

DATE: 2/9/24  
N:\PROJECTS\2022\225302 CENTRAL MESA REUSE PIPELINE (1.DES)\40-CA0\1-SHEET FILES\225302 C-00.DWG

CITY OF MESA LANDSCAPE GENERAL NOTES

1. LANDSCAPE CONTRACTOR SHALL CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION AND SHALL BE RESPONSIBLE FOR THE FOLLOWING:
- A. DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF THE CONTRACTOR'S ACTIVITIES.
- B. DAMAGES TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC.
- C. INSPECTING THE SITE IN ORDER TO BE FULLY AWARE OF EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
2. INSTALLATION OF ALL LANDSCAPE AND IRRIGATION MATERIALS SHALL COMPLY WITH SECTIONS 424, 425, 757, AND 795 OF THE MAG STANDARD SPECIFICATIONS.
3. CONTRACTOR SHALL REPAIR ANY DAMAGE MADE TO THE EXISTING SPRINKLER SYSTEM TO THE SATISFACTION OF THE CITY AT NO ADDITIONAL COST TO THE CITY.
4. LANDSCAPE REMOVAL IS A NON-PAY ITEM UNLESS OTHERWISE NOTED.
5. ALL EXISTING VEGETATION, WEEDS, DEBRIS, ETC. NOTED TO BE REMOVED ON THE PLANS AND SPECIFICATIONS SHALL BE REMOVED FROM PROJECT AREA AND DISPOSED OF PROPERLY OFF THE SITE AT THE CONTRACTOR'S EXPENSE (SCARIFY EXISTING SUBGRADE, MINIMUM SIX (6) INCHES DEPTH).
6. DAMAGE TO TURF SHALL BE REPAIRED BY CONTRACTOR, I.E., RUTS FILLED WITH CLEAN SOIL, COMPACTED TO MATCH SURROUNDING GRADES, EXCESS SOIL, ROCK, ETC. SHALL BE REMOVED TO LEAVE THE SITE CLEAN.
7. ALL PLANT MATERIAL, OTHER THAN TREES, SHALL CONFORM TO GRADING, TYPE, ETC. AS SET FORTH IN THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN. ALL TREES SHALL CONFORM TO THE CURRENT ARIZONA NURSERY ASSOCIATION TREE SPECIFICATIONS AND MAG SPEC 795.7. SHOULD ANY CONFLICTS IN THE SPECIFICATIONS OCCUR, THE ARIZONA NURSERY ASSOCIATION'S SPECIFICATIONS SHALL PREVAIL.
8. CITY RESERVES THE RIGHT TO INSPECT SHRUBS AND CONTAINERED TREES FOR CONDITION OF ROOT BALLS. FOR ANY SUCH INSPECTIONS WHICH MAY DESTROY ROOTBALL, CONTRACTOR SHALL SUPPLY ADDITIONAL PLANT AT NO COST TO CITY.
9. PLANT PITS SHALL BE INSPECTED BY CITY PRIOR TO PLANTING BY THE CONTRACTOR BY REQUESTING AN INSPECTION 48 HOURS IN ADVANCE.
10. ROUGH AND FINE GRADING TO ESTABLISH UNIFORM SMOOTH GRADE IS INCLUDED IN THIS PROJECT.
- 11.SOIL TEST FOR FERTILITY AND ADDITIVE RECOMMENDATIONS (FOR TURF AND ORNAMENTALS) SHALL BE COMPLETED BY CONTRACTOR TO DETERMINE IF ADDITIVES ARE REQUIRED. CONTRACTOR SHALL PROVIDE COPY OF SOIL TEST RESULTS FOR REVIEW AND APPROVAL TO ENGINEERING INSPECTOR AT LEAST SEVEN (7) DAYS PRIOR TO ANTICIPATED PLANTING. AFTER APPROVAL BY THE CITY, THE CONTRACTOR SHALL PROVIDE AND INCORPORATE ANY ADDITIVES REQUIRED PRIOR TO OR AT TIME OF PLANTING.
- 12.PLANT PIT SOIL MIXTURE SHALL CONSIST OF FOUR AND ONE-HALF PARTS NATURAL FERTILE, FRIABLE SOIL AND ONE PART HUMUS BY VOLUME, THOROUGHLY MIXED PRIOR TO BACKFILLING IN PITS. BACKFILLING SHALL BE IN 6" LIFTS WITH EACH LIFT WATER SETTLED WITHOUT PUDDLING.
- 13.CONTRACTOR SHALL STAKE TREE AND SHRUB LOCATIONS FOR 5-GALLON PLANTS AND LARGER. STAKES SHALL BE MARKED WITH PLANT NAME OR PLANT LEGEND ITEM NUMBER FROM PLANS.
- 14.ALL EXISTING (GAS, ELECTRIC, WATER, ETC.) COVERS AND BOXES SHALL REMAIN UNCOVERED. CONTRACTOR TO ADJUST TO FINAL GRADE AS NECESSARY. NON-PAY ITEM (NPI) UNLESS OTHERWISE NOTED.
- 15.THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE UNDERGROUND SPRINKLER SYSTEMS IN ADVANCE OF CONSTRUCTION. THE SPRINKLER SYSTEM LOCATIONS NOTED ON PLANS ARE FOR REFERENCE ONLY.
- 16.CONTRACTOR TO VERIFY DEPTH OF ALL INLET STRUCTURES AND SPRINKLER SYSTEMS PRIOR TO TRENCHING FOR LOW-FLOW CHANNEL..
- 17.CONTRACTOR TO PROVIDE PUMPING WITHIN FIVE (5) DAYS AFTER THE NOTICE TO PROCEED IS GIVEN AS REQUIRED TO DRY THE AREA SUFFICIENTLY TO BEGIN CONSTRUCTION.
- 18.CONTRACTOR SHALL ARRANGE FOR SPRINKLER SYSTEM SHUTDOWN DURING CONSTRUCTION BY CONTACTING THE ENGINEERING INSPECTOR.
- 19.NO ROCKS LARGER THAN 1" IN DIAMETER SHALL BE ALLOWED IN THE TOP SIX (6) INCHES OF TOPSOIL WHERE TURF ESTABLISHMENT IS SPECIFIED. ROCK REMOVAL AS NECESSARY IS A NON-PAY (NPI) ITEM UNLESS OTHERWISE NOTED.
- 20.WHERE CALICHE IS ENCOUNTERED IN PLANT PITS, DEPTH AND WIDTH OF PIT SHALL BE INCREASED BY ONE-THIRD (1/3) OVER SPECIFICATION, AND A LIQUID PENETRATOR, "AL-KALICHE" OR EQUAL, SHALL BE INCORPORATED FOR EACH PIT PER MANUFACTURER'S RECOMMENDATIONS.
- 21.CONTRACTOR SHALL INSTALL DECOMPOSED GRANITE TO A ROLLED DEPTH PER THE APPROVED PLANS AND SPECIFICATIONS. DECOMPOSED GRANITE SHALL BE PER THE APPROVED PLANS AND SPECIFICATIONS WITH THE COLOR AS SPECIFIED ON THE PLANS. PRE-EMERGENT HERBICIDE SHALL BE APPLIED BEFORE AND AFTER PLACEMENT OF DECOMPOSED GRANITE PER THE MANUFACTURER'S RECOMMENDATIONS. PRE-EMERGENT HERBICIDE SHALL BE SURFLAN, DACTHAL, OR APPROVED EQUAL. SAMPLE TO BE PROVIDED FOR CITY REVIEW AND APPROVAL. CONTRACTOR SHALL WASH OFF ROCK MULCH ONCE FINAL PLACEMENT HAS OCCURRED.
- 22.RESTORE ALL EXISTING LANDSCAPE IRRIGATION SYSTEMS, COMPONENTS AND LANDSCAPE AREAS IMPACTED BY ANY WORK UNDER THIS CONTRACT. RESTORE ALL EXISTING IRRIGATION AND LANDSCAPE IN ACCORDANCE WITH THE LANDSCAPE RESTORATION NOTES INDICATED WITHIN THESE DOCUMENTS. AT A MINIMUM, ALL RESTORATION SHALL BE IN ACCORDANCE WITH M.A.G. SPECIFICATION 107.9 - PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. ALL RESTORATION WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY OF MESA ENGINEER.
- 23.ALL RESTORATION WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE REFERENCED DETAILS AND ANY ADDITIONAL DETAILS PROVIDED.
- 24.REFER TO LANDSCAPE PLANTING SHEETS AND ENGINEERING DRAWINGS FOR ADDITIONAL RESTORATION NOTES AND REQUIRED COORDINATION.

PROJECT INFORMATION

PROPERTY ADDRESS: 3626 E. THOMAS RD.  
MESA, AZ 85213

APN: 141-22-066

TOTAL GROSS ACREAGE: 0.753 ACRES

TOTAL OPEN SPACE LANDSCAPE AREA (SEE LANDSCAPE PLAN) 4,753 SF

BUILDING AREA 6,365 SF

MAX HEIGHT: 1,075 SF

PROPOSED STL TANK) 25 FT

ZONING: GI

(GENERAL INDUSTRIAL)

PROPOSED LAND USE: PUMP STATION

LOT DEVELOPMENT

SRP EASEMENT 10 FT

INTERIOR / REAR SETBACK 11'-2"

PREVIOUS AREA 12, 532 SF

IMPERVIOUS AREA 16,951 SF

BASIN AREA 3,318 SF

ARTERIAL STREET SETBACK 52'-3"

(N. VALVISTA DR.)

COLLECTOR STREET SETBACK 1'-9"

(E. THOMAS RD.)

FREEWAY SIDE SETBACK 9'-3"

LOT COVERAGE 52%

PROJECT TEAM

OWNER / DEVELOPER

CITY OF MESA  
20 E. MAIN STREET  
MESA, AZ 85021  
P: (480) 644-2251  
WWW.MESAAZ.GOV


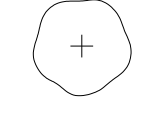







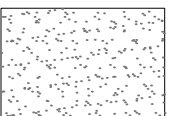
LANDSCAPE ARCHITECT

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WAYNE COLEBANK | 480.967.1343  
WCOLEBANK@LOGANSIMPSON.COM

CIVIL ENGINEER

PETER OLSZEWSKI, P.E.  
BLACK AND VEATCH  
2231 E. CAMELBACK RD. STE. 250  
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OLSZEWSKIP@BV.COM

LANDSCAPE SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER
	3	VITEX AGNUS-CASTUS	CHASTE TREE	36" BOX	1.75" CALIPER MULTI-TRUNK
	3	CAESALPINIA MEXICANA	MEXICAN BIRD OF PARADISE	36" BOX	1.5" CALIPER MULTI-TRUNK
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	
	30	AMBROSIA DELTOIDEA	TRIANGLELEAF BURSAGE	5 GAL	
	4	CALLIANDRA X 'SIERRA STARR' TM	HYBRID FAIRY DUSTER	5 GAL	
	16	ENCELIA FARINOSA	BRITTLEBUSH	5 GAL	
	21	EREMOPHILA PROSTRATA 'OUTBACK SUNRISE'	EMU BUSH	5 GAL	
	5	LANTANA CAMARA 'GOLD MOUND'	GOLD MOUND LANTANA	5 GAL	
	9	TECOMA STANS 'GOLD STAR'	YELLOW BELLS	15 GAL	
ACCENTS	QTY	BOTANICAL NAME	COMMON NAME	CONT	
	3	HESPERALOE PARVIFLORA	RED HESPERALOE	5 GAL	
INERT MATERIALS	QTY	ITEM	SIZE	COLOR	
	6,568 SF	DECOMPOSED GRANITE (DG)	1/2" SCREENED (2" DEPTH)	PAINTED DESERT	

SHEET INDEX

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L-00-004	IRRIGATION PLAN
L-00-005	IRRIGATION DETAILS

PROJECT NARRATIVE

THE CITY OF MESA HAS PROPOSED A REUSE PIPELINE INTERMEDIATE PUMP STATION ON THE NORTHEAST CORNER OF THOMAS AND VAL VISTA DRIVE. THE SITE IS APPROXIMATELY 1 ACRE WITH RETENTION BASIN, RESERVOIR, AND PUMP STATION. VARIOUS CMU VENEER WALLS ENCLOSE THE FACILITY. THE LANDSCAPE CONSISTS OF DROUGHT TOLERANT PLANTS THAT ARE ON THE APPROVED PLANT LIST OF THE ARIZONA DEPARTMENT OF WATER REOURCES AND THE SRP EASEMENT PLANTING REQUIREMENTS. DECOMPOSED GRANITE WILL COMPLEMENT THE WALL'S TAN COLOR AND BLEND INTO THE SONORAN DESERT LANDSCAPE. THE PLANT MATERIALS OFFER SEASONAL COLOR, FOLIAGE AND TEXTURE TO THE SITE.

