

IRRIGATION GENERAL NOTES

- THE HAYMEADOW METROPOLITAN DISTRICT WILL OWN AND OPERATE THE RAW WATER IRRIGATION SYSTEM SERVING THE DEVELOPMENT.
- THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE IMPROVEMENTS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH THE GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE FOR SUCCESSFUL COMPLETION OF THIS WORK.
- ALL IRRIGATION EQUIPMENT IS TO BE AS SPECIFIED OR APPROVED EQUAL PER THE DISCRETION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR ASSUMES ALL LIABILITY ASSOCIATED WITH THE MODIFICATION OF THE IRRIGATION SYSTEM DESIGN WITHOUT NOTIFYING THE OWNER'S REPRESENTATIVE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A THOROUGH SITE INSPECTION AND REVIEW OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LANDSCAPE PLAN, UTILITY PLAN, CIVIL UTILITY PLAN, ARCHITECTURE PLAN, GRADING AND DRAINAGE PLAN AND ALL OTHER ASSOCIATED PLANS AND SPECIFICATIONS THAT AFFECT THIS WORK PRIOR TO START OF WORK. IF THE AND CONTRACTOR OBSERVES ANY DISCREPANCIES AMONG THE CONSTRUCTION DOCUMENTS AND THE EXISTING CONDITIONS ON SITE, IT IS THEIR RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. IF THE CONTRACTOR FAILS TO DO SO AND DAMAGES ANY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY REPAIR WORK ASSOCIATED WITH SAID DAMAGES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN ALL IRRIGATION DISTRIBUTION LINES AND ALL UTILITIES (EXISTING OR PROPOSED), CONDUIT, STORM WATER COMPONENTS, DRAINS, ETC.
- THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE REGULATIONS AND INSTALL THE IRRIGATION SYSTEM AND ITS COMPONENTS PER MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS REQUIRED BY ANY LOCAL AND STATE AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
- IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN LANDSCAPE AREAS AND WITHIN THE PROJECT LIMITS. EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN FOR GRAPHIC CLARITY ONLY. IF THERE IS A QUESTION REGARDING THE LOCATION OF ANY COMPONENT OF THE IRRIGATION SYSTEM, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR NEGLECTS TO NOTIFY THE NECESSARY PARTIES, THE CONTRACTOR SHALL PAY FOR ANY REPLACEMENT OR MODIFICATION TO ENSURE PROPER LOCATION AND OPERATION OF THE IRRIGATION SYSTEM AND ITS COMPONENTS.
- ALL IRRIGATION DISTRIBUTION LINES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO, MAINLINE, LATERALS, SPRAY HEADS, DRIP EMITTERS SHALL BE KEPT A MINIMUM DISTANCE OF 6' AWAY FROM ALL BUILDING AND WALL FOUNDATIONS, OR AS STIPULATED IN THE GEOTECHNICAL REPORT , WHICHEVER IS GREATER. EQUIPMENT MAY BE SHOWN IN THIS AREA FOR GRAPHIC CLARITY. COORDINATE ALL REQUIRED SETBACKS WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.
- EACH VALVE SHALL BE INSTALLED IN A SEPARATE VALVE BOX AS DETAILED. ALL VALVE BOXES AND LIDS SHALL BE COMMERCIAL GRADE, PLASTIC WITH SELF LOCKING COVERS. LID COLOR TO BE PURPLE. INSTALL FLUSH TO FINISH GRADE AND PER CONSTRUCTION DETAILS. DO NOT INSTALL IN PAVED AREAS OR IN BOTTOMS OF DRAINAGE SWALES/BASINS.
- CONTRACTOR SHALL INSTALL DETECTABLE MARKING TAPE OR #14g DIRECT BURY TRACER WIRE IN ALL PRESSURE MAINLINE TRENCHES. SEE IRRIGATION DETAILS FOR MORE INFORMATION.
- PLANT MATERIAL LOCATIONS TAKE PRECEDENCE OVER ROUTING OF IRRIGATION PIPING. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
- THE CONTRACTOR SHALL MARK THE LOCATION OF THE MAINLINE, CONTROL VALVES, GATE VALVES AND HEAD LAYOUT OF A REPRESENTATIVE SPRAY ZONE. SCHEDULE A REVIEW WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- INSTALL SCH. 40 BALL WITH OPERATIONAL INDICATOR AT ENDS OF ALL DRIP LATERALS AS DETAILED. FLUSH ALL LATERALS THOROUGHLY BEFORE INSTALLING EMITTERS AND BUBBLERS.
- CONTRACTOR SHALL FINE TUNE AND ADJUST NOZZLE DIRECTION AND RADIUS TO REDUCE OVERSPRAY ONTO PAVING OR HARD SURFACES.
- CONTRACTOR SHALL INSTALL A QUICK COUPLER IN 10" VALVE BOX AT THE END OF ALL BRANCHES OF THE MAINLINE, OR AS SHOWN ON PLANS, FOR WINTERIZATION AND FLUSHING OF MAINLINE.
- THE CONTRACTOR SHALL PERFORM A PRESSURE TEST ON ALL MAINLINES. CONTRACTOR SHALL PRESSURIZE MAINLINES TO 120 PSI AND MAINTAIN PRESSURE AT 120 PSI FOR A MINIMUM CONTINUOUS PERIOD OF TWO (2) HOURS TO ACHIEVE FINAL ACCEPTANCE.
- THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE DURING A THREE(3) NIGHT PER WEEK, SIXTEEN(16) HOURS PER NIGHT WATERING WINDOW. DRIP IRRIGATION ZONES MAY BE ALLOWED TO RUN ON A SEPARATE SCHEDULE FROM THIS WATER WINDOW DEPENDING JURISDICTION. LANDSCAPE ESTABLISHMENT WILL REQUIRE INCREASED IRRIGATION WATER FOR DURATION OF THE ESTABLISHMENT PERIOD AND MAY REQUIRE TWICE THE AMOUNT OF WATER AS ESTABLISHED PLANT MATERIAL. THE CONTRACTOR SHALL COORDINATE WATERING SCHEDULES AND APPLICATION RATES WITH THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE.
- THE DESIGN IS BASED ON THE FOLLOWING PROJECTED PEAK SEASON WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND VARIABLE WEATHER CONDITIONS.
 - FESCUE/BLUEGRASS BLEND TURF- 1.75" PER WEEK PEAK SEASON
 - TREE, SHRUB, AND PERENNIAL PLANT MATERIAL- 1.00" PER WEEK PEAK SEASON
 - NATIVE DROUGHT TOLERANT SEED MIX- 0.75" PER WEEK PEAK SEASON
- THE CONTRACTOR SHALL PROVIDE A SEASONAL MAINTENANCE SCHEDULE WHICH SHALL BEGIN ON MAY 1ST AND END ON OCTOBER 1ST TO ENSURE THE EFFICIENCY AND LONGEVITY OF THE IRRIGATION SYSTEM. THE MAINTENANCE SCHEDULE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING LIST OF BEST MANAGEMENT PRACTICES:
 - CHECK HEADS FOR COVERAGE AND LEAKAGE.
 - CHECK CONTROLLER PROGRAMMING AND ADJUST FOR SEASONAL CHANGES AS NECESSARY.
 - VERIFY THAT THE WATER SUPPLY AND PRESSURE ARE AS STATED IN THE DESIGN.
 - CERTIFY THE BACKFLOW PREVENTION DEVICE AND SUBMIT TEST RESULTS TO THE PROPERTY MANAGER.
 - PERIODICALLY VERIFY THE THE SENSORS IN THE IRRIGATION SYSTEM ARE OPERATING CORRECTLY.
 - WINTERIZATION AND SPRING START UP PROCEDURES.

IRRIGATION POINT OF CONNECTION NOTES

- POINT OF CONNECTION: THERE IS ONE (1) POINT OF CONNECTION ON THIS PROJECT.
POC #1 : 2' DEDICATED IRRIGATION WATER METER LOCATED AT SOUTHWEST CORNER OF RMF 4-5.
 - CONTRACTOR IS TO LOCATE AND CONNECT DOWNSTREAM OF THE DEDICATED NON-POTABLE IRRIGATION POINT OF CONNECTION (PROVIDED BY OTHERS) WITH CLASS 200 PVC AT A DEPTH OF 24" OR PER LOCAL CODE, WHICHEVER IS GREATER. EXTEND PVC PIPING MINIMUM 30" HORIZONTAL FROM CONNECTION AND INSTALL ONE MANUAL DRAIN, TRANSITION TO AND EXTEND CLASS 200 PVC MAINLINE TO GATE VALVE, MASTER VALVE, FLOW SENSOR, 1" QUICK COUPLER, AND EXTEND MAINLINE TO VALVES AS SHOWN.
 - THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES, OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS ASSOCIATED WITH THIS WORK.
- CONTROLLER LOCATION: THERE IS ONE (1) CONTROLLER ON THIS PROJECT.
CONTROLLER A : PEDESTAL MOUNTED CONTROLLER LOCATED AT SOUTHWEST CORNER OF RMF 4-5.
 - CONTROLLER SHALL BE PROGRAMMED TO RUN MULTIPLE VALVES AT ONE TIME WITH A MAXIMUM TOTAL OF 50 GPM .
 - CONTROLLER TO BE MOUNTED PER DETAILS AND MANUFACTURER'S SPECIFICATIONS.
 - CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE AND ELECTRICAL PLANS FOR POWER SERVICE. ALL ELECTRICAL EQUIPMENT AND POWER CONNECTION INSTALLATION SHALL CONFORM TO ALL LOCAL CODES. INSTALL A LINE VOLTAGE SURGE DEVICE (INTERMATIC AG2401C3/ OR SQUARE D SDSA1175) FOR 120V IN A JUNCTION BOX PRIOR TO CONTROLLER.
 - RAIN/FREEZE SENSOR: MOUNT THE RAIN SENSOR ON POLE IN PROXIMITY TO THE CONTROLLER. THE SENSOR SHALL BE MOUNTED IN A LOCATION IN FULL SUN AND OPEN TO RAINFALL. SENSOR SHALL BE NO MORE THAN 200' FROM WIRELESS RECEIVER. MOUNT WIRELESS RECEIVER ON OR ADJACENT TO THE IRRIGATION CONTROLLER.
- SYSTEM PRESSURE: THE SYSTEM HAS BEEN DESIGNED PER THE FOLLOWING SPECIFICATIONS: REQUIRED MINIMUM STATIC PRESSURE OF 75 PSI AND MAXIMUM SAFE VELOCITY OF 5 FPS IN ANY PVC PIPE AND 7.5 FPS IN ANY COPPER PIPE.
 - PER (WATER PURVEYOR/CITY WATER) THE STATIC PRESSURE ON SITE IS APPROXIMATELY TBD PSI.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESSURE IN THE FIELD AT THE POINT OF CONNECTION BEFORE CONSTRUCTION BEGINS AND FOR NOTIFYING THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DESIGN PRESSURE OF THE SYSTEM AND THE MEASURED PRESSURE IN THE FIELD. IF THE CONTRACTOR FAILS TO NOTIFY OWNER'S REPRESENTATIVE OF SUCH DISCREPANCIES, THEN THE CONTRACTOR ASSUMES ALL LIABILITY AND COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS TO ACCOMMODATE THE ACTUAL PRESSURE.
- FLOW SENSOR: SENSOR REQUIRES A MINIMUM FLOW FOR PROPER READINGS. MULTIPLE ZONES MAY BE REQUIRED TO RUN SIMULTANEOUSLY TO ACHIEVE THE MINIMUM FLOWS REQUIRED. CONTRACTOR TO SET 'K' VALUES PER MANUFACTURER.
 - FLOW SENSOR REQUIRES A MINIMUM FLOW OF 1 GPM.
- COMMUNICATION: IT IS RECOMMENDED THAT THE IRRIGATION CONTROLLER BE CONNECTED TO A WATER MANAGEMENT CONTROL SOFTWARE FOR OPTIMUM FUNCTION OF THE IRRIGATION SYSTEM. COORDINATE WITH OWNER'S REPRESENTATIVE AND CONTACT THE LOCAL CONTROLLER MANUFACTURER REPRESENTATIVE OR AUTHORIZED VENDOR PRIOR TO ORDERING CONTROLLER FOR COMMUNICATION AND CONNECTIVITY OPTIONS.

TWO WIRE NOTES

- GROUNDING FOR THE IRRIGATION CONTROLLER AND DECODERS ARE TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND PER THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS GUIDELINE 100-2002 FOR EARTH GROUNDING ELECTRONIC EQUIPMENT IN IRRIGATION SYSTEMS FOUND AT WWW.ASIC.ORG. FOR ADDITIONAL TECHNICAL SUPPORT REGARDING THE IRRIGATION CONTROLLER OR GROUNDING PLEASE CONTACT THE MANUFACTURER.
- DO NOT LOOP TWO WIRE PATH. STAR PATTERN FROM CONTROLLER FOR EACH BRANCH OF MAINLINE.
- CONTRACTOR IS RESPONSIBLE FOR GROUNDING THE TWO-WIRE PATH AT THE FOLLOWING LOCATIONS, BUT ARE NOT LIMITED TO:
 - CONTROLLER TO BE GROUNDED INDEPENDENTLY FROM BUILDING.
 - GROUND 1ST DECODER ON WIRE PATH FROM CONTROLLER.
 - GROUND EVERY 8TH DECODER OR EVERY 500 FEET BETWEEN DECODERS, WHICH EVER LENGTH IS SMALLER.
 - GROUND EVERY END OF WIRE PATH.
- THE TWO-WIRE CONTROLLER REQUIRES EACH CONTROL VALVE AND SENSOR TO HAVE A DECODER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE PROPER DECODERS, SURGE SUPPRESSION AND GROUNDING. THE RAIN SENSOR AND FLOW SENSOR REQUIRE A SENSOR DECODER.
- QTY OF STATIONS (VALVES) PER MANIFOLD REQUIRED DECODER
 - SINGLE STATION RAIN BIRD IVMSOL
 - FLOW SENSOR RAIN BIRD IVMSEN
- CONTROLLER TWO-WIRE PATH SHALL BE MANUFACTURER'S APPROVED WIRE OR APPROVED EQUAL.
- CONTRACTOR SHALL USE UL APPROVED WIRE STRIPPER AND WATERPROOF CONNECTIONS (DBRY-6 OR APPROVED EQUAL) AT ALL SPLICES AND CONNECTIONS POINTS.
- PROVIDE 30" MINIMUM TWO WIRE PATH IN EACH VALVE BOX FOR MAINTENANCE.
- CONTRACTOR SHALL INCLUDE TWO-WIRE RUN PATHS ON AS-BUILT DRAWINGS.

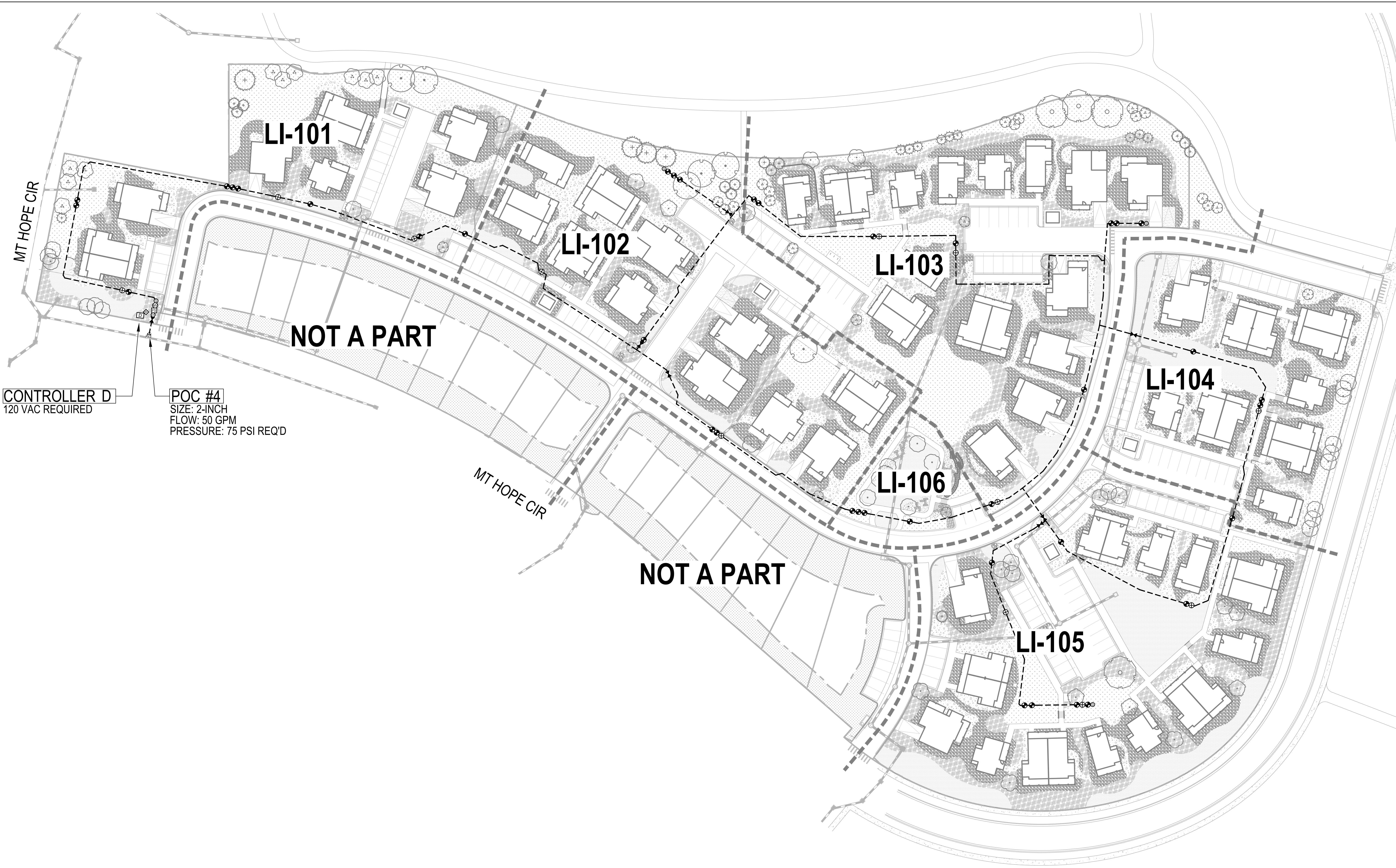
SLEEVING COORDINATION NOTES

- INSTALLATION OF IRRIGATION SLEEVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR LOCATION AND SIZING OF SLEEVES PRIOR TO THE START OF CONSTRUCTION.
- SLEEVES SHALL BE INSTALLED PRIOR TO THE START OF PAVING OPERATIONS.
- THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIRES AND COMMUNICATION WIRES UNDER ALL PAVED SURFACES, WALL FOOTERS, DRAINAGE CHANNELS, INLETS, CATCH BASINS, ETC.
- ALL SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND EDGE OF ALL OBSTRUCTIONS. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER ANY OBSTRUCTIONS.
- EACH PIPE SHALL BE IN A SEPARATE SLEEVE. WIRES SHALL BE IN A SEPARATE PIPE UNDER ALL PAVED SURFACES.
- SLEEVING SHALL BE INSTALLED PER THE SIZES AND QUANTITIES SHOWN ON THE PLANS BASED ON THE CHART BELOW.

