

LANDSCAPE CODE COMPLIANCE CHART

FORT PIERCE - CODE OF ORDINANCES; CH. 22; ART XII

STORAGE FACILITY

TOTAL SITE AREA: 60,039 sq.ft. (1.38 AC) ZONING: C-3 GENERAL COMMERCIAL
 TOTAL VUA: 17,658.48 sq.ft.
 TOTAL LANDSCAPE AREA: 12,060 sq.ft. (0.28 AC) (20.1%)

SEC. 123-37 - GENERAL LANDSCAPE REQUIREMENTS

1 - Requirements for Plant Materials
 Trees: Minimum 12' height x 5' width, 5' clear trunk, 2.5" dbh
 Palms: 3 Palms = 1 Tree (50% MAX)
 Shrubs: Min. 24" height at time of installation

4 - Landscape Strips
 Between Street R/O/W and VUA Use, Building and/or Retention Areas
 10' width minimum Landscape Strip
 1 Tree/300 sq.ft. (400.99 ft x 10' = 4,009.9 sq.ft.)
 36" ht. Continuous Visual Screen

6 - Vehicular Use, Building, Retention/Detention Areas Adjacent to Other Property
 10' width minimum Landscape Strip
 1 Tree/200 sq.ft. (XX ft x 10' = XX sq.ft.) N/A - OUTPARCEL
 6' Continuous Visual Screen

7 - Interior Vehicular Use Areas
 1 sq.ft. of Interior Landscape Area/15 sq.ft. of VUA
 1 Tree/100 sq.ft. of Required Interior Landscape Area

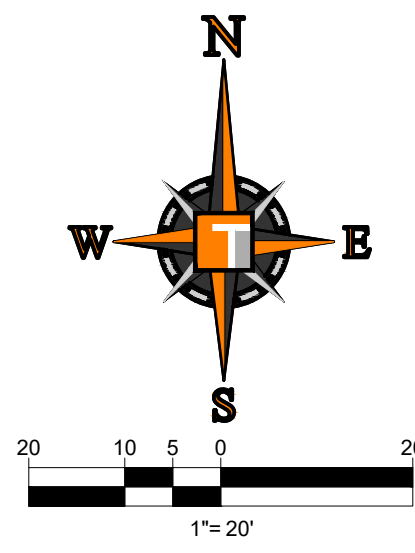
REQUIRED	PROVIDED
10'	10'
14 TREES	14 TREES
N/A	N/A
1,177.23 sf	1,177.23 sf
12 TREES	12 TREES
TOTAL	TOTAL
26 TREES	26 TREES

SEC 123-66 - TREE PROTECTION AND MITIGATION

(d)(2) Native Trees with a DBH of 14" or greater Shall be Mitigated Inch:Inch
 214.5" Removed
 0" Preserved
 Deficit Inches: 214.5"

Planted Trees in Excess of Code Count at 50% towards mitigation:
 Trees Over Code Minimum: 67 Credits
 Total Mitigation deficit: 147.5" @ \$250/in = \$36,875.00

When property is not suitable for on-site mitigation, the applicant's plan may, with city approval, provide for use of a site on city public lands providing that the applicant furnishes all necessary services incident to such mitigation on public property, including, but not limited to, funding plants material and labor. Any contributions shall be placed at the City of Fort Pierce Tree Preservation Funds.



PLANT SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	CAL/DBH	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
+	CS	2	Orange Geiger Tree	Cordia sebestena	B & B	2.5" DBH	12' Ht	5'	Yes	High	5' CT
+	IC	11	Dahoon Holly	Ilex cassine	B & B	4" DBH	16' Ht	5-6'	Yes	High	5' CT
+	MV	18	Sweetbay Magnolia	Magnolia virginiana	B & B	4" DBH	16' Ht	5-6'	Yes	High	6' CT
+	QV	3	Southern Live Oak	Quercus virginiana	B & B	6" dbh	18'-20' Ht	7-8'	Yes	High	5.5' CT
PALM TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	CAL/DBH	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
o	SF	12	Cabbage Palmetto	Sabal palmetto	B & B		18-22" oa	10'	Yes	High	
o	TR	6	Florida Thatch Palm	Thrinax radiata	B & B		10' oa		Yes	High	6' ct
SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
o	CER	214	Buttonwood	Conocarpus erectus	NA	30"	36"	24-30"	Yes	High	
o	CES	235	Silver Button Wood	Conocarpus erectus sericeus	NA	24"	36"	24"	Yes	High	full to base
o	IAH	3	East Palatka Holly	Ilex attenuata	NA	30"	48"	30"	Yes	High	Full to base; Pyramidal
SHRUB AREAS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
hatched	CHR	85	Red Tip Coccolup	Chrysobalanus icaco 'Red Tip'	n/a	24"	18"	18"	Yes	High	Full to base
dots	FIM	305	Green Island Ficus	Ficus microcarpa	n/a	16"	16"	20"	No	Medium	Full
lines	MUH	143	Pink Muhly Grass	Muhlenbergia capillaris	n/a	18"	14-16"	14-16"	Yes	High	
GROUND COVERS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
circles	BFS	160	Bush Seaside Tansy	Borrchia frutescens	n/a	16"	16"-18"	18"	Yes	High	

ALL TREES AND PALMS PLANTED SHALL BE SECURELY GUYED, BRACED, AND/OR STAKED AT THE TIME OF PLANTING UNTIL ESTABLISHMENT. ALL STABILIZATION SYSTEMS SHALL BE CLEARLY MARKED (FLAGGING, PAINTED, ETC.) TO PREVENT HAZARDS.

ALL EXISTING INVASIVE & EXOTIC SPECIES, SHRUBS, & GROUND COVER NOT SHOWN ON THIS PLAN SHALL BE REMOVED FROM SITE

ALL MECHANICAL EQUIPMENT, BACKFLOW PREVENTERS, DUMPSTER ENCLOSURES, A/C UNITS, ETC., SHALL BE SCREENED IN ADDITION TO THE MINIMUM LANDSCAPE REQUIREMENTS.

ANY PVIOUS AREA TO REMAIN THAT IS DISTURBED BY CONSTRUCTION & IS NOT NOTED ON THE LANDSCAPE PLAN TO HAVE SHRUBS OR GROUND COVER SHALL BE SODDED

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REVISIONS:

REV.	DATE	COMMENT	BY
1	10/28/22	BUILDING PERMIT SUBMITTAL	MDG

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PROJECT No.: FJ210016
 DRAWN BY: JMG
 CHECKED BY: JMG
 DATE:
 CAD I.D.: FJ210016 LANDSCAPE PLAN

PROJECT:
FORT PIERCE STORAGE FACILITY
 FOR
LG FT PIERCE
 FORT PIERCE FLORIDA

THOMAS ENGINEERING GROUP
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MICHAEL D. GROSSWIRTH
 REGISTERED LANDSCAPE ARCHITECT
 October 28, 2022
 FLORIDA BUS. REG. NO. 120571
 FLORIDA BUS. REG. NO. 27528

SHEET TITLE:
LANDSCAPE PLAN
 SHEET NUMBER:
L-2.0

LANDSCAPE GENERAL NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL PLANTING AREAS OF THIS CONTRACT UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, AND OTHER ITEMS OF CONSTRUCTION AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THIS CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS, EXISTING OR OTHERWISE, CAUSED BY CARELESS OPERATION OF EQUIPMENT, STOCKPILING OF MATERIALS, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP – LINE OR THE SPILLING OF OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP – LINE.

2. NO MATERIALS SHALL BE BURNED WHERE THE HEAT WILL DAMAGE ANY PLANT. TREES KILLED OR DAMAGED SO THAT THEY ARE MISSEAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY PERCENT (20%) PER INCH OVER FOUR INCHES (4") CALIPER AS FIXED AND AGREED. LIQUIDATED DAMAGES, OR AS MAY BE REQUIRED BY THE REGULATING GOVERNMENT AGENCY, WHICHEVER IS GREATER. CALIPER SHALL BE MEASURED AT BREAST HEIGHT OR FOUR FEET (4') ABOVE SURROUNDING GROUND.

D. MATERIALS

1. SUBMITTALS: GENERAL SAMPLES OF PLANTING MATERIALS AS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON THE SITE OR AS OTHERWISE DETERMINED BY THE OWNER, UPON APPROVAL OF SAMPLES. DELIVERY OF MATERIALS MAY BEGIN.

MATERIALS SAMPLE SUBMITTALS

MULCH ONE (1) CUBIC FOOT

TOPSOIL ONE (1) CUBIC FOOT

PLANTS ONE (1) REPRESENTATIVE SAMPLE OF EACH VARIETY

2. PLANT MATERIALS

A) GENERAL: PLANT SPECIES, SIZES, & QUANTITIES SHALL, AT A MINIMUM, CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH "GRADING AND STANDARDS FOR NURSERY PLANTS" PARTS 1 AND II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA NO. 1 AS AN ABSOLUTE MINIMUM UNLESS OTHERWISE SUPERSDED BY A FLORIDA FANCY DESIGNATION, AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL – BRANCHED AND FREE OF DISEASE AND INSECTS. INSECT EGGS AND LARVAE SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE OWNER.

B) MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE TOP OF ROOT BALL (TRUNK FLARE) AND/OR ACROSS THE AVERAGE SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C) INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH PRELIMINARY APPROVAL SHALL NOT SUPERSEDE THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF BALLS OR ROOTS, LATENT DEFECTS OR INJURIES, PRESENCE OF INSECTS, AND OTHER CONDITIONS THAT MAY HAVE OCCURRED SINCE THE NURSERY INSPECTION. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE THIS REJECTION INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

D) AMENDED PLANTING SOIL: PLANTING SOIL FOR USE IN BACK FILLING PLANTING HOLES SHALL BE FORTY PERCENT (40%) TOPSOIL AND SIXTY PERCENT (60%) SAND AND BE FERTILE, FRABLE, AND OF A LOAMY CHARACTER, WITHOUT MIXTURE OF SOIL OR MATERIALS, AND OBTAINED FROM A WELL-DRAINED, ARABLE SITE. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND SHALL BE FREE FROM HEAVY CLAY, COARSE SAND, STONES, LIME, LUMPS, PLANTS, ROOTS OR OTHER FOREIGN MATERIALS, OR NOXIOUS WEEDS. IT SHALL NOT CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. PH RANGE SHALL BE 5.0 TO 7.0 INCLUSIVE.

E) SAND SHALL BE CLEAN, WELL DRAINING NATIVE SAND. IF REQUESTED, CONTRACTOR SHALL AT ANY TIME AND AT NO COST TO OWNER, SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY OWNER.

E. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE GROWTH OF PLANTS AND SHALL NOT CONTAIN HARMFUL NATURAL OR MAN – MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SUCH SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

F. COMMERCIAL FERTILIZER

1. COMMERCIAL FERTILIZER SHALL BE A COMPLETE FORMULA, IT SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. THIS FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED CONTAINERS, EACH BEARING THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS. FIFTY PERCENT (50%) OF THE NITROGEN SHALL BE DELIVERED FROM NATURAL ORGANIC SOURCES. THE FOLLOWING FERTILIZERS SHALL BE USED AND APPLIED AT RATES AS SUGGESTED BY MANUFACTURER'S SPECIFICATIONS:

1. SHRUBS AND TREES – MILONGANITE, OR APPROVED EQUAL
2. ANNUALS AND GROUNDCOVERS – OSMOCOTE/SIERRA BLEND 14 – 14 – 14
3. SOD – 8 – 8 – 8

IN ADDITION TO SURFACE APPLIED FERTILIZERS, ALL CONTAINER GROWN AND FIELD GROWN PLANT MATERIAL SHALL RECEIVE "AGRIFORM" PLANTING TABLETS 24 – 10 – 5 FORMULA, 21 GRAM OR EQUAL. THESE TABLETS SHALL BE PLACED AT THE RATE AND DEPTH SPECIFIED BY MANUFACTURER.

G. MULCH

1. MULCH SHALL BE FROM SHREDDED WOOD DERIVED FROM MELALEUCA OR OTHER INVASIVE TREE SPECIES AND SHALL BE STERILIZED TO EFFECTIVELY ELIMINATE ALL SEEDS, SPORES, ETC. AND RENDER THEM BARREN.

2. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT AND APPLIED AT A DEPTH OF THREE INCHES (3"). MULCH IS TO BE KEPT 3" FROM THE STEM OF ALL GROUNDCOVERS & 3-4" FROM THE TRUNKS OF ALL TREES & PALMS.

3. MULCH SHALL BE GRADE "B" SHREDDED, AND SHALL BE APPLIED EVENLY AND SMOOTH TO PLANTED AREAS.

4. NO RED OR COLORED MULCH SHALL BE ACCEPTED UNLESS SPECIFIED ACCORDINGLY. NO CYPRESS MULCH OR PINE BARK SHALL BE USED.

H. DIGGING AND HANDLING

1. PROTECT ROOT SYSTEMS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN AND DRYING WINDS. WATER EROSION, AND OTHER HARMFUL CRITERIA AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT BREAKING AND DRYING OUT DURING LOADING, TRANSIT, AND UNLOADING/PLANTING. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTFRUP" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS, AND IN ACCORDANCE WITH "GRADING AND STANDARDS FOR NURSERY PLANTS" FLORIDA PUBLICATION. NO PLANT WITH A ROOTBALL SHALL BE PLANTED IF

THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "B&B" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. THE ROOTS SHALL NOT BE CUT WITHIN THE MINIMUM SPREAD SPECIFIED IN THE PLANT LIST. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT IN MOVING AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS BY "GRADING AND STANDARDS FOR NURSERY PLANTS" FLORIDA PUBLICATION. PRUNING PRACTICED OTHER THAN MINOR PRUNING OF FRONDS, PRIMARILY TO REACH A "CLEAR TRUNK" SPECIFICATION, MAY CONSTITUTE REJECTION, OF ALL PALMS SUBJECTED TO SUCH PRACTICE. LIKEWISE, EXCESSIVE PRUNING OR "SHAVING" OF ROOT BALLS TO MEET "CLEAR TRUNK" CRITERIA MAY CONSTITUTE REJECTION ON SITE. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL ON THE PLANTING DETAILS SHEET.

5. EXCAVATION OF PLANTING HOLES SHALL BE DONE USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS, AND PREPARED SUB-BASES.

I. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL – ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, AND SHALL MEET MINIMUM SPECIFICATIONS IN THE PLANT LIST.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. PLANT ROOTS BOUND IN CONTAINERS OR WITH CIRCLING ROOTS SHALL NOT BE ACCEPTABLE.

4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NEED AUTHORIZATION FROM THE OWNER. LIKEWISE, SUBSTITUTION OF CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE BALLED AND BURLAPPED GROWN WILL NEED AUTHORIZATION FROM THE OWNER AND LA OF RECORD PRIOR TO THE ORDERING OF ANY MATERIALS.

5. ALL PLANT MATERIALS SHALL MEET THE MINIMUM SPECIFICATIONS LISTED IN THE PLANT SCHEDULE. SIZE (HEIGHT/SPREAD) SPECIFICATIONS TAKE PRECEDENCE OVER GALLON SIZES (IF GALLON SIZES ARE SPECIFIED).

J. COLLECTED STOCK

1. WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED ON THE PLANT LIST SCHEDULE, THE MINIMUM SIZES OF ROOT BALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

K. NATIVE STOCK

1. PLANTS COLLECTED FROM WILD OR NATIVE STAND SHALL BE CONSIDERED GROWN WHEN THEY HAVE BEEN SUCCESSFULLY REESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

L. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THEY ARE NOT A GUARANTEE OF QUANTITY OR LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN A BIDDER'S TAKE OFF AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO THE SUBMISSION OF BIDS. DRAWING SHALL TAKE PRECEDENCE. ALL DIMENSIONS AND/or SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE. WHERE NO GALLON SIZE IS SPECIFIED ON CONTAINERIZED SHRUBS OR GROUNDCOVERS, THE HEIGHT & SPREAD SPECIFICATIONS SHALL PREVAIL.

M. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT- END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS.

N. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN UP WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBSCURABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE COMPLETELY REMOVED FROM THE SITE. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY AFFECT THE VIABILITY OF THE PLANTS TO BE INSTALLED, HE/SHE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S CONSTRUCTION MANAGER OR DESIGNEE.

2. DURING LAWN ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE PROHIBITED TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL, DEBRIS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE JURISDICTIONAL MUNICIPALITY

3. VERIFY LOCATIONS OF ALL UTILITIES, CONDUIITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: GAS LINES, GAS LINES AND TANKS, WATER LINES AND TANKS, SEWER, STORM WATER LINES, CABLE AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES.

4. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO MINIMUM DEPTH OF APPROXIMATELY 20% GREATER THAN THE RECOMMENDED PLANTING SOIL DEPTH – UNLESS OTHERWISE SPECIFIED BY JURISDICTIONAL CODE. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK CONDITIONS OCCUR IN PLANTED AREAS AFTER 30" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE OR CONTACT OWNER'S CONSTRUCTION MANAGER OR DESIGNEE FOR RESOLUTION.

CONTRACTOR IS TO ENSURE THAT ALL COMPACTED SOIL, ROAD ROCK, & EXCESS DEBRIS SHALL BE REMOVED & A 24" LAYER OF NON-LIMEROCK PLANTING SOIL FAVORABLE TO SHRUB GROWTH & SUSTAINABILITY EXISTS OVER ALL PLANTING AREAS. THREE PITS SHALL BE EXCAVATED & BACKFILLED WITH PLANTING SOIL TO A MINIMUM DEPTH OF 30".

5. RECOMMENDED PLANTING SOIL DEPTH IS GENERALLY AS FOLLOWS:

ALL TREES AND TALL SHRUBS (INDICATED AS "SHRUBS" & "SHRUBS AREAS" ON THE PLANT SCHEDULE) SHALL BE PLANTED WITH A MINIMUM OF 12" TOPSOIL AROUND AND BENEATH THE ROOTBALL. MINIMUM TOPSOIL SHALL BE 6" FOR LOW SHRUBS/GROUNDCOVER AREAS AND 2" FOR SODDED GRASS AREAS.

THE MINIMUM TOPSOIL DEPTHS ARE IN ADDITION TO A MINIMUM NON-LIMEROCK SOIL DEPTH OF 10"-18", CONSISTING OF EXISTING UNDISTURBED OR NATIVE SOIL THAT WAS STORED/STOCKPILED ON SITE AND REUSED, OR CLEAN IMPORTED RANGER SOIL WITH A RATIO OF ORGANIC MATTER BETWEEN 3-5% CONTAINING NO STONES GREATER THAN AN INCH AND A HALF IN DIAMETER IN ANY DIRECTION. TOPSOIL DEPTHS PLUS PLANTING SOIL/EXISTING NATIVE SOIL MINIMUM DEPTHS ARE IN ADDITION TO ANY LIMESTONE/LIMEROCK SUBGRADE, & IN ADDITION TO EXCAVATION WIDTHS REQUIRED FOR TREE PITS AS SHOWN ON THE PLANTING DETAILS.

PURSUANT TO THE ABOVE, THE TOTAL MINIMUM DEPTH OF VIABLE NON-LIMEROCK PLANTING SOIL, INCLUDING EXISTING VIABLE UNDISTURBED OR STOCKPILED SOIL (IF PRESENT), REQUIRED TO BE PROVIDED ABOVE ANY LIMESTONE/LIMEROCK SUBGRADE CONDITION SHALL BE 12" MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR SOD AREAS; 16" MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR GROUNDCOVERS; 24" MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR SHRUBS/SHRUB AREAS; AND 30" MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR TREE PITS. DESIGNATION OF TREES, "SHRUBS/SHRUB AREAS," AND "GROUNDCOVERS" SHALL BE CONSISTENT WITH THE LABELING OF PLANTINGS SHOWN ON THE LANDSCAPE PLANTS' PLANT SCHEDULE, WITH THE EXCEPTION OF COMMON TURFGRASSES WHICH MAY BE INDICATED AS "GROUNDCOVERS." NONE OF THE ABOVE MINIMUMS SHALL PRECLUDE THE CONTRACTOR FROM EXCAVATING & PROVIDING SOIL IN ACCORDANCE WITH NOTE N.1 OR N.9. IMPORTED PLANTING SOIL SHALL BE IN ACCORDANCE WITH NOTE D.2. DURING THE DURATION OF TWENTY (20) MINUTES OR MORE THAT PRODUCE MORE THAN A HALF INCH (1/2") OF PRECIPITATION WILL NEGATE THE EXTENT OF EXCAVATION REQUIRED & TO DETERMINE THE AMOUNT OF PLANTING SOIL NECESSARY TO ENSURE LONG-TERM SUSTAINABILITY & SURVIVAL OF THE PLANT MATERIALS IN ACCORDANCE WITH THIS CONTRACT.

6. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HERIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

7. GENERAL: COMPLY WITH FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. PLANTS SHALL BE PROTECTED UPON ARRIVAL AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS SHALL NOT REMAIN UNPROTECTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

8. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE THE PLANTING WITH THE IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION ITEMS AND PLANTS.

9. ALL PLANTING HOLES SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD TO NURSERY STOCK 280.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL AS SPECIFIED HEREIN BEFORE (SEE MATERIALS, SECTION D). TEST ALL THREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE PLANTING DETAIL THAT ADDRESSES THIS CONDITION. POOR DRAINAGE CONDITIONS TYPICALLY HAVE A PERCOLATION RATE OF 4" OR LESS PER HOUR, AS DETERMINED BY THE GEOTECHNICAL ENGINEER. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLOUSED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURE AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL RECOMMENDED.

10. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS, CURBS, PAVING, AND OTHER HARDSCAPE MATERIALS WHILE INSTALLING TREES.

11. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION D (MATERIALS) OF THESE SPECIFICATIONS. IN ADDITION, EACH PLANTING HOLE SHALL RECEIVE 21-GRAM "AGRIFORM" PLANTING TABLETS PER MANUFACTURER'S SPECIFICATIONS OR AS FOLLOWS:

- TWO (2) TABLETS PER 1 GAL. PLANT
- THREE (3) TABLETS PER 3 GAL. PLANT
- FOUR (4) TABLETS PER 10 GAL. PLANT

LARGER MATERIAL

- TWO (2) TABLETS PER HALF INCH (1/2") OF TRUNK CALIPER

12. TREES AND SHRUBS SHALL BE SET STRAIGHT AND AT SUCH A LEVEL THAT AFTER SETTLEMENT, THE TOP OF THE ROOT SYSTEM (FOR SHRUBS AND GROUND COVER) OR TRUNK (FOR TREES AND PALMS) WILL STAND ONE (1) TO TWO (2) INCHES ABOVE FINAL GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PLANTING HOLE. PLANTING SOIL MIXTURE SHALL BE BACKFILLED AND THOROUGHLY TAMPED AROUND THE BALL AND SHALL BE SETTLED BY WATER AFTER TAMPING.

13. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, TURNING SOIL. IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET OR OTHER TAMPING DEVICE. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, ETC. SHALL BE PULLED FROM UNDERNEATH.

14. PRUNING: FOR DAMAGED OR BROKEN LIMBS, EACH TREE SHALL BE PRUNED TO PRESERVE THE NATURAL CHARACTER OF THE SPECIES. ALL SUCKER GROWTH SHALL BE COMPLETELY REMOVED PRIOR TO DIGGING.

15. SHRUBS AND GROUNDCOVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED IN THE PLANT LIST. CULTIVATE ALL MASS PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE OF ALL DEBRIS, TILL 4" OF PLANTING SOIL INTO THE NEWLY TILLED PLANTING BED FOR GENERAL NUTRIENT DISBURSEMENT. MASS PLANTING BED IS NOW READY TO RECEIVE HOLES FOR NEW PLANTS. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

16. TREES AND BRACING SHALL BE INSTALLED BY THE LANDSCAPE CONTRACTOR IN ACCORDANCE WITH THE PLANTS TO ENSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. TREES SHALL USE ABORTIVE AS PER DETAIL SHEET. PALMS SHALL USE WOOD BRACING PER DETAIL SHEET.

17. MULCHING: PROVIDE A THREE INCH (3") MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUNDCOVER AND VINE BED AND TREE PIT (FOR TREES AND PALMS, MIN. THREE INCH (3") FROM EDGE OF TRUNKS). – UNLESS OTHERWISE REQUIRED BY LOCAL CODES AND SPECIFIED AS SUCH.

18. SYSTEMIC HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER OR THEIR DESIGNEE, A SYSTEMIC HERBICIDE SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. AFTER MULCH HAS BEEN APPLIED TO PLANTING BEDS AND TREE RINGS, TREAT ALL MULCHED AREAS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER.

19. GRADING AND DRAINAGE NOTES

1. PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE "DIG SAFE" NOTIFICATION PROCEDURES PROMOTED BY THE RESPECTIVE UTILITY COMPANIES IN FLORIDA. CALL FLORIDA SUNSHINE AT 811.

2. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDINGS AT ALL TOP AND BOTTOM OF SLOPES.

3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF ONE-EIGHTH INCH (1/8") PER FOOT. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.

4. WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK, SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW, WHERE EXISTING VEGETATION IS TO REMAIN, MEET EXISTING GRADES; DO NOT FILL ABOVE BASAL FLARE OF EXISTING TREES.

5. UTILITY PLAN NOTES

1. CONTRACTOR SHALL INSTALL SCHEDULE 80 PVC CONDUIT (SLEEVES) FOR ALL IRRIGATION PIPING UNDER ALL PAVEMENT AREAS TO CONNECT ALL LANDSCAPE AREAS.

6. W. SITE PREPARATION

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MEET THE OWNER AND IDENTIFY TREES AND SHRUBS WHICH ARE TO BE PROTECTED AS WELL AS THOSE WHICH ARE TO BE REMOVED. DO NOT CLEARING WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.

7. TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED BY THE INSTALLATION OF FENCING AT THE DRIP LINE OR AS DIRECTED BY THE OWNER (SEE LANDSCAPE DETAIL SHEET). PROTECTIVE FENCING SHALL BE INSTALLED PRIOR TO CONSTRUCTION, PROTECTIVE FENCING SHALL BE SUFFICIENT TO PREVENT CONSTRUCTION EQUIPMENT FROM COMPACTING SOIL AT THE ROOT ZONE AND DAMAGING TRUNKS AND BRANCHES.

8. IF, IN ORDER TO PERFORM EXCAVATION WORK, IT SHOULD BECOME NECESSARY TO CUT ROOTS OF PLANTS TO BE SAVED, SUCH ROOTS SHALL BE CUT NEATLY WITH A SMOOTH CLEAN CUT BY A SHARP SAW, COVERED WITH BURLAP, AND KEPT MOIST UNTIL ROOTS ARE BACK FILLED. TEARS OR GAGGED CUTS TO ROOTS ARE UNACCEPTABLE.

9. TREE AND SHRUB REMOVAL SHALL INCLUDE THE FILLING, CUTTING, GRUBBING OUT OF ENTIRE ROOT SYSTEMS AND SATISFACTORY OFF-SITE DISPOSAL OF ALL TREES, SHRUBS, STUMPS, VEGETATIVE AND EXTRANEOUS DEBRIS PRODUCED BY THE REMOVAL OPERATIONS.

10. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE THE LIMITS OF CONSTRUCTION DUE TO HIS CONTRACT OPERATIONS.

11. ALL REFUSE, DEBRIS, UNSUITABLE MATERIALS AND MISCELLANEOUS MATERIALS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR.

12. ALL INVASIVE EXOTIC VEGETATION SHALL BE DISPOSED OF OR TREATED AS PER THE LOCAL OR REGIONAL GOVERNING AUTHORITIES, REQUIREMENTS OR RECOMMENDATIONS.

X. ROOT CONTROL BARRIER

1. ROOT CONTROL PRODUCT SHALL BE A BIOLOGICAL BARRIER PRODUCT. PRODUCT SHALL BE 810-BARRIER ROOT CONTROL SYSTEM, AS MANUFACTURED BY BBA FIBERWEB/REEMAY, INC. AND DISTRIBUTED BY HORT ENTERPRISES, INC. SEE WWW.BIOBARRIER.COM FOR ADDITIONAL INFORMATION AND PRODUCT SPECIFICATION. HORT ENTERPRISES, INC. P.O. BOX 2448 POMPANO BEACH, FL 33061 1-800-966-6478

2. PRODUCT SHALL BE A BIOLOGICAL BARRIER UTILIZING LIME-RELEASE CAPSULES INTEGRATED INTO A GEOTEXTILE FABRIC. ACTIVE HERBICIDE SHALL BE A TRIFLURALIN, AND MINIMUM TIME RELEASE OF EFFECTIVE PRODUCT SHALL BE 1-5 YEARS IN THE MOST ADVERSE CONDITIONS FOR SUCH A PRODUCT. ALTERNATIVELY, A RIGID PHYSICAL ROOT BARRIER SUCH AS "DEEP ROOT" HARD PLASTIC AT LEAST 24" IN DEPTH SHALL BE USED.

P. CLEANUP

1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

Q. PLANT MATERIAL MAINTENANCE

1. ALL PLANTS AND PLANTING MATERIALS INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER OR OWNER'S DESIGNEE. MAINTENANCE AFTER THE CERTIFICATION OF AN ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF NINETY (90) CALENDAR DAYS COMMENCING AFTER ACCEPTANCE (SEE NEXT SECTION).

R. MAINTENANCE (ALTERNATIVE BID ITEM)

1. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR LANDSCAPE AND IRRIGATION MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST PER MONTH BASIS.

S. GUARANTEE

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER OR OWNER'S DESIGNEE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CARE & MAINTENANCE OF THE PLANT MATERIAL UNTIL THE END OF ESTABLISHMENT OR 90 DAYS AFTER FINAL LANDSCAPE CERTIFICATION BY THE LANDSCAPE ARCHITECT, WHICHEVER IS LATER, & SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AS NEEDED TO ENSURE ADEQUATE WATER IS SUPPLIED TO THE PLANT MATERIALS DURING ESTABLISHMENT. AT THE END OF THE ESTABLISHMENT PERIOD, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THE IRRIGATION TIMELOCK IS ADJUSTED TO A NORMAL WATERING CYCLE PER THE IRRIGATION WATERING SCHEDULE SHOWN ON THE IRRIGATION PLANS.

2. THE LIFE AND SATISFACTORY CONDITION OF ALL SOD INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM OF NINETY (90) CALENDAR DAYS, COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNERS OR OWNER'S DESIGNEE.

3. REPLACEMENT: ANY PLANT NOT IN A HEALTHY, THRIVING GROWING CONDITION SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. SHOULD THE OWNER ELECT, TREES AND PALMS MAY BE GIVEN A PERIOD OF NINETY (90) DAYS BEFORE REMOVAL TO ALLOW THE CONTRACTOR TO RESUBJECT THE TREE OR PALM IN QUESTION AND BRING IT TO A THRIVING, HEALTHY CONDITION. ALL REPLACEMENTS SHALL BE PLANTS OF LIKE KIND, CONDITION AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED, AND MULCHED AS SPECIFIED WITHIN THESE SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER. ANY REPAIRS FROM THIS REPLACEMENT MATERIAL SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY. REPLACEMENT MATERIAL SHALL BE GUARANTEED TO A ONE (1) YEAR PERIOD FROM THE DAY OF REPLACEMENT AS SPECIFIED BY THE OWNER IN WRITING BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

4. IN THE EVENT THE OWNER ELECTS NOT TO CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER OR THEIR DESIGNEE, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH OF ITEMS UNDER REPLACEMENT WITHIN 20 FEET OF ANY OTHER LARGE MATURING SHADE TREES UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE LANDSCAPE PLAN. CONTRACTOR SHALL NOT WILLFULLY INSTALL PLANT MATERIALS IN CONFLICT WITH EXISTING OR PROPOSED SITE FEATURES.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

1. FINAL INSPECTION BY OWNER OR THEIR DESIGNEE AT THE END OF THE GUARANTEE PERIOD SHALL INCLUDE PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY PLANTS NOT MEETING THE CRITERIA OF HEALTHY, VIGOROUS, AND THRIVING AT THIS TIME, AND THAT HAVE NOT ALREADY BEEN REPLACED PREVIOUSLY UNDER SAID WARRANTY, SHALL BE SUBJECT TO THE SAME ONE (1) YEAR GUARANTEE PER AS SPECIFIED BY THE OWNER IN WRITING BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