LANDSCAPE REQUIREMENTS

CITY OF MESA CODE OF ORDINANCES - FIFTY PERCENT (50%) OF ALL REQUIRED OPEN SPACE SHALL CONTAIN LIVE PLANT MATERIAL FOR LOTS OR RIGHT-OF-WAYS			
TOTAL SITE AREA: 6365 SF REQUIRED COVERAGE: 3183 SF (50%) PROVIDED COVERAGE: 2380 SF (37%) *			
PLANT TYPE	MESA CREDIT (SF) PER PLANT	PROVIDED	
SHADE TREES	50	6 TREES	300 SF
LARGE SHRUBS	50	9 SHRUBS	450 SF
SMALL SHRUBS	10	23 SHRUBS	230 SF
EVERGREEN GROUND COVER (EGC)	25	56 (EGC)	1400 SF
TOTAL			2380 SF

CITY OF MESA CODE OF ORDINANCES PER SECTION 11-33-3(A) - ARTERIAL AND COLLECTOR STREETS REQUIRE (1) TREE AND (6) SHRUBS PER 25 LINEAR FEET OF STREET FRONTAGE.			
STREET RIGHT-OF-WAY	PLANT TYPE	REQUIRED	PROVIDED
ARTERIAL - N. VAL VISTA DR.	1 TREE PER 25 LINEAR FEET	5	6
TOTAL LINEAR FEET = 118	6 SHRUBS PER 25 LINEAR FEET	24	28
COLLECTOR - E. THOMAS RD.	1 TREE PER 25 LINEAR FEET	18	0
TOTAL LINEAR FEET = 448	6 SHRUBS PER 25 LINEAR FEET	107	59

CITY OF MESA CODE OF ORDINANCES PER SECTION 11-33-3(A) - ARTERIAL AND COLLECTOR MINIMUM SIZE OF PLANT MATERIALS AS FOLLOWS:			
STREET RIGHT-OF-WAY	PLANT SIZE	REQUIRED %	PROVIDED %
ARTERIAL - N. VAL VISTA DR.	36" BOX TREE	25	100
COLLECTOR - E. THOMAS RD.	24" BOX TREE	50	0
	5 GALLON OR LARGER SHRUB	50	100

\* DEVIATION IS BEING ADDRESSED BY THE ALTERNATIVE LANDSCAPE PLAN (ALP), PLEASE SEE NARRATIVE.

TREES



VITEX AGNUS-CASTUS  
CHASTE TREE



CAESALPINIA MEXICANA  
MEXICAN BIRD OF PARADISE

SHRUBS & GROUND COVER



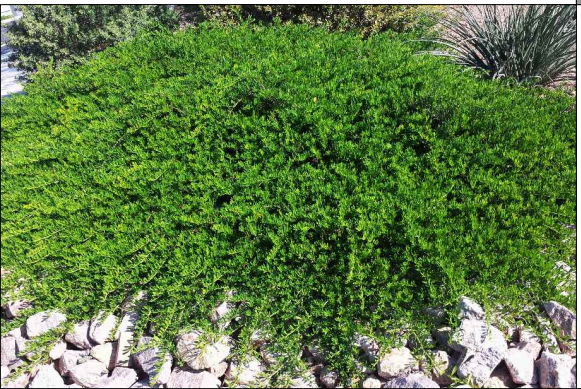
AMBROSIA DELTOIDEA  
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CALLIANDRA X 'SIERRA STARR'  
HYBRID FAIRY DUSTER



ENCELIA FARINOSA  
BRITTLEBUSH



EREMOPHILA 'OUTBACK SUNRISE'  
EMU BUSH



LANTANA CAMARA 'GOLD MOUND'  
GOLD MOUND LANTANA



TECOMA STANS 'GOLD STAR'  
YELLOW BELLS

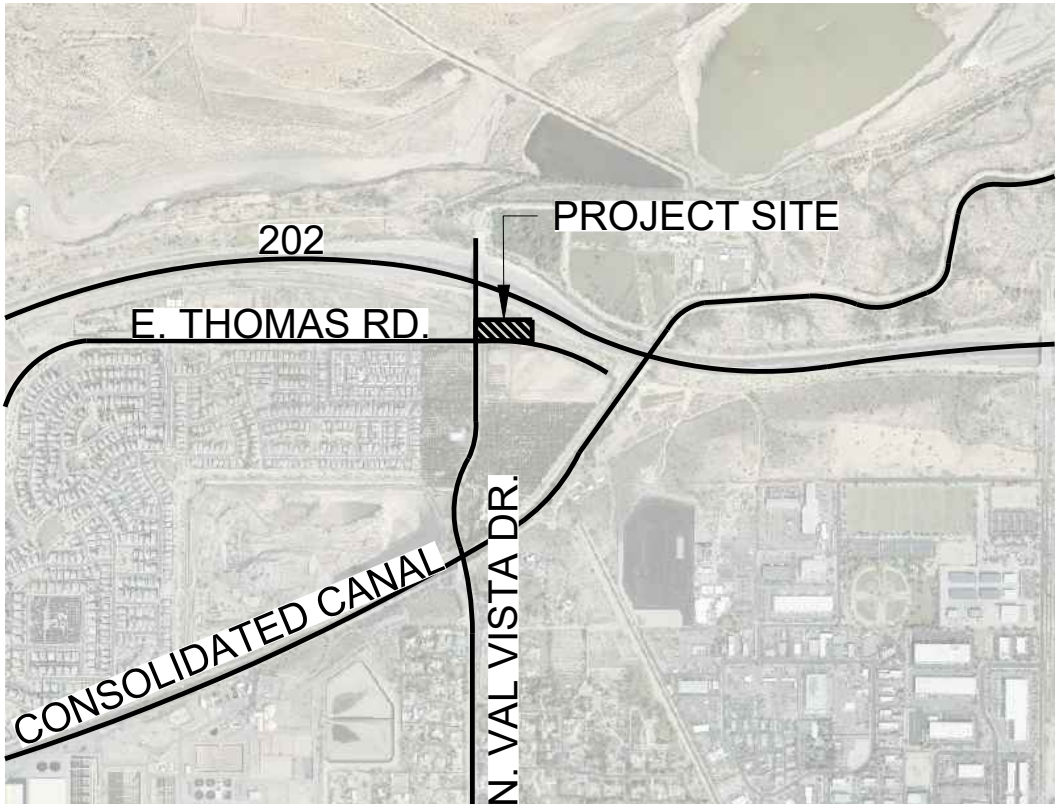
ACCENTS



HESPERALOE PARVIFLORA  
RED HESPERALOE

VICINITY MAP

NTS



NORTH

CITY OF MESA CODE OF ORDINANCES PER SECTION 11-33-3(B)(2) - LANDSCAPING FOR NON-SINGLE RESIDENCE USES ADJACENT TO OTHER NON-SINGLE RESIDENCE.		
	REQUIRED	PROVIDED
LANDSCAPE YARD	15' WIDE	0'
VEGETATIVE GROUND COVERAGE	50%	0%
TREE / SHRUB QUANTITY (EAST SIDE ; NORTH SIDE)	2 / 8 ; 11 / 70	0 / 0 ; 0 / 0
24" BOX OR LARGER TREES	50%	0%

CITY OF MESA BENCHMARK  
BRASS TAG, HANDHOLE MCHD,  
INTERSECTION BASELINE ROAD AND  
RECKER ROAD ELEVATION = 1322.726



LOGAN SIMPSON

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NOT FOR CONSTRUCTION



BLACK & VEATCH

Black & Veatch Corporation  
Phoenix, Arizona



FINAL

NOT FOR  
CONSTRUCTION  
OR RECORDING

DRAWN BY: TR  
ENGINEER: N/A  
APPROVED BY: JM

ACTIVITY: \_\_\_\_\_  
PROJ. NO.: CP0896

CITY OF MESA  
ENGINEERING DEPARTMENT

CENTRAL MESA REUSE PIPELINE-PLANTS  
INTERMEDIATE PUMP STATION

LANDSCAPE  
LEGEND, NOTES  
AND TABLES

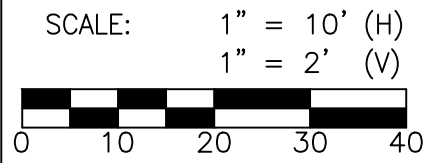
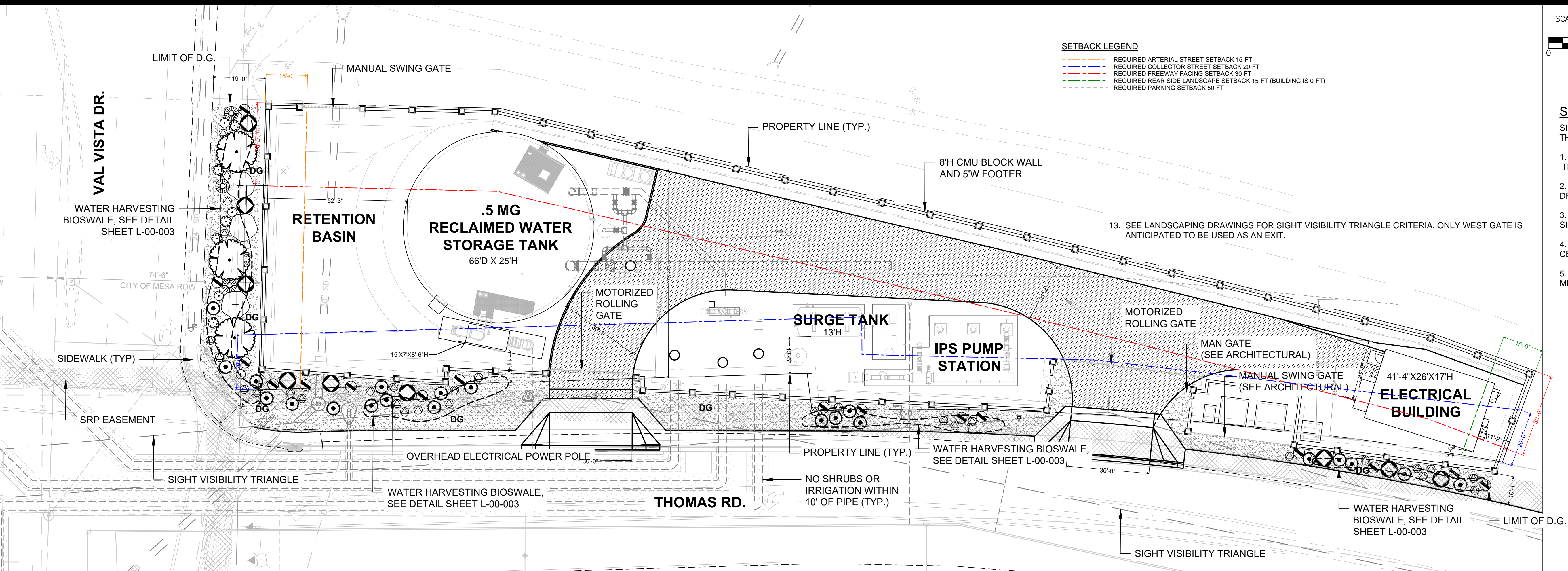
L-00-001

