

**NOTES:**

- ALL STATE OF TEXAS LAWS/RULES AND ALL LOCAL CODES/ORDINANCES ARE MADE PART OF THESE PLANS AND SPECIFICATIONS WHETHER SHOWN OR NOT. THESE LAWS AND ORDINANCES WILL SUPERCEDE THE PLANS, DETAILS, AND/OR SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS CAUTIONED THAT HE IS TO INCLUDE ANY AND ALL COST NECESSARY TO MEET OR EXCEED THE LAWS OF THE STATE OF TEXAS OR LOCAL CODES CONCERNING LANDSCAPE IRRIGATION.
- ALL 24 VOLT LEAD AND COMMON VALVE WIRING SHALL BE A MINIMUM OF UF-14 GA. SINGLE CONDUCTOR. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR PROPER WIRE SIZE. CONNECTORS SHALL BE 3M-DBY PERMANENT AND WATERPROOF FOR ALL FIELD WIRE SPLICES ONLY. CONNECTORS SHALL BE KING ONE STEP TAN PERMANENT AND WATERPROOF FOR ALL STATION VALVES ONLY.
- COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH LANDSCAPE CONTRACTOR TO ENSURE ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. DO NOT INSTALL THE LANDSCAPE UNTIL THE AUTOMATIC IRRIGATION SYSTEM IS FULLY OPERATIONAL PER TOA.
- PIPING AND VALVES IN PAVING SHOWN FOR CLARITY, INSTALL IN ADJACENT PLANTING BED OR LAWN AREA.
- LATERAL PIPING SHALL HAVE A MINIMUM OF 12" OF COVER. MAINLINE AND PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 12" AND A MAXIMUM OF 14" OF COVER. ALL FITTINGS TO BE SCHEDULE 40 PVC. USE TURFTITE SOLVENT WELD FLEXIBLE PIPE GLUE AND WELD ON #P-68 PRIMER ON THESE CONNECTIONS PER THE SPECIFICATIONS.
- ALL MAINLINE TO BE 2-1/2" CLASS 200 PVC. SIZE ALL LATERAL PIPING PER MANUFACTURER'S RECOMMENDATIONS OF NOT EXCEEDING 5 FPS. REFERENCE PIPE SIZE CHART. NO 1/2" PIPE ALLOWED
- CONNECT DRIP INDICATOR HEADS TO LATERAL PIPING WITH 1/2" TORO FUNNY PIPE WITH TORO BARBED FITTINGS AS REQUIRED, PER DETAIL SHOWN.
- INSTALL QUICK COUPLING VALVES IN TWELVE BY SEVENTEEN (12"x17") INCH HIGHLINE VALVE BOX. CONNECT QUICK COUPLING VALVES TO MAINLINE PIPE WITH LASCO "UNITIZED", #7722-212 O-RING SWING JOINTS. SUPPLY OWNER WITH THREE (3) COUPLER KEYS WITH SWIVEL HOSE BIBB EACH, #33DK-10 AND #SH-0 RESPECTIVELY. VALVES TO BE INSTALLED SO THAT TOP OF QUICK COUPLER IS 2" BELOW BOTTOM OF VALVE BOX TOP. PURPLE LID READS "NON-POTABLE, NOT SAFE FOR DRINKING" IN ENGLISH AND SPANISH. INSTALL EVERY 150'-0" ON CENTER ALONG ENTIRE LENGTH OF MAINLINE.
- INSTALL REMOTE CONTROL VALVES WITH FEMALE THREADED PLASTIC LASCO OR SPEARS BALL VALVE AND WIRE SPLICES IN TEN (10") INCH ROUND HIGHLINE VALVE BOXES.
- DESIGN PRESSURE IS 62.0 PSI. STATIC PRESSURE IS 70 PSI. TEN DAYS PRIOR TO START OF CONSTRUCTION, VERIFY STATIC PRESSURE. IF STATIC PRESSURE IS LESS THAN STATED DO NOT START WORK UNTIL NOTIFIED TO PROCEED BY OWNER.
- MINIMUM DISTANCE BETWEEN MAIN LINE AND LATERAL LINE FITTINGS (EXCEPT FOR REDUCER BUSHINGS) TO BE EIGHTEEN (18") INCHES AND MINIMUM HORIZONTAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN ANY VALVES THAT ARE INSTALLED SIDE BY SIDE.