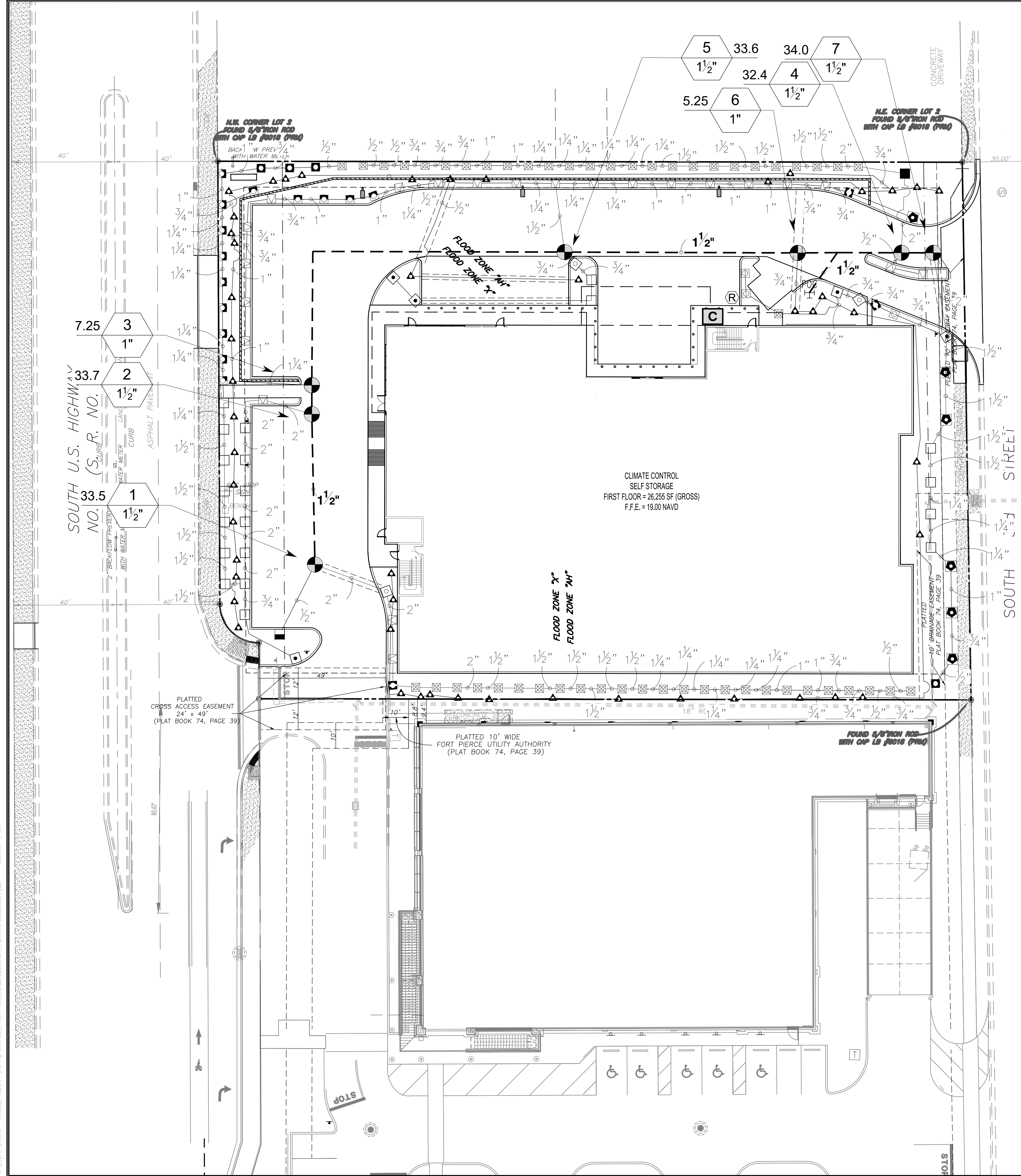
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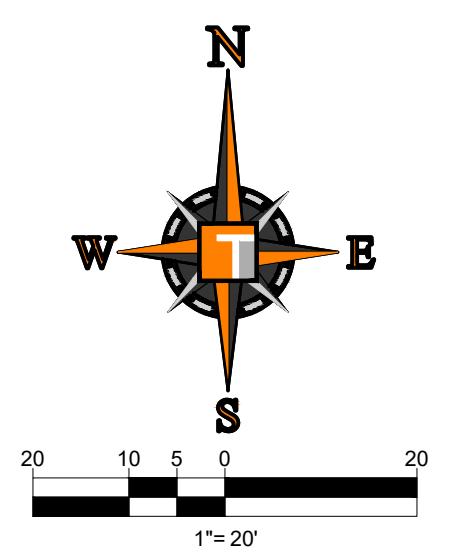
4. WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK, SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW, WHERE EXISTING VEGETATION IS TO REMAIN, MEET EXISTING GRADES; DO NOT FILL



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6" popup with pressure regulator.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6" popup with pressure regulator.	55	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6" popup with pressure regulator.	18	30
Q T H TT TQ F	Rain Bird 1806-PRS 12 Series MPR Turf Spray 6" popup with pressure regulator.	20	30
Q T H TT TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6" popup with pressure regulator.	2	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6" popup with pressure regulator.	17	30
1402 1408 1401 1404	Rain Bird 1804-1400 Flood Flood Bubbler 4" popup	50	40
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
●	Rain Bird PEB Electric Remote Control Valve	7	
C	Rain Bird ESP-13Mi Modular Controller, 13 stations, indoor model.	1	
R	Rain Bird RSD-BEX Rain Sensor, with bracket, extension wire	1	
POC	Point of Connection 2 HP CENTRIFUGAL PUMP @34 GPM, 50 PSI & 4" CASED WELL	1	
---	Irrigation Lateral Line: Polyethylene and PVC Class 160 Polyethylene SDR-7 up to 1-1/4, then PVC Class 160 SDR 26 for 1-1/2" and larger. Only lateral transition pipe sizes 3/4" and above are indicated on the plan, with all others being 1/2" in size.	2,931 l.f.	
---	Irrigation Mainline: Polyethylene and PVC Class 200	380.9 l.f.	
---	Pipe Sleeve: PVC Schedule 80 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	248.5 l.f.	
#	Valve Callout		
#	Valve Number		
#	Valve Flow		
#	Valve Size		

PLEASE REFER TO SHEET L-3.1 FOR IRRIGATION SCHEDULES, L-3.2 FOR LANDSCAPE GENERAL NOTES.



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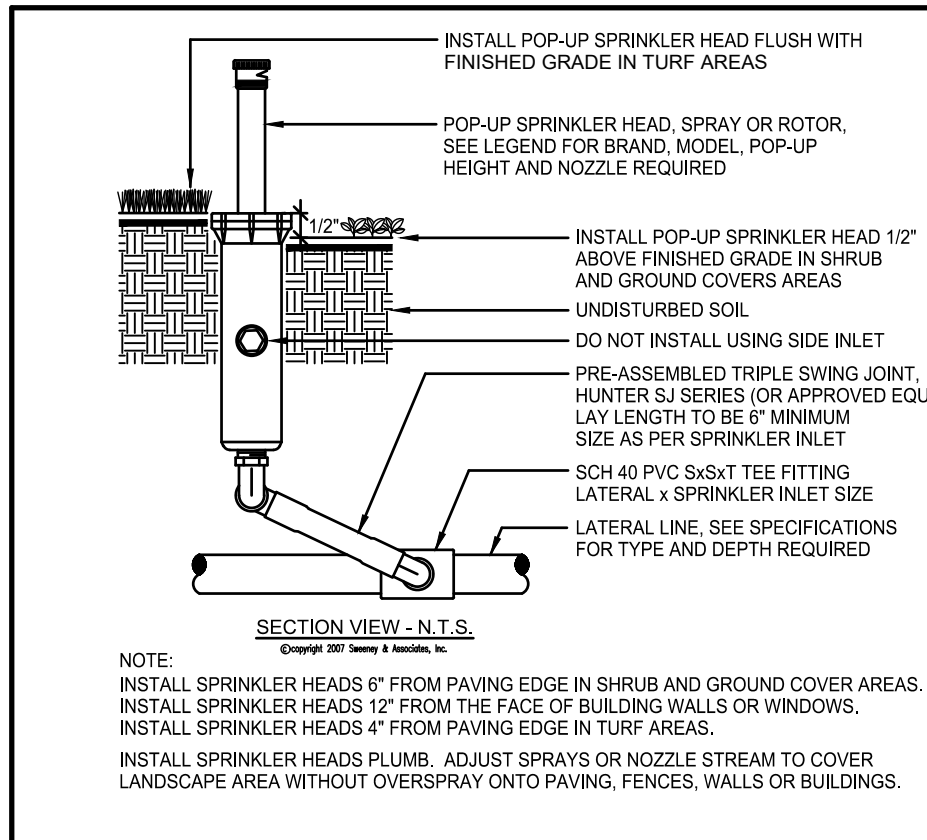
PROJECT No.:	FJ210016
DRAWN BY:	JMG
CHECKED BY:	JMG
DATE:	
CAD I.D.:	FJ210016 IRRIGATION PLAN