SHEET  
OF

CATALOG NUMBER:



DATE: 2/12/24  
PROJECT: 2022\225302 - CENTRAL MESA REUSE PIPELINE (1.DES)\40-CA\1-SHEET FILES\225302\_LL-01.DWG



CITY OF MESA BENCHMARK  
BRASS TAG, HANDHOLE MCHD,  
INTERSECTION BASELINE ROAD AND  
RECKER ROAD ELEVATION = 1322.726

SIGHT VISIBILITY TRIANGLE

SIGHT VISIBILITY TRIANGLES AT EACH SITE DRIVEWAY ARE BASED ON THE FOLLOWING CRITERIA:

- DESIGN SPEED IS 40 MPH WHICH IS BASED ON THE SPEED LIMIT OF THOMAS RD. BEING 35 MPH + 5 MPH.
- APEX OF TRIANGLE IS MEASURED FROM THE CENTER OF THE DRIVEWAY, 15 FT FROM THE FACE OF CURB.
- MAXIMUM THROUGH ROAD WIDTH OF THOMAS RD IS 55 FT ON WEST SIDE. DESIGN USED 4LD / 5LU ROAD WIDTH TO BE CONSERVATIVE.
- REQUIRED SITE DISTANCE IS 500 FT AND IS MEASURED TO THE CENTER OF TRAVEL LANE ON EITHER SIDE.
- SITE DISTANCES ON SECTIONS OF ROAD THAT CURVE ARE MEASURED AS A CHORD LENGTH ON THE CURVE.

GENERAL LANDSCAPE NOTES - NOT APPROVED AS PART OF THIS PLAN

GENERAL INFORMATION:

- ALL PLANT MATERIAL SHALL HAVE A ONE YEAR WARRANTY FROM OWNER'S ACCEPTANCE DATE OF SUBSTANTIAL COMPLETION.
- PLANT ESTABLISHMENT BY THE CONTRACTOR SHALL BE FOR 90 DAYS, BEGINNING DATE OF SUBSTANTIAL COMPLETION OF LANDSCAPING. MAINTENANCE SHALL CONSIST OF MAINTAINING ALL WORK INSTALLED UNDER CONTRACT AND MONITORING THE WATERING SYSTEM (INCLUDING IF INSTALLED BY OTHERS). AFTER 90 DAYS THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR A SITE INSPECTION. UPON ACCEPTANCE OF PLANTS AND MAINTENANCE, THE OWNER ASSUMES MAINTENANCE RESPONSIBILITIES. PROJECT WARRANTY REMAINS IN EFFECT FOR 1 YEAR FROM DATE OF SUBSTANTIAL COMPLETION ACCEPTANCE.
- PRIOR TO COMMENCEMENT OF ANY WORK, DETERMINE LOCATION OF ALL UNDERGROUND UTILITIES THROUGH 'BLUE STAKE' OR OTHER METHOD AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED AS A RESULT OF HIS WORK.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION WHEN NO LANDSCAPE IMPROVEMENTS ARE SHOWN ON THE PLANS. VERIFY TREATMENT WITH THE OWNER'S REPRESENTATIVE PRIOR TO IMPLEMENTATION.

FINISH GRADE / LANDSCAPE PREPARATION

- SITE GRADING NECESSITATED BY THE WORK AS IT PROGRESSES AND NOT SPECIFICALLY CALLED OUT ON THE PLANS WILL BE CONSIDERED INCIDENTAL WORK.
- CONTRACTOR SHALL INSPECT SUBGRADES PREPARED BY OTHERS PRIOR TO

- COMMENCING WITH CONTRACTED LANDSCAPING OR IRRIGATION ACTIVITIES. ADVISE OWNER'S REPRESENTATIVE OF DISCREPANCIES WITH DRAWINGS OR TECHNICAL SPECIFICATIONS. ALL PLANTING AREAS SHALL BE LEFT FREE OF CONSTRUCTION DEBRIS AND/OR TOXIC MATERIAL AND SUBGRADED TO A LEVEL TO PERMIT LANDSCAPE CONSTRUCTION. TRENCHES OR OTHER FILLED EXCAVATIONS SHALL BE COMPACTED PRIOR TO LANDSCAPE INSTALLATION.
- ALL TEMPORARY CONSTRUCTION ROADS AND COMPACTED AREAS DEVELOPED THAT ARE WITHIN THE LANDSCAPE AREAS SHALL BE SCARIFIED AND LOOSEEN THEN WATER-SETTLED TO A DEPTH OF 12" PRIOR TO BEGINNING LANDSCAPE AND IRRIGATION WORK.
  - THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINISH GRADE AND SHALL BEAR FINAL RESPONSIBILITY FOR PROPER SURFACE DRAINAGE OF PLANTED AREAS. FINISH GRADES SHALL MATCH ENGINEERS PLANS AND SPECIFICATIONS.
  - FINISH GRADE FOR PLANTED AREAS SHALL BE PER THE DETAILS WITH SMOOTH EVEN LINES AT EDGES OF STRUCTURES.
  - FINISH GRADE IF NOT SPECIFIED ON THE PROJECT'S GRADING PLANS SHALL SLOPE AT A 2% GRADE AWAY FROM CURBS, WALKS, AND WALLS FOR MINIMUM OF 10 FEET.

PLANTING

- ALL PLANT MATERIAL AND SPECIFICATIONS TO CONFORM TO THE ARIZONA NURSERY ASSOCIATION STANDARDS UNLESS OTHERWISE NOTED. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REFUSE PLANT MATERIAL NOT MATCHING THE STANDARD FOR SIZE, HEALTH, AND FORM.
- DO NOT MAKE SUBSTITUTIONS; IF SPECIFIED LANDSCAPE MATERIAL IS NON-OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY FROM AT LEAST FIVE

SUPPLIERS TO OWNER'S REPRESENTATIVE, TOGETHER WITH A PROPOSAL FOR SUBSTITUTION OF EQUIVALENT MATERIAL FOR ACCEPTANCE.

- LAYOUT INDIVIDUAL TREE AND PLANT LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS, STAKE LOCATIONS AND OUTLINE AREAS AND SECURE OWNER'S REPRESENTATIVE ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE DIRECTED.
- PLANT QUANTITIES LISTED IN THE LANDSCAPE SCHEDULE ARE FOR THE CONVENIENCE OF THE CONTRACTOR. IN THE CASE OF ANY DISCREPANCIES, PLANS SHALL OVERRIDE THE LANDSCAPE AND BID SCHEDULE QUANTITIES. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON THE PLANS AND BASE THEIR BID ACCORDINGLY.
- ALL PLANT MATERIALS SHALL HAVE A MINIMUM SETBACK FROM EDGE OF CURBS, WALKS, WALLS, PADS, ETC. AS FOLLOWS UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE AS FOLLOWS:
  - TREES 5 FOOT MINIMUM SETBACK
  - SHRUBS 3 FOOT MINIMUM SETBACK
  - GROUND COVER AN 18 INCH MINIMUM SETBACK
- EXCAVATE PLANTING PITS, AS SHOWN ON THE DRAWINGS AND SCHEDULES. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION. TEST DRAINAGE OF TREE, SHRUB AND PLANT PITS BY FILLING WITH WATER TWICE IN SUCCESSION. CONDITIONS PERMITTING THE RETENTION OF WATER IN PLANTING PITS FOR MORE THAN TWENTY-FOUR (24) HOURS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IF PLANT PIT DOES NOT DRAIN WITHIN 24 HOURS, THEN DRILL ONE (1) 6" DIAMETER X 24" DEEP HOLE. AT EDGE OF EXCAVATED PIT, RE-TEST PERCOLATION PER SPECIFICATIONS, CERTIFY PERCOLATION AND FILL HOLE WITH PEA GRAVEL. COORDINATE LOCATION WITH TREE STAKES.

- IF ROCK, UNDERGROUND CONSTRUCTION, ADVERSE DRAINAGE CONDITIONS, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED IN EXCAVATION FOR PLANTING OF TREES, SHRUBS, OR PLANTS NOTIFY OWNER'S REPRESENTATIVE. NEW LOCATIONS MAY BE DETERMINED, OR INSTRUCTIONS MAY BE ISSUED TO DIRECT REMOVAL OF OBSTRUCTION. PROCEED WITH WORK ONLY AFTER APPROVAL OF OWNER'S REPRESENTATIVE.
- ALL PLANT BACKFILL MIXES SHALL BE AMENDED AS DESCRIBED ON THE LANDSCAPE DRAWING DETAILS, UNLESS SUPERCEDED BY SPECIFIC SOIL TESTING AND OR LANDSCAPE SPECIFICATIONS. BACKFILL MIX SHALL BE PLACED IN 6" LIFTS AND TAMPED INTO PLACE TO OBTAIN COMPACTION. NO TRANSPLANTING SHALL BE DONE WHEN SOIL IS EXCESSIVELY WET. DO NOT COUNTERSINK AROUND CACTI OR SUCCULENTS. PROVIDE POSITIVE DRAINAGE AWAY FROM PLANT.
- ALL SHRUBS SHALL HAVE A FULL HEAD THAT COVERS THE CAN DIAMETER (CAN FULL) AND A MINIMUM OF THREE STEMS/BRANCHES.
- PLANT BACKFILL MIX SHALL CONFORM TO LANDSCAPE DETAIL NOTES, UNLESS OTHERWISE SPECIFIED.
- FERTILIZER TABLETS SHALL BE AGRIFORM (21 GRAM 20-10-5) OR EQUAL. QUANTITY OF TABLETS SHALL BE PLACED 1/2 THE DEPTH OF THE ROOTBALL AT THE FOLLOWING RATE:
  - 1 TABLET PER 1 GALLON CONTAINER
  - 2 TABLETS PER 5 GALLON CONTAINER
  - 3 TABLETS PER 15 GALLON CONTAINER
  - 4 TABLETS PER 24" BOX
  - 6 TABLETS PER 36" BOX
  - 8 TABLETS PER 48" BOX
  - AT A RATE OF 1 TABLET PER EACH ADDITIONAL 6" BOX SIZE.

WHEN MULTIPLE QUANTITIES OF TABLETS ARE REQUIRED THEY SHALL BE EQUALLY SPACED AT THE SPECIFIED DEPTH.

LANDSCAPE SCHEDULE NOTES

- THE INERT MATERIALS DO NOT INCLUDE ANY RIP-RAP QUANTITIES SHOWN ON THE CIVIL SHEETS
- THE CONTRACTOR IS RESPONSIBLE FOR APPLYING 2" D.G. TO ALL AREAS DISTURBED BY CONSTRUCTION OUTSIDE THE LIMIT OF WORK OR THE LIMIT OF D.G. SHOWN ON THE PLANS. IF THERE ARE SIGNIFICANT AREAS, THE REVISION TO THE D.G. LIMITS SHALL BE BROUGHT TO THE OWNER'S ATTENTION.
- THE QUANTITIES OF MATERIAL ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THEIR OWN TAKE-OFFS FOR BID AND PURCHASING.