- STAKE TREE BUBBLER LOCATIONS AND RECEIVE APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- INSTALL REMOTE CONTROL DRIP VALVE AND PLASTIC PVC BALL VALVE IN TWELVE BY SEVENTEEN (12"x17") INCH HIGHLINE VALVE BOX AND DISC FILTER WITH PRESSURE REGULATING VALVE IN SECOND TWELVE BY SEVENTEEN (12"x17") INCH HIGHLINE VALVE BOX.
- INSTALL DRIPLINE MINIMUM OF 2" AND A MAXIMUM OF 4" FROM HARDSCAPE SURFACES. STAKE DRIPLINE AND RECEIVE APPROVAL FROM OWNER'S REPRESENTATIVE BEFORE INSTALLATION. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS OF 5'-0" PER SECOND IN DRIPLINE.
- PROVIDE AND INSTALL DISTRIBUTION TUBING, STAKES, EMITTERS, TRANSFER FITTINGS, DIFFUSER BUG CAP, CONTROL ZONE KITS, ETC. NECESSARY FOR PROPER INSTALLATION OF THE BEDS. ALL PVC HEADER PIPING TO BE CLASS 200 PVC SOLVENT WELD PIPE. INSERT ALL RAINBIRD XF DRIPLINE INSERT FITTINGS PER MANUFACTURER'S RECOMMENDATIONS.
- INSTALL ONE DRIP INDICATOR HEAD FOR EACH DRIP ZONE. INDICATOR HEAD TO BE A TORO 12" HIGH-POP-UP SPRAY WITH NOZZLE TURNED TO OFF POSITION.
- AIR RELIEF VALVE TO BE NETAFIM 1/2" AIR RELIEF VALVE INSTALLED IN A TEN-INCH (10") HIGHLINE ROUND VALVE BOX WITH BLACK LID AND 6" OF GRAVEL SUMP. FLUSH VALVES TO BE NETAFIM AUTOMATIC FLUSH VALVE INSTALLED IN A TEN-INCH (10") HIGHLINE ROUND VALVE BOX WITH BLACK LID AND 6" OF GRAVEL SUMP.
- ALL PLANTING BED XFD DRIPLINE AND DISTRIBUTION TUBING TO BE INSTALLED AT GRADE BELOW MULCH LAYER PER MANUFACTURER'S RECOMMENDATIONS. ALL DRIPLINE TO BE INSTALLED 12" ON CENTER ROW SPACING UNLESS INSTRUCTED OTHERWISE. L.I.C. IS RESPONSIBLE TO VERIFY THE EXACT EMITTER FLOW, EMITTER SPACING, AND ROW SPACING WITH MANUFACTURER PRIOR TO INSTALLING TO PROVIDE PROPER PRECIPITATION RATE BASED ON PLANT MATERIAL AND SOIL TYPE. TUBING TO BE STAKED WITH HEAVY DUTY JUTE NETTING PINS FROM DALLAS BAG AND BURLAP OR APPROVED EQUAL. INSTALL STAKES EVERY 3'-0" ALONG ENTIRE LENGTH OF TUBING AND A MINIMUM OF 24" FROM ANY FITTINGS.
- ALL TURF SOD XFS DRIPLINE AND DISTRIBUTION TUBING TO BE INSTALLED BELOW FINISH GRADE APPROXIMATELY 3" TO 4" PER MANUFACTURER'S RECOMMENDATIONS. ALL TURF DRIPLINE TO BE INSTALLED 12" ON CENTER ROW SPACING UNLESS INSTRUCTED OTHERWISE. L.I.C. IS RESPONSIBLE TO VERIFY THE EXACT EMITTER FLOW, EMITTER SPACING, AND ROW SPACING WITH MANUFACTURER PRIOR TO INSTALLING TO PROVIDE PROPER PRECIPITATION RATE BASED ON TURF AND SOIL TYPE. TUBING TO BE STAKED WITH RAINBIRD 12 GA. GALVANIZED TIE DOWNS. INSTALL STAKES EVERY 3'-0" ALONG ENTIRE LENGTH OF TUBING AND A MINIMUM OF 24" FROM ANY FITTINGS.
- INCLUDE THE FOLLOWING ALLOWANCES FOR PROVIDING AND INSTALLING AIR RELIEF VALVES AND FLUSH VALVES FOR THE DRIP SYSTEM. EXACT QUANTITY AND LOCATION OF THESE DEVICES WILL BE DETERMINED AT THE TIME OF INSTALLATION. IN GENERAL, ALL AIR RELIEF VALVES WILL BE INSTALLED AT THE HIGH POINTS AND FLUSH VALVES WILL BE INSTALLED AT THE LOW POINTS OF EXHAUST HEADER. ALLOW FOR APPROXIMATELY ONE (1) AIR RELIEF VALVE AND APPROXIMATELY ONE (1) FLUSH VALVE FOR EACH DRIP ZONE KIT.
