



## DRYLAND SEEDING REQUIREMENTS

### GENERAL OVERVIEW

THIS REPORT OUTLINES RECOMMENDED REVEGETATION AND SLOPE STABILIZATION MEASURES FOR DISTURBED CUT AND FILL SLOPES WITHIN THE PROJECT LIMITS AS DEFINED ON THE ACCOMPANYING PLAN WHICH WILL BE SEEDED WITH THE DRYLAND SEED MIX AND NOT IRRIGATED. THESE RECOMMENDATIONS ARE MADE TO PREVENT SHORT TERM AND LONG TERM SOIL EROSION AS WELL AS TO PROVIDE AN AESTHETIC REVEGETATION WHICH WILL BLEND WITH THE EXISTING NATURAL SURROUNDING AREA. THE MEASURES INCLUDE REVEGETATION AND HYDROMULCHING PROCEDURES FOLLOWING TOPSOIL DISTRIBUTION AND FINE GRADING. THE AREA TO BE REVEGETATED CONSISTS OF ALL DISTURBED AREAS RELATED TO GRADING FOR CONSTRUCTION AND ANY OTHER AREAS DISTURBED IN THE PROCESS OF CONSTRUCTION. THE SLOPES TO BE AFFECTED VARY WIDELY IN DEGREE AND ASPECT.

### GENERAL EARTHWORK

ALL WORK SHALL BE LIMITED TO THE AREA REQUIRED FOR CONSTRUCTION WITH MINIMAL, IF ANY, DISTURBANCE TO THE SURROUNDING NATURAL SLOPE OR VEGETATION. ALL FINISHED GRADES SHALL BE SMOOTH AND ROUNDED TO ENSURE A NATURAL TRANSITION BETWEEN NEW AND EXISTING GRADES. REFER TO GRADING AND DRAINAGE PLANS FOR ADDITIONAL REQUIREMENTS.

### SITE PREPARATION

EARTHWORK PROCESS SHOULD BEGIN WITH CLEARING LARGE SHRUBS FROM THE AREAS TO BE DISTURBED. WOODY STEMS AND BRANCHES SHALL BE CHIPPED ON SITE TO IMPROVE THE AMOUNT OF ORGANIC MATERIAL IN THE TOP SOIL. NATURAL TOPSOIL OCCURS AT VARYING DEPTHS ON THE PROJECT SITE. THE TOPSOIL SHOULD BE EXCAVATED AND STOCKPILED AT DESIGNATED STORAGE AREAS PRIOR TO THE PROPOSED GRADING OPERATIONS.

### TOPSOIL DISTRIBUTION

ONCE THE GENERAL EARTHWORK IS COMPLETE AND ROUGH GRADING HAS BEEN ACCOMPLISHED, THE TOPSOIL SHOULD BE REDISTRIBUTED OVER THE AREA TO MINIMUM DEPTHS AS SPECIFIED. WHERE NEEDED, SLOPES SHOULD BE GRADED WITH SERRATION TO HOLD TOPSOIL ADEQUATELY. TOPSOIL SHOULD BE SPREAD AND LIGHTLY COMPACTED UTILIZING A SMALL GLEATED TRACTOR MOVING PERPENDICULAR TO THE CONTOURS OR ANOTHER METHOD WITH EQUAL CAPABILITY. IT IS OUR RECOMMENDATION THAT ANY NECESSARY MECHANICAL MEANS OF EROSION CONTROL BE IN PLACE PRIOR TO BEGINNING SITE DISTURBANCE.

ONCE TOPSOIL HAS BEEN DISTRIBUTED AND GRADED, REVEGETATION SEEDING SHALL FOLLOW IMMEDIATELY. IN ORDER TO ELIMINATE SURFACE CRUSTING AND TO FACILITATE BETTER ROOT PENETRATION, THE SURFACE SHOULD BE SCARIFIED PRIOR TO SEEDING.

### SEEDING

APPLY SEED TO THE PROJECT SITE BY HYDROSEEDING. THE FOLLOWING INFORMATION PROVIDES MATERIAL AND EXECUTION FOR SEEDING.

SEED MIXTURE	RATE, PURE LIVE SEED LBS. / ACRE
WESTERN YARROW	0.12
FIRECRACKER PENSTEMON	0.24
BLUE FLAX	2.52
CALIFORNIA POPPY	2.52
SHEEP FESCUE	1.80
IDAHO FESCUE	2.40
SANDBURG BLUEGRASS	1.20
ROCKY MOUNTAIN PENSTEMON	1.20

TOTAL SEED INSTALL @ 12 LBS. / ACRE

### FERTILE-FIBER MULCH MATERIAL

KINI FERTILE-FIBER FROM @QUATTRO ENVIRONMENTAL, A COMPOSTED POULTRY BASED MULCH MATERIAL FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS. APPLY AT THE RATE OF 2000 LBS. PER ACRE.

### ORGANIC SOIL AMENDMENT

KINI POWER FROM @QUATTRO ENVIRONMENTAL (OR APPROVED EQUAL) APPLIED AT 5 GALLONS PER ACRE.

### TACKIFIER

MULCH TACKIFIER SOIL STABILIZER - ECOLOGY CONTROLS M-BINDER. TACKIFIER APPLIED AT THE RATE OF 80 LBS. PER ACRE.

### GRANITE SEED

64T WEST 2100 NORTH  
P.O. BOX 177  
LEHI, UTAH 84043  
1-800-768-4433  
(OR APPROVED EQUAL)

### HYDROSEEDING

MIX SPECIFIED SEED AND ORGANIC SOIL AMENDMENT IN WATER PER MANUFACTURER'S RECOMMENDATIONS. APPLY SEEDED SLURRY EVENLY IN TWO INTERSECTION DIRECTIONS. DO NOT HYDROSEED AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON SAME DAY. KEEP OFF ROADS, WALLS, STRUCTURES AND AREAS NOT TO BE SEEDING. CLEAN UP THESE AREAS. AFTER HYDROSEED, TRACK IN SEED USING A GLEATED CRAWLER WITH TRACK MARKS PERPENDICULAR TO THE SLOPE. AFTER TRACKED, MULCH SLOPE WITH 2000 LBS. PER ACRE OF FERTILE-FIBER MULCH MATERIAL AND 80 LBS. PER ACRE OF TACKIFIER.

### MAINTENANCE

IMMEDIATELY RESEED AREAS WHICH SHOW BARE SPOTS. MINIMUM ACCEPTABLE PLANT COVERAGE IS 80 PERCENT AFTER ONE GROWING SEASON. PROTECT SEEDING AREAS WITH WAXING SIGNS DURING MAINTENANCE PERIOD. THE SEED WILL REQUIRE APPROXIMATELY NINETY (90) DAYS OF FAVORABLE GROWING CONDITIONS TO GERMINATE AND BECOME ESTABLISHED FOR SUCCESSFUL SURVIVAL WITH NORMAL MINIMAL SUMMER PRECIPITATION.

### SEEDING TIME

THE OPTIMAL SEEDING TIME SHALL BE IN FALL, BETWEEN MID SEPTEMBER AND MID OCTOBER. IF SEEDING IS APPLIED TOO EARLY OR TOO LATE AND PROPER GERMINATION IS NOT REALIZED PRIOR TO FALL DORMANCY, THEN RESEEDING SHALL BE APPLIED IN EARLY SPRING, AS SOON AS SOIL IS WORKABLE (NOT MUDDY) BETWEEN MARCH AND MID MAY. THIS PLANTING TIME PROVIDES THE OPTIMUM WEATHER CONDITIONS FOR SEED GERMINATION AND SEEDLING SURVIVAL RATE. SEEDING AFTER NOVEMBER 20, 'DORMANT SEEDS' INSURES THAT THE SEED DOES NOT GERMINATE PRIOR TO FREEZING WINTER TEMPERATURES AND SEED SHOULD BE IN PLACE FOR THE EARLY SPRING RAINS.

### WATER

THE CONTRACTOR WILL PROVIDE SUPPLEMENTAL WATER TO ENSURE PROPER SEED GERMINATION.

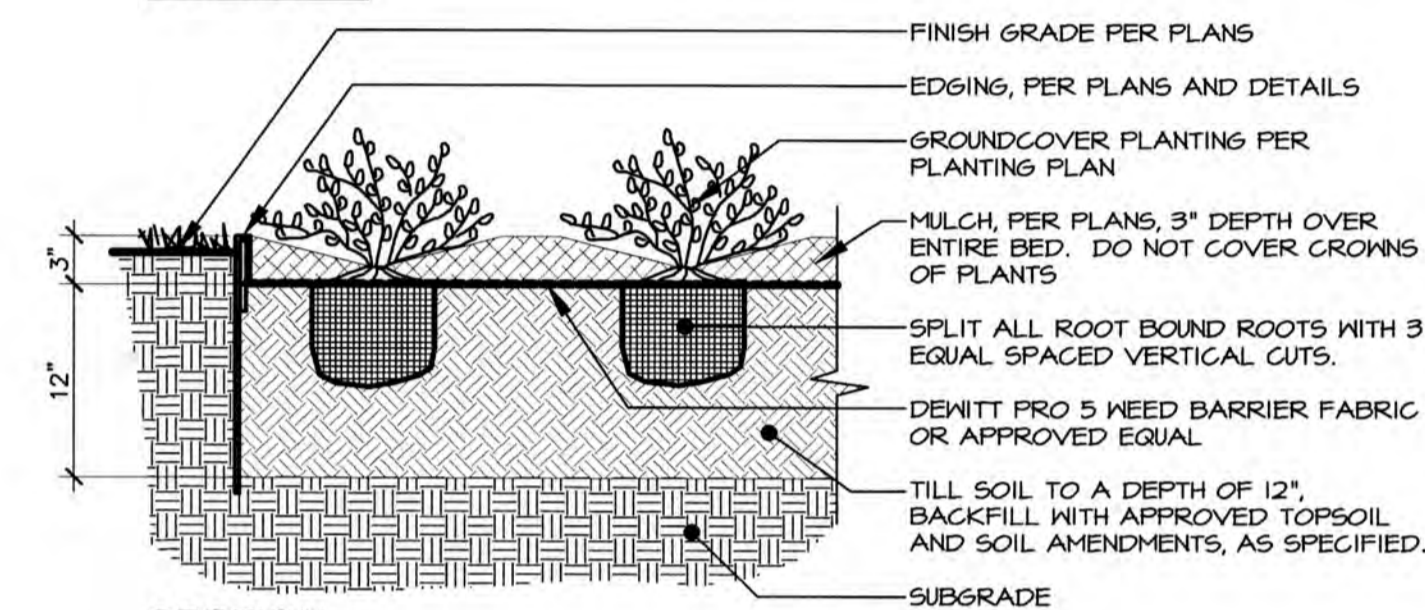
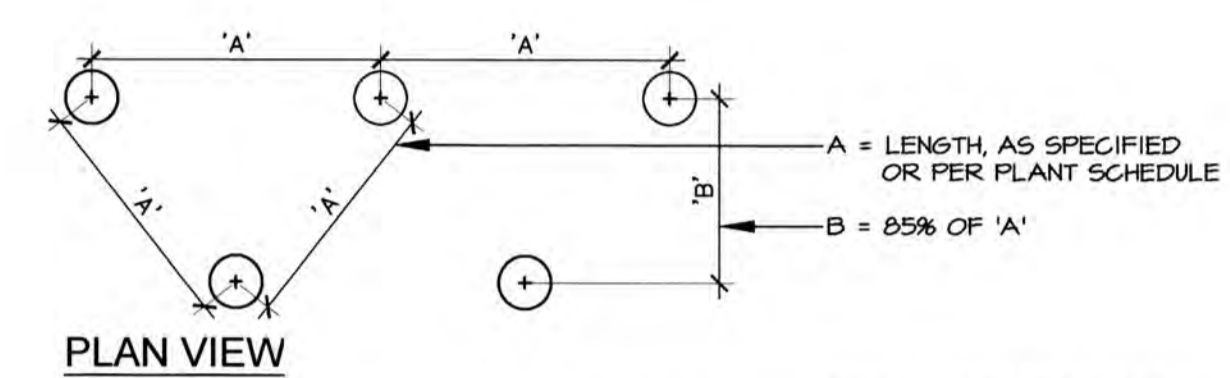
### FERTILIZATION

FERTILIZATION IS NOT RECOMMENDED FOR RECLAMATION SEEDING DUE TO PROMOTION OF WEED COMPETITION. IF WEEDS ARE APPARENT, CONTACT LANDSCAPE ARCHITECT FOR WEED REMOVAL REQUIREMENTS.

