

SITE DEVELOPMENT PLANS

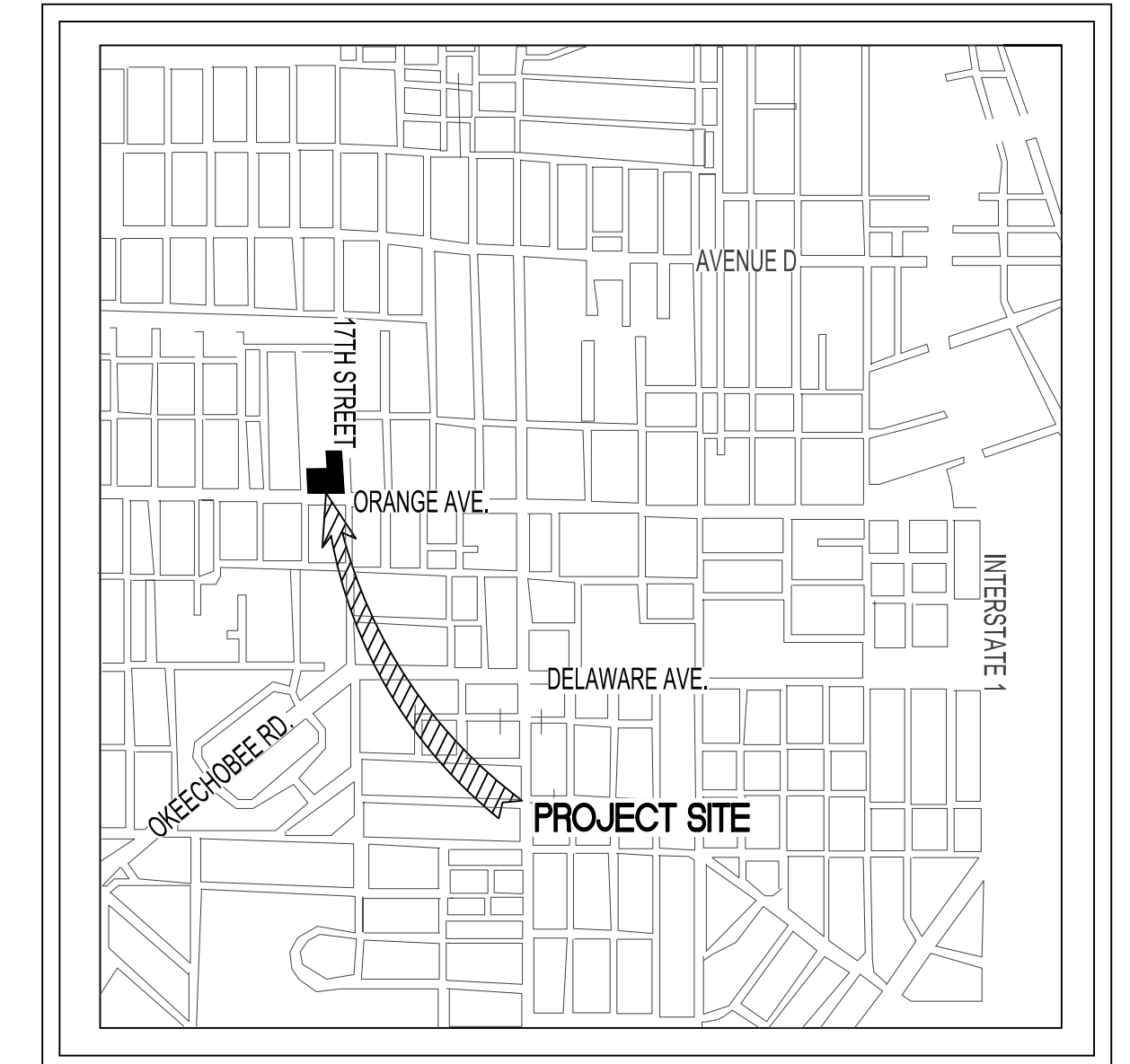
FOR



my family my family dollar

1712 ORANGE AVENUE, FORT PIERCE, FL 34950

PARCEL I.D. 240960600320004; 240960600310007; 240960600340008;
240960600350005; 240960600010008; 240960600300000



VICINITY MAP

N.T.S.

LEGAL DESCRIPTION

DESCRIPTION (OFFICIAL RECORD BOOK 1477, PAGE 111):
LOTS 1, 2, 3, 42, 43 AND 47, BLOCK 1, AMY ANNA PARK, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 72 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

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DEVELOPER

LA CABANA, LLC
222 WEST COLEMAN BLVD
MOUNT PLEASANT, SC 29464
TEL: (843) 906-5917
CONTACT: ERIC LEINEWEBER
EMAIL: ERIC@BLUECURRENTDEV.COM

ARCHITECT

C.L. HELT ARCHITECT, INC.
1136 GREENWOOD CLIFF
CHARLOTTE, NC 28204
TEL: (704) 342-1686
FAX: (704) 343-0054
CONTACT: DIANA MYERS
EMAIL: DIANAM@CLHELT.COM

ENGINEER

LBYD, INC
5405 CYPRESS CENTER DRIVE, SUITE 310
TAMPA, FL 33609
TEL: (813) 362-8585
FAX: (205) 488-0226
CONTACT: MATT WALKER, PE
EMAIL: MWALKER@LBYD.COM

SURVEYOR

SOUTHEASTERN SURVEYING AND MAPPING
6500 ALL AMERICAN BLVD.
ORLANDO, FL 32810
TEL: (407) 292-8580
FAX: (407) 292-0141
CONTACT: TONY SYFRETT

LANDSCAPE ARCHITECT

PLACEMAKER DESIGN STUDIO, LLC
3000 GULF TO BAY BLVD, SUITE 301
CLEARWATER, FL 33759
TEL: (727) 726-6124
CONTACT: CHRIS ANUSZKIEWICZ, RLA
EMAIL: CHRIS@PLACEMAKERDESIGNSTUDIO.COM

UTILITY PROVIDERS

WATER / SEWER / ELECTRIC:
FORT PIERCE UTILITY AUTHORITY
206 S 6TH ST,
FORT PIERCE, FL 34950
TEL: (772) 466-1600
WATER / SEWER CONTACT: JOYCE KEENE (TEL. EXT. 3473)
ELECTRIC CONTACT: SAL SCINECA (TEL. EXT. 6957)

CABLE:
COMCAST CABLE
10435 IRONWOOD ROAD
PALM BEACH GARDENS, FL 33410
TEL: (772) 692-9010
CONTACT: TONY SPRINGSTEEL

TELEPHONE:
AT&T DISTRIBUTION
2021 N MILITARY TRAIL, RM 107
WEST PALM BEACH, FL 33415
TEL: (561) 357-6615
FAX: (561) 964-3499
CONTACT: ROBERT LOWEN

STORMWATER:
FLORIDA DEPARTMENT OF TRANSPORTATION
3400 WEST COMMERCIAL BOULEVARD
FORT LAUDERDALE, FL 33309
TEL: (954) 777-4090
FAX: (954) 4223
CONTACT: BARBARA L. KELLEHER

APPROVAL AGENCIES

CITY OF FORT PIERCE
CITY HALL 100 N. US 1
P.O. BOX 1480 FORT PIERCE, FL 34954
TEL: (772) 460-2200
CONTACT: TRACY TELLE

SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD)
MARTIN / ST. LUCIE REGULATORY OFFICE
337 NORTH 4TH STREET
SUITES 307 AND 316
FORT PIERCE, FLORIDA 34950
TEL: (863) 462-5260 / (800) 250-4200
FAX: (863) 462-5269

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
TREASURE COAST OPERATIONS CENTER
3601 OLEANDER AVENUE
FT. PIERCE, FL 34982
TEL: (772) 465-7396

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (CONSTRUCTION GENERIC PERMIT)
2600 BLAIR STONE ROAD M.S. 3500
TALLAHASSEE, FL 32399
TEL: (850) 245-8336
WWW.DEP.STATE.FL.USWATER

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SL	SITE LIGHTING PLAN (BY OTHERS)

PREPARED FOR
LA CABANA, LLC
SEPTEMBER 2014
REVISED OCTOBER, 2014



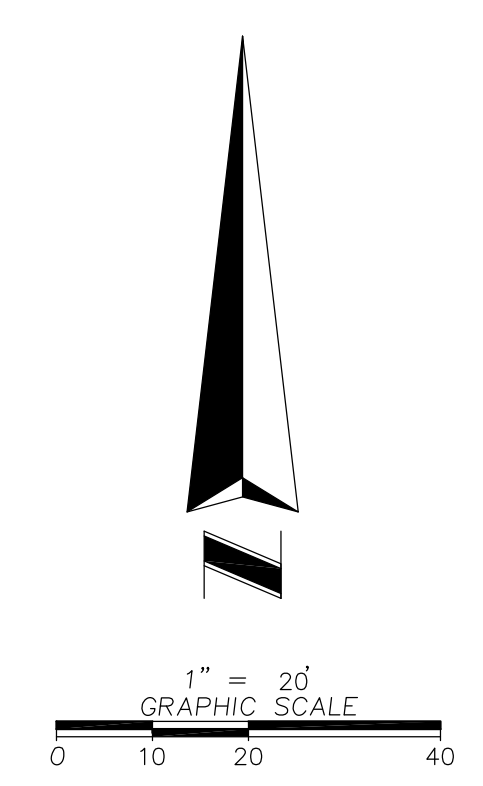
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C-1

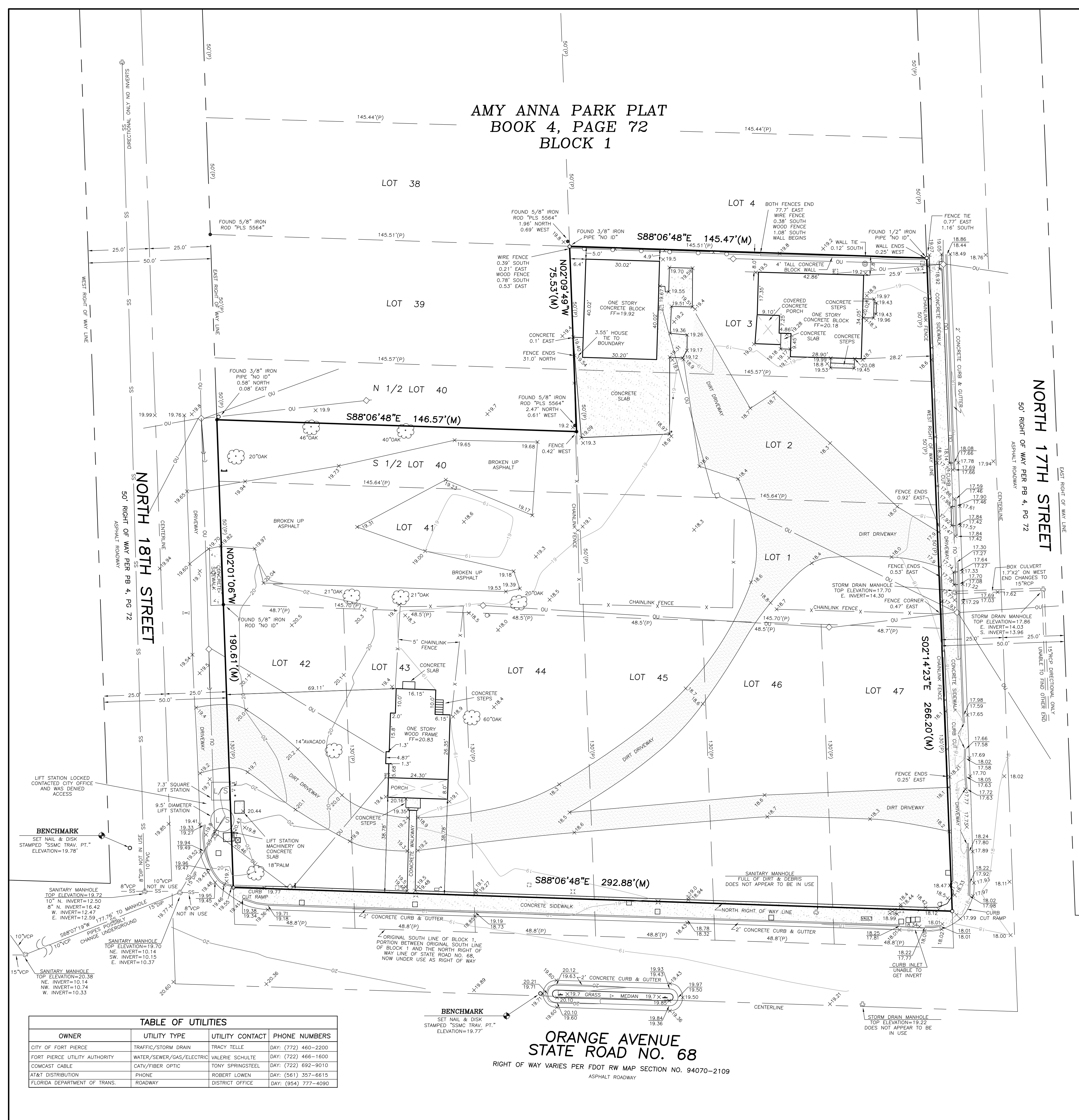
Robert M. Walker
PE #70246

BOUNDARY & TOPOGRAPHIC SURVEY

SITE-PROJECT NUMBER: 402-14-016
1706 ORANGE AVENUE
FORT PIERCE, FLORIDA



**AMY ANNA PARK PLAT
BOOK 4, PAGE 72
BLOCK 1**



LEGEND & ABBREVIATION

■ = CONCRETE MONUMENT	⋄ = BACKFLOW PREVENTER
⊖ = CLEAN OUT	• = POST/BOLLARD
⊕ = DRAINAGE MANHOLE	⊠ = TRAFFIC CONTROLLER CABINET
⊙ = FIRE HYDRANT	⊚ = TRAFFIC SIGNAL SPAN POLE
— = GUY WIRE	□ = WIRE PULL-BOX
○ = FOUND IRON PIPE	⊙ = WATER SPIGOT
• = SET IRON ROD "LB 2108" UNLESS NOTED OTHERWISE	⊙ = PINE TREE
⋄ = LIGHT POLE	⊙ = UNDERGROUND VAULT
⊠ = MAILBOX	FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
○ = SET NAIL & DISC "LB 2108" UNLESS NOTED OTHERWISE	RW = RIGHT OF WAY
⊕ = POWER POLE	PB = PLAT BOOK
⊕ = SANITARY MANHOLE	PG = PAGE
⊕ = NON-TRAFFIC SIGN	FF = FINISHED FLOOR ELEVATION
⊕ = TRAFFIC SIGN	(M) = MEASURED DISTANCE
⊕ = ELECTRIC SERVICE METER	(P) = PLATTED DISTANCE
⊕ = WATER METER	NO. = NUMBER
⊕ = VALVE	ID = IDENTIFICATION
	-OU- = OVERHEAD UTILITY LINE

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- SURVEYOR'S REPORT:**
- THIS IS A BOUNDARY AND TOPOGRAPHIC SURVEY WITH THE LOCATION OF ABOVE GROUND FIXED IMPROVEMENTS IN THE IMMEDIATE VICINITY OF THE ABOVE DESCRIBED PARCEL BOUNDARY ONLY. NO ATTEMPT WAS MADE TO INVESTIGATE THE LOCATION OF UNDERGROUND UTILITIES, FOUNDATIONS, OR OTHER IMPROVEMENTS, IF THEY EXIST.
 - BEARINGS AND COORDINATES SHOWN HEREON ARE GRID AND BASED ON NATIONAL GEODETIC SURVEY CONTROL POINT "AF6647", BEING A STEEL ROD WITH BRASS DISK STAMPED "A 356 1979" HAVING PUBLISHED FLORIDA STATE PLANE COORDINATES EAST ZONE AND THE RELATIVE BEARING FOR THIS DRAWING IS S02°14'23"E ALONG THE MONUMENTED WEST RIGHT OF WAY LINE OF NORTH 17TH STREET.
 - THE VERTICAL INFORMATION SHOWN HEREON IS BASED ON NATIONAL GEODETIC SURVEY CONTROL POINT "AF6647", BEING A STEEL ROD WITH BRASS DISK STAMPED "A 356 1979", HAVING AN ELEVATION OF 20.43 FEET, VERTICAL DATUM (NAVD 88), THE CONTOUR INTERVAL IS ONE FOOT.
 - THE MINIMUM HORIZONTAL ACCURACY FOR THIS URBAN SURVEY IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 54-17.050-052 OF FLORIDA ADMINISTRATION CODE IS ONE PART IN 7,500. THE MAP AND MEASUREMENT METHODS USED FOR THIS SURVEY MEET OR EXCEED THIS REQUIREMENT. THE DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL THEREAFTER.
 - THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF AN ABSTRACT, TITLE SEARCH, TITLE OPINION OR TITLE COMMITMENT. A TITLE SEARCH MAY REVEAL ADDITIONAL INFORMATION AFFECTING THE PARCEL AS SHOWN.
 - THERE MAY BE OTHER RESTRICTIONS NOT SHOWN ON THIS MAP THAT MAY BE RECORDED IN THE PUBLIC RECORDS FOR ST. LUCIE COUNTY, FLORIDA.
 - INFORMATION SHOWN ON ADJACENT PROPERTIES WAS COMPILED USING LATEST AVAILABLE DATA. NO ATTEMPT WAS MADE BY THIS FIRM TO VERIFY ITS ACCURACY.
 - EASEMENTS OR RIGHTS OF WAY THAT APPEAR ON RECORDED PLANS, THAT HAVE BEEN FURNISHED TO THE SURVEYOR BY OTHERS OR THAT WERE VISIBLY OBSERVED DURING THE FIELD PORTION OF THIS SURVEY HAVE BEEN INCORPORATED INTO THIS DRAWING WITH APPROPRIATE NOTATION. OTHER EASEMENTS MAY BE DISCOVERED BY A SEARCH OF THE PUBLIC RECORDS.
 - THIS SURVEY DOES NOT DETERMINE OWNERSHIP OF THE LANDS SHOWN HEREON.
 - THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
 - FEATURES SHOWN BY SYMBOL AS INDICATED IN THE LEGEND ARE NOT TO SCALE.
 - THE ABOVE DESCRIBED LANDS CONTAINS 1.53 ACRE, MORE OR LESS.

NOTICE OF LIABILITY:
THIS SURVEY IS CERTIFIED TO THOSE INDIVIDUALS SHOWN ON THE FACE THEREOF. ANY OTHER USE, BENEFIT OR RELIANCE BY ANY OTHER PARTY IS STRICTLY PROHIBITED AND RESTRICTED. SURVEYOR IS RESPONSIBLE ONLY TO THOSE CERTIFIED AND HEREBY DISCLAIMS ANY OTHER LIABILITY AND HEREBY RESTRICTS THE RIGHTS OF ANY OTHER INDIVIDUAL OR FIRM TO USE THIS SURVEY, WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR.

TABLE OF UTILITIES

OWNER	UTILITY TYPE	UTILITY CONTACT	PHONE NUMBERS
CITY OF FORT PIERCE	TRAFFIC/STORM DRAIN	TRACY TELLE	DAY: (772) 460-2200
FORT PIERCE UTILITY AUTHORITY	WATER/SEWER/GAS/ELECTRIC	VALERIE SCHULTE	DAY: (772) 466-1600
COMCAST CABLE	CATV/FIBER OPTIC	TONY SPRINGSTEEL	DAY: (772) 692-9010
AT&T DISTRIBUTION	PHONE	ROBERT LOWEN	DAY: (561) 357-6615
FLORIDA DEPARTMENT OF TRANS.	ROADWAY	DISTRICT OFFICE	DAY: (954) 777-4090

**ORANGE AVENUE
STATE ROAD NO. 68**
RIGHT OF WAY VARIES PER FDOT RW MAP SECTION NO. 94070-2109
ASPHALT ROADWAY

**SOUTHEASTERN SURVEYING
AND MAPPING CORPORATION**
1130 HIGHWAY 90
CHIPLEY, FLORIDA 32428
(850) 636-1668
E-MAIL: INFO@SOUTHEASTERNSURVEYING.COM
CERT. NO. LB-2108

BY		REVISION		REVISION DATE	
PROJECT	BOUNDARY & TOPOGRAPHIC SURVEY				
DRAWN BY	TBF				
SURVEY DATE	07/03/14				
SCALE	1"=20'				
CERTIFIED TO:	LEBYD, INC.				
DRAWING NUMBER	58554001				
SHEET NUMBER	1 OF 1				

GENERAL NOTES:

- 1. ALL ELEVATIONS IN THESE PLANS REFERENCE NAVD 1988 VERTICAL DATUM.
2. LBVD, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE OR BUILDING CONTRACTORS' WORK OR RESPONSIBILITIES.
3. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION UNLESS THEY BEAR A STAMP FROM THE CITY OF FORT PIERCE...

GRADING NOTES:

- 1. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY AREHNA ENGINEERING, INC. (PROJECT NUMBER B-14-079, JULY 2014) AND IS AVAILABLE FOR INFORMATION PURPOSES.
2. ALL TOPSOIL WITHIN THE PROPOSED LIMITS OF GRADING SHALL BE STRIPPED AND SHALL BE STOCKPILED ON-SITE IN AN APPROVED LOCATION FOR LATER USE DURING FINISHED GRADING AND LANDSCAPING ACTIVITIES.
3. ALL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION.

ANY SHEETING, BRACING, SHORING, ETC. REQUIRED TO CONTAIN EXCAVATIONS AND STOCKPILES WITHIN THE PROPERTY OR EASEMENTS PROVIDED, TO STABILIZE THE SIDES OF THE EXCAVATION, TO BE IN ACCORDANCE WITH OSHA REQUIREMENTS, AND TO PREVENT ANY MOVEMENT WHICH MAY CAUSE DAMAGE TO ADJACENT STRUCTURES OR PAVEMENT.

STORM DRAINAGE NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM DRAINAGE MATERIALS AND STRUCTURES TO LBVD, INC. PRIOR TO INSTALLATION AND/OR FABRICATION.
2. ALL STORM DRAINAGE MATERIALS (GRATES, CURB, YARD, AREA DRAINS) ARE TO BE LOCATED AT LOWPOINTS, AND SITE GRADING SHALL BE SUCH THAT RUNOFF IS DIRECTED TO THESE INLETS, NOTIFY LBVD, INC. OF ANY DISCREPANCIES.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED STORM INLET GRADES, PIPE SLOPES, PIPE INVERTS, POTENTIAL CONFLICTS AND POINTS OF CONNECTION PRIOR TO INSTALLATION OR ORDERING OF MATERIALS.

DEWATERING NOTES:

- 1. ALL DEWATERING ACTIVITIES SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL DESIGN AND INSTALL A DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR SLOUGHING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES.
3. WHERE NECESSARY, THE CONTRACTOR SHALL LOWER THE WATER LEVEL IN ADVANCE OF EXCAVATION, UTILIZING WELLS, WELLPOINTS, OR SIMILAR POSITIVE METHODS.

EROSION AND SEDIMENTATION CONTROL NOTES:

- 1. EROSION AND SEDIMENT CONTROL IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE STATE, FEDERAL, AND LOCAL EROSION CONTROL REGULATIONS AND SHALL ENSURE THAT ANY STORMWATER AND NON-STORMWATER DISCHARGES FROM THE SITE DO NOT EXCEED THE TOLERANCES SET FORTH IN THOSE REGULATIONS.
2. EROSION AND SEDIMENT CONTROLS ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION.
3. THE EROSION AND SEDIMENT CONTROL MEASURES OUTLINED IN THESE PLANS ARE REPRESENTATIVE OF BEST MANAGEMENT PRACTICES, AND ARE INTENDED TO MEET THE MINIMUM ACCEPTABLE STANDARDS FOR EROSION AND SEDIMENT CONTROL AND ENSURE COMPLIANCE WITH RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 17-25-FAC AND THE LOCAL WATER MANAGEMENT DISTRICT. ADDITIONAL CONTROLS MAY BE NECESSARY DEPENDING ON SITE CONDITIONS, CONSTRUCTION PHASING, RAINFALL SEVERITY, AND ACTUAL EFFECTIVENESS OF CONTROLS.

PROJECT DESCRIPTION:

- A. SITE LOCATION
THE SITE IS LOCATED AT THE NE CORNER OF N. 18TH ST AND ORANGE AVENUE (SR 68), IN FORT PIERCE, FL.
B. PROJECT AREA
THE TOTAL PROJECT AREA IS 1.53 +/- ACRES. THE AREA TO BE DISTURBED IS 1.53 +/- ACRES.
C. EXISTING SITE CONDITIONS
THE EXISTING CONDITION OF THE SITE IS DEVELOPED WITH RESIDENTIAL STRUCTURES, DIRT DRIVES, AND PAVED AREAS.

D. DESCRIPTIONS OF PROPOSED STORM WATER MANAGEMENT SYSTEM

STORMWATER RUNOFF FROM THE PROJECT AREA WILL BE COLLECTED IN A SYSTEM OF INLETS AND PIPE ROUTED TO A SINGLE DRY DETENTION POND AT THE NORTHEAST CORNER OF THE SITE WHERE IT WILL DISCHARGE THROUGH A CONTROL STRUCTURE TO AN EXISTING FOOT STORMWATER STRUCTURE ALONG THE WESTERN RIGHT-OF-WAY OF N. 17TH STREET (EASTERN EDGE OF SITE).

E. RECEIVING WATERS/WETLAND AREAS:

THE STORMWATER MANAGEMENT SYSTEM WILL DISCHARGE INTO AN EXISTING FOOT STORMWATER STRUCTURE ALONG THE WESTERN RIGHT-OF-WAY OF N. 17TH STREET (EASTERN EDGE OF SITE). THERE ARE NO WETLANDS OR OTHER SURFACE WATERS ON OR ADJACENT TO THE PROJECT SITE.

F. STATE AND LOCAL PERMITS AND APPROVALS:

THE FOLLOWING PERMITS OR APPROVALS HAVE BEEN ISSUED FOR THE CONSTRUCTION OF THE STORMWATER FACILITIES FOR THIS PROJECT:

- SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) - ERP SELF-CERTIFICATION THROUGH FDEP
• CITY OF FORT PIERCE SITE WORK PERMIT - APPLIED FOR
• FOOT DRAINAGE PERMIT - APPLIED FOR

THE FOLLOWING MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION FOR THIS PROJECT:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FILE "NOTICE OF INTENT (NOI) FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT" (EPA FORM 4510-9 OR LATEST VERSION) TO EPA.
• IT IS THE CONTRACTOR'S RESPONSIBILITY TO FILE "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES" (DEP FORM 62-621.300(4)(B) OR LATEST VERSION) TO FDEP.

G. GENERAL SEQUENCING FOR EROSION CONTROL

- 1. INSTALLATION OF PERIMETER CONTROLS AND INLET PROTECTION
2. CONSTRUCTION OF SEDIMENT BASIN
3. CLEARING AND GRUBBING
4. SITE GRADING (ALL AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF 7 DAYS OR MORE SHALL BE STABILIZED WITH SEED AND MULCH OR OTHER ACCEPTABLE MEANS)
5. SITE DEVELOPMENT AND BUILDING CONSTRUCTION
6. FINAL STABILIZATION.

SEE EROSION CONTROL PLAN FOR ADDITIONAL CONSTRUCTION SEQUENCING NOTES.

AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED AND MAINTAINED BY THE CONTRACTOR, THE SITE CONTRACTOR SHALL PREPARE A CONSTRUCTION SCHEDULE. THIS SCHEDULE SHALL INCLUDE THE DATE GRADING WILL BEGIN, THE EXPECTED DATE OF FINAL STABILIZATION, AND THE SCHEDULE FOR INSTALLATION AND MAINTENANCE OF SPECIFIC CONTROL MEASURES AS RELATED TO THE SCHEDULE OF CONSTRUCTION ACTIVITIES. IN CASE OF DISCREPANCIES, SEQUENCING OUTLINED IN THE SWPPP SHALL PREVAIL.

EROSION CONTROL BEST PRACTICES:

- A. CONSTRUCTION ACTIVITIES SHOULD BE PLANNED IN PHASES WITH THE MINIMUM AMOUNT OF LAND DISTURBANCE NECESSARY TO DEVELOP OCCURRING IN EACH PHASE IN ORDER TO REDUCE THE EROSION POTENTIAL OF THE SITE.
B. PERIMETER CONTROLS, SEDIMENT TRAPS, BASINS, DIVERSIONS, AND OTHER EROSION CONTROLS SHOULD BE INSTALLED PRIOR TO ANY LAND DISTURBANCE AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE, FINAL STABILIZATION IS ESTABLISHED AND THE SITE INSPECTOR HAS APPROVED THEIR REMOVAL.
C. CONSTRUCTION ENTRANCE/EXIT PADS SHOULD BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES AND SHOULD BE MONITORED REGULARLY FOR EFFECTIVENESS IN MINIMIZING OFFSITE SEDIMENT TRACKING.
D. THE CONTRACTOR SHALL EXCAVATE THE PROPOSED STORMWATER POND(S) OR AN APPROPRIATELY SIZED SEDIMENTATION BASIN AT THE COMMENCEMENT OF GRADING ACTIVITIES, AND SHALL DIRECT SITE RUNOFF TO THESE LOCATIONS TO MINIMIZE OFFSITE RUNOFF.