- WHERE POSSIBLE LOCATE ALL MAINLINES, VALVES, OR CONTROL WIRES SHALL BE LOCATED AND INSTALLED OUTSIDE RIGHT-OF-WAY.
- PROVIDE ALL LABOR AND MATERIAL NECESSARY TO HAND DIG WITHIN ALL EXISTING TREE ROOT ZONES. CONTRACTOR MUST STAKE DITCHES AND RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO ANY TRENCHING OR DIGGING.
- PROVIDE TEMPORARY IRRIGATION TO ALL DISTURBED AREAS THAT DO NOT HAVE PERMANENT IRRIGATION. PROVIDE ALL MATERIAL AND LABOR NECESSARY TO INSTALL AND OPERATE THE TEMPORARY SYSTEM. TEMPORARY SYSTEM TO BE LEFT IN PLACE UNTIL PLANT MATERIAL IS ESTABLISHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. SHOULD IT BECOME NECESSARY TO REMOVE AND REPLACE THE TEMPORARY SYSTEM FOR MOWING AND MAINTENANCE OPERATIONS, THE LANDSCAPE IRRIGATION CONTRACTOR SHALL CONSIDER THIS PART OF HIS SCOPE OF WORK. EXACT METHOD OF PROVIDING AND OPERATING THE TEMPORARY SYSTEM WILL BE THE LANDSCAPE IRRIGATION CONTRACTOR'S RESPONSIBILITY. OPERATION OF THE TEMPORARY SYSTEM MUST BE COORDINATED WITH THE PERMANENT SYSTEM TO INSURE PROPER HYDRAULIC OPERATION OF BOTH SYSTEMS. CONTRACTOR IS RESPONSIBLE TO REFERENCE THE LANDSCAPE PLANS FOR THE SCOPE OF THIS WORK.
- PROVIDE ALL LABOR AND MATERIAL NECESSARY TO REPAIR THE EXISTING IRRIGATION SYSTEM IN THIS AREAS SO THAT IT IS 100% OPERABLE AND AUTOMATED UPON COMPLETION OF THE PROJECT. THIS WORK TO INCLUDE BUT NOT LIMITED TO CUTTING AND CAPPING, ADJUSTING, BLENDING, ADDING COMPONENTS TO ACHIEVE THIS WORK. REVIEW THE EXISTING IRRIGATION PLANS FOR ANY QUESTIONS REGARDING THE EXISTING IRRIGATION. CONTRACTOR MUST COORDINATE THIS WORK WITH ALL DISCIPLINES PRIOR TO BIDDING AND INSTALLATION.
- PROVIDE ALL LABOR AND MATERIAL NECESSARY TO CONNECT THE PROPOSED REMOTE CONTROL VALVES TO THE EXISTING IRRIGATION MAINLINE AT THIS APPROXIMATE LOCATION. VERIFY EXACT SIZE AND LOCATION OF EXISTING MAINLINE. CONTRACTOR MUST COORDINATE THIS WORK WITH ALL DISCIPLINES PRIOR TO BIDDING AND INSTALLATION. REFERENCE NOTES 1 AND 26 FOR THIS WORK.
- PROVIDE ALL LABOR AND MATERIAL NECESSARY TO CONNECT THE PROPOSED IRRIGATION WIRES TO THE EXISTING FOUR (4) IRRIGATION WIRES AT THIS APPROXIMATE LOCATION. VERIFY EXACT NUMBER AND LOCATION OF EXISTING WIRES. CONTRACTOR MUST COORDINATE THIS WORK WITH ALL DISCIPLINES PRIOR TO BIDDING AND INSTALLATION.
- A LICENSED IRRIGATOR OR LICENSED IRRIGATION TECHNICIAN SHALL BE ON-SITE AT ALL TIMES WHILE THE LANDSCAPE IRRIGATION SYSTEM IS BEING INSTALLED PER CITY OF ADDISON REQUIREMENTS.
- IT IS THE INTENT OF THESE PLANS TO PROVIDE THE OWNER WITH A FULLY AUTOMATED AND OPERATIONAL IRRIGATION SYSTEM UPON COMPLETION OF THE PROJECT. CONTRACTOR MUST READ AND FOLLOW THE TOWN OF ADDISON IRRIGATION SPECIFICATIONS 06/14/19 FOR THIS PROJECT.

