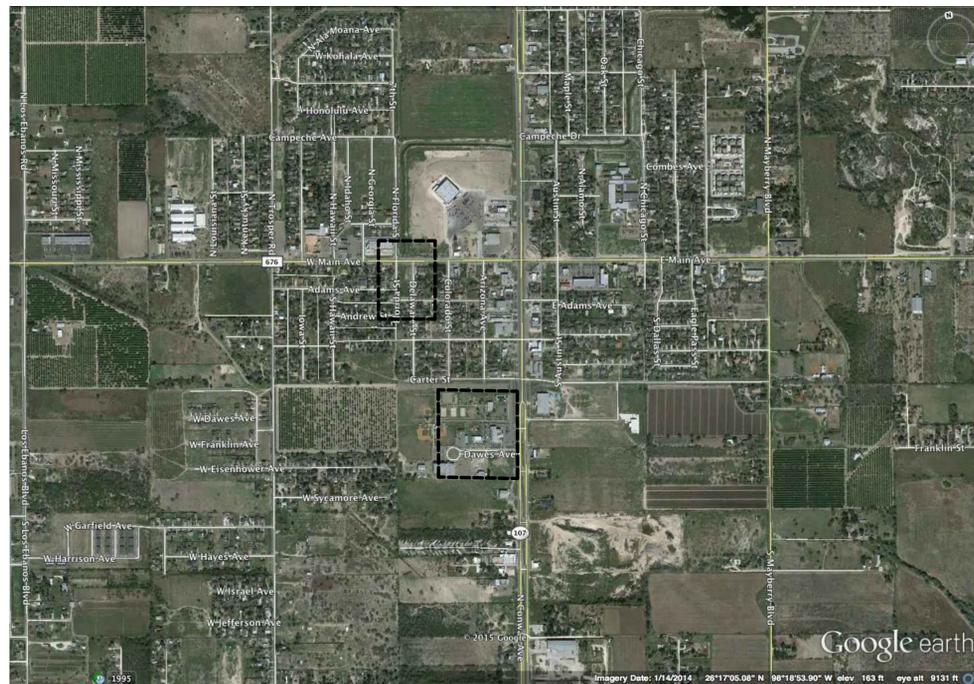


CITY OF ALTON LANDSCAPE DESIGN

509 S. ALTON BLVD., ALTON, TX, 78573

CONSTRUCTION DRAWINGS

LOCATION MAP



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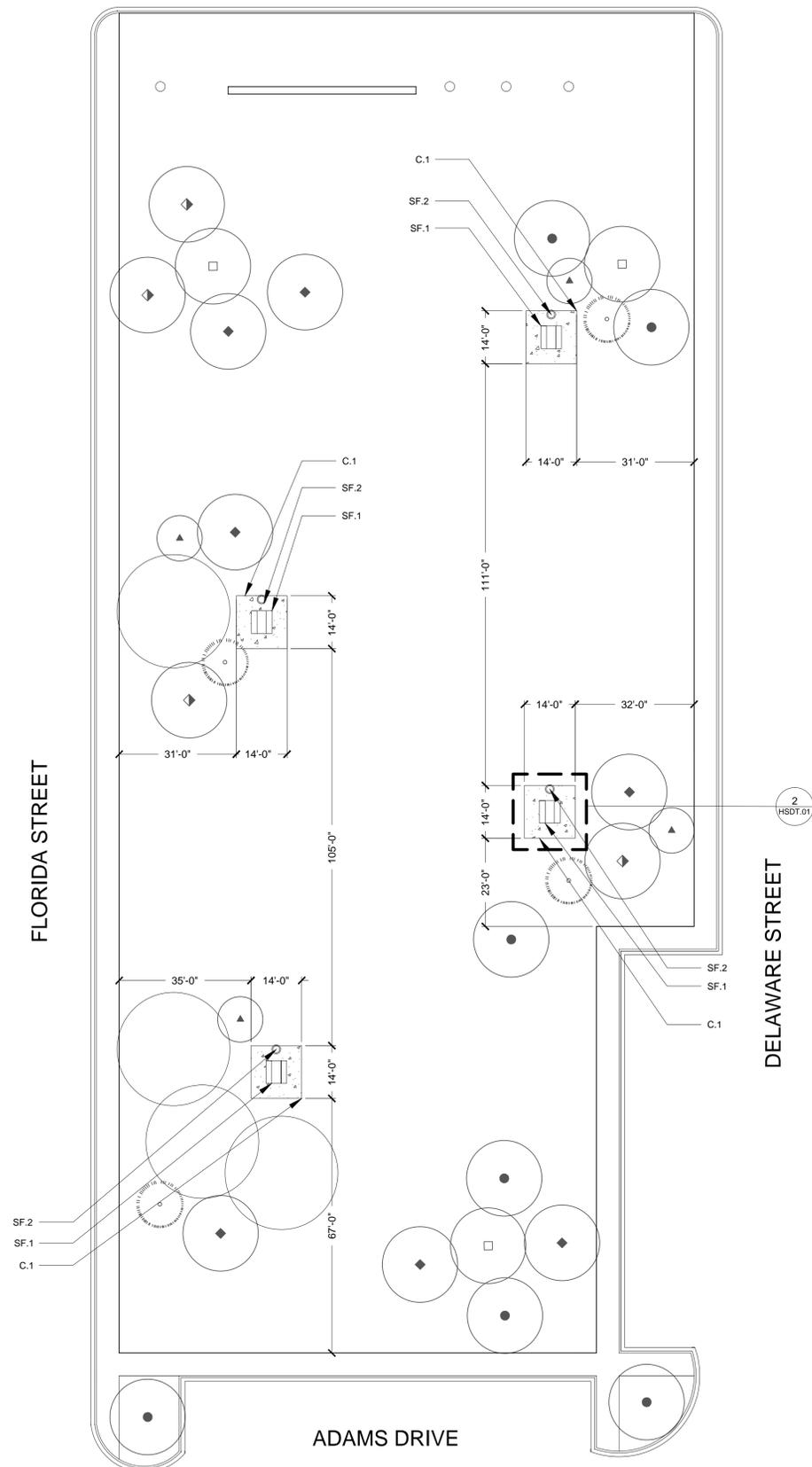
Sheet Information ::

Project # :: 001
Date :: 9.11.2015
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Drawn :: AP
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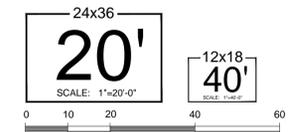
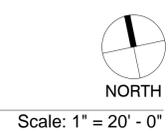


Adams Avenue

FLORIDA STREET

DELAWARE STREET

ADAMS DRIVE



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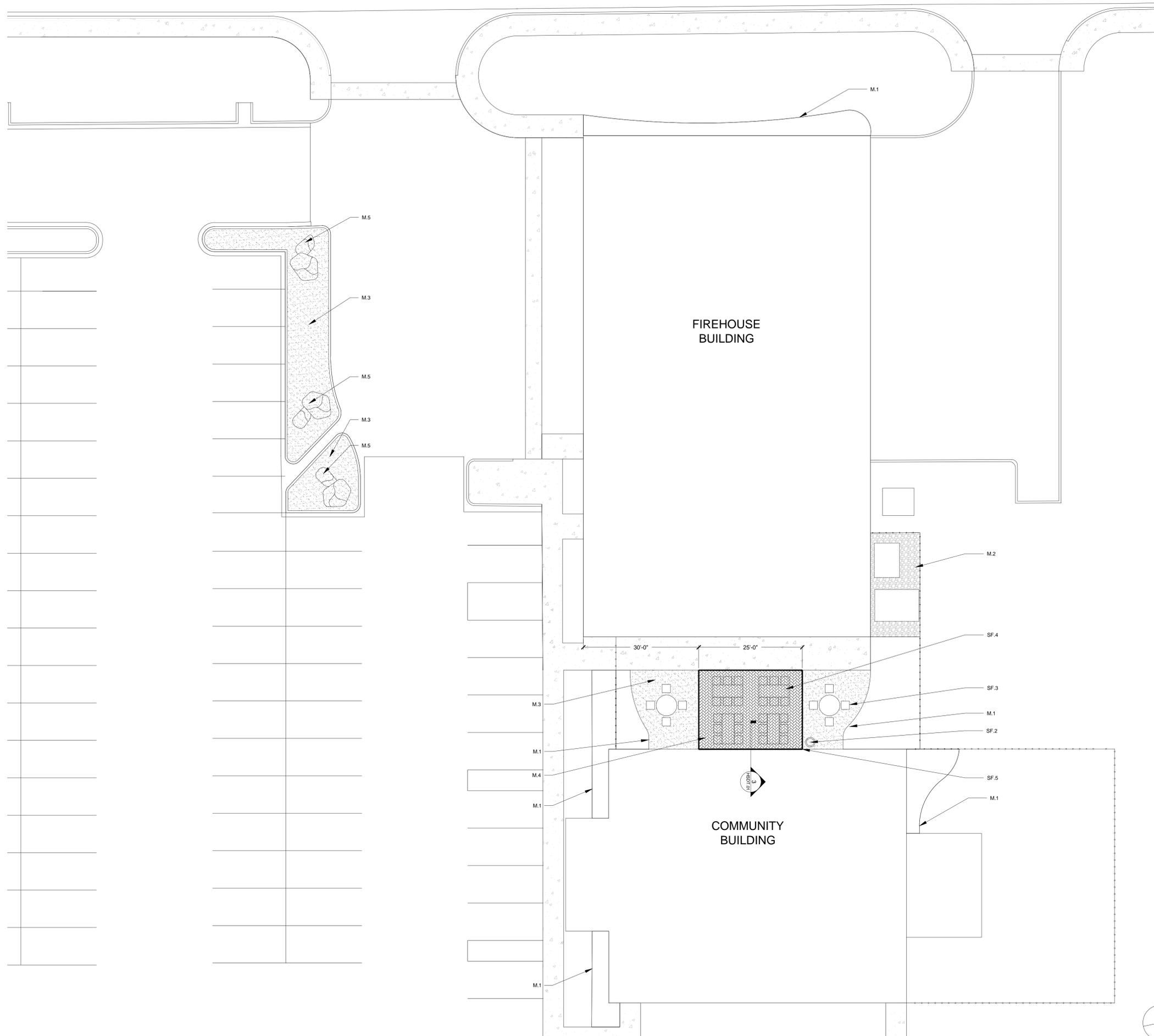
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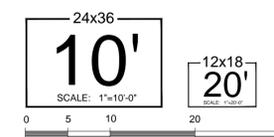
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HS.01
 HARDSCAPE
 PLAN
 1 of 11



A
1 FIREHOUSE HARDSCAPE PLAN

Scale: 1" = 10' - 0"



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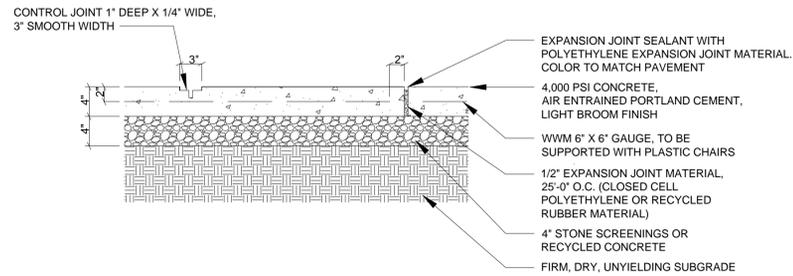
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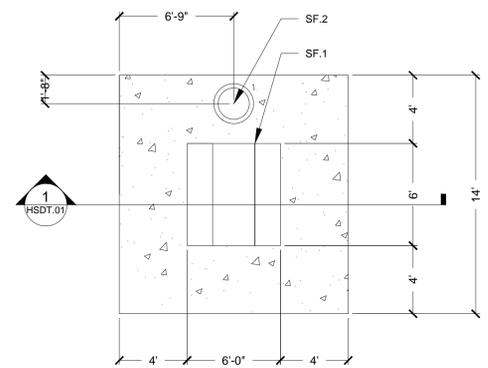
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HS.02
HARDSCAPE
PLAN
2 of 11



1 4-IN. REINFORCED CONCRETE PAVEMENT

SCALE: N.T.S.