INSPECTION AND MAINTENANCE:

- A. THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL INSTALLATION AND MAINTENANCE ON A 24 HOUR BASIS. THE SWPPP SHALL INCLUDE THE NAME AND PHONE NUMBER OF THE CONTRACTOR'S DESIGNATED REPRESENTATIVE.
B. THE CONTRACTOR OR OTHER DESIGNATED INDIVIDUAL IS REQUIRED TO INSPECT AND MAINTAIN ALL CONTROLS WEEKLY AND WITHIN 24 HOURS AFTER A RAINSTORM EVENT IN EXCESS OF 1/2-INCH.
C. THE DESIGNATED INSPECTOR MUST BE A QUALIFIED EROSION AND SEDIMENT CONTROL INSPECTOR AS DEFINED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
D. THE INSPECTOR SHALL BE RESPONSIBLE FOR MEETING THE FOLLOWING OBJECTIVES AT A MINIMUM:
1. CONFIRM THAT ALL EROSION AND SEDIMENT CONTROL MEASURES AND OTHER BMPs HAVE BEEN PROPERLY INSTALLED AND MAINTAINED PER THE APPROVED EROSION CONTROL PLAN AND SWPPP.
2. CONFIRM THAT EROSION IS BEING EFFECTIVELY CONTROLLED.
3. CONFIRM THAT OFFSITE SEDIMENTATION IS BEING PREVENTED.
4. CONFIRM THAT NO TURBIDITY IS BEING GENERATED IN RECEIVING WATERS.
E. THE INSPECTOR SHALL IMMEDIATELY RECORD AND REPORT ALL INSPECTION FINDINGS AND CORRECTIVE ACTIONS TAKEN AS A RESULT OF THE INSPECTION. INSPECTION REPORTS SHALL BE SIGNED BY THE INSPECTOR AND CONTRACTOR AND RETAINED ON SITE FOR FUTURE REFERENCE AS NEEDED.
F. INSPECTION REPORT FORMS SHALL BE A PART OF THE SWPPP AND SAMPLE FORMS CAN BE OBTAINED FROM THE FDEP.

PROTECTION OF WETLANDS AND SURFACE WATERS:

- A. IT SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE WATER QUALITY OF DOWNSTREAM OR ADJACENT WETLANDS AND SURFACE WATERS IS PROTECTED DURING CONSTRUCTION ACTIVITIES. IN NO CASE SHALL TURBID OR POLLUTED WATERS BE DISCHARGED TO ON OR OFF SITE WETLANDS OR OTHER SURFACE WATERS.
B. WHERE APPROPRIATE OR WHEN REQUIRED BY STATE, FEDERAL OR LOCAL AGENCIES, DOWNSTREAM RECEIVING WATERS SHALL BE MONITORED THROUGHOUT CONSTRUCTION FOR TURBIDITY AND PH. A BACKGROUND SAMPLE SHALL BE TAKEN PRIOR TO COMMENCEMENT OF CONSTRUCTION.
C. EROSION CONTROL AND TURBIDITY CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THE SWPPP. GENERAL BEST MANAGEMENT PRACTICES INCLUDE THE FOLLOWING:
1. EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION;
2. PERIMETER EROSION CONTROL AND TURBIDITY CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE, FINAL STABILIZATION IS ESTABLISHED AND THE SITE INSPECTOR HAS APPROVED THEIR REMOVAL;
3. EROSION CONTROL INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND EXISTING STORMWATER INLETS AND OUTFALL STRUCTURES. PROTECTION MEASURES SHALL BE EMPLOYED IMMEDIATELY UPON INSTALLATION OF THE STORMWATER STRUCTURES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
D. NO ACTIVITY, INCLUDING BUT NOT LIMITED TO CLEARING AND GRUBBING, GRADING, STORAGE OF EQUIPMENT OR MATERIALS, OR ANY OTHER LAND DISTURBANCE OR CONSTRUCTION ACTIVITIES, SHALL OCCUR WITHIN THE PROTECTIVE BUFFER AREAS OF WETLANDS AND SURFACE WATERS AS DELINEATED ON THESE PLANS OR AS REQUIRED BY ANY STATE, FEDERAL OR LOCAL AGENCIES.
E. STOCKPILES AND EXCAVATED MATERIALS SHOULD NOT BE PLACED NEAR WETLANDS OR WATER BODIES AND SHOULD BE ENCIRCLED WITH PROPER SEDIMENT CONTROLS.
F. PARKING AND MAINTENANCE AREAS FOR CONSTRUCTION EQUIPMENT SHALL BE DESIGNED TO PREVENT OIL, GREASE AND LUBRICANTS FROM DISCHARGING INTO SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTOR SHALL IMPLEMENT EFFECTIVE MEANS OF PREVENTING SUCH DISCHARGES, SUCH AS:
1. ENCIRCLE AREAS WITH SILT FENCES OR SILT DIKES;
2. CONSTRUCT SEDIMENT SUMPS WITHIN THE AREAS IN ORDER TO CONTAIN SPILLS;
3. UTILIZE ABSORBENT FILTER PADS TO CLEAN UP SPILLS IMMEDIATELY AFTER ANY OCCURRENCE.
G. INSPECT AND MAINTAIN ALL EROSION AND TURBIDITY CONTROLS WEEKLY AND WITHIN 24 HOURS AFTER A RAINSTORM EVENT IN EXCESS OF 1/2-INCH.

CONTROL OF WIND EROSION:

- A. FUGITIVE DUST SHALL NOT BE ALLOWED TO LEAVE THE SITE WHILE UNDER CONSTRUCTION.
B. BARE EARTH AREAS AND STOCKPILES SHALL BE WATERED, COVERED, OR VEGETATED TO PREVENT EROSION AND FUGITIVE DUST EMISSIONS. WATERING SHALL BE DONE DAILY, OR AT AN INTERVAL APPROPRIATE FOR MAINTAINING DUST CONTROL, BUT SHALL NOT CAUSE WATER EROSION OR TURBIDITY IN NEARBY WATER BODIES OR STORM SYSTEMS.
C. CONSTRUCTION VEHICLE SPEED SHALL BE LIMITED IN CASES WHERE BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED.
D. FOR AREAS TO ULTIMATELY BE VEGETATIVE, PERMANENT VEGETATION SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF FINAL GRADING.
E. THE CONTRACTOR SHALL IMPLEMENT OTHER MEANS OF DUST CONTROL, SUCH AS DUST CONTROL FENCES, AS NECESSARY WHEN WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR FUGITIVE DUST EMISSIONS.

REFERENCES:

- 1. THE CONSTRUCTION PLANS AND SPECIFICATIONS FOR JOB # 402-14-016 AS PREPARED BY LBVD, INC. IN SEPTEMBER 2014 ARE HEREBY REFERENCED AND MADE A PART OF THIS PLAN.



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LBVD Project Number
402-14-016

Table with columns: Revision No., Date, Description, Per City of Fort Pierce Comment. Row 1: 1, 10/12/2014, [blank], [blank].

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

GENERAL NOTES

Date: SEPTEMBER 2014

Checked By: RMW, MKA

Sheet Number: C-3, Sequence: 9, Total: 22

Robert M. Walker
PE #70246

QUALITY CONTROL TESTING, INSPECTIONS AND APPROVALS

- 1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO UNDERSTAND AND COMPLY WITH THE TESTING REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS AS WELL AS ANY AND ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT...
2. THE CONTRACTOR SHALL CLEAN ALL INSTALLED LINES AND STRUCTURES PRIOR TO ANY TESTING PROCEDURES.
3. TESTING SHALL INCLUDE AT A MINIMUM:
a. CONCRETE AND ASPHALT PAVING QUALITY CONTROL TESTING INCLUDING DESIGN MIX REVIEW, MATERIALS, FIELD SLUMP AND AIR CONTENT, AND FIELD AND LAB CURED STRENGTH SAMPLES AND TESTING;
b. PIPING AND STRUCTURAL EXCAVATION, BEDDING AND BACKFILL MATERIALS AND DENSITY TESTS;
c. DETERMINATION OF COMPACTIVE EFFORT NEEDED FOR COMPLIANCE WITH THE DENSITY REQUIREMENTS;
d. PRESSURE AND LEAKAGE TESTING AS REQUIRED FOR WATER DISTRIBUTION, SANITARY SEWER, AND STORM SEWER LINES.
e. FOR ALL INSTALLED GRAVITY SANITARY SEWERS AND GRAVITY STORM SEWERS, THE CONTRACTOR SHALL HAVE INTERNAL TELEVISION INSPECTION PERFORMED BY A QUALIFIED SUBCONTRACTOR.
4. THE CONTRACTOR SHALL CLEAN ALL INSTALLED LINES AND STRUCTURES PRIOR TO ANY TESTING PROCEDURES.
5. ANY DESIGN OR TESTING LABORATORY UTILIZED BY THE CONTRACTOR SHALL BE AN INDEPENDENT LABORATORY ACCEPTABLE TO THE OWNER AND THE ENGINEER, AND SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO BEGINNING WORK.
6. THE LAB SHALL COMPLY WITH THE LATEST EDITION OF THE "RECOMMENDED REQUIREMENTS FOR INDEPENDENT LABORATORY QUALIFICATION", PUBLISHED BY THE AMERICAN COUNCIL OF INDEPENDENT LABORATORIES.

AS-BUILT DRAWING REQUIREMENTS:

- 1. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER AN AS-BUILT SURVEY DOCUMENTING AS-BUILT CONDITIONS. ALL AS-BUILT DATA SHALL BE PREPARED BY AND SIGNED, SEALED AND DATED BY A LICENSED SURVEYOR REGISTERED IN THE APPLICABLE STATE OF WORK.
2. THE AS-BUILT INFORMATION IS TO INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
a. SPECIFY THE HORIZONTAL AND VERTICAL DATUM REFERENCED. DATUM SHALL BE THE SAME AS THAT UTILIZED IN THESE CONSTRUCTION PLANS.
b. WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION AND/OR VERTICAL ELEVATION DATA, THE AS-BUILT DRAWINGS SHALL SHOW THE CORRESPONDING HORIZONTAL LOCATION AND/OR VERTICAL ELEVATION AS MEASURED IN THE FIELD.
c. FINISHED FLOOR ELEVATIONS OF ALL STRUCTURES.
d. FOR ROADWAY AND DRIVE AISLES, PROVIDE PAVEMENT WIDTH AND ELEVATIONS AT THE CENTERLINE AND EDGE OF PAVEMENT EVERY 100 FEET PLUS ALL CHANGES IN LONGITUDINAL SLOPE OR CROSS SLOPE, AT INLET LOCATIONS, AND AT ALL DRIVEWAY AND STREET INTERSECTIONS.
e. FOR PARKING LOTS, RECORD CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS ALONG ALL DRIVE AISLES AND ISLANDS AND SHOW THE DEPTH AND WIDTH OF PARKING STALLS.
f. PROVIDE HORIZONTAL AND VERTICAL MEASUREMENTS FOR ALL PARKING AREAS AND SIDEWALK RAMPS DESIGNATED AS HANDICAP ACCESSIBLE ROUTES IN ORDER TO VERIFY REQUIRED WIDTHS AND SLOPES HAVE BEEN MET.
g. STORMWATER DRAINAGE SYSTEMS (BOTH OPEN CONVEYANCE AND PIPED SYSTEMS) INCLUDING DIMENSIONS, ELEVATIONS, CONTOURS AT ONE FOOT INTERVALS, AND CROSS SECTIONS OF OUTFALL CONTROL STRUCTURE(S).
h. STORMWATER CONTROL STRUCTURE INFORMATION (INCLUDING BOX STRUCTURES, FLUMES, AND SPILLWAYS) SHALL INCLUDE DIMENSIONS AND ELEVATIONS OF ALL PIPES, WEIRS, SLOTS, ORIFICES, GRATES, AND SKIMMERS, AS SHOWN ON CONSTRUCTION DETAILS.
i. FOR ALL STORMWATER PONDS AND OPEN CONVEYANCE SYSTEMS, PROVIDE TOP OF BANK ELEVATIONS, BOTTOM ELEVATIONS, AND HORIZONTAL DIMENSIONS MEASURED AT LOCATIONS AS SHOWN ON THE CONSTRUCTION PLANS. A MINIMUM OF 10 LOCATIONS PER POND WILL BE REQUIRED AND MORE MAY BE NECESSARY TO ACCURATELY SHOW THE FOOTPRINT AND VOLUME OF THE POND. HORIZONTAL POND DIMENSIONS ARE ALSO TO BE TIED TO PROPERTY CORNERS, EASEMENTS, RIGHTS-OF-WAY, OR OTHER POINTS ON THE PROPERTY.
j. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS INCLUDING STRUCTURE TOPS, INVERT ELEVATIONS, AND PIPE SIZES FOR ALL UTILITY AND STORM STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLES, INLETS, CLEANOUTS, VALVES, FITTINGS, AND CONNECTION POINTS.
k. LENGTHS OF PIPELINES BETWEEN STRUCTURES.
l. UTILITY LOCATIONS TIED TO EDGE OF PAVEMENT AND RIGHT-OF-WAY LINES, LOCATED EVERY 100-FT PLUS ALL CHANGES IN HORIZONTAL OFFSET.
m. VERTICAL ELEVATIONS OF ALL PIPELINES WHERE THERE IS A CROSSING OF NEW AND EXISTING DOMESTIC AND FIRE WATER MAINS, SANITARY SEWER MAINS, AND STORM SEWER LINES IN ORDER TO DOCUMENT THAT THE MINIMUM REQUIRED VERTICAL SEPARATIONS HAVE BEEN MET.
n. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS.
3. FOR ALL INSTALLED GRAVITY SANITARY SEWERS AND GRAVITY STORM SEWERS, THE CONTRACTOR SHALL HAVE INTERNAL TELEVISION INSPECTION PERFORMED BY A QUALIFIED SUBCONTRACTOR. THE INSPECTION SHALL BE RECORDED AND ALL FEATURES SHALL BE MEASURED AND LOGGED AS THE CAMERA PROGRESSES THROUGH THE PIPE. INSPECTION REPORTS SHALL INCLUDE PIPE SIZE, PIPE MATERIAL, LOCATION OF CHANGES IN MATERIAL, BRANCH OR CONNECTION LOCATIONS AND LOCATIONS OF DEFECTS.

TRAFFIC CONTROL NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND IMPLEMENTING A TRAFFIC CONTROL PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION. TRAFFIC CONTROL PLAN SHALL INCLUDE DETAILED CONSTRUCTION SEQUENCING AND SHALL OUTLINE THE USE OF BARRICADES, TEMPORARY AND PERMANENT PAVEMENT MARKINGS, TRAFFIC CONTROL SIGNAGE, FLAGMEN AND ANY OTHER TRAFFIC CONTROL MEASURES AS NEEDED TO MAINTAIN SAFE AND CONSISTENT TRAFFIC FLOW AND SAFETY FOR WORKERS AND PEDESTRIANS DURING ALL CONSTRUCTION ACTIVITIES.
2. TRAFFIC CONTROL PLAN AND ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FOOT INDEX NO. 600 LATEST EDITIONS.
3. TRAFFIC CONTROL DEVICES SHALL BE INSPECTED DAILY TO ENSURE PROPER PLACEMENT AND FUNCTIONALITY IS MAINTAINED THROUGHOUT THE DURATION OF DEMOLITION AND CONSTRUCTION ACTIVITIES.
4. UNLESS OTHERWISE AUTHORIZED IN THE APPROVED TRAFFIC CONTROL PLAN, ALL PROPOSED ROADWAY AND DRIVEWAY LANE CLOSURES SHALL BE LIMITED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M.
5. THE CONTRACTOR SHALL CONTACT ANY PROPERTY OWNERS AFFECTED BY CONSTRUCTION ACTIVITIES, AND SHALL COORDINATE THE SEQUENCING OF TEMPORARY DRIVEWAY CLOSURES IN ORDER TO MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.

UTILITY GENERAL NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING ALL UTILITY SERVICE SYSTEMS (WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, CABLE TV) BETWEEN THE POINT THE RESPECTIVE UTILITY COMPANY COMPLETES THEIR WORK TO THE POINT OF CONNECTION AT THE BUILDING.
2. ALL UNDERGROUND ELECTRICAL, TELEPHONE, AND CABLE TV SHALL BE INSTALLED IN PVC CONDUIT OR CONCRETE ENCASED DUCT BANK WITH PULL WIRE MEETING THE LOCAL UTILITY COMPANY'S REQUIREMENTS. INFORMATION SHOWN ON CIVIL DRAWINGS IS FOR REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR ACTUAL LOCATIONS OF THESE UTILITIES AND FOR SPECIFIC NOTES AND INFORMATION.
3. WHERE UTILITIES ARE TO BE INSTALLED IN AREAS OF EXISTING PAVING, HARDCAPE, SIDEWALKS, ETC. THE CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING PAVING, HARDCAPE, SIDEWALK ETC. AND REPLACE IN LIKE KIND AND RESTRIPE AS NECESSARY. BACKFILL TRENCH FULL DEPTH WITH STONE.
4. UTILITY TRENCHES SHALL BE BACKFILLED WITH COMPACTED FILL PLACED IN 6 INCH LOOSE LIFTS. FILL SHALL BE COMPACTED TO 98% STANDARD PROCTOR AND OPTIMUM MOISTURE CONTENT WITHIN +/-2.0%.
5. ANY EXISTING UTILITY LIDS/MANHOLE TOPS WHICH ARE TO REMAIN SHALL BE FIELD ADJUSTED TO MATCH PROPOSED FINISHED GRADE.
6. ALL EXISTING UTILITY SERVICES WHICH ARE TO REMAIN SHALL BE MAINTAINED UNINTERRUPTED UNLESS SPECIFICALLY COORDINATED WITH THE RESPECTIVE UTILITY PROVIDER AND ANY AFFECTED PROPERTY OWNERS.

ELECTRICAL, TELEPHONE, AND CABLE TV UTILITIES:

LBVY, INC. IS NOT RESPONSIBLE FOR THE DESIGN OF ELECTRIC, TELEPHONE, OR CABLE TV UTILITIES, AND ANY INFORMATION PERTAINING TO THE DESIGN OR LOCATION OF THOSE UTILITIES IS SHOWN ON THE CIVIL DRAWINGS FOR GENERAL REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR ACTUAL LOCATIONS OF THESE UTILITIES AND FOR SPECIFIC NOTES AND INFORMATION.

UTILITY SEPARATION REQUIREMENTS:

- 1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND THE FOLLOWING:
1.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
1.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
1.3. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT

- LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
1.4. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.006(5), F.S., AND RULE 64E-6.002, F.A.C.
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES SHALL BE IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND THE FOLLOWING:
2.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
2.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
2.3. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES SHALL BE IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND THE FOLLOWING:
3.1. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
3.2. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.
4. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST:
4.1. THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
4.2. AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER
4.3. AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
4.4. AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM.
5. EXCEPTIONS, WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS ABOVE, FDEP MAY ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION, IN ACCORDANCE WITH F.A.C. RULE 62-555.314, ACCEPTABLE ALTERNATIVE CONSTRUCTION FEATURES SHALL BE APPROVED IN WRITING BY LBVY, INC. AND FDEP AND MAY INCLUDE THE FOLLOWING:
5.1. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:
5.1.1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY-OR VACUUM-TYPE PIPELINE;
5.1.2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE:
5.1.3. USE OF WATER-TIGHT CASING PIPE OR CONCRETE ENCASMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE;
5.1.4. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:
5.2.1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
5.2.2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

WATER DISTRIBUTION NOTES:

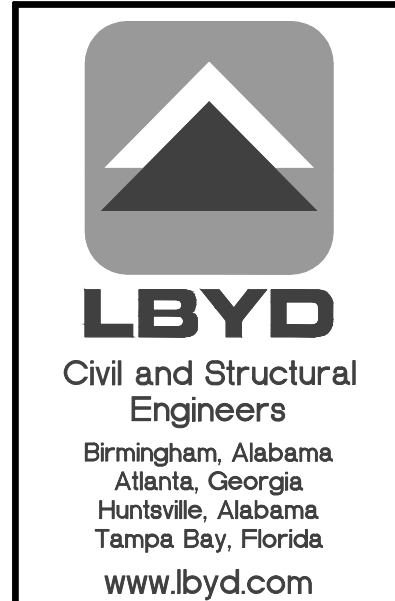
- 1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE WATER AND RECLAIMED WATER SYSTEMS SHOWN ON THESE PLANS IS FAMILY DOLLAR. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF THE OPERATING ENTITY AND THE WATER UTILITY PROVIDER.
2. UNLESS OTHERWISE NOTED IN THE PLANS, THE UTILITY COMPANY SHALL PROVIDE AND INSTALL WATER METERS AND RECLAIMED WATER METERS. CONTRACTOR SHALL CONSTRUCT WATER SERVICE AND RECLAIMED WATER SERVICE TO THE GATE VALVES OR CORPORATION STOPS.
3. MINIMUM 36 INCHES OF COVER SHALL BE PROVIDED OVER ALL WATER AND RECLAIMED MAINS IN PAVED AREAS. MINIMUM 30 INCHES OF COVER SHALL BE PROVIDED OVER ALL WATER AND RECLAIMED MAINS IN GRASS AREAS.
4. HORIZONTAL AND VERTICAL SEPARATION DISTANCES BETWEEN WATER MAINS AND OTHER UTILITY LINES SHALL BE IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND THESE PLANS.
5. ALL WATER AND RECLAIMED MAIN PIPE SHALL BE EITHER DUCTILE IRON OR PVC, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
6. ALL SERVICE PIPING (1/2"- 3") SHALL BE POLYETHYLENE (PE). SDR-PPR PE PIPE SHALL BE MANUFACTURED FROM PE3408 AND SHALL CONFORM TO AWWA C901. ALL PIPE SHALL BE DR9, PRESSURE CLASS 200 PSI. PIPE AND FITTINGS SHALL BE NSF APPROVED FOR THE USAGE TO WHICH THEY ARE TO BE APPLIED. JOINTS IN SDR-PPR PE PIPE SHALL BE BUTT HEAT FOR FUSION OR SOCKET HEAT FUSION TYPE. FITTINGS SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE PIPE AND SHALL BE OF THE SAME SDR OR LESS. PROVIDE ADAPTERS AS REQUIRED TO JOIN PE PIPE TO PIPE, FITTINGS AND EQUIPMENT OF OTHER MATERIALS.
7. ALL SERVICE SADDLES SHALL CONSIST OF DUCTILE IRON BODIES IN ACCORDANCE WITH ASTM A536, WITH DOUBLE STAINLESS STEEL STRAPS, BOLTS, WASHERS AND NUTS. STAINLESS STEEL TO BE TYPE 304. NUTS TO BE TEFLON COATED. DUCTILE IRON BODY TO BE FUSION BONDED NYLON COATING, MINIMUM THICKNESS 12 MILS. OUTLET OF SADDLE TO HAVE NPT THREADS.
8. ALL SERVICES SHALL INCLUDE THE FOLLOWING: CURB STOPS, UNIONS AS REQUIRED, CORPORATION STOPS. CONFORMANCE WITH AWWA C800 AND C901 IS REQUIRED. THE CONTRACTOR SHALL CUT "W" IN THE TOP CURB OF EACH WATER SERVICE AND A "V" AT ALL VALVE LOCATIONS. CUT "VS" AND "V5" SHALL BE HIGHLIGHTED IN BLUE PAINT.
9. PVC PIPE SHALL BE BLUE IN COLOR (WATER MAINS) OR PURPLE (RECLAIMED WATER MAINS), STENCILED "WATER LINE" OR "RECLAIMED WATER LINE", AS APPLICABLE. LETTERING SHALL BE 2" LETTERING ON TWO SIDES OF THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION.
10. PVC PIPE SPECIFICATIONS SHALL BE AS FOLLOWS:
10.1. PIPE 4" - 12" SHALL CONFORM TO AWWA C900;
10.2. PIPE 14" - 36" SHALL CONFORM TO AWWA C905;
10.3. PIPE SHALL CONFORM TO ASTM D1784-11, TYPE I, GRADE I, 4000 PSI DESIGN STRESS, AND SHALL BE NATIONAL SANITATION FEDERATION (NSF) APPROVED;
10.4. PIPE SHALL BE CLASS 150 (DR18) WITH MARKINGS ON EACH SECTION SHOWING CONFORMANCE TO THE ABOVE SPECIFICATIONS;
10.5. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO AWWA C900 OR C905;
10.6. THE BELL SHALL BE INTEGRAL WITH THE PIPE AND OF EQUAL OR GREATER PRESSURE RATING. THE BELL OF PIPE AND FITTINGS USING PUSH-ON JOINTS SHALL HAVE AN INTEGRAL GROOVE TO RETAIN THE GASKET IN PLACE.
11. BURIED DUCTILE IRON PIPE SPECIFICATIONS SHALL BE AS FOLLOWS:
11.1. PIPE SHALL CONFORM WITH ANSI/AWWA C150/A21.50 AND C151/A21.51, AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI.
11.2. BURIED PIPE SHALL COMPLY WITH THE FOLLOWING PRESSURE CLASS (PC) DESIGNATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS:
11.2.1. 12" DIAMETER AND SMALLER = PC 350;
11.2.2. 14" THROUGH 24" DIAMETER = PC 250;
11.2.3. 30" THROUGH 60" DIAMETER = PC 200.
12. EXPOSED PIPE 4" AND LARGER SHALL BE DUCTILE IRON FLANGED AND SHALL MEET THE FOLLOWING SPECIFICATIONS:
12.1. SHALL CONFORM WITH AWWA/ ANSI C115/A21.15;
12.2. SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI;
12.3. FLANGED PIPE SHALL COMPLY WITH THE FOLLOWING THICKNESS CLASS (TC) DESIGNATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS
12.3.1. 4" DIAMETER = TC 54;
12.3.2. 6" THROUGH 24" DIAMETER = TC 53.
13. DUCTILE IRON PIPE AND FITTINGS WITHIN 10 FEET OF GAS MAINS SHALL HAVE AN 8-MIL POLYETHYLENE WRAP IN ACCORDANCE WITH ANSI/AWWA C105/A21.4.
14. ALL CHANGES IN DIRECTION SHALL BE MADE WITH FITTINGS OR APPROVED JOINT DEFLECTION. BENDING OF PIPE, EXCEPT COPPER AND POLYETHYLENE, IS PROHIBITED. JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.
15. ALL FITTINGS SHALL BE RESTRAINED IN ACCORDANCE WITH DIRPA, "THRUST RESTRAINT" DESIGNED FOR DUCTILE IRON PIPE. PIPE JOINTS SHALL BE RESTRAINED UPSTREAM AND DOWNSTREAM OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS OR THE TABLE SHOWN IN THE DRAWINGS, WHICHEVER IS GREATER. DUCTILE IRON RESTRAINED JOINTS SHALL BE AMERICAN FAST GRIP GASKET, FLEX-RING, FIELD FLEX RING, LOK-FING, US PIPE TR-FLEX,

- EBAA MEGALUG, OR EQUAL. PVC PIPE JOINTS SHALL BE RESTRAINED USING MECHANICAL DEVICE, UNIFLANGE BLOCK BUSTER SERIES 1350 OR ENGINEER APPROVED EQUAL.
16. ALL FITTINGS SHALL BE MANUFACTURED OF DUCTILE IRON, CONFORMING TO ANSI/AWWA C110/A21.10 OR ANSI/AWWA C153/A21.53. ALL FULL BODY (C110/A21.10) FITTINGS SHALL BE PRESSURE RATED TO 250 PSI. MINIMUM. ALL COMPACT FITTINGS (C153/A21.53) SHALL BE PRESSURE RATED TO 350 PSI.
17. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE LINED AND COATED. INTERIOR LINING SHALL BE STANDING THICKNESS CEMENT MORTAR LINING PER ANSI/AWWA C105/A21.4. EXTERIOR COATING FOR BURIED PIPE AND FITTINGS SHALL BE A PETROLEUM ASPHALTIC COATING IN ACCORDANCE WITH ANSI/AWWA C110/A21.10. EXTERIOR COATING OF EXPOSED PIPE AND FITTINGS SHALL BE A RUST INHIBITING EPOXY PRIMER, MINIMUM 3 MILS DRY FILM THICKNESS. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH TWO COATS TNEMC SERIES 2 TNEMC-GLOSS, GUDDEN LIFE MASTER PRO HIGH PERFORMANCE ACRYLIC NO. 6900 SERIES, OR EQUAL. AT MINIMUM 4 MILS DRY FILM THICKNESS PER COAT. PAINT COLOR TO BE IN ACCORDANCE WITH LOCAL UTILITY REQUIREMENTS.
18. MECHANICAL AND PUSH ON JOINTS FOR DUCTILE IRON PIPE AND FITTINGS SHALL BE RUBBER GASKETED, CONFORMING TO ANSI/AWWA C111/A21.11. LUBRICANTS OTHER THAN THAT FURNISHED BY THE PIPE MANUFACTURER WITH THE PIPE SHALL NOT BE USED.
19. VALVE SPECIFICATIONS
19.1. UNLESS OTHERWISE INDICATED OR SPECIFIED, ALL VALVES TWO INCHES AND SMALLER SHALL BE ALL BRASS OR BRONZE; VALVES OVER TWO INCHES SHALL BE IRON BODY, FULLY BRONZE OR BRONZE MOUNTED.
19.2. VALVES 4 INCHES AND LARGER SHALL BE LINED AND COATED.
19.2.1. BURIED AND EXPOSED VALVES SHALL BE COATED INSIDE AND OUT WITH A RUST INHIBITING EPOXY PRIMER, FOLLOWED BY AN EPOXY COATING MEETING THE REQUIREMENTS OF AWWA C650, APPLIED AT THE FACTORY. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH TWO COATS TNEMC SERIES 2 TNEMC-GLOSS, GUDDEN LIFE MASTER PRO HIGH PERFORMANCE ACRYLIC NO. 6900 SERIES, OR EQUAL. AT 4 MILS MINIMUM DRY FILM THICKNESS PER COAT. PAINT COLOR TO BE IN ACCORDANCE WITH LOCAL UTILITY REQUIREMENTS.
19.3. ALL VALVES 12" AND SMALLER SHALL BE GATE VALVES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
19.3.1. GATE VALVES 3 INCHES TO 12 INCHES SHALL CONFORM TO AWWA C509 OR AWWA C515.
19.3.2. THE VALVE SHALL BE IRON BODY, CAST IRON FULLY ENCAPSULATED MOLDED RUBBER WEDGE COMPLYING WITH ASTM D2000, NON-RISING STEM WITH O-RING SEALS.
19.3.3. VALVES SHALL OPEN COUNTERCLOCKWISE.
19.4. VALVES 14" AND LARGER SHALL BE BUTTERFLY VALVES. BUTTERFLY VALVES SHALL MEET OR EXCEED THE DESIGN STRENGTH, TESTING AND PERFORMANCE REQUIREMENTS OF AWWA C504, CLASS 150. VALVE BODY SHALL BE MECHANICAL JOINT END TYPE VALVE CONSTRUCTED OF CAST IRON OR DUCTILE IRON. DISC SHALL BE ONE PIECE CAST DESIGN WITH NO EXTERNAL RIBS TRANSVERSE TO FLOW. DISC SHALL BE CASE RION OR DUCTILE IRON. THE RESILIENT SEAT SHALL MATE WITH A 304 OR 316 STAINLESS STEEL SURFACE.
19.5. TAPPING VALVES AND SLEEVES SHALL BE APPROVED AWWA TYPE OF THE SIZE REQUIRED. VALVES SHALL CONFORM TO THE REQUIREMENTS OF AWWA C509.
19.6. VALVE SEATS SHALL BE MECHANICALLY RESTRAINED, AND MAY BE INSTALLED ON EITHER THE BODY OR DISC. O-RING SEATS ON VALVE DISCS ARE UNACCEPTABLE. SEATS FOR VALVES 14" DIAMETER AND LARGER SHALL BE FULLY FIELD REPLACEABLE WITHOUT USE OF SPECIAL TOOLS. OPERATORS OF THE ENCLOSED TRAVELING-NUT TYPE SHALL BE PROVIDED UNLESS OTHERWISE INDICATED.
19.7. ALL BURIED VALVES SHALL BE PROVIDED WITH ADJUSTABLE VALVE BOXES APPROXIMATELY 5 INCHES IN DIAMETER WITH A MINIMUM THICKNESS OF 3/16 INCH CAST IRON. BOXES SHALL BE OF SUFFICIENT LENGTH TO OPERATE ALL VALVES BURIED IN THE GROUND, CONSISTING OF BASE, CENTER SECTION, AND TOP SECTION WITH COVER. VALVE BOXES LOCATED IN UNPAVED AREAS SHALL BE SLIP TYPE DESIGN TO PERMIT MOVEMENT OF THE TOP SECTION WITHOUT TRANSMITTING FORCES ONTO THE VALVE BODY. VALVE BOXES CAST INTO CONCRETE OR ASPHALT SURFACINGS SHALL HAVE BRASS COVERS. ALL VALVE BOX COVERS SHALL BE INTERNALLY CHAMFERED TO A MINIMUM OF 1/8 INCH GALVANIZED STEEL. VALVE BOX COVERS SHALL BE CAST WITH THE INSCRIPTION "WATER" OR "RECLAIMED WATER".
20. INSTALL IDENTIFICATION TAPE ALONG ALL DUCTILE IRON PIPE AND PVC PIPE. MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH. APPLY TAPE TO SURFACE OF PIPE, CONTINUOUSLY EXTENDING FROM JOINT TO JOINT. TAPE COLOR AND LETTERING SHALL BE BLACK PRINTING ON BLUE BACKGROUND (WATER MAINS), BLACK PRINTING ON PURPLE BACKGROUND (RECLAIMED WATER MAINS). PLACE TAPE AS FOLLOWS: 2" - 8" PIPE - CENTER ALONG TOP HALF OF PIPE; 10" - 18" PIPE - PLACE ALONG BOTH SIDES OF THE TOP HALF OF PIPE; 20" PIPE AND LARGER - PLACE ON BOTH SIDES OF TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
21. INSTALL WARNING TAPE ALONG ALL PIPELINES, PLACED 2 FEET ABOVE PIPE. TAPE SHALL BE 6-INCH WIDE VINYL CONTINUOUS TAPE. TAPE SHALL BE COLORED BLUE (WATER MAINS) OR PURPLE (RECLAIMED WATER MAINS) WITH BLACK LETTERING, COLORED AND WORDED "CAUTION: WATER MAIN BURIED BELOW", OR "CAUTION: RECLAIMED WATER MAIN BURIED BELOW", APPLICABLE.
22. INSTALL LOCATING WIRE ALONG ALL PVC PIPELINES. WIRE SHALL BE COLOR-CODED 14 GAUGE CONTINUOUS INSULATED WIRE. COLOR CODING SHALL BE SIMILAR TO WARNING TAPE COLORS. INSTALL LOCATOR WIRE ALONG ALL PRESSURIZED PIPELINES 2" AND LARGER. LOOP WIRE INTO ALL VALVE BOXES. LOOPING TO OCCUR EVER 500 FEET MINIMUM. WHERE THERE ARE NO VALVE BOXES TO ALLOW LOOPING, PROVIDE ACCESS BOXES PER FORT PIERCE UTILITY AUTHORITY REQUIREMENTS. CHECK WIRE FOR ELECTRICAL CONTINUITY.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING ASSOCIATED WITH INSTALLATION OF THE WATER DISTRIBUTION SYSTEM.
23.1. ALL SERVICE LINES SHALL BE COMPLETED PRIOR TO TESTING AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS WATER MAINS.
23.2. ALL TEST PROCEDURES SHALL BE APPROVED BY LBVY, INC. AND SHALL BE PERFORMED IN THE PRESENCE OF LBVY, INC. AND THE UTILITY PROVIDER, NOTIFY LBVY, INC. AND THE UTILITY PROVIDER AT LEAST 72 HOURS PRIOR TO ANY INSPECTIONS OR TESTING.
23.3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EQUIPMENT NECESSARY FOR TESTING, AND ALL EQUIPMENT SUCH AS GAUGES, HOSES, AND PUMPS SHALL BE IN GOOD WORKING ORDER WITH NO NOTICEABLE LEAKS. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE OF SCALED TO THE NEAREST 0.1 PSI.
23.4. APPLY HYDROSTATIC TEST PRESSURE OF 150 PSI (WATER MAINS), 200 PSI (FIRE MAINS), OR 100 PSI (RECLAIMED WATER MAINS) FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S SUGGESTED TIME DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.
23.5. APPLY LEAKAGE TEST PRESSURE OF 150 PSI (WATER MAINS), 200 PSI (FIRE MAINS), OR 100 PSI (RECLAIMED WATER MAINS). MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5 % DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE PUMP.
23.5.1. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGED, THREADED, OR WELDED JOINTS OR BURIED NON-PROTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES.
23.6. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED; S = LENGTH OF LINE TESTED (IN FEET); D = NOMINAL INTERNAL DIAMETER (IN INCHES) OF THE PIPE; AND P = THE SQUARE ROOT OF THE ACTUAL PRESSURE IN PSIG ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AUTHORIZED TEST PRESSURE.
24. THE CONTRACTOR SHALL DISINFECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, HYDRANTS PRIOR TO PUTTING INTO SERVICE.
24.1. ALL DISINFECTION WORK SHALL BE IN ACCORDANCE WITH REGULATIONS OF THE STATE HEALTH AUTHORITY. IF ANY REQUIREMENTS OF THIS SECTION ARE IN CONFLICT WITH REQUIREMENTS OF THE AUTHORITY FOR DISINFECTION, THOSE OF THE AUTHORITY SHALL GOVERN.
24.2. THE WATER MAIN DISINFECTION AND BACTERIOLOGICAL SAMPLING AND METHODS OF DISINFECTION FOR ALL WATER CONTAINMENT DEVICES AND PIPING SYSTEMS SHALL CONFORM TO AWWA C651.
24.3. THE SEQUENCE OF TESTING AND DISINFECTION SHALL BE AS FOLLOWS
24.3.1. CONDUCT PRESSURE AND LEAKAGE TESTING;
24.3.2. PERFORM FLUSHING PER UTILITY REQUIREMENTS AND AWWA C651
24.3.3. DISINFECT THE WATER MAIN, INCLUDING VALVES AND FITTINGS;
24.3.4. FLUSH AFTER DISINFECTION.
25. ANY AND ALL APPARENT LEAKS DISCOVERED WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER SHALL BE LOCATED AND REPAIRED BY THE CONTRACTOR, REGARDLESS OF THE TOTAL LINE LEAKAGE RATE.

SANITARY SEWER NOTES:

- 1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE ON-SITE SEWER SYSTEM SHOWN IN THESE PLANS IS FAMILY DOLLAR. THE CONTRACTOR SHALL MEET ALL THE REQUIRED STANDARDS AND SPECIFICATIONS OF THE OPERATING ENTITY.
2. CONNECTION TO EXISTING SANITARY SEWER SYSTEMS SHALL BE PER THE REQUIREMENTS OF THE WASTEWATER UTILITY PROVIDER AND/OR OWNER OF SUCH SEWER SYSTEM. THERE SHALL BE NO SERVICE INTERRUPTIONS CAUSED BY THE INSTALLATION OF CONNECTIONS TO EXISTING SEWERS. THE CONTRACTOR SHALL PROVIDE BYPASS ROUTING/PUMPING OR SHALL COLLECT AND DISPOSAL OF WASTE IN A LEGAL MANNER AS NECESSARY TO ACCOMMODATE CONSTRUCTION.
3. A MINIMUM OF 36" OF COVER SHALL BE PROVIDED OVER ALL SANITARY LINES.
4. PVC SEWER PIPE SHALL BE TYPE PSM CONFORMING TO ASTM D3034 AND SHALL BE SDR 35 FOR 4" THRU 15" AND ASTM F 679, T-1 WALL THICKNESS, FOR PIPE 16" THRU 24".
5. JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212 WITH THE USE OF RUBBER GASKETS CONFORMING TO ASTM F447.
6. SEWER FITTINGS SHALL MEET THE SAME REQUIREMENTS AS THE PIPE. CONTRACTOR SHALL PROVIDE ADAPTERS AS REQUIRED TO JOIN PVC PIPE TO FITTINGS, PIPE, AND EQUIPMENT OF OTHER MATERIALS AND SHALL MEET THE MANUFACTURER'S RECOMMENDATIONS FOR JOINING MATERIAL.
7. SEWER PIPE SHALL BE GREEN IN COLOR AND STENCILED "SEWER LINE". LETTERING SHALL BE 2" LETTERING ON TWO SIDES OF THE PIPE AND AT LEAST THREE AREAS PER PIPE SECTION.

- WARNING TAPE SHALL BE INSTALLED ALONG ALL SEWER PIPELINES. TAPE SHALL BE 6" WIDE VINYL CONTINUOUS TAPE, GREEN IN COLOR WITH BLACK LETTERING WHICH READS "CAUTION: SEWER BURIED BELOW". INSTALL 2" ABOVE PIPE AND A MINIMUM OF 1" BELOW PROPOSED GRADE.
9. ADHESIVE IDENTIFICATION TAPE SHALL BE INSTALLED ALONG ALL SEWER PIPELINES. TAPE SHALL BE AT A MINIMUM THICKNESS OF 4 MILS, WIDTH OF 6", 1" LETTER HEIGHT. TAPE COLOR SHALL BE GREEN WITH BLACK LETTERING AND SHALL READ "SEWER LINE". PLACE TAPE AS FOLLOWS: 2" - 8" PIPE - CENTER ALONG TOP HALF OF PIPE; 10" - 18" PIPE - PLACE ALONG BOTH SIDES OF THE TOP HALF OF PIPE; 20" PIPE AND LARGER - PLACE ON BOTH SIDES OF TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING ASSOCIATED WITH INSTALLATION OF THE SANITARY SEWER SYSTEM.
10.1. ALL LATERALS SHALL BE COMPLETED PRIOR TO TESTING AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS SEWER MAINS.
10.2. CONTRACTOR SHALL CLEAN ALL LINES AND MANHOLES PRIOR TO TESTING AND/OR INSPECTIONS.
10.3. ALL TEST PROCEDURES SHALL BE APPROVED BY LBVY, INC. AND SHALL BE PERFORMED IN THE PRESENCE OF LBVY, INC. AND THE UTILITY PROVIDER, NOTIFY LBVY, INC. AND THE UTILITY PROVIDER AT LEAST 72 HOURS PRIOR TO ANY INSPECTIONS OR TESTING.
10.4. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EQUIPMENT NECESSARY FOR TESTING, AND ALL EQUIPMENT SUCH AS GAUGES, HOSES, AND PUMPS SHALL BE IN GOOD WORKING ORDER WITH NO NOTICEABLE LEAKS. GAUGES USED FOR LOW PRESSURE AIR TESTING SHALL BE TO THE NEAREST 0.1 PSI.
10.5. CONDUCT LOW PRESSURE AIR TESTING (4.0 PSI INITIAL PRESSURE) OF INSTALLED SEWER PIPING IN ACCORDANCE WITH ASTM F1417. MAXIMUM ALLOWABLE LEAKAGE IS 0.0016 CFM PER SQUARE FOOT INTERNAL SURFACE BEING TESTED. ALLOWABLE AIR PRESSURE DROP DURING THE TEST IS 0.5 PSIG.
10.5.1. MINIMUM REQUIRED TEST DURATION IS:
10.5.1.1. 4" PIPE = 1 MINUTE 53 SECONDS
10.5.1.2. 6" PIPE = 2 MINUTES 50 SECONDS OR 0.427 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER
10.5.1.3. 8" PIPE = 3 MINUTES 47 SECONDS OR 0.760 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER
10.5.1.4. 10" PIPE = 4 MINUTES 43 SECONDS OR 1.187 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER
10.5.1.5. 12" PIPE = 5 MINUTES 40 SECONDS OR 1.709 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER
10.6. CONDUCT LEAKAGE TESTING OF MANHOLES, PLUG INVERTS AND FILL MANHOLE WITH WATER, ALLOWABLE WATER DROP IN MANHOLE TO BE FIELD DETERMINED BY THE UTILITY PROVIDER. TEST DURATION IS 1 HOUR.
10.7. CONDUCT DEFLECTION TESTING OF PIPES AFTER THE FINAL BACKFILL HAS BEEN COMPACTED AND IN-PLACE AT LEAST 30 DAYS. MAXIMUM ALLOWABLE PIPE DEFLECTION IS 5% MEASURED BY MANUALLY PULLING A MANDREL THROUGH THE PIPE. ANY FAILING PIPE SHALL BE REMOVED AND CORRECTED AND RE-TESTED FOR LEAKAGE.



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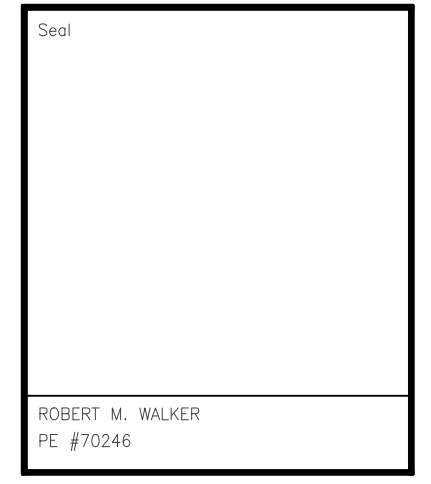
LBVY Project Number
402-14-016

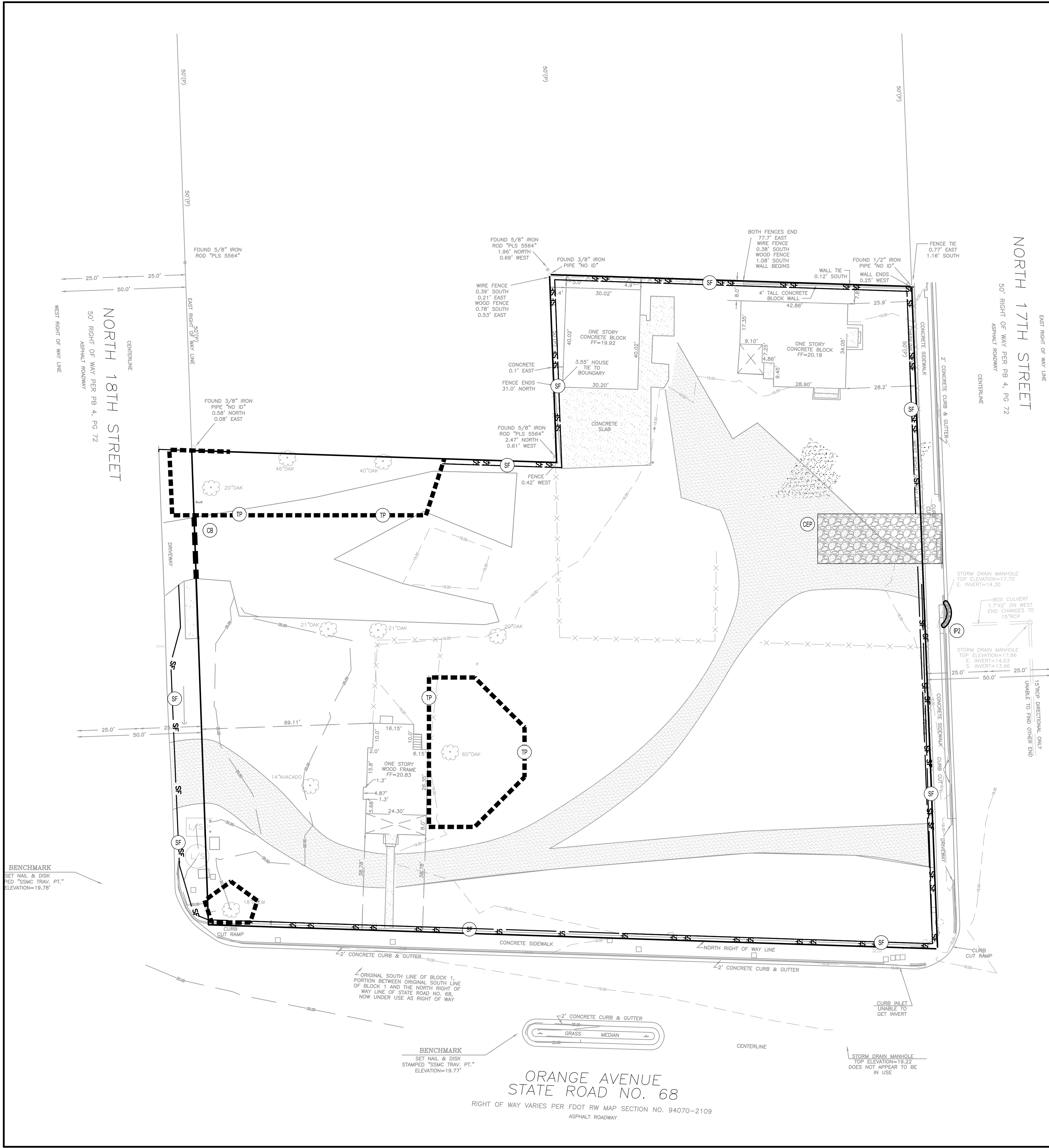
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FAMILY DOLLAR LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950
Project Name, Sheet Title, Date, Checked By, Drawn By, Sheet Number, Sequence, Total

GENERAL NOTES CONTINUED

Date: SEPTEMBER 2014
Checked By: RMW, Drawn By: MKA
Sheet Number: C-4, Sequence: 4, Total: 22





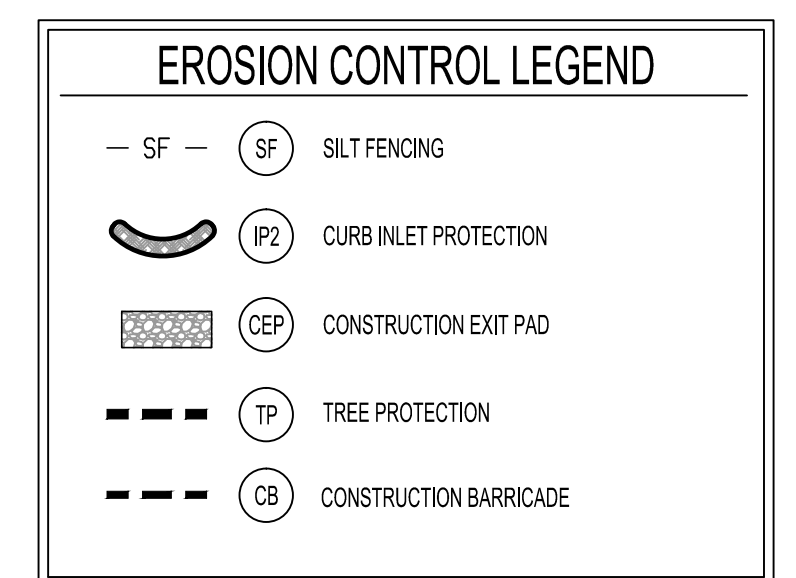
SEQUENCE OF CONSTRUCTION:
 AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED AND MAINTAINED BY THE CONTRACTOR, THE SITE CONTRACTOR SHALL PREPARE A DETAILED CONSTRUCTION SCHEDULE. THIS SCHEDULE SHALL INCLUDE THE DATE GRADING WILL BEGIN, THE EXPECTED DATE OF FINAL STABILIZATION, AND THE SCHEDULE FOR INSTALLATION AND MAINTENANCE OF SPECIFIC CONTROL MEASURES AS RELATED TO THE SCHEDULE OF CONSTRUCTION ACTIVITIES.

THE SWPPP SHALL BE AMENDED WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS TO WETLANDS, SURFACE WATERS OF THE STATE, OR A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MSS). THE SWPPP ALSO SHALL BE AMENDED IF IT PROVES TO BE INEFFECTIVE AND/OR TO INDICATE ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT ANY MEASURE OF THE SWPPP.

IN CASE OF DISCREPANCIES, SEQUENCING OUTLINED IN THE SWPPP SHALL PREVAIL.

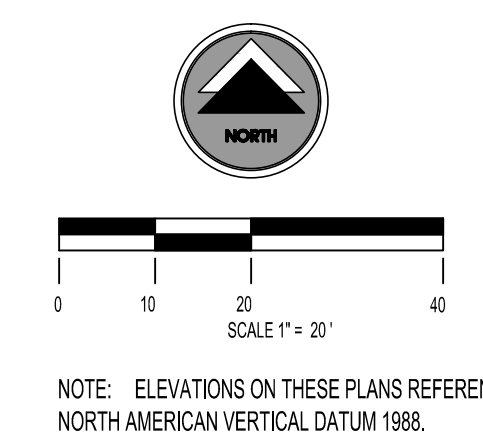
1. INSTALL INLET EROSION PROTECTION ON INLETS TO REMAIN, AS SHOWN ON THIS PLAN.
2. INSTALL SILT FENCE, TURBIDITY BARRIERS, AND OTHER PERIMETER CONTROLS.
3. INSTALL STABILIZED CONSTRUCTION EXIT ENTRANCES.
4. CONSTRUCT TEMPORARY SEDIMENT BASIN.
5. PREPARE AND CLEARLY DELINEATE POLLUTION SOURCE CONTROL AREA SUCH AS MATERIALS AND EQUIPMENT STORAGE, STOCKPILES, TEMPORARY PARKING, VEHICLE WASH DOWN, CONCRETE WASHOUT, EQUIPMENT MAINTENANCE/REPAIR, WASTE COLLECTION AND DISPOSAL, FUEL STORAGE. THE LOCATIONS OF THESE AREAS SHOULD BE DENOTED ON THE SITE MAP AND UPDATED THROUGHOUT THE PROJECT CONSTRUCTION.
6. CLEAR AND GRUB THE SITE. WHEN APPROPRIATE, CLEARING AND GRUBBING SHOULD OCCUR IN STAGES IN ORDER TO MAINTAIN NATIVE VEGETATION AND REDUCE EROSION.
7. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
8. BEGIN SITE GRADING. AS CLEARING AND GRADING PROGRESS, TEMPORARY SEEDING AND MULCHING SHOULD FOLLOW IMMEDIATELY FOR ALL AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF 7 DAYS OR MORE.
9. INSTALL UNDERGROUND UTILITIES SUCH AS WATER LINES, WASTEWATER LINES, POWER UTILITIES, STORM SEWERS, AND UNDERDRAINS. INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED. INSTALL CURB AND GUTTER.
10. AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZE AS THEY ARE BROUGHT TO FINAL GRADE.
11. PREPARE SITE FOR PAVING.
12. PAVE SITE. INSTALL INLET EROSION PROTECTION ON INLETS AS THEY ARE CONSTRUCTED.
13. FINALIZE GRADING AND PERMANENTLY STABILIZE ALL AREAS. COORDINATE SODDING, AND PERMANENT VEGETATION WITH LANDSCAPE PLAN.
14. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ONLY WHEN CONSTRUCTION IS COMPLETED AND SITE IS COMPLETELY STABILIZED.

- SPECIAL NOTES:
1. SEE SHEET C4 FOR APPLICABLE EROSION CONTROL GENERAL NOTES.
 2. SEE LANDSCAPE PLANS FOR PERMANENT PLANTING INFORMATION.
 3. SEE LANDSCAPE PLANS FOR IRRIGATION INFORMATION.
 4. SEE SHEET C6 FOR APPLICABLE EROSION CONTROL DETAILS.



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NOTE: ELEVATIONS ON THESE PLANS REFERENCE NORTH AMERICAN VERTICAL DATUM 1988.

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Revision No.	Date	PER CITY OF FORT PIERCE COMMENT
1	10/2/2014	

FAMILY DOLLAR
LA CABANA, LLC
 1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title
EROSION CONTROL PLAN PHASE 1

Date
 SEPTEMBER 2014

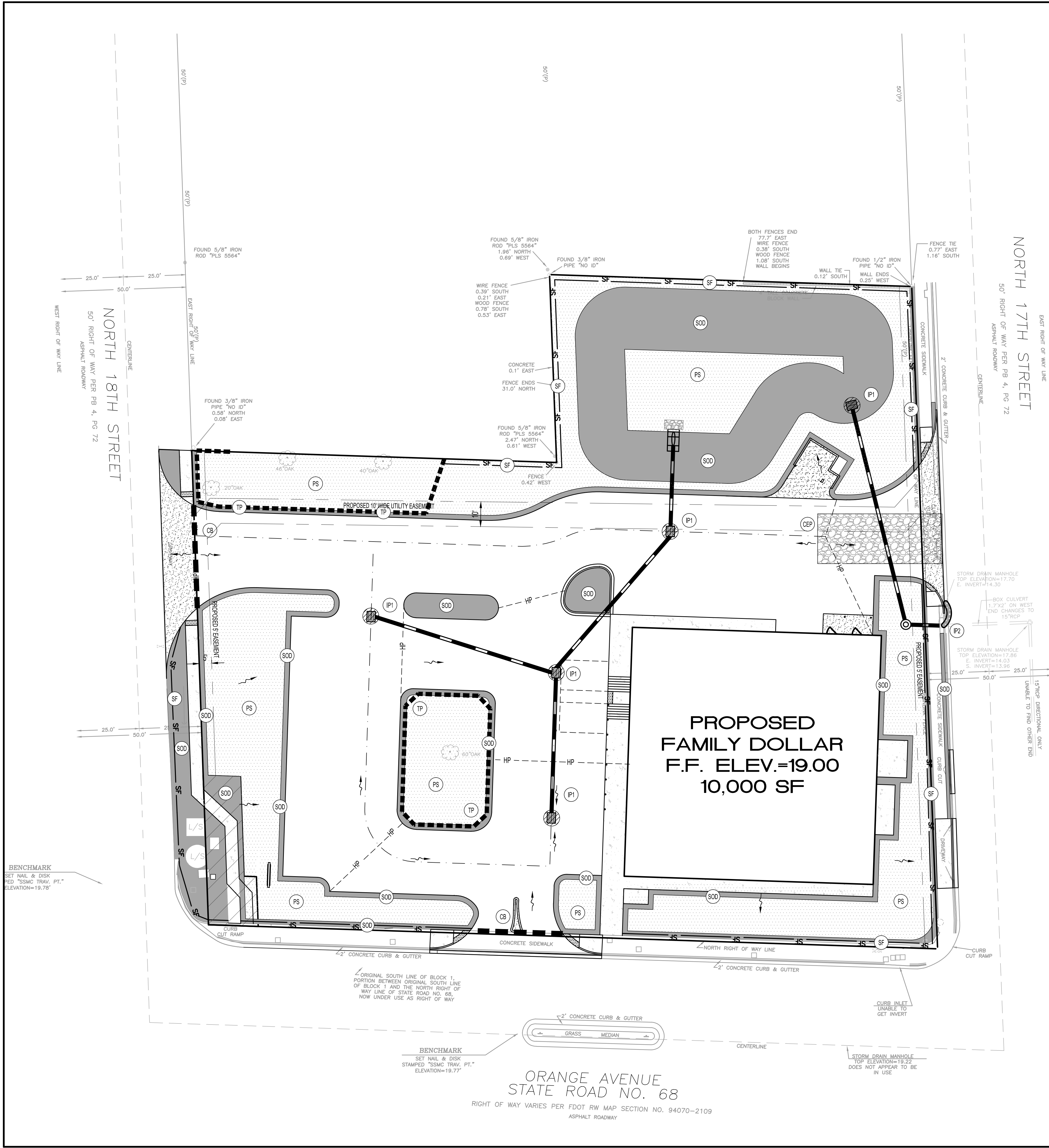
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 RMW

Drawn By
 MKA

Sheet Number
C-5.0

Sequence
 5

Total
 22



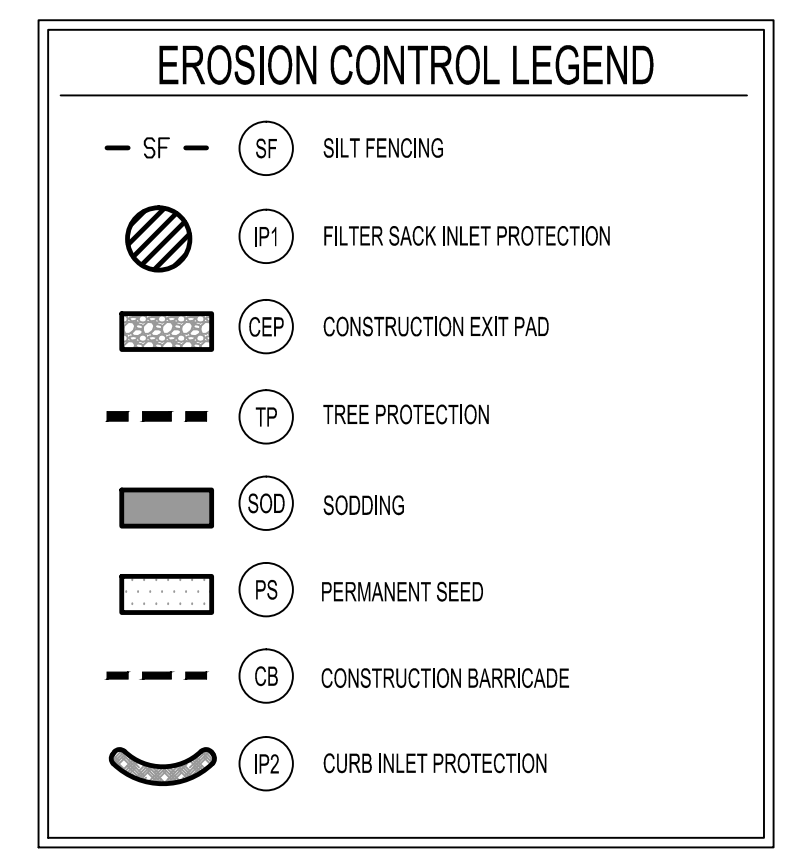
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3. INSTALL STABILIZED CONSTRUCTION EXIT ENTRANCES.
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- SPECIAL NOTES:
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REVISION	DATE	DESCRIPTION
1	10/12/2014	PER CITY OF FORT PIERCE COMMENT

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

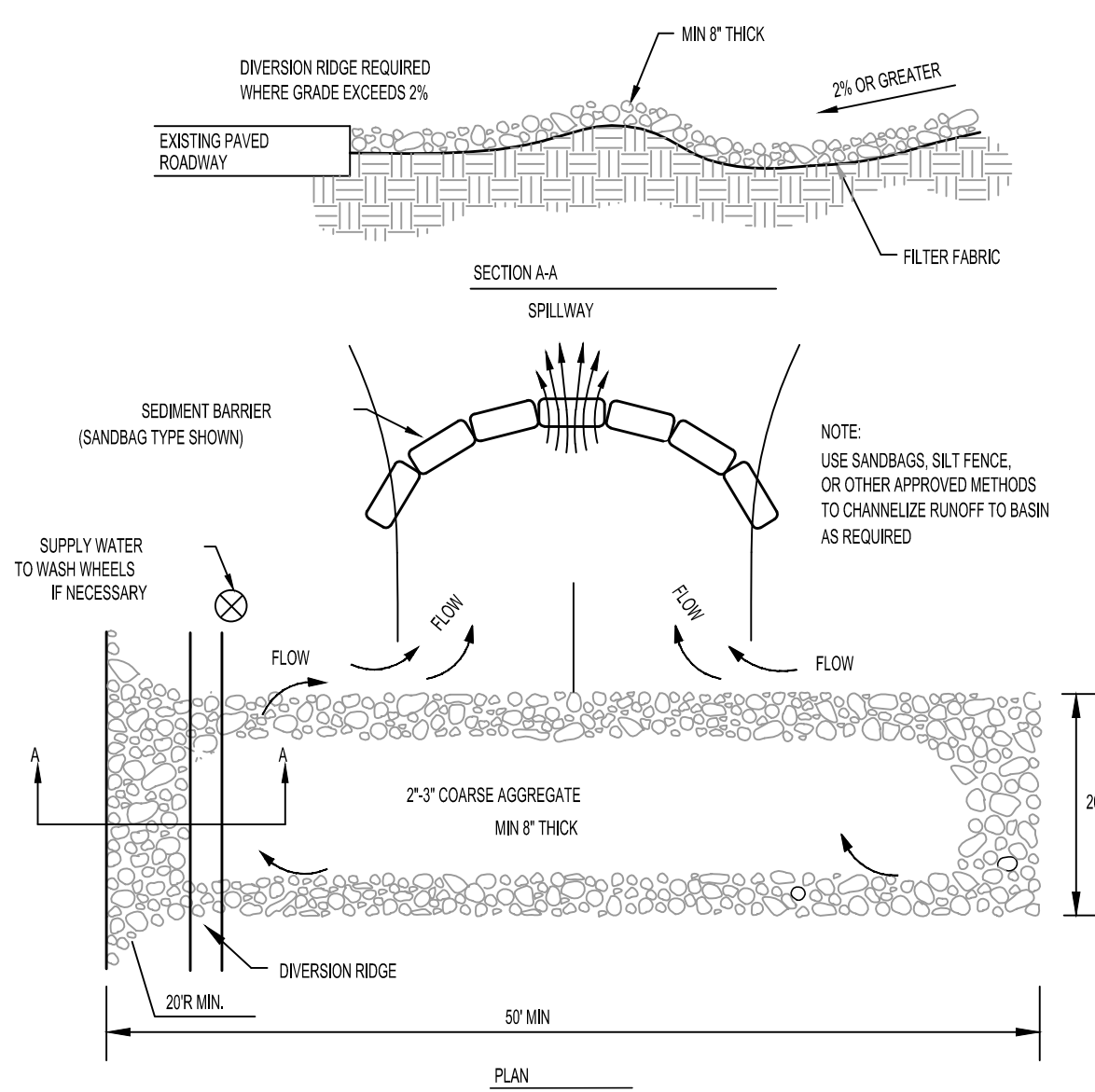
Sheet Title
EROSION CONTROL PLAN PHASE 2

Date	SEPTEMBER 2014
Checked By	RMW
Drawn By	MKA
Sheet Number	C-51
Sequence	6
Total	22

Scale
 Robert M. Walker
 PE #70246

NOTE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT

1. TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO
2. PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED
3. WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

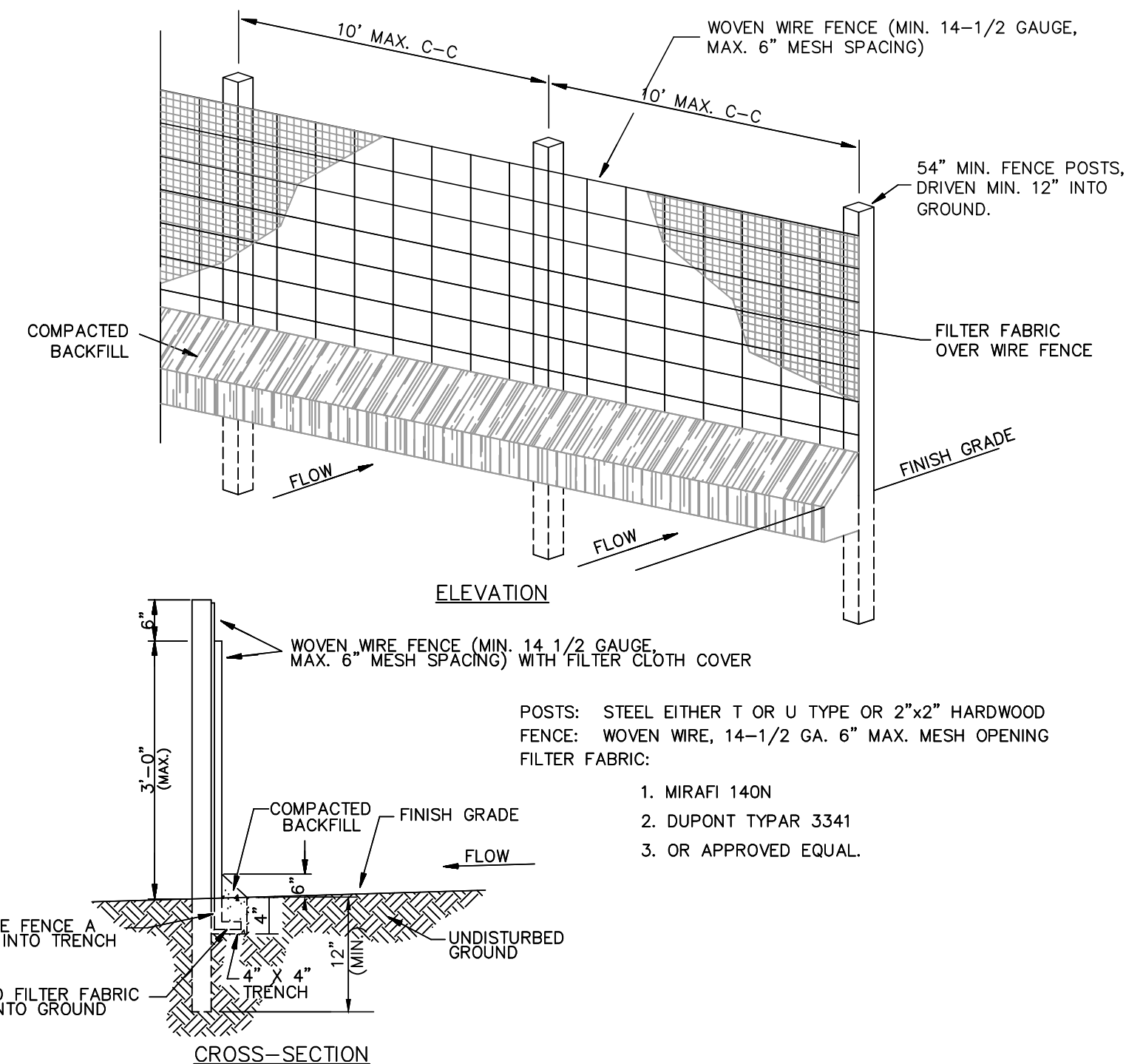


CEP Construction Exit Pad
N.T.S.

SF

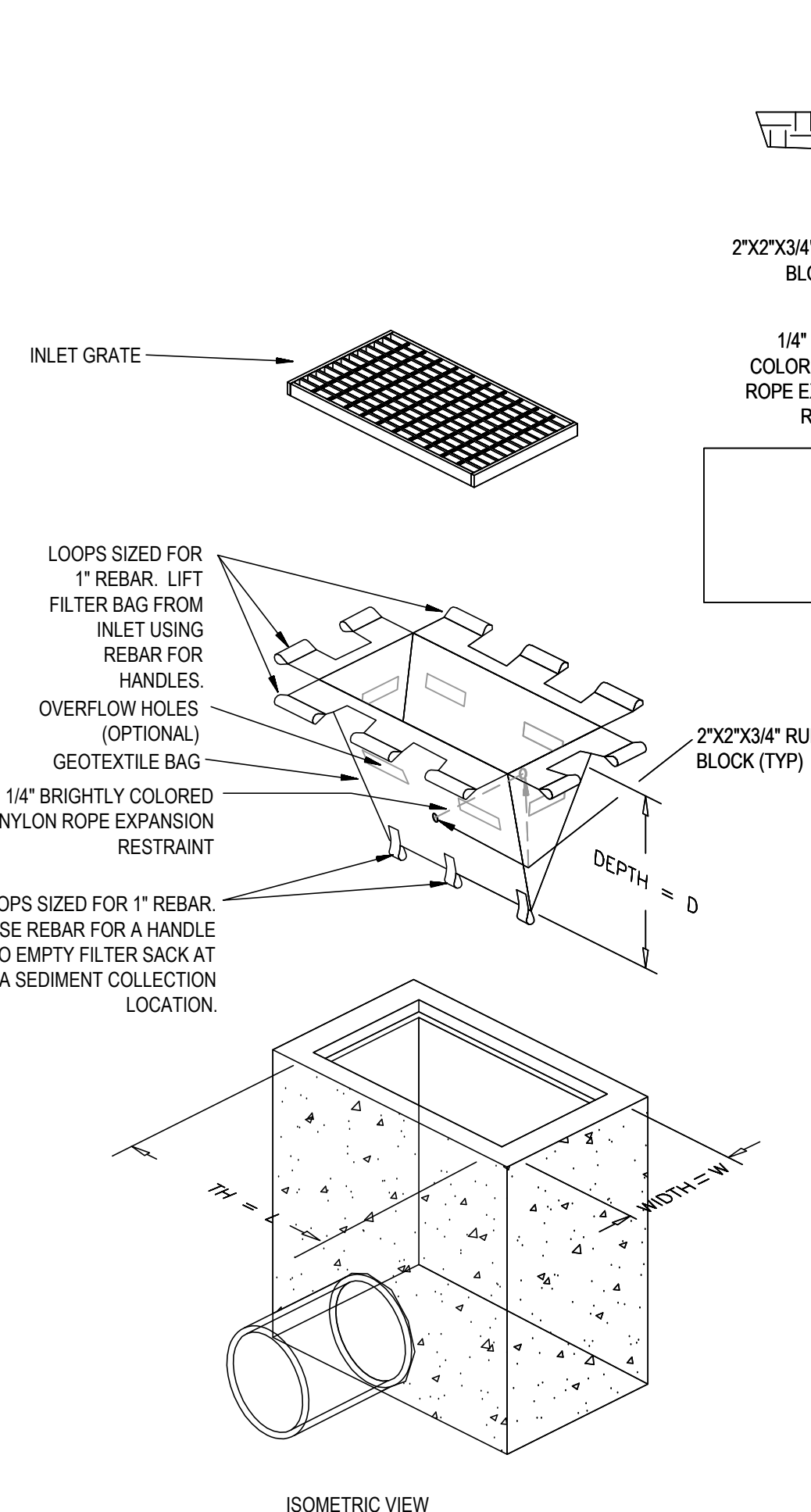
Sedimentation/Silt Fence With Wire Support

N.T.S.



- POSTS: STEEL EITHER T OR U TYPE OR 2"x2" HARDWOOD
FENCE: WOVEN WIRE, 14-1/2 GA. 6" MAX. MESH OPENING
FILTER FABRIC:
1. MIRAFI 140N
 2. DUPONT TYPAR 3341
 3. OR APPROVED EQUAL

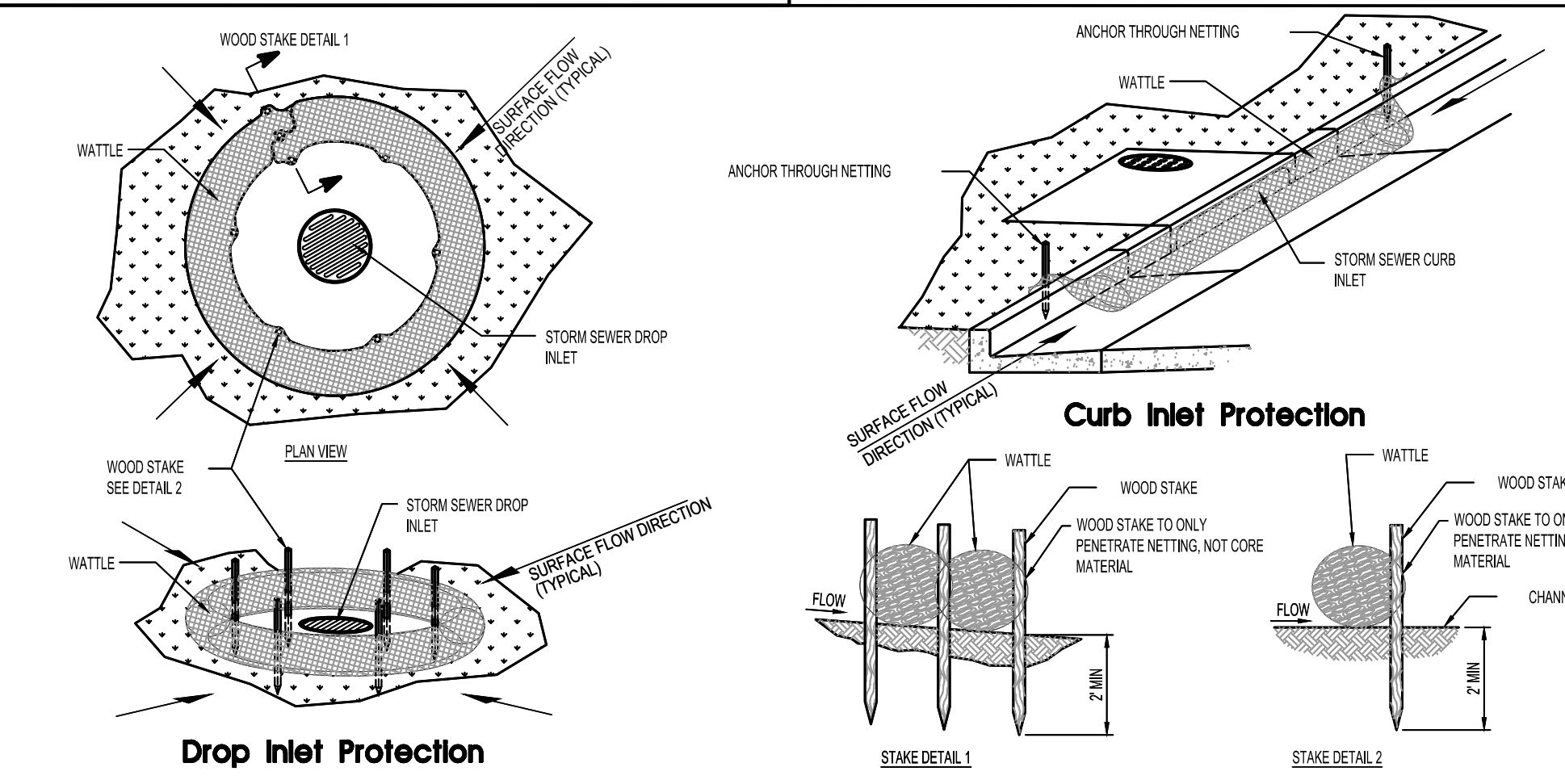
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF THE SILT FENCE.
5. THE SILT FENCE WILL NOT BE TRENCHED/DUG IN WITHIN THE DRIPLINES OF THE PRESERVED TREES.



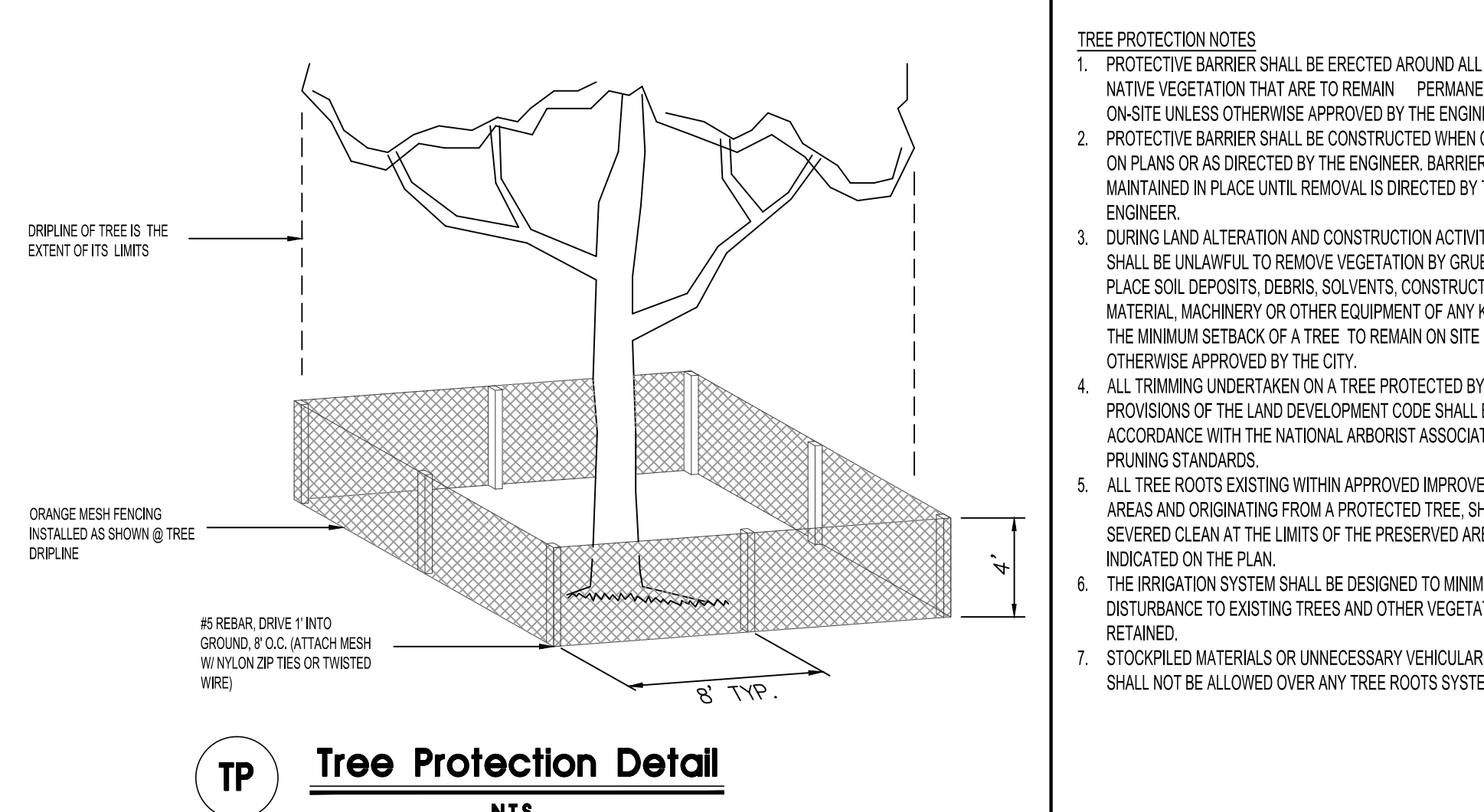
IP1 Filter Sack Inlet Protection
N.T.S.

DO NOT USE ON ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



IP2 Curb Inlet Protection
N.T.S.



TP Tree Protection Detail
N.T.S.

- TREE PROTECTION NOTES
1. PROTECTIVE BARRIER SHALL BE ERECTED AROUND ALL TREES AND NATIVE VEGETATION THAT ARE TO REMAIN PERMANENTLY ON-SITE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 2. PROTECTIVE BARRIER SHALL BE CONSTRUCTED WHEN CALLED FOR ON PLANS OR AS DIRECTED BY THE ENGINEER. BARRIERS SHALL BE MAINTAINED IN PLACE UNTIL REMOVAL IS DIRECTED BY THE ENGINEER.
 3. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE MINIMUM SETBACK OF A TREE TO REMAIN ON SITE UNLESS OTHERWISE APPROVED BY THE CITY.
 4. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE NATIONAL ARBORIST ASSOCIATION (NAA) PRUNING STANDARDS.
 5. ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA INDICATED ON THE PLAN.
 6. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO MINIMIZE ROOT DISTURBANCE TO EXISTING TREES AND OTHER VEGETATION TO BE RETAINED.
 7. STOCKPILED MATERIALS OR UNNECESSARY VEHICULAR TRAFFIC SHALL NOT BE ALLOWED OVER ANY TREE ROOTS SYSTEM.

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Civil and Structural Engineers
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LBYD Project Number
402-14-016

Revision No.	Date	PER CITY OF FORT PIERCE COMMENT
1	10/12/2014	

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title
EROSION CONTROL DETAILS

Date
SEPTEMBER 2014

Checked By
RMW

Drawn By
MKA

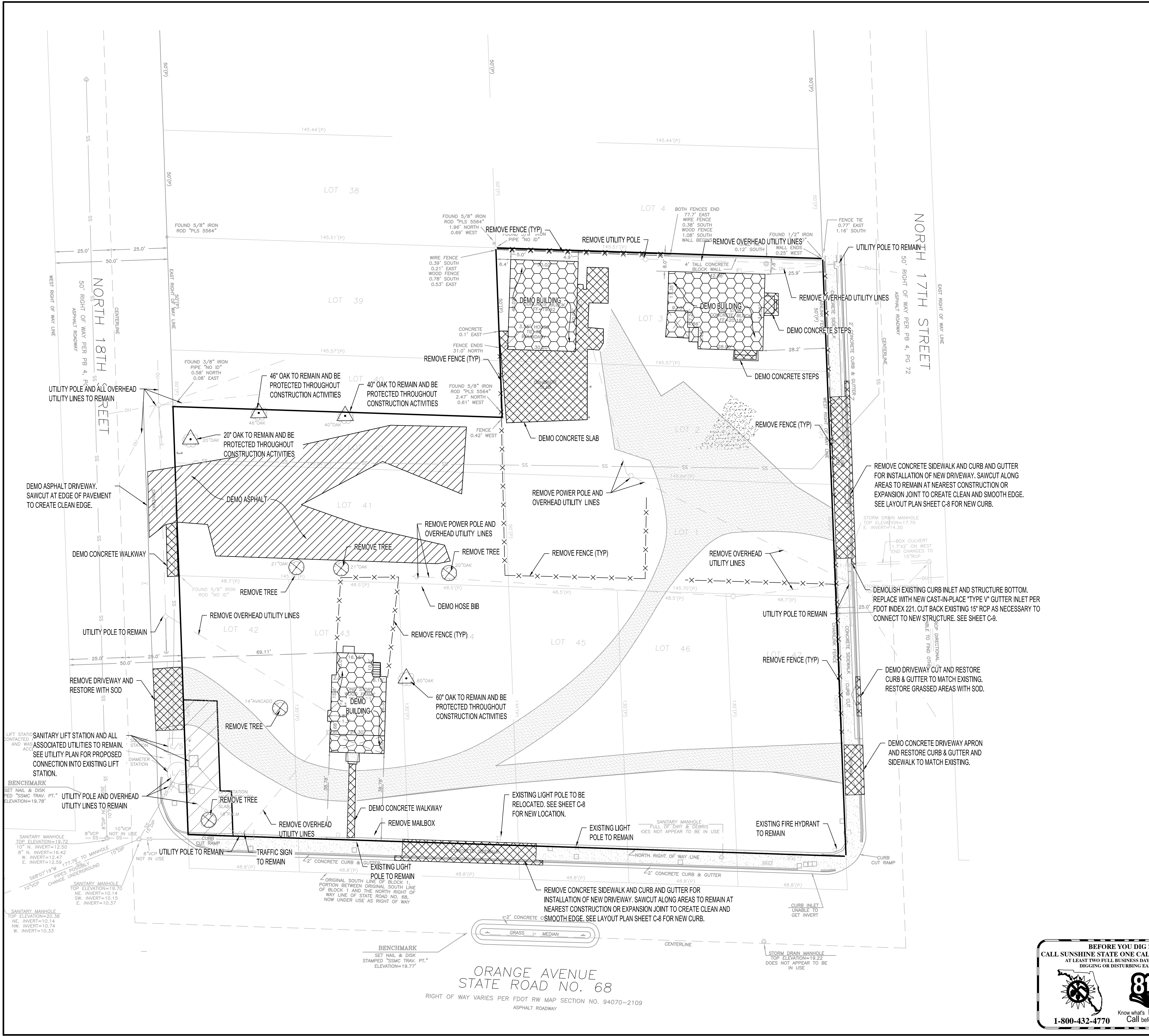
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C-6

Sequence
7

Total
22

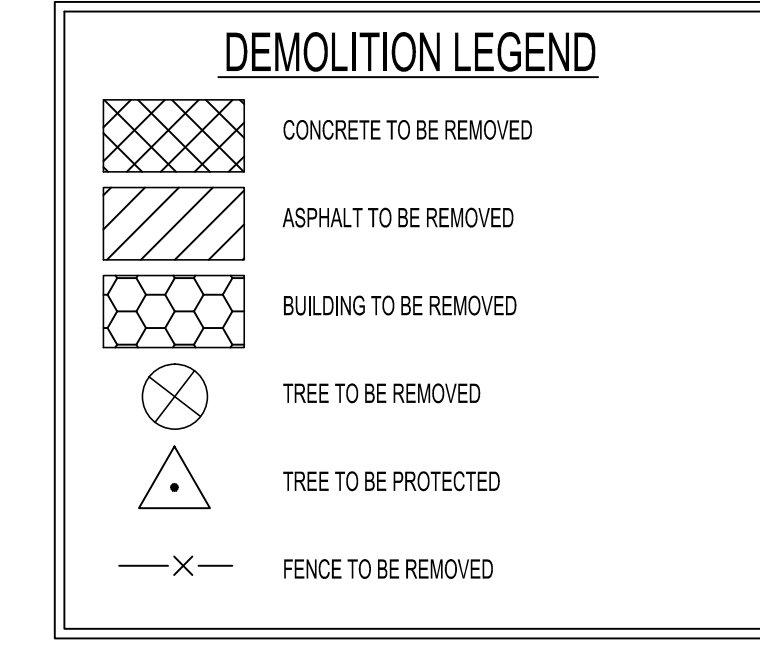
Scale

ROBERT M. WALKER
PE #70246



SITE DEMOLITION NOTES:

1. ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND OTHER UTILITIES MAY EXIST. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL SUNSHINE811 PRIOR TO ANY DEMOLITION, DIGGING, OR CONSTRUCTION ACTIVITIES. CONTRACTOR MUST HAVE EXISTING UTILITIES LOCATED BY UNDERGROUND LINE LOCATORS AND FIELD VERIFIED BY ONSITE PERSONNEL PRIOR TO ORDERING MATERIALS OR COMMENCING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO LBVD, INC.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND THE UTILITY PROVIDER PRIOR TO THE DISCONNECTING OR REMOVAL OF ANY UTILITY SERVICE. ALL UTILITIES TO BE REMOVED ARE TO BE CAPPED OR PLUGGED OR TERMINATED ACCORDING TO THE UTILITY OWNERS' REQUIREMENTS.
3. EXISTING UTILITIES TO REMAIN MAY BE LOCATED WITHIN PROPOSED DEMOLITION AREAS. CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING IN THESE AREAS TO ENSURE NO UTILITY SERVICE INTERRUPTIONS TO FACILITIES THAT REMAIN OR TO ADJACENT PROPERTIES.
4. REFER TO SITE GRADING AND UTILITY PLANS FOR ADDITIONAL NOTES REGARDING PROPOSED UTILITY AND DRAINAGE INSTALLATION AND REMOVAL.
5. UNLESS SPECIFICALLY NOTED "TO REMAIN", ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REMOVED OR RELOCATED. NOTIFY LBVD INC. OF ANY DISCREPANCIES PRIOR TO DEMOLITION ACTIVITIES.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PROPERTY CORNERS AND SURVEY BENCHMARKS AND TO ACCURATELY REPLACE OR RESTORE THEM IF DAMAGED OR DISTURBED.
7. IT SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE PROTECTION OF ADJACENT PROPERTIES AND EXISTING ON OR OFF SITE STRUCTURES, UTILITIES, AND OTHER IMPROVEMENTS TO REMAIN, AND IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
8. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO ANY DEMOLITION OF ITEMS TO BE SALVAGED, RECYCLED, AND REUSED. ITEMS TO BE RELOCATED, SALVAGED, OR REUSED SHALL BE REMOVED WITH EXTREME CARE AND CAUTION TO PREVENT DAMAGE. ALL SALVAGED ITEMS AND MATERIALS SHALL BE THE PROPERTY OF THE OWNER.
9. ALL DEMOLITION AND CONSTRUCTION DEBRIS SHALL BE TRANSPORTED OFF SITE AND DISPOSED OF AT LEAST WEEKLY IN A LEGAL AND APPROVED MANNER.
10. SCHEDULING OF DEMOLITION AND CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
11. LIMITS OF LAND CLEARING SHALL BE 5' OUTSIDE OF ALL AREAS TO BE GRADED OR NOT BEYOND THE PROPERTY LINES, WHICHEVER IS LESS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST, WATER, DEBRIS OR OTHER POSSIBLE POLLUTANTS CAUSED BY DEMOLITION AND CONSTRUCTION ACTIVITIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING ANY HAZARDOUS MATERIALS SUCH AS LEAD OR ASBESTOS WHICH ARE ENCOUNTERED DURING DEMOLITIONS OR CONSTRUCTION.
14. ALL EXISTING PAVING, SIDEWALKS, CURBS, HARDSCAPES, ETC. SHALL BE SAW CUT AT THE LIMITS OF REMOVAL IN ORDER TO PROVIDE A CLEAN EDGE. EXISTING PAVING SHALL BE MILLED BACK AT EDGE A MINIMUM OF 8" TO ENSURE SMOOTH TRANSITION.
15. REFER TO LAYOUT AND LANDSCAPE PLANS FOR ADDITIONAL INFORMATION RELATING TO PAVING, SIDEWALKS, CURBS, HARDSCAPES, ETC.
16. EXISTING DRAINAGE PATTERNS FROM OFF-SITE SHALL BE MAINTAINED THROUGHOUT DEMOLITION AND CONSTRUCTION ACTIVITIES.



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LBVD Project Number
402-14-016

Revision No.	Date	PER CITY OF FORT PIERCE COMMENT
1	10/2/2014	

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title	DEMOLITION PLAN
Date	SEPTEMBER 2014
Checked By	RMW
Drawn By	MKA
Sheet Number	C-7
Sequence	6
Total	22

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AT LEAST TWO FULL BUSINESS DAYS BEFORE
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SCALE 1" = 20'

NOTE: ELEVATIONS ON THESE PLANS REFERENCE NORTH AMERICAN VERTICAL DATUM 1988.

ORANGE AVENUE
STATE ROAD NO. 68
RIGHT OF WAY VARIES PER FDOT RW MAP SECTION NO. 94070-2109
ASPHALT ROADWAY



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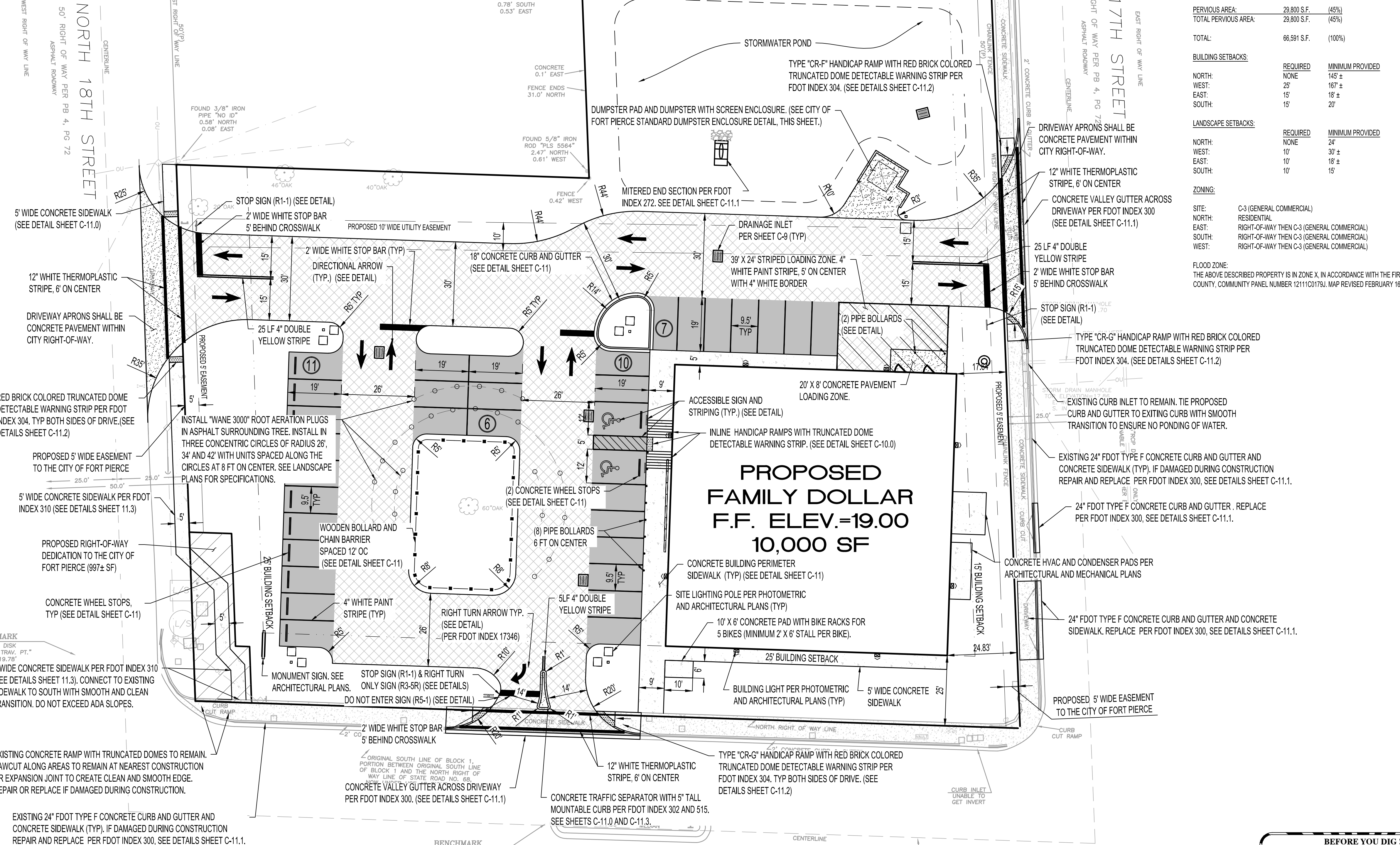
Revision No.	1
Date	10/2/2014
Drawn By	
Checked By	
Project Name	PER CITY OF FORT PIERCE COMMENT
Revision	
City	
State	
County	
City of Fort Pierce Comment	

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Project Name	SITE LAYOUT PLAN
Sheet Title	
Date	SEPTEMBER 2014
Checked By	RMW
Drawn By	MKA
Sheet Number	C-8
Sequence	9
Total	22

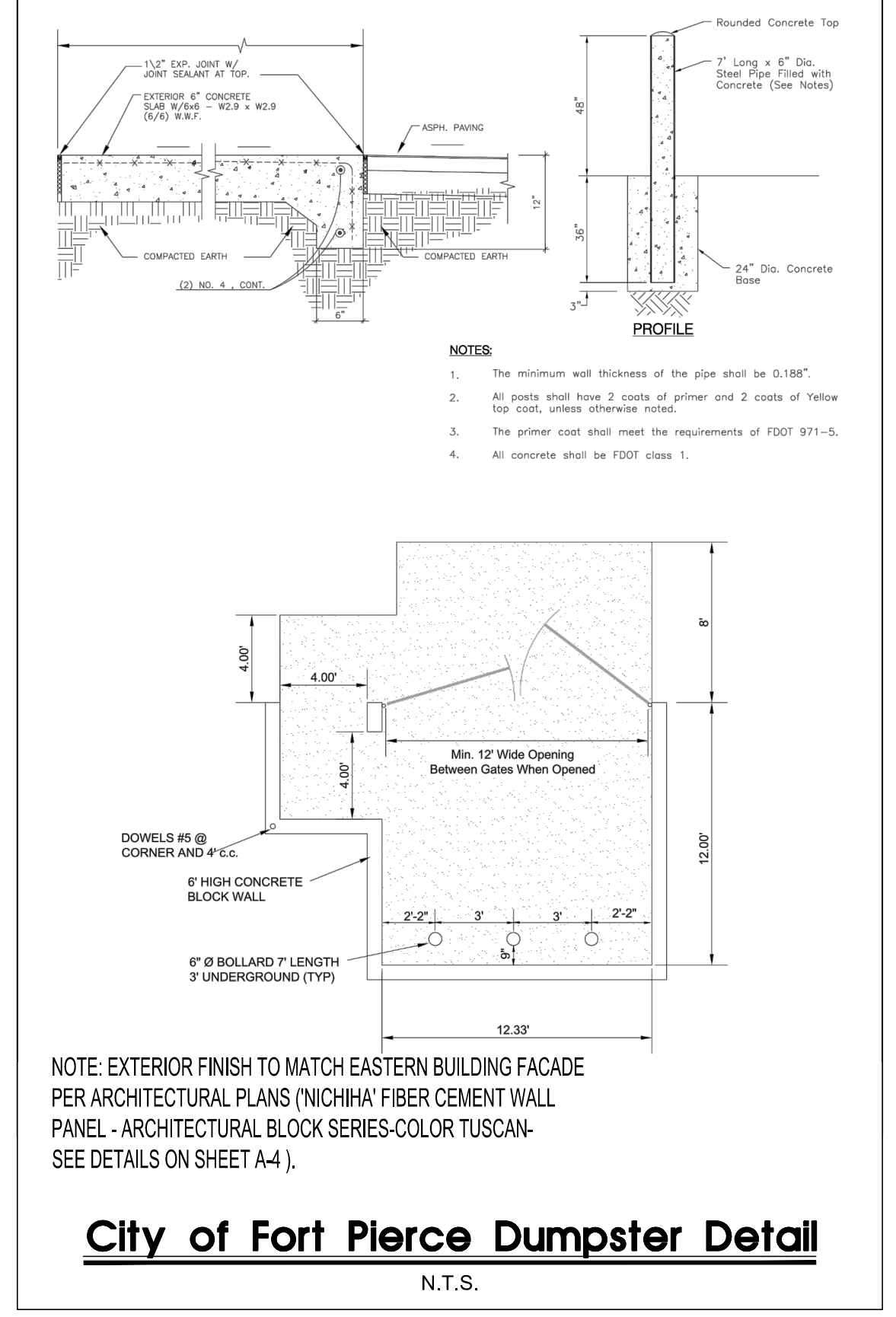
PARKING INFORMATION	
TOTAL SPACES REQUIRED	44
TOTAL SPACES PROVIDED	34
BYCYCLE PARKING	5
UTILITY INFORMATION	
UTILITY	LOCATION
SANITARY SEWER	LIFT STATION AT NE CORNER OF ORANGE AVE. & N. 18TH ST.
WATER	SERVICE LINE FROM ORANGE AVENUE
RECLAIM WATER	NOT APPLICABLE
STORM SEWER	INLET ALONG WESTERN RIGHT-OF-WAY OF N. 17TH ST.
ELECTRIC	OVERHEAD LINES ON WESTERN RIGHT-OF-WAY OF N. 17TH ST.
GAS	NOT APPLICABLE

SITE LAYOUT LEGEND	
	STANDARD DUTY ASPHALT PAVING
	HEAVY DUTY ASPHALT PAVING
	CONCRETE PAVING
	CONCRETE SIDEWALKS
	PARKING SPACE COUNT
	WHEELSTOP
	SINGLE LIGHTPOLE
	DOUBLE LIGHTPOLE
	TRAFFIC SIGN
	MONUMENT SIGN



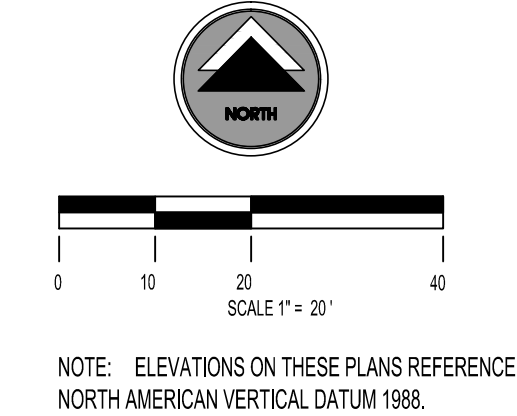
SITE DATA:	
STATEMENT OF INTENT:	THE OWNER PROPOSES TO DEMOLISH EXISTING ON-SITE IMPROVEMENTS AND TO CONSTRUCT A NEW 10,000 S.F. FAMILY DOLLAR RETAIL STORE AND THE REQUIRED SITE SUPPORT ELEMENTS TO STRUCTURE IT.
SITE ADDRESS:	1712 ORANGE AVENUE, FORT PIERCE, FL 34950
PARCEL I.D. NUMBERS:	240960600320004, 240960600310007, 240960600340008, 240960600350005, 240960600010008, 240960600300000
SITE TOTAL AREA:	1.53 ACRES ±
EXISTING LAND USE:	RESIDENTIAL
PROPOSED LAND USE:	COMMERCIAL RETAIL
MAX. ALLOWED BUILDING HEIGHT:	65'
EXISTING AREA CALCULATIONS:	
BUILDING AREA:	3,489 S.F. (5%)
PAVED AREA:	17,582 S.F. (27%)
TOTAL IMPERVIOUS AREA:	21,051 S.F. (32%)
PERVIOUS AREA:	45,540 S.F. (88%)
TOTAL PERVIOUS AREA:	45,540 S.F. (88%)
TOTAL:	66,591 S.F. (100%)
PROPOSED AREA CALCULATIONS:	
BUILDING AREA:	10,000 S.F. (15%)
PAVED AREA:	26,791 S.F. (40%)
TOTAL IMPERVIOUS AREA:	36,791 S.F. (55%)
PERVIOUS AREA:	29,800 S.F. (45%)
TOTAL PERVIOUS AREA:	29,800 S.F. (45%)
TOTAL:	66,591 S.F. (100%)
BUILDING SETBACKS:	
NORTH:	NONE 145' ±
WEST:	25' 167' ±
EAST:	15' 18' ±
SOUTH:	15' 20'
LANDSCAPE SETBACKS:	
NORTH:	NONE 24'
WEST:	10' 30' ±
EAST:	10' 18' ±
SOUTH:	10' 15'
ZONING:	
SITE:	C-3 (GENERAL COMMERCIAL)
NORTH:	RESIDENTIAL
EAST:	RIGHT-OF-WAY THEN C-3 (GENERAL COMMERCIAL)
SOUTH:	RIGHT-OF-WAY THEN C-3 (GENERAL COMMERCIAL)
WEST:	RIGHT-OF-WAY THEN C-3 (GENERAL COMMERCIAL)
FLOOD ZONE:	
THE ABOVE DESCRIBED PROPERTY IS IN ZONE X, IN ACCORDANCE WITH THE FRM MAP OF ST. LUCIE COUNTY, COMMUNITY PANEL NUMBER 12111031701, MAP REVISED FEBRUARY 16, 2012.	

- LAYOUT NOTES:**
- ALL CONSTRUCTION SHALL COMPLY WITH SECTIONS 17 AND 22 OF THE CITY OF FORT PIERCE CODE OF ORDINANCES.
 - SEE SHEETS C-3 AND C-4 FOR APPLICABLE NOTES.
 - ALL ELEVATIONS ON THIS PLAN REFERENCE NAVD 1988 DATUM.
 - LBVD, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE OR BUILDING CONTRACTOR'S WORK OR RESPONSIBILITIES. LBVD IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION.
 - ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND OTHER UTILITIES MAY EXIST. CONTRACTOR MUST HAVE EXISTING UTILITIES LOCATED BY UNDERGROUND LINE LOCATORS AS WELL AS FIELD VERIFIED BY ON-SITE PERSONNEL PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO LBVD.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS ON OR OFF SITE DUE TO THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL VERIFY SITE BOUNDARY AND EXISTING TOPOGRAPHY. NOTIFY LBVD OF ANY DISCREPANCIES PRIOR TO SUBMITTING PRICES OR ORDERING MATERIALS.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL BENCHMARKS AND PROPERTY CORNERS. ANY REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO CONSTRUCT THIS PROJECT AND PAY ALL PERMIT FEES. ALL PERMITS MUST BE IN-HAND PRIOR TO CONSTRUCTION.
 - ALL HANDICAP RAMPS, SIGNS, SYMBOLS, AND PAINTED ISLANDS AND ACCESS ROUTES MUST CONFORM TO THE LATEST ADA REQUIREMENTS.
 - ALL DIMENSIONS AND COORDINATES SHOWN ARE TO THE BACK OF CURB, OR TO THE EDGE OF SURFACING UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL PLANS FOR SPECIFIC BUILDING INFORMATION.
 - ALL STRIPING TO BE PER THE LATEST EDITION OF THE MUTCD UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SITE CONSTRUCTION TRAFFIC CONTROL PLAN AND OBTAINING ANY REQUIRED APPROVALS FROM THE LOCAL JURISDICTIONAL AUTHORITY. THE SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL TAKE INTO ACCOUNT THE ENTERING AND EXITING OF CONSTRUCTION TRAFFIC ONTO THE ROADWAY AND THE IMPACT TO THE FLOW OF TRAFFIC. THIS PLAN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. THIS SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL BE IN ADDITION TO ANY TRAFFIC CONTROL PLAN PROVIDED IN THE PLAN SET FOR ROADWAY IMPROVEMENTS.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY AND PERFORMED BY SOUTHEASTERN SURVEYING AND MAPPING AND DATED 07/03/2014.



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Design	
Check	
Draw	
Plot	
Print	
Scale	
Author	ROBERT M. WALKER PE #70246



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402-14-016

REVISION	PER CITY OF FORT PIERCE COMMENT
10/2/2014	

**FAMILY DOLLAR
LA CABANA, LLC**
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title
**GRADING AND
DRAINAGE PLAN**

Date
SEPTEMBER 2014

Checked By
RMW

Drawn By
MKA

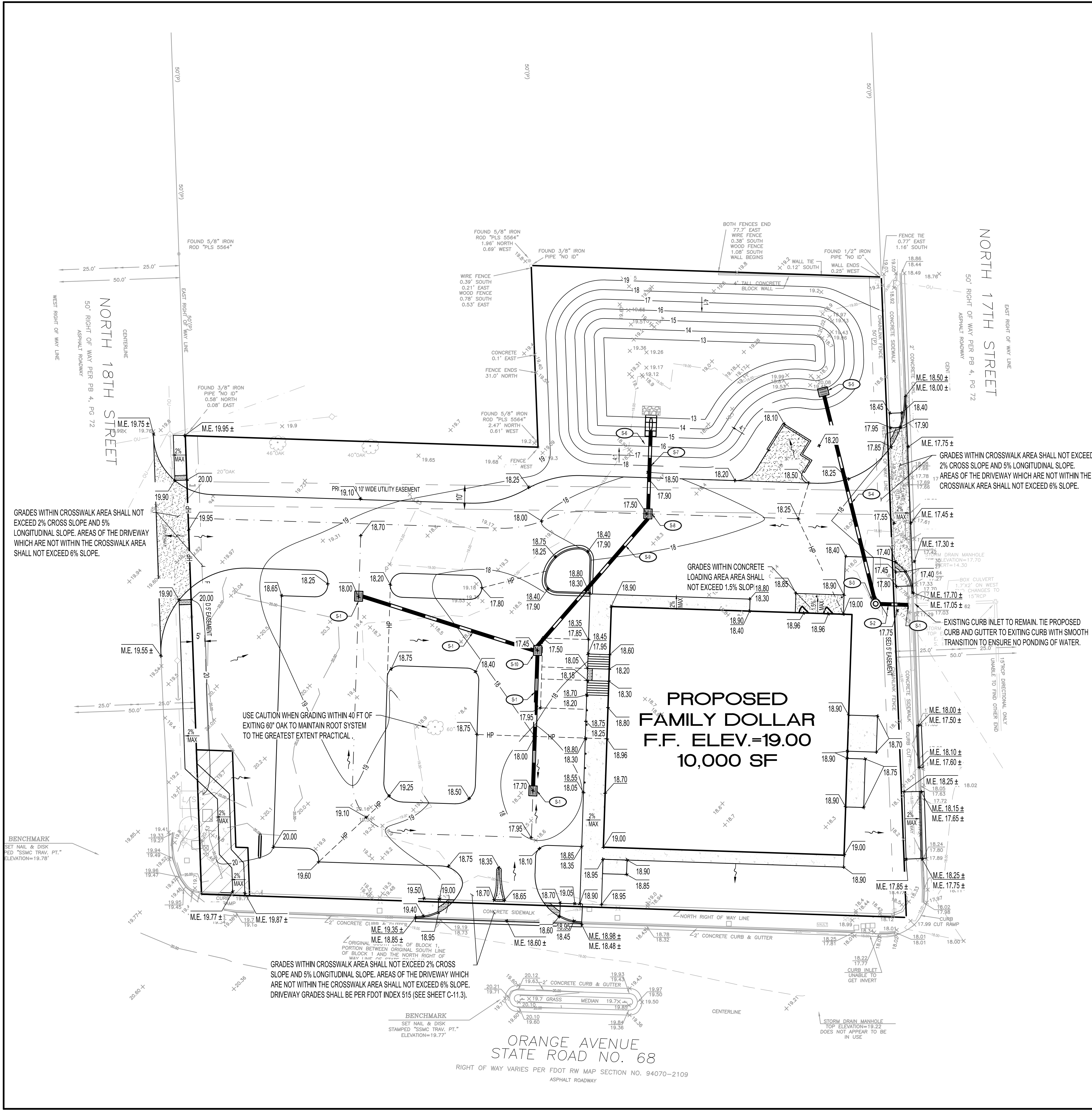
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10

Total
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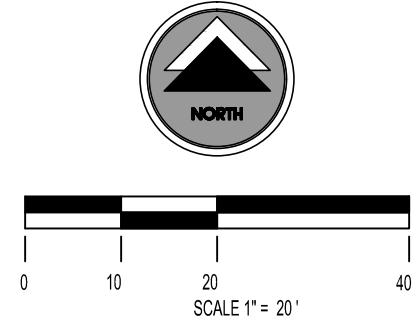
STORM SCHEDULE

- (S1) EXISTING CURB INLET
TOP ELEVATION=17.70
EAST INV. = 14.30 (EXISTING)
WEST INV. = 14.40 (PROPOSED)
- (S2) 13 L.F. - 15" RCP @ 1.23 %
- (S3) 4" DIA STORM MANHOLE
PER FDOT INDEX 201
TOP E.L. = 18.00
EAST INV. E.L. = 14.56
WEST INV. E.L. = 14.56
- (S4) 88 L.F. - 15" RCP @ 0.44 %
- (S5) TYPE "C" GRATE INLET
PER FDOT INDEX 232
TOP E.L. = 16.80
SOUTH INV. E.L. = 15.00
- (S6) MITERED END SECTION
PER FDOT INDEX 232
SOUTH INV. = 14.00
- (S7) 40 L.F. - 15" RCP @ 0.45%
- (S8) TYPE "C" GRATE INLET
TOP ELEV. = 17.50
NORTH INV. = 14.18
SOUTH INV. E.L. = 14.18
- (S9) 68 L.F. - 15" RCP @ 0.50%
- (S10) TYPE "C" GRATE INLET
TOP ELEV. = 17.45
NORTH INV. = 14.52
SOUTH INV. E.L. = 14.52
- (S11) 57 L.F. - 15" RCP @ 0.50%
- (S12) TYPE "C" GRATE INLET
TOP ELEV. = 17.70
NORTH INV. = 14.80
SOUTH INV. E.L. = 14.80
- (S13) 77 L.F. - 15" RCP @ 0.50%
- (S14) TYPE "C" GRATE INLET
TOP ELEV. = 18.00
NORTH INV. = 14.91
SOUTH INV. E.L. = 14.91



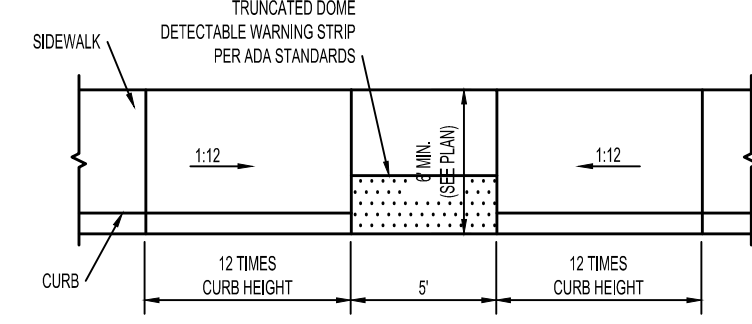
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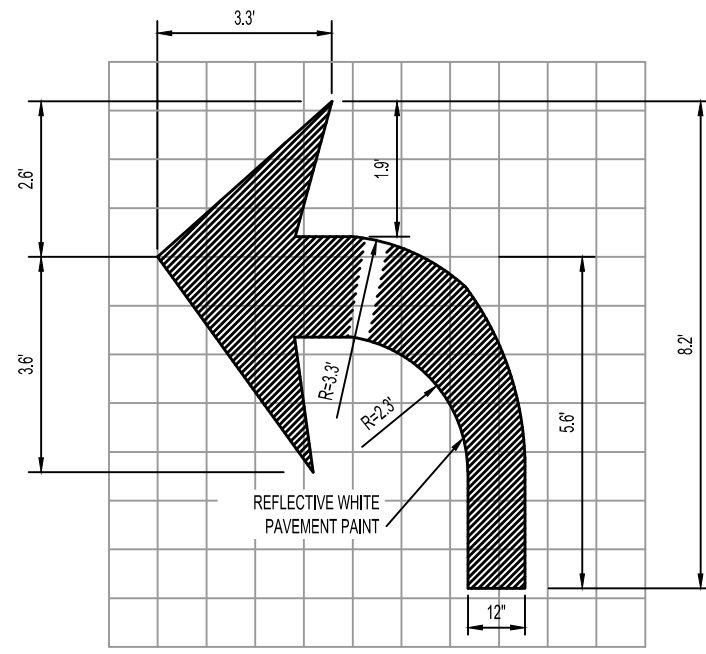
NOTE: ELEVATIONS ON THESE PLANS REFERENCE
NORTH AMERICAN VERTICAL DATUM 1988.

Author	Robert M. Walker
Check	Robert M. Walker
Scale	1" = 20'

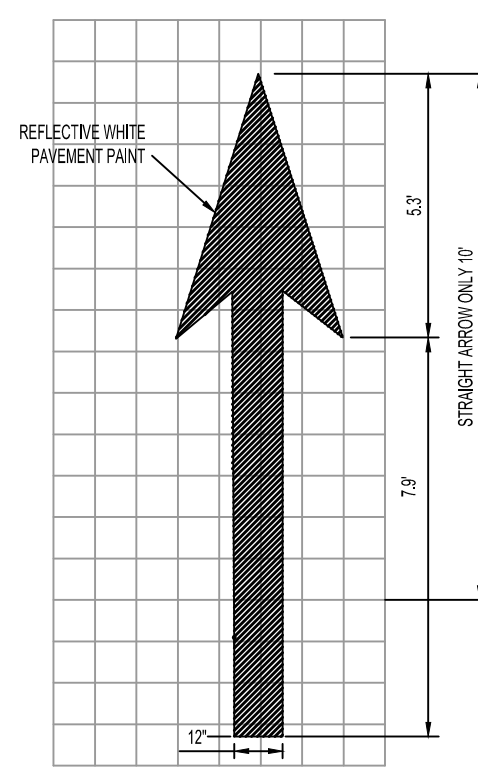


NOTES:
 1. THE FULL WIDTH, DEPTH, AND FLARES SHALL BE PAINTED THE HANDICAP COLOR.
 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990 INCLUDING CONTRASTING TEXTURES, AS REQUIRED.

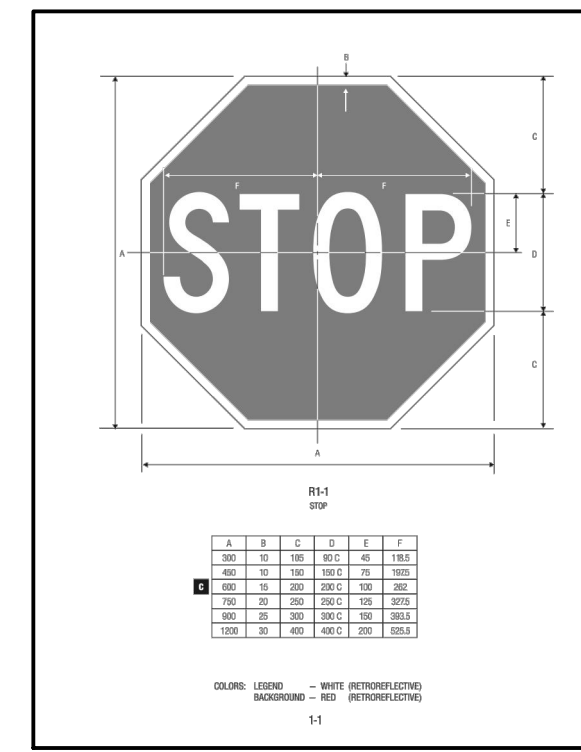
Inline Handicap Ramp
N.T.S.



Painted Turn Arrow
N.T.S.

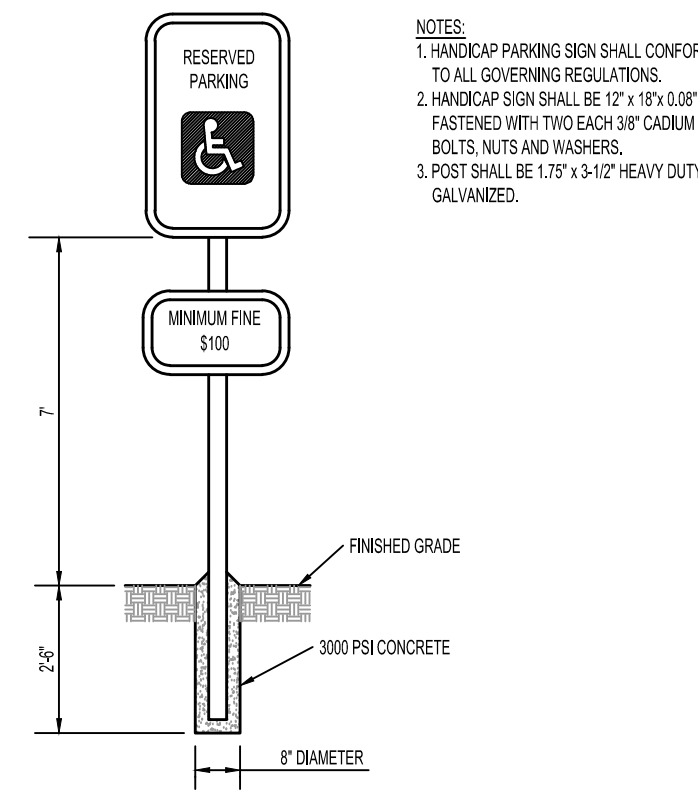


Painted Straight Arrow
N.T.S.

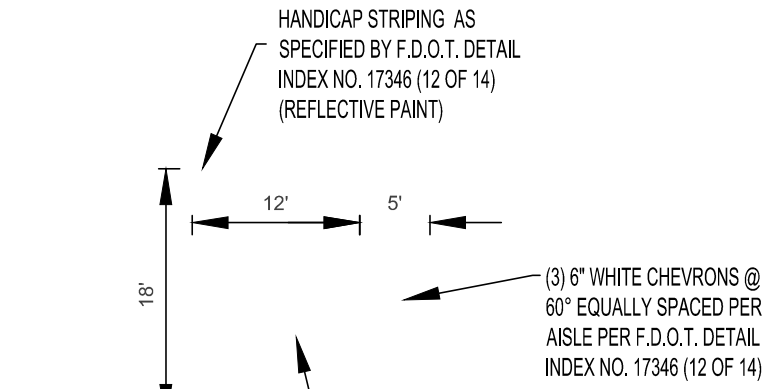


NOTE:
 1. SIGN AND INSTALLATION PER MUTCD.

Stop Sign R1-1
N.T.S.

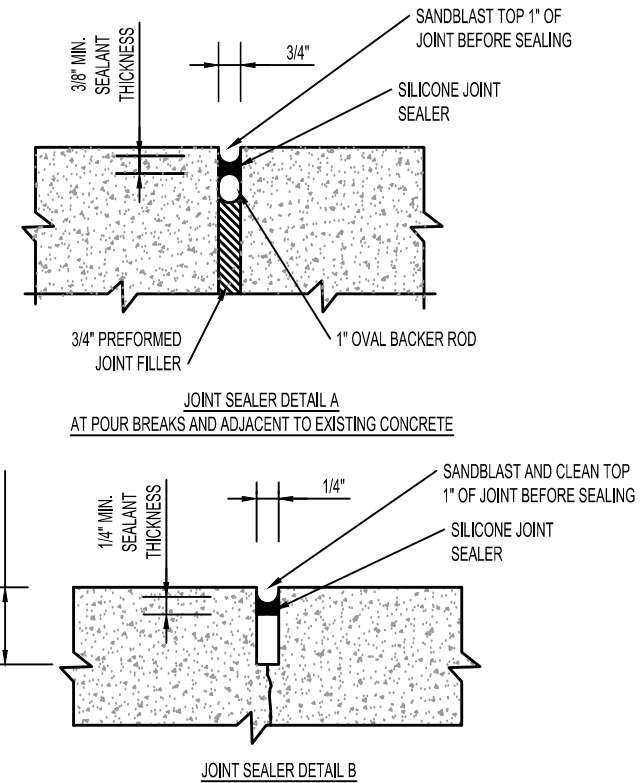


Handicap Sign
N.T.S.



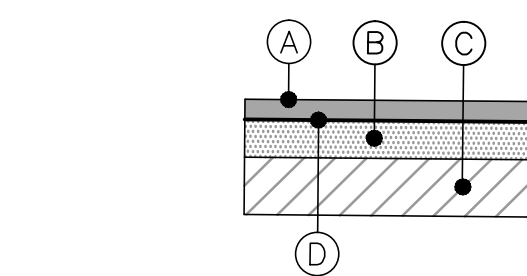
STANDARD 8" ACCESSIBLE SPACE W/ACCESSIBLE PARKING SYMBOL & SIGNAGE PER F.D.O.T. DETAIL INDEX NO. 17346 (12 OF 14) (REFLECTIVE PAINT)

Handicap Symbol and Striping
N.T.S.



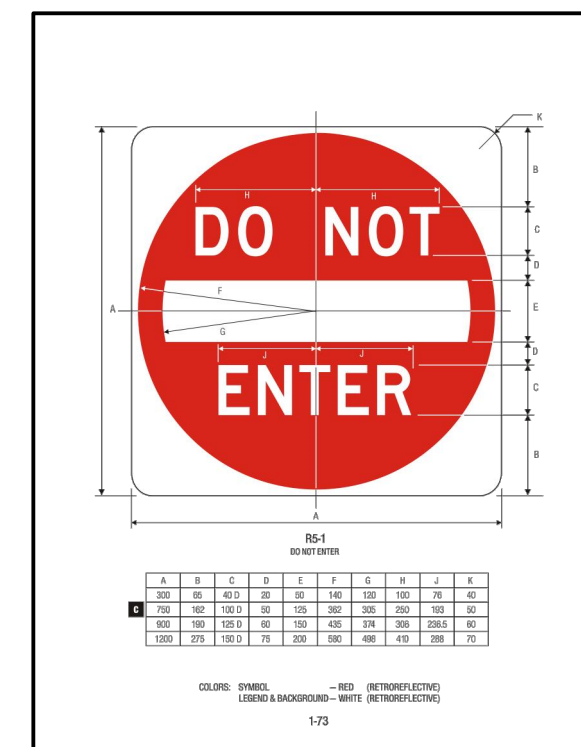
- (A) 3" FOOT TYPE SA ASPHALT CONCRETE WITH 95 PERCENT MARSHALL DESIGN DENSITY.
- (B) 6" LIME ROCK OR CRUSHED CONCRETE BASE WITH 8% MOISTURE PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, ASTM D-558) TO YIELD MINIMUM LBR = 100. (PER FOOT REQUIREMENTS)
- (C) 12" SUBGRADE STABILIZED TO MINIMUM 98% OF THE MOISTURE PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557) TO YIELD A MINIMUM LBR = 40.
- (D) PRIME OR TACK COAT. (PER F.D.O.T. SECTION 300)

HEAVY DUTY ASPHALT
N.T.S.



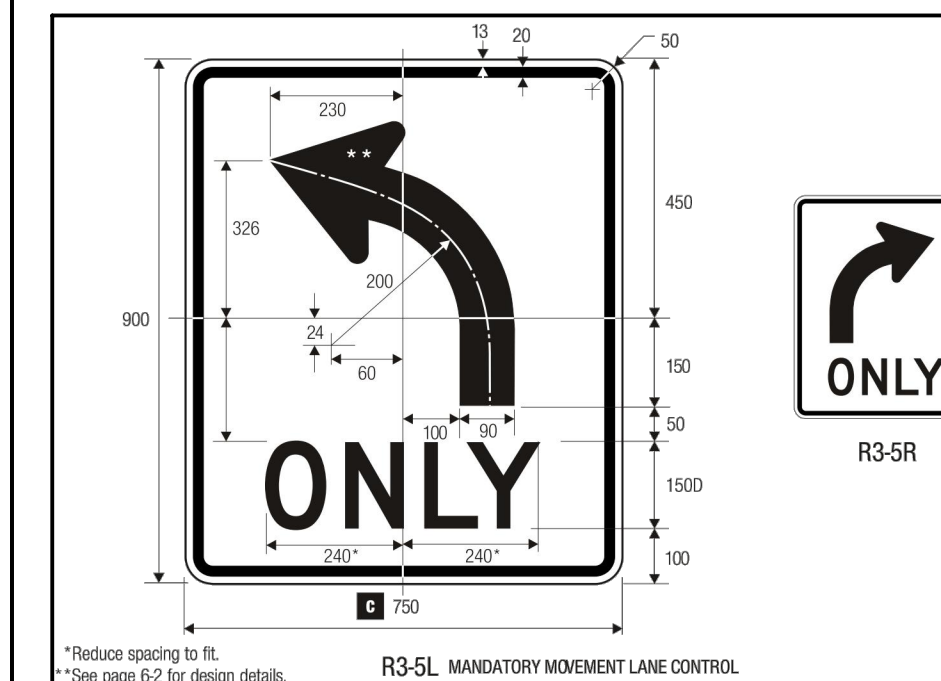
- (A) 1.5" FOOT TYPE SA ASPHALT CONCRETE WITH 95 PERCENT MARSHALL DESIGN DENSITY.
- (B) 6" LIME ROCK OR CRUSHED CONCRETE BASE WITH 8% MOISTURE PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, ASTM D-558) TO YIELD MINIMUM LBR = 100. (PER FOOT REQUIREMENTS)
- (C) 12" SUBGRADE STABILIZED TO MINIMUM 98% OF THE MOISTURE PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557) TO YIELD A MINIMUM LBR = 40.
- (D) PRIME OR TACK COAT. (PER F.D.O.T. SECTION 300)

STANDARD DUTY ASPHALT
N.T.S.



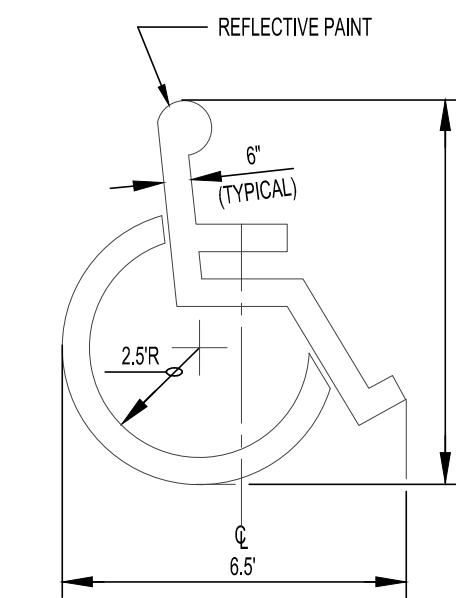
NOTE:
 1. SIGN AND INSTALLATION PER MUTCD.

Do Not Enter R5-1
N.T.S.



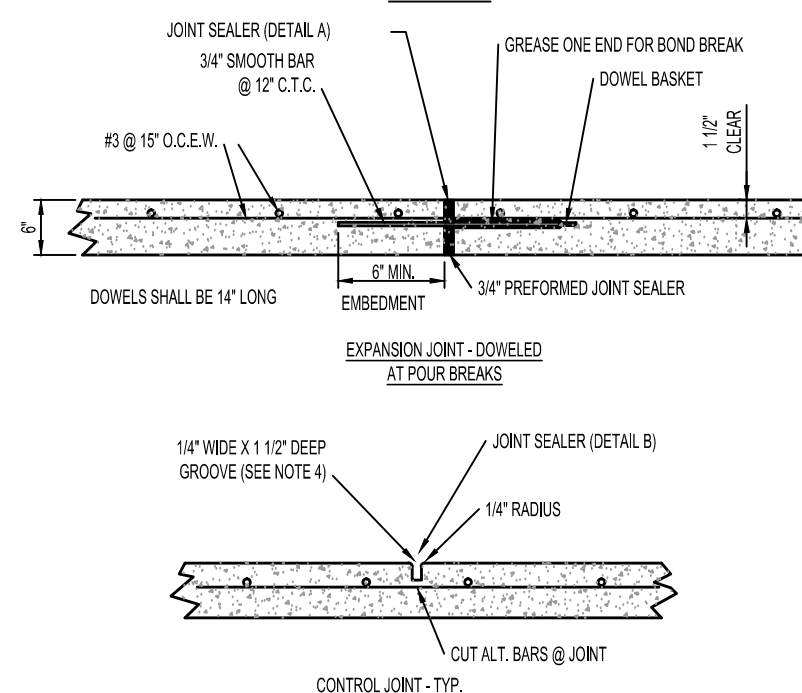
NOTE:
 1. SIGN AND INSTALLATION PER MUTCD.

Right Turn Only R3-5R
N.T.S.



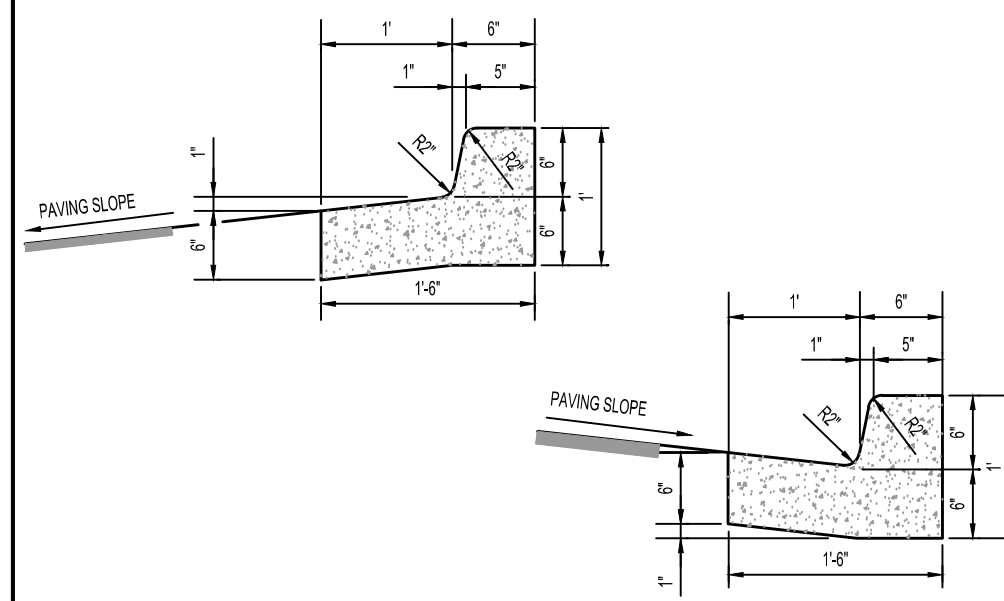
ACCESSIBLE PARKING SYMBOL
 PER FOOT INDEX NO. 17346 (12 OF 14)

Handicap Symbol
N.T.S.



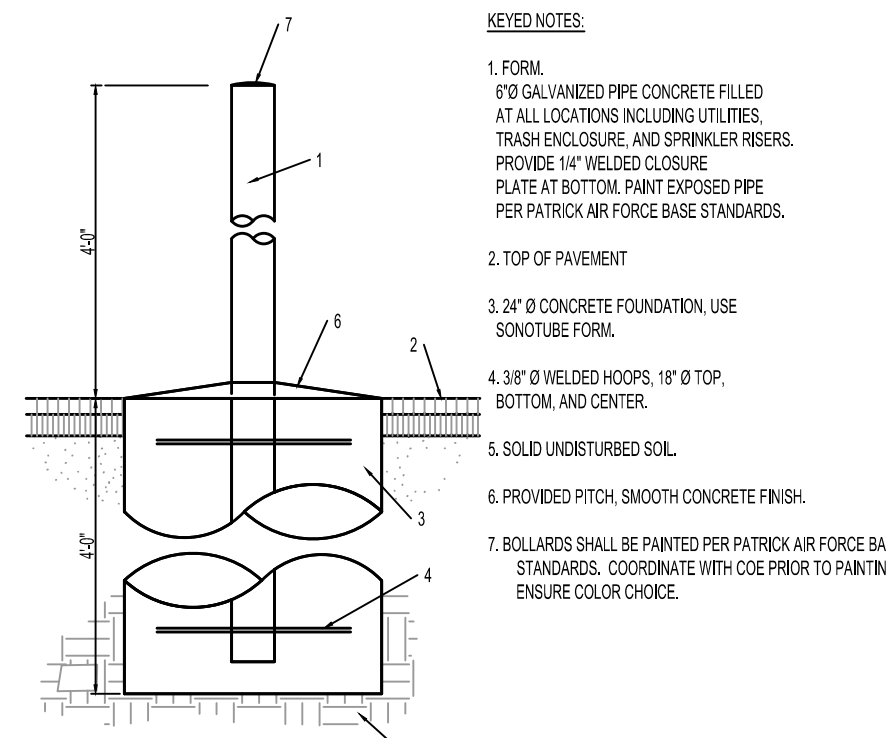
NOTES:
 1. SUBGRADE SOILS MUST BE "PRE-DRAINING" (K=5 FT/DAY) AND AT LEAST 8% MOISTURE TO A DEPTH OF 12" BELOW THE BOTTOM OF THE SLAB.
 2. CONCRETE SHALL HAVE 4000 PSI AT 28 DAYS.
 3. CONTRACTOR SHALL INSTALL CONTROL JOINTS IN CONCRETE PAVING AT 15' MAX SPACING BOTH WAYS. COORDINATE WITH ARCHITECTURAL PLANS FOR SIGNING PATTERN.
 4. CONTROL JOINT TO BE 1/4" THICKNESS TYPICALLY.
 5. EXPANSION JOINTS AT POOR BREAKS AND 100' MAX SPACING. COORDINATE WITH CONTROL JOINTS. CONTROL JOINT MAX SPACING IS 15' FT.
 6. IN LIEU OF REINFORCEMENT SHOWN, CONTRACTOR MAY USE #4 WELDED WIRE FABRIC.

Concrete Paving Detail
N.T.S.

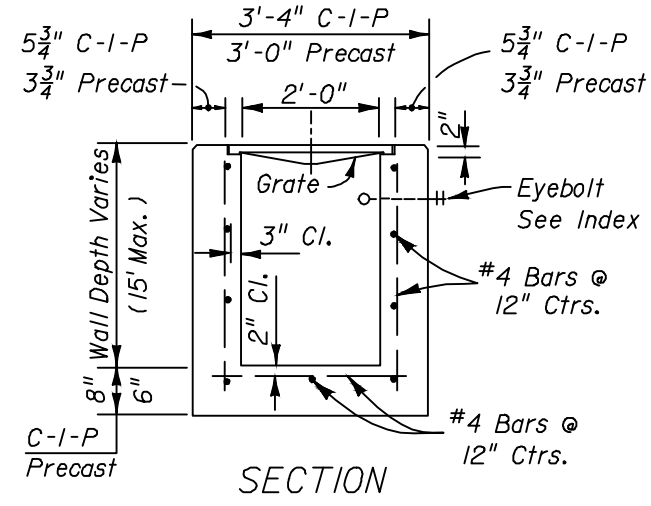
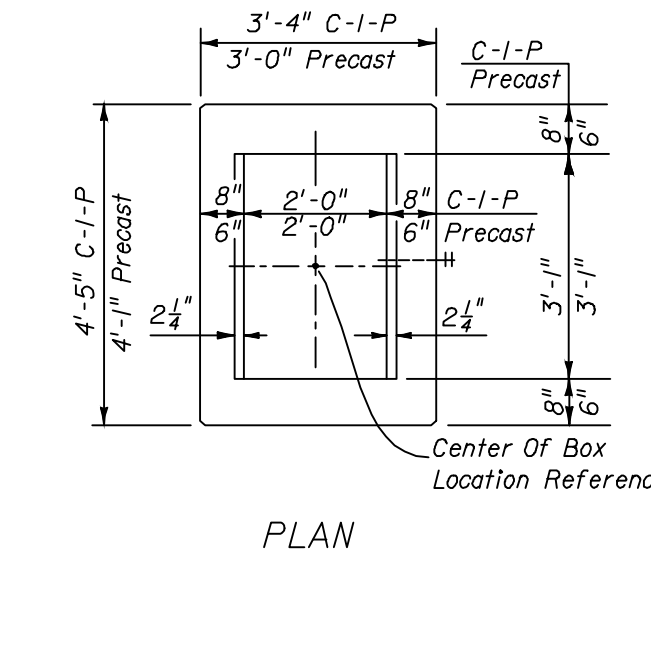


NOTES:
 1. SLOPE GUTTER AS SHOWN ACCORDING TO PAVING SLOPE. THIS SLOPE SHALL NOT EXCEED 5% TO COMPLY WITH ADA REQUIREMENTS AT ANY HANDICAP RAMP.
 2. 3/4\"/>

16\"/>N.T.S.



Typical Pipe Bollard Detail
N.T.S.

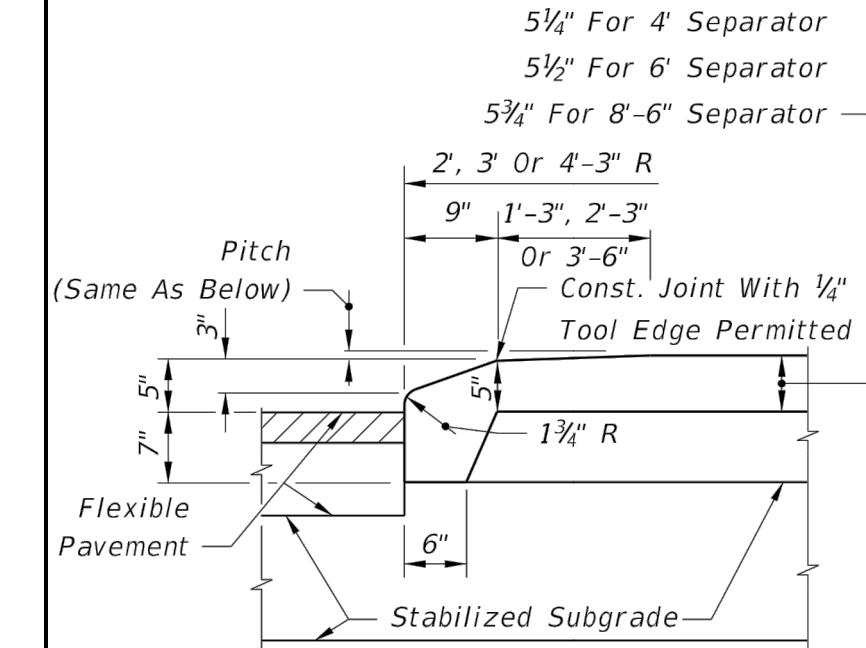


WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING BARS	WWF
0'-15"	A12	0.20	12"	8"

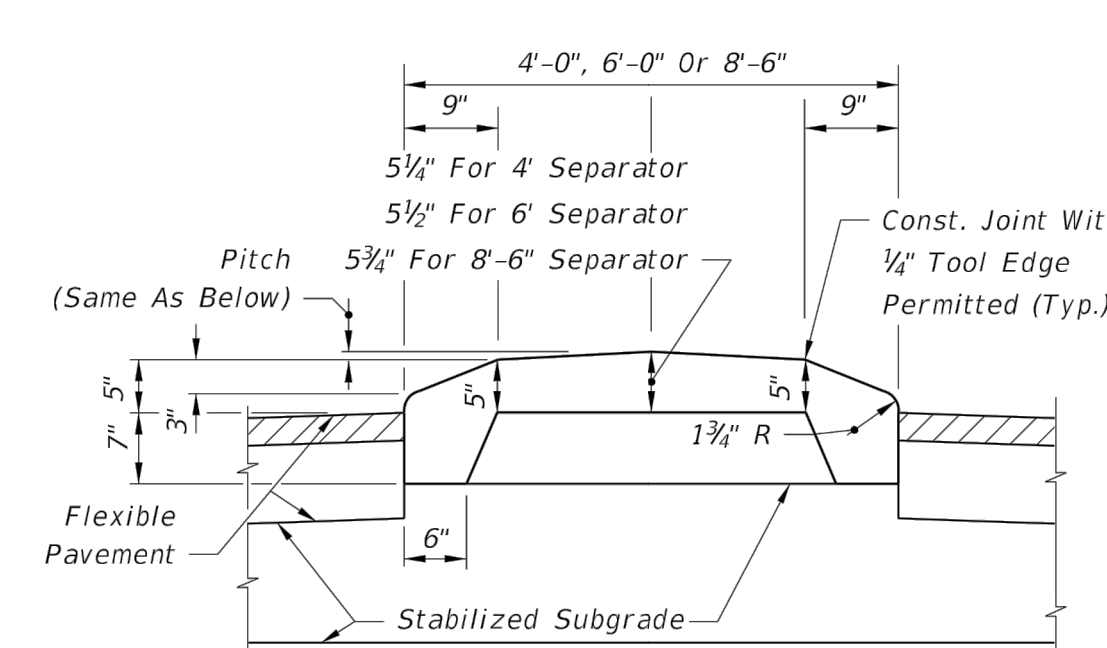
TYPE C
 Recommended Maximum Pipe Size:
 2'-0" Wall - 18" Pipe
 3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

NOTE:
 1. INLET TO BE PER FOOT INDEX #232

FDOT Type "C" Inlet
N.T.S.

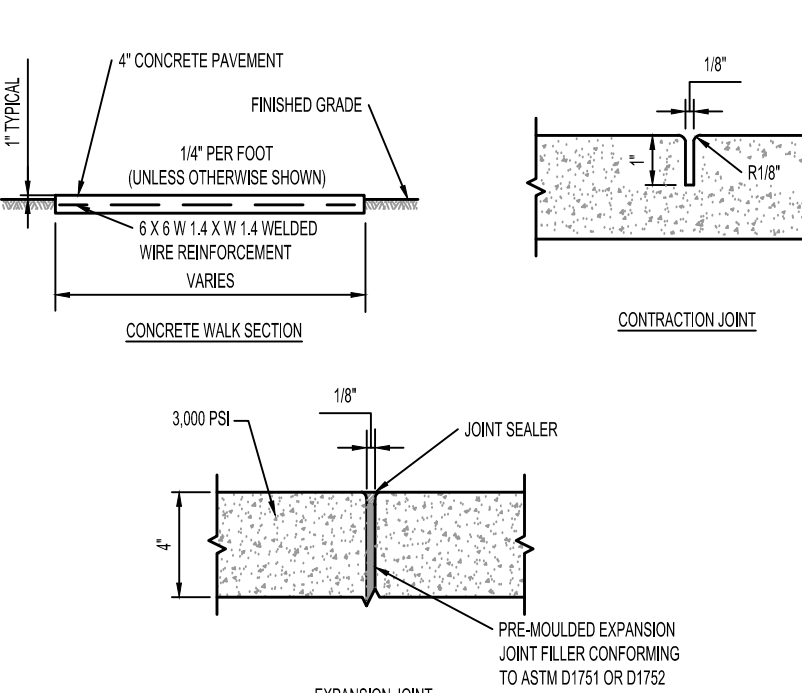


LONGITUDINAL SECTION (NOSE) OPTION 1

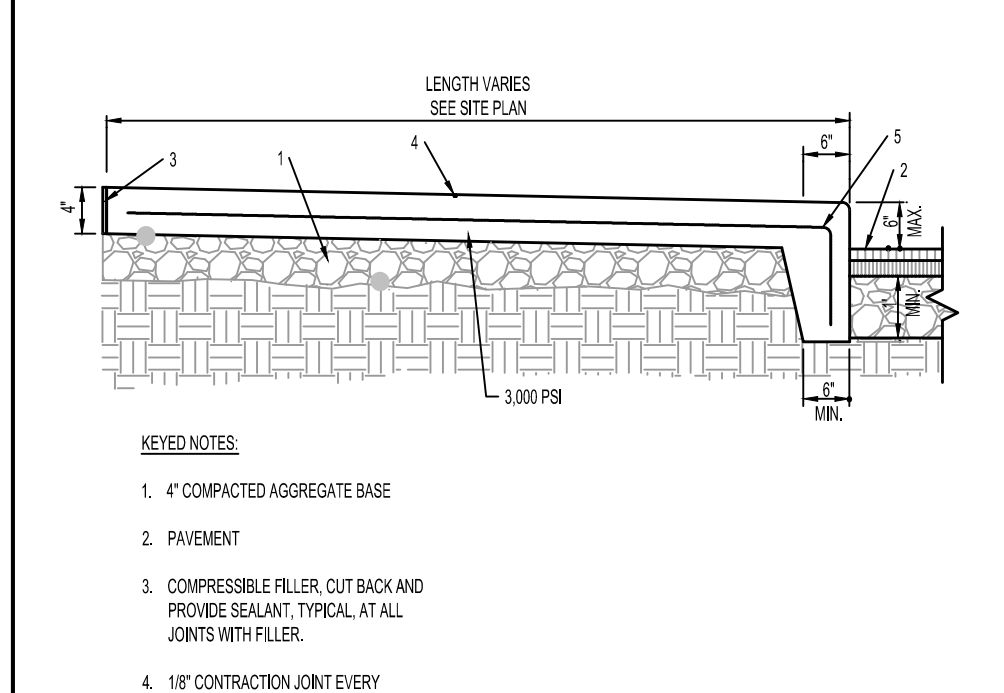


TRANSVERSE SECTION

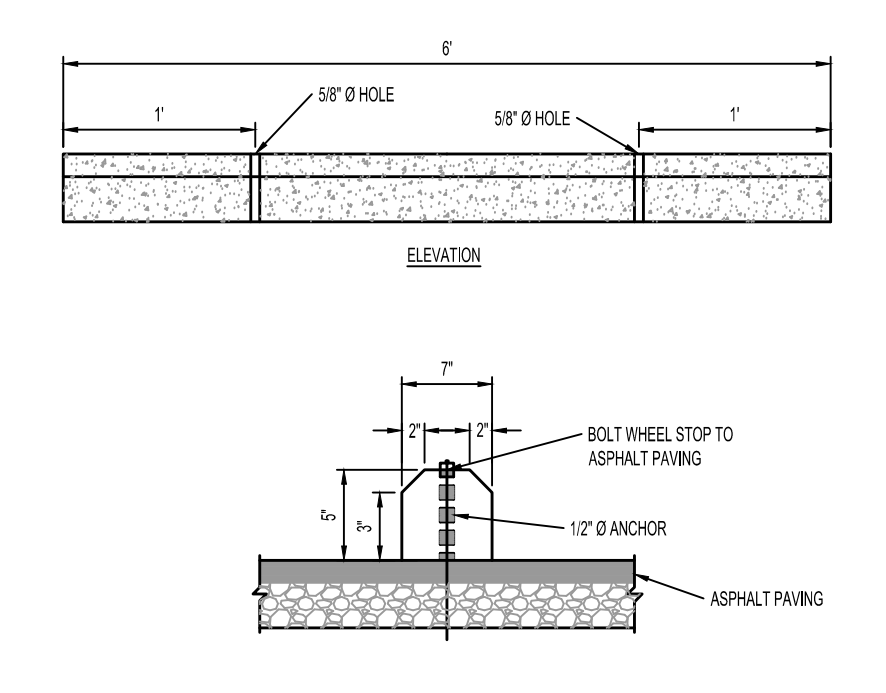
FDOT CONCRETE TRAFFIC SEPARATOR
N.T.S.



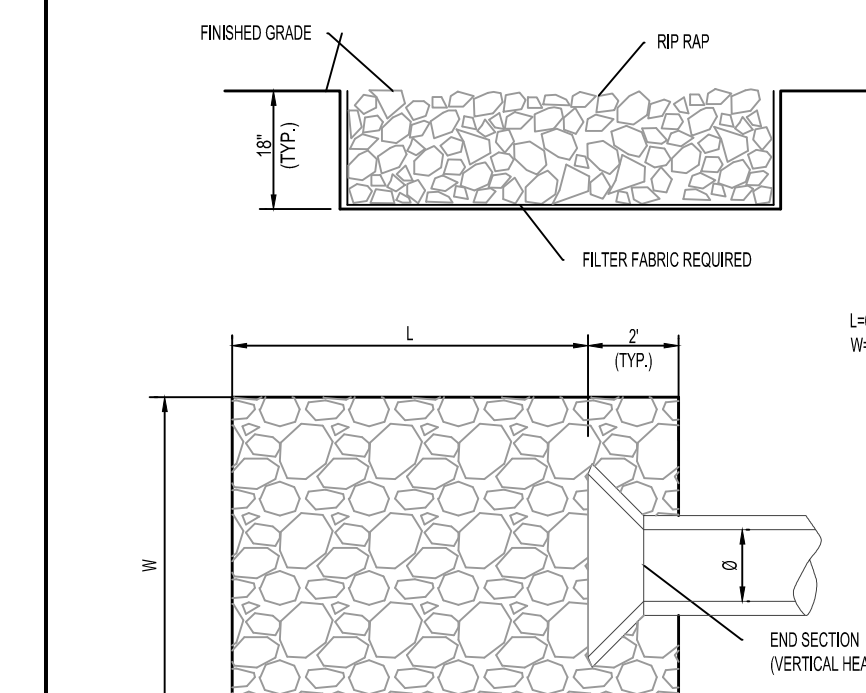
Typical Sidewalk Detail
N.T.S.



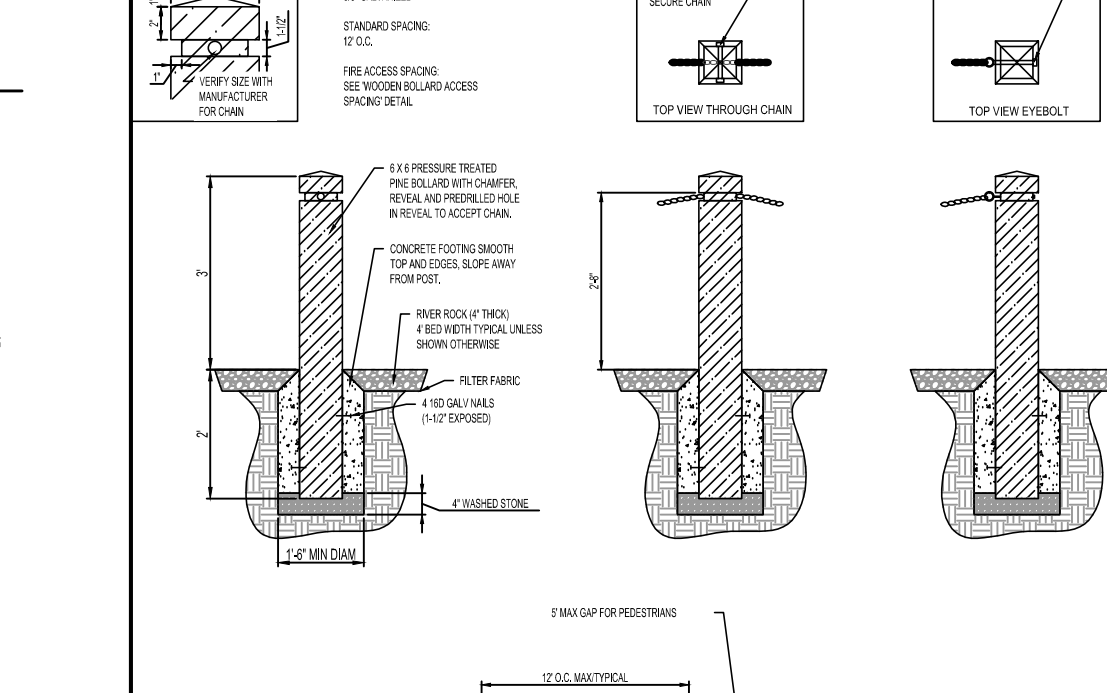
Building Perimeter Sidewalk Detail
N.T.S.



Concrete Wheel Stop
N.T.S.



Rip Rap Placement
N.T.S.



WOOD BOLLARD AND CHAIN BARRIER DETAIL

Revision No.	Date	Description
1	10/2/2014	PER CITY OF FORT PIERCE COMMENT

D	X	DIMENSIONS AND QUANTITIES																	
		M								N									
		Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe		
15'	2'-0"	1.92	2.18	4.10	2.06	5	1.22	2.9	4.63	12.37	1.19	0.38	0.58	0.77	0.96	21	24	27	30
18'	2'-10"	1.97	2.74	4.71	2.56	6	1.41	3.4	4.92	12.37	1.21	0.44	0.65	0.87	1.09	22	25	28	31
24'	3'-5"	2.06	3.85	5.91	3.56	7	1.73	3.4	5.50	8.92	12.37	1.25	0.54	0.83	1.12	24	28	32	35
30'	4'-3"	2.15	4.95	7.10	4.56	8	2.00	3.4	6.08	10.33	14.58	1.29	0.66	1.09	1.50	26	31	36	40
36'	5'-1"	2.25	6.08	8.33	5.56	9	2.24	3.4	6.67	11.75	16.83	1.33	0.81	1.38	1.95	28	34	39	45
42'	6'-0"	2.34	7.21	9.55	6.56	10	2.49	3.4	7.29	13.23	19.25	1.38	0.97	1.70	2.45	30	37	43	50
48'	6'-9"	2.42	8.33	10.76	7.56	11	2.65	3.4	7.87	14.58	21.33	1.42	1.13	2.04	2.93	32	39	47	54
54'	7'-8"	2.52	9.44	11.96	8.56	12	2.82	3.4	8.42	16.08	23.75	1.46	1.31	2.44	3.58	34	42	51	59
60'	8'-6"	2.62	10.56	13.18	9.56	14	3.00	4.4	9.00	17.50	26.00	1.50	1.51	2.89	4.28	36	45	55	64
66'	9'-2"	2.71	11.68	14.39	10.56	15	3.18	4.4	9.58	18.75	27.92	1.54	1.68	3.25	4.84	38	48	58	68
72'	10'-0"	2.80	12.80	15.60	11.56	16	3.30	4.4	10.16	20.16	30.16	1.58	1.89	3.74	5.59	40	51	62	73

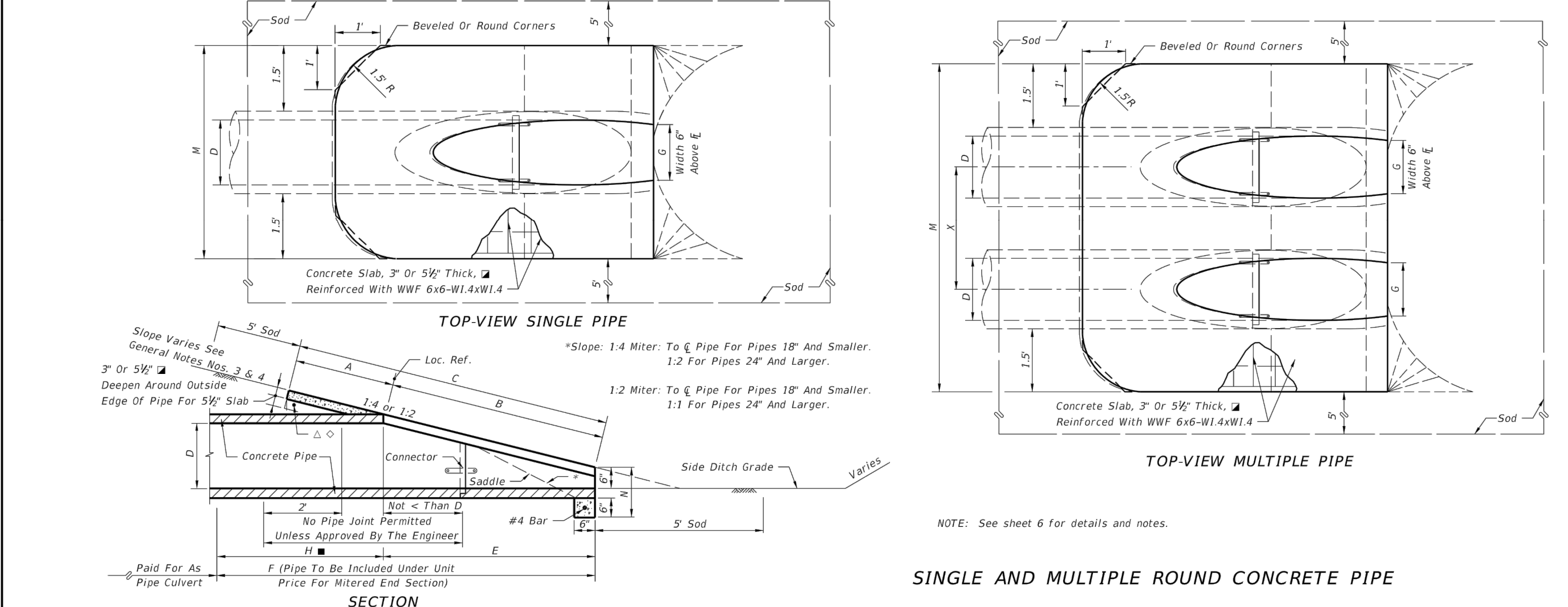
See General Note No. 5. See Sheet 5 For 3" Slab Quantities.

Values shown for estimating pipe quantities and are for information only.

Dimensions permitted to allow use of 8' standard pipe lengths.

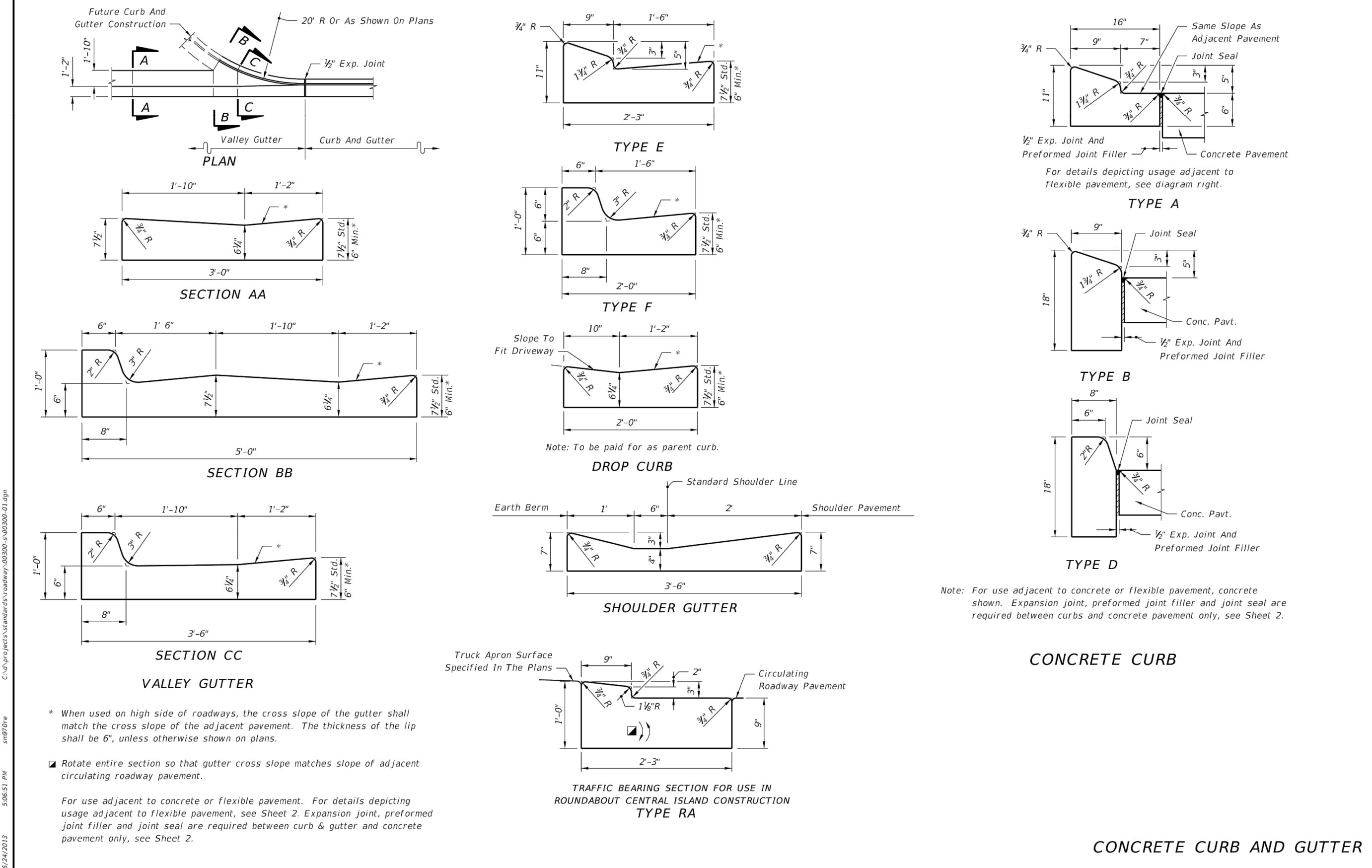
Dimensions permitted to allow use of 12' standard pipe lengths.

Concrete slab shall be deepened to form bridge across crown of pipe. See section below.



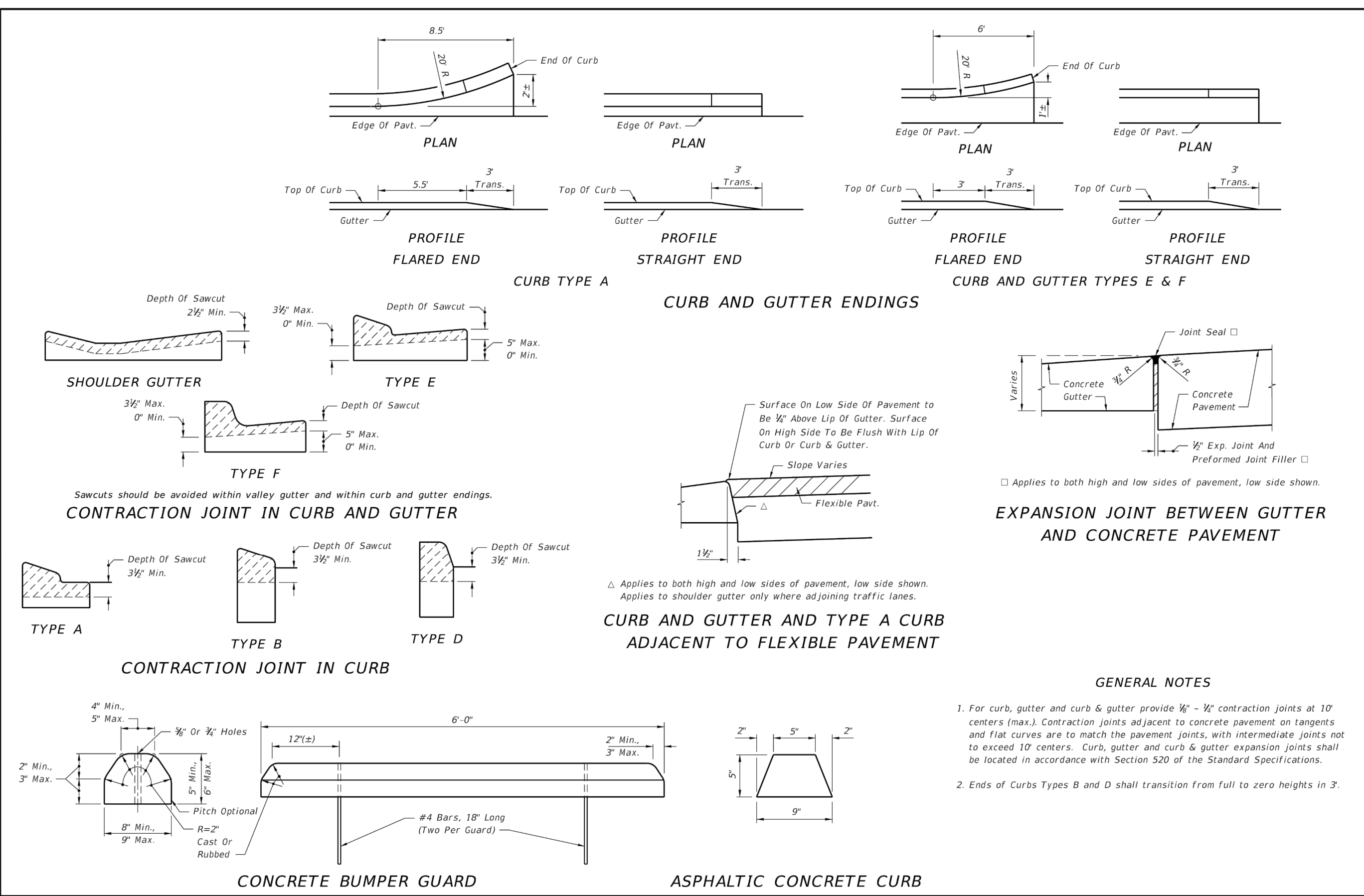
SINGLE AND MULTIPLE ROUND CONCRETE PIPE CROSS DRAIN MITERED END SECTION

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/02	FDOT 2014 DESIGN STANDARDS	272	1 of 6



CURB & CURB AND GUTTER

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/00	FDOT 2014 DESIGN STANDARDS	300	1 of 2



CURB & CURB AND GUTTER

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/00	FDOT 2014 DESIGN STANDARDS	300	2 of 2



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5405 Cypress Center Drive, Suite 310
Tampa FL 33609
Phone (813) 362-8585
Fax (813) 353-5515

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LBYD Project Number
402-14-016

REVISION	DATE	PER CITY OF FORT PIERCE COMMENT
1	10/2/2014	

Project Name
FAMILY DOLLAR LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title
FDOT DETAILS

Date
SEPTEMBER 2014

Checked By
RMW

Drawn By
MKA

Sheet Number
C-111

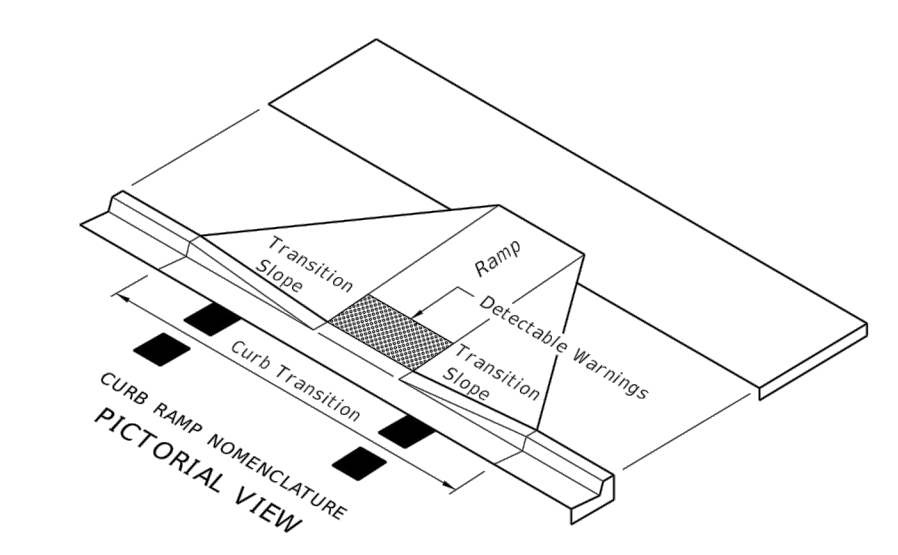
Sequence
13
Total
22

Seal
ROBERT M. WALKER
PE #70246

Revision No.	Date	Description
1	10/2/2014	PER CITY OF FORT PIERCE COMMENT

GENERAL NOTES

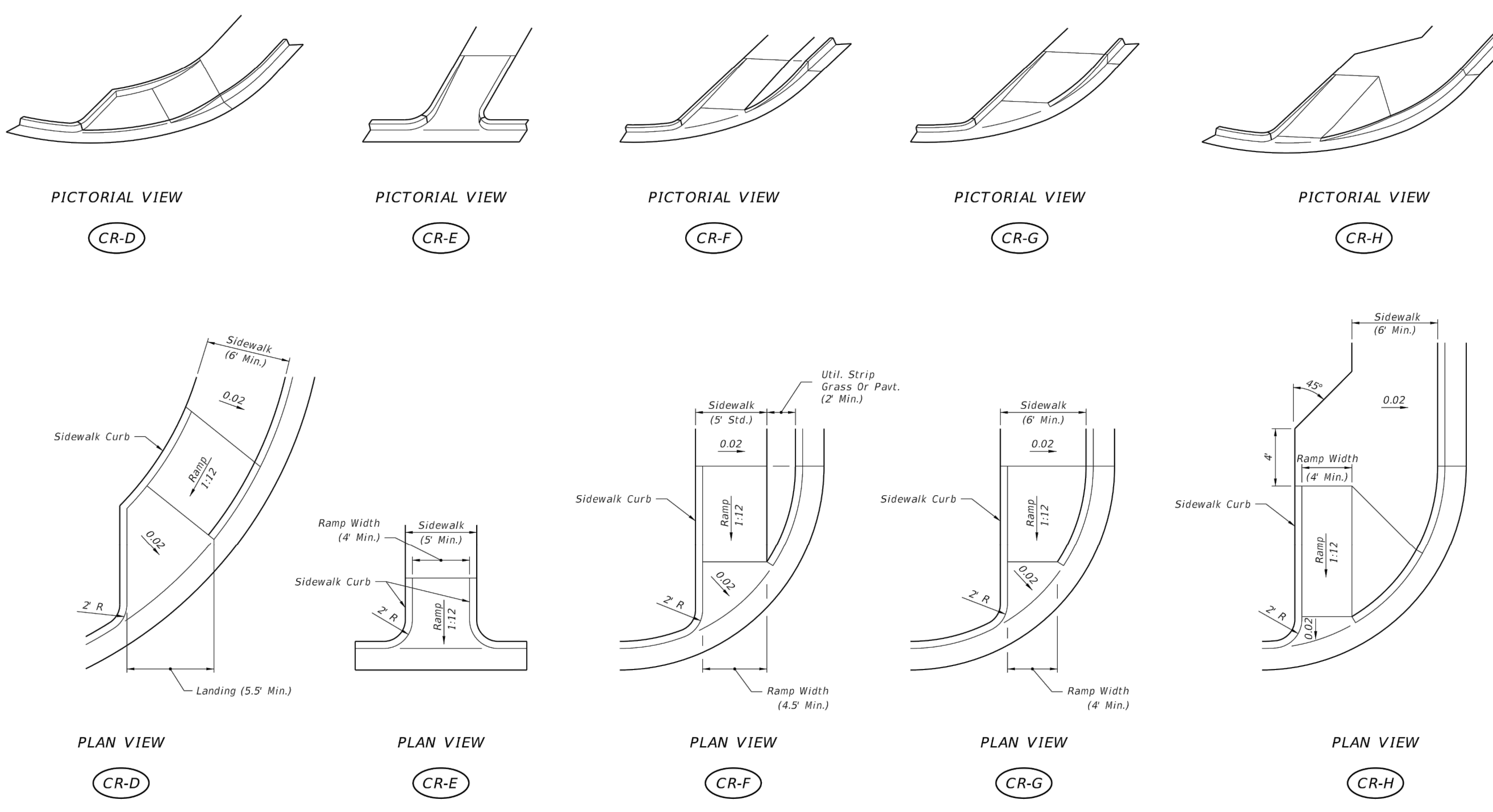
- Sidewalk curb ramps shall be constructed at locations that will provide continuous unobstructed pedestrian circulation path to pedestrian areas, elements and facilities within the right of way and to accessible pedestrian routes on adjacent sites. Curbed facilities with sidewalks and those without sidewalks are to have curb ramps constructed for all intersections and turnouts with curbed returns. To accommodate curb returns, partial curb returns are to extend to the limits prescribed in Index No. 515. Ramps constructed at locations without sidewalks are to have a landing constructed at the top of each ramp, see LANDINGS FOR CURB RAMP WITHOUT SIDEWALKS.
- When altering existing pedestrian facilities, where existing restricted conditions preclude the accommodation of a ramp slope of 1:12, a ramp slope between 1:12 and 1:10 is permitted for a rise of 6" maximum. Where compliance with the requirements for cross slope cannot be fully met, the minimum feasible cross slope shall be provided. Ramp slopes are not required to exceed 12' in length.
- If sidewalk curb ramps are located where pedestrians must walk across the ramp, then provide transition slopes to the ramp, otherwise a sidewalk curb may be required.
- All sidewalks, ramps, and landings with a cross slope of 0.02 shown in this Index are 0.02 maximum. All ramp slopes shown in this Index as 1:12 are 1:12 maximum. Landings shall have slopes less than or equal to 0.02 in any direction.
- Grade breaks at the top and bottom of ramps shall be parallel to each other and perpendicular to the direction of the ramp slope.
- Where a sidewalk curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transition or to the extent that no remaining section of curb or curb and gutter is less than 5' long. Existing sidewalks shall be removed to the nearest joint beyond the transition slope or to the extent that no remaining section of sidewalk is less than 5' long. For CONCRETE SIDEWALK details refer to Index 310.
- Sidewalk curb ramp alpha-identifications are for reference purposes (plans, permits, etc.). Alpha-identifications CR-I and CR-J were intentionally omitted.
- Detectable warnings shall extend the full width of the ramp and to a depth of 2'. Detectable warnings shall be constructed in accordance with Specification Section 527. For the layout of detectable warnings, refer to the TYPICAL PLACEMENT OF DETECTABLE WARNINGS details. Detectable warnings shall not be provided on transition slopes.
- When detectable warnings are placed on a slope greater than 5%, domes shall be aligned with the centerline of the ramp; otherwise domes are not required to be aligned.
- Detectable warnings shall be required on sidewalks at:
 - Intersecting roads.
 - Median Crossings greater than or equal to 6' in width.
 - Railroad Crossings.
 - Signalized driveways.
- Detectable Warnings - Acceptance Criteria:
 - Color and texture shall be complete and uniform.
 - 90% of individual truncated domes shall be in accordance with the Americans with Disabilities Act Standards for Transportation Facilities, Section 705.
 - There shall be no more than 4 non-compliant domes in any one square foot.
 - Non-compliant domes shall not be adjacent to other non-compliant domes.
 - Surfaces shall not deviate more than 0.10" from a true plane.
- Detectable warnings shall be installed no greater than 5' from the back of curb or edge of pavement.
- Detectable warnings shall not be installed over grade breaks.



LEGEND

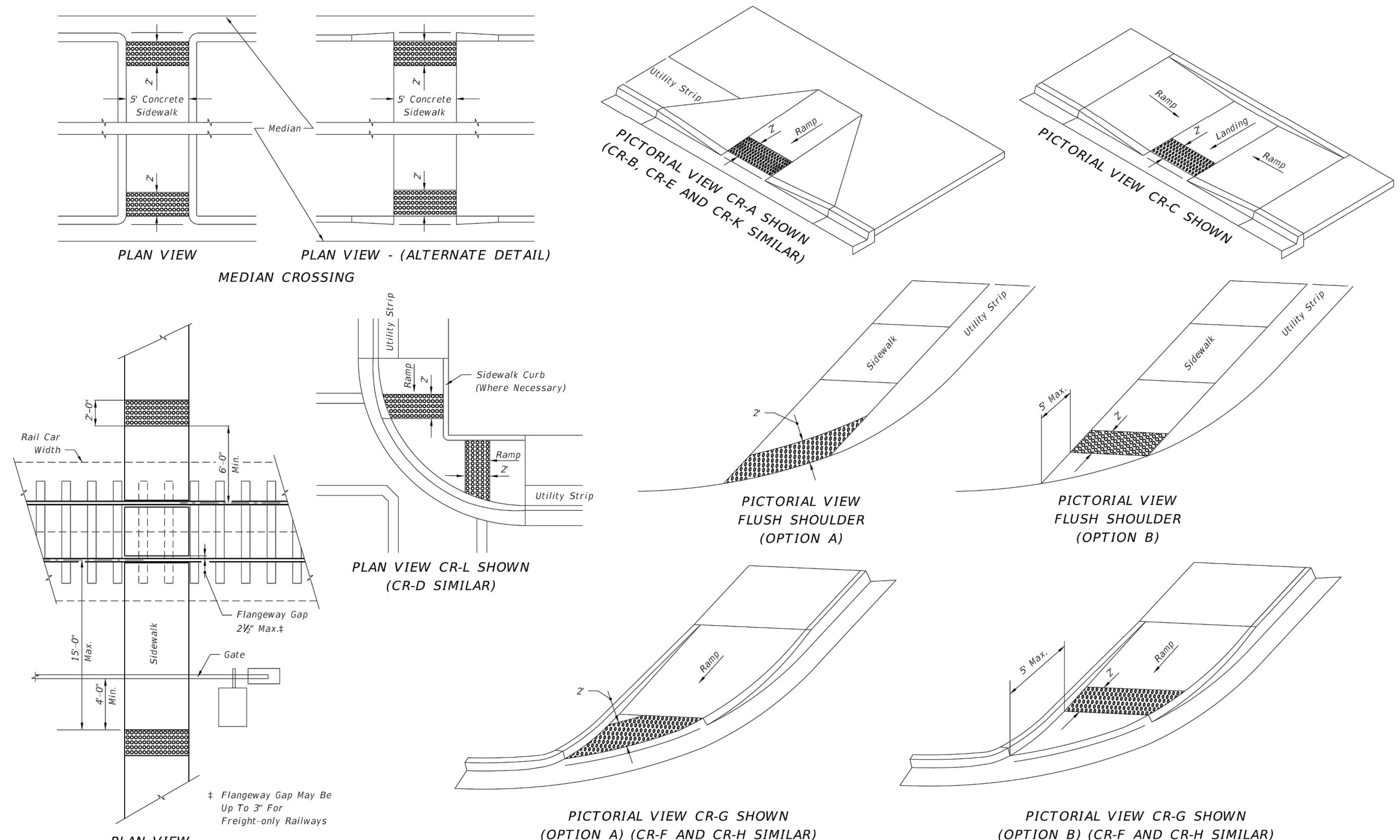
[Pattern] Detectable Warnings

LAST REVISION 07/01/13	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 304	SHEET NO. 1 of 7
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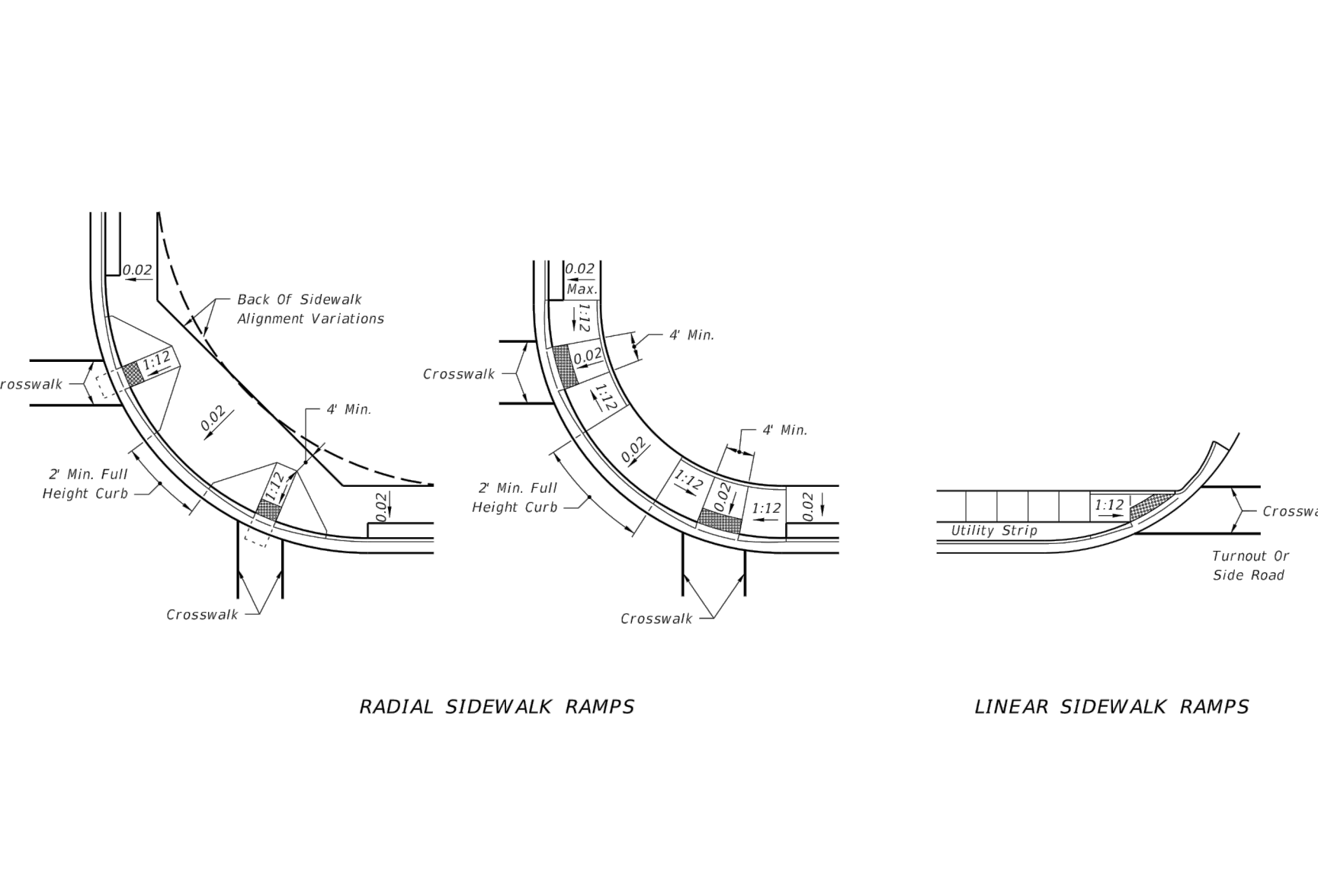
DIMENSIONAL FEATURES OF SIDEWALK CURB RAMP FOR LINEAR PEDESTRIAN TRAFFIC

LAST REVISION 07/01/13	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 304	SHEET NO. 3 of 7
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TYPICAL PLACEMENT OF DETECTABLE WARNINGS

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TYPICAL PLACEMENT OF SIDEWALK CURB RAMP AT CURBED RETURNS

TABLE OF DETECTABLE WARNINGS

CURB RAMP TYPE	CURB RADIUS (FT)	TOTAL AREA (SF)
CR-A	N/A	8
CR-B	N/A	8
CR-C	N/A	8
CR-D	25	11
CR-E	N/A	8
CR-F	10	9
	20	11
	25	12
	30	14
CR-G	10	10
	20	11
	25	12
	30	14
CR-H	20	8
	25	8
	30	8
CR-K	N/A	8
CR-L	10	18
	15	13
FLUSH SHOULDER		
OPTION A	10	11
	20	14
	25	15
	30	17
	40	19
	50	21
OPTION B	10	10
	20	10
	25	10

AREAS OF DETECTABLE WARNINGS FOR SIDEWALK CURB RAMP AND FLUSH SHOULDER APPLICATIONS

NOTES:

- Where crosswalk markings are used, ramps shall fall within the crosswalk limits. A clear space of 48" minimum is required at the bottom of the ramp within a marked crosswalk. If crosswalk markings are not present, a clear space of 48" minimum is required at the bottom of the ramp outside of active travel lanes.
- Crosswalk widths and configurations vary; must conform to Index No. 17344 and 17346.

Note:
Due to construction applications, CR-L is the only curb ramp for which a detectable warning quantity was calculated using a curb radius of 15'.
For flush shoulder options with 5' sidewalks, the back of sidewalk is measured at 10' from the edge of traveled way.

LAST REVISION 07/01/13	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 304	SHEET NO. 7 of 7
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Robert M. Walker
PE #70246

Revision No.	1	10/2/2014	PER CITY OF FORT PIERCE COMMENT
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CONCRETE SIDEWALK ON CURBED ROADWAYS

LONGITUDINAL SECTION (NOT TO SCALE)

JOINT LEGEND

A-1/2" Expansion Joints (Preformed Joint Filler)
B-1/2" Dummy Joints, Tooled
C-1/2" Formed Open Joints
D-1/2" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
E-1/2" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers
F-1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.

NOTES FOR CONCRETE SIDEWALK ON CURBED ROADWAYS

- Sidewalks shall be constructed in accordance with Specification Section 522. Sidewalk ramps shall include detectable warnings and be constructed in accordance with Index No. 304. Detectable warnings are not required where sidewalks intersect urban flared roadways.
- Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils nor more than 1/2".
- For turnouts see Index No. 515.
- Construct sidewalks with 1" thick Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Picket Railing or Pipe Guiderail shown in the plans.

CONCRETE SIDEWALK

INDEX NO. 310 SHEET NO. 1 of 2

CONCRETE SIDEWALK ON UNCURBED ROADWAYS

LONGITUDINAL SECTIONS (NOT TO SCALE)

JOINT LEGEND

A-1/2" Expansion Joints (Preformed Joint Filler)
B-1/2" Dummy Joints, Tooled
C-1/2" Formed Open Joints
D-1/2" Saw Cut Joints, 1 1/2" Deep (96 Hour) Max. 5' Centers
E-1/2" Saw Cut Joints, 1 1/2" Deep (12 Hour) Max. 30' Centers
F-1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.

NOTES FOR CONCRETE SIDEWALKS ON UNCURBED ROADWAYS

- Sidewalks shall be constructed in accordance with Specification Section 522.
- Detectable Warnings shall conform to the requirements described in Index No. 304. Detectable Warnings are not required for sidewalks that run continuous through driveways.
- For TURNOUTS see Index No. 515.
- Construct sidewalks with a 1"-0" thick Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Picket Railing or Pipe Guiderail shown in the plans (see SIDEWALK WITH EDGE BEAM FOR SURFACE MOUNTED RAILINGS detail).
- When driveways are newly constructed, reconstructed, or altered, cross slopes for discontinuous sidewalks shall not exceed 0.02.

CONCRETE SIDEWALK

INDEX NO. 310 SHEET NO. 2 of 2

TURNOUTS

LEGEND

Return Radius Point Or Flare Point
Buffer Areas
Boundary Line
Frontage
Driveway Width
Driveway Angle
Corner Clearance
Setback
Outside Radius
Inside Radius
Distance Between Connections
Flare

GENERAL NOTES

- For definitions and descriptions of access connection "Categories" and access "Classifications" of highway segments, and for other detailed information on access to the State Highway System, refer to FDOT Rule Chapter 14-96, "State Highway Connection Permits Administrative Process" and Rule Chapter 14-97, "State Highway System Access Management Classification System And Standards."
- For this index the term "turnout" applies to that portion of driveways or side roads adjoining the outer roadway. For this index the term "connection" encompasses a driveway or side road and their appurtenant islands, separators, transition tapers, auxiliary lanes, travelway flares, drainage pipes and structures, crossovers, sidewalks, curb cut ramps, signing, pavement marking, required signalization, maintenance of traffic or other means of access to or from controlled access facilities. The turnout requirements set forth in this index do not provide complete intersection design, construction or maintenance requirements.
- The location, positioning, orientation, spacing and number of connections and median openings shall be in conformance with FDOT Rule Chapter 14-97.
- On Department construction projects all driveways not shown on the plans shall be reconstructed at their existing location in conformance to these standards, or, in conformance to permits issued during the construction project.
- Driveways shall have sufficient length and size for all vehicular queuing, stacking, maneuvering, standing and parking to be carried out completely beyond the right of way line. Except for vehicles stopping to enter the highway, the turnout areas and drives within the right of way shall be used only for moving vehicles entering or leaving the highway.
- Connections with expected daily traffic over 4000 vpd shall be constructed as intersecting side roads. The design requirement of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department. For connections with expected daily traffic less than 4000 vpd, the Department will determine if drop curbs or radius returns are required in accordance with existing or planned connections. Where radius returns apply, the design requirements of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department.
- For connections that are intended to daily accommodate either multi-unit vehicles or single unit vehicles exceeding 30' in length, returns with 50' radii shall be used, unless otherwise called for in the plans or otherwise stipulated by permit. Where large numbers of multi-unit vehicles will use the connection, the connection width and radii shall be increased and auxiliary lanes, tapers, lane flares, separators and/or islands constructed, as determined by the Department to be necessary for safe turning movements.
- Any connection requiring or having a specified median opening with left turn storage and saved directly by that opening shall have radial returns.
- Where a connection is intended to align with a connection across the highway, the through lanes shall align directly with the corresponding through lanes.
- For new connections and for connections on all new construction and reconstruction projects, pavement materials and thicknesses shall meet the requirements applicable to either that detailed for "Urban Flared Turnouts" or, that described in "Table S15-1" for connections with radial returns and/or auxiliary lanes.
- The responsibility for the cost of construction or alteration to an access connection shall be in accordance with FDOT Rule Chapter 14-96.

DESIGN NOTES

- Prior to the adoption of FDOT Rules Chapters 14-96 and 14-97, connections to the State Highway System were defined and permitted by Classes. Connections have been redefined by Categories under Rule 14-96; and, the term "Class" has been applied to highway segments of the State Highway System as defined under Rule 14-97.

NOT INTENDED FOR FULL INTERSECTION DESIGN SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS

ELEMENT DESCRIPTION	URBAN (CURB & GUTTER)			RURAL		
	1-20 Trips/Day or 1-5 Trips/Hour	21-600 Trips/Day or 6-60 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour	1-20 Trips/Day or 1-5 Trips/Hour	21-600 Trips/Day or 6-60 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour
CONNECTION WIDTH W	12 Min. 24 Max.	24 Min. 36 Max.	24 Min. 36 Max.	12 Min. 24 Max.	24 Min. 36 Max.	24 Min. 36 Max.
FLARE (Drop Curb) F	10' Min.	10' Min.	N/A	N/A	N/A	N/A
RETURNS (Radius) R & U	N/A	Δ	25' Min. 50' Std. 75' Max.	15' Min. 25' Std. 50' Max.	25' Min. 50' Std. 75' Max.	25' Min. 50' Std. (Or 3-Centered Curves)
ANGLE OF DRIVE Y		60°-90°	60°-90°		60°-90°	60°-90°
DIVISIONAL ISLAND (Throat Median)		4'-22" Wide	4'-22" Wide		4'-22" Wide	4'-22" Wide
SETBACK G	12' Min., All categories. See General Note No. 5.					

Side road intersection design, with possible auxiliary lanes and channelization, may be necessary. Intersection design, with possible auxiliary lanes and channelization, should be considered for connections with more than 4000 trips/days.
2-Way refers to one "in" movement and one "out" movement i.e., not exclusive left or right turn lanes on the connection.
When more than 2 lanes in the turnout connection are required, the 36' max. width may be increased to relieve interference between entering and exiting traffic which adversely affects traffic flow. These cases require documented site specific study and design.
Small radii may be used in lieu of flares as approved by the Department.
DESIGN NOTE: 1-Way connections will be designed to effectively eliminate unpermitted movements.

TURNOUTS

INDEX NO. 515 SHEET NO. 1 of 7

TURNOUT PROFILES

RURAL TURNOUT PROFILES

URBAN TURNOUT PROFILES

RECOMMENDED TURNOUT PROFILE TRANSITION LENGTHS (L) (FT.)

A	CRESTS				SAGS			
	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED
6-13%	3	0	5	0	3	0	5	0
14%	3	0	10	0	3	0	10	0
15%	3	2.5	10	3	5	3	10	5
16%	5	3	10	4	6	4	10	6
17%	6	3.5	10	5	8	5	10	7
18%	6	4	10	6	9	6	10	8
19%	7	4.5	10	7	11	7	12	9
20%	8	5	11	8	12	8	13	10
21%	9	5.5	12	9	13	8.5	14	11
22%	10	6	13	10	14	9	16	12
23%	10	6.5	14	10.5	14	9.5	16	12.5
24%	11	7	15	11	15	10	17	13
25%	12	7.5	15	11.5	16	10.5	18	13.5
26%	12	8	16	12	17	11	18	14
27%	13	8.5	17	12.5	17	11.5	19	14.5
28%	14	9	17	13	18	12	20	15
29%	NA	NA	22	14	NA	NA	21	17
30-31%	NA	NA	23	15	NA	NA	22	18
32-33%	NA	NA	24	16	NA	NA	23	20
34-36%	NA	NA	26	17	NA	NA	25	21
37-38%	NA	NA	27	18	NA	NA	26	22
39-41%	NA	NA	29	19	NA	NA	28	24
42-43%	NA	NA	30	20	NA	NA	29	25
44-46%	NA	NA	32	21	NA	NA	31	26
47-48%	NA	NA	33	22	NA	NA	32	27
49-51%	NA	NA	34	23	NA	NA	34	28
52-54%	NA	NA	36	24	NA	NA	35	30
55-56%	NA	NA	37	25	NA	NA	36	31

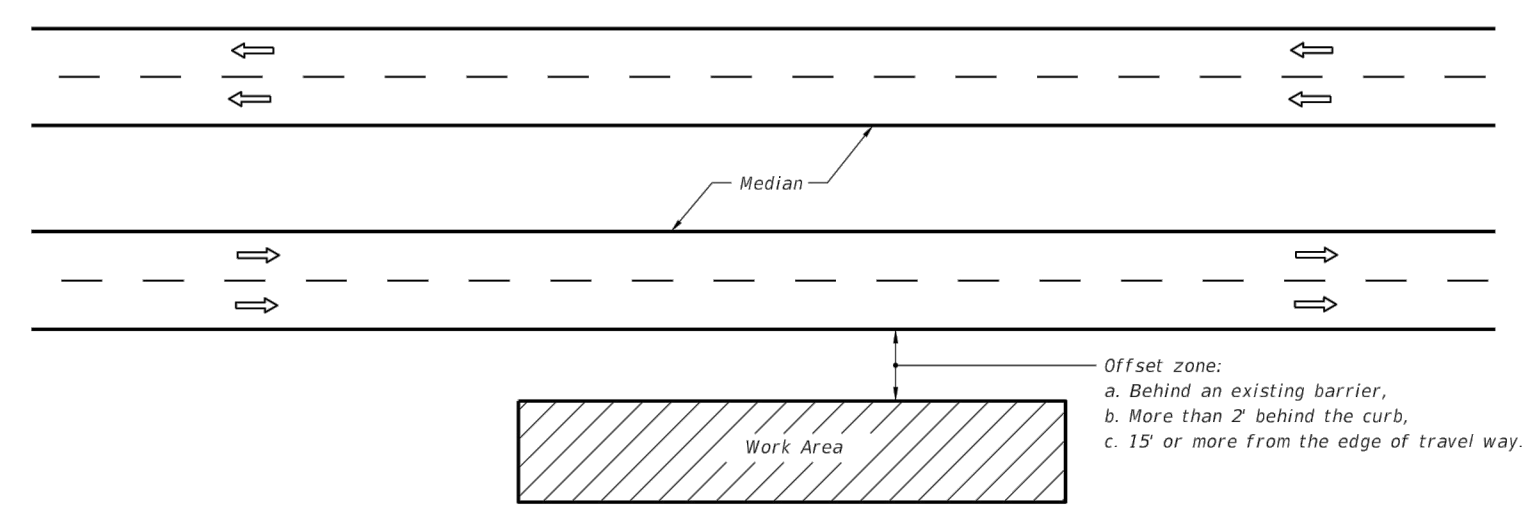
ROADWAY PAVEMENT SLOPES AND SLOPES OF ABUTTING RURAL TURNOUT SURFACES (G_i)

STORMWATER RUNOFF AND PROFILE OPTION NOTES

- Turnouts shall neither cause water to flow on or across the roadway pavement, nor cause water ponding or erosion within the State right of way. On all rural turnouts the transition (L) nearest the roadway shall be sloped or crowned to direct stormwater runoff to the roadside ditch. Inlets, flumes or other appropriate runoff control devices shall be constructed when runoff volumes are sufficient to cause erosion of the shoulder. Similar runoff control devices shall be constructed as necessary to properly direct and control the stormwater runoff on urban turnouts.
- The Option 1 profile is intended for locations where roadway, turnout taper and auxiliary lane stormwater runoff volumes are relatively large. The Option 2 profile is intended for locations where runoff volumes are relatively small and/or where there is no roadside ditch.

TURNOUTS

INDEX NO. 515 SHEET NO. 7 of 7



GENERAL NOTES

- If the work operation (excluding establishing and terminating the work area), requires that two or more work vehicles cross the offset zone in any one hour, traffic control will be in accordance with Index No. 612.
- No special signing is required.
- This index also applies when work is being performed on a multilane undivided highway.
- This index also applies to work performed in the median behind an existing barrier or more than 15' from the edge of travel way, both roadways. Work performed in the median behind curb and gutter shall be in accordance with Index No. 612.
- When a side road intersects the highway within the work area, additional traffic control devices shall be placed in accordance with other applicable TCZ indexes.
- When construction activities encroach on a sidewalk, refer to Index No. 660.
- For general TCZ requirements and additional information, refer to Index No. 600.

- SYMBOLS**
- Work Area
 - Sign With 18" X 18" (Min.) Orange Flag And Type B Light
 - Channelizing Device (See Index No. 600)
 - Work Zone Sign
 - Lane Identification + Direction of Traffic

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR 15' OR MORE FROM THE EDGE OF TRAVEL WAY.

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/05	FDOT 2014 DESIGN STANDARDS	611	1 of 1
MULTILANE WORK OUTSIDE SHOULDER			

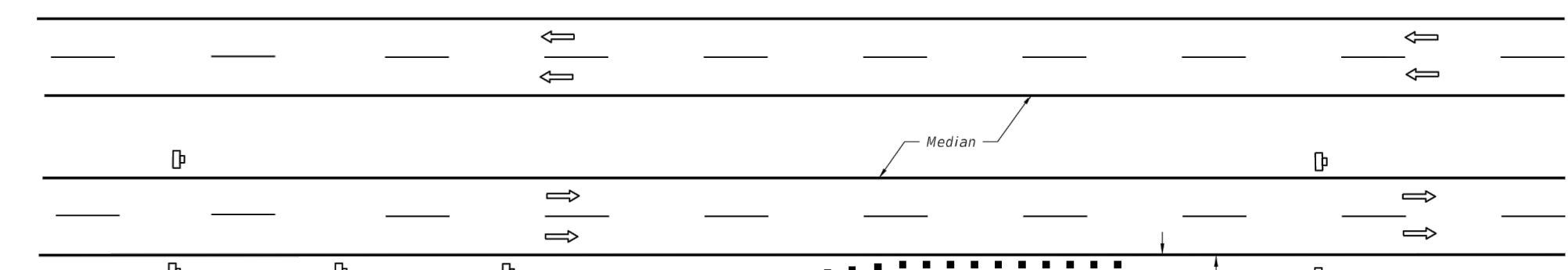


Table II
Taper Length - Shoulder

Speed (mph)	L (ft.)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L = WS ¹ 60
30	40	50	60	
35	35	68	82	L = WS
40	72	90	107	
45	120	150	180	
50	133	167	200	
55	147	183	220	
60	160	200	240	
65	173	217	260	
70	187	233	280	

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.)			
	Type I or Type II Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

SYMBOLS

- Work Area
- Sign With 18" X 18" (Min.) Orange Flag And Type B Light
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Lane Identification + Direction of Traffic

GENERAL NOTES

- If the work operation encroaches on the through traffic lanes or when four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), a flagger shall be provided and a FLAGGER sign shall be substituted for the WORKERS sign. The flagger shall be positioned at the point of vehicle entry or departure from the work area.
- This TCZ plan also applies to work performed in the median more than 2' but less than 15' from the edge of travelway.
- When work is being performed on a multilane undivided roadway the signs normally mounted in the median (as shown) shall be omitted.
- WORKERS signs to be removed or fully covered when no work is being performed.
- SHOULDER WORK sign may be used as an alternate to the WORKER sign.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ indexes.
- For general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

- Signs and channelizing devices may be omitted if all of the following conditions are met:
 - Work operations are 60 minutes or less.
 - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRUCH THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/07	FDOT 2014 DESIGN STANDARDS	612	1 of 1
MULTILANE, WORK ON SHOULDER			

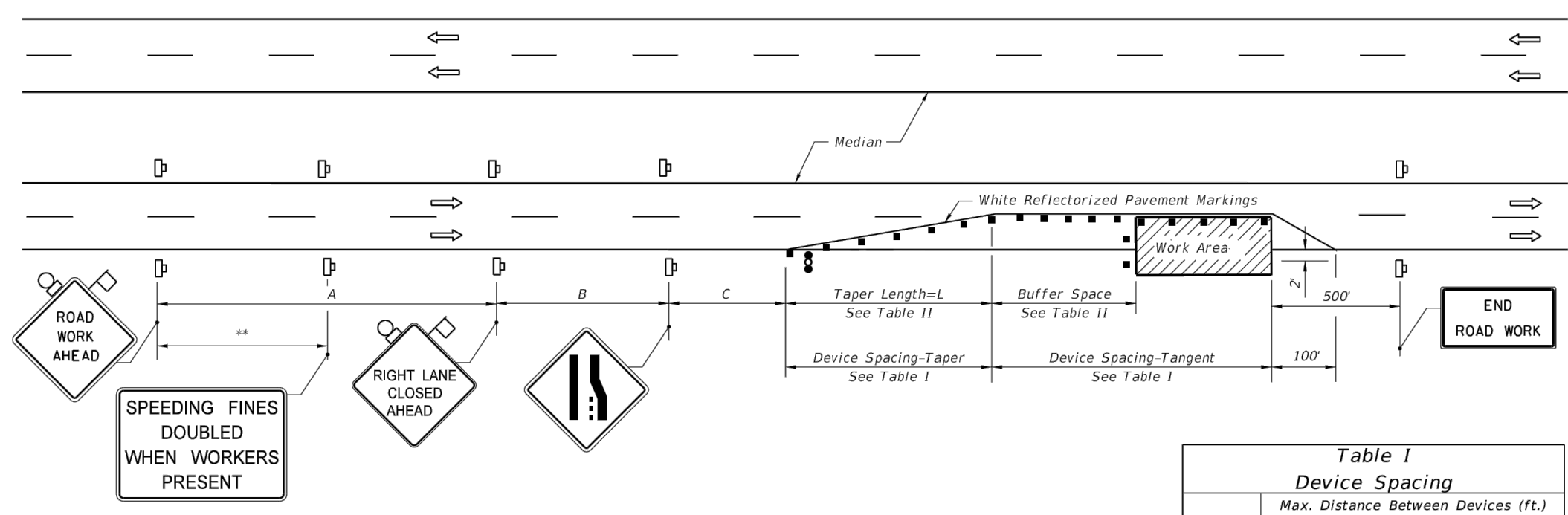


Table II
Buffer Space and Taper Length

Speed (mph)	Buffer Space (ft.)	Taper Length (2 Lateral Transitions) (ft.)		Notes (Merge)
		Dist.	L	
25	155	125		L = WS ¹ 60
30	200	180		
35	250	245		L = WS
40	305	320		
45	360	540		
50	425	600		
55	495	660		
60	570	720		
65	645	780		
70	730	840		

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

For lateral transitions other than 12', use Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.)			
	Type I or Type II Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

GENERAL NOTES

- Work operations shall be confined to one traffic lane, leaving the adjacent lane open to traffic.
- On undivided highways the median signs as shown are to be omitted.
- When work is performed in the median lane on divided highways, the channelizing device plan is inverted and left lane closed and lane ends signs substituted for the right lane closed and lane end signs.
- The same applies to undivided highways with the following exceptions:
 - Work shall be confined within one median lane.
 - Additional barricades, cones, or drums shall be placed along the centerline abutting the work area and across the trailing end of the work area.
- When work on undivided highways occurs across the centerline so as to encroach on both median lanes, the inverted plan is applied to the approach of both roadways.
- Signs and traffic control devices are to be modified in accordance with INTERMITTENT WORK STOPPAGE details (sheet 2 of 2) when no work is being performed and the highway is open to traffic.
- The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
- When paved shoulders having a width of 8 ft. or more are closed, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ indexes.
- This TCZ plan does not apply when work is being performed in the middle lane(s) of a six or more lane highway. See Index No. 614.
- For general TCZ requirements and additional information, refer to Index No. 600.

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350
50 mph	500	500	500
55 mph or greater	2640	1640	1000

* The ROAD WORK 1 MILE sign may be used as an alternate to the ROAD WORK AHEAD sign and the RIGHT LANE CLOSED 1/2 MILE sign may be used as an alternate to the RIGHT LANE CLOSED AHEAD sign.

** 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