PROJECT:
FORT PIERCE STORAGE FACILITY
 FOR
LG FT PIERCE
 FORT PIERCE FLORIDA

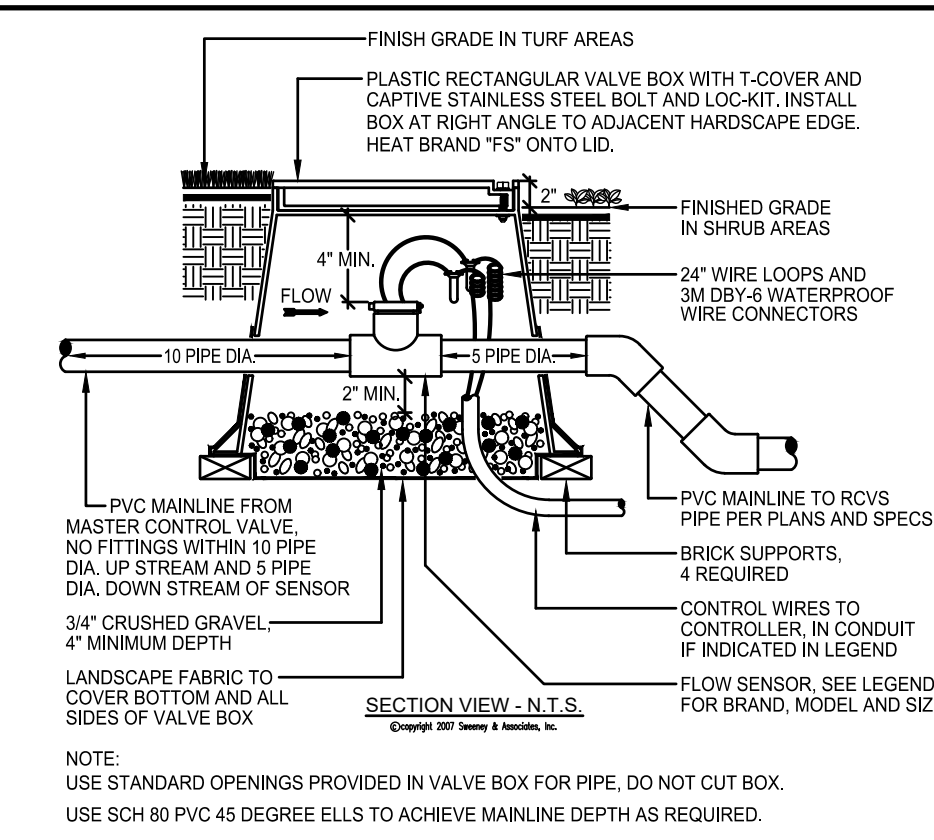
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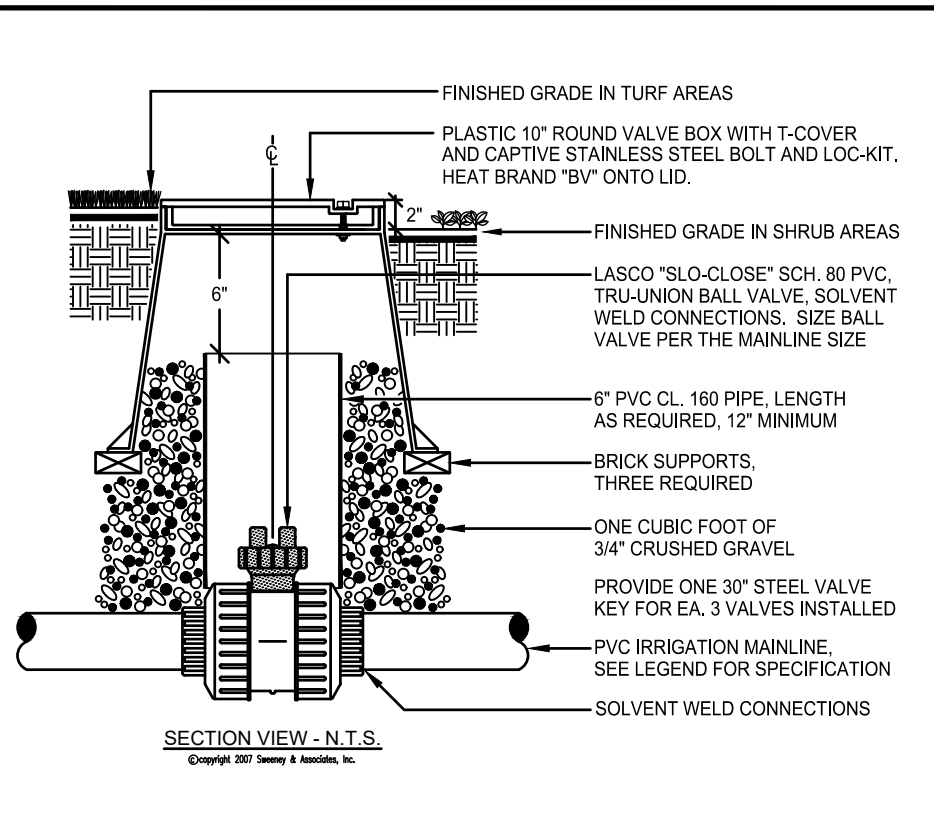
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IRRIGATION PLAN
 SHEET NUMBER:
L-3.0