### EROSION CONTROL

UNDER NORMAL CIRCUMSTANCES AND ADHERENCE TO THE CONSTRUCTION PRACTICES DESCRIBED IN THE SPECIFICATIONS, THE ABOVE RECOMMENDED EROSION CONTROL MEASURE SHOULD PROVIDE A STABLE SLOPE CONDITION. TO AVOID INCIDENTAL EROSION, IT IS IMPERATIVE THAT THE SLOPES, ONCE PREPARED, REMAIN UNDISTURBED UNTIL SEEDING GERMINATES AND IS ESTABLISHED.

AN 80% VEGETATION COVER IS RECOMMENDED TO CONTROL EROSION. SURFACE CONDITIONS SHOULD BE MONITORED DAILY. IF EROSION DETRIMENTAL TO THE SLOPE IS OBSERVED OR ANTICIPATED DUE TO EXCESSIVE RAINFALL, REMEDIAL MEASURES SHALL BE IMPLEMENTED AS REQUIRED. REFER TO THE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.

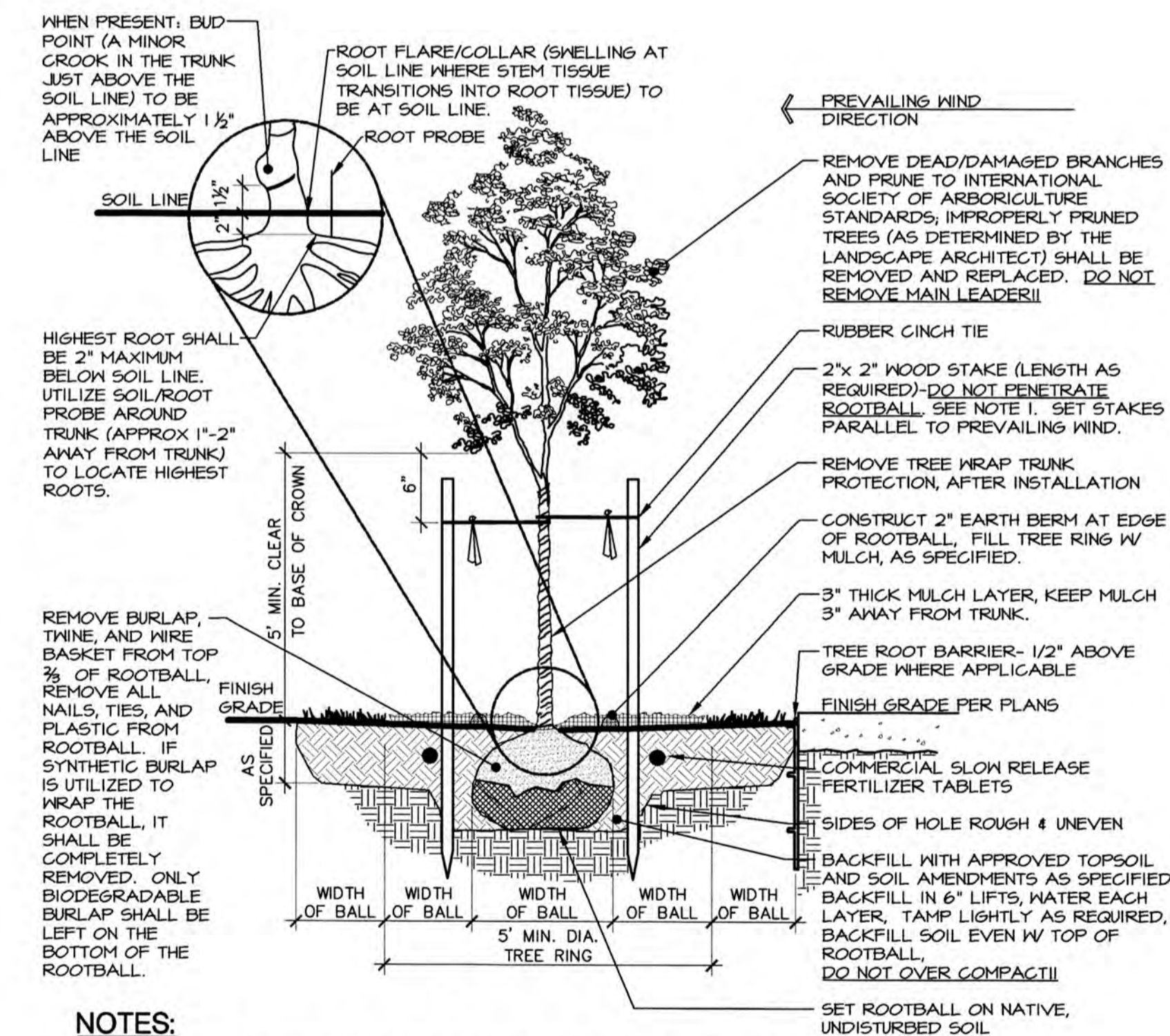


### NOTES:

- ALL GROUND COVER PLANTS TO BE PLANTED ON CENTER AND IN A TRIANGULAR PATTERN.
- APPLY SPECIFIED PRE-EMERGENT PER MANUFACTURER'S RECOMMENDATIONS TO ALL GROUND COVER BEDS.

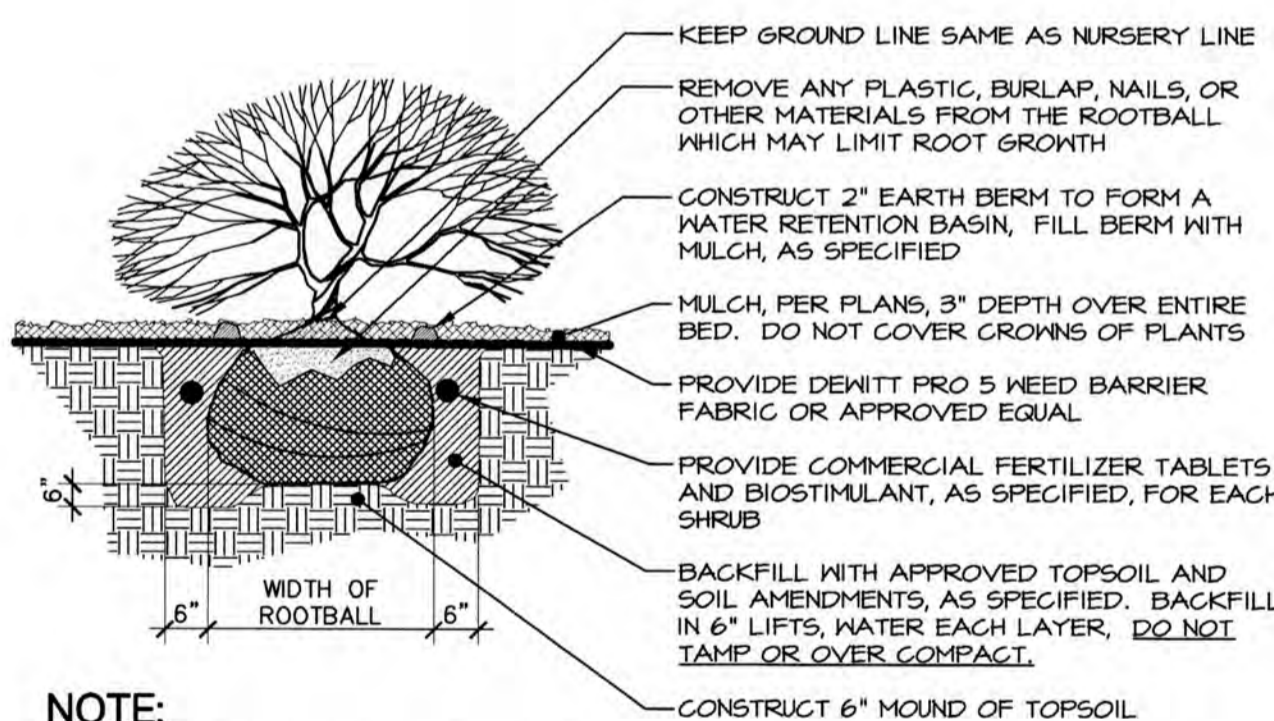
## 3 PERENNIAL & GROUND COVER PLANTING

Scale: 1" = 1'-0"



### NOTES:

- THE STAKING OF TREES IS TO BE THE CONTRACTOR'S OPTION, HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR LENGTH OF WARRANTY PERIOD OR 1 YEAR AFTER SUBSTANTIAL COMPLETION WHICHEVER IS GREATER. ALL STAKING SHALL BE REMOVED AT THE END OF THE WARRANTY PERIOD.
- IN THE EVENT OF A QUESTION OR LACK OF CLARITY ON THE DRAWINGS, THE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
- LANDSCAPE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO INSTALLATION OF PLANT MATERIAL.
- WRAP RUBBER GINCH TIES AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR FIGURE EIGHT TYING METHOD. SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT SLIPPAGE.
- WATER TREE TWICE WITHIN THE FIRST 24 HOURS.
- IN THE EVENT HARDPAN SOILS PREVENT TREE PLANTING AS DETAILED, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.
- FOR TREES LOCATED WITHIN ROADSIDE PLANTERS LESS THAN 8'-0" IN WIDTH, PROVIDE 24" TREE ROOT BARRIER (DEEPROK #24-2 OR APPROVED EQUAL). LOCATE ROOT BARRIER AT BACK OF CURB AND EDGE OF SIDEWALK. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ALL TREE INSTALLATIONS SHALL CONFORM TO ALL AGENCY APPROVAL REQUIREMENTS, CONTRACTOR SHALL VERIFY PRIOR TO ANY INSTALLATIONS.

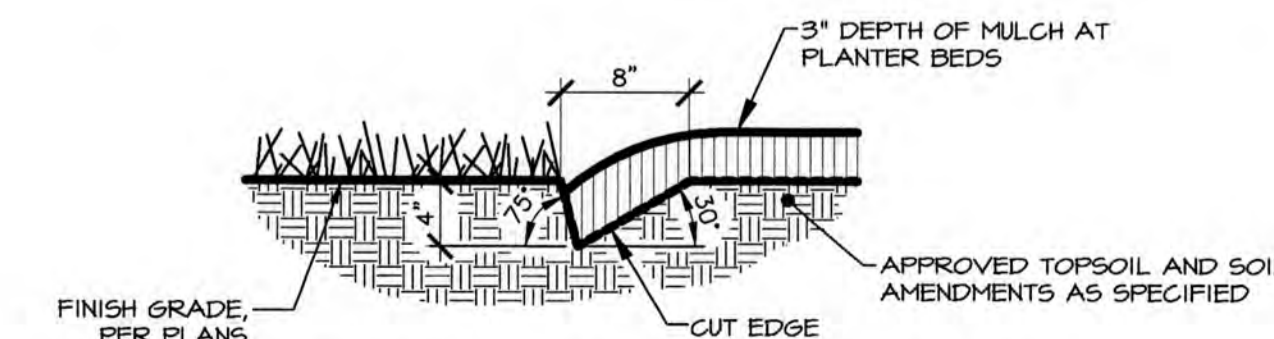


### NOTE:

- WATER SHRUB TWICE WITHIN FIRST 24 HOURS.
- APPLY SPECIFIED PRE-EMERGENT PER MANUFACTURER'S RECOMMENDATIONS TO ALL GROUND COVER BEDS.

