## LANDSCAPE ARCHITECTURAL DRAWINGS

### LIVE OAK MANOR PARK

TOWN OF LOS GATOS, CALIFORNIA

#### PLANS WERE DESIGNED BY REFERENCING:

GRADING PLANS PREPARED BY <u>HMH</u> DATED: <u>AUGUST 2, 2024</u>.
 NO GEOTECHNICAL REPORT PROVIDED.

#### <u>NOTES</u>

SOIL MANAGEMENT REPORT SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND SOIL AMENDMENTS SHALL BE FOLLOWED PER THE REPORT. PHYSICAL COPIES OF THE SOIL MANAGEMENT REPORT SHALL BE PROVIDED TO CLIENT, PROJECT LANDSCAPE ARCHITECT AND LOCAL AGENCY AS REQUIRED. SOIL MANAGEMENT REPORT SHALL CONFORM TO STATE AB1881 WATER EFFICIENT LANDSCAPE ORDINANCE OR AGENCY ADOPTED WELO AS FOLLOWS:

- (A) SOIL SAMPLING SHALL BE CONDUCTED IN ACCORDANCE WITH LABORATORY PROTOCOL, INCLUDING PROTOCOLS REGARDING ADEQUATE SAMPLING DEPTH FOR THE INTENDED PLANTS.
- (B) THE SOIL ANALYSIS MAY INCLUDE: SOIL TEXTURE, INFILTRATION RATE DETERMINED BY LABORATORY TEST OR SOIL TEXTURE INFILTRATION RATE TABLE, PH, TOTAL SOLUBLE SALTS, SODIUM, PERCENT ORGANIC MATTER, AND RECOMMENDATIONS
- (2) THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, SHALL COMPLY WITH ONE OF THE FOLLOWING:

  (A) IF SIGNIFICANT MASS GRADING IS NOT PLANNED. THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO T
- (A) IF SIGNIFICANT MASS GRADING IS NOT PLANNED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE LOCAL AGENCY AS PART OF THE LANDSCAPE DOCUMENTATION PACKAGE; OR
- (B) IF SIGNIFICANT MASS GRADING IS PLANNED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE LOCAL AGENCY AS PART OF THE CERTIFICATE OF COMPLETION.
- (3) THE SOIL ANALYSIS REPORT SHALL BE MADE AVAILABLE, IN A TIMELY MANNER, TO THE PROFESSIONALS PREPARING THE LANDSCAPE DESIGN PLANS AND IRRIGATION DESIGN PLANS TO MAKE ANY NECESSARY ADJUSTMENTS TO THE DESIGN PLANS.
- (4) THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, SHALL SUBMIT DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE LOCAL AGENCY WITH CERTIFICATE OF COMPLETION.

CONTRACTOR MUST PROVIDE AN IRRIGATION AUDIT IN ACCORDANCE WITH TITLE 23 BY THE STATE DEPARTMENT OF WATER RESOURCES SECTION 492.12, OR LOCAL AGENCY APPROVED ORDINANCE: IRRIGATION AUDIT, IRRIGATION SURVEY, AND IRRIGATION WATER USE ANALYSIS PRIOR TO PROJECT ACCEPTANCE.

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE WORK IS COMPLETE AND IN COMPLIANCE WITH THE MOST CURRENT CODES, ORDINANCES AND REQUIREMENTS OF THE GOVERNING AGENCY. HMH IS NOT RESPONSIBLE FOR CHANGES WHICH OCCUR TO THE CODES, ORDINANCES OR REQUIREMENTS AFTER THE GOVERNING AGENCY'S APPROVAL OR DURING INSTALLATION.

CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. HMH IS NOT RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION CONTRACT DOCUMENTS, NOR RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

AS REQUESTED BY THE OWNER, HMH WILL VISIT THE SITE AT INTERVALS APPROPRIATE TO THE STAGE OF CONSTRUCTION TO REVIEW THE PROGRESS AND QUALITY OF WORK AND TO DETERMINE IN GENERAL IF THE WORK IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN COMPLETED, WILL BE IN SUBSTANTIAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. HOWEVER, HMH WILL NOT MAKE EXHAUSTIVE OR CONTINUOUS ON-SITE OBSERVATIONS TO CHECK QUALITY OF THE WORK.

THERE IS NO WARRANTY OR GUARANTEE EITHER EXPRESSED OR IMPLIED BY HMH FOR THE COMPLETION OF THE WORK OR THE QUALITY OF PERFORMANCE OF THE CONSTRUCTION CONTRACTOR(S).

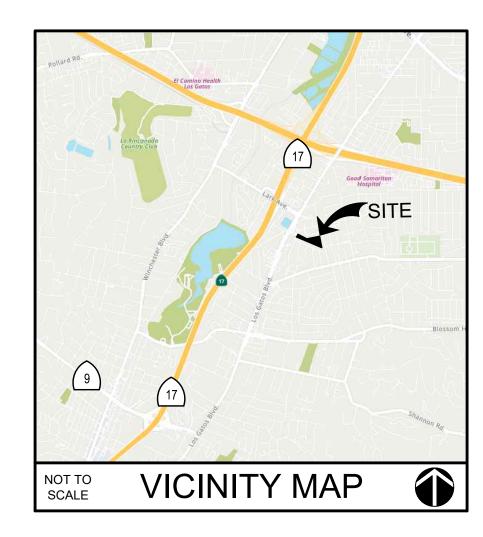
CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK.

CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR ACTS AND OMISSIONS OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING PORTIONS OF THE WORK UNDER A CONTRACT WITH CONTRACTOR.

IN THE EVENT OWNER CONSENTS TO, ALLOWS, AUTHORIZES OR APPROVES OF CHANGES TO ANY PLANS, SPECIFICATIONS, OR OTHER CONSTRUCTION DOCUMENTS, AND THESE ALTERATIONS ARE NOT APPROVED IN WRITING BY HMH, OWNER RECOGNIZES THAT SUCH ALTERATION AND THE RESULTS THEREOF ARE NOT THE RESPONSIBILITY OF HMH IN ADDITION, OWNER AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HMH HARMLESS FROM ANY DAMAGE, LIABILITY OR COST (INCLUDING REASONABLE ATTORNEY'S FEES AND COSTS OF DEFENSE) ARISING FROM SUCH ALTERATIONS.

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS AT THE TIME THE PLANS WERE DRAFTED AND DO NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF SUCH UTILITIES. IN NORTHERN CALIFORNIA, CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ALERT AT 1-800-642-2444 PRIOR TO PERFORMING ANY CONSTRUCTION WORK. IN OTHER AREAS, CONTRACTOR SHALL CONTACT A SIMILAR AGENCY/ORGANIZATION.

CONTRACTOR SHALL PROVIDE PROPER PROJECT MAINTENANCE AFTER THE PROJECT IS COMPLETE. ANY LACK OF OR IMPROPER MAINTENANCE MAY RESULT IN DAMAGE TO PROPERTY OR PERSONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESULTS OF ANY LACK OF OR IMPROPER MAINTENANCE.



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LANDSCAPE SPECIFICATIONS

#### **GOVERNING AGENCY**

#### TOWN OF LOS GATOS:

PARKS DEPARTMENT 110 E. MAIN STREET LOS GATOS, CA 95030 (408) 354-6876

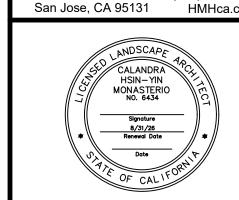
#### CONSULTANTS

#### LANDSCAPE ARCHITECT

HMH LANDSCAPE ARCHITECTURE 1570 OAKLAND ROAD SAN JOSE, CA 95131 (408) 487-2200

#### CIVIL ENGINEER:

HMH CIVIL ENGINEER 1570 OAKLAND ROAD SAN JOSE, CA 95131 (408) 487-2200 Land Use Entitlements
Land Planning
Landscape Architecture
Civil Engineering
Utility Design
Land Surveying
Stormwater Compliance



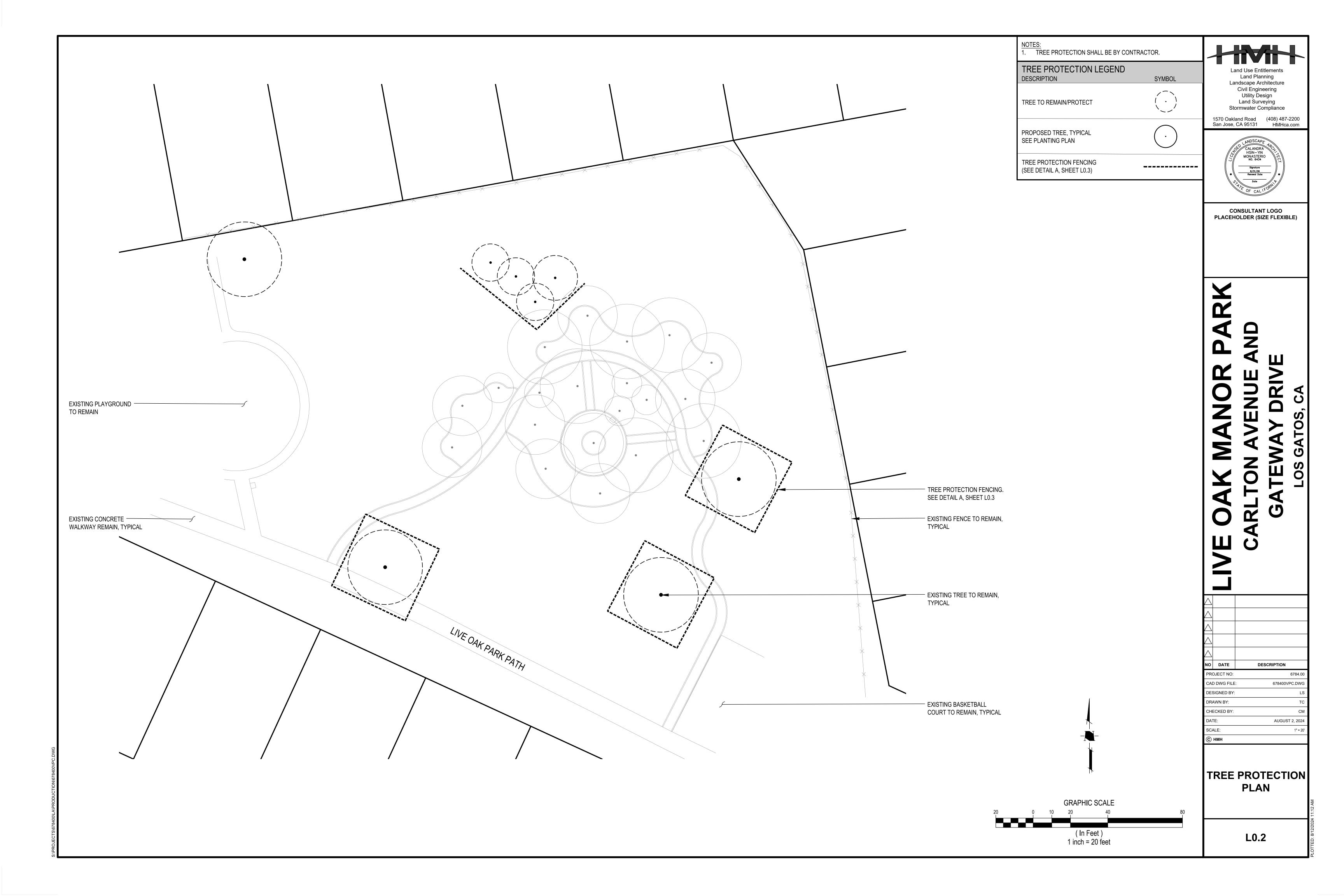
## ANOK PAK VENUE AND AY DRIVE

# LIVE OAK CARLTON GATE

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DESIGNED BY:	LS LS
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**COVER SHEET** 

L0.1



#### TREE PROTECTION NOTES

#### SITE PREPARATION:

ALL EXISTING TREES SHALL BE FENCED WITHIN OR AT THE DRIP LINE (FOLIAR SPREAD) OF THE TREE. DEPENDING ON THE LOCATION OF THE TREE THE FENCING MAY NOT BE ABLE TO BE AT THE DRIPLINE. EXAMPLES OF THIS WOULD BE PUBLIC RIGHT OF WAY, NEAR PROPERTY LINES OR AROUND EXISTING STRUCTURES TO REMAIN. WHERE COMPLETE DRIP LINE FENCING IS NOT POSSIBLE, THE ADDITION OF STRAW WADDLES AND ORANGE SNOW FENCING WRAPPING THE TRUNK SHALL BE INSTALLED PER THE TREE PROTECTION DETAIL. THE FENCE SHOULD BE A MINIMUM OF SIX FEET HIGH, MADE OF GALVANIZED 11-GAUGE WIRE MESH WITH GALVANIZED POSTS OR ANY MATERIAL SUPERIOR IN QUALITY. A TREE PROTECTION ZONE (TPZ) SIGN SHALL BE AFFIXED TO FENCING AT APPROPRIATE INTERVALS AS DETERMINED BY THE ARBORIST ON SITE. SEE TREE PROTECTION DETAIL FOR ADDITIONAL INFORMATION, INCLUDING TREE PROTECTION ZONE SIGN. IF THE FENCE IS WITHIN THE DRIP LINE OF THE TREES, THE FOLIAR FRINGE SHALL BE RAISED TO OFFSET THE CHANCE OF LIMB DAMAGE FROM ACTIVE CONSTRUCTION.

#### **ACTIVE CONSTRUCTION:**

ALL CONTRACTORS, SUBCONTRACTORS AND OTHER PERSONNEL SHALL BE WARNED THAT ENCROACHMENT WITHIN THE FENCED AREA AND DRIPLINE IS PROHIBITED WITHOUT THE CONSENT OF THE CERTIFIED ARBORIST ON THE JOB. THIS INCLUDES, BUT IS NOT LIMITED TO, STORAGE OF LUMBER AND OTHER MATERIALS, DISPOSAL OF PAINTS, SOLVENTS OR OTHER NOXIOUS MATERIALS, PARKED CARS, GRADING EQUIPMENT OR OTHER HEAVY EQUIPMENT. IF CONSTRUCTION ACTIVITY NEEDS TO HAPPEN IN THE TPZ THE FENCE CAN BE MOVED TEMPORARILY FOR DELIVERY OF CONSTRUCTION MATERIALS. THE CONTRACTOR SHOULD MAKE ACCOMMODATIONS TO OFF LOAD ITEMS SUCH AS TRUSSES, TIMBER, PLASTERBOARD, WALLBOARD, CONCRETE, GYPSUM BOARD, FLOORING, ROOFING OR ANY OTHER HEAVY CONSTRUCTION MATERIAL OUTSIDE THE FOLIAR SPREAD OF THE TREE SO THERE IS NO HEAVY EQUIPMENT NEEDED THAT COULD CAUSE DAMAGE TO THE CANOPY OF THE TREE OR COMPACT THE ROOT ZONE. THE TREE PROTECTION FENCING SHOULD BE REESTABLISHED PER THE PLANS AND DETAILS IMMEDIATELY AFTER ANY ACTIVITY THROUGH THE TPZ. PENALTIES, BASED ON THE COST OF REMEDIAL REPAIRS AND THE EVALUATION GUIDE PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE, SHALL BE ASSESSED FOR DAMAGES TO THE TREES.

#### GRADING/EXCAVATING:

ALL GRADING PLANS THAT SPECIFY GRADING WITHIN THE DRIP LINE OF ANY TREE, OR WITHIN THE DISTANCE FROM THE TRUNK AS OUTLINED IN THE SITE PREPARATION SECTION ABOVE WHEN SAID DISTANCE IS OUTSIDE THE DRIP LINE, SHALL FIRST BE REVIEWED BY A CERTIFIED ARBORIST. PROVISIONS FOR AERATION, DRAINAGE, PRUNING, TUNNELING BENEATH ROOTS, ROOT PRUNING OR OTHER NECESSARY ACTIONS TO PROTECT THE TREES SHALL BE OUTLINED BY AN ARBORIST. IF TRENCHING IS NECESSARY WITHIN THE AREA AS DESCRIBED ABOVE, SAID TRENCHING SHALL BE UNDERTAKEN BY HAND LABOR AND DUG DIRECTLY BENEATH THE TRUNK OF THE TREE. ALL ROOTS 2 INCHES OR LARGER SHALL BE TUNNELED UNDER AND OTHER ROOTS SHALL BE CUT SMOOTHLY TO THE TRUNK SIDE OF THE TRENCH. THE TRUNK SIDE SHOULD BE DRAPED IMMEDIATELY WITH TWO LAYERS OF UNTREATED BURLAP TO A DEPTH OF 3 FEET FROM THE SURFACE. THE BURLAP SHALL BE SOAKED NIGHTLY AND LEFT IN PLACE UNTIL THE TRENCH IS BACK FILLED TO THE ORIGINAL LEVEL. AN ARBORIST SHALL EXAMINE THE TRENCH PRIOR TO BACK FILLING TO ASCERTAIN THE NUMBER AND SIZE OF ROOTS CUT, SO AS TO SUGGEST THE NECESSARY REMEDIAL REPAIRS.

#### REMEDIAL REPAIRS:

AN ARBORIST SHALL HAVE THE RESPONSIBILITY OF OBSERVING ALL ONGOING ACTIVITIES THAT MAY AFFECT THE TREES AND PRESCRIBING NECESSARY REMEDIAL WORK TO ENSURE THE HEALTH AND STABILITY OF THE TREES. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL ARBORIST ACTIVITIES BROUGHT OUT IN THE PREVIOUS SECTIONS. IN ADDITION, PRUNING, AS OUTLINED IN INTERNATIONAL SOCIETY OF ARBORICULTURE BEST MANAGEMENT PRACTICES: PRUNING AND ANSI A300 PART 1 STANDARD PRACTICES: PRUNING, SHALL BE PRESCRIBED AS NECESSARY. FERTILIZING, AERATION, IRRIGATION, PEST CONTROL AND OTHER ACTIVITIES SHALL BE PRESCRIBED ACCORDING TO THE TREE NEEDS, LOCAL SITE REQUIREMENTS, AND STATE AGRICULTURAL PEST CONTROL LAWS. ALL SPECIFICATIONS SHALL BE IN WRITING. FOR PEST CONTROL OPERATIONS, CONSULT THE LOCAL COUNTY AGRICULTURAL COMMISSIONER'S OFFICE FOR INDIVIDUALS LICENSED AS PEST CONTROL ADVISORS OR PEST CONTROL OPERATORS.

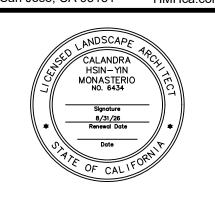
#### FINAL INSPECTION:

UPON COMPLETION OF THE PROJECT, THE ARBORIST SHALL REVIEW ALL WORK UNDERTAKEN THAT MAY IMPACT THE EXISTING TREES. SPECIAL ATTENTION SHALL BE GIVEN TO CUTS AND FILLS, COMPACTING, DRAINAGE, PRUNING AND FUTURE REMEDIAL WORK. AN ARBORIST SHOULD SUBMIT A FINAL REPORT IN WRITING OUTLINING THE ONGOING REMEDIAL CARE FOLLOWING THE FINAL INSPECTION.

Land Use Entitlements
Land Planning
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CONSULTANT LOGO
PLACEHOLDER (SIZE FLEXIBLE)

# E OAK MANOR PAR ARLTON AVENUE AND GATEWAY DRIVE

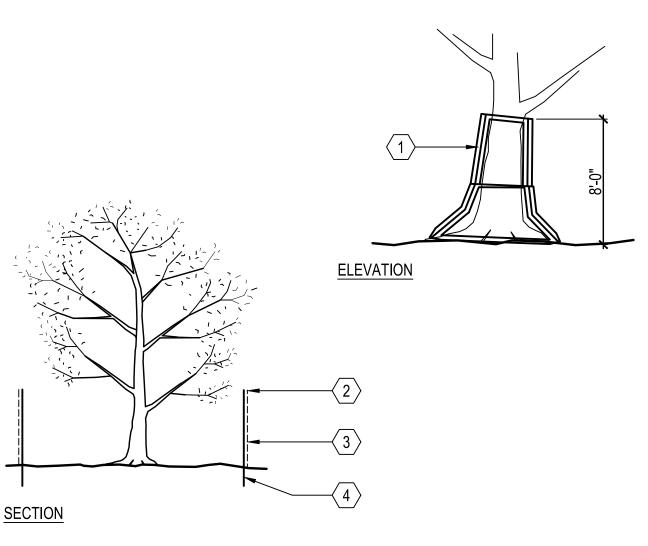
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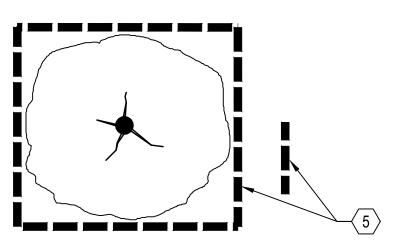
TREE PROTECTION
NOTES AND TREE
PROTECTION
FENCING DETAIL

L0.3

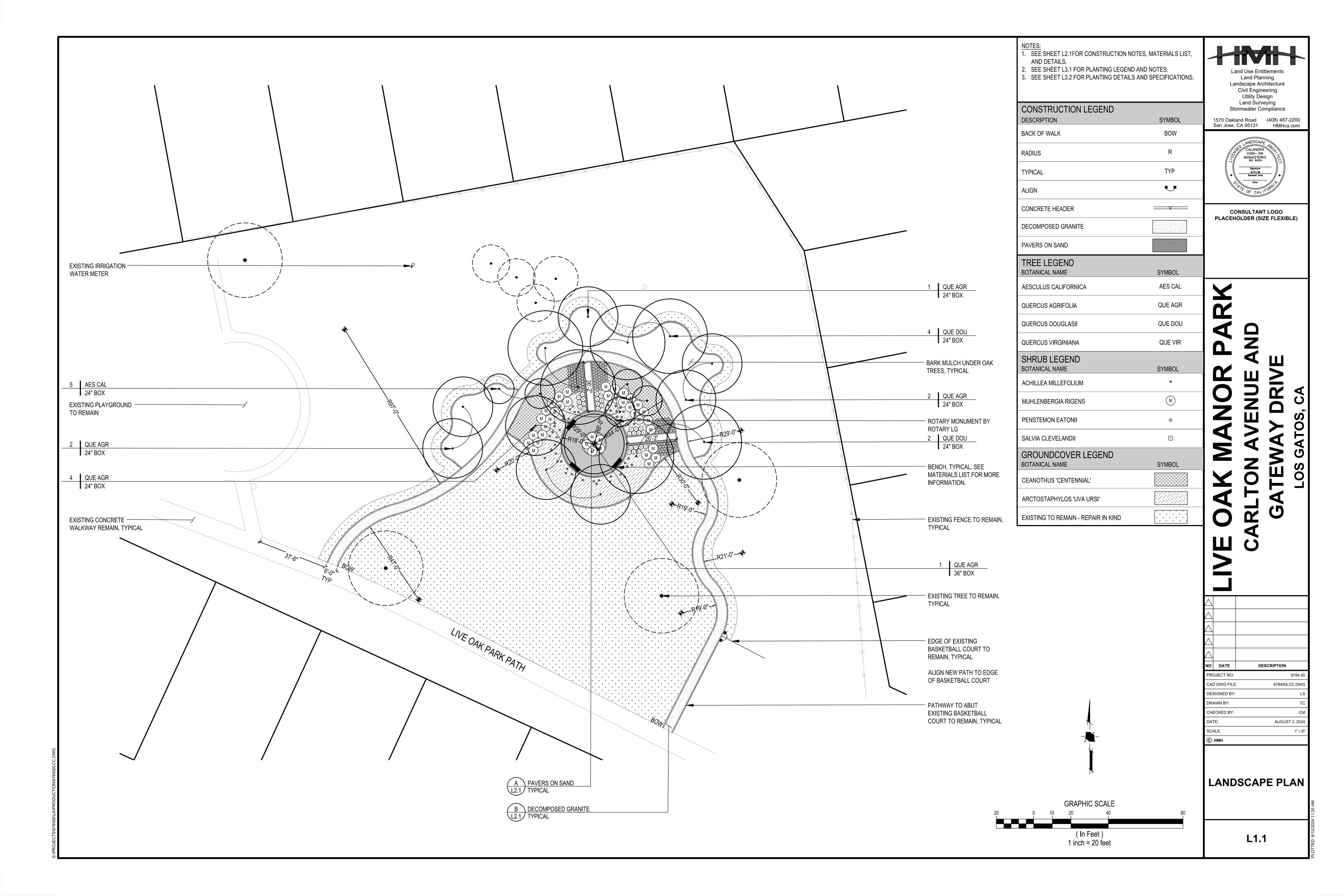
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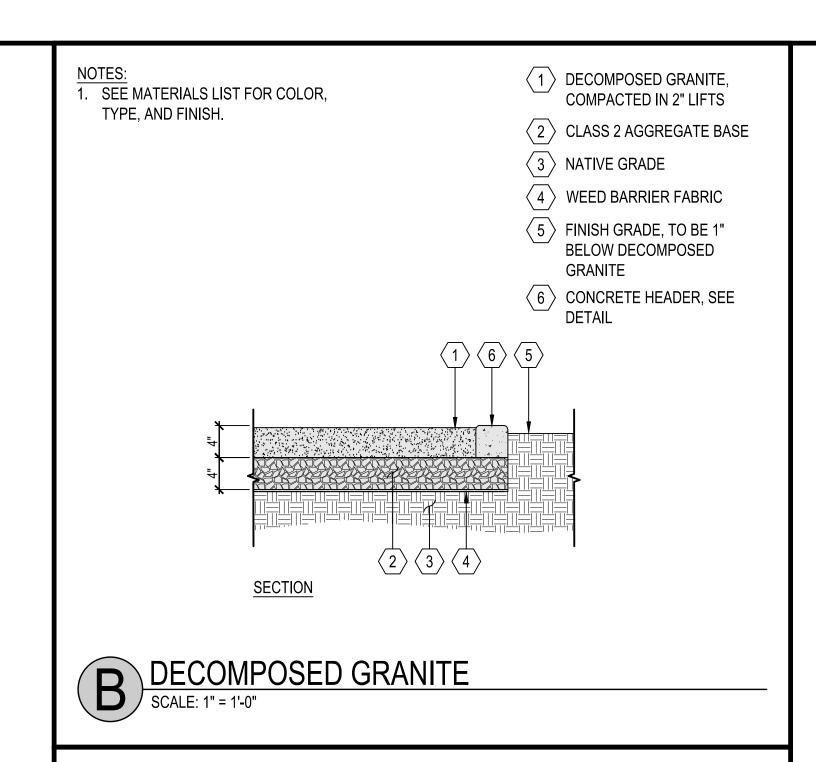
- 1. CONSTRUCTION PERIOD PROTECTION
  FOR TREES SHOULD BE PROVIDED
  BEFORE GRADING OR OTHER
  EQUIPMENT IS ALLOWED ON THE
  PROPERTY.
- 2. WHEN CONSTRUCTION IS TO TAKE PLACE BENEATH A TREE CANOPY ON ONE SIDE, THE FENCE SHOULD BE SITED 2 TO 3 FEET BEYOND THAT CONSTRUCTION, BUT BETWEEN CONSTRUCTION AND THE TREE TRUNK.
- 3. IF CONSTRUCTION OR PAVING IS TO TAKE PLACE THROUGHOUT THE AREA BENEATH CANOPY, AND DRIP LINE FENCING IS NOT PRACTICAL, SNOW FENCING SHOULD BE USED TO PROTECT THE TRUNKS FROM DAMAGE.
- SNOW FENCING THREE LAYERS OF WIRE AND LATH SNOW FENCING TO 8 FEET ABOVE GROUND ON TREES WHERE CONSTRUCTION WILL TAKE PLACE BENEATH THE CANOPY.
- TOP OF FENCE WITH FLUORESCENT FLAGGING TAPE HUNG EVERY 10 FEET
- 3 6' CHAIN LINK OR WELDED WIRE MESH
- 8' FENCE POST OF 2" DIAMETER GI PIPE OR T-ANGLE POST
- FENCE PLACED AT DRIP LINE OR 50% GREATER THAN THE TREE CANOPY RADIUS WHERE POSSIBLE





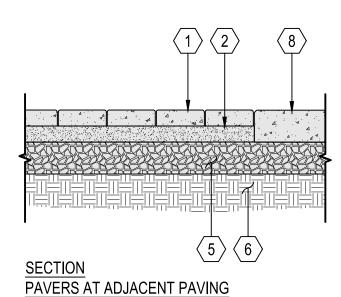
A TREE PROTECTION FENCING
SCALE: NOT TO SCALE

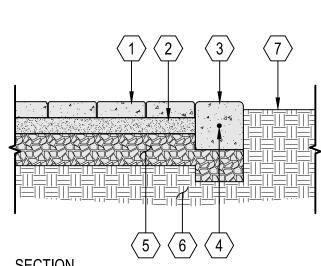


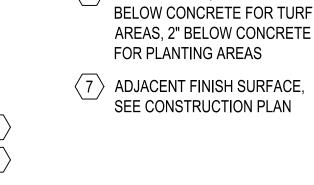


I. SEE MATERIALS LIST FOR COLOR, TYPE, AND FINISH.

- 1 PAVERS
- 2 SAND LEVELING BED, 2"
- (3) CONCRETE HEADER, 6" WIDE, 6" DEEP, TOP OF HEADER SHALL BE FLUSH WITH TOP OF PAVERS
- 4 #4 REBAR, CONTINUOUS, CENTERED IN CONCRETE HEADER
- (5) CLASS 2 AGGREGATE BASE, 4" THCIK
- 6 NATIVE GRADE
- 7 > FINISH GRADE, 1" BELOW CONCRETE FOR TURF AREAS, 2" BELOW CONCRETE FOR PLANTING AREAS
- (8) ADJACENT PAVING, SEE CONSTRUCTION PLAN







(1) CONCRETE HEADER, 6" WIDE,

6" DEEP, 1/2" RADIUS ON

CENTERED IN CONCRETE

CONTROL JOINT, 1/4" WIDE, 1"

BOTH TOP EDGES

2 #3 REBAR, CONTINUOUS,

3 TOOLED OR SAW CUT

DEEP, AT 6'-0" O.C.

6 FINISH GRADE, TO BE 1"

4 CLASS 2 AGGREGATE BASE,

HEADER

4" THICK

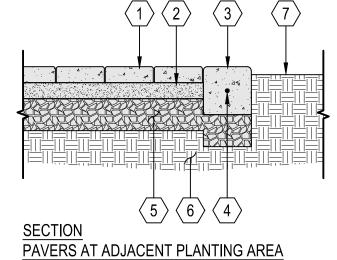
5 NATIVE GRADE

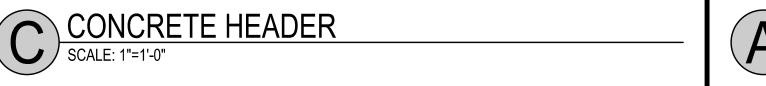
1. SEE MATERIALS LIST FOR

COLOR, TYPE, AND FINISH.

 $\langle 3 \rangle \langle 2 \rangle \langle 1 \rangle$ 

SECTION







#### CONSTRUCTION PLAN NOTES

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE INSTALLATION OF ALL IMPROVEMENTS AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.

CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID AND PRIOR TO COMMENCING INSTALLATION. IF ANY DISCREPANCIES EXIST, THEY SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND STAKING ALL SEWER, WATER AND UTILITY LINES ABOVE OR BELOW GRADE THAT MIGHT BE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED FOR REPAIR, RESTORATION, OR REPLACEMENT OF AFOREMENTIONED UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS.

DEVIATIONS BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.

HARDSCAPE AND STRUCTURAL ELEMENTS SHALL BE PLACED PER GEOTECHNICAL SOILS REPORT. IF SUCH REPORT IS UNAVAILABLE, CONTRACTOR SHALL DISCUSS PLACEMENT ON SUITABLE GRADE WITH THE OWNER'S AUTHORIZED REPRESENTATIVE.

UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, ALL MATERIALS DESIGNATED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE.

COSTS INCURRED DUE TO REPAIR, RESTORATION, OR REPLACEMENT OF EXISTING IMPROVEMENTS WHICH ARE DESIGNATED "TO BE PROTECTED" OR "TO REMAIN" WHICH ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, MATERIALS TO BE PURCHASED AND FURNISHED BY THE CONTRACTOR SHALL BE NEW.

CONCRETE INDICATED FOR SAWCUTTING AND REMOVAL SHALL BE CUT TO A TRUE LINE WITH NEATLY SAWED EDGES. IF A SAWCUT IS WITHIN THREE FEET (3') OF AN EXISTING EXPANSION OR CONTROL JOINT, CONCRETE SHALL BE REMOVED TO THAT NEAREST JOINT.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MANUFACTURER'S CUT OR DATA SHEETS FOR APPROVAL PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL FURNISH TO THE OWNER'S AUTHORIZED REPRESENTATIVE A CERTIFICATE OF COMPLIANCE FOR SUCH FURNISHED MATERIALS.

ABANDONED PIPES SHALL BE CAPPED OR PLUGGED IN A MANNER APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

#### MATERIALS LIST

CONCRETE HEADER: SHALL BE NATURAL GREY WITH SMOOTH TROWEL FINISH.

PAVERS ON SAND: CONCRETE HEADER SHALL BE NATURAL COLOR WITH SMOOTH TROWEL FINISH. PAVER STONES SHALL BE BELDEN BRICK COMPANY 4X8 TAN BRICK. DONOR ENGRAVING BY POLAR ENGRAVING. WWW.POLARENGRAVING.COM

DECOMPOSED GRANITE: SHALL BE LYNGSO CALIFORNIA GOLD WITH POLYPAVEMENT STABILIZER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ADD ADDITIONAL SURFACE BINDER. SURFACE BINDER: SHALL BE POLYPAVEMENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

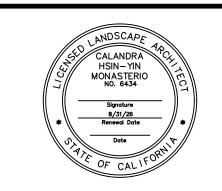
BENCH: VICTOR STANLEY MODEL 8. WOOD SLAT. 6' LENGTH. CENTER ARMREST. 3 TOTAL PER PLAN.

MONUMENT ITEM: PER ROTARY LOS GATOS

#### Land Use Entitlements Land Planning Landscape Architecture

Civil Engineering **Utility Design** Land Surveying Stormwater Compliance

1570 Oakland Road (408) 487-2200 San Jose, CA 95131 HMHca.com



## $\geq$ LOS

PROJECT NO: CAD DWG FILE: 678400DSC.DW0 DESIGNED BY: DRAWN BY: CHECKED BY:

CONSTRUCTION NOTES, MATERIALS **LIST AND DETAILS** 

AUGUST 2, 2024

AS NOTED

L2.1

#### PLANTING PLAN NOTES

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL PLANT MATERIAL AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.

UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, STRUCTURAL IMPROVEMENTS AND HARDSCAPE SHALL BE INSTALLED PRIOR TO PLANTING OPERATIONS.

PLANT LIST ON THE DRAWINGS SHALL BE USED AS A GUIDE ONLY. CONTRACTOR SHALL TAKEOFF AND VERIFY SIZES AND QUANTITIES BY PLAN CHECK.

A SOIL MANAGEMENT REPORT SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND SOIL AMENDMENTS SHALL BE FOLLOWED PER THE REPORT. PHYSICAL COPIES OF THE SOIL MANAGEMENT REPORT SHALL BE PROVIDED TO THE CLIENT, PROJECT LANDSCAPE ARCHITECT AND LOCAL AGENCY AS REQUIRED. THE SOIL MANAGEMENT REPORT SHALL CONFORM TO STATE AB1881 WATER EFFICIENT LANDSCAPE ORDINANCE (WELO) OR LOCAL AGENCY ADOPTED WELO. CONTRACTOR SHALL OBTAIN A SOILS MANAGEMENT REPORT AFTER GRADING OPERATIONS AND PRIOR TO PLANT INSTALLATION.

SAMPLES OF FERTILIZERS, ORGANIC AMENDMENT, SOIL CONDITIONERS, AND SEED SHALL BE SUBMITTED PRIOR TO INCORPORATION. CONTRACTOR SHALL FURNISH TO THE OWNER'S AUTHORIZED REPRESENTATIVE A CERTIFICATE OF COMPLIANCE FOR SUCH FURNISHED MATERIALS.

ALL WORK ON THE IRRIGATION SYSTEM, INCLUDING HYDROSTATIC, COVERAGE, AND OPERATIONAL TESTS AND THE BACKFILLING AND COMPACTION OF TRENCHES SHALL BE PERFORMED PRIOR TO PLANTING OPERATIONS.

LOCATIONS OF PLANT MATERIAL SHALL BE REVIEWED ON SITE BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.

TREES SHALL BE PLANTED NO CLOSER THAN TEN FEET (10') FROM UTILITIES.

TREES PLANTED WITHIN FIVE FEET (5') OF HARDSCAPE OR STRUCTURES SHALL BE INSTALLED WITH A ROOT BARRIER AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

CONTRACTOR MUST CONTACT THE TOWN OF LOS GATOS ARBORIST TO VERIFY SPECIES (EVEN IF SHOWN ON THE PLANS), LOCATIONS, AND QUANTITIES OF ALL STREET TREES PRIOR TO ORDERING MATERIAL. IF STREET TREES ARE TO BE PLANTED IN TREE WELLS, FINAL LOCATION OF TREE WELLS SHALL BE DETERMINED BY THE ARBORIST PRIOR TO INSTALLATION OF SIDEWALK.

ALL PLANTING AREAS TO RECEIVE 3" THICK BARK MULCH LAYER. CONTRACTOR SHALL PROVIDE SAMPLE OF PROPOSED BARK MULCH FOR APPROVAL. BARK MULCH SHALL BE LYNGSO SMALL FIR BARK (3/4" TO 1-1/2") OR APPROVED EQUAL.

ALL PLANT MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1)

FOR STANDARD FORM TREES, CALIPER SIZE SHALL BE MEASURED 6" ABOVE THE SOIL LINE FOR CALIPERS EQUAL TO OR LESS THAN 4" FOR CALIPERS GREATER THAN 4", CALIPER SHALL BE MEASURES 12" ABOVE THE SOIL LINE. FOR MULTI-TRUNK TREES THE CALIPER SHALL BE ESTABLISHED BY TAKING THE AVERAGE OF THE CALIPER OF THE TWO LARGEST TRUNKS.

CALIPER IS MEASURED 6" ABOVE ORIGINATION POINT OF THE SECOND LARGEST TRUNK OR 6" ABOVE GROUND IF ALL TRUNKS ORIGINATE FROM THE SOIL.

CALIPER SIZES STANDARDS: 15 GALLON: 0.75-1.25" 24" BOX: 1.25-2" 36" BOX: 2-3.5" 48" BOX: 3.5-5"

60" BOX: 4-6"

WATER NEEDS CATEGORY BASED ON WUCOLS IV (JANUARY 2014) LANDSCAPE COEFFICIENT METHOD:

CATEGORY PERCENTAGE OF ETO

(H) HIGH: 0.7-0.9 (M) MEDIUM: 0.4-0.6 (L) LOW: 0.1-0.3 (VL) VERY LOW: <0.1

#### PROPOSED PLANT PALETTE

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	MINIMUM CONTAINER SIZE	HxW	WUCOLS	NOTES
TREES							
AES CAL	05	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	24" BOX	20'X20'	VL	STANDARD FOR
QUE AGR	09	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	50'X40'	VL	STANDARD FOR
QUE DOU	06	QUERCUS DOUGLASII	BLUE OAK	24" BOX	40'X50'	VL	STANDARD FOR
SHRUBS							
•	52	ACHILLEA MILLEFOLIUM	YARROW	1 GALLON	1' X 2'	L	
M	38	MUHLENBERGIA RIGENS	DEERGRASS	1 GALLON	3' X 5'	L	
•	176	PENSTEMON EATONII	FIRECRACKER PENSTEMON	1 GALLON	3' X 3'	L	
3	28	SALVIA CLEVELANDII	CLEVELAND SAGE	5 GALLON	3' X 5'	L	
GROUNDCOVERS							
	1552 SF	CEANOTHUS 'CENTENNIAL'	CENTENNIAL CEANOTHUS	1 GALLON	SPREADING	L	
	1996SF	ARCTOSTAPHYLOS 'UVA URSI'	RED BEARBERRY	1 GALLON	SPREADING	L	
* * * * * * * * * * * * * * * * * * *	AS NEEDED	EXISTING TURF TO REMAIN - REPAIR IN KIND AS NEEDED					



1570 Oakland Road (408) 487-2200 San Jose, CA 95131 HMHca.com



## ANOR PAR VENUE AND

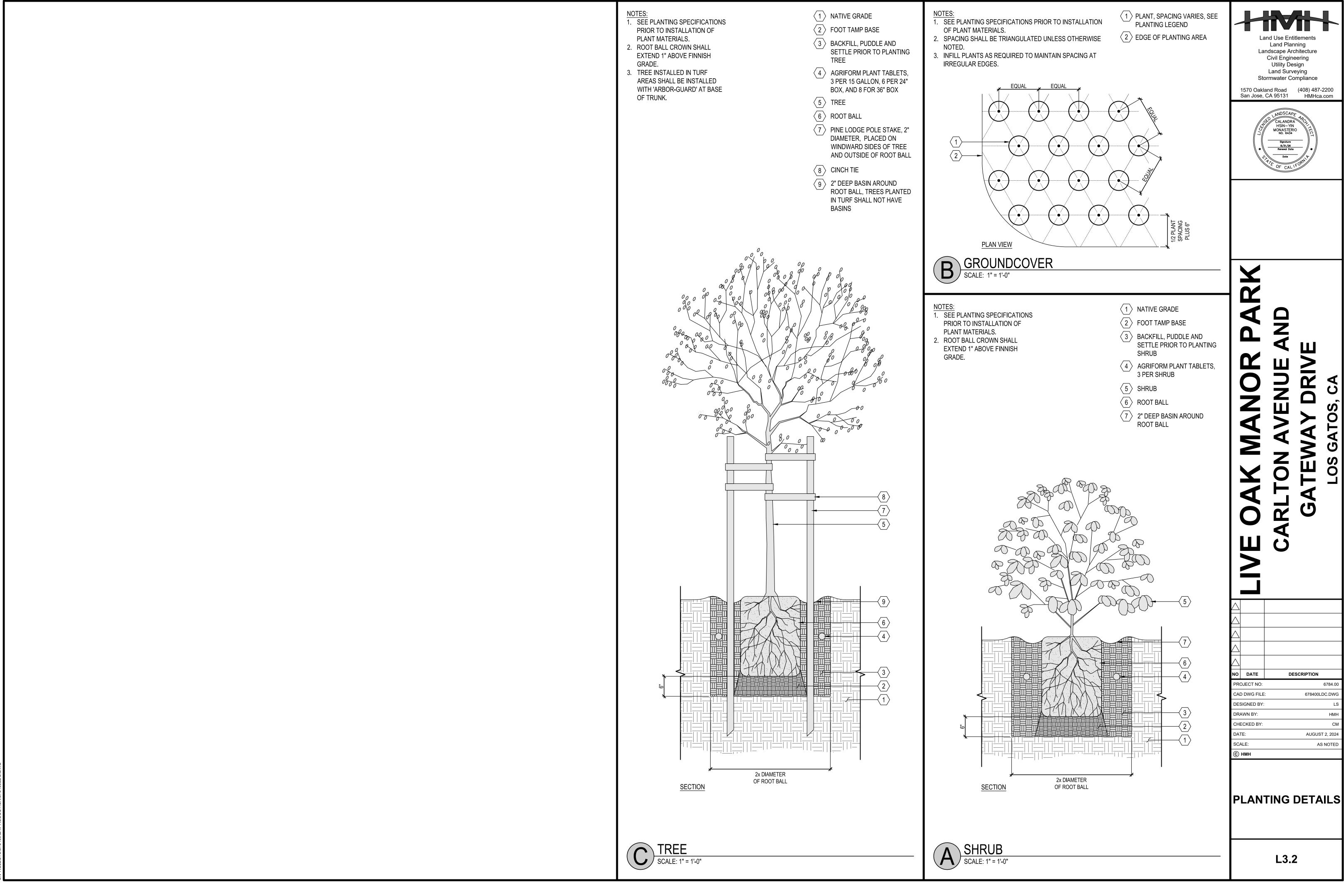
IVE OAK MAN CARLTON AVE

$\triangle$		
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NO	DATE	DESCRIPTION
PR	OJECT NO:	6784.00
CAI	D DWG FILE	:: 678400LDC.DWG

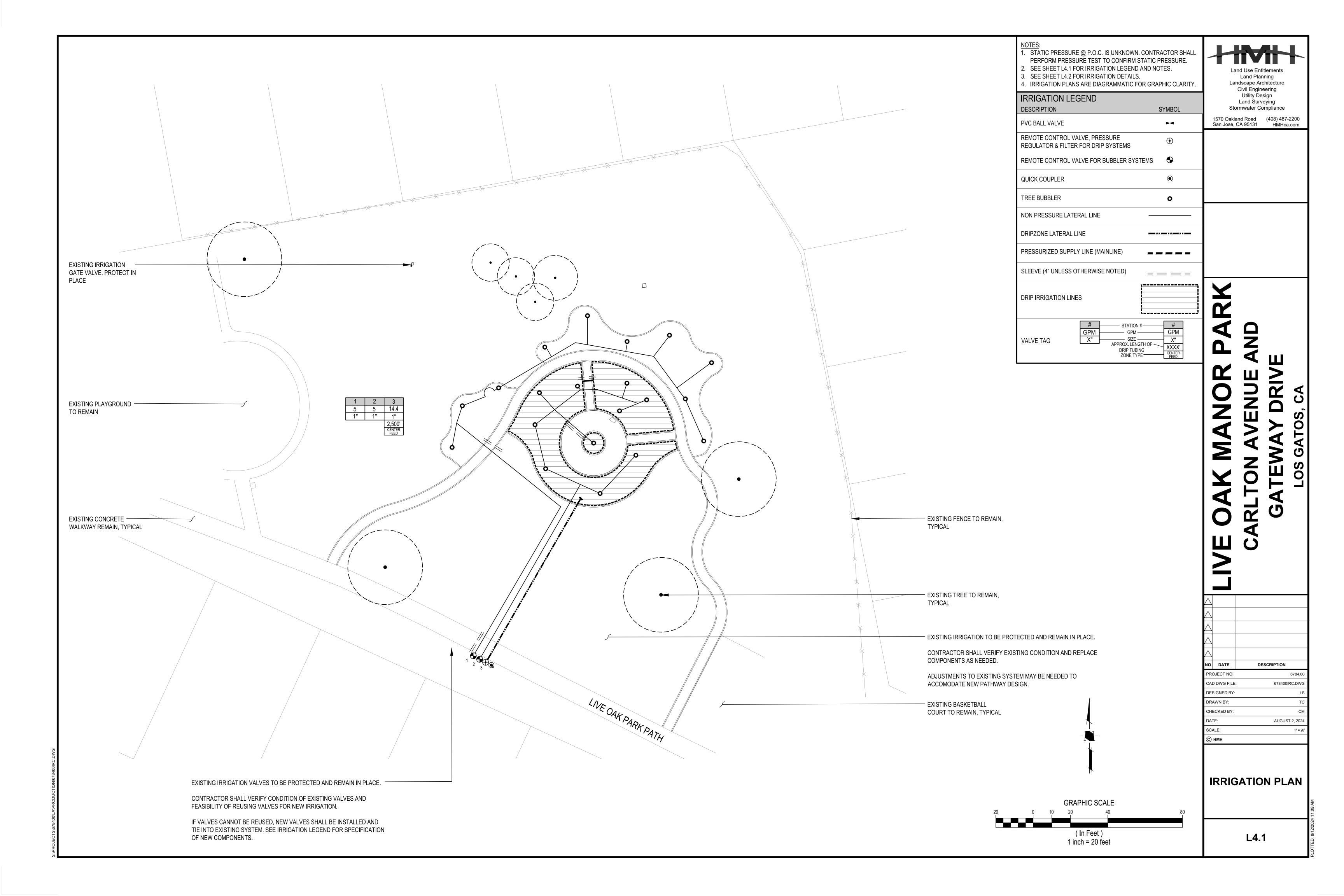
PROJECT NO:	6784.00
CAD DWG FILE:	678400LDC.DWG
DESIGNED BY:	LS
DRAWN BY:	НМН
CHECKED BY:	СМ
DATE:	AUGUST 2, 2024
SCALE:	NONE

PLANTING LEGEND AND NOTES

L3.1



AUGUST 2, 2024 AS NOTED



#### IRRIGATION NOTES

- . CONTRACTOR SHALL CONNECT P.O.C. FROM DOWNSTREAM OF WATER METER AND COMPLETE THE ENTIRE SYSTEM AS SHOWN ON THE PLANS AND SPECIFICATIONS.
- 2. DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE ALL THE OFFSETS AND FITTINGS REQUIRED FOR A COMPLETE IRRIGATION SYSTEM. THE IRRIGATION SYSTEM SHALL BE INSTALLED WITHIN A PLANTING AREA WHEREVER POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS NECESSARY TO CONFORM TO ACTUAL FIELD CONDITIONS.
- 3. EQUIPMENT INCLUDING MAIN, LATERALS, AND VALVES SHOWN IN HARDSCAPE AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WHENEVER POSSIBLE WITHIN PLANTED AREAS A REASONABLE. REACHABLE DISTANCE FROM HARDSCAPE OR TURF AREAS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 4. CONTRACTOR SHALL INSTALL WIRE AND PIPE UNDER HARDSCAPE AREAS IN SEPERATE P.V.C. SCHEDULE 40 SLEEVES. CONTRACTOR SHALL COORDINATE PIPING AND SLEEVING LOCATION PRIOR TO HARDSCAPE INSTALLATION. SLEEVING SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES. WHEREVER POSSIBLE, CONTROL WIRES SHALL OCCUPY THE SAME TRENCH AS PIPES. EACH CONTROLLER SHALL HAVE AN INDEPENDENT GROUND WIRE.
- . "I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN." INSTALL IRRIGATION SYSTEM IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND ORDINANCES.
- 6. THE EXISTING WATER PRESSURE AT THE PROPOSED WATER METER LOCATION RANGES FROM XX TO XX P.S.I. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND WATER PRESSURE. IF ANY DISCREPANCY EXISTS BETWEEN DESIGN AND ACTUAL FIELD CONDITIONS NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IN WRITING FOR A DECISION BEFORE PROCEEDING WITH THE INSTALLATION.
- . SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE (P.S.I.) AND A MAXIMUM DEMAND (G.P.M.) AS SHOWN AT EACH POINT OF CONNECTION ON THE DRAWINGS. CONTRACTOR SHALL VERIFY PRESSURE AND DEMAND AT EACH POINT OF CONNECTION PRIOR TO COMMENCING INSTALLATION AND SUBMIT SUCH IN WRITING TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IF ANY DISCREPANCIES EXIST, THEY SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE AND EFFECTIVE COVERAGE OF ALL PLANTING AREAS. DURING THE MAINTENANCE PERIOD, IT IS THE RESPONSIBILITY OF THE LANDSCAPE MAINTENANCE CONTRACTOR TO ENSURE ALL PLANT MATERIAL RECEIVES AS MUCH WATER AS IS NECESSARY FOR ESTABLISHMENT AND TO SUSTAIN GOOD PLANT HEALTH.
- 10. CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST IRRIGATION SYSTEM FOR OPTIMUM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS. COSTS INCURRED DUE TO ANY ADJUSTMENTS FOR 100% COVERAGE. INCLUDING THOSE REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LAYOUT AND INSTALLATION OF THE PLANT MATERIAL TO ENSURE THAT THERE WILL BE COMPLETE AND UNIFORM IRRIGATION COVERAGE OF PLANTING. THE IRRIGATION LAYOUT SHALL BE CHECKED BY THE CONTRACTOR AND OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO CONSTRUCTION TO DETERMINE IF ANY CHANGES, DELETIONS, OR ADDITIONS ARE REQUIRED. THE IRRIGATION SYSTEM SHALL BE INSTALLED AND TESTED PRIOR TO THE INSTALLATION OF ANY PLANT MATERIALS.
- 12. TRENCHING DEPTHS FOR IRRIGATION PIPES SHALL BE AS FOLLOWS: MAIN = 24", ALL LATERALS = 12". ALL DIMENSIONS ARE FROM THE TOP OF THE PIPE. PROVIDE A MINIMUM 3" SAND ENVELOPE AROUND ALL MAINLINE PIPE.
- 13. MINIMUM LATERAL SIZE SHALL BE 3/4". SEE PIPE SIZING CHART FOR SIZING.
- 14. IF SETTLEMENT OCCURS ALONG TRENCHES AND ADJUSTMENT(S) TO PIPES, VALVES, OR HEADS IS REQUIRED, THE CONTRACTOR, AS PART OF WORK UNDER THIS CONTRACT, SHALL MAKE ALL ADJUSTMENTS WITHOUT EXTRA COSTS TO THE OWNER.
- 15. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FILL AND REPAIR ALL DEPRESSIONS AND REPLACE ALL NECESSARY LAWN AND/OR PLANTING DUE TO THE SETTLEMENT OF IRRIGATION FOR ONE YEAR FOLLOWING THE ACCEPTED COMPLETION OF MAINTENANCE.
- 16. CONTRACTOR SHALL GUARANTEE THAT ALL MATERIAL, EQUIPMENT, AND WORKMANSHIP FURNISHED BY HIM BE FREE OF DEFECTS FOR ONE YEAR FOLLOWING THE ACCEPTED COMPLETION OF MAINTENANCE. CONTRACTOR SHALL BE LIABLE FOR REPAIRS AND REPLACEMENT OF FAILED MATERIAL DURING THIS GUARANTEE PERIOD.
- 17. ALL PLASTIC FITTINGS SHALL BE A MINIMUM OF 18" APART TO FACILITATE REMOVAL AND REPLACEMENT OF INDIVIDUAL FITTINGS.
- 18. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. CONTRACTOR TO LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE AND EVERY 100' ON CENTER ALONG WIRE RUN. TAPE WIRE BUNDLES 10' ON CENTER. NO TAPING WILL BE PERMITTED INSIDE SLEEVES. WIRE CONNECTORS SHALL BE SCOTCH DBY OR APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 19. CONTROL VALVES SHALL BE SIZED AS DESIGNATED ON THE DRAWINGS AND SHALL BE INSTALLED IN VALVE BOXES AS INDICATED IN THE DETAILS. BOXES SHALL BE SET FLUSH WITH THE FINISH GRADE OR SURFACE AND PERMANENTLY MARKED AS INDICATED IN THE DETAILS.
- 20. EXACT LOCATION OF CONTROLLERS TO BE DETERMINED AT JOB SITE BY PROJECT MANAGER. USE THIN WALL METAL CONDUIT ABOVE GRADE AND IN GARAGES. PAINT ALL CONDUIT TO MATCH BUILDING OR WALL COLOR. USE WATERPROOF CONNECTIONS FOR OUTDOOR INSTALLATION. INSTALL PER MANUFACTURERS SPECIFICATIONS. SEAL ALL CONDUIT HOLES WITH SILICONE OR EQUAL. PROGRAM CONTROLLER TO IRRIGATE USING MULTIPLE REPEAT CYCLES OF SHORT DURATION. CARE SHALL BE TAKEN TO PREVENT RUNOFF OF WATER AND SLOPE/SOIL EROSION DUE TO PROLONGED APPLICATIONS OF WATER. FOR CONTROL WIRE INSTALLED IN GARAGE, COORDINATE WITH ELECTRICAL ENGINEER AND PROJECT ELECTRICIAN FOR CONNECTIONS BETWEEN PODIUM OR WALL PENETRATIONS TO IRRIGATION CONTROLLER LOCATION(S).
- 21. CONTROL WIRES SHALL BE 14 GAUGE (RED). SEPARATE WIRES SHALL RUN FROM THE CONTROLLER TO EACH VALVE. COMMON GROUND WIRES SHALL BE 12 GAUGE (WHITE) ALL CONTROL WIRES LEADING FROM VALVES TO CONTROLLER SHALL BE LOOPED-UP A MINIMUM OF 30" INTO EVERY VALVE BOX INTERCEPTED ON THE WAY TO THE CONTROLLER.
- 22. CONTRACTOR TO COORDINATE CONTROLLER POWER HOOK-UP WITH PROJECT ELECTRICIAN. THE GENERAL CONTRACTOR SHALL COORDINATE HIS PORTION OF WORK WITH THE UNDERGROUND ELECTRICAL CONTRACTOR TO MINIMIZE CONFLICTS.
- 23. FINAL LOCATION FOR BACKFLOW PREVENTION DEVICES SHALL BE APPROVED BY THE OWNERS AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLING. CONTRACTOR SHALL NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
- 24. BUBBLERS SHALL BE LOCATED ON THE UPHILL SIDE OF TREES.
- 25. ALL WATER TO DRAIN AWAY FROM BUILDING PER LOCAL BUILDING CODE.
- 31. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OF DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- 32. A LAMINATED, COLOR CODED, REDUCED SIZE IRRIGATION PLAN SHALL BE FURNISHED TO THE OWNER AFTER FINAL ACCEPTANCE. PLACE ANOTHER LAMINATED COPY INSIDE THE CONTROLLER CABINET DOOR.
- 33. LANDSCAPE CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR PRIOR TO DEMOLITION OR PROTECTION OF EXISTING MAINLINE AND CONTROLLER WIRE FOR FUTURE USE.
- 34. IF THE INTENT IS TO DEMO ANY IRRIGATION EQUIPMENT IN NEW CONSTRUCTION AREA, LANDSCAPE CONTRACTOR SHALL SUPPLY ALL NEW MAINLINE AND CONTROLLER WIRE TO NEW REMOTE CONTROL VALVE AS DESIGNED PER THIS PLAN, TYPICAL.
- 35. CONTRACTOR SHALL INSTALL DRIPLINE ON SLOPES PER MANUFACTURERS RECOMMENDATIONS WITH 25% INCREASED SPACING AT BOTTOM 1/3 OF SLOPE.
- 36. CONTRACTOR MUST PROVIDE AN IRRIGATION AUDIT IN ACCORDANCE WITH LOCAL WELO AND TITLE 23 DEPARTMENT OF WATER RESOURCES SECTION 492.12: IRRIGATION AUDIT, IRRIGATION SURVEY, AND IRRIGATION WATER USE ANALYSIS PRIOR TO PROJECT ACCEPTANCE.
- 37. CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLETION AS REQUIRED TO THE LOCAL REVIEWING AGENCY. SEE CALIFORNIA CODE OF REGULATIONS TITLE 23 WATERS DIVISION 2
  DEPARTMENT OF WATER RESOURCES CHAPTER 2.7 MODEL WATER EFFICIENT LANDSCAPE ORDINANCE APPENDIX C.
- 38. SOIL MANAGEMENT REPORT SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND SOIL AMENDMENTS SHALL BE FOLLOWED PER THE REPORT. PHYSICAL COPIES OF THE SOIL MANAGEMENT REPORT SHALL BE PROVIDED TO CLIENT, PROJECT LANDSCAPE ARCHITECT AND LOCAL AGENCY AS REQUIRED. SOIL MANAGEMENT REPORT SHALL CONFORM TO STATE AB1881 WATER EFFICIENT LANDSCAPE ORDINANCE OR AGENCY ADOPTED WELO.
- 39. CONTRACTOR IS RESPONSIBLE FOR HAND WATERING INCLUDING BUT NOT LIMITED TO THE FOLLOWING AREAS DURING PLANT ESTABLISHMENT: BIO-CELL AREAS, SODDED AREAS. THESE AREAS WILL NEED SUPPLEMENTAL HAND WATERING IF THEY ARE IRRIGATED BY DRIP UNTIL ROOTS ARE ESTABLISHED AS DRIP IRRIGATION MAY NOT PROVIDE SUFFICIENT WATER TO THESE AREAS FOR HEALTHY PLANT ESTABLISHMENT.

SYMBOL	END  DESCRIPTION		MANUFACTURER/MODEL/SIZE		
► M	PVC BALL VALVE		NIBCO PVC BALL VALVE 4660-S OR EQUAL, LINE SIZE		
			THIBOOT VO BALL VALVE 4000 O ON EQUAL, LINE SIZE		
DRIPZONE CONTROL KIT INC. REMOTE CONTROL VALVE, PRESSURE REGULATOR & FILTER FOR DRIP AND TREE BUBBLER VALVES  REMOTE CONTROL VALVE FOR BUBBLER SYSTEMS		RAINBIRD XCZLF-100-PRF-LOW FLOW CONTROL KIT (.2-10.0 GPM)  RAINBIRD 100PGA INLET INLINE PLASTIC VALVE (2-150 GPM			
					•
UBBLERS	DESCRIPTION	OPERATING PRESSURE	MODEL	NOZZLE GPM	
•	ON GRADE TREE BUBBLER	20-75 PSI	RAINBIRD PCT05 MOUNTED ON RAINBIRD SHRUB ADAPTERS IN QUANTITIES AS FOLLOWS: 2 PER 15 GALLON OR 24" BOX TREE 4 PER 36" BOX AND LARGER TREE	(0.25 GPM EACH)	
RIP	DESCRIPTION	OPERATING PRESSURE	MODEL		
	ON-GRADE TORO DRIP TUBING	30 PSI	RAINBIRD LDQ0812100 EMITTER TUBING (ET63918-100)		
	NOTE: INSTALL TORO DL2000 PER MANUFACTURER'S SPECIFICATIONS	8	FOR GROUND COVER & SHRUB AREAS: DRIPLINE SPACING =12" EMITTER SPACING =12" DRIPPER FLOW =0.53 GPH		
	UIPMENT NOT GRAPHICALLY DEPICTED ON I	PLANS:			
	JFACTURER'S RECOMMENDATIONS.)	PLANS:	MINIMUM ONE PER VALVE		
	JFACTURER'S RECOMMENDATIONS.) FLUSH VALVE FOR DRIP SYSTEM				
	JFACTURER'S RECOMMENDATIONS.)	RIP SYSTEM	MINIMUM ONE PER VALVE RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE		
	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR	RIP SYSTEM	RAINBIRD ARV050 MINIMUM ONE PER VALVE		
	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS	RIP SYSTEM	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE	NOTES	
(INSTALL PER MANU	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS  LEEVES DESCRIPTION	RIP SYSTEM SYSTEM	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE RAINBIRD FITTINGS	NOTES 12" COVER	
(INSTALL PER MANU	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS  LEEVES DESCRIPTION  NONPRESSURE DRIP IRRIGATION	RIP SYSTEM SYSTEM HART	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE RAINBIRD FITTINGS  MODEL		
(INSTALL PER MANU	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS  LEEVES DESCRIPTION  NONPRESSURE DRIP IRRIGATION  LATERAL, SIZED PER PIPE SIZING C	RIP SYSTEM SYSTEM HART	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE RAINBIRD FITTINGS  MODEL  SCHEDULE 40 PVC PIPE	12" COVER	
(INSTALL PER MANU	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS  LEEVES DESCRIPTION  NONPRESSURE DRIP IRRIGATION LATERAL, SIZED PER PIPE SIZING C  NONPRESSURE IRRIGATION SUPPLY  PRESSURE SUPPLY MAINLINE	RIP SYSTEM SYSTEM HART YLINE-3/4" MIN.	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE RAINBIRD FITTINGS  MODEL  SCHEDULE 40 PVC PIPE  CLASS 200 PVC PIPE  1120 SCHD. 40 PVC PIPE FOR SIZES 1-1/2" AND SMALLER 1120 CLASS 315 PVC PIPE FOR SIZES 2" AND LARGER	12" COVER	
RRIGATION LINES AND SI	JFACTURER'S RECOMMENDATIONS.)  FLUSH VALVE FOR DRIP SYSTEM  AIR VACUUM RELIEF VALVE FOR DR  OPERATION INDICATOR FOR DRIP S  DRIP TUBE FITTINGS  LEEVES DESCRIPTION  NONPRESSURE DRIP IRRIGATION LATERAL, SIZED PER PIPE SIZING C  NONPRESSURE IRRIGATION SUPPLY  PRESSURE SUPPLY MAINLINE	RIP SYSTEM SYSTEM  HART YLINE-3/4" MIN.	RAINBIRD ARV050 MINIMUM ONE PER VALVE RAINBIRD OPERND MINIMUM ONE PER VALVE RAINBIRD FITTINGS  MODEL  SCHEDULE 40 PVC PIPE  CLASS 200 PVC PIPE  1120 SCHD. 40 PVC PIPE FOR SIZES 1-1/2" AND SMALLER 1120 CLASS 315 PVC PIPE FOR SIZES 2" AND LARGER	12" COVER  12" COVER  R 24" COVER	

CENTER ZONE TYPE, IF APPLICAPBLE

CONDUIT &	SLEEVE SIZING	LATERAL PIPE	SIZING CHART		
MAXIMUM NUMBER OF	MINIMUM CONDUIT SIZE	MAXIMUM LATERAL OR MAINLINE PIPE	MINIMUM SLEEVE SIZE REQUIRED	FLOW RATE (GPM)	PIPE SIZE (DIAMETER)
WIRES	(SCH 40 PIPE)	SIZE	(SCH 40 PIPE)	0 TO 9	.75"
4	1"	1/2"	1-1/2"	9.1 TO 18	1"
8 12	1-1/4" 1-1/2"	3/4" 1" TO 1-1/4"	2" 2-1/2"	18.1 TO 30	1.25"
17	2"	1-1/2"	3"	30.1 TO 40	1.5"
25 35	2-1/2" 3"	2" TO 2-1/2"	4" 6"	40.1 TO 60	2"
50	<u> </u>	4"-6"	<u> </u>	60.1 TO 70	2.5"
>50	6"				

# INE OAK MANOR PARK CARLTON AVENUE AND

Land Planning Landscape Architecture Civil Engineering

Utility Design

Land Surveying Stormwater Compliance

1570 Oakland Road (408) 487-2200

CALANDRA

MONASTERIO NO. 6434

8/31/26 Renewal Date

San Jose, CA 95131

NO DATE DESCRIPTION

PROJECT NO: 6784.00

CAD DWG FILE: 678400IDC.DWG

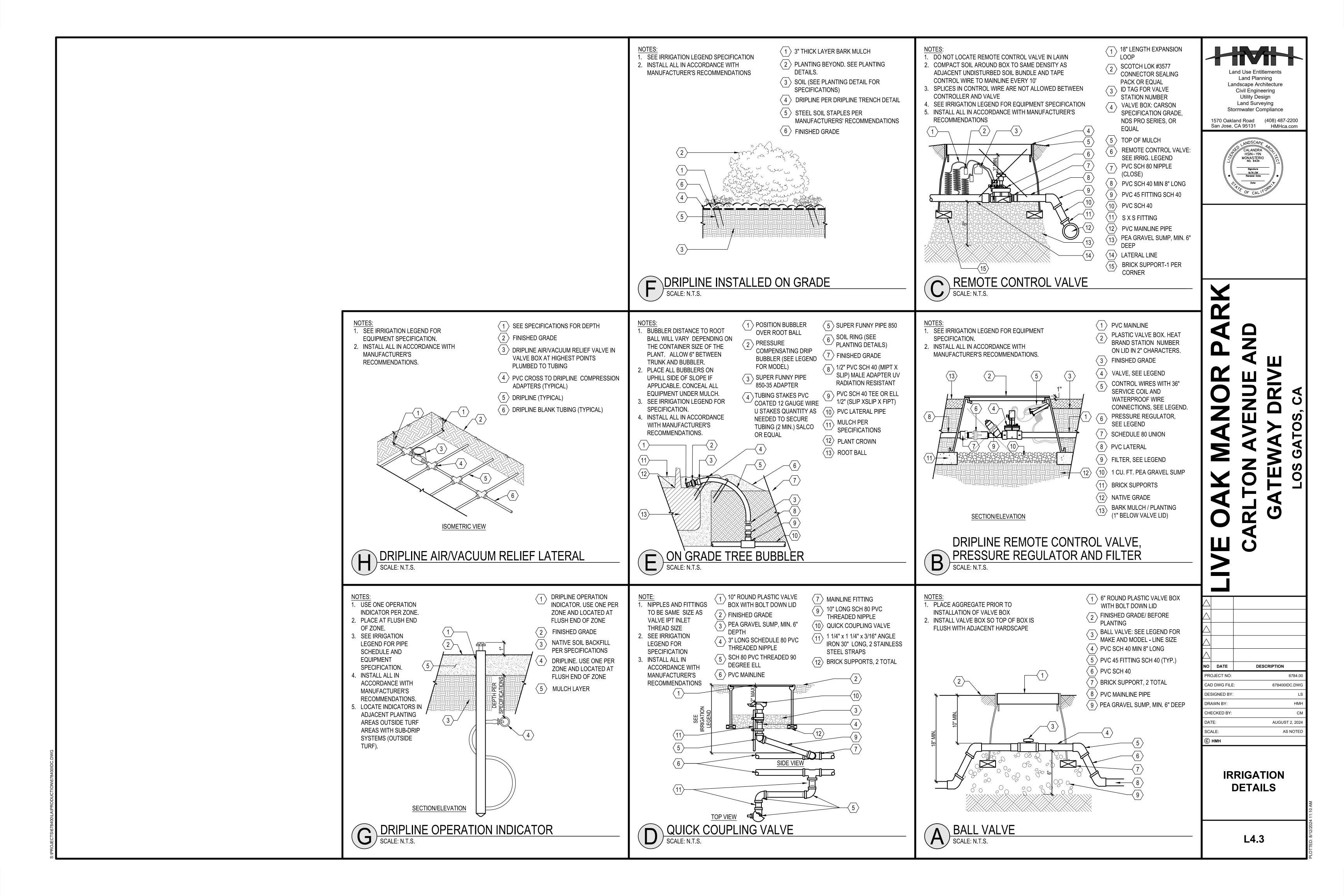
DESIGNED BY: LS

DRAWN BY: HMH
CHECKED BY: CM

IRRIGATION LEGEND AND NOTES

AUGUST 2, 2024

L4.2



#### **INSTRUCTIONS TO BIDDERS**

#### A. SUBMITTALS

- Bids shall be submitted in sealed envelopes bearing on the outside the name of the bidder, the bidder's address and the name of the project for which the bid is being submitted. Bids shall be delivered to Owner or general contractor responsible for reviewing and processing bids.
- B. EXAMINATION OF CONSTRUCTION DOCUMENTS AND SITE
- Each bidder shall inspect the construction documents (drawings and specifications) and site of the proposed project. The submission of a bid shall constitute and acknowledge that the bidder is familiar with all conditions which might affect the contemplated project.
- Any discrepancies shall be brought to the immediate attention of the Owner. Contractor shall assume all necessary revisions due to failure to give such notification.
- C. REJECTION OF ALL BIDS
- The Owner reserves the right to any time prior to the award, to reject all bids. The Owner also reserves the right to accept other than the lowest bidder, to accept one (1) part of a proposal and to waive any technical informalities in any proposal.
- D. WITHDRAWAL OF BID
- A bidder may withdraw the bid without prejudice, provided a written request for such withdrawal is delivered to the Owner prior to the commencement of the opening of bids.

#### **GENERAL CONDITIONS**

- A. DEFINITIONS
- Unless otherwise specifically defined herein, or unless the context requires a different meaning, all words, abbreviations, symbols, terms and phrases having a well known or technical meaning shall be so construed.
- Whenever in these specifications, or in any documents or instruments where these specifications govern, the following terms are used, the intent and meaning thereof shall be as follows:
- CONTRACT Represents the entire and integrated agreement between the Owner and the Contractor. The contract documents form the Contract for construction.
- CONTRACT DOCUMENTS These specifications, the drawings, addenda issued prior to execution of the Contract, and the Contract between the Owner and the Contractor.
- CONTRACTOR The person or entity whose bid is accepted and to whom the Contract is awarded.
- LANDSCAPE ARCHITECT The professional services firm who prepared the project drawings and specifications for the Owner.
- OWNER Is the person or entity identified as such in the Contract.
- WORK The term "work" or "project" means the construction and services required by the Contract Documents and includes providing all labor, materials, equipment, transportation, tools, and incidentals necessary to complete the work in a satisfactory manner by licensed contractor and experienced workers.
- B. CONSTRUCTION PROCEDURE
- Contractor shall not be relieved of obligations to perform the work in accordance with the Contract Documents either by activities or duties of the Owner, Landscape Architect, or by tests, inspections or approvals required or performed by persons other than the Contractor.
- C. SUBCONTRACTS
- Contractor shall set forth in the bid the name and the location of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work.
- Contractor must have the written consent of the Owner to substitute a subcontractor other than that designated in the bid.
- D. DRAWINGS AND SPECIFICATIONS
- The contractor shall keep at the project site a copy of the drawings and specifications. In the event a discrepancy exists between figures and/or drawings, the discrepancy shall be immediately submitted to the Owner for clarification. Any adjustment made by the Contractor without obtaining such clarification from the Owner shall be at the Contractor's risk and expense and be subject to removal if said adjustment does not meet the approval of the Owner.
- The Contract documents, as defined herein, are intended to be read together to describe a complete and finished piece of work, including all labor, materials and equipment necessary for the proper execution of the project. Anything in the specifications and not on the drawings, or on the drawings and not in the specifications, shall be as though shown or mentioned in both.
- E. SHOP DRAWINGS OR PRODUCT DATA AND SAMPLES
- Shop drawings, product data, samples, and similar submittals are not contract documents. The purpose of their submittals is to demonstrate for those portions of the work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the drawings.
- The Contractor shall review, approve, and submit such submittals required by the contract documents with reasonable promptness and in such sequence or to cause no delay in the work.

- Landscape Architect shall review and approve or take other appropriate action on the contractor submittals, such as shop drawings, product data, samples and other date, which the contractor is required to submit, but only for the limited purpose of checking for conformance with the design concept and the information shown in the construction documents. This review shall not include review of the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all of which are the sole responsibility of the contractor, review of a specific item shall not indicate that the landscape architect has reviewed the entire assemble of which the item is a component. Landscape Architect shall not be responsible for any deviations from the construction documents not brought to the attention of the Landscape Architect in writing by the contractor.
- F. CHANGE ORDERS
- The Owner may at any time prior to acceptance of the work, by written order to Contractor and without notice to sureties, increase or decrease the estimated quantity of work or material, make alterations, deviations, additions to or omissions from the drawings and specifications, and make changes in the project as may be deemed necessary or advisable, within the general scope thereof.
- No claim for additional work or material will be allowed unless supported by a written Change Order signed by the Owner and the Contractor stating their agreement upon all of the following:
- Change in the work.
- Amount of the adjustment in the Contract sum, and
- Extent of the adjustment in the Contract time, if any.
- G. CONTROL OF MATERIALS
- Materials, parts and equipment to be furnished by the Contractor shall be new, unless otherwise specified in these specifications or noted on the drawings. The materials shall be manufactured, handled, and used in a workmanlike manner.
- All materials shall be subject to rigid inspection and if, in the opinion of the Owner the same do not comply with the contract documents, said materials shall be rejected and immediately removed from the premises at the expense of the Contractor.
- Manufacturers warranties, guaranties, instructions sheets and parts lists, which are furnished with certain articles or materials incorporated in the work, shall be delivered to the Owner prior to acceptance of the work.
- H. SAMPLES AND TESTS
- The Contractor shall furnish such samples of all materials as requested by the Owner without charge. Labor and equipment necessary for the furnishing of such samples shall be the responsibility of the Contractor.
- I. SUBSTITUTION OR EQUIVALENTS
- For convenience in designation on the drawings or in the specifications, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and catalogue number. Subject to approval by the Owner or Landscape Architect, an alternative article or material may be utilized.
- The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor.
- J. CERTIFICATES OF COMPLIANCE
- When requested, Contractor shall furnish the Owner with a Certificate of Compliance stating that the material substantially meets the specifications
- K. INDEMNIFICATION
- The obligations of the Contractor under this section shall not extend to the liability of the Landscape Architect, the Landscape Architect's consultants, and agents and employees of any of them arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Landscape Architect, the Landscape Architect's consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage.
- L. SAFETY OF PERSONS AND PROPERTY
- The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.
- The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to: employees on the work and other persons who may be affected thereby, the work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's subcontractors, and other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
- The Contractor shall so conduct operations as to offer the least possible obstruction and inconvenience to the public. The Contractor shall have under construction no greater amount of work than can be performed properly with due regard to the rights of the public.

#### M. PROJECT SITE MAINTENANCE

- Throughout all phases of construction, and until acceptance of the work, the Contractor shall keep the project site clean and free from rubbish and debris.
- Costs incurred due to cleanup operations shall be as included in the prices bid for the various items of work and no separate payment will be made therefor.
- N. AIR POLLUTION
- Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes which apply to any work performed pursuant to the Contract and shall not discharge smoke, dust or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.
- O. NOISE CONTROL
- Contractor shall comply with all local sound control and noise level regulations and ordinances which apply to any work performed pursuant to the Contract, and shall make every effort to control an undue noise resulting from the construction operation.

#### P. PESTICIDES/HERBICIDES

- Contractor shall comply with all rules and regulations of the Department of Food and Agriculture, the Department of Health, the Department of Industrial Relations and all other agencies which govern the use of pesticides/herbicides required in the performance of the work.
- Q. DUST CONTROL
- The Contractor shall abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means as necessary, and shall save the Owner free and harmless from any claim for loss or damage sustained by others and resulting from operations on the project site.
- R. UTILITIES
- When placing concrete around or contiguous to any utility, the Contractor shall assume responsibility for costs to furnish and install a cushion of expansion joint material, clear opening or sleeve, or by other suitable means shall prevent embedment in or bonding with the concrete.
- S. PATENTS AND ROYALTIES
- The Contractor shall absorb in its bid, the patent fees or royalties on any patented article or process which may be furnished or used in the work. The Contractor shall indemnify and hold the Owner harmless from any legal actions that may be brought from infringement of patents.
- T. REPAIRS AND REPLACEMENT
- Costs incurred due to repair or replacement of defective or damaged work shall be the responsibility of the contractor.
- PROJECT MAINTENANCE
- Project maintenance is required after the project is complete. A lack of maintenance in area such as, but not limited to irrigation and planting operations may result in damage to property and/or persons. Contractor acknowledges and agrees that, as between parties to the contract, the contractor is solely responsible for the results of any lack of or improper maintenance.
- CLEARING and GRUBBING
- A. GENERAL
- Contractor shall provide all labor, materials, and equipment for clearing and grubbing operations performed in advance of grading operations.
- Clearing and grubbing shall consist of removing all natural and artificial objectionable materials within the limits of construction.
- Except as indicated on the drawings, materials removed shall not be incorporated in the project.
- Depressions caused by the removal of objectionable materials shall be backfilled and compacted with materials equal to the surrounding soil.
- B. PRESERVATION OF PROPERTY
- Costs incurred due to repair of replacement of existing improvements which are not designated for removal and which are damaged as a result of construction operations shall be the responsibility of the Contractor.
- Replacements shall be at least equal to the conditions when Contractor entered upon the work, and shall match them in finish and dimension. Plant material shall be replaced with the same species, size, and in the original location (unless otherwise designated).
- C. REMOVAL and DISPOSAL OF MATERIAL
- All materials removed shall be disposed of off-site. Burning shall not be permitted. No accumulation of flammable material shall remain on or adjacent to the project site.
- Abandoned pipes shall be capped or plugged in a manner suitable to site supervisor or agency inspector.

#### FINE GRADING

- A. GENERAL
- Contractor shall provide all labor, materials and equipment to perform all fine grading operations as indicated on the drawings and specified herein. See geotechnical, civil, and structural drawings for other earthwork specifications/recommendations.
- The Contractor shall provide all lines and grades necessary to properly carry on the work.

  Any work which is not found to comply with the lines and grades shown on the drawings shall be altered or removed and replaced by, and at the expense of, the Contractor.
- All bench marks, monuments and other reference points shall remain undisturbed.
- B. GRADING OPERATIONS
- Finished surfaces in all cases shall conform to the lines, grades, cross sections and dimensions indicated on the drawings.
- Finish grades shall be well compacted, reasonably smooth, ensuring positive drainage, free
  of abrupt grade changes, irregularities, water pockets or discontinuities in surface level.
  Grades shall flow away from structures and in accordance with local jurisdictional
  requirements.
- Finish grade adjacent to paved areas, curbs, valve boxes and similar features shall be one inch (1") below the finished surface for turf areas, and two to three inches (2" 3") below the finished surface for ground cover areas. Areas adjacent to hardscape should be graded so 3" layer of mulch does not over spill onto adjacent surface.
- No grading shall be done when the moisture content of the soil is so great that excessive compaction will occur, nor when it is so dry that dust will form in the air or that clods will not break readily.
- Grading shall be completed prior to weed abatement operations and soil preparation.
- Grading shall be to the dimensions and elevations indicated on the drawings, of sufficient width to provide clearances for setting of forms and inspection of the various classifications of work.
- Concrete for footings shall be placed against native grade or certified compacted subgrade prepared per geotechnical report.
- Grading excavations shall be level, free from loose material, and free from standing water.
- C. COMPACTED FILL
- Fill material shall be composed of satisfactory excavated material or approved imported soil and shall be evenly spread in uniform continuous horizontal layers per geotechnical report.
- D. BACKFILL
- Excavated material, approved for backfilling by geotechnical engineer, shall be free from large clods, stones and other objectionable materials, exceeding three inches (3") in diameter; and deposited in accordance with the requirements for compacted fill as specified herein.
- Trenches that settle below grade shall be reopened to a depth required for proper compaction, refilled and compacted to indicated surface elevation.
- Compaction of backfill by ponding and jetting will not be permitted.
- E. UNSUITABLE MATERIALS
- Unsuitable materials as determined by the Owner shall be removed from the project site.
   Arrangements for disposal of the material at off-site locations shall be made with the City's/Owner's written consent of the property upon which such material will be disposed.

#### DRAINAGE

- A. GENERAL
- Contractor shall provide all labor, materials, and equipment to furnish and install drainage systems as indicated on the drawings and as specified herein. Cross reference civil engineering drawings for connections and coordinated drainage systems.
- Contractor shall maintain the project site throughout the progress of the work in a reasonable, dry, workable condition, free of surface water.
- Contractor shall be responsible for all cutting and patching of new or existing walks, curbs and pavements required for proper installation of drainage systems.
- In order to make any necessary adjustments, connections that are to be made to an existing pipe, catch basin or other appurtenances shall be exposed and inspected before laying new pipe.
- B. HORIZONTAL SUBDRAINS
- Drainage systems shall be as indicated and installed as detailed on the drawings.
- Pipe shall be as indicated on the drawings and laid and jointed in accordance with generally accepted practice and to line and grade as designated on the drawings.
- Interior of pipe shall be thoroughly cleaned of all foreign matter prior to, during, and after installation in the trench.

Land Use Entitlements
Land Planning
Landscape Architecture
Civil Engineering
Utility Design
Land Surveying
Stormwater Compliance

1570 Oakland Road (408) 487-2200 San Jose, CA 95131 HMHca.com



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PLACEHOLDER (SIZE FLEXIBLE)

### PARK AND E

EWAY DR.

LTON AVATEWAY

NO DATE DESCRIPTION

PROJECT NO: 6784.00

CAD DWG FILE: 678400SPC.DWG

DESIGNED BY: LS

DRAWN BY: HMH

CHECKED BY: CM

DATE: AUGUST 2, 2024

SCALE: NONE

LANDSCAPE SPECIFICATIONS

L5.1

#### A. WEED ABATEMENT AND SOIL TREATMENT

- Contractor shall apply, in areas to be installed with subbase materials, a selective pre-emergent, surface-applied herbicide. Rates and application method shall be as recommended by manufacturer.
- Visible weeds shall be sprayed with a non-selective, post-emergent herbicide. Application method shall be as recommended by manufacturer.
- Contractor shall apply spray chemicals when air currents are still; preventing drifting onto adjoining property and preventing any toxic exposure to persons whether or not they are in, or near, the project.

#### B. AGGREGATE SUBBASE MATERIAL

- Aggregate subbase material shall be as specified in the project geotechnical report.
- Material shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base that is spread in one (1) operation, free from pockets of large fine material.

#### C. SAND SUBBASE MATERIAL

Sand utilized for subbase material shall be as specified in the project geotechnical report OR consist of natural or manufactured granular material free of clay, deleterious amounts of organic material broken glass, cans or other substances not suitable for the purposes intended. Samples should be submitted prior to project order for approval.

#### D. SAND FOR SURFACE AREAS

Sand for surface areas shall consist of natural or manufactured granular material free of clay, deleterious amounts of organic material, broken glass, cans or other substances not suitable for the purposes intended. Washed concrete sand shall be thoroughly and uniformly washed. Plaster sand is unacceptable for play areas. Samples should be submitted prior to project order for approval.

#### E. DECOMPOSED GRANITE

- Decomposed granite shall be the product of crushing rock or gravel; clean, hard, sound, durable, uniform in quality, and free of any detrimental quantity of soft, friable, thin, elongated or laminated pieces, disintegrated material, organic matter, oil, or other deleterious substances. Color shall be as indicated on the drawings or selected by Landscape Architect.
- Geotextile fabric, if applicable, shall be TenCrate Mirifi Type N-Series, nonwoven polypropylene geotextile fabric or equal, unless otherwise noted in detail or materials list.

#### TEMPORARY ASPHALTIC CONCRETE PAVING

#### . GENERAL

- Contractor shall provide all labor, materials and equipment for furnishing, spreading, compacting and finishing asphaltic concrete paving as indicated on the drawings and specified herein.
- Prior to placement of asphaltic concrete, Contractor shall be responsible for establishing subgrade and providing drainage in accordance with the Fine Grading Section, and performing weed abatement operations as specified herein.

#### B. WEED ABATEMENT AND SOIL TREATMENT

- Contractor shall apply an approved selective pre-emergent, surface-applied herbicide. Rates and application method shall be as recommended by the manufacturer.
- Visible weeds shall be sprayed with an approved non-selective, post-emergent herbicide. Rates and application method shall be as recommended by the manufacturer.
- Contractor shall apply spray chemicals when air currents are still; preventing drifting onto adjoining property and preventing any toxic exposure to persons whether or not they are in, or near, the project.

#### C. MATERIALS

- Asphaltic concrete shall be the product of mixing coarse and fine aggregate with paving asphalt at a central mixing plant until all aggregate particles are uniformly coated.
- Paving asphalt shall be steam-refined, produced from crude asphaltic petroleum or a mixture of refined liquid asphalt and refined solid asphalt. Paving asphalt shall be homogeneous and free from water and residues obtained by the artificial distillation of coal, coal tar or paraffin oil.
- Aggregates shall be clean and free from decomposed or organic materials, and other deleterious substances.

#### D. REPAIR AND REPLACEMENT

■ Costs incurred due to repair or replacement of defective or damaged work shall be the responsibility of the Contractor.

#### CONCRETE

#### A. GENERAL

- Contractor shall provide all labor, materials and equipment to construct concrete items as indicated on the drawings and specified herein.
- Concrete shall consist of portland cement, fine aggregate (sand), coarse aggregate and water, proportioned and mixed to attain a twenty-eight (28) day compressive strength of at least 2,500 pounds per square inch with a slump not to exceed three inches (3"). Concrete shall not contain reactive aggregate or calcium chloride.
- In addition to complying with all pertinent codes and regulations of local governing agencies, Contractor shall comply with all pertinent recommendations contained in "Recommended Practice for Concrete Formwork", publication #347-78 of the American Concrete Institute.

#### B. MATERIALS

- Cement shall be Type II low alkali portland cement conforming to ASTM C-150. Cement shall be of the same brand and type used throughout the project.
- Sand shall consist of natural or manufactured granular material, free of deleterious amounts of organic material, mica, loam, clay, and other substances not suitable for portland cement concrete. Sand shall be thoroughly and uniformly washed.
- Coarse aggregate shall be composed of gravel or a blended mixture of crushed rock and gravel containing no more than fifty (50) percent of crushed rock particles having all faces fractured and not less than twenty-five percent (25%) of gravel. Aggregates shall not exceed a diameter of one and one-half inches (1 1/2"). Blending shall produce a uniform, consistent percentage of each. Rock products shall be clean, hard, sound, durable, uniform in quality and free of any detrimental quantity of soft, friable, thin, elongated or laminated pieces, disintegrated material, organic matter, oil, alkali, or other deleterious substances.
- Water shall not contain deleterious substances or any amount of impurities that will cause a change in the time of setting. The amount of water used in the mixture shall not exceed the amount necessary to permit material placement and consolidation.

#### C. FORMS

- Forms shall be free of warp, set plumb and true to line and grade with upper edges flush with specified grade or finished surface of the constructed improvement, and not more than one-half inch (1/2") less in depth than the specified thickness of the edge of the concrete to be placed.
- Wooden forms shall have a net thickness of at least one and one-half inches (1 1/2") and shall be free of imperfections which would impair the strength for the use intended. Forms shall be secured by nailing to side stakes of sufficient length and cross-sectional area to adequately resist lateral displacement during placement of concrete. Forms shall be clean and shall receive a coat of light oil immediately prior to placing concrete. Benders or thin plank forms may be used on curves.
- Metal forms shall have sufficient rigidity to resist springing during placement of concrete. Forms shall be secured by means of metal stakes designed so as to be driven below the top of the forms through openings, locking them into position.

#### D. REINFORCEMENT

- Reinforcement shall conform to the dimensions and details shown on the drawings and shall be cleaned thoroughly of all rust, mill scale, mortar, oil, dirt, or coating of any character which would be likely to destroy or impair its proper bonding with the concrete.
- Reinforcing steel, where indicated on the drawings, shall be Grade 40 or Grade 60 billet steel, conforming to ASTM A-615.
- Wire mesh reinforcement, where indicated on the drawings, shall conform to ASTM A-185.

#### E. PLACING CONCRETE

- Install embedded items accurately in their proper locations, secured against displacement, prior to placing concrete.
- Concrete shall be placed on native grade, certified compacted subgrade, or subbase material, free of all loose and extraneous material, sufficiently dampened to ensure that no moisture will be absorbed from the fresh concrete.
- Concrete shall be distributed uniformly and thoroughly vibrated in a manner that will encase the reinforcement, fill the forms and bring the surface true to grade and cross-section.
- Equipment used shall not have any aluminum components coming into direct contact with the concrete.

#### F. FINISHING

- Concrete surfaces shall be floated prior to steel troweling. Formed edges shall be rounded to a radius of one-half inch (1/2"). Edges at expansion joints shall be rounded to a radius of one-half inch (1/2").
- Concrete finishes shall be as indicated on the drawings and specified herein.
- No advertising impressions, stamp or mark of any description will be permitted on surface of concrete.
- Concrete shall not be covered with plastic sheeting.
- <u>Broom finish</u>, where indicated on the drawings, shall be performed after finish troweling by drawing the following broom types across the narrowest width of the concrete or in the direction as indicated on the drawings.
- Fine Broom Push with fine or soft textured bristles.
- Medium Broom Push with medium or medium stiff bristles.
- Heavy Broom Push with coarse or stiff bristles.
- Rock salt finish, where indicated on the drawings, shall be performed by applying rock salt evenly over entire surface just prior to the finish troweling. Press salt crystals into the surface with sufficient trowel pressure so that salt is embedded just barely below surface leaving the tops of the crystals exposed. Cure finished surface in accordance with generally accepted practice.
- Colored concrete, where indicated on the drawings and per materials list and installed per manufacturer recommendations.
- <u>Stamped concrete</u>, where indicated on the drawings, shall be performed by applying special forming tools while concrete is still in the plastic stage of set. Desired pattern shall be as indicated on the drawings. Contractor shall be licensed, tooled, and trained for stamping product being used.

Sandblasted Finish, where indicated on the drawings, shall be performed after finish troweling by blowing the surface granules with an air-pressure hose and fine grain silicon sand. Contractor shall do a test sample for approval prior to completing entire area to be sandblasted.

#### JOINTS

- Expansion joints shall be as indicated on the drawings and at corners, radius points and at regular intervals not to exceed twelve feet (12') on center. Set premolded expansion joint strip below finished surface, temporarily secured to top of expansion strip or use a removable plastic filler strip. Expansion joints shall be sealed per detail callout.
- Scored control joints shall be tooled to a minimum depth of three-quarters inch (3/4") and a radius of one-eighths inch (1/8") at five foot (5') intervals or per plan.
- Saw cut joints, where specified shall be as indicated on the drawings or at intervals not to exceed twelve feet (12') on center, and shall be cut to a minimum depth of three-quarters inch (3/4") and a width not to exceed one-quarter inch (1/4").

#### . CURING

- Curing compound shall form an impervious membrane and shall be a blend of pure waxes and alkali-resistant pigments in a solvent emulsion and installed per manufacturer recommendation.
- Spraying of curing compound shall commence as soon as free water leaves the surface but no later than three (3) hours following placement of concrete.

#### MASONRY

#### A. GENERAL

 Contractor shall provide all labor, materials and equipment to construct masonry structures conforming to the dimensions and details indicated on the drawings and specified herein.

#### B. MATERIALS

- Hollow load bearing (CMU) masonry units shall be made with sand-gravel aggregate and shall conform to ASTM C-90 for Grade N-1 units, free of cracks or defects. Net size of units shall be shown on the drawings.
- Brick shall be whole, sound, hard burned, give a clear ringing sound when struck together, and be uniform in quality. Brick shall be clean and free of dust or other foreign materials. Net size, color and texture of units shall be as shown on the drawings.
- Stone shall be uniform in quality; clean and free of dust or other foreign materials.
- Mortar used in masonry construction shall be one (1) part portland cement to two and one-half (2 1/2) parts of sand, to which one-quarter (1/4) to one-half (1/2) part hydrated lime or lime putty has been added. Color shall be as indicated on the drawings or as selected by Landscape Architect.
- Grout for use in spaces less than two inches (2") clear in dimension shall be one (1) part portland cement and two and one-quarter (2 1/4) to three (3) parts sand. For spaces four inches (4") or larger add one and one-quarter (1 1/4) to two (2) parts of aggregate.
- Water shall be free of any amount of impurities that will cause change in the time of setting of portland cement. Quantity of water shall be the minimum required to produce a mixture sufficiently workable for the purpose intended.
- Cement shall be Type II low alkali portland cement conforming to ASTM C-150.
   Cement shall be of the same brand and type used throughout the project.
- Sand shall consist of natural or manufactured granular material, free of deleterious amounts of organic material, mica, loam or clay, conforming to ASTM G-404 for grout and ASTM C-144 for mortar. Sand shall be thoroughly and uniformly washed.
- Coarse aggregate shall be composed of gravel or a blended mixture of crushed rock and gravel. Rock products shall be clean, hard, sound, durable, uniform in quality and free of any detrimental quantity of soft, friable, thin, elongated or laminated pieces, disintegrated material, organic matter, oil, alkali or other deleterious substance.
- Reinforcing steel shall be Grade 40 or Grade 60 billet steel conforming to ASTM A-615. Varying grades shall not be used interchangeably in any one wall.

#### . INSTALLATION

- All work shall be performed in compliance with applicable local building ordinances and Uniform Building Code and Masonry Design Manual.
- All walls shall be laid true, level, and plumb, and unless otherwise indicated on the drawings. Brick and concrete block shall be laid in a running bond pattern.
- Brick and stone shall be clean, wetted immediately before laying and shall be laid on a full mortar bed with "push joints".
- Mortar joints for brick and concrete block shall be straight, clean, uniform in thickness of not less than three-eighths of an inch (3/8"), tooled to produce a slightly concave surface, and well bonded at edges.

Concrete block which becomes wet shall be permitted to dry before commencing

- Mortar joints for stone shall be tooled to produce a slightly concave surface, and well-bonded to stone at edges.
- Contractor shall provide expansion joints at corners and at thirty feet (30') on center or as required by local code.
- All bolts and anchors to be inserted in the wall shall be solidly grouted in place.
- Contractor shall provide weep holes in first or second layer of brick as indicated in details on drawings or as required.

#### D. REINFORCEMENT

- Reinforcement shall be placed as indicated on the drawings and as required by building codes.
- Horizontal steel for concrete block walls shall be laid in a course of bond beam block filled with grout.
- For concrete block walls, a vertical dowel shall be provided in the foundation for each vertical bar. Vertical cores containing steel shall be filled solid with grout.

#### LAYING PAVERS

- Spread and screed setting bed to a uniform thickness, except for minor variations required to produce a true surface, level in plane or uniformly spread for drainage as shown on drawings.
- Setting bed shall be three-quarter inch (3/4") minimum and one and one-quarter inch (1 1/4") maximum.
- Apply a thin layer of cement paste (1/32" to 1/16") by brushing or troweling over setting bed or to bottom of brick. Set and level each brick.

#### F. GRAFFITI CONTROL

- Product shall be Graffiti Control as manufactured by Sure Klean or an approved equal.
- Deliver materials in manufacturer's original unopened containers.
- Rates and application method shall be as recommended by the manufacturer.

#### ROUGH CARPENTRY

#### . GENERAL

 Contractor shall provide all labor, materials and equipment to construct wooden structures conforming to the dimensions and details indicated on the drawings and as specified herein.

#### MATERIALS

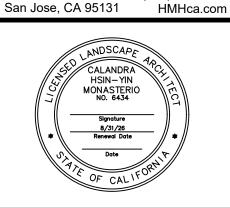
- Lumber shall be straight; free from large, loose or unsound knots or knot clusters, scars, decay, holes, insect damage, and other defects or imperfections that would materially impair the strength or durability. Splits shall be no longer than the butt dimension. No cracks will be permitted. No nails, spikes, or other metal shall be
- Douglas fir, where indicated on the drawings, shall conform in all particulars to the Standard Grading Rules for Western Lumber published by the Western Wood Products Association.
- Cedar, where indicated on the drawings, shall conform in all particulars to the Standard Grading Rules for West Coast Lumber.
- Redwood, where indicated on the drawings, shall conform in all particulars to the Standard Specifications for Grades of California Redwood of the Redwood Inspection Service
- Plywood, where indicated on the drawings, shall be manufactured and graded in accordance with the rules of the American Plywood Association and the latest Product Standard for Softwood Plywood, Construction and Industrial, of the National Bureau of Standards. Each sheet of plywood shall bear the official stamp of a quality control agency stating the grade of the sheet.
- Poles, where indicated on the drawings, shall be cut from sound, live, close-grained trees, machine peeled with all branch stubs and overgrown knots trimmed flush with the surface.

#### C. TREATMENTS AND PRESERVATIVES

- Type of pressure treatment or preservative shall be as indicated on the drawings and shall conform with the applicable standards contained in the Manual of Recommended Practice of the American Wood Preservers Association. Contractor shall furnish a Certificate of Compliance for each load of pressure treated lumber to Owner.
- Where a particular method of pressure treatment is not indicated on the drawings, the lumber shall be conditioned, seasoned, prepared and treated by the empty cell pressure process with pentachlorophenol with six-tenths (0.60) pounds per cubic foot retention. Penetration shall be determined by the pentor check method.
- Where practical, treated wood shall be cut to final size and trimmed prior to treatment. If site sawing or drilling is necessary, cut surfaces shall be thoroughly brushed with two (2) coats of the same kind of preservative in conformance with AWPA Specification M-4.
- Portions of posts which are to be embedded in earth or concrete shall be brushed before installation with two (2) coats of coal tar bitumen, or approved equal. Applications shall extend a minimum of one inch (1") above finish grade or surface. Spraying will not be permitted.

Land Use Entitlements
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Civil Engineering
Utility Design
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Stormwater Compliance

1570 Oakland Road (408) 487-2200



CONSULTANT LOGO
PLACEHOLDER (SIZE FLEXIBLE)

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DRAWN BY:

CHECKED BY

DATE:

SCALE:

) нмн

# TON AVENUE ATEWAY DRIVI

NO DATE DESCRIPTION

PROJECT NO: 6784.00

CAD DWG FILE: 678400SPC.DWG

DESIGNED BY: LS

LANDSCAPE SPECIFICATIONS

AUGUST 2, 2024

L5.2

LJ.Z

#### WORKMANSHIP

- Framing shall be true and exact. All lumber shall be cut and framed to a close fit and shall have even bearing over the entire contact surface. Shimming will not be permitted.
- Lumber shall be well nailed or bolted together as indicated on the drawings. Nails shall not be driven closer together than one-half (1/2) their length. Care shall be taken to avoid hammer marks, moons, or saw cuts.
- Lumber shall be stored neatly in piles on skids in such manner that they may be readily inspected, and shall be handled in a manner that will avoid injury or breakage.

PAINTING and STAINING

#### GENERAL

- Contractor shall provide all labor, material, tools, equipment and incidentals for sanding, priming, painting and staining of improvements as indicated on the drawings and specified herein.
- Contractor shall be responsible for the location, alignment, layout, dimensions and application of paint and stains.
- Costs incurred for repair or replacement of defective or damaged work, rejected materials or workmanship shall be the responsibility of the Contractor.

#### MATERIALS

- Paints and stains shall be of colors and tints as indicated on the drawings, and shall be applied in accordance with the manufacturer's recommendations and these specifications. Contractor shall submit color samples to the City for approval before applying any paint materials.
- Paint shall be homogeneous, free of contaminants and of a consistency suitable for use in the capacity for which it is specified. Finished paint shall be well ground and the pigment shall be properly dispersed in the vehicle according to the requirements of the paint. The dispersion shall be of such nature that the pigment does not settle appreciably, does not cake or thicken in the container or become granular or curdled. Paints shall possess properties which in all respects effect satisfactory application, adhesion and curing. Thinning will not be permitted.
- Paint shall be delivered to the project site in new, unopened, round, airtight containers, appropriately identified with the manufacturer's name, date of manufacture, type of material and lot or batch number.

#### WORKMANSHIP AND PROTECTION

- Paint shall be applied on thoroughly dry surfaces and during periods of favorable
- Surfaces being covered shall be free from moisture, dust, grease or other deleterious substance which would prevent bonding.
- Painting shall be done in a neat and workmanlike manner, applied by brush, roller or spray methods. Finished surfaces shall be uniform, free of brush marks, roller stipple texture, runs or skips. Each application of paint shall be thoroughly cured and any skips, holidays, thin areas or other deficiencies corrected before the succeeding application
- Contractor shall protect all adjacent improvements against disfigurement as a result of painting operations.

#### PAINTING GALVANIZED SURFACES

- Galvanized surfaces which are to be painted shall be prepared by hand-scraping, brushing with stiff fiber or wire brushes or cleaning with alkaline solution followed by a fresh water rinse. After washing, surfaces shall be roughened by abrasive blasting. Galvanizing shall not be removed during preparation operations.
- After preparation, apply one (1) coat of zinc dust-zinc oxide primer followed by a vinyl wash pre-treatment and two (2) finish enamel paint coats.

#### PAINTING CONCRETE

- Prior to painting concrete surfaces, a brush coat or surface film of thin cement mortar shall be applied. When the film has set sufficiently the surface shall be rubbed by hand or mechanical means necessary to remove excess mortar and produce a smooth surface of even texture. Finished surfaces shall be washed with water and then with a ten percent (10%) to fifteen percent (15%) muriatic acid wash. Concrete surfaces shall be thoroughly dry and free of dust at time of painting.
- Paint for concrete surfaces shall be of either epoxy enamel type or acrylic emulsion type applied in not less than two (2) applications producing a uniform appearance.

#### PAINTING WOOD SURFACES

- Wood surfaces shall be prepared for painting by removing any foreign matter by wire brushing, scraping or sanding. All surfaces shall be wiped or dry brushed to remove any dust or chalky residue resulting from preparation operations.
- Paints, stains, or sealers shall be applied prior to assembling.

MISCELLANEOUS METAL

#### GENERAL

- Contractor shall provide all labor, materials, and equipment to furnish and install miscellaneous metal items as indicated on the drawings and as specified herein.
- This section does not include reinforcing steel for concrete and masonry or items required in connection with irrigation or electrical work.

#### WORKMANSHIP

- Workmanship and finish shall be equal to the best general practice in steel fabricating
- Portions of work exposed to view shall be finished neatly. All sharp corners and edges that are marred, cut or roughened during erection shall be slightly rounded.

#### MATERIALS

- All materials, prior to fabrications, shall be thoroughly wire brushed and cleaned of all scale and rust. Finished members shall be free from twists, bends or open joints.
- Miscellaneous metal items shall conform to the dimensions and details as indicated on the drawings. Steel bars, plates and shapes shall conform to ASTM A-36.

#### BOLTS. NUTS AND FASTENERS

- Unless specified otherwise in the details on the drawings, nails and spikes shall be galvanized flat common.
- Bolts shall be long enough to extend entirely through the nut but not more than one-quarter inch (1/4") beyond. Unless otherwise specified on the drawings, bolts, nuts and lag screws shall be galvanized square head. Carriage bolts shall have truss heads with square shoulder. Washers shall be over-sized of "cut" type. Holes shall be either punched full size, drilled full size, or sub-punched and reamed.
- Anchor bolts, where applicable, shall be carefully installed to permit true positioning of the bearing assemblies.
- Framing anchors, where applicable, shall be sixteen (16) gauge, zinc-coated, corrosion resistant sheet steel.

#### GALVANIZING

- Galvanizing shall be performed after fabrication and prior to assembling component
- Zinc used for galvanizing shall be grade Prime Western conforming to ASTM B-6. Materials shall be galvanized by the hot-dip method or electrodepositing process.
- Galvanized surfaces that are abraded or damaged after zinc coating application shall be thoroughly stripped and cleaned and repaired by a coating of "galvalloy", or approved equal. Finish coat to match existing finish.

#### WROUGHT IRON OR TUBULAR STEEL FENCING

- Material shall be manufactured from coil steel having a minimum yield strength of 50,000 psi. Steel shall be galvanized to meet the requirements of ASTM A-526 with a minimum zinc coating weight of nine-tenths (.90) ounces per square foot hot-dit process.
- Contractor shall submit detail shop drawings indicating material thickness, type grade, and class; dimension; construction details; and other pertinent data for review and approval by engineer prior to fabrication. drawings shall include catalog cuts, erection details, manufacturer's descriptive data and installation instructions and templates.
- Contractor shall verify al measurements and shall take all field measurements necessary before fabrication. Exposed fastenings shall be compatible materials, shall generally batch in color and finish, and shall harmonize with the material to which fastenings are applied. Materials and parts necessary to complete each item, even though such work is not definitely shown or specified, shall be included. Poor matching of holes for fasteners shall be cause for rejection. Fastenings shall be concealed where practical. Thickness of metal and details of assembley and supports shall provide strength and stiffness. Joints exposed to weather shall be formed to exclude water.
- Anchorage shall be provided where necessary for fastening miscellaneous metal items securely in place. Anchorage not otherwise specified or indicated shall include slotted inserts made to engage with the anchor, expansion shields, and power-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine and carriage bolts for steel; and lag bolts and screws for wood.

**IRRIGATION SYSTEM** 

#### GENERAL

- Contractor shall provide all labor, materials, and equipment necessary to furnish and install the irrigation system as indicated on the drawings and as specified herein.
- Coordinate the installation of all irrigation materials with the construction of site amenities and planting.
- All work on the irrigation system, including hydrostatic, coverage, and operational tests and the backfilling and compaction of trenches shall be performed before planting operations.
- Drawings are diagrammatic and shall be adjusted as necessary to conform to actual field conditions. Costs incurred due to any adjustment for coverage, including those requested by the Owner relative to the location of irrigation heads as shown on the drawings shall be the responsibility of the Contractor.
- Point of connection (P.O.C.) and operating pressure (P.S.I.) shall be as indicated on the drawings. Contractor shall verify the location and size of water source, PSI, and electrical supply prior to commencing installation. In case of discrepancy, Contractor shall immediately notify the Owner.

#### QUALITY ASSURANCE

 All local and state laws, rules and regulations governing or relating to any portion of the irrigation system are hereby incorporated into and made a part of these specifications. However, if these specifications call for or describe materials workmanship or construction of a better quality, higher standard or larger size than is required by the above rules, regulations or requirements, these specifications and the drawings shall take precedence.

- In the event any equipment or methods indicated on the drawings or specified herein conflict with applicable regulations, Contractor shall immediately notify the Owner or Landscape Architect in writing prior to installation. In case of discrepancy, Contractor shall immediately notify the Owner.
- Due to the scale of the drawings, it is not possible to indicate all offsets, fittings, sleeves, and related other equipment, which may be required. Contractor shall carefully investigate the structural and finished conditions affecting the work and install a complete irrigation system within the intent of the drawings and specifications.
- Manufacturer's warranties shall not relieve the Contractor of liability under the provisions for guarantees.

#### MATERIALS LIST

- Within fifteen (15) calendar days after award of Contract and prior to installation, the Contractor shall submit to the Owner a list of materials including the manufacturer, description, model number and installation data.
- Equipment or materials installed or furnished without prior written acceptance may be rejected and such materials removed from the site at the Contractor's expense.

#### PRODUCT DELIVERY, STORAGE AND HANDLING

 Contractor shall exercise care in handling, loading, unloading and storing of irrigation materials and equipment.

#### PLASTIC PIPE

- Plastic pipe, where indicated on the drawings, shall be injection molded, rigid, unplasticized polyvinyl chloride (PVC), NSF approved, of high tensile strength, chemical resistant and impact strength, and depending on class and grade, conform to ASTM 2241 or ASTM D-1785.
- Fittings and couplings shall be threaded PVC Schedule 80 conforming to ASTM D-2464, or slip-fitting, tapered socket, solvent-weld type, PVC Schedule 40 conforming to ASTM D-2466 or PVC Schedule 80 conforming to ASTM D-2467.
- Solvent cement and primer for rigid PVC solvent-weld pipe and fittings shall be of commercial quality, IAPMO approved, conforming to ASTM D-2564.

#### BRASS PIPE

- Brass pipe, where indicated on the drawings, shall be 86% red brass, American National Standards Institute, Schedule 40 screwed pipe, conforming to Federal Specifications WW-P-351.
- Fittings shall be medium brass, screwed 125 pound class, conforming to Federal Specifications WW-P-460.

#### GALVANIZED PIPE

- Galvanized steel pipe, where indicated on the drawings, shall be ASA Schedule 40 mild steel screwed pipe. Fittings shall be medium galvanized screwed beaded malleable iron.
- All galvanized pipe and fittings installed below grade shall be painted with two (2) coats of Koppers #50 Bitumastic, or approved equal. Pipes may be wrapped with an approved asphaltic tape.

#### UVR-PVC PIPE

■ UVR-PVC pipe, where indicated on the drawings, shall be ultra-violet resistant, Schedule 40 PVC pipe. Fittings shall be UVR-PVC fittings.

#### **BACKFLOW PREVENTION UNIT**

 Backflow prevention unit shall be factory assembled and shall be as indicated in the Irrigation Legend on the drawings, or approved equal. Contractor shall install backflow prevention unit as indicated in the details on the drawings and in accordance with manufacturer's recommendation.

#### VALVE BOXES

- Gate valves and remote control valves, except for anti-siphon valves, shall be installed below grade as indicated in the details on the drawings, in lockable valve boxes manufactured by Carson, Brooks, Fraser, Ametek, or approved equal.
- Valve box lids shall be per Irrigation Legend. Gate valves shall be identified by stamping "CV" on the valve box cover. Remote control valves shall be identified by stamping "RCV" and station number on the valve box cover.
- Valve boxes shall be set one inch (1") above finish grade, with valves set at sufficient depth to provide appropriate clearance between the cover and valve.

#### ISOLATION VALVES

Isolation valves (ball) shall be as indicated in the Irrigation Legend on the drawings, or approved equal. Contractor shall install isolation valves as indicated in the details on the drawings and in accordance with manufacturer's recommendation.

#### QUICK COUPLING VALVES

Quick coupling valves shall be as indicated in the Irrigation Legend on the drawings.

#### ANTI-DRAIN VALVES

Where indicated on the drawings, and as needed for field conditions, anti-drain valves shall be as indicated in the Irrigation Legend on the drawings.

#### REMOTE CONTROL VALVES

■ Remote control valves shall be solenoid activated, of the type, manufacturer and size as indicated in the Irrigation Legend on the drawings.

#### CONTROLLERS AND WIRING

- Controller shall be of the type and manufacturer as indicated in the Irrigation Legend on the drawings, or approved equal. Contractor shall install controller as indicated in the details on the drawings and in accordance with manufacturer's recommendations.
- valves shall be made with direct burial solid copper wire. Control wire shall be #14 AWG, Type U.F., 600 volt. Common wire shall be #12 AWG. Wire shall be PVC
- For traditional wire systems, as practical, pilot wires shall be a different color for each valve. Common wires shall be white with a different color stripe for each automatic controller. For 2wire systems, each controller shall have a different wire color.
- Wire shall be buried a minimum of eighteen inches (18") in depth and whenever possible shall occupy the same trench as the mainline, bundled and secured to irrigation pipelines at ten foot (10') intervals with plastic electrical tape, providing
- Wire for slope systems shall be installed in a UVR PVC sleeve laid adjacent to the
- For traditional wire systems, all splices shall be made with Scotch-Lok #3576 Connector Sealing Packs, Rain Bird Pen-Tite, Sears DS-400 wire connectors, 3M DBY wire sealing packs, or approved equal. Use one (1) splice per connector sealing pack. Wire splices shall be located in pull boxes set one inch (1") above finish grade.
- For two wire systems, all splices shall be made with 3M DBY-6 direct bury splice kits or approved equal. Use one (1) splice per connector sealing pack. Wire splices shall be located in pull boxes set one inch (1") above finish grade.
- For traditional wire systems, install a spare control wire of a different color along entire mainline. Loop thirty-six inches (36") excess wire into each single box and into one valve box in each group of valves.
- metal wall electrical conduit and labeled as "Irrigation Control Wires."
- other electrical surge events is required. All installations shall conform to manufacturer's instructions, and must meet or exceed the American Society of Irrigation Consultants (ASIC) Earth Grounding Guideline 100-2002. In all cases where it does not conflict with appropriate grounding grid design for the project, Ground Rods or Plates as referred to in this specification shall conform to the following standards:

2. All grounding plates shall be 5 square feet, typically 4" by 96", as outlined in ASIC

Grounding Guideline 100-2002.

TW-LA-1

Ground rods and plates shall be located at a minimum distance to assure that the two-wire path is outside of the electrode sphere of influence for the grounding rod. For

right angle to the two-wire path. See the section below for details on connecting the

rod or plate to the device or lightning arrestor. (Under no circumstance should a

ground plate be installed in or under a valve box, meter box or electrical box.)

#### P. IRRIGATION HEADS

- Irrigation heads shall be of the manufacturer, size, type, and rate of precipitation with the diameter (or radius) of throw, pressure, and discharge as specified in the Irrigation
- Spacing of heads and drip irrigation tubing shall not exceed the maximum shown on the drawings and in no case exceed the maximum spacing recommended by the manufacturer. Contractor responsible to insure complete coverage.

#### Q. INSTALLATION

- Pipe shall be cut square and the ends reamed out to the full inside diameter of the pipe and thoroughly cleaned of dirt, dust and moisture before installation.
- PVC pipe shall be protected from tool damage during assembly. Plastic pipe which has been nicked, scarred or damaged shall be removed and replaced at the Contractor's expense.
- PVC solvent-weld joints shall be made in accordance with ASTM D-2855. Pipe shall not be exposed to water for twenty-four (24) hours after solvent-weld joints are
- Trenches shall be of open vertical construction to appropriate depths as indicated on the drawings and specified herein. PVC pipe shall be laid on native grade or certified compacted subgrade, free of rocks or sharp-edged objects and snaked from side to
- threads only.
- Galvanized pipe threads shall be cut with clean, sharp dies, conforming to American Standards Association Specification. Male pipe threads shall be coated with a non-toxic, non-hardening, non-corrosive joint compound.

■ For traditional wire systems connections between the controller and the remote control insulated of single conductor type, underground feeder cable, U.L. approved.

sufficient slack for expansion and contraction.

on-grade pipes.

Provide a separate ground wire for each controller.

- An expansion curl shall be provided within three feet (3') of each wire connection and change of direction, and at least every 100 feet of wire length on longer runs.
- Field splices between the controller and remote control valves will not be permitted.
- All controller wires installed within the garage shall be run in corrosion resistant thin
- For two wire systems, surge protection against surge damage due to lightening or

1. All grounding rods shall be bare copper of 5/8" diameter or greater, and 8' length or

3. A measured resistance reading of no more than 25 ohms is necessary at each

(Lightning Arrestor). ASIC Spec: Section 7.0 – Measuring resistance, item A.

an 8' grounding rod, this means that the grounding rod must be connected at least 8' away from the two-wire

ground rod or

- Riser units shall be oriented perpendicular to the finish grade with nipples of the same size as the riser opening in the irrigation head.

- completed.
- side in the trench to allow for expansion and contraction. Teflon tape shall be used on all threaded PVC to PVC and on all threaded PVC to
- Brass pipe and fittings shall be assembled using Teflon dope, applied to the male

Land Use Entitlements Land Planning Landscape Architecture

> Civil Engineering Utility Design Land Surveying Stormwater Compliance



**CONSULTANT LOGO** PLACEHOLDER (SIZE FLEXIBLE)

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DESIGNED BY:

DRAWN BY:

CHECKED BY

DATE:

SCALE:

LOS

NO DATE DESCRIPTION PROJECT NO: 6784.0 CAD DWG FILE 678400SPC.DW0

LANDSCAPE **SPECIFICATIONS** 

AUGUST 2, 2024

L5.3

- Galvanized pipe or ultra-violet resistant (UVR) PVC installed on grade shall be anchored at intervals not to exceed ten feet (10'), with #4 rebar, with a "J" hooked radius
- Rubber Ring Seal Joint:
- Use factory-made male end or prepare field-cut male end to exact specifications of factory-made end.
- Carefully clean bell or coupling and insert rubber ring without lubricant. Position ring carefully according to manufacturers recommendations.
- Lubricate male end according to manufacturers recommendations and insert male end to specified depth. Use hands only when inserting PVC pipe.
- Thrust blocks shall be provided where necessary to resist system pressure on ring-tite pipe and fittings. Blocks shall be concrete and the size shall be based on an average soil safe bearing load of 1000 pounds per square foot.
- ■Form thrust blocks in such a manner that concrete comes in contact only with the fittings. Thrust blocks shall be between solid soil and the fitting.
- Irrigation lines and control wiring shall be installed under paving in separate PVC Schedule 40 sleeves. Sleeves shall be installed with the coverage depths as specified herein.
- Piping under existing pavement may be installed by jacking, boring or hydraulic driving, except that no hydraulic driving will be permitted under asphaltic concrete pavement. Where cutting or breaking of existing pavement is necessary, obtain permission from the Owner before cutting or breaking pavement and then make all necessary repairs and replacements to the satisfaction of the Owner, and at no additional cost to the Owner.
- All lines shall have a minimum horizontal clearance of six inches (6") from each other and from lines of other trades. Parallel lines shall not be installed directly over one another.
- Provide the following minimum coverage (where lines occur under paved areas, these coverage depths shall be considered below subgrade):

Pressure mainline 18"
Non-pressure lateral lines 12"
Control wiring 18"

#### R. ADJUSTING AND TESTING THE SYSTEM

- Contractor shall furnish all equipment, materials and labor to conduct pipeline pressure tests, coverage tests and operational tests. All tests shall be made in the presence of the Owner prior to planting operations. Trenches shall not be backfilled until the pipeline pressure tests have been performed to the satisfaction of the Owner.
- After completion of pipeline assembly, prior to installation of terminal fittings, including but not limited to remote control valves and quick coupler valves, entire system shall be thoroughly flushed to remove dirt, scale or other deleterious material.
- With open ends capped, prior to installing valves, test pressure supply lines for six (6) hours at 125 PSI. Center load PVC pipe with a small amount of backfill to prevent arching and whipping under pressure.
- Contractor shall be responsible for correcting any portions of the work twenty (24) hours in advance for the following inspections,
  - system layout
  - pressure pipeline tests
  - coverage testsoperational tests (prior to commencing planting operations)
- Coverage test shall demonstrate that each station area is balanced to provide uniform and
- adequate coverage.
- Operational test shall demonstrate the performance and operation of all components of the controller system. Remote control valves shall be properly balanced, heads adjusted for coverage and system shall be workable, clean and efficient.
- Contractor shall be responsible for correcting any portions of the work that are not properly installed and retesting until installation has been accepted by the Owner.

#### S. MATERIALS TO BE FURNISHED

- Contractor shall furnish the Owner the following materials at the end of construction, prior to the Post-Installation Maintenance Period:
  - Two (2) sets of special tools required for removing, disassembling and adjusting each type of sprinkler and valve supplied on the project.
  - Two (2) five foot (5') valve keys for operating isolation valves.

Two (2) keys for each controller.

One (1) quick coupler key and matching hose swivels for each quick coupler valve installed.

One (1) set each approved as-built and record drawings.

Two (2) sets each approved controller charts.

#### T. AS-BUILT AND RECORD DRAWINGS

- Contractor shall maintain and keep up to date one (1) set of bluelines showing the "as-built" location of major features of the project and indicating changes that may occur during installation.
- Prior to acceptance of the work, Contractor shall furnish the Owner with one (1) set of reproducible transparencies as the Record Set showing the as-built data, of a quality satisfactory to the Owner. Transfer as-built data in ink (no ball point pen) and eradicate outdated items.
- Dimension from two (2) permanent points of reference (buildings, monuments, sidewalks, curbs, pavement) the location of the following items:

Point of connection to existing water lines.

Point of connection to existing electrical power.

Irrigation valves.

Routing of irrigation pressure lines (dimensions, maximum 100' along route).

Remote control valves.
Routing of control valves.
Quick coupling valves.

Other related equipment as requested by the Owner.

 Contractor shall submit As-built/Record Drawings to Owner for review prior to completing Controller Charts.

#### U. CONTROLLER CHARTS

Contractor shall provide two (2) controller charts for each controller supplied. The controller charts shall show the area controlled and shall be the maximum size which the controller door will allow. The controller charts shall be a photographic print with a different color indicating the area of coverage for each station. When completed and approved, the controller charts shall be hermetically sealed between two (2) pieces of transparent plastic, each being a minimum of twenty (20) mils thick.

#### V. OPERATION AND MAINTENANCE MANUALS

- Prepare and deliver four (4) individually bound copies of the Operation and Maintenance Manual to the Owner at least ten (10) calendar days prior to acceptance of the work. The Manual shall include descriptive material of equipment installed and shall be in sufficient detail for maintenance personnel to understand, operate and maintain all equipment. Each complete, bound manual shall include the following:
  - Index sheets stating Contractor's address and telephone number, list of equipment with names and addresses of local manufacturers representatives.
  - Catalog and parts sheets on all material and equipment installed.

    Guarantee statement.
  - Complete operating and maintenance instructions.

#### W. GUARANTEE

■ Contractor shall guarantee all materials and equipment for one (1) year from the date of acceptance of the work. Should any trouble develop within the time specified due to inferior or faulty materials or workmanship, the Contractor shall be responsible for costs incurred due to repair and replacement.

GENERAL PLANTING

#### A. GENERAL

- Contractor shall provide all labor, materials and equipment for the installation of plant material as indicated on the drawings and as specified herein.
- Contractor shall coordinate planting with other site improvements. Unless otherwise specified, structural improvements shall be installed prior to planting operations.
- Contractor shall be responsible for locating and staking existing sewer, water and utility lines above or below grade that might be damaged as a result of planting operations. Contractor shall assume sole responsibility for any cost incurred due to damage and for replacement of aforementioned utilities.
- All work on the irrigation system, including hydrostatic, coverage, and operational tests, and the backfilling and compaction of trenches shall be performed prior to planting operations.
- Samples of fertilizers, soil conditioners, seed, or other materials shall be submitted to Owner forty-eight (48) hours prior to incorporation in the work.
- An agricultural suitability and fertility analysis soils report shall take precedence over these specifications.

#### PLANT MATERIAL QUALITY

- Plant material shall be in accordance with the State Department of Agriculture's regulations for nursery inspections, rules and grading. All plants shall be of No. 1 Grade and have a normal habit of growth, and shall be sound, healthy, vigorous and free of insect infestations, plant diseases, sun scalds, fresh bark abrasions or other objectionable disfigurements. All plants shall have a normal, well-developed branch system and vigorous and fibrous root system which is not root bound and is free of kinked or girdling roots.
- Nursery growth stock shall be selected from high quality, well-shaped stock, grown under climatic conditions similar to those in the project locale. Minimum acceptable size of plants as indicated in the drawings shall correspond with that normally expected for the species and variety of commercially available nursery stock.
- Where applicable, caliper shall be the diameter of the trunk one foot (1') above the ground surface.
- Oversize plants may be used if not root bound, but shall not increase the Contract price. Up to ten percent (10%) of undersized plants in any one (1) variety and grade may be used, provided they are larger than the average size of the next smallest grade.
- Scientific and common names conform to customary nursery usage.
- Types and sizes of plant materials shall be as indicated on the drawings. Quantities shown are a guide only, Contractor shall verify quantities by plan check.
- The Owner reserves the right to refuse or reject any unsuitable plant material. Unsuitable plants shall be removed from the project site and replaced at the Contractor's expense. Replacement plants shall be the same species, variety, size and conditions as specified.
- Pruning of plant materials shall not be done prior to delivery. After planting, pruning shall be limited to the minimum necessary to remove injured twigs and branches, dead wood and suckers.
- Plant material is subject to substitution based upon availability. Substituted material shall be approved in advance by the Owner.

#### C. FERTILIZERS

■ Fertilizers shall comply with applicable requirements of the State Agricultural Code and shall be packaged, first grade, commercial quality products identified as to source, type of material, weight and manufacturer's guaranteed analysis. Fertilizers shall not contain toxic ingredients in quantities harmful to human, animal, or plant life. When requested, Contractor shall furnish the Owner with Certificate of Compliance stating that the material substantially meets the specifications.

- Commercial fertilizer shall be a pelleted, beaded, or granular product having the chemical analysis specified herein and shall be free-flowing material delivered in original unopened containers. Use of material which becomes caked or otherwise damaged shall not be
- Organic base fertilizer shall be comprised of decomposed animal, fish and vegetable matter with humic acids and a bacterial stimulant, manufactured as Gro-Power by Southern California Organic Fertilizer Co., Glendale, California, or approved equal.

#### D. AMENDMENTS

- Nitrogen stabilized organic amendment shall be a ground or processed wood product derived from wood of redwood, fir or cedar, treated with a non-toxic agent to absorb water quickly. Nitrogen content, based on dry weight, shall be 0.5% for redwood and 0.7% for fir and cedar. Iron content, based on dry weight, shall be 0.1%. Pine sawdust is not acceptable.
- When requested, Contractor shall furnish the Owner with a delivery receipt and Certificate of Compliance stating that the material substantially meets the specifications.

#### TOPSOIL

- Topsoil shall consist of fertile, friable soil of loamy character, and shall contain an amount of organic matter normal to the area. It shall be reasonably free from weeds, refuse, roots, heavy or stiff clay, stones larger than one inch (1") in diameter, sticks, brush, litter and other deleterious substances. Topsoil may be obtained from the site if approved by the Owner.
- When required, imported topsoil shall be subject to inspection and testing at the source of supply prior to delivery to the project.

#### F. MATERIAL DELIVERY AND INSPECTION

- Plant material shall be delivered with legible identification labels, handled and stored adequately to maintain a healthy condition, protecting them from drying out, windburn or any other injury.
- Inspection of plant materials required by Owner, County, State or Federal authorities shall be the responsibility of the Contractor. When requested, Contractor shall furnish copies of such permits or certificates to Owner.

#### SOIL PREPARATION

- Areas to receive "soil preparation" include turf, groundcover from rooted cuttings and non-slope hydroseeded areas.
- Fertilizing and conditioning materials shall be as specified in the project agricultural suitability report. Wash off fertilizer from plant.
- If an agricultural suitability report is not available, the following amendments, or approved equal, shall be mechanically spread and uniformly cultivated into the upper six inches (6") per 1,000 square feet of soil by suitable equipment operated at approximately right angles in at least two (2) directions:
  - 3 CY Nitrogen stabilized organic amendment 125 LBS Gro-Power Plus soil conditioner/fertilizer
  - 30 LBS Agricultural gypsum
- Resulting soil shall be clean, in a friable condition and suitable for planting.

#### . WEED ABATEMENT OPERATIONS

- The irrigation system and finish grade shall be completed prior to weed abatement operations.
- Contractor shall operate the irrigation system to keep planting areas uniformly moist for a period of three (3) weeks (21 consecutive calendar days). At the end of the three (3) week period, Contractor shall spray all visible weeds with a contact herbicide. Application method shall be as recommended by manufacturer. After spraying, planting areas shall remain unwatered for a minimum of forty-eight (48) hours. Remove weeds from site.
- Water seven (7) additional consecutive calendar days from the first application, and apply a contact herbicide as may be necessary. After second spraying, water shall not be applied for an additional forty-eight (48) hour period. Applications shall continue at seven (7) day intervals as determined by the Owner.
- Contractor shall apply spray chemicals when air currents are still, preventing drifting onto adjoining property and preventing any toxic exposure to persons whether or not they are in or near the project.
- Weeds and debris shall be disposed of off-site.

#### I. BACKFILL

- Backfill shall be as specified in the project agricultural suitability report, machine-mixed and approved by the Owner prior to incorporation in planting pits.
- If a agricultural suitability report is not available, the following amendments or approved equal, shall be incorporated:

7 parts by volume On-site soil

3 parts by volume Nitrogen stabilized organic amendment 16 LBS per CY of mix Gro-Power Plus soil conditioner/fertilizer

1 LB per CY of mix Iron sulfate2 LBS per CY of mix Agricultural gypsum

#### J. INSTALLATION -SHRUBS, VINES, AND TREES

- Stake plant locations and secure approval from the Owner before excavating pits. Excavated pits shall be as indicated in the details on the drawings. Dust sides of pits with gypsum before backfilling.
- Containers shall be opened and removed such that the rootball is not injured.
- Water all planting areas thoroughly after installation of plant materials. Additional backfill shall be added to fill voids caused by water settlement.

- Trees shall be staked at time of planting as indicated in the details on the drawings.
- All nursery stakes shall be removed after tree has been planted and staked according to construction details.

#### K. BIOTREAMENT SOIL

- Biotreatment soil shall conform to the most current regional permit based on project location.
- Biotreament soil for projects located within the MRP (Municipal Regional Permit) boundary including but not limited to portions of Contra Costa County, Alameda County, San Mateo County and Santa Clara County shall conform to California Regional Water Quality Control Board San Francisco Bay Region Municipal Stormwater NPDES Permit No. CAS6120058 Attachment L "Specification of Soils for Biotreament or Bioretention Facilities."
- Biotreament soil for projects located within the Small MS4s (Municipal Separate Storm Sewer System) General Permit Boundary including but not limited to portions of Santa Clara County (southern), Santa Cruz County, San Benito County and Monterey County shall conform to the provisions in the permit. If none exists, soil shall conform to California Regional Water Quality Control Board San Francisco Bay Region Municipal Stormwater NPDES Permit No. CAS6120058 Attachment L "Specification of Soils for Biotreament or Bioretention Facilities."

#### GUARANTEE

- Contractor shall guarantee plant material through one (1) full year after the date of acceptance of the work.
- Replacement plant material shall be of the same species, variety, & size as originally planted and shall be guaranteed for one (1) full year from the date of re-planting.
- Cost incurred due to replacement of dead or dying plant material shall be the responsibility of the Contractor.

#### M. INSTALLATION - HYDROSEEDING

An agricultural suitability report that has been prepared for the specific site shall take precedent over the following materials. If such report is not available, the following materials shall be of such a character that when dispersed in a uniform slurry shall form an absorbent porous mat:

3000 gallons per acre

1500 to 3000 pounds per acre,
depending on slope

5 to 15 pounds per acre,
depending on slope

5 resh water

Wood cellulose fiber, Conwed 2000 or approved equal
Organic stabilizer, ECO E-Tac or approved equal

Grow-Power Plus, or approved equal

Seed mixture shall be as indicated on the drawings.

1000 pounds per acre

- Water shall be fresh, free of impurities, excess chlorine and salts.
- Fiber shall be clean, weed-free mulch of wood cellulose containing no germination or growth-inhibiting factors. Fiber shall contain a harmless, temporary green dye.
- Mixing shall be performed in a tank, with a built-in continuous agitation and recirculation system, of sufficient operating capacity to produce a homogeneous slurry and a discharge system which will apply the slurry to the designated areas at a continuous and uniform rate.
- The slurry preparation shall take place at the project site and shall begin by adding water to the tank when the engine is at halt throttle. When the water level has reached the height of the agitator shaft, good recirculation shall be established, and at this time the seed shall be added. Fertilization shall then be added followed by the wood cellulose fiber, when the tank is at least one-third (1/3) filled with water. Spraying shall commence immediately when the tank is full.
- Contractor shall spray designated areas with the slurry in a sweeping motion, in an arched stream, until a uniform coat is achieved and the material is spread at the required rate per acre.
- A slurry mixture which has not been applied within four (4) hours after mixing shall be rejected and replaced at the Contractor's expense.
- Slopes shall be hydroseeded after weed abatement operations and planting of trees and shrubs.
   Costs incurred for repair or replacement of bare, sparse or damaged areas shall be the

#### N. INSTALLATION - SOD

responsibility of the Contractor.

- Prepare soil and provide weed abatement operations in accordance with the General Planting Section. Rake, cultivate, float and roll until areas to receive turf are in a smooth and uniform condition
- Finish grade for turf areas shall be one inch (1") below the finish surface of walks, curbs, or related hardscape.
- Prior to sodding, soil shall be moist to a minimum depth of one inch (1").
- Prior to installation, area to be sodded shall receive sulphate of ammonia at the rate of one
   (1) pound per 200 square feet.
- Sod shall be laid and tamped with butt joint in a staggered "running bond" pattern.
- After installation, sod shall be rolled with a 200-pound water-filled lawn roller.
- Sod shall be as indicated on the drawings.

## Land Use Entitlements Land Planning

Civil Engineering Utility Design Land Surveying Stormwater Compliance

1570 Oakland Road (408) 487-2200

Landscape Architecture



CONSULTANT LOGO PLACEHOLDER (SIZE FLEXIBLE)

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TO

DESIGNED BY:

CHECKED BY:

CMDATE:

AUGUST 2, 2024

SCALE:

NONE

LANDSCAPE SPECIFICATIONS

L5.4

POST-INSTALLATION MAINTENANCE PERIOD

#### A. GENERAL

- Contractor shall provide all labor, materials and equipment to perform work during the Post-Installation Maintenance Period, as specified herein, including but not limited to, adequate watering of plant material, replacing unsuitable plant material and controlling weeds, rodents and other pests.
- Contractor shall maintain the project on a continuous basis from the first day after planting is completed, until acceptance of the work.
- Costs incurred due to damage or replacement during Post-Installation Maintenance Period shall be the responsibility of the Contractor.
- Unless stipulated otherwise by the Owner, the Post-Installation Maintenance Period shall consist of a minimum of ninety (90) consecutive calendar days, once all parties agree the Maintenance Period can start.
- Post-Installation Maintenance Period may be extended by the Owner if the project is improperly maintained, appreciable replacement is required, or other corrective work becomes necessary.

#### B. EXECUTION

- All areas including, but not limited to, turf, ground cover, and concrete flatwork, shall be kept clean and free of weeds, litter and debris.
- Subsurface drains and catch basin grates shall be kept clear of leaves, litter and debris to ensure unimpeded passage of water. Drainlines shall be periodically flushed with clear water to avoid build-up of silt and debris.
- Before weeds exceed two inches (2") in height, they shall be removed and disposed of off-site. All weeds shall be spot sprayed and left in place for seven (7) calendar days. Areas sprayed shall remain unwatered for a minimum of forty-eight (48) hours. Dead weeds shall be removed seven (7) calendar days after application and disposed of off-site.
- If the Owner notifies the Contractor of failure to control weeds as specified herein, the Contractor shall kill all weeds within ten (10) calendar days of such notification. The Post-Installation Maintenance Period will be extended for every day after the ten (10) calendar days until such weeds have been killed.
- Contractor shall take appropriate steps to eliminate rodents.

#### C. IRRIGATION SYSTEM

- Contractor shall operate the irrigation system automatically and shall properly and completely maintain all parts of the irrigation system.
- Contractor shall provide for delivery of water in sufficient quantities and adjust water application to compensate for seasonal conditions and shall ensure full and complete coverage.
- Costs incurred due to repair or replacement of equipment shall be the responsibility of the Contractor. Replacement parts shall be identical to the material and as indicated on the drawings and specified herein.

#### D. TUF

- Prior to acceptance of the project and maintenance period, turf areas shall be established with a uniform 80% coverage, healthy vigorous growth and to a minimum of two inches (2") in height. Costs incurred for repair or replacement of bare, sparse or damaged areas shall be the responsibility of the Contractor.
- If an agricultural suitability soils report is not available, turf areas shall be fertilized with Gro Power Plus or approved equal every seventy (70) calendar days, at a rate recommended by the manufacturer.
- First mowing of turf shall be performed when the grass is two and one-half inches (2-1/2") in height. After initial mowing, turf shall be cut as often as necessary to maintain the turf at a height of two inches (2") for bluegrass and fescues and one inch (1") for bermuda.
- Contractor shall trim around irrigation heads to allow for unimpeded spray, at the base of trees, and at borders along walks, mowstrips and curbs.
- Contractor shall remove all grass clippings from project site.

#### E. SPECIALTY SODS INCLUDING NATIVE, MOW FREE, AND BIOFILTRATION SOD

- Prior to acceptance of the project and maintenance period, turf areas shall be established with a uniform 80% coverage, healthy vigorous growth and to a minimum of four inches (4") in height. Costs incurred for repair or replacement of bare, sparse or damaged areas shall be the responsibility of the Contractor.
- If an agricultural suitability soils report is not available, specialty sod areas shall be fertilized with Gro Power Plus or approved equal two or three times per year in early spring, late spring, or fall depending on grower reccomendations and sod type and sod health. Specialty sods do not require as much fertilization as tradional fescue sod.
- Mow free and specialty sods shall be allowed to grow without regular mowing or line trimming. No more than 1/3 of the leaf blade shall be removed, mowed or trimmed in any trim or mow cycle. Specialty sod shall never be mowed or trimmed to a height less than 4". Mowing or trimming shall be done once a year in the late spring to remove florets or seed heads.
- Contractor shall trim around irrigation heads to allow for unimpeded spray, at the base of trees, and at borders along walks, mowstrips and curbs.
- Contractor shall remove all grass clippings from project site.

#### F. GROUND COVER AREAS

■ If an agricultural suitability soils report is not available, ground cover areas shall be fertilized with Gro Power Plus or approved equal every seventy (70) calendar days, at a rate recommended by the manufacturer.

#### G. TREES

- If required, or at the direction of the Owner, trees planted as part of the Contract shall be pruned or headed back, to eliminate diseased or damaged growth, reduce toppling or wind damage, maintain growth within space limitations, maintain natural appearance, due to vandalism, and to balance the crown with the root structure.
- Staking of trees shall be checked frequently for damage, and to prevent chaffing or girdling. Costs incurred due to damage or replacement due to improper staking materials shall be the responsibility of the Contractor.
- At the request of the Owner, wounds over one and one-half inch (1-1/2") in diameter may be sealed with an approved tree seal.
- Dead or dying trees shall be immediately replaced at the Contractor's expense with material
  of the same species and size and guaranteed as described in these specifications.
- Contractor shall exercise preventive measures when using stringline trimmers near tree trunks. Costs incurred due to damage or replacement of trees due to improper measures shall be the responsibility of the Contractor.

#### H. SLOPES

- Prior to acceptance of the project and maintenance period, slopes shall be established with a uniform 80% coverage, healthy vigorous growth. Costs incurred for repair or replacement of bare, sparse or damaged areas shall be the responsibility of the Contractor.
- Seed for replacement shall be of the same type and quantity ratio as specified in the Plant List on the drawings.
- If a soils report is not available, slopes shall be fertilized with Gro Power Plus or approved equal every seventy (70) calendar days, at a rate recommended by the manufacturer.

#### I. BIOTREAMENT AREAS

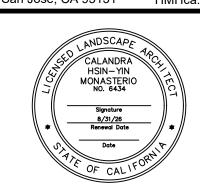
■ Biotreatment areas and facilities including but not limited to planting, irrigation, soils, impermeable liner, drain rock, mulch, underground storm drain piping, and tree filter boxes shall be monitored and maintained throughout the life of the project in accordance with local regulations and requirements.

#### J. INSPECTION

Upon completion of the Post-Installation Maintenance Period, Contractor shall request a final observation and letter of acceptance of the work performed in accordance with the Contract Documents. The request shall be made to the Owner, a minimum of seven (7) calendar days prior to the date for inspection.

Land Use Entitlements
Land Planning
Landscape Architecture
Civil Engineering
Utility Design
Land Surveying
Stormwater Compliance

1570 Oakland Road (408) 487-2200 San Jose, CA 95131 HMHca.com



CONSULTANT LOGO
PLACEHOLDER (SIZE FLEXIBLE)

TON AVENU TEWAY DRI

NO DATE DESCRIPTION

PROJECT NO: 6784.00

CAD DWG FILE: 678400SPC.DWG

DESIGNED BY: LS

DRAWN BY: HMH

CHECKED BY: CM

DATE: AUGUST 2, 2024

SCALE: NONE

LANDSCAPE SPECIFICATIONS

L5.5

ROJECTS\678400\LA\PRODUCTION\678400SPC.DWG