PIPING	REQUIRED SLEEVE SIZE
MAINLINE PIPING	4" CLASS 200 PVC
LATERAL PIPING	2X NOMINAL DIAMETER OF LATERAL
CONTROL WIRES	2" CLASS 200 PVC (2.5" 45 WIRES +)

IRRIGATION SCHEDULE						
SYMBOL		DESCRIPTION	MODEL NO. DESCRIPTION		DETAIL # AND SHEET	
		IRRIGATION CONTROLLER	RAIN BIRD ESPLXIVMP W/ IQ-NCC-4G COMMUNICATION MODULE, LXMM ENCLOSURE, & LXMMPED PEDESTAL 120VAC POWER REQUIRED - SEE PLANS FOR LOCATION(S)		1 LI501	
		RAIN SENSOR	RAIN BIRD WR2-RFC REFER TO CONTROLLER NOTES		2 LI501	
		AIR & VACUUM RELIEF VALVE	CRISPIN AL SERIES INSTALLED VERTICAL IN AEP 1015-1G2G VALVE BOX WITH PURPLE LID		NA NA	
		MANUAL DRAIN VALVE	MATCO-NORCA 3/4" 201X INSTALLED IN AEP 910L-1G2G VALVE BOX WITH PURPLE LID		3 LI501	
		MASTER VALVE	RAIN BIRD IVM-200-EFB SERIES WITH SCH 40 BALL VALVE AND PREINSTALLED IVM SOLENOID DECODER, INSTALLED IN AEP 1015-1G2G VALVE BOX PURPLE LID		4 LI501	
		FLOW SENSOR	RAIN BIRD UFS-200 WITH IVM-SEN SENSOR DECODER, INSTALLED IN AEP 1015-1G2G VALVE BOX WITH PURPLE LID		5 LI501	
		ISOLATION GATE VALVE	MATCO-NORCA 10RS MATCH LINE SIZE, INSTALLED IN AEP 910L-1G2G VALVE BOX WITH PURPLE LID		6 LI501	
		QUICK COUPLER	RAIN BIRD 44-NP INSTALLED IN AEP 910L-1G2G VALVE BOX WITH PURPLE LID		7 LI501	
		TURF VALVE ASSEMBLY	RAIN BIRD PESB-R SERIES WITH SCH 40 BALL VALVE AND PREINSTALLED IVM SOLENOID DECODER, INSTALLED IN AEP 1015-1G2G VALVE BOX WITH PURPLE LID, SIZED PER PLAN		1 LI502	
		DRIP VALVE ASSEMBLY	RAIN BIRD XCZ-100-PRBR WITH SCH 40 BALL VALVE, AND PREINSTALLED IVM SOLENOID DECODER, INSTALLED IN AEP 1320-1G2G VALVE BOX WITH PURPLE LID, SIZED PER PLAN		2 LI502	
		GROUNDING / LINE SURGE SUPPRESSION	COPPER-CLAD GROUNDING ROD OR GROUNDING PLATE WITH WATERPROOF WIRE CONNECTORS AND IVM-SD SURGE ARRESTING DECODER, INSTALLED IN AEP 910L-1G2G VALVE BOX WITH PURPLE LID.		3 LI502	
		TURF ROTARY	RAIN BIRD RD06-S-P45-NP WITH R-VAN SERIES NOZZLE NOZZLE PER PLAN		4 LI502	
		TURF SPRAY	RAINBIRD RD06-S-P30-NP WITH U-SERIES NOZZLE 6" POP-UP RISER WITH 30 PSI PRESSURE REGULATED BODY AND BUILT-IN CHECK VALVE ON 1/2" FLEXIBLE SWING JOINT. NOZZLE PER PLAN, REFER TO MANUFACTURERS SPECIFICATIONS.		4 LI502	
		NATIVE ROTOR	HUNTER I-20-12-R WITH STANDARD (BLUE) NOZZLE NOZZLE PER PLAN		6 LI502	
		NATIVE SEED ROTARY	RAIN BIRD RD12-S-P45-NP WITH R-VAN SERIES NOZZLE NOZZLE PER PLAN		5 LI502	
		TREES IN NATIVE	HUNTER RD12-S-P30-NP WITH PCN-50 BUBBLER (2) BUBBLER ASSEMBLIES PER TREE TWO		7 LI502	
		SLEEVING	CLASS 200 PVC REFER TO SLEEVING NOTES		8 LI501	
		PVC MAINLINE	CLASS 200 PVC BE - PURPLE SIZE: 2" UNLESS OTHERWISE NOTED		9 LI501	
		PVC TURF LATERAL	CLASS 200 PVC BE - PURPLE SIZE: 1" MINIMUM UNLESS OTHERWISE NOTED		9 LI501	
		PVC TREE LATERAL	CLASS 200 PVC - PURPLE SIZE: 1" UNLESS OTHERWISE NOTED		9 LI501	
		DRIP LATERAL	UV RESISTANT POLYETHYLENE - PURPLE STRIPE SIZE: 3/4" MINIMUM UNLESS OTHERWISE NOTED		1-3 LI503	
		DRIP FLUSH VALVE & INDICATOR	SCH 40 BALL VALVE WITH HUNTER ECO-ID-12-R OPERATIONAL INDICATOR INSTALLED IN AEP 910L-1G2G VALVE BOX		4 LI503	
VALVE CALLOUT			EMITTER SCHEDULE			
<p>VALVE/STATION NUMBER ZONE DESIGNATION: T (TREES), S (SHRUBS), G (TURF), N (NATIVE), X (MISC) VALVE FLOW: (GPM) VALVE SIZE</p>			PLANT TYPE	EMITTER	QTY.	TOTAL GPH
			PERENNIAL / GRASSES	0.5 GPH	TWO EACH	1.0 GPH
			DECIDUOUS SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
			EVERGREEN SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
			DECIDUOUS TREE	1.0 GPH	EIGHT EACH	8.0 GPH
			EVERGREEN TREE	1.0 GPH	EIGHT EACH	8.0 GPH
			TREES IN NATIVE	ROOT ZONE WATERING / TREE RING ASSEMBLY		
			SPADE TREE	2.0 GPH	TEN EACH	20.0 GPH
			EMITTER NOTES			
1. ALL PLANT MATERIAL SHALL BE IRRIGATED WITH RAIN BIRD XB SERIES PRESSURE COMPENSATING EMITTERS.						
2. EMITTER SCHEDULE IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL ADJUST EMITTER AND NUMBER OF EMITTERS BASED ON THE NEEDS OF INDIVIDUAL PLANTS OR PLANT HYDROZONES.						
3. 1/4" DISTRIBUTION TUBING NOT TO EXCEED 8' IN LENGTH.						
4. RAIN BIRD DBC-025 DIFFUSER BUG CAP AND TS-025 STAKE ON ALL 1/4" DISTRIBUTION TUBING EMISSION POINTS.						
5. REFER TO DRIP IRRIGATION DETAILS 1-3, SHEET LI-503						





CONTROLLER D
120 VAC REQUIRED

POC #4
SIZE: 2-INCH
FLOW: 50 GPM
PRESSURE: 75 PSI REQ'D

MT HOPE CIR

NOT A PART

LI-101

LI-102

LI-103

LI-104

LI-106

LI-105

NOT A PART

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

OWNER:
ABRIKA PROPERTIES, LLC
8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

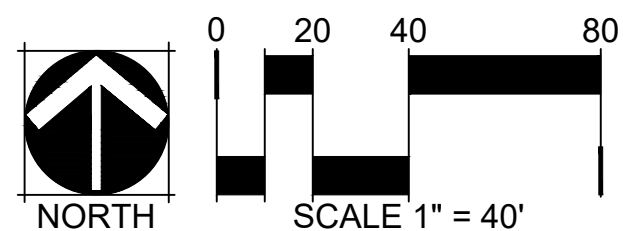
NOT FOR
CONSTRUCTION

DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

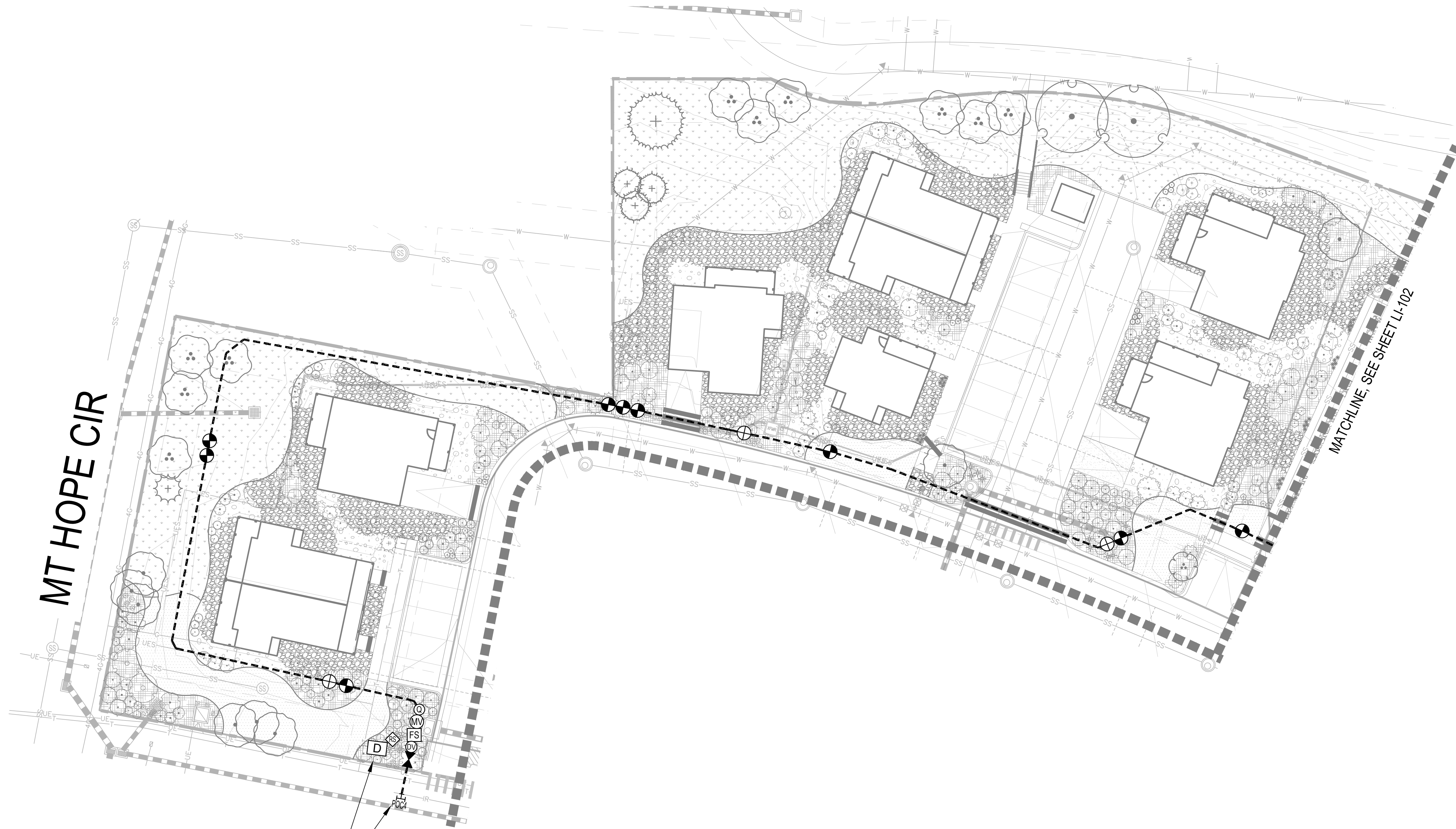
SHEET TITLE:
IRRIGATION
OVERALL

LI-100

CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP



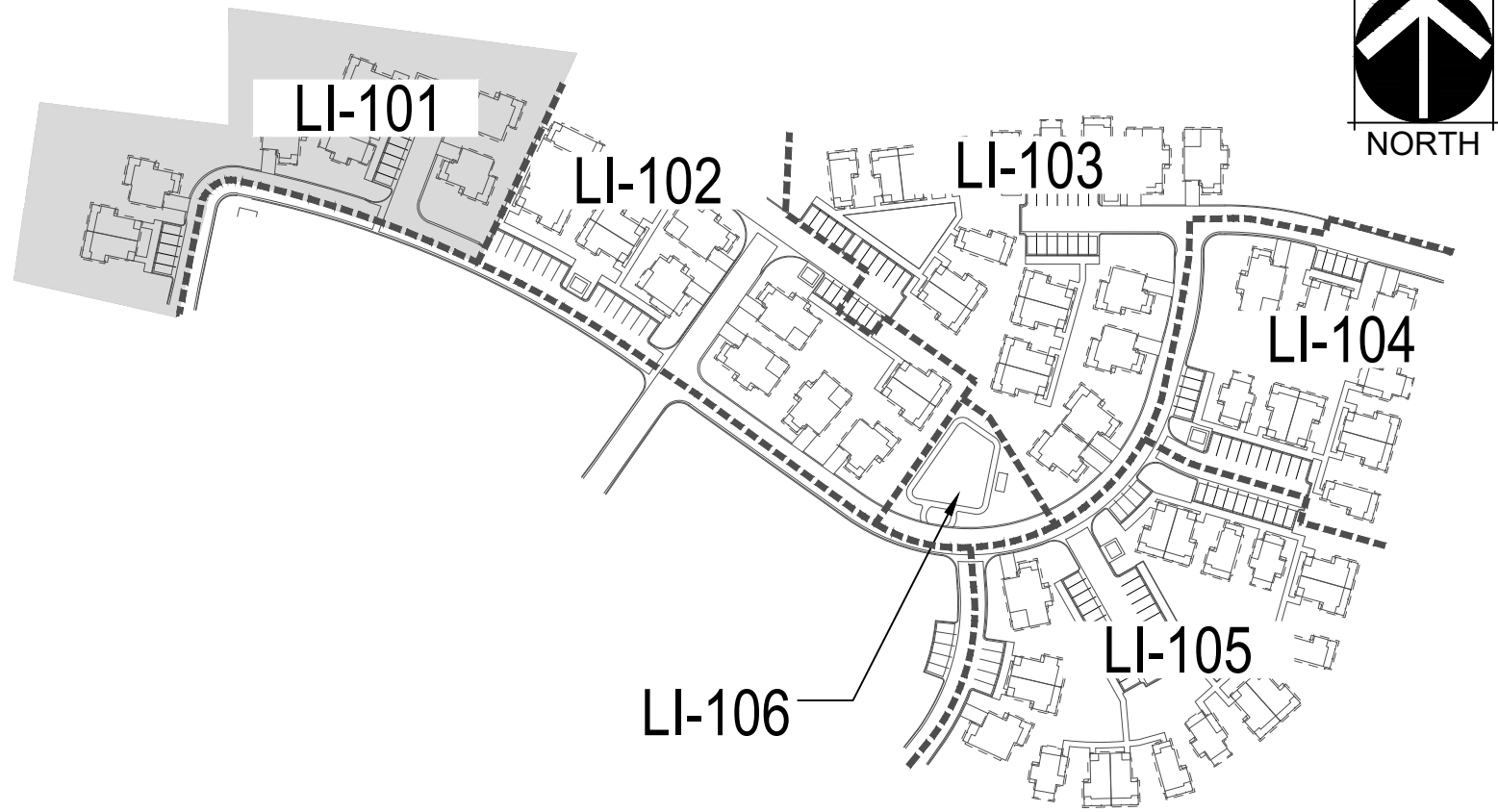
CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP



CONTROLLER D
120 VAC REQUIRED

POC #4
SIZE: 2-INCH
FLOW: 50 GPM
PRESSURE: 75 PSI REQ'D

KEY MAP



N.T.S.
NORTH

**NORRIS
DESIGN**
PEOPLE + PLACEMAKING

409 MAIN STREET
SUITE 207
P.O. BOX 2320
FRISCO, CO 80443
P 970.368.7068
NORRIS-DESIGN.COM

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

OWNER:
ABRIKA PROPERTIES, LLC

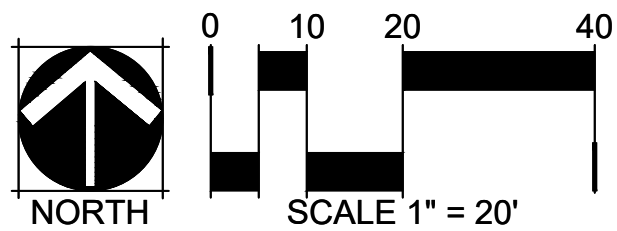
8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

NOT FOR
CONSTRUCTION

DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

SHEET TITLE:
IRRIGATION
PLAN

LI-101

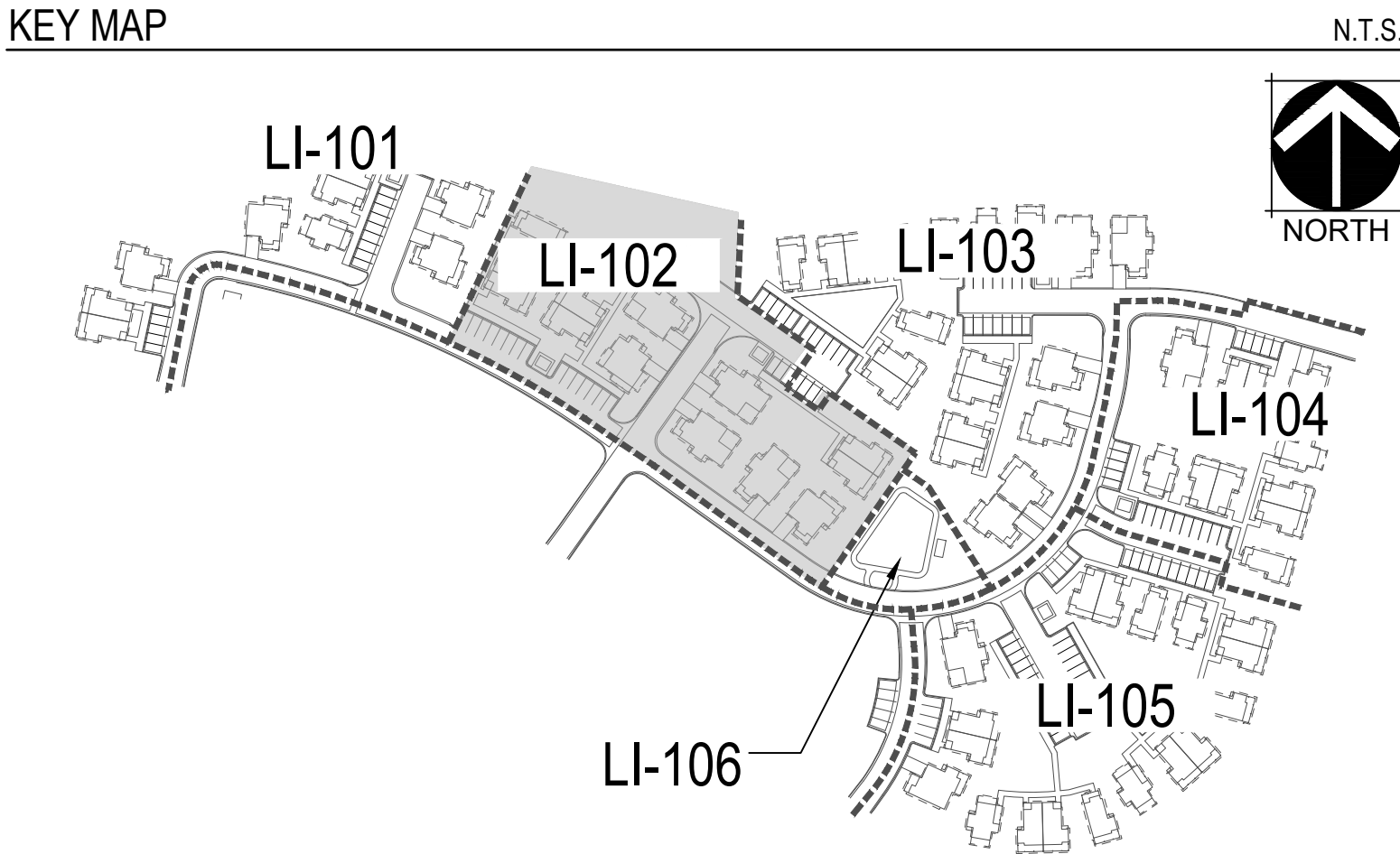
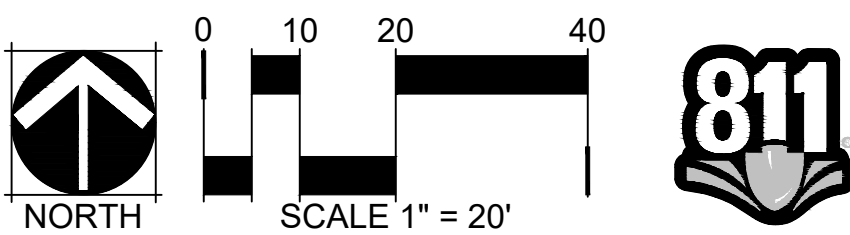


CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP



IRRIGATION KEY NOTES

① IRRIGATION EQUIPMENT IS SHOWN HERE FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING AREAS.