## 1 SHRUB PLANTING

NOT TO SCALE



## 2 PLANTER BED CUT EDGE

NOT TO SCALE

## 4 DECIDUOUS TREE PLANTING

NOT TO SCALE



Know what's below.  
Call before you dig.



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PROJECT:  
NEW O'REILLY AUTO PARTS STORE  
N. MARKSHEFFEL ROAD  
COLORADO SPRINGS, CO #11  
LANDSCAPE DETAILS



COMM # 4369

DATE: 10-11-19

REVISION

DATE:

# IRRIGATION NOTES

- SYSTEM DESIGN BASED ON THE ASSUMPTION OF THE AVAILABILITY OF 20 G.P.M. WITH 57 P.S.I. AT THE SOURCE AND 57 P.S.I. AT THE EMITTERS. FIELD VERIFY. IF THE SOURCE PRESSURE DOES NOT MEET THESE REQUIREMENTS CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CHANGE ORDER REQUIREMENTS.
- ALL LATERAL LINES THAT ARE NOT LABELED SHALL BE 3/4" DIAMETER.
- CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.
- COORDINATE ALL IRRIGATION INSTALLATION OPERATIONS WITH CIVIL, MECHANICAL, AND ELECTRICAL ENGINEERING SHEETS.
- CONTRACTOR SHALL COORDINATE INSTALLATION OF IRRIGATION CONDUIT AND SLEEVES UNDER HARD SURFACES WITH RESPECTIVE CONTRACTORS.
- ALL SLEEVES SHALL BE INSTALLED AS PART OF IRRIGATION CONTRACT. APPROXIMATE LOCATION OF SLEEVES ARE SHOWN ON THE IRRIGATION PLAN. FIELD VERIFY LOCATION. ALL ENDS OF SLEEVES SHALL BE TAPED OR CAPPED AND MARKED WITH A 2" X 4" PAINTED STAKE EXTENDING TO 24" ABOVE GRADE. STAKES SHALL NOT BE REMOVED UNTIL THE IRRIGATION SYSTEM IS COMPLETE. ALL SLEEVES SHALL EXTEND A MINIMUM OF 18" BEYOND BACK OF CURB OR EDGE OF PAVEMENT. PROVIDE COMPACTED BACKFILL AS NECESSARY AT HARD SURFACE LOCATIONS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES REQUIRED FOR THIS WORK.
- IRRIGATION CONTROLLER(S) ARE TO BE LOCATED AS SHOWN ON THE PLAN. CONTROLLERS SHALL BE WIRED TO POWER SUPPLY BY A LICENSED ELECTRICIAN PER LOCAL CODES. IRRIGATION CONTRACTOR TO PROVIDE ALL REQUIRED CONNECTIONS TO 24 VOLT IRRIGATION CONTROL WIRE INSIDE THE BUILDING THROUGH APPROPRIATE SIZED CONDUIT.
- ALL ELECTRICAL WORK TO MEET OR EXCEED N.E.C., STATE CODES, LOCAL CODES, AND MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ROCK AND DEBRIS BROUGHT TO THE SURFACE AS A RESULT OF TRENCHING OPERATIONS.
- CONTRACTOR SHALL REFER TO SPECIFICATIONS AND DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- ALL 24 VOLT POWER WIRES SHALL BE #14 AWG COPPER. ALL ABOVE GROUND 120 VOLT AND 24 VOLT WIRE SHALL BE IN PVC CONDUIT. ONE POWER WIRE SHALL BE PROVIDED BACK TO THE CONTROLLER FOR EACH VALVE. ALL COMMON WIRES SHALL BE #12 AWG COPPER. ALL 24 VOLT WIRES SHALL BE TAPED TOGETHER AT TEN FOOT (10'-0") INTERVALS.
- INSTALLATION SHALL COMPLY WITH ALL NATIONAL, STATE, AND LOCAL LAWS AND ORDINANCES.
- IRRIGATION CONTRACTOR SHALL PROVIDE A COMPLETE AS-BUILT DRAWING IN PDF FORMAT UPON COMPLETION OF INSTALLATION AND PRIOR TO FINAL PAYMENT.
- THE ENTIRE SYSTEM SHALL BE GUARANTEED TO BE COMPLETE AND PERFORM IN EVERY DETAIL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ITS ACCEPTANCE; REPAIR OR REPLACEMENT OF ANY DEFECTS OCCURRING WITHIN THE ONE YEAR SHALL BE FREE OF EXPENSE TO THE OWNER.
- AS PART OF THIS CONTRACT, PERFORM AT NO EXTRA COST WINTERIZATION AND SPRING START UP OF THE SYSTEM DURING THE GUARANTEE PERIOD (ONE YEAR).
- ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF THE QUALITY AND PERFORMANCE SPECIFIED, AND SHALL MEET THE REQUIREMENTS OF THIS SYSTEM. USE MATERIALS AS SPECIFIED, NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION OF THE OWNER OR LANDSCAPE ARCHITECT.
- IRRIGATION CONTRACTOR SHALL MAKE NECESSARY MINOR FIELD ADJUSTMENTS TO PIPE, AND OTHER IRRIGATION EQUIPMENT LOCATIONS TO FIT THE AS-BUILT SITE. ADJUST HEAD AND PIPE LOCATIONS AS REQUIRED TO AVOID DAMAGING EXISTING TREE ROOTS. ADJUSTMENTS SHALL ENSURE HEAD TO HEAD COVERAGE AND NOT OVERSPRAY THE BUILDING OR OTHER IMPROVEMENTS.
- IRRIGATION PIPING LAYOUT IS SCHEMATIC. WHERE LINES ARE SHOWN BELOW PAVEMENT OR IN LANDSCAPE AREAS, THEY SHALL BE LOCATED IN THE LANDSCAPE AREA UNLESS SHOWN WITH A SLEEVE SYMBOL.
- BASE PLAN AND LOCATION OF EXISTING EQUIPMENT ARE SCHEMATIC IN NATURE. FIELD VERIFY ALL BASE AND EXISTING IRRIGATION ELEMENTS AND CONDITIONS PRIOR TO CONSTRUCTION AND PROVIDE NECESSARY ADJUSTMENTS.
- ALL MAIN LINE FITTINGS SHALL BE LEECOC DUCTILE IRON PUSH ON TYPE UNLESS NOTED FOR LATERAL SERVICE. (ON 3" OR LARGER ONLY)
- IN THE EVENT OF A DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT.
- ALL MAIN LINE FITTINGS SHALL BE SCHEDULE 40 SOLVENT WELD TYPE UNLESS NOTED FOR LATERAL SERVICE.
- IN THE EVENT OF A DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT.

# DRIP IRRIGATION NOTES

- ALL PLANTER BEDS SHALL BE IRRIGATED WITH AN INLINE EMITTER DRIP LINE IRRIGATION SYSTEM, NETAFIM TECHLINE HCVR OR APPROVED EQUAL. ALL TREES IN THE NOTED AREA ARE TO BE IRRIGATED AS PER DETAIL. THE CONTRACTOR IS RESPONSIBLE TO INSTALL THE DRIP SYSTEM AS PER MANUFACTURER'S RECOMMENDATIONS AND THE FOLLOWING REQUIREMENTS:
  - AN INLINE EMITTER DRIP LINE TUBING SHALL BE USED. THE EMITTER SPACING SHALL BE TWELVE INCHES (12") AND THE EMITTER FLOWS ARE TO BE 0.11 G.P.H. LATERALS SHALL BE SPACED AT EIGHTEEN INCHES (18").
  - A MANUAL DISC FILTER SHALL BE INSTALLED ON EACH ZONE SEE LEGEND FOR MODEL NUMBER. THE FILTER SHALL BE INSTALLED IN CONJUNCTION WITH AN ELECTRIC REMOTE CONTROL VALVE AS SPECIFIED (SIZE AS NOTED ON SCHEDULE). THE FILTER SHALL INCLUDE 120 MESH DISC FILTER RINGS. SEE DETAIL.
  - ALL ZONES SHALL BE INSTALLED WITH A MANUAL LINE FLUSHING VALVE. INSTALL WITH COLLAR. SEE DETAIL 12/L4.
  - ALL TUBING SHALL BE STAKED DOWN WITH T156 SIX INCH (6") SOIL STAPLES EVERY 3'-5" PLUS TWO ON EACH TEE, ELBOW OR CROSS.
- THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE A MEETING WITH THE LANDSCAPE ARCHITECT AND THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH ANY IRRIGATION INSTALLATION IN ORDER TO REVIEW WORK TO BE DONE. NO CHANGES IN MATERIAL SPECIFIED OR TO THE DESIGN OF THE SYSTEM SHALL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PVC LATERAL LINES FROM VALVES TO HEADERS ARE TO BE BURIED AT MINIMUM DEPTH OF TWELVE INCHES (12"). SIZE AS NECESSARY. (SEE PIPE SIZING NOTES ON THIS SHEET.)
- AFTER INSTALLATION OF THE IRRIGATION SYSTEM THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER WITH AS-BUILT DRAWINGS AND INSTRUCTIONS FOR MAINTENANCE OF THE DRIP SYSTEM.
- PROVIDE DRIP LINE TO ENSURE EACH SHRUB AND TREE RECEIVES ADEQUATE IRRIGATION SO THAT THE APPROPRIATE AMOUNT OF WATER IS APPLIED TO ENSURE THE HEALTH OF ALL PLANT MATERIAL. BURY DRIP LINE AT 5" MIN. BELOW GRADE. SEE DETAIL 6/L4. LOCATE DRIP LINE TO OBTAIN COMPLETE COVERAGE OF PLANTER AREAS. SEE DETAIL 14/L4. REFER TO NOTES, SPECIFICATIONS, AND DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