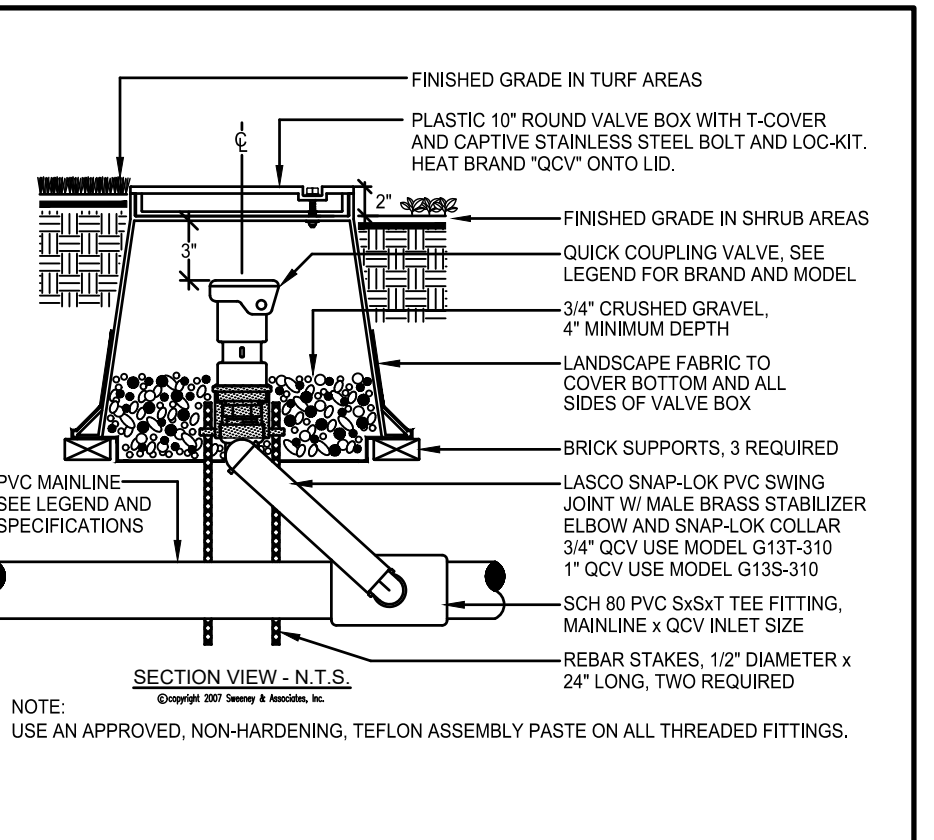
(A) POP-UP SPRINKLER



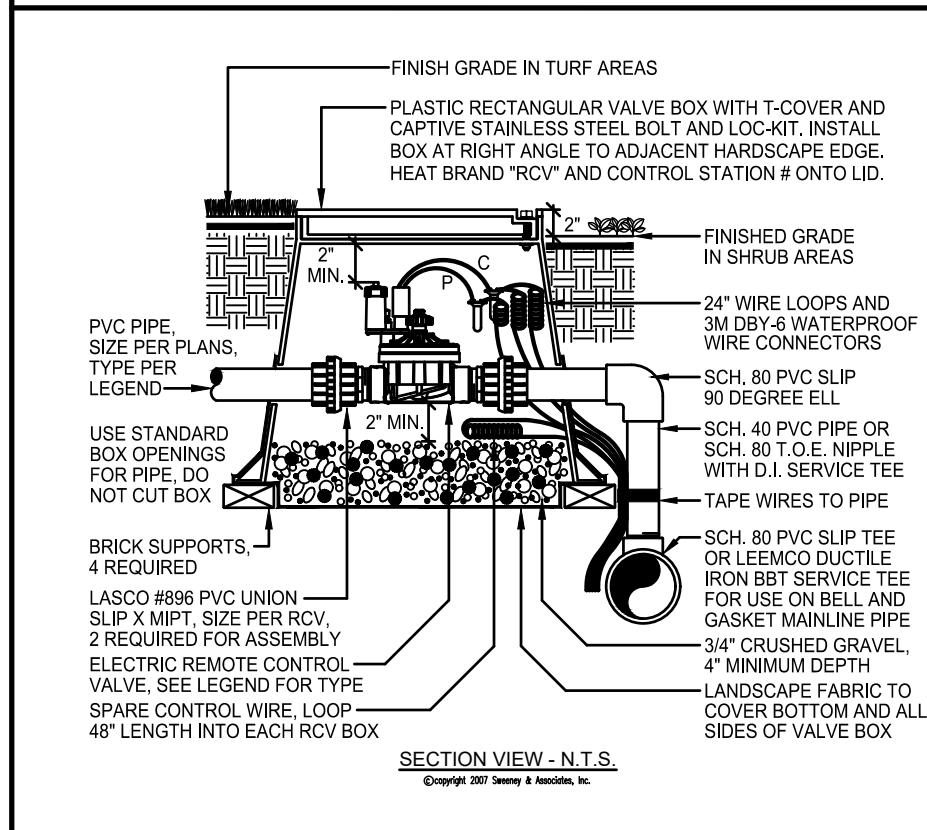
(C) FLOW SENSOR



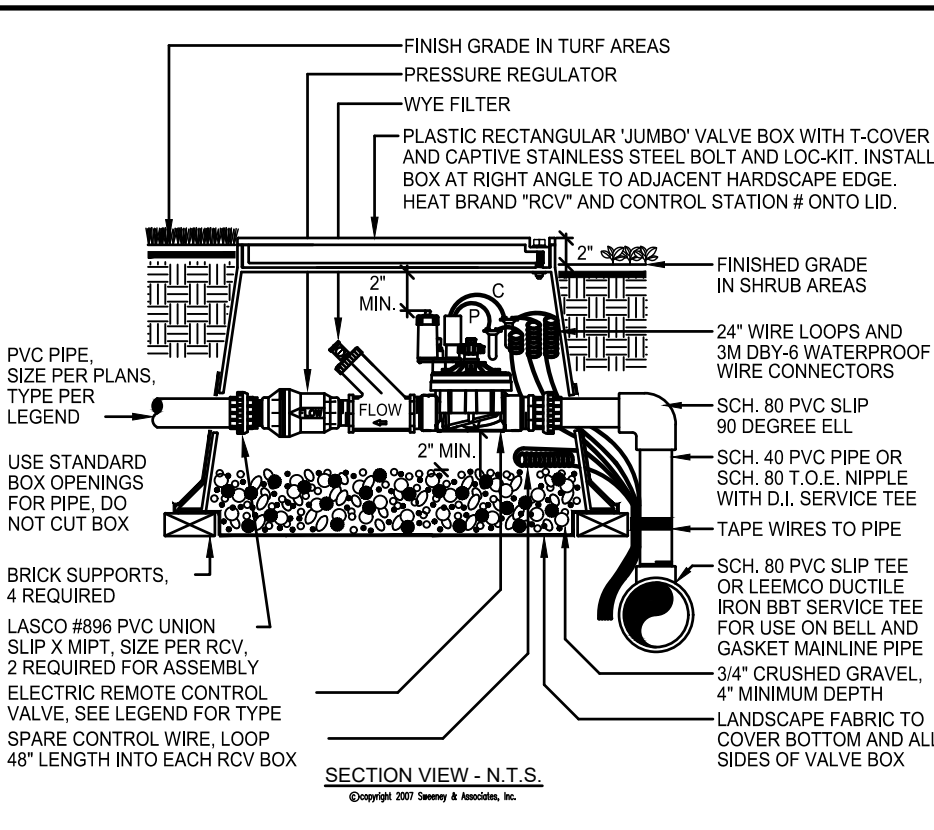
(D) BALL VALVE



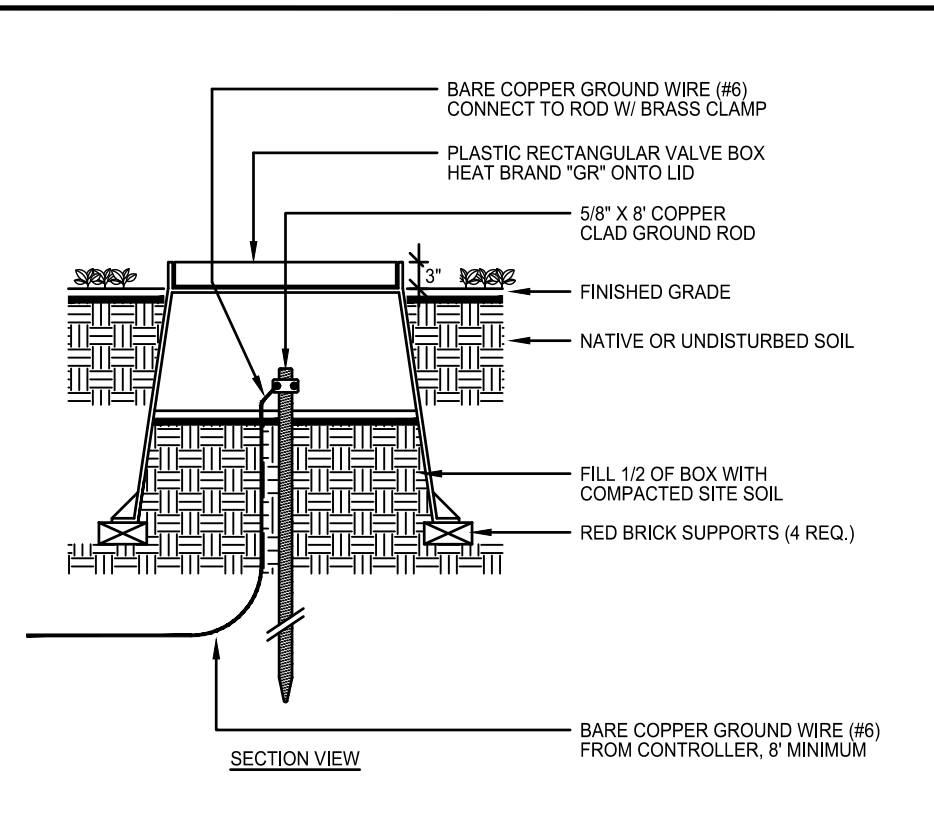
(E) QUICK COUPLER VALVE



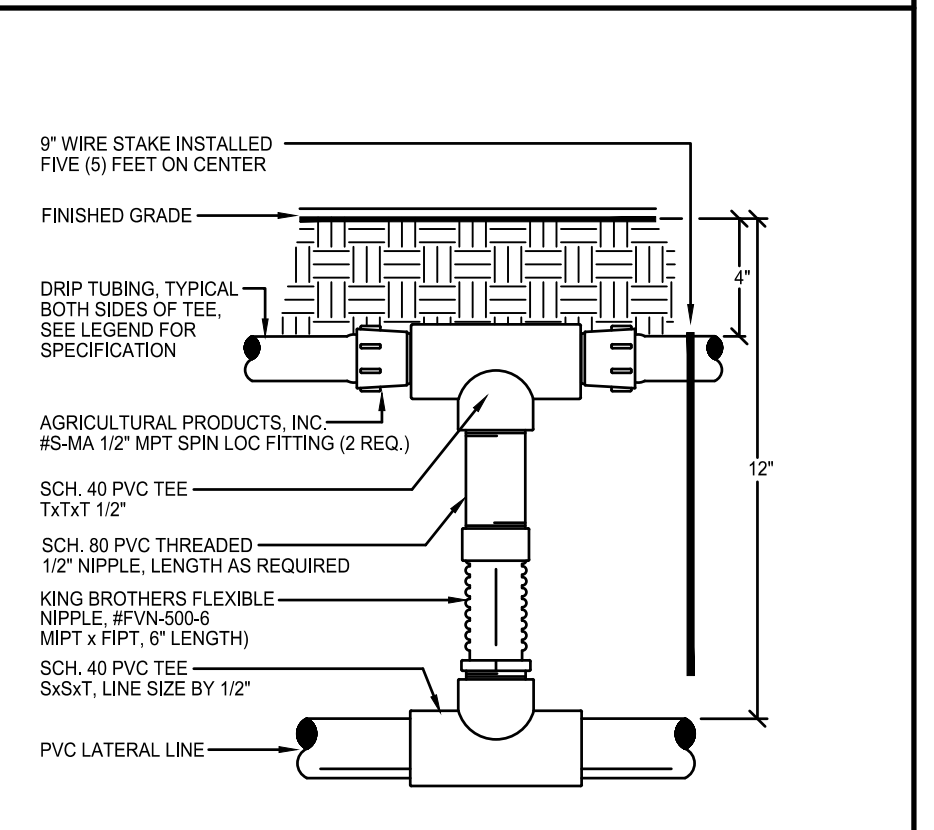
(F) REMOTE CONTROL VALVE