2 CONCRETE LAYOUT

SCALE: 1" = 5' - 0"



MATERIALS SCHEDULE						
KEY	QTY	DESCRIPTION	COLOR	FINISH	CONTACT	REMARKS
CONCRETE						
C.1	4	STANDARD CONCRETE PAVING, 14'-0" X 13'-6"	N/A	LIGHT BROOM	Local source	REF. DETAIL 2/HSDT.01
SITE FURNISHINGS						
SF.1	4	6' RECTANGULAR PICNIC TABLE	N/A	ADA MCA PRESSURE TREATED SOUTHERN YELLOW PINE	Belson Outdoors Inc. www.belson.com 1-800-323-5664,	Model #PR-6WA
SF.2	5	PARK 42 GALLON TRASH RECEPTACLE	STORM METALLIC	N/A	Belson Outdoors Inc. www.belson.com 1-800-323-5664,	Model #CBTR-42
SF.3	2	CIRCULAR TABLE SET W/ 4 CHAIRS	SILVER	SMOOTH ALUMINUM METALLIC FINISH	Commercial Outdoor www.commercialoutdoor.com 888-802-6168	Tropitone Veer Cast Dining Set Item#: TPVRCDS
SF.4	4	RECTANGULAR TABLE SET W/ 6 CHAIRS	SILVER W/ TAN POLYMER	TEXTURED SILVER FINISH WITH TREE HOUSE POLYMER	Commercial Outdoor www.commercialoutdoor.com 888-802-6168	Trex Surf City 6-Piece Dining Set Item#: TRXTXS124
SF.5	1	WOODEN PERGOLA	CONTRACTOR TO SUBMIT SAMPLES	CONTRACTOR TO SUBMIT SAMPLES		CONTRACTOR TO SUBMIT SHOP DRAWINGS
MISCELLANEOUS						
M.1		SHOVEL CUT EDGE	N/A	N/A	N/A	REFER TO DETAIL 4 ON SHEET LPDT.01
M.2	1.5 CY	BRAZOS RIVER ROCK 2-4" @ 3' W/ WEED BARRIER (166 SF)	N/A	N/A	Local source	N/A
M.3	16.5 CY	DECOMPOSED GRANITE PATIO @4" DEPTH W/ WEED BARRIER (1,320 SF)	TAN	N/A	Local source	REF. DETAIL
M.4	475 SF	FIRESIDE BRICK PAVERS	RED	N/A	Hanson Building Products www.hansonbrick.com 856-686-3600	Product #:1466 Collection: Texas Collection
M.5	6	LIMESTONE BOULDERS	N/A	N/A	Southern Stone, LLC www.southernnaturalstone.com 800-408-5979	N/A

3 MATERIALS SCHEDULE

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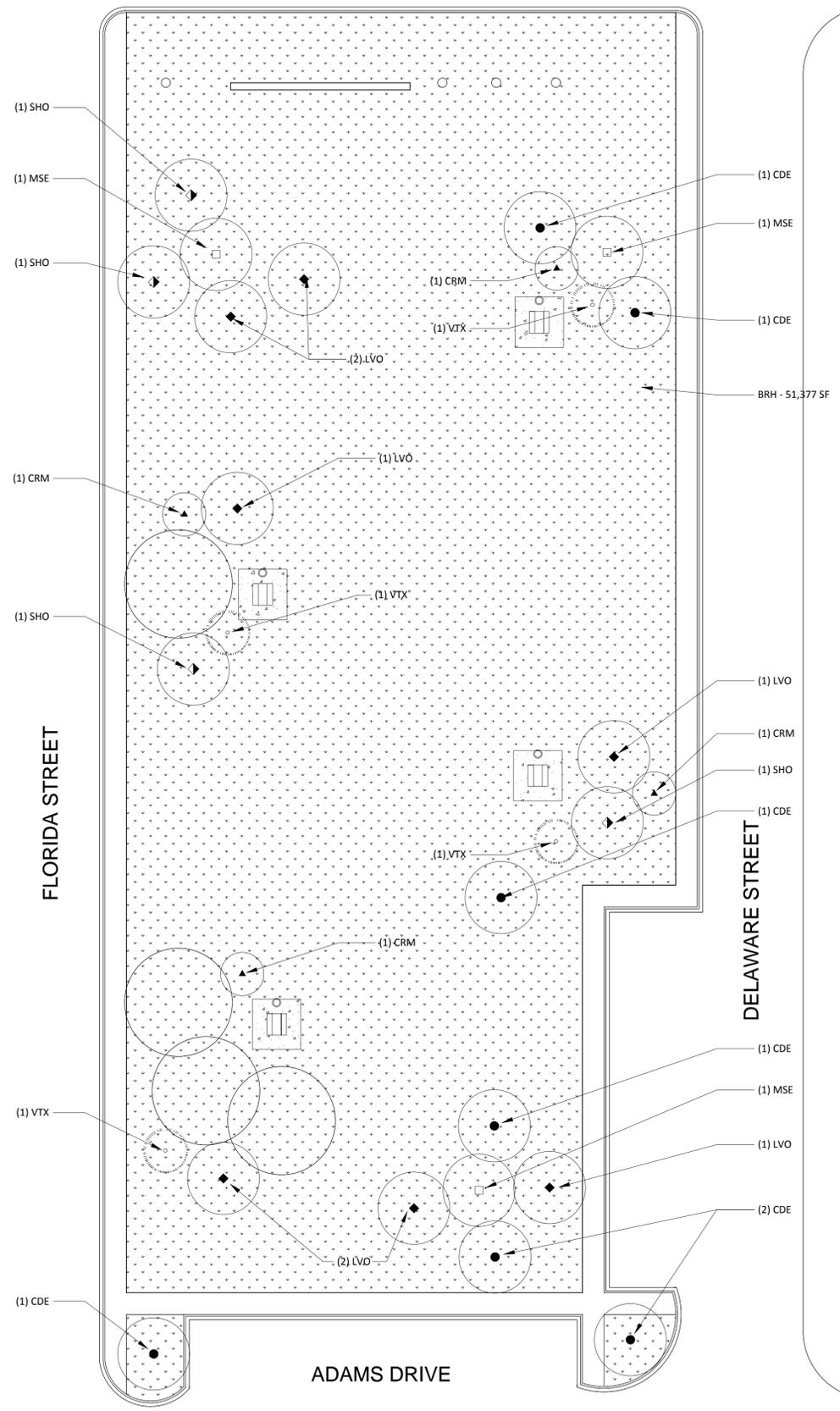
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HSDT.01
 HARDSCAPE
 NOTES & DETAILS
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WEST MAIN AVENUE

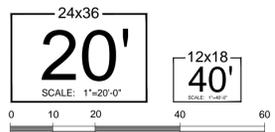
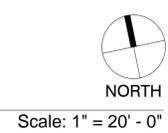


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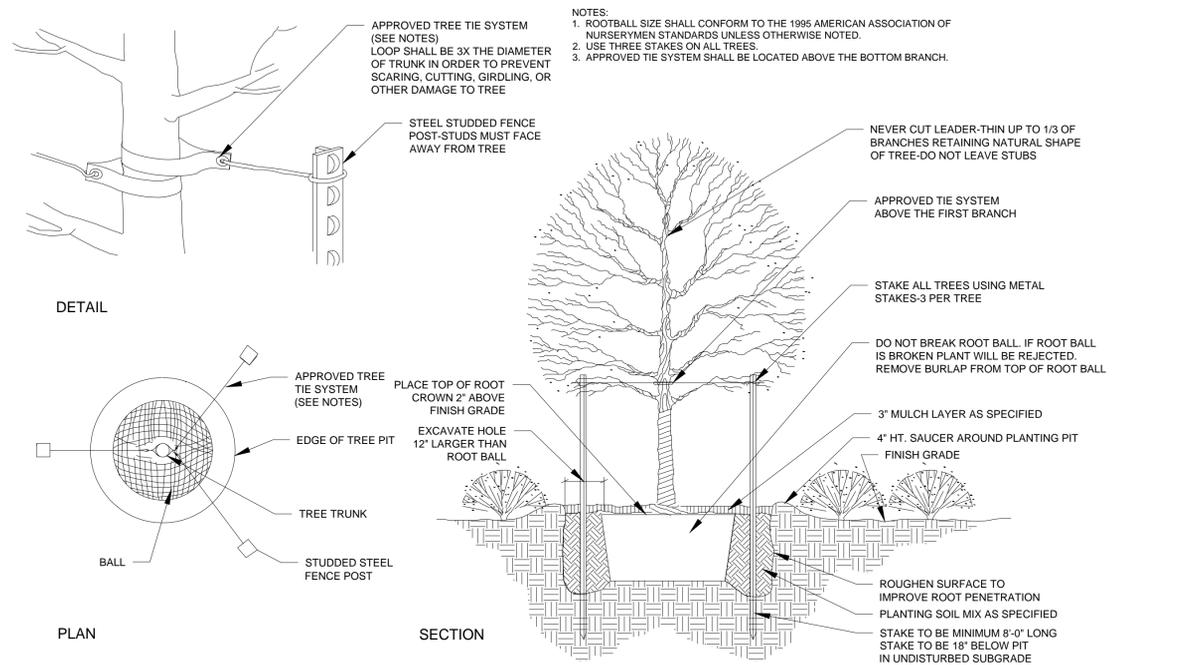
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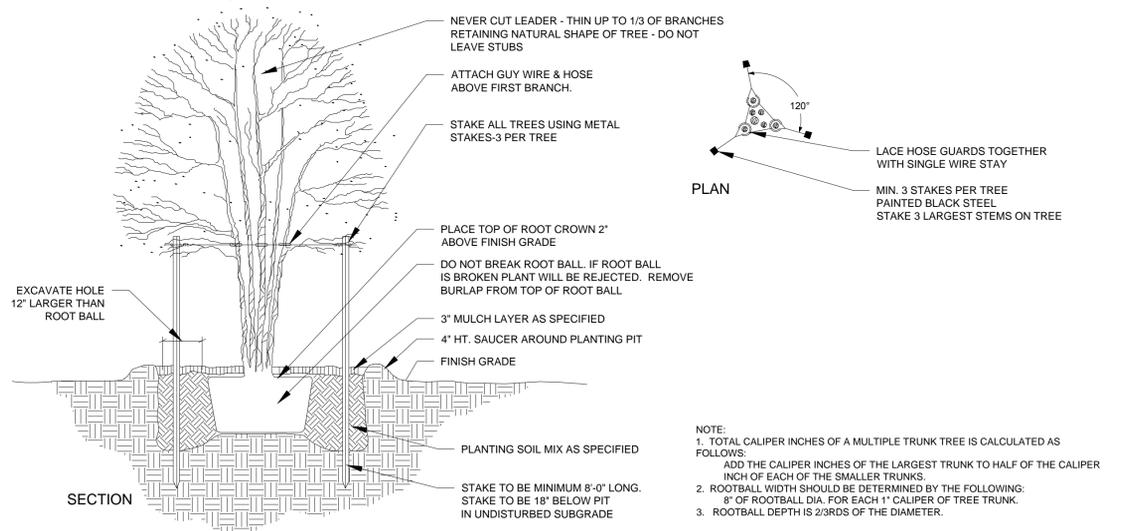
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LP.01
LANDSCAPE
PLANTING PLAN
4 of 11

