading of problems (including gophers, moles and ground squirrels).

3. Chemical treatment: When recommended by the Pest Control Advisor, apply in strict accordance with manufacturer's instructions and local codes and regulations.

E. Grounds Maintenance

1. Remove from Project and dispose legally, all debris created from maintenance operations at the end of each workday.

2. Remove and dispose legally all trash and litter that collect in planted and hardscape areas in the course of maintenance work.

3.5 CLEANUP AND PROTECTION

A. During planting, keep adjacent pavement and construction clean and work area in an orderly condition.

B. Protect plants from damage due to landscape operations, operations by other contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged planting.

3.6 DISPOSAL

A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris.

B. Legally dispose of them off Owner's property.

END OF SECTION 329300

ATTACHMENT NO. 5

REVISED PLAN SHEETS

T-1.1 TITLE SHEET
LP-5.1 PLANTING DETAILS AND NOTES
LI-1.1 IRRIGATION PLAN
LI-5.1 IRRIGATION DETAILS AND NOTES

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

IMPROVEMENT PLANS

FOR

CITY OF GUADALUPE
GUADALUPE TRANSIT HUB

330 HIGHWAY ONE
GUADALUPE, CA

SCOPE OF WORK

THE SCOPE OF WORK SHALL INCLUDE THE DEMOLITION OF THE EXISTING SITE INCLUDING EXISITNG PARKIING LOT, DRIVEWAY, HARDSCAPE, UTILITIES, AND LANDSCAPING AND IRRIGATION. NEW IMPROVEMENTS SHALL INCLUDE ASPHALT, PERVIOUS PAVERS, AND CONCRETE PARKING LOT, WALKWAYS, UTILITIES, PORTLAND LOO RESTROOM, PERGOLA, BIKE LOCKERS, BIKE RACK, AND LANDSCAPING AND IRRIGATION.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS CCS83, ZONE V (2004.00) BASED ON STATIC TIES TO MONUMENTS FOUND PER THE RECORD OF SURVEY RECORDED IN BOOK 176, PAGE 23 OF RECORD OF SURVEYS AND CORS STATION "ORES." USING COORDINATES PUBLISHED IN SAID RECORD OF SURVEY (SEE THE RECORD OF SURVEY PUBLISHED BY GROMATICI RECORDED IN BOOK 212, PAGE 79 OF RECORD OF SURVEYS FOR MORE DETAILS).

BASIS OF ELEVATIONS

THE BENCHMARK FOR THIS SURVEY IS POINT 424 AS LISTED HEREON HAVING AN ELEVATION OF 86.12 FEET.

VERTICAL DATUM

VERTICAL DATUM FOR THIS SURVEY IS NAVD'88 BASED ON GPS TIES TO NGS BENCHMARK H533 (PID DS0811) USING A PUBLISHED ELEVATION OF 87.07 FEET PER NGS DATA (SEE RECORD OF SURVEY BY GROMATICI RECORDED IN BOOK 212, PAGE 79 OF RECORD OF SURVEYS FOR MORE DETAILS).

UNDERGROUND UTILITIES

UNDERGROUND UTILITY LOCATIONS ARE PLOTTED BASED ON ABOVE GROUND PAINT MARKS BY OTHERS, AND ABOVE GROUND SURFACE STRUCTURES. ACTUAL LOCATION MAY DIFFER. ADDITIONAL UNDERGROUND UTILITY LINES MAY EXIST. FOR INFORMATION REGARDING UTILITY LOCATION, SIZE, DEPTH, CONDITION, AND CAPACITY CONTACT UTILITY OR MUNICIPAL/PUBLIC SERVICE FACILITY.

APPLICABLE CODES:

THIS PROJECT MUST COMPLY WITH THE LATEST APPLICABLE CODE WHICH HAVE BEEN ADOPTED BY THE GOVERNING AGENCIES HAVING JURISDICTION, INCLUDING BUT LIMITED TO THE FOLLOWING:

2022 EDITION OF THE CALIFORNIA BUILDING CODE, VOLS 1 & 2
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA GREEN BUILDING CODE
2022 CALIFORNIA REFERENCE STANDARDS CODE

THESE CODES SHALL BE CONSIDERED AN INTERGRAL PART OF THESE DRAWINGS AS IF THEY WERE PRINTED HERE ON THIS SHEET IN THEIR ENTIRETY.

CODE ANALYSIS:

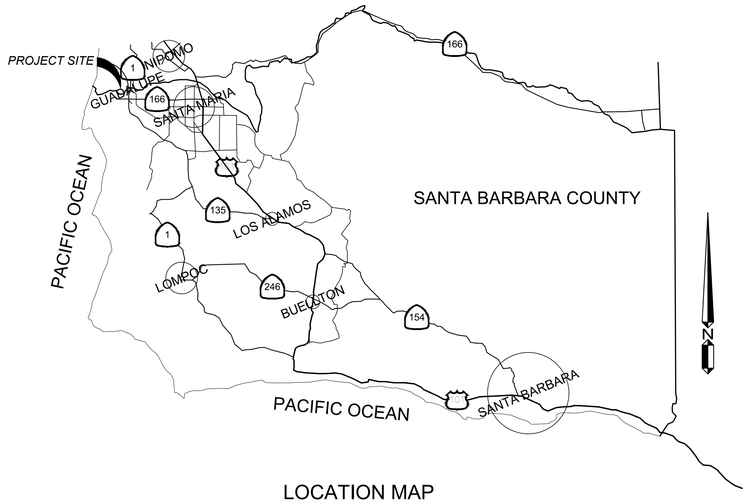
TYPE OF CONSTRUCTION:	V-B
USE & OCCUPANCY:	EXISTING A-3 PROPOSED A-3
NUMBER OF STORIES:	1-STORY
BUILDING HEIGHT(S):	14'-4" RIDGE HEIGHT
BUILDING AREAS:	EXISTING 788-SF PROPOSED 788-SF
FIRE SPRLINKERS:	NOT REQUIRED

PARKING COUNT:

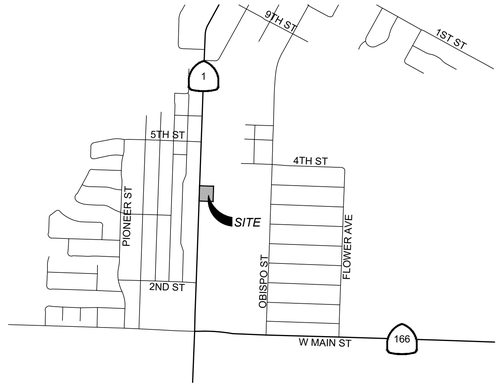
EXISTING PARKIING	
EXISTING STANDARD STALLS	17
EXISTING COMPACT STALLS	8
EXISTING ACCESSIBLE VAN STALL	1
EXISTING ACCESSIBLE STD STALL	1
TOTAL PARKING	27

PROPOSED PARKING	
PROPOSED STANDARD STALLS	15
PROPOSED COMPACT STALLS	8
PROPOSED ACCESSIBLE VAN STALL	1
PROPOSED ACCESSIBLE STD STALL	1
TOTAL PARKING	25
PROPOSED ACCESSIBLE VAN EV STALL	1
PROPOSED ACCESSIBLE STANDARD STALL	1*
TOTAL PARKING & CHARGING	27

*STANDARD ACCESSIBLE STALL EVCS TO BE INSTALLED BY CITY UPON AVAILABILITY OF EVCS TO BE PROVIDED BY CITY.