**NORRIS
DESIGN**
PEOPLE + PLACEMAKING

409 MAIN STREET
SUITE 207
P.O. BOX 2320
FRISCO, CO 80443
P 970.368.7068

NORRIS-DESIGN.COM

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

OWNER:
ABRIKA PROPERTIES, LLC

8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

NOT FOR
CONSTRUCTION

DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

SHEET TITLE:
IRRIGATION
PLAN

LI-102

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

OWNER:
ABRIKA PROPERTIES, LLC
8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

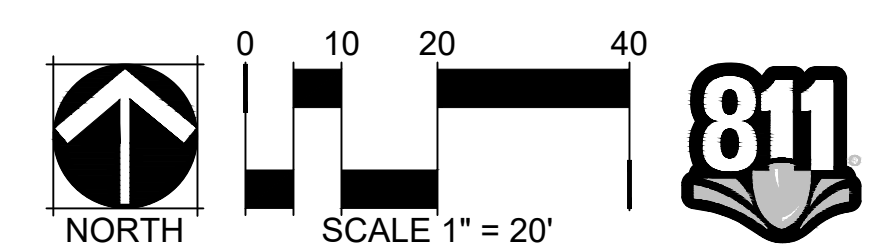
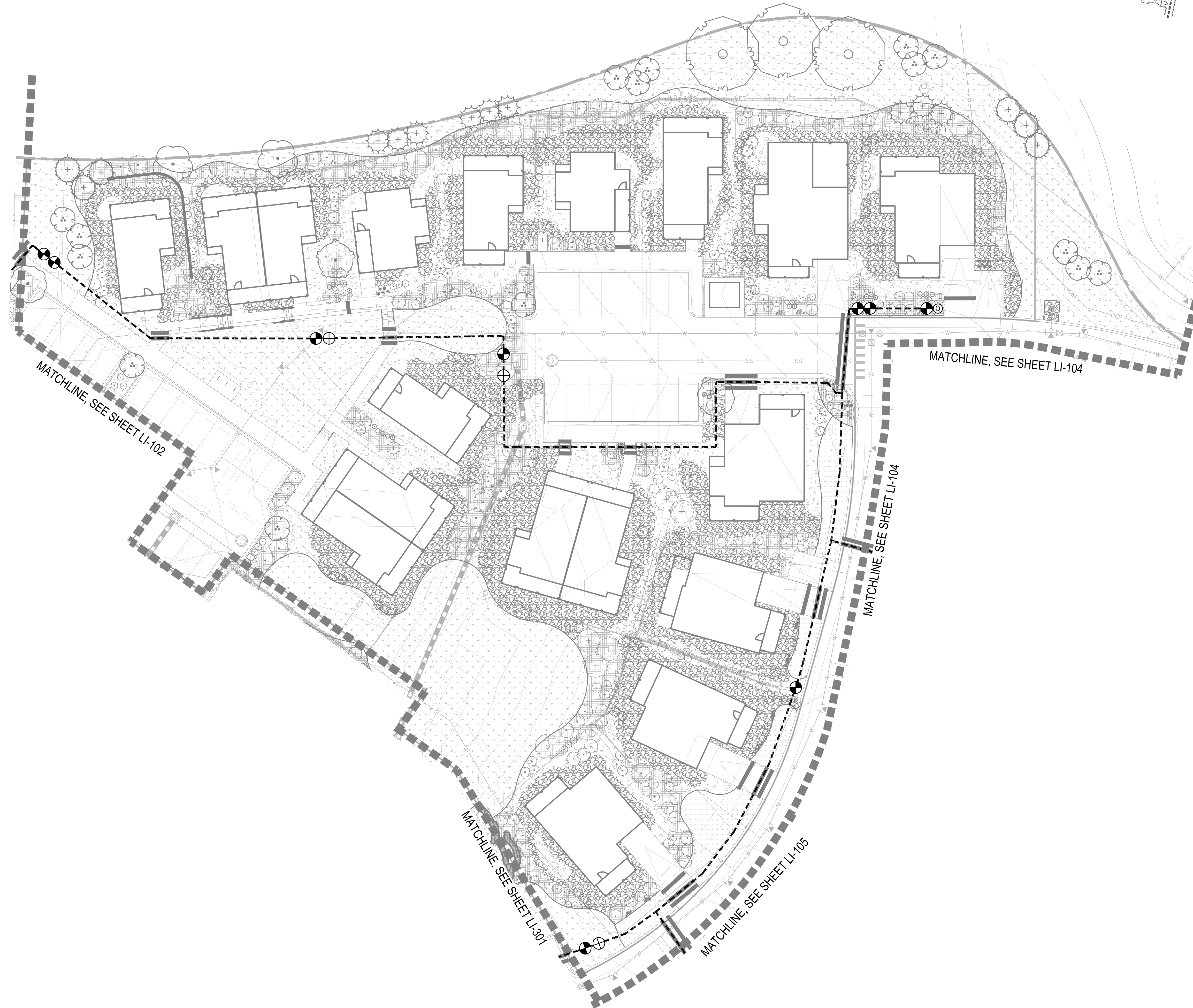
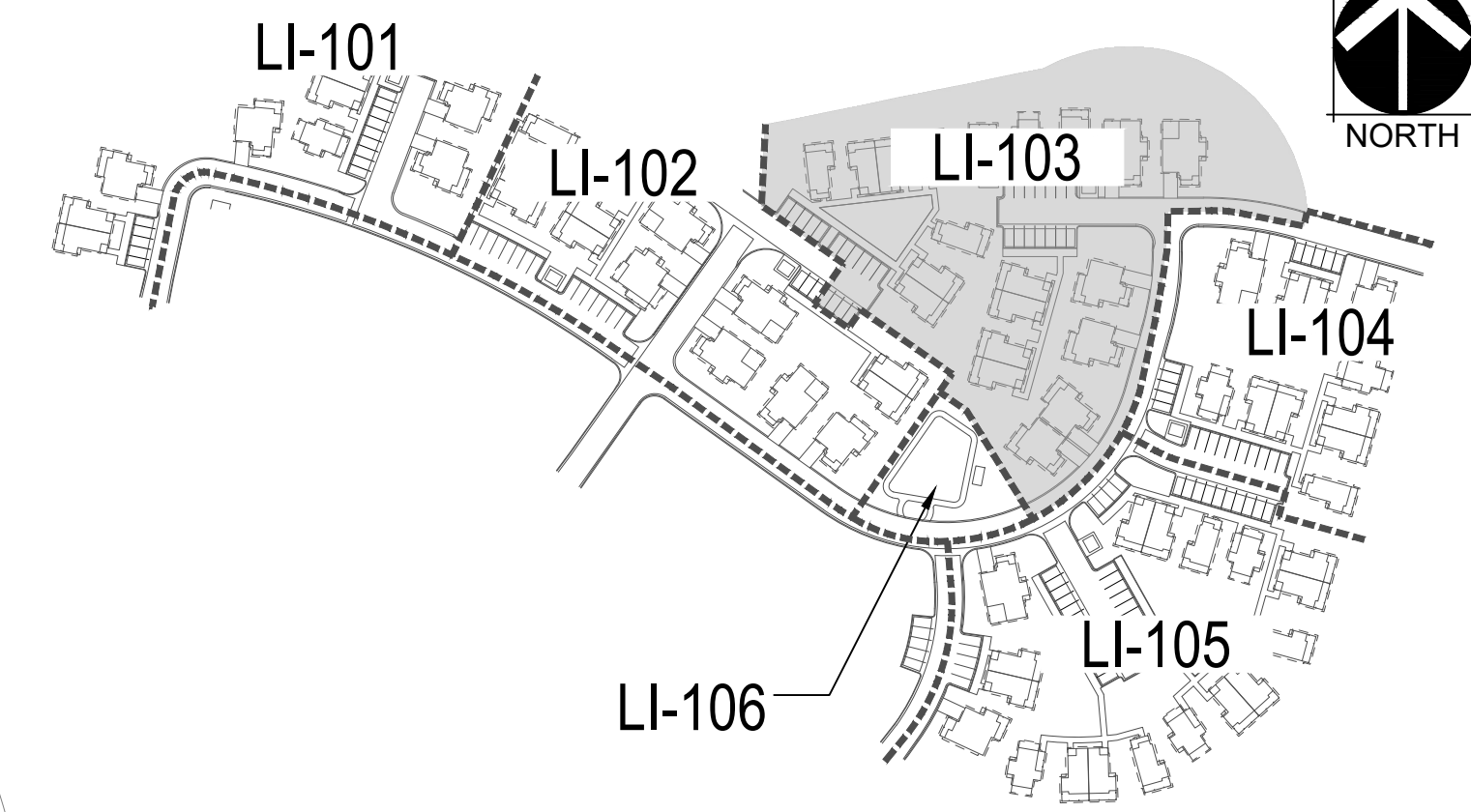
NOT FOR
CONSTRUCTION

DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

SHEET TITLE:
IRRIGATION
PLAN

LI-103

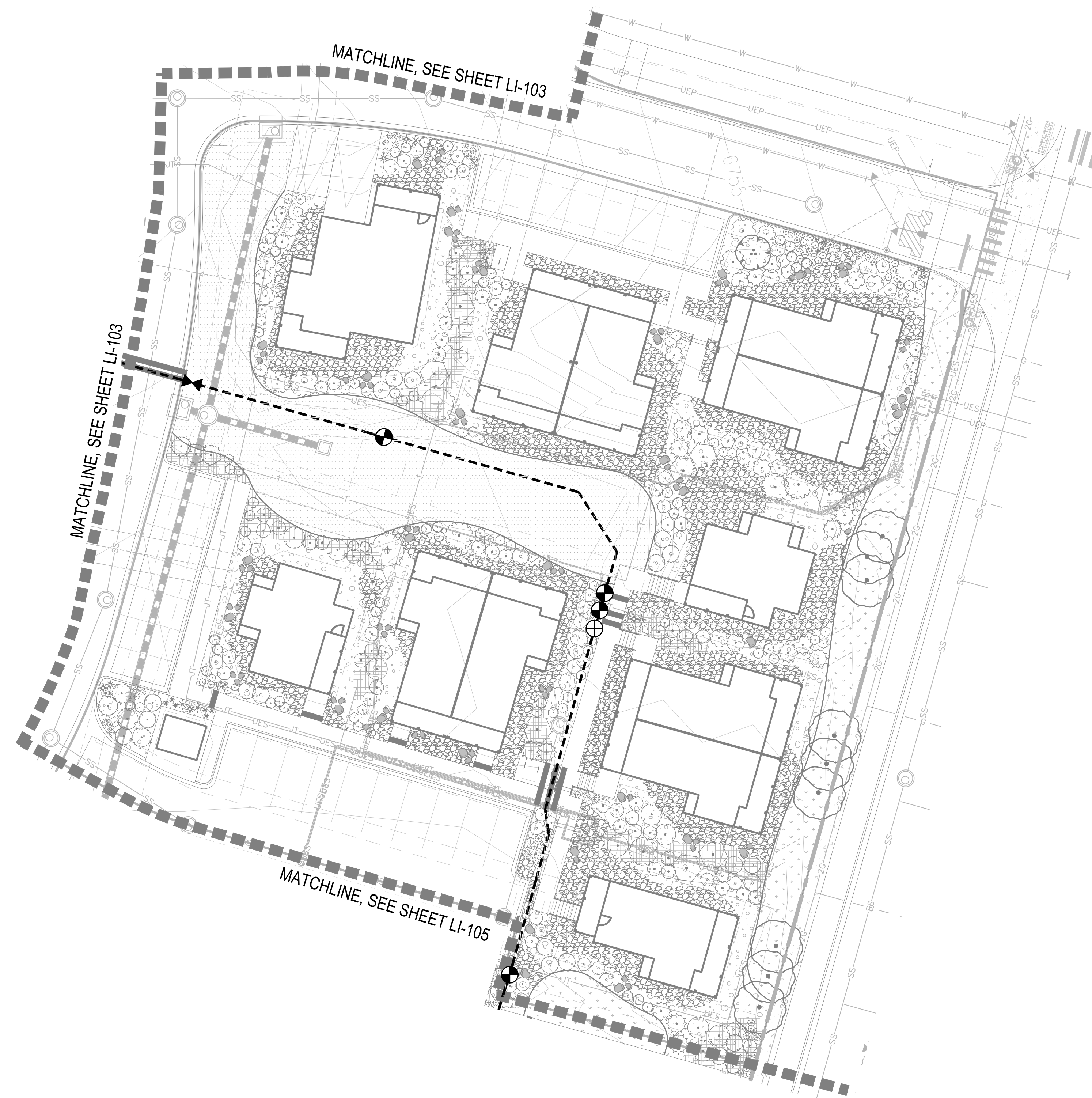
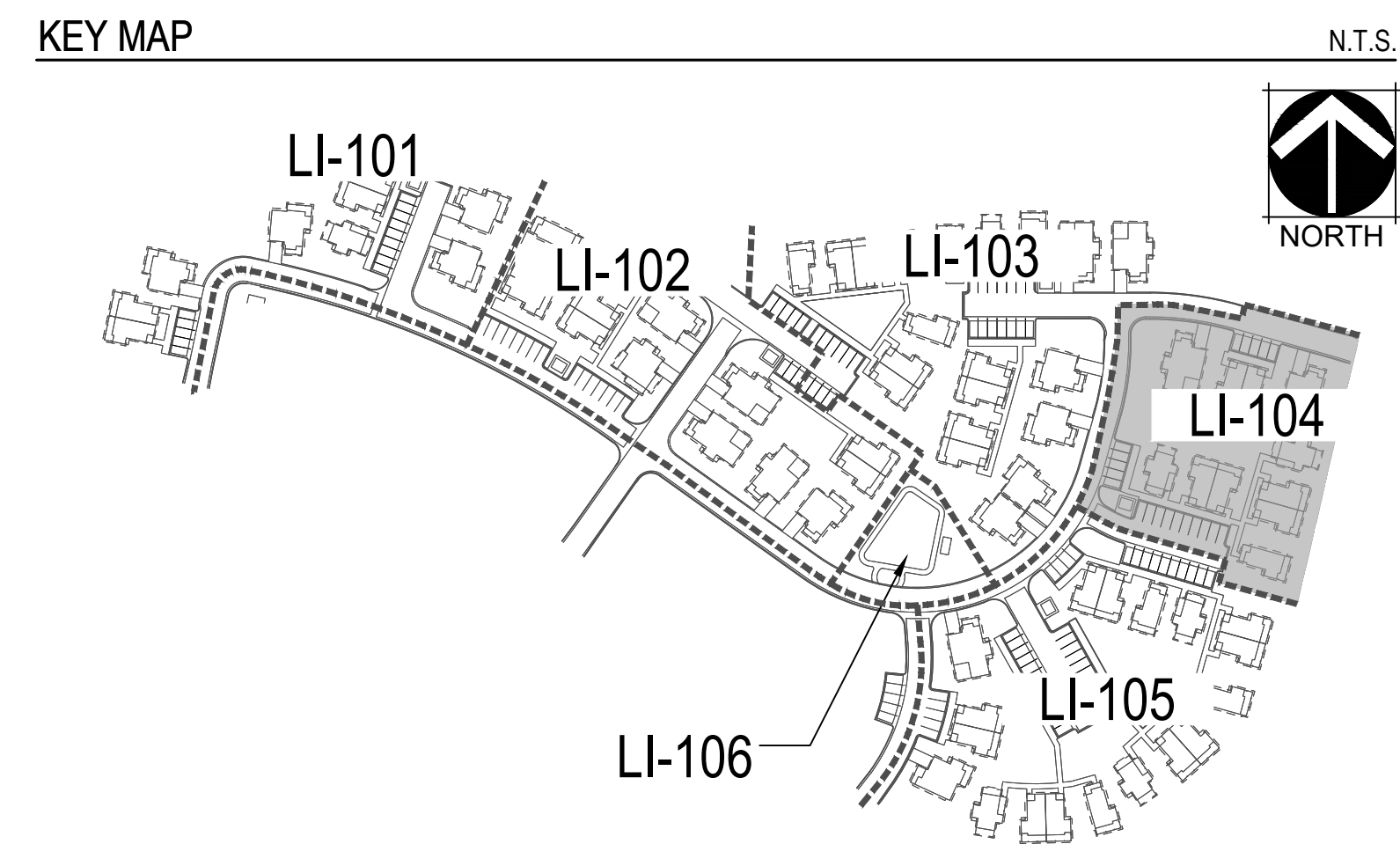
KEY MAP