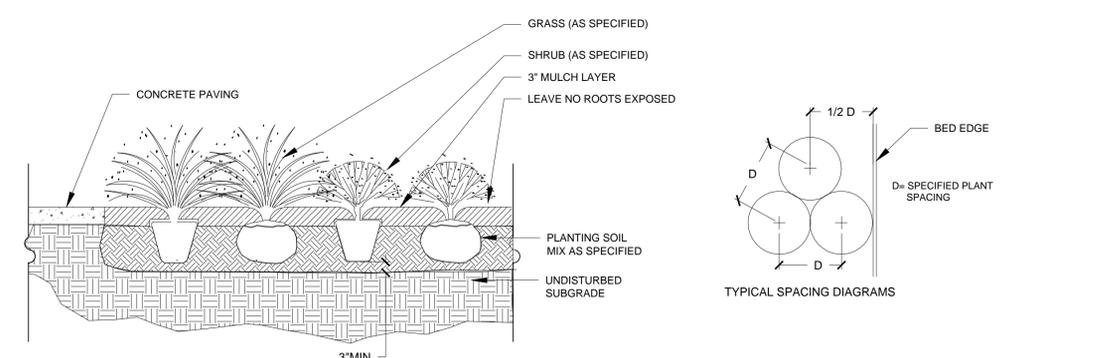


NOTES:
 1. ROOTBALL SIZE SHALL CONFORM TO THE 1995 AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS UNLESS OTHERWISE NOTED.
 2. USE THREE STAKES ON ALL TREES.
 3. APPROVED TIE SYSTEM SHALL BE LOCATED ABOVE THE BOTTOM BRANCH.

1 SINGLE TRUNK TREE PLANTING AND STAKING SCALE: N.T.S



2 MULTI-STEM TREE PLANTING AND STAKING STANDARD SCALE: N.T.S



3 SHRUB/ GRASS PLANTING SCALE: N.T.S

LANDSCAPE NOTES:

- COMPLETE ALL LANDSCAPE PLANTING AND RELATED EARTHWORK INCLUDING ALL PRODUCTS, EQUIPMENT AND LABOR, FOR THE LANDSCAPE AREAS SHOWN ON THE DRAWING AND DESCRIBED IN THE SPECIFICATIONS.
- ALL QUESTIONS SHOULD BE REFERRED TO THE PROJECT LANDSCAPE ARCHITECT.
- INFORMATION PROVIDED ON THIS PLAN IS GENERAL IN NATURE. DIMENSIONS, LOCATIONS, AND AREAS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO BIDDING & INSTALLATION.
- QUANTITIES SHOWN FOR PLANT MATERIALS ARE APPROXIMATE. ACTUAL INSTALLED QUANTITIES OF PLANT MATERIALS MAY VARY FROM THE PLAN AND SHOULD BE FIELD DETERMINED ACCORDING TO THE GIVEN SPACING AND FIELD CONDITIONS. DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE PLAN WHICH LIMIT THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- BY BIDDING, THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS SATISFIED HIMSELF/HERSELF AS TO THE NATURE AND LOCATION OF THE WORK AND TO THE QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES INSOFAR AS THIS DATA IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF/HERSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM/HER FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK AS DESCRIBED.
- INSTALLATION OF ALL LANDSCAPING MUST BE COORDINATED WITH THE INSTALLATION OF RELATED IRRIGATION, SITE WORK, AND GRADING.
- UNLESS SPECIFICALLY NOTED, INSTALL ALL MASSED PLANTING UTILIZING EQUILATERAL TRIANGULAR SPACING.
- EVENLY APPLY 3" OF MULCH TO ALL CONTINUOUS PLANTING BEDS. MULCH TO BE TRANSPORTED AND INSTALLED BY THE CONTRACTOR.
- SUBSTITUTIONS OF PLANT SPECIES, SIZES, OR OTHER SPECIFIED MATERIALS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
- PLANT MATERIAL AND LAYOUT MUST BE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL IDENTIFICATION TAGS PROVIDED BY GROWERS AND PLACED ON TREES AND SHRUBS ARE TO REMAIN ON THE PLANTS THROUGH THE PUNCH-LIST INSPECTION. TAGS ARE TO BE REMOVED PRIOR TO FINAL ACCEPTANCE, OR UPON REQUEST OF THE PROJECT LANDSCAPE ARCHITECT.
- SEED MIX/SOLID SOD WILL BE APPLIED TO ALL CONSTRUCTION-DAMAGED GROUND SURFACES NOT OTHERWISE PLANTED. CONTRACTOR SHALL REVIEW RELATED CONSTRUCTION DRAWINGS FOR LIMITS OF CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH OTHER SITE CONTRACTORS TO DETERMINE ACTUAL AREAS OF SEEDING REQUIRED, INCLUDING AREAS DISTURBED BY UTILITY EXTENSIONS.
- THE LANDSCAPE CONTRACTOR SHALL EXCAVATE FULLY PREPARED PLANT BEDS AS REQUIRED TO ACCOMMODATE A FULL 6" OF PREPARED SOIL AND 3" MULCH LAYER. CLEAN, NATIVE TOPSOIL REMOVED FROM THESE BEDS MAY BE SPREAD ON NEARBY AREAS TO BE SODDED OR SEEDED. STONES LARGER THAN 1" DIAMETER SHALL BE REMOVED AND DISPOSED OF OFF SITE. FOLLOWING EXCAVATION, PLACE PREPARED SOIL IN THESE PLANT BEDS. PREPARED SOIL SHALL CONSIST OF 4" IMPORTED "CHOCOLATE" LOAM TOPSOIL AND 2" ORGANIC COMPOST SOIL CONDITIONER (SUCH AS "LIVING EARTH TECHNOLOGIES", "BACK-TO-EARTH" OR OTHER APPROVED MANUFACTURER), THOROUGHLY BLENDED TOGETHER. THIS MIX SHALL ALSO BE USED TO BACKFILL PLANTING PITS OF ALL TREES AND LARGE SHRUBS. CONTRACTOR SHALL SUBMIT PLANTING SOIL MATERIAL TO THE LANDSCAPE ARCHITECT FOR APPROVAL.
- ALL PLANTING BEDS INDICATED WILL BE IRRIGATED WITH UNDERGROUND AUTOMATIC IRRIGATION. IRRIGATION CONTRACTOR IS TO BE A STATE OF TEXAS LICENSED IRRIGATOR, AND SHALL FOLLOW ALL TCEC ORDINANCES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS AND SPECIFICATIONS FOR IRRIGATION SYSTEM INCLUDING PIPE SIZES AND LOCATIONS.
- ALL SEEDING AREAS DISTURBED BY CONSTRUCTION SHALL TEMPORARILY IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
- REGULAR MAINTENANCE IS REQUIRED OF ALL LANDSCAPE AREAS AND PLANT MATERIALS IN A VIGOROUS AND HEALTHY CONDITION, FREE FROM DISEASES, PEST WEEDS, AND LITTER. THIS MAINTENANCE SHALL INCLUDE WEEDING, WATERING, FERTILIZATION, PRUNING, MOWING, EDGING, MULCHING OR OTHER NEEDED MAINTENANCE, IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL PRACTICES UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE PROJECT LANDSCAPE ARCHITECT.
- THE OWNERS OF THE LANDSCAPED PROPERTY, OR THE MANAGER OR AGENT OF THE OWNER, SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE AREAS. SAID AREAS SHALL BE MAINTAINED SO AS TO PRESENT A HEALTHY, NEAT AND ORDERLY APPEARANCE AT ALL TIMES AND SHALL BE KEPT FREE OF REFUSE AND DEBRIS. ALL PLANTING BEDS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY AND WATERED AS NECESSARY TO ENSURE CONTINUOUS HEALTHY GROWTH AND DEVELOPMENT. MAINTENANCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL IF THAT MATERIAL WAS USED TO MEET THE REQUIREMENTS OF THE ORDINANCE.