LOCATION MAP
SCALE: NTS



VICINITY MAP
SCALE: NTS

Sheet List Table

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES

612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

REGISTERED PROFESSIONAL ENGINEER
JAMIE L. PLATZ
No. 67490
CIVIL
STATE OF CALIFORNIA

SIGNATURE
6/27/25
DATE SIGNED

6/27/25
BRETT HADLEY, PE — DATE
SENIOR ENGINEER
WALLACE GROUP

REGISTERED PROFESSIONAL ENGINEER
BRETT D. HADLEY
No. 80124
CIVIL
STATE OF CALIFORNIA

JEFFREY VAN DEN EIKHOF, PE — DATE
CITY ENGINEER
CITY OF GUADALUPE

Know what's **below.**
Call before you dig.

PROJECT PARTICIPANTS:

OWNER
CITY OF GUADALUPE
918 OBISPO STREET
GUADALUPE CA 93434
CONTACT: JEFF VAN DEN EIKHOF, PE (805) 470-1910

CIVIL ENGINEER
WALLACE GROUP
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
CONTACT: JAMIE PLATZ, PE (805) 544-4011

LANDSCAPE ARCHITECT
WALLACE GROUP
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
CONTACT: MATT WILKINS, PLA (805) 544-4011

ARCHITECT
ANDREW GOODWIN DESIGNS
1238 MONTEREY STREET
SAN LUIS OBISPO, CA 93401
CONTACT: MICHAEL DEMARTINI (805) 439-1611

ELECTRICAL ENGINEER
OTTO ELECTRICAL
979 OSOS STREET, SUITE F10
SAN LUIS OBISPO, CA 93401
CONTACT: GARRETT OTTO, PE (805) 459-4329

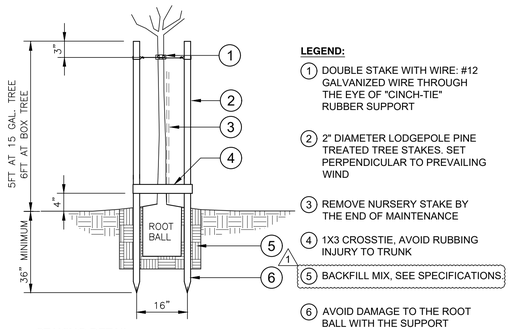
STRUCTURAL ENGINEER
MURPHY STRUCTURAL ENGINEERS, INC.
793 E. FOOTHILL BOULEVARD, SUITE A-1911
SAN LUIS OBISPO, CA 93405
CONTACT: CHRIS MURPHY, SE (805) 748-3693

Rev.	Date	Description of revisions	By
1	10/07/2025	REVISED PER CITY ADDENDUM 2	JLP

CITY OF GUADALUPE
GUADALUPE TRANSIT HUB
TITLE SHEET

JOB #: 0075-0041
DESIGNERS: JLP
DRAWN BY: JLP
DATE: 10/07/25

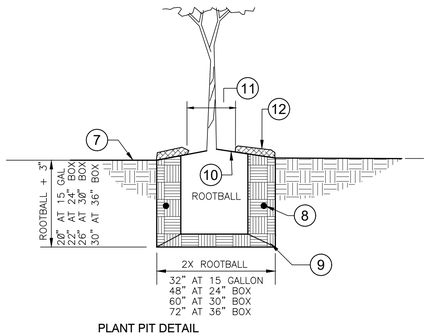
DRAWING NO.
T-1.1
1 OF 41 SHEETS



STAKING DETAIL

LEGEND:

1. DOUBLE STAKE WITH WIRE: #12 GALVANIZED WIRE THROUGH THE EYE OF "CINCH-TIE" RUBBER SUPPORT
2. 2" DIAMETER LODGEPOLE PINE TREATED TREE STAKES. SET PERPENDICULAR TO PREVAILING WIND
3. REMOVE NURSERY STAKE BY THE END OF MAINTENANCE
4. 1X3 CROSSTIE, AVOID RUBBING INJURY TO TRUNK
5. BACKFILL MIX, SEE SPECIFICATIONS.
6. AVOID DAMAGE TO THE ROOT BALL WITH THE SUPPORT STAKES



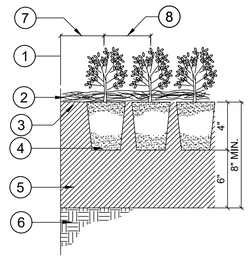
PLANT PIT DETAIL

LEGEND:

7. FINISHED GRADE
8. PLANT TABLETS AS NOTED OR SPECIFIED
1 9. BACKFILL MIX, SEE SPECIFICATIONS.
10. SET ROOTBALL CROWN 1-1/2" HIGHER THAN THE SURROUNDING FINISHED GRADE. SLOPE BACKFILL AWAY FROM ROOTBALL FOR POSITIVE DRAINAGE
11. KEEP BARK MULCH 6"-8" FROM BASE OF TREE
12. BARK MULCH - 3" DEPTH WHERE NOTED ON PLANS.