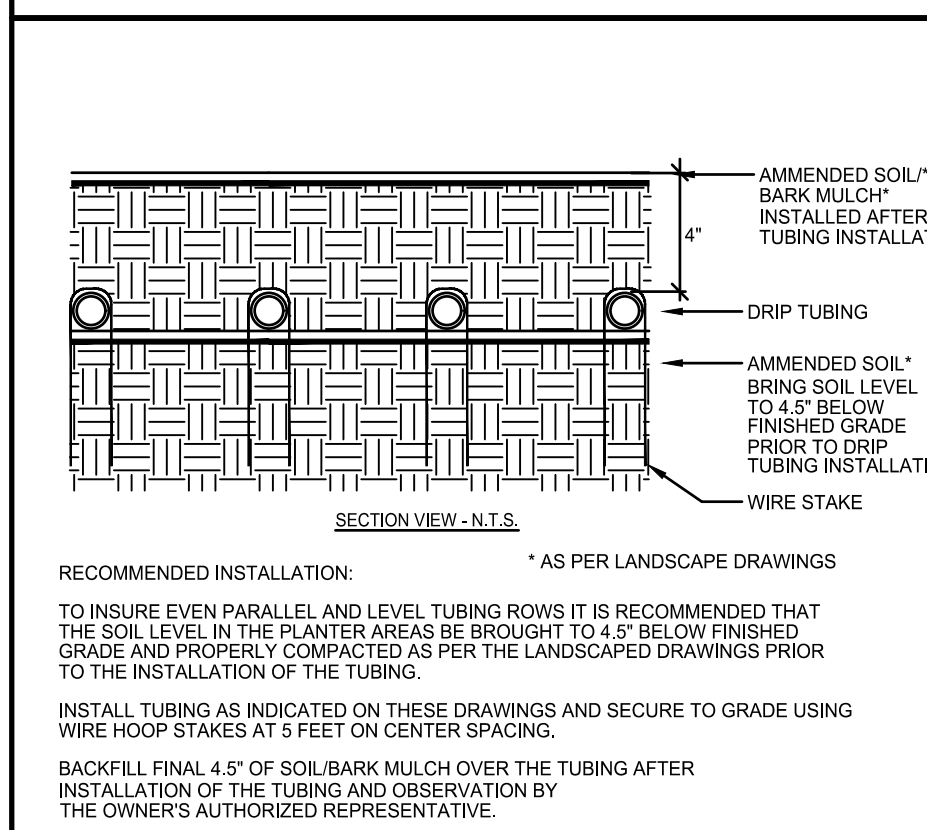
(G) DRIP RCV ASSEMBLY



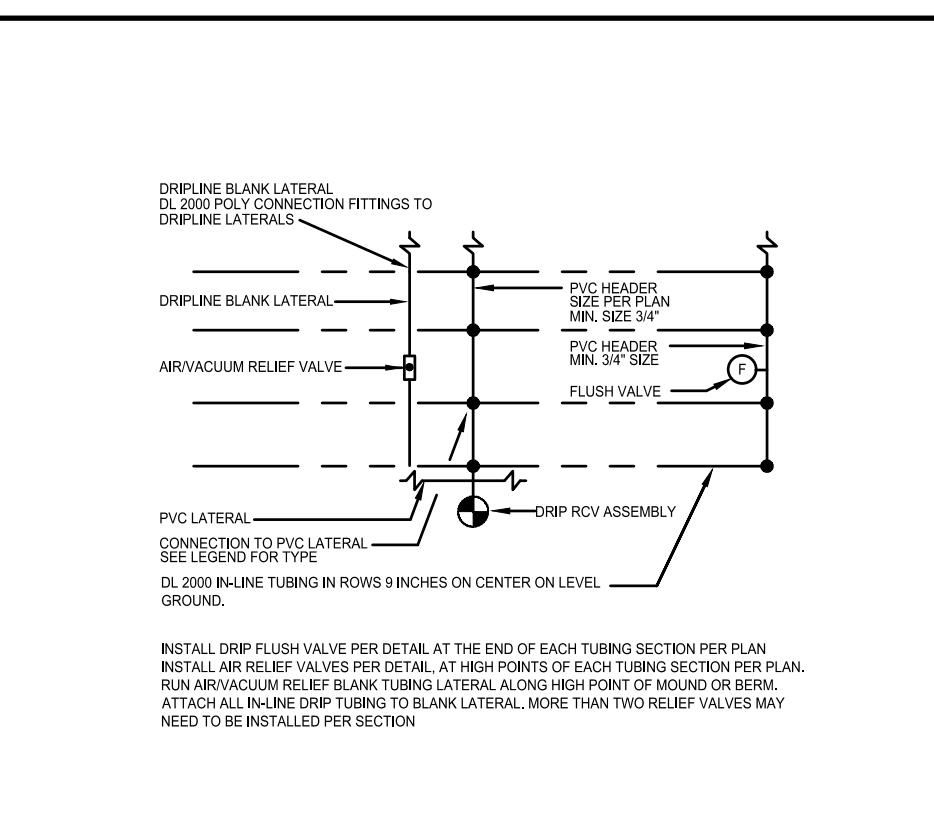
(I) GROUND ROD INSTALLATION



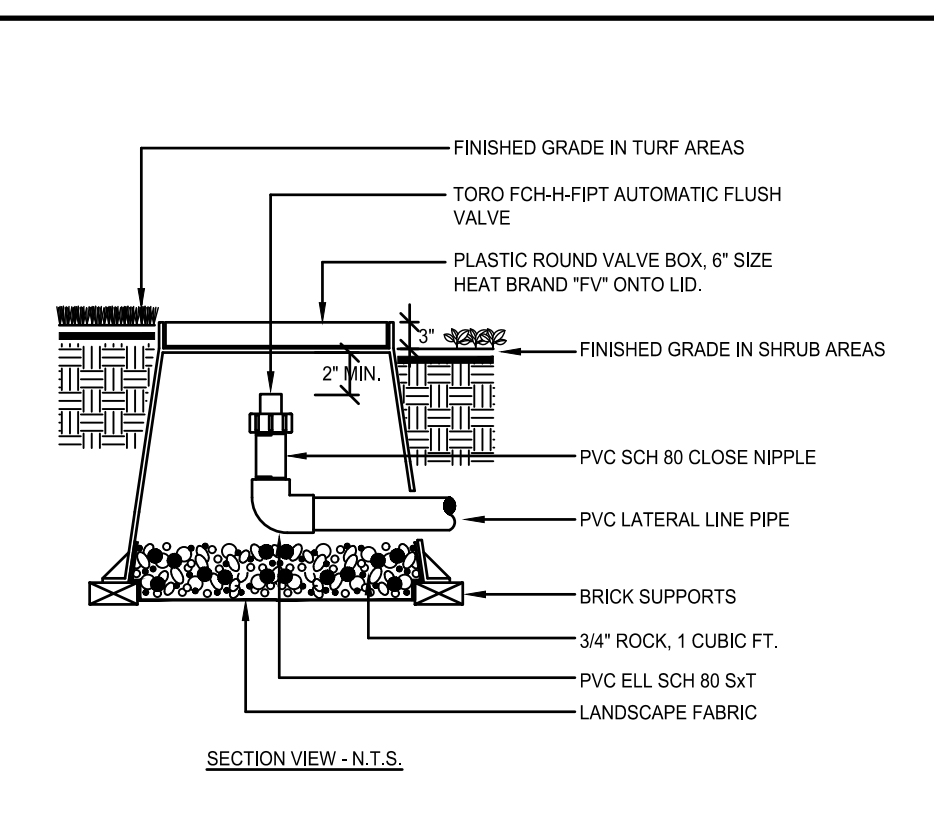
(J) DRIPLINE TUBING



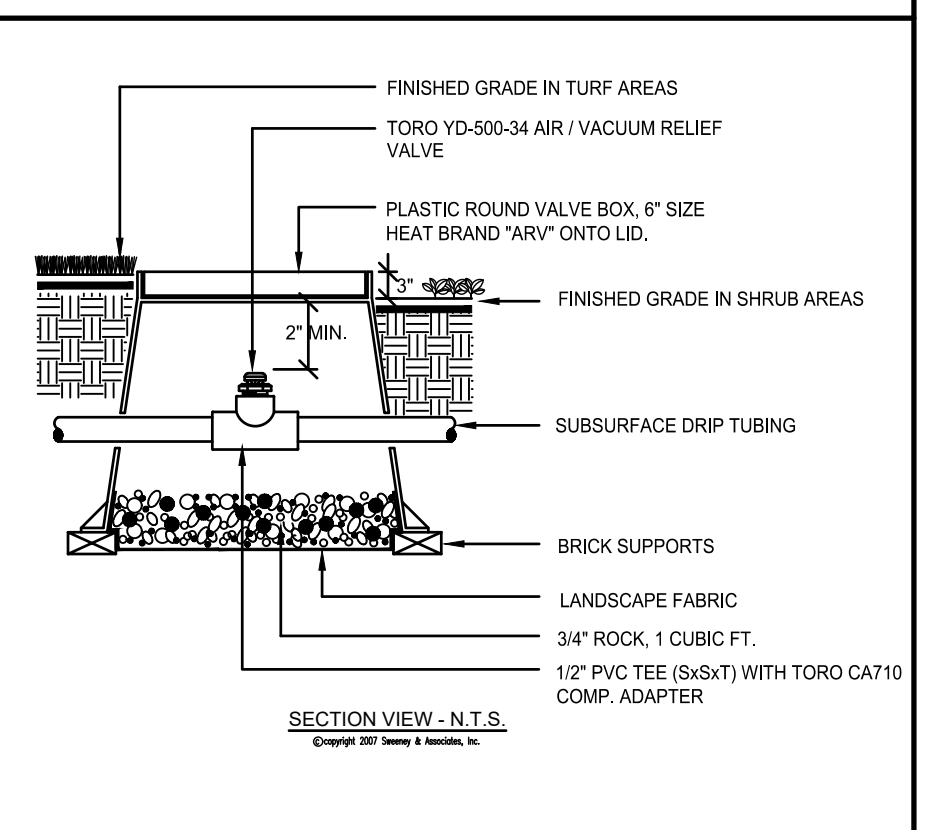
(K) DRIPLINE CONNECTION (SECTION)



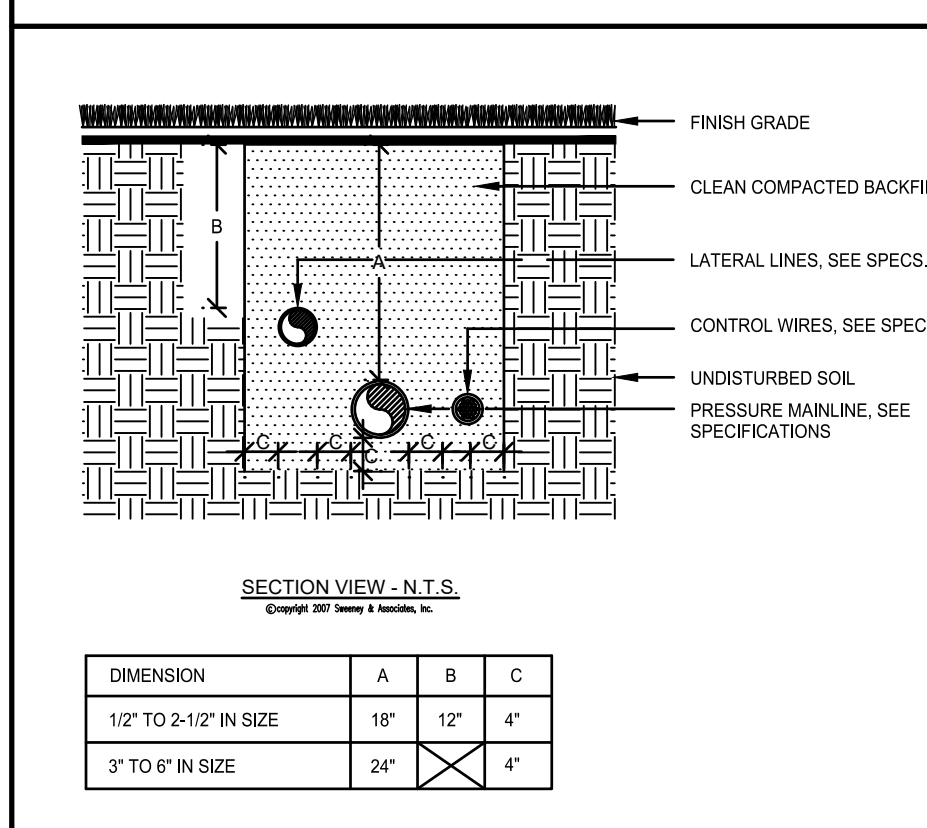
(L) DRIPLINE CONNECTION (PLAN)