4 SHOVEL CUT EDGE SCALE: N.T.S

LANDSCAPE MAINTENANCE NOTES:

- THE PROPERTY'S LANDSCAPING SHALL BE MAINTAINED AT ALL TIMES. THE QUALITY OF THE LANDSCAPE MAINTENANCE SHALL MEET THE STANDARDS OF PERFORMANCE PROVIDED BY LANDSCAPE COMPANIES IN THE REGIONAL LANDSCAPE AREAS WILL AT ALL TIMES HAVE A NEAT, CLEAN, HEALTHY, & MANICURED APPEARANCE.
- TURF AREAS**
 - MOWING & EDGING OF ALL TURF AREAS SHALL BE PERFORMED AT LEAST ONCE PER WEEK, JANUARY THROUGH DECEMBER.
 - PERENNIAL RYE GRASS OVERSEEDING SHALL BE SEPARATE & MUST BE APPROVED BY THE OWNER PRIOR TO OVERSEEDING. OVERSEEDING SHALL BE DONE IN A MANNER & AT A RATE TO INSURE A LUSH, THICK CONSISTENT WINTER TURF. TRIMMING & EDGING OF TURF AREAS TO BE PERFORMED AT EACH VISIT.
 - ALL TURF AREAS ARE TO BE FERTILIZED A MINIMUM OF FOUR TIMES PER YEAR W/ A HIGH QUALITY, SLOW RELEASE FERTILIZER FROM A REPUTABLE MANUFACTURER.
 - CONTRACTOR SHALL APPLY APPROPRIATE FUNGICIDES AS NECESSARY & PRE-EMERGENT HERBICIDE TWO TIMES PER YEAR & POST-EMERGENT HERBICIDE AT THE TIME DEEMED MOST EFFICIENT & FAVORABLE BY CONTRACTOR.
 - TURF TO BE TREATED AS OFTEN AS NECESSARY W/ APPROPRIATE INSECTICIDE TO CONTROL NORMAL SOIL PESTS.
 - TREAT FIRE ANTS IN ALL TURF AREAS AS NECESSARY.
 - RAKING TO BE PERFORMED AS NEEDED TO MAINTAIN APPEARANCE. DE-THATCH & AERATE TURF ONCE DURING THE YEAR IN CONJUNCTION W/ RYE OVERSEEDING. IF OWNER OPTS TO NOT PERFORM RYE OVERSEED, DE-THATCHING & AERATING TO BE PERFORMED IN EARLY SPRING.
 - BAG ALL AREAS WITHIN 45 FEET OF BUILDINGS, DRIVEWAYS, & SIDEWALKS.
 - SHRUBS, GROUND COVER, BEDS & ANNUALS**
 - TO BE MAINTAINED WEED FREE, AS NEEDED USING APPROPRIATE HERBICIDES & MANUAL WEEDING. USE A MINIMUM OF TWO PRE-EMERGENT APPLICATIONS & MANUALLY WEED EACH VISIT.
 - TO BE FERTILIZED FOUR TIMES PER YEAR W/ A BALANCED HIGH QUALITY, SLOW RELEASE FERTILIZER, APPROPRIATE TO THE SHRUBS ON THE PROJECT.
 - SHRUBBERY TO BE HAND TRIMMED AS SPECIFIED TO MAINTAIN A MANICURED APPEARANCE OR AS OTHERWISE REQUESTED BY OWNER. USE ONLY SKILLED PERSONNEL W/ SIGNIFICANT EXPERIENCE IN CLASS A PROPERTIES. NO SHEARING, ALL TO BE DONE W/ SELECTIVE HAND PRUNING TO KEEP PLANT WITHIN BOUNDS BUT TO MAINTAIN A NATURAL SHAPE & APPEARANCE.
 - TO BE INSPECTED WEEKLY BY QUALIFIED SUPERVISOR, FOLLOWED BY A WRITTEN REPORT OF PROBLEMS DISCOVERED & ACTIONS TO BE TAKEN.
 - TO BE SPRAYED W/ APPROPRIATE INSECTICIDES & FUNGICIDES AS NECESSARY.
 - ANNUALS TO BE CHANGED OUT FOUR TIMES PER YEAR USING FOUR (4) INCH POTS & FERTILIZED AT EACH CHANGE. MONITOR & APPLY FUNGICIDES & INSECTICIDES AS NECESSARY TO INSURE MAXIMUM VIGOR & APPEARANCE.
 - APPLY SHREDDER/HARDWOOD MULCH TO A DEPTH OF TWO INCHES, A MINIMUM OF THREE TIMES ANNUALLY. IF MULCH DEPTH ACCUMULATION BECOMES SO EXCESSIVE AS TO BE DETRIMENTAL TO PLANT HEALTH, RAKE OUT & DISPOSE OF EXCESS QUANTITIES OF THE OLDEST MATERIAL OFF-SITE.
 - ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE & CLEAR FROM ALL BUSHES/SHRUBS, ETC.
 - A THREE-FOOT PERIMETER AROUND ALL FIRE HYDRANTS SHALL BE MAINTAINED
 - LANDSCAPE TREES (4" CALIPER OR LESS)**
 - TO BE LIGHTLY PRUNED AS NECESSARY (AT LEAST ONCE A MONTH DURING GROWING SEASON).
 - TO BE PRUNED & SHAPED ONCE DURING WINTER MONTHS. PRUNE TO CLASS I STANDARDS. NOTIFY MANAGEMENT PRIOR TO & IMMEDIATELY FOLLOWING PRUNING ACTIVITY. PRUNING TO BE DONE BY QUALIFIED TREE CARE FIRM, SUBJECT TO MANAGEMENT APPROVAL.
 - DEEP ROOT FERTILIZE ALL LANDSCAPE TREES ONE TIME PER YEAR. SUBMIT INFORMATION ON MATERIALS, APPLICATION METHODS & APPLICATOR QUALIFICATION ONE WEEK PRIOR TO PERFORMING WORK TO OWNER'S REPRESENTATIVE.
 - ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES
 - LARGE TREES (GREATER THAN 4" CALIPER)**
 - KEEP TREES FREE OF WINES AT ALL TIMES.
 - CONTRACTOR SHALL AT ALL TIMES BE ON THE LOOKOUT FOR INSECT & DISEASE INFESTATIONS & OTHER TREE DAMAGE SUCH AS LIGHTNING OR VEHICULAR DAMAGE. CONTRACTOR SHALL NOTIFY MANAGEMENT IMMEDIATELY OF SUCH DANGER OR DISEASE SO THAT CORRECTIVE ACTION CAN BE TAKEN.
 - WHEN PRUNING IS REQUIRED TO REMOVE DEAD OR DAMAGED LIMBS, WORK IS TO BE DONE BY QUALIFIED TREE CARE FIRM. MANAGEMENT APPROVAL IS REQUIRED PRIOR TO PRUNING.
 - ANY FERTILIZING RECOMMENDED BY QUALIFIED TREE CARE FIRM IS SUBJECT TO MANAGEMENT APPROVAL.
 - ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES
 - DEBRIS & LITTER**
 - NORMAL TRASH & LITTER WILL BE REMOVED FROM ALL LAWN & LANDSCAPED AREAS WEEKLY.
 - ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.
 - REMOVE DEBRIS FROM POTS/PLANTERS ON SIDEWALKS
 - PAVED AREAS**
 - AT PARKING LOT PERIMETERS & PAVING JOINTS, WEEDS & GRASSES ARE TO BE CONTROLLED W/ CONTACT HERBICIDE SPRAYS & MANUAL WEEDING AS REQUIRED.
 - ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.
 - IRRIGATION**
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING & OPERATING ALL IRRIGATION SYSTEMS AT THE PROPERTY EXCEPT AS MAY BE OTHERWISE NOTED.
 - IRRIGATION SYSTEMS MUST BE INSPECTED MONTHLY & A REPORT MUST BE SUBMITTED TO MANAGEMENT. MANAGEMENT MUST APPROVE REPAIRS GREATER THAN \$250.00.
 - CONTRACTOR WILL ENSURE THAT WATERING CYCLES ARE IN COMPLIANCE W/ ANY CITY GUIDELINES AS A RESULT OF WATER RATIONING OR WATER CONSERVATION. ANY FEES OR PENALTIES INCURRED BY VIOLATION OF ORDINANCES WILL BE BILLED TO CONTRACTOR.
 - ALL HEADS & NOZZLES BROKEN BY LANDSCAPE MAINTENANCE OPERATIONS WILL BE REPAIRED OR REPLACED AT CONTRACTOR EXPENSE.
 - ALL NOZZLES WILL BE CLEANED MONTHLY IF NECESSARY & ALL HEADS WILL BE ADJUSTED AS NEEDED.
 - GENERAL**
 - CONTRACTOR SHALL PROVIDE ADEQUATE SUPERVISION TO ASSURE THAT ALL WORK WILL BE DONE IN ACCORDANCE W/ THIS AGREEMENT & GENERALLY ACCEPTED GOOD PRACTICE. A WEEKLY VISIT BY A QUALIFIED SUPERVISOR IS A MINIMUM REQUIREMENT. ADEQUATE TIME SHALL BE ALLOWED FOR A THOROUGH & COMPLETE EXAMINATION OF THE ENTIRE PROPERTY.
 - CONTRACTOR SHALL REPLACE AT CONTRACTOR'S EXPENSE ANY PLANT MATERIAL THAT DIES DUE TO DAMAGE BY LAWN MAINTENANCE, EQUIPMENT OR CONTRACTOR'S NEGLIGENCE.
 - ALL WORK SHALL BE PERFORMED BY CONTRACTOR'S EMPLOYEES; NO WORK SHALL BE PERFORMED BY SUBCONTRACTORS WITHOUT WRITTEN CONSENT OF MANAGEMENT.
 - ALL EMPLOYEES WILL WEAR UNIFORMS & PROVIDE A NEAT APPEARANCE & PROFESSIONAL BEHAVIOR AT ALL TIMES.
 - CREW MEMBERS WILL OBSERVE ALL OSHA REGULATIONS. ALL EQUIPMENT WILL BE PROPERLY MAINTAINED & KEPT IN A SAFE OPERATING CONDITION.
 - ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE IMMEDIATELY CLEANED UP & REMOVED FROM SITE. USE OF AN ON-SITE DUMPSTER IS PROHIBITED.
 - ADDITIONAL PROJECTS, LANDSCAPE UPGRADES, ETC. WILL BE NEGOTIATED AS NEEDED.
 - IF THERE ARE POTS OR SIDEWALK PLANTERS AT PROPERTY, CONTRACTOR SHALL MAINTAIN IRRIGATION OR HAND WATER AS NEEDED. CONTRACTOR TO MAINTAIN PLANTS/ANNUALS IN POTS/CONTAINERS IN ACCORDANCE W/ ALL SPECS NOTED ABOVE.

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Owner ::
 CITY OF ALTON

JEFF UNDERWOOD
 509 S. ALTON BLVD.

CITY OF ALTON

509 S. ALTON BLVD., ALTON, TX, 78573

Sheet Information ::

Project # :: 001
 Date :: 9.11.2015
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 Drawn :: AP
 Checked ::
 Approved ::

LPDT.01

LANDSCAPE
 NOTES & DETAILS

6 of 11

OVERALL PLANTING SCHEDULE								
QTY	KEY	UNIT	COMMON NAME	SCIENTIFIC NAME	SIZE	HEIGHT	SPACING	REMARKS
TREES								
4	SHO	EA	Shumard Oak	<i>Quercus shumardii</i>	2" CAL	12'-14'	as shown	Full canopy, symmetrical growth
7	LVO	EA	Live Oak	<i>Quercus virginiana</i>	3" CAL	14'-16'	as shown	Full canopy, symmetrical growth
9	CDE	EA	Cedar Elm	<i>Ulmus crassifolia</i>	2" CAL	12'-14'	as shown	Full canopy, symmetrical growth
3	MSE	EA	Mexican Sycamore	<i>Platanus occidentalis</i>	2" CAL	12'-14'	as shown	Full canopy, symmetrical growth
4	VTX	EA	Chaste Tree	<i>Vitex agnus-castus</i>	45 GAL	10'	as shown	Full canopy, symmetrical growth
5	CRM	EA	Crape Myrtle	<i>Lagerstroemia indica</i>	45 GAL	10'	as shown	Full canopy, symmetrical growth
SHRUBS								
23	OLE	EA	Oleander	<i>Nerium oleander</i>	3 GAL		as shown	
25	IXO	EA	Ixora	<i>Ixora coccinea</i> 'Maui'	1 GAL		as shown	
28	KOR	EA	Red Knockout Rose	<i>Rosa</i> 'Double Knockout'	3 GAL		as shown	
50	LAN	EA	New Gold	<i>Lantana camara</i>	1 GAL		as shown	
GRASSES								
38	GUL	EA	Gulf Muhly	<i>Muhlenbergia capillaris</i>	1 GAL		as shown	
23	BIC	EA	Bicolor Iris	<i>Diets bicolor</i>	3 GAL		as shown	
14	LIR	EA	Aztec Grass	<i>Liriope muscari</i> 'Aztec Grass'	1 GAL		as shown	
GROUND COVER								
139	MXP	EA	Katie Wild Petunia	<i>Ruellia simplex</i> 'Katie'	4" POT		as shown	
2,780	BRG	SF	Bermuda Grass	<i>Cynodon dactylon</i>	SOD		per spec	
51,952	BRH	SF	Bermuda Grass	<i>Cynodon dactylon</i>	HYDRO		per spec	
OTHER								
13		CY	Native Hardwood Mulch @3" Depth					
13		CY	Planting Bed Mix @3" Depth					
169		CY	Topsoil @1" Depth					