1 TREE PLANTING DOUBLE STAKE

1" = 1'-0" 329343.19-20



LEGEND:

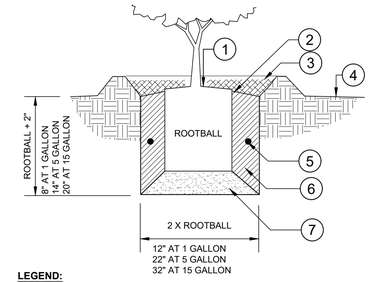
1. EDGE OF PLANTING
2. 3" DEPTH OF BARK MULCH
3. FINISH GRADE
4. PLANTS FROM POTS OF LINERS AS REQUIRED
5. BACKFILL MIX, SEE SPECIFICATIONS
6. EXISTING SOIL
7. 2/3 PLAN SPACING
8. SPACING PER PLANS

NOTES:

A. PREPARE FINISH GRADE OF BEDS TO SURFACE DRAIN AWAY FROM WALLS / STRUCTURES

2 GROUND COVER BED PLANTING

SCALE = NTS 329313.13-03

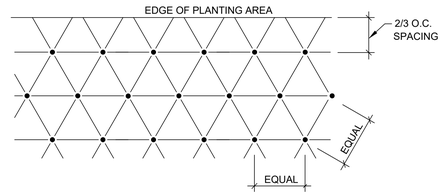


LEGEND:

1. SET ROOTBALL CROWN 1" HIGHER THAN SURROUNDING FINISHED GRADE
2. SLOPE FINISHED GRADE AT BACKFILL AWAY FROM ROOTBALL
3. MULCH 3" DEPTH AT WATER WELL
4. FINISH GRADE
5. PLANT TABLETS, SEE NOTES
1 6. BACKFILL MIX, SEE SPECIFICATIONS
7. NATIVE SOIL, FIRMLY COMPACTED

3 SHRUB PLANTING

1" = 1'-0" 329333.13-01

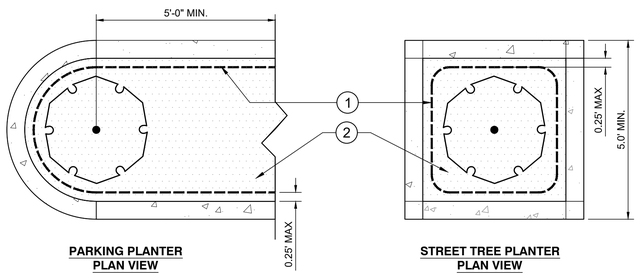


NOTES:

1. ALL SHRUBS/GROUNDCOVER SHALL BE PLANTED AT EQUAL SPACING (TRIANGULAR) UNLESS OTHERWISE INDICATED ON PLANS. SEE LEGEND ON PLANTING PLAN FOR SPACING REQUIREMENTS.
2. ADJUST ROWS AND SPACING AS NEEDED TO UNIFORMLY FILL A NON-LINEAR AREA. PLANT SPACING NOTED ON LEGEND SHALL BE MAXIMUM ALLOWED DIMENSION.

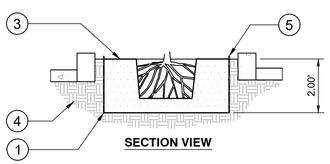
4 SHRUB / GROUND COVER SPACING DIAGRAM

SCALE = NTS 329313.13-02



PARKING PLANTER PLAN VIEW

STREET TREE PLANTER PLAN VIEW



SECTION VIEW

LEGEND:

1. 24" DEEP LINEAR ROOT BARRIER
2. TAMP SOIL ADJACENT TO ROOT BARRIERS TO STABILIZE THEM SO THAT IRRIGATION FLOWS DIRECTLY THROUGH THE ROOT BALL
3. FINISH GRADE 2" BELOW ADJACENT PAVEMENT
4. EXISTING SOIL
5. TOP OF ROOT BARRIER 1" ABOVE FINISHED GRADE

5 ROOT BARRIERS

1/2" = 1'-0" 3294-01

PLANTING NOTES:

1. REFER TO PLANTING PLANS, PLAN NOTES, SPECIFICATIONS, PLANT LEGEND, AND PLANTING DETAILS FOR ADDITIONAL PLANTING INFORMATION. REFER TO IRRIGATION PLANS, NOTES, SPECIFICATIONS, AND DETAILS FOR RELATED LANDSCAPE WORK.
2. NOTIFY OWNER'S REPRESENTATIVE (REP.) 48 HOURS MINIMUM PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULE.
3. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE OF FIELD CONDITIONS THAT VARY FROM THOSE SHOWN ON DRAWINGS AND SEEK CORRECTIONS AND DIRECTIONS BEFORE PROCEEDING WITH WORK. ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY CORRECTIONS DUE TO FAILURE TO REPORT KNOWN DISCREPANCIES.
4. LOCATE AND MARK ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT. PROTECT FROM DAMAGE ALL UTILITIES, AREAS AND STRUCTURES IN AND AROUND LANDSCAPE WORK AREAS. ASSUME FULL RESPONSIBILITY AND EXPENSE FOR REPAIR AND REPLACEMENT OF DAMAGES CAUSED BY CONTRACTOR.
5. LOCATION OF NON-LANDSCAPE CONSTRUCTION ELEMENTS SUCH AS LIGHTS, SIGNS, VENTS, HYDRANTS, TRANSFORMERS, AND OTHER STRUCTURES OR ELEMENTS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FIELD CONDITIONS WHETHER SHOWN HEREON OR NOT. WHEN SHOWN ITEMS DO NOT CORRESPOND TO FIELD CONDITIONS, REPORT DISCREPANCIES TO OWNER'S REP. FOR CLARIFICATIONS AND INSTRUCTIONS PRIOR TO PROCEEDING WITH WORK.
6. PLANTING ACCESSORIES & MATERIAL:
   A. TREE TIE: CINCH TIE, BY V.I.T. PRODUCTS, 800-729-1314.
   B. FERTILIZER TABLETS: REFER TO SPECIFICATIONS FOR MORE INFORMATION.
   C. ROOT BARRIER: REFER TO SPECIFICATIONS FOR MORE INFORMATION.
1 D. IMPORTED TOPSOIL: 60-70% LOAM TOPSOIL THOROUGHLY MIXED WITH 30-40% FULLY COMPOSTED ORGANIC MATERIAL.
   E. MULCH: SMALL FIR BARK MULCH AT SHRUB ONLY LOCATIONS WHERE NO GROUNDCOVER IS SHOWN. SUBMIT ONE POUND SAMPLE FOR APPROVAL.
8. SOIL MANAGEMENT REPORT: AFTER ROUGH GRADING AND PRIOR TO DELIVERING TOPSOIL TO PROJECT SITE, PROVIDE THREE (3) REPRESENTATIVE SOIL SAMPLES OF THE TOPSOIL FROM DIFFERENT LOCATIONS ON SITE IN ACCORDANCE WITH LABORATORY PROTOCOL. SOIL ANALYSIS TO INCLUDE:
   A. SOIL TEXTURE
   B. INFILTRATION RATE
   C. PH
   D. TOTAL SOLUBLE SALTS
   E. SODIUM
   F. PERCENT ORGANIC MATTER RECOMMENDATIONS FOR TREE, SHRUB AND SOD PLANTING
9. ADD FERTILIZER AND AMENDMENTS TO THE TOPSOIL (BACKFILL MIX) PER SOIL TEST REPORT RECOMMENDATIONS FOR PLANTING WORK.
10. PREPLANTING PREPARATION:
    A. PROCEED WITH PLANTING WORK ONLY AFTER IRRIGATION WORK IS COMPLETED, TESTED, AND APPROVED BY OWNER'S REP. PROTECT IRRIGATION SYSTEM FROM DAMAGE.
    B. ROUGH GRADE PLANTING AREAS UNIFORMLY SMOOTH, DEVOID OF DEPRESSIONS, TO CONFORM TO THE GRADING PATTERNS ESTABLISHED BY CIVIL ENGINEERING DRAWINGS. ENSURE POSITIVE WATER REMOVAL AT 2% MINIMUM GRADIENT TO DRAINAGE ELEMENTS OR STRUCTURES PROVIDED BY OTHERS.
    C. REMOVE ALL ROCKS GREATER THAN 1" DIAMETER AND ALL DEBRIS AND DELETERIOUS MATERIAL FROM PLANTING AREAS.
10. PLANTS: ALL PLANTS OF THE SAME SPECIES/CULTIVAR/VARIETY SHALL HAVE MATCHING FORM, FLOWER COLOR, AND SIZE, IN HEALTHY AND THRIVING CONDITION, FREE FROM INJURIES, DISEASES, PESTS AND ROOT-BOUND OR GIRDLING ROOTS. REPLACE REJECTED PLANTS WITH MATCHING SPECIES, SIZE AND FORM.
11. PLANTING:
    A. IRRIGATE PLANTING AREAS TO BRING TOP 6" OF SOIL TO FIELD CAPACITY. ALLOW SOIL TO DRAIN. DO NOT WORK SOIL UNTIL IT RETURNS TO A MOIST FRIABLE CONDITION. TREE EXCAVATIONS MAY REQUIRE ADDITIONAL IRRIGATION. FLOOD TREE PITS AS REQUIRED TO MOISTEN SUBGRADE.
    B. PLACE PLANTS IN THEIR CONTAINERS AT THE LOCATIONS PER PLANS FOR APPROVAL BY OWNER'S REP. MAKE MINOR ADJUSTMENTS AS REQUIRED BY FIELD CONDITIONS AND TO ALLOW OPTIMAL IRRIGATION COVERAGE.
    C. PLANT QUANTITIES GIVEN ON PLANT LEGEND ARE FOR GENERAL GUIDANCE ONLY. PROVIDE THE SPECIFIED PLANT SPECIES IN THE QUANTITIES AT THE REQUIRED SPACING TO ACHIEVE THE DESIGN EFFECT/INTENT SHOWN ON THE PLANS.
    D. PRIOR TO TREE PLACEMENT, CONTRACTOR SHALL PLACE ROOT BARRIER PANELS AS SHOWN ON PLANS OR WITHIN 5 FEET OF PAVEMENT AND SLAB FOUNDATIONS.
    E. PLANT TREES AND SHRUBS AS SHOWN ON DETAILS.
    F. INSTALL 3" DEEP SMALL FIR BARK MULCH TO COVER BARE SOIL AROUND TREES & SHRUBS. KEEP MULCH 3" AWAY FROM SHRUB TRUNKS, 6-8" AWAY FROM TREE TRUNKS.
12. 90 DAY MAINTENANCE PERIOD: MAINTAIN PLANTINGS IN THRIVING CONDITION USING ACCEPTED INDUSTRY PRACTICES FOR WATERING, FERTILIZING, AND PRUNING. MAINTAIN TREE STAKES IN PROPER POSITIONS. REMOVE TREE STAKES AT END OF MAINTENANCE PERIOD. REPLACE PLANTS THAT DIE OR FAIL TO ESTABLISH IN THRIVING CONDITION WITH SPECIES, SIZE AND FORM MATCHING OTHERS ON SITE. REPAIR OR REPLACE BROKEN IRRIGATION COMPONENTS.
13. WARRANTY: WARRANT PLANT MATERIAL AND IRRIGATION SYSTEM FOR ONE YEAR FROM END OF MAINTENANCE PERIOD. REPLACE DEAD OR DYING PLANTS AND BROKEN IRRIGATION COMPONENTS WITHIN THIS PERIOD.

Rev.	Date	Description of revisions	By
1	9/30/2025	Revised per City Addendum 2	

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES

612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

REGISTERED LANDSCAPE ARCHITECT
LIC. #6398
MATTHEW J. WILKINS
FOR PLAN REVIEW ONLY
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA

SIGNATURE

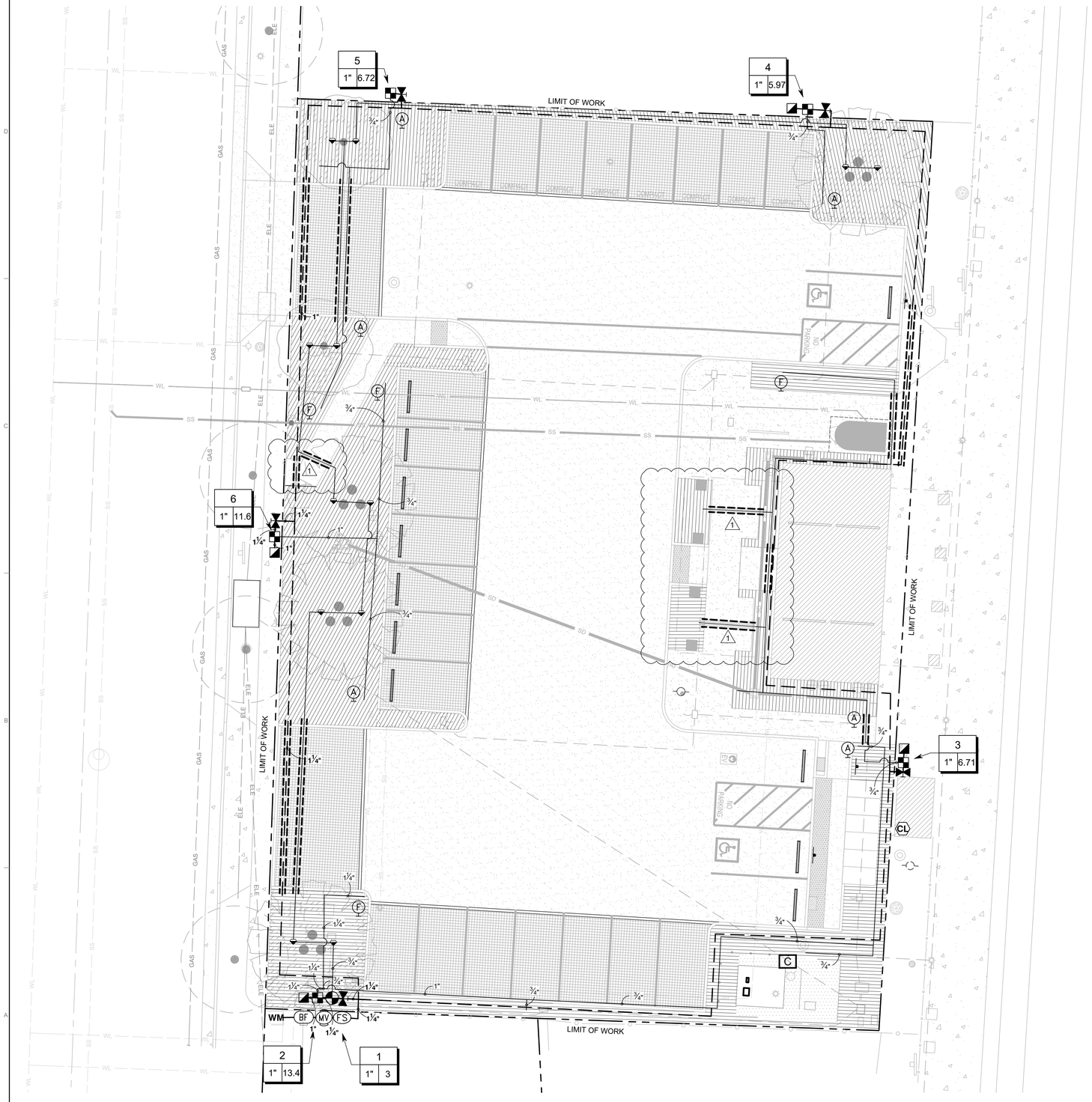
6/27/25
DATE SIGNED

CITY OF GUADALUPE
GUADALUPE TRANSIT HUB
PLANTING DETAILS & NOTES

JOB #: 0075-0041
DESIGNERS: SLB
DRAWN BY: IB
DATE: 10/07/25

DRAWING NO.
LP-5.1
19 OF 41 SHEETS

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2 3
5



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402	RAIN BIRD RWS-M-B-C-P-SOCK MINI ROOT WATERING SYSTEM WITH 4.0" DIAMETER X 18.0" LONG WITH LOCKING GRATE. SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, PURPLE GRATE, AND SAND SOCK FOR SANDY SOIL.	12	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	NETAFIM LVCZS8010075-HF PRE-ASSEMBLED CONTROL ZONE KIT, WITH 1" SERIES 80 CONTROL VALVE, 3/4" DISC FILTER, AND HIGH FLOW PRESSURE REGULATOR 4.5GPM TO 17.6GPM.	5
F	RAIN BIRD MDCFCAP DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.	4
A	RAIN BIRD ARV050 1/2IN. AIR RELIEF VALVE, MADE OF QUALITY RUST-PROOF MATERIALS, WITH A 6IN. DRIP VALVE BOX (SEB 7XB EMITTER BOX). USE WITH INSTALLATION BELOW SOIL. THE VALVE WILL ALLOW AIR TO ESCAPE THE PIPELINE, THUS PREVENTING WATER HAMMER OR BLOCKAGE.	5
	AREA TO RECEIVE DRIPLINE NETAFIM TLCV-06-12 TECHLINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH CHECK VALVE. 0.6 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. 17MM.	4,436 LF

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD PGA GLOBE 1IN., 1-1/2IN., 2IN. ELECTRIC REMOTE CONTROL VALVE, GLOBE.	1
	RAIN BIRD 5-LRC 1IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 1-PIECE BODY.	4
	MATCO-NORCA 759 BRASS SHUT OFF BALL VALVE, 1/2" TO 4". TWO PIECE BODY, BLOW-OUT PROOF STEM, CHROME PLATED SOLID BRASS BALL, THREADED, WITH PTFE SEATS. SAME SIZE AS MAINLINE PIPE.	5
MV	RAIN BIRD PGA GLOBE 1" 1IN., 1-1/2IN., 2IN. ELECTRIC MASTER VALVE, GLOBE.	1
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER	1
1 C	IRRITROL MC-08E 8- STATION, COMMERCIAL-GRADE, OUTDOOR/INDOOR CONTROLLER, PEDESTAL MOUNTED. EQUIPPED IN A RUGGED, LOCKABLE, VANDAL-PROOF, WEATHER RESISTANT STEEL CABINET. FITS PEDESTAL P-2B (TO BE PURCHASED SEPARATELY). COMPATIBLE WITH IRRITROLFT.S CLIMATE LOGIC.	1
CL	IRRITROL CL-100-WIRELESS WIRELESS WEATHER SENSING SYSTEM. 100-RECEIVE AND TRANSMITTER KIT. OUTDOOR SENSOR, AND RECEIVER ATTACHES TO IRRITROL CONTROLLER. COMPATIBLE WITH RAIN DIAL-R, TOTAL CONTROL-R, KD2, AND MC-E CONTROLLERS. MONITORS WEATHER DATA FOR WATERING ADJUSTMENTS AND PROVIDES RAIN-FREEZE SHUT-DOWN.	1
FS	CREATIVE SENSOR TECHNOLOGY FSI-T10-001 1IN. PVC TEE TYPE FLOW SENSOR W/SOCKET ENDS, CUSTOM MOUNTING TEE AND ULTRA-LIGHTWEIGHT IMPELLER ENHANCES LOW FLOW MEASUREMENT. 2 WIRE DIGITAL FREQUENCY OUTPUT COMPATIBLE W/ALL IRRIGATION CONTROLLERS EXCEPT HYDRAWISE. SEE BELOW. FLOW RANGE: .86 GPM - 52 GPM.	1
WM	WATER METER 1" CITY OF GUADALUPE	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	855.8 LF
	IRRIGATION MAINLINE: PVC SCHEDULE 40	665.4 LF
1	PIPE SLEEVE: PVC SCHEDULE 40	36.9 LF
1	PIPE SLEEVE: PVC SCHEDULE 80	168.9 LF

Valve Callout
— Valve Number
#" # — Valve Flow
Valve Size

NOTES:

1. REFER TO ELECTRICAL PLANS FOR ELECTRIC VEHICLE CHARGING STATION AND POWER SUPPLY.
2. REFER TO LANDSCAPE PLANS FOR SITE FACILITIES.

