

CONSTRUCTION DOCUMENTS  
FOR  
MEMORIAL PARK ATHLETIC FIELD RENOVATION

TOWN OF SAN ANSELMO  
1000 Sir Francis Drake Boulevard  
San Anselmo, CA 94960



1005 A Street, Suite 305  
San Rafael, California 94901  
Phone 415-258-9580  
Fax 415/258-9780  
CA License #2616

ABBREVIATIONS

AC	ASPHALT CONCRETE	JT.	JOINT
ADL.	ADDITIONAL	LB.	POUND
ADJ.	ADJUSTABLE	MFR.	MANUFACTURER
AGG.	AGGREGATE	MAT.	MATERIAL
ALT.	ALTERNATE	MAX	MAXIMUM
APPROX.	APPROXIMATE	MECH.	MECHANICAL
ARCH.	ARCHITECT	MED.	MEDIUM
ASPH.	ASPHALT	MIN.	MINIMUM
AUTO.	AUTOMATIC	MISC.	MISCELLANEOUS
BD.	BITUMINOUS	MTG.	MOUNTING
BLDG.	BUILDING	MTL.	MATERIAL
BOT.	BOTTOM	(N)	NEW
BTWN.	BETWEEN	N.I.C.	NOT IN CONTRACT
C.B.	CATCH BASIN	N.T.S.	NOT TO SCALE
CBC	CALIF. BUILDING CODE	NO.	NUMBER
C.I.	CAST IRON	NOM.	NOMINAL
C.I.P.	CAST IN PLACE+	O.C.	ON CENTER
CJ	CONTROL JOINT	O.D.	OUTSIDE DIAMETER
CMU	CONCRETE MASONRY UNIT	OPG.	OPENING
CEM.	CEMENT	OPP.	OPPOSITE
CL	CENTER LINE	PSI	POUNDS PER SQUARE INCH
CLR.	CLEAR	PVC	POLYVINYL CLORIDE
CLMN	COLUMN	PENN.	PENETRATION
CONC.	CONCRETE	PERF.	PERFORATED
CONN	CONNECTION	PL	PROPERTY LINE
CONST.	CONSTRUCTION	PLYWD.	PLYWOOD
SONT.	CONTINUOUS	PR.	PAIR
CONTR.	CONTRACTOR	PRCST.	PRECAST
COORD.	COORDINATE	PREFAB.	PREFABRICATED
CTR.	CENTER	PT.WD.	PRESSURE TREATED WOOD
D.F.	DRINKING FOUNTAIN	QTY.	QUANTITY
DBL.	DOUBLE	RADIUS	RADIUS
DEMO.	DEMOLITION	R.C.P.	REINFORCED CONCRETE PIPE
DEPT.	DEPARTMENT	RDWD.	REDWOOD
DET.	DETAIL	RE	RIM ELEVATION
DI	DROP INLET	REF.	REFERENCE
DIA.	DIAMETER	REINF.	REINFORCING
DIAG.	DIAGONAL	REQD.	REQUIRED
DIM.	DIMENSION	REV.	REVISION
DN.	DOWN	SD	STORM DRAIN
DWG.	DRAWING	S.F.	SQUARE FOOT
(E)	EXISTING	S.J.	SCORE JOINT
EXIST.	EXISTING	S.M.	SHEET METAL
EJ	EXPANSION JOINT	S.Y.	SQUARE YARD
E.S.	EACH SIDE	SCH.	SCHEDULE
E.W.	EACH WAY	SHT.	SHEET
EA.	EACH	SIM	SIMILAR
ELEV.	ELEVATION	SPAC.	SPACING
ENCL.	ENCLOSURE	SPEC.	SPECIFICATION
ENGR.	ENGINEER	SQ.	SQUARE
EQ.	EQUAL	STA	STATION
EQUIP.	EQUIPMENT	STD	STANDARD
ETC.	ETCETERA	STL.	STEEL
EXP.	EXPANSION	STOR.	STORAGE
EXT.	EXTERIOR	STRUCT.	STRUCTURAL
FDN	FOUNDATION	SYM.	SYMMETRICAL
FIN.	FINISH	SYS.	SYSTEM
FR.	FROM	T.C.	TOP OF CURB
FT.	FOOT	T.O.	TOP OF
FUT.	FUTURE	T.O.P.	TOP OF PAVING
GA	GAUGE	T.O.W.	TOP OF WALL
GALV.	GALVANIZED	TP	TOP OF PIPE
GND.	GROUND	TEMP.	TEMPORARY
H.B.	HOSE BIBB	THK.	THICK
H.P.	HIGH POINT	TYP.	TYPICAL
HDR.	HEADER	V.I.F.	VERIFY IN FIELD
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HT.	HEIGHT	W/	WITH
IE	INVERT ELEVATION	W.O.	WHERE OCCURS
I.D.	INSIDE DIAMETER	W.P.	WATER PROOF
IN.	INCH	W.W.M.	WELDED WIRE MESH
INCL.	INCLUDE	W/O	WITHOUT
INV.	INVERT	WT.	WEIGHT

GENERAL NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LAYOUT AND MEASUREMENTS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEYING AND FIELD ENGINEERING NECESSARY TO ESTABLISH THE LINES AND GRADE STAKES.
- BEFORE COMMENCING WORK UNDER THIS CONTRACT NOTIFY USA, UNDERGROUND SERVICE ALERT, AT 1-800-227-2600. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PIPES AND STRUCTURES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE SAID UTILITIES. EXISTING UTILITIES SHOWN FOR REFERENCE ONLY
- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE TOWN REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- THE CONTRACTOR SHALL EXAMINE THE SITE, COMPARE IT WITH THE DRAWINGS AND SPECIFICATIONS, CAREFULLY EXAMINE ALL OF THE CONTRACT TO BE PERFORMED BEFORE ENTERING INTO THIS CONTRACT. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE ON BEHALF OF THE CONTRACTOR ON ACCOUNT OF AN ERROR ON HIS PART OR HIS NEGLIGENCE OR FAILURE TO AQUAINT HIMSELF WITH THE CONDITIONS OF THE SITE.
- THE CONTRACTOR SHALL FIELD VERIFY ALL JOB CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS. ANY VARIATIONS THERE OF FROM THE DRAWINGS MUST BE REPORTED TO THE TOWN REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH THE LATEST ADDITION OF CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (UMUTCD).
- UPON COMPLETION OF FINAL PUNCH LIST ITEMS, RECORD PLANS, PREPARED BY THE CONTRACTOR SHALL BE PROVIDED TO SAN ANSELMO. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SIGN A STATEMENT OF COMPLIANCE, VERIFY THAT ALL MATERIALS AND EQUIPMENT ARE INSTALLED PER PLAN AND ARE IN GOOD OPERATING ORDER. REFER TO SPECIFICATIONS 10.14.06 FOR MAINTENANCE PERIOD REQUIREMENTS.
- AN INVENTORY OF EXISTING IMPROVEMENTS SHALL BE SUBMITTED FOR ENTIRE PROJECT AREA. THIS IS TO DOCUMENT CONDITION OF EXISTING IMPROVEMENTS UPON THE CONTRACTOR'S ARRIVAL. INFORMATION SHALL INCLUDE: TREES, RETAINING WALLS, EXISTING CATCH BASINS, ROAD SIGNS, CURBING, UTILITY BOXES AND MANHOLES. IMPROVEMENTS RECORDED SHALL INCLUDE ALL CITY SIDEWALKS, SIGNS AND CURBING.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING STORMWATER POLLUTION PREVENTION BMP'S AS REQUIRED BY THE STATE REGIONAL WATER QUALITY BOARD DURING CONSTRUCTION, INCLUDING NON-WORKING HOURS. CONTRACTOR SHALL HAVE ONSITE, MATERIALS NECESSARY TO PROVIDE STORMWATER RUNOFF PROTECTION DURING A STORM EVENT.

SIGNATURES

DIRECTOR OF PUBLIC WORKS

DATE

PROJECT DIRECTORY

CLIENT  
**TOWN OF SAN ANSELMO**  
1000 SIR FRANCIS DRAKE BLVD.  
SAN ANSELMO, CA 94960  
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LANDSCAPE ARCHITECT:  
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SURVEYOR  
**STEPHEN J. FLATLAND**  
PO BOX 1837  
SAN ANSELMO, CA 94960  
CONTACT: STEPHEN FLATLAND  
PHONE: (415) 457-5081

PROJECT SCOPE

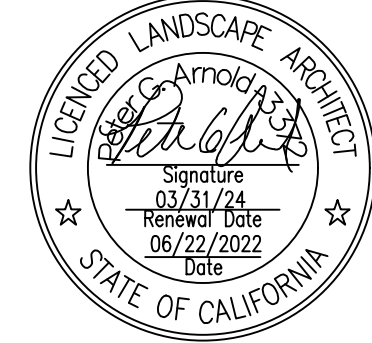
DEMOLITION AND REMOVAL OF EXISTING NATURAL TURF, GRADING. INSTALLATION SUBSURFACE OF DRAIN LINES. INSTALLATION OF NEW IRRIGATION SYSTEM, REPAIR AND RE-GRADING OF BASEBALL INFIELDS. INSTALLATION OF SOD TURF .

**BUILDING CODE**  
2019 CBC

DRAWING LIST

NO.	SHEET	SHEET TITLE
1.	T-1	TITLE SHEET
2.	S-1	SURVEY, EXISTING CONDITIONS PLAN
3.	EC	COUNTY OF MARIN MCSTOPPP
4.	D-1	DEMOLITION PLAN
5.	L-1	LAYOUT PLAN
6.	G-1	GRADING AND DRAINAGE PLAN
7.	CD-1	CONSTRUCTION DETAILS
8.	CD-2	CONSTRUCTION DETAILS
9.	I-1	IRRIGATION PLAN
10.	I-2	IRRIGATION PLAN, LEGEND AND NOTES
11.	I-3	IRRIGATION DETAILS
12.	I-4	IRRIGATION DETAILS

Seal



Consultants

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Project

**Athletic Field Turf  
Renovation Project**

**Memorial Park**

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

TITLE SHEET

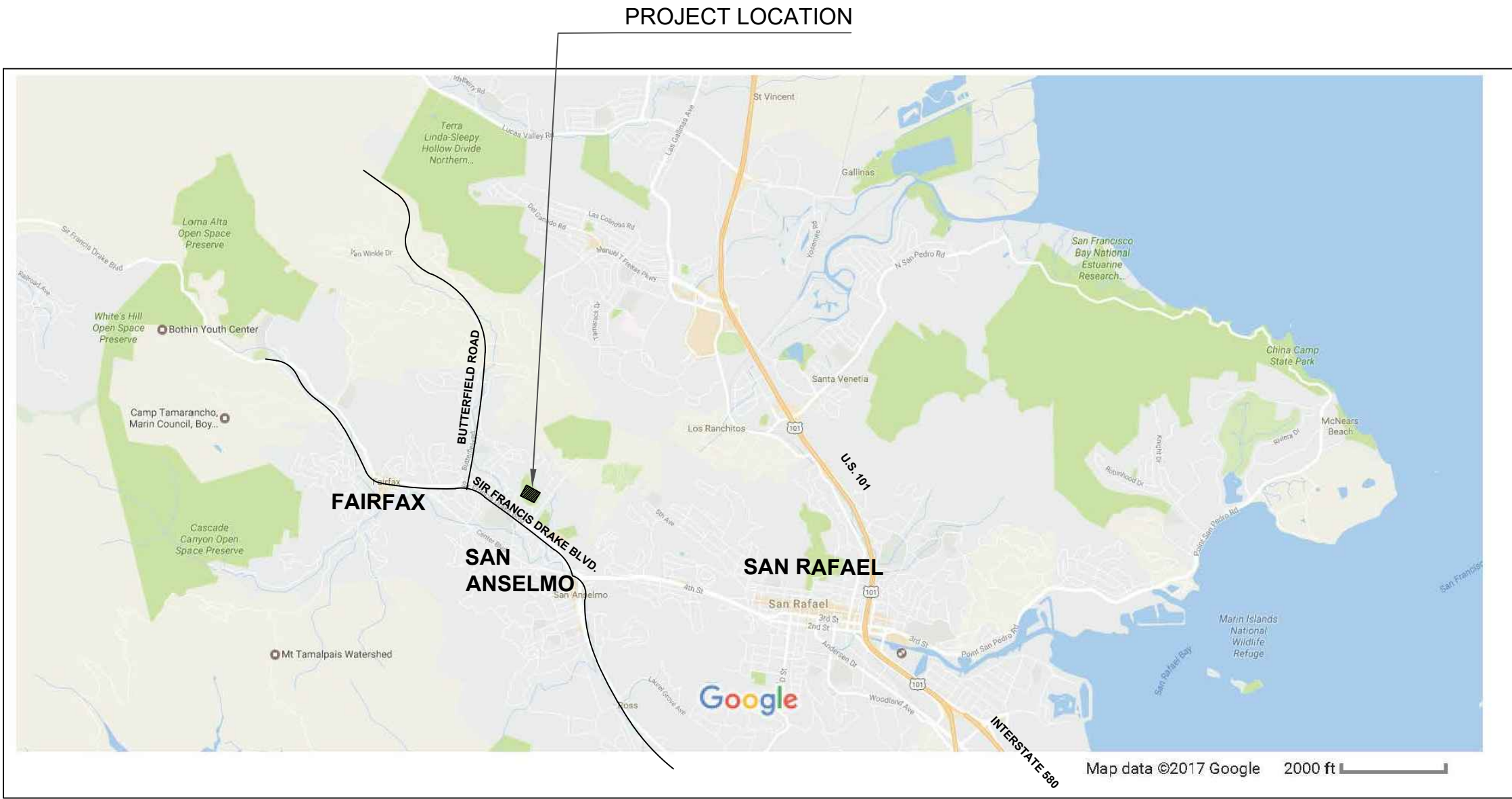
Date: June 22, 2022

Job #: 2005

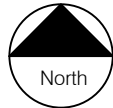
Revisions

Sheet Number

T-1

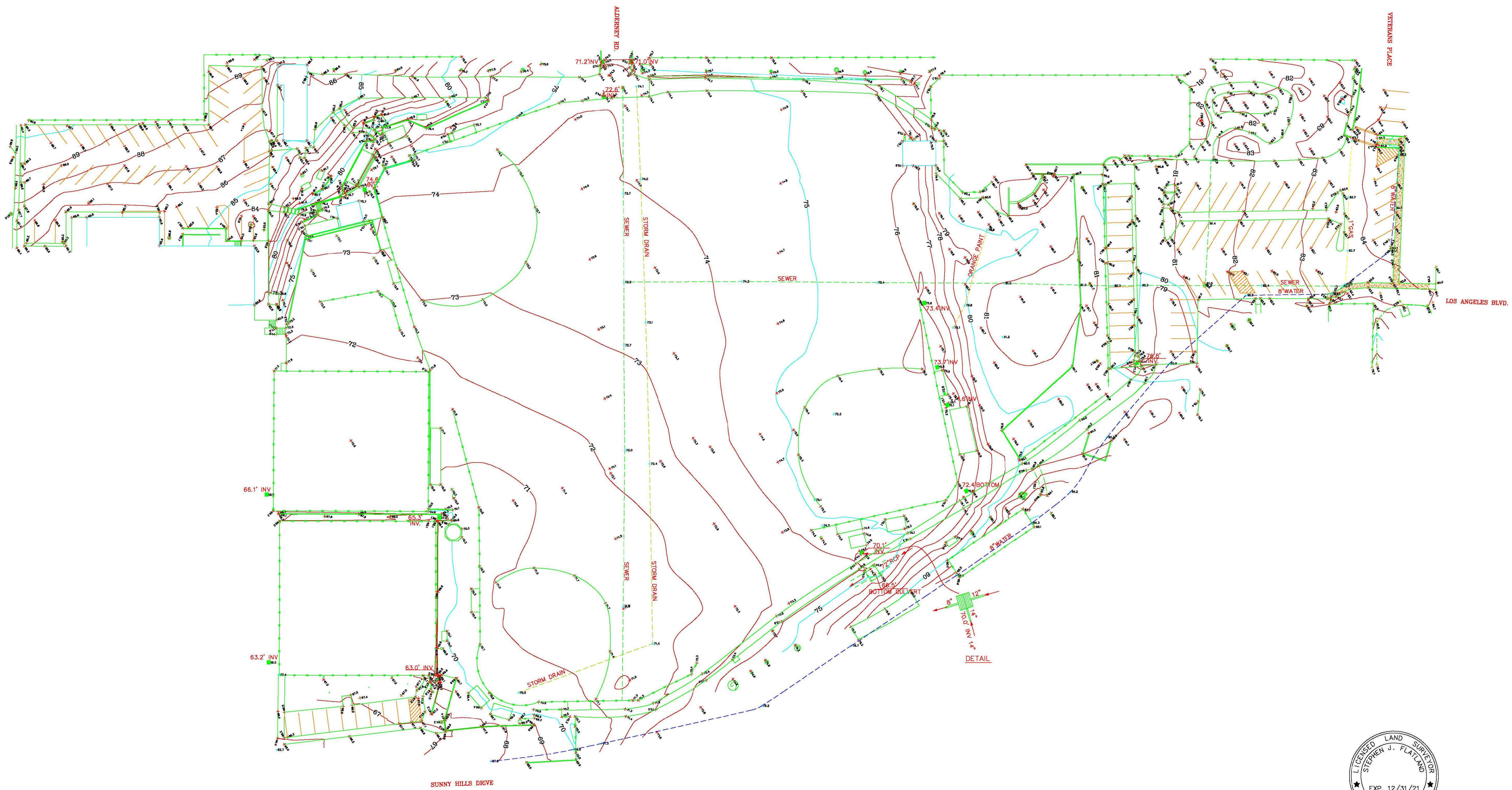


PROJECT LOCATION



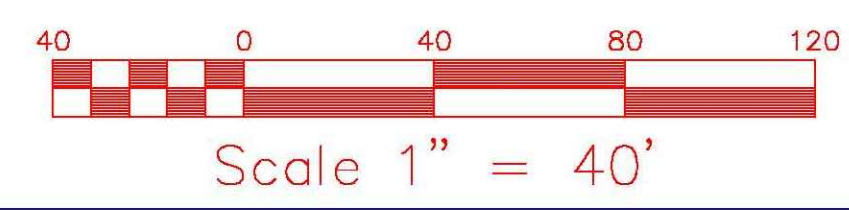


SUN FRANCIS DRIVE BVD



NOTES  
ELEVATIONS ARE BASED ON NAVD 88 DATUM.  
BENCHMARK K1394, ELEVATION 91.87' NAVD88 WAS USED  
TO ESTABLISH ELEVATION SHOWN HEREIN.

- 1' CONTOUR INTERVAL
- FENCE LINE
- TREE AS NOTED
- APN ASSESSOR PARCEL NUMBER
- SPOT ELEVATION



Item 1.3	
Attachment 1	

STEPHEN J. FLATLAND  
PROFESSIONAL LAND SURVEYOR  
P.O. BOX 1837  
SAN ANSELMO, CALIFORNIA 94960  
(415) 457-5081

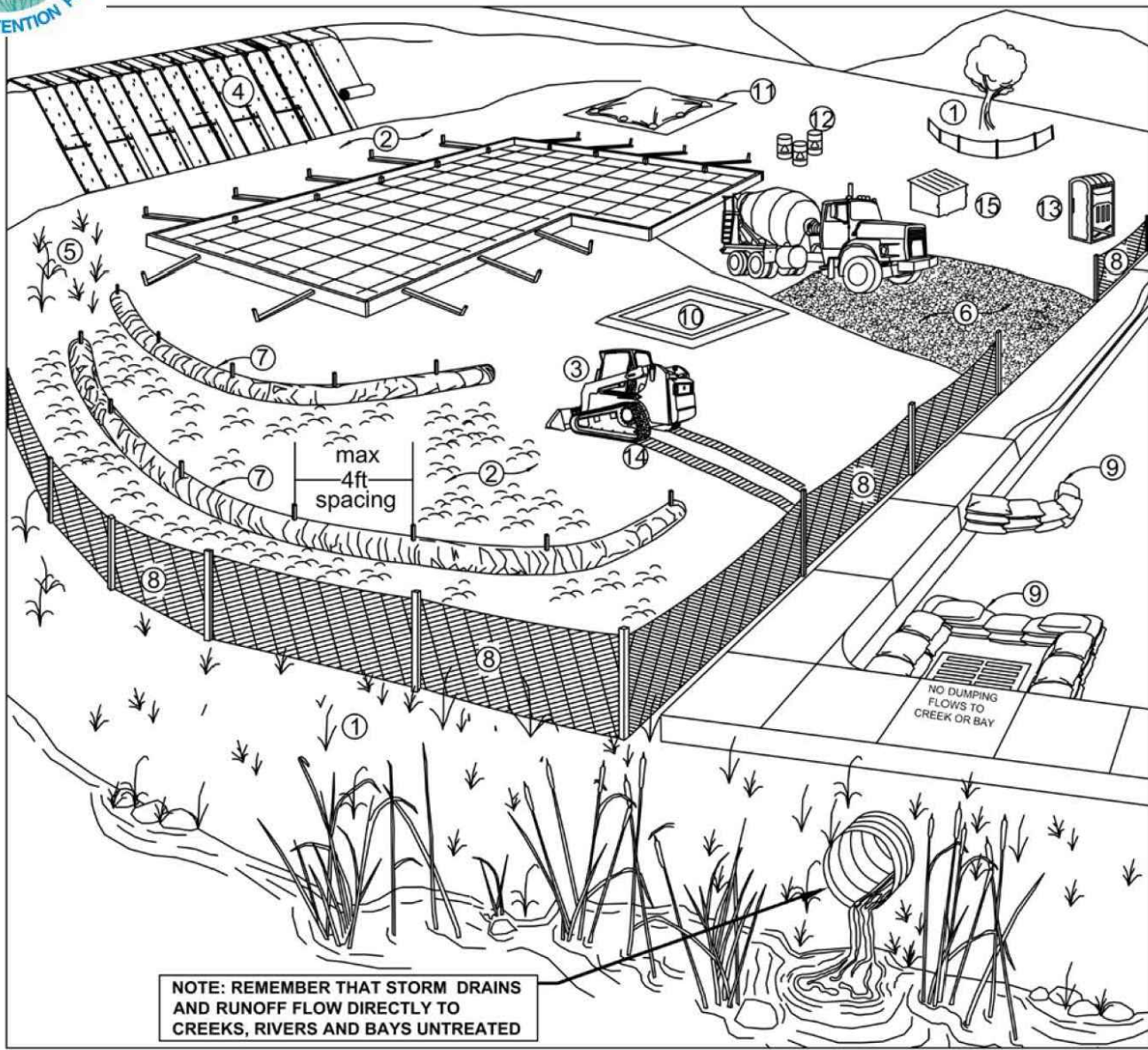
TOPOGRAPHIC SURVEY  
FOR: TOWN OF SAN ANSELMO  
MEMORIAL PARK LIMITS  
SAN ANSELMO, CALIFORNIA  
APN 047-112-60

DATE: FEB., 2020  
SCALE: 1"=40'  
DRAWN:  
CHECKED:  
JOB NO: F1178





**Marin County Stormwater Pollution Prevention Program**  
**Minimum Control Measures**  
**For Small Construction Projects**



Erosion Controls	Sediment Controls	Good Housekeeping
NS. Scheduling	6. Tracking Controls	10. Concrete Washout
1. Preserve Vegetation & Creek Set Backs	7. Fiber Rolls	11. Stockpile Management
2. Soil Cover	8. Silt Fence	12. Hazardous Material Management
3. Soil Preparation/ Roughening	9. Drain Inlet Protection	13. Sanitary Waste Management
4. Erosion Control Blankets	NS. Trench Dewatering	14. Equipment and Vehicle Maintenance
5. Revegetation		15. Litter and Waste Management

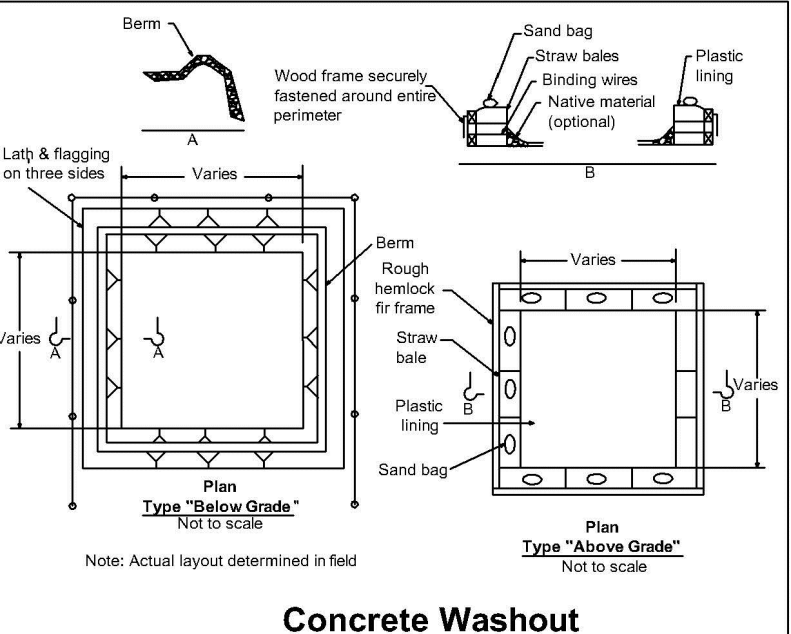
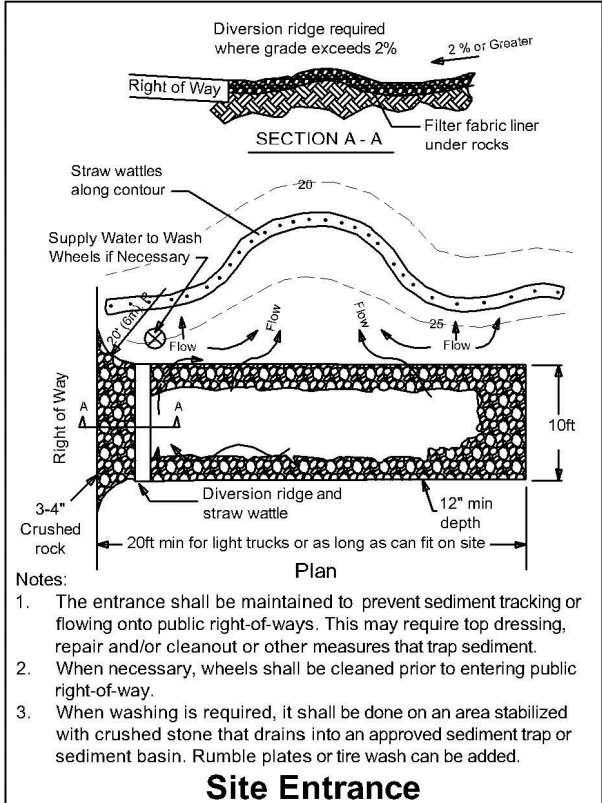
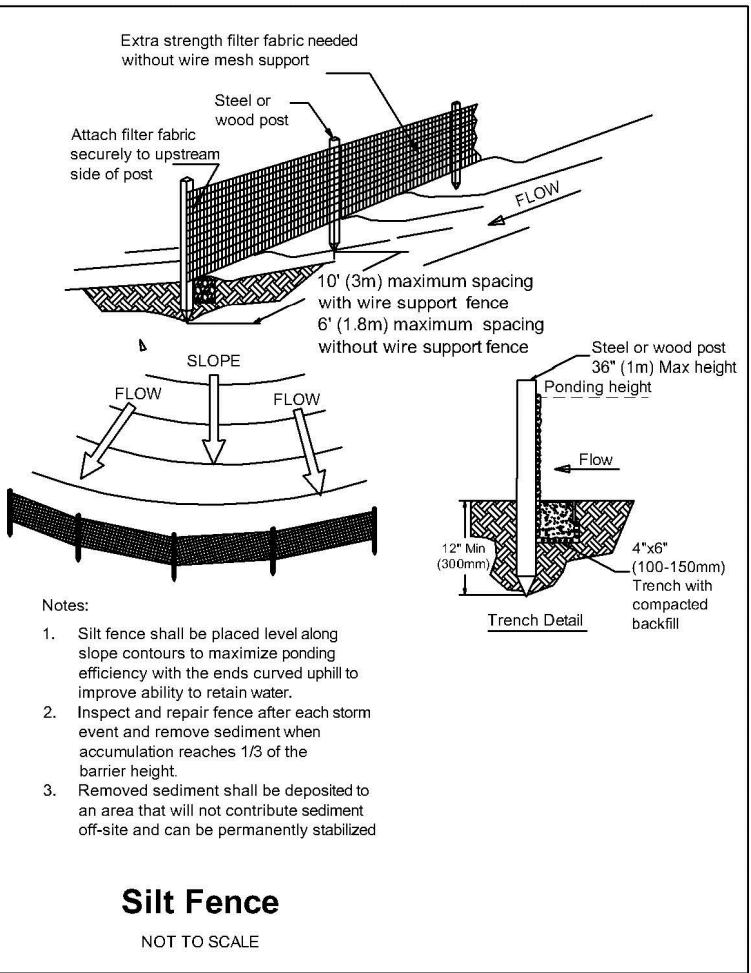
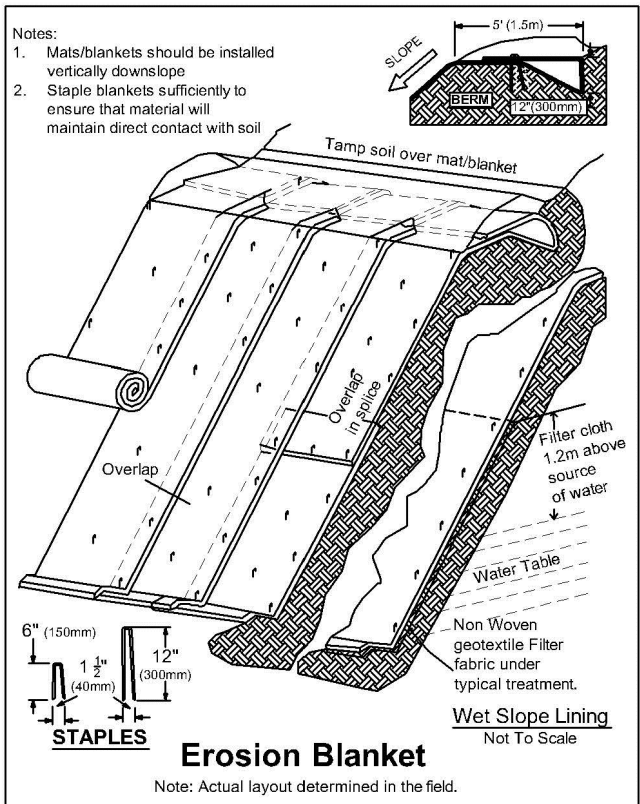
NS=not shown on graphic

**Note:** Select an **effective combination of control measures from each category**, Erosion Control, Sediment Control, and Good Housekeeping. Control measures shall be **continually implemented and maintained throughout the project** until activities are complete, disturbed areas are stabilized with permanent erosion controls, and the local agency has signed off on permits that may have been required for the project. **Inspect and maintain the control measures** before and after rain events, and as required by the local agency or state permit.

More detailed information on the BMPs can be found in the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factsheets. CASQA factsheets are available by subscription in the *California Best Management Practices Handbook Portal: Construction* at <http://www.casqa.org>. Caltrans factsheets are available in the *Construction Site BMP Manual March 2003* at <http://www.dot.ca.gov/hq/construct/stormwater/manuals.htm>. Visit [www.mcstoppp.org](http://www.mcstoppp.org) for more information on construction site management and Erosion and Sediment Control Plans.

If you require materials in alternative formats, please contact:  
415-473-4381 voice/TTY or [disabilityaccess@co.marin.ca.us](mailto:disabilityaccess@co.marin.ca.us)

Control Measure	General Description
<b>Erosion Control Best Management Practices</b>	
N/A	Scheduling Plan the project and develop a schedule showing each phase of construction. Schedule construction activities to reduce erosion potential, such as scheduling ground disturbing activities during the summer and phasing projects to minimize the amount of area disturbed. <i>For more info see the following factsheets: CASQA: EC-1; or Caltrans: SS-1.</i>
1	Preserve Existing Vegetation and Creek Setbacks Preserve existing vegetation to the extent possible, especially along creek buffers. Show creek buffers on maps and identify areas to be preserved in the field with temporary fencing. Check with the local Planning and Public Works Departments for specific creek set back requirements. <i>For more info see the following factsheets: CASQA: EC-2; or Caltrans: SS-2.</i>
2	Soil Cover Cover exposed soil with straw mulch and tackifier (or equivalent). <i>For more info see the following factsheets: CASQA: EC-3, EC-5, EC-6, EC-7, EC-8, EC-14, EC-16; or Caltrans: SS-2, SS-4, SS-5, SS-6, SS-7, SS-8.</i>
3	Soil Preparation/ Roughening Soil preparation is essential to vegetation establishment and BMP installation. It includes soil testing and amendments to promote vegetation growth as well as roughening surface soils by mechanical methods (decompacting, scarifying, stair stepping, etc.). <i>For more info see the following factsheets: CASQA: EC-15.</i>
4	Erosion Control Blankets Install erosion control blankets (or equivalent) on disturbed sites with 3:1 slopes or steeper. Use wildlife-friendly blankets made of biodegradable natural materials. Avoid using blankets made with plastic netting or fixed aperture netting. See: <a href="http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf">http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf</a> . <i>For more info see the following factsheets: CASQA: EC-7; or Caltrans: SS-7.</i>
5	Revegetation Re-vegetate areas of disturbed soil or vegetation as soon as practical. <i>For more info see the following factsheets: CASQA: EC-4; or Caltrans: SS-4.</i>
<b>Sediment Control Best Management Practices</b>	
6	Tracking Controls Stabilize site entrance to prevent tracking soil offsite. Inspect streets daily and sweep street as needed. Require vehicles and workers to use stabilized entrance. Place crushed rock 12-inches deep over a geotextile, using angular rock between 4 and 6-in. Make the entrance as long as can be accommodated on the site, ideally long enough for 2 revolutions of the maximum tire size (16-20 feet long for most light trucks). Make the entrance wide enough to accommodate the largest vehicle that will access the site, ideally 10 feet wide with sufficient radii for turning in and out of the site. Rumble pads or rumble racks can be used in lieu of or in conjunction with rock entrances. Wheel washes may be needed where space is limited or where the site entrance and sweeping is not effective. <i>For more info see the following factsheets: CASQA: TC-1, TC-3; or Caltrans: TC-1, TC-3.</i>
7	Fiber Rolls Use fiber rolls as a perimeter control measure, along contours of slopes, and around soil stockpiles. On slopes space rolls 10 to 20 feet apart (using closer spacing on steeper slopes). Install parallel to contour. If more than one roll is used in a row overlap roll do not abut. J-hook end of roll upslope. Install rolls per either Type 1 (stake rolls into shallow trenches) or Type 2 (stake in front and behind roll and lash with rope). Use wildlife-friendly fiber rolls made of biodegradable natural materials. Avoid using fiber rolls made with plastic netting or fixed aperture netting. See: <a href="http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf">http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf</a> . Manufactured linear sediment control or compost socks can be used in lieu of fiber rolls. <i>For more info see the following factsheets: CASQA: SE-5 (Type 1), SE-12, SE-13; or Caltrans: SC-5 (Type 1 and Type 9).</i>
8	Silt Fence Use silt fence as a perimeter control measure, and around soil stockpiles. Install silt fence along contours. Key silt fence into the soil and stake. Do not use silt fence for concentrated water flows. Install fence at least 3 feet back from the slope to allow for sediment storage. Wire backed fence can be used for extra strength. Avoid installing silt fence on slopes because they are hard to maintain. Manufactured linear sediment control can be used in lieu of silt fences. <i>For more info see the following factsheets: CASQA: SE-1; SE-12; or Caltrans: SC-1.</i>
9	Drain Inlet Protection Use gravel bags, (or similar product) around drain inlets located both onsite and in gutter as a last line of defense. Bags should be made of a woven fabric resistant to photo-degradation filled with 0.5-1-in washed crushed rock. Do not use sand bags or silt fence fabric for drain inlet protection. <i>For more info see the following factsheets: CASQA: SE-10; or Caltrans: SC-10.</i>
N/A	Trench Dewatering Follow MCSTOPPP BMPs for trench dewatering. <a href="http://www.marincounty.org/depts/pw/divisions/mcstoppp/development/~media/Files/Departments/PW/mcstoppp/development/TrenchingSWReqMCSTOPPPFinal6_09.pdf">http://www.marincounty.org/depts/pw/divisions/mcstoppp/development/~media/Files/Departments/PW/mcstoppp/development/TrenchingSWReqMCSTOPPPFinal6_09.pdf</a> . <i>For more info see the following factsheets: CASQA: NS-2; or Caltrans: NS-2.</i>
<b>Good Housekeeping Best Management Practices</b>	
10	Concrete Washout Construct a lined concrete washout site away from storm drains, waterbodies, or other drainages. Ideally, place adjacent to stabilized entrance. Clean as needed and remove at end of project. <i>For more info see the following factsheets: CASQA: WM-6; or Caltrans: WM-8.</i>
11	Stockpile Management Cover all stockpiles and landscape material and berm properly with fiber rolls or sand bags. Keep behind the site perimeter control and away from waterbodies. <i>For more info see the following factsheets: CASQA: WM-3 or Caltrans: WM-3.</i>
12	Hazardous Material Management Hazardous materials must be kept in closed containers that are covered and within secondary containment; do not place containers directly on soil. <i>For more info see the following factsheets: CASQA: WM-6; or Caltrans: WM-6.</i>
13	Sanitary Waste Management Place portable toilets near stabilized site entrance, behind the curb and away from gutters, storm drain inlets, and waterbodies. Tie or stake portable toilets to prevent tipping and equip units with overflow pan/tray (most vendors provide these). <i>For more info see the following factsheets: CASQA: WM-9; or Caltrans: WM-9.</i>
14	Equipment and Vehicle Maintenance Prevent equipment fluid leaks onto ground by placing drip pans or plastic tarps under equipment. Immediately clean up any spills or drips. <i>For more info see the following factsheets: CASQA: NS-8, NS-9, and NS-10; or Caltrans: NS-8, NS-9, and NS-10.</i>
15	Litter and Waste Management Designate waste collection areas on site. Use watertight dumpsters and trash cans; inspect for leaks. Cover at the end of each work day and when it is raining or windy. Arrange for regular waste collection. Pick up site litter daily. <i>For more info see the following factsheets: CASQA: WM-5; or Caltrans: WM-5.</i>