1 PLANT SCHEDULE



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LPDT.02

LANDSCAPE
CALCULATIONS

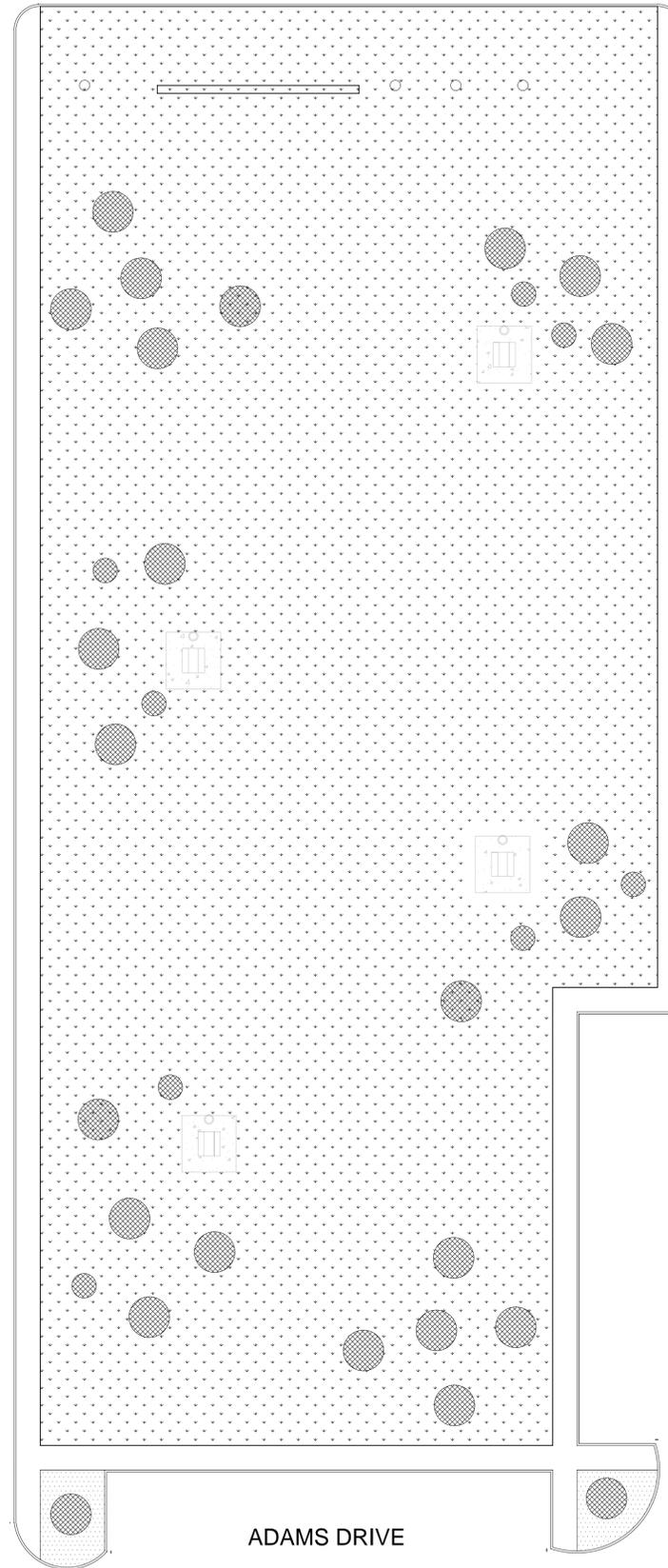
WEST MAIN AVENUE

FLORIDA STREET

DELAWARE STREET

Adams Avenue

ADAMS DRIVE



IRRIGATION LEGEND

- IRRIGATION SLEEVES (2) - 4" SCH 40 (no mainline)
(1) - 6" SCH 40 (mainline)
- MAIN LINE
- M** METER - LOCATION TBD
- C** CONTROLLER - LOCATION TBD
- ◐ ISOLATION VALVE
- ◑ QUICK COUPLER

IRRIGATED AREAS

- LANDSCAPE BED - DRIP IRRIGATION
- TREE BUBBLERS - TWO PER TREE
- TURF AREA - SPRAY IRRIGATION
- LARGE ROTARY SPRAY IRRIGATION
(single row along perimeter walk/ trail, not head to head coverage)

NOTES

1. THIS SCHEMATIC PLAN DEPICTS AREAS TO BE IRRIGATED. THIS IS NOT FINAL DESIGN. CONTRACTOR TO DEVELOP AND SUBMIT FINAL DESIGN AND SEALED PLANS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO BANK VALVES/BOXES, IN NEAT AND ORDERLY MANNER, INSIDE THE PLANTING BEDS.
3. VALVES/BOXES IN TURF AREAS SHALL OCCUR ADJACENT TO CONCRETE WALK OR DRIVE AND NOT IN THE MIDDLE OF LAWN AREAS.
4. TURF AND LANDSCAPE BEDS SHALL BE ZONED SEPARATELY.
5. CONTRACTOR TO PROVIDE APPROPRIATE SIZED SPRAY HEAD TO SPRAY FROM PROPERTY LINE INTO ADJACENT ROW AND NOT SPRAY WATER ON WALKS, STREETS, OR DRIVE.

DRIP IRRIGATION NOTES

DEVISE SELECTIONS:
 EMITTERS: XB-10 OR XB-20
 MODULE: PC-05
 XERI-BUBBLER: SXB PR UXB

LATERAL LINES TO BE OFFSET 2" FROM HARDSCAPE AREAS.

SPACING BETWEEN LATERAL LINES TO BE 24".

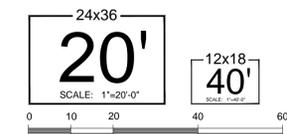
EMITTERS TO BE SPACED 24", TYP. (MIN. 18", MAX. 30").

MIN. AMOUNT OF EMITTERS: 149

FLOW RATE: 0.9GPH / 0.015GPM
 WATER REQUIREMENT PER DAY: 0.20 INCHES

RUN TIME PER DAY: 39 MINUTES A DAY.
 MAX. RUN TIME: 106 MIN. A DAY
 MAX IRRIGATION INTERVAL: AT LEAST EVERY THIRD DAY.

SUGGESTED WATER SCHEDULE:
 DAILY: RUN FOR 39 MINUTES
 EVERY OTHER DAY: RUN FOR 78 MINUTES



Scale: 1" = 20' - 0"

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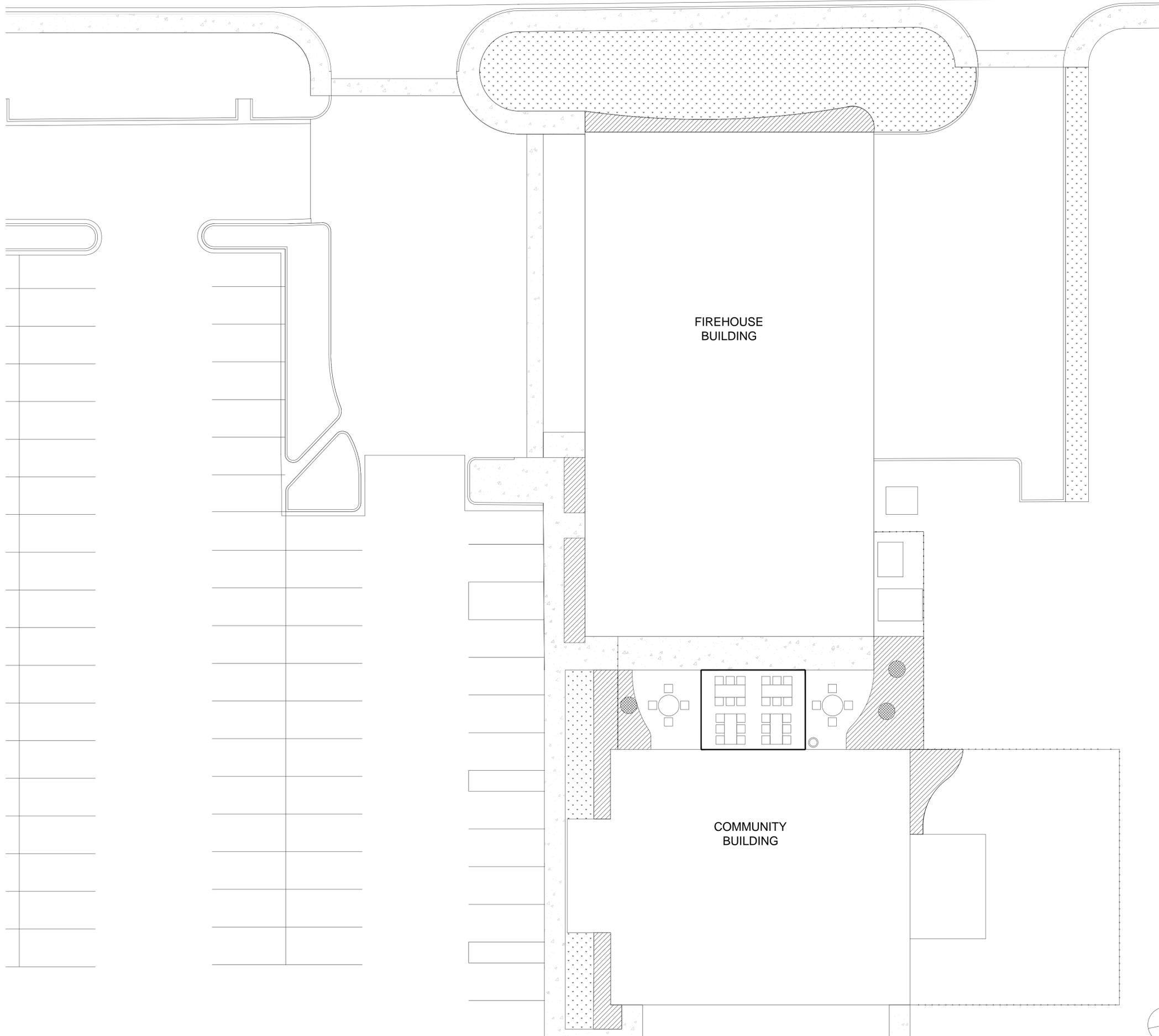
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IR.01