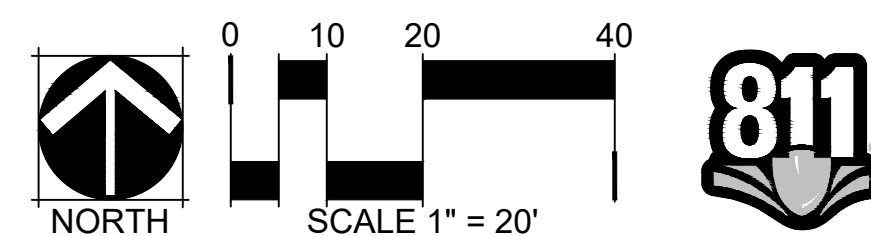
NOT FOR
CONSTRUCTION

SHEET TITLE:
IRRIGATION
PLAN

LI-104

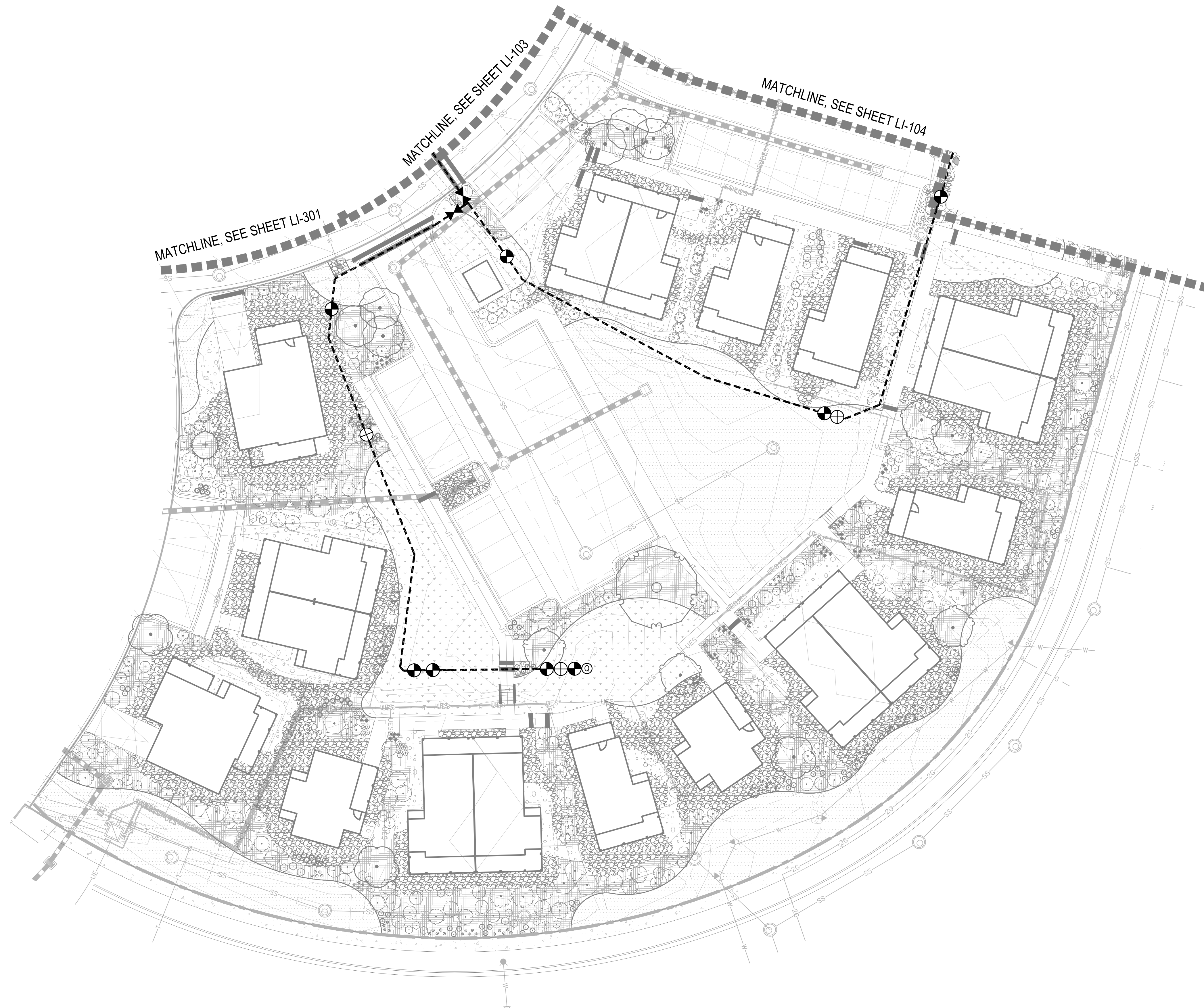


① IRRIGATION EQUIPMENT IS SHOWN HERE FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING AREAS.

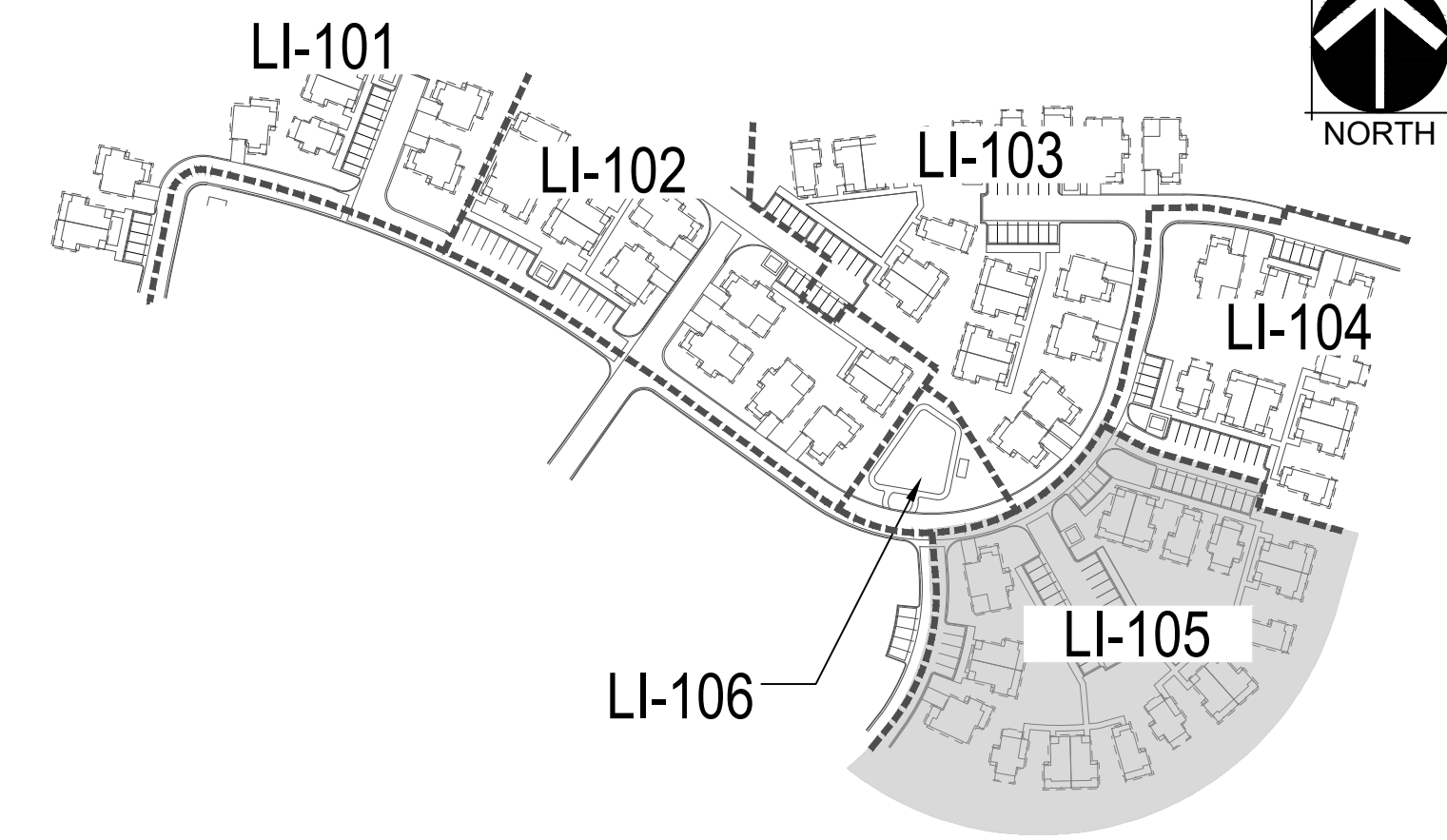


CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP

CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP



KEY MAP



**NORRIS
DESIGN**
PEOPLE + PLACEMAKING
409 MAIN STREET
SUITE 207
P.O. BOX 2320
FRISCO, CO 80443
P 970.368.7068
NORRIS-DESIGN.COM

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

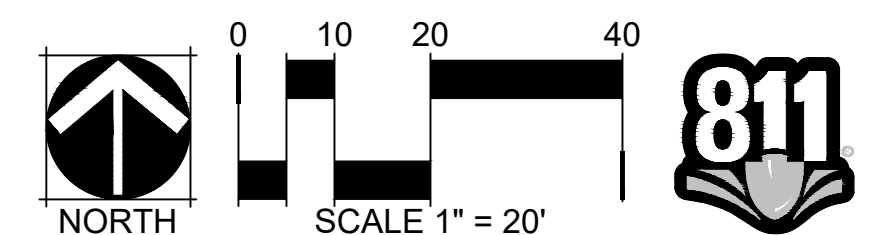
OWNER:
ABRIKA PROPERTIES, LLC
8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

NOT FOR
CONSTRUCTION

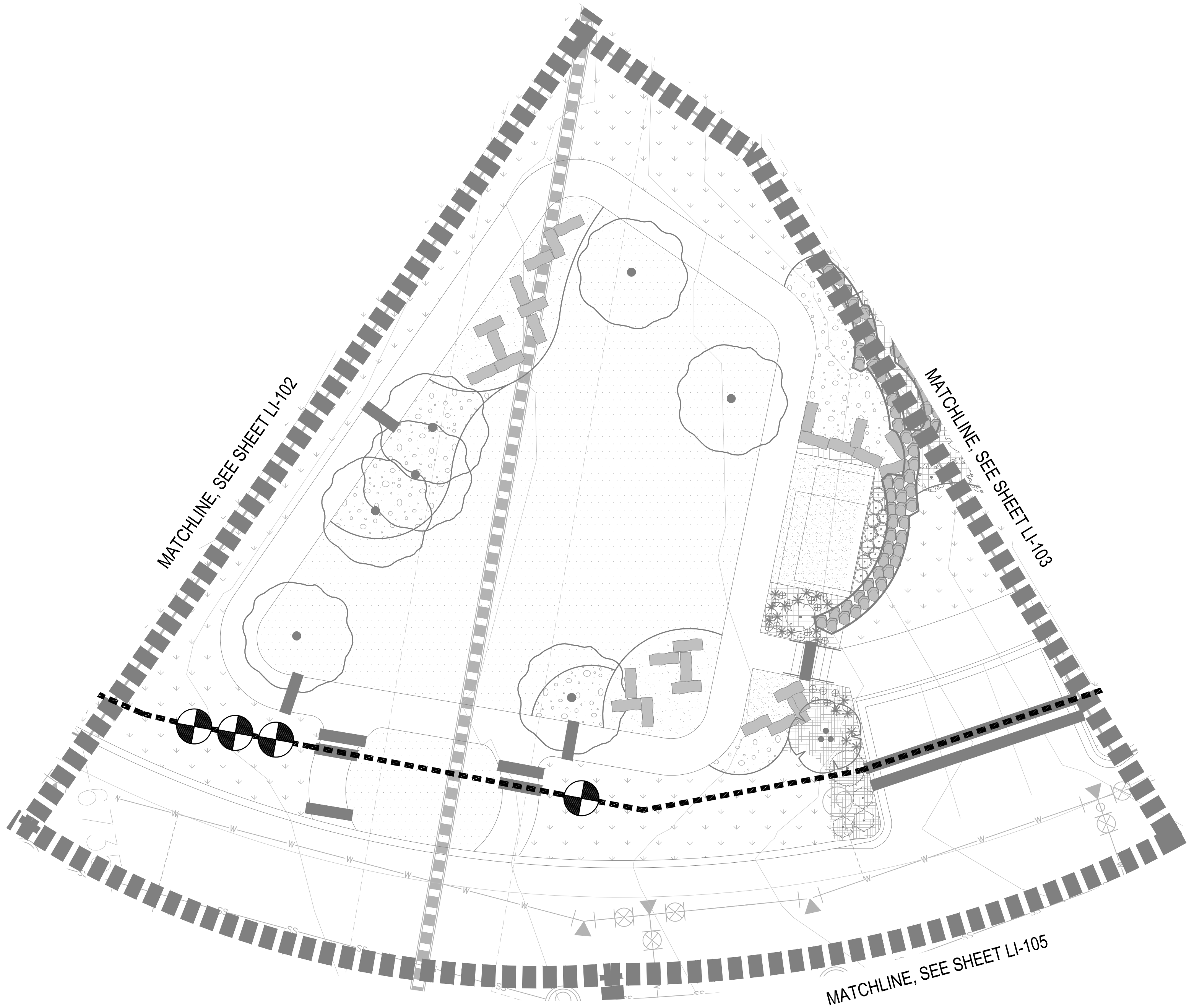
DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

SHEET TITLE:
IRRIGATION
PLAN

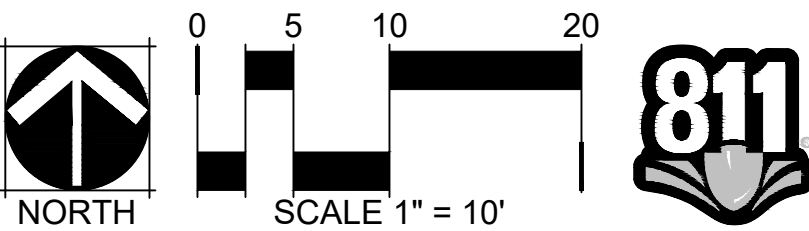
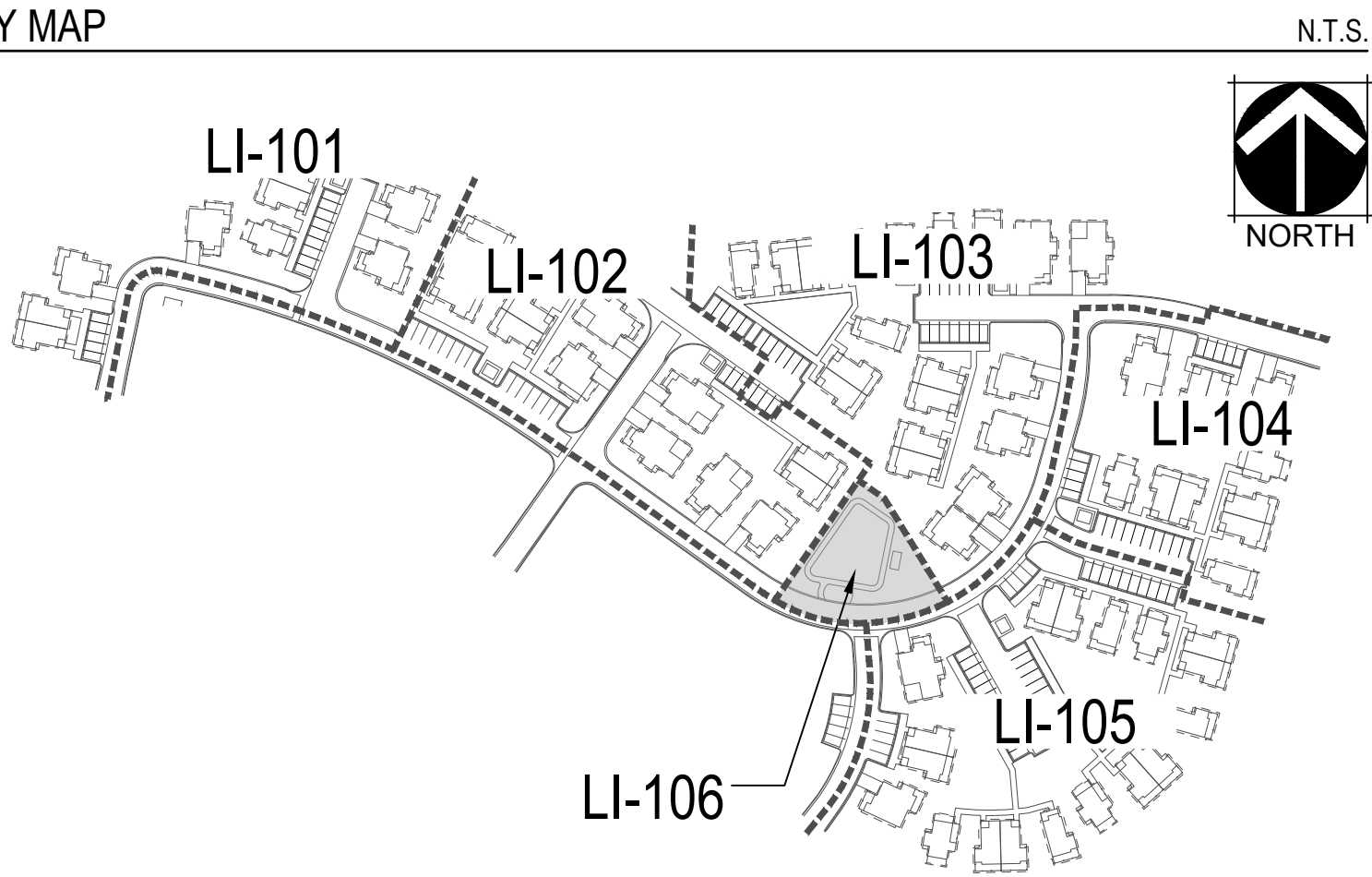
LI-105



CHECKED BY: CG, MT
DRAWN BY: BP, CG, LF, NP



KEY MAP



**NORRIS
DESIGN**
PEOPLE + PLACEMAKING
409 MAIN STREET
SUITE 207
P.O. BOX 2320
FRISCO, CO 80443
P 970.368.7068
NORRIS-DESIGN.COM

WILDFLOWER COTTAGES AT HAYMEADOW
EAGLE, COLORADO

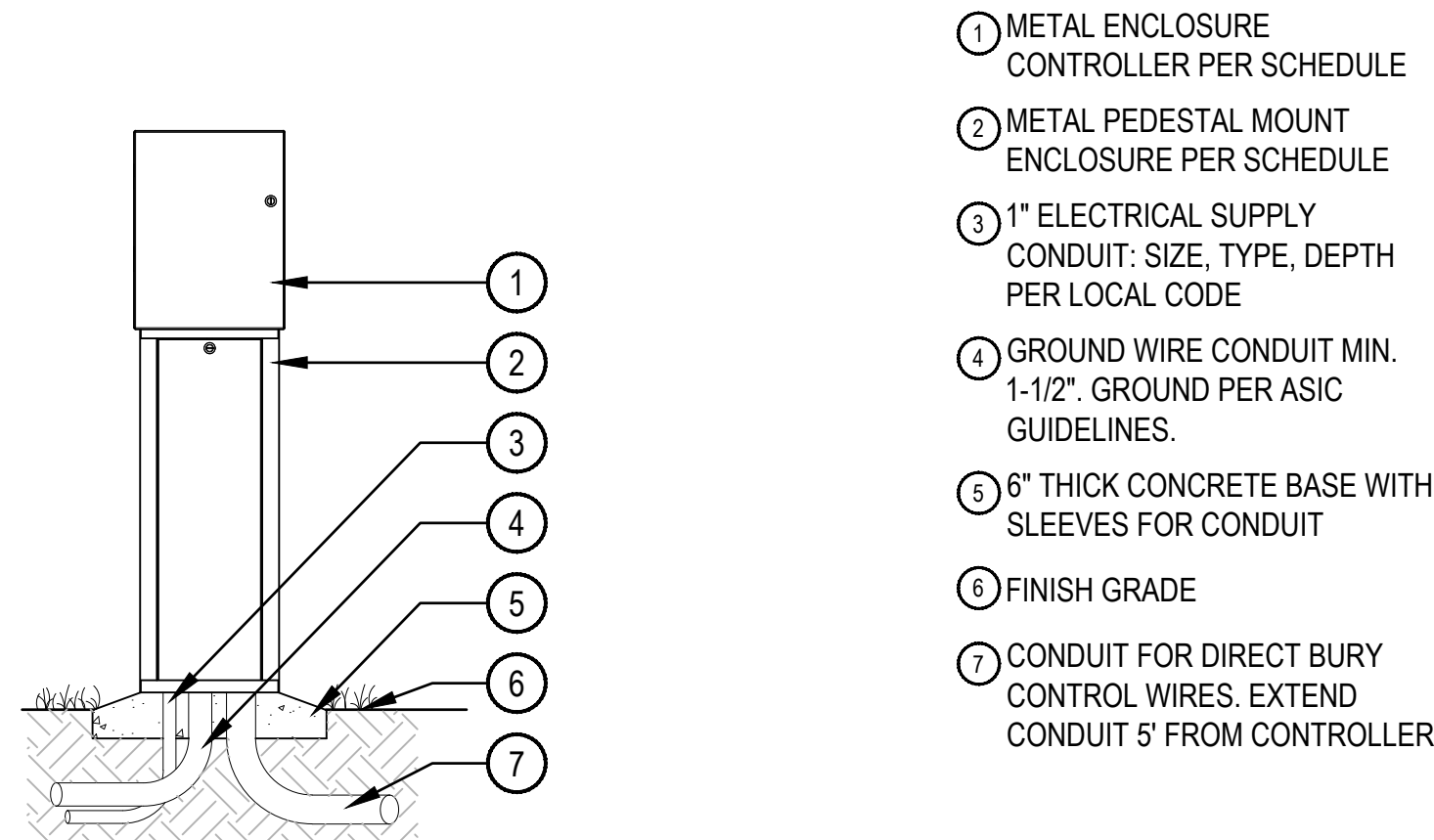
OWNER:
ABRIKA PROPERTIES, LLC
8250 SW 27TH AVE
OCALA FL, 34476
352.854.7753

