

UNDERGROUND SERVICE ALERT



Know what's below.
Call before you dig.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

SPECIAL NOTE:

WHERE UNDERGROUND AND SURFACE STRUCTURES ARE SHOWN ON THE PLANS, THE LOCATIONS, DEPTH AND DIMENSIONS OF STRUCTURES ARE BELIEVED TO BE REASONABLY CORRECT, BUT ARE NOT GUARANTEED. SUCH STRUCTURES ARE SHOWN FOR THE INFORMATION OF THE CONTRACTOR, BUT INFORMATION SO GIVEN IS NOT TO BE CONSTRUED AS A REPRESENTATION THAT SUCH STRUCTURES WILL, IN ALL CASES, BE FOUND WHERE SHOWN, OR THAT THEY REPRESENT ALL OF THE STRUCTURES WHICH MAY BE ENCOUNTERED. CONTRACTOR SHALL NOTIFY "USA" (UNDERGROUND SERVICE ALERT) AT 811, TWO WORKING DAYS BEFORE COMMENCING EXCAVATION AND ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK, OF CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES, AND CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES WITHIN THE WORK AREA.

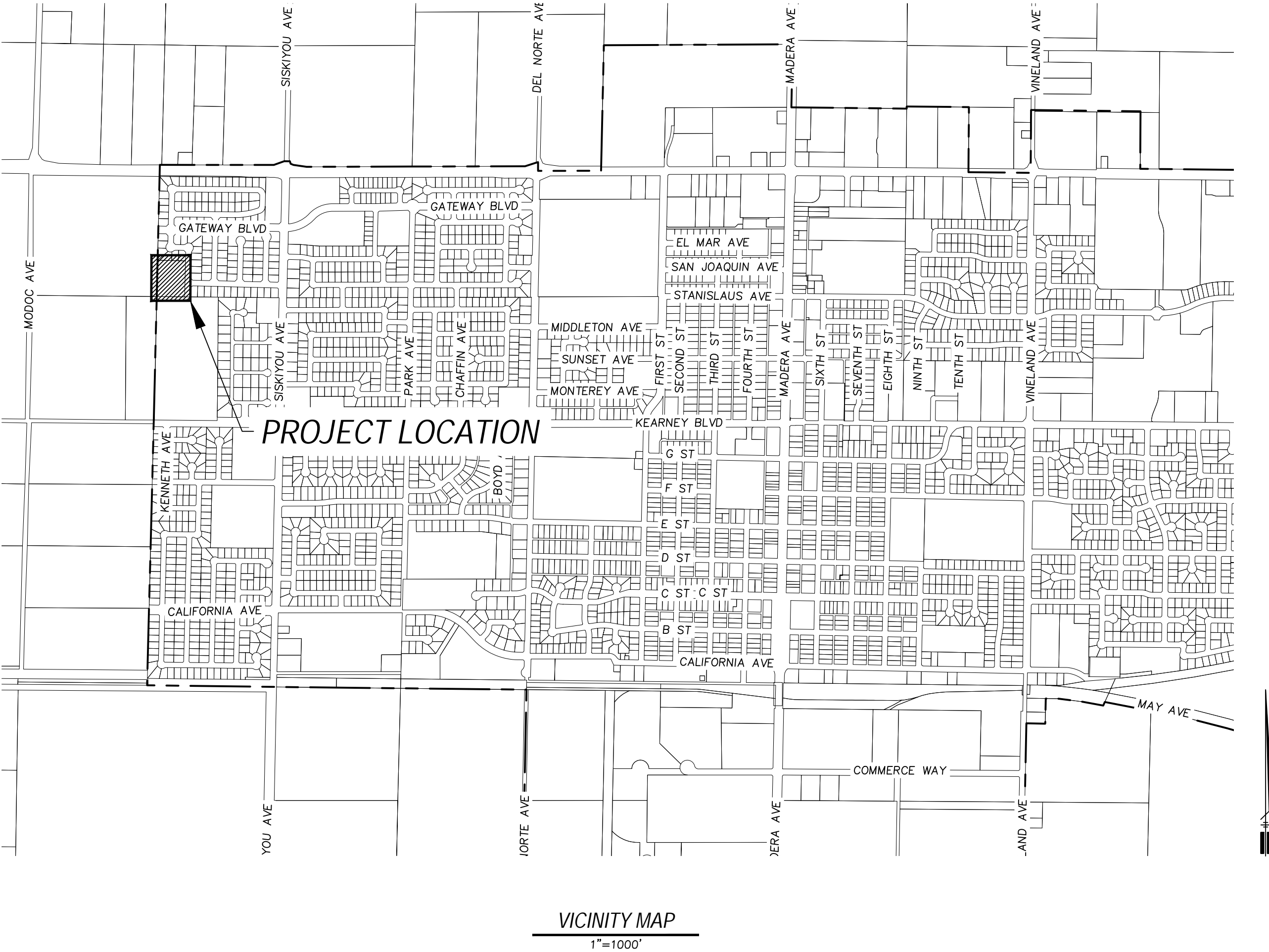
LEGEND:

---	EXISTING SECTION LINE	○	EXISTING IRRIGATION RISER
---	EXISTING CENTER LINE	⊕	EXISTING IRRIGATION SPRINKLER
- · - · -	EXISTING PROPERTY LINE	○	EXISTING IRRIGATION VENT PIPE
---	EXISTING RIGHT-OF-WAY LINE	MB	EXISTING MAIL BOX
---	EXISTING CURB & GUTTER	○	EXISTING SANITARY SEWER CLEANOUT
=====	EXISTING AC DIKE	⊙	EXISTING SANITARY SEWER MANHOLE
---	EXISTING EDGE OF PAVEMENT	○	EXISTING SIGN
---(CATV)---	EXISTING CABLE TV	⊙	EXISTING STORM DRAIN MANHOLE
---(CO)---	EXISTING CONDUIT	⊙	EXISTING STORM DRAIN GRATE INLET
---(E)---	EXISTING ELECTRIC LINE	⊙	EXISTING STORM DRAIN INLET
---(OH-E)---	EXISTING OVERHEAD ELECTRIC LINE	⊙	EXISTING STREET LIGHT
○-○-○-○-○	EXISTING FENCE (CHAIN LINK)	⊙	EXISTING STREET LIGHT (POST)
○-○-○-○-○	EXISTING FENCE (RAIL/IRON)	⊙	EXISTING TELEPHONE MANHOLE
○-○-○-○-○	EXISTING FENCE (WIRE)	⊙	EXISTING TELEPHONE RISER
○-○-○-○-○	EXISTING FENCE (WOOD)	⊙	EXISTING TREE
---(F)---	EXISTING FIRE LINE	⊙	EXISTING UTILITY POLE
---(FM)---	EXISTING FORCE MAIN	⊙	EXISTING UTILITY BOX
---(FO)---	EXISTING FIBER OPTIC	⊙	EXISTING UNDERGROUND MARKER
---(G)---	EXISTING GAS	⊙	EXISTING WATER HOSE BIB
---(GCC)---	EXISTING INTERCONNECT CABLE	⊙	EXISTING WATER METER
---(IRR)---	EXISTING IRRIGATION LINE	⊙	EXISTING WATER PUMP
---(JT)---	EXISTING JOINT TRENCH	⊙	EXISTING WATER VALVE
---(NPW)---	EXISTING NON POTABLE WATER	⊙	EXISTING WATER WELL
---(SD)---	EXISTING STORM DRAIN LINE	⊙	EXISTING CONCRETE
---(SS)---	EXISTING SEWER LINE	⊙	EXISTING A.C. PAVEMENT
---	EXISTING SWALE	⊙	PROPOSED TRASH RECEPTACLE
---	EXISTING TELEPHONE LINE	⊙	FUTURE BENCH
---(OH-T)---	EXISTING TELEPHONE (OVERHEAD)	⊙	
---(TS)---	EXISTING TRAFFIC SIGNAL	⊙	
---(W)---	EXISTING WATER LINE	⊙	
---	EXISTING WALL	⊙	
---	EXISTING HANDICAP RAMP	⊙	
---	EXISTING ANCHOR POLE	⊙	
---	EXISTING DRIVE APPROACH	⊙	
---	EXISTING ELECTRIC MANHOLE	⊙	
---	EXISTING FIRE HYDRANT	⊙	
---	EXISTING GAS VALVE	⊙	
---	EXISTING GUYED WIRE	⊙	
---	EXISTING IRRIGATION BOX	⊙	

ABBREVIATIONS:

BLDG	BUILDING	PE	PEDESTRIAN EASEMENT
C	CONCRETE	PL	PROPERTY LINE
CATV	CABLE TELEVISION	PP	POWER POLE
CL	CENTER LINE	PUE	PUBLIC UTILITY EASEMENT
CR	CROWN	R/W	RIGHT-OF-WAY LINE
DI	STORM DRAIN DROP INLET	SDMH	STORM DRAIN MANHOLE
DIKE	AC DIKE	SF	SPLIT FLOW
ELB	ELECTRIC BOX	SL	SECTION LINE
EP	EDGE OF PAVEMENT	SSMH	SANITARY SEWER MANHOLE
EX. OR (E)	EXISTING	SW	SIDEWALK
FD	FINISH DIRT	TC	TOP OF CURB
FF	FINISH FLOOR	TD	TOP OF DIKE
FH	FIRE HYDRANT	TELB	TELEPHONE BOX
FL	FLOWLINE	TELR	TELEPHONE RISER
FNC	FENCE	TOE	TOE OF SLOPE
GB	GRADE BREAK	TOP	TOP OF SLOPE
GW	GUY WIRE	TP	TELEPHONE POLE
HP	HINGE POINT	UM	UNDERGROUND MARKER
LE	LANDSCAPE EASEMENT	VG	VALLEY GUTTER
LIP	LIP OF GUTTER	VP	VENT PIPE/STAND PIPE
OG	ORIGINAL GROUND	WM	WATER METER
P	PAVEMENT	WV	WATER VALVE
PC	POINT ON CURVE	(XXX.XX)	EXISTING GRADE

CITY OF Kerman
DEPARTMENT OF PUBLIC WORKS
MICHAEL BARAJAS - DIRECTOR
PLANS FOR
Kerman Northwest Park



GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF Kerman IMPROVEMENT STANDARDS MANUAL AND ANY APPLICABLE SECTIONS OF THE 2015 CALTRANS STANDARD SPECIFICATIONS AND THE PROJECT SPECIFICATIONS.
- SIDEWALKS SHALL NOT BE POURED UNTIL ALL WATER METER BOXES AND SERVICES HAVE BEEN INSPECTED BY THE CITY OF Kerman AND ANY NECESSARY STREET SIGNS HAVE BEEN INSTALLED. NOTIFY THE CITY OF Kerman, 24 HOURS PRIOR TO POURING.
- TEMPORARY TRENCH RESURFACING TO BE A MINIMUM 4" COLD MIX.
- ANY EXISTING SECTION CORNER OR PROPERTY CORNER MONUMENTS DAMAGED BY THIS PROJECT SHALL BE RESET TO THE SATISFACTION OF THE CITY ENGINEER.
- ALL PROPOSED AND EXISTING VALVES (CAP AND LID), MANHOLES, AND CLEANOUTS AFFECTED BY THIS WORK SHALL BE ADJUSTED TO GRADE AS NECESSARY AND INCLUDED IN THIS WORK.
- ANY DIRT TRACKED ONTO ANY CITY STREET FROM THIS PROJECT SHALL BE SWEEP UP AT THE END OF EACH WORK DAY TO THE SATISFACTION OF THE CITY ENGINEER.
- DUST CONTROL SHALL BE PROVIDED AS REQUIRED BY THE CITY ENGINEER.
- COMPANIES HAVING POSSIBLE INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES IN THE WORK AREA. THE CONTRACTOR SHALL NOTIFY U.S.A. TWO (2) DAYS PRIOR TO BEGINNING ANY EXCAVATION.
- THE COSTS OF ALL REPEAT TESTING REQUIRED FOR ACCEPTANCE OF WORK SHALL BE FULLY BORNE BY THE CONTRACTOR.
- ALL CURB AND GUTTER SHALL BE WATER TESTED UNDER THE DIRECTION AND IN THE PRESENCE OF THE CITY INSPECTOR PRIOR TO ANY STREET OPERATION.
- THE CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM ANY ADJACENT PROPERTY OWNER GIVING PERMISSION TO ENTER HIS/HER PROPERTY FOR PURPOSES OF CONSTRUCTING THE IMPROVEMENTS DELINEATED ON THESE PLANS AND TRANSITIONS THERETO. THE CONTRACTOR SHALL PROVIDE THE CITY WITH A COPY PRIOR TO START OF WORK.
- ALL STORM DRAIN FACILITIES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF Kerman REQUIREMENTS AND THESE PLANS.
- NO WATER MAIN VALVES SHALL BE CLOSED BY THE CONTRACTOR EXCEPT IN THE CASE OF A BROKEN MAIN. THE CONTRACTOR SHALL NOTIFY THE CITY IMMEDIATELY AFTER A LINE IS BROKEN.
- HOT MIX ASPHALT (HMA) 2" THICKNESS OR LESS SHALL BE TYPE "A", 1/2" MAX. AGGREGATE, PER STATE OF CALIFORNIA STANDARD SPECIFICATIONS, SECTION 39. WHERE THE ASPHALT THICKNESS IS MORE THAN 2", THE PAVING SHALL BE PLACED IN TWO COURSES. THE FIRST COURSE SHALL BE 1/2" MAX. AGGREGATE AND THE FINAL COURSE SHALL BE 1/2" MAX. AGGREGATE.
- AGGREGATE BASE SHALL BE "CLASS II", 3/4" MAX., PER STATE OF CALIFORNIA STANDARD SPECIFICATIONS, SECTION 26.
- CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION IN PUBLIC RIGHTS-OF-WAY.
- COMPACTION TESTS SHALL BE WITHIN TWO PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT TO BE CONSIDERED AS PASSING.
- DURING PROJECT CONSTRUCTION, ALL STREETS SHALL BE KEPT CLEAR OF ANY CONSTRUCTION OR LANDSCAPING DEBRIS AND SHALL NOT BE USED AS A STORAGE AREA FOR EQUIPMENT, MATERIALS, AND OTHER ITEMS.
- THE CITY ENGINEER OR HIS REPRESENTATIVE WILL HAVE THE PRIMARY INSPECTION RESPONSIBILITY AND WILL CONDUCT DAY TO DAY INSPECTIONS. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (559) 846-9343, 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- REPLACE ALL EXISTING TRAFFIC STRIPING AND PAVEMENT MARKINGS DAMAGED DURING CONSTRUCTION.
- CONTRACTOR SHALL RESTORE, IN-KIND, ALL IMPROVEMENTS DISTURBED BY CONSTRUCTION.
- EXISTING UTILITY LOCATIONS ARE FROM TOPOGRAPHIC SURVEY DATA AND RECORDED DATA. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATIONS AND DEPTHS. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTACT THE CITY ENGINEER WHEN INSTALLING ANY SIGNS. THE CITY ENGINEER SHALL BE INFORMED OF ALL LOCATIONS, TYPES, DATE OF INSTALLATION, ETC.
- A PRECONSTRUCTION MEETING AND WALK-THROUGH IS REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL WALK THE ENTIRE PROJECT WITH CITY STAFF TO REVIEW PRE-EXISTING DAMAGED AREAS TO AVOID CLAIMS FROM SURROUNDING PROPERTY OWNERS.
- CONTRACTOR SHALL REPAIR/REPLACE ANY LANDSCAPE IRRIGATION SYSTEM COMPONENTS DAMAGED OR DESTROYED DURING CONSTRUCTION. CONTRACTOR SHALL REPLACE ANY LAWN (WITH EQUIVALENT TYPE SOD) AND/OR LANDSCAPE PLANTINGS (NOT SPECIFIED TO BE REMOVED ON THE PLANS) DAMAGED OR DESTROYED DURING CONSTRUCTION. THE COST OF REPAIR OR REPLACEMENT OF LANDSCAPE IRRIGATION SYSTEMS, LAWNS, AND LANDSCAPE PLANTINGS SHALL BE INCLUDED IN THE BID ITEM FOR MISCELLANEOUS STREET FACILITIES AND OPERATIONS AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFORE.

SHEET INDEX:

SHEET NO.	DESCRIPTION
GENERAL	
G1.0	COVER SHEET
CIVIL	
C2.0	GRADING PLAN
C3.0	WATER POLLUTION CONTROL PLAN

LANDSCAPE

L1.0	SITE FINISHES LEGEND, NOTES, & PLAN
L2.0	IRRIGATION LEGEND AND NOTES
L2.1	IRRIGATION PLAN
L2.2	MWEL CALCCS AND IRRIGATION SCHEDULE
L3.0	PLANTING LEGEND, NOTES, & PLAN
L4.0	CONSTRUCTION DETAIL
L5.0	IRRIGATION DETAILS
L5.1	IRRIGATION DETAIL
L5.2	IRRIGATION AND PLANTING DETAILS

BENCHMARK:

CITY OF Kerman - TBM 07-02
CHISELED SQUARE IN TOP OF CURB, EAST RETURN NORTHEAST CORNER KEARNEY & SISKIYOU
ELEVATION = 212.29' U.S.G.S. DATUM

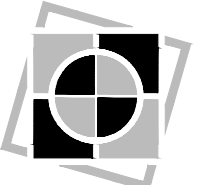
APPROVED BY:

JERRY C. JONES RCE 76803 CITY ENGINEER DATE

MICHAEL BARAJAS DIRECTOR OF PUBLIC WORKS DATE

Ref. & Rev.

Yamabe & Horn
Engineering, Inc.
CIVIL ENGINEERS • LAND SURVEYORS
2865 N. BURL AVENUE SUITE 101 FRESNO, CA 93727
TEL (559) 244-3723 WWW.YAHENG.COM



Kerman Northwest Park
City of Kerman
COVER SHEET

PROJECT TITLE

SHEET DESCRIPTION

Dr. By: JG

Ch. By: DL

Date: 10/21/2022

Scale: As Noted

Job No. 21-199

G1.0

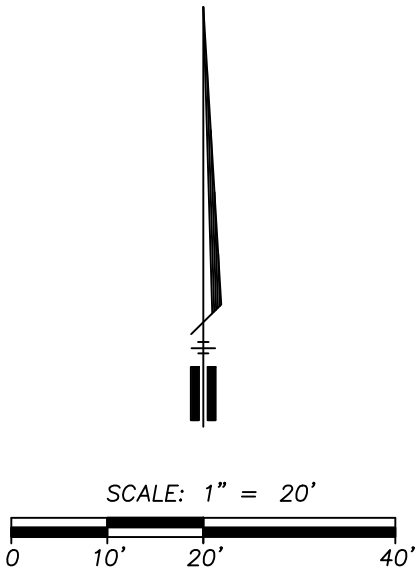


GRADING QUANTITIES:

QUANTITIES ARE UNADJUSTED:
CUT = 183.71 CU. YD.
FILL = 181.93 CU. YD.

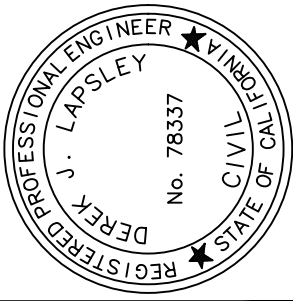
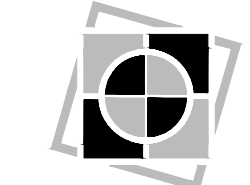
LEGEND:

- PROPOSED CONCRETE SIDEWALK AND FLATWORK, SEE LANDSCAPE PLANS.
TOTAL AREA = 5,760± S.F.
- PROPOSED LANDSCAPING, SEE LANDSCAPE PLANS.
- PROPOSED TURF, SEE LANDSCAPE PLANS.
- FUTURE BENCH
- INSTALL TRASH RECEPTACLE



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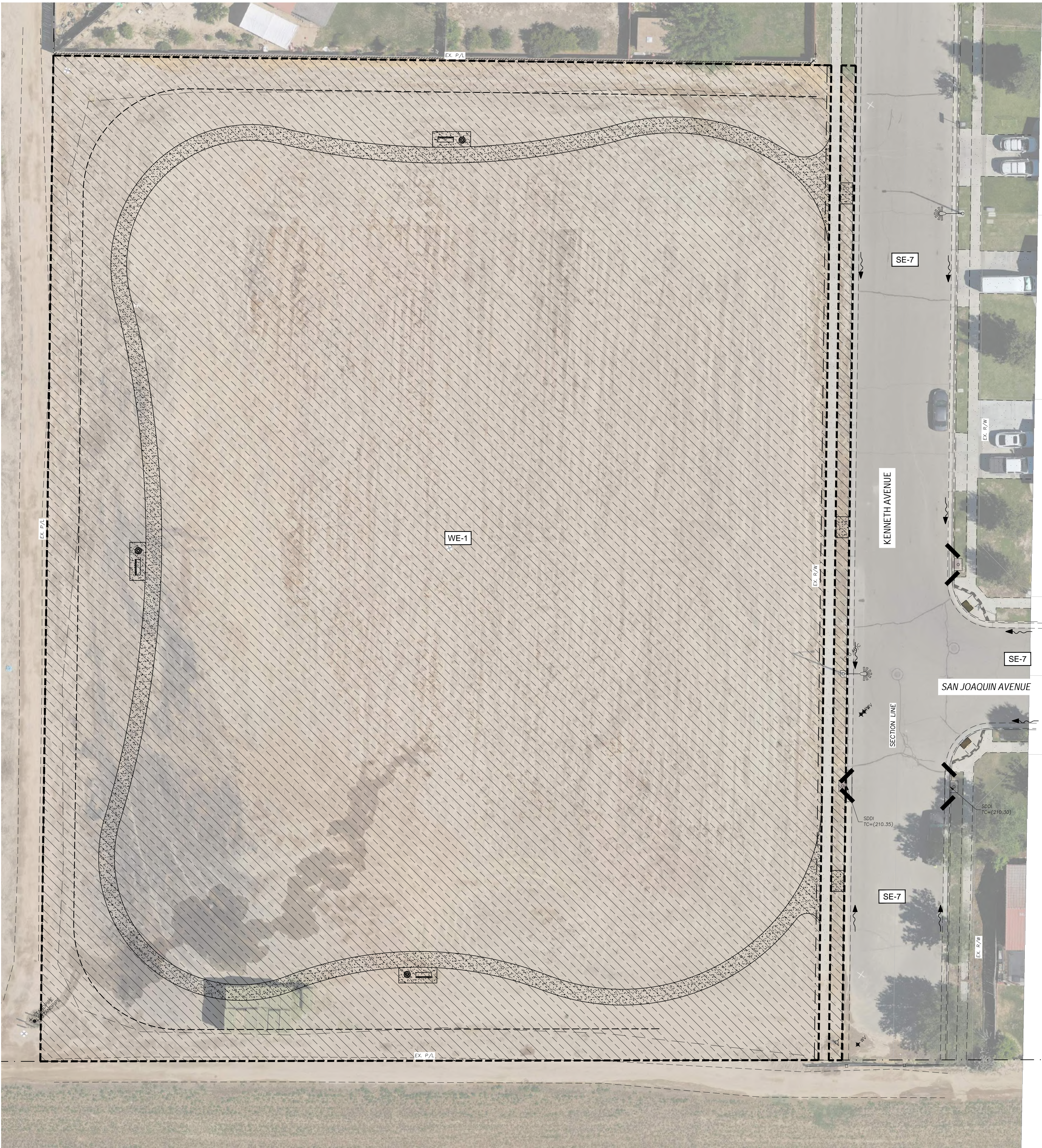


KERMAN NORTHWEST PARK
CITY OF KERMAN
GRADING PLAN

PROJECT TITLE
SHEET DESCRIPTION

Dr. By: JG
Ch. By: DL
Date: 10/21/2022
Scale: As Noted
Job No. 21-199

C2.0



BMP LEGEND:

THE FOLLOWING BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IMPLEMENTED IN CONFORMANCE WITH THE CALIFORNIA STORMWATER BEST MANAGEMENT PRACTICES HANDBOOK:

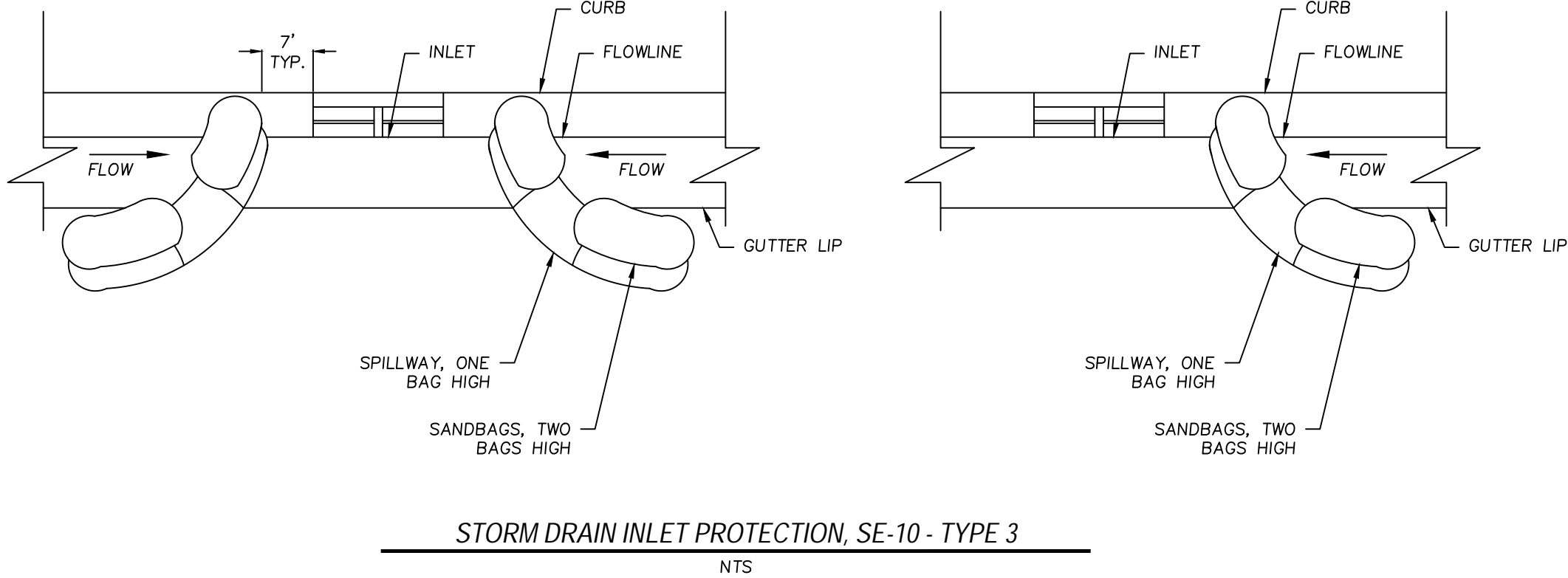
- EC-1 SCHEDULING
- EC-2 PRESERVATION OF EXISTING VEGETATION
- SE-1 SILT FENCE
- SE-5 FIBER ROLLS
- SE-7 STREET SWEEPING AND VACUUMING
- WE-1 WIND EROSION CONTROL
- NS-1 WATER CONSERVATION PRACTICES
- NS-3 PAVING AND GRINDING OPERATIONS
- NS-6 ILLICIT CONNECTION/DISCHARGE
- NS-7 POTABLE WATER/IRRIGATION
- NS-8 VEHICLE AND EQUIPMENT CLEANING
- NS-9 VEHICLE AND EQUIPMENT FUELING
- NS-10 VEHICLE AND EQUIPMENT MAINTENANCE
- NS-12 CONCRETE CURING
- NS-13 CONCRETE FINISHING
- TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT
- WM-1 MATERIAL DELIVERY AND STORAGE
- WM-2 MATERIAL USE
- WM-3 STOCKPILE MANAGEMENT
- WM-4 SPILL PREVENTION AND CONTROL
- WM-5 SOLID WASTE MANAGEMENT
- WM-6 HAZARDOUS WASTE MANAGEMENT
- WM-8 CONCRETE WASTE MANAGEMENT
- WM-9 SANITARY/SEPTIC WASTE MANAGEMENT

CONTRACTOR NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH THE STORM WATER DISCHARGE GENERAL PERMIT AND SHALL IMPLEMENT BMP'S AS INDICATED ON THIS PLAN, AT A MINIMUM.
2. CONTRACTOR TAKES FULL RESPONSIBILITY FOR IMPLEMENTING, MONITORING, REPORTING, AND ADDING ANY ADDITIONAL BMP'S DURING CONSTRUCTION FOR COMPLIANCE WITH THE GENERAL PERMIT AT THEIR SOLE EXPENSE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A QUALIFIED SWPPP PRACTITIONER (OSP) FOR THE DURATION OF THE PROJECT AND UNTIL THE NOTICE OF TERMINATION IS APPROVED.
4. CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING THE NOTICE OF TERMINATION AND ANNUAL REPORT ON THE STATE WATER BOARD'S SMARTS WEBSITE. THE OWNER (LRP) WILL BE RESPONSIBLE FOR REVIEWING AND SUBMITTING THE NOTICE OF TERMINATION AND ANNUAL REPORT WITHIN SAID WEBSITE.

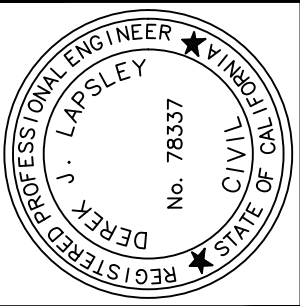
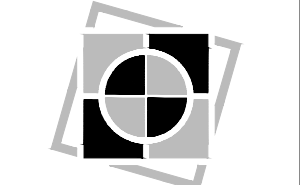
LEGEND:

- LIMITS OF DISTURBED AREA
TOTAL AREA = 114,446± S.F.
- DRAINAGE DIRECTION
- STREET SWEEPING & VACUUMING
- WIND EROSION CONTROL
- GRAVEL BAG BERM OR EQUIVALENT



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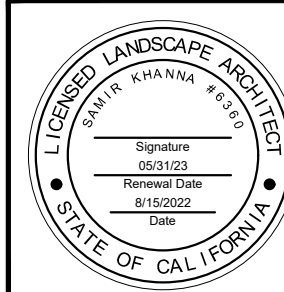


KERMAN NORTHWEST PARK
CITY OF KERMAN
WATER POLLUTION CONTROL PLAN

PROJECT TITLE
SHEET DESCRIPTION

Dr. By: JG
Ch. By: DL
Date: 10/21/2022
Scale: As Noted
Job No. 21-199

C3.0

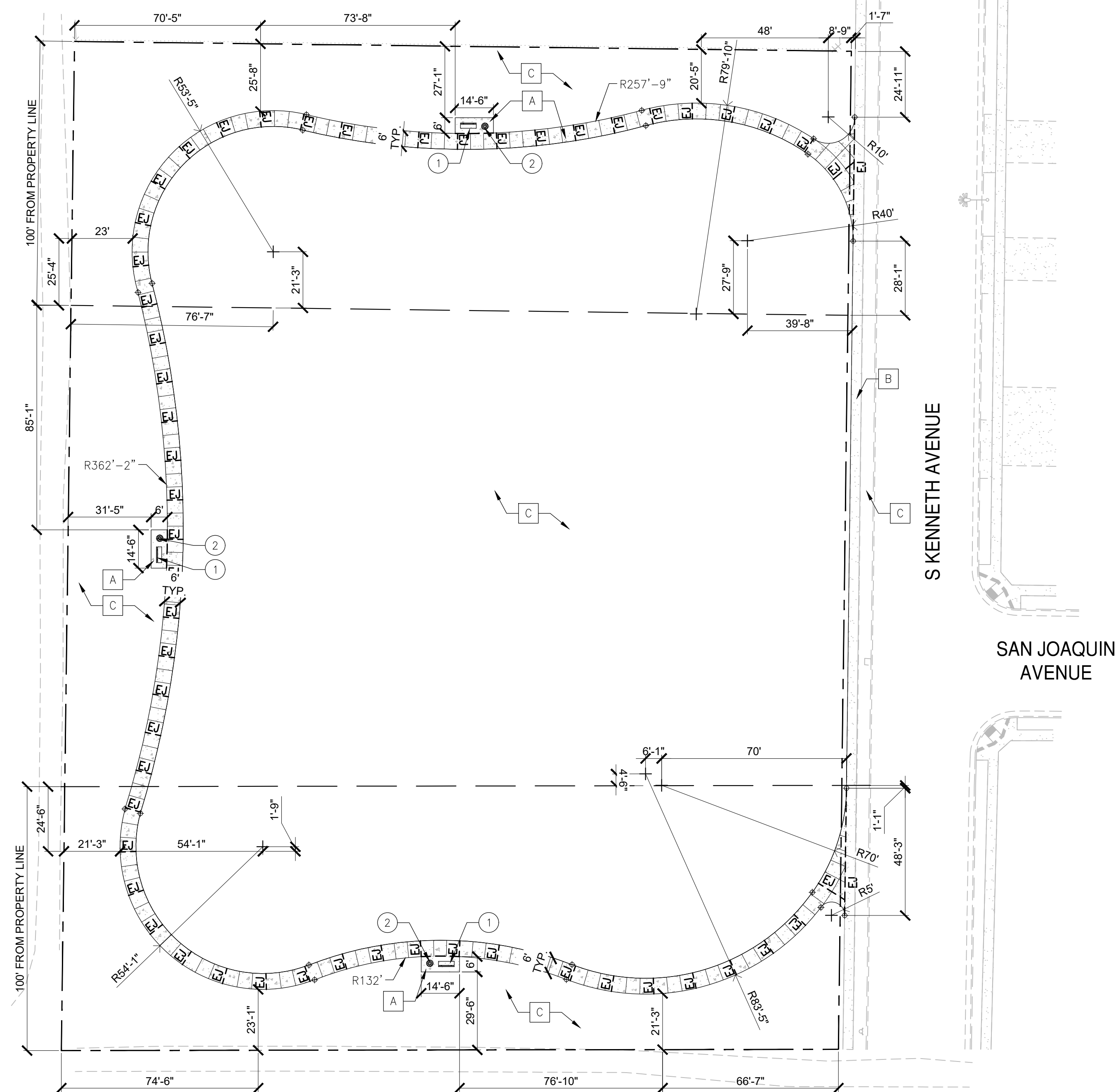


**KERMAN NORTHWEST PARK
CITY OF KERMAN**

PROJECT TITLE F

Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

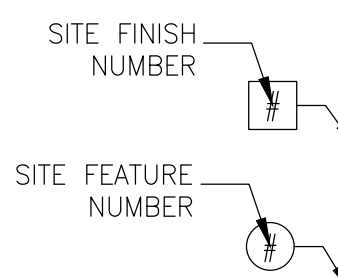
L1.0



FINISH	DESCRIPTION	COLOR	QUANTITY	SUPPLIER / INFORMATION	DET. REF.
A	CONCRETE FLATWORK	STANDARD GRAY	5,651 S.F.	MEDIUM BROOM FINISH / DAVIS COLORS / DAVISCOLORS.COM / P: (800) 356-4848	1&2/L4.0
B	EXISTING CONCRETE FLATWORK				
C	PLANTING AREA, SEE PLANTING PLAN, SHEET L3.0				

ITEM	DESCRIPTION / MODEL	COLOR	QUANTITY	MANUFACTURER / SUPPLIER / INFORMATION	DET. REF.
①	BENCH (FUTURE)	TBD	3	BY OTHERS	—
②	TRASH RECEPTACLE	BY OTHERS	3	BY OTHERS	—

CONCRETE JOINT LEGEND



EJ = EXPANSION JOINT
SJ = CONTROL JOINT
CJ = COLD JOINT

A diagram of a cylinder. A horizontal line segment is labeled "RADIUS" with an arrow pointing to the right. Below it, a horizontal line segment is labeled "LENGTH" with diagonal tick marks at both ends.

ARC RADIUS

DIMENSION

ALIGN

ORIGIN OF RADIUS

START/END POINT OF ARC



SCALE: 1" = 30'

NOT FOR CONSTRUCTION

100% SUBMITTAL

- INSPECTIONS**
1. CONTACT CITY OF KERMAN, 48HRS PRIOR TO TEST TO SCHEDULE ALL IRRIGATION INSPECTIONS, REQUIRED TESTING:
- A. PRESSURE TEST: MAINLINE SHALL HOLD 120 PSI MIN. FOR 3 HOURS IF LEAKS OCCUR, REPLACE FAULTY COMPONENTS AND RE-TEST. CONTRACTOR SHALL PROVIDE MAINLINE & WIRE AS-BUILT'S TO LANDSCAPE ARCHITECT/OWNER PRIOR TO BACKFILLING TRENCH AFTER PRESSURE TEST IS COMPLETE.
- B. COVERAGE TEST: COVERAGE TEST SHALL BE PERFORMED PRIOR TO INSTALLATION OF ANY PLANT MATERIAL. IRRIGATION AUDIT SHALL BE PERFORMED AT THIS POINT, BY CERTIFIED IRRIGATION AUDITOR. CONTRACTOR SHALL PROVIDE RESULTS TO LANDSCAPE ARCHITECT/OWNER AND MAKE ALL NECESSARY CORRECTIONS PRIOR TO PLANTING. FAILURE TO DO SO SHALL MAKE ALL REQUIRED COSTS ASSOCIATED WITH ADJUSTING IRRIGATION THE CONTRACTOR'S RESPONSIBILITY.

1. CONTRACTOR SHALL INVESTIGATE AND DETERMINE THE

1. CONTROLLER LOCATION SHOWN ON DRAWINGS IS AN APPROXIMATE LOCATION. CONTRACTOR SHALL CONFIRM LOCATION OF CONTROLLER WITH OWNER PRIOR TO CONTROLLER INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONNECTIONS BETWEEN THE 120 VOLT POWER SOURCE TO THE CONTROLLER, VALVES, AND ADDITIONAL IRRIGATION EQUIPMENT. FAILURE TO OBTAIN APPROVAL OF CONTROLLER ASSEMBLY LOCATION PRIOR TO INSTALLATION WILL RESULT IN OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.
2. A LAMINATED, WATERPROOF, LEGIBLE, CHART OF THE IRRIGATION SYSTEM, DRAWING #17 SHALL BE PROVIDED TO THE OWNER AND ONE ADHERED TO THE INSIDE COVER OF THE CONTROLLER. ALL VALVES AND THEIR RESPECTIVE COVERAGE AREAS SHALL BE IDENTIFIED WITH SEPARATE AND DISTINCT COLORS.

1. ALL HEADS SHALL INCLUDE A FACTORY INSTALLED DRAIN CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
2. ALL HEADS SHALL INCLUDE A FACTORY INSTALLED PRESSURE REGULATOR. SEE LEGEND FOR SPECIFIED PRESSURE LEVELS OF INDIVIDUAL HEADS.
3. ALL HEADS AND NOZZLES SHALL BE INSTALLED PER PLANS. AFTER INSTALLATION, ADJUST ALL ARCS AND THROWS FOR EVEN COVERAGE AND TO PREVENT OVERSPRAY ONTO PAVEMENT, BUILDINGS, WALLS, OR EQUIPMENT. THIS INCLUDES BUT IS NOT LIMITED TO: ADJUSTMENTS TO THE RADIUS REDUCTION SCREW, SCREEN REPLACEMENTS, AND APPROVED NOZZLE REPLACEMENTS. ANY VERTICAL OBSTRUCTIONS NOT NOTED ON THESE PLANS ARE TO BE REPORTED TO THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WORK.
4. ALL GOOD TRUCKS TO COMPACT SOIL PRIOR TO LEVELING HEADS. ALL HEADS SHALL BE INSTALLED FLUSH AND PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE NOTED OR DETAILED.

1. VALVE AND QUICK COUPLER LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE LOCATIONS. CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF VALVES AND QUICK COUPLERS FOR APPROVAL BY OWNER PRIOR TO INSTALLATION.
2. VALVES AND QUICK COUPLERS SHALL BE GROUPED TOGETHER AND INSTALLED IN SHRUB BEDS, UNLESS OTHERWISE INDICATED.
3. INSTALL ALL VALVES AND QUICK COUPLERS PER PLAN DETAILS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

1. INSTALL ALL DRIPLINE AND EMITTERS PER DETAILS AND PLANS. TUBING TO BE INSTALLED 1-2" BELOW SOIL SURFACE WITH GALVANIZED TIE-DOWN STAKES AT 24" INTERVALS.

1. PIPING AND EQUIPMENT LAYOUT IS SHOWN SCHEMATICALLY FOR VISUAL CLARITY. PIPING AND EQUIPMENT SHOWN WITHIN PAVED AREAS SHALL BE INSTALLED WITHIN AREAS DESIGNATED FOR LANDSCAPE. MAINLINES SHOULD BE LOCATED A MINIMUM OF 18" OFF ADJACENT PAVEMENT OR OTHER OBSTACLES.
2. NON-PRESSURIZED LINES SHALL BE BURIED WITH A MINIMUM OF 18" COVER. PRESSURIZED MAINLINES SHALL BE BURIED WITH A MINIMUM OF 24" COVER. UNDERGROUND WARNING TAPE READING "CAUTION, BURIED IRRIGATION LINE BELOW" SHALL BE INSTALLED 12" ABOVE PRESSURIZED LINES.
3. PIPE SIZES SHALL BE INSTALLED PER PLANS. SMALLER PIPE SIZES AND THICKNESS ARE NOT ACCEPTABLE; LARGER PIPE SIZES MAY BE APPROVED.
4. SOLVENT WELD FITTINGS FOR MAINLINES 2" AND LARGER SHALL BE SCHEDULE 80 PVC. ALL THREADED FITTINGS SHALL BE SCHEDULE 80 PVC.

1. SCHEDULE 40 PVC SLEEVES SHALL PROVIDED FOR ALL MAINLINE PIPING, LATERAL LINE PIPING AND WIRING UNDER PAVEMENT. LATERAL LINE SLEEVES NOT REQUIRED UNDER PAVEMENT SPANNING LESS THAN 6'. ANY LATERAL LINES NOT REQUIRING A SLEEVE SHALL BE INSTALLED PRIOR TO PAVING AND SHALL BE SCHEDULE 40 PVC.
2. SLEEVES SHALL BE SIZED PER PLAN OR TWICE THE SIZE OF THE PIPE WHEN NOT SPECIFIED. ELECTRICAL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES. PIPING AND WIRING SHALL BE IN SEPARATE SLEEVES.
3. SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND PAVED SURFACES.

1. I HAVE COMPLIED WITH THE CRITERIA OF THE
(CALIFORNIA/**KERMAN** WATER CONSERVATION) ORDINANCE
AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN
THE IRRIGATION DESIGN PLAN.

1. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:
 - A. PROJECT INFORMATION STATE THAT CONTAINS:
 1. DATE
 2. PROJECT NAME
 3. PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.
 4. PROJECT ADDRESS
 5. PROPERTY OWNER NAME, TELEPHONE NUMBER AND MAILING ADDRESS.
 - B. CERTIFICATION BY THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
 1. WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION
 2. A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
 - B. IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
 - C. LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
 - D. IRRIGATION AUDIT REPORT.
 - E. SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL REPORT RECOMMENDATIONS.

	SEE SLEEVING NOTES FOR SIZE
	SLEEVE
	SCH 40 PVC PIPE, SIZE PER PLAN.
	2" MAINLINE SCHEDULE 40 PVC PIPE
	¾" SCHEDULE 40 PVC PIPE
	1" SCHEDULE 40 PVC PIPE
	1¼" SCHEDULE 40 PVC PIPE

		VALVE NUMBER
Ø	Ø.ØØ GPM	Ø.ØØ APPLICATION RATE (IN/H)
Ø"	ØØ PSI	ROTOR-DRIP-BUBBLER
		VALVE SIZE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	DETAIL
ROTORS					
	RAIN BIRD 5006-PL-PC-SAM-R-SS-MPR TURF ROTOR, 6" POP-UP, STAINLESS STEEL RISER, WITH FLOW SHUT-OFF DEVICE. MATCHED PRECIPITATION ROTOR (MPR NOZZLE), ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE, AND IN-STEM PRESSURE REGULATOR.	118	35	VARIES	6/L5.1
BUBBLERS					
	(1) RAIN BIRD RWS-M-B-C-1401 W/ RWS-GRATE-P & RWS-SOCK AND (1) RAIN BIRD 1401	34	20	VARIES	CITY STD
	RAIN BIRD RWS-M-B-C-1401 W/ RWS-GRATE-P & RWS SOCK (2 PER TREE)	30	30	.25/EA	CITY STD
DRIP COMPONENTS					
	PIPE TRANSITION POINT PIPE TRANSITION POINT FROM PVC LATERAL TO QF HEADER	14			7/L5.1
	RAIN BIRD XFF-MA-050 W/ 1/2" SCH. 40 THREADED CAP FLUSH VALVE, PLUMBED TO FLUSH MANIFOLD AT LOW POINT.	28			8/L5.1
	RAIN BIRD XFF-TFA-050 W/ AR050 I AIR RELIEF VALVE IN RAIN BIRD STANDARD VALVE BOX WITH LOCKABLE LID.	14			9/L5.1
	RAIN BIRD OPERIND POP-UP OPERATION INDICATOR	28			10/L5.1
	RAIN BIRD XFS-P-12-06 (18" LINE SPACING) SHRUB AREAS	20,857 L.F.	0.61 GPH		7/L5.1 & 6/L5.2
IRRIGATION EQUIPMENT					
	RAIN BIRD 100-PESB-R, W/TBOS POTTED LATCHING SOLENOID, W/ LCRBY-100D AND PSI-M40X-100 1" DURABLE REMOTE CONTROL VALVE W/ SCRUBBER MECHANISM TECHNOLOGY, LATCHING SOLENOID, DISK Y-FILTER AND 40 PSI PRESSURE REGULATOR. USE RAIN BIRD 2-WIRE. USE RAIN BIRD 2-WIRE DECODER CDEC-ISP-1, CDEC-ISP-2 (SIZE AS NEEDED). INSTALL IN RAIN BIRD STANDARD VALVE BOX W/ LOCKABLE LID.	14			CITY STD
	RAIN BIRD PESB-R W/TBOS POTTED LATCHING SOLENOID 1", 1-1/2" AND 2" DURABLE REMOTE CONTROL VALVE W/ SCRUBBER MECHANISM TECHNOLOGY AND LATCHING SOLENOID (SEPARATE). USE RAIN BIRD 2-WIRE DECODER CDEC-ISP-1, CDEC-ISP-2 (SIZE AS NEEDED). INSTALL IN RAIN BIRD STANDARD VALVE BOX W/ LOCKABLE LID.	31			5/L5.0
	RAIN BIRD 33-DNP QUICK COUPLER VALVE. PLACE IN RAIN BIRD STANDARD VALVE BOX W/ LOCKABLE LID. INSTALL EVERY 200'.	6			5/L5.1
	NIBCO T-113 K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER. INSTALL IN STANDARD VALVE BOX W/ LOCKABLE LID.	13			CITY STD
	FSI-B FLOW SENSOR 1-1/2" 1-1/2" CREATIVE SENSOR TECHNOLOGY BRASS FLOW SENSOR. INSTALL IN A RAIN BIRD STANDARD VALVE BOX W/ LOCKABLE LID.	1			3/L5.1
	RAIN BIRD 200-EFB-CP 2" W/TBOS POTTED LATCHING SOLENOID 2" NORMALLY CLOSED MASTER VALVE. USE TORO 2-WIRE DECODER CDEC-ISP-1. INSTALL IN RAIN BIRD STANDARD VALVE BOX W/ LOCKABLE LID.	1			2/L5.1
	BACKFLOW PREVENTER IN ENCLOSURE	1			CITY STD
	WATER METER (POTABLE)	1			CITY STD
	HUNTER I-CORE 48-STATION, TWO-WIRE DECODER COMMERCIAL CONTROLLER. INSTALL IN STAINLESS STEEL ENCLOSURE	1			1/L5.1
	WEATHER SENSOR, MOUNTED ON CONTROLLER STAINLESS STEEL ENCLOSURE	1			7/L5.2
PIPING					
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.	7,878 L.F.			11/L5.1 & 3/L5.0
	IRRIGATION MAINLINE: 2" PVC SCHEDULE 40 PVC SCH 40 IRRIGATION PIPE. ALL MAINLINE FITTINGS SHALL BE SCH 80 PVC.	1,883 L.F.			CITY STD
	DRIP HEADER 1-1/4" DISTRIBUTION TUBE W/ BARBS PRE-INSTALLED @ 12" OR 18" O.C. (SIZE AS NEEDED)	356 L.F.			7/L5.1 & 3/L5.0
	PIPE SLEEVE: PVC SCHEDULE 40	80 L.F.			11/L5.1 & 3/L5.0
	1" PVC SCHEDULE 40 ELECTRICAL CONDUIT FOR 2-WIRE PATH, WITH PAIGE ELECTRIC P7072D COMMUNICATION CABLE	1,276 L.F.			4&11/L5.1 & 3/L5.0
	1" PVC SCHEDULE 40 ELECTRICAL CONDUIT FOR FLOW SENSORS, WITH (1) PAIGE ELECTRIC PE89 COMMUNICATION CABLE	66 L.F.			11/L5.1 & 3/L5.0