# CAUTION NOTICE

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

# SYSTEM OPERATIONAL NOTES

**SYSTEM OPERATION:**  
(BASED ON HISTORICAL CLIMATE)

# CONTROLLER SETUP / WATERING SCHEDULE:

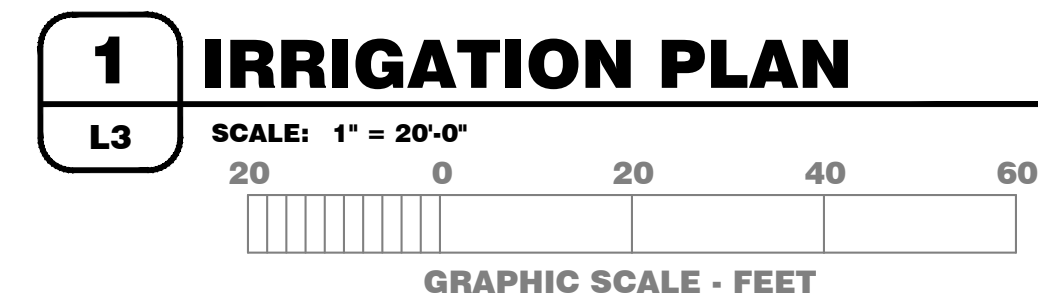
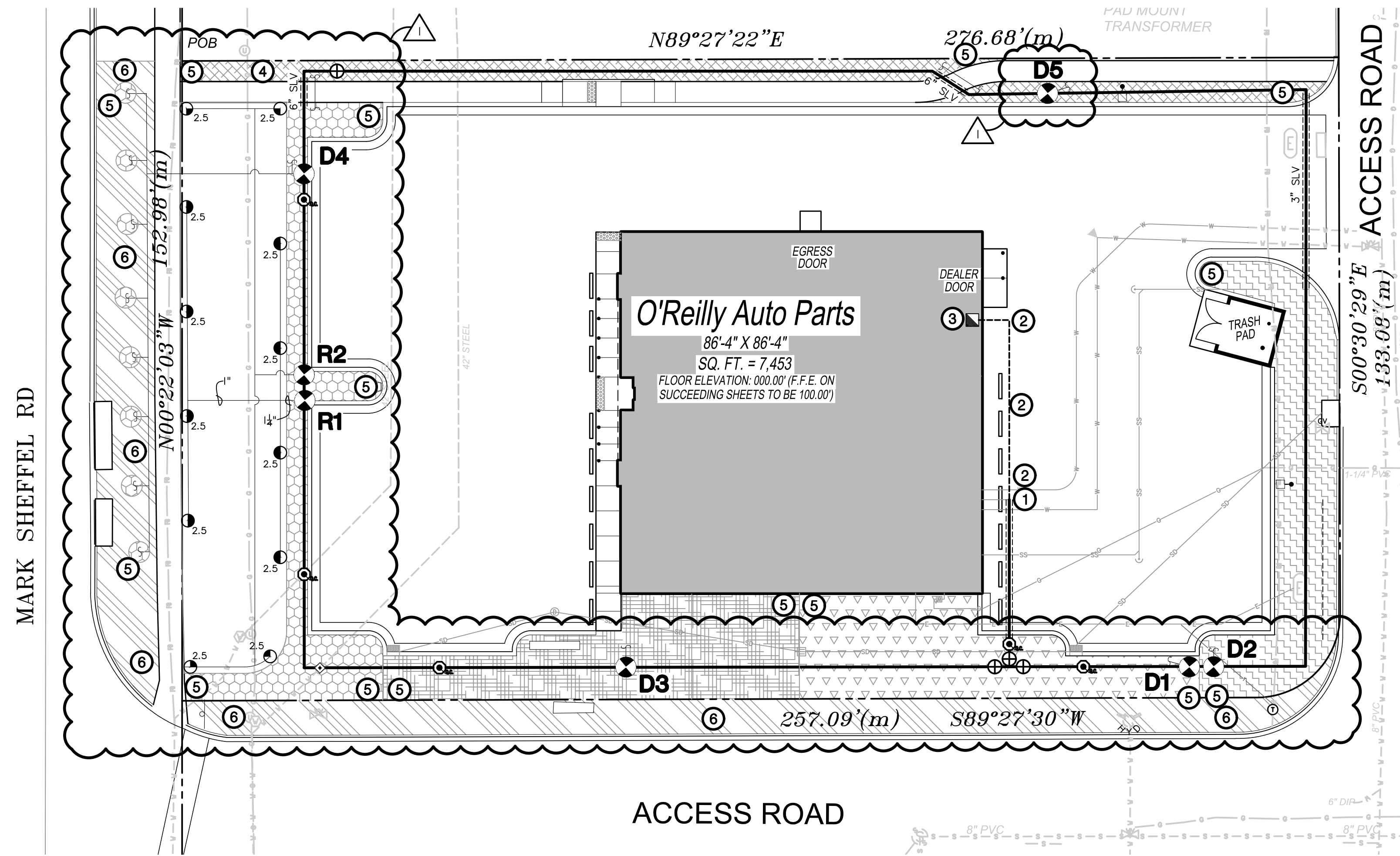
A CYCLING TECHNIQUE WILL BE USED FOR APPLICATION OF WATER. EACH STATION RUN TIME WILL BE APPLIED WITH THREE (3) DIFFERENT START TIMES. THEREFORE STATION RUN TIMES REFLECT ONE THIRD (1/3) THE TOTAL APPLICATION. THE WATERING SCHEDULE SHALL BE MONDAYS, WEDNESDAYS AND FRIDAYS. SET CONTROLLERS FOR START TIME #1 AT 5:30AM. WATERING WILL BE STOPPED DURING THE MONTHS OF DECEMBER THROUGH FEBRUARY. EXTEND WATER WINDOW IF REQUIRED TO MEET PEAK WATER REQUIREMENTS.

# INITIAL STATION RUN TIMES:

DRIP ZONES: SHRUBS - 30 MINUTE CYCLES.  
TREES - 45 MINUTE CYCLES.

# SYSTEM BALANCING:

AS THE SYSTEM OPERATES, SOME ZONES WILL BE WET WHILE OTHERS ARE DRY. ADJUST ONLY THOSE STATIONS WHICH REQUIRE ADDITIONAL OR LESS WATER. FOR EXAMPLE, IF STATION T51, A 15' TURF SPRAY ZONE IS ALWAYS DRY, CHANGE THE STATION T51 RUN TIME FROM FIFTEEN (15) MINUTES TO SIXTEEN (16) MINUTES. CONTINUE MAKING ADJUSTMENTS UNTIL THE ZONE MOISTURE CONTENT IS ACCEPTABLE. USE NOZZLE CHANGES OR NOZZLE SCREEN ADJUSTMENTS TO ADJUST WET AND DRY AREAS WITHIN A ZONE.



# IRRIGATION MATERIAL LEGEND

SYMBOL	DESCRIPTION
3.0 2.0 1.5 1.0 75 5	'HUNTER' PGJ-04 GEAR ROTOR AS SPECIFIED. NOZZLE AS INDICATED ON PLANS. SEE DETAIL 5/L4.
TS3	ELECTRIC REMOTE CONTROL VALVE AS SPECIFIED. SEE ZONE SCHEDULE FOR VALVE SIZE. SEE DETAILS 1/L4 AND 10/L4.
1/4"	'HUNTER' ICV REMOTE CONTROL VALVE LABEL (R = ROTOR, TS = TURF SPRAY, SS = SHRUB SPRAY, D = DRIP).
6" SLV	LATERAL LINE AS SPECIFIED, SIZE AS INDICATED ON PLANS.
1/2"	1/2" MAIN LINE AS SPECIFIED.
CLASS 200 IRRIGATION SLEEVE	CLASS 200 IRRIGATION SLEEVE, SIZE AS INDICATED ON PLANS. (Provide a 2-1/2" sleeve at all main line sleeve locations for control wires.)
GRAY SCHEDULE 40 PVG FOR ELECTRICAL CONTROL WIRES	GRAY SCHEDULE 40 PVG FOR ELECTRICAL CONTROL WIRES, SIZE AS INDICATED ON PLANS. COORDINATE WITH ELECTRICAL.
WILKINS GATE VALVE OR APPROVED EQUAL	WILKINS GATE VALVE OR APPROVED EQUAL, SIZE TO MATCH MAIN LINE, SEE DETAIL 13/L4.
1" 'HUNTER' HQ-5LRC QUICK COUPLING VALVE W/ HK-55 KEY, AND HOSE SHIVEL	1" 'HUNTER' HQ-5LRC QUICK COUPLING VALVE W/ HK-55 KEY, AND HOSE SHIVEL, SEE DETAIL 8/L4.
NIECO MANUAL DRAIN VALVE	NIECO MANUAL DRAIN VALVE SIZE TO MATCH MAINLINE, SEE DETAIL 3/L4.
'NETAFIM' COMBINATION TEE	'NETAFIM' COMBINATION TEE, SEE DETAIL 10/L4.
HUNTER I-CORE-600-55 6 STATION WALL MOUNTED CONTROLLER WITH ICM-600 EXPANSION MODULE TO ACCOMMODATE 12 ZONES AND LOCKABLE, STAINLESS STEEL CABINET, AND SOLAR-SYNC ET SYSTEM; SEE DETAIL. INSTALL SOLAR-SYNC SENSOR WITHIN 40'-0" OF CONTROLLER. SEE DETAIL 7/L4.	

# CALLOUT LEGEND

- CONNECT NEW 1/2" MAINLINE TO IRRIGATION STUB AT BUILDING PER CIVIL PLANS IN THIS APPROXIMATE LOCATION. (FIELD VERIFY). SEE CIVIL PLANS FOR ADDITIONAL INFORMATION.
- 2" WIRE SLEEVE. ROUTE TO CONTROLLER LOCATION PER LOCAL CODES AS REQUIRED.
- WALL MOUNT IRRIGATION CONTROLLER IN THIS APPROXIMATE LOCATION AS REQUIRED. CONNECT 120 VOLT AS REQUIRED. ALL ABOVE GRADE WIRES SHALL BE LOCATED IN APPROPRIATELY SIZED CONDUIT (2" MINIMUM). IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH CERTIFIED ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL CONNECTIONS. IRRIGATION CONTRACTOR SHALL ENSURE ALL CONTROLLER OPTIONS AND ZONES ARE FULLY OPERATIONAL AFTER TRENCHING HAS FINISHED. CONTROLLER LOCATION TO BE OWNER APPROVED. REVISE LOCATION AS REQUIRED FOR OWNER APPROVAL.
- EXTEND EXTRA WIRES TO THIS POINT, COIL APPROXIMATELY 24" LENGTH OF EXTRA WIRES IN SEPARATE VALVE BOX AT THIS LOCATION.
- INSTALL 'HUNTER' OPERATION INDICATOR STAKE AT END OF DRIFZONE LINE TO ENSURE PROPER FUNCTIONALITY, SEE DETAIL 4/L4.
- CONTRACTOR TO PROVIDE SUPPLEMENTAL WATER TO ENSURE PROPER PLANT ESTABLISHMENT. SEE LANDSCAPE PLAN, SHEET L1 FOR DETAILS.

# ZONE SCHEDULE

ZONE #	GPM	PSI	VALVE SIZE
R1	20.00	30	1"-ICV-1016
R2	10.00	30	1"-ICV-1016
D1	15.07	57	1"-LVZ100T5-HFHP
D2	14.66	57	1"-LVZ100T5-HFHP
D3	15.48	57	1"-LVZ100T5-HFHP
D4	13.67	57	1"-LVZ100T5-HFHP
D5	11.83	57	1"-LVZ100T5-HFHP

NOTE:  
1. VALVES TO BE INSTALLED FOR ANGLE VALVE CONFIGURATION.