NOTE: A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO THE GROUND AFTER THE PLACEMENT OF NON-VEGETATIVE MULCH MATERIALS TO PREVENT WEEDS

INERT MATERIALS	ITEM	SIZE	COLOR
	DECOMPOSED GRANITE (DG)	1/2" SCREENED (2" DEPTH)	PAINTED DESERT

PLANTING SCHEDULE

TREES	COMMON NAME
	CHASTE TREE
	MEXICAN BIRD OF PARADISE
SHRUBS	COMMON NAME
	TRIANGLELEAF BURSAE
	HYBRID FAIRY DUSTER
	BRITTLEBUSH
	EMU BUSH
	GOLD MOUND LANTANA
	YELLOW BELLS
ACCENTS	COMMON NAME
	RED HESPERALOE



51 WEST THIRD STREET, SUITE 450  
TEMPE, AZ 85281  
P (480) 967-1343

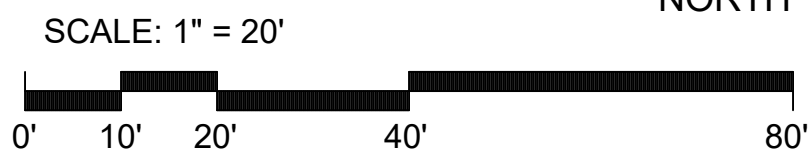
NOT FOR CONSTRUCTION



Black & Veatch Corporation  
Phoenix, Arizona

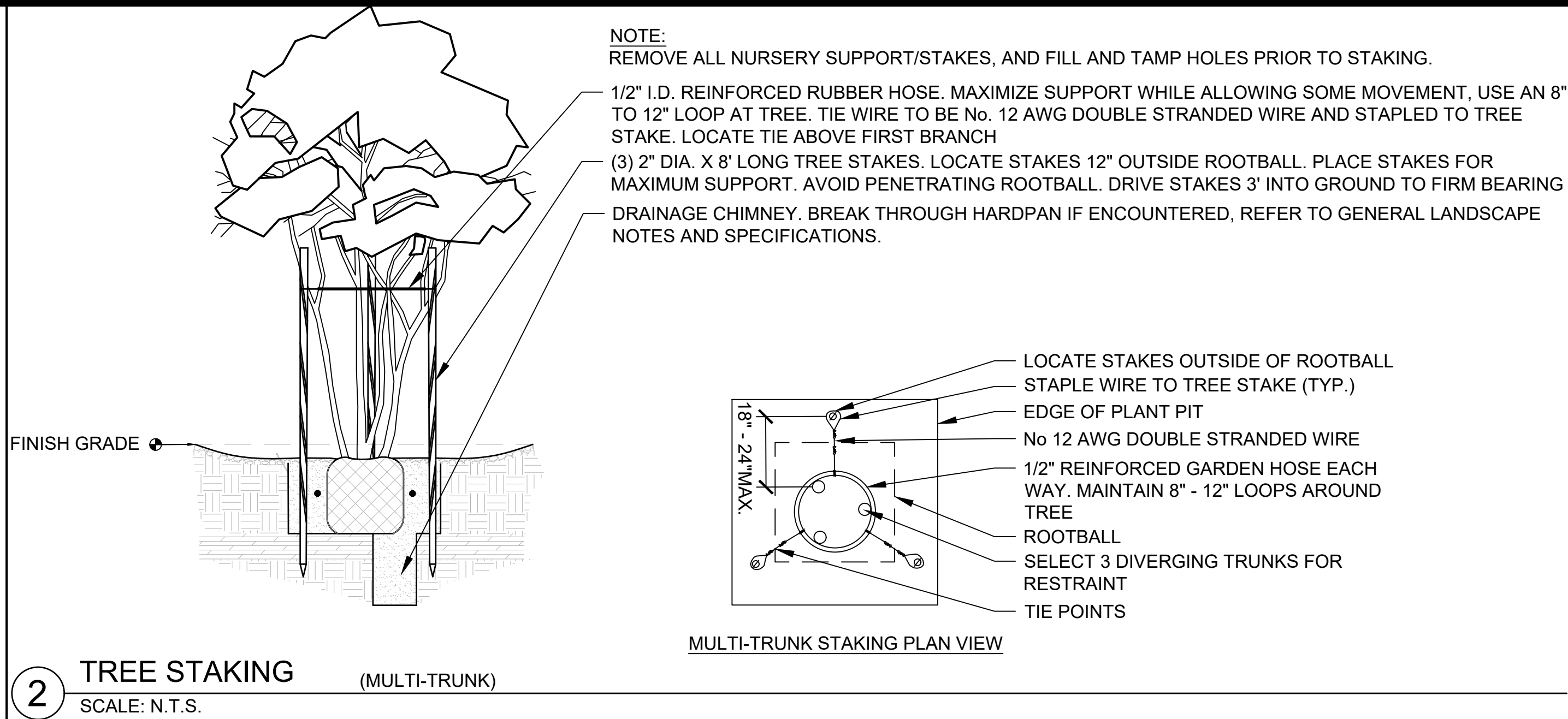
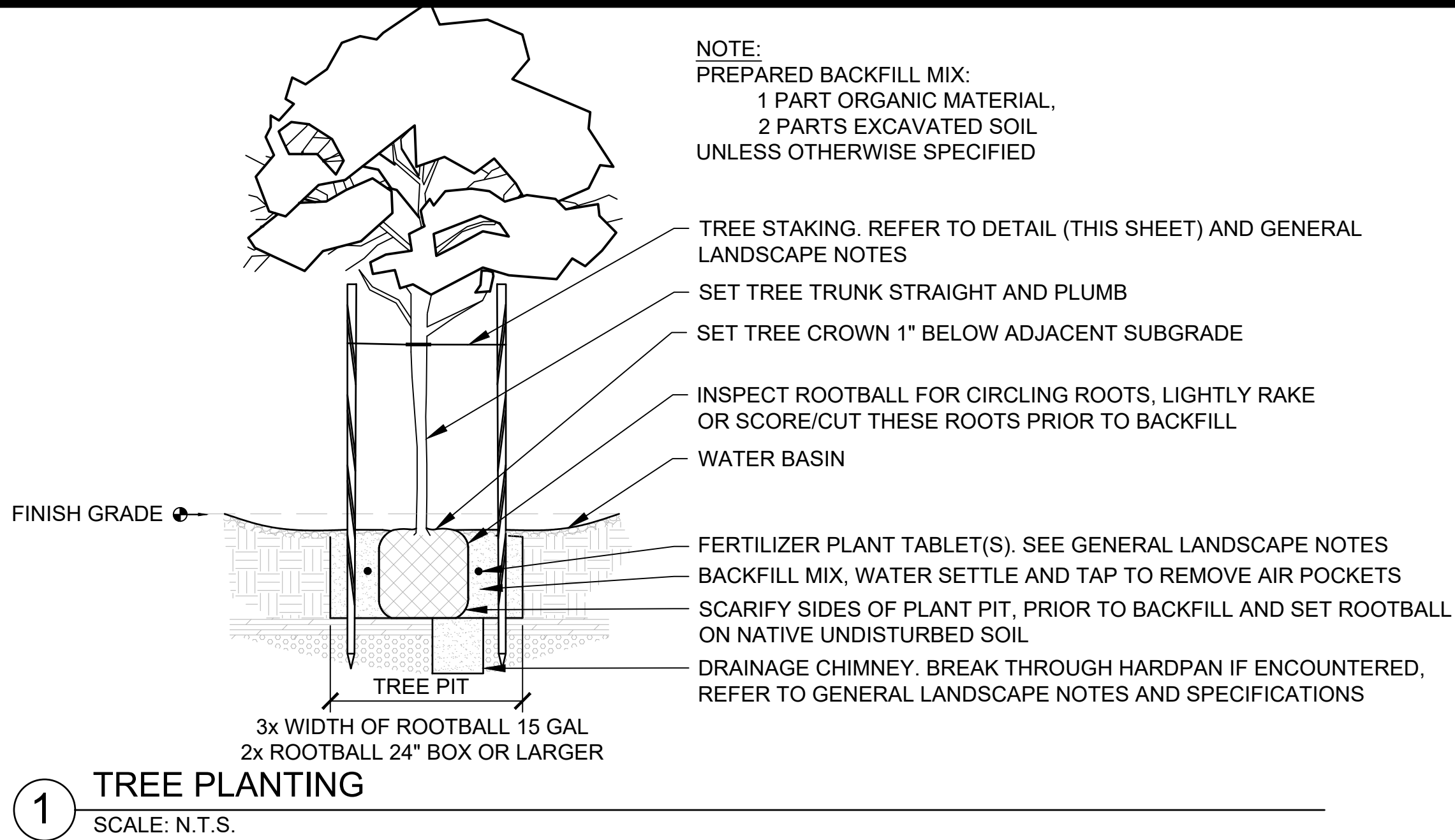


FINAL  NOT FOR CONSTRUCTION OR RECORDING	CITY OF MESA ENGINEERING DEPARTMENT	
	CENTRAL MESA REUSE PIPELINE-PLANTS INTERMEDIATE PUMP STATION	
	LANDSCAPE PLANTING PLAN	L-00-002
	SHEET OF	CATALOG NUMBER:
DRAWN BY: TR ENGINEER: N/A APPROVED BY: JM		
ACTIVITY: PROJ. NO.: GP0886		