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Project

**Athletic Field Turf Renovation Project**

**Memorial Park**

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

**MCSTOPPP  
EROSION CONTROL**

Date: June 22, 2022

Job #: 2005

Revisions

Sheet Number

EC





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San Rafael, California 94901  
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San Anselmo, CA 94960

Drawing Title

**DEMOLITION PLAN**

Date: June 22, 2022

Job #: 2005

Revisions

Sheet Number

**D-1**

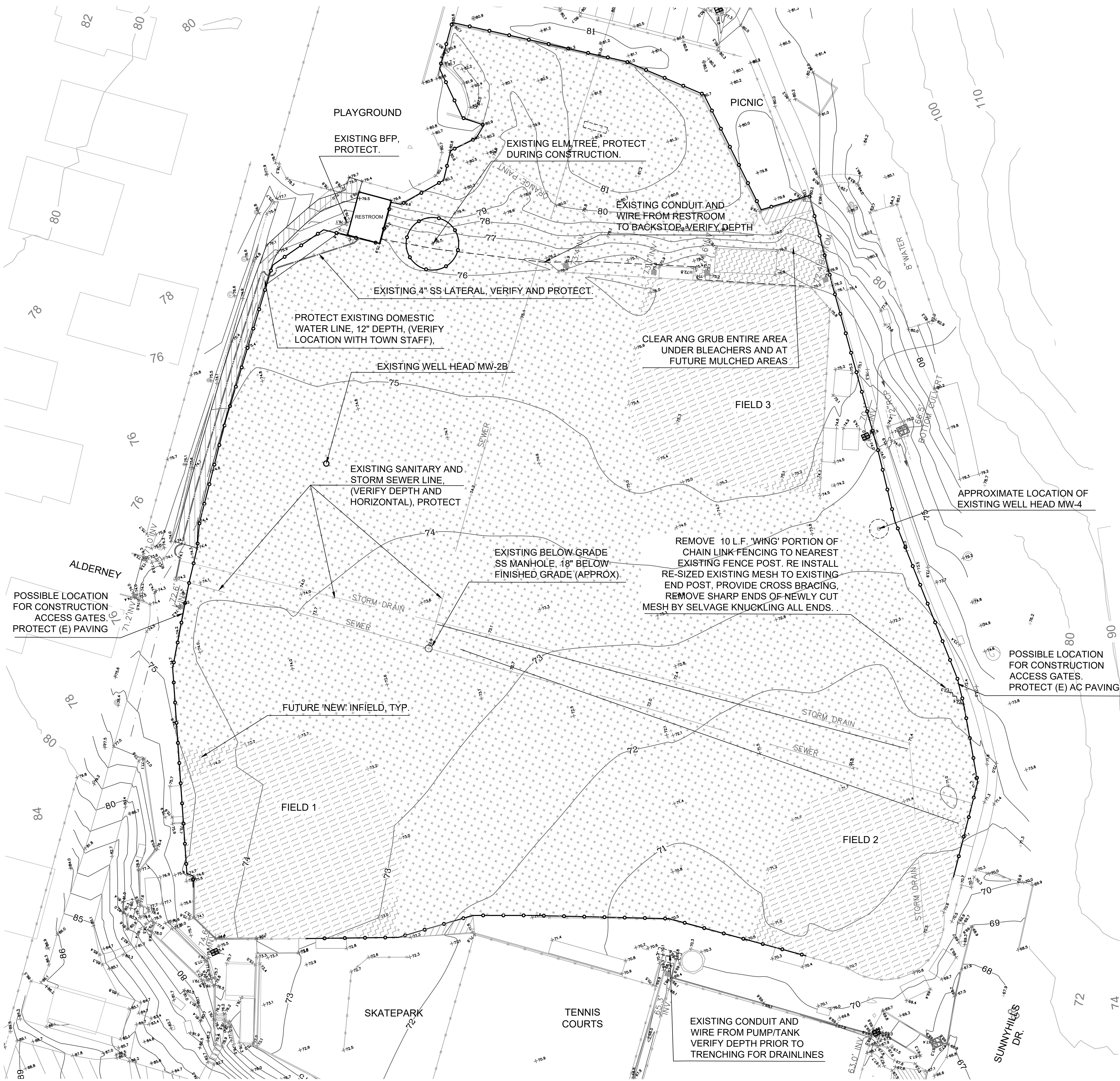
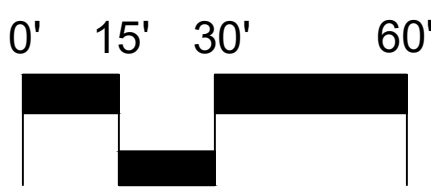
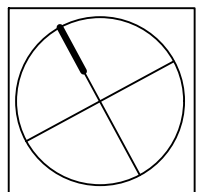
## DEMOLITION/MOBILIZATION NOTES

1. CONTRACTOR SHALL SUPPLY ALL NECESSARY TEMPORARY FENCING TO SECURE THE JOB SITE AND ALLOW STORAGE OF EQUIPMENT AND MATERIALS DURING CONSTRUCTION OPERATIONS. FENCING SHALL BE 6' MIN. HEIGHT CHAIN-LINK WITH STEEL FRAMING AND FOOTINGS. FENCING SHALL BE APPROXIMATELY IN LOCATIONS SHOWN AND SHALL NOT IMPEDE ACCESS OR USE OF ENTIRE SURFACE OF EXISTING PATHWAYS. CONTRACTOR TO PROVIDE STRUCTURALLY SOUND AND SECURE LOCKABLE GATES, SIZED APPROPRIATELY TO ALLOW FOR EQUIPMENT AND DELIVERIES TO THE CONSTRUCTION ZONE.
2. CONTRACTOR SHALL MEET ONSITE WITH TOWN STAFF PRIOR TO DEMOLITION TO REVIEW LAYOUT AND IMPROVEMENTS TO BE PROTECTED.
3. TREE PROTECTION SHALL CONSIST OF EMBEDDED 6' TALL CHAIN LINK FENCING INSTALLED SO IT THAT PREVENTS LARGE CONSTRUCTION EQUIPMENT FROM COMPACTING SOIL WITHIN THE DRIPLINE OF THE TREE. IF DEEMED BENEFICIAL TO THE TREE'S HEALTH BY A CERTIFIED ARBORIST AND THE TOWN, SOME TRIMMING OF THE LOWER TREE BRANCHES MAY BE ALLOWED. THIS WORK WILL NOT COMMENCE WITHOUT WRITTEN PERMISSION BY THE TOWN PROJECT MANAGER.
4. PRIOR TO BEGINNING 'TURF TILL-IN', THE CONTRACTOR SHALL NOTIFY THE TOWN AND REQUEST THAT WATERING OF THE EXISTING TURF BE STOPPED TO ALLOW TURF DIE BACK AND DRY OUT. TURF SHALL NOT BE TILLED INTO THE SOIL UNTIL MOISTURE LEVELS ARE LOW ENOUGH TO ALLOW PROPER DECOMPOSITION.
5. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING ALL PORTIONS OF THE DEMOLITION PROCESS IN WHICH DUST IS CREATED.
6. ALL EXISTING IRRIGATION ROTOR HEADS SHALL BE SALVAGED AND HANDED OVER TO TOWN STAFF. REMAINING IRRIGATION EQUIPMENT, (REMOTE CONTROL VALVES, CONTROLLER, PIPE, QUICK COUPLERS, GATE VALVES ETC...),SHALL BE REMOVED AND DISPOSED OF.
7. CONTRACTOR SHALL NOTIFY STAFF AND DESIGNER OF ANY DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS PRIOR TO DEMOLITION.
8. ALL REFUSE RESULTING FROM DEMOLITION SHALL BE OFF HAULED AND DISPOSED OF IN A LEGAL AND PROPER MANNER, FOLLOWING ALL STATE AND LOCAL ORDINANCES.
9. PROVIDE WASTE REPORTS FOR ALL REFUSE.
10. CONTRACTOR TO PROVIDE VERIFICATION TO TOWN STAFF THAT EXISTING LIVE IRRIGATION LINES HAVE BEEN CUT AND CAPPED PRIOR TO DEMOLITION IN LANDSCAPE AREAS.
11. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING UTILITY LINES. CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY,(ROSS VALLEY SANITARY, MARIN WATER, TOWN OF SAN ANSELMO), AND TOWN ENGINEER IF UTILITY CONFLICTS OCCUR DURING DEMOLITION.
12. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT INDICATED FOR REMOVAL WITHIN THE PROJECT SITE AND IS RESPONSIBLE FOR REPLACEMENT OF ITEMS DAMAGED DURING THE INSTALLATION OF THE PROJECT AT THE CONTRACTORS EXPENSE, (LABOR, MATERIALS AND PROFIT INCLUDED).
13. CONTRACTOR IS RESPONSIBLE FOR RECORDING EXISTING SITE CONDITIONS PRIOR TO COMMENCING AND IS TO PROVIDE A DATED COPY OF RECORDED INFORMATION TO THE TOWN.
14. DURING MATERIAL AND EQUIPMENT DELIVERIES, CONTRACTOR SHALL COORDINATED WITH TOWN STAFF AND PROVIDE SIGNS, BARRIERS AND PERSONNEL NECESSARY TO FACILITATE SAFE PATHWAY CLOSURES .

## DEMOLITION LEGEND

- TURF AND IRRIGATION SYSTEM REMOVAL, (THOROUGHLY TILL EXISTING TURF INTO EXISTING SOIL TO 12" MINIMUM DEPTH)
- INFIELD AREA FOR STAGING , (PROTECT EXISTING INFIELD MIX, REMOVE AND REPLACE ALL MIX CONTAMINATED DURING CONSTRUCTION.)
- REMOVE EXISTING 'MIXED PAVING' (INFIELD MIX/ASPHALT/DG) TO A DEPTH OF 9" IN PREPARATION FOR NEW ASPHALT PAVING.
- CLEAR AND GRUB FOR INFIELD MIX AND/OR MULCH INSTALLATION
- APPROXIMATE LOCATION OF CONSTRUCTION FENCING. CONTRACTOR IS RESPONSIBLE FOR CREATING A SECURE AND SAFE CONSTRUCTION SITE.

## DEMOLITION PLAN







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Project

## Athletic Field Turf Renovation Project

## Memorial Park

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

## LAYOUT PLAN

Date: June 22, 2022

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## LAYOUT LEGEND

BASEBALL INFIELDS, TMT 'PAC BELL INFELD FINES' OR EQUAL. RE-GRADE PER PLAN. MAINTAIN MINIMUM 3" DEPTH INFELD MIX, (40 CUBIC YARD INFELD MIX MATERIAL ALLOWANCE). FOLLOWING IRRIGATION AND GRADING OPERATIONS, REPAIR AND FINE GRADE INFELD. PROVIDE ADDITIONAL INFELD SURFACING AT CORNERS TO CREATE NEW LIMIT OF SURFACING AS SHOWN ON PLAN. COMPACT TO 90%.

TALL FESCUE SOD and LIMIT OF SOIL PREPARATION, FINE GRADE TO MEET NEW GRADES INDICATED, (139,030 S.F.) (SOD - WEST COAST TURF, 'WEST COASTER' TALL FESCUE OR EQ.)

3" DEPTH WOOD MULCH, (1,900 S.F.)  
REDI GROW, GOLDEN NUGGETS, (916) 381-6063

ASPHALT PAVING

SAWCUT AT EXISTING PAVING

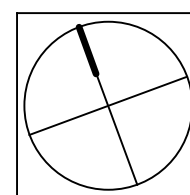
CP CENTER POINT OF LAYOUT RADIUS

WOOD HEADER  
(HEADER AT AC PAVING TO BE INCLUDED IN PAVING COST)

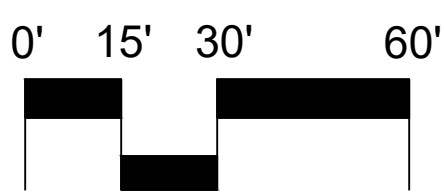
## LAYOUT NOTES

- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. ALL DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT COORDINATOR FOR RESOLUTION.
- CONTRACTOR IS TO FINE GRADE AND BLEND INFELD MIX MATERIAL AND CREATE A 'PLANAR' SURFACE. PROVIDE NEW INFELD SURFACING AT CORNERS OF EACH FIELD PER THE DEMOLITION PLAN. SUBMIT SAMPLE OF MIX FOR APPROVAL. NEW INFELD AREAS ARE TO BE 3" MIN. DEPTH INFELD MIX OVER COMPACTED SUBGRADE, (92% MIN.).
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STAKING OF PAVING AND HEADER IMPROVEMENTS.
- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR SITE CONDITIONS EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE TOWN PROJECT ENGINEER.
- ALL UTILITY BOXES WITHIN PAVED AND LANDSCAPED AREAS ARE TO BE ADJUSTED AND/OR EXTENDED TO MEET NEW FINISHED GRADES.
- CONTRACTOR TO BE RESPONSIBLE FOR HAVING TRAINED PERSONNEL FOR SWPPP, MONITORING AND ASSOCIATED REPORTS.

## LAYOUT PLAN



North







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Project

## Athletic Field Turf Renovation Project

## Memorial Park

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title  
**GRADING  
and  
DRAINAGE PLAN**

Date: June 22, 2022

Job #: 2005

Revisions

Sheet Number

**G-1**

6 Of 12 Sheets

## MATERIALS LEGEND

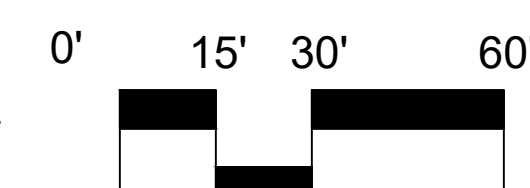
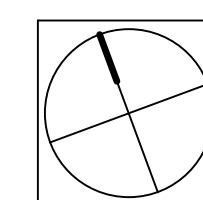
	BASEBALL INFIELDS
	TALL FESCUE SOD
	WOOD MULCH
	ASPHALT PAVING

## GRADING/DRAINAGE LEGEND

+ 0.00	EXISTING ELEVATION
x 0.00 IE	PIPE INVERT ELEVATION
x 0.00 RE	RIM ELEVATION
x 0.00	FINISHED GRADE ELEVATION
	DIRECTION OF SURFACE FLOW
GB	GRADE BREAK
	EXISTING CONTOUR
	PROPOSED CONTOUR
CO	CLEANOUT - AT GRADE WITH BOX
CO (bg)	CLEANOUT- BELOW GRADE WITH LOCATION WIRE
	DRAIN BOX- PRECAST CONCRETE, 24", WITH PROTECTIVE COVER
	PUMP SUPPLY LINE, HDPE TYPE DR9, CAP BOTH ENDS
	PUMP ELECTRICAL CONDUIT AND WIRE, (6- 12g, INSULATED SOLID COPPER)
	PERFORATED DRAIN LINE, (Smoothwall, HDPE) S= SLOPE, D=INSIDE DIAMETER, LF= LINEAR FT
	SOLID DRAIN LINE, (Smoothwall, HDPE) S= SLOPE, D=INSIDE DIAMETER, LF= LINEAR FT (FOR 'STORAGE DRAINLINES' UTILIZE IRRIGATION TRENCH WHEN POSSIBLE. PIPE IS TO BE INSTALLED BELOW IRRIGATION MAINLINE AND/OR LATERAL)

## GRADING/DRAINAGE NOTES

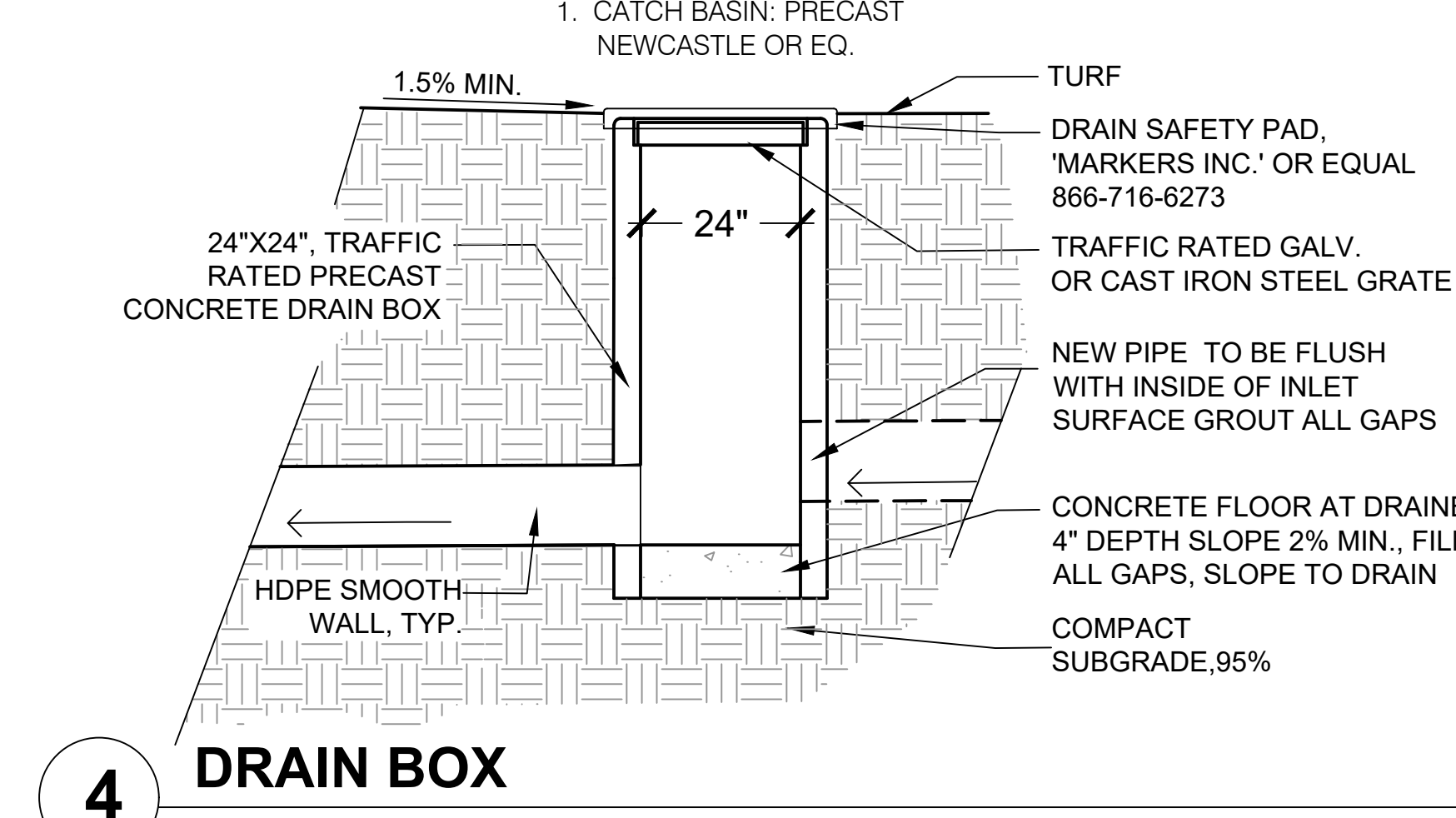
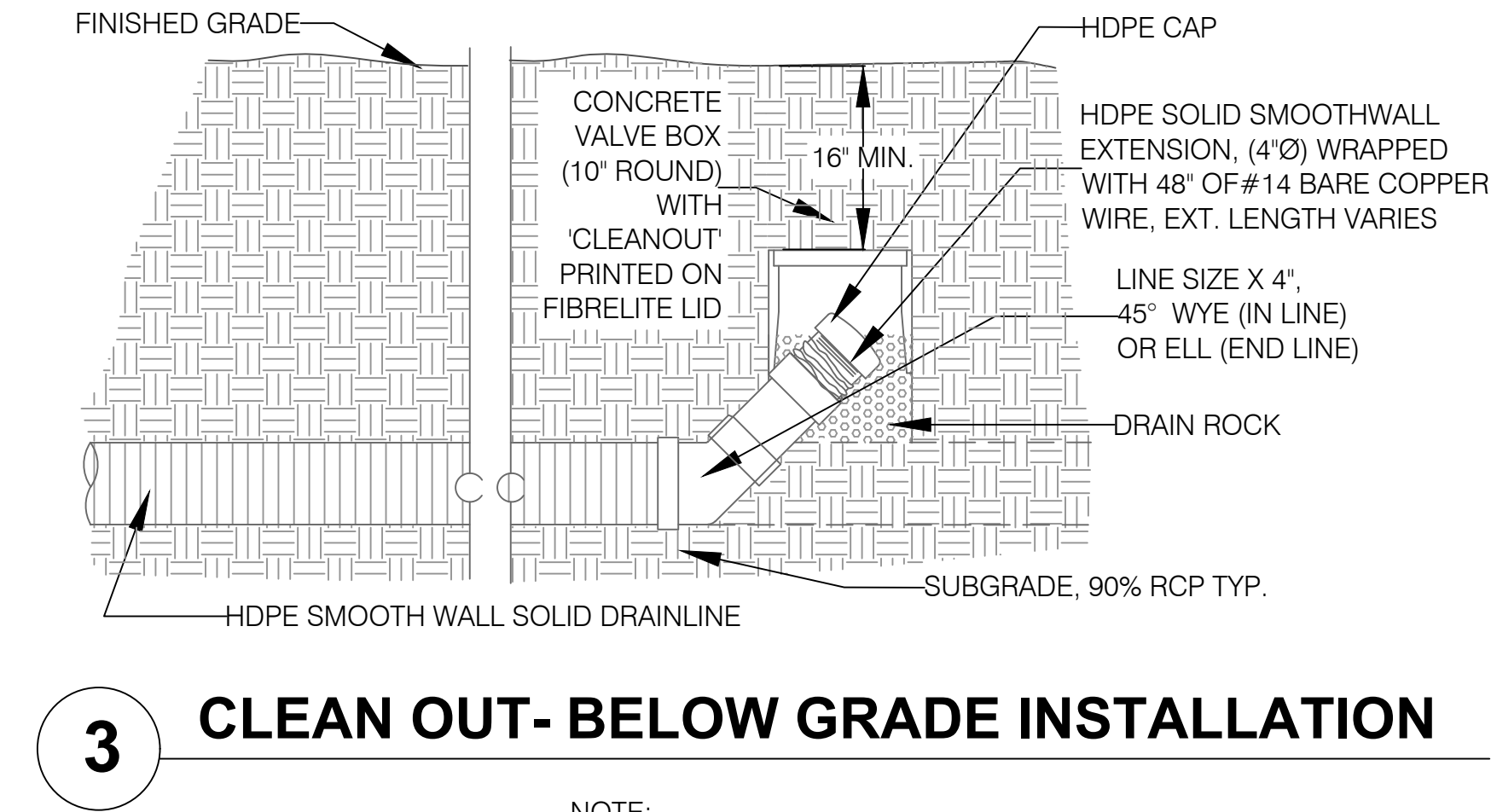
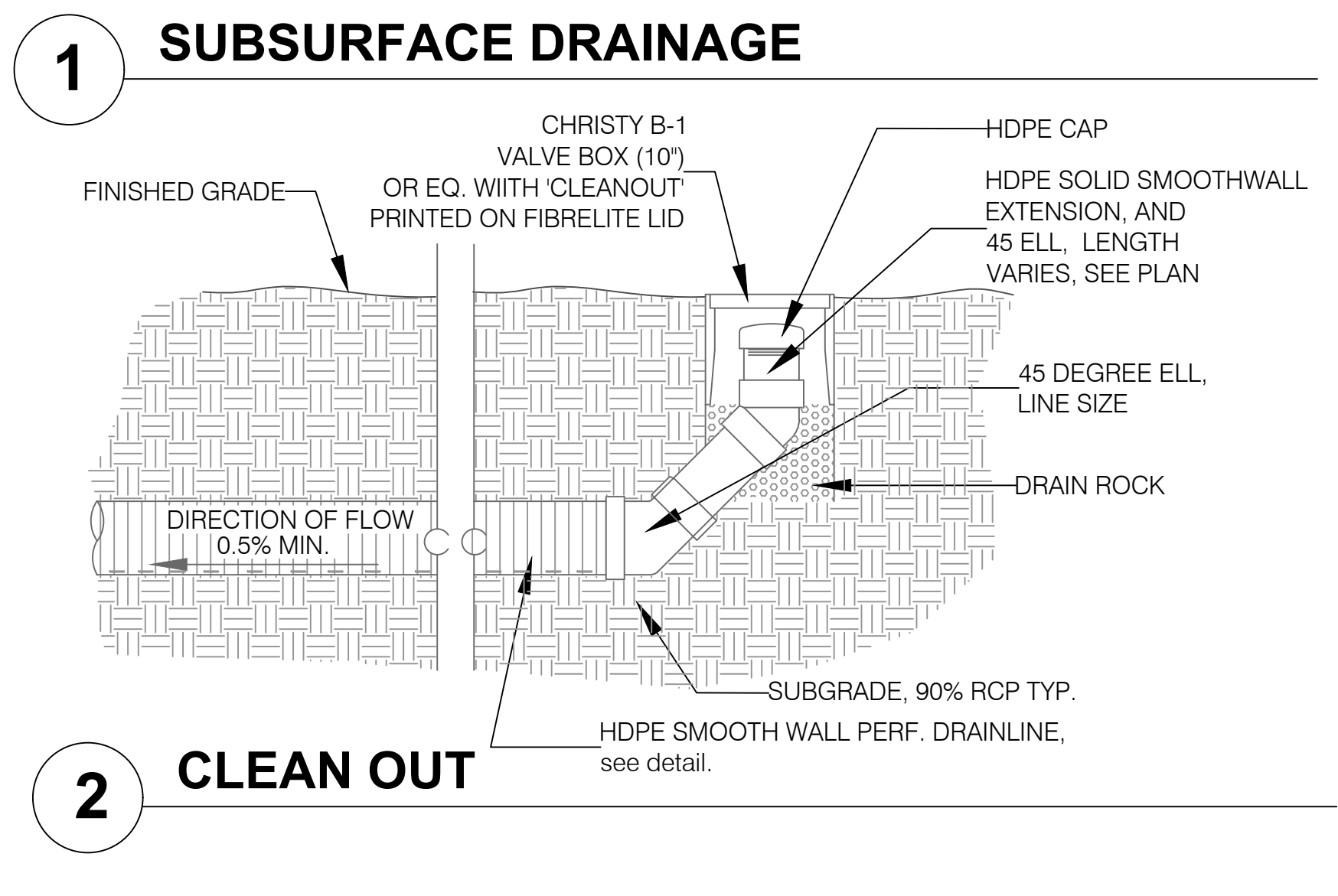
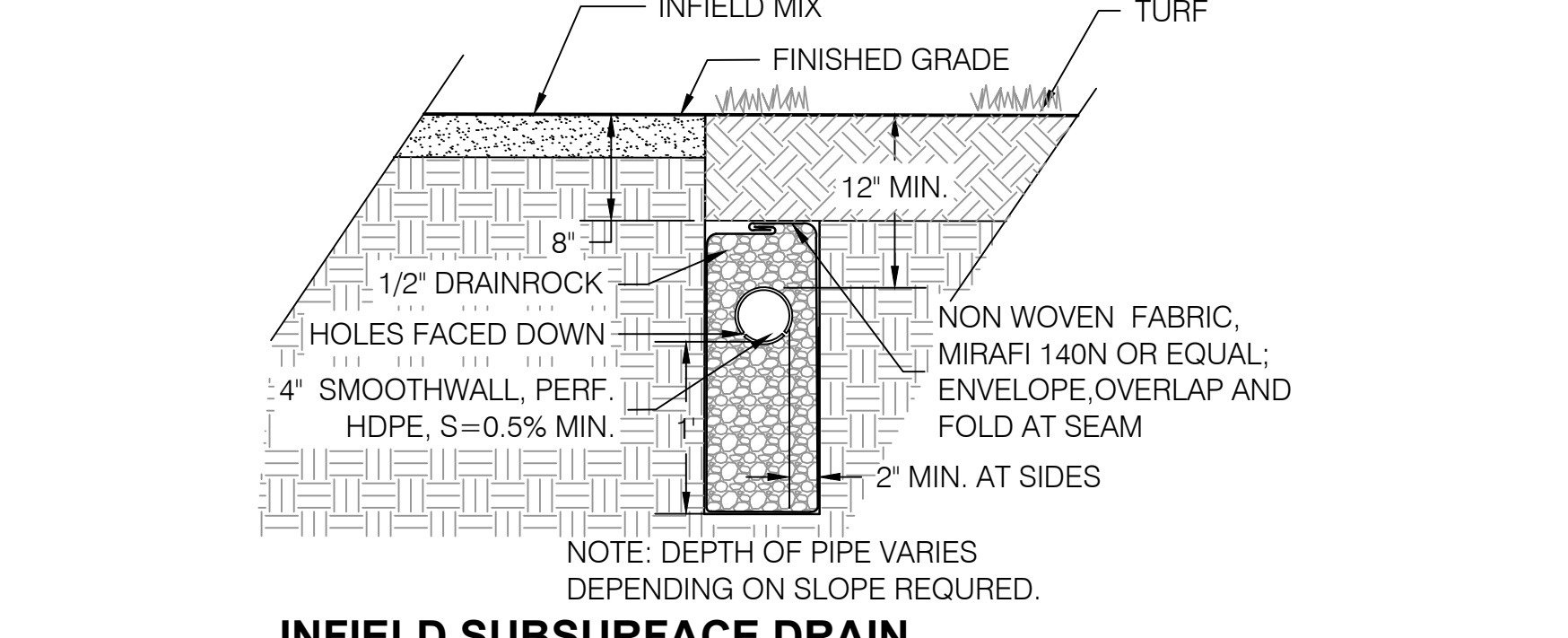
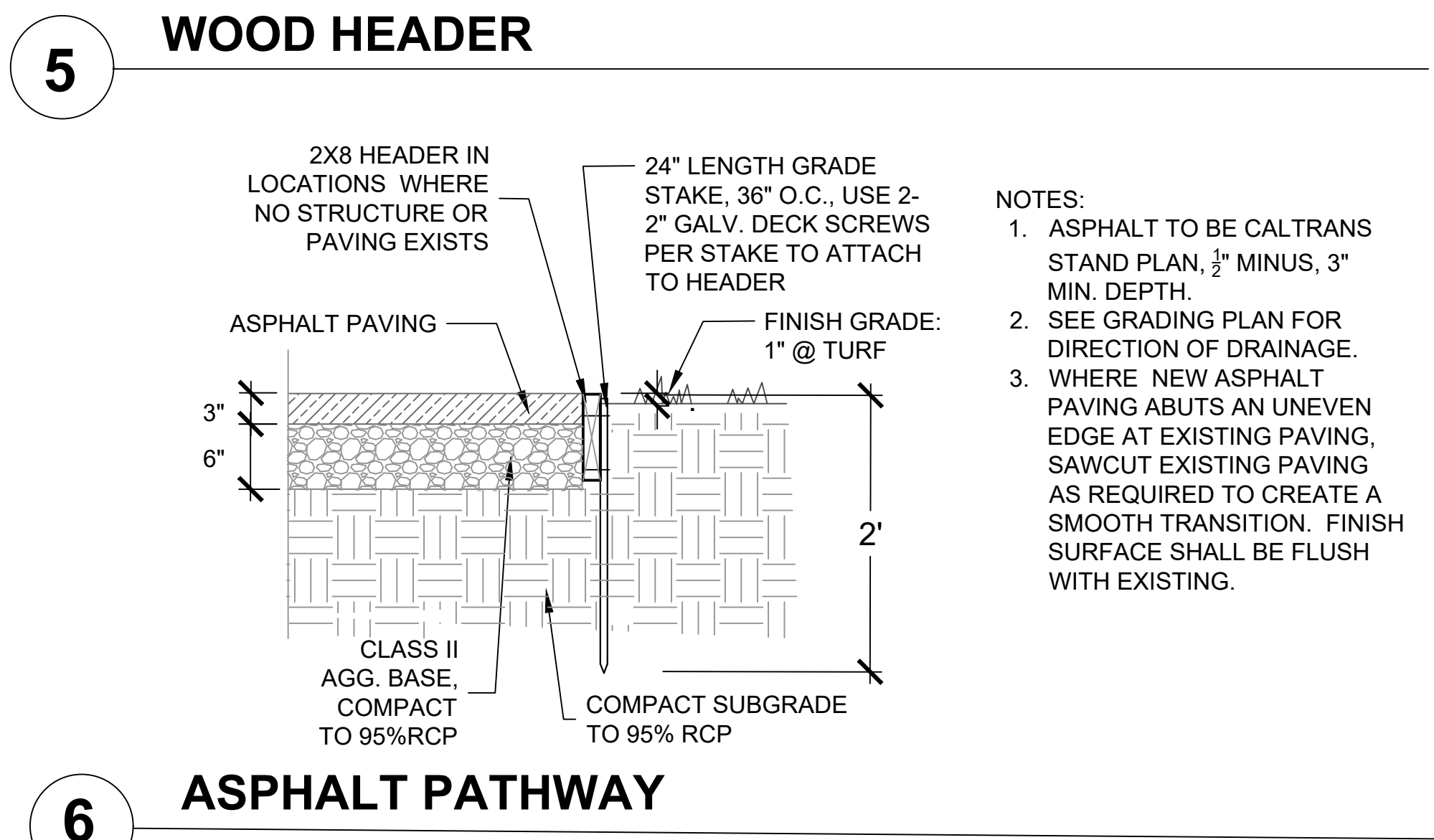
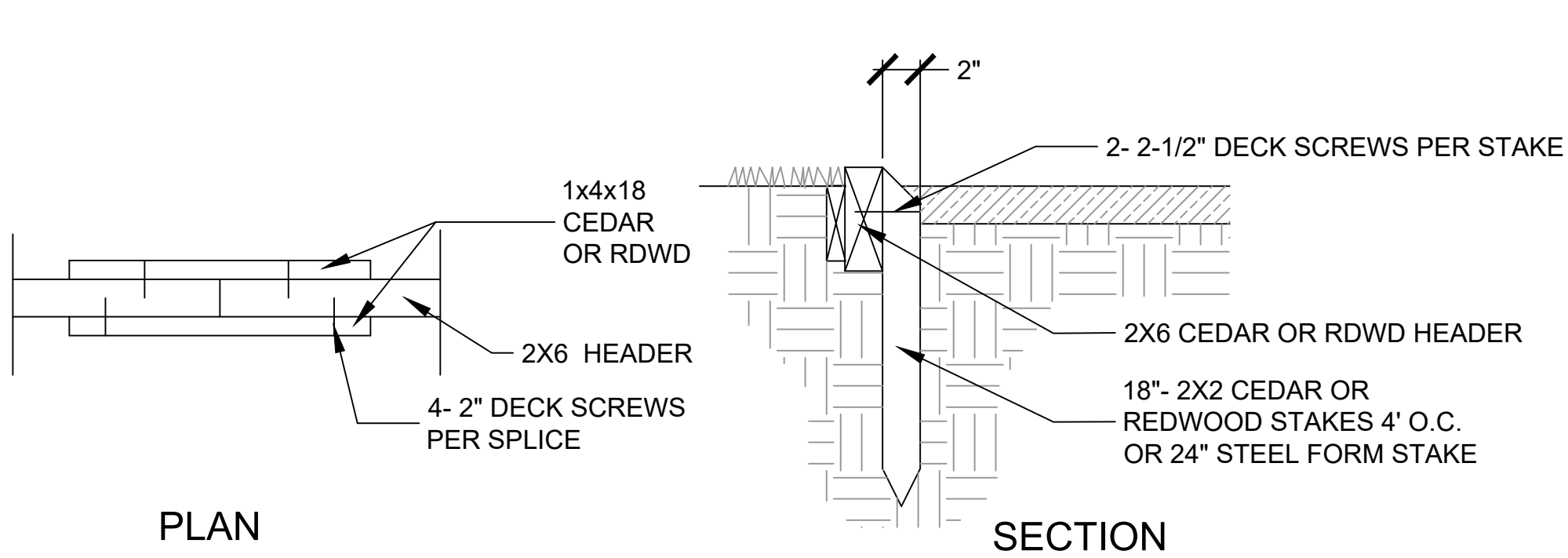
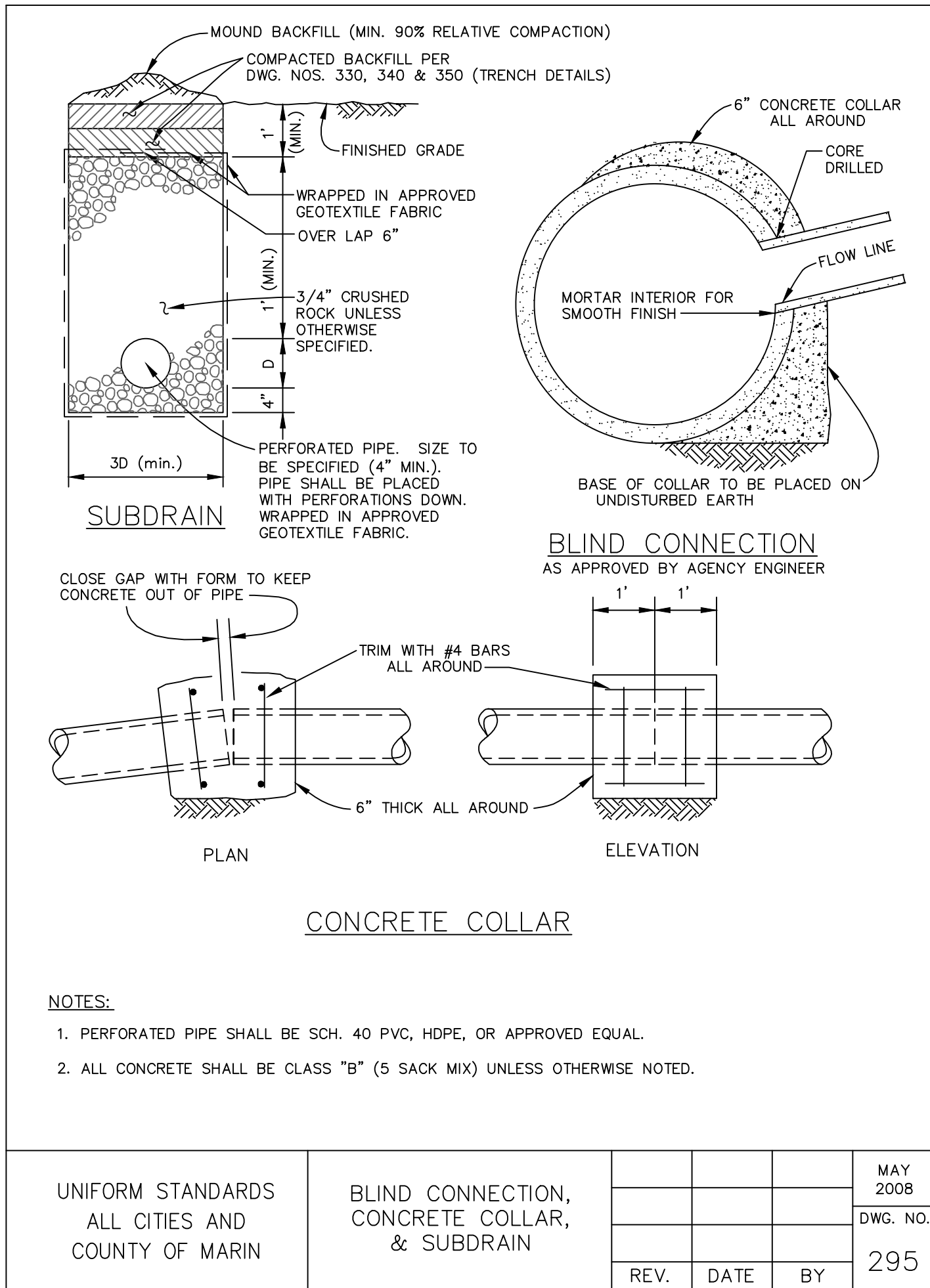
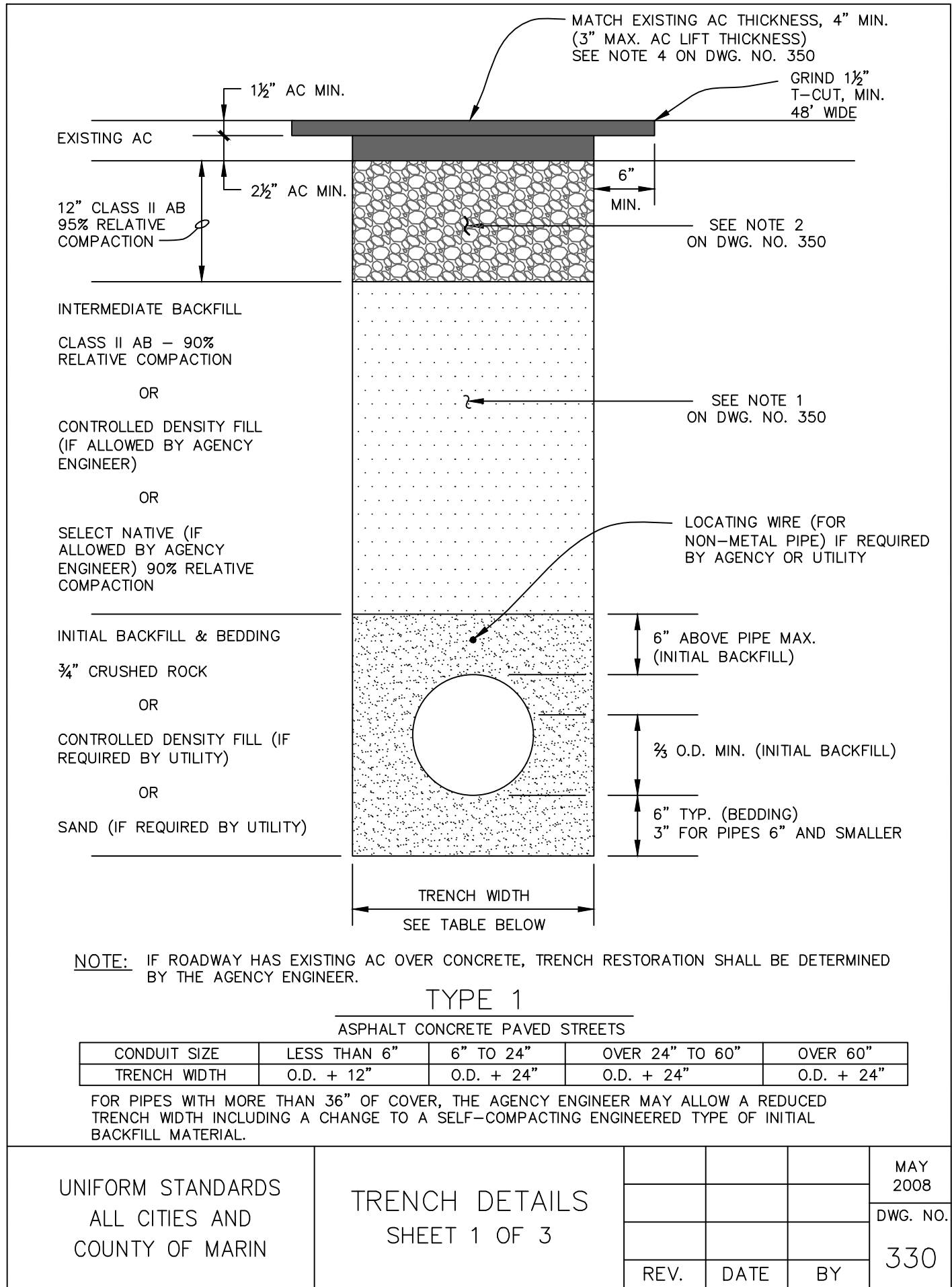
- CONTRACTOR SHALL VERIFY ALL GRADES, EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. ALL DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT COORDINATOR FOR RESOLUTION.
- THE INTENTION OF THIS PLAN IS TO HAVE A BALANCED SITE, INCLUDING TRENCH SPOILS. NO IMPORT OR EXPORT OF SOIL IS REQUIRED. EXCLUDING MATERIALS REMOVED FOR INSTALLATION OF AC PAVING, WHICH IS TO BE OFF HAULED.
- CONTRACTOR IS TO PROVIDE AN ALLOWANCE OF 40 CUBIC YARDS OF INFIELD MIX MATERIAL FOR TO ACCOMMODATE CHANGES IN GRADE AT THE INFIELD AREAS. PROVIDE NEW INFIELD SURFACING AT CORNERS OF EACH FIELD PER PLAN. SUBMIT SAMPLE OF MIX FOR APPROVAL. NEW INFIELD AREAS ARE TO BE 3" MIN. DEPTH INFIELD MIX OVER COMPACTED SUBGRADE, (92% MIN.).
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STAKING OF NEW CONTOURS, AND MAKING THEMSELVES FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COSTS INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES.
- GRADING DUTIES, FOLLOWING INSTALLATION OF UNDERGROUND DRAINAGE AND IRRIGATION EQUIPMENT, INCLUDE ROTOTILLING OF EXISTING TURF INTO ON SITE SOIL and SOIL PREPARATION, STAKING OF ALL CONTOURS, ESTABLISHMENT OF NEW SUBGRADE ELEVATIONS (ALLOWING FOR SOIL PREPARATION AND SOD TURF MATERIAL), SOIL PREPARATION, FINE GRADING OF PREPARED SOIL (ALLOWING FOR SOD THICKNESS).
- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ALL UTILITY BOXES WITHIN PAVED AND LANDSCAPED AREAS ARE TO BE ADJUSTED AND/OR EXTENDED TO MEET NEW FINISHED GRADES.
- CONTRACTOR TO BE RESPONSIBLE FOR HAVING TRAINED PERSONNEL FOR SWPPP, MONITORING AND ASSOCIATED REPORTS.