# DRIP MATERIAL LEGEND

NETAFIM -AREA ONE	NETAFIM -AREA TWO
NETAFIM -AREA THREE	NETAFIM -AREA FOUR
NETAFIM -AREA FIVE	SUPPLEMENTAL WATER AREA

**CRAIG A. SCHNEIDER, AIA**  
ARCHITECT  
1736 East Sunshine, Suite 417  
Springfield, Missouri 65804  
417.862.0558  
417.862.3265  
e-mail: architect@esterfischneider.com

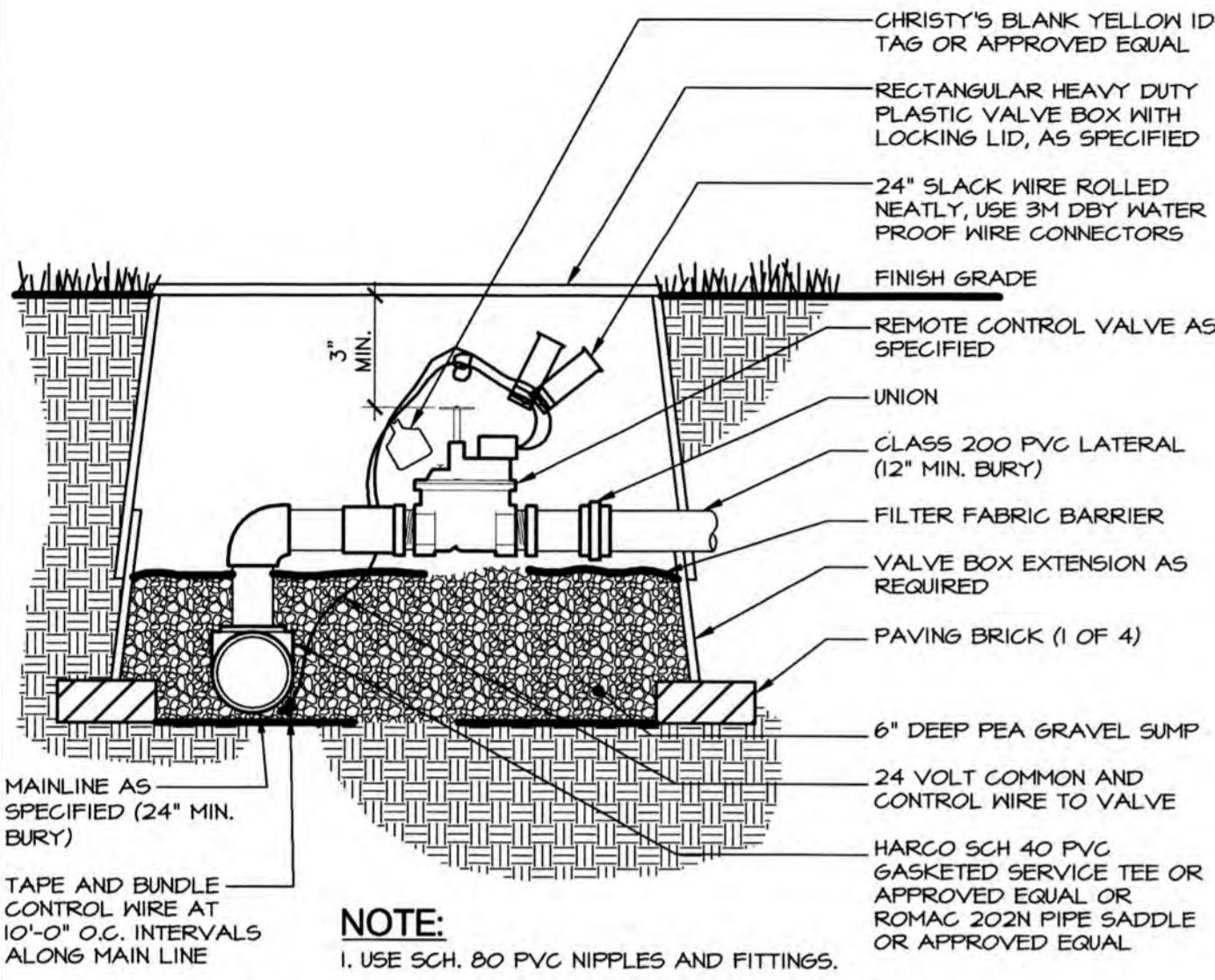
**PROJECT:**  
NEW O'REILLY AUTO PARTS STORE  
N. MARKSHEFFEL ROAD  
COLORADO SPRINGS, CO #11  
**IRRIGATION PLAN**

COMM #	4369
DATE:	10-11-19
REVISION	
DATE:	11-18-19

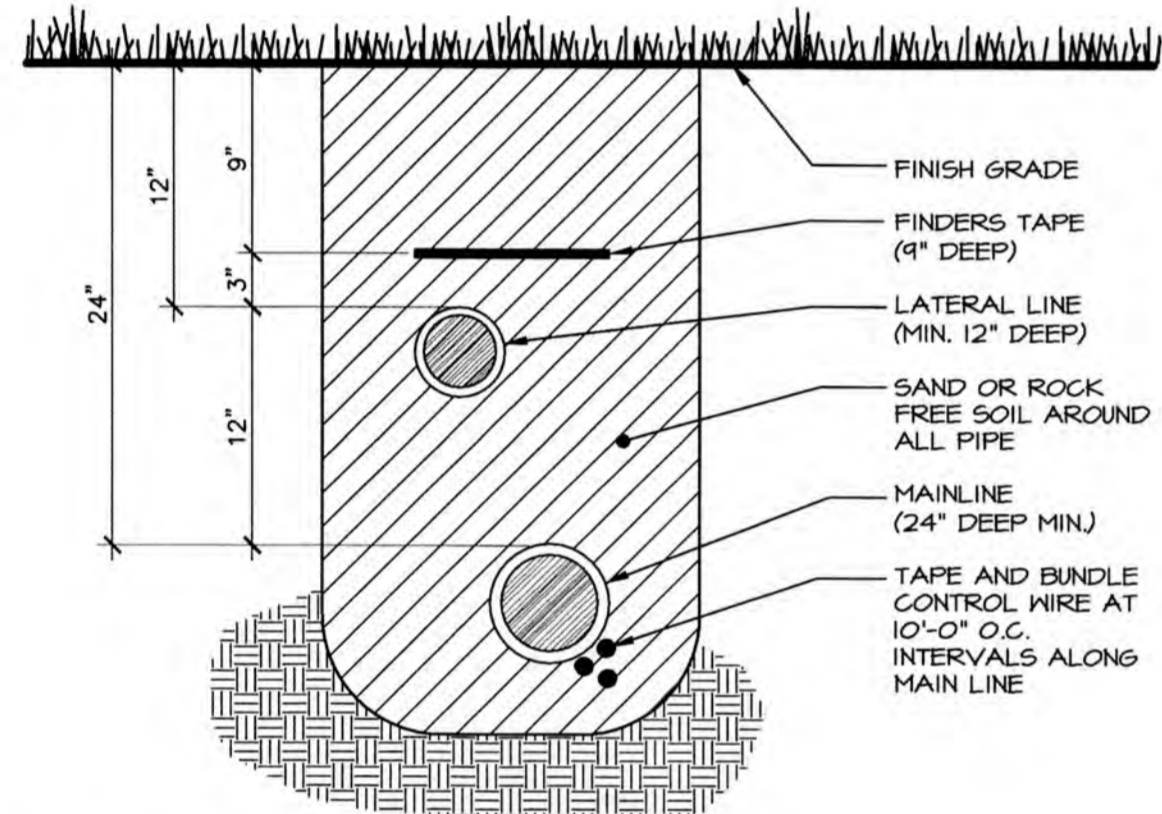
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1128 E SUNSHINE ST. SUITE 417  
SPRINGFIELD, MO

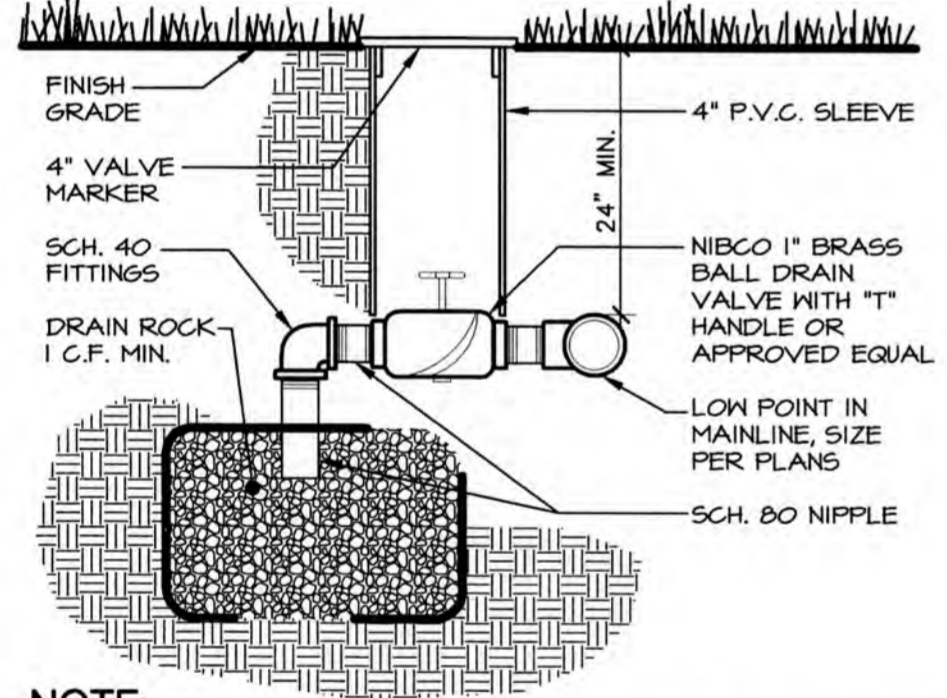
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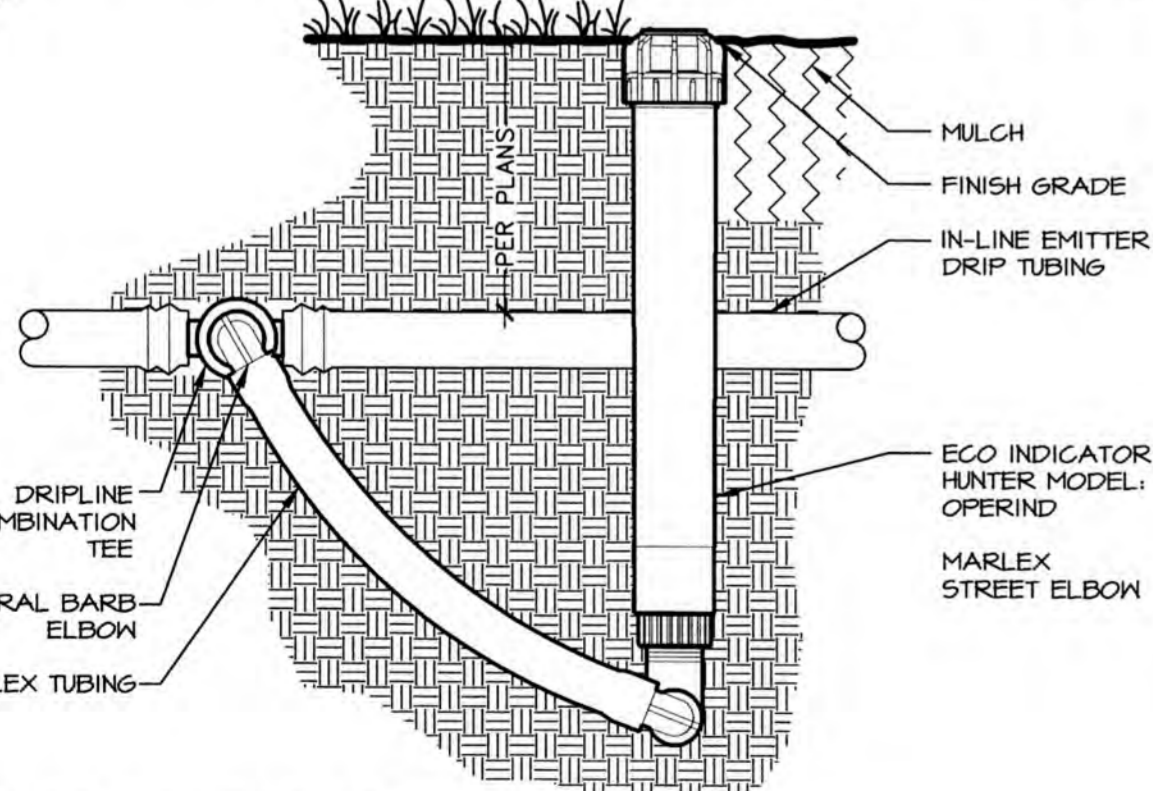
**1 REMOTE CONTROL VALVE** NOT TO SCALE