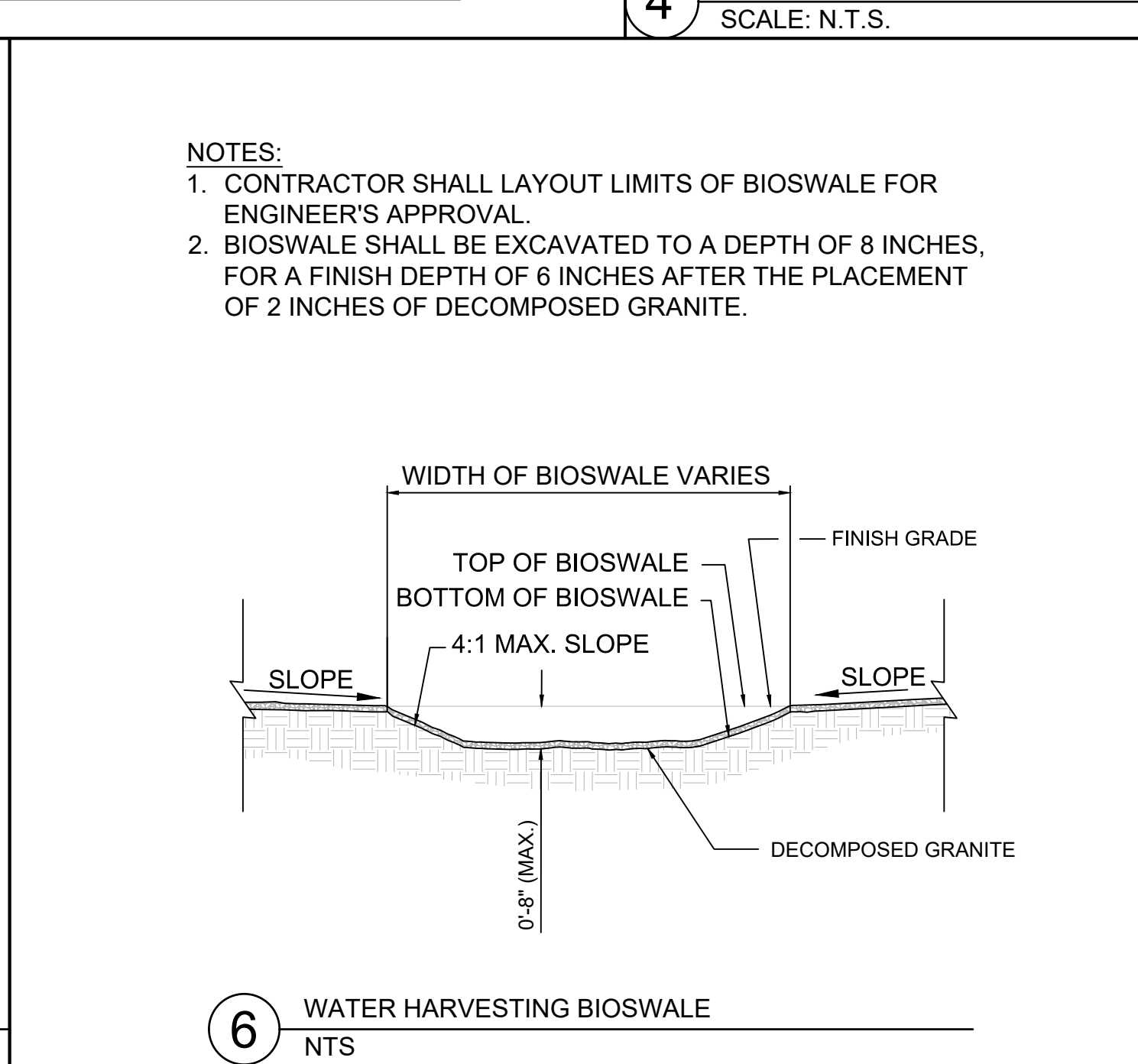
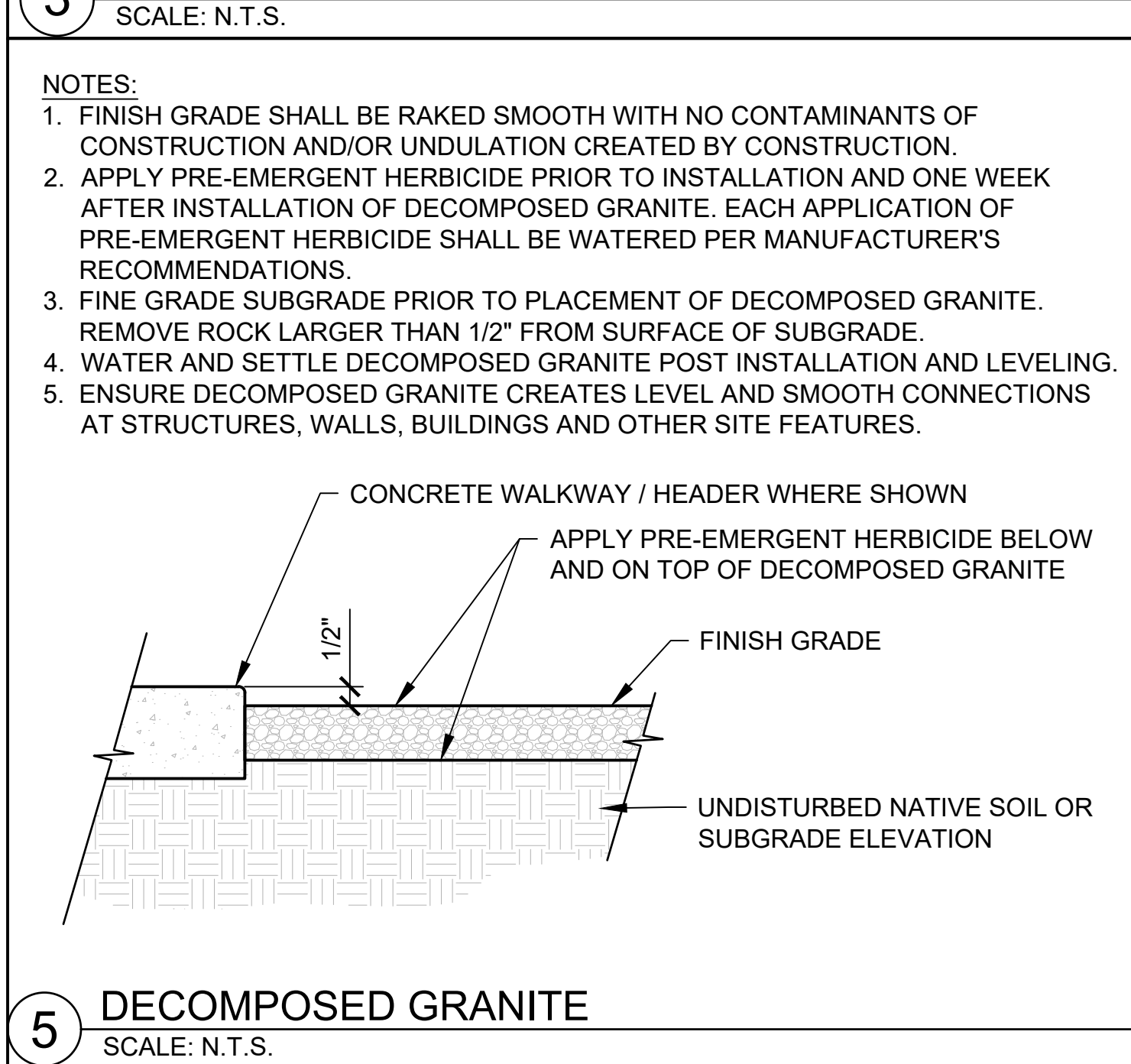
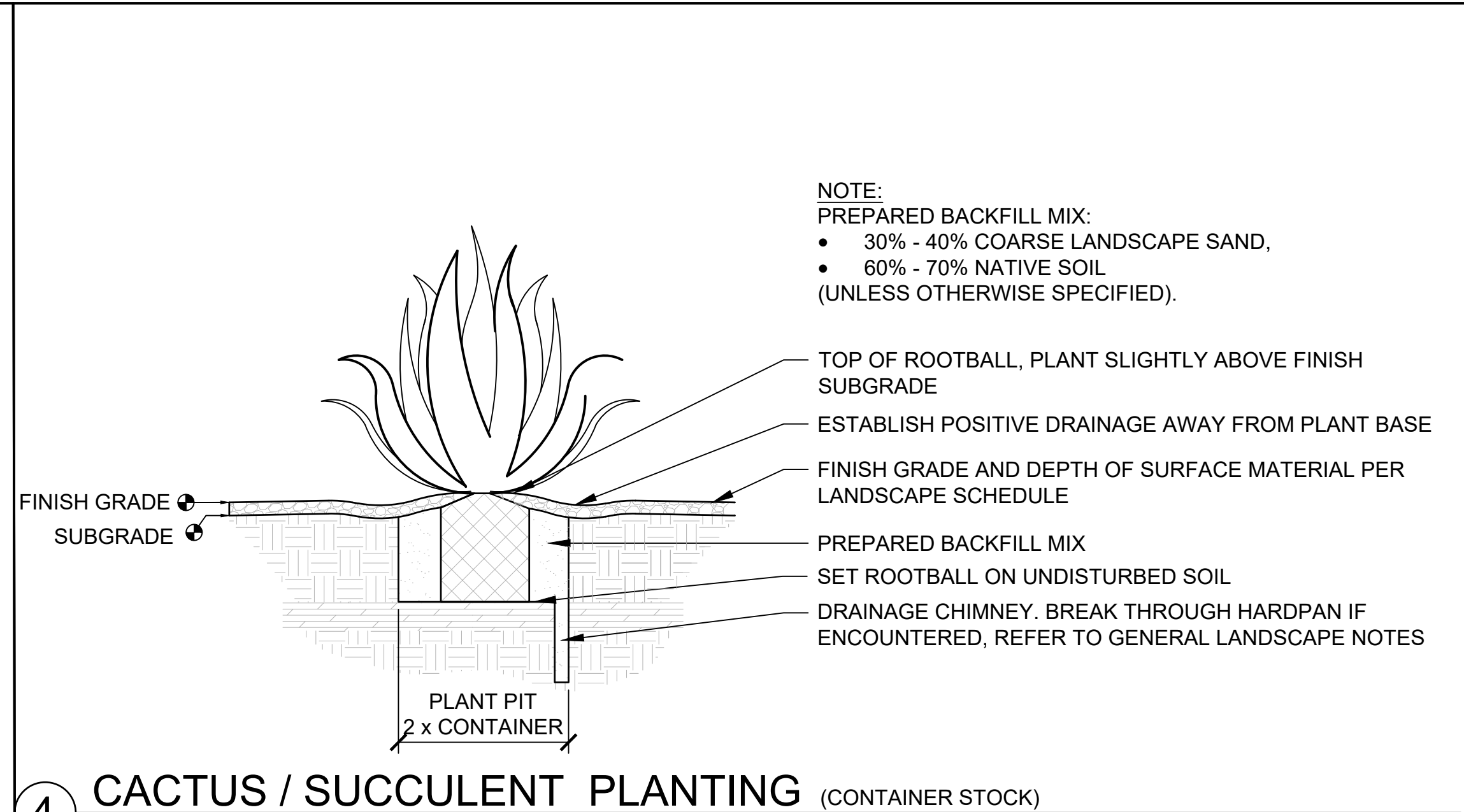
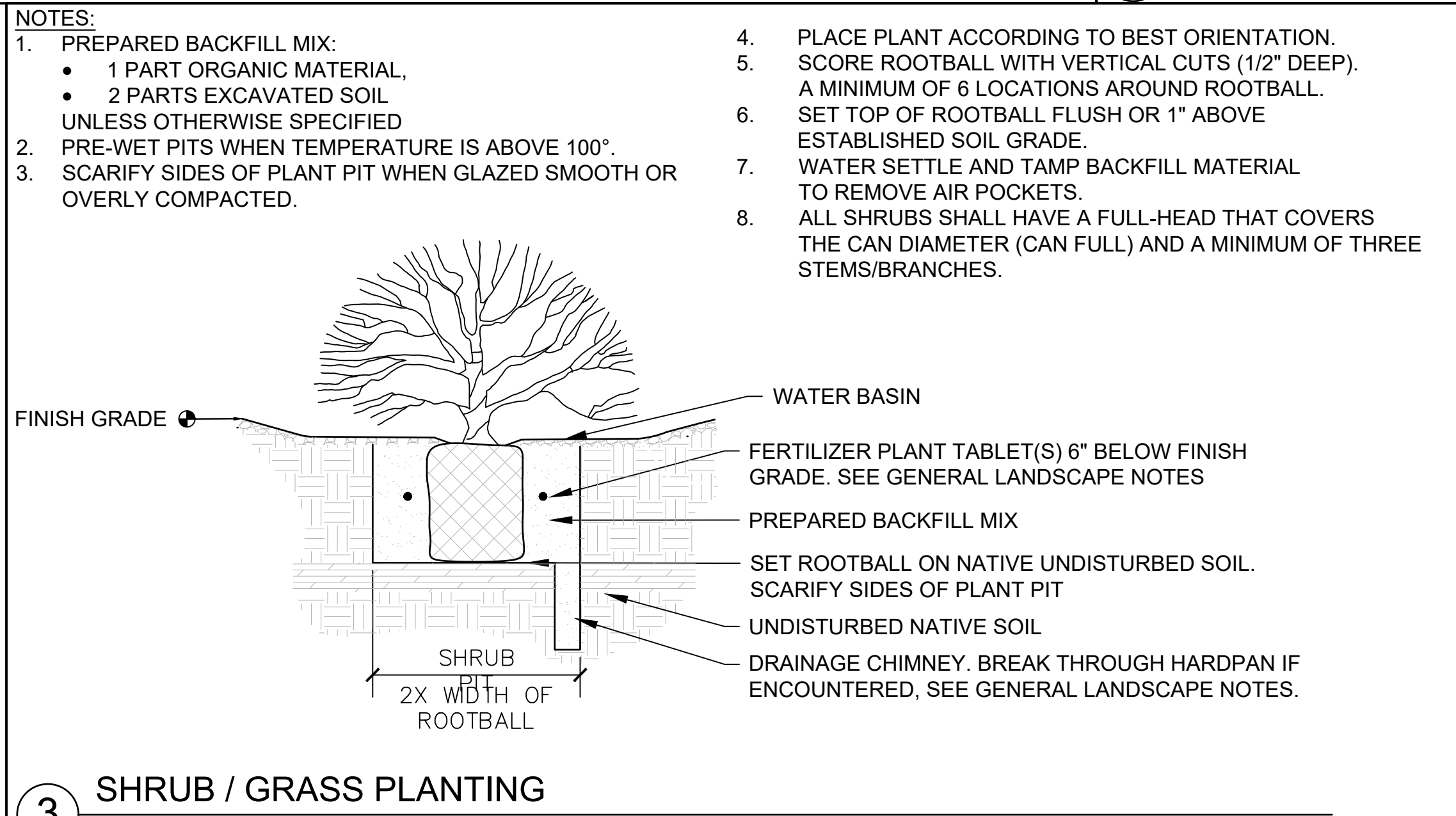