N

GRAPHIC SCALE
0 5' 10' 20'
(IN FEET)
1 IN = 10 FT

Rev.	Date	Description of revisions	By
1	9/30/2025	Revised per City Addendum 2	

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES

612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

REGISTERED LANDSCAPE ARCHITECT
LIC. #6398
MATTHEW J. WILKINS
STATE OF CALIFORNIA

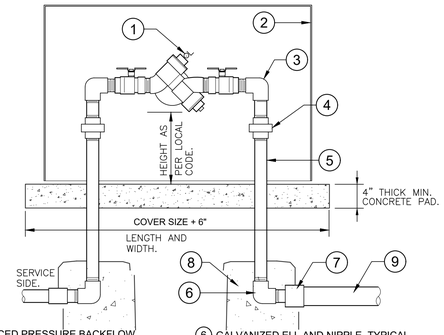
SIGNATURE
6/27/25
DATE SIGNED

CITY OF GUADALUPE
GUADALUPE TRANSIT HUB
IRRIGATION PLAN

JOB #: 0075-0041
DESIGNERS: SLB
DRAWN BY: IB
DATE: 10/07/25

DRAWING NO.
LI-1.1
20 OF 41 SHEETS

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

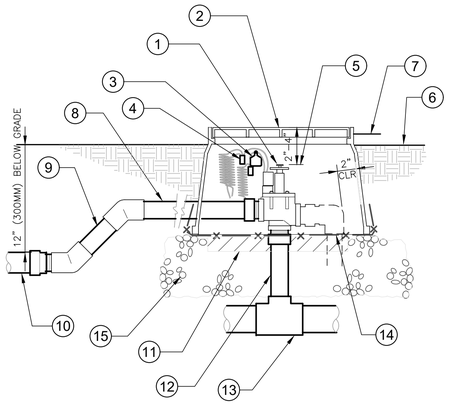


LEGEND:

1. REDUCED PRESSURE BACKFLOW DEVICE AS SPECIFIED
2. BACKFLOW COVER AS SPECIFIED
3. GALVANIZED NIPPLES AND ELL AS REQUIRED
4. GALVANIZED UNIONS AT EACH SIDE
5. GALVANIZED RISERS
6. GALVANIZED ELL AND NIPPLE, TYPICAL
7. PVC COUPLER OR REDUCER AS REQ., TYP.
8. CONCRETE THRUST BLOCKS, 90 LBS. OF CONCRETE EACH
9. MAIN LINE, SIZE AS PER PLANS

1 RP BACKFLOW ASSEMBLY W/ ENCLOSURE

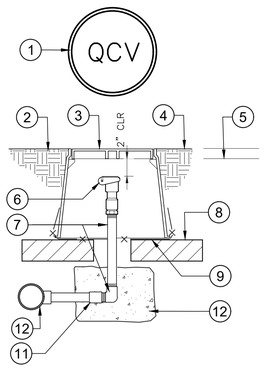
1" = 1'-0" 328409.46-03



1. REMOTE CONTROL VALVE AS SPECIFIED, ONE PER BOX.
2. RECTANGULAR VALVE BOX.
3. PLASTIC I.D. TAG AT EACH VALVE.
4. WATER PROOF WIRE CONNECTORS ON 30" LOOPED WIRES.
5. 2" (50MM) MINIMUM, 4" (100MM) MAXIMUM BELOW TOP OF BOX.
6. 2" (100MM) ABOVE FINISH GRADE AT SHRUBS.
7. 3/4" (19MM) ABOVE FINISH GRADE AT LAWN.
8. OUTLET PIPE SAME SIZE AS VALVE, 24" MINIMUM (300MM) TO FIRST FITTING.
9. 45 DEGREE DOWN AS REQUIRED TO LATERAL PIPE DEPTH.
10. INCREASE LATERAL LINE SIZE AS PER IRRIGATION PLAN.
11. TWO 6X2X16 CONCRETE BLOCK CAPS, ONE EACH SIDE OF THE BOX.
12. SCHEDULE 80 RISER.
13. MAIN LINE AS OCCURS.
14. 1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES.
15. 6" (150MM) THICK LAYER OF PEA GRAVEL BASE.

2 REMOTE CONTROL VALVE ASSEMBLY

1 1/2" = 1'-0" FX-IR-FX-RCV-01

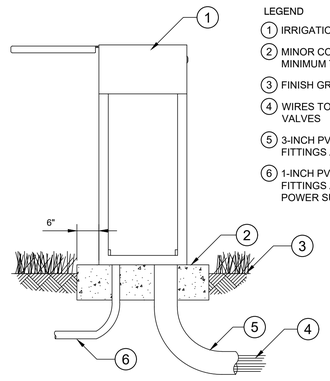


LEGEND:

1. 10" DIAMETER VALVE BOX. HEAT BRAND "QCV" ON LID WITH 2" HIGH LETTERS
2. FINISHED GRADE
3. 10" DIAMETER VALVE BOX
4. FLUSH TO GRADE AT TURF
5. 1" ABOVE GRADE AT SHRUBS
6. QUICK COUPLER AS SPECIFIED
7. GALVANIZED RISER AND ELBOW, QC INLET SIZE
8. FOUR COMMON BRICKS AS SUPPORT UNDER BOX
9. 1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES
10. MAIN LINE
11. PVC MALE ADAPTER
12. 60 LB CONCRETE TORQUE BLOCK

3 QUICK COUPLING VALVE IN BOX ASSEMBLY

1 1/2" = 1'-0" 328406.43-03



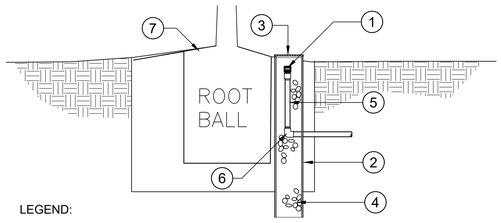
LEGEND

1. IRRIGATION CONTROLLER
2. MINOR CONCRETE PAD: 6-INCH MINIMUM THICKNESS
3. FINISH GRADE
4. WIRES TO REMOTE CONTROL VALVES
5. 3-INCH PVC SCH 40 CONDUIT, FITTINGS AND SWEEP ELL
6. 1-INCH PVC SCH 40 CONDUIT, FITTINGS AND SWEEP ELL TO POWER SUPPLY

CONTROLLER ENCLOSURE PEDESTAL - SEE SCHEDULE FOR MAKE AND MODEL

4 PEDESTAL CONTROLLER ASSEMBLY

1" = 1'-0" 328409.16-01

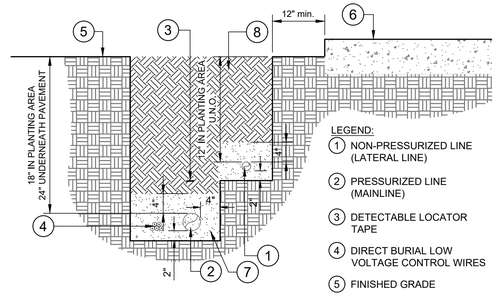


LEGEND:

1. BUBBLER HEAD, PLACE INSIDE PERFORATED PIPE UNDER GRATE CAP
2. ROOT WATERING TUBE
3. LOCKING GRATE CAP. TOP OF CAP SHALL BE A MINIMUM OF 1/2 INCH ABOVE FINISHED GRADE
4. FILL TUBE WITH ROUNDED DRAIN ROCK TO JUST BELOW BUBBLER CONNECTION
5. THREADED SCH 80 RISER, LENGTH AS REQUIRED
6. THREAD/SLIP ELL
7. TREE PLANTING AS INDICATED ON PLANTING DETAILS

5 ROOT WATERING SYSTEM

3/16" = 1'-0" 328403.53-17



LEGEND:

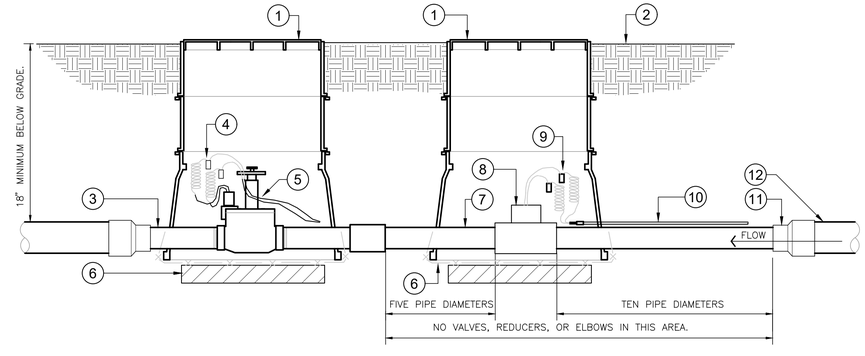
1. NON-PRESSURIZED LINE (LATERAL LINE)
2. PRESSURIZED LINE (MAINLINE)
3. DETECTABLE LOCATOR TAPE
4. DIRECT BURIAL LOW VOLTAGE CONTROL WIRES
5. FINISHED GRADE
6. PAVEMENT
7. SAND BACKFILL, MATERIAL FREE FROM ALL ROCK AND DEBRIS GREATER THAN ONE HALF INCH. 4" ABOVE AND 2" BELOW PRESSURE SUPPLY LINE
8. BACKFILL MATERIAL, FREE FROM ALL ROCK AND DEBRIS LARGER THAN 1-INCH

NOTES:

A. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
B. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC SLEEVE UNDER PAVEMENT.
C. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 ELECTRICAL CONDUIT.
D. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

6 IRRIGATION TRENCHING

1 1/2" = 1'-0" FX-IR-FX-AUXEQ-08

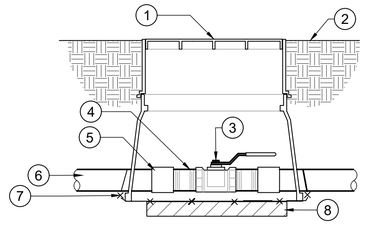


LEGEND

1. 10X15 RECTANGULAR BOXES WITH 6' EXTENSIONS AS INDICATGED
2. FINISHED GRADE
3. SCH 80 NIPPLES VALVE INLET SIZE
4. WATER PROOF WIRE CONNECTORS, ON 30" LOOPED WIRES
5. MASTER CONTROL VALVE AS SPECIFIED
6. EACH BOX BOTTOM: 1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES, OVER 6X2X16 CONC. BLOCK CAPS, ONE EACH SIDE (TWO PER BOX).
7. SCHEDULE 80 NIPPLES, VALVE INLET SIZE
8. FLOW SENSOR AS SPECIFIED
9. WATERPROOF WIRE CONNECTORS ON 18" LOOPED WIRES
10. EV-CAB-SEN CABLE TO CONTROLLER SENSOR TERMINAL BOARD "PC-DX2ST"
11. REDUCER AS REQUIRED
12. PVC MAIN LINE TO BACKFLOW DEVICE

7 MASTER VALVE/FLOW SENSOR ASSEMBLY

1 1/2" = 1'-0" 328406.23-10



LEGEND:

1. 10"X15" RECTANGULAR BOX WITH 6" EXTENSION
2. SET BOX FLUSH TO GRADE
3. ISOLATION BALL VALVE AS SPECIFIED, SAME SIZE AS MAIN LINE
4. SCHEDULE 80 THREADED NIPPLE AS REQUIRED
5. ADAPTER
6. PVC MAIN LINE
7. 1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES
8. TWO 6X2X16 CONCRETE BLOCK CAPS, ONE ON EACH SIDE OF BOX

8 BRASS BALL ISOLATION VALVE ⚠1

1 1/2" = 1'-0" 328406.33-02

IRRIGATION NOTES:

1. THE SYSTEM DESIGN SHOWN IS BASED UPON A MINIMUM PRESSURE OF 65 PSI AT A MAXIMUM DISCHARGE OF 14 GPM. VERIFY PRESSURE AND FLOW ON SITE PRIOR TO CONSTRUCTION WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
2. ALL WORK SHALL CONFORM TO LOCAL AND STATE CODES AND ORDINANCES AND THE PLANS, SPECIFICATIONS, DETAILS AND NOTES FOR THIS PROJECT. READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS AND RELATED WORK PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES AND STRUCTURES. COORDINATE ALL WORK WITH CIVIL, MECHANICAL, AND ELECTRICAL WORK AND TRADES TO MINIMIZE CONFLICTS. THE WORK INCLUDES THE RESPONSIBILITY FOR THE INSTALLATION OF IRRIGATION SLEEVING. CONTRACTOR SHALL COORDINATE SLEEVE INSTALLATION AND SEQUENCE HIS WORK WITH ALL WORK AND DISCIPLINES AS REQUIRED.
4. LAYOUT SHOWN IS DIAGRAMMATIC. IRRIGATION PIPING AND COMPONENTS MAY BE SHOWN OUTSIDE PLANTING AREAS FOR CLARITY. INSTALL IRRIGATION PIPING AND WIRING IN LANDSCAPED AREAS WHENEVER POSSIBLE. INSTALL IRRIGATION VALVES IN GROUND COVER OR SHRUB AREAS WHENEVER POSSIBLE. LOCATE IRRIGATION CONTROL AND QUICK COUPLING VALVES ADJACENT TO HARDSCAPE OR TURF AREAS FOR EASY ACCESS. AVOID CONFLICTS BETWEEN THE IRRIGATION SYSTEM, PLANTING MATERIAL, AND ARCHITECTURAL FEATURES.
5. DO NOT PROCEED WITH THE INSTALLATION OF THE SYSTEM WHEN IT IS EVIDENT THAT FIELD CONDITIONS OR DIFFERENCES EXIST THAT COULD NOT HAVE BEEN CONSIDERED IN ENGINEERING OR IF DISCREPANCIES IN CONSTRUCTION DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS ARE DISCOVERED. BRING ALL SUCH DIFFERING FIELD CONDITIONS AND DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
6. REPLACE EXISTING WATER METER WITH NEW 1" WATER METER.
7. BACKFLOW PREVENTION DEVICE TO BE REPLACED WITH NEW BACKFLOW AND ENCLOSURE. BACKFLOW TO BE INSTALLED IN PLANTING AREA AS INDICATED ON PLAN.
8. SEE LEGEND FOR PIPING MATERIAL. SEE DRAWINGS AND LEGEND FOR PIPE SIZES. SIZE CALLOUTS ON DRAWINGS INDICATE NOMINAL PIPE SIZE. UNLABELED SECTIONS ARE THE NOMINAL SIZE OF THE PRECEDING CALLOUT. SUBSEQUENT CALLOUTS INDICATE CHANGE IN PIPE SIZE.
9. UNLESS OTHERWISE NOTED, TRENCHING DEPTHS FOR IRRIGATION SHALL BE 18" FOR MAINLINES AND 12" FOR LATERALS. DEPTH SHALL BE MEASURED FROM THE TOP OF PIPE TO FINISHED SOIL LEVEL.
10. INSTALL CONCRETE THRUST BLOCKS ON ALL MAINLINES THREE (3) INCHES AND LARGER IN DIAMETER IN ACCORDANCE WITH LOCAL CODES AND STANDARDS OR ASAE STANDARD S376.1.
11. ⚠1 ALL MAINLINES, LATERALS, AND CONTROL WIRES UNDER PEDESTRIAN PAVEMENT SHALL BE INSTALLED IN SCHEDULE 40 PVC SLEEVES AND SCHEDULE 80 PVC SLEEVES UNDER TRAFFIC-RATED PAVEMENT. SLEEVES SHALL EXTEND 12" BEYOND EDGE OF PAVEMENT AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE DURING CONSTRUCTION.
12. ANY EXISTING IRRIGATION EQUIPMENT, LATERAL AND/OR MAINLINE PIPE LINE IMPACTED BY CONSTRUCTION WILL BE REPAIRED AND/OR RETROFITTED AS NEEDED.
13. PRIOR TO BACKFILLING, FLUSH AND TEST MAINS AND LATERALS. FLUSH MAINS BEFORE INSTALLING VALVES. FLUSH LATERALS BEFORE INSTALLING SPRINKLERS. SUBJECT MAINS TO HYDROSTATIC PRESSURE OF 1.5 TIMES THE ANTICIPATED OPERATING PRESSURE (MIN. 100 PSI) FOR TWO HOURS. SUBJECT LATERALS TO HYDROSTATIC PRESSURE EQUAL TO ANTICIPATED OPERATING PRESSURE. ALL FLUSHING SHALL BE DONE IN THE PRESENCE OF THE ARCHITECT. BACKFILL WITH CLEAN MATERIAL FROM EXCAVATION. REMOVE ROCKS AND DEBRIS LARGER THAN 1" DIAMETER.
14. INSTALL QUICK COUPLING VALVE ASSEMBLIES AS SHOWN OR APPROXIMATELY 50 FEET ON CENTER FOR IRRIGATION AND HARDSCAPE WASHDOWN WATER.
15. REPLACE EXISTING IRRIGATION CONTROLLER WITH NEW AS SPECIFIED. THE FINAL LOCATION OF THE IRRIGATION CONTROLLER SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. 120V ELECTRICAL SUPPLY SHALL BE BY ELECTRICAL CONTRACTOR. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE FINAL CONNECTION TO THE CONTROLLER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND LOCAL ELECTRICAL CODES.
16. INSTALL ONE (1) AWG #14 CONTROL WIRE (RED) FROM THE CONTROLLER TO EACH REMOTE CONTROL VALVE. INSTALL ONE (1) AWG #14 WIRE (GREEN) FROM THE CONTROLLER TO THE MOST REMOTE REMOTE CONTROL VALVE ALONG EACH BRANCH OF WIRING RUNS FOR USE AS A SPARE CONTROL WIRE. INSTALL ONE (1) AWG #12 WIRE (WHITE) FOR COMMON GROUND. COIL THREE (3) FEET OF WIRE IN EACH VALVE OR SPLICE BOX. USE 3M DBY SPLICE KITS FOR ALL WIRE CONNECTIONS AND SPLICES.RE-PURPOSE EXISTING IRRIGATION CONTROLLER.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE AND UNIFORM COVERAGE OF ALL PLANTED AREAS. ADJUST REMOTE CONTROL VALVE PRESSURE REGULATOR AND FLOW CONTROL TO BALANCE EACH LATERAL SYSTEM AND TO ENSURE PROPER VALVE CLOSURE TIME. SELECT AND ADJUST NOZZLES FOR SPRAY AND BUBBLER SPRINKLERS WITH RADII AND ANGLES TO ENSURE UNIFORM COVERAGE WITH MINIMUM OVERSPRAY. SELECT NOZZLES FOR ROTARY SPRINKLERS AND ADJUST DIFFUSER AND RADIUS TO ENSURE UNIFORM COVERAGE WITH MINIMUM OVERSPRAY.
18. CONTRACTOR SHALL ADJUST SPRINKLER HEAD LOCATION(S) AND ADD HEADS AS REQUIRED TO ACCOMMODATE VERTICAL OBSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, AND SIGNAGE.

Rev.	Date	Description of revisions	By
⚠1	9/30/2025	Revised per City Addendum 2	

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

REGISTERED LANDSCAPE ARCHITECT
LIC. #6398
MATTHEW J. WILKINS
STATE OF CALIFORNIA

SIGNATURE
6/27/25
DATE SIGNED

CITY OF GUADALUPE
GUADALUPE TRANSIT HUB
IRRIGATION DETAILS & NOTES

JOB #: 0075-0041
DESIGNERS: SLB
DRAWN BY: IB
DATE: 10/07/25

DRAWING NO.
LI-5.1
21 OF 41 SHEETS