NOT FOR
CONSTRUCTION

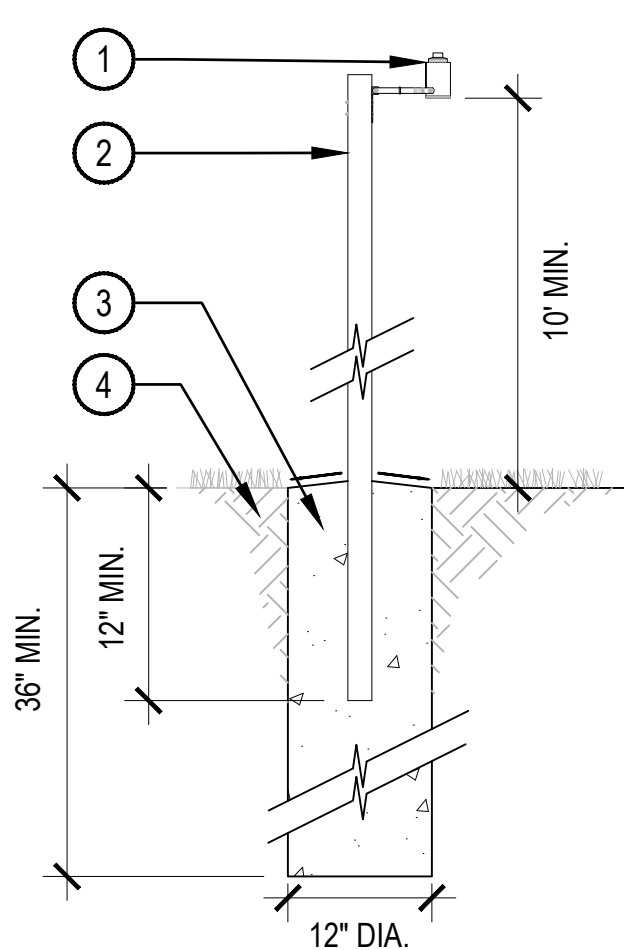
DATE:
08/01/25 MAJOR
DEVELOPMENT PLAN
01/07/26 MAJOR
DEVELOPMENT PLAN 02

SHEET TITLE:
IRRIGATION
PLAN

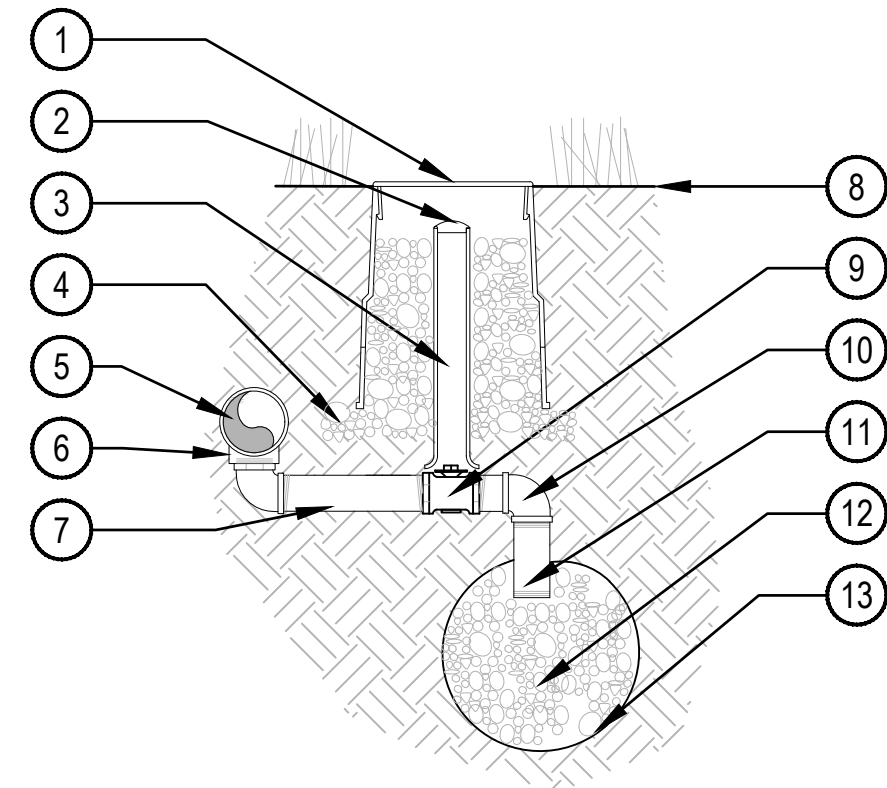
LI-106



- NOTE:
1. ALL ELECTRICAL AND CONTROLLER WIRE TO BE INSTALLED PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS.
2. PROVIDE LOCK AND KEY FOR ENCLOSURE.
3. GROUND CONTROLLER PER LOCAL CODE, MANUFACTURER AND ASIC SPECIFICATIONS.
4. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS.



- NOTE:
1. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
2. SLOPE TOP OF FOOTER AWAY FROM POLE.
3. FINAL LOCATION AND MOUNTING SYSTEM TO BE APPROVED BY OWNER.
4. SENSOR SHOULD NOT BE MOUNTED UNDER TREES, IN AREAS AFFECTED BY SPRINKLER SYSTEM OR UNDER EAVE OF HOUSE.



- NOTE:
1. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.
2. LOCATE DRAIN VALVE AT POINT OF CONNECTION AND AT ALL LOW POINT(S) ALONG THE IRRIGATION MAINLINE AS NEEDED.

1. 10" LOCKING ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO BE FLUSH WITH FINISH GRADE.
2. 2" VALVE MARKER
3. 2" CL160 PVC ACCESS SLEEVE LENGTH AS REQUIRED.
4. 3" DEPTH 3/4" CRUSHED GRAVEL 6" BEYOND EDGE OF BOX
5. PVC PRESSURE MAIN LINE
6. SCH. 80 TEE PER MAINLINE SIZE. ALIGN IN A DOWNWARD POSITION
7. SCH. 80 PVC NIPPLE
8. FINISH GRADE
9. 1" BRONZE STOP VALVE WITH SLOTTED KEY OPERATOR
10. SCH. 80 PVC ELL
11. SCH. 80 PVC NIPPLE
12. 3/4" GRAVEL SUMP - 1 CU. FT. MIN
13. SOIL BLANKET ENCLOSING SUMP AMOCO ENG. FABRIC 4545 - 4.5 OZ. OR EQUAL

1 CONTROLLER PEDESTAL

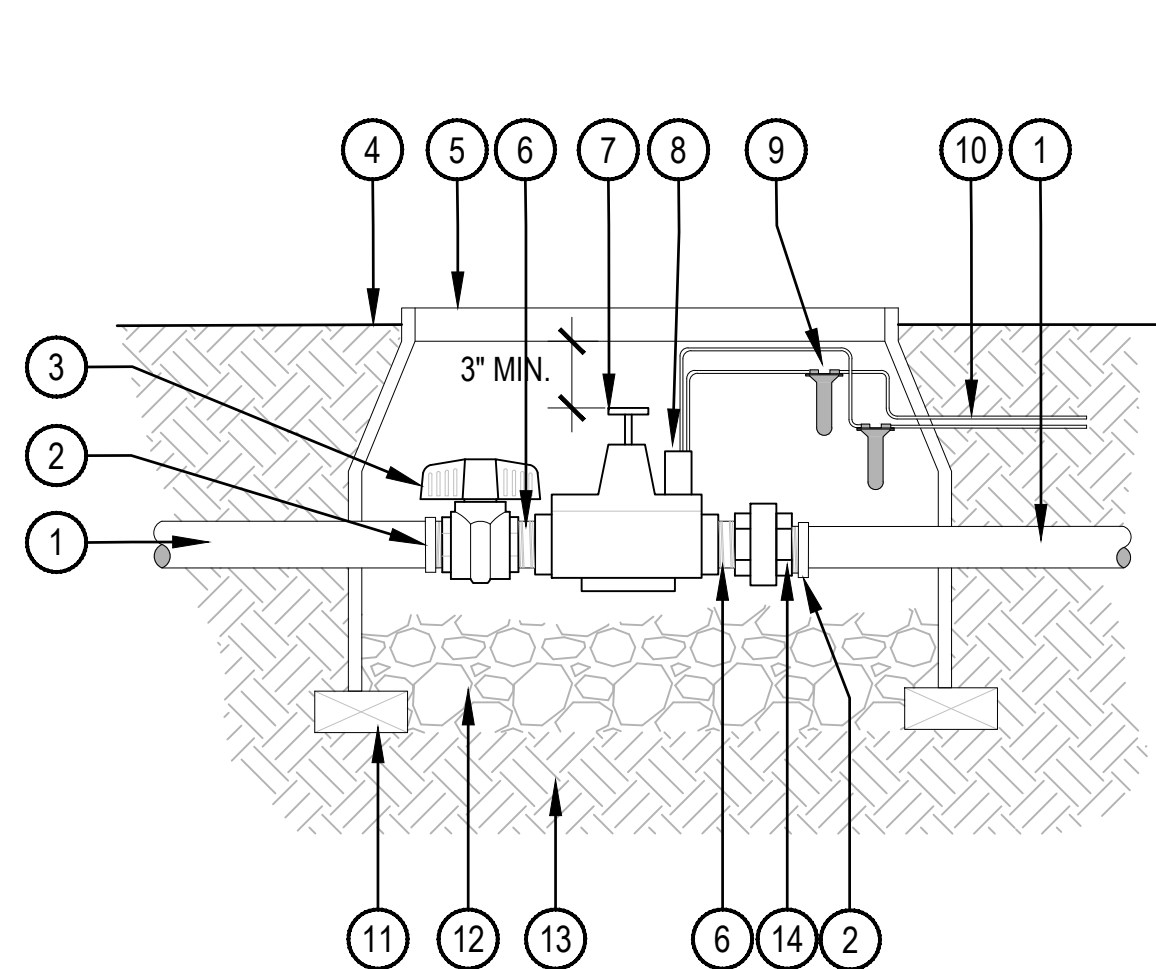
SCALE: NTS

2 RAIN SENSOR POLE MOUNT

NTS

3 MANUAL DRAIN VALVE

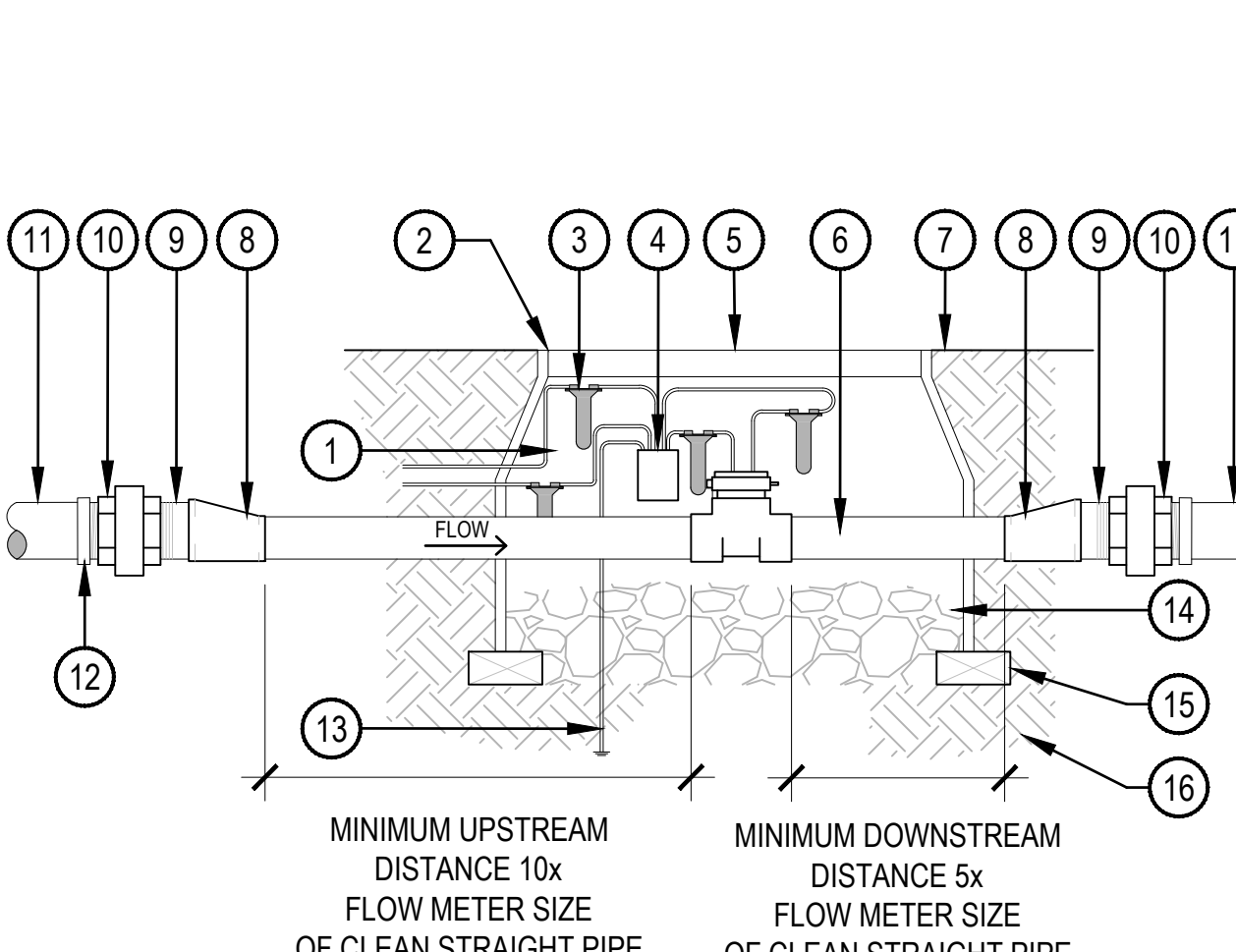
SCALE: NTS



- NOTE:
1. INSTALL MASTER VALVE PER MANUFACTURER'S SPECIFICATIONS FOR WIRING AND GROUNDING.

4 MASTER VALVE WITH IVM SOLENOID

SCALE: NTS



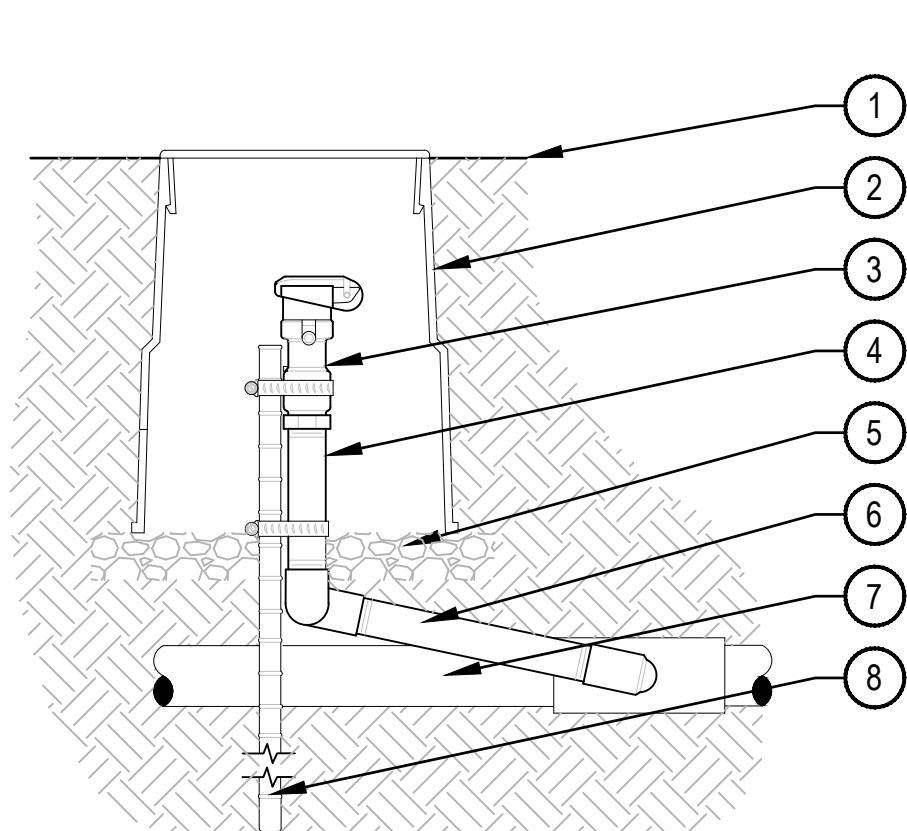
- NOTE:
1. INSTALL FLOW SENSOR AND SENSOR DECODER PER MANUFACTURER'S SPECIFICATIONS FOR WIRING AND GROUNDING.