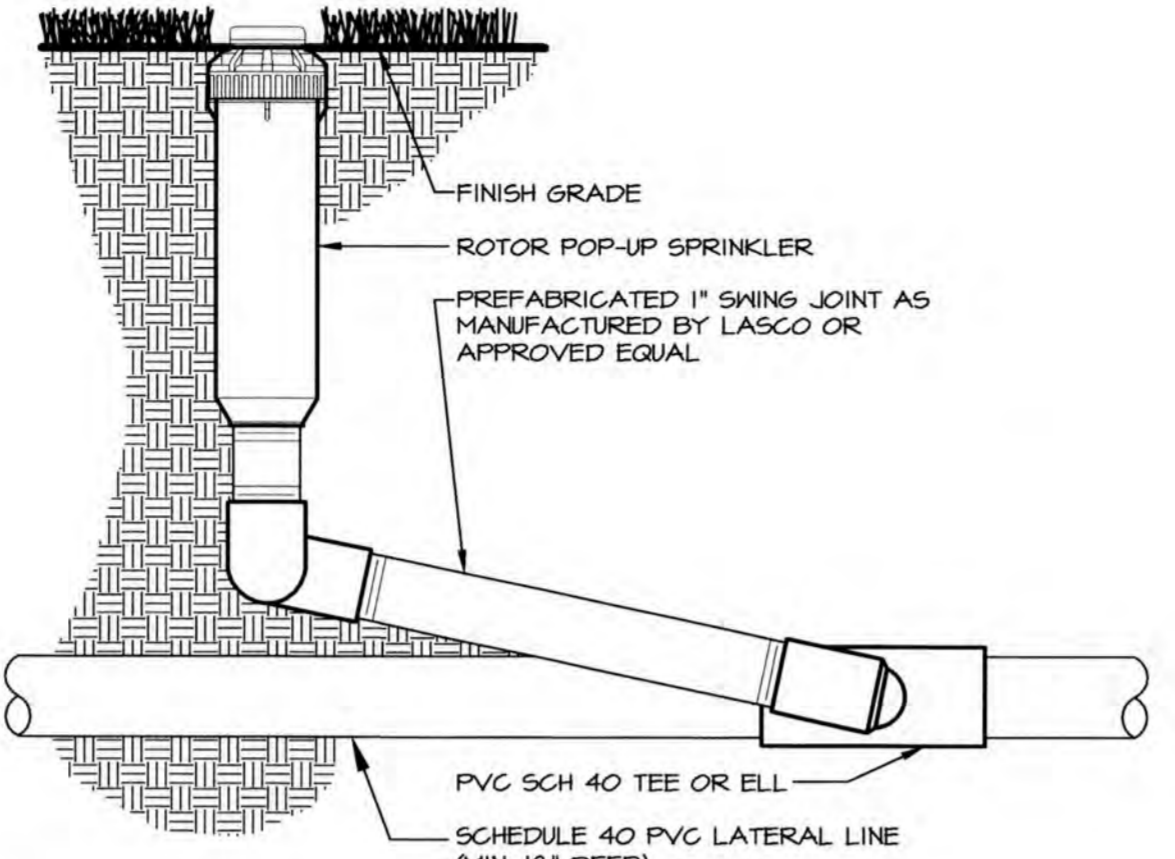
**2 TRENCH SECTION** NOT TO SCALE



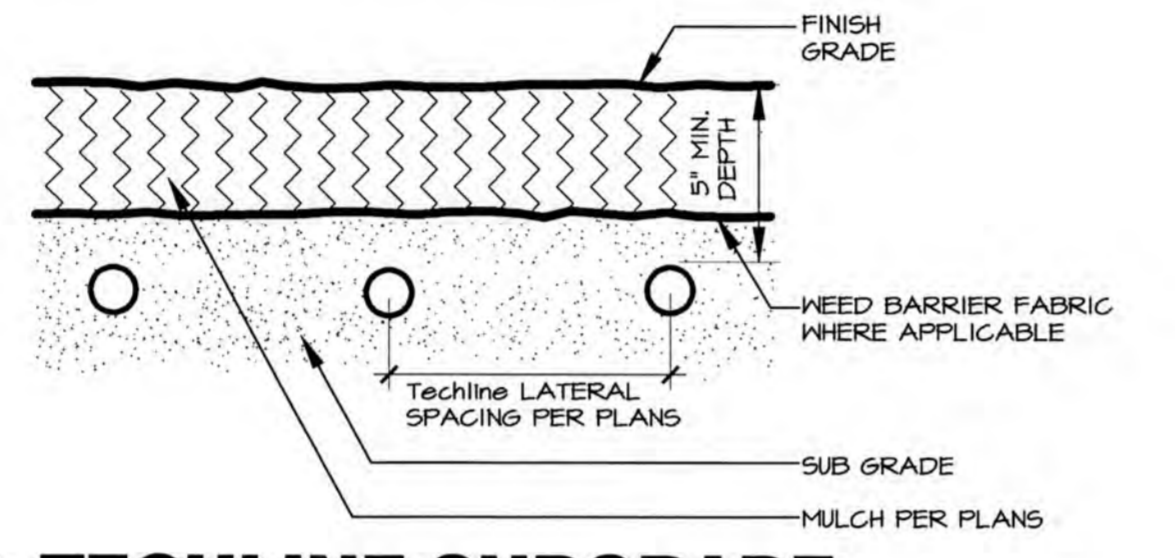
**3 MANUAL DRAIN VALVE** NOT TO SCALE



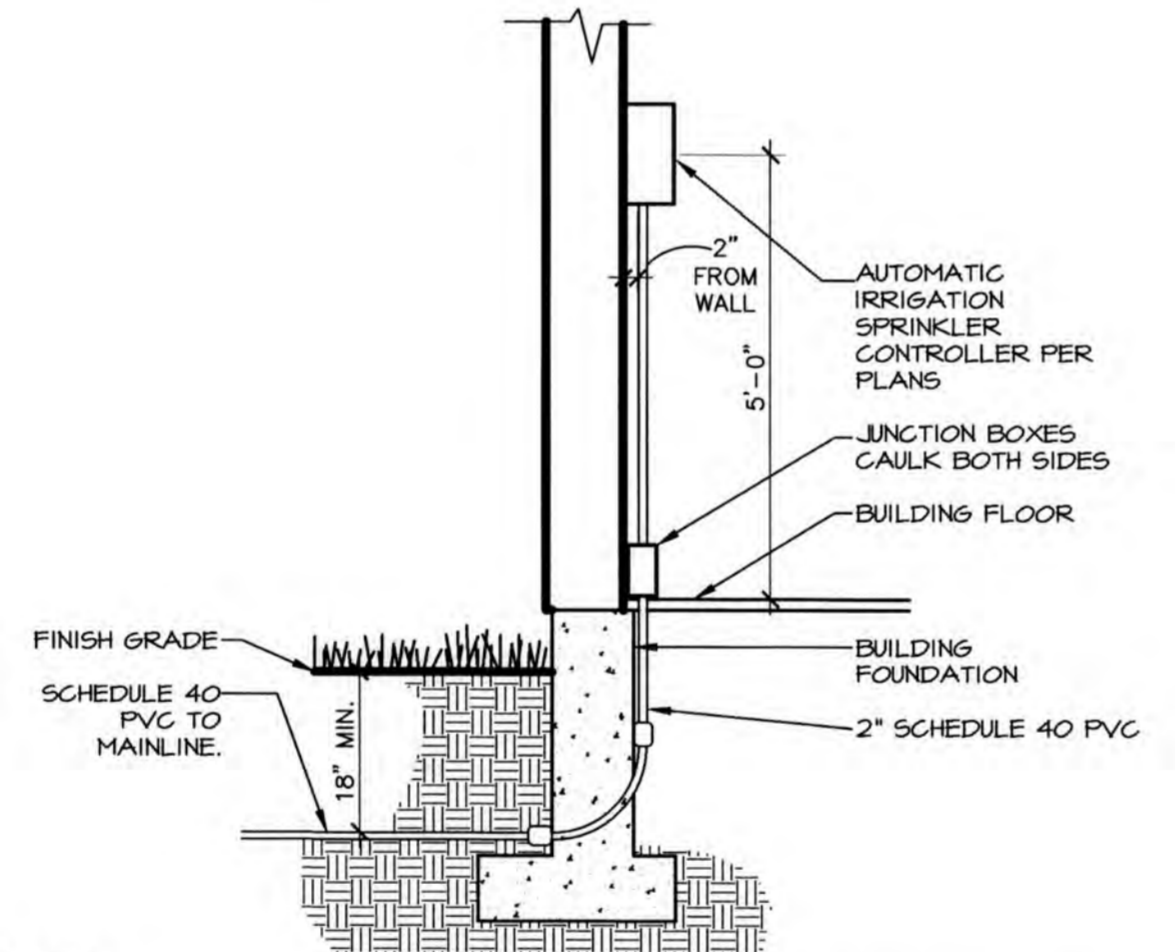
**4 ECO INDICATOR** NOT TO SCALE



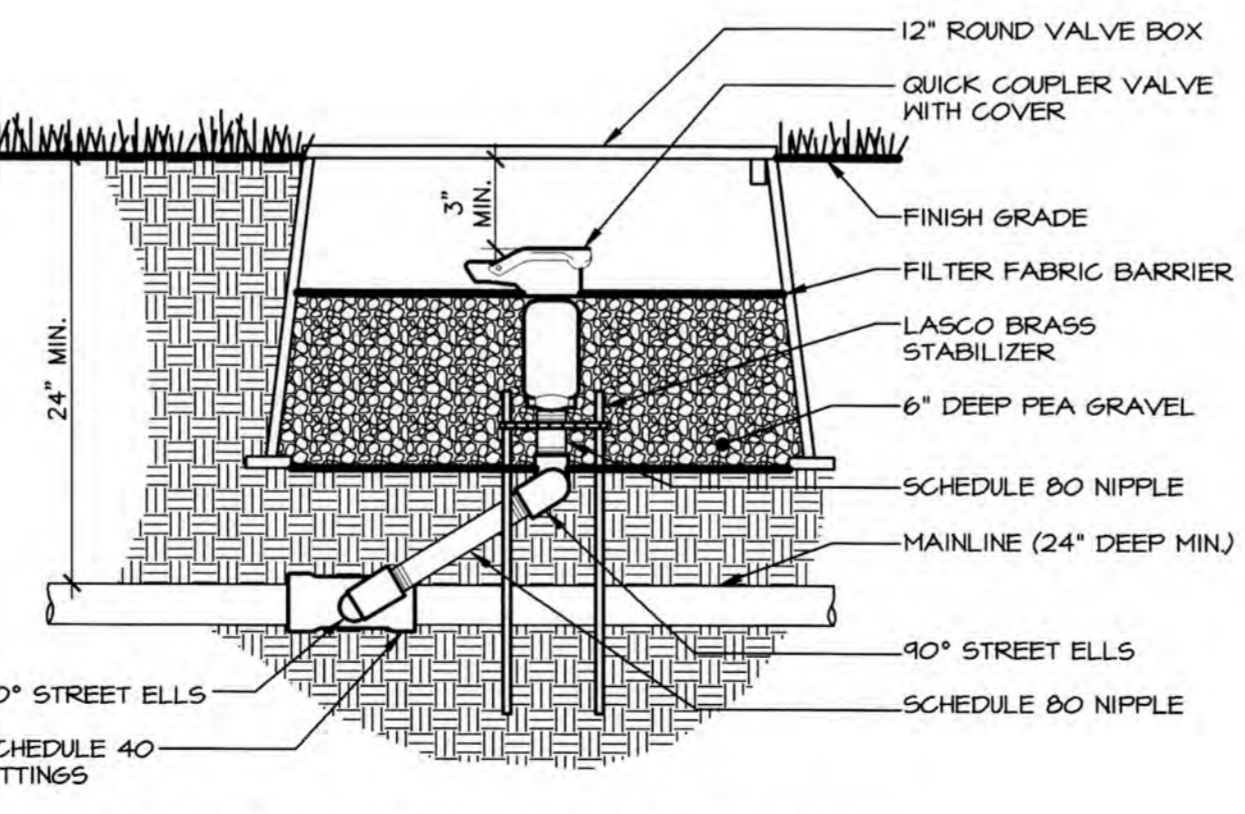
**5 ROTOR POP-UP SPRINKLER** NOT TO SCALE