IRRIGATION LEGEND AND NOTES

SHEET DESCRIPTION

Job No. 21-199

120

L2.0

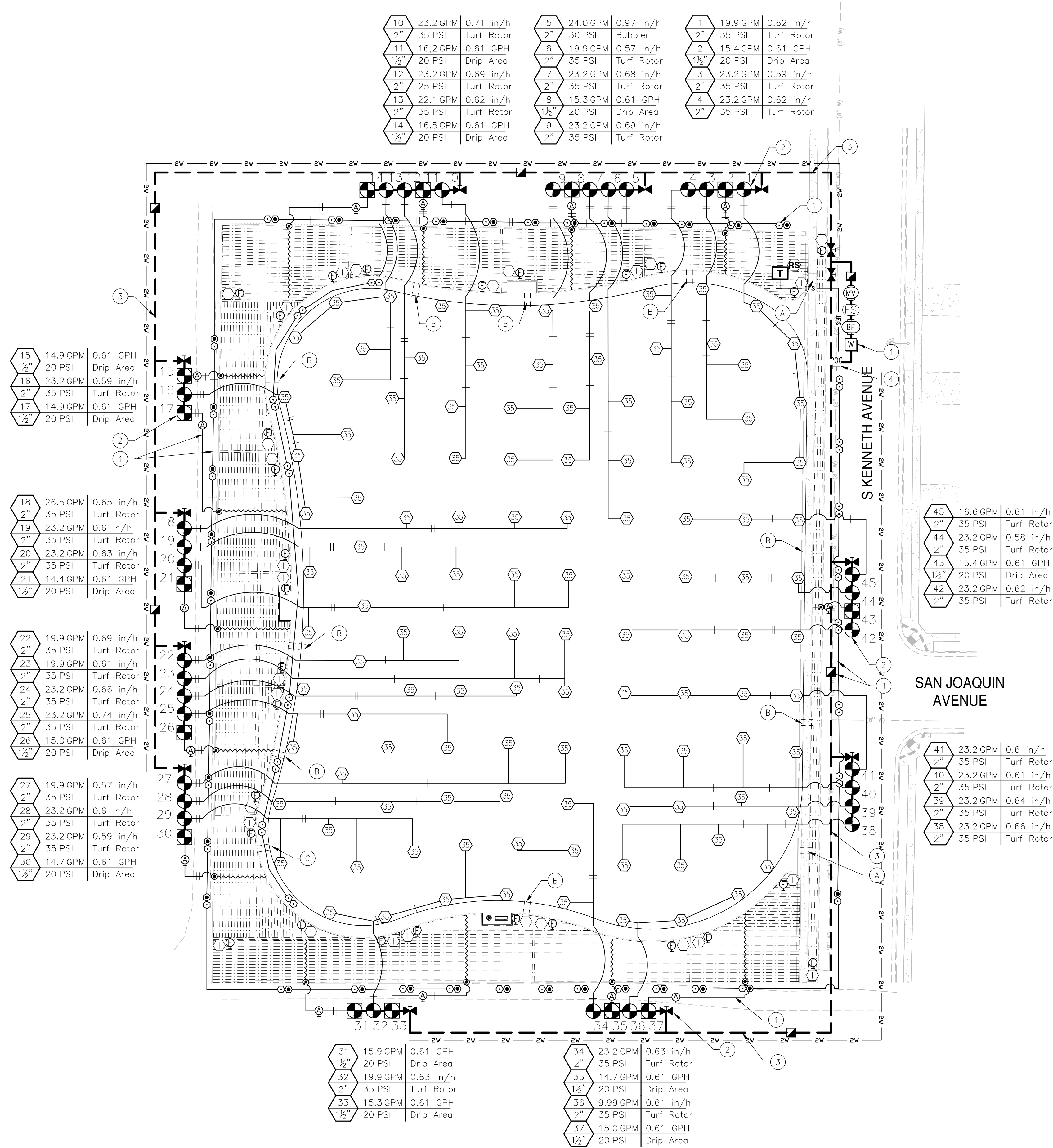
100% SUBMITTAL

SHEET NOTES

- IRRIGATION EQUIPMENT SHOWN OUTSIDE OF PROPERTY LINE FOR GRAPHIC CLARITY. INSTALL IN ADJACENT PLANTING AREA, TYP.
- IRRIGATION VALVES SHOWN OUTSIDE OF PROPERTY AND FENCE LINE FOR GRAPHIC CLARITY. INSTALL IN ADJACENT PLANTING AREA, TYP.
- IRRIGATION MAINLINE SHOWN OUTSIDE OF PROPERTY AND FENCE LINE FOR GRAPHIC CLARITY. INSTALL IN ADJACENT PLANTING AREA, TYP.
- CONNECT TO EXISTING 8" CITY WATER MAINLINE.

SLEEVING NOTES

- (A) (1)3" MAINLINE SLEEVE W/(1)3" WIRE SLEEVE AND (1)3" LATERAL LINE SLEEVE
(B) (3)3" LATERAL LINE SLEEVES
(C) (2)3" LATERAL LINE SLEEVES



NOT FOR CONSTRUCTION

100% SUBMITTAL

Appendix B – Sample Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 51.2

Hydrozone # /Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d
Regular Landscape Areas							
TREES	0.50	RWS	0.81	0.62	1,385	855	27,139
SHRUBS	0.24	DRIP	0.81	0.30	27,231	8,169	259,326
				Totals	28,616	9,024	286,465
Special Landscape Areas							
GRASS				1	79,615	79,615	2,527,299
				1			
				1			
				Totals	79,615	79,615	2,527,299
						ETWU Total	2,813,764
						Maximum Allowed Water Allowance (MAWA) ^e	2,936,072

^aHydrozone #/Planting Description
E.g.
1.) front lawn
2.) low water use plantings
3.) medium water use planting

^bIrrigation Method
overhead spray
or drip

^cIrrigation Efficiency
0.75 for spray head
0.81 for drip

^dETWU (Annual Gallons Required) = ETo x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas.

^eMAWA (Annual Gallons Allowed) = (ETo) (0.62) ((ETAF x LA) + ((1-ETAF) x SLA))

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	B ÷ A

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	(B+D) ÷ (A+C)

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

IRRIGATED LANDSCAPE WATER EFFICIENCY TABLE

WATER BUDGET CALCULATIONS

MAXIMUM APPLIED WATER ALLOWANCE

MAWA=(ETo)(0.62)((0.45xLA)+((1.0-0.45)xSLA))

LOCAL ETo= 51.2

LA = 108,231

SLA = 79,615

MAWA TOTAL= 2,936,072 GAL.

ESTIMATED TOTAL WATER USE

ETWU=(ETo)(0.62)((PFxHA)/IE)+SLA

LOCAL ETo= 51.2

PF = SEE BELOW

LA = 108,231

SLA = 79,615

ETWU TOTAL= 2,813,764 GAL.

HYDROZONE INFORMATION TABLE

HYDROZONE TAG	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (SF)	ETAF X AREA	ESTIMATED TOTAL WATER USE (ETWU)
VALVE #: 5 (TREE/RWS/MODERATE)	0.50	RWS	0.81	0.62	1,385 SF	855	27,139 GAL
VALVE #: 2,8,11,14,15,17,21,26,30,31,33,35,37,43 (SHRUB/DRIP/LOW)	0.24	IN-LINE DRIP	0.81	0.30	27,231 SF	8,169	259,326 GAL
					TOTAL AREA= 28,616 SF	TOTAL= 9,024	TOTAL = 286,465 GAL.

LANDSCAPE AREAS

SPECIAL LANDSCAPE AREAS

VALVE #: 1,3,4,6,7,9,10,12,13,14,16,18,19,20,22,23,24,25,27,28,29,32,34,36,38,39,40,41,42,44,45 (GRASS/ROTOR/HIGH)				1	79,615 SF	79,615	2,527,299 GAL
					TOTAL AREA= 79,615 SF	TOTAL= 79,615	TOTAL = 2,527,299 GAL.

* THIS INFORMATION DERIVED FROM PLANT FACTOR DESIGNATIONS IN THE WUCOLS IV DOCUMENT.

IRRIGATION SCHEDULE

SCHEDULING NOTES & RUN TIMES

WATERING CYCLES AND DURATION DURING PRE-ESTABLISHMENT PERIODS SHOULD BE ADJUSTED PER PLANT PROVIDER'S RECOMMENDATIONS AND CURRENT WEATHER CONDITIONS.

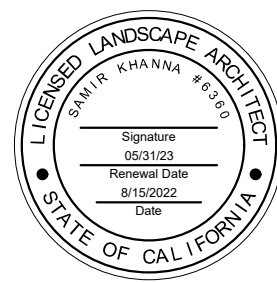
POST ESTABLISHMENT IRRIGATION SCHEDULE CALCULATED USING AVERAGE CLIMATE CONDITIONS AND AVERAGE PLANT REQUIREMENTS. THIS SCHEDULE SERVES AS A BASE FOR CONTROLLER PROGRAMMING. EXTREME AND SITE SPECIFIC CONDITIONS WILL RESULT IN ETo ADJUSTMENTS AND MAY REQUIRE ADJUSTMENTS TO SCHEDULE FREQUENCY/DURATION.

IRRIGATION CONTROLLER SHALL BE CONFIGURED TO RUN ALL ZONES ON SOAK CYCLES.

STATION RUN-TIMES ARE SHOWN IN MINUTES PER DAY (MIN) AND DAYS PER WEEK (DW)

WINTER		SPRING		SUMMER		FALL	
PRE-EST.	POST-EST.	PRE-EST.	POST-EST.	PRE-EST.	POST-EST.	PRE-EST.	POST-EST.
5 MIN/2 DW	10 MIN/1 DW	18 MIN/2 DW	35 MIN/1 DW	22 MIN/2 DW	43 MIN/1 DW	9 MIN/2 DW	16 MIN/1 DW
4 MIN/4 DW	8 MIN/2 DW	14 MIN/4 DW	29 MIN/2 DW	18 MIN/4 DW	36 MIN/2 DW	7 MIN/4 DW	15 MIN/2 DW
7 MIN/2 DW	14 MIN/1 DW	26 MIN/2 DW	52 MIN/1 DW	33 MIN/2 DW	67 MIN/1 DW	14 MIN/2 DW	27 MIN/1 DW

Ref. & Rev.



Kerman Northwest Park
City of Kerman
MWEL CALCS AND IRRIGATION SCHEDULE

PROJECT TITLE

SHEET DESCRIPTION

Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

L2.2

NOT FOR CONSTRUCTION

100% SUBMITTAL

GENERAL PLANTING NOTES

1. ANY AND ALL PORTIONS OF THIS WORK ARE SHALL CONSTRUCTED IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS AS SET FORTH BY LOCAL MUNICIPALITIES, STATE AND NATIONAL AGENCIES. IN THE EVENT THERE IS A CONFLICT WITH THESE PLANS AND THE AGENCIES STATED ABOVE, THE GOVERNING BODY'S REGULATIONS SHALL PREVAIL.
2. PRIOR TO BIDDING AND COMMENCEMENT OF SITE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND EXAMINE CONDITIONS OF THE PROJECT SITE, VERIFYING LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES. LOCATIONS OF ITEMS SHOWN ON THESE PLANS ARE ONLY APPROXIMATIONS. ANY DISCREPANCIES DISCOVERED SHALL BE REPORTED TO THE **LANDSCAPE ARCHITECT/OWNER**. FAILURE TO REPORT DISCREPANCIES TO THE **CITY OF KERMAN** BEFORE COMMENCEMENT OF SITE WORK IMPLIES ACCEPTANCE OF SITE CONDITIONS AND COSTS ASSOCIATED WITH CORRECTING PLANTING RELATED INSTALLATIONS.
3. CONTRACTOR TO PURCHASE AND PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE LANDSCAPE WORK (I.E. TREE PLANTING, LAWN HYDROSEEDING, ETC.) AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THESE ITEMS UNTIL THE PROJECT IS COMPLETED.
4. ALL SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES AND SHALL IMMEDIATELY INFORM THE **LANDSCAPE ARCHITECT/OWNER** OF ANY DISCREPANCY BETWEEN THE INFORMATION, NUMBERS PROVIDED ON THIS PLAN ARE FOR REFERENCE ONLY. THE NUMBER OF SYMBOLS SHOWN ON THE PLANS SHALL HAVE PRIORITY OVER THE NUMBERS GIVEN.

SOIL PREPARATION

1. THE LANDSCAPE CONTRACTOR SHALL INSPECT THE PLANTING AREAS FOR EXTREME COMPACTION. PARTICULARLY AROUND CONSTRUCTION AREAS, PROVIDE MEANS FOR RIPPING TO A DEPTH OF TWELVE INCHES (12") ALL COMPACTED AREAS TO INSURE PROPER ROOT GROWTH OF NEW PLANTINGS.
2. CULTIVATE TOP SIX INCHES (6") OF SOIL IN ALL AREAS.
3. NO SOIL SHALL BE HANDLED OR WORKED WHEN IN A MUDDY CONDITION.
4. FINISH GRADE SHALL BE APPROVED BY THE **LANDSCAPE ARCHITECT/OWNER** BEFORE ANY PLANTING BEGINS.
5. AN EVEN FINISHED GRADE WITH NO RIDGES OR DEPRESSIONS SHALL BE CAREFULLY MAINTAINED DURING OPERATIONS TO ENSURE PROPER SURFACE DRAINAGE PER GRADING PLANS.
6. LAWN AREAS SHALL BE FINE GRADED TO WITHIN ONE INCH (1") BELOW ADJACENT SURFACES.
12. CONTRACTOR SHALL COORDINATE AND GET PRICING FROM CALIFORNIA CONSERVATION CORPS AND TREE FRESNO FOR INSTALLATION OF PLANTING, IRRIGATION, AND DECOMPOSED GRANITE PATHS IN BID SUBMITTAL
13. CONTRACTOR SHALL COORDINATE WITH THE CITY OF KERMAN FOR HOSTING AN EVENT FOR TREE PLANTING ON THE PROJECT.
14. CONTRACTOR TO PERFORM SOILS ANALYSIS AND OBTAIN AMENDMENT RECOMMENDATIONS FROM SOIL LABORATORY PRIOR TO BEGINNING WORK AND AFTER BACKFILL SOIL HAS BEEN PLACED. CONTRACTOR SHALL AMEND SOILS PER MOST RECENT RECOMMENDATIONS. THE FOLLOWING MINIMUM AMENDMENTS SHALL BE INCORPORATED INTO ALL PLANTED AREAS AND TILLED INTO THE SOIL TO A DEPTH OF SIX TO TWELVE INCHES (6"-12"):

-RECOMMENDED FERTILIZER AND ELEMENTAL

AMENDMENTS.
-ORGANIC AMENDMENT AT 4 CUBIC YARDS PER 1,000 SF.

PLANT MATERIAL

1. SUBSTITUTIONS SHALL NOT BE PERMITTED UNLESS APPROVED BY THE **LANDSCAPE ARCHITECT/OWNER**.
2. PLANTS SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM NOXIOUS WEEDS, PLANT DISEASE, INSECT PESTS, OR THEIR EGGS, AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS AND COMPLY WITH ALL STATE AND LOCAL REGULATIONS.
3. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY EXCEPT AS AUTHORIZED BY THE OWNER'S REPRESENTATIVE. DO NOT "TOP" TREES.
4. ALL PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL BY THE THE CITY OF **KERMAN** PRIOR TO PLACEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY REJECTED MATERIAL AT THEIR COST.
5. CONTRACTOR SHALL PROVIDE PLANT MATERIAL DELIVERY TO JOB SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE, CARE, INSTALLATION, AND GUARANTEE FROM TIME OF DELIVERY. DO NOT STORE PLANT MATERIAL ON CONCRETE OR ASPHALT SURFACES.

HYDROSEEDING

1. PROVIDE HYDROMULCH COMPOSED OF WOOD CELLULOSE FIBER AND CONTAINING NO GERMINATIONS OR GROWTH-INHIBITING FACTORS. ENSURE A CONSISTENT TEXTURE WHICH DISPERSES EVENLY AND REMAINS SUSPENDED IN AGITATED WATER. PROVIDE WITH A TEMPORARY GREEN DYE.
2. PROVIDE ORGANIC BINDER SEEDING ADDITIVE OR EQUAL.
3. USE A BALANCED 15-15-15 BALANCED FERTILIZER.
4. INCORPORATE SEED UNIFORMLY IN HYDROMULCH AT THE SPECIFIED RATES PER ACRE. SEED SHALL BE OF THE LATEST CROP, LABELED IN ACCORDANCE WITH THE CALIFORNIA FOOD AND AGRICULTURE CODE. SUBSTITUTIONS OF THE SEED MIX ARE PERMISSIBLE ONLY WITH PRIOR APPROVAL OF THE **LANDSCAPE ARCHITECT/OWNER**. THE SEED MIX SHALL CONSIST OF THE FOLLOWING:

-TURF TYPE: TALL FESCUE 90%, PREMIUM KENTUCKY BLUEGRASS 10%. AVAILABLE THROUGH DELTA GROWERS, CONTACT NUMBER IS (209)469-7979.

HYDROSEEDING PROCEDURE

1. LAWN HYDROSEEDING SHALL BE ALLOWED ONLY DURING APPROPRIATE WEATHER CONDITIONS TO ASSURE GERMINATION.
2. SLURRY MIXTURE WHICH HAS NOT BEEN APPLIED WITHIN FOUR (4) HOURS OF MIXING SHALL NOT BE USED AND SHALL BE REMOVED FROM THE SITE.
3. AFTER APPLICATION, THE CONTRACTOR SHALL NOT OPERATE ANY EQUIPMENT OVER THE COVERED AREA.
4. APPLY IN A SLURRY FORM CONSISTING OF CELLULOSE FIBER, SEED, CHEMICAL ADDITIVES, COMMERCIAL FERTILIZER, AND WATER. WHEN HYDRAULICALLY SPRAYED ON SOIL, ENSURE THAT HYDROMULCH FORMS A BLOTTER-LIKE GROUNDCOVER IMPREGNATED UNIFORMLY WITH SEED AND FERTILIZER THAT ALLOWS THE ABSORPTION OF MOISTURE AND RAINFALL TO PERCOLATE TO THE UNDERLYING SOIL.
5. HYDRAULIC EQUIPMENT USED FOR THE APPLICATION OF SLURRY SHALL BE A COMMERCIAL TYPE HYDRO-SEEDER AND HAVE A BUILT-IN AGITATION SYSTEM WITH AN OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND, AND HOMOGENEOUSLY MIX SLURRY. DISTRIBUTION LINES SHALL BE LARGE ENOUGH TO PROVIDE EVEN DISTRIBUTION OF THE SLURRY OVER THE GROUND. THE SLURRY TANK SHALL HAVE A MINIMUM CAPACITY OF 1,000 GALLONS AND SHALL BE MOUNTED ON A TRAVELING UNIT WHICH WILL PLACE THE SLURRY TANK

- AND SPRAY NOZZLES WITHIN SUFFICIENT PROXIMITY TO THE AREAS TO BE SEEDD SO AS TO PROVIDE UNIFORM DISTRIBUTION WITHOUT WASTE.
6. SPRAY WITH A UNIFORM VISIBLE COAT BY USING THE GREEN COLOR OF THE MULCH AS A GUIDE. APPLY THE SLURRY IN A SWEEPING MOTION, IN AN ARCHED STREAM SO AS TO FALL LIKE RAIN, ALLOWING THE WOOD FIBERS TO BUILD ON EACH OTHER UNTIL A GOOD COAT IS ACHIEVED AND THE MATERIAL IS SPREAD AT REQUIRED RATES.
7. CLEAN UP SPILLED SLURRY ON SIDEWALKS, CONCRETE STRUCTURES, PLANTS, ARCHITECTURAL FEATURES, SITE AMENITIES AND STREETS.
8. MIX SLURRY COMPONENTS PER MANUFACTURER RECOMMENDATIONS PER ACRE.

WEED CONTROL

1. PRIOR TO HYDROSEEDING THE CONTRACTOR SHALL SPRAY A POST EMERGENT HERBICIDE TO KILL EXISTING WEEDS. ALLOW ONE (1) WEEK FOR WEEDS TO COMPLETELY DIE AND REMOVE FROM SITE.
2. FOLLOWING REMOVAL OF WEEDS, IRRIGATE THE SITE KEEPING SOIL MOIST UNTIL GERMINATION OF THE NEW CROP OF WEEDS IS A MINIMUM OF ONE INCH (1") TALL. REPEAT THE HERBICIDE TREATMENT. AFTER THE SECOND TREATMENT AND AFTER THE REQUIRED WAIT PERIOD (AS SPECIFIED BY HERBICIDE MANUFACTURER) HYDROSEEDING MAY BE PERFORMED.
3. THE CONTRACTOR SHALL APPLY A BROADLEAF HERBICIDE FORTY-FIVE (45) DAYS AFTER SEEDING BUT NOT BEFORE THE THIRD MOWING. THE HERBICIDE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED DIRECTIONS.
4. AFTER PLANTING SHRUB BEDS AND PRIOR TO TOPDRESSING, APPLY RONSTAR-G (OR EQUAL) PRE-EMERGENT WEED CONTROL IN THE AMOUNTS SPECIFIED BY THE MANUFACTURER.

PLANTING OPERATIONS

1. ALL PLANTS SHALL BE PLANTED, STAKED, AND TIED ACCORDING TO THESE PLANS.
2. STAKE TREES AT THE LOWEST POINT WHERE THE TREE CAN SUPPORT ITSELF.
3. THOROUGHLY WATER TREES, SHRUBS, AND GROUNDCOVER IMMEDIATELY AFTER PLANTING.
4. RELOCATION OF TREES: IN THE EVENT THAT UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN EXCAVATION OF THE TREE HOLES, ALTERNATE LOCATIONS WILL BE SELECTED BY THE **LANDSCAPE ARCHITECT/OWNER**.
5. ALL TREES SHALL BE PRUNED TO REMOVE BROKEN AND DAMAGED LIMBS AND BRANCHES. NO OTHER PRUNING IS APPROVED.
6. ROOT BARRIERS SHALL BE REQUIRED FOR ALL TREES PLANTED WITHIN 10' OF A PAVED SURFACE. SEE DETAIL 5 ON SHEET L5.2 FOR MORE INFORMATION.
7. 3" TOPDRESSING OF DECORATIVE MULCH (BROWN) BY **GROVER ENVIRONMENTAL PRODUCTS 1(800)-585-4401** (MAXIMUM 2 INCH LENGTHS) SHALL BE INSTALLED PER DETAILS. WASH EXCESS BARK OFF LEAVES AND DO NOT ENGULF STEMS OF PLANTS AND GROUNDCOVER.
8. FERTILIZER TABLETS SHALL BE BEST-PAKS (20-10-5) PLANTER PACKETS PLACED IN ALL PLANTING PITS PER DETAILS.