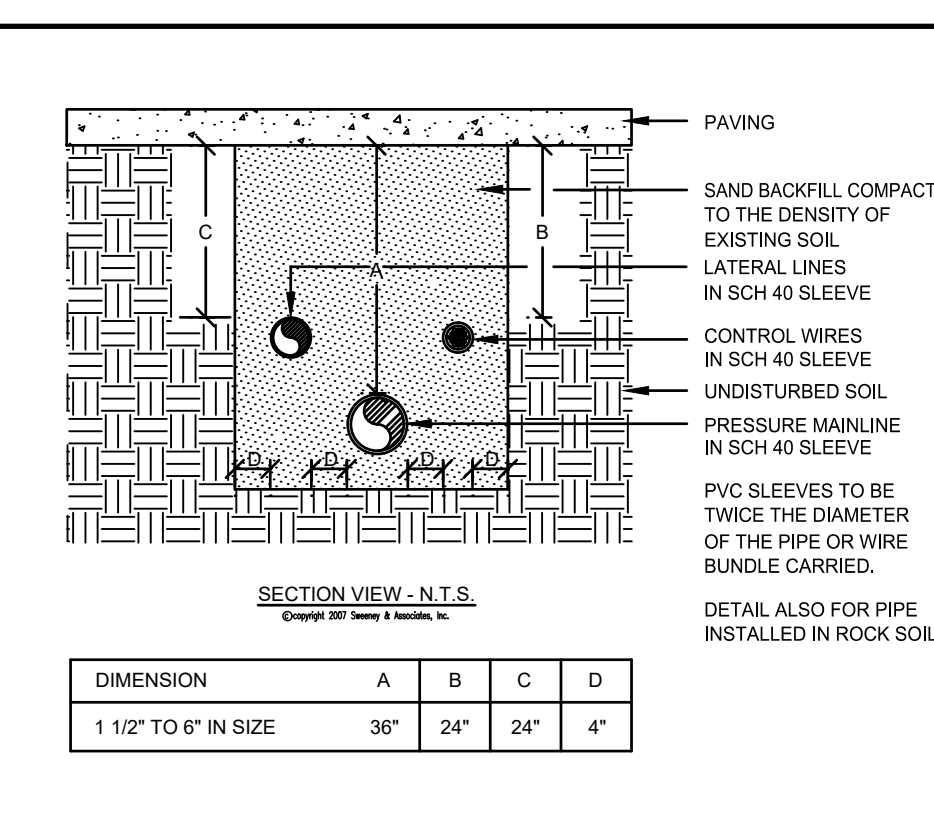
(M) DRIP FLUSH VALVE



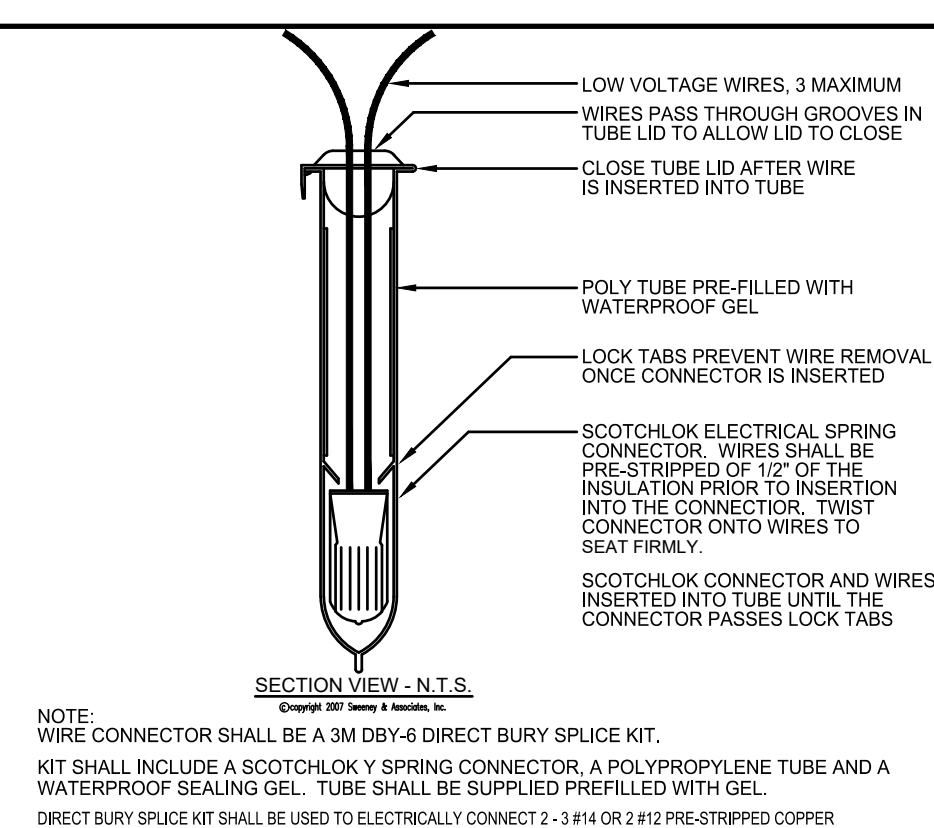
(N) DRIP AIR RELIEF VALVE



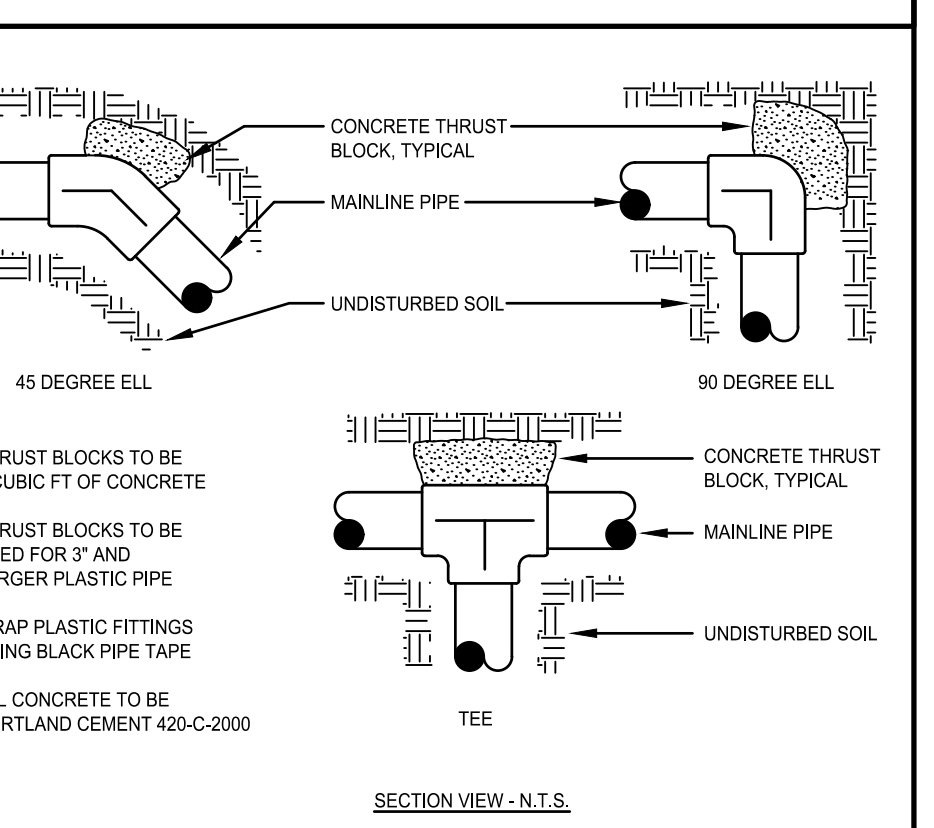
(O) PIPE INSTALLATION



(P) SLEEVE INSTALLATION



(Q) WIRE CONNECTION

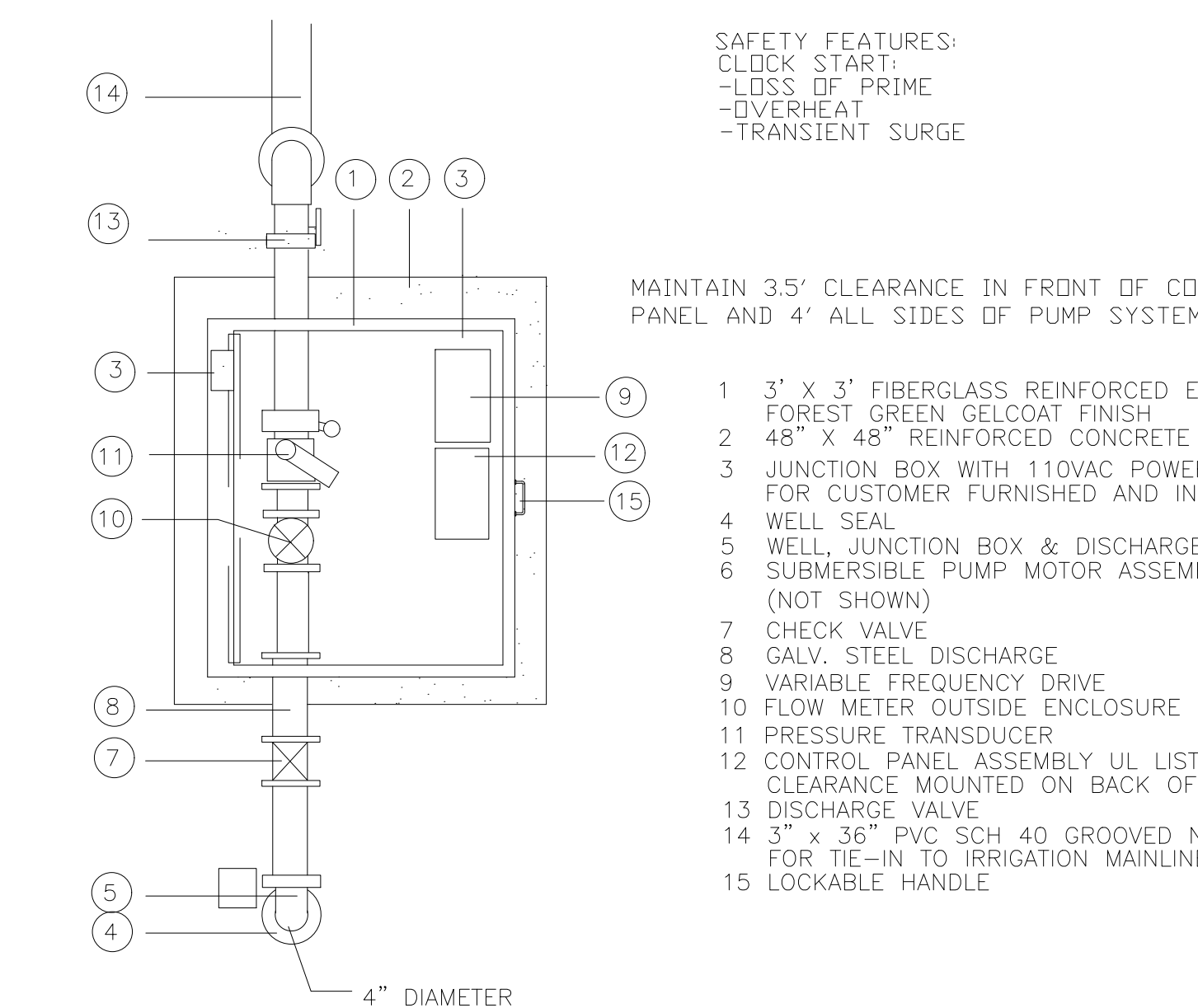


(R) THRUST BLOCKING

NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROOVE FITTINGS. PUMP DROP PIPE SHALL BE HDPE HEAT FUSED OR SCHED 40 GALV. STEEL SET PUMP 60\"/>

WELL DRILLER SHALL NOTIFY THE PUMP SYSTEM MANUFACTURER IN WRITING WITHIN 24 HOURS OF DEVELOPING THE WELL IF THE WELL PUMPING LEVEL IS GREATER THAN 50' BELOW FINISHED GRADE AFTER 8 HOURS OF CONTINUOUS PUMPING AT 150% OF THE DESIGN FLOW BELOW.

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF PUMP SYSTEM
 * OPTIONAL FEATURES ARE INCLUDED IF MARKED WITH AN "X"
 X VARIABLE FREQUENCY DRIVE
 _ IRRIGATION CONTROLLER _ STATIONS, WITH RAIN SENSOR ON 8' POLE
 _ PRESSURE TANK FOR PRESSURE DEMAND SYSTEM



PLAN VIEW NTS

ELECTRIC SERVICE TO BE, IN ORDER OF PREFERENCE:
 460V 3-PHASE, 230V CLOSED-DELTA 3-PHASE, 208 WYE 3-PHASE, 230 1-PHASE, 208V 1-PHASE, 230 OPEN-DELTA 3-PHASE.

PUMP PERFORMANCE
 34 GPM @ 120 TDH, 50 PSI DISCHARGE PRESSURE
 MINIMUM FLOW 12 GPM

FRANKLIN PUMPING MODEL: #35FA3S4-PE
 Pompano Beach, Florida, Tel: 954-971-7350
 OR APPROVED EQUAL

SUBMERSIBLE PUMP SYSTEM DETAIL
 FIBERGLASS ENCLOSED SINGLE WELL SUCTION
 VARIABLE FREQUENCY DRIVE (VFD) CLOCK START
 OR APPROVED EQUAL

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 CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
 6800 NW 31ST AVE. TAMPA, FL 33609
 4860 W. KENNEDY BLVD. TAMPA, FL 33609
 125 W INDIANTOWN RD. JUPITER, FL 33468
 P: 813-379-4100
 P: 813-203-7503
 P: 561-203-7503

REVISIONS			
REV.	DATE	COMMENT	BY
1	10/28/22	BUILDING PERMIT SUBMITTAL	MDG

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PROJECT No.:	FJ210016
DRAWN BY:	JMG
CHECKED BY:	JMG
DATE:	
CAD I.D.:	FJ210016 IRRIGATION PLAN

PROJECT:
FORT PIERCE STORAGE FACILITY

FOR
LG FT PIERCE

FORT PIERCE
 FLORIDA

THOMAS ENGINEERING GROUP
 125 W. INDIANTOWN RD. SUITE 206
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SHEET TITLE:
IRRIGATION DETAILS
 SHEET NUMBER:
L-3.2