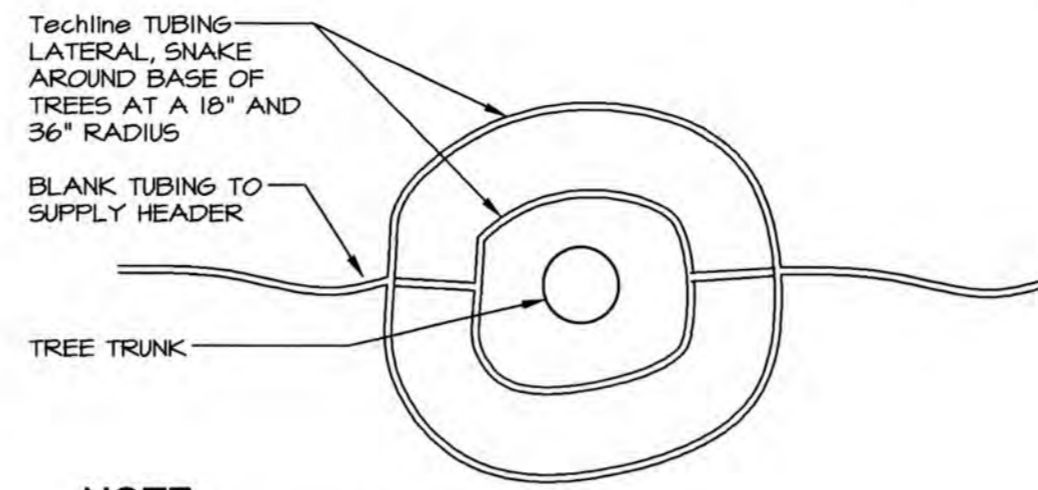
**6 TECHLINE SUBGRADE INSTALLATION** NOT TO SCALE