5 FLOW SENSOR WITH DECODER

SCALE: NTS

6 GATE VALVE 2" AND SMALLER

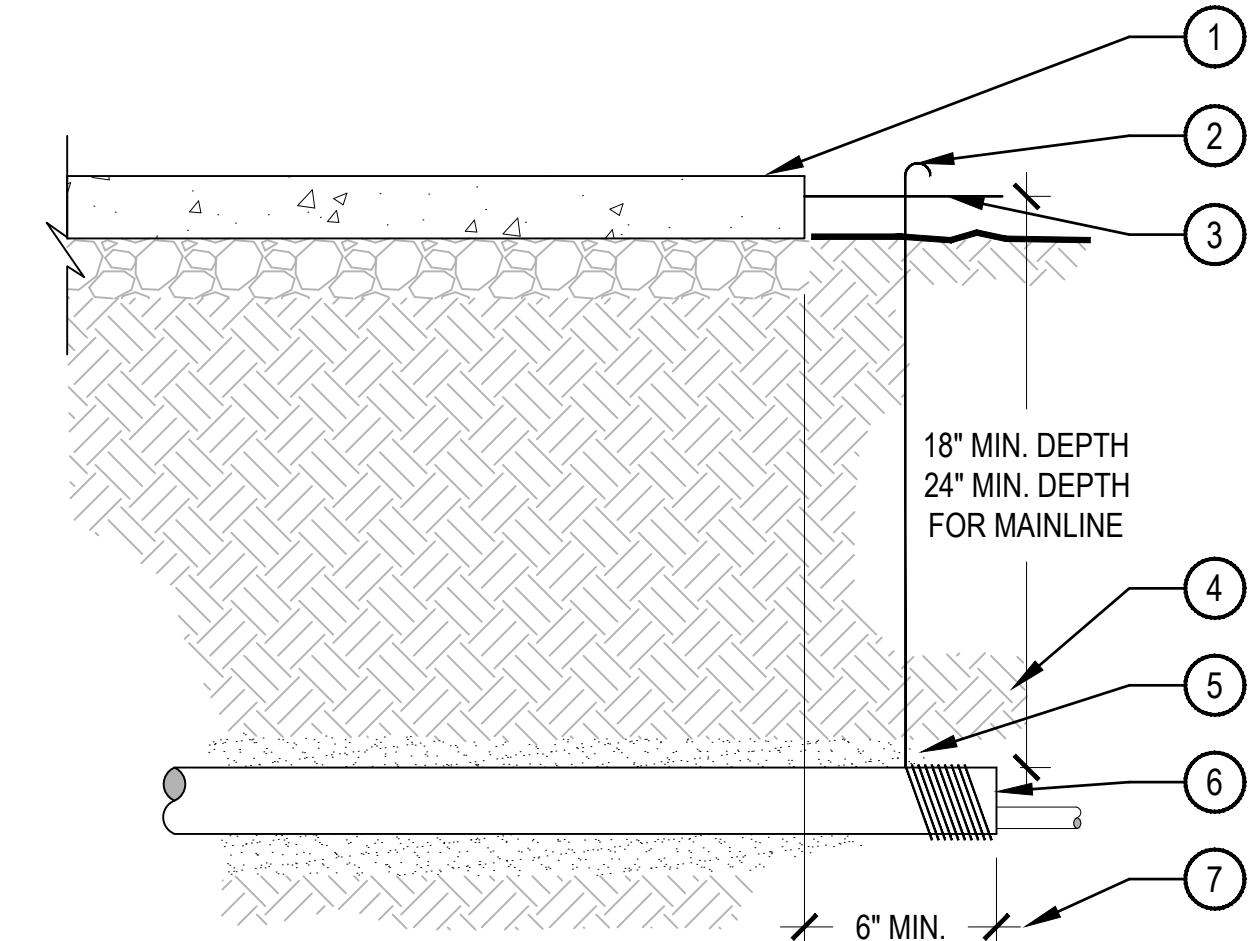
SCALE: NTS



- NOTES:
1. EACH QUICK COUPLER SHALL BE IN A SEPARATE VALVE BOX.
2. PROVIDE (1) QUICK COUPLER KEY FOR EACH QUICK COUPLER VALVE.
3. QUICK COUPLER SHALL HAVE LOCKING RUBBER COVER. COLOR PER LEGEND.
4. COMPACT SOIL AROUND GATE VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUB-GRADE.
5. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

7 QUICK COUPLER

SCALE: NTS



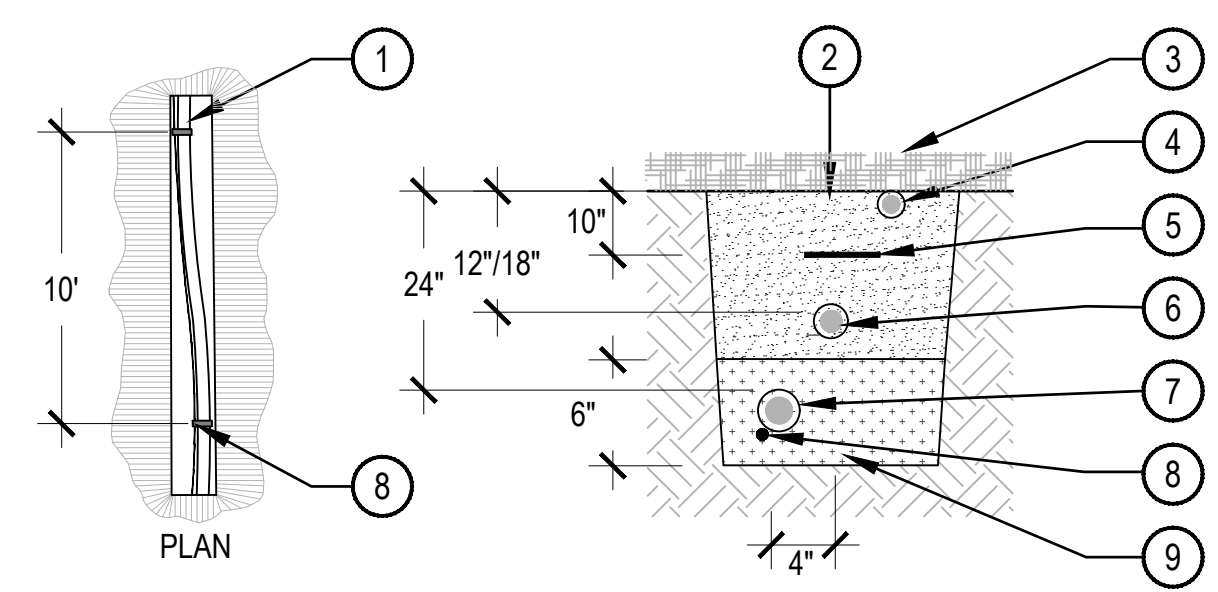
- NOTE:
1. ALL SLEEVES SHALL BE INSPECTED PRIOR TO BACKFILLING.
2. CAP SLEEVES UNTIL USE.
3. MULTIPLE SLEEVES REQUIRE 4" HORIZONTAL SEPARATION WITHIN SAME SLEEVE TRENCH.
4. IRRIGATION PIPE AND WIRE SHALL NOT SHARE THE SAME SLEEVE.
5. MARK / STAMP - 'X' AND/OR INSTALL PLACARD AT BACK OF CURB.