IRRIGATION
 AREA PLAN

8 of 11



IRRIGATION LEGEND

- IRRIGATION SLEEVES (2) - 4" SCH 40 (no mainline)
(1) - 6" SCH 40 (mainline)
- MAIN LINE
- M** METER - LOCATION TBD
- C** CONTROLLER - LOCATION TBD
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- ⬠ QUICK COUPLER

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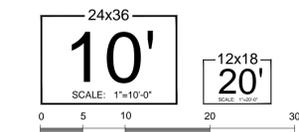
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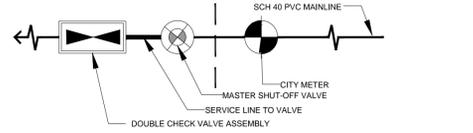
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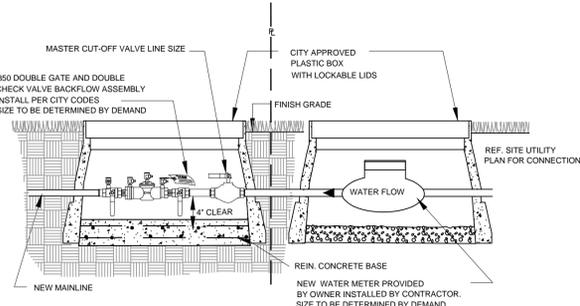
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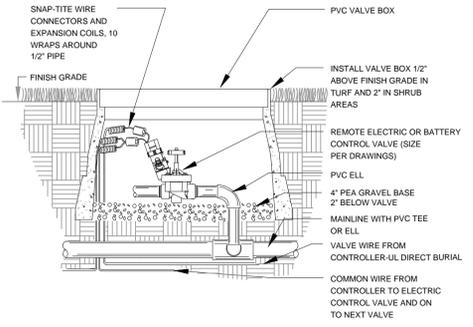
IR.02
 IRRIGATION
 AREA PLAN
 9 OF 11



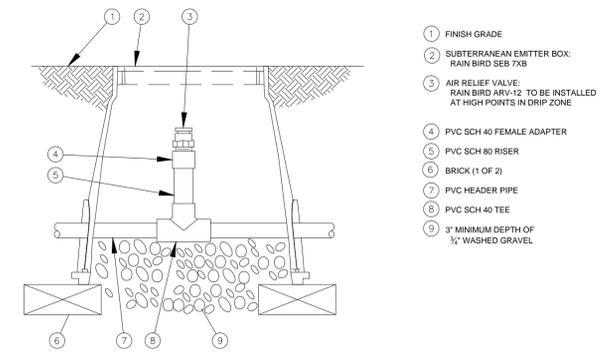
1 IRRIGATION WTR CONNECTION (TYP.)
SCALE: N.T.S.



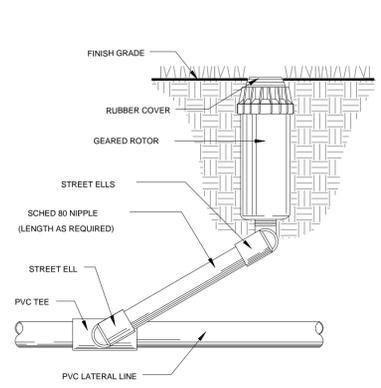
2 DOUBLE CHECK VALVE ASSEMBLY (TYP.)
SCALE: N.T.S.



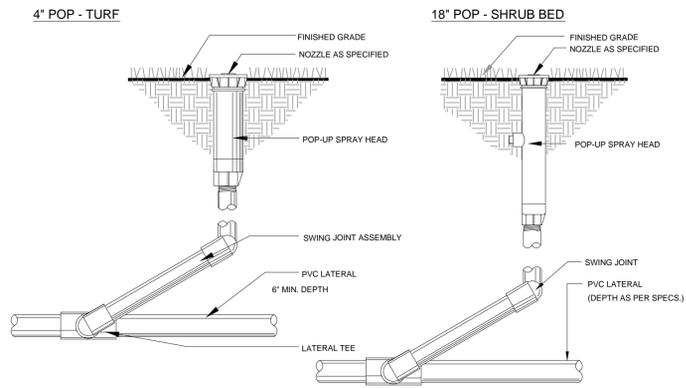
3 REMOTE CONTROL VALVE (TYP.)
SCALE: N.T.S.



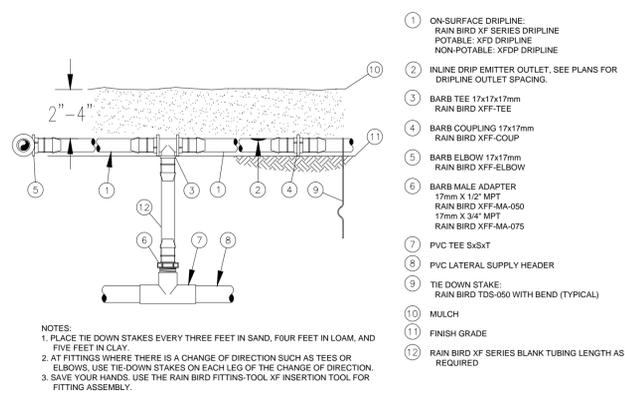
4 AIR RELIEF VALVE IN PVC HEADER DRIP IRR DETAIL
SCALE: N.T.S.



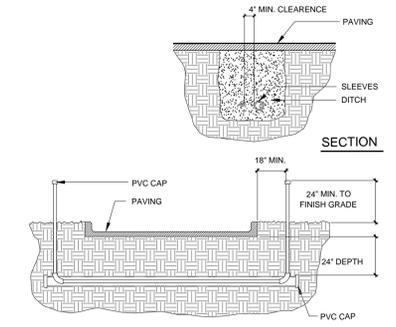
5 GEAR DRIVE ROTOR (TYP.)
SCALE: N.T.S.



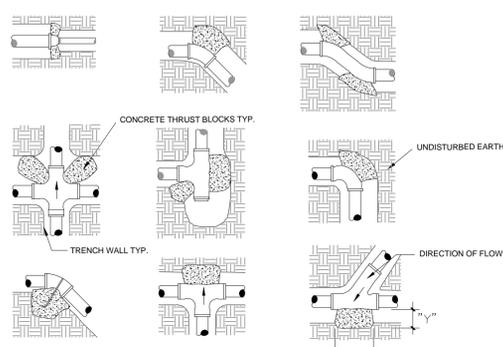
6 POP-UP SPRAY HEADS (TYP.)
SCALE: N.T.S.



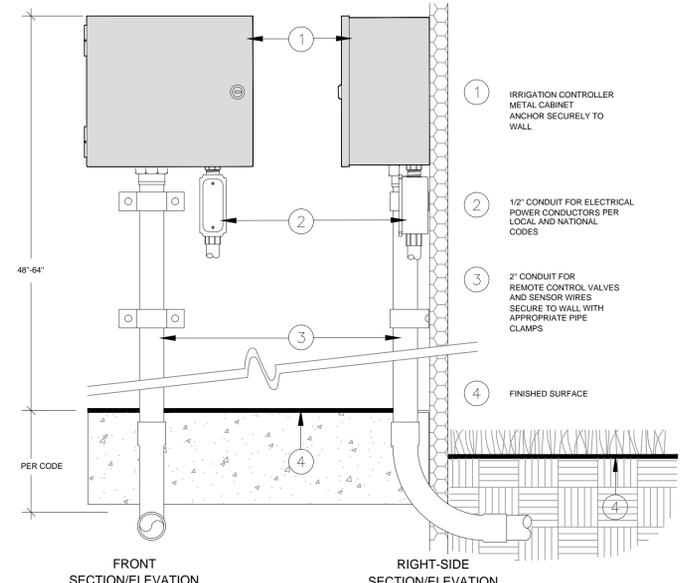
7 XFD ON-SURFACE DRIPLINE RISER DRIP IRR DETAIL
SCALE: N.T.S.



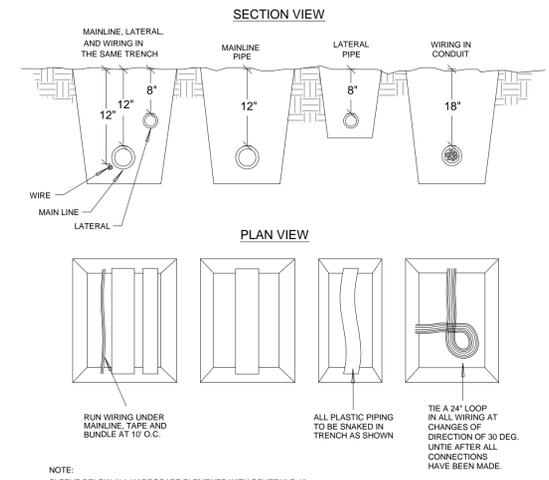
8 IRRIGATION SLEEVING (TYP.)
SCALE: N.T.S.



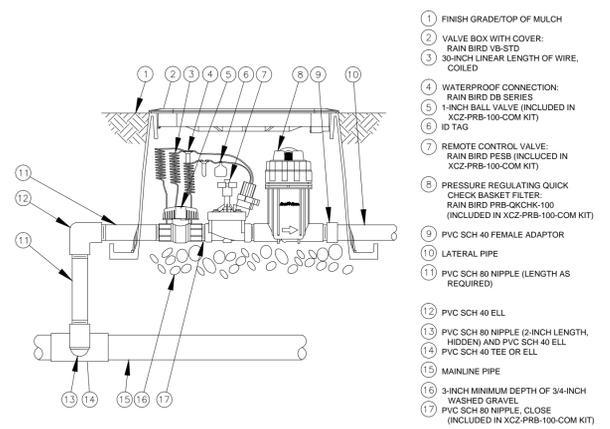
9 PIPE THRUST BLOCKING (TYP.)
SCALE: N.T.S.