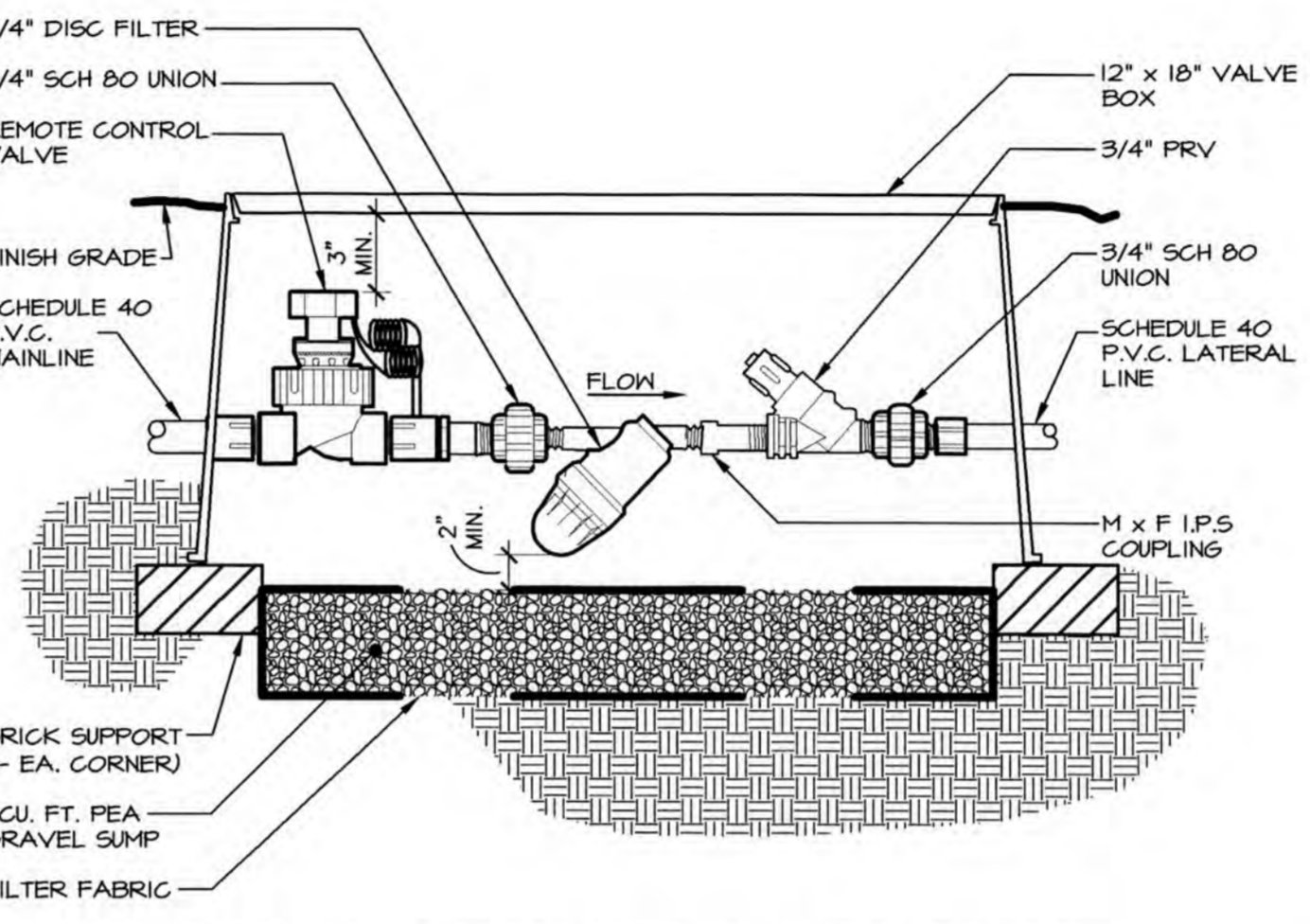
**7 AUTOMATIC IRRIGATION CONTROLLER** NOT TO SCALE



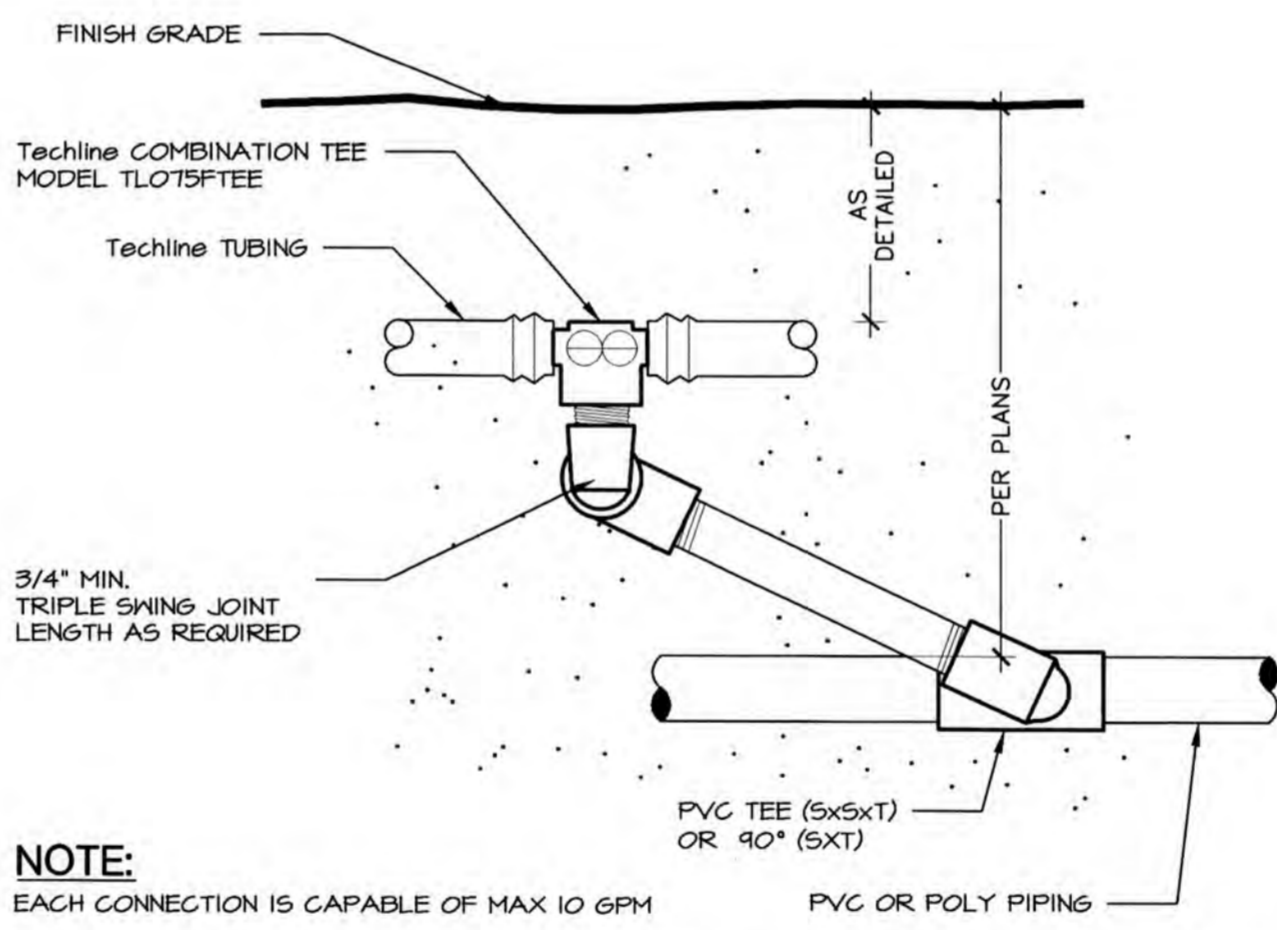
**8 QUICK COUPLER VALVE** NOT TO SCALE



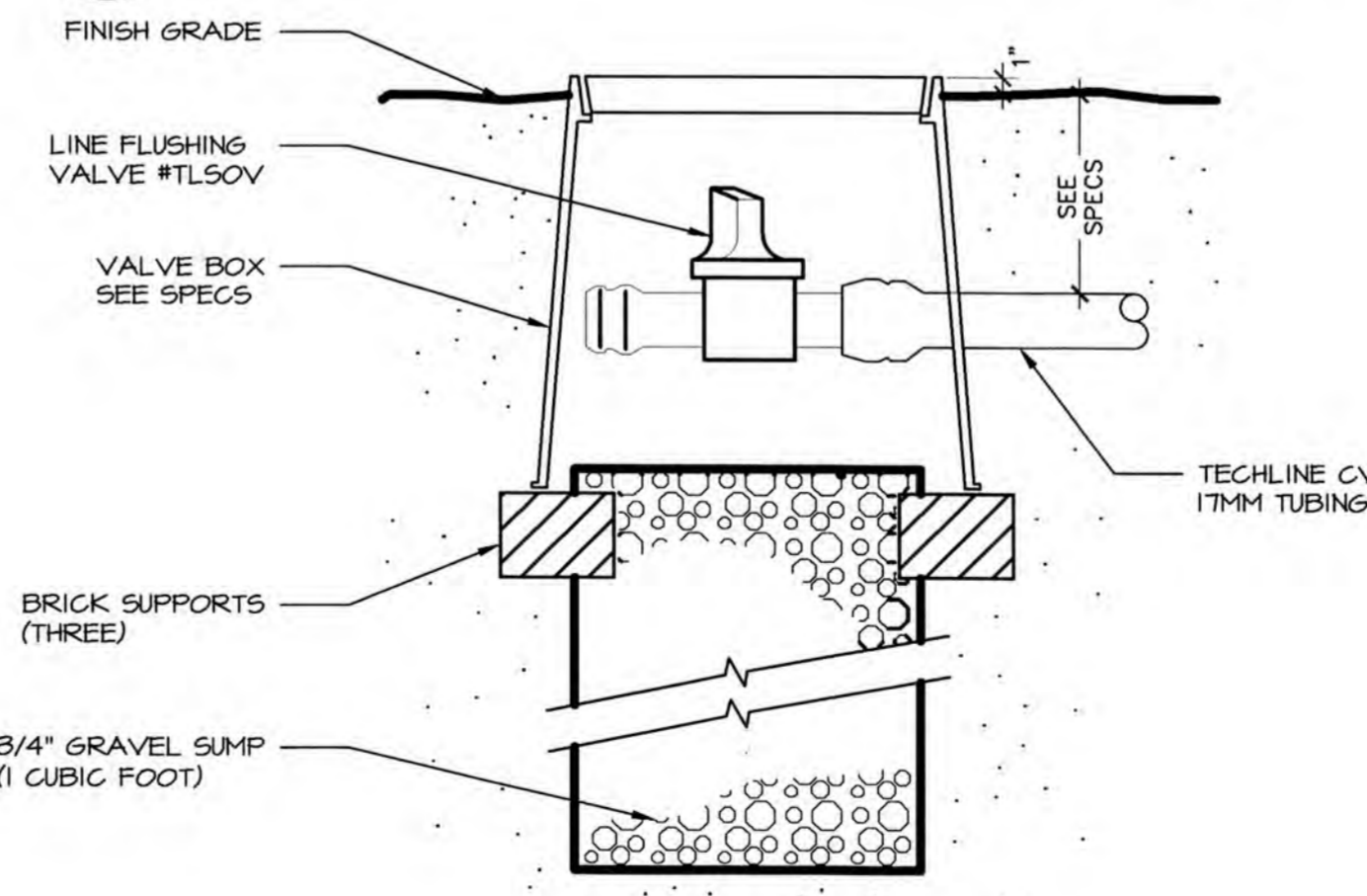
**9 TECHLINE LAYOUT AT TREES** NOT TO SCALE



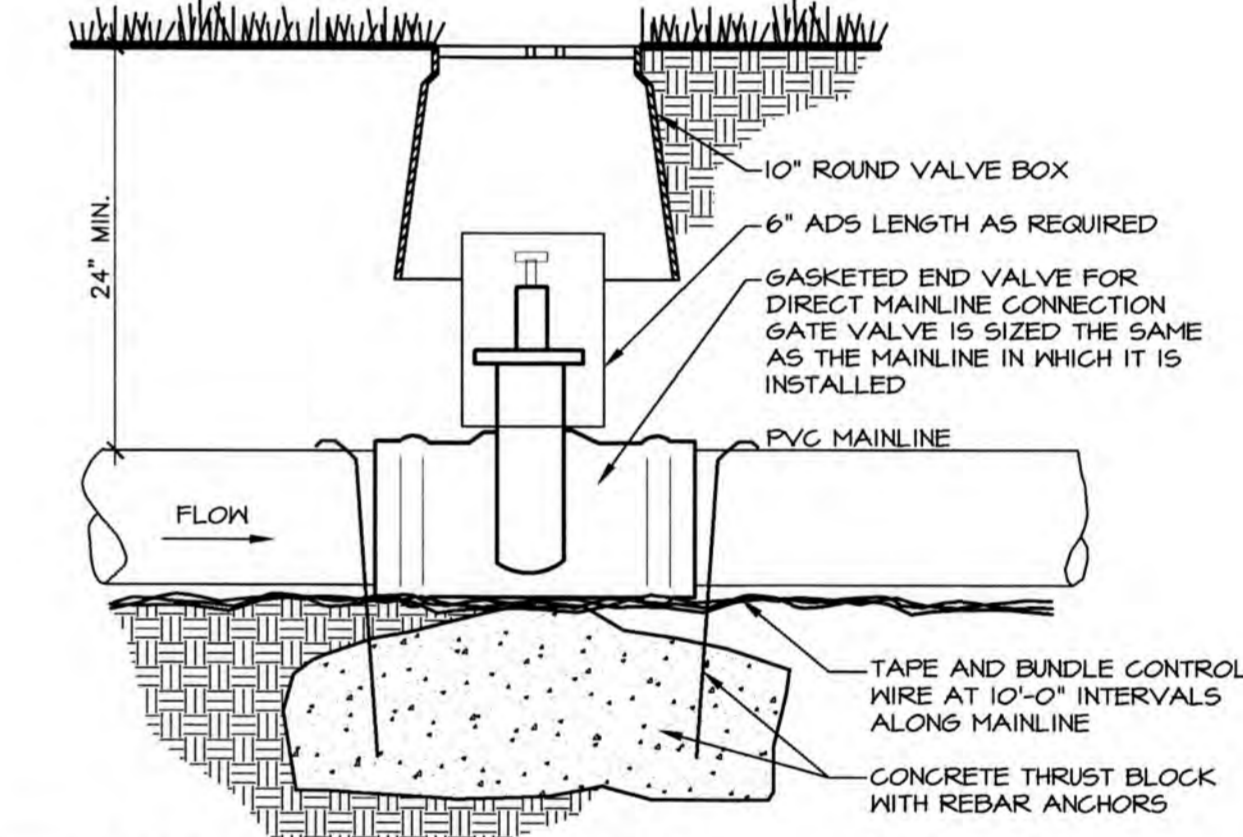
**10 REMOTE CONTROL VALVE WITH 3/4\"/>**



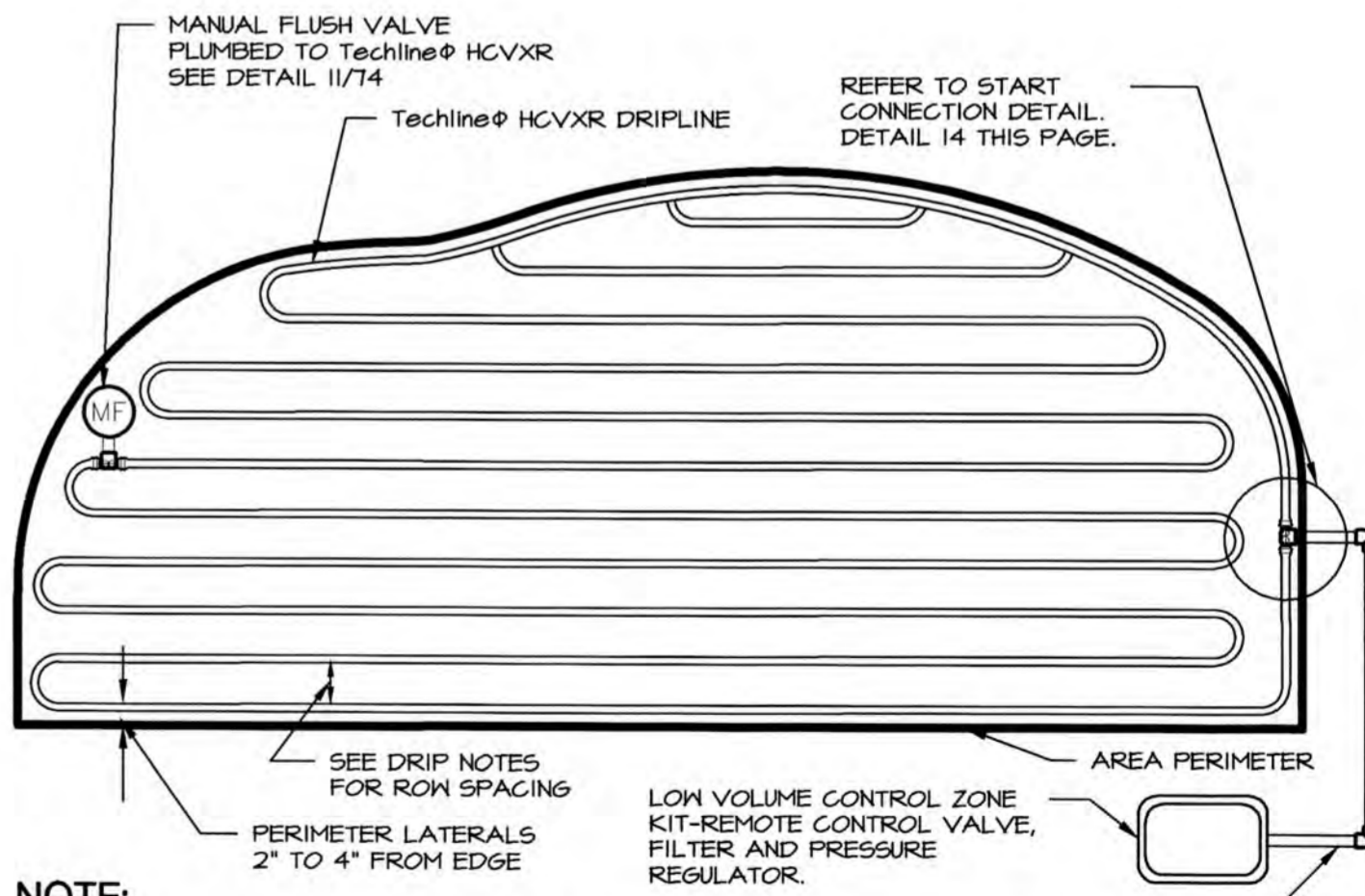
**11 TECHLINE START CONNECTION** NOT TO SCALE



**12 MANUAL LINE FLUSHING VALVE PLUMBED TO TUBING** NOT TO SCALE



**13 ISOLATION VALVE** NOT TO SCALE



**NOTE:**  
1. CENTER FEED LITE LAYOUTS ALLOW 2X MAX TUBING LENGTH OF STANDARD LAYOUTS.  
2. PLACE SOIL STAPLE EVERY 3'-5' PLUS TWO ON EACH TEE, ELBOW OR CROSS.  
3. BELOW ARE MAX LINE DISTANCE FOR CENTER FEED LITE LAYOUT @ 57 PSI INLET; REFER TO FULL CHART FOR ALTERNATE PRESSURES.  
33 @ 12\"/>

**14 TECHLINE LAYOUT** NOT TO SCALE

**811**  
Know what's below.  
Call before you dig.

**CRAIG A. SCHNEIDER, AIA**  
ARCHITECT  
1736 East Sunshine, Suite 417  
Springfield, Missouri 65804  
e-mail: architect@estettyschneider.com  
417.862.0558  
417.862.3265  
Fax: 417.862.3265

**PROJECT:**  
NEW O'REILLY AUTO PARTS STORE  
N. MARKSHEFFEL ROAD  
COLORADO SPRINGS, CO #11  
**IRRIGATION DETAILS**

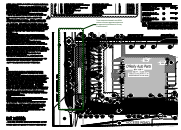
COMM #	4369
DATE:	10-11-19
REVISION	
DATE:	

# Landscape drawing\_V1.pdf Markup Summary

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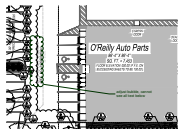
Cloud+ (2)

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Trees cannot be located in the ROW without a license agreement that must be approved by the Board of County Commissioners



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