8 PIPE SLEEVE

SCALE: NTS

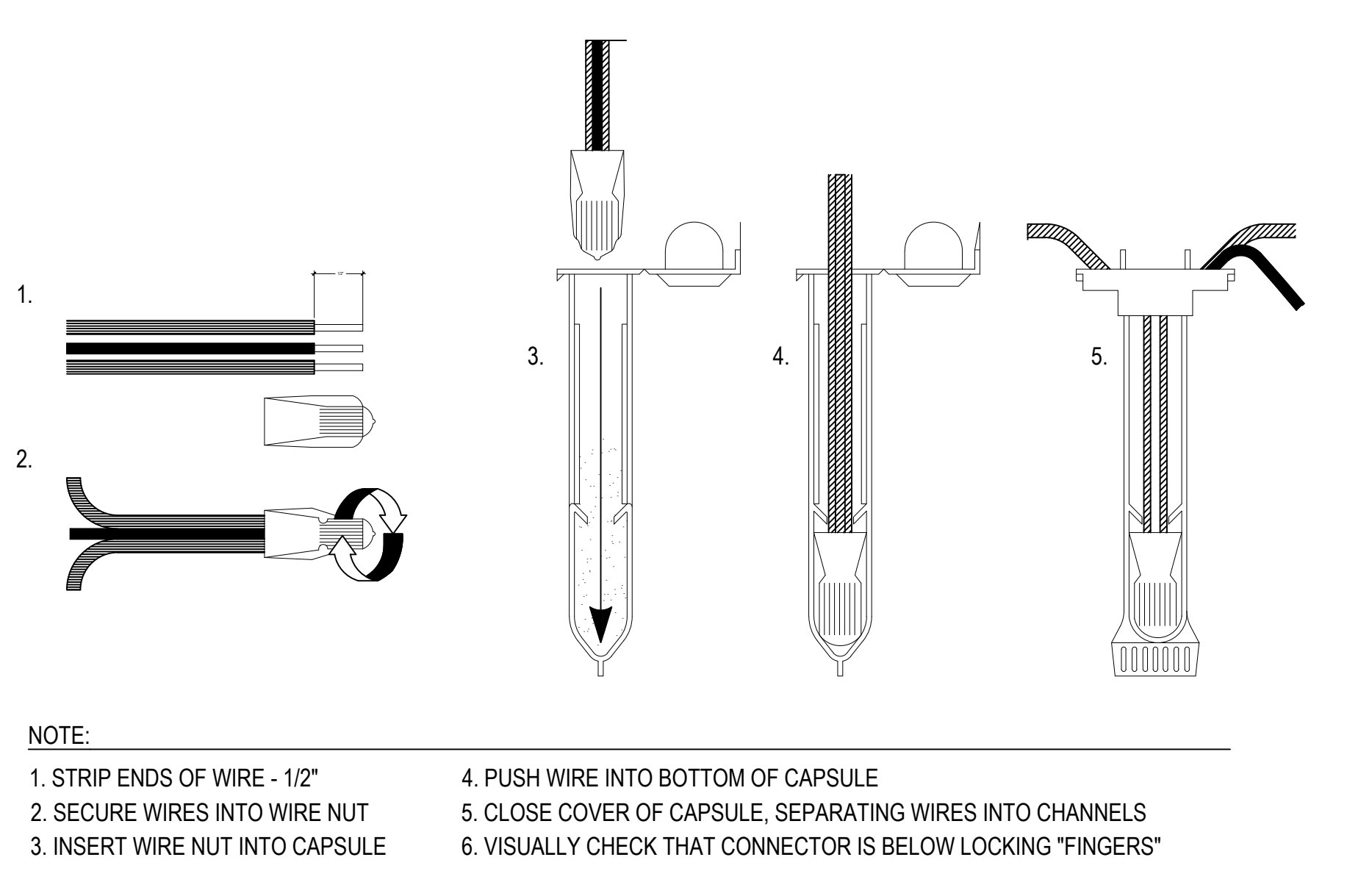
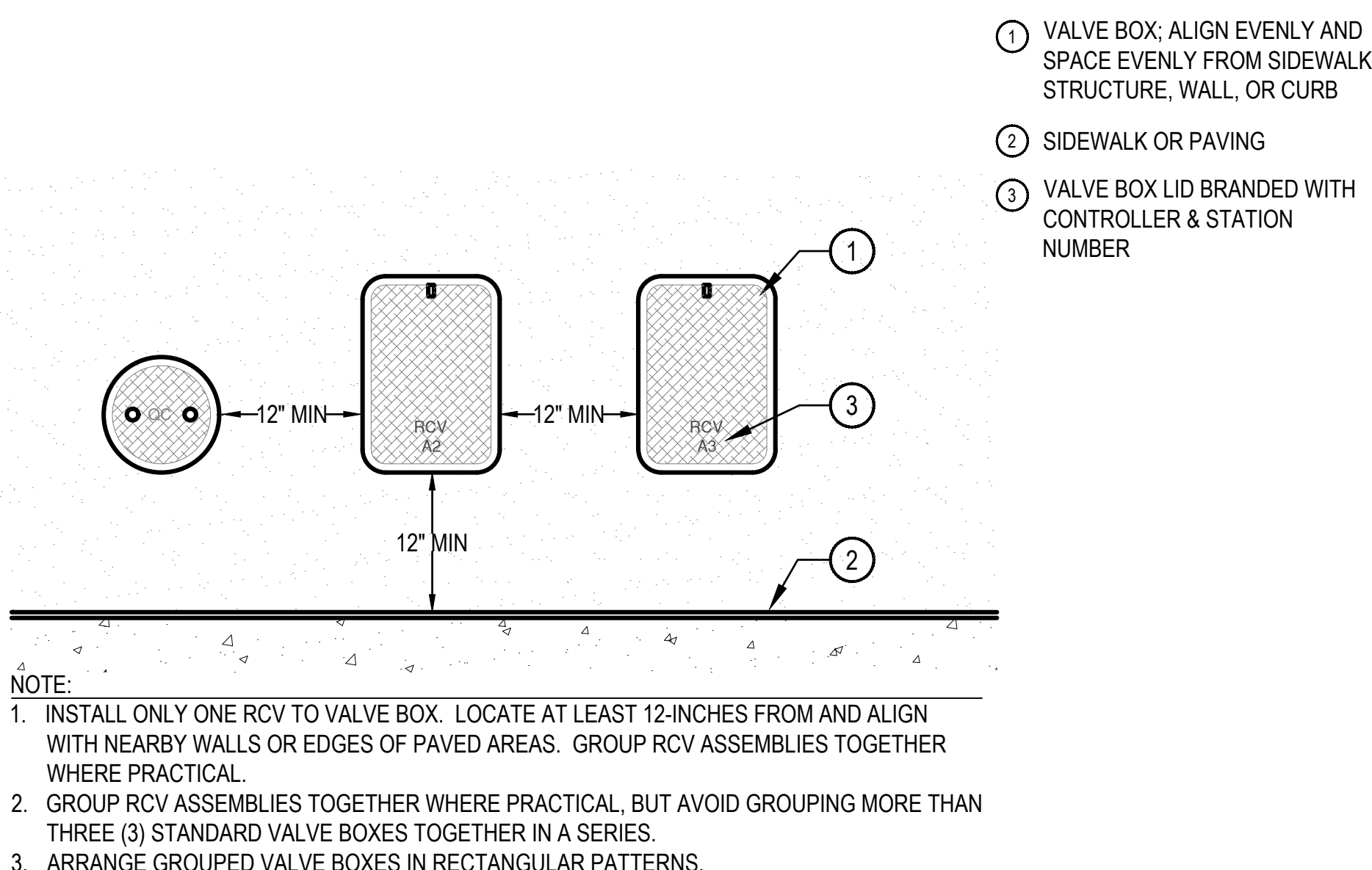
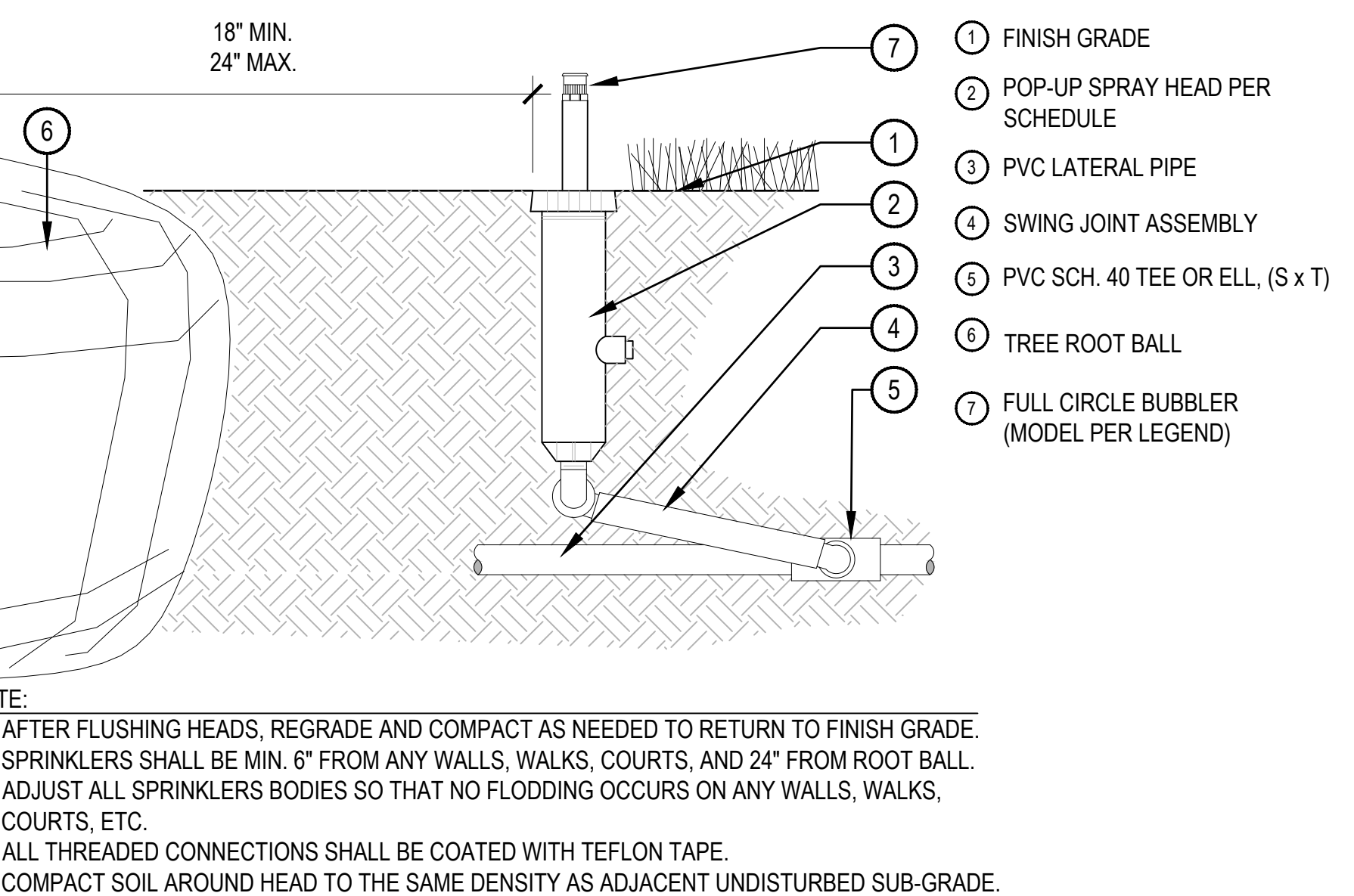
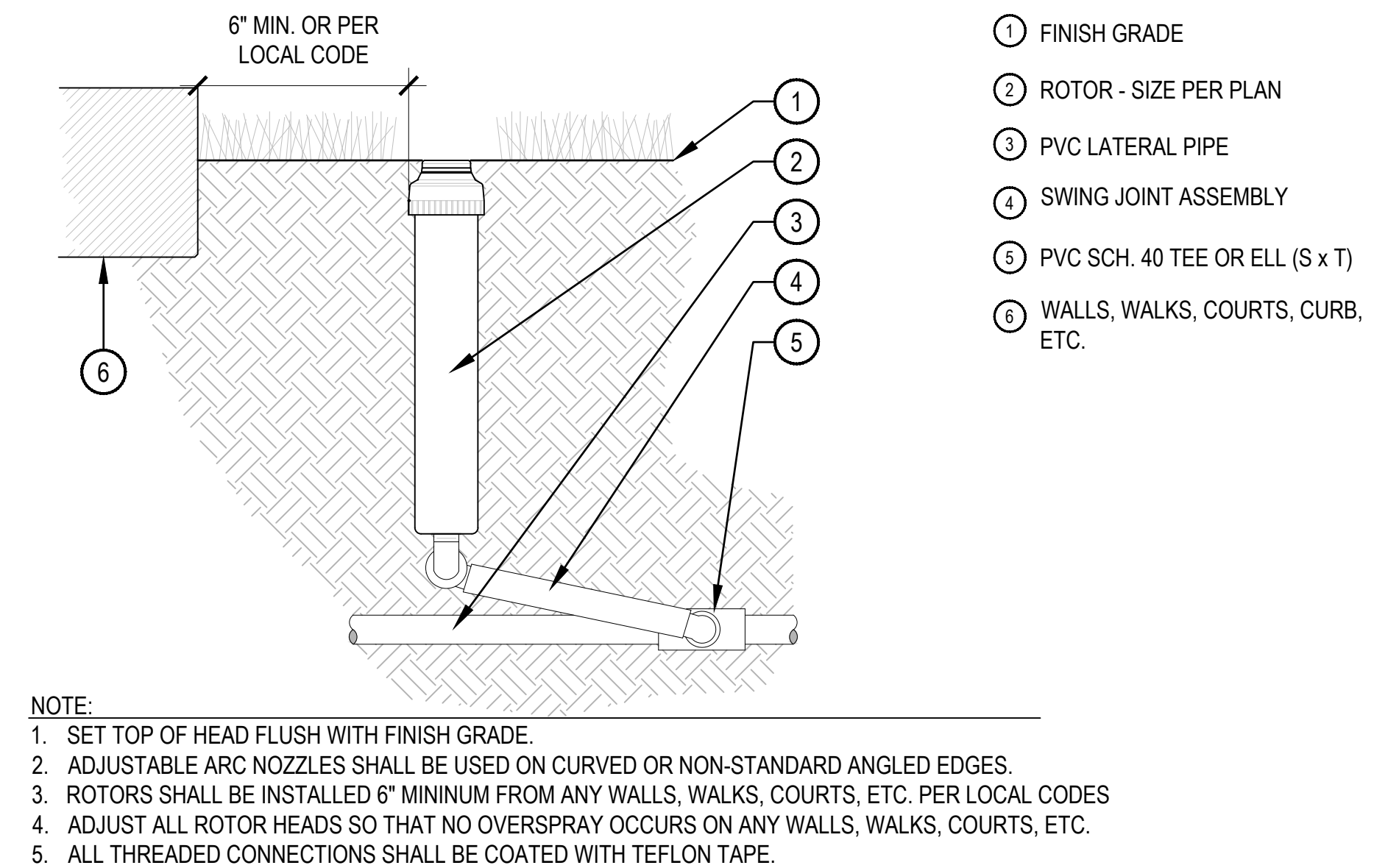
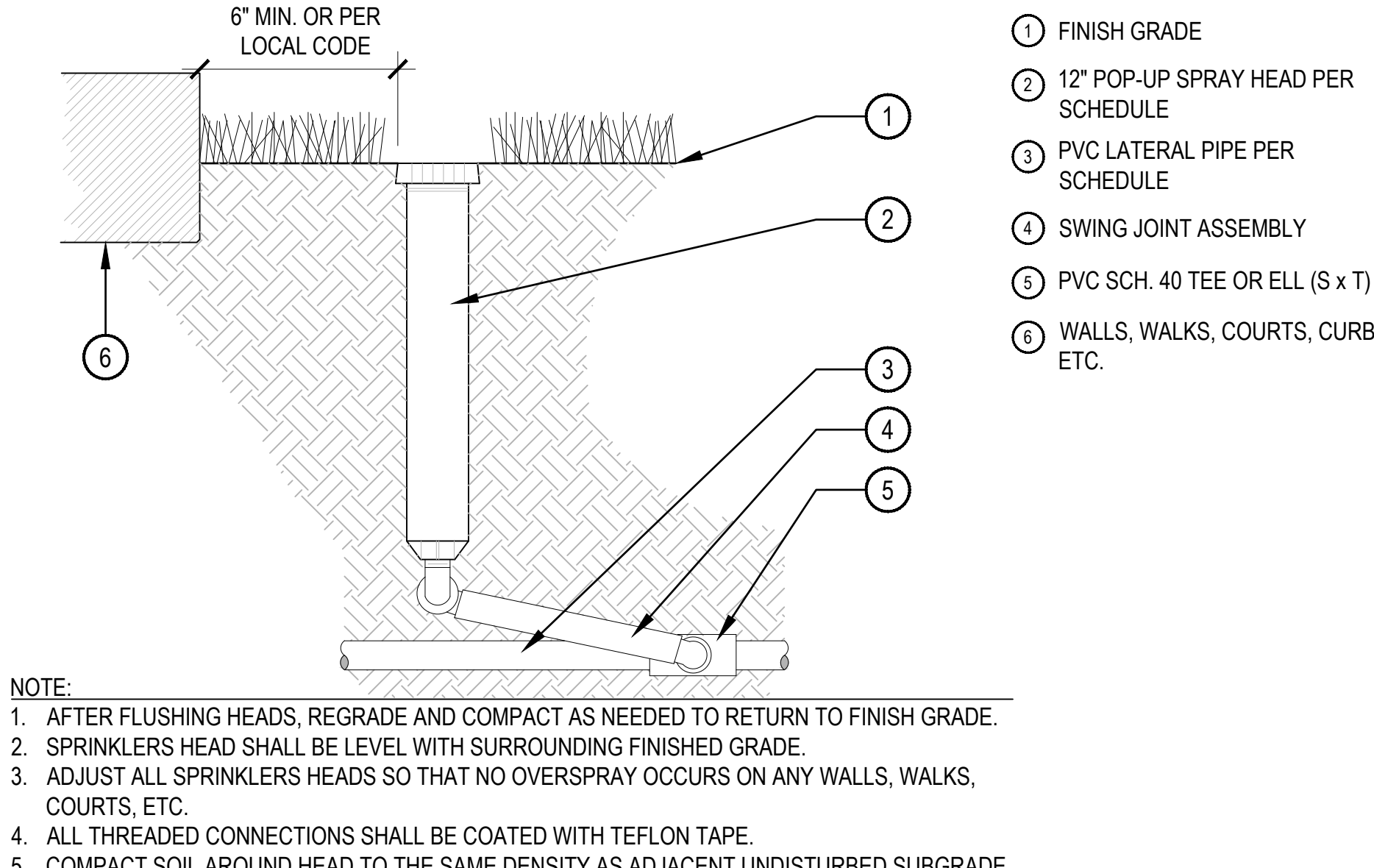
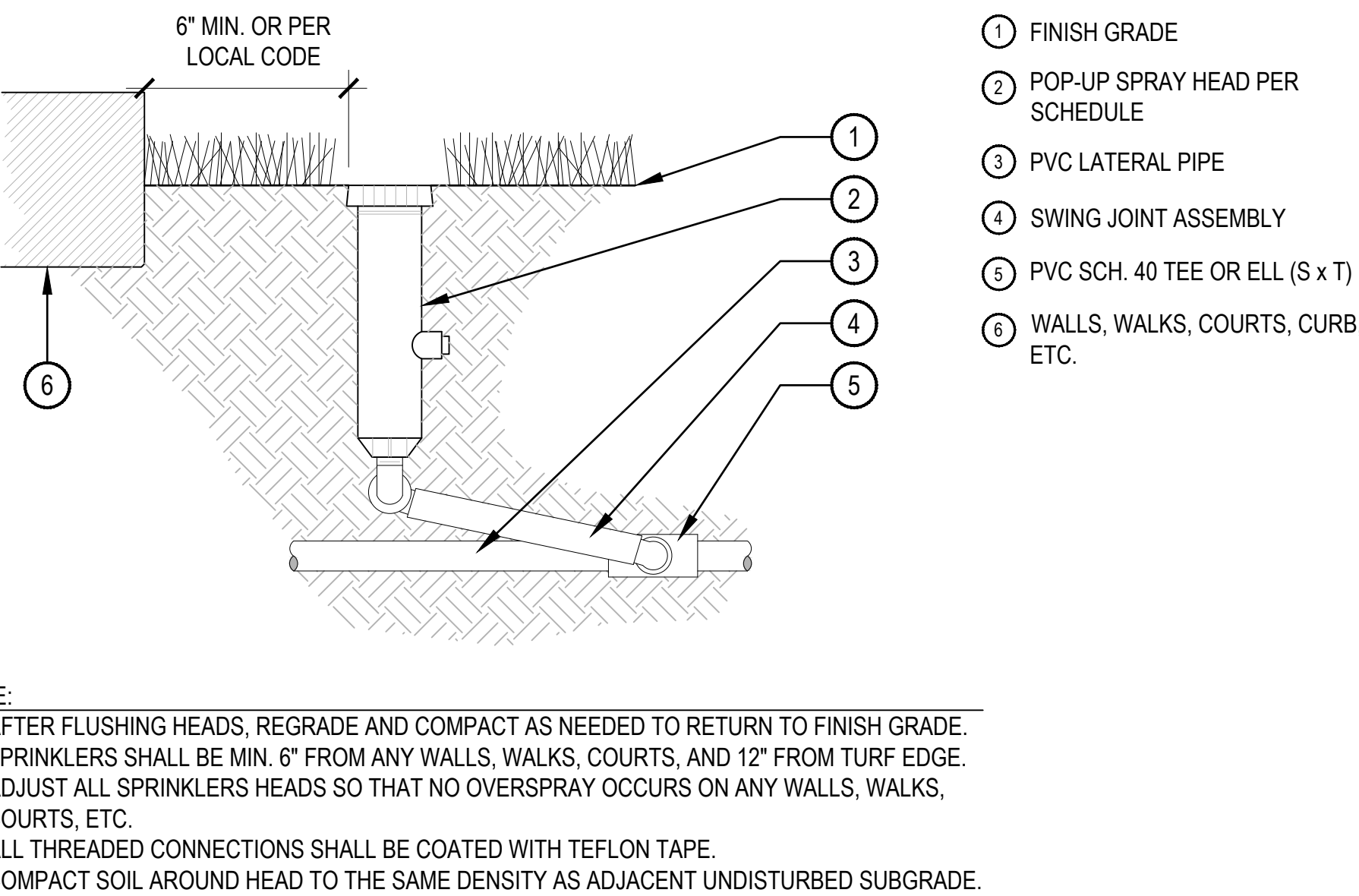
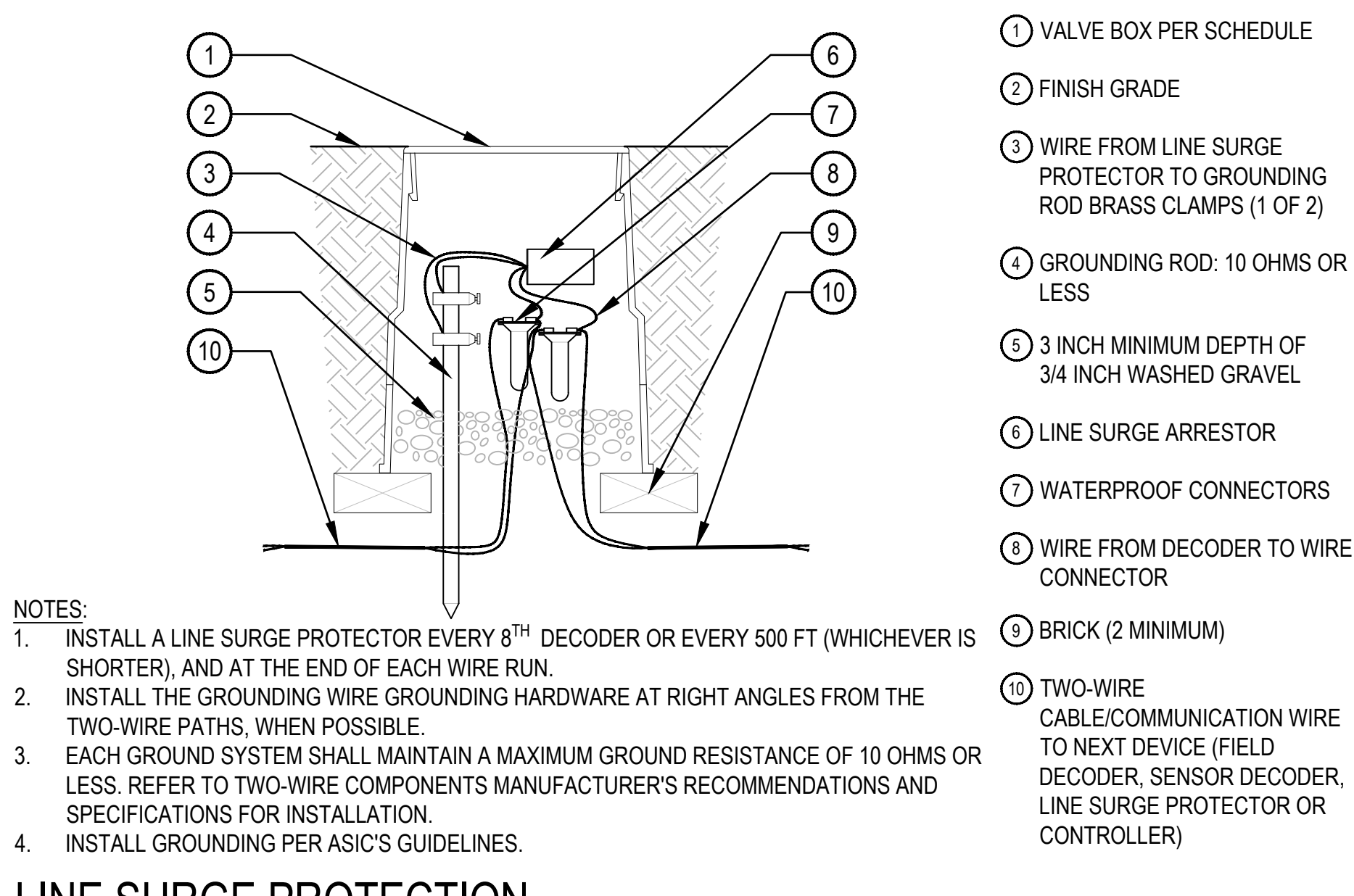
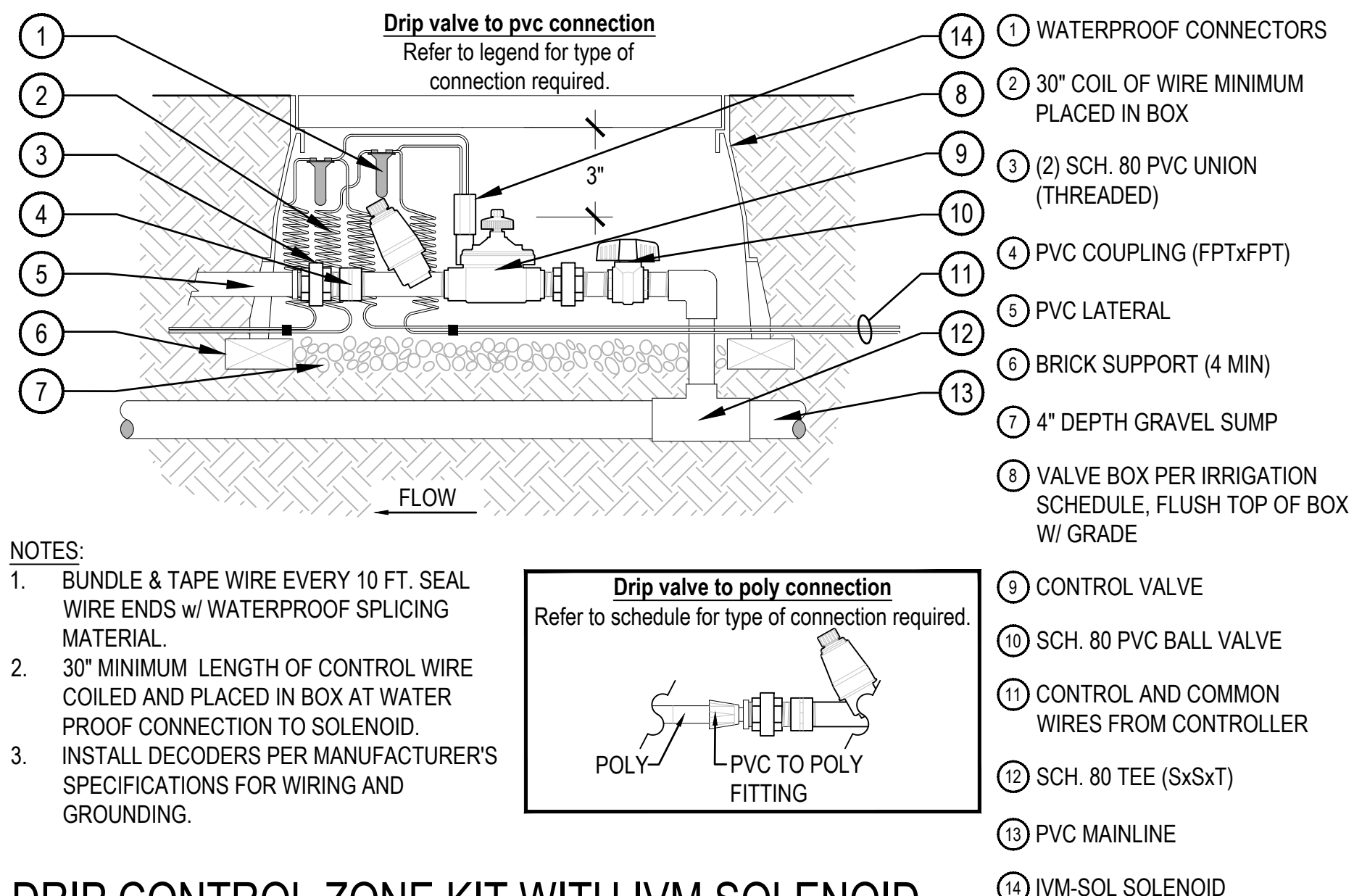
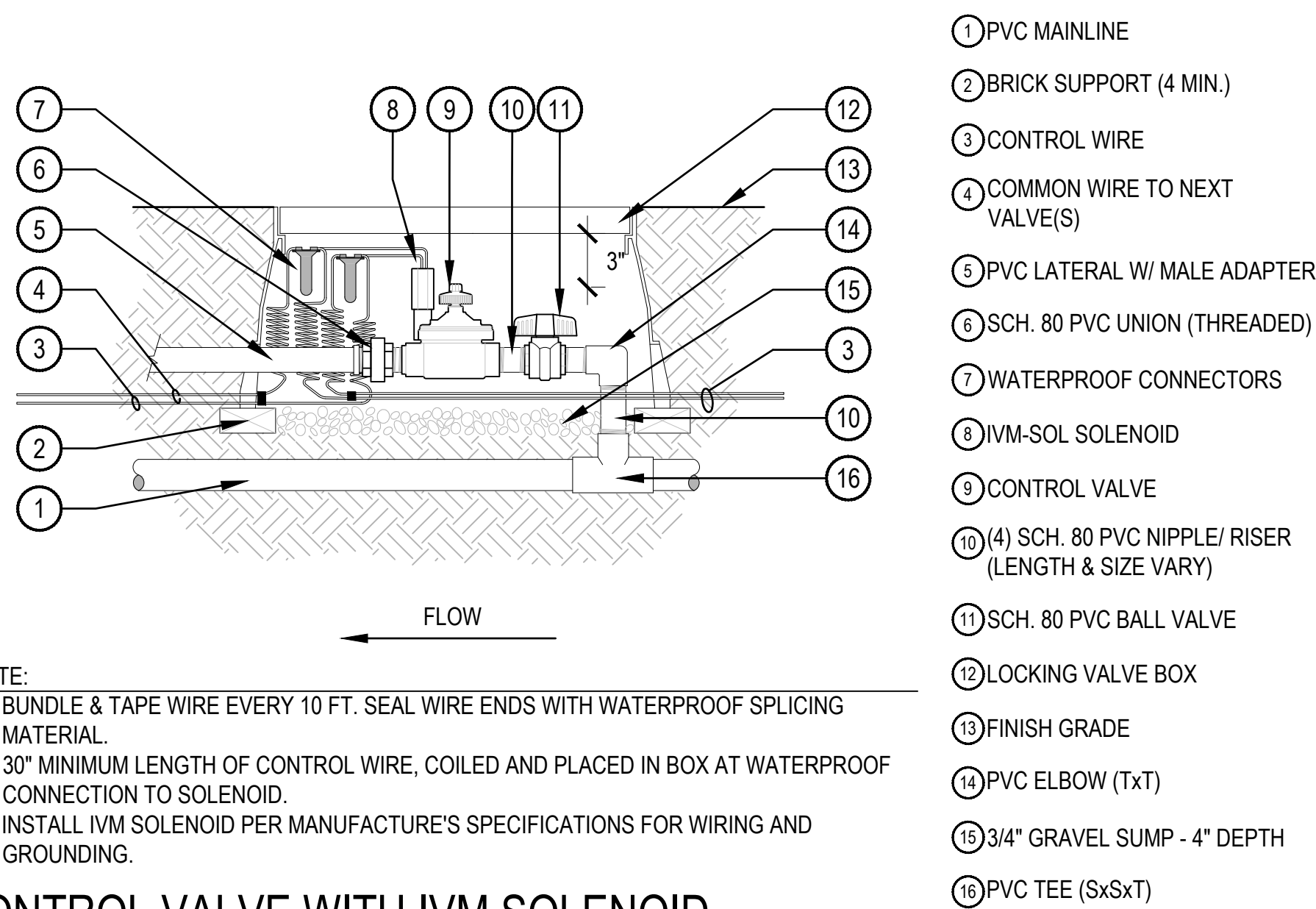
9 PIPE TRENCH