10 CONTROLLER - INTERIOR WALL MOUNT
SCALE: N.T.S.



11 PIPE & WIRE TRENCHING (TYP.)
SCALE: N.T.S.



12 XCZ-PRB CONTROL ZONE KIT VALVE BOX DRIP IRR DETAIL
SCALE: N.T.S.

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IRDT.01
IRRIGATION
NOTES & DETAILS
10 OF 11

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IRRIGATION MATERIALS AND PERFORMANCE SPECIFICATIONS:

DESCRIPTION	* EXAMPLE OR EQUAL	SIZE	REMARKS
TAPMETER	BY CONTRACTOR	AS REQUIRED	CONTRACTOR RESPONSIBLE FOR ALL ASSOCIATED FEES
DRIPLINE TUBING WITH DUAL OUTLET PORTS	RAINBIRD, TORO, NETAFIM DRIPLINE PRESSURE COMPENSATING	0.6 GAL./HR. 12 inch INLINE DRIPPER SPACING	DRIP TUBING MAY REQUIRE AIR RELIEF VALVE AS REQUIRED BY THE MANUFACTURER
PRESSURE REGULATOR	RAINBIRD, NETAFIM, AGRIFIM	1"	(200 MESH)
BALL VALVE	RAINBIRD, NETIFIM, AGRIFIM	1"	PLASTIC; 40 PSI
REMOTE CONTROL VALVE	RAINBIRD, TORO, HUNTER	1"	
SPRAY / ROTARY HEADS	RAINBIRD, TORO, HUNTER		
TREE BUBBLERS	RAINBIRD, TORO, HUNTER		
CONTROLLER - SMART VALVE CONTROLLER	RAINBIRD, TORO, HUNTER SVC-100		
BACKFLOW PREVENTER	FEBCO, CONBRACO	1"	
PVC SCH 40 CASING FOR SLEEVES AND BORES PRESSURE RATED WITH SLIP TYPE SOLVENT WELDED JOINTS		VARIABLES	
PVC SCH 40 MAINLINE AND LATERALS PRESSURE RATED WITH TWIN GASKET COUPLINGS AND FITTINGS OR SLIP TYPE SOLVENT WELDED JOINTS		VARIABLES	
FITTINGS ALL FITTINGS INCORPORATED INTO SYSTEM SHALL BE OF THE SAME TYPE, SIZE AND CLASS MATERIAL AS THE PIPE		VARIABLES	
CONTROL WIRE ALL LOW VOLTAGE CONTROL WIRE SHALL BE COLOR CODED.	ALL WIRE SHALL BE SPECIFICALLY MANUFACTURED FOR DIRECT BURIAL	WIRE SIZE SHALL BE MINIMUM 16GA.	THE SPlice SHALL BE COMPLETELY WATERPROOF AND SHALL BE COMPLETELY ENCAPSULATED WITHIN A KING SAFETY SEALED IRRIGATION CONNECTOR/SPlice ENCLOSURE OR AN APPROVED EQUAL
SOLVENT CEMENT			SOLVENT CEMENT SHALL BE THE TYPE RECOMMENDED BY THE PIPE MANUFACTURER
VALVE BOXES	NDS;	BOX SIZE SHALL ALLOW FOR EASY REMOVAL OF VALVE, ETC.	QUANTITY AS REQUIRED FOR SECTION VALVES, BELOW GROUND BACKFLOW PREVENTERS, QUICK COUPLING VALVES AND REQUIRED ACCESSORIES

* REFERENCE TO MANUFACTURER'S TRADE NAME OR CATALOG NUMBER IS FOR THE PURPOSE OF IDENTIFICATION ONLY. CONTRACTOR SHALL BE PERMITTED TO FURNISH LIKE MATERIALS OF OTHER MANUFACTURERS PROVIDED THEY ARE OF EQUAL QUALITY AND COMPLY WITH SPECIFICATIONS FOR THIS PROJECT AND ARE APPROVED BY THE ENGINEER.

IRRIGATION NOTES:

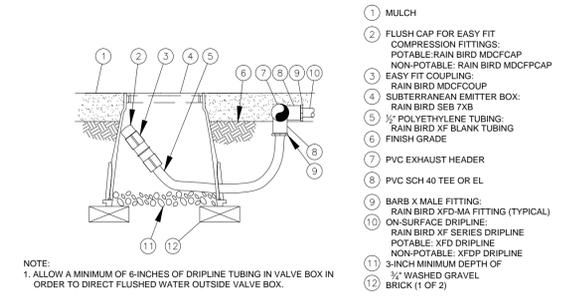
- GENERAL:**
- ADJUSTABLE FLOW CONTROLS SHALL BE REQUIRED ON CIRCUIT REMOTE CONTROL VALVES. A PRESSURE REGULATION COMPONENT(S) SHALL BE REQUIRED WHERE STATIC PRESSURE EXCEEDS MANUFACTURER'S RECOMMENDED OPERATING RANGE.
 - SPRINKLER HEADS SHALL HAVE MATCHED PRECIPITATION RATES WITHIN THE CONTROL VALVE CIRCUIT.
 - SERVICEABLE CHECK VALVES SHALL BE REQUIRED WHERE ELEVATION DIFFERENTIAL MAY CAUSE LOW HEAD DRAINAGE ADJACENT TO PAVING AREAS.
 - SPRINKLER HEAD SPACING SHALL BE DESIGNED FOR HEAD-TO-HEAD COVERAGE OR HEADS SHALL BE SPACED AS PER MANUFACTURER'S RECOMMENDATIONS AND ADJUSTED FOR PREVAILING WINDS. THE SYSTEM SHALL BE DESIGNED FOR MINIMUM RUN-OFF AND MINIMUM OVER SPRAY ONTO NON-IRRIGATED AREAS, (I.E. PAVING, ROADS AND STRUCTURES).
 - ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A CONTROLLER CAPABLE OF DUAL OR MULTIPLE PROGRAMMING. CONTROLLER CAPABLE OF DUAL OR MULTIPLE PROGRAMMING. CONTROLLERS SHALL HAVE MULTIPLE CYCLE START CAPACITY AND A FLEXIBLE CALENDAR PROGRAM, INCLUDING THE CAPABILITY OF BEING SET TO WATER EVERY FIVE DAYS. ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A RAIN SENSOR SHUTOFF DEVICE LOCATED WHEREIN FALL IS UNOBSTRUCTED AND ADJUSTED TO ONE-FOUR INCH SETTING. CONTRACTOR TO COORDINATE AND PROVIDE ELECTRIC SERVICE FOR AUTOMATIC CONTROLLER(S).
 - PROVIDE A LAMINATED COPY OF THE RECOMMENDED SETTINGS AND A SCHEDULE TO INCLUDE:
 - ESTIMATED MONTHLY WATER USE (IN GALLONS PER APPLICATION)
 - PRECIPITATION RATE FOR THE VALVE CIRCUIT.
 - MONTHLY IRRIGATION SCHEDULE FOR THE PLANT ESTABLISHMENT PERIOD (FIRST THREE MONTHS) AND RECOMMENDED YEARLY WATERING SCHEDULE, INCLUDING SEASONAL ADJUSTMENTS.
 - LOCATION OF EMERGENCY IRRIGATION SYSTEM SHUTOFF VALVE.
 - LANDSCAPE CONTRACTOR TO PROVIDE CADD BASED SHOP DRAWINGS WITHIN 45 DAYS OF CONTRACT AWARD FOR LA APPROVAL PRIOR TO INSTALLATION. IRRIGATION PLAN IS TO BE SCHEMATIC. LOCATE ALL LATERAL AND PRESSURE LINES IN THE LANDSCAPE AREA. DO NOT ROUTE PIPE DOWN THE CENTER OF THE TREE AND SHRUB BED PLANTINGS ALLOW FOR TREE AND SHRUB PLANTINGS. INSTALL PIPING DIRECTLY BEHIND CURBS AND WALKS WHERE POSSIBLE. COMBINE PIPE IN TRENCHES WHEREVER POSSIBLE.
 - PRIOR TO CONSTRUCTION, VERIFY WITH THE GENERAL CONTRACTOR AND THE UTILITY COMPANIES THE LOCATION OF ALL UNDERGROUND UTILITIES.
 - IRRIGATION SYSTEM IS DESIGNED FOR 30 PSI AT THE SMALL HEADS. CONTRACTOR IS TO VERIFY THIS INFORMATION AND MAKE ADJUSTMENTS TO THE SYSTEM IF THESE MINIMUMS ARE NOT PRESENT AT TIME OF INSTALLATION. ADJUSTMENTS TO THE SYSTEM ARE TO BE MADE PRIOR TO INSTALLATION TO INSURE THAT THE SYSTEM IS WORKING.
 - PROVIDE SLEEVES AS SHOWN TO COMPLETE THIS PROJECT. COORDINATE AND MARK ALL SLEEVE LOCATIONS WITH THE GENERAL CONTRACTOR.
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 - ALL UNMARKED LATERAL PIPING ASSUMED TO BE 1/2" 200 PSI PR CL 200 PVC PIPE.
 - OFFSET OF MAINLINE FROM BACK OF CURB IS 2'-0" MIN. TYP.
 - IRRIGATION CONTRACTOR IS TO BE A STATE OF TEXAS LICENSED IRRIGATOR, AND IS TO FOLLOW ALL TCEQ CODES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS AND SPECIFICATIONS FOR IRRIGATION SYSTEM INCLUDING PIPE SIZES AND LOCATIONS.
 - ALL LANDSCAPE AND TURF AREAS WITHIN THE LIMITS OF CONSTRUCTION TO RECEIVE 100% IRRIGATION WITH TURF, LANDSCAPE BEDS, AND TREES TO BE ON SEPARATE ZONES. A MINIMUM OF ONE BUBBLER PER TREE IS REQUIRED FOR ALL TREES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, LICENSES, TEXTS, AND/OR APPROVALS, PAYING ANY FEES AND INSTALLING OR ARRANGING FOR ALL WATER METERS AND TAPS FOR INSTALLATION AND OPERATION AS APPLICABLE. WATER METERS SHALL BE PLACED IN NAME OF ENTITY, NOT THE CONTRACTOR, AS PROVIDED BY THE LANDSCAPE ARCHITECT. THE ENTITY, NOT THE CONTRACTOR WILL PAY FOR MONTHLY WATER CHARGES. WATER METERS SHALL REMAIN OPERATIONAL AND TURNED ON THROUGH ALL PHASES OF THE CONTRACT TO ENSURE PLANTS RECEIVE REQUIRED WATERING.