DATE: 2/12/24  
N:\PROJECTS\2022\225302 CENTRAL MESA REUSE PIPELINE (1.DES)\40-CAO\1-SHEET FILES\225302\_LL-01.DWG



SCALE: 1" = 10' (H)  
1" = 2' (V)

CITY OF MESA BENCHMARK  
BRASS TAG, HANDHOLE MCHD,  
INTERSECTION BASELINE ROAD AND  
RECKER ROAD ELEVATION = 1322.726



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Phoenix, Arizona

**CITY OF MESA  
ENGINEERING DEPARTMENT**

CENTRAL MESA REUSE PIPELINE-PLANTS  
INTERMEDIATE PUMP STATION

LANDSCAPE  
PLANTING  
DETAILS

L-00-003

FINAL  
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ENGINEER: N/A  
APPROVED BY: JM

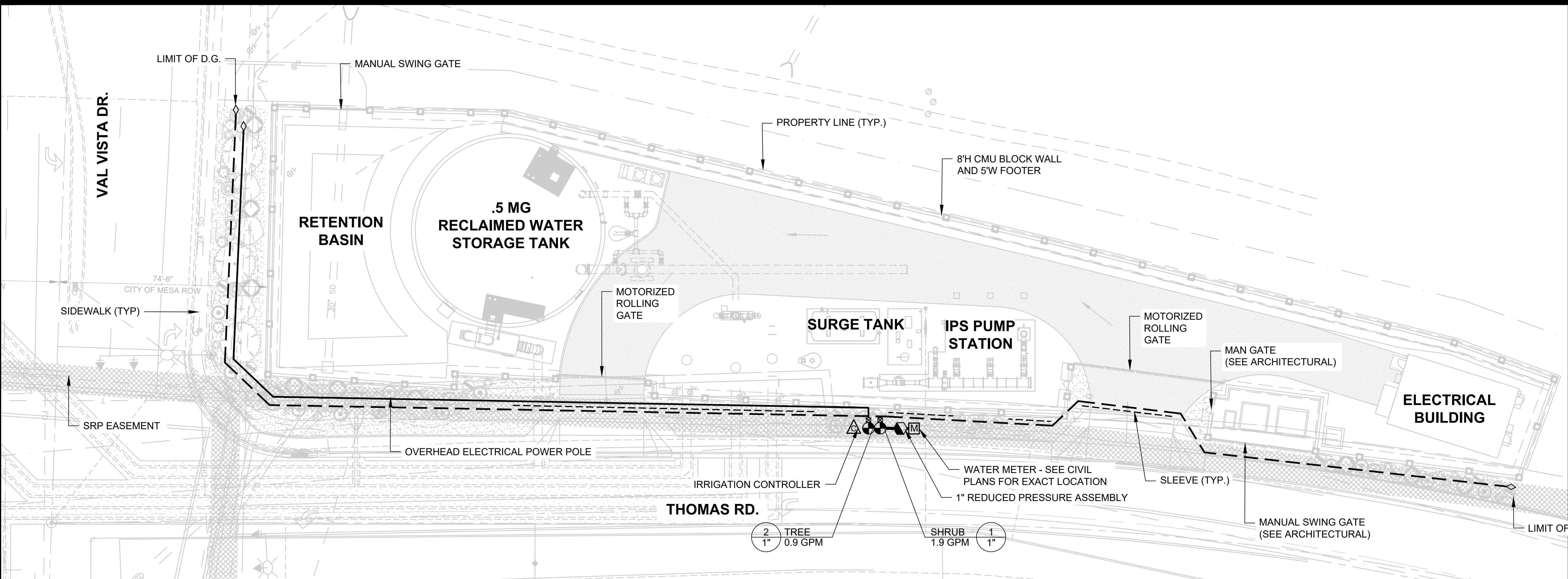
ACTIVITY:  
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CATALOG NUMBER:



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SCALE: 1" = 10' (H) 1" = 2' (V)

CITY OF MESA BENCHMARK BRASS TAG, HANDHOLE MCHD, INTERSECTION BASELINE ROAD AND RECKER ROAD ELEVATION = 1322.726

IRRIGATION LEGEND

SYMBOL	BRAND	MODEL	DESCRIPTION
M	EXISTING		WATER METER
FEBCO	825		REDUCED PRESSURE ASSEMBLY
DIG	LEIT-4000		SOLAR IRRIGATION CONTROLLER
RAIN BIRD	PEB		REMOTE CONTROL VALVE
WILKENS	500XLYSBR-G		PRESSURE REDUCING VALVE WITH GAUGE
N/S	BOWSMITH	ML206	MULTI OUTLET EMITTER (0.6 GPH)
N/S	BOWSMITH	ML210/220	MULTI OUTLET EMITTER (1.0/2.0 GPH)
SPEARS	AP-100		END CAP

1/2" SCHEDULE 40 PVC PIPE LATERAL (TREE)

1/2" SCHEDULE 40 PVC PIPE LATERAL (SHRUB)

SCHEDULE 40 PVC PIPE MAINLINE

SCHEDULE 40 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 40 PIPE, 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED. MINIMUM 2"

2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

3. FURNISH AND INSTALL DC LATCHING SOLENOID FOR THE SPECIFIED REMOTE CONTROL VALVE

VALVE CALLOUT

VALVE #

#

1

TREE

0.0 GPM

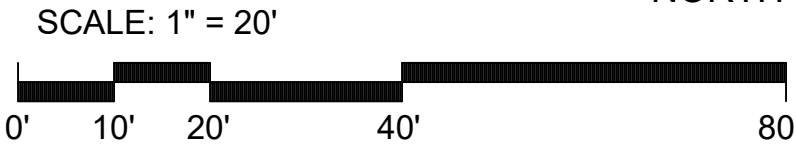
VALVE TYPE

VALVE SIZE

TOTAL GPM

IRRIGATION NOTES:

1. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL CONTACT BLUE STAKE TO VERIFY LOCATIONS AND DEPTHS OF ANY UTILITIES THAT MAY BE AFFECTED BY HIS/HER WORK, AND SHALL BE RESPONSIBLE FOR DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF THIS WORK.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR FAULTY MATERIAL OR FAULTY WORKMANSHIP FOR THE PERIOD OF 1-YEAR FROM SUBSTANTIAL COMPLETION OF LANDSCAPE WORK.
3. THE IRRIGATION SYSTEM IS DESIGNED FOR A MINIMUM OF 60 PSI. CONTRACTOR SHALL PROVIDE A STATIC PRESSURE READING BEFORE STARTING ANY WORK. IF WATER PRESSURE IS LESS THAN 60 PSI NOTIFY THE CONTRACTING OFFICER OR HIS DESIGNEE BEFORE STARTING WORK.
4. THE CONTRACTOR WILL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, CODES, AND REGULATIONS APPLICABLE TO THE IRRIGATION SYSTEM COVERED BY THESE PLANS.
5. ALL PERMITS, REQUIRED TO COMPLETE THE IRRIGATION WORK SHOWN ON THE PLANS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO START OF WORK.
6. IRRIGATION PLANS ARE SCHEMATIC. ALL VALVES AND PIPING ARE SHOWN DIAGRAMMATICALLY FOR CLARITY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF SYSTEM COMPONENTS. ALL IRRIGATION COMPONENTS TO BE LOCATED IN PLANTING AREAS. SOME IRRIGATION IS SHOWN OUTSIDE OF PLANTING AREAS FOR CLARITY PURPOSES ONLY. COORDINATE IRRIGATION WORK WITH LANDSCAPE PLANS TO AVOID CONFLICTING LOCATIONS BETWEEN PIPING AND PLANT PITS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR 100% IRRIGATION COVERAGE TO PLANT AND SOD MATERIAL SHOWN ON THE PLANS, INCLUDING EXISTING TREES AND PLANTS TO REMAIN.
8. ALL PIPES SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION AND ASTM STANDARD D-2774 AT THE DEPTHS SHOWN IN THE IRRIGATION DETAILS.
9. ALL THREADED JOINTS SHALL BE COATED WITH TEFLON TAPE UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. USE LIQUID TEFLON ON METAL PIPE THREADS ONLY.
10. CONTRACTOR SHALL FLUSH ALL LINES PRIOR TO INSTALLATION OF EMITTERS, END CAPS OR ANY OTHER DEVICE THAT IMPACTS THE OUTWARD FLOW OF SYSTEM WATER.
11. ALL ELECTRICAL CONNECTIONS SHALL BE MADE WITHIN REMOTE CONTROL VALVE BOXES, CONTROLLER ENCLOSURES AND VALVE BOXES DESIGNATED SPECIFICALLY FOR ELECTRICAL CONNECTIONS. NO SPLICES OUTSIDE OF BOXES OR ENCLOSURES WILL BE ACCEPTED.
12. INSTALL ALL TWO WIRE CABLE IN 1-1/4" PVC ELECTRICAL CONDUIT.
13. INSTALL ALL REMOTE CONTROL VALVES AT HEIGHTS INDICATED ON DETAILS, AS HIGH AS POSSIBLE BUT ALLOWING CLEARANCE BETWEEN VALVE BOX LID AND FLOW CONTROL HANDLE ON REMOTE CONTROL VALVE.
14. AT THE COMPLETION OF THE PROJECT, SUPPLY THE FOLLOWING MATERIAL TO THE CONTRACTING OFFICER OR HIS DESIGNEE: TWO (2) WRENCHES FOR DISASSEMBLY AND ADJUSTING OF EACH TYPE OF VALVE SUPPLIED. TWO (2) KEYS FOR EACH TYPE OF CONTROLLER. THREE (3) VALVE BOX KEYS OR WRENCHES. (20) EMITTERS FOR EACH TYPE OF GPH USED. (10) 1-20 ROTORS.
15. TREES AND SHRUBS SHALL BE IRRIGATED ON SEPARATE REMOTE CONTROL VALVES.
16. AS-BUILT DRAWINGS, CONTROLLER CHARTS, MAINTENANCE MANUALS AND SPECIALTY TOOLS SHALL BE TURNED OVER TO THE CONTRACTING OFFICER OR HIS DESIGNEE AT THE COMPLETION OF CONSTRUCTION.
17. A ONE-YEAR WARRANTY ON MATERIALS AND INSTALLATION SHALL COMMENCE AT THE SUBSTANTIAL COMPLETION.
18. ALL IRRIGATION PIPING REGARDLESS OF SIZE AND CLASS IS TO BE INCASED IN A PIPE SLEEVE WHEN LOCATED UNDER IMPERVIOUS SURFACE MATERIAL, INCLUDING ANGULAR ROCK AREAS.
19. CONTRACTOR SHALL ENSURE THAT ALL REMOTE CONTROL VALVES WITHIN THE LIMITS OF WORK ARE FUNCTIONING AND FULLY OPERABLE. REPORT ANY DEFICIENT OR DAMAGED VALVES TO OWNERS REPRESENTATIVE.
20. CONTRACTOR SHALL FIELD VERIFY AND LOCATE DAMAGED IRRIGATION MAINLINE SECTIONS FOR REPLACEMENT IN LIKE KIND (INCLUDING CONTROLLER WIRE). ENSURE THAT PIPE TRANSITIONS FROM NEW PIPE TO EXISTING PIPE ARE INCLUDED AS PART OF THE PROJECT SPECIFIED AS-BUILT DRAWINGS.
21. REPLACE ANY AND ALL DAMAGED VALVE BOXES AND/OR VALVE BOX LIDS IN LIKE KIND WITHIN THE LIMITS OF WORK.
22. CONTRACTOR SHALL ADJUST SYSTEM LAYOUT AS NECESSARY TO ENSURE MAINLINE, LATERALS AND HEADS ARE 10' AWAY FROM EXISTING AND PROPOSED TREE (TRUNK) LOCATIONS. ENSURE ANY ADJUSTMENTS TO HEAD LAYOUT DOES NOT IMPACT HEAD-TO-HEAD COVERAGE/100% COVERAGE. AS-BUILT ANY FIELD ADJUSTMENTS TO EQUIPMENT LOCATIONS.



EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
CHASTE TREE	2.0 GPH	MULTI-OUTLET	6	12.0 GPH
MEXICAN BIRD OF PARADISE	1.0 GPH	MULTI-OUTLET	6	6.0 GPH
SHRUBS/ACCENTS				
BURSAGE	0.6 GPH	MULTI-OUTLET	1	0.6 GPH
FAIRY DUSTER	0.6 GPH	MULTI-OUTLET	1	0.6 GPH
BRITTLEBUSH	0.6 GPH	MULTI-OUTLET	1	0.6 GPH
EMU BUSH	0.6 GPH	MULTI-OUTLET	2	1.2 GPH
LANTANA	0.6 GPH	MULTI-OUTLET	2	1.2 GPH
YELLOW BELLS	0.6 GPH	MULTI-OUTLET	3	3.6 GPH
RED HESPERALOE	0.6 GPH	MULTI-OUTLET	1	0.6 GPH

- EMITTER NOTES
1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

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ENGINEER: N/A  
APPROVED BY: JM

ACTIVITY: PROJ. NO.: CP0886

CITY OF MESA  
ENGINEERING DEPARTMENT

CENTRAL MESA REUSE PIPELINE-PLANTS  
INTERMEDIATE PUMP STATION

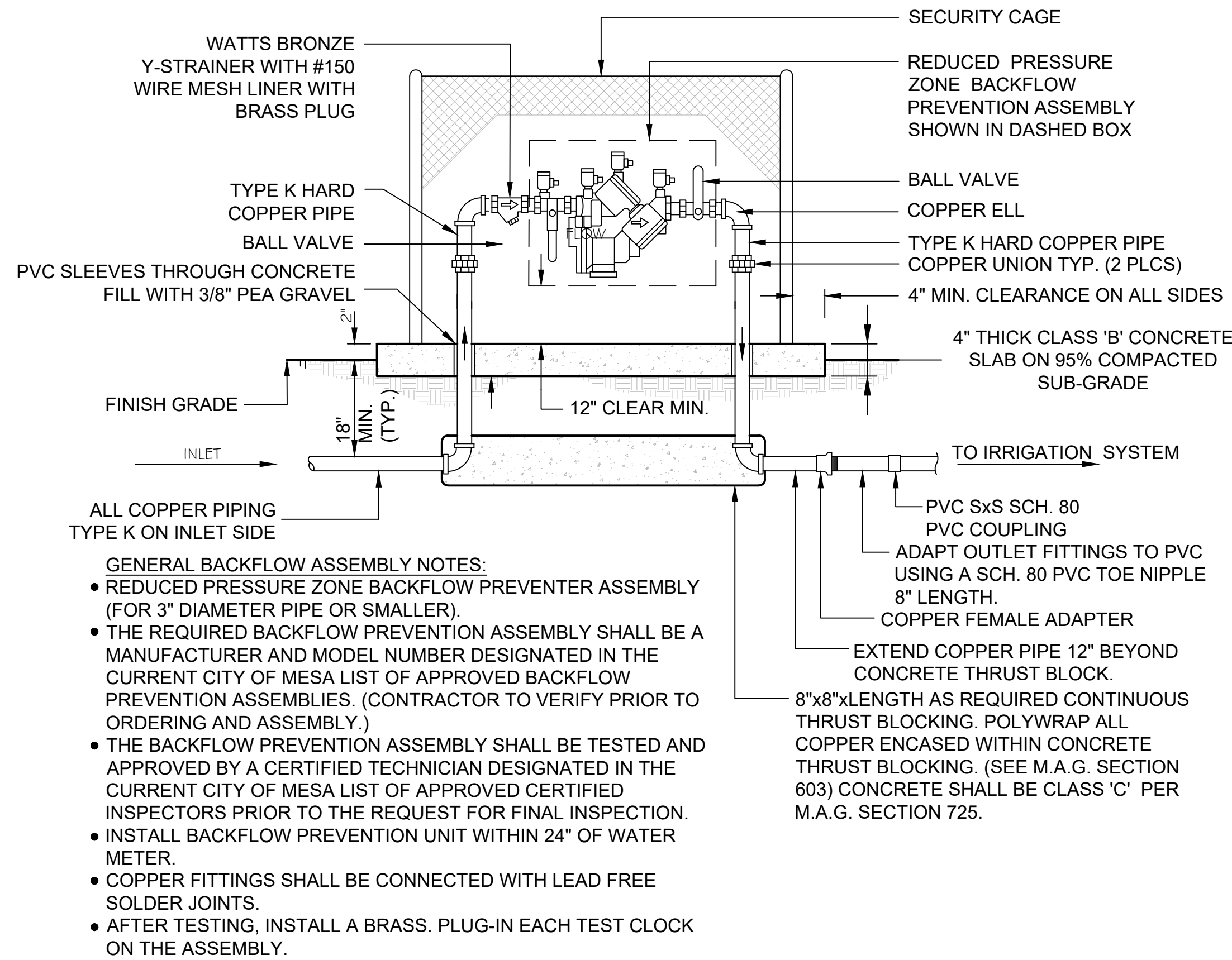
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PLAN