SCALE: NTS



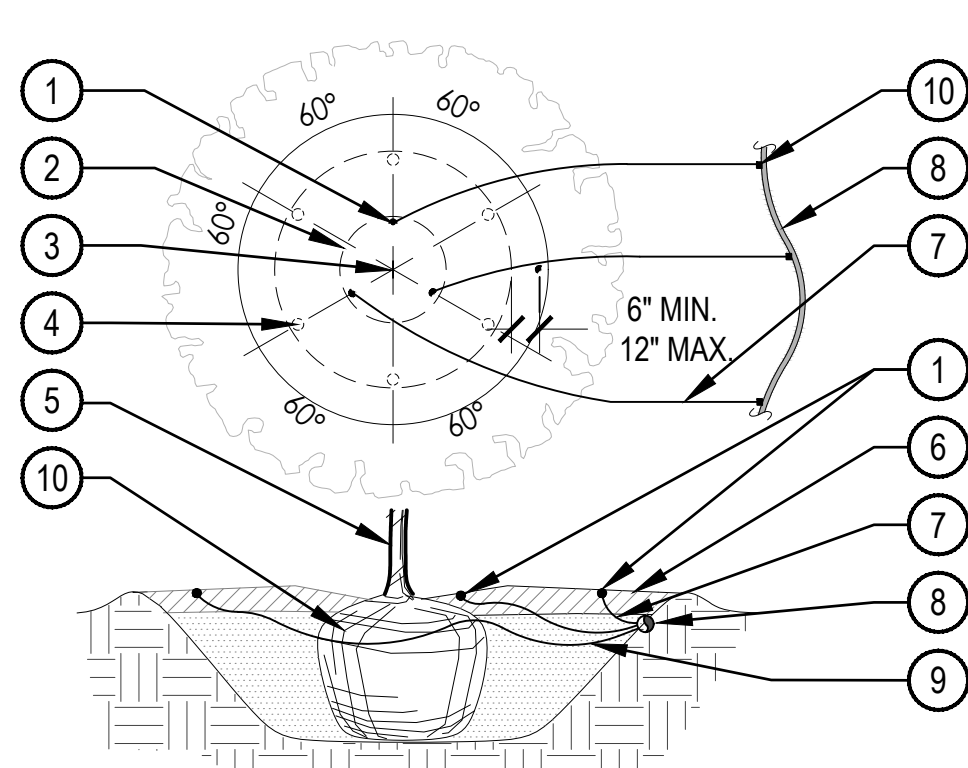
- NOTE:
1. ALL MAINLINES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL PVC PIPING TO BE SNAKED IN TRENCHES AS SHOWN IN PLAN VIEW ABOVE.
3. PROVIDE HORIZONTAL OFFSET FOR PIPING IN SHARED TRENCHES.
4. ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED AS PER LOCAL CODES.
5. ALL ELECTRICAL WIRE CONNECTIONS TO VALVES AND SPLICES TO BE INSTALLED WITHIN A VALVE BOX AND MADE WITH DBY WATERPROOF CONNECTORS, OR APPROVED EQUAL.
6. BUNDLE AND TAPE CONTROLLER WIRING PER NOTES AND INSTALL WITHIN MAINLINE TRENCH WHEREVER POSSIBLE.
7. CONTROLLER WIRE TO BE BURIED AT 18" MIN DEPTH IF NOT LOCATED WITH MAINLINE.
8. MAINLINE BEDDING MATERIAL SHALL BE 1/4" MINUS SAND, AND SHALL BE 3" BELOW PIPE OR WIRE AND 3" ABOVE MAINLINE.
9. BEDDING IS NOT REQUIRED IN POLYETHYLENE TUBING TRENCHES OR SHARED TRENCHES.
10. EXCAVATED COVER MATERIAL SHALL BE FREE FROM DEBRIS AND ROCKS 1/2" OR GREATER.

1. SNAKE PVC OR POLYETHYLENE PIPE IN TRENCH
2. EXCAVATED COVER MATERIAL (SEE NOTES)
3. FINISH GRADE/TOP OF MULCH
4. POLYETHYLENE DRIP LATERAL (INSTALL JUST BELOW ROUGH GRADE TO PROVIDE UV COVER PRIOR TO MULCH LAYER)
5. MAINLINE MARKING TAPE (PURPLE MARKING TAPE IF RECLAIMED)
6. IRRIGATION SPRAY LATERAL PIPE 12" DEPTH FOR SPRAY LATERALS 18" FOR ROTOR LATERALS
7. IRRIGATION MAINLINE PIPE
8. VALVE WIRING. BUNDLE AND TAPE PER IRRIGATION NOTES
9. BEDDING MATERIAL (SEE NOTES)



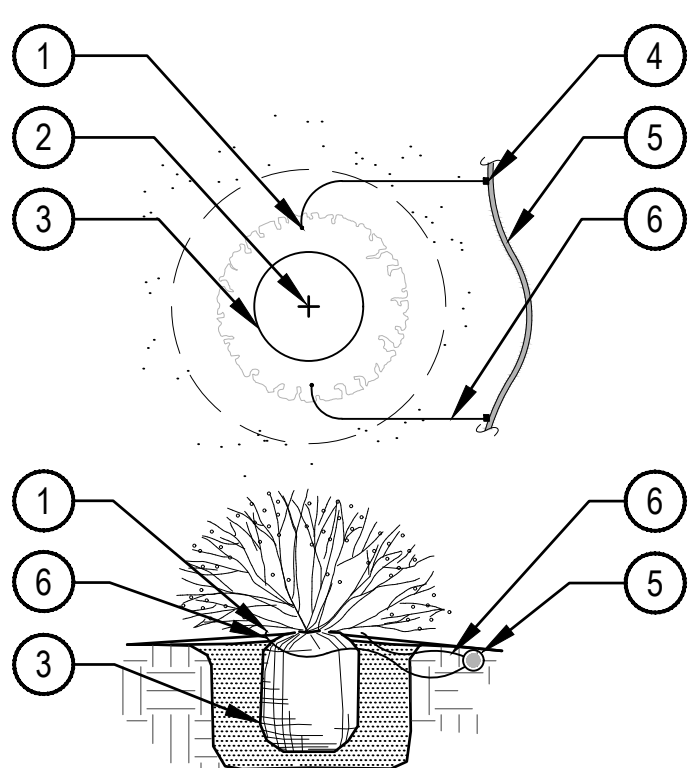


- 1 EMISSION POINT, DIFFUSER CAP W/ DRIP STAKE (TYP.)
2 PLANT ROOT BALL (TYP.)
3 PLANT CENTER (TYP.)
4 SECOND EMISSION POINTS SEE NOTE 3 BELOW
5 TREE TRUNK
6 MULCH LAYER
7 1/4" DISTRIBUTION TUBING (LENGTH NOT TO EXCEED 8')
8 3/4" POLYETHYLENE DRIP TUBING
9 SINGLE OUTLET EMITTER
10 ROOTBALL



- NOTE:
1. MAXIMUM LENGTH OF ONE DISTRIBUTION TUBE SHALL BE 8'.
2. ALL EMISSION POINTS SHALL BE LOCATED ON UPHILL SIDE OF PLANT MATERIAL. ONE EMISSION POINT SHALL BE DIRECTLY TO PLANT BALL AS INDICATED. ADDITIONAL EMISSION POINTS SHALL BE WITHIN PLANT PIT PERIMETER AS DIRECTED IN THE EMITTER SCHEDULE.
3. SECOND EMISSION POINTS (IF NEEDED) AS PER THE EMITTER SCHEDULE FOR TREES WITH 3" CALIPER OR GREATER OR CONIFEROUS TREES 10' OR GREATER IN HEIGHT.
4. THIS IS A WATERING GUIDE ONLY. SITE, SOIL AND PLANT CONDITIONS VARY GREATLY. CONTRACTOR MUST OBSERVE THE PLANT MATERIAL AND MAKE ADJUSTMENTS AS NECESSARY FOR PROPER PLANT WATER REQUIREMENT.

- 1 DIFFUSER CAP W/ DRIP STAKE
2 PLANT CENTER
3 PLANT ROOTBALL
4 SINGLE OUTLET EMITTER
5 3/4" POLYETHYLENE DRIP TUBING
6 1/4" DISTRIBUTION TUBING (LENGTH NOT TO EXCEED 8')

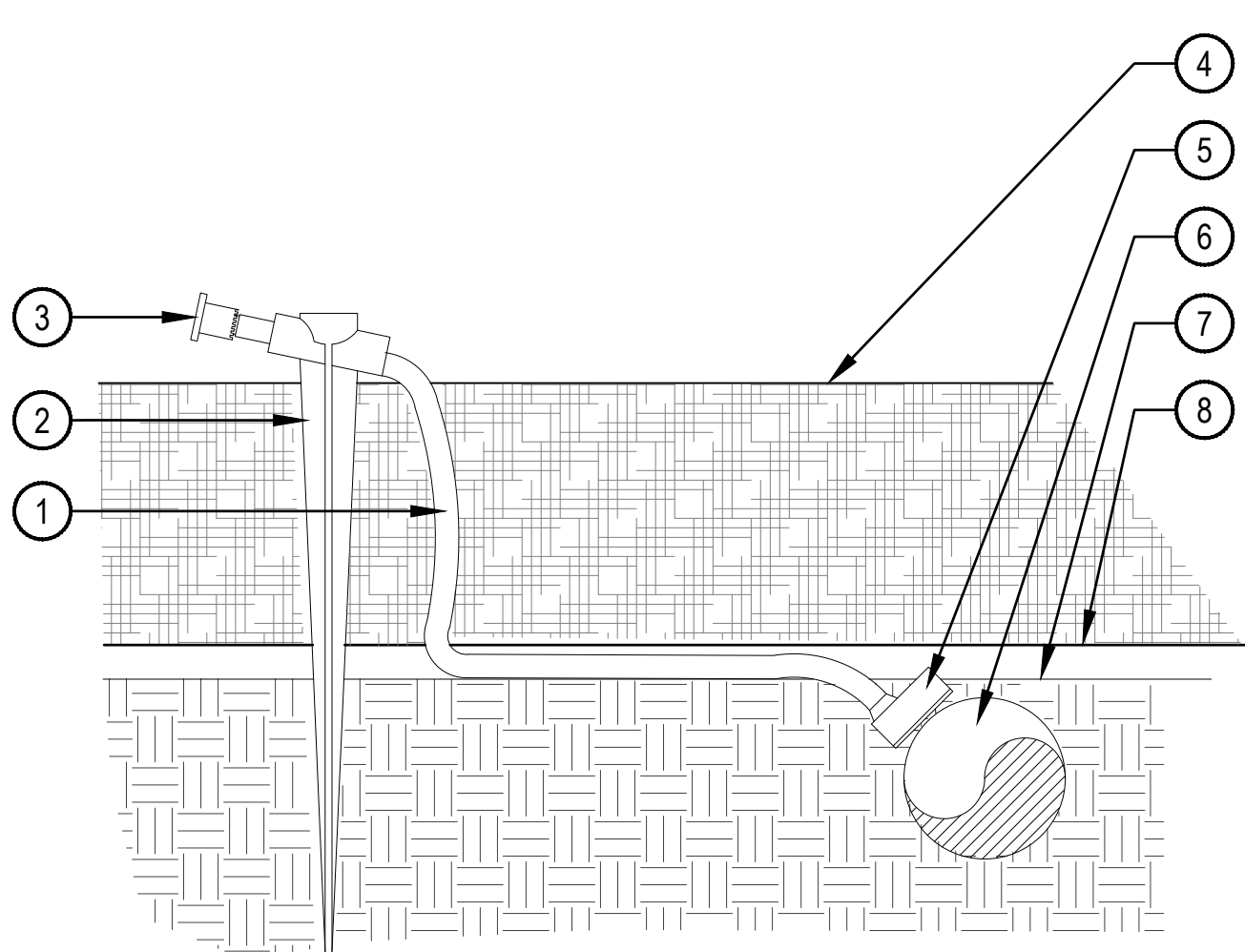


- NOTE:
1. EMITTERS SHALL BE EQUALLY SPACED AROUND ROOTBALL.
2. FLUSH ALL LINES THOROUGHLY PRIOR TO EMITTER INSTALLATION.
3. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL EMITTERS ON THE UPHILL SIDE OF PLANT.
4. EMITTERS SHALL BE SELF-FLUSHING PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE.
5. DRIP VALVE ZONES (HYDROZONES) ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT REQUIREMENTS AND SUN EXPOSURE.
6. CONTRACTOR SHALL ENSURE HYDROZONES ARE VALVED SEPARATELY AS SHOWN ON PLAN.

2 SINGLE OUTLET EMITTER PLACEMENT

SCALE: NTS

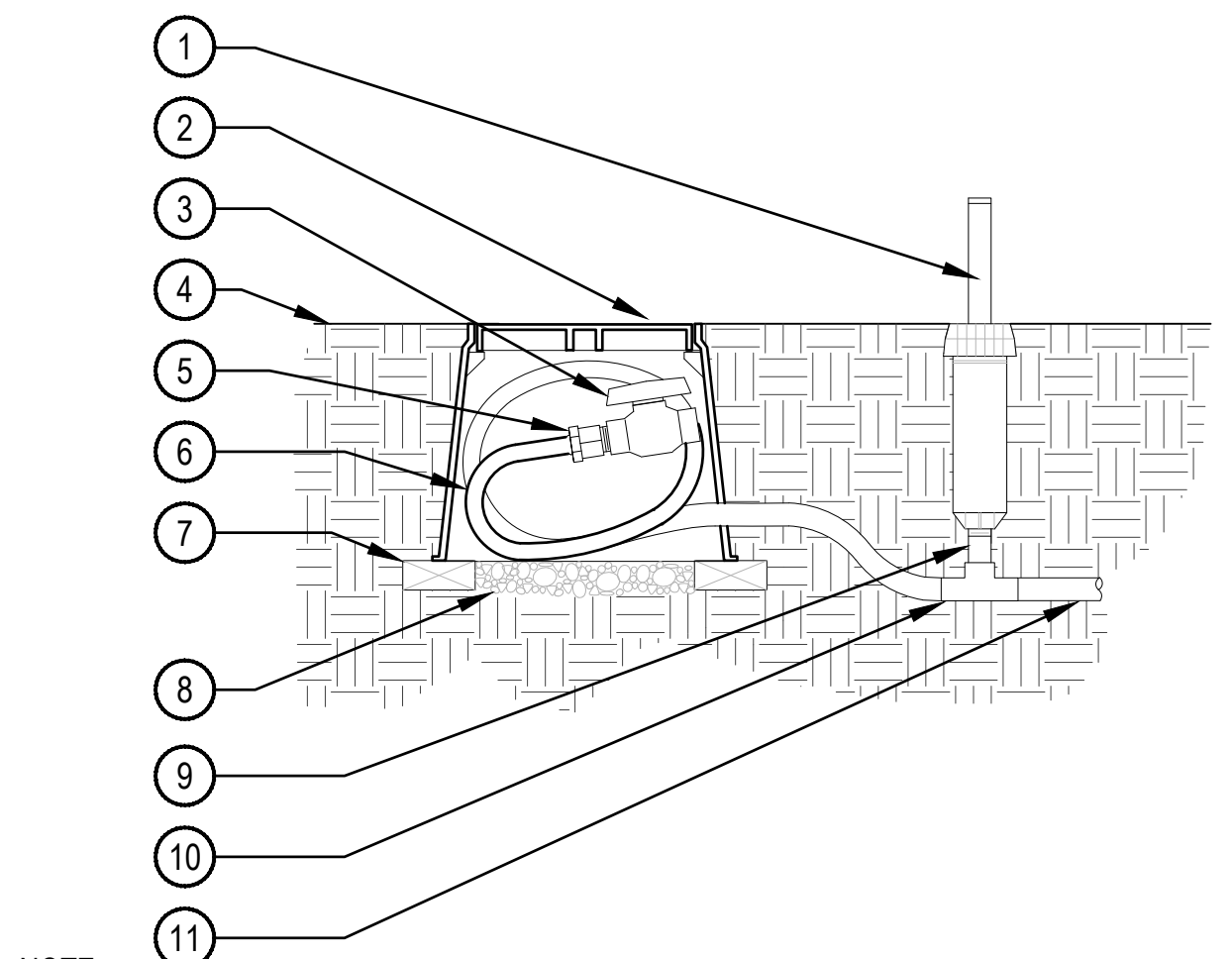
- 1 1/4" DISTRIBUTION TUBING. RUN TUBING UNDER WEED BARRIER FABRIC TO PLANT. LENGTH NOT TO EXCEED 8'
2 UNIVERSAL 1/4" STAKE
3 DIFFUSER CAP
4 TOP OF MULCH
5 PRESSURE COMPENSATING EMITTER PER EMITTER SCHEDULE. INSTALL EMITTER AT 45° TO 60° ANGLE
6 3/4" POLYETHYLENE TUBING SET WITH TOP OF TUBING FLUSH WITH FINISH GRADE OF SOIL
7 FINISH GRADE OF SOIL
8 WEED BARRIER FABRIC



1 SINGLE OUTLET EMITTER

SCALE: NTS

- 1 12" MIN. POP-UP HEAD WITH ENCLOSED NOZZLE AND SWING PIPE. (ZONE OPERATIONAL INDICATOR)
2 LOCKING ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO BE FLUSH WITH FINISH GRADE
3 3/4" SCH. 40 PVC BALL VALVE
4 FINISH GRADE
5 3/4" MxI MALE ADAPTER W/ CLAMPS
6 3/4" POLYETHYLENE DRIP TUBING - 24" COIL IN BOX FOR MAINTENANCE
7 BRICK (2 REQUIRED MIN.)
8 3/4" GRAVEL SUMP, 4" DEPTH
9 1/2" SCH. 80 NIPPLE (LENGTH AS NEEDED)
10 3/4"x3/4"x1/2" IxIxF INSERT TEE
11 POLY LATERAL



- NOTE:
1. COMPACT SOIL AROUND VALVE BOX TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.
2. INSTALL OPERATIONAL INDICATOR WITHIN 24" OF FLUSH VALVE.
3. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

4 DRIP FLUSH VALVE WITH OPERATIONAL INDICATOR

SCALE: NTS