CONSTRUCTION METHODS:

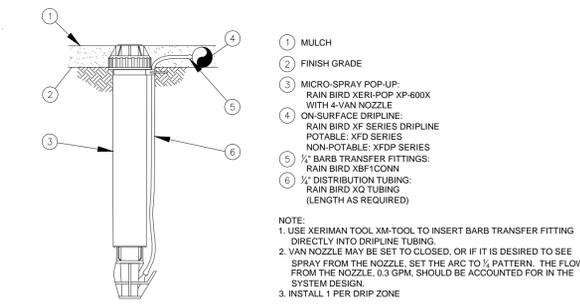
- THE CONTRACTOR SHALL INVESTIGATE THE SITE CONDITIONS AFFECTING THE WORK AND SHALL FURNISH OFFSETS, FITTINGS, AND SLEEVES AS MAY BE REQUIRED TO MEET SITE CONDITIONS.
- CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR TREES. NO MECHANICAL TRENCHING SHALL BE PERMITTED BELOW THE CANOPY OF EXISTING TREES. CONTRACTOR SHALL ADJUST TRENCH PATH AND/OR EXCAVATE BY HAND TO AVOID DAMAGE TO EXISTING TREE ROOT SYSTEMS.
- DIG TRENCHES STRAIGHT AND SUPPORT PIPE CONTINUOUSLY ON BOTTOM OF TRENCH. INSTALL PIPE TO AN EVEN GRADE. TRENCH BOTTOM SHALL BE CLEAN AND SMOOTH WITH ALL ORGANIC DEBRIS AND SHARP OBJECTS REMOVED. PIPE SHALL BE SNAKED IN TRENCH, TO ALLOW FOR EXPANSION AND CONTRACTION. FOR PUBLIC SAFETY, PLASTIC CONSTRUCTION FENCING, MINIMUM 4-FEET HIGH, SHALL BE USED AROUND OPEN EXCAVATIONS.
- PVC CASING(S) FOR BORES AND SLEEVES SHALL CONSIST OF SCH 40 SMOOTH WALL PIPE WITH WELDED JOINTS AND SEAMS, AND SHALL BE CONTINUOUS. THE SIZE OF BORE SHALL NOT EXCEED THE DIAMETER OF CASING(S) REQUIRE BY THE PLANS BY MORE THAN 1-INCH. ALL CASINGS SHALL BE INSTALLED PRIOR TO ANY ROAD PAVING OR FINAL GRADES BY TRENCHING.
- PIPE SHALL NOT BE INSTALLED WHEN AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PLASTIC PIPE SHALL BE CUT IN A MANNER THAT WILL INSURE A SQUARE CUT. BURRS AT CUT ENDS SHALL BE REMOVED PRIOR TO INSTALLATION SO THAT A SMOOTH UNOBSTRUCTED FLOW WILL BE OBTAINED.
- ALL WATER LINES SHALL BE THOROUGHLY FLUSHED BEFORE INSTALLING DRIPLINE.
- CONTROL WIRE AND WIRE CONNECTIONS SHALL BE AS DESCRIBED ON IRRIGATION MATERIALS SPECIFICATIONS SHEET. ALL WIRE CONNECTIONS AND SPLICES SHALL BE MADE IN GROUND BOXES.
- COMPACTION OF THE PIPE TRENCHES MUST BE SUFFICIENT TO LIMIT SHORT TERM SETTLING OF THE BACKFILL TO NO MORE THAN 1-INCH. THE CONTRACTOR SHALL CORRECT SETTLING GREATER THAN THIS WITHOUT ADDITIONAL COMPENSATION.

GUARANTEE AND ACCEPTANCE:

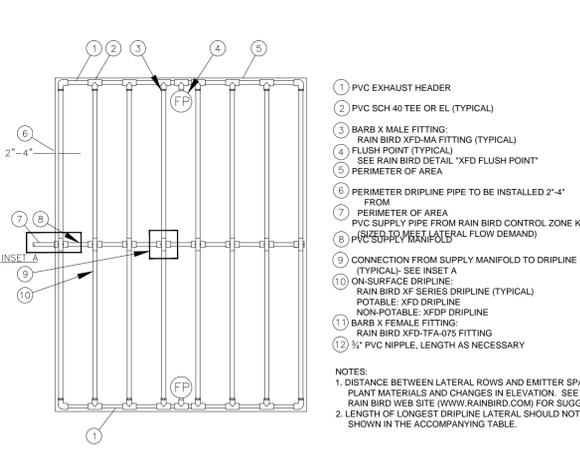
- MAINTENANCE PERIOD. DURING THE INSTALLATION, ESTABLISHMENT, AND MAINTENANCE, CONTRACTOR SHALL PERFORM THE FOLLOWING ACTIVITIES AS A MINIMUM AND TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT:
 - INSTALL AND MAINTAIN THE CONTROLLER PROGRAM TO INSURE THE PROPER DISTRIBUTION OF WATER (INCLUDES REPLACEMENT OF ANY BATTERIES).
 - INSPECT, REPAIR, AND/OR REPLACE ANY EQUIPMENT THAT IS FOUND DEFECTIVE OR MAY BE DAMAGED BY OTHER MAINTENANCE.
 - MAKE ANY ADJUSTMENTS THAT MAY BECOME NECESSARY TO ENSURE THE PROPER DELIVERY OF WATER TO THE PLANT MATERIAL.
- AS-BUILT DRAWINGS. UPON COMPLETION OF THE REQUIRE MAINTENANCE PERIOD, THE LANDSCAPE ARCHITECT WILL MAKE AN INSPECTION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE LANDSCAPE ARCHITECT A SET OF AS-BUILT DRAWINGS ON REPRODUCIBLE 22-34 FILM BASE SHEETS. THE LANDSCAPE ARCHITECT WILL CHECK BASE SHEETS TO BE SURE THEY ARE A TRUE RECORD OF THE PROJECT CONDITIONS AND WILL DIRECT THE CONTRACTOR TO CORRECT ANY ERRORS THAT ARE FOUND. THE DRAWINGS SHALL SHOW ALL VALVE LOCATIONS BY TRIANGULATION FROM A FIXED OBJECT AND ANY CHANGE TO SPRINKLER HEAD LOCATION FROM A FIXED OBJECT AND ANY CHANGE TO SPRINKLER HEAD LOCATION AND REROUTING OF MAIN AND LATERAL LINES (CHANGE OF THIS NATURE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION).
- OPERATING AND MAINTENANCE DATA. THE CONTRACTOR SHALL PROVIDE INSTRUCTIONS COVERING FULL OPERATION, CARE AND MAINTENANCE OF THE EQUIPMENT, INCLUDING A SCHEDULE SHOWING LENGTH OF TIME EACH VALVE IS TO BE OPEN TO PROVIDE DETERMINED AMOUNT OF WATER, AND INSTRUCT THE STATE'S DESIGNATED PERSONNEL IN PROPER OPERATION OF THE SYSTEM.
- TEST. THE CONTRACTOR SHALL ALSO TEST AND ASSURE THE PROPER ELECTRICAL WORKING ORDER OF THE SYSTEM TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.



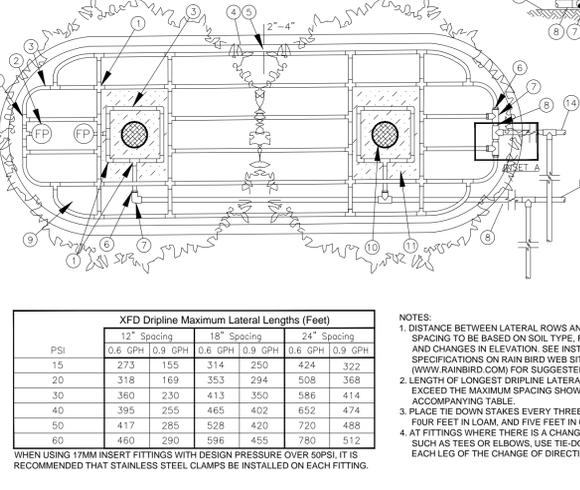
1 XFD ON-SURFACE DRIPLINE FLUSH POINT DRIP IRR DETAIL
SCALE: N.T.S.



2 XFD ON-SURFACE DRIPLINE INDICATOR DRIP IRR DETAIL
SCALE: N.T.S.



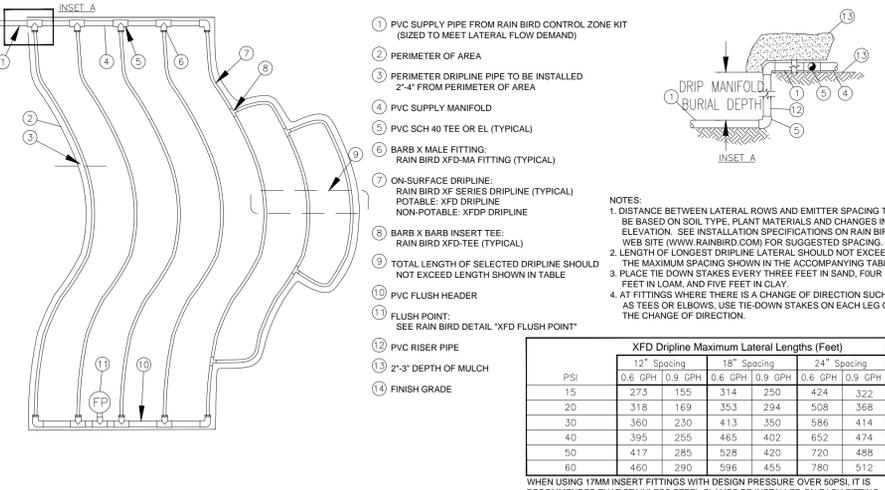
3 XFD ON-SURFACE DRIPLINE CENTER FEED LAYOUT DRIP IRR DETAIL
SCALE: N.T.S.



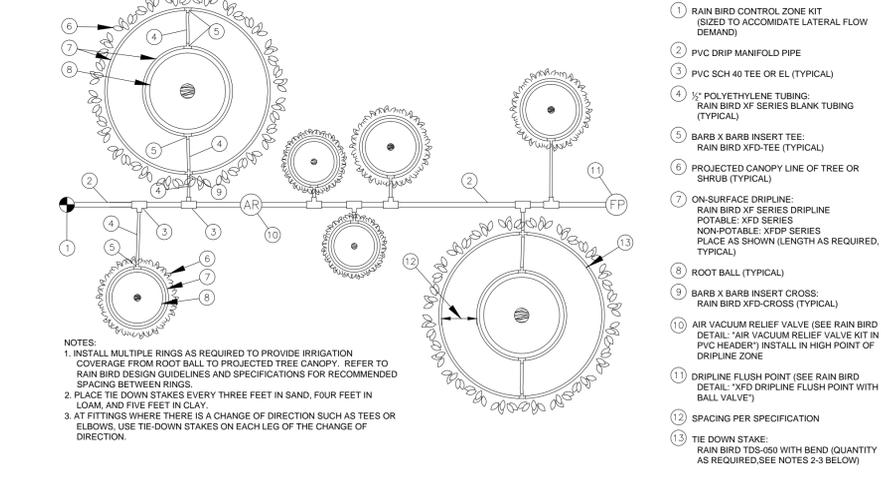
4 XFD ON-SURFACE DRIPLINE PARKING ISLAND WITH TREES DRIP IRR DETAIL
SCALE: N.T.S.

Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (GPH)					
15	255	194	357	273	448	343
20	291	220	408	313	514	394
30	350	266	494	378	622	478
40	396	302	560	428	705	541
50	434	333	614	470	775	594

- NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.



5 XFD ON-SURFACE DRIPLINE TYPICAL ODD CURVES LAYOUT DRIP IRR DETAIL
SCALE: N.T.S.



6 XFD ON-SURFACE DRIPLINE MULTIPLE TREE/ SHRUB DETAIL DRIP IRR DETAIL
SCALE: N.T.S.

Owner :
CITY OF ALTON

JEFF UNDERWOOD
509 S. ALTON BLVD.

CITY OF ALTON
509 S. ALTON BLVD., ALTON, TX, 78573

Sheet Information ::

Project # : 001
Date : 9.11.2015
Designed : MD, GJ, AP
Drawn : AP
Checked :
Approved ::

06.23.15	50% CONSTRUCTION DOCUMENTS
08.19.15	90% CONSTRUCTION DOCUMENTS
09.11.15	100% CONSTRUCTION DOCUMENTS

IRDT.02
IRRIGATION
NOTES & DETAILS