## GRADING and DRAINAGE PLAN











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Project

## Athletic Field Turf Renovation Project

### Memorial Park

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

## CONSTRUCTION DETAILS

Date: June 22, 2022

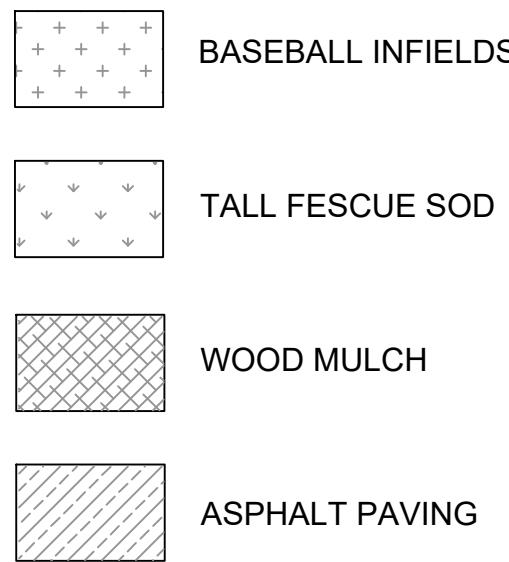
Job #: 2005

Revisions

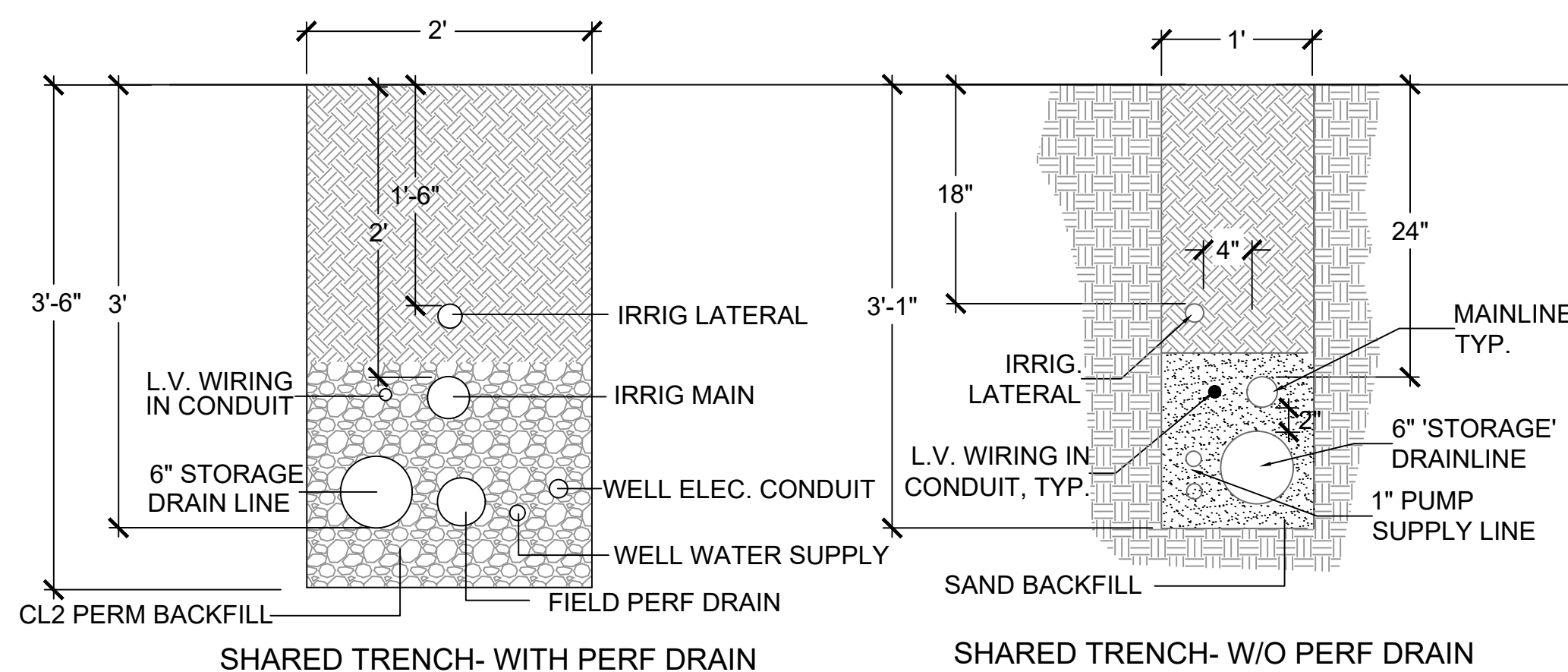
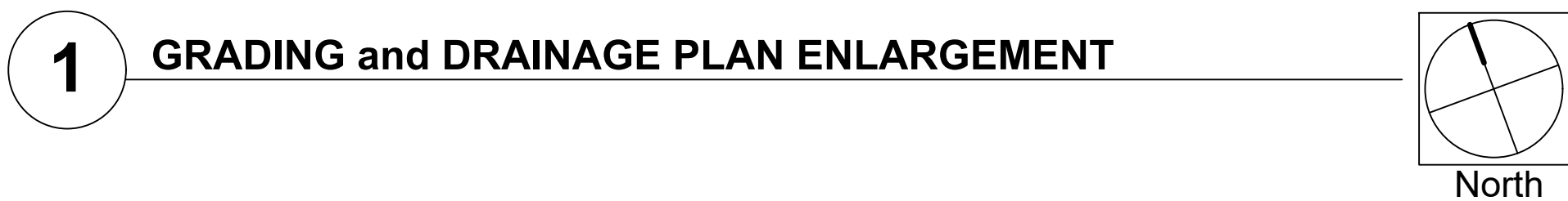
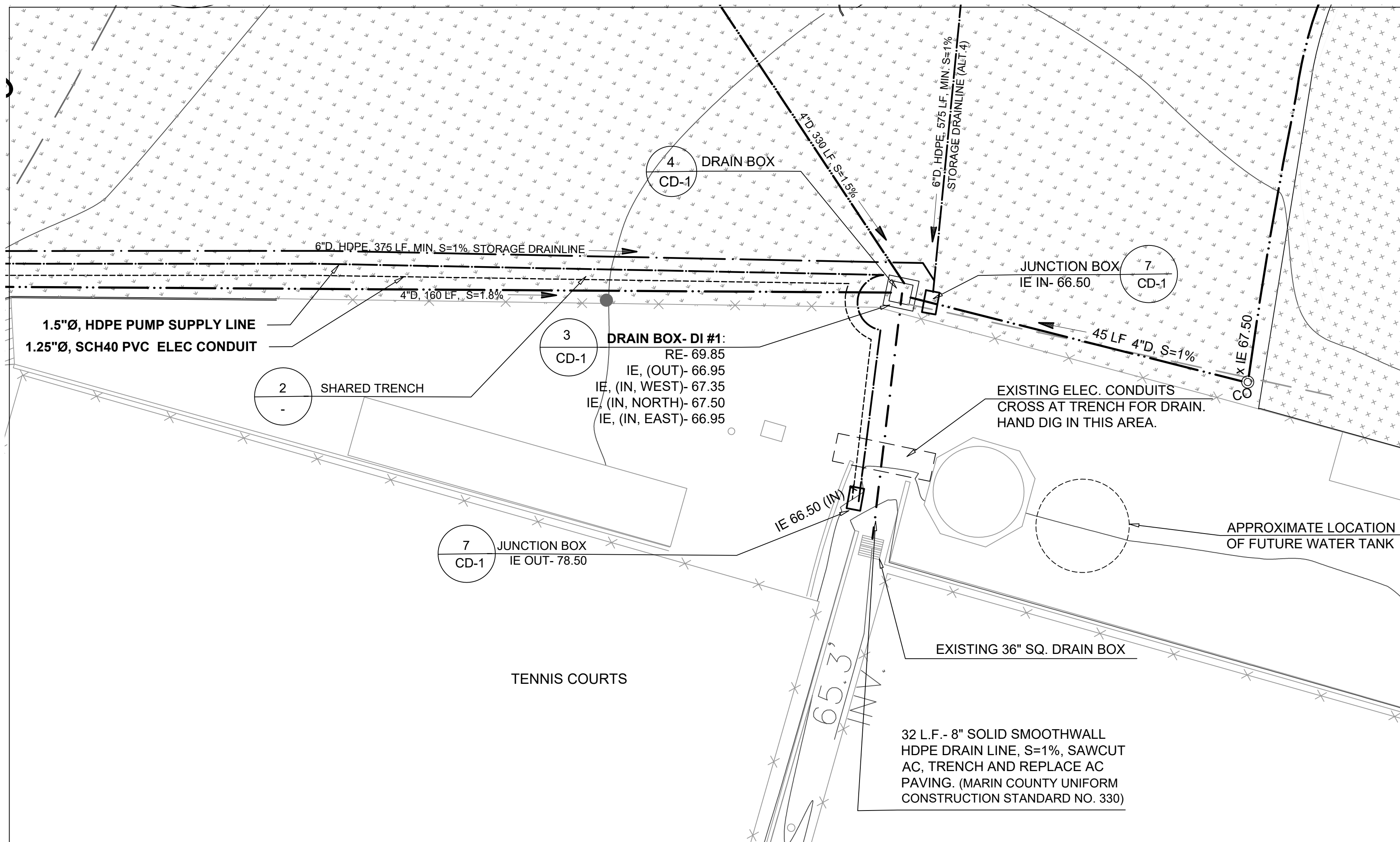
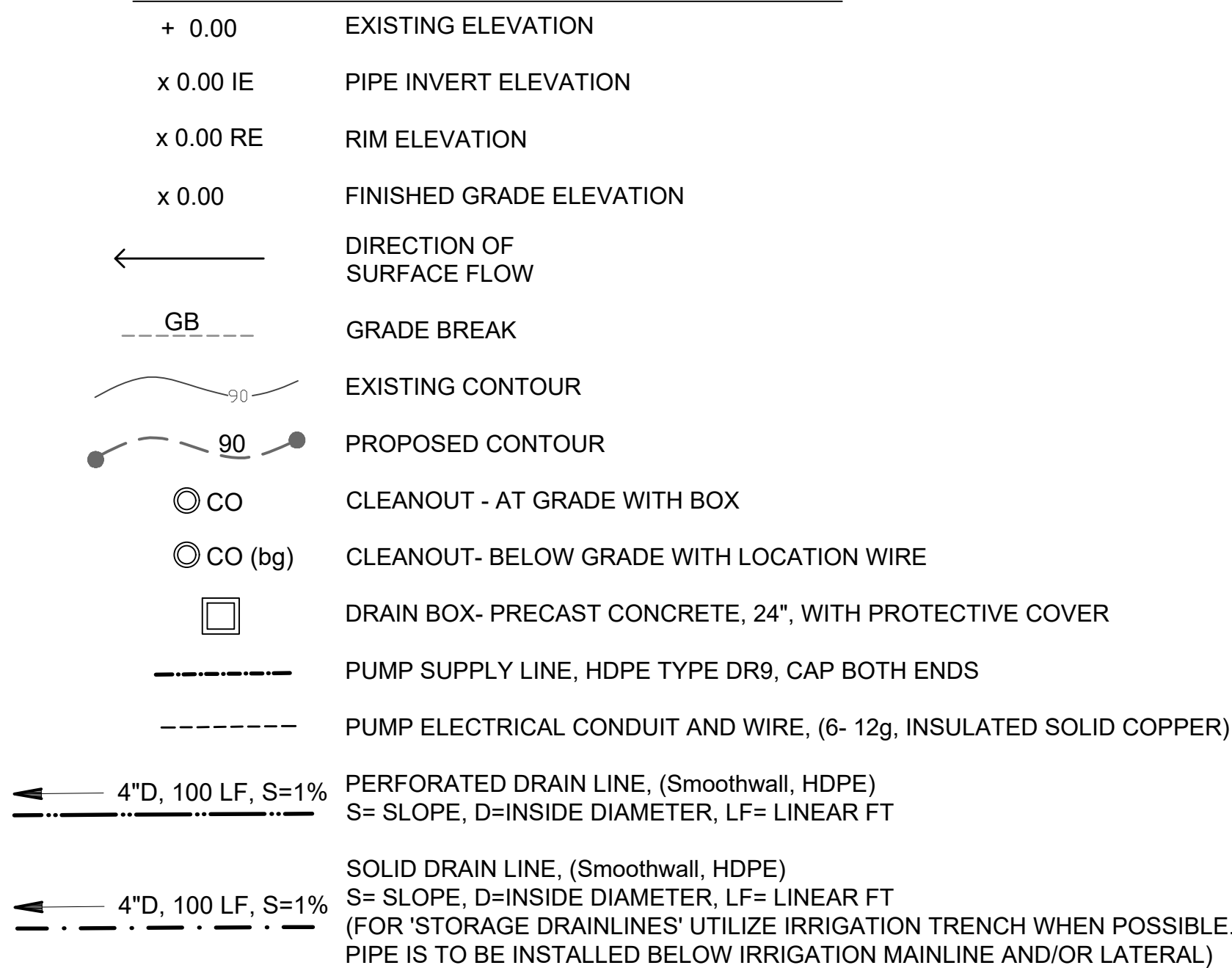
Sheet Number

CD-2

## MATERIALS LEGEND



## GRADING/DRAINAGE LEGEND

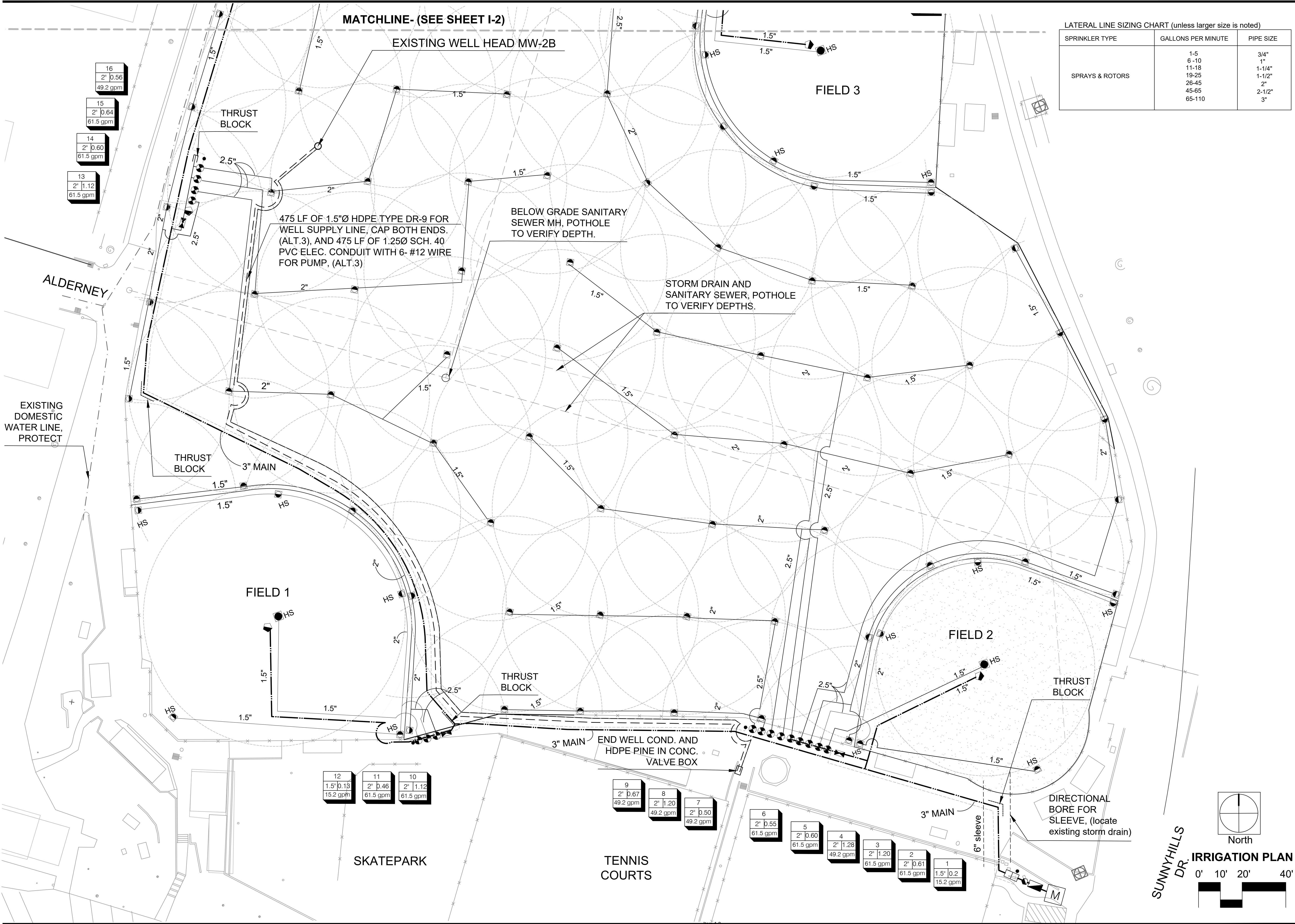


### NOTES:

1. INSTALL 3" WIDE DETECTABLE WARNING TAPE 6" MIN. ABOVE MAINLINE.
2. SALVAGED EXCAVATED FILL COMPACTED TO ORIGINAL DENSITY IN ALL LANDSCAPED AREA, ALL OTHER AREAS SHALL BE AT 95% COMPACTION.
3. IN THE EVENT OF AN IRRIGATION LINE CONFLICTING WITH A DRAIN LINE, THE DRAIN LINE HAS PRIORITY. IF PROPER COVERAGE CANNOT BE ATTAINED ABOVE THE DRAIN LINES, THE IRRIGATION PIPES AND SLEEVES WILL BE INSTALLED BENEATH THE DRAIN LINE WITH 2" MIN. SEPARATION.

2 SHARED TRENCH





LATERAL LINE SIZING CHART (unless larger size is noted)

SPRINKLER TYPE	GALLONS PER MINUTE	PIPE SIZE
SPRAYS & ROTORS	1-5	3/4"
	6-10	1"
	11-18	1-1/4"
	19-25	1-1/2"
	26-45	2"
	46-65	2-1/2"
	66-110	3"

Item 1.3  
Attachment 1

abey•arnold  
ASSOCIATES  
LANDSCAPE ARCHITECTS

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Project

**Athletic Field Turf Renovation Project**

**Memorial Park**

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

**IRRIGATION PLAN**

Date: June 22, 2022  
Job #: 2005

Revisions

Sheet Number

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Project

## Athletic Field Turf Renovation Project

## Memorial Park

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Drawing Title

## IRRIGATION PLAN NOTES & LEGEND

Date: June 22, 2022

Job #: 2005

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## IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	SIZE
	MMWD METER (EXISTING)			2"
	CONTROLLER	RAINBIRD	ESP-LXIVM-IQ4 W/ NCC CARTRIDGE	60 STATION
	EXISTING BACKFLOW PREVENTER, REINSTALL. PROVIDE NEW ENCLOSURE	WILKINS STRONGBOX	875XL BC-45CR- DARK GREEN	2"
	FLOW SENSOR and MASTERVALVE	RAINBIRD/SUPERIOR	FS200B / 3100- W/ RB DECODER	2"
	RAIN SENSOR	RAINBIRD	RSD-CEx	
	2-WIRE SURGE PROTECTOR(Ground Rod)	RAINBIRD	LSP-1TURF M10008	
	EXIST. PRESSURE REDUCER, REINSTALL	ZURN/WILKINS	500-XLFC	2"
	ISOLATION VALVE, (RES. SEAT GATE)	KENNEDY	KS-FW 8597 SS	3"
	QUICK COUPLING VALVE	RAINBIRD	44 NP	
	AUTOMATIC VALVE	RAINBIRD	EFB-CP-IVM-PRS-D	SEE PLAN

## IRRIGATION HEADS

				MANUF. PRECIP. RATE	
	ROTOR	HUNTER	PGJ	0.55-0.68 IN/HR (PART CIR) 0.26-0.34 IN/HR (FULL CIR)	SEE PLAN
	STREAM ROTOR- HIGH SPEED OPP. NOZ.	HUNTER	I-40-06-ON-SS-HS	0.42-0.49 IN/HR	NOZZLE -18
	STREAM ROTOR HEAD	HUNTER	I-40-06-SS	0.91-1.05 IN/HR (PART CIR.) 0.46-0.53 IN/HR (FULL CIR.)	NOZZLE 13
	STREAM ROTOR HEAD-HIGH SPEED	HUNTER	I-40-06-SS-HS	1.07-1.24 IN/HR	NOZZLE 13

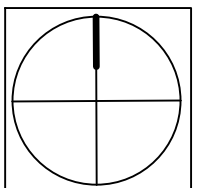
## PIPE AND WIRE

	LATERAL LINE	SCHEDULE 40	PVC	SEE PLAN and CHART
	NEW MAIN LINE	SCHEDULE 40	PVC- Non Potable Purple Pipe	SEE PLAN
	CONTROL WIRE	2 WIRE - RAINBIRD MAXI CABLE		
	EXISTING DOMESTIC WATER	PVC	VERIFY DEPTH AND LOCATION.	
	ELEC. CONDUIT AND WIRE	SCHEDULE 40PVC	(TO CONTAIN 6 12g- INSULATED SOLID CORE WIRES)	
	WELL SUPPLY LINE	DR9	HDPE	1.25" DIAM.
	THRUST BLOCK AT MAIN LINE			1.5" DIAM.
	SLEEVE	PVC OR HDPE (SMOOTHWALL)		

1	VALVE NUMBER
1" 1.85	PRECIP. RATE, (IN./HR.)
45.0 gpm	VALVE SIZE
	GALLONS PER MINUTE

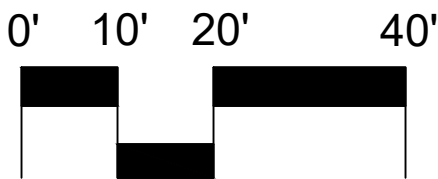
## IRRIGATION NOTES

- THE IRRIGATION SYSTEMS INDICATED IN THESE DRAWINGS REQUIRES THE DEMOLITION OF THE EXISTING SYSTEM AND THE INSTALLATION OF ALL NEW MAIN LINES, LATERAL LINES, ROTOR HEADS, ISOLATION VALVES, QCVS, CONTROLLER, 2-WIRE CABLE AND MASTERVALVE/FLOW SENSOR. ALSO INCLUDED IS THE REMOVAL AND RE-INSTALLATION OF THE BACKFLOW PREVENTER AND PRESSURE REDUCING DEVICE WITH NEW PIPE, FITTINGS FROM THE METER TO SAID DEVICES, CONCRETE AND ENCLOSURE.
- PROVIDE INSTALLATION BY PERSONS FAMILIAR WITH IRRIGATION WORK AND UNDER THE SUPERVISION OF A QUALIFIED SUPERVISOR.
- OBTAIN THE PERMITS REQUIRED AND PROVIDE LABOR AND MATERIALS NECESSARY TO FULLY COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.
- LOCATE AND PROTECT NEW AND EXISTING UTILITIES PRIOR TO EXCAVATION.
- DO NOT DAMAGE EXISTING UTILITIES PAVING OR STRUCTURES, CONTRACTOR TO PROVIDE REPAIRS TO ANY DAMAGED ITEMS AT NO ADDITIONAL COST TO THE TOWN.
- REMOVE DEBRIS AND ACCUMULATION OF DEBRIS AS A RESULT OF IRRIGATION CONSTRUCTION FROM THE SITE AND LEAVE AREA IN A CLEAN CONDITION ACCEPTABLE TO TOWN'S REPRESENTATIVE
- THESE DRAWINGS ARE DIAGRAMMATIC. EQUIPMENT SHOWN IN PAVING IS FOR CLARITY ONLY, INSTALL ALL SPECIFIED EQUIPMENT IN PLANTING AREAS. PLEASE NOTE THAT THE FLOW SENSOR AND MASTER VALVE ARE SHOWN IN AN AREA CONTAINING EXISTING UTILITIES AND THE NEW MAIN LINE. CONTRACTOR IS TO ADJUST LOCATIONS AS REQUIRED TO INSTALL NEW EQUIPMENT PER DETAILS AND SPECIFICATIONS.
- SPLICING OF 24 VOLT WIRES IS NOT PERMITTED.
- PLASTIC VALVE BOXES ARE TO BE GREEN IN COLOR WITH BOLT DOWN, NON-HINGED COVER WITH VALVE NUMBERS MARKED PER SPECIFICATION. BOX BODY SHALL HAVE KNOCK OUTS. MANUFACTURER: RAINBIRD, CARSON, NDS OR APPROVED EQUAL.
- FLUSH ALL PIPE OF ALL DELETERIOUS MATERIAL.
- CONTRACTOR TO PROVIDE PRESSURE TESTS FOR MAINLINE, (200 PSI, 2 HOURS) AFTER INSTALLATION OF VALVES.
- THIS IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 60 PSI. MAXIMUM FLOW RATE IS 65.0 GPM.
- ALL SLEEVES INSTALLED AS A PART OF THIS CONTRACT ARE TO HAVE MINIMUM COVERAGE OF 18" AND EXTEND BEYOND THE BACK OF CURB 12" AT MEDIANS AND 12" BEYOND THE BACK OF SIDEWALK OR CURB AT ROADSIDES. MARK LOCATION OF SLEEVE TERMINUS WITH A VALVE BOX.
- ALL EXISTING and PROPOSED UTILITY IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, PG&E, TELEPHONE, LIGHTING, AND/OR, DRAINAGE SHALL BE LOCATED AND VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION EQUIPMENT. UTILITIES DAMAGED DURING THE EXECUTION OF THIS CONTRACT ARE TO BE REPAIRED AND OR REPLACED TO THEIR ORIGINAL CONDITION.



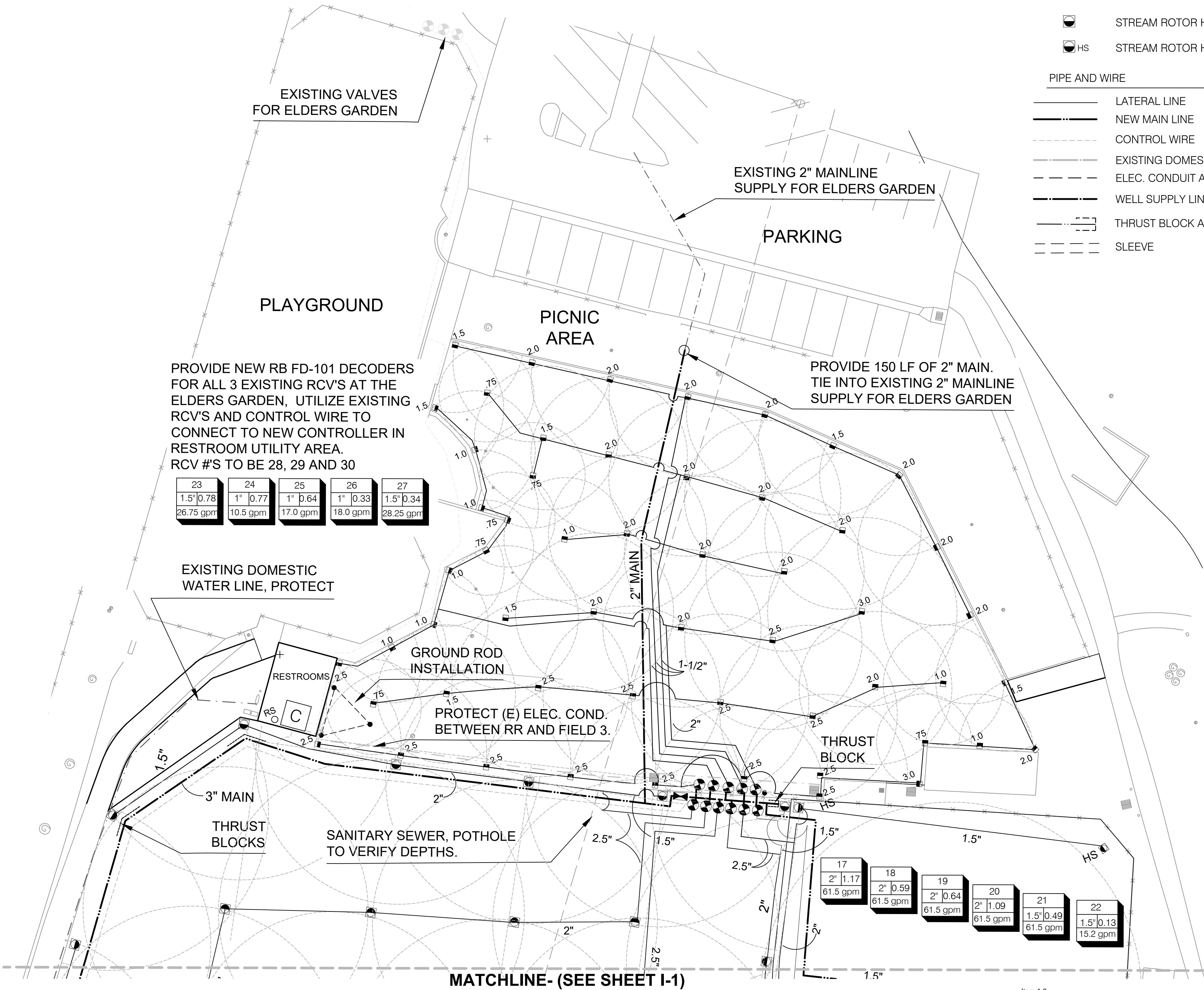
North

## IRRIGATION PLAN



LATERAL LINE SIZING CHART (unless larger size is noted)

SPRINKLER TYPE	GALLONS PER MINUTE	PIPE SIZE
SPRAYS & ROTORS	1-5	3/4"
	6-10	1"
	11-18	1-1/4"
	19-25	1-1/2"
	26-45	2"
	45-65	2-1/2"
	65-110	3"







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Project

**Athletic Field Turf  
Renovation Project**

**Memorial Park**

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

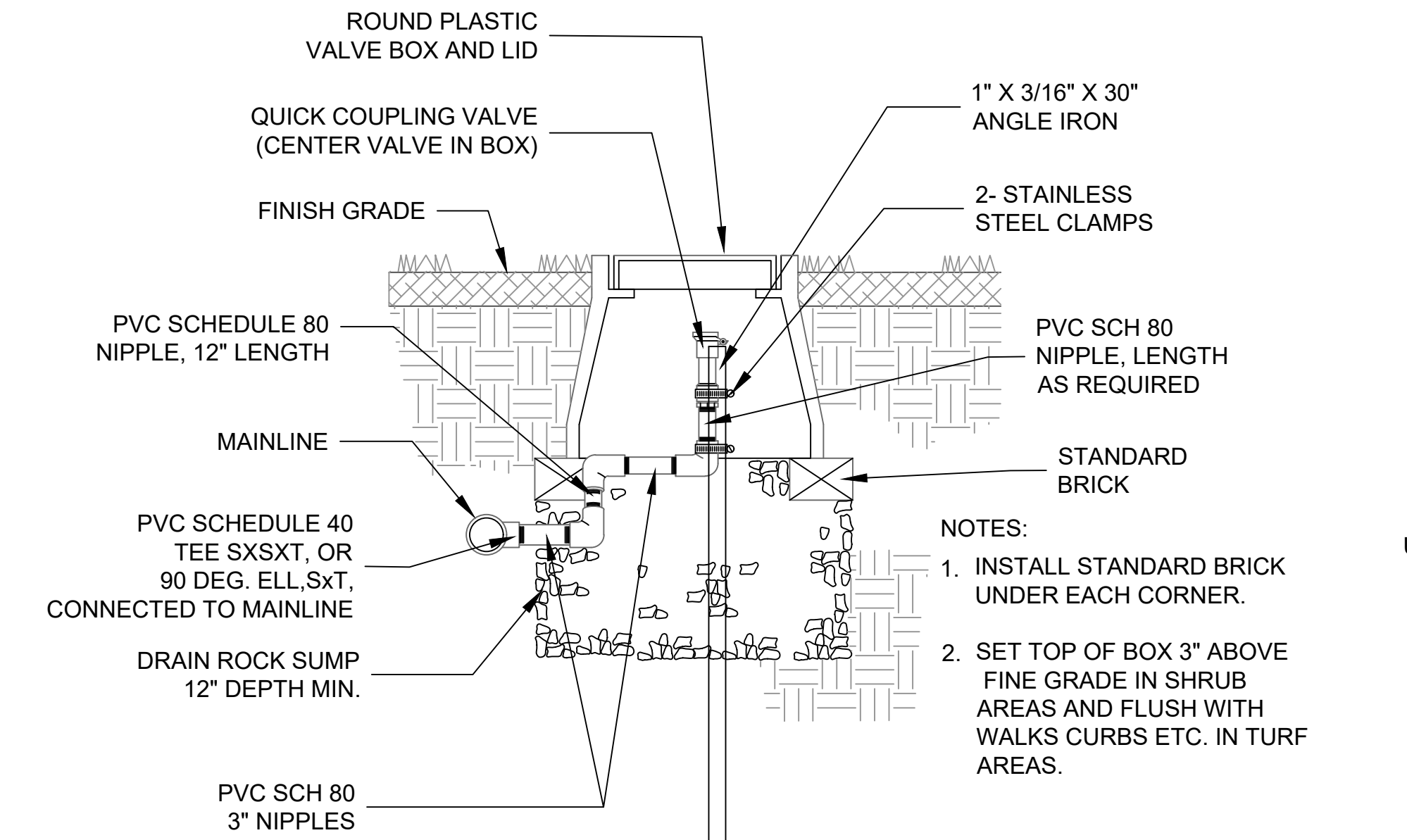
**IRRIGATION DETAILS**

Date: June 22, 2022  
Job #: 2005

Revisions

Sheet Number

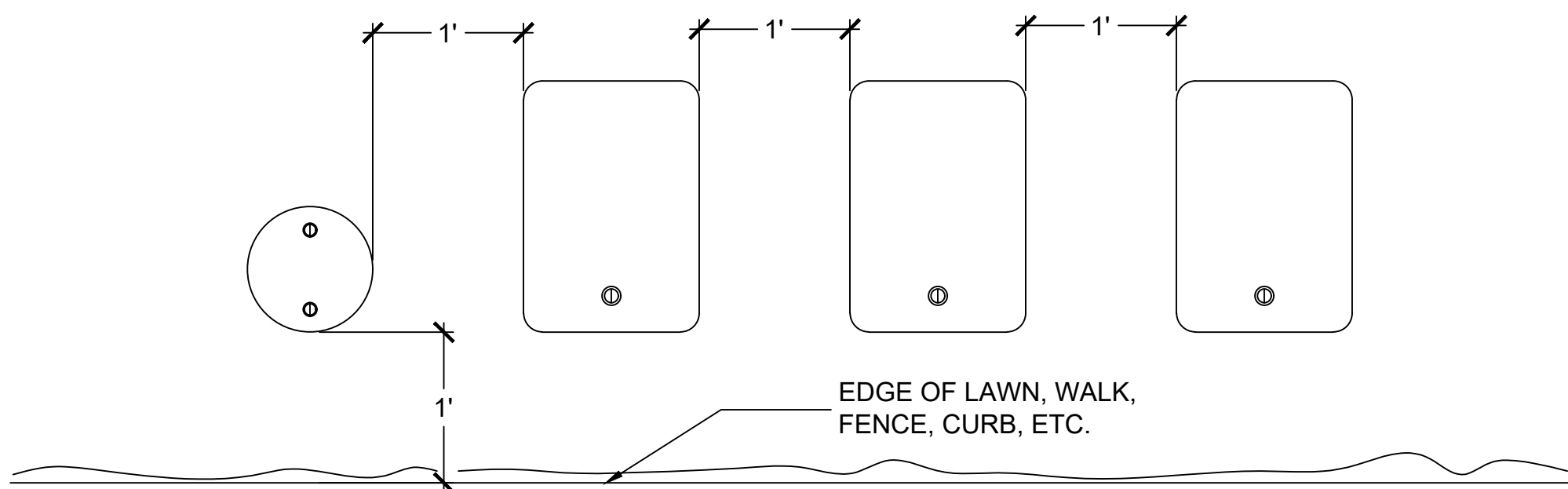
**I-3**



## 5 QUICK COUPLER VALVE

NOTES:

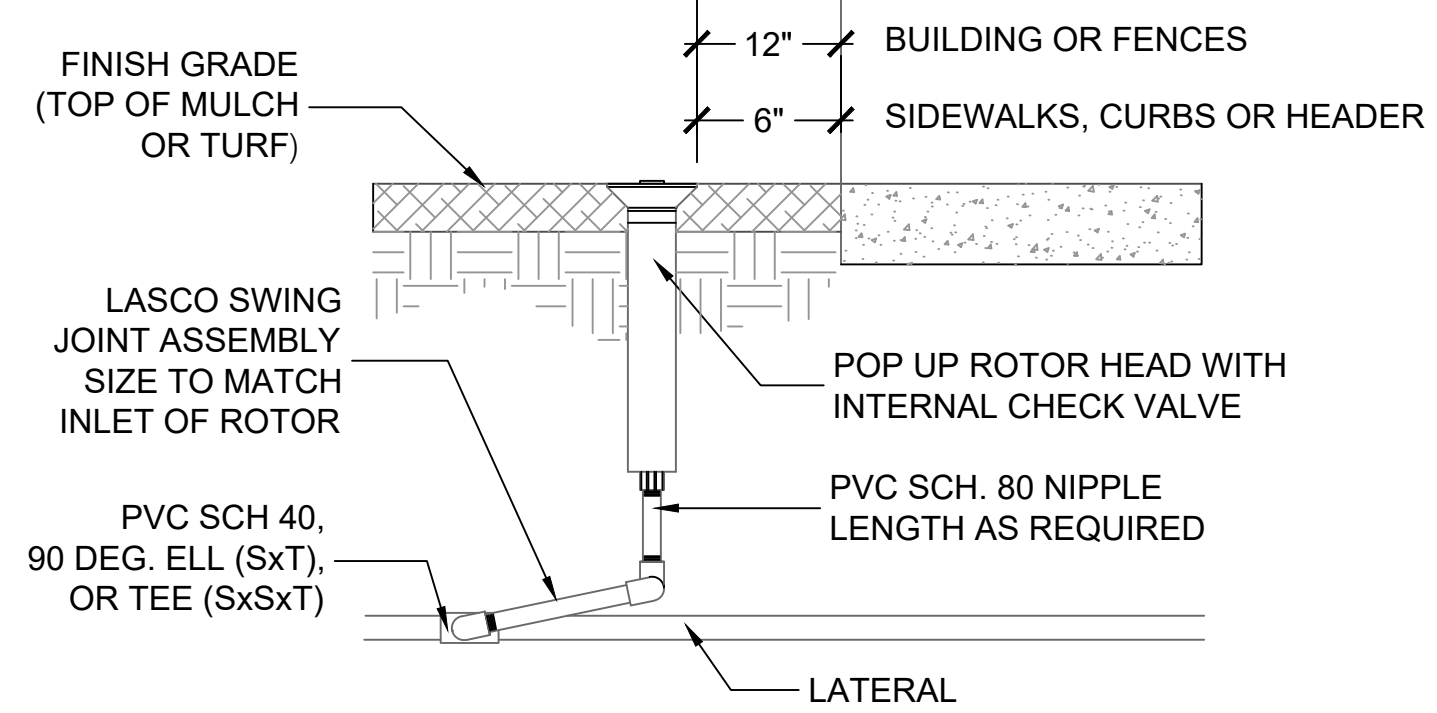
1. ALL VALVE BOXES AND LIDS TO BE GREEN PLASTIC.
2. CENTER VALVE BOX OVER EQUIPMENT ASSEMBLY TO FACILITATE SERVICING
3. SET BOX AND ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
5. AVOID HEAVY COMPACTION OF SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOX SIDES.
6. SET ALL BOXES FLUSH WITH WALKS, CURBS, ETC. IN ALL CASES.
7. SET BOXES WITH STANDARD BRICK UNDER EACH CORNER OR IN CASE OF ROUND BOX USE TWO BRICKS 180 DEGREES APART.
8. MAKE SURE ALL VALVE BOXES HAVE LOCKING BOLTS.
9. SEAL OPENINGS TO PREVENT ENTRANCE OF SOIL INTO BOXES.



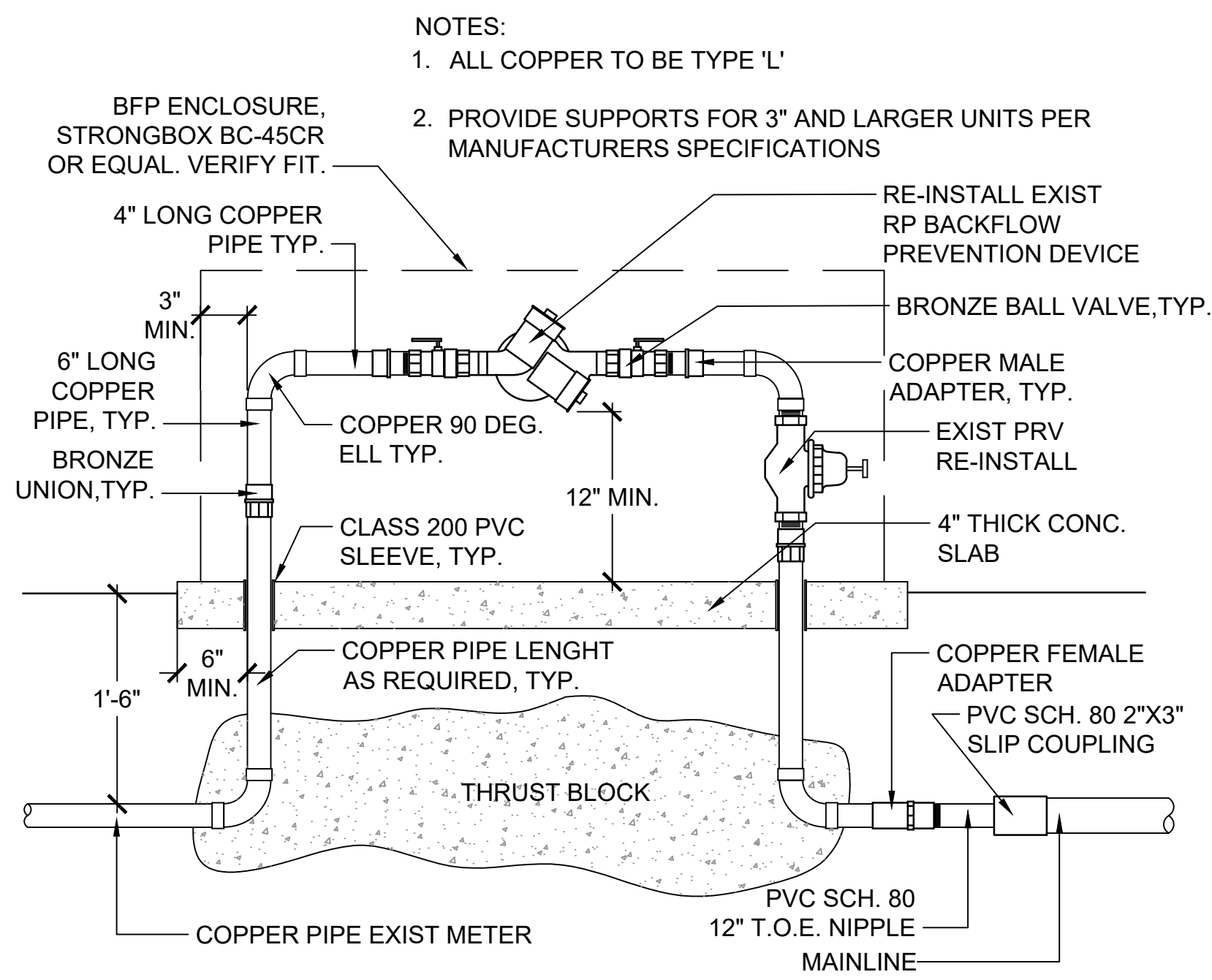
## 6 VALVE BOX LAYOUT

NOTES:

1. TOP OF HEAD TO BE FLUSH WITH SIDEWALK, CURB OR HEADERBOARD
2. ALL THREADED JOINTS TO RECEIVE TEFLON TAPE



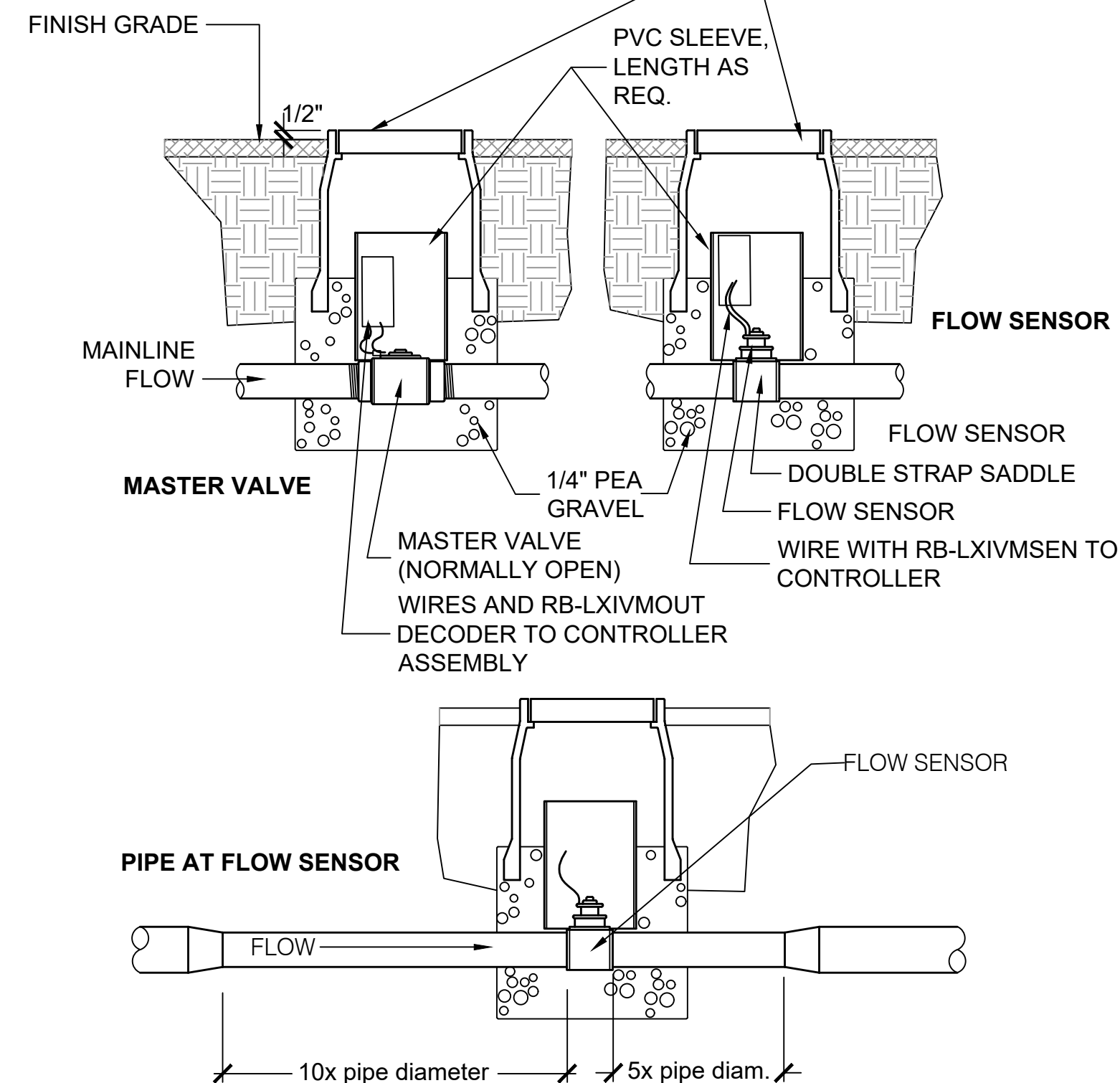
## 7 ROTOR IRRIGATION HEAD



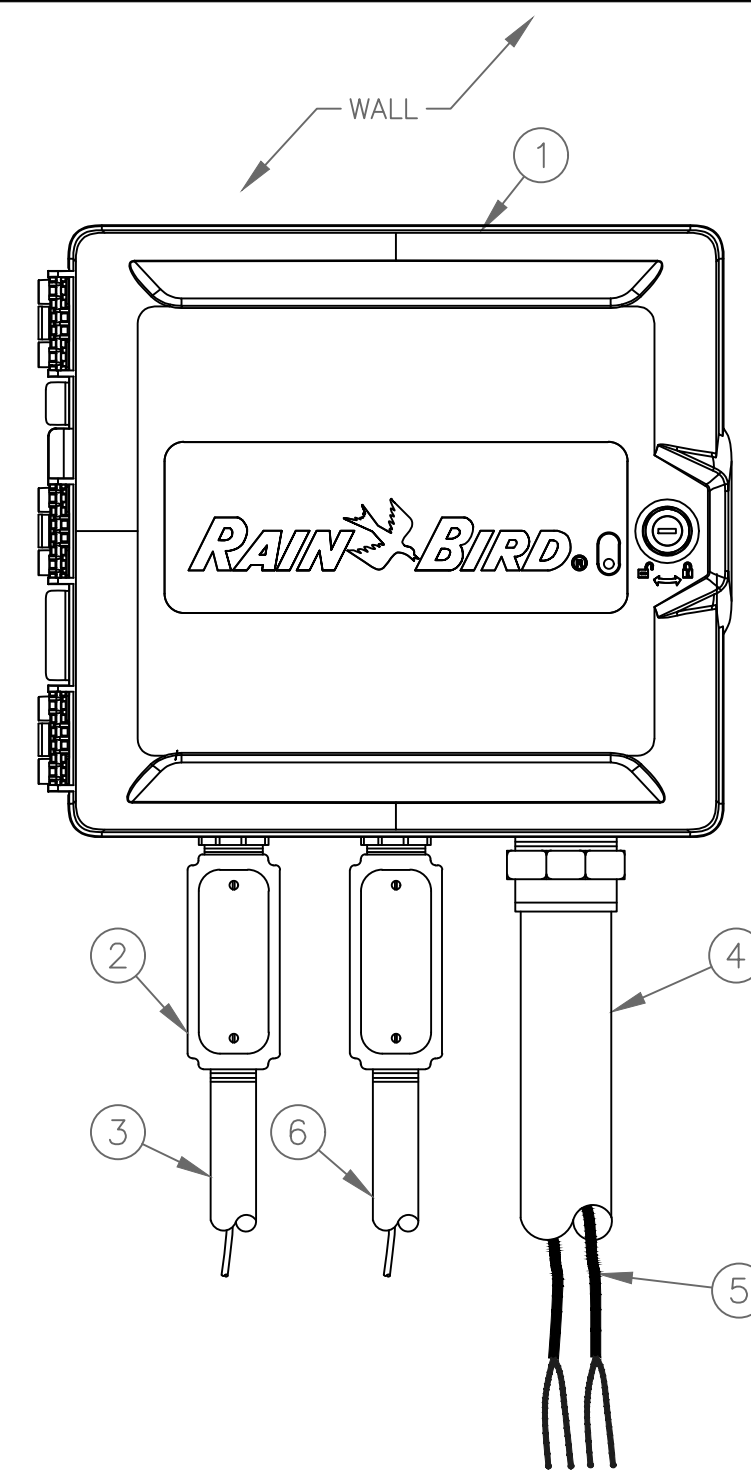
## 3 BACKFLOW PREVENTER RE-INSTALL

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR ALL PIPE, CONDUIT, FITTINGS, BOXES, WIRE AND SADDLES NECESSARY FOR INSTALLATION OF EQUIPMENT.
2. PROVIDE ADDITIONAL 3' MINIMUM OF 2-WIRE CABLE AT EACH DEVICE.



## 4 FLOW SENSOR - MASTER VALVE



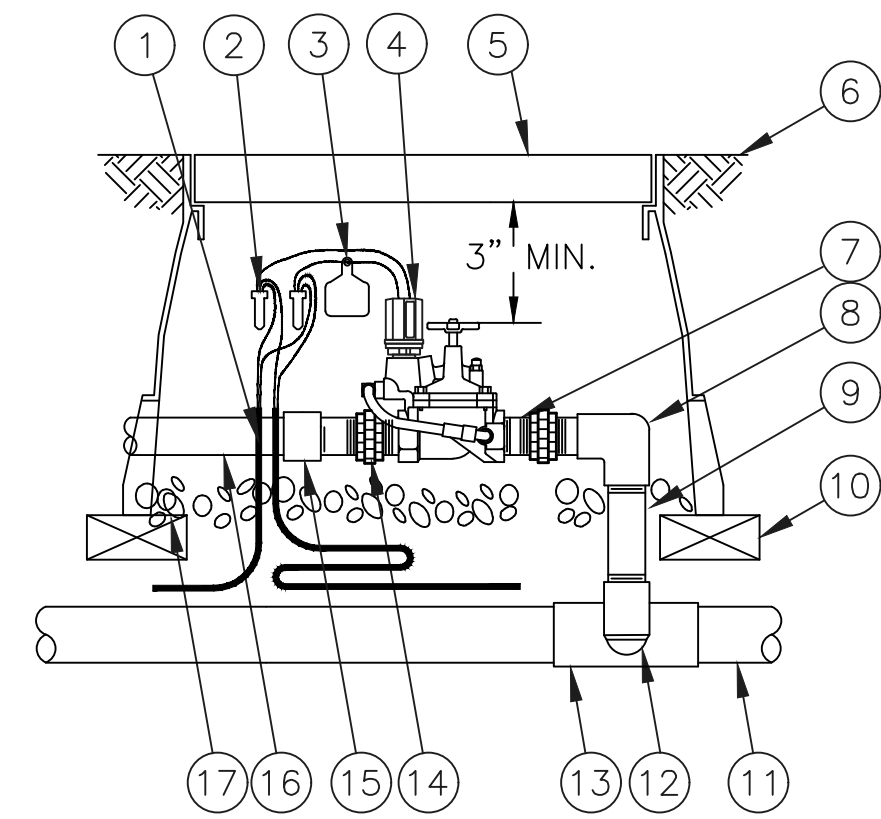
## 1 WALL MOUNT CONTROLLER (INTERIOR)

- 1 TWO-WIRE CONTROLLER:  
RAIN BIRD ESP-LXIVM/PRO IN PLASTIC CABINET WITH WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.

- 2 JUNCTION BOX
- 3 1-INCH CONDUIT AND FITTINGS FOR POWER SUPPLY WIRE
- 4 2-INCH CONDUIT AND FITTINGS FOR TWO-WIRE CABLE
- 5 MAXICABLE TWO-WIRE PATH TO FIELD DEVICES  
USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
- 6 1-INCH CONDUIT AND FITTINGS FOR GROUND WIRE. ONLY FOR OUTDOOR INSTALLATIONS.

NOTES:

1. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
2. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS. IF CONTROLLER IS MOUNTED INDOORS, USE POWER SUPPLY GROUND.



- 1 30-INCH LENGTH OF 2-WIRE CABLE
- 2 WATERPROOF CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
- 3 ID TAG: RAIN BIRD VID SERIES
- 4 REMOTE CONTROL VALVE: RAIN BIRD EFB-CP WITH IVM
- 5 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 6 FINISH GRADE/TOP OF MULCH
- 7 PVC SCH 80 NIPPLE (CLOSE)
- 8 PVC SCH 40 ELL
- 9 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)

- 10 BRICK (1 OF 4)
- 11 PVC MAINLINE PIPE
- 12 SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
- 13 PVC SCH 40 TEE OR ELL
- 14 PVC SCH 80 UNION, BOTH SIDES
- 15 PVC SCH 40 MALE ADAPTER
- 16 PVC LATERAL PIPE
- 17 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

## 2 REMOTE CONTROL VALVE WITH DECODER





1005 A Street, Suite 305  
San Rafael, California 94901  
Phone 415-258-9580  
Fax 415/258-9780  
CA License #2816



Consultants

All drawings and written material appearing herein are the original unpublished work of Abey/Arnold Associates and may not be used or duplicated in any form without the written consent of Abey/Arnold Associates.

Project

**Athletic Field Turf Renovation Project**

**Memorial Park**

1000 Sir Francis Drake Blvd.  
San Anselmo, CA 94960

Drawing Title

**IRRIGATION DETAILS**

Date: June 22, 2022

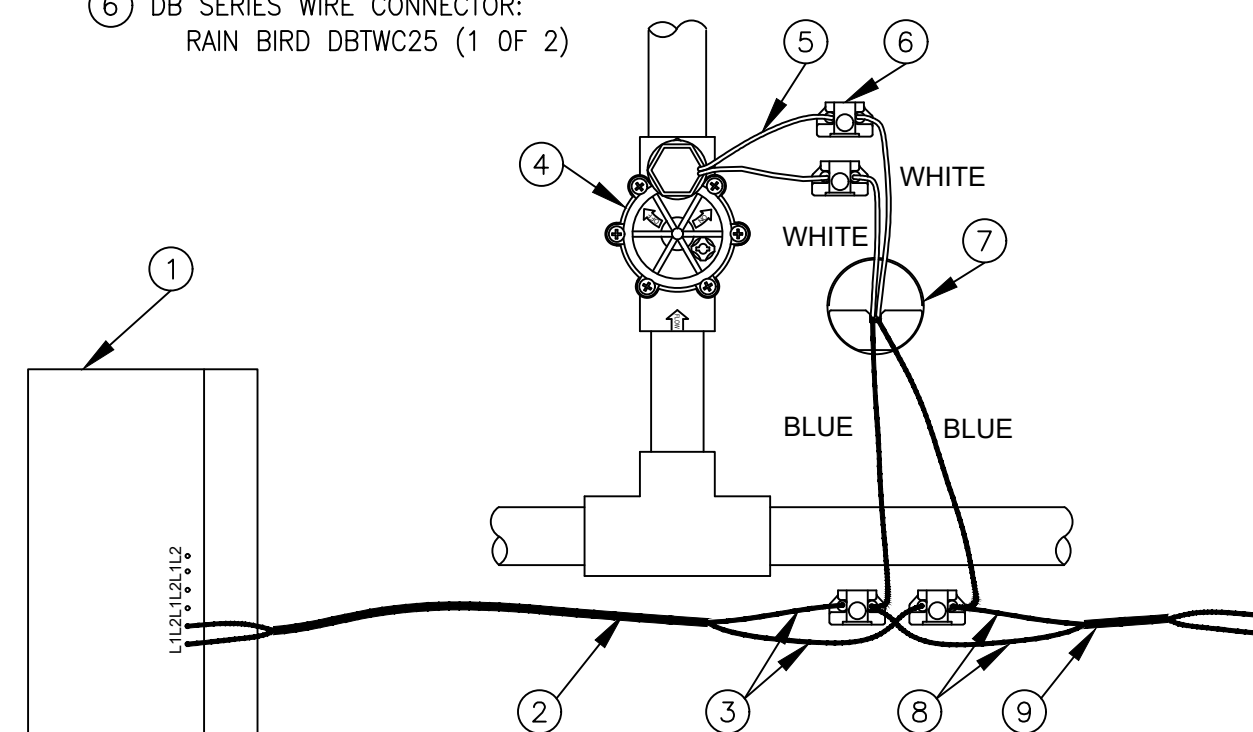
Job #: 2005

Revisions

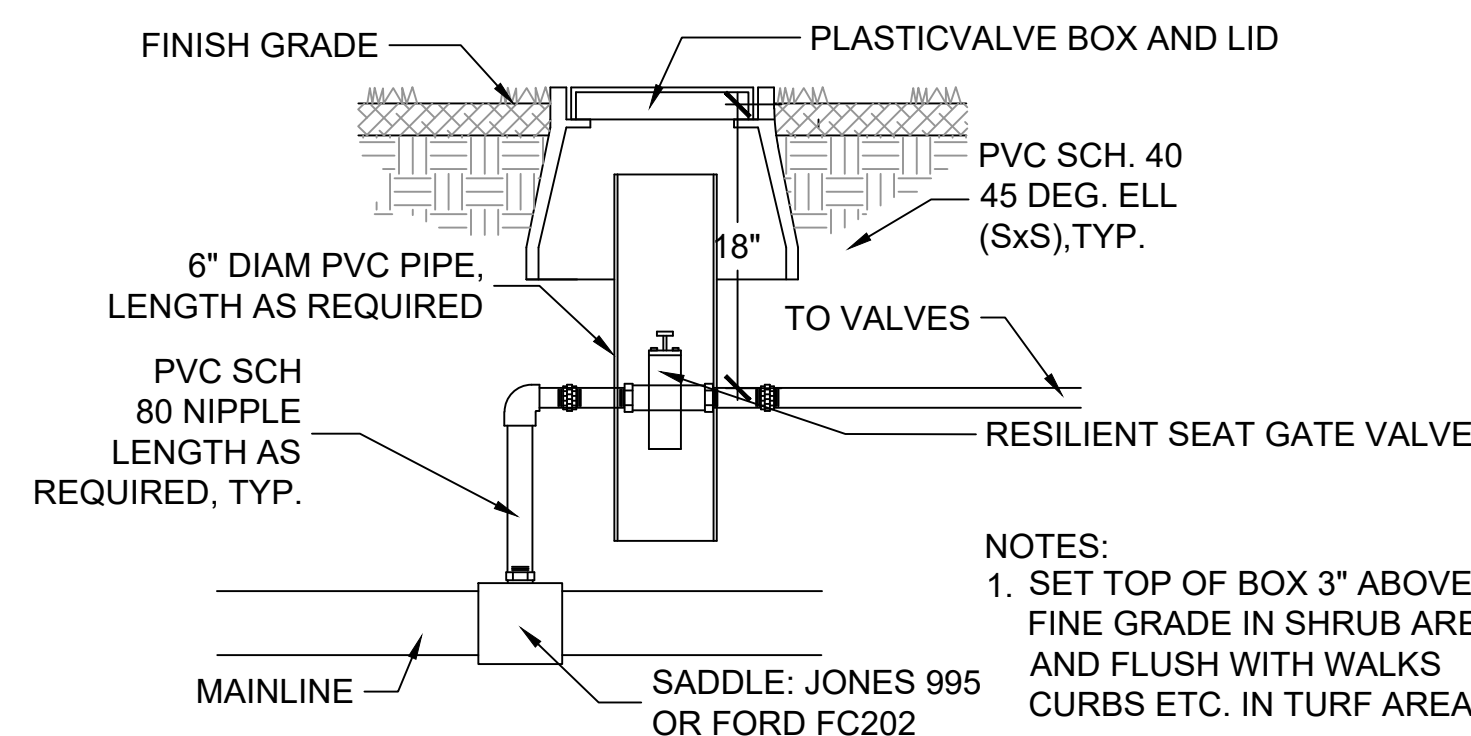
Sheet Number

I-4

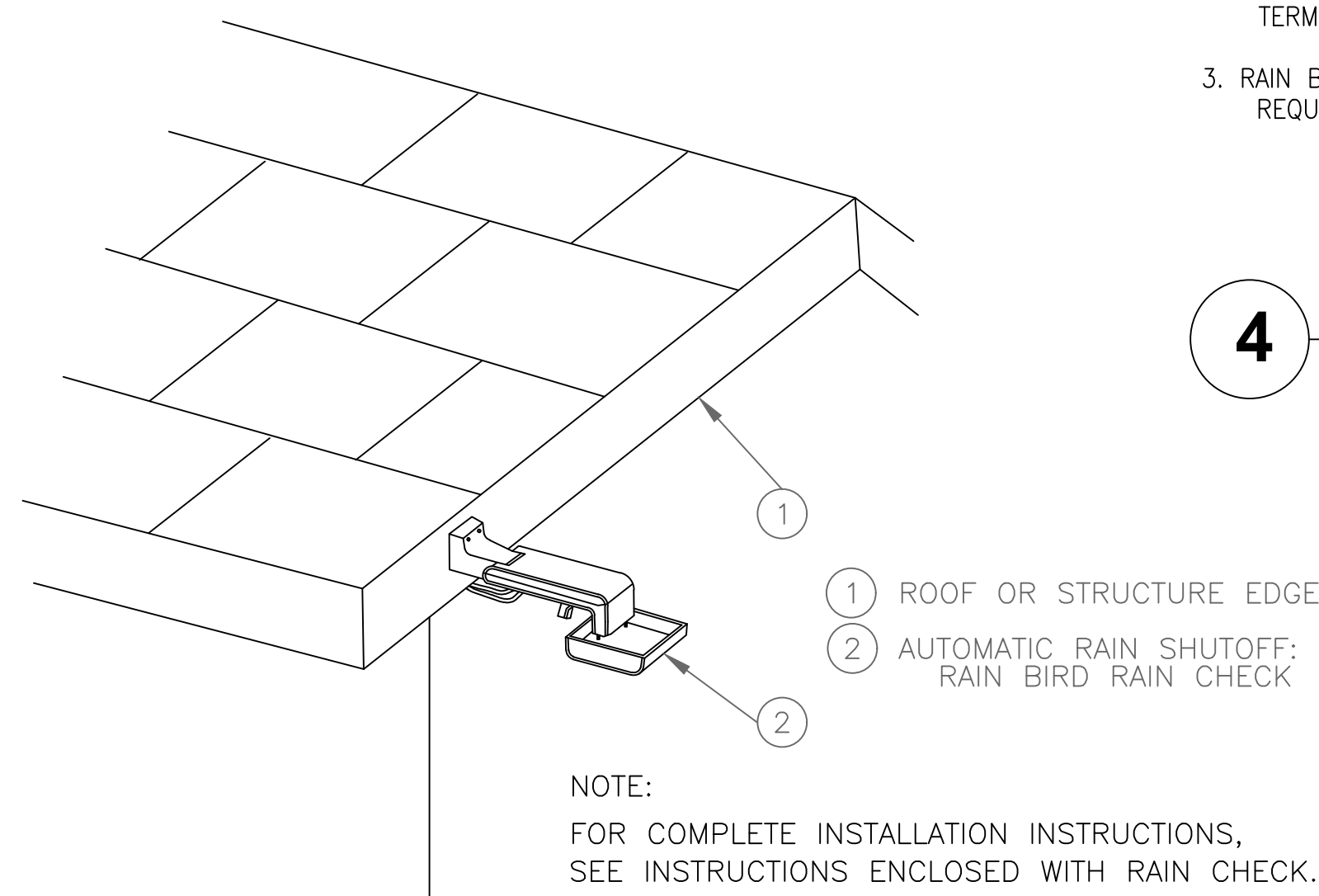
- ① TWO-WIRE DECODER CONTROLLER:  
RAIN BIRD ESP-LXI CONTROLLER
- ② TWO-WIRE TO ESP-LXI CONTROLLER
- ③ COMMUNICATION WIRE TO  
ESP-LXI CONTROLLER
- ④ SOLENOID VALVE OR MASTER VALVE
- ⑤ SOLENOID WIRE (1 OF 2)
- ⑥ DB SERIES WIRE CONNECTOR:  
RAIN BIRD DBTWC25 (1 OF 2)
- ⑦ FIELD DECODER:  
RAIN BIRD FD-101TURF M13011 DECODER
- ⑧ COMMUNICATION WIRE TO NEXT DEVICE  
(FIELD DECODER, SENSOR DECODER  
OR LINE SURGE PROTECTOR)
- ⑨ TWO-WIRE CABLE TO NEXT DEVICE  
(FIELD DECODER, SENSOR DECODER  
OR LINE SURGE PROTECTOR)



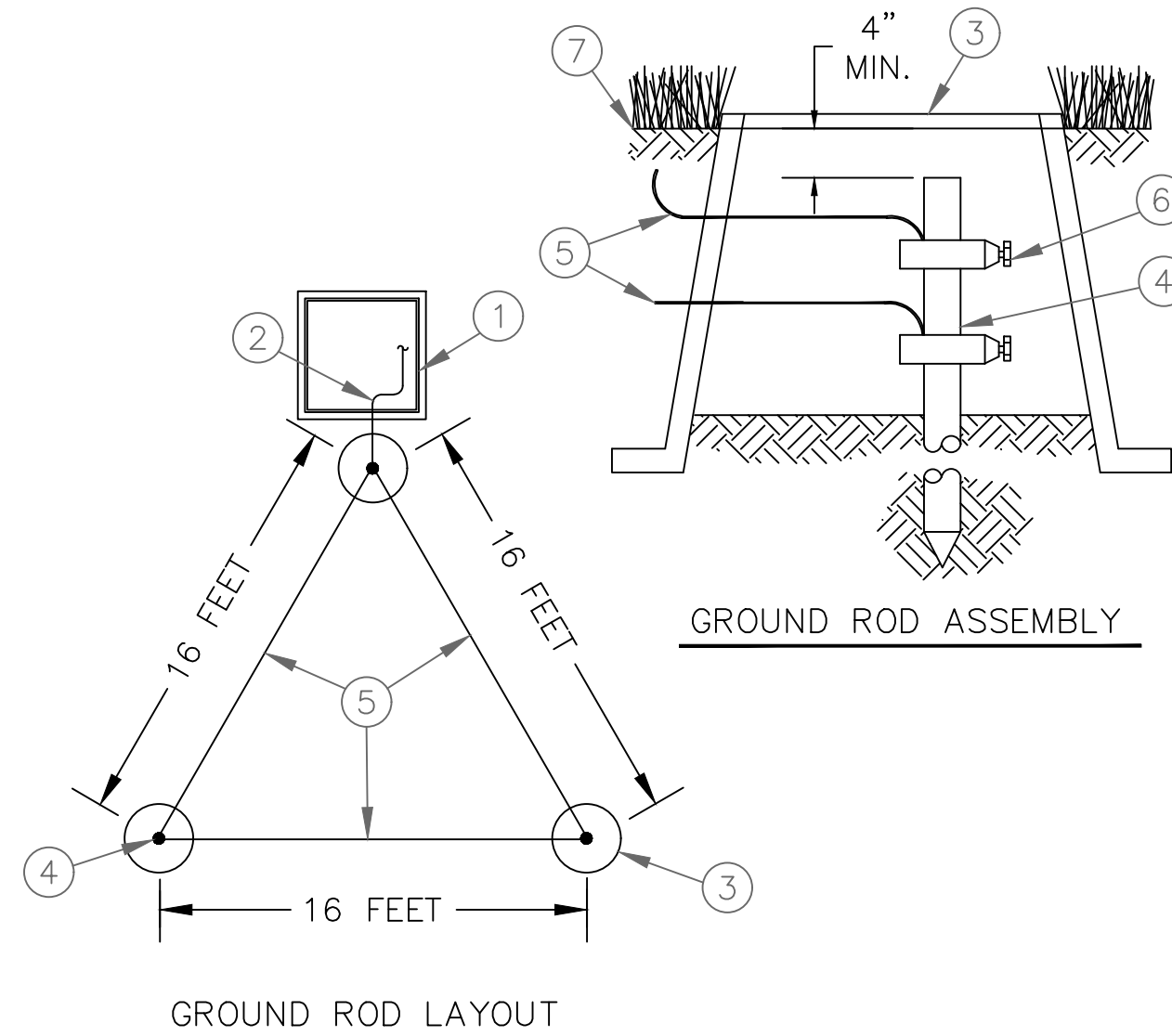
## 5 DECODER TO EXISTING VALVE WIRING



## 6 ISOLATION VALVE

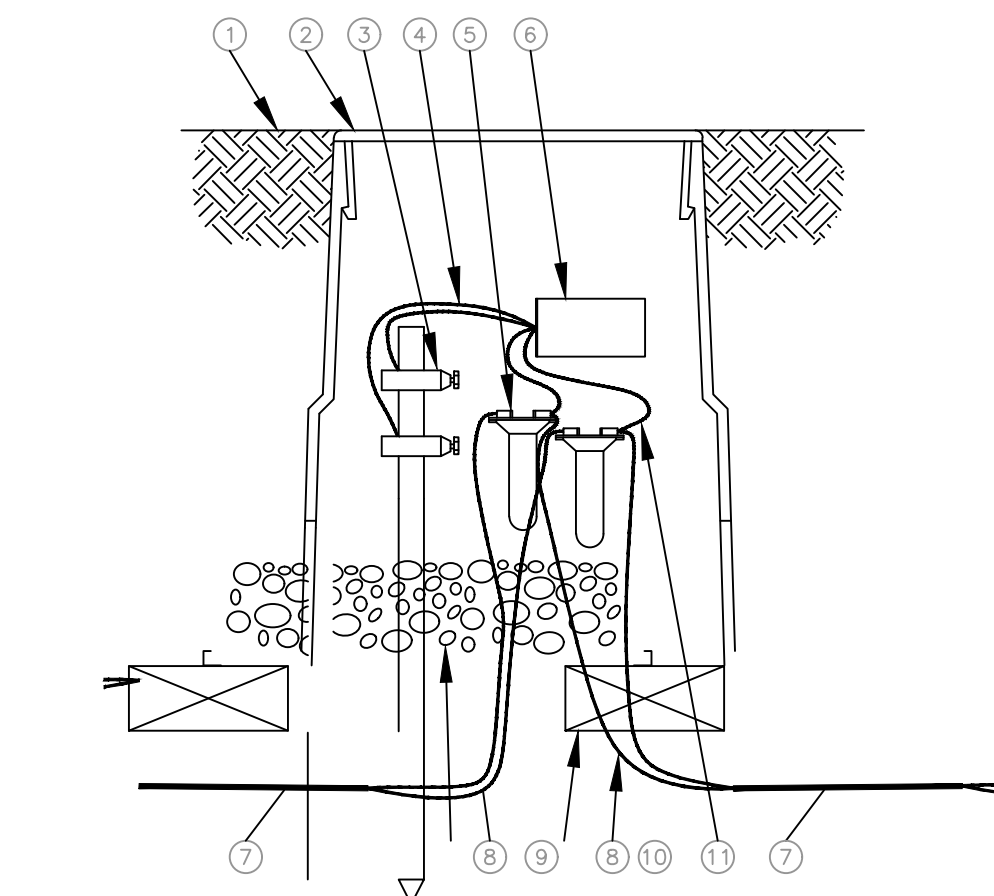


## 7 RAIN SHUT OFF DEVICE



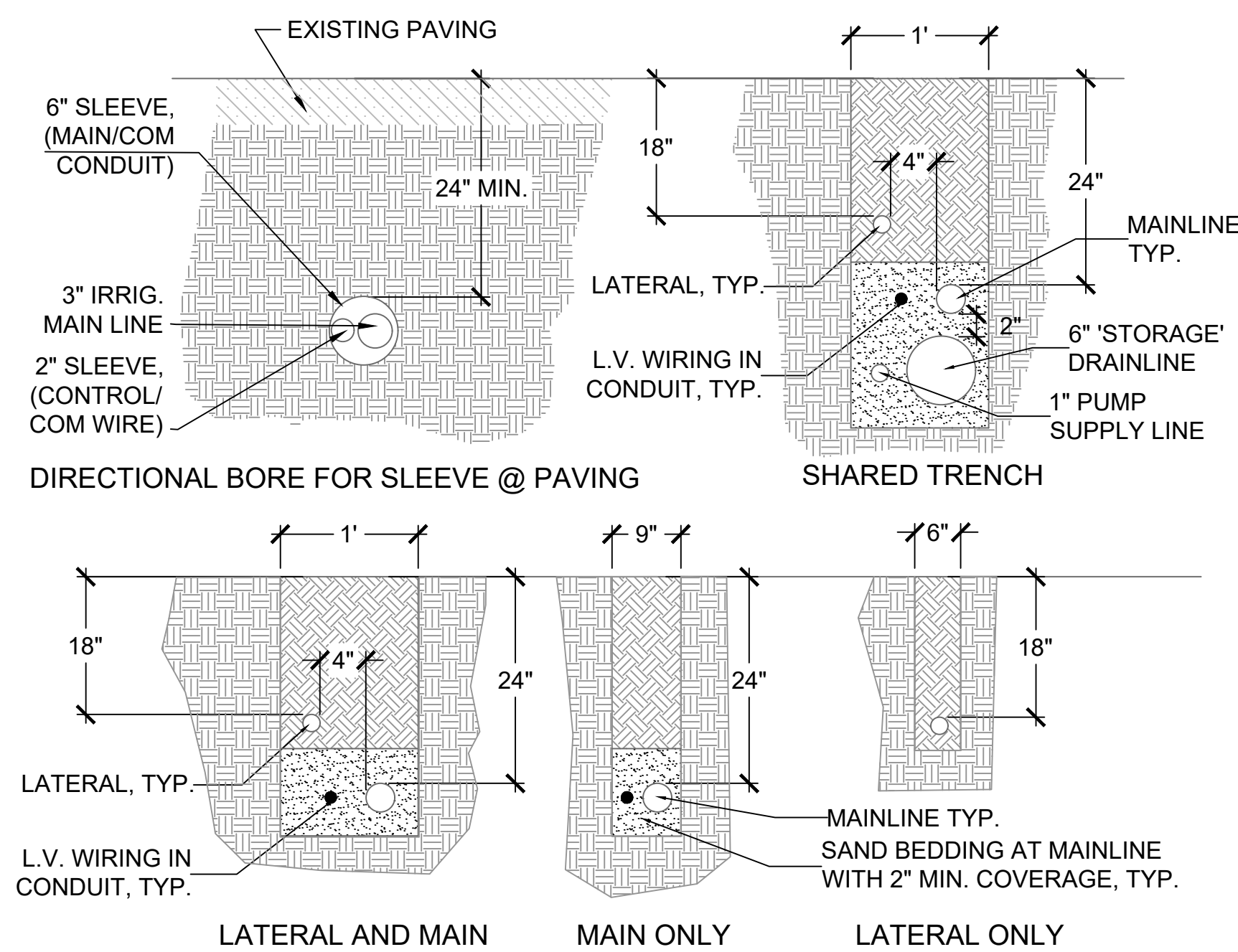
## 3 GROUNDING ROD INSTALLATION AT CONTROLLER

- ① RAIN BIRD CONTROLLER
- ② SOLID BARE COPPER WIRE (#10 AWG) FROM  
GROUNDING ROD TO CONTROLLER. MAKE  
WIRE AS SHORT AND STRAIGHT AS  
POSSIBLE
- ③ COVER GROUNDING ROD WITH 10-INCH  
ROUND VALVE BOX AS SHOWN
- ④ 5/8-INCH X 8 FT COPPER CLAD GROUNDING  
ROD OR GROUNDING PLATE. INSTALL  
RODS IN SOIL IN A TRIANGULAR PATTERN  
SPACED A MINIMUM OF 16 FT APART  
FROM EACH OTHER. GROUNDING GRID TO  
HAVE A RESISTANCE OF TEN (10) OHMS  
OR LESS
- ⑤ BARE COPPER WIRE (#10 AWG MIN.)  
BETWEEN GROUNDING RODS
- ⑥ GROUND ROD CLAMP OR WELDS
- ⑦ FINISH GRADE



- NOTES:
1. LSP-1TURF SHOULD BE INSTALLED EVERY 500-FOOT OR FOR  
EVERY EIGHT DECODERS ON TWO-WIRE PATH.
  2. LSP-1TURF TO BE INSTALLED AT END OF WIRE RUN THAT  
TERMINATES IN THE FIELD (STAR CONFIGURATION).
  3. RAIN BIRD FD-101TURF, FD-102TURF AND FD-202TURF  
REQUIRE SEPARATE LSP-1TURF PROTECTION.
- ① FINISH GRADE OR TOP OF MULCH
  - ② 10-INCH VALVE BOX WITH COVER:  
RAIN BIRD VB-10RND
  - ③ GROUNDING ROD: 10 OHMS OR LESS
  - ④ GREEN/YELLOW WIRE FROM LSP-1TURFTURF TO  
GROUNDING ROD BRASS CLAMPS (1 OF 2)
  - ⑤ DB SERIES WIRE CONNECTOR:  
RAIN BIRD DBTWC25 (1 OF 2)
  - ⑥ LINE SURGE PROTECTOR:  
RAIN BIRD LSP-1TURF M10008
  - ⑦ TWO-WIRE CABLE TO NEXT DEVICE (FIELD DECODER,  
SENSOR DECODER, LINE SURGE PROTECTOR OR  
ESP-LXD CONTROLLER)
  - ⑧ COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER,  
SENSOR DECODER, LINE SURGE PROTECTOR OR  
ESP-LXD CONTROLLER)
  - ⑨ 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
  - ⑩ BRICK (1 OF 2)
  - ⑪ BLUE WIRE FROM LSP-1TURF TO DB SERIES WIRE  
CONNECTOR

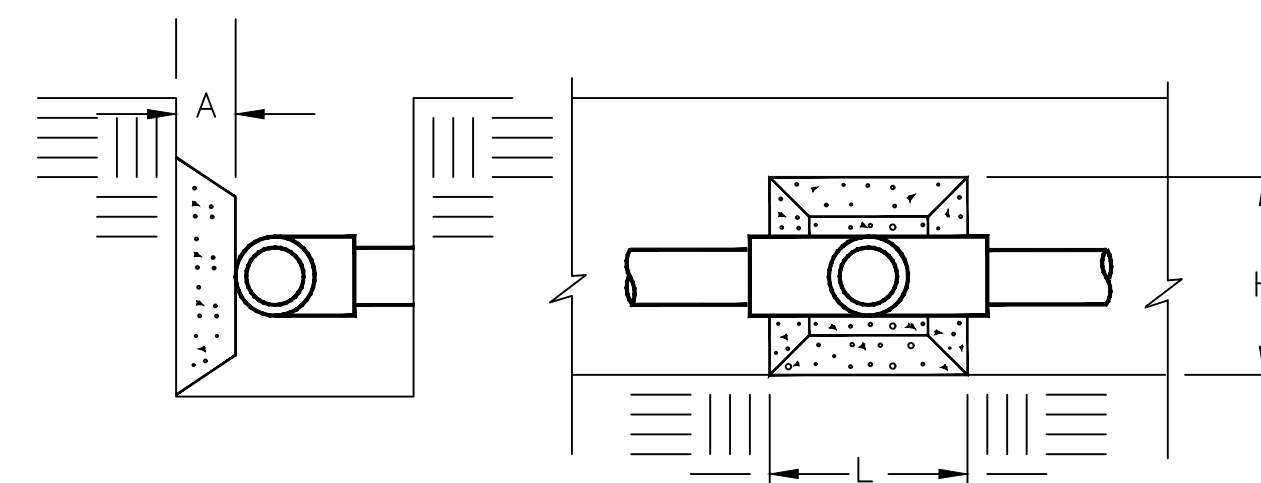
## 4 GROUNDING, LSP-2TURF TO 2-WIRE CONNECTION



NOTES:

1. INSTALL 3" WIDE DETECTABLE WARNING TAPE 12" MIN. ABOVE MAINLINE.
2. SALVAGED EXCAVATED FILL COMPACTED TO ORIGINAL DENSITY IN ALL  
LANDSCAPED AREA, ALL OTHER AREAS SHALL BE AT 95% COMPACTION.
3. FOR ALL SLEEVES, 24" COVER MIN. PROVIDE 90ELL AT BOTH ENDS AND  
EXTEND CAPPED, SLEEVE DIAMETER PIPE TO SURFACE.
4. IN THE EVENT OF AN IRRIGATION LINE CONFLICTING WITH A DRAIN LINE,  
THE DRAIN LINE HAS PRIORITY. IF PROPER COVERAGE CANNOT BE  
ATTAINED ABOVE THE DRAIN LINES, THE IRRIGATION PIPES AND SLEEVES  
WILL BE INSTALLED BENEATH THE DRAIN LINE WITH 2" MIN. SEPARATION.

## 1 TRENCHING



NOTES:

1. DISTANCE "A" TO BE 18" MINIMUM FROM FITTING TO UNDISTURBED SOIL.  
THRUST BLOCKS SHALL BE POURED ONLY AGAINST UNDISTURBED EARTH.
2. REFER TO THRUST BLOCK CHART FOR DISTANCE "L" AND "H".
3. CONCRETE TO BE SHAPED INTO A WEDGE WITH THE WIDE END AGAINST THE  
SOLID WALL OF THE TRENCH.
4. THRUST BLOCKING APPLIES TO GASKETED PIPE ONLY.
5. CONCRETE SHALL BE MIXED AND POURED IN ACCORDANCE WITH PIPE MANUFACTURER'S  
RECOMMENDED STANDARDS AND SPECIFICATIONS FOR THRUST BLOCKS.
6. CONCRETE SHALL BE KEPT BEHIND THE BELL OF THE FITTING WITH THE CONCRETE  
NOT PERMITTED TO RUN OVER AGAINST THE PIPE OR INTO THE JOINT.

PIPE SIZE	90deg BEND		45deg BEND		BEARING AREA (SQUARE FT.)	L x H
	BEARING AREA (SQUARE FT.)	L x H	BEARING AREA (SQUARE FT.)	L x H		
3"	1.0	13"x13"	.57	10"x10"	.74	11"x11"
4"	1.7	16"x16"	.93	12"x12"	1.2	14"x14"
6"	3.7	23"x23"	2.0	17"x17"	2.6	20"x20"
8"	6.6	30"x30"	3.5	23"x23"	4.6	26"x26"

THE FIGURES IN THIS CHART ARE BASED ON A WORKING PRESSURE OF 150 PSI.

## 2 THRUST BLOCKS



*TOWN OF SAN ANSELMO*

*DEPARTMENT OF PUBLIC WORKS*

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**BID BOOK**

**FOR**

2022  
*MEMORIAL PARK*  
*ATHLETIC FIELD RENOVATION PROJECT*

**IN**

*SAN ANSELMO CALIFORNIA*

---

For use in Connection with the project Plans, Special Provisions, Standard Specifications and Standard Plans of the California Department of Transportation dated 2010, the Revised Standard Specifications of the California Department of Transportation dated **May 31, 2018**, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and the 2008 Marin Uniform Construction Standards.

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**Contract No. MPTR-2022**

**Bid Opening Date: August 4, 2022, 10:00 A.M.**



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## **INSTRUCTIONS TO BIDDERS**

### ***1. INTERPRETATION OR CORRECTION OF CONTRACT DOCUMENTS***

- a. Bidder shall, before submitting its Bid, carefully study and compare the components of the Contract Documents and shall examine the Project Site, the conditions under which the Work is to be performed, and the local conditions.
- b. In the event Bidder has any question as to the meaning of any part of the Contract Documents, or Bidder finds any error, omission, inconsistency, or ambiguity in the Contract Documents, Bidder shall make a written Request for Clarification prior to submitting its Bid. Requests for clarification or interpretation of the Contract Documents shall be addressed only to the Engineer designated in the Notice to Contractors. It shall be the Bidder's responsibility to ensure that any such request is submitted to the Town in a timely manner to allow sufficient time for the Town to issue a written Addendum.
- c. If necessary, the Town shall make clarifications, interpretations, corrections, and changes to the Contract Documents by Addenda issued as provided in Section 2 of these Instructions to Bidders, below. Purported clarifications, interpretations, corrections, and changes to the Contract Documents made in any other manner shall not be binding on the Town, and Bidders shall not rely upon them.

### ***2. ADDENDA***

- a. Addenda will only be issued in writing. The Town will make reasonable efforts to deliver (via email or U.S. Mail) Addenda to all Bidders who are known by the Town to have received a complete set of Contract Documents and who have provided an email address and a street address for receipt of Addenda.
- b. Each Bidder shall be responsible for ascertaining, prior to submitting its Bid, that it has received all issued Addenda. Town makes no guarantee that all Bidders will receive all Addenda. Copies of Addenda will be made available for inspection at the office where Contract Documents are on file for inspection, as indicated on the Notice to Contractors.
- c. Addenda withdrawing the Notice to Contractors or postponing the Bid Deadline may be issued any time prior to the Bid Deadline. However, if any Addenda result in a material change (addition or deletion) to the Contract Documents, the Bid Deadline shall be extended by the Town by not less than 72 hours, pursuant to California Public Contract Code section 4104.5.
- d. Each Bidder shall acknowledge receipt of all Addenda on the Bid. Failure to acknowledge receipt of Addenda may render the bid non-responsive.

### ***3. FILLING IN BID BOOK BY BIDDERS***

- a. The portion of the Contract Documents entitled "Bidding Documents" (including the Notice to Bidder, the Instructions to Bidders, the Bid and the Bid Forms) focuses the Bidder's attention on the requirements for submitting a bid.
- b. Bids shall be submitted on the Bid Forms included within the Bid Book. A complete Bid Book, with all Bid Forms, must be submitted.
- c. All blanks on the Bid Forms shall be filled in by typewriter or printed legibly in black ink.
- d. Interlineations, alterations, and erasures must be individually initialed by the Bidder.



- e. Bidder shall not modify or qualify the Bid Book in any manner.
- f. The Bid Forms shall be signed by a person or persons legally authorized to bind Bidder to the Contract. The individuals signing each document shall warrant that they are authorized to bind the legal entity of the Bidder.

#### **4. SUBMITTING BID**

All Bids shall be submitted as directed in the Special Provisions.



(DO NOT DETACH)

**BID TO THE TOWN OF SAN ANSELMO**

**DEPARTMENT OF PUBLIC WORKS**

**FOR PROJECT KNOWN AS: MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**

**CONTRACT NO. MPTR-2022**

**NAME OF BIDDER** \_\_\_\_\_

**BUSINESS P.O. BOX** \_\_\_\_\_

**CITY, STATE, ZIP** \_\_\_\_\_

**BUSINESS STREET ADDRESS** \_\_\_\_\_

*(Please include even if P.O. Box used)*

**CITY, STATE, ZIP** \_\_\_\_\_

**TELEPHONE NO:** \_\_\_\_\_ **AREA CODE ( )** \_\_\_\_\_

**FAX NO:** \_\_\_\_\_ **AREA CODE ( )** \_\_\_\_\_

**CONTRACTOR LICENSE NO.** \_\_\_\_\_

**DATE OF BID:** \_\_\_\_\_

The work to be performed under this Contract consists of, but is not limited to: clearing and grubbing, irrigation and landscape planting, drainage, water pollution control, and ancillary work in Memorial Park in San Anselmo, CA.

The work for which this bid is submitted is for construction in conformance with the Bid Book, (including the payment of not less than the State general prevailing wage rates), the Project Plans and Special Provisions described below, including any addenda thereto, the Contract Agreement annexed hereto, and also in conformance with the California Department of Transportation Standard Plans, dated **2018**, the California Department of Transportation Standard Specifications, dated **2018**, the California Department of Transportation Revised Standard Specifications, dated May 31, 2018, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, the 2008 Marin Uniform Construction Standards, and documents included in the specifications by reference.

The work shall conform to the requirements of the Contract Documents as presented and/or referenced in the documents dated June 28, 2022 and entitled:

**TOWN OF SAN ANSELMO**  
**MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**  
**BID BOOK**

And

**TOWN OF SAN ANSELMO**  
**MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**  
**SPECIAL PROVISIONS**

The project plans for the work to be done were approved June 28, 2022 and are entitled:



**MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT  
TOWN OF SAN ANSELMO**

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items in the **Base Bid**.

The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage-wise the unit price or item total in the *TOWN OF SAN ANSELMO*'s Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity that may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the *TOWN OF SAN ANSELMO*, and that discretion will be exercised in the manner deemed by the *TOWN OF SAN ANSELMO* to best protect the public interest in the prompt and economical completion of the work. The decision of the *TOWN OF SAN ANSELMO* respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

The quantities of work under each item are approximate only, being given for a basis of comparison of Bids, and the right is reserved to the Town to increase or decrease the amount of work under any item as may be required, in accordance with provisions set forth in the specifications for this project.

The total amount of money set forth for each item of work or as the total amount bid for the project does not constitute an agreement to pay a lump sum for the work unless it specifically so states.



If this bid shall be accepted and the undersigned shall fail to enter into the contract and furnish all bonds in the sums required by the State Contract Act, with surety satisfactory to the *TOWN OF SAN ANSELMO*, within 10 days, not including Saturdays, Sundays and legal holidays, after the bidder has received notice from the *TOWN OF SAN ANSELMO* that the contract has been awarded, the *TOWN OF SAN ANSELMO* may, at its option, determine that the bidder has abandoned the contract, and thereupon this bid and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this bid shall operate and the same shall be the property of the *TOWN OF SAN ANSELMO*.

**The work site will become available to the Contractor on Tuesday September 6, 2022, which will be the first official work day. The time period between Award of Contract and September 6, 2022 will not be counted towards the working days for the project.**

The undersigned, as bidder, declares that the only persons or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans and specifications therein referred to; and he proposes, and agrees if this bid is accepted, that he will contract with the *TOWN OF SAN ANSELMO*, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the *TOWN OF SAN ANSELMO* as therein set forth, and that he will take in full payment for the following prices:



**TOWN OF SAN ANSELMO  
SCHEDULE OF BID ITEMS 'BID LIST'  
MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**

**BASE BID**

NO.	ITEM	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	MOBILIZATION/TEMPORARY FENCE/SWPPP/STAKING/TREE PROTECTION	LS	1		
2	DEMOLITION (TURF TILLED & DEBRIS REMOVED)	LS	1		
3	ROUGH GRADING	LS	1		
4	NEW DRAIN BOX & GRATE COVER (ALDERNEY AND FIELD 2)	LS	1		
5	8" DIA. DRAINAGE LATERALS (2 TOTAL – APPROX. 78 LF, INCLUDING TIE-INS TO EXISTING STORM DRAIN	LS	1		
6	SAWCUT, TRENCH, REPAIR PAVING FOR DRAIN LINE	LS	1		
7	WELL SUPPLY PIPE (1.5" DIA.), ELECTRICAL CONDUIT (1" DIA.) APPROX. 475 LF	LS	1		
8	6" DIA. STORAGE PIPE, APPROX. 950 LF INCLUDING BACKFILL, CLEAN OUTS (3 EA) AND JUNCTION BOXES (3 EA)	LS	1		
9	4" DIA. INFIELD/BACKSTOP SUBDRAINS (APPROX. 835 LF)	LS	1		
10	4" DIA. MAIN FIELD SUBDRAIN – APPROX. 330 LF PLUS 65 LF AT FIELD 3	LS	1		
11	CLEANOUTS (6 TOTAL)	LS	1		
12	6" SLEEVE INSTALLATION AT FIELD 2 – DIRECTIONAL BORING	LS	1		
13	SOIL PREP/FINE GRADING (APPROX. 141,730 SF)	LS	1		
14	INFIELD MIX REPAIR	CY	40		
15	INFIELD MIX (NEW)	SF	1,575		
16	INFIELD FINE GRADING (APPROX. 34,865 SF)	LS	1		
17	WOOD MULCH AT FIELD 3 SPECTATOR AREA (1,900 SF, 3" DEPTH)	LS	1		
18	WOOD HEADER AT RESTROOM, FIELD 3 DUGOUT AND SKATEPARK (APPROX 287 LF)	LS	1		
19	AC PAVING/GRADING AT RESTROOM, FIELD 1 AND PICNIC AREA, INCLUDING WOOD HEADER	LS	1		
20	SOD TURF (APPROX. 141,730 SF)	LS	1		
21	IRRIGATION SYSTEM (ALL INCLUSIVE)	LS	1		
22	90 DAY MAINTENANCE	LS	1		
<b>BASE BID</b>					



The Bidder shall list the name and address of each and every subcontractor to whom the Bidder proposes to subcontract portions of the work, as required by the provisions in Section 2-1.33C "Subcontractor List" of the Standard Specifications. The bidder shall here give a complete description of the work to be performed by each subcontractor. If no subcontractor is listed for a portion of work, the contractor is required to self perform that portion of the work. (Public Contract Code § 4106).

## LIST OF SUBCONTRACTORS

[illegible]

NO SUBSTITUTIONS OR ADDITIONS MAY BE MADE WITHOUT PRIOR WRITTEN APPROVAL



## **SUBCONTRACTS**

Pursuant to the provisions in Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at <http://www.dir.ca.gov/dir/Labor-law/DLSE/Debar.html>.

No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].



## Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376 §1, Stats. 1985), the bidder hereby declares

under penalty of perjury under the laws of the State of California that the bidder has ☐ , has not ☐ been convicted

within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

---

## Public Contract Code Section 10162 Questionnaire

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes ☐ No ☐

If the answer is yes, explain the circumstances in the following space:



## Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

---



## NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_[date], at \_\_\_\_\_[city], \_\_\_\_\_[state]."

(California Public Contract Code § 7106; 23 U.S. Code § 112).

Note: The above Noncollusion Declaration is part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Noncollusion Declaration. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

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## **WORKER'S COMPENSATION CERTIFICATION**

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

---

Signature of Contractor

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Date

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Printed Name



## EXPERIENCE AND FINANCIAL QUALIFICATIONS

The following statement as to experience and financial qualifications of the Bidder are submitted in conjunction with the bid, as a part thereof and the truthfulness and accuracy of the information is guaranteed by the bidder.

The Bidder has been engaged in the contracting business under the present business name for \_\_\_\_\_ years. Experience in work of a nature similar to that covered in the bid extends over a period of \_\_\_ years.

The Bidder currently holds a valid Contractor's License of the following Class or Classes, \_\_\_\_\_ issued by the Contractor's License Board under the provision of Chapter 9 of Division 3 of the Business and Professions Code of the State of California.

The Bidder, as a contractor, has never failed to satisfactorily complete a contract awarded to him, except as follows: (Name any and all exceptions and reasons therefor).

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In the last 10 years, have you or your firm been a party to arbitration, lawsuit or any other proceeding involving work that you or your firm performed?      yes\_\_\_ no\_\_\_

If so, please provide the following information as to each such proceeding:

- (I)      the name, address and telephone numbers of all parties to the proceeding;
- (II)     the general nature of the claims being made against or by your firm;
- (III)    the outcome of the proceeding.

Have you or your firm ever requested payment of more money than any of your clients have been willing to pay?      yes\_\_\_ no\_\_\_

As to each such request, please state:

- (I)      the name, address and telephone number of the client;
- (II)     the amount and nature of your claim;

- (III) the nature of the client's position;
- (IV) the outcome of your claim.

The following contracts have been satisfactorily completed in the last three years for the person, or authority indicated, and to whom reference is made. (Name five contracts.)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The following is a list of plant and equipment owned by the Bidder, and which is definitely available for use on the proposed work as required.

Quantity	Name, Type & Capacity	Condition	Location
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



## DEBARMENT AND SUSPENSION CERTIFICATION

### TITLE 2, CODE OF FEDERAL REGULATIONS, PART 1200

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Certification.

## CONTRACTOR FIELD REVIEW CERTIFICATION PRIOR TO BID

We \_\_\_\_\_ (Contractor's name), have inspected the locations of all proposed work included in the "**MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**" and have determined all the field conditions and obstructions and are bidding accordingly.

NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_



## CONTRACTOR'S LICENSE REQUIREMENT

Section 7028.15 of the Business and Professions Code provides that it is a misdemeanor for any person to submit a bid to a public agency in order to engage in the business or act in the capacity of a contractor within the state without having a license therefor except in certain cases. Therefore you must sign one of the following two statements:

1. I am familiar with the provisions of Section 7028.15 of the California Business and Professions Code in my opinion the following exceptions contained within the Code section apply:

I declare under penalty of perjury that the foregoing is true and correct. Executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
at, \_\_\_\_\_ California.

\_\_\_\_\_  
(Signature)

2. I am a licensed contractor possessing the following license \_\_\_\_\_, the number of which is, \_\_\_\_\_, the license expiration date is \_\_\_\_\_.

I declare under penalty of perjury that the foregoing is true and correct. Executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
at \_\_\_\_\_ California.

\_\_\_\_\_  
(Signature)

ANY BID NOT CONTAINING THE FOREGOING INFORMATION OR A BID CONTAINING INFORMATION WHICH IS SUBSEQUENTLY PROVEN FALSE SHALL BE CONSIDERED NON-RESPONSIVE AND SHALL BE REJECTED BY THE PUBLIC AGENCY.

## BID (Continued)

Accompanying this Bid is \_\_\_\_\_

(NOTICE: INSERT THE WORDS "CASH(\$ \_\_\_\_\_)," "CASHIER'S CHECK,"  
"CERTIFIED CHECK," OR "BIDDER'S BOND," AS THE CASE MAY BE.)

in amount equal to at least ten percent of the total of the bid.

The names of all persons interested in the foregoing BID as principals are as follows:

## IMPORTANT NOTICE

*If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.*

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Licensed in conformance with an act providing for the registration of Contractors,

License No. \_\_\_\_\_ Classification(s) \_\_\_\_\_

### **ADDENDA** -

This Bid is submitted with respect to the changes to the contract included in addenda number/s \_\_\_\_\_

*(Fill in addenda numbers if addenda have been received and insert, in this Bid, any Engineer's Estimate sheets that were received as part of the addenda.)*

By my signature on this Bid I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the Bidder has complied with the requirements of Section 11102 of the Fair Employment and Housing Commission Regulations (Title 2, Div. 4.1 of the California Code of Regulations). By my signature on this Bid I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Declaration required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106 are true and correct.

Date: \_\_\_\_\_



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Signature and Title of Bidder

Business Address \_\_\_\_\_

Place of Business \_\_\_\_\_

Place of Residence \_\_\_\_\_



**TOWN OF SAN ANSELMO  
DEPARTMENT OF PUBLIC WORKS  
BIDDER'S BOND**

We, \_\_\_\_\_  
\_\_\_\_\_ as Principal, and

\_\_\_\_\_ as Surety are bound unto the *TOWN OF SAN ANSELMO*, State of California, hereafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitted to the Obligee, for the work performed under the contract consisting of, but not limited to: clearing and grubbing, irrigation and landscape planting, drainage, water pollution control, and ancillary work in Memorial Park in San Anselmo, CA, for which bids are to be opened at the **Town of San Anselmo Council Chambers, 525 San Anselmo Ave, San Anselmo, California on August 4, 2022.**

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in conformance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Principal  
\_\_\_\_\_  
Surety  
By \_\_\_\_\_  
Attorney-in-fact

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California  
City/County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_ before me  
\_\_\_\_\_, personally appeared \_\_\_\_\_,  
Attorney-in-fact

who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her/his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

(SEAL)

\_\_\_\_\_  
Notary Public

## **SAMPLE CONTRACT FORMS**

### **CONTRACT SUBMITTAL**

*All of the following documents shall be submitted by the successful bidder within 10 calendar days after the Notice of Award is mailed by the Town.*

Contract Agreement

Payment Bond

Performance Bond

Escrow Agreement for Security Deposits in Lieu of Retention (Sample Form to be used if requested by Contractor)

Workers' Compensation Certification

### **WARRANTY SUBMITTAL**

*All of the following documents shall be submitted by the Contractor within 10 business days after the Final Estimate is mailed by the Town.*

Guarantee

Defective Materials and Workmanship Bond



# TOWN OF SAN ANSELMO

## Contract Agreement for

### **MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**

#### **Project No. MPTR-2022**

This Agreement is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ by and between the Town of San Anselmo (hereinafter called Town) and \_\_\_\_\_ (**Insert Contractor Name**) (hereinafter called Contractor). Witnesseth, that the Town and the Contractor, for the considerations hereinafter named, agree as follows:

#### **I - Scope of the Work**

The Contractor hereby agrees to furnish all of the resources and activities, materials, equipment and labor necessary, and to complete all of the work shown on the plans and described in the specifications for the project entitled: **MEMORIAL PARK ATHLETIC FIELD RENOVATION Project No. MPTR-2022**, all in accordance with the requirements and provisions of the Contract Documents as defined in the Special Provisions which are hereby made a part of this Agreement. The liability insurance provided to Town by Contractor under this contract shall be primary and excess of any other insurance available to the Town.

#### **II- Time of Completion**

- (a) The contract shall be signed by the successful bidder and returned, together with the contract bonds, copy of insurance policies, and Certificates of Insurance, with documents to verify any self-insurance coverage within **ten (10) working days** from the date the Notice of Award is mailed by the Town to the Contractor.
- (b) The work to be performed under this Contract shall be commenced within **fifteen (15) calendar days** after the date of written notice that the Contract has been fully executed.
- (c) **The first working day shall be Tuesday September 6, 2022.**
- (d) The work shall be completed within **ninety (90) working days** counting from and after the fifteenth (15) calendar days from the date the Notice of Award is mailed by the Town to the Contractor, or from and after the first day of work, whichever occurs first, and with such extensions of time as are provided for in the Special Provisions.

#### **III – Workers' Compensation**

The Contractor hereby certifies that before commencing performance of the work of this Contract, it will comply with the provisions of California Labor Code Sections 3700, et seq., which require every employer to be insured against liability for workers' compensation or to undertake self insurance in conformance with the law.

#### **IV - The Contract Sum**

The Town shall pay to the Contractor for the performance of the Contract the amounts determined for the total number of each of the units of work in the attached Schedule of Bid Items completed at the unit price stated.

The number of units contained in this schedule is approximate only, and the final payment shall be made for the actual number of units that are incorporated in or made necessary by the work covered by the Contract.

**IN WITNESS WHEREOF**, Town and Contractor have caused their authorized representatives to execute this Agreement the day and year first written above.

**TOWN OF SAN ANSELMO:**

**CONTRACTOR:**

\_\_\_\_\_  
**David Donery, Town Manager**

\_\_\_\_\_  
**By: INFORMATION ONLY (NOT TO BE  
SUBMITTED WITH BID)**

\_\_\_\_\_  
**Printed Name:**

\_\_\_\_\_  
**Title:**

\_\_\_\_\_  
**License Number:**

\_\_\_\_\_  
**Federal Employer ID Number:**

\_\_\_\_\_  
**ATTEST:**

\_\_\_\_\_  
**Robyn Clifford, Acting Town Clerk**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Megan H. Acevedo, Town Attorney**



TOWN OF SAN ANSELMO  
DEPARTMENT OF PUBLIC WORKS

**SAMPLE PAYMENT BOND**

(Section 9550, Civil Code)

**WHEREAS**, The *TOWN OF SAN ANSELMO*, acting by and through the Department of Public Works, hereafter referred to as "Obligee", has awarded to Contractor \_\_\_\_\_, hereafter designated as the "Principal", a contract for the work described as follows:

**AND WHEREAS**, said Principal is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen and other persons as provided by law.

**NOW, THEREFORE**, we the undersigned Principal and Surety are bound unto the Obligee in the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_), for which payment, we bind ourselves, jointly and severally.

**THE CONDITION OF THIS OBLIGATION IS SUCH,**

That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by such claimant, or any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board for the wages of employees of the Principal and his subcontractors pursuant to the Revenue and Taxation Code, with respect to such work and labor, that the surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the surety will pay a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

Dated: \_\_\_\_\_, 20 \_\_\_\_

Correspondence or claims relating to this bond should be sent to the surety at the following address:

\_\_\_\_\_  
\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety (SEAL)

By : Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California  
City / County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20 \_\_\_\_ before me \_\_\_\_\_, personally appeared \_\_\_\_\_, who proved to me on the basis of

*Attorney-in-fact*

satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her/his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

(SEAL)

\_\_\_\_\_  
Notary Public

TOWN OF SAN ANSELMO  
DEPARTMENT OF PUBLIC WORKS

**SAMPLE PERFORMANCE BOND**

(To Accompany Contract)

Bond No. \_\_\_\_\_

**WHEREAS**, the *TOWN OF SAN ANSELMO*, acting by and through the Department of Public Works, has awarded to Contractor \_\_\_\_\_, hereafter designated as the "Contractor", a contract for the work described as follows:

**AND WHEREAS**, the Contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof:

**NOW, THEREFORE**, we the undersigned Contractor and Surety are held firmly bound to the *TOWN OF SAN ANSELMO* in the sum of \$ \_\_\_\_\_ dollars (\$ \_\_\_\_\_), to be paid to said Town or its certain attorney, its successors and assigns: for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH,**

That if the above bound Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning, and shall indemnify and save harmless the *TOWN OF SAN ANSELMO*, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

**IN WITNESS WHEREOF**, We have hereunto set our hands and seals on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Correspondence or claims relating to this bond should be sent to the surety at the following address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Contractor  
\_\_\_\_\_  
Name of Surety (SEAL)  
\_\_\_\_\_  
By: Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California, City / County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20 \_\_\_\_ before me \_\_\_\_\_, a notary public in and for the City / County of \_\_\_\_\_, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be

*Attorney-in-fact*

the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her/his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

(SEAL)

\_\_\_\_\_  
Notary Public



**TOWN OF SAN ANSELMO**  
**ESCROW AGREEMENT**  
**FOR SECURITY DEPOSITS IN LIEU OF RETENTION**

This Escrow Agreement is made and entered into by and between the Town of San Anselmo, whose address is 525 San Anselmo Avenue, San Anselmo CA 94960, hereinafter called "Owner," and \_\_\_\_\_ whose address is \_\_\_\_\_ hereinafter called "Contractor" and \_\_\_\_\_ whose address is \_\_\_\_\_ hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

- (1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Contract Agreement entered into between the Owner and Contractor for \_\_\_\_\_ in the amount of \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of \_\_\_\_\_, and shall designate the Contractor as the beneficial owner.
- (2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
- (3) When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
- (4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.
- (5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
- (6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- (7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.
- (8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
- (9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

- (10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Signature

On behalf of Contractor:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Signature

On behalf of Escrow Agent:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

Owner

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

Contractor

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

Attachment A – written consent from Contractor's surety.



# TOWN OF SAN ANSELMO

## DEFECTIVE MATERIALS AND WORKMANSHIP BOND

### MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT

WHEREAS, the TOWN OF SAN ANSELMO ("Town") a municipal corporation located in the County of Marin, State of California, has entered into an agreement with \_\_\_\_\_, hereinafter designated as "Principal" whereby Principal agrees to complete the improvements more particularly described in all documents forming the complete contract entitled "MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT" which said Contract Agreement is hereby referred to and made a part hereof; and

WHEREAS, said Principal is required to furnish a bond in connection and with said contract, to protect the Town against the results of defective materials or workmanship for a period of one (1) year after completion and acceptance.

NOW, THEREFORE, we the Principal and \_\_\_\_\_, as Surety, are held and firmly bound unto the TOWN OF SAN ANSELMO in the sum of \$ \_\_\_\_\_, lawful money of the United States, being not less than ten (10%) percent of the Final Estimate of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these present.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said work is found to contain defects in material or workmanship within a period of one (1) year from the date of completion and acceptance and the Principal, his/her/its heirs, executors, administrators, successors or assigns, shall fail to correct such defects, then said Surety will pay the cost for correction of any defects in material or workmanship which appear within said one (1) year in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond a reasonable attorney's fee in such suit, which fee shall be fixed by the Court.

If any action shall be brought by the Town upon the bond, a reasonable attorney's fee, to be fixed by the Court, shall be and become a part of the Town's Judgment in any action.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the work or to the specifications.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

NOTE: To be signed by Principal and Surety and acknowledgment and notarial seal attached.

(SEAL)

PRINCIPAL

By: \_\_\_\_\_

Title: \_\_\_\_\_

SURETY

By: \_\_\_\_\_

Title: \_\_\_\_\_

The above bond is accepted and approved this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

# TOWN OF SAN ANSELMO

## GUARANTEE

### MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT

#### Project Description:

The work to be performed under this Contract consists of, but is not limited to: clearing and grubbing, irrigation and landscape planting, drainage, water pollution control, and ancillary work in Memorial Park in San Anselmo, CA.

#### Date of Acceptance:

We hereby guarantee that the work we have installed for the Town has been done in accordance with the approved Plans and Specifications as well as all applicable State and local regulations and that the work as installed will fulfill the requirements of the guarantee.

We agree to repair or replace any or all of our work, together with any other adjacent damages resulting from our work, that may prove to be defective in its workmanship or material within a period of ONE YEAR from the date of acceptance of the above-named work by Town without any expense whatsoever to the Town, ordinary wear and tear and unusual abuse or neglect excepted.

Within fifteen (15) days after being notified in writing by Town of any defects in the work, we agree to commence and prosecute with due diligence all work necessary to fulfill the terms of this guarantee, and to complete the work within a reasonable period of time (not to exceed thirty (30) days after commencement of the repair work); and in the event of our failure to so comply, we collectively and separately, do hereby authorize said Town to proceed to have such work done at our expense and we will honor and pay the cost and charges therefor upon demand.

DATED: \_\_\_\_\_

CONTRACTOR

BY: \_\_\_\_\_

Title: \_\_\_\_\_

(To be signed and notarized before acceptance of project).



## **MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**

### **SPECIAL PROVISIONS**

For use in Connection with the Project Bid Book, Project Plans, the Standard Specifications and Standard Plans of the California Department of Transportation dated **2018**, the Revised Standard Specifications of the California Department of Transportation dated **May 31, 2018**, the Caltrans Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and the **2008** Marin County Uniform Construction Standards.

**Bid Opening:**  
**August 4, 2022 at 10:00 a.m.**  
**Town of San Anselmo**  
**Council Chambers**  
**525 San Anselmo Avenue**  
**San Anselmo, CA 94960**

June 28, 2022





## MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT

**These Special Provisions were prepared under the Direction of the following licensed persons:**



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Sean Condry, PE  
Town Public Works Director  
Town of San Anselmo

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Scott Schneider, PE  
Assistant Public Works Director  
Town of San Anselmo

# IMPORTANT SPECIAL NOTICE

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- THE “PROPOSAL AND CONTRACT” BOOK HAS BEEN RETITLED AND IS NOW THE “BID” BOOK.
- THE “NOTICE TO CONTRACTORS” HAS BEEN RETITLED AND IS NOW THE “NOTICE TO BIDDERS.”
- THE “GENERAL PROVISIONS” HAVE BEEN RETITLED AND ARE NOW INCLUDED IN THE SPECIAL PROVISIONS UNDER DIVISION I.
- THE SPECIAL PROVISIONS HAVE BEEN CHANGED TO REFERENCE THE 2018 STATE STANDARD SPECIFICATIONS.
- A REFERENCE TO A STANDARD SPECIFICATION HEADING IS ONLY MADE WHEN MODIFYING THE SECTION AND IS NOT A COMPREHENSIVE LISTING OF THE SECTIONS WHICH APPLY TO THE PROJECT. UNLESS DELETED, ALL SECTIONS APPLY TO THE PROJECT. SECTIONS WHICH ARE NOT DELETED, ADDED, OR MODIFIED BY THE SPECIAL PROVISIONS REMAIN AS WRITTEN AND AS MODIFIED BY THE REVISED STANDARD SPECIFICATIONS PUBLISHED ON MAY 31, 2018. ANY MODIFICATION TO A SECTION DOES NOT CHANGE THE REST OF THE SECTION. ANY PARAGRAPH ADDED OR DELETED BY A REVISION CLAUSE DOES NOT CHANGE THE PARAGRAPH NUMBERING OF THE STANDARD SPECIFICATIONS FOR ANY OTHER REFERENCE TO A PARAGRAPH OF THE STANDARD SPECIFICATIONS.



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[Click here to enter text.](#)

## **TOWN OF SAN ANSELMO NOTICE TO BIDDERS**

### **INVITING SEALED PROPOSALS**

### **MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT**

NOTICE IS HEREBY GIVEN that sealed proposals will be received by the Town of San Anselmo, Department of Public Works, 525 San Anselmo Avenue, San Anselmo, California 94960, 10:00 a.m., August 4, 2022, at which time they will be publicly opened and read.

SCOPE: The bid shall cover all costs for all work involved and furnishing of the resources and activities which are required for the MEMORIAL PARK ATHLETIC FIELD RENOVATION PROJECT. The work to be performed under this contract consists of, but is not limited to: clearing and grubbing, irrigation and landscape planting, drainage, water pollution control, and ancillary work in Memorial Park in San Anselmo, CA.

ESTIMATED COST: The estimated cost for this project is \$785,000.

INSPECTION OF DOCUMENTS: Plans, Notice to Bidders, Bid Book, and Special Provisions may be viewed at the Department of Public Works, 525 San Anselmo Avenue, San Anselmo CA 94960, and can be obtained from BPXpress Reprographics located at 4903 Central Avenue, Richmond, CA 94804 for a nonrefundable cost of \$50 per set. Shipping and handling are extra, depending on the delivery method. Electronic copies of the documents are also available for a non-refundable cost of \$50 per set.

For additional information or technical questions concerning this project, please call Scott Schneider, Assistant Public Works Director, at (415) 258-4653. Inquiries or questions based on patent ambiguity of the plans, specifications, contract documents or estimate must be communicated in writing prior to 10:00 A.M. on July 22, 2022, and the Town will provide a written response.

No pre-bid meeting is scheduled for this project.

ELIGIBILITY: Bidders must hold a valid license to perform the required work as provided by the Business and Professions Code, and may be required to submit evidence to the Town as to their ability, financial responsibility, and experience, in order to be eligible for consideration of their proposal. The Contractor shall possess a valid Class A License for the State of California at the time contract is awarded. The Contractor and all listed Subcontractors shall possess valid Department of Industrial Relations Registration Numbers.

BID: Bids must be submitted as a completed Bid Book with bidder's security and signed copies of all issued addenda.

BIDDER'S SECURITY: Bids shall be accompanied by one of the following forms of bidder's security equal to at least 10 percent of the bid and made out to Town of San Anselmo: Certified Check, Cashier's Check, Bidder's Bond. If using a bidder's bond, use the form in the Bid Book or a form containing the same information.

Failure of the successful bidder to execute and return the contract, or to file acceptable bond, as required, within the time allotted shall be cause for the annulment of the award and forfeiture of the bidder's security. The bidder's security of unsuccessful bidders may be retained by the Town of San Anselmo for a period of 30 days after award. If a bidder to whom the contract is awarded fails, or refuses, to execute the contract within 10 days of notice of award, as herein provided, the Director of Public Works may award to the next lowest bidder and apply the bidder's security of the bidder failing, or refusing, to execute contract as herein required. The bidder's security of bidders to whom no award was made will be returned upon request.

**BID OPENING:** Bids will be opened and read at the Town of San Anselmo Town Hall on the day specified above. Bids are required for the entire work described in the Bid Book and Contract Documents. Bidders should take care to complete all details in a legible manner in the bid documents. Failure to do so may be cause for rejection of the bid. Only the total amount of the bid will be read at the bid opening, unless requested, in writing, at the time of the submission of bids. Bidders can inspect bids at the Department of Public Works, to which they will be removed for the purpose of checking after reading of totals. Bids are required for the entire work described herein, and neither partial nor contingent bids will be considered.

**AWARD:** Award of contract, if awarded, will be to the lowest responsible bidder whose proposal complies with prescribed requirements, and will be within thirty (30) days after receipt of proposals. The Town of San Anselmo reserves the right to reject any or all bids. **The work site will become available to the Contractor on Tuesday September 6, 2022, which will be the first official work day. The time period between Award of Contract and September 6, 2022 will not be counted towards the working days for the project.**

**BID PROTEST:** All bid protests shall be in writing and delivered to the Town of San Anselmo Public Works Director within five (5) working days following the determination of the lowest responsible bidder. If necessary, a hearing may be held to determine the position of all involved parties.

**ADDENDA:** When issued, addenda will be on file at the Town of San Anselmo, Department of Public Works at least 72 hours before bids are opened. In addition, all addenda will be faxed or e-mailed to persons on the Town's Bid Holder's List; however, it shall be the bidder's responsibility to ensure that the contact information is correct and to make inquiry as to the addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda whether or not received by the bidders. Bidders who acquire project bid documents from sources other than directly from the Town of San Anselmo are not on the Town's bid holder's list, and are solely responsible for inquiring about and acquiring all addenda. If the Town issues any addendum that results in a material change to the invitation for bids, the date and time for submitting bids will be extended by at least 72 hours and the revised bid opening date will be noted on the addendum.

**BONDS:** The Contractor whose bid is accepted shall furnish the following bonds to the Town (at no expense to Town), executed by an admitted surety insurer in a form acceptable to the Town: Performance Bond, Payment Bond, and Defective Material and Workmanship Bond.

The Performance Bond shall be in an amount equal to one hundred percent (100%) of the total amount bid by the Contractor in his proposal. The Payment Bond shall be in an amount equal to one hundred percent (100%) of the total amount bid by the Contractor in his proposal. The Defective Material and Workmanship Bond shall be in an amount equal to not less than ten percent (10%) of the contract cost of work determined in the final pay estimated prepared by the Engineer.



The surety for such security shall be currently admitted to transact surety insurance by the California Department of Insurance and shall carry a Best's rating of no less than A.

**PREVAILING WAGES:** In compliance with the provisions of Section 1777.6 of the Labor Code of the State of California, as amended, the Contractor and each of his Subcontractors shall keep an accurate payroll record, showing the name, address, social security number, work classifications, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, or worker employed by them in connection with the Project. Said records shall be available for inspection at all reasonable hours, and copies shall be made available to the employer or his authorized representative, the State Division of Labor Standards Enforcement, the State Division of Apprenticeship Standards, and the Town.

Attention is directed to Section 7-1.02K (2), "Wages," of the Standard Specifications and The General Prevailing Wage Rates determined by the Director of Industrial Relations for Town of San Anselmo where the work is to be completed. Copies of said wage rates are available at the Labor Compliance Office and at the Public Works Department, 525 San Anselmo Avenue, San Anselmo. Changes, if any, to the general prevailing wage rates will be available at the same location.

No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

**ACKNOWLEDGEMENT OF CONDITIONS:** By submitting a bid in response to this notice inviting bids, the bidder shall be conclusively deemed to have visited the site, read, understood and agreed with all of the information and materials contained in the bid documents, including but not limited to the Contract, the Bid Book, the Special Provisions, the Project Plans, the 2018 Caltrans Standard Plans and Specifications, the Revised Standard Specifications published May 31, 2018, the required indemnification obligation, and the required nature and amount of insurance and endorsements and certificates evidencing such insurance.

If a bidder has any problems understanding or accepting any of the terms and/or conditions specified in the bid documents, said bidder should contact the Assistant Public Works Director at [sschneider@townofsananselmo.org](mailto:sschneider@townofsananselmo.org) prior to submitting the bid. The deadline for submitting questions about this project is 10:00 A.M. on July 22, 2022.



Date: 06/29/22

By: \_\_\_\_\_  
Sean Condry  
Director of Public Works/Town Engineer

## **SPECIAL PROVISIONS**

### **- GENERAL -**

The work embraced herein shall be done in accordance with the Contract Documents: the bid book, these special provisions, the project plans, the California Department of Transportation Standard Specifications dated 2018 and Standard Plans dated 2018, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and the 2008 Marin Uniform Construction Standards.

Refer to Section 5-1.02 for the order of precedence of Contract Documents in case of any conflict.

Special provisions and Revised Standard Specifications, under separate cover, are under headings that correspond with the main-section headings of the Standard Specifications. A main-section heading is a heading shown in the table of contents of the Standard Specifications.

Each special provision begins with a revision clause that describes or introduces a revision to the Standard Specifications. A reference to a Standard Specification heading is only made when modifying the section and is not a comprehensive listing of the sections which apply to the project. All sections apply to the project. Sections which are not deleted, added, or modified by the special provisions remain as written and as modified by the Revised Standard Specifications published on or prior to May 31, 2018. Any modification to a section does not change the rest of the section. Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the Standard Specifications for any other reference to a paragraph of the Standard Specifications.

Any reference to a State Agency or officer shall be interpreted as if the corresponding Town Office or officer acting under this contract were so specified.

Any reference to contact information for the State shall be interpreted as if the corresponding Town contact information were so specified. Should there be any question as to what the corresponding information would be, contact the Town Director of Public Works for determination.

Where the version of a referenced document is not specified, use the current version in effect on the date of the Notice to Bidders.

Unless an object or activity is specified to be less than the total, the quantity or amount is all of the object or activity.

All items in a list apply unless the items are specified as choices.





**Contract Documents:** The Contract Documents consist of the accepted Bid; all issued Addenda (if any); all Bidding Documents including the Notice to Bidders, Instructions to Bidders, Bid Book, Schedule of Bid Items, List of Subcontractors, Debarred Contractor List, Public Contract Code Statements, Questionnaire, and Non-collusion Affidavit, Experience and Financial Qualifications, Debarment and Suspension Certification, Field Review Certification, Contractor's License Requirement Declaration, Bidder's Security, Faithful Performance Bond, Labor and Material Bond, Escrow Agreement for Security Deposit in Lieu of Retention if submitted, Defective Materials and Workmanship Bond, Worker's compensation Certification, executed Contract Agreement, insurance, project Plans and Special Provisions, all documents included by reference in any contract document, 2018 State of California Standard Specifications, 2018 State of California Standard Plans, 2008 Marin Uniform Construction Standards, the Caltrans Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, warranty, fully executed contract change orders, and any Engineer endorsed working drawings, sketches, or instructions clarifying or enlarging upon the work specified herein issued by the Town.

**Contract Time:** Number of original working days as adjusted by any time adjustment.

**Disadvantaged Business Enterprise:** Disadvantaged Business Enterprise as defined in 49 CFR 26.5.

**Defective Work:** Work that is unworkmanlike, unsatisfactory, faulty, omitted, incomplete, deficient, or does not conform to the requirements of the Contract Documents, directives of the Engineer, or requirements of any inspection, reference standard, test, or approval specified in the Contract Documents.

**Director of Public Works/ Engineer:** "Director of Public Works" and the term, "Engineer" shall mean the Director of the Department of Public Works of San Anselmo, acting on behalf of the Town or ex officio as engineer of the awarding entities as described under the definition of "Town ", or his authorized agent acting within the scope of his authority, who shall act as the representative of the Town during the term of the contract.

**Laboratory:** The laboratory or laboratories authorized by the Town of San Anselmo to test materials and work involved in the contract.

**Legal Holidays:** Those days designated as holidays by the Town of San Anselmo.

**Office Engineer:** Public Works Director

**Punch list:** An inventory prepared by the Town of contract items of work, or portions thereof, that are incomplete, deficient, or not in conformance with the contract plans, specifications, contract change orders, or other contract documents.

**Requests for Information:** A request from the contractor or one of their subcontractors, to the Town, seeking an interpretation or a clarification of some requirement of the contract documents submitted to the Town in the form required by the Contract. The Contractor shall clearly and concisely set forth, in writing, the issue for which they seek clarification or interpretation and why a response is needed from the Town. The contractor shall, in the written request, set forth their interpretation or understanding of the contract's requirements along with reasons why they have reached such an understanding. Responses from the Town will not change any requirements of the contract documents unless so noted in the Request for Information Response by the Town.

**Schedule Submittals:** Contract schedules, contract schedule updates, contract schedule revisions, time impact analyses, etc. required by the Contract to be provided to the Town for review and acceptance.

**Shop Drawings:** Any technical submittals, shop drawings or samples, including supporting catalogue cuts, manufacturer's literature, sketches or drawings, calculations, and other pertinent data, required by any technical specification included in these contract documents. The contractor shall transmit to the Town submittals/shop drawings in sufficient detail to enable the Town to review the information and determine that the Contractor clearly understands the requirements of the contract documents.

**Standard Plans:** The Standard Plans of the State of California Department of Transportation dated 2018.



Replace section **2-1.06A General** with:

Plans, Notice to Bidders, Bid Book, and Special Provisions may be viewed or purchased at the Town of San Anselmo Department of Public Works, 525 San Anselmo Avenue, San Anselmo, CA 94960.

*2018 Standard Specifications* and *Standard Plans* may be viewed at the Caltrans 'Bidders' Exchange Web site and may be purchased at the Caltrans Publications Unit of the Division of Procurement and Contracts: (916) 263-0822.

*May 31, 2018 Revised Standard Specifications* and the 2008 Marin County Standards can be obtained via email from the Town at no charge. Email request to [mdelacruz@townofsananselmo.org](mailto:mdelacruz@townofsananselmo.org)

Replace section **2-1.06B Supplemental Project Information** with:

Supplemental project information, if available, can be obtained from the Town of San Anselmo Department of Public Works, 525 San Anselmo Avenue, San Anselmo, CA 94960

Add to section **2-1.07: RESERVED**

#### **2-1.07 JOB SITE AND DOCUMENT EXAMINATION**

Examine the job site and bid documents. Notify the Town of apparent errors and patent ambiguities in the plans, specifications, and Bid Item List. Failure to do so may result in rejection of a bid or rescission of an award.

Bid submission is your acknowledgment that you have examined the job site and bid documents and are satisfied with:

1. General and local conditions to be encountered
2. Character, quality, and scope of work to be performed
3. Quantities of materials to be furnished
4. Character, quality, and quantity of surface and subsurface materials or obstacles
5. Requirements of the contract

Delete section **2-1.15 DISABLED VETERAN BUSINESS ENTERPRISES**

Delete section **2-1.18 SMALL BUSINESS AND NON-SMALL BUSINESS SUBCONTRACTOR PREFERENCES**

Delete the 1st and 2nd paragraphs of section **2-1.24 TIED BID RESOLUTION**

Delete section **2-1.27, "CALIFORNIA COMPANIES"**

Replace section **2-1.33 BID DOCUMENT COMPLETION AND SUBMITTAL** with:

#### **BID DOCUMENT COMPLETION AND SUBMITTAL**

The Engineer may, at a time prior to the bid opening, issue addenda to the Notice to Bidder, Bid Book, Special Provisions, Plans and Specifications to amend, clarify, or correct matter contained therein. Such addenda shall constitute a part of said Plans and Specifications and shall be equally binding with them. Addenda will be forwarded to all prospective bidders on the Town's bid holders list, so long as their contact information was correctly provided to the Town.



All addenda issued for this project must be signed and submitted with your Bid Book

Complete the forms in the Bid Book.

Submit the completed Bid Book, signed addenda (if issued), and bidder's security with your bid.

If using a bidder's bond, you may use the form in the Bid Book. If you do not use the form in the Bid Book, note 'see attached equivalent' on the form in the Bid Book, and submit a form containing the same information. If submitting cashier's check, or certified check, note "see attached alternative method of security" on the form in the Bid Book and attach the security.

Submit your bid:

1. Under sealed cover
2. Marked as a bid
3. Identifying the contract name
4. Identifying the date and time of the bid opening

Failure to submit the forms and information as specified results in a nonresponsive bid.

If an agent other than the authorized corporation officer or a partnership member signs the bid, file a Power of Attorney with the Department either before opening bids or with the bid. Otherwise, the bid may be nonresponsive.

Add to section **2-1.36 RESERVED:**

#### **2-1.36 GUARANTY AND WARRANTY**

Furnish a Defective Material and Workmanship Bond (sample in Appendix A of Bid Book), of a surety company acceptable to the Engineer, and payable to the Town of San Anselmo, in a sum not less than ten percent of the total Final Estimate amount. This warranty bond shall be delivered to the Engineer before requesting Contract Acceptance by the Town.

Warranty the quality of the Work, in accordance with the terms of the Contract Documents, for the "Warranty Period." The Warranty Period shall be a one year period, unless otherwise required in the Contract Documents, commencing on the date of acceptance of the contract by the Town Council.

Complete and submit the Town of San Anselmo Guarantee (sample in Appendix A of Bid Book). This guarantee shall be delivered to the Engineer before requesting Contract Acceptance by the Town.

The Contractor hereby agrees to repair or replace any and all work, together with any other adjacent work which may be displaced in so doing, that may prove to be not in accordance with the requirements of the Contract or that may be defective in its workmanship or material within the guarantee period specified, without any expense whatsoever to the Town.

The Contractor further agrees, that within ten (10) calendar days after being notified in writing by the Town of any work not in accordance with the requirements of the Contract or any defects in the work, he will commence and prosecute with due diligence all work necessary to fulfill the terms of this guarantee, and to complete the work within a reasonable period of time (not to exceed thirty (30) days after commencement of the repair work). In the event the Contractor fails to comply, it does hereby authorize the Town to proceed to have such work done at the Contractor's expense and he will honor and pay the costs and charges upon demand. The Town shall be entitled to all costs and expenses, including reasonable attorney's fees, necessarily incurred upon the Contractor's refusal to honor and pay the above costs and charges.

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### **3 CONTRACT AWARD AND EXECUTION**

Replace section 3-1.05 **CONTRACT BONDS (PUB CONT CODE §§ 10221 AND 10222)**  
with:

The successful bidder must furnish 2 bonds:

1. Payment bond to secure the claim payment of laborers, workers, mechanics, or materialmen providing goods, labor, or services under the Contract. This bond must be equal to at least 100 percent of the total bid.
2. Performance bond to guarantee the faithful performance of the Contract. This bond must be equal to at least 100 percent of the total bid.

Whenever any surety on any such bonds become insufficient, or if there is a reasonable cause to believe that such surety or sureties have become insufficient, a demand in writing may be made of you to furnish good and sufficient bond or bonds required by the terms of the contract. Thereafter, no payment will be made upon such contract to you or any assignee of yours until such further bond or bonds or additional surety has been furnished.

The surety for such security shall be currently admitted to transact surety insurance by the California Department of Insurance and shall carry a Best's rating of no less than A.

**Notification of Surety Companies** - The surety companies shall familiarize themselves with all of the conditions and provisions of the contract, and shall waive the right of special notification of change or modification of the contract, or of any other act or acts by the Town or its authorized agents, under the terms of the contract. Failure to notify the surety companies of changes shall in no way relieve them of their obligations under the contract.

The Town furnishes the successful bidder with bond forms.

Delete section **3-1.08, SMALL BUSINESS PARTICIPATION REPORT**

Delete section **3-1.11, PAYEE DATA RECORD**

Add to section **3-1.17 Bid Protest Procedures:**

Any protest of the proposed award of Bid to the bidder deemed the lowest responsible bidder must be submitted in writing to the Town no later than 5:00 PM of the fifth (5<sup>th</sup>) business day following the date of the Bid opening, and

- The initial protest must contain a complete statement of the basis for protest.
- The protest must state the facts and refer to the specific portion of the document or the specific statute that form the basis for the protest. The protest must include the name, address, and telephone number of the person representing the protesting party.
- The party filing the protest must concurrently transmit a copy of the initial protest to the bidder deemed the lowest responsible bidder.
- The party filing the protest must have actually submitted a Bid on the Project. A subcontractor of a party filing a Bid on this Project may not submit a Bid Protest. A party may not rely on the Bid Protest submitted by another Bidder, but must timely pursue its own protest.

- The procedure and time limits set forth in this Section are mandatory and are the Bidder's sole and exclusive remedy in the event of a Bid Protest. The Bidder's failure to fully comply with these procedures shall constitute a waiver of any right to further pursue the Bid Protest, including filing of a challenge of the award pursuant to the California Public Contracts Code, filing of a claim pursuant to the California Government Code, or filing of any other legal proceedings.
- The Town shall review all timely protests prior to formal award of the Bid. The Town shall not be required to hold an administrative hearing to consider a timely protest, but may do so at the option of the Town Manager. At the time of the Town Council's consideration of the award of the Bid, the Town Council shall consider the merits of any timely protests. The Town Council may either accept the protest and award the bid to the next lowest responsible bidder or reject the protest and award to the lowest responsible bidder.
- These bid protest procedures shall not limit the Town's ability to reject all bids.

Bid Protests based upon a staff recommendation to the Town Council that the apparent low bidder is not a responsible bidder shall be subject to the following procedure:

- The Town Engineer or his/her designee, shall provide notice to the apparent low bidder of its determination and recommendation to the Town Council that the bidder is not responsible stating the specific reasons therefore.
- The bidder shall no later than 5:00 PM of the second (2nd) business day following receipt of the notice, file any protest in writing with the Town Engineer or his/her designee. The protest must clearly specify in writing the grounds and evidence on which the protest is based. If the protestor later raises new grounds or evidence not previously set forth in the written submissions that reasonably could have been raised, the Town will not consider such new evidence in the determination of the protest.
- The protest will be processed in the same manner as other protests are processed as described above.

Replace section **3-1.18 CONTRACT EXECUTION** with:

The successful bidder must sign the *Contract* form.  
Deliver two copies of the following to the Office Engineer:

1. Signed Contract form
2. Contract bonds
3. Documents identified in section 3-1.07
4. Small Business (SB) Participation Report form
5. For a federal-aid contract, Caltrans Bidder - DBE Information form
6. For a federal-aid contract, form FHWA-1273
7. Insurance documents

For an informal-bid contract, the Office Engineer must receive these documents before the 5th business day after the bidder receives the contract.

For all other contracts, the Office Engineer must receive these documents before the 10th business day after the date that the Notice of Award is mailed to the bidder.

The bidder's security may be forfeited for failure to execute the contract within the time specified (Pub Cont Code §§ 10181, 10182, and 10183).

A sample of the *Contract* form is included in the Sample Contract Forms section of the Bid Book.



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#### **4 SCOPE OF WORK**

Add to section **4-1.06 DIFFERING SITE CONDITIONS (23 CFR 635.109)**:

During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall no later than five (5) working days from discovery of the differing site condition notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions, and, if the Engineer determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

No contract adjustment will be allowed under the provisions specified in this section for any effects caused on unchanged work.

Any contract adjustment warranted due to differing site conditions will be made in accordance with the provisions in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications except as otherwise provided.

AA

#### **5 CONTROL OF WORK**

Add to section **5-1.01 GENERAL**:

If a portion of the Work is covered prior to inspection by the Town (contrary to Engineer's request or direction, or contrary to the requirements of the Contract Documents), you shall, if required by the Engineer, uncover the Work for the Engineer's observation, and replace the Work at your expense without adjustment of the Contract Time or the Contract Sum.

If a portion of the Work has been covered, which is not required by the Contract Documents to be observed or inspected prior to it being covered and which the Engineer has not specifically requested to observe prior to its being covered, the Engineer may request to see such Work and it shall be uncovered and replaced by you. If such Work is in accordance with the Contract Documents, the costs of uncovering and replacing the Work shall be added to the Contract Amount by Change Order; and if the uncovering and replacing of the Work results in an Excusable Delay or a Compensable Delay, an appropriate adjustment of the Contract Time shall be made by Change Order. If such Work is not in accordance with the Contract Documents, you shall pay such costs and shall not be entitled

to an adjustment of the Contract Time or the Contract Amount.

Replace section **5-1.02 CONTRACT COMPONENTS** with:

A component in one Contract part applies as if appearing in each. The parts are complementary and describe and provide for a complete work.

If a discrepancy exists:

1. The governing ranking of Contract parts in descending order is:

- 1.1. Special provisions
- 1.2. Project plans
- 1.3. Revised standard specifications
- 1.4. Standard specifications
- 1.5. Revised standard plans
- 1.6. Standard plans
- 1.7. Marin Uniform Construction Standards
- 1.8. Supplemental project information

2. Written numbers and notes on a drawing govern over graphics
3. A detail drawing governs over a general drawing
4. A detail specification governs over a general specification
5. A specification in a section governs over a specification referenced by that section

If a discrepancy is found or confusion arises, submit an RFI, reference shall be made to the Director of Public Works and his decision shall be final.

Add to section **5-1.12 ASSIGNMENT**:

The Contract Documents, and any portion thereof, shall not be assigned or transferred, nor shall any of the Contractor's duties be delegated, without the written consent of the Town. Any attempt to assign or delegate the Contract Documents without the written consent of the Town shall be void and of no force and effect. A consent by the Town to one assignment shall not be deemed to be a consent to any subsequent assignment.

Pursuant to California Government Code section 4552, the Contractor shall assign to the Town, all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Action (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the California Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the Town tenders final payment to the Contractor, without further acknowledgment by the parties. The Contractor further warrants that all goods, services, and materials provided to the Town in accordance with this Contract are free and clear of all liens and encumbrances.

Add to section **5-1.16 REPRESENTATIVE**:

The Contractor shall designate in writing before starting work, for approval by the Engineer prior to construction, an authorized representative who shall have the authority to represent and act for the Contractor. The authorized representative shall be the same person from the beginning to the end of the project. Said authorized representative shall have a mobile phone at the site at all time while work is in progress. The representative shall provide an emergency contact list whereby an authorized contractor representative is reachable at all times for the duration of the Contract. Whenever the

Contractor varies the period during which work is carried on each day, he shall give due notice to the Engineer so that proper inspection may be provided.

**Add to section 5-1.20B(1) General:**

Procure all permits and licenses, pay all charges and fees, and give all notices necessary to the due and lawful prosecution of the work.

You and your subcontractors must possess valid Town of San Anselmo business licenses, and provide a copy to the Engineer; valid State contractor licenses with a classification appropriate for the work to be performed (Bus & Prof Code § 7000 et seq.), and valid public works contractor registration numbers with the Department of Industrial Relations.

Pay all license fees and royalties related to or necessary for the Work and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject to patent rights or copyrights held by others.

**Replace paragraph 3 of section 5-1.23A General with:**

Each sheet of a submittal must include:

1. Project Name
2. Submittal Number
3. Date of Submittal

**Add to section 5-1.23A General:**

**Proposed Products List**

Within five (5) days after contract approval, submit a complete list of materials to be incorporated into the project stating the special provision section, the vendor's name, the manufacturers name if different from the vendor's, trade name, and model number or code for each product.

**Add between the 5th and 6th paragraphs of section 5-1.23B(1) General:**

For a revised submittal, allow the same number of days for review as for the original submittal.

**Add to section 5-1.27A General:**

Make a record of changes during construction on one set of prints of the plans and specifications provided by the Engineer for this purpose. This set of documents shall be kept at the job site and shall be used only for marking as-built conditions. Upon completion of the project, deliver these documents to the Engineer prior to the processing of the final estimate.

**Replace section 5-1.27E Change Order Bills with:**

Maintain separate records for change order work costs. Submit daily.

**Add to section 5-1.36:**

**5-1.36E Survey Monuments**

Protect survey monuments. Upon discovery of a survey monument, immediately:

1. Stop work near the monument
2. Notify the Engineer

Do not resume work near the monument until authorized.

Add to section **5-1.43A General**:

Your failure to comply with section 5-1.43 including **5-1.43B Initial Potential Claim Record**, section **5-1.43C Supplemental Potential Claim Record**, section **5-1.43C Supplemental Potential Claim Record**, and section **5-1.43E Alternative Dispute Resolution** is:

1. Waiver of the potential claim and a waiver of the right to a corresponding claim for the disputed work in the administrative claim procedure
2. Bar to arbitration (Pub Cont Code 10240.2 and Pub Cont Code § 20104.2 )

Certify all potential claim records with reference to the California False Claims Act, Government Code Sections 12650- 12655.

AA

## **6 CONTROL OF MATERIALS**

Add to section **6-3.05E Certificates of Compliance**:

Furnish certificates of compliance where specifically required by the Standard Specifications, by these Special Provisions, and as requested by the Engineer.

AA

## **7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**

Replace section **7-1.02A General** with:

Comply with laws, regulations, orders, and decrees applicable to the project. Indemnify and defend the Town of San Anselmo; the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity; and the Town's employees, officers, and agents against any claim or liability arising from the violation of a law, regulation, order, or decree by you or your employees or any individual or company furnishing resources or activities for you. Immediately report to the Engineer a discrepancy or inconsistency between the Contract and a law, regulation, order, or decree.

You shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the Work.

If the Town incurs any fines or penalties because of your failure to comply with a law, regulation, order, or decree, the Town deducts the amount of the fine or penalty.

Immediately notify the Engineer if a regulatory agency requests access to the job site or to records. Submit a list of documents provided to the agency and issued enforcement actions.

A Town business license must be held.

Add to section **7-1.02I(2) Nondiscrimination**:



Contractor must comply with the STANDARD CALIFORNIA NONDISCRIMINATION CONSTRUCTION CONTRACT SPECIFICATIONS (GOV. CODE, SECTION 12990). Contractor must include Section 7-1.02I(2) in all subcontracts.

**Add to section 7-1.02K(3) Certified Payroll Records (Labor Code § 1776):**

Do not submit certified payroll records by email. Submit certified payroll to the attention of the Engineer at 525 San Anselmo Avenue, San Anselmo, California, 94960.

**Add to section 7-1.02K(6)(a) General:**

The Engineer may notify Cal/OSHA if you fail to establish or maintain a safe and healthful workplace. The Engineer notifying or failing to notify Cal/OSHA does not relieve the Contractor of Contractor's responsibility to provide public and worker safety. The Engineers failure to identify an unsafe condition does not relieve the Contractor of Contractor's responsibility to provide public and worker safety.

**Replace section 7-1.02L(2) Antitrust Claims with:**

The following provisions of Public Contract Code Section 7103.5 and Government Code Sections 4553 and 4554 shall be applicable to the Contractor and all subcontractors:

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act ( 15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties."

"If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery."

"Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action."

**Add to section 7-1.03 PUBLIC CONVENIENCE:**

Compliance with these special provisions does not relieve you of your responsibility for public safety.

You shall conduct operations in a manner which will result in the least possible obstruction and inconvenience to the public. You shall undertake no greater length or amount of work than you can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions or approved in writing by the Public Works Director, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

No work will be allowed on Saturday, Sunday, or legal Town holidays, unless shown on the plans, specified in these Special Provisions or approved by the Engineer.

The Contractor shall exercise diligence in preventing dust nuisance. When necessary or when directed by the Engineer, the Contractor shall apply water for laying dust. Water shall be applied by means of pressure-type distributors equipped with a spray system that will insure a uniform application.

**Provide driveway access.** You are responsible for investigating and accommodating the specific access needs of the residents whose driveways are impacted by your construction activity. Prior to closure of driveways, coordinate and notify the property owner or resident at least twice of such closure. Closure notices shall be given to the property owner/resident 48 hours and one hour prior to each closure. It is your responsibility to assess and accommodate all property owners' specific needs for driveway access. In no case shall a driveway remain closed for more than 8 hours unless otherwise authorized by the Engineer.

**Pedestrian access** facilities shall be provided through construction areas at all times. If your operations require closure of walkways, adequate pedestrian directional signs shall be provided and maintained. At the end of each working day or until the pedestrian walkways are permanently restored, temporary asphalt concrete (4'-0" minimum width) or trench steel plate ADA compliant walkways, free from tripping hazards, shall be provided and maintained. The temporary walkway surfacing shall be skid resistant and free from irregularities.

**Provide all public notification**, written and otherwise, to ensure public convenience and public safety as specified herein and in the Standard Plans and Specifications, and as directed by the Engineer.

Provide written notification to the public, local residents and businesses, local utility companies and any other persons or agencies affected by this project.

At all times other than normal working hours, all lanes shall be provided for uninterrupted traffic.

#### Add to section **7-1.04 PUBLIC SAFETY:**

**The Contractor shall prepare a Traffic Control Plan** for each stage of construction if staging or storage areas are to be proposed in the public right-of-way, and when requested by the Engineer for any specific construction activity. The Traffic Plan shall be prepared by a person who is certified by the Institute of Transportation (ITS), the American Traffic Safety Services Association (ATSSA), the International Municipal Signal Association (IMSA) or the State of California Department of Transportation (Caltrans) as having successfully completed training in the design and operation of work zone traffic control. Along with the Traffic Control Plan, submit the designer's Certification. Work shall not proceed without the Engineer's advance approval of the Traffic Control Plan for the work attempted.

If the failure to perform or the manner of performance of the Work results in a threat to public health or safety, the Town may, after making a reasonable, at the sole discretion of the Public Works Director, attempt to contact you, perform necessary emergency work and deduct the reasonable cost of it from the amount owed to you. The Town performing or failing to perform necessary emergency work does not relieve the Contractor of Contractor's responsibility to provide public and

worker safety. The Engineer's failure to identify an unsafe condition does not relieve the Contractor of Contractor's responsibility to provide public and worker safety.

**Add to section 7-1.05A General:**

For the purpose of Section 7-1.05 INDEMNIFICATION, "TOWN" shall mean the Town of San Anselmo, and the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity.

Contractor shall effectively protect and guard the Town, its officers, agents, and employees, from any liability as a consequence of any willful act, negligent act or non-negligent act or omission by the Contractor, any of the Contractor's employees or agents, or any subcontractor or supplier, and shall be responsible for any and all damage, injury, or death to persons, or damage to property. Contractor shall indemnify, defend and hold Town harmless from any and all claims, suits, actions, costs, and liability ensuing in connection with the performance of the contract, or failure to protect the safety of workers or the general public, regardless of the existence of or degree of fault or negligence on the part of the Town or the Contractor, subcontractor, or any employee of any of these, other than the active negligence of the Town, its officers, or employees.

In those instances where the Town has obtained "Rights of Entry" from private property owners upon whose property it will be necessary for the Contractor to enter to perform the work to be done under the contract, Contractor shall indemnify such property owners in the same manner as the Town is indemnified.

**Add to section 7-1.06A General:**

For the purpose of Section 7-1.06 INSURANCE, "TOWN" shall mean the Town of San Anselmo, and the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity.

Contractor shall procure and maintain as a minimum for the duration of the contract, the following described insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

**a. Minimum Scope of Insurance**

Coverage shall be at least as broad as:

- i. Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001 or equivalent or "claims made" form CG 00 02 or equivalent) NOTE: "claims made" coverage requires special approval and "modified occurrence" coverage is unacceptable.
- ii. Insurance Services Office form number CA 0001 (Ed. 01/87 or equivalent) covering Automobile Liability, Code 1 "any auto" with endorsement CA 0029 (auto contractual).
- iii. Worker's Compensation insurance as required by the State of California and Employers' Liability Insurance.

b. Minimum Limits of Insurance

Contractor shall maintain limits of no less than:

- i. General Liability: \$3 million per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.
- ii. Automobile Liability: \$2 million per accident for bodily injury and property damage.
- iii. Employers' Liability: Provide Employer's Liability Insurance in amounts not less than:
  - 1. \$1,000,000 for each accident for bodily injury by accident
  - 2. \$1,000,000 policy limit for bodily injury by disease
  - 3. \$1,000,000 for each employee for bodily injury by disease

c. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Town of San Anselmo. At the option of the Town of San Anselmo, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Town of San Anselmo, its officials, employees and volunteers, or the Contractor shall provide a financial guarantee satisfactory to the Town of San Anselmo guaranteeing payment of losses and related investigations, claim administration and defense expenses.

d. Other Insurance Provisions

The general liability policy is to contain, or be endorsed to contain, the following provisions:

- i. The Town of San Anselmo, its officials, employees and volunteers are to be covered as insured with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations.
- ii. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (using either the Town's prepared form or using ISO form CG 20 10 11 85 or equivalent).
- iii. For any claims related to this project, the Contractor's insurance coverage shall be the primary insurance with respect to the Town of San Anselmo, its officials, employees, or volunteers. Any insurance or self-insurance maintained by the Town of San Anselmo shall be excess of the Contractor's insurance and shall not contribute with it.
- iv. The workers' compensation policy shall contain a waiver of subrogation in favor of the Town.



- v. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty days prior written notice (10 days for non-payment of premium) by certified mail with return receipt requested given to the Town of San Anselmo.
- vi. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Town, its elected and appointed officers, employees, agents or volunteers

### e. Rights of Entry

If applicable, all private property owners granting "Rights of Entry" for construction of the work shall be covered as insured under the same coverage as provided the Town as respects their ownership of the property and the work to be done thereon.

#### f. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's Financial Strength rating of no less than A:A-, and a Financial Size Category of no less than VII. Carriers not licensed in the State of California should have a current A.M. Best's rating of no less than A:X.

### g. Verification of Coverage

Contractor shall furnish the Town of San Anselmo with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the Town of San Anselmo or on other than the Town of San Anselmo's forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the Town of San Anselmo before work commences. The Town of San Anselmo reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.

#### h. Subcontractors

Contractor shall require all its subcontractors to name Contractor, and the Town of San Anselmo under its policies as additional insured and Contractor shall require all its subcontractors to furnish separate certificates and endorsements. All coverage for subcontractors shall be subject to all of the requirements stated herein. By signing a contract the successful bidder acknowledges that he is aware of the provisions of Labor Code §3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with that Code, and that he will comply with such provisions before commencing of the work of this contract. On signing the contract, Contractor shall give the Town (1) a certificate of consent to self-insure issued by the Director of Industrial Relations, or (2) a certificate of Workers' Compensation insurance issued by an admitted insurer, or (3) an exact copy or duplicate thereof certified by the Director or the insurer.

[illegible]

## 8 PROSECUTION AND PROGRESS

Replace section **8-1.03 PRECONSTRUCTION CONFERENCE** with:

Subsequent to the issuance of the Notice of Award, but prior to the commencement of work, a preconstruction conference will be held at the San Anselmo Town Hall, San Anselmo, California for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, signs and traffic control, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution of and the satisfactory completion of the project as required. The Contractor's representatives at this conference shall include all major superintendents for the work, including major subcontractors.

At this meeting, the Contractor shall provide an emergency contact list. The list shall contain the names, addresses fax numbers and phone numbers by which they may be reached 24 hours/day. The Contractor shall also provide the contact information for the local Insurance Agent(s) for the Contractor's and subcontractors' required insurance. The contact information shall include the insurance company name, the local agent's name, local phone and fax numbers and local address.

In addition, at this meeting the work plan, schedule and sequence of work will be reviewed.

An on-site preconstruction meeting may be held for the purpose of discussing site specific matters.

Replace section **8-1.04B Standard Start** with:

Complete all pre-mobilization requirements of the special Provisions within 15 days of the date that the Notice of Award is mailed to the Contractor.

**The work site will become available to the Contractor on Tuesday September 6, 2022, which will be the first official work day. The time period between Award of Contract and September 6, 2022 will not be counted towards the working days for the project.**

Submit a notice 72 hours before starting job site activities. If the project has more than 1 location of work, submit a separate notice for each location.

Diligently prosecute the work to final completion.

Add to section **8-1.10A General**:

It is agreed that, if all the work required by the contract is not finished or completed within the number of working days as set forth in the contract, damage will be sustained by the Town, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the Town will sustain in the event of and by reason of such delay; and it is therefore agreed that the Contractor will pay to the Town, \$1,900 for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed in the Proposal and the Contract Agreement; and the Contractor agrees to pay said liquidated damages herein provided for, and further agrees that the Town may deduct the amount thereof from any moneys due or that may become due the Contractor under the contract.

Should the Contractor prepare to begin work at the regular starting time in the morning of any days on which inclement weather or the condition of the site prevents the work from beginning at the usual starting time, and the crew is dismissed, the Contractor will not be charged for a working day whether or not conditions should change thereafter and the major portion of the day could be considered to be suitable for construction operations.



designed to exempt the Contractor from payment of any tax will be furnished to Contractor by the Town of San Anselmo, as to any tax on labor, services, materials, transportation or any other items furnished pursuant to this contract.

Add Item 3 to paragraph 3 of section **9-1.03 Payment Scope**:

3. Any resource or activity not specifically listed for a bid item in the special provisions, but required to complete the bid item, shall be included in the bid price for the item. Payment for a bid item includes payment for work in sections referenced by the section set forth by that bid item.

Replace the heading and the 1st paragraph of section **9-1.04D(3)** with:

**9-1.04D(3) Equipment Not On the Job Site and Not Required for Original Contract Work**

For equipment not on the job site at the time required to perform work paid by force account and not required for original Contract work, the time paid is the time the equipment is operated to perform work paid by force account and the time to return the equipment to its source when the work paid by force account is completed.

Replace item 2 in the 3rd paragraph of section **9-1.04D(3)** with:

2. Operated less than 4 hours is paid as 1/2 day

Replace section **9-1.04D(4)** with:

**9-1.04D(4) Equipment Not On the Job Site and Required for Original Contract Work**

For equipment not on the job site at the time required to perform work paid by force account and required for original Contract work, the time paid is the time:

1. To move the equipment to the location of work paid by force account plus an equal amount of time to move the equipment to a location on the job site or its source when the work paid by force account is completed
2. Equipment is operated to perform work paid by force account

Add to section **9-1.16A General**:

Prompt progress payment and prompt payment of withheld funds to subcontractors: A prime contractor or subcontractor shall pay a subcontractor not later than 7 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 7 days is applicable unless, a longer period is agreed to in writing. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction and other remedies of that section.

Add to section **9-1.16D Mobilization**:

The lump sum price for "Mobilization" shall include all mobilizations, remobilizations, and demobilizations.

Add to section **9-1.16E(1) General**:

The Town may withhold or, on account of later discovered evidence, nullify all or part of any certification made to the Contractor by the Town as to the amount determined to be due the Contractor, to such extent and period of time only as may be necessary to protect the Town from loss on account of:



- (A) Defective work not remedied or uncompleted work;
- (B) Claims filed or reasonable evidence indicating probable filing;
- (C) Failure to properly pay Subcontractors or for material or labor;
- (D) Reasonable doubt that the work can be completed for the balance then unpaid;
- (E) Damage to the Town, other than damages due to delays;
- (F) Damage to another Contractor, or third party; or
- (G) Nonpayment of prevailing wages.

Replace section **9-1.16F Retentions** with:

The Town will retain five (5) percent of the estimated value of the work done. An escrow agreement for security deposit in lieu of retention may be utilized if it was submitted with the Contract and in accordance with these special provisions.

Delete section **9-1.17B Payment before Final Estimate**

Replace the first paragraph of section **9-1.17C Proposed Final Estimate** with:

After the Engineer has made the final inspection as provided in Section 5-1.46, and determines that the contract work has been completed in all respects in accordance with the Plans, Specifications, and Special Provisions, the Engineer estimates the amount of work completed and shows the amount payable in a proposed final estimate based on:

1. Contract items
2. Payment adjustments
3. Work paid by force account or agreed price
4. Extra work
5. Deductions

Replace section **9-1.17(D)1 General** with:

If you accept the proposed final estimate or do not submit a claim statement within 30 days of receiving the estimate, the Engineer furnishes the final estimate to you and the Town pays the amount due, minus retention, within 30 days. This final estimate and payment is conclusive except as specified in sections 5-1.27, 6-3.06, and 9-1.21.

If you submit a claim statement within 30 days of receiving the Engineer's proposed final estimate, the Engineer furnishes a semifinal estimate to the Contractor and the Department pays the amount due per the semifinal estimate, minus retention, within 30 days. The semifinal estimate is conclusive as to the amount of work completed and the amount payable except as affected by the claims or as specified in sections 5-1.27, 6-3.06, and 9-1.21.

Within 60 days after the date of Contract Acceptance, and provided no claims, notices or liens are pending, the retention withheld shall be released. In the event of a dispute the Town may withhold from the final payment an amount not to exceed 150 percent of the disputed amount.

Pursuant to California Government Code section 8546.7, the California State Auditor, at the request of the Town or as part of any audit of the Town, all contract documents associated with the performance of this contract shall be subject to examination and audit by the California State Auditor within three years of final payment on the contract. The Town is also entitled to audit the Contractor's project records in response to a construction claim or a Public Records Act request.



operations. Marin County requires non-potable water to be used for dust control, pressure testing of irrigation system, etc. Well water is available from the Town at Creek Park (Sir Francis Drake Boulevard side). Recycled water is available from the County of Marin at the Civic Center in San Rafael.

- C. Electric Power Service from Existing System: Electric power shall be provided by the Contractor. Provide connections and extensions of services as required for construction operations.

### 1.3 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

### 1.4 QUALITY ASSURANCE

- A. Electric Service, If deemed necessary by the Contractor: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

### 1.5 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Chain-Link Fencing: Maximum 2-inch mesh, 11 gauge, galvanized-steel, chain-link fabric fencing; minimum 6 feet high.
- B. Chain-Link Fence Posts: 0.148-inch- thick, galvanized-steel, pipe posts; minimum 2-3/8-inch-OD line posts and 2-7/8-inch- OD corner and pull posts. Provide embedded posts, minimum embedment -18". Verify that posts will not conflict with existing utilities. In locations where embedded posts conflict with utilities, free standing fencing will be allowed, but it shall not interfere with pathway use by pedestrians.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, and Owner, to make connections for temporary services.
- B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
  - 1. Construction for temporary offices, shops, and sheds, if used, located within construction area or within 30 feet of building lines shall be noncombustible according to ASTM E 136. Comply with NFPA 241.
  - 2. Maintain support facilities, if used, in good condition, until Owner Representative schedules Substantial Completion inspection. Remove before Substantial Completion.
- B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas as indicated on Drawings.
  - 1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- E. Project Signs: Unauthorized signs are not permitted.
  - 1. Identification Signs: Install Town provided 24"x36" Project Info sign onto temp fencing, (three locations).
  - 2. Temporary Signs: Provide other signs as provided by the Town and as required to inform public and individuals seeking entrance to Project.
    - a. Provide temporary, directional signs for construction personnel and visitors.
- F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Individual Project circumstances may require use of other construction aids.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.



- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control: Comply with requirements specified in Plans and Section 02230 "Site Clearing".
- D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings.
- E. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- F. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates. Fence will be left in place to protect new turf installation until March 31, 2023.
  - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to secure and accommodate construction operations. Verify that existing utilities will not be affected by direct embed posts.
  - 2. Temporary Site Enclosure fence can terminate at existing backstops that are minimum 6' height, if all dugouts and other gates that are part of the backstops are deemed secure by the contractor.
  - 3. Tree Protection fence. Provide fencing so as to prevent damage to the limbs, trunk and surface roots of the indicated tree. The fencing shall be secured so that it stays in place and cannot be inadvertently adjusted during construction.
  - 4. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
- G. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
- H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs.
- I. Temporary Enclosures: Provide temporary enclosures for protection and safety of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

## 4.1 GENERAL

- |  |          |
|--|----------|
| Mobilization/Temp Facilities/SWPPP/Staking/Tree Protection | Lump Sum |
|--|----------|

[illegible]

## PART 1 - GENERAL

- Excavate trenches for utilities.
- Compacted fill from top of utility bedding.
- Backfilling and compaction.

## Section 02810 – Irrigation

- A. ANSI/ASTM D1556 – Test Method for Density of Soil in Place by the Sand-Cone Method.
- B. ANSI/ASTM D1557 – Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10lb. (4.54kg) Rammer and 18 inch (457mm) Drop.
- C. ASTM D2922 – Test Methods for Density of Soil and Soil-Aggregate in Place by nuclear Methods (Shallow Depth).
- D. ASTM D3017 – Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

#### 1.04 DEFINITIONS

Utility: Any buried pipe, conduit or cable.

#### 1.05 PROTECTION

- A. Contact the Town Representative 48 hours prior to construction in areas of all existing underground utilities. Movement on construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Perform all work adjacent to privately owned utilities as indicated in accordance with procedures outlined by utility company. Excavation made with power-driven equipment is not permitted within two feet of any known subsurface construction including the building structure. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, use hand or light equipment excavation. Start hand or light equipment excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work as affected by the contract excavation until approval for backfill is granted by the Town Representative. Report damage to utility lines or subsurface construction immediately to the Town Representative.
- B. Shoring and Sheet piling: Shoring and sheet piling shall be done as may be necessary for the protection of the work and for the safety of the personnel, in accordance with the California State Labor Code.

#### 1.06 FIELD MEASUREMENTS

Verify that all bench mark and intended elevations for the work are as shown on drawings.

### PART 2 - PRODUCTS

#### 2.01 FILL MATERIALS

Select non-expansive fill material: Fill material shall not contain rocks or rock fragments over 4" in greatest dimension and shall be predominately granular material that is nonexpansive in nature and contains no organic matter. The material should have a plasticity index of less than 15. If more material is required than is available from on-site excavation, then provide that material from approved sources.

#### 2.02 BEDDING MATERIALS

Class 2 Aggregate Base, ¾ inch maximum, conforming to State of California, Department of Transportation Standard Specifications.

#### 2.03 IMPERVIOUS SEAL

Impervious cohesive soil material or lean concrete conforming to State of California, Department of Transportation Standard Specifications.

### PART 3 - EXECUTION

#### 3.01 PREPARATION

- A. Identify required lines, level, contours and datum.
- B. Protect trees and other features remaining as a portion of final landscaping.

- C. Maintain and protect above and below grade utilities which are to remain.
- D. Cut out soft areas of subgrade not capable of insitu compaction. Backfill with structural fill and compact to density equal to or greater than requirements for subsequent backfill material.

### 3.02 EXCAVATION

- A. Excavate subsoil required for utilities.
- B. Cut trenches sufficiently wide to enable installation and allow inspection.
- C. Hand trim excavation. Remove loose matter.
- D. Remove lumped subsoil, boulders and rock (larger than 4").
- E. Stockpile excavated material in area designated by Town Representative and remove excess material not being used from site.

### 3.03 BACKFILLING

- A. Install utility and bedding material in accordance with respective specification section.
- B. Backfill trenches to contours and elevations with unfrozen materials.
- C. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.
- D. Select fill: Place and compact materials in continuous layers not exceeding 8 inches compacted depth.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Remove surplus fill materials from site.
- G. Leave fill material stockpile areas completely free of excess fill materials.

### 3.04 BACKFILLING WITH IMPERVIOUS SEAL

Utility trenches that pass underneath foundations shall be sealed with a compacted impervious cohesive soil material or lean concrete where the trench enters/exits the building perimeter. The impervious seal shall extend a minimum of 2 feet away from the building perimeter.

### 3.05 TOLERANCES

- A. Top Surface of Backfilling Under Paved Areas: Plus or minus 0.05 feet from required elevations.
- B. Top Surface of General Backfilling: Plus or minus 0.08 feet from required elevations.

### 3.06 FIELD QUALITY CONTROL





## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Protecting existing vegetation to remain.
  - 2. Clearing and grubbing.
  - 3. Disconnecting, capping or sealing, and abandoning site utilities in place.
  - 4. Disconnecting, capping or sealing, and removing site utilities.
- B. Related Sections include the following:
  - 1. Section 02300 "Earthwork".

### 1.3 DEFINITIONS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch in diameter; and free of weeds, roots, and other deleterious materials.

### 1.4 MATERIALS OWNERSHIP

- A. Except for materials indicated to be stockpiled or to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from the site.

### 1.5 SUBMITTALS`

- A. Photographs or videotape, sufficiently detailed, of existing conditions of trees and plantings and adjoining construction that might be misconstrued as damage caused by site clearing and site improvements.

### 1.6 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if

required by authorities having jurisdiction.

- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- B. Notify utility locator service for area where Project is located before site clearing.

## PART 2 - PRODUCTS (Not Applicable)

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Provide SWPPP measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Locate and clearly flag trees and vegetation to remain or to be relocated.
- D. Protect existing site improvements to remain from damage during construction.
  - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

### 3.2 UTILITIES

- A. Engineer will arrange for disconnecting and sealing indicated utilities that serve existing systems before site clearing when requested by Contractor.
  - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
  - 1. Engineer will arrange to shut off indicated utilities when requested by Contractor.
- C. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Engineer's written permission.

### 3.3 CLEARING AND GRUBBING

- A. Remove obstructions and irrigation related equipment, to permit installation of new construction. Removal includes digging out obstructions and grubbing roots.
  - 1. Do not remove shrubs, and other vegetation indicated to remain or to be relocated.

2. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
  3. Existing turf is to be thoroughly tilled into the existing topsoil to a minimum depth of 12". Prior to tilling, the turf shall be allowed to dry out.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
1. Place fill material in horizontal layers not exceeding 8-inch loose depth, and compact each layer to a density equal to adjacent original ground.

### 3.4 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the Town's property.

## PART 4 – MEASUREMENT AND PAYMENT

## 4.1 GENERAL

- A. Measurement and Payment shall be as follows:

Demolition	Lump Sum
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END OF SECTION

[illegible]

## SECTION 02300

## EARTHWORK

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Preparing subgrades for lawn.
  - 2. Excavating and backfilling.
  - 3. Subsurface drainage gravel backfill for trenches.
- B. Related Sections include the following:
  - 1. Section 02230 "Site Clearing".

### 1.3 DEFINITIONS

- A. Backfill: Soil materials used to fill an excavation.
  - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- C. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- D. Excavation: Removal of material encountered above subgrade elevations.
  - 1. Additional Excavation: Excavation below subgrade elevations as directed by Staff. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
  - 2. Bulk Excavation: Excavations more than 10 feet in width and pits more than 30 feet in either length or width.
  - 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Staff. Unauthorized excavation, as well as remedial work directed by Staff, shall be without additional compensation.
- E. Fill: Soil materials used to raise existing grades.
- F. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material 3/4 cu. yd. or more in volume that when tested by an independent geotechnical testing agency, according to ASTM D 1586, exceeds a standard penetration resistance of 100 blows/2 inches.
- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- H. Subbase Course: Layer placed between the subgrade and base course for asphalt paving, or layer placed between the subgrade and a concrete pavement or walk.
- I. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
- J. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

### 1.4 SUBMITTALS

- A. Product Data: For the following:
  - 1. Each type of plastic warning tape.



2. Drainage fabric.
  3. Separation fabric.
  4. Sand bedding material
  5. Drainage Fill (3/4" gravel)
- B. Samples: For the following:
1. 5lb of specified sand.
  2. 12-by-12-inch sample of drainage fabric.

## 1.5 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: An independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock-definition testing, as documented according to ASTM D 3740 and ASTM E 548.

## 1.6 PROJECT CONDITIONS

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Staff and then only after arranging to provide temporary utility services according to requirements indicated:
1. Notify Staff not less than two days in advance of proposed utility interruptions.
  2. Do not proceed with utility interruptions without Staff's written permission.
  3. Contact utility-locator service for area where Project is located before excavating.

## PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

- A. General: Provide topsoil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Backfill and Fill: Satisfactory soil materials.
- C. Drainage Fill: Washed, narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 3/4-inch sieve and 0 to 5 percent passing a No. 8 sieve.
- D. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand.

### 2.2 ACCESSORIES

- A. Warning Tape: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility.

- B. Drainage Fabric: Nonwoven geotextile, specifically manufactured as a drainage geotextile; made from polyolefins, polyesters, or polyamides; and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
  - 1. Grab Tensile Strength: 110 lbf; ASTM D 4632.
  - 2. Tear Strength: 40 lbf; ASTM D 4533.
  - 3. Puncture Resistance: 50 lbf; ASTM D 4833.
  - 4. Water Flow Rate: 150 gpm per sq. ft.; ASTM D 4491.
  - 5. Apparent Opening Size: No. 50; ASTM D 4751.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

### 3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
  - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

### 3.3 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
  - 2. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.

3. Rock excavation includes removal and disposal of rock.

#### 3.4 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.

#### 3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit, unless otherwise indicated.

1. Clearance: Minimum 2" around all pipe.

- C. Trench Bottoms: Excavate trenches 6 inches deeper than bottom of pipe elevation to allow for bedding course. Hand excavate for bell of pipe.

#### 3.6 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow materials and satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

#### 3.7 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:

- 1. Surveying locations of underground utilities for record documents.
- 2. Inspecting and testing underground utilities.
- 3. Removing trash and debris.
- 4. Removing temporary shoring and bracing, and sheeting.
- 5. Placement of bedding material.

#### 3.8 UTILITY TRENCH BACKFILL

- A. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- B. Place and compact initial backfill of subbase material, free of particles larger than 1 inch, to a height of 6 inches over the utility pipe or conduit.
  - 1. Carefully compact material under pipe haunches and bring backfill evenly up on both sides and along the full length of utility piping or conduit to avoid damage or displacement of utility system.

- C. Coordinate backfilling with utilities testing.
- D. Fill voids with approved backfill materials while shoring and bracing, and as sheeting is removed.
- E. Place and compact final backfill of satisfactory soil material to final subgrade.
- F. Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

### 3.9 FILL

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up surfaces so fill material will bond with existing material.
- C. Place and compact fill material in layers to required elevations as follows:
  - 1. Under grass and planted areas, use topsoil material.

### 3.10 MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.
  - 1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### 3.11 COMPACTION OF BACKFILLS AND FILLS

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
- D. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
  - 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill material at 95 percent.
  - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill material at 95 percent.

3. Under lawn or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill material at 85 percent.

### 3.12 GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  1. Provide a smooth transition between adjacent existing grades and new grades.
  2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
  1. Lawn or Unpaved Areas: Plus or minus 1 inch.

### 3.13 SUBSURFACE DRAINAGE

- A. Subsurface Drain: Place a layer of drainage fabric around perimeter of drainage trench as indicated. Place an appropriate depth course of filter material on drainage fabric to support drainage pipe. Encase drainage pipe in a minimum of 12 inches of gravel material and lap drainage fabric, overlapping at least 12 inches.
  1. Compact each course of gravel material to 95 percent of maximum dry unit weight according to ASTM D 698.
- B. Drainage Backfill: Place and compact filter material over subsurface drain, in width indicated, to within 12 inches of final subgrade. Overlay drainage backfill with one layer of drainage fabric, overlapping sides and ends at least 6 inches.
  1. Compact each course of filter material to 95 percent of maximum dry density according to ASTM D 698.
  2. Place and compact impervious fill material over drainage backfill to final subgrade.

### 3.14 FIELD QUALITY CONTROL

- A. Testing Agency: San Anselmo School will engage a qualified independent geotechnical Staffing testing agency to perform field quality-control testing.
- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
- C. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable.
- D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

### 3.15 PROTECTION





## 1.02 RELATED SECTIONS

- A. Section 02225 - Trenching
- B. Section 02230 – Site Clearing

## 1.03 INCORPORATED DOCUMENTS

- A. Requirements of General Provisions and Special Provisions shall apply to all work in this Section. Conform to the Provisions in Section 39, “Asphalt Concrete” of the State Standard Specifications.
- B. Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to Work of this Section where cited by abbreviations noted below (latest editions apply).
  - 1. State of California Department of Transportation: Standard Specifications, 2006 Edition (Caltrans SS).
  - 2. State of California Department of Transportation California Test (DOT CT).
  - 3. American Society for Testing and Materials (ASTM).

## 1.04 SUBMITTALS

- A. Materials List: Submit copies of materials list, listing and identifying types and sources of materials proposed for the Work. Include material description and application instructions for pavement sealer.
- B. Testing Laboratory Reports: Submit copies of laboratory test reports for asphalt concrete materials, mixtures, and in-place construction.
- C. Mix Design: Submit mix design for asphalt concrete.
- D. Material Certificates:
  - 1. Provide copies of material certificates and material laboratory test reports.
  - 2. Material certificates shall be signed by material producer and contractor, certifying that each material item complies with, or exceeds, specified requirements.

## 1.05 QUALITY ASSURANCE

- A. Qualifications of Asphalt Concrete Producer: Use only materials that are furnished by a bulk asphalt concrete producer regularly engaged in production of hot-mix, hot-laid asphalt concrete.
- B. Testing and Inspection Services:
  - 1. Asphalt concrete paving shall be tested and inspected.
  - 2. Include sampling and testing of all asphalt concrete materials proposed for use in the Work, and tests and calculation for asphalt concrete mixtures at Contractor's expense.

- C. Comply with the latest requirements of the following agencies insofar as they have jurisdiction over the work:
  - 1. CAL-OSHA (The Federal Occupational Safety Health Act of 1970)
  - 2. All other agencies having jurisdiction over the work.
- D. Samples may be taken and/or tests may be performed by the Testing Laboratory at any time during or after pavement work to determine quality and compaction. If quality and/or compaction does not meet these Specifications, the Contractor shall remove defective work, replace it with satisfactory work, and pay for retesting.
- E. No aggregate base, asphalt concrete, or concrete shall be placed until the subgrade has been observed by the Town Project Coordinator.
- F. The Contractor shall employ a licensed Surveyor or Civil Engineer to lay out the work and establish the necessary markers, benchmarks, and stakes.
- G. In addition to provisions set forth elsewhere in this Contract, all sampling and testing specified herein shall be conducted by a Town approved testing laboratory and cost borne by the Contractor.

#### 1.06 JOB CONDITIONS

##### A. Weather Limitations:

- 1. Apply bituminous prime and tack coats only when ambient temperature in the shade is above 50 degrees F, and when the temperature has not been 35 degrees F or less for twelve hours immediately prior to application.
- 2. Do not apply prime and tack coats when base surface is wet or contains an excess of moisture that would prevent uniform distribution and required penetration.
- 3. Construct asphalt concrete surface course only when atmosphere temperature is above 50 degrees F, when underlying base is dry, and when weather is not rainy.
- 4. Base course may be placed when air temperature is above 30 degrees F and rising.

- B. Grade Control: Establish and maintain required lines and grades for each course during construction operations.

#### 1.07 COORDINATION

- A. Do not commence placement of the aggregate base course until preparation and compaction of the subgrade has been accepted.
- B. Do not apply prime coat until placement and compaction of the aggregate base course has been accepted.

#### 1.08 PROTECTION

- A. Protect products against damage during transportation, field handling, and installation of this work.
- B. Protect adjacent existing and newly placed construction and finishes as necessary to prevent damage during installation of this work.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Aggregate Base: Class 2, 3/4-inch maximum, conforming to Caltrans Specifications.
- B. Base Primer: Liquid asphalt Type SC-70 conforming to Caltrans SS, Section 93.
- C. Paint Binder or Tack Coat: Diluted asphaltic emulsion Type RS-1 conforming to Caltrans SS, Section 94.

Asphaltic emulsions shall be composed of a bituminous material uniformly emulsified with water and an emulsifying or stabilizing agent. Polymer modified asphaltic emulsion shall also contain a polymer.

- D. Asphalt Concrete:
  - 1. Surface Course: Type A, 1/2-inch maximum, medium grading, conforming to Caltrans SS, Section 39.
  - 2. Base Course: Type A, 3/4-inch maximum, medium grading, conforming to Caltrans SS, Section 39.

Aggregate – All aggregates shall be clean and free from decomposed materials, organic material and other deleterious substances. Coarse aggregate is material retained on the No. 4 sieve; fine aggregate is material passing the No. 4 sieve; and supplemental fine aggregate is added fine material passing the No. 30 sieve, including, but not limited to, cement and stored fines from dust collectors.
  - 3. Paving Asphalt: PG 64-16 grade, steam refined, conforming to Caltrans SS, Section 92.
  - 4. Mix Design: Comply with Caltrans SS, Section 93-3. The asphalt concrete mixture, composed of the aggregate proposed for use and the optimum amount of asphalt as determined by California Test 367.
- E. Pavement Sealer: Asphalt Emulsion SS1h in conformance with Caltrans SS, Section 94. Asphaltic emulsions shall be composed of a bituminous material uniformly emulsified with water and an emulsifying or stabilizing agent. Polymer modified asphaltic emulsion shall also contain a polymer.

### 2.02 MIXING

Asphaltic Concrete: Proportion and mix asphaltic concrete in accordance with Reference Standards.

## PART 3 – EXECUTION

### 3.01 INSPECTION

- A. Verify that conditions are satisfactory for installation of asphalt concrete paving.
  - 1. Confirm that concrete adjacent to paving has been installed.
  - 2. Confirm that all embedded items are in place and at proper elevations prior to commencement of installation.
- B. Do not proceed with the work of this Section until satisfactory conditions have been corrected.

### 3.02 ASPHALT CONCRETE PAVEMENT - SUBGRADE PREPARATION

Prepare subgrade in conformance with Section 02300 Earthwork of this Specification.

### 3.03 AGGREGATE BASE

Prepare aggregate base in conformance with Caltrans Specifications.

### 3.04 PRIME COAT AND PAINT BINDER

- A. Uniformly apply prime coat, distributed at a rate of 0.20 to 0.50 gallons per square yard, over compacted sub-base surface.
- B. Apply sufficient material to penetrate and seal, but not flood, the surface.
- C. Apply paint binder by brush to contact surfaces of curbs, gutters, manholes, and other structures projecting into or abutting asphalt concrete pavement.
- D. Allow surfaces to dry until paint binder material is in proper condition of tackiness to receive asphalt concrete mixture.

### 3.05 PREPARATION AND PLACEMENT OF MIX

- A. Comply with the requirements of Caltrans SS, Section 39 for asphalt concrete pavements and overlays for spreading and compacting. Place mix in maximum 3-inch layers and compact.
- B. Tolerance of finished grade shall be ¼-inch plus or minus at any point. At no point shall the surface fail to drain.
- C. Asphalt concrete may be placed when the atmospheric temperature is lower than 50 degrees F, provided the asphalt concrete is placed directly into the asphalt paver hopper from the truck. Asphalt concrete may not be placed when the atmospheric temperature is below 40 degrees F.

### 3.06 SIGNS

Signs and posts shall be installed by the Contractor in accordance with the details shown on the plans and as directed by the Town.

### 3.07 CLEAN-UP





- D. PP: Polypropylene.
- E. PS: Polystyrene.
- F. PVC: Polyvinyl chloride.

#### 1.4 SUBMITTALS

- A. Product Data: For drainage conduit, drainage panels, and geotextile fabrics.
  - 1. Perforated pipe.
  - 2. Solid pipe.
  - 3. Drainage conduits.
  - 4. Geotextile fabrics.

#### 1.5 COORDINATION- NA

### PART 2 – PRODUCTS

#### 2.1 MANUFACTURERS

- A. The following requirements apply for product selection:
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified.
  - 2. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

#### 2.2 PIPING MATERIALS

- A. Refer to various application articles in Part 3 for applications of pipe, tube, fitting, and joining materials.

#### 2.3 DRAINAGE PIPES AND FITTINGS

- A. Perforated, PE Pipe and Fittings: ASTM F 405, corrugated, for coupled joints.
  - 1. Couplings: Manufacturer's standard, band type.
- B. Perforated, PE Pipe and Fittings: ASTM F 667, corrugated, for coupled joints.
  - 1. Couplings: Manufacturer's standard, band type.

#### 2.4 SPECIAL PIPE COUPLINGS

- A. Description: ASTM C 1173. Rubber or elastomeric sleeve and band assembly fabricated to match outside diameters of pipes to be joined.

#### 2.5 CLEANOUTS

- A. PVC Pipe: ASTM D 3034, PVC cleanout threaded plug and threaded pipe hub.

## 2.6 DRAINAGE CONDUIT

- A. Pipe and Fittings: Perforated and corrugated, molded from HDPE complying with ASTM D 3350, with fittings and geotextile filter fabric jacket.
  - 1. Fittings: HDPE with combination NPS 4 and NPS 6 outlet connection.
  - 2. Couplings: Corrugated HDPE band.
- B. Pipe and Fittings: Solid smoothwall, corrugated and molded from HDPE.
  - 1. Size: 8 inches inside diameter.

## 2.7 SOIL MATERIALS

- A. Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D 448, coarse aggregate, Size No. 57, with 100 percent passing 3/4-inch sieve and not more than 5 percent passing No. 8 sieve.

## 2.8 GEOTEXTILE FILTER FABRICS

- A. Woven or nonwoven geotextile filter fabric of PP or polyester fibers, or combination of both. Flow rates range from 110 to 330 gpm per sq. ft. when tested according to ASTM D 4491. Available styles are flat and sock.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine surfaces and areas for suitable conditions where subdrainage systems are to be installed.
- B. If subdrainage is required for landscaping, locate, and mark existing utilities, underground structures, and aboveground obstructions before beginning installation and avoid disruption and damage of services.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Division 2 Section "Earthwork."

### 3.3 SUBDRAINAGE SYSTEM APPLICATIONS

- A. NPS 4 Piping:
  - 1. Perforated, HDPE pipe and fittings, couplings, and coupled joints.

### 3.4 IDENTIFICATION

- A. Materials and their installation are specified in Division 2 Section "Earthwork." Arrange for installation of green warning tapes directly over piping.

1. Install warning tape or detectable warning tape over ferrous piping.
2. Install detectable warning tape over nonferrous piping and over edges of underground structures.

### 3.5 LANDSCAPING DRAINAGE INSTALLATION

- A. Install drainage pipe with a horizontal distance of at least 6 inches between pipe and trench walls. Grade bottom of trench excavations to required slope and compact to firm, solid bed for drainage system.
- B. Drainage Fill: Place supporting layer of drainage fill over trench bottom to compacted depth of not less than 4 inches. After installing drainage piping, add drainage fill to top of pipe to perform tests. After satisfactory testing, cover piping to within 12 inches of finish grade. Place drainage fill in layers not exceeding 3 inches in loose depth; compact each layer placed.
  1. Before installing drainage fill, lay flat-style geotextile filter fabric in trench and overlap trench sides. After installing drainage fill, wrap top of drainage fill with flat-style geotextile filter fabric.
- C. Drainage Conduit: Provide trench width to allow installation of drainage conduit. Grade bottom of trench excavations to required slope and compact to firm, solid bed for drainage system.
- D. Fill to Grade: Place native fill material over drainage fill. Place material in loose-depth layers not exceeding 6 inches. Thoroughly compact each layer. Fill to finish grade.

### 3.6 PIPING INSTALLATION

- A. Install piping beginning at low points of system, true to grades and alignment indicated, with unbroken continuity of invert. Bed piping with full bearing in filtering material. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions and other requirements indicated.
  1. Landscaping Subdrainage: Install piping pitched down in direction of flow, at a minimum slope of 0.5 percent and with a minimum cover of 36 inches, unless otherwise indicated.
  2. Lay perforated pipe with perforations down.
  3. Lay open-joint pipe spaced as indicated on Drawings or, if not indicated, with 1/4-inch space between ends. Cover top two-thirds of joint opening with open-joint screening material and tie with corrosion-resistant wire.
  4. Excavate recesses in trench bottom for bell ends of pipe. Lay pipe with bells facing upslope and with spigot end entered fully into adjacent bell.
- B. Use increasers, reducers, and couplings made for different sizes or materials of pipes and fittings being connected. Reduction of pipe size in direction of flow is prohibited.
- C. Install PE piping according to ASTM D 2321.

### 3.7 PIPE JOINT CONSTRUCTION

- A. Join PE pipe, tubing, and fittings with couplings for soiltight joints according to AASHTO's "Standard Specifications for Highway Bridges," Division II, Section 26.4.2.4, "Joint Properties."
- B. Join perforated, PE pipe and fittings with couplings for soiltight joints according to AASHTO's "Standard Specifications for Highway Bridges," Division II, Section 26.4.2.4, "Joint Properties"; or according to ASTM D 2321.

### 3.8 RETAINING-WALL AND LANDSCAPING SUBDRAINAGE CLEANOUT INSTALLATION

- A. Install cleanouts from subdrainage piping to grade. Locate cleanouts at beginning of piping run and at changes in direction. Install fittings so cleanouts open in direction of flow in piping.

### 3.9 CONNECTIONS

- A. Piping installation requirements are specified in other Division 15 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Connect low elevations of subdrainage system to solid storm drainage system.

### 3.10 FIELD QUALITY CONTROL

- A. Testing: After installing drainage fill to top of pipe, test drain piping with water to ensure free flow before backfilling. Remove obstructions, replace damaged components, and repeat test until results are satisfactory.

### 3.11 CLEANING

- A. Clear interior of installed piping and structures of dirt and other superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed. Place plugs in ends of uncompleted pipe at end of each day or when work stops.

## PART 4- MEASUREMENT AND PAYMENT

## 4.1 GENERAL

- A. Measurement and Payment shall be as follows:

Infield/Backstop Subdrain	Lump Sum
Main Field Subdrain	Lump Sum
Cleanouts	Lump Sum
Drainage Laterals	Lump Sum
Storage Pipe	Lump Sum
Well Supply Pipe	Lump Sum

END OF SECTION

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## **SECTION 02810** **IRRIGATION SYSTEMS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes piping, valves, sprinklers, specialties, controls, and wiring for automatic control irrigation system.

#### **1.3 DEFINITIONS**

- A. Circuit Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.
- B. Irrigation Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.
- C. The following are industry abbreviations for plastic materials:
  - 1. ABS: Acrylonitrile-butadiene-styrene plastic.
  - 2. FRP: Fiberglass-reinforced plastic.
  - 3. HDPE: High Density Polyethylene
  - 4. PA: Polyamide (nylon) plastic.
  - 5. PE: Polyethylene plastic.
  - 6. PP: Polypropylene plastic.
  - 7. PTFE: Polytetrafluoroethylene plastic.
  - 8. PVC: Polyvinyl chloride plastic.
  - 9. TFE: Tetrafluoroethylene plastic.

#### **1.4 PERFORMANCE REQUIREMENTS**

- A. Design 100 percent water-coverage irrigation system for lawns and exterior plants indicated.
- B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent water coverage of turf and planting areas indicated.

- C. Minimum Working Pressures: The following are minimum pressure requirements for piping, valves, and specialties, unless otherwise indicated:

1. Irrigation Main Piping: **200 psi**
2. Circuit Piping: **150 psi**

## 1.5 SUBMITTALS

- A. Product Data: Include pressure ratings, rated capacities, and settings of selected models for the following:

1. General-duty valves.
2. Pipe
3. Specialty valves.
4. Control-valve boxes.
5. Sprinkler heads.
6. Controller.
7. Wiring and Electrical

- B. Coordination Drawings: Show piping and major system components. Indicate interface and spatial relationship between piping, system components, adjacent utilities, and proximate structures.

- C. Field quality-control test reports.

- D. Operation and Maintenance Data: For irrigation systems, to include in emergency, operation, and maintenance manuals. Include data for the following:

1. Automatic-control valves.
2. Backflow Preventer.
3. Flow Sensor
4. Automatic Control Valves
5. Sprinkler heads.
6. Controller

## 1.6 QUALITY ASSURANCE

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

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

## 1.8 PROJECT CONDITIONS

- A. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by the Town of San Anselmo or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:
  - 1. Notify Engineer no fewer than two (2) days in advance of proposed interruption of water service.
  - 2. Do not proceed with interruption of water service without Engineer's written permission.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.

### 2.2 PIPES, TUBES, AND FITTINGS

- A. PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40, purple non-potable.
  - 1. PVC Socket Fittings, Schedule 40: ASTM D 2466.

### 2.3 GENERAL-DUTY VALVES

- A. Bronze Resilient Seat Gate Valves: MSS SP-80, Class 125, Type 1, non-rising stem, bronze body with solid wedge, threaded ends, and malleable-iron square peg shut off.

### 2.4 SPECIALTY VALVES

- A. Automatic Control Valves: Nylon body, normally closed, diaphragm type with manual flow adjustment, and operated by 24-V ac solenoid and 2-wire decoder.
- B. Bronze Automatic Control Valves: Cast-bronze body, normally closed, diaphragm type with manual flow adjustment, and operated by 24-V ac solenoid and 2-wire decoder.
- C. Quick-Couplers: Factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring-loaded or weighted, rubber-covered cap with purple reclaimed water identification; hose swivel with ASME B1.20.7, 3/4-11.5NH threads for garden hose on outlet; and operating key.
  - 1. Locking-Top Option: Vandal-resistant, locking feature. Include two (2) matching key(s).

## 2.5 CONTROL-VALVE BOXES

- A. Plastic Control-Valve Boxes: Box and cover, with open bottom and openings for piping; designed for installing flush with grade, purple non-potable. Include size as required for valves and service.

1. Shape: Rectangular.
2. Sidewall Material: PE, ABS, or FRP.
3. Cover Material: PE, ABS or FRP.

Lettering: VALVE BOX; IRRIGATION

Label each valve with corresponding valve number.

4. Manufacturers:

Carson Industries LLC or equal.

- B. Drainage Backfill: Cleaned gravel or crushed stone, graded from 3/8 inch minimum to 3/4 inch maximum.

## 2.6 SPRINKLERS

- A. Description: Plastic housing and corrosion-resistant interior parts designed for uniform coverage over entire spray area indicated, matched precipitation rates at available water pressure, purple non-potable. See drawings.

1. Pop-up, Spray Sprinklers: Adjustable micro rotor spray pattern, with stainless-steel retraction spring and matched precipitation rates.
2. Pop-up, Rotary, Spray Sprinklers: Gear drive, full-circle and adjustable part-circle types with stainless steel risers.

## 2.7 AUTOMATIC-CONTROL SYSTEM

- A. Description: Two wire shielded cable, fully automatic, high efficiency, weather based, flow sensor capable, self -adjusting programing, with rain sensor.

## PART 3 - EXECUTION

### 3.1 EARTHWORK

- A. Refer to Section 02300 "Earthwork" for excavating, trenching, and backfilling.
- B. Install warning tape directly above pressure piping, 12 inches below finished grades, except 6 inches below subgrade under pavement and slabs.
- C. Install piping and wiring in sleeves under sidewalks, roadways, parking lots, and railroads.
1. Install piping sleeves by boring or jacking under existing paving if possible.
- D. Provide minimum cover over top of underground piping according to the following:

1. Irrigation Main Piping: Minimum depth of **24 inches** below finished grade.
2. Circuit Piping: **18 inches**.
3. Drain Piping: **12 inches** below finished grade.
4. Sleeves: **24 inches** below finished grade.

### 3.2 PREPARATION

- A. Set stakes to identify locations of proposed irrigation system. Obtain Engineer's approval before excavation.

### 3.3 PIPING APPLICATIONS

- A. Install components having pressure rating equal to or greater than system operating pressure.
- B. Piping in control-valve boxes and aboveground may be joined with flanges instead of joints indicated.
- C. Underground Irrigation Main Piping: Use the following piping materials for each size range:
  1. NPS 4 and Smaller: Schedule 40, PVC pipe and socket fittings, and solvent-cemented joints.
- D. Circuit Piping: Use the following piping materials for each size range:
  1. NPS 2 and Smaller: Schedule 40, PVC pipe and socket fittings; and solvent-cemented joints.
  2. NPS 2-1/2 to NPS 4: Schedule 40, PVC pipe and socket fittings; and solvent-cemented joints.
- E. Underground Branches and Offsets at Sprinklers and Devices: Schedule 40, PVC pipe; threaded PVC fittings; and threaded joints.
- F. Sleeves: Schedule 40 PVC pipe and socket fittings; and solvent-cemented joints.
- G. Transition Fittings: Use transition fittings for plastic-to-metal pipe connections according to the following:
  1. Couplings:

Underground Piping NPS 1-1/2 and Smaller: Manufactured fitting or coupling.

Underground Piping NPS 2 and Larger: AWWA transition coupling.
  2. Fittings:

Aboveground Piping: Plastic-to-metal transition fittings.

Underground Piping: Union with plastic end of same material as plastic piping.



3. Transition fittings are specified in Division 2 Section "Piped Utilities -- Basic Materials and Methods."
- H. Dielectric Fittings: Use dielectric fittings for dissimilar-metal pipe connections according to the following:
  1. Underground Piping:

NPS 2 and Smaller: Dielectric couplings or dielectric nipples.

NPS 2-1/2 and Larger: Prohibited except in valve box.
  2. Aboveground Piping:

NPS 2 and Smaller: Dielectric unions.

NPS 2-1/2 to NPS 4: Dielectric flanges.
  3. Piping in Valve Boxes or Vaults:

NPS 2 and Smaller: Dielectric unions.

NPS 2-1/2 to NPS 4: Dielectric flanges.
  4. Dielectric fittings are specified in Division 2 Section "Piped Utilities – Basic Materials and Methods."

### 3.4 VALVE APPLICATIONS

- A. Underground, Shutoff-Duty Valves: Use the following:
  1. NPS 2 and Smaller: Curb stop with tee head, curb-stop service box, and shutoff rod.
  2. NPS 3 and Larger: AWWA cast-iron gate valve with elastomeric gaskets and stem nut, valve box, and shutoff rod.
- B. Control Valves:
  1. See Drawings.

### 3.5 PIPING INSTALLATION

- A. Location and Arrangement: Drawings indicate location and arrangement of piping systems. Install piping as indicated unless deviations are approved on Coordination Drawings.
- B. Install piping at minimum uniform slope of 0.5 percent down toward drain valves.
- C. Install piping free of sags and bends.
- D. Install groups of pipes parallel to each other, spaced to permit valve servicing.
- E. Install fittings for changes in direction and branch connections.
- F. Install unions adjacent to valves and to final connections to other components with NPS 2 or smaller pipe connection.

- G. Install flanges adjacent to valves and to final connections to other components with NPS 2-1/2 or larger pipe connection.
- H. Install dielectric fittings to connect piping of dissimilar metals.
- I. Install underground thermoplastic piping according to ASTM D 2774.
- J. Lay piping on solid subbase, uniformly sloped without humps or depressions.
- K. Install PVC piping in dry weather when temperature is above 40 deg F 5 deg C. Allow joints to cure at least 24 hours at temperatures above 40 deg F 5 deg C before testing unless otherwise recommended by manufacturer.

### 3.6 VALVE INSTALLATION

- A. Underground Gate Valves: Install in valve box with top flush with grade.
- B. Control Valves: Install in control-valve box with top flush with grade.

### 3.7 SPRINKLER INSTALLATION

- A. Install sprinklers at manufacturer's recommended heights.

### 3.8 CONNECTIONS

- A. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

### 3.9 LABELING AND IDENTIFYING

- A. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplates and signs on each automatic controller.
  - 1. Text: In addition to identifying unit, distinguish between multiple units, inform operator of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.
- B. Warning Tapes: Arrange for installation of continuous, underground, detectable warning tape over underground piping, during backfilling of trenches.
- C. Refer to Section 02300 "Earthwork" for warning tapes.

### 3.10 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
  - 1. Leak Test: After installation, prior to backfilling, charge system and test for leaks. Repair leaks and retest until no leaks exist.
  - 2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.

- ### 3.11 STARTUP SERVICE

- ### 3.12 ADJUSTING

- A. Flush dirt and debris from piping before installing sprinklers and other devices.

## 4.1 GENERAL

- | Irrigation System | Lump Sum     |
|-------------------|--------------|
| 1. Mainline       | 1000         |
| 2. Submain        | 2000         |
| 3. Lateral        | 3000         |
| 4. Wheel Line     | 4000         |
| 5. Other          | 5000         |
| <b>Total</b>      | <b>10000</b> |

END OF SECTION

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## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS:

- ## 1.2 SUMMARY

- 59

1. Section 02920 "Lawns and Grasses"

2. Section 02930 "Planting"

### 1.3 DEFINITIONS

A. The definitions of the following terms shall be as follows:

- Rough Grade: Soil level before amendments
- Fine Grade: Soil level after amendments
- Finish Grade: Top of sod

### 1.4 REGULATIONS AND STANDARDS

A. Regulations of Regulatory Agencies: Comply with State of California Administration Code, Title 8, Industrial Relations, Chapter 4, Sub-chapter 4, Construction Safety Orders, and with rules and regulations of all regulatory agencies having jurisdiction over the project.

### 1.5 TESTS, INSPECTIONS AND SUBMITTALS

A. Prior to commencing soil preparation operations, Contractor shall request a review by the Landscape Architect to verify specified limits and grades of work completed. If additional inspections or observations by the Engineer are required as a result of Contractor's non-compliance with these

Specifications, Contractor shall pay for such additional inspections or observations at no increase in contract sum.

B. If required on the plans, Contractor shall provide an agricultural suitability test for all soil to be used in planting areas.

C. The Contractor shall submit to the Engineer at least fourteen (14) calendar days prior to installation samples of materials for approval. For standard products, also submit the manufacturer's certified analysis. For other materials, submit an analysis by a recognized laboratory made in accordance with the current methods established by the Association of Official Agricultural Chemists.

D. The Contractor shall submit to the Engineer written certification stating quantity, type, composition, weight and origin of all amendments and chemicals delivered to the site for soil preparation work.

E. Verification of Material: The Contractor shall, upon demand, produce records to verify the ordering and delivery of specified quantities and types of material for this job.

### 1.6 GENERAL REQUIREMENTS AND JOB CONDITIONS

A. Contractor shall exercise caution and provide necessary safeguards to prevent injury to, or defacement of, existing site improvements, including planting and underground utilities. contractor shall repair or replace, at no increase in contract sum, property damaged as a result of his work.

- B. Before commencing site work, locate underground utilities in order to preclude any possible damage. Do not use heavy equipment which may cause damage to existing facilities. Use hand excavation as required to minimize the possibility of damage to underground utilities.
- C. Equip internal combustion motors and compressors with mufflers. Do not leave such equipment running under trees.
- D. Areas to be planted shall be rough graded by the General Contractor. Rough grades may vary within a tolerance of 1 inch (25 mm) from the finished grade elevations shown on the Drawings. Areas to be planted shall be finish graded by the Landscape Contractor to the finish grades indicated on the drawings. Contractor to grade landscape area in such a manner as to direct drainage away from buildings and walkways. Contractor to grade landscape areas so as not to allow standing water. Minimum percentage of slope to all landscape areas shall be two percent (2%). Contractor to notify Engineer if he anticipates any drainage problems from site conditions prior to start of construction.
- E. Before proceeding with the work: Contractor shall check rough graded areas and verify all dimensions and quantities. Contractor shall immediately inform the Engineer of any discrepancy between the Drawings and Specifications and actual conditions. Contractor shall perform no work in any area where there is such a discrepancy until approval has been given by the Engineer.

## PART 2 - MATERIALS

- 2.1 TOPSOIL: The existing topsoil has had samples taken and its agricultural suitability has been determined. The test results, analysis, and recommendations are indicated in section 3:

- A. Top Soil Analysis: After approval of rough grading, the attached soils report recommendations shall be followed. Provide the quantities of soil amendment, fertilizer and other additives in accordance with the report.

## 2.2 COMMERCIAL FERTILIZER

Commercial fertilizer shall be commercially processed fertilizer and shall conform to applicable requirements of agricultural laws and regulations of the State of California.

- A. Pre-Plant Fertilizer: Shall consist of the following percent by weight and shall be mixed by a commercial fertilizer supplier.
  - Calcium Carbonate Lime
  - 6-24-24 Mixed Fertilizer
- B. Post-Planting Fertilizer: Complete fertilizer, fifty percent of the nitrogen to be derived from natural organic sources or urea-form. available phosphoric acid shall be from superphosphate, bone or tankage. Potash shall be derived from muriate of potash containing 60 percent potash:
  - 6-24-24 Mixed Fertilizer

## 2.3 QUANTITIES OF AMENDMENT AND FERTILIZER

- A. Roto-till thoroughly the following into the top 6 inches (150 mm) of all planting areas, including turf areas:

Amount per 1000sf

35 pounds	6-24-24 fertilizer (Best' Cropmaker)
35 pounds	Calcium Carbonate Lime (Oyster shell flour)

2.4 IMPORTED SAND FOR SUBSURFACE DRAINAGE TRENCH

- A. Graded sand as follows, (depth of sand to be 12" minimum):

<u>Particle Size</u>	<u>% by weight</u>
>2.0mm	1.0
1.0-2.0mm	1.0
0.5-1.0 mm	3.0
0.25-0.5mm	32.0
0.05-0.25mm	58.0
Silt	3.0
Clay	2.0

PART 3 - EXECUTION

3.1 CLEARING

In all areas to be planted, remove and properly dispose of all rocks and paving materials 1 inch (25 mm) in any dimension, and all weeds, debris and other unwanted or noxious material.

3.2 SOIL PREPARATION

- A. Soil Moisture Content: Do not work soil when moisture content is so great that excessive compaction will occur, or when the soil is so dry that clods will not break readily or dust will form in the air. Apply water as required to prevent the formation of an airborne dust nuisance and to provide ideal soil moisture content for tilling.
- B. Subgrade Scarification: All turf areas to be planted shall have the supplemental irrigation turned off and the existing turf be allowed to dry. The remaining dry turf and existing soil is to be scarified and tilled to a minimum depth of 12 inches (200 mm) prior to soil preparation and planting. Following scarifying, all areas to be planted shall be tilled to break down clods. Any rocks over 1 inch (25 mm) in any dimension, gravel, and miscellaneous debris shall be removed. Any areas which, subsequent to initial scarification become recompacted as a result of having been subjected to vehicular traffic shall be re-ripped. If unsuitable soil is unearthed during this process, notify the Engineer for review.



- C. Topsoil Layer: All areas to be planted shall finish with site soil placed to eighty five percent (85%) maximum relative compaction, as determined by Test Method No. California 216. Minimum depth of topsoil layer shall be 8 inches (150 mm) unless indicated otherwise in the Drawings.
- D. Incorporate commercial fertilizer and soil amendments as specified, cultivate top 6 inches (150 mm) of soil in all areas, and remove all sticks, stones over 1 inch (25 mm) in any dimension, roots, weeds and other foreign material.

### 3.3 FINE GRADING

- A. After completion of pavements and structures, areas to be planted shall be graded and shaped by blading, dragging, and other means. Final grade surfaces shall be uniform and smooth and shall conform to slopes and final grades indicated on the Drawings after soil preparation, settlement, and planting have occurred. Minor adjustments to final grades shall be made at the direction of the Engineer if required.
- B. Fine grades shall provide for surface drainage of planting areas. Contractor shall correct drainage condition which may be detrimental to the growth of plants or which result in retention of water.
- C. Fine grades of planting areas shall be 1.5 inches below adjacent pavement or tops of curbs after settlement to accommodate sod installation with 1 inch (25 mm) left below walks, curbs, etc.
- D. Tops and toes of all slopes shall be rounded to produce a smooth, continuous, and natural-appearing transition between slopes and relatively level areas.
- E. Fine grading shall direct water away from all structures and walks and toward drainage structures.
- F. Contractor shall obtain approval by Engineer for fine grades before any planting begins.

### 3.4 WATERING AND SPRAYING

- A. Watering Period: At completion of soil preparation and finish grading, water soil using cycle/soak method for 4 days. Soil shall remain moist to a minimum depth of 12 inches throughout watering period.
- B. Weed Removal: At the end of the watering period, cut/pull all weeds, to eliminate all weed plant growth and roots including both broad leaf and invasive grass seedlings.

## PART 4- MEASUREMENT AND PAYMENT

### 4.1 GENERAL

- A. Measurement and Payment shall be as follows:

Rough Grading	Lump Sum
Soil Prep/Fine Grading	Lump Sum
Infield Mix Repair	Cubic Yard
Infield Mix (New)	Square Foot



- D. Qualification Data: For landscape Installer.
- E. Planting Schedule: Indicating anticipated planting dates for each type of planting.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful lawn establishment.
  - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when planting is in progress.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Sod: Harvest, deliver, store, and handle sod according to requirements in TPI's "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in its "Guideline Specifications to Turfgrass Sodding."

## 1.7 SCHEDULING

- A. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit and will not damage graded and prepared soil.

## 1.8 LAWN MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
  - 1. Sodded Lawns: 90 days from date of Substantial Completion.
- B. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and resod bare or eroded areas.
- C. Watering: Provide and maintain irrigation system to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
- D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
  - 1. Mow grass 2 inches high.
- E. Lawn Postfertilization: Apply fertilizer after initial mowing and when grass is dry.
  - 1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sq. ft. to lawn area.

## PART 2 - PRODUCTS

### 2.1 TURFGRASS SOD

- A. Turfgrass Sod: Complying with TPI's "Specifications for Turfgrass Sod Materials" in its "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color,

and texture, strongly rooted, grown on a sand base and capable of vigorous growth and development when planted on a soil base. No netting is allowed.

- B. Turfgrass Species for soil based turf. Rhyzomacous Tall Fescue.

## 2.2 SOIL AMENDMENTS AND FERTILIZERS

- A. See Section 02910 "Soil Preparation of Planting Areas".

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas to receive lawns and grass for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

### 3.3 LAWN PREPARATION

- A. Limit lawn subgrade preparation to areas to be planted.
  - 1. Complete required soil preparation and sand section installation.
- B. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 0.20 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
- C. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

### 3.4 OVER-SEEDING

- A. Sow seed with slit seeding machine.
  - 1. Do not use wet seed or seed that is moldy or otherwise damaged.
- B. Rake seed lightly into top 1/8 inch of topsoil, roll lightly, and water with fine spray.

### 3.5 SODDING

- A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
- C. Saturate sod with fine water spray within two hours of planting. During first week, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

### 3.6 SATISFACTORY LAWNS

- A. Satisfactory Sodded Lawn: At end of maintenance period, a healthy, well-rooted, even-colored, viable lawn has been established, free of weeds, open joints, bare areas, and surface irregularities.
- B. Reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

### 3.7 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.
- C. Remove erosion-control measures after grass establishment period.

## PART 4- MEASUREMENT AND PAYMENT

## 4.1 GENERAL

- A. Measurement and Payment shall be as follows:

Sod Turf	Lump Sum
90 Day Maintenance	Lump Sum

END OF SECTION

[illegible]

**SECTION 06063**  
**EXTERIOR ROUGH CARPENTRY**

## PART 1 - GENERAL

Section Includes:

1. Wood header

## PART 2 - PRODUCTS

## 2.1 LUMBER, GENERAL

- A. Comply with DOC PS 20 and with grading rules of lumber grading agencies certified by ALSC's Board of Review as applicable. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by ALSC's Board of Review.

1. Factory mark each item with grade stamp of grading agency.
2. Provide dressed lumber, S4S, unless otherwise indicated.

- B. Maximum Moisture Content:

1. Boards: 15 percent.
2. Dimension Lumber: 19 percent

- C. LUMBER

1. Boards:

A. Redwood, Heart B or Select Heart; RIS.

B. Western red cedar, Grade A; NLGA, WCLIB, or WWPA.

- D. FASTENERS

1. General: Provide fasteners of size and type indicated, acceptable to authorities having jurisdiction, and that comply with requirements specified in this article for material and manufacture. Provide nails or screws, in sufficient length, to penetrate not less than 75% of total dimension of wood depth, into wood substrate.

A. Use fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or ASTM F 2329 unless otherwise indicated.

- E. METAL ACCESSORIES

1. Form Stakes

## PART 3 - INSTALLATION, GENERAL

Set work to required levels and lines, with members plumb, true to line, cut, and fitted. Fit work to other construction; scribe and cope as needed for accurate fit.

## PART 4- MEASUREMENT AND PAYMENT

### 4.1 GENERAL

- A. Measurement and Payment shall be as follows:

Wood Header at Restroom, Field 3, and Restroom

Lump Sum

Wood Header at AC Paving

Lump Sum as Part  
of AC Paving Bid  
Item



## 12 TEMPORARY TRAFFIC CONTROL

### No Parking Signs:

## 13 WATER POLLUTION CONTROL

Unless arrangements for disturbance of areas outside the project limits are made by the Town and made part of the contract, it is expressly agreed that the Town assumes no responsibility whatsoever to you or any property owner with respect to any arrangements made between you and a property owner to allow disturbance of areas outside the project limits. Information in this section shall be included in any arrangement.

**Add to section 13-1.03D:**

You shall be responsible for penalties assessed or levied on you or the Town as a result of your failure to comply with the provisions in this section "Water Pollution Control," including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State, and local laws, regulations and requirements as set forth therein. See "Retention of Funds" sub-section later in this special provision.

Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against you or the Town, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

Contractor must train employees/subcontractors on the water pollution prevention requirements contained in these provisions. The Contractor must inform all subcontractors of the water pollution prevention contract requirements and must include appropriate subcontract provisions to ensure that these requirements are met.

**Add to section 13-2 "Water Pollution Control Program":**

It is anticipated that the project will disturb less than 5 acres of soil, and have an 'erosivity waiver' and therefore a SWPPP would not be required unless triggered as described in Section 13-2.03.

Contractor shall prepare a Water Pollution Control Program.

Notwithstanding any other remedies authorized by law, the Town may retain money due to you under the contract, in an amount determined by the Town, up to and including the entire amount of Penalties proposed, assessed, or levied as a result of your violation of the Permit, the Manuals, or Federal or State law, regulations or requirements. Funds may be retained by the Town until final disposition has been made as to the Penalties. You shall remain liable for the full amount of Penalties until such time as they are finally resolved with the entity seeking the Penalties.

Retention of funds for failure to conform to the provisions in this section, "Water Pollution Control," shall be in addition to the other retention amounts required by the contract. The amounts retained from you for failure to conform to provisions in this section will be released for payment on the next monthly estimate for partial payment following the date when an approved WPCP has been implemented and maintained, and when water pollution has been adequately controlled, as determined by the Engineer.

When a regulatory agency identifies a failure to comply with the Permit and modifications thereto, the Manuals, or other Federal, State or local requirements, the Town may retain money due to you, subject to the following:

A. The Town will give you 30 days' notice of the Town's intention to retain funds from partial payments which may become due to you prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to you.

B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.16 of the Standard Specifications and these special provisions.

C. If the Town has retained funds, and it is subsequently determined that the Town is not subject to the entire amount of the Costs and Liabilities assessed or proposed in connection with the matter for which the retention was made, the Town shall be liable for interest on the amount retained for the period of the retention. The interest rate payable shall be 6 percent per annum.

During the first estimate period that you fail to conform to the provisions in this section, "Water Pollution Control," the Town may retain an amount equal to 25 percent of the estimated value of the contract work performed.

**Replace Section 13-3.04 "Payment" with:**

The contract lump sum price paid for **SWPPP** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work required as specified in Section 13, including preparing the water pollution control plan and all work necessary for water pollution control, as shown on the plans, as specified in the Specifications, and as directed by the Engineer, and no additional compensation will be made therefor.

**Replace Paragraph 1 of Section 13-4 "Job Site Management" with**

Section 13-4 includes specifications for performing job site management, including water pollution control management of : spill prevention and control, material, material storage, stockpiles, paint waste, asphalt concrete waste, HMA waste, PCC waste; sanitary and septic waste; liquid waste; nonstormwater, water control conservation; illicit connection and illegal discharge detection and reporting; vehicle and equipment cleaning; vehicle and equipment fueling and maintenance; material and equipment used over water; structure removal over or adjacent to water, paving, sealing, sawcutting, grooving and grinding activities, thermoplastic striping and pavement markers; Pile driving; Concrete curing; Concrete finishing; Sweeping; and dewatering.

**Add to section 13-4.03C(3) "Stockpile Management":**

Unless authorized by the Engineer, stockpiling shall be limited to material necessary for the day's work. The Contractor shall propose designated areas of the project site, for approval by the Engineer.

**Add to section 13-4.03D(3) " Concrete Waste ":**

Perform washout of concrete trucks off site where discharge is controlled and not permitted to discharge into the storm drain system.

The Contractor must inspect vehicles and equipment arriving on-site for leaking fluids and must promptly repair leaking vehicles and equipment. Drip pans must be used and replaced frequently enough to catch leaks. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

At the end of each working day or as directed by the Engineer, the Contractor must clean and sweep roadways and on-site paved areas of all materials attributed to or invoiced in the work. The Contractor must not use water to flush down streets in place of street sweeping.

[illegible]

**Add to section 15-1.01:**

The location of all existing underground utilities may not be shown on the Plans. It is not the intent of the plans to show the exact location of existing or relocated utilities. Do not assume that all utilities have been identified on the plans. The Engineer assumes no responsibility therefor. You are responsible for verifying the actual location and depth in the field of all utilities.

Be cognizant of the existing overhead and underground utility lines in the proximity of the work area and take all precautions, as necessary, to not disturb these facilities.

Notify Underground Service Alert prior to any excavation. Call 811 and follow the USA North's California Excavation Manual and the specifications. Prior to starting an excavation, examine the excavation site for physical evidence (manholes, valve covers, water meters, fire hydrants, sewer cleanouts, storm drains, vaults, utility maintenance boxes, pole risers, trench cuts etc.) that would indicate the existence of underground facilities. You must excavate, as cautiously and prudently as possible.

Where excavations are performed in the vicinity of underground utility mains and/or services, perform initial hand dug exploratory excavations to determine their exact depth and location. Exercise extreme care to avoid damage to all utility facilities. It is your responsibility to make repairs to any facilities damaged by your operation, at your cost. The Town of San Anselmo will not reimburse you for this work. If you cannot locate an underground facility whose presence is indicated on the plan or as marked by USA, you must notify the Engineer in writing.

Full compensation for Existing Facilities shall be considered as included in the various items of work and no separate payment will be made thereof unless otherwise noted.

Full compensation for Landscape Restoration shall be considered as included in the various items of

work and no separate payment will be made therefor.

Full compensation for complying with all other provisions of this section shall be considered as included in the various contract items of work and no separate payment will be made therefor.

**Add to section 15-2.10B:**

Utility companies reserve the right to perform the work using their own forces after the contract is awarded. You must notify the utility agencies prior to start of construction for any coordination effort and to determine if the utility owners will perform the work using their own forces. Advise the Town of the utility owner's response prior to the start of construction. If the owners chose to use their own forces, then prior to placing of asphalt concrete, notify utility agencies a minimum of five (5) working days in advance of paving operations so that the affected agencies can be prepared to reset covers to grade following paving.

Contact information of utility companies is:

PG&E:	MDRa@pge.com
MMWD	amitchell@marinwater.org aanaya@marinwater.org
RVSD	<u>pbenedetti@rvsd.org</u> dgavallos@rvsd.org

Obtain a response. Advise the Town if assistance with additional contact information is necessary

All manhole and other utility covers encountered in the area of HMA must be carefully referenced out using spray chalk or similar non-permanent marking media prior to disturbance by the Contractor. Notify the Engineer that the referencing is complete at least 2 days prior to work that may disturb the utility covers. Using the reference markings, the locations of the covers must be painted on the pavement surface immediately after paving to assure they can be found in an emergency.

Covers must be adjusted so that there will not be any perceptible difference in elevation between the finished pavement surface and the cover. The Engineer shall be the sole judge of the acceptable degree of smoothness of passage of a motor vehicle over the adjusted covers.

Portland cement concrete used for adjusting covers must be Class B, 5 sack minor concrete conforming to the provisions in State Standard Specification Section 51, "Concrete Structures," and must be 1 inch maximum grading specified in Section 90-1.02C(4)(d), "Combined Aggregate Grading" of the specifications.

Mortar used in resetting manhole covers must conform to the requirements of the specifications, including Section 51.

Precast concrete elements must conform to the requirements of the specifications, including Section 70-4.

Salvaged materials which are undamaged may be reinstalled as directed by the Engineer. Structures built of cast-in-place or precast concrete and brick or vitrified clay pipe parts must be replaced in kind, unless otherwise permitted by the owners of the facilities.

Dirt, rocks or debris shall not be permitted to enter sewer or storm drain lines. When manhole adjustment involves excavation or concrete removal, a temporary cover must be placed to prevent entry of material into the manhole and sewer pipe.

During sealing or paving operations, all surface structures must be protected and no adhesive material shall be permitted to fill the joint between the frame and cover.

Cooperate with utility companies working within and around the project area. In the event a utility company elects to have you perform the work by written confirmation, you will be responsible for adjusting the covers. You must perform the work according to said utility companies' standards.

In the event that work by others causes a delay in your operation, you will be granted a time extension but shall not be entitled to a Delay per Section 8-1.07 of the State Standard Specifications due to the progress or operations of others.

#### WATER VALVE

Water valve covers must be adjusted to grade per Marin Municipal Water District Standards, as shown on the plans, and as directed by the Engineer.

#### SANITARY SEWER MANHOLES

Sanitary Sewer Manholes must be adjusted to grade per Ross Valley Sanitary Sewer District, Sanitary District No. 1 of Marin County Standard Specifications and Drawings, as shown on the plans, and as directed by the Engineer.

#### SANITARY SEWER CLEAN OUTS

Sanitary Sewer Clean Outs (rod holes) must be adjusted to grade per Ross Valley Sanitary Sewer District, Sanitary District No. 1 of Marin County Standard Specifications and Drawings, as shown on the plans, and as directed by the Engineer.

#### STORM DRAIN MANHOLES

Storm Drain Manholes must be adjusted to grade as shown on the plans and as directed by the Engineer.

#### IDENTIFYING, REPLACING MONUMENT, AND ADJUSTING MONUMENT COVER

Protect all monuments whether noted on the plans or not. Monuments that will be disturbed must be identified by the Contractor to the Engineer, in order for a town hired surveyor to set reference points to reestablish the monument. Contractor must provide at least 10 days' notice to the Engineer of any monuments that will be disturbed. No monuments shall be removed without the prior agreement of the Engineer nor before the surveyor has set reference points to reestablish the monument. Monuments that will be disturbed must be removed during the removal of the existing pavement. After the pavement is reconstructed, disturbed monuments must be replaced in the same location using the same bronze plaque and cast iron frame and cover. After the pavement is reconstructed, for monuments that are protected in place, the monument cover must be adjusted so that there will not be any perceptible difference in elevation between the finished pavement surface and the cover. Monument Covers must be adjusted to grade per Marin Uniform Construction Standards, as shown on the plans and as directed by the Engineer.