**IRRIGATION LEGEND:**

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO.
●	LAWN SPRAY HEAD	TORO (30 PSI)	570Z-40-XF WITH MPR PLASTIC NOZZLE ON 1/2" POLY GREEN NIPPLE
⊕	(2) BUBBLER HEADS	HUNTER (30 PSI)	PCN-10 (1 GPM) NOZZLE ON 1/2" SCH. 80 RISER WITH SHRUB ADAPTER
▲	QUICK COUPLING VALVE	RAINBIRD	#33-DNP WITH LASCO BALL VALVE, PURPLE LID READS "RECLAIMED WATER, DO NOT DRINK" IN ENGLISH AND "NO TOME" IN SPANISH.
⊕	REMOTE CONTROL VALVE	WEATHERMATIC	#11000 SERIES WITH BALL VALVE, REFER TO PLANS FOR SIZE
—	EXISTING MAINLINE	REFER TO SPEC.	REFER TO PLANS
—	MAINLINE PIPING	REFER TO SPEC.	2-1/2" CLASS 200 BELLED PVC
—	LATERAL PIPING	REFER TO SPEC.	3/4" & LARGER - CLASS 200 PVC
==	EXISTING SLEEVES	SCHEDULE 40 PVC	REF REFERENCE ORIGINAL DESIGN
⊕	REMOTE CONTROL DRIP VALVE	WEATHERMATIC	#11000 SERIES WITH PRESSURE REDUCER AND WYE STRAINER, REFER TO PLAN FOR SIZE
—	DRIP HEADER PIPING	REFER TO SPEC.	CLASS 200 PVC UNLESS OTHERWISE NOTED
[ ]	PLANTING BED DRIPLINE TUBING	NETAFIM	XFD-06-12 AT 12" ROW SPACING W/ 17MM BARBED FITTINGS, GALVANIZED TUBING STAKES, AND DRIP INDICATOR HEAD
[ ]	STATION NUMBER		
[ ]	VALVE SIZE		
[ ]	GPM (APPROX.)		

NO.	REVISION	BY	DATE
 824 Exposition Avenue, Ste. 5 Dallas, Texas 75226 o214.954.7160 f214.954.7162			
<b>VW2 STREETSCAPE IMPROVEMENTS</b> VP PUBLIC INFRASTRUCTURE - PHASE 5, BLOCK 200B TOWN OF ADDISON, TEXAS <b>IRRIGATION DETAILS</b>			
DESIGN	DRAWN	DATE	SCALE
SAH	SAH	SEPT 10, 2019	AS NOTED
NOTES	Sheet No.		
	<b>22</b>		

Irrigation in Texas is regulated by the Texas Commission of Environmental Quality (TCEQ), 6607 North Loop West, P.O. Box 13887, Austin, Texas, 78711-3887. TCEQ website is: www.tceq.texas.gov

VP - PUBLIC INFRASTRUCTURE - PHASE 5, BLOCK 200B - PROJECT NO. 5029-06