PLANT ESTABLISHMENT AND MAINTENANCE PERIODS

1. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A PLANT ESTABLISHMENT PERIOD OF **THIRTY (30)** DAYS COMMENCING AT COMPLETION OF PLANT MATERIAL INSTALLATION.
2. APPROXIMATELY 30 DAYS AFTER INITIAL PLANTING, APPLY A BALANCED FERTILIZER TO TURF AND SHRUB AREAS PER MANUFACTURER'S RECOMMENDED RATES.

3. FOLLOWING THE PLANT ESTABLISHMENT PERIOD, THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE INSTALLATION FOR **SIXTY (60)** DAYS INCLUDING MOWING AND MAINTENANCE OF TURF, SHRUBS, TREES, FERTILIZATION, REMOVING CLIPPINGS FROM SITE, EDGING, AND THE CONTROL OF WEEDS. ADJUSTMENTS TO THE IRRIGATION SYSTEM FOR TIME AND DURATION OF FLOWS AND REPLACEMENT AND ADJUSTMENTS TO HEADS AND NOZZLES ARE ALSO REQUIRED.
4. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR DISEASE AND PEST CONTROL DURING THE ESTABLISHMENT AND MAINTENANCE PERIODS.

ACCEPTANCE

1. COMPLETED WORK WILL BE REVIEWED AND OBSERVED BY **LANDSCAPE ARCHITECT/OWNER**. ANY MODIFICATIONS REQUIRED TO MEET THE STANDARDS AS SET FORTH IN THESE LANDSCAPE DOCUMENTS SHALL BE SUBMITTED TO THE LANDSCAPE CONTRACTOR AND CORRECTED AT THE LANDSCAPE CONTRACTOR'S EXPENSE. CORRECTED ITEMS SHALL BE REVIEWED AND APPROVED BY OWNER.
2. UPON FINAL ACCEPTANCE, LANDSCAPE CONTRACTOR SHALL INSTRUCT MAINTENANCE PERSONNEL AS TO THE OPERATION AND MAINTENANCE OF ALL LANDSCAPING.

GUARANTEE

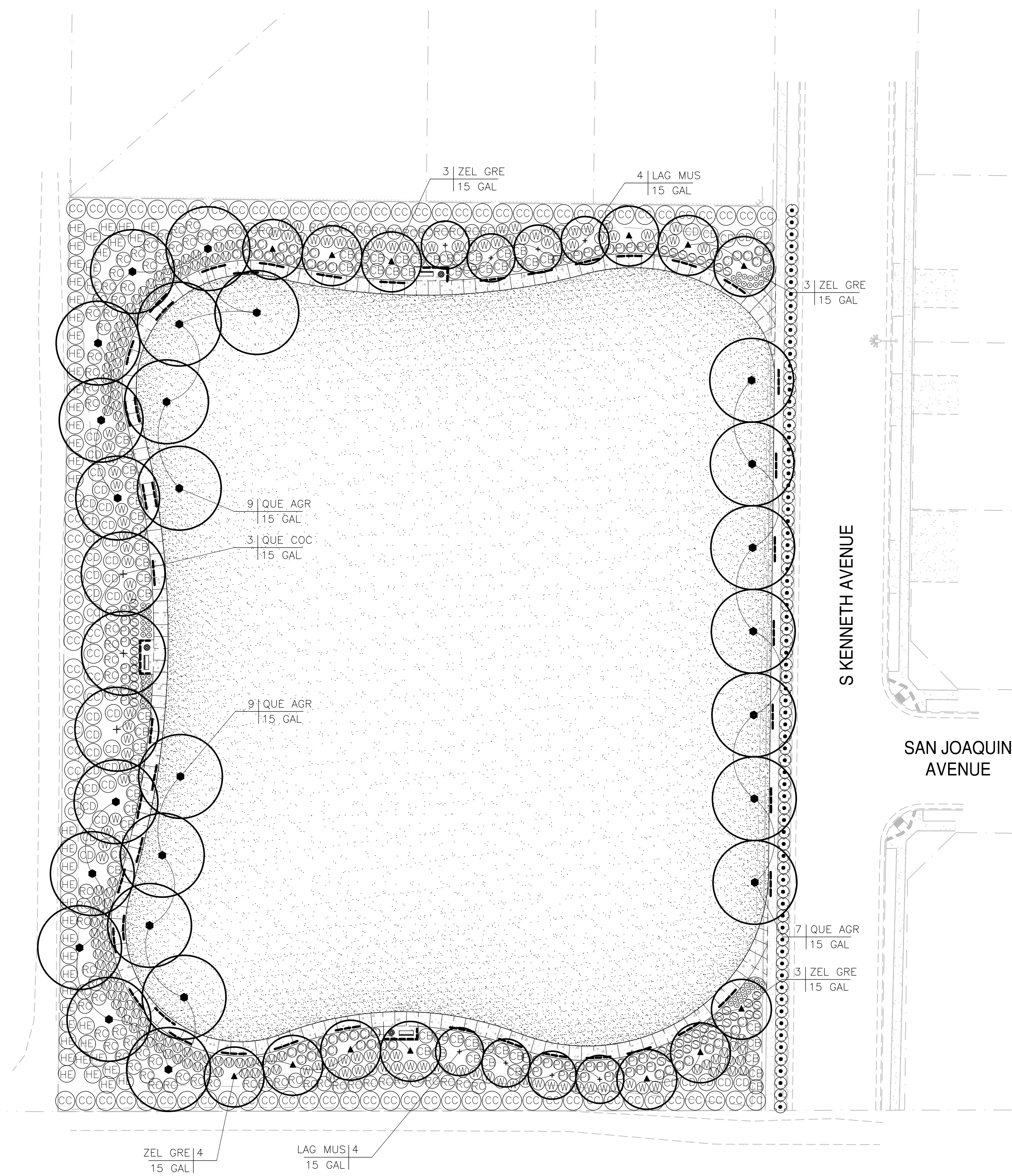
1. TURF/SOD CONTRACTOR SHALL GUARANTEE COMPLETE COVERAGE OF THE AREAS TO BE TURF SODDED.
2. ALL TREES AND SHRUBS SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR TO LIVE AND GROW IN A HEALTHY UPRIGHT POSITION DURING THE ESTABLISHMENT AND MAINTENANCE PERIODS. REPLACEMENT MATERIAL WILL BE AT THE LANDSCAPE CONTRACTOR'S EXPENSE EXCEPT IF VANDALIZED OR STOLEN.

WATER CONSERVATION STATEMENT

1. I HAVE COMPLIED WITH THE CRITERIA OF THE (STATE/CITY WATER CONSERVATION) ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

CLOSE-OUT DOCUMENTS

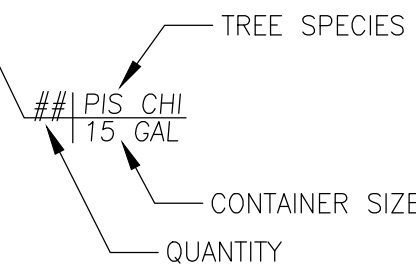
1. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:
- A. PROJECT INFORMATION SHEET THAT CONTAINS:
1. DATE
2. PROJECT NAME
3. PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.
4. PROJECT ADDRESS
5. PROPERTY OWNER NAME, TELEPHONE NUMBER AND MAILING ADDRESS.
- B. CERTIFICATION BY THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
1. WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION.
2. A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
- C. IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
- D. LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
- E. IRRIGATION AUDIT REPORT.
- F. SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOILS REPORT RECOMMENDATIONS.



PLANT LIST ABBREVIATIONS

BR GR	BRANCHED TO GROUND	MATCH	MATCHED SIZE, FORM, CALIPER, BRANCHING AND CULTIVAR. SELECT FORM ONE LOT, ONE GROWER, FOR GUARANTEED CONSISTENCY THROUGH LIFE OF PLANTS. IN GENERAL PLANTS WITHIN A GROUP OR AREA ARE TO BE MATCHED, UNLESS NOTED OTHERWISE.
DV	DWARF VARIETY	SL	SINGLE, STRAIGHT, DOMINANT LEADER
F&B	FULL DENSE, BUSHY, VIGOROUS PLANTS, WITH YOUNG GROWTH CLOSELY SPACED ON BRANCHES	TRI SP	TRIANGULARLY SPACED
FGR	FREE OF GIRDLING ROOTS	TTW	TRAIN TO WALL
FLW	FLOWER	VAR	VARIEGATED SPECIES
GAL	GALLON CAN		
HI BR	HIGH BRANCHED		
LO BR	LOW BRANCHED		

TREE CALLOUTS



SCALE: 1" = 30'

PLANT LEGEND

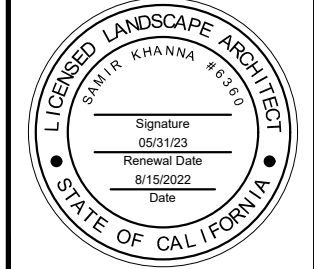
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	WATER USE	APPROX. SPACING	COMMENTS/NOTES
TREES							
LAG MUS	LAGERSTROEMIA X 'MUSKOGEE'	GRAPE MYRTLE LIGHT LAVENDER	15 GAL	8	LOW	PER PLAN	F&B, FGR, PURPLE FLW, HI BR, MATCH
QUE AGR	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	25	LOW	PER PLAN	F&B, FGR, HI BR, MATCH
QUE COC	QUERCUS COCCINEA	SCARLET OAK	15 GAL	3	MODERATE	PER PLAN	F&B, FGR, HI BR, MATCH
ZEL GRE	ZELKOVA SERRATA 'GREEN VASE'	SAWLEAF ZELKOVA	15 GAL	13	LOW	PER PLAN	F&B, FGR, HI BR, MATCH
SHRUBS							
●	ARCTOSTAPHYLOS X 'EMERALD CARPET'	EMERALD CARPET MANZANITA	5 GAL	76	LOW	60" O.C.	F&B, FGR, WHITE FLW, MATCH
CC	CARPENTERIA CALIFORNICA	BUSH ANEMONE	1 GAL	91	LOW	60" O.C.	F&B, FGR, WHITE FLW, MATCH, TRI SP
CD	CEANOTHUS X 'DARK STAR'	DARK STAR WILD LILAC	1 GAL	39	LOW	72 O.C.	F&B, FGR, BLUE FLW, MATCH, TRI SP
O	CISTUS X PURPUREUS	ORCHID ROCKROSE	1 GAL	50	LOW	48" O.C.	F&B, FGR, PURPLE FLW, MATCH, TRI SP
CB	COTONEASTER DAMMERI 'CORAL BEAUTY'	BEARBERRY COTONEASTER	1 GAL	62	LOW	60" O.C.	F&B, FGR, MATCH, TRI SP
HE	HETEROMELES ARBUTIFOLIA	TOYON	1 GAL	47	VERY LOW	42" O.C.	F&B, FGR, MATCH, TRI SP
U	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	113	LOW	48" O.C.	F&B, FGR, MATCH, TRI SP
P	PINUS MUGO PUMILIO	DWARF MUGO PINE	1 GAL	40	LOW	48" O.C.	F&B, FGR, MATCH, TRI SP
EC	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	1 GAL	84	LOW	60" O.C.	F&B, FGR, MATCH, TRI SP
o	SALVIA MICROPHYLLA 'HOT LIPS'	BABY SAGE	1 GAL	45	LOW	24" O.C.	F&B, FGR, WHITE & RED FLW, MATCH, TRI SP
o	TEUCRIUM CHAMAEDRYS	GERMANDER	1 GAL	54	LOW	24" O.C.	F&B, FGR, PURPLE FLW, MATCH, TRI SP
U	WESTRINGIA FRUTICOSA 'WYNABBIE GEM'	WYNABBIE GEM COAST ROSEMARY	1 GAL	95	LOW	48" O.C.	F&B, FGR, PURPLE FLW, MATCH, TRI SP
TURF							
	BERMUDA TIFWAY	CELEBRATION BLEND	79,615 S.F.		HIGH	N/A	AVAILABLE FROM LOCAL SOURCES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
MISCELLANEOUS							
	ROOT BARRIERS (DEEP ROOT UB18-2, OR EQUAL)					516 L.F.	SEE DETAIL 5, SHEET L5.2

NOT FOR CONSTRUCTION

100% SUBMITTAL

Ref. & Rev.

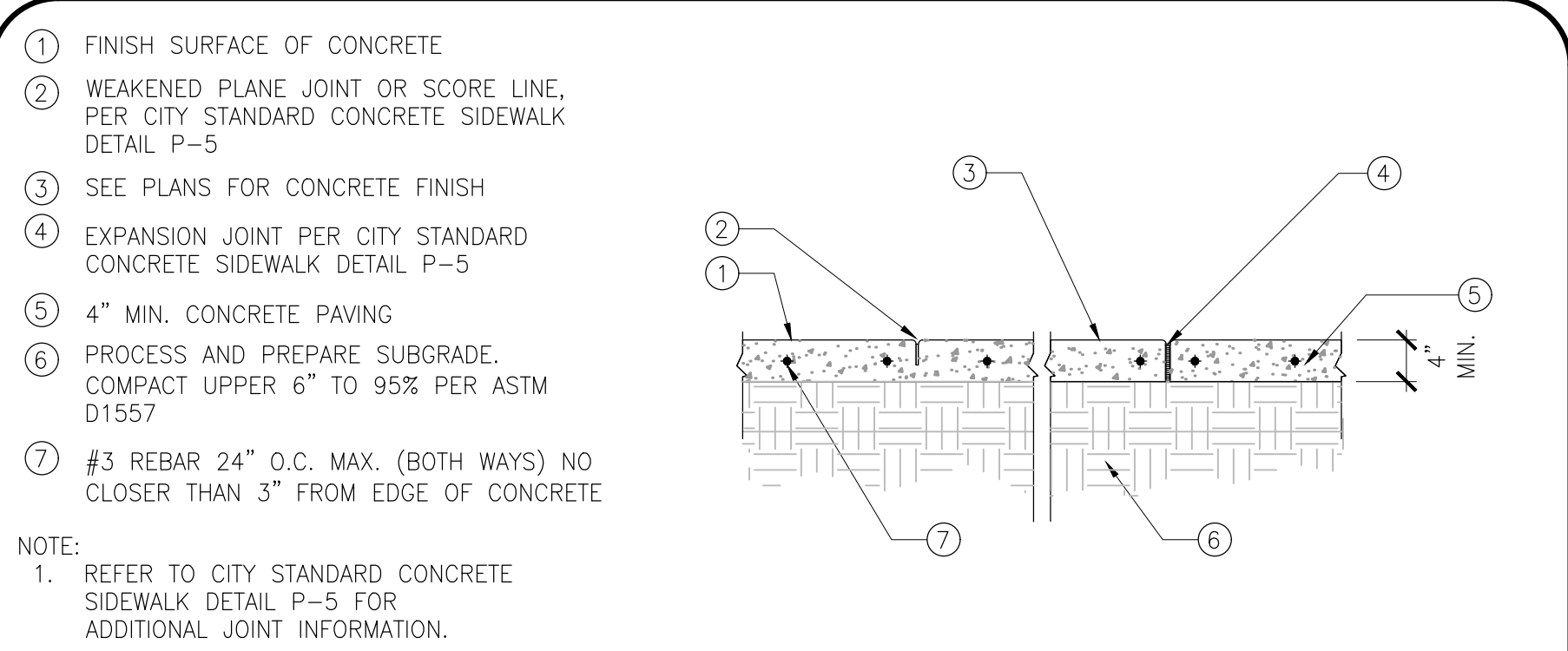
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odellengineering.com



KERMAN NORTHWEST PARK
CITY OF KERMAN
PLANTING LEGEND, NOTES, & PLAN

PROJECT TITLE
SHEET DESCRIPTION
Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

L3.0



1 CONCRETE PAVING

NOT FOR CONSTRUCTION

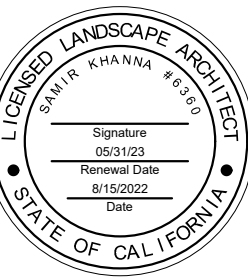
100% SUBMITTAL

Ref. & Rev.

Odell

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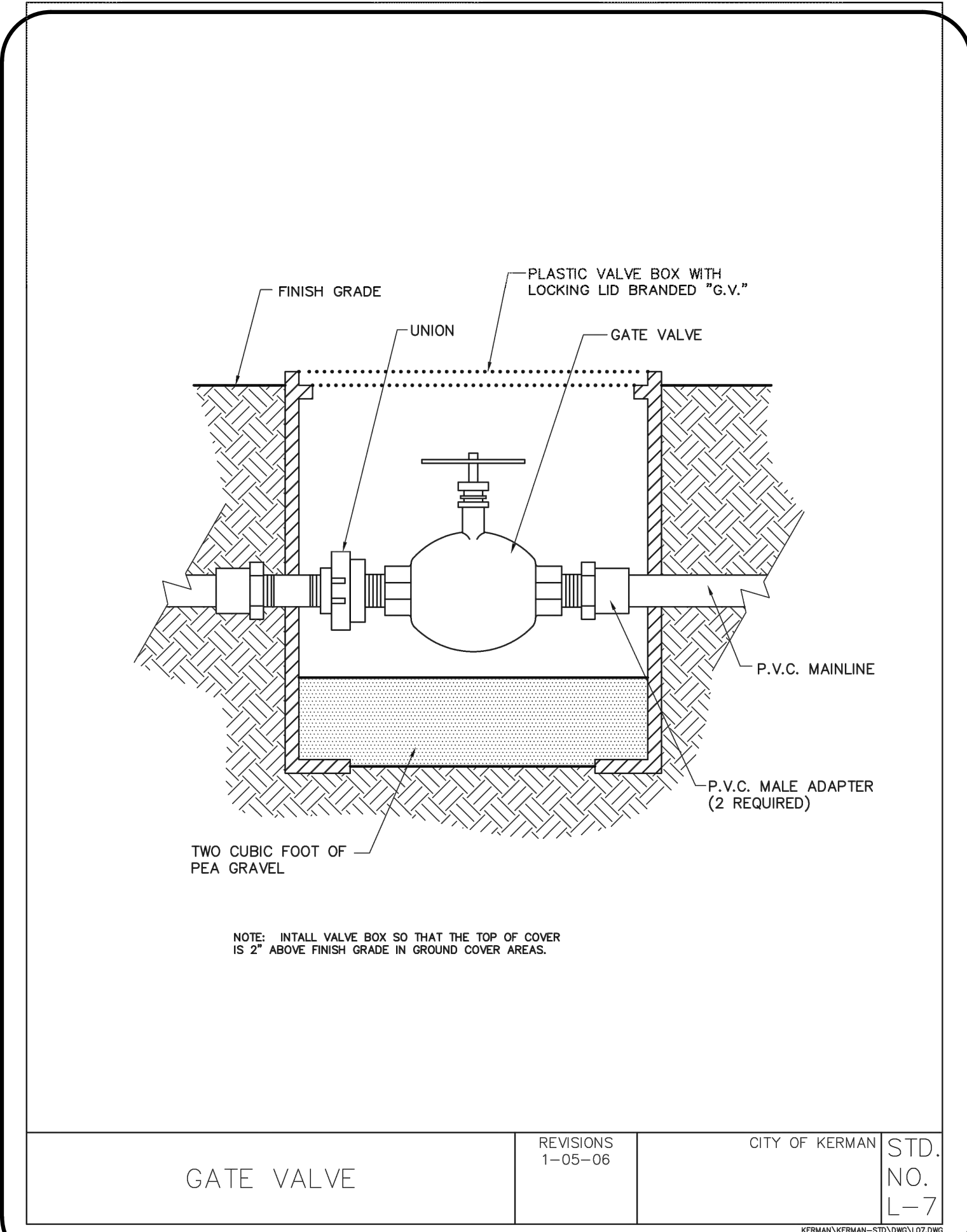
1165 Scenic Drive, Suite B
Modesto, CA 95350
odellengineering.com



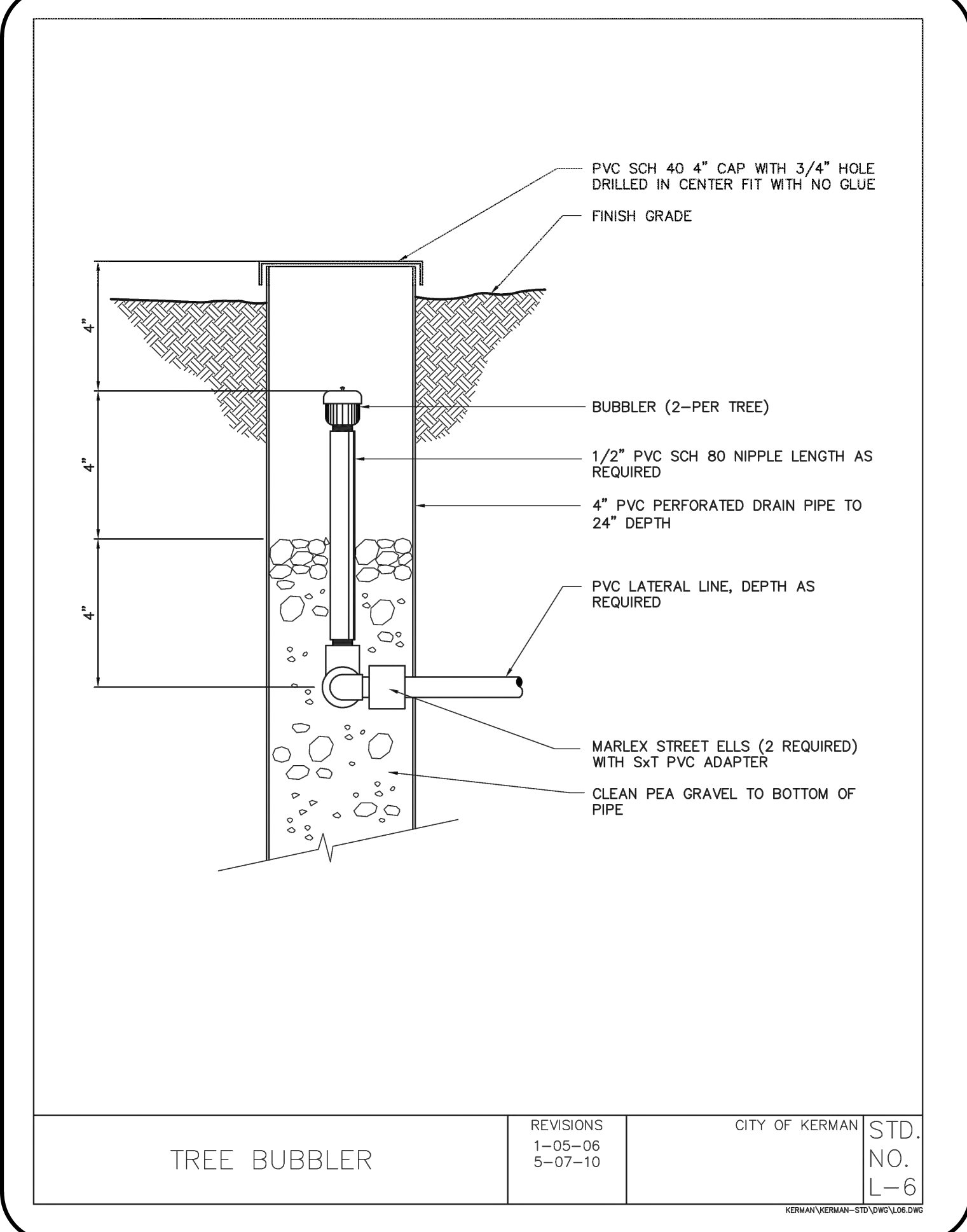
KERMAN NORTHWEST PARK
CITY OF KERMAN
CONSTRUCTION DETAILS

PROJECT TITLE
SHEET DESCRIPTION
Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

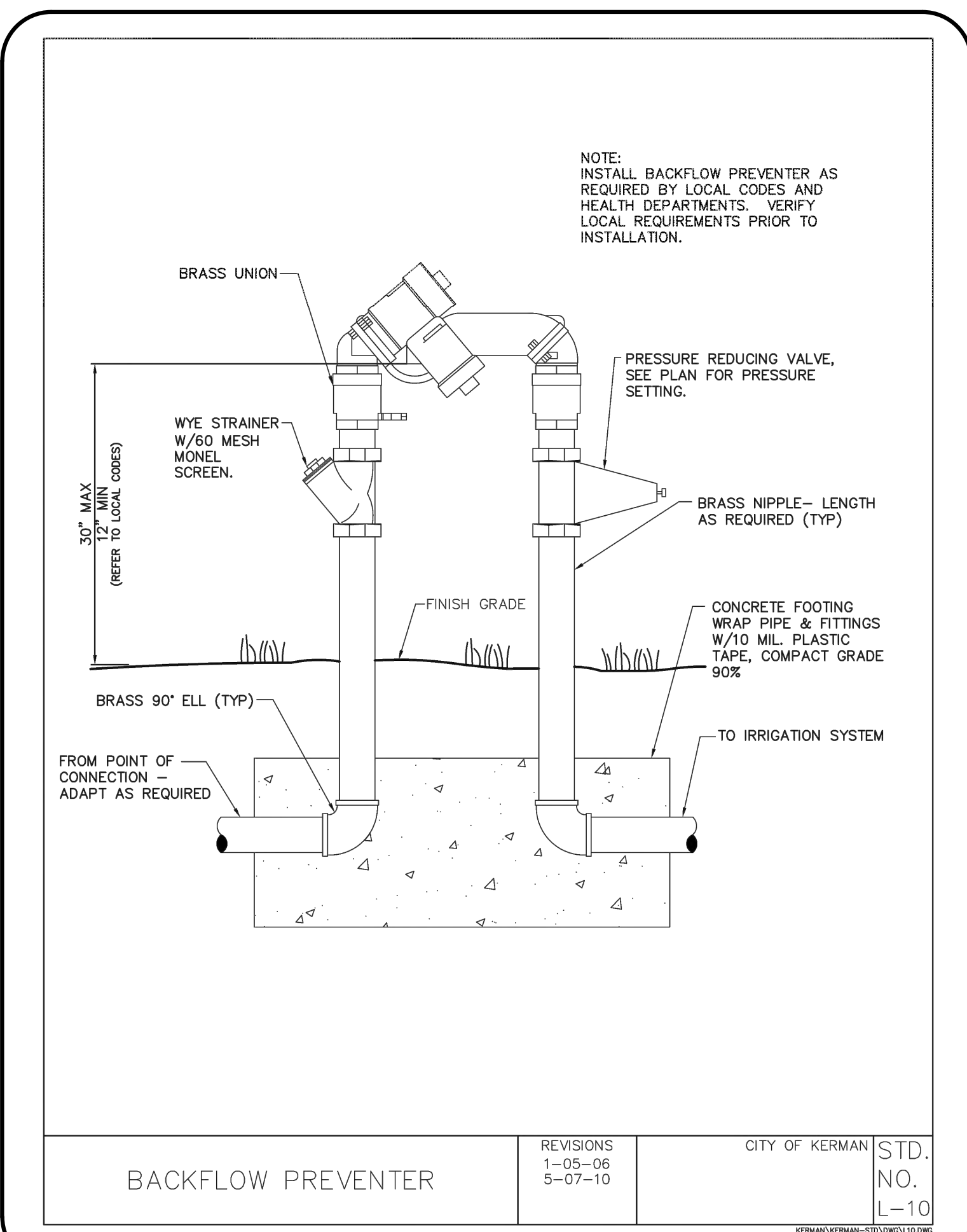
L4.0



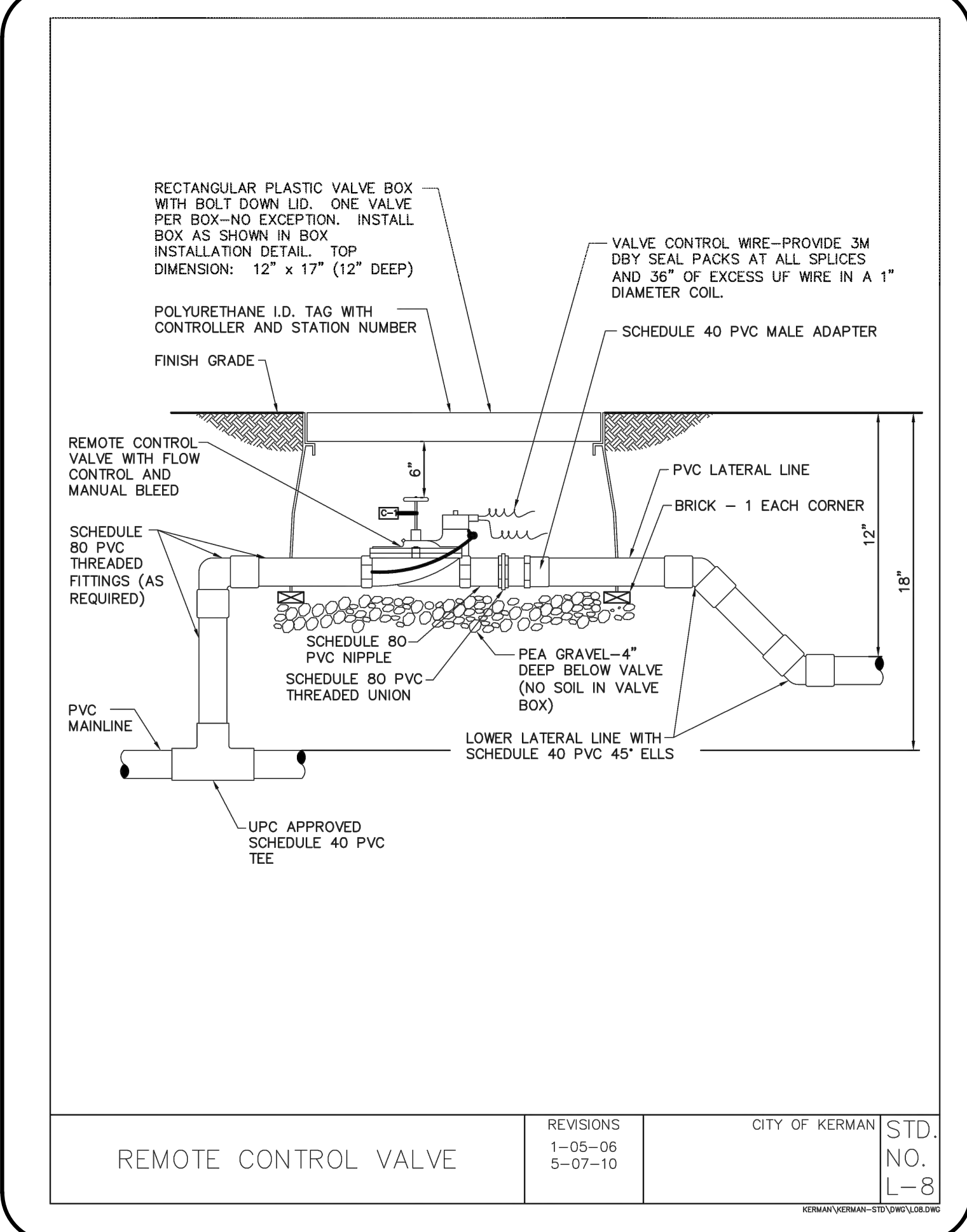
6 GATE VALVE (CITY STANDARD) NOT TO SCALE



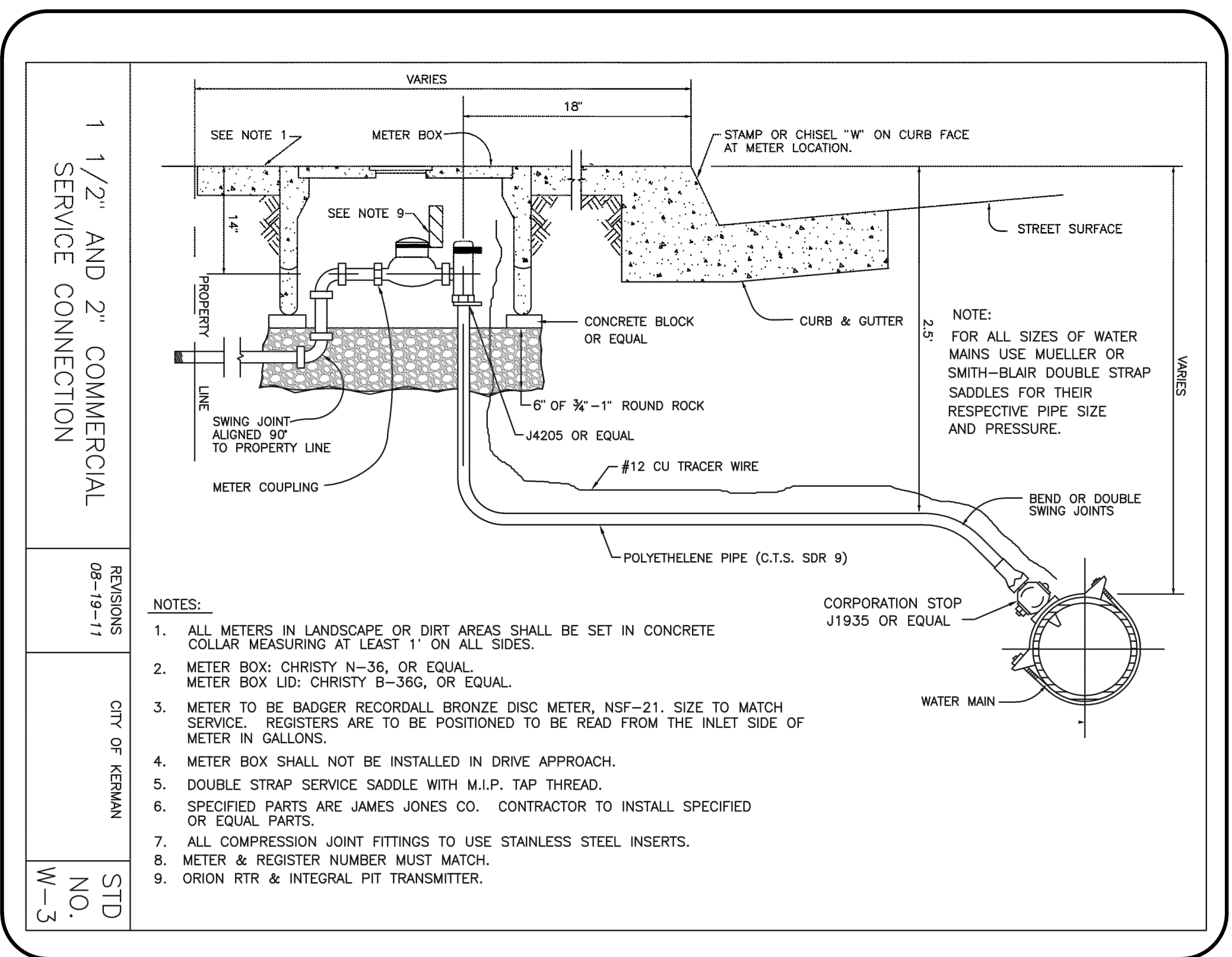
7 TREE BUBBLER (CITY STANDARD) NOT TO SCALE



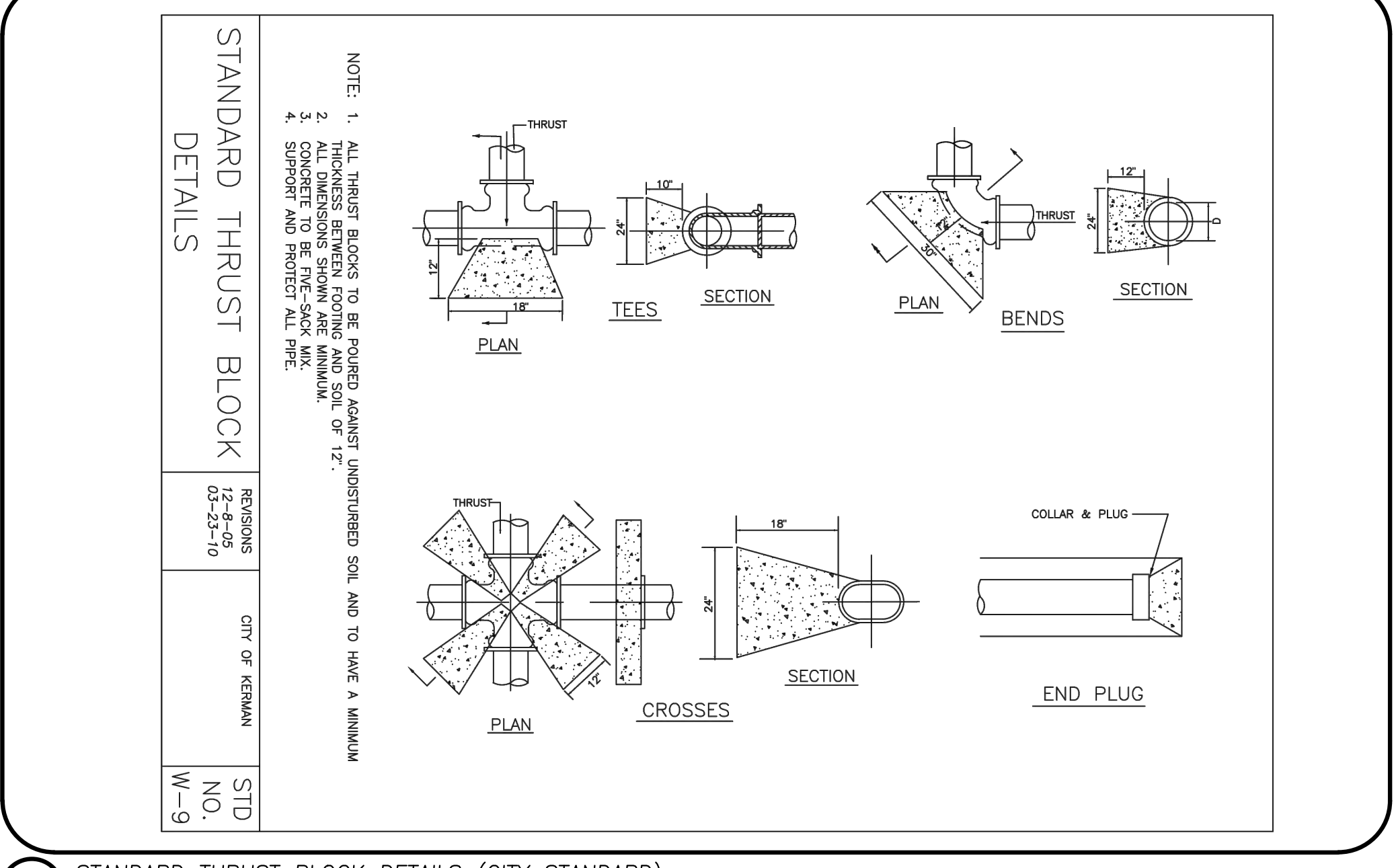
4 BACKFLOW PREVENTER (CITY STANDARD) NOT TO SCALE



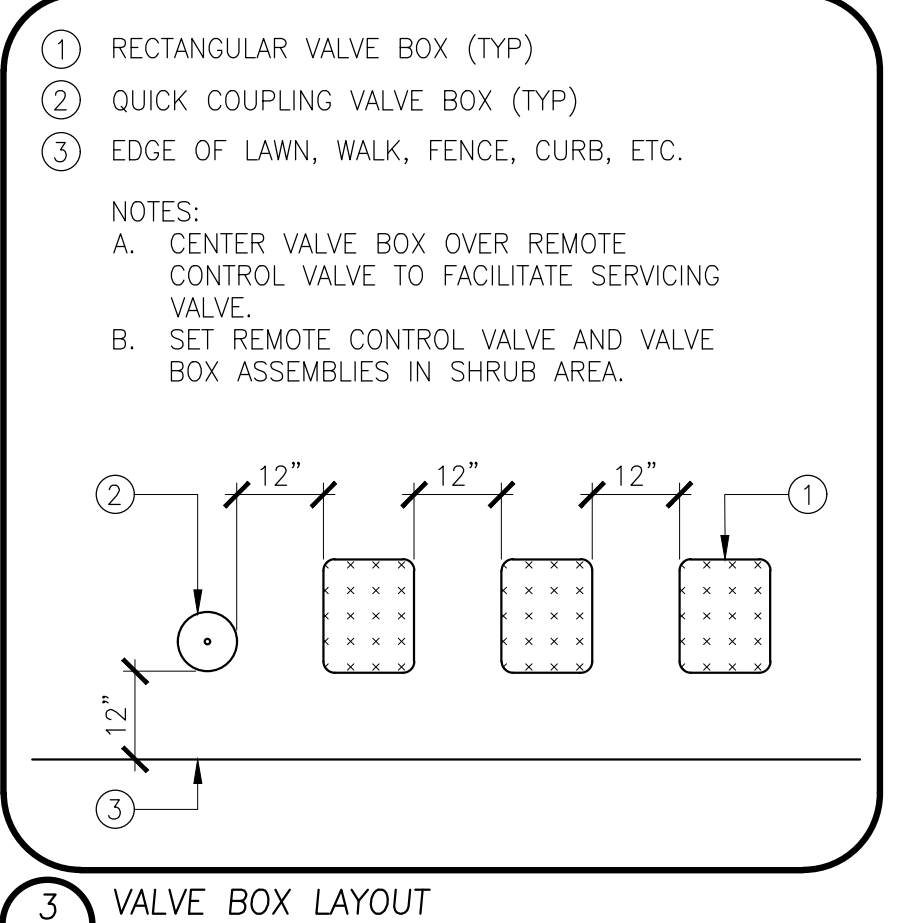
5 REMOTE CONTROL VALVE (CITY STANDARD) NOT TO SCALE



1 1 1/2" AND 2" SERVICE CONNECTION (CITY STANDARD) NOT TO SCALE

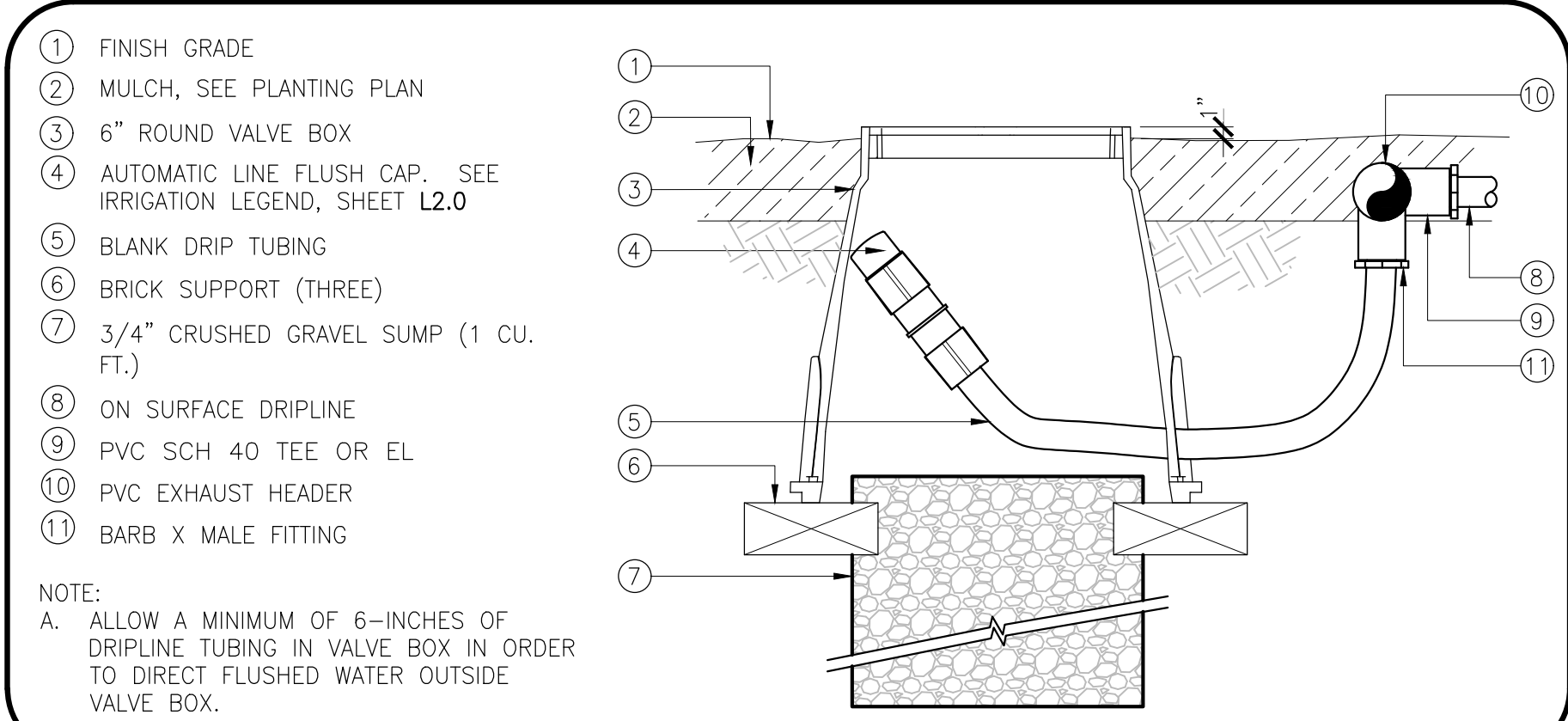


2 STANDARD THRUST BLOCK DETAILS (CITY STANDARD) NOT TO SCALE

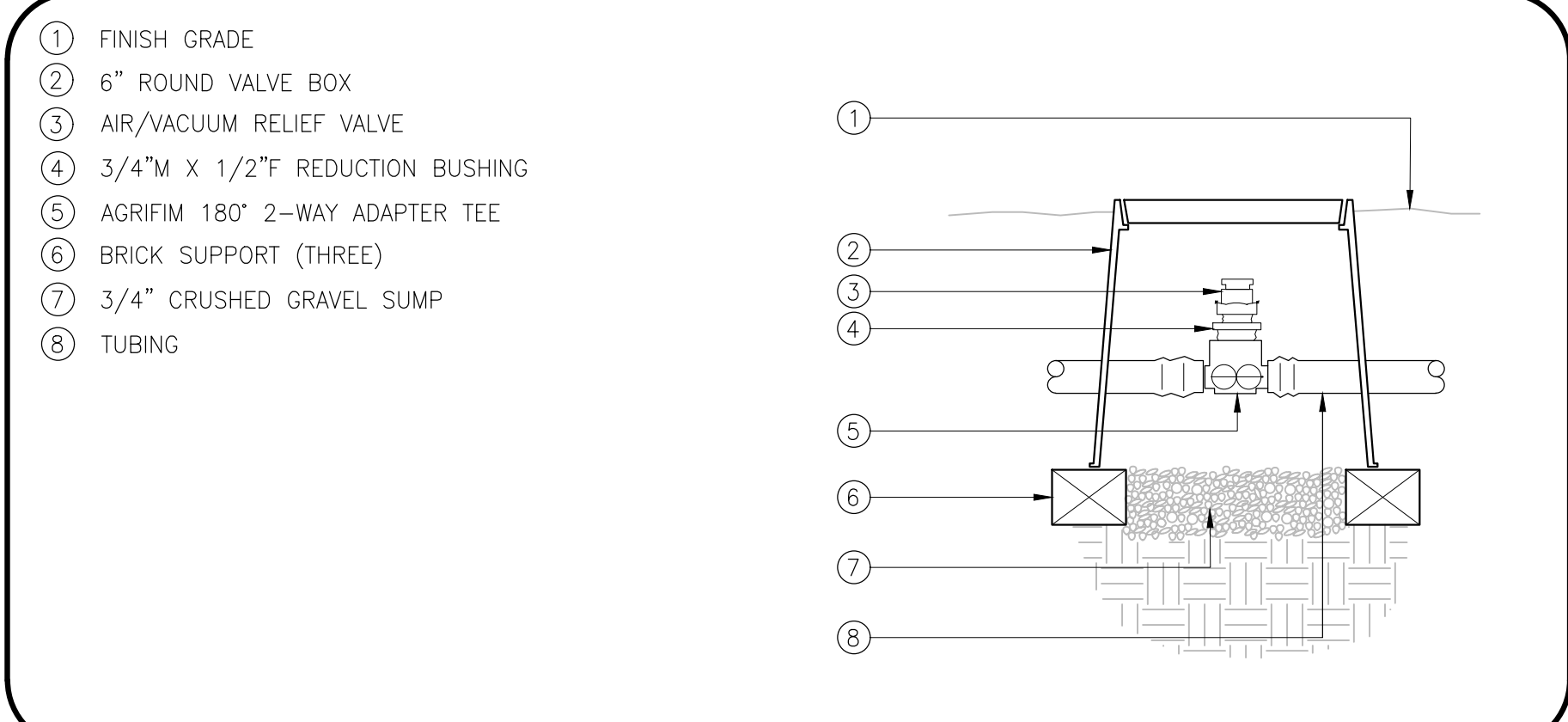


3 VALVE BOX LAYOUT NOT TO SCALE

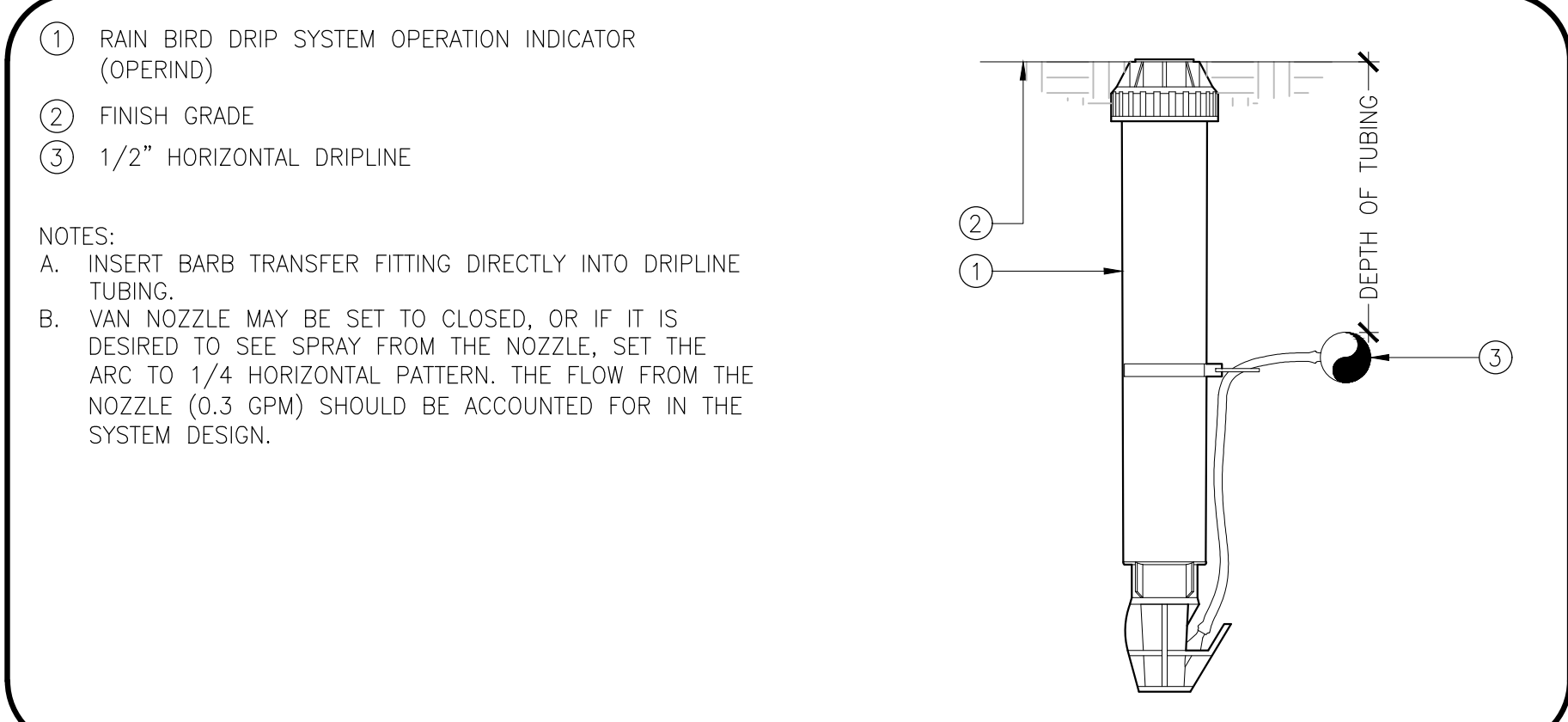
NOT FOR CONSTRUCTION 100% SUBMITTAL



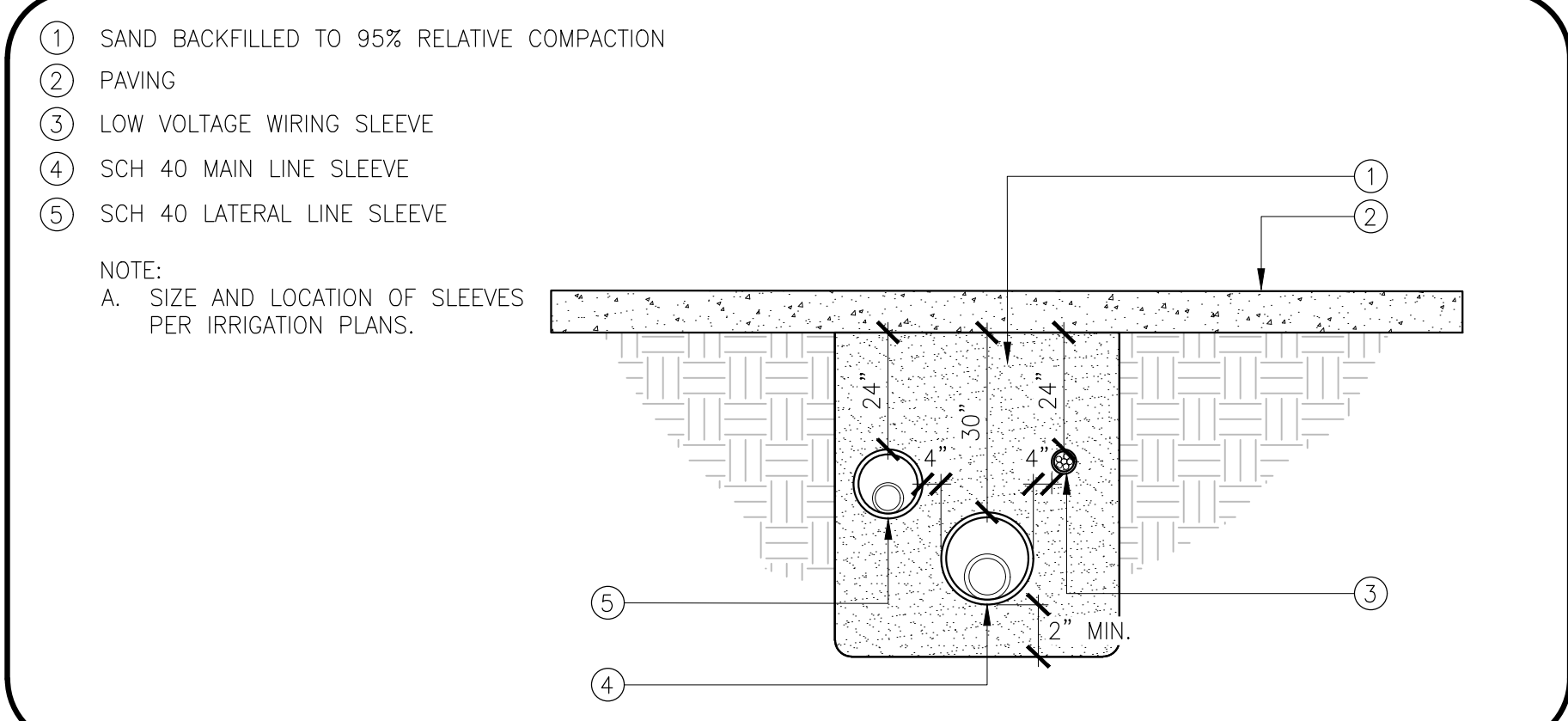
8 DRIPLINE FLUSH POINT NOT TO SCALE



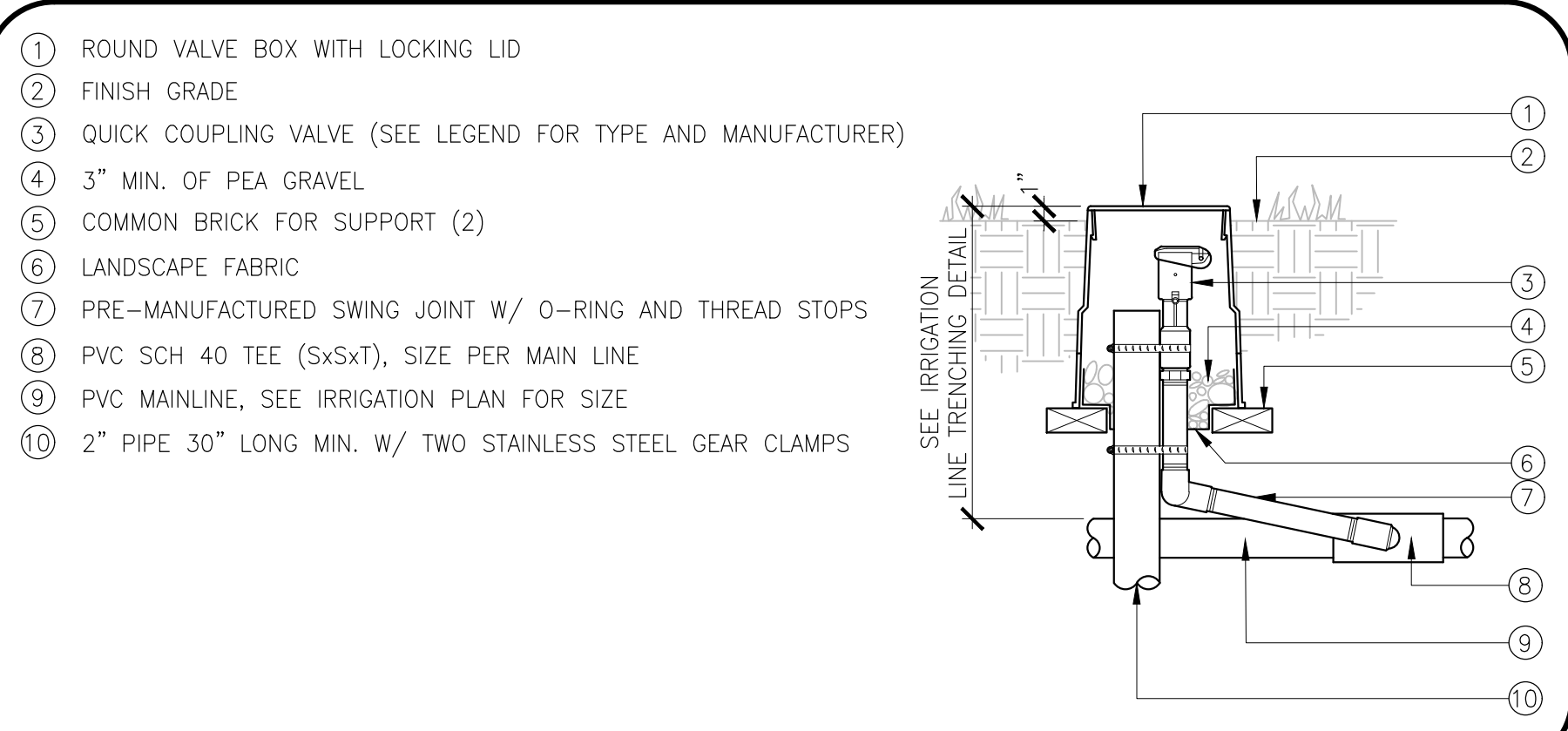
9 AIR RELIEF VALVE KIT NOT TO SCALE



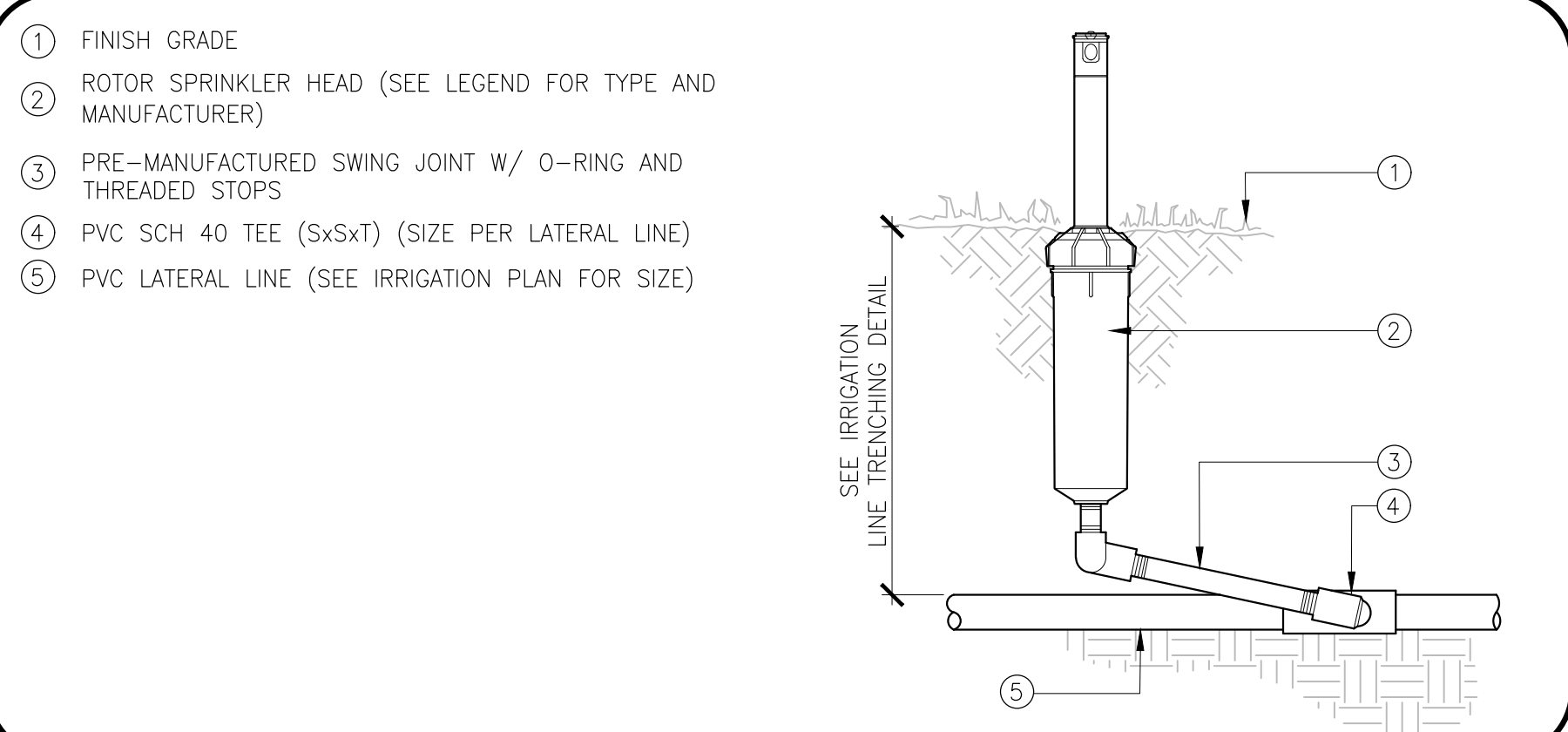
10 DRIPLINE OPERATION INDICATOR NOT TO SCALE



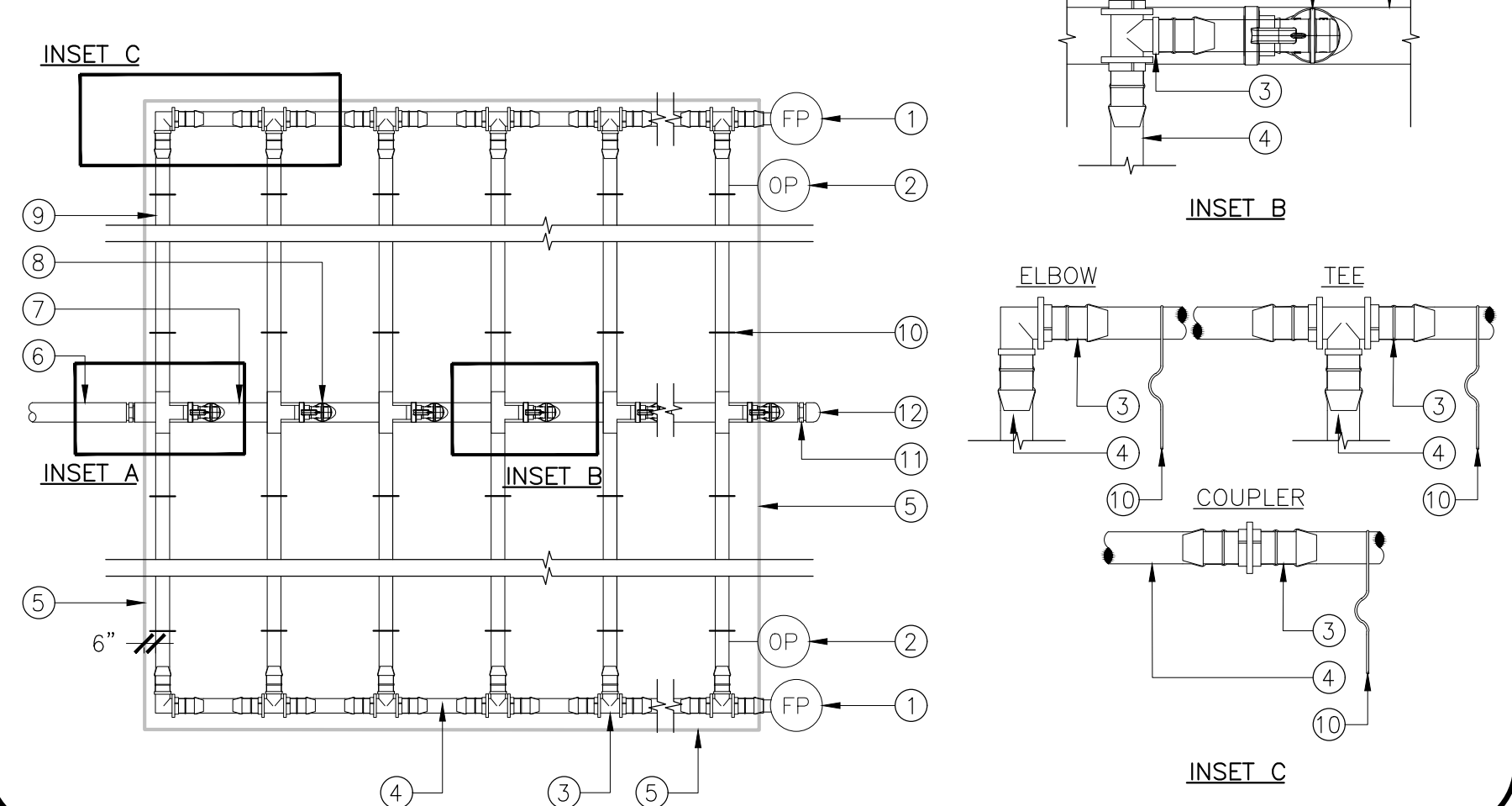
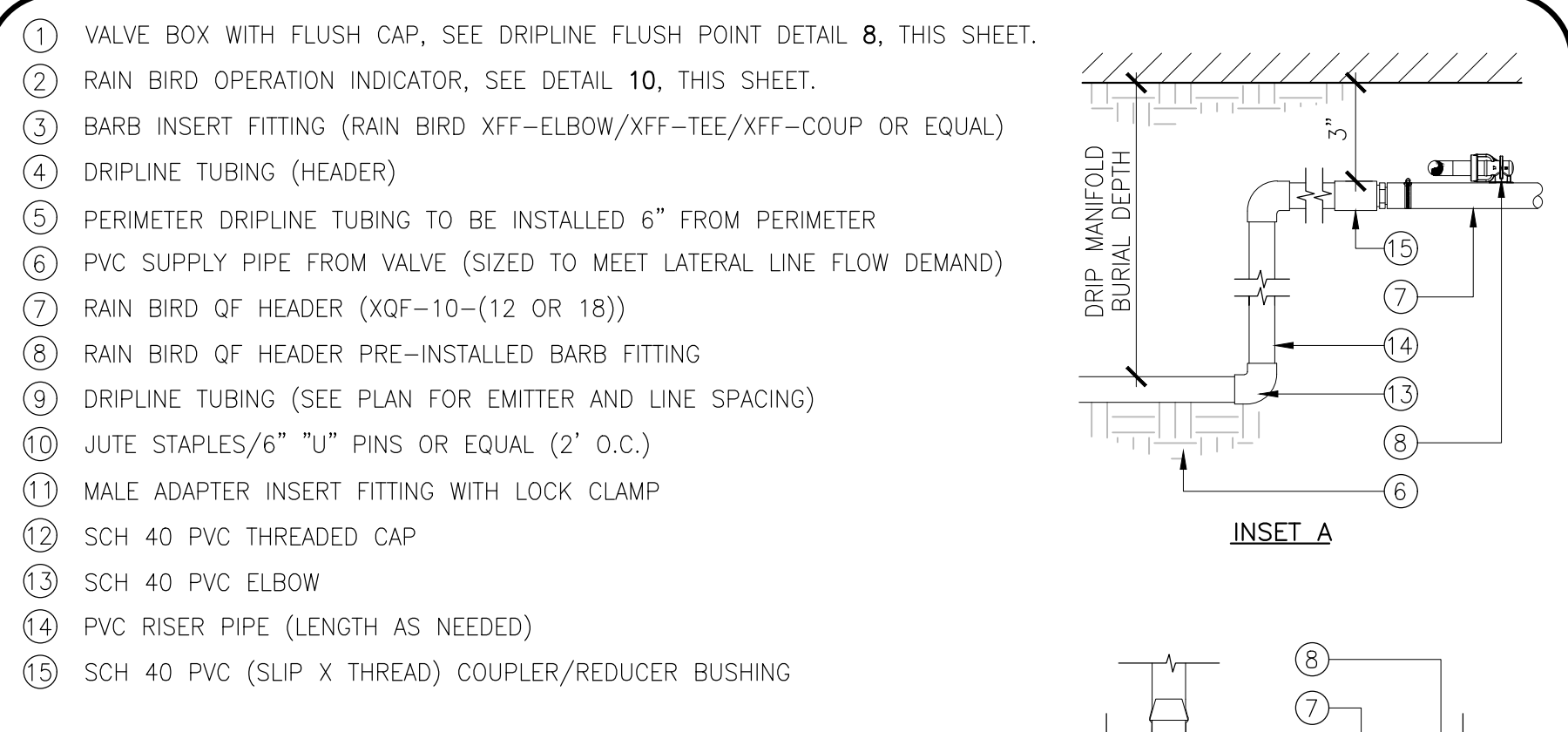
11 SLEEVE INSTALLATION NOT TO SCALE



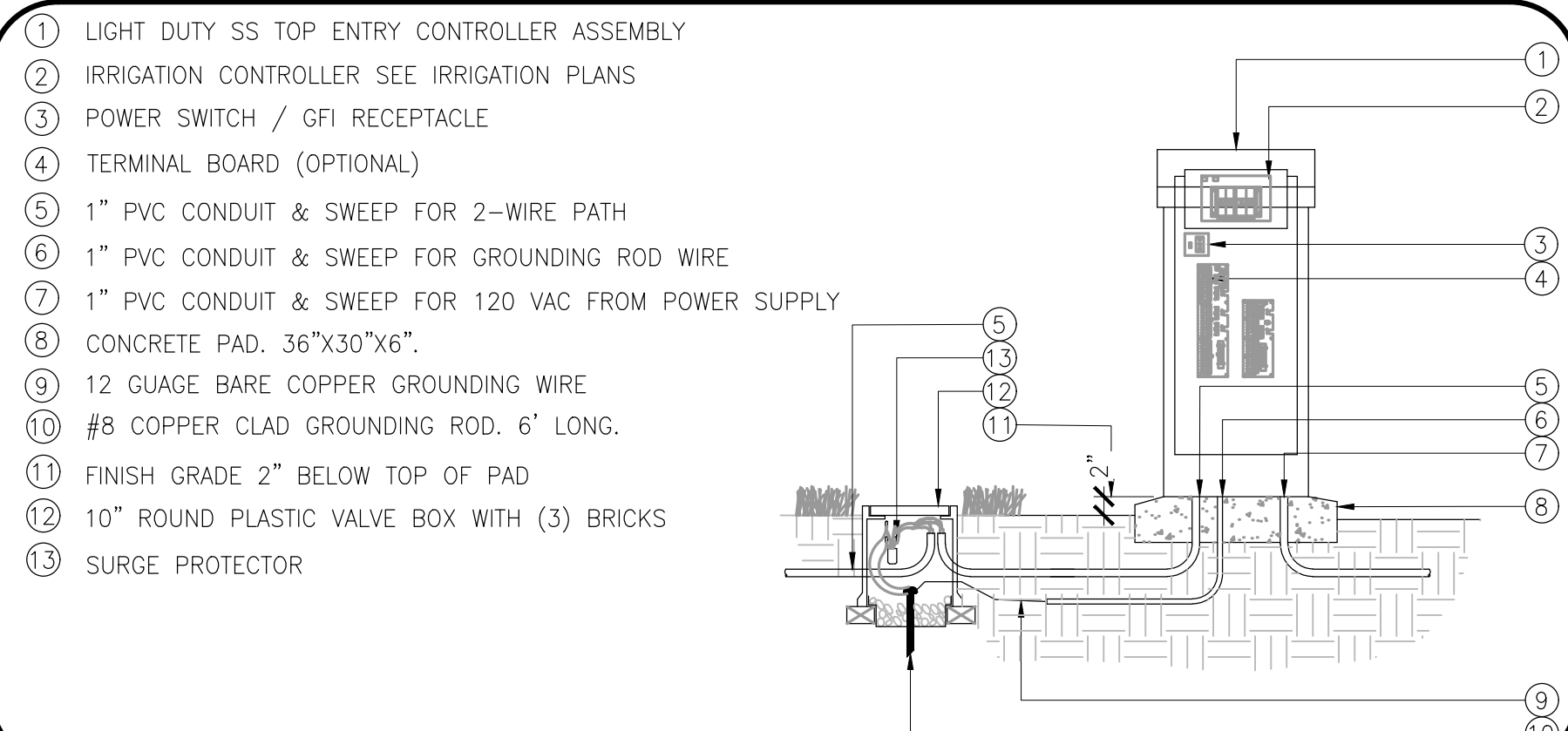
5 QUICK COUPLER VALVE NOT TO SCALE



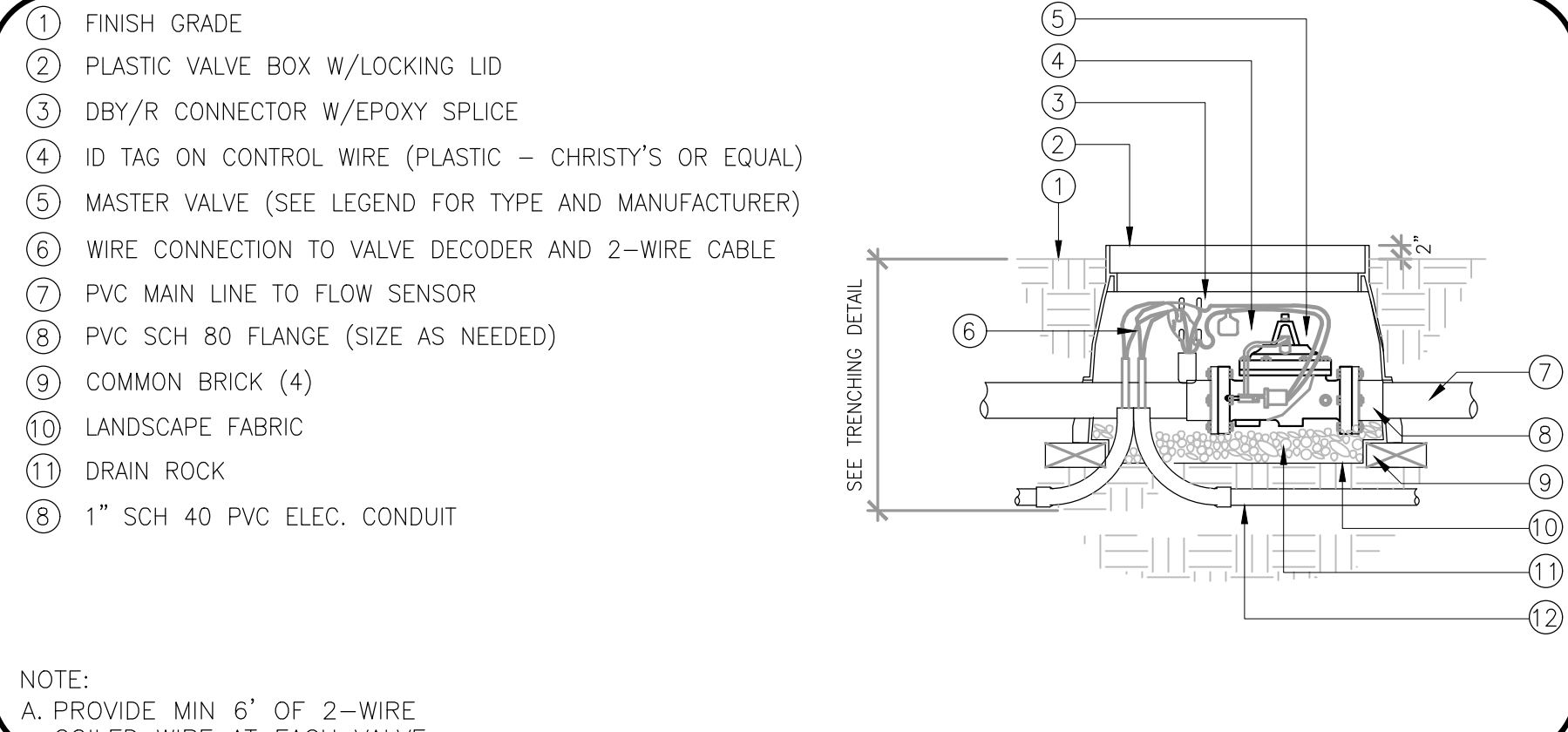
6 POP-UP ROTOR HEAD NOT TO SCALE



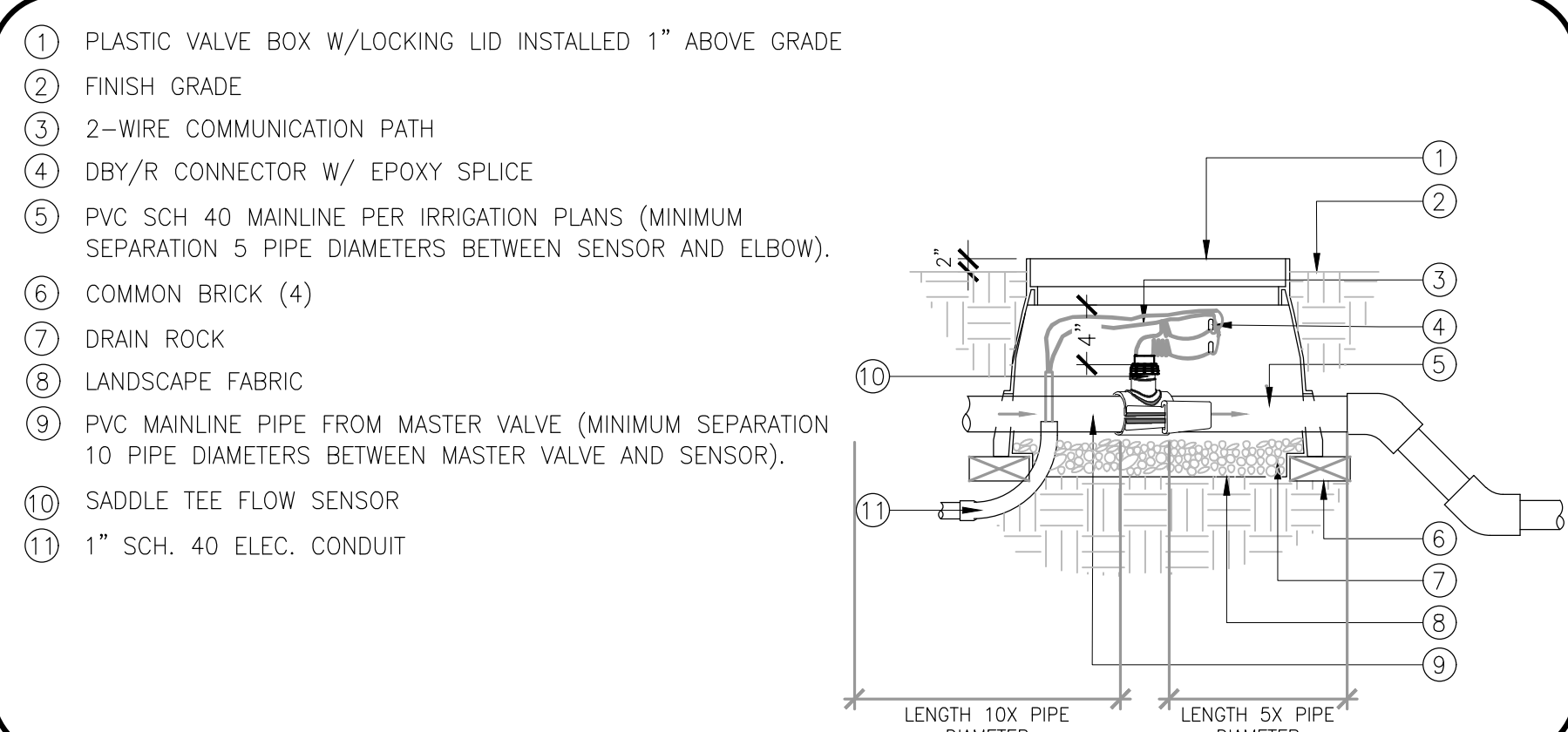
7 IN-LINE DRIP TUBING CENTER FEED CONFIGURATION (LESS THAN 16 GPM) NOT TO SCALE



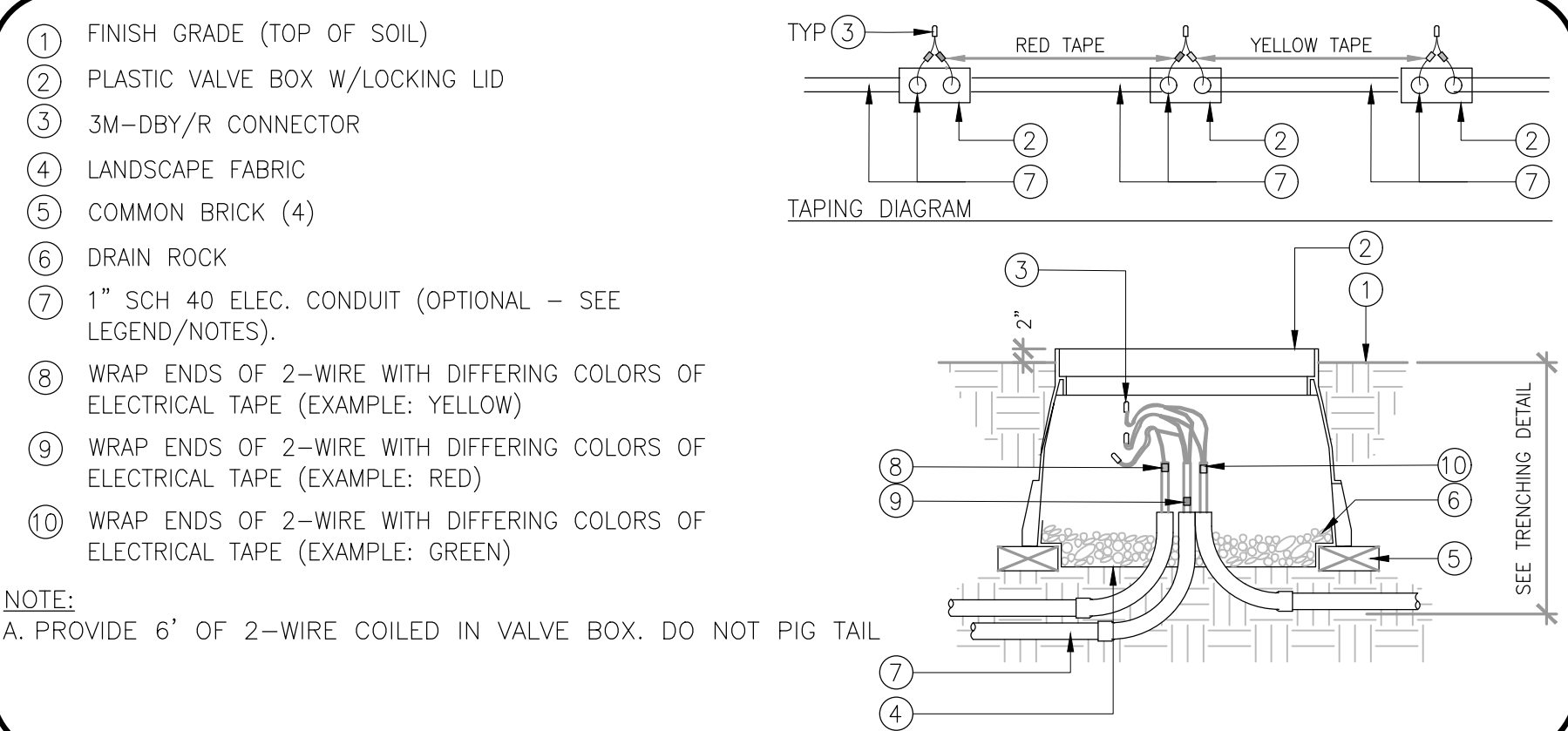
1 2-WIRE IRRIGATION CONTROLLER ON CONCRETE PAD NOT TO SCALE



2 MASTER VALVE IN PLASTIC VALVE BOX WITH DECODER NOT TO SCALE



3 FLOW SENSOR IN PLASTIC VALVE BOX NOT TO SCALE



4 PULL BOX 2-WAY SPLICING NOT TO SCALE

Ref. & Rev.

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1165 Scenic Drive, Suite B
Modesto, CA 95350
odelleengineering.com

LICENSED LANDSCAPE ARCHITECT
STATE OF CALIFORNIA
Signature: [Signature]
Expiry Date: 8/15/2022
ID# 100002

KERMAN NORTHWEST PARK
CITY OF KERMAN
IRRIGATION DETAILS

PROJECT TITLE
SHEET DESCRIPTION

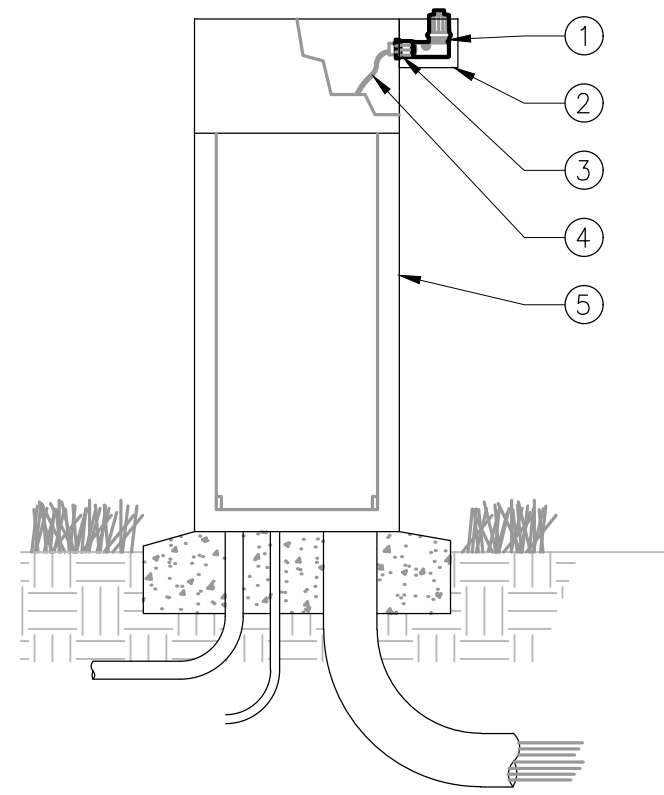
Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

L5.1

NOT FOR CONSTRUCTION

100% SUBMITTAL

- ① RAIN SENSOR, SEE IRRIGATION LEGEND
② RAIN SENSOR GUARD. BOLT TO SIDE OF PEDESTAL. MATCH PEDESTAL MATERIAL.
③ 3/4-INCH SCH 40 RISER, EXTENSION (FIFT X MIPT), SECURED TO ENCLOSURE WITH SCH 40 NUT
④ WIRE TO IRRIGATION CONTROLLER
⑤ IRRIGATION CONTROLLER PEDESTAL. SEE IRRIGATION LEGEND FOR MORE INFORMATION.



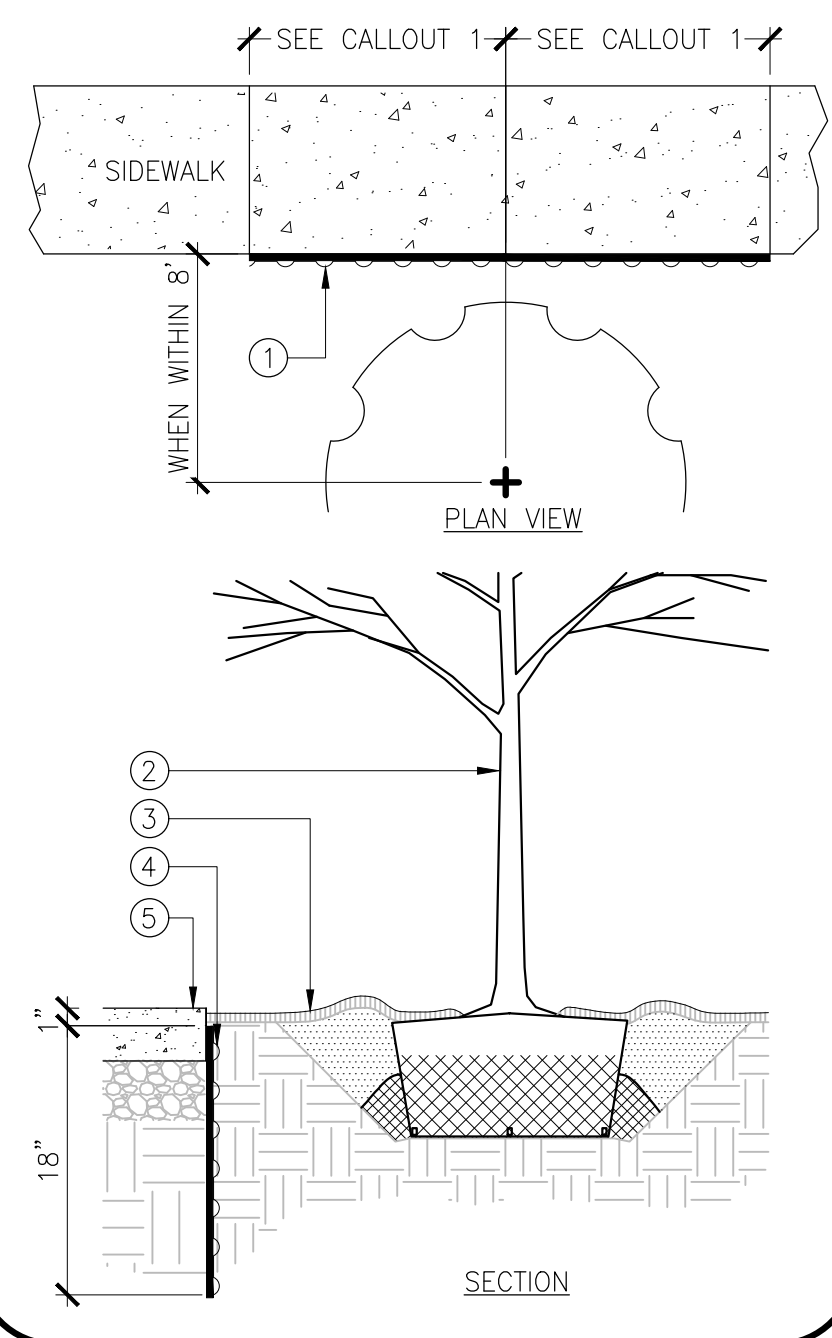
7 RAIN SENSOR PEDESTAL MOUNT

NOT TO SCALE

- ① LINEAR ROOT BARRIER INSTALLATION. INSTALL 10' O.C. FOR >25' CANOPY & 7' O.C. FOR <25' CANOPY.
② SEE TREE PLANTING DETAIL 1, THIS SHEET
③ MULCH. SEE PLANTING NOTES
④ ROOT BARRIER: ROOT INHIBITOR IMPREGNATED NODULES OR FABRIC
⑤ BACK OF CURB OR WALK

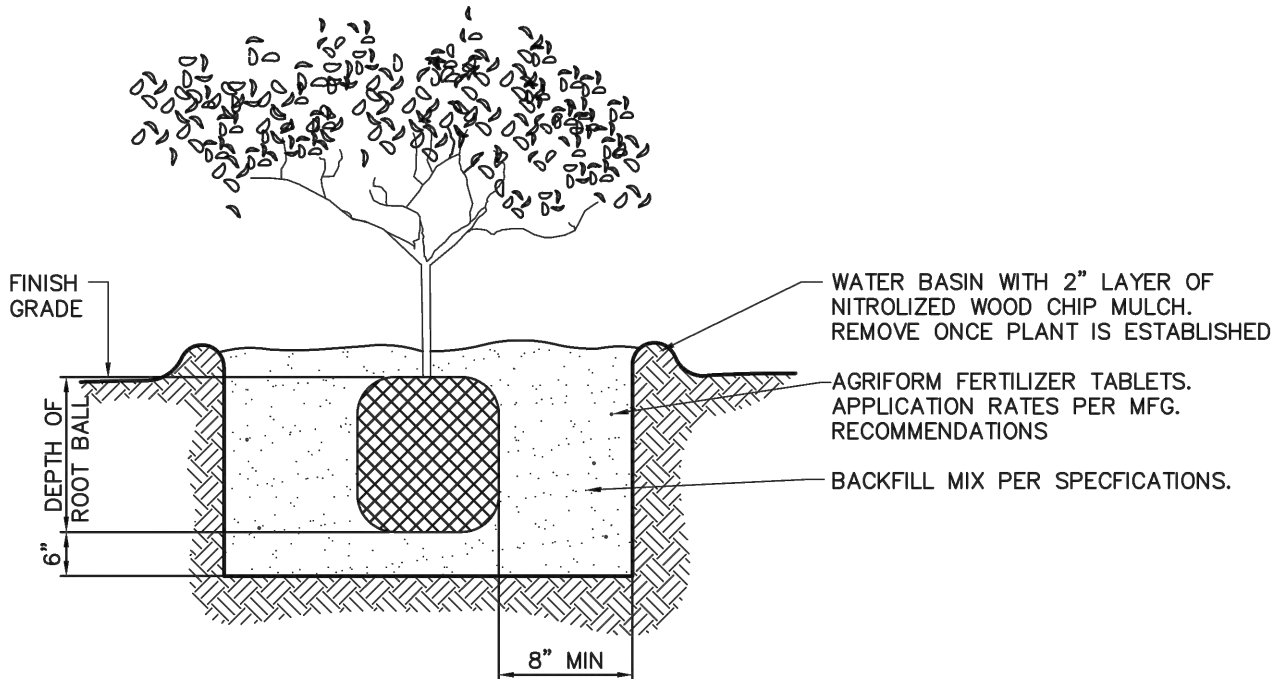
NOTES:

- A. ALL TREES WITHIN 8' OF A CURB OR SIDEWALK SHALL HAVE ROOT BARRIERS INSTALLED.
B. INSTALL ROOT BARRIERS PER MANUFACTURER'S RECOMMENDATIONS.



5 ROOT BARRIER DETAIL

NOT TO SCALE



SHRUB PLANTING

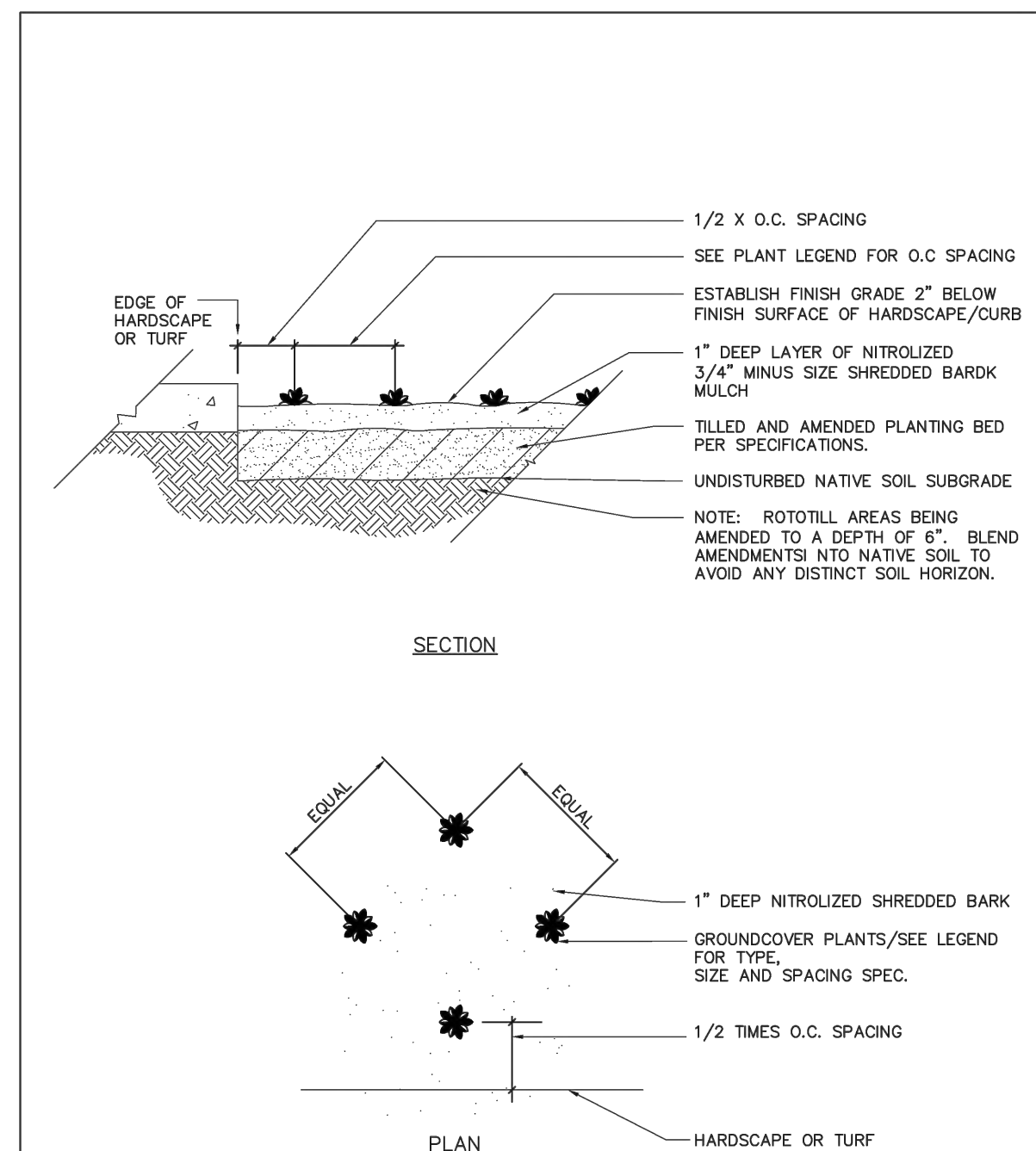
REVISIONS
1-05-06
5-07-10

CITY OF KERMAN

STD.
NO.
L-4

3 SHRUB PLANTING (CITY STANDARD)

NOT TO SCALE



GROUND COVER SPACING

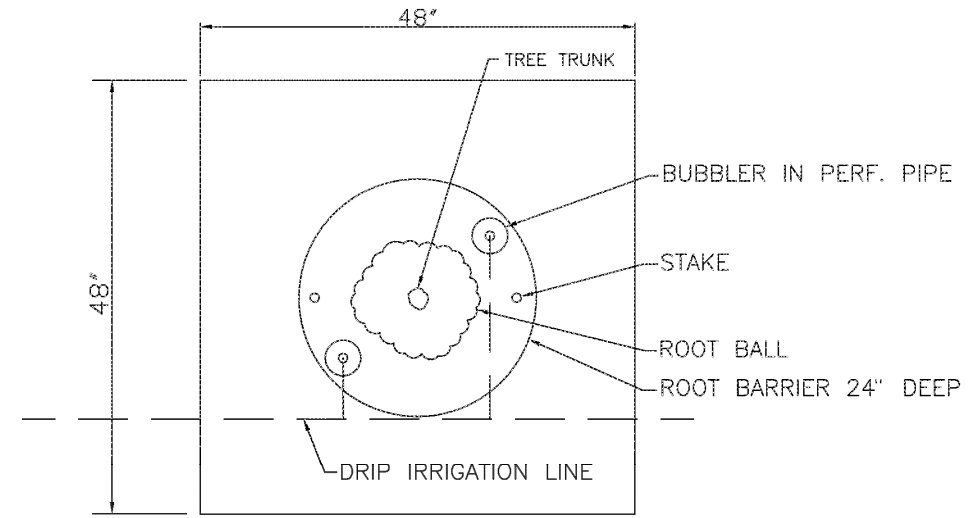
REVISIONS
1-05-06

CITY OF KERMAN

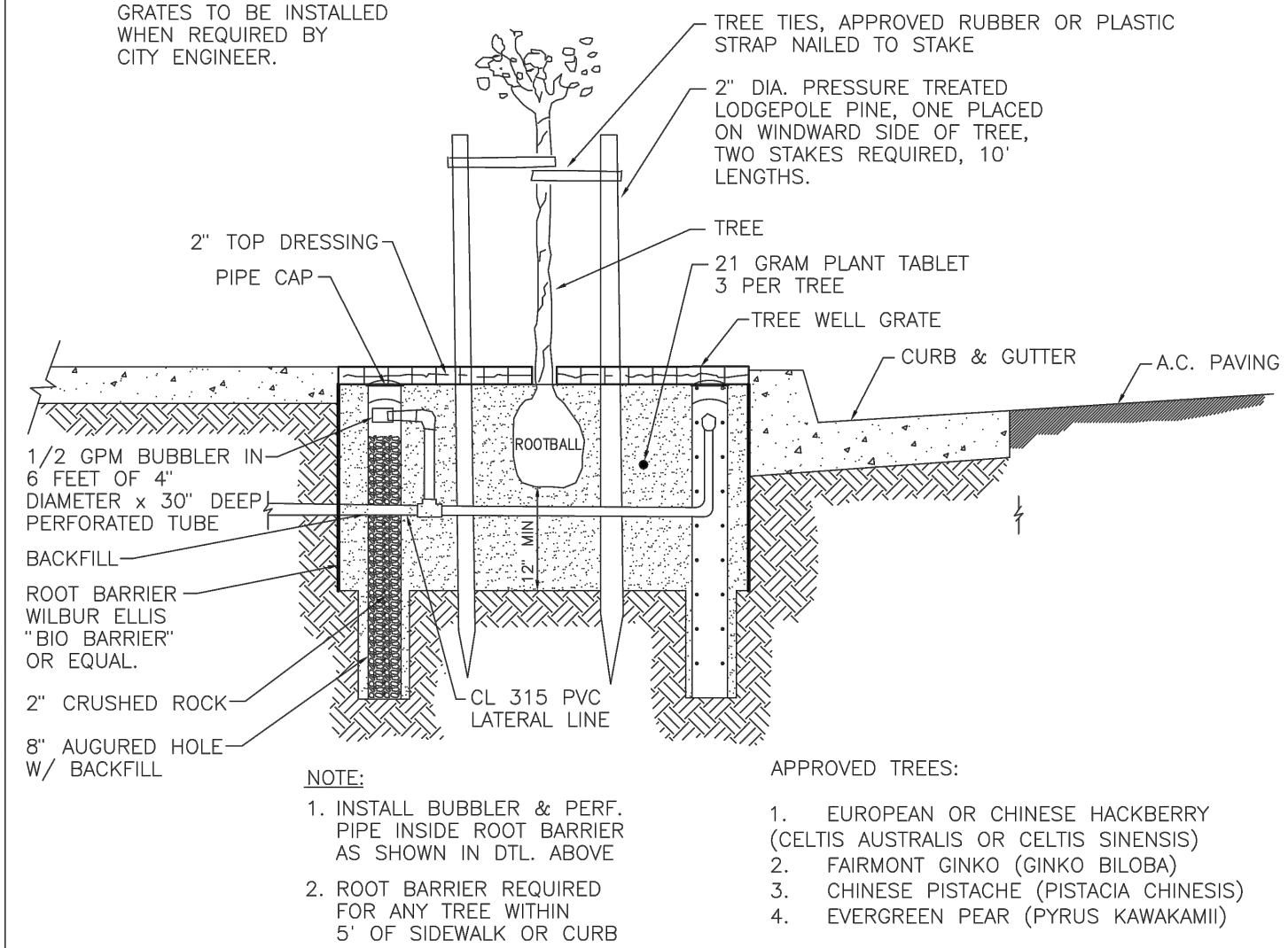
STD.
NO.
L-2

4 GROUND COVER SPACING (CITY STANDARD)

NOT TO SCALE



GRATES TO BE INSTALLED WHEN REQUIRED BY CITY ENGINEER.



NOTE:

1. INSTALL BUBBLER & PERF. PIPE INSIDE ROOT BARRIER AS SHOWN IN DTL. ABOVE
2. ROOT BARRIER REQUIRED FOR ANY TREE WITHIN 5' OF SIDEWALK OR CURB

APPROVED TREES:

1. EUROPEAN OR CHINESE HACKBERRY (CELTIS AUSTRALIS OR CELTIS SINENSIS)
2. FAIRMONT GINKO (GINKO BILOBA)
3. CHINESE PISTACHE (PISTACIA CHINESIS)
4. EVERGREEN PEAR (PYRUS KAWAKAMI)

TREE WELL

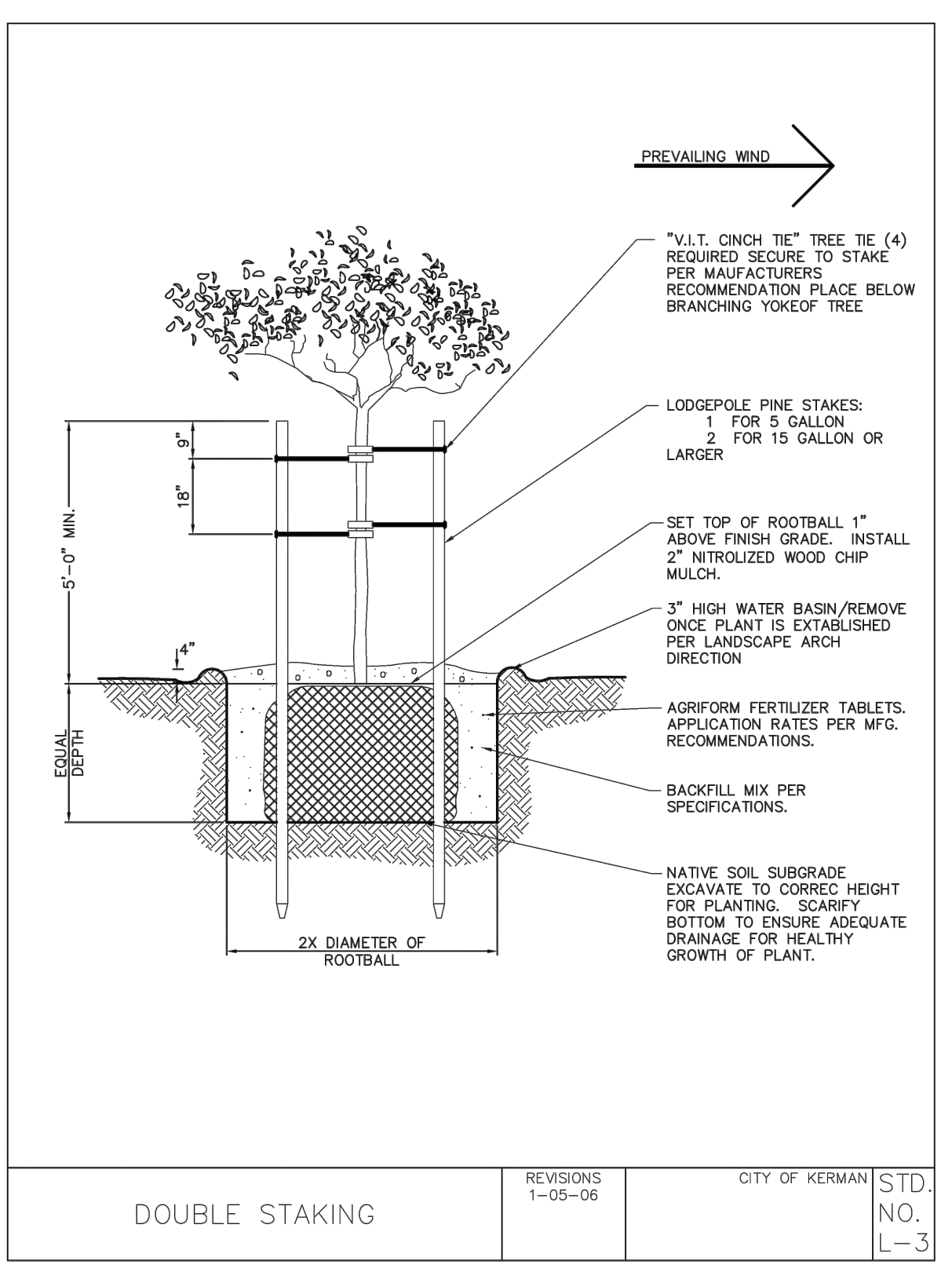
REVISIONS
01-15-98
12-5-98

CITY OF KERMAN

STD.
NO.
L-1

1 TREE WELL (CITY STANDARD)

NOT TO SCALE



DOUBLE STAKING

REVISIONS
1-05-06

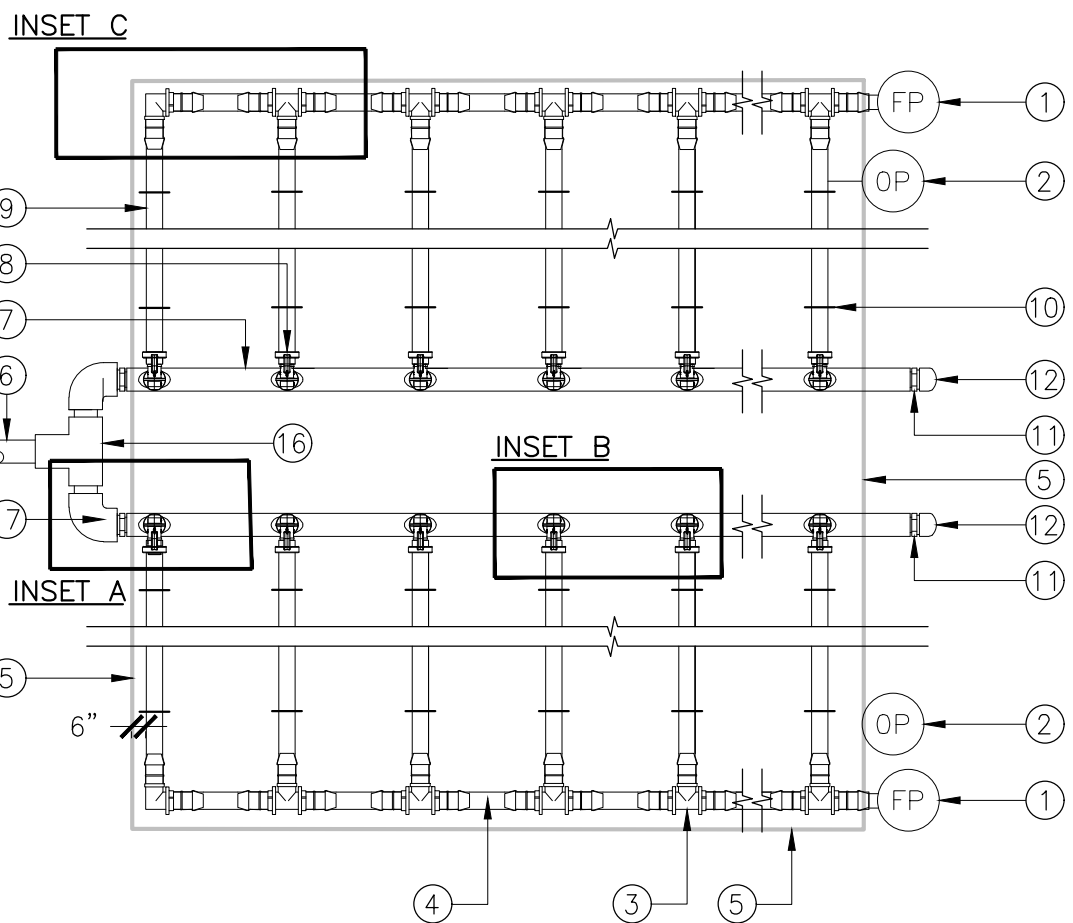
CITY OF KERMAN

STD.
NO.
L-3

2 DOUBLE TREE STAKING (CITY STANDARD)

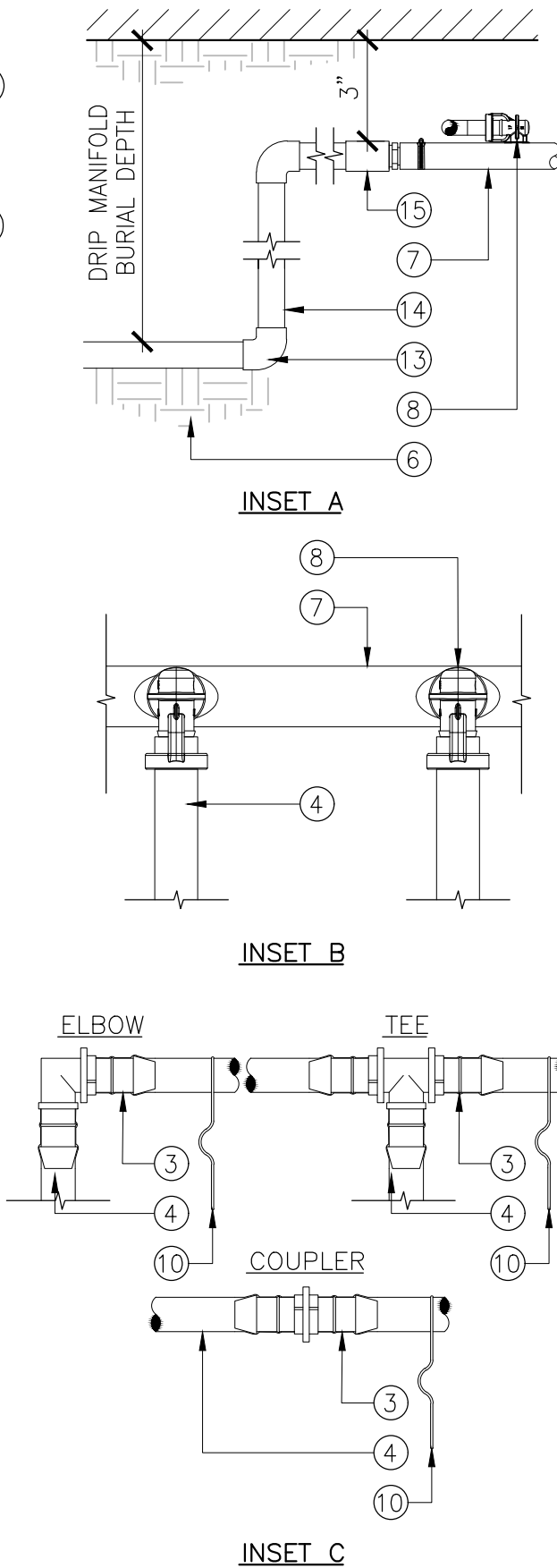
NOT TO SCALE

- ① VALVE BOX WITH FLUSH CAP, SEE DRIPLINE FLUSH POINT DETAIL 8, SHEET L5.1.
② RAIN BIRD OPERATION INDICATOR, SEE DETAIL 10, SHEET L5.1.
③ BARB INSERT FITTING (RAIN BIRD XFF-ELBOW/XFF-TEE/XFF-COUP OR EQUAL)
④ DRIPLINE TUBING (HEADER)
⑤ PERIMETER DRIPLINE TUBING TO BE INSTALLED 6" FROM PERIMETER
⑥ PVC SUPPLY PIPE FROM VALVE (SIZED TO MEET LATERAL LINE FLOW DEMAND)
⑦ RAIN BIRD OF HEADER (XOF-10-(12 OR 18))
⑧ RAIN BIRD OF HEADER PRE-INSTALLED BARB FITTING
⑨ DRIPLINE TUBING (SEE PLAN FOR EMITTER AND LINE SPACING)
⑩ 6" JUTE STAPLES/6" "U" PINS OR EQUAL (2' O.C.)
⑪ MALE ADAPTER INSERT FITTING WITH LOCK CLAMP
⑫ SCH 40 PVC THREADED CAP
⑬ SCH 40 PVC ELBOW
⑭ PVC RISER PIPE (LENGTH AS NEEDED)
⑮ SCH 40 PVC (SLIP X THREAD) COUPLER/REDUCER BUSHING
⑯ SCH 40 PVC (SLIP X SLIP) TEE W/ REDUCER BUSHING (SIZE AS NEEDED)
⑰ 3/4" OR 1" SCH 40 PVC (SLIP X THREAD) ELBOW



6 IN-LINE DRIP TUBING CENTER FEED CONFIGURATION (16 GPM - 32 GPM)

NOT TO SCALE



Ref. & Rev.

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KERMAN NORTHWEST PARK
CITY OF KERMAN
IRRIGATION AND PLANTING DETAILS

PROJECT TITLE

SHEET DESCRIPTION

Dr. By: TL
Ch. By: SK
Date: 8/15/2022
Scale: As Noted
Job No. 21-199

L5.2

NOT FOR CONSTRUCTION

100% SUBMITTAL