SHEET  
OF

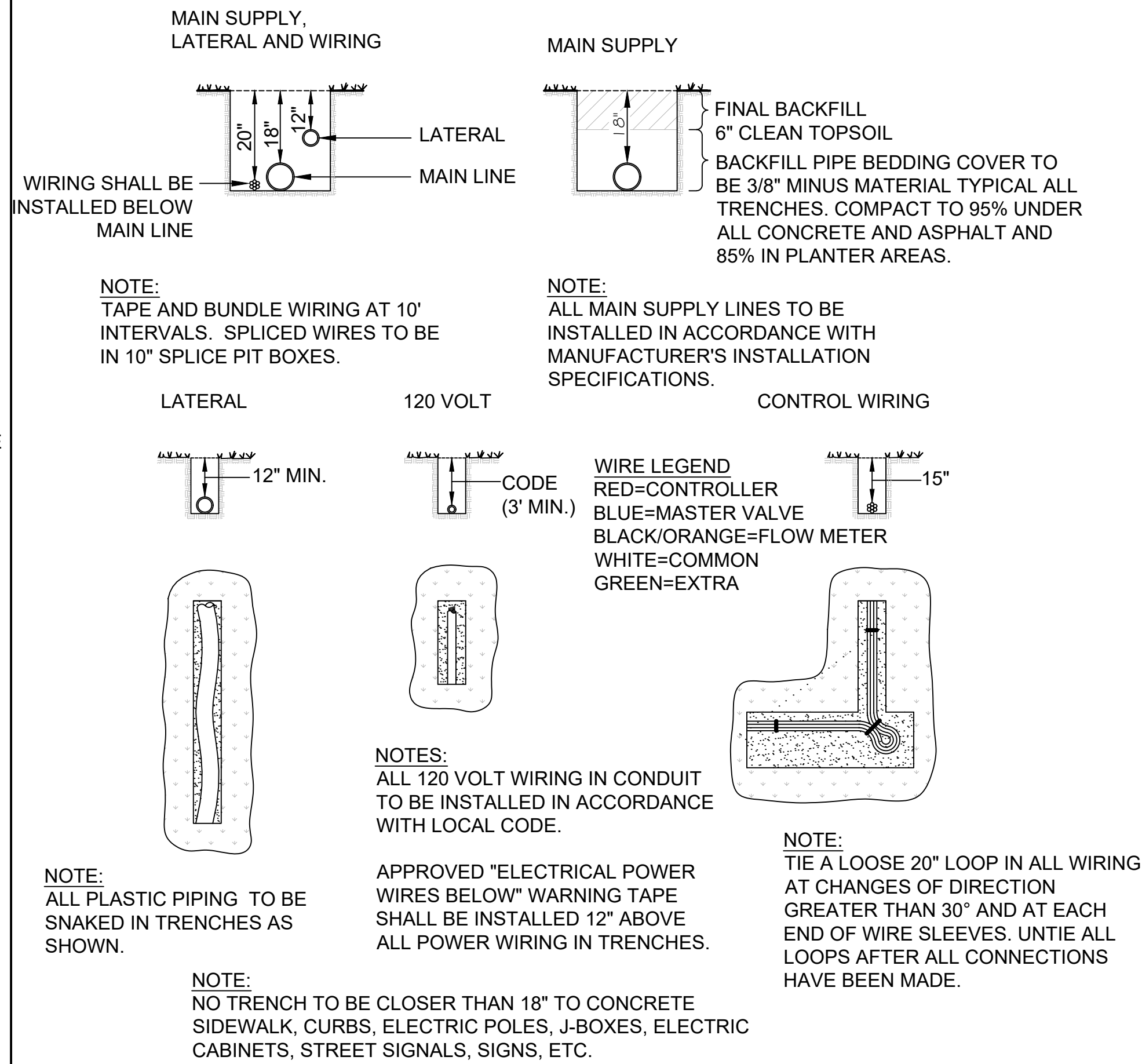
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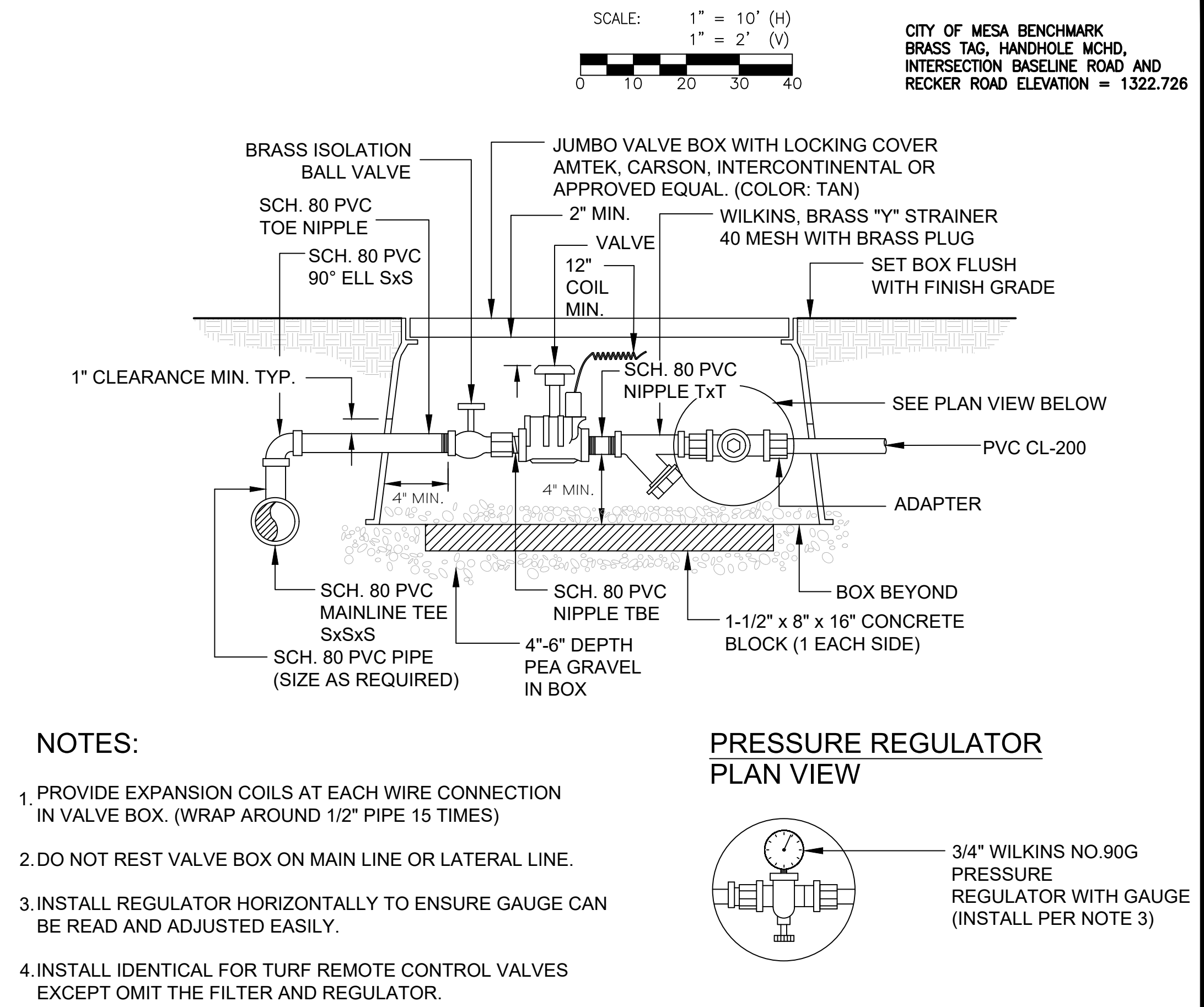
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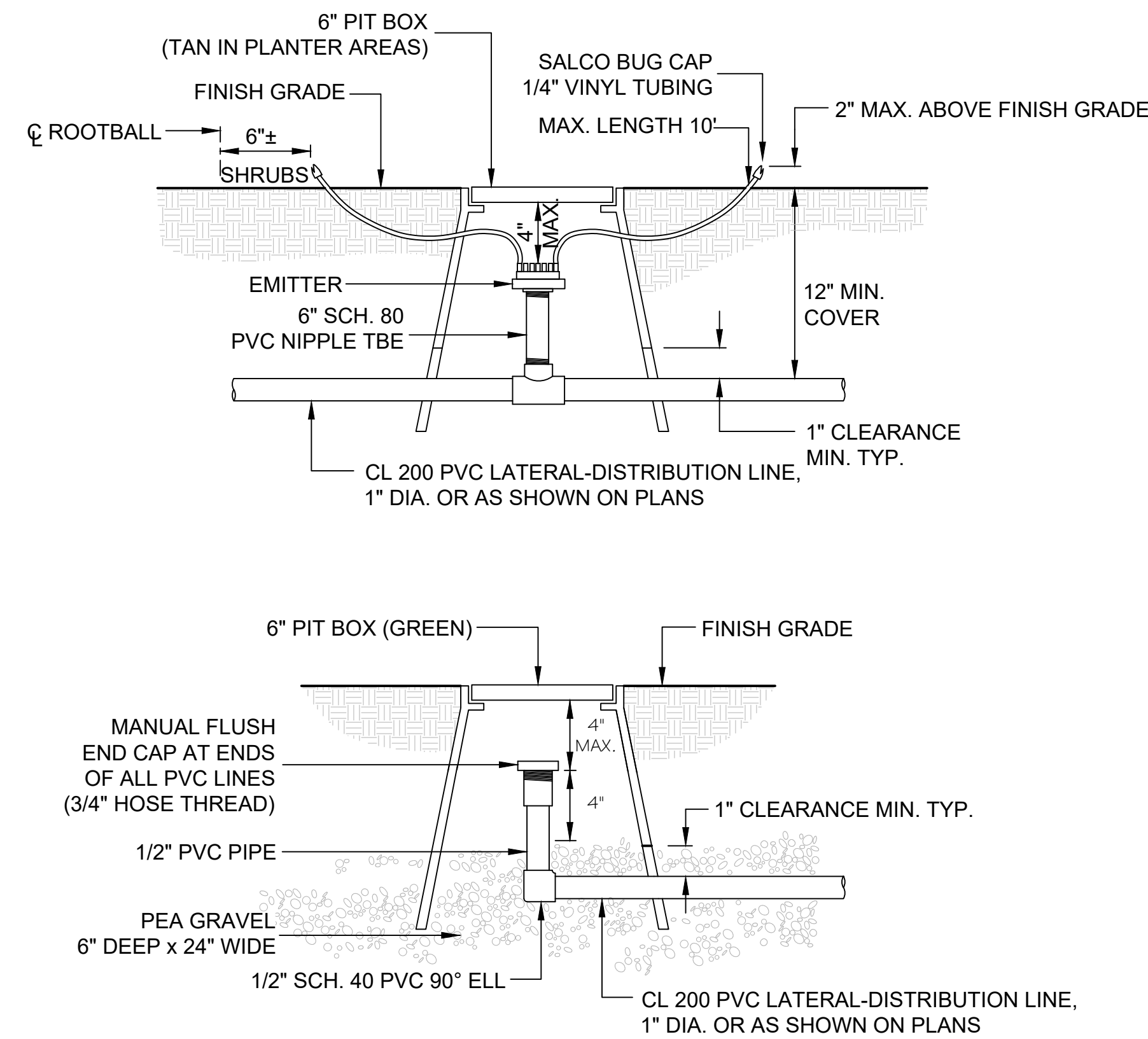
1 REDUCED PRESSURE ZONE BACKFLOW PREVENTION UNIT  
SCALE: N.T.S.



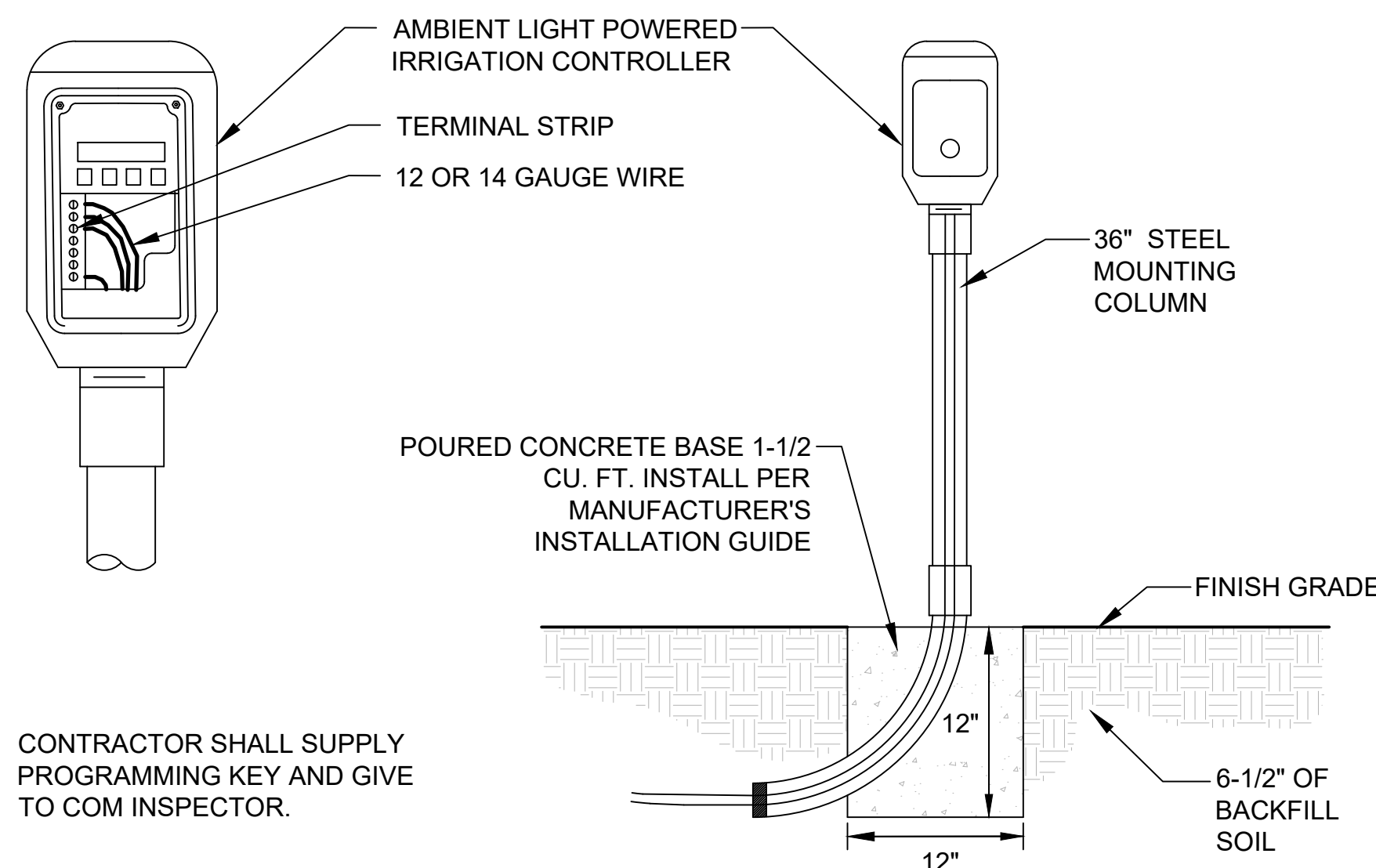
2 TYPICAL TRENCHING DETAIL  
SCALE: N.T.S.



3 DRIP SYSTEM REMOTE CONTROL VALVE ASSEMBLY  
SCALE: N.T.S.



4 DRIP SYSTEM-EMITTER DETAIL AND FLUSH CAP ASSEMBLY  
SCALE: N.T.S.



5 SOLAR IRRIGATION CONTROLLER  
SCALE: N.T.S.



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INTERMEDIATE PUMP STATION

LANDSCAPE

IRRIGATION  
DETAILS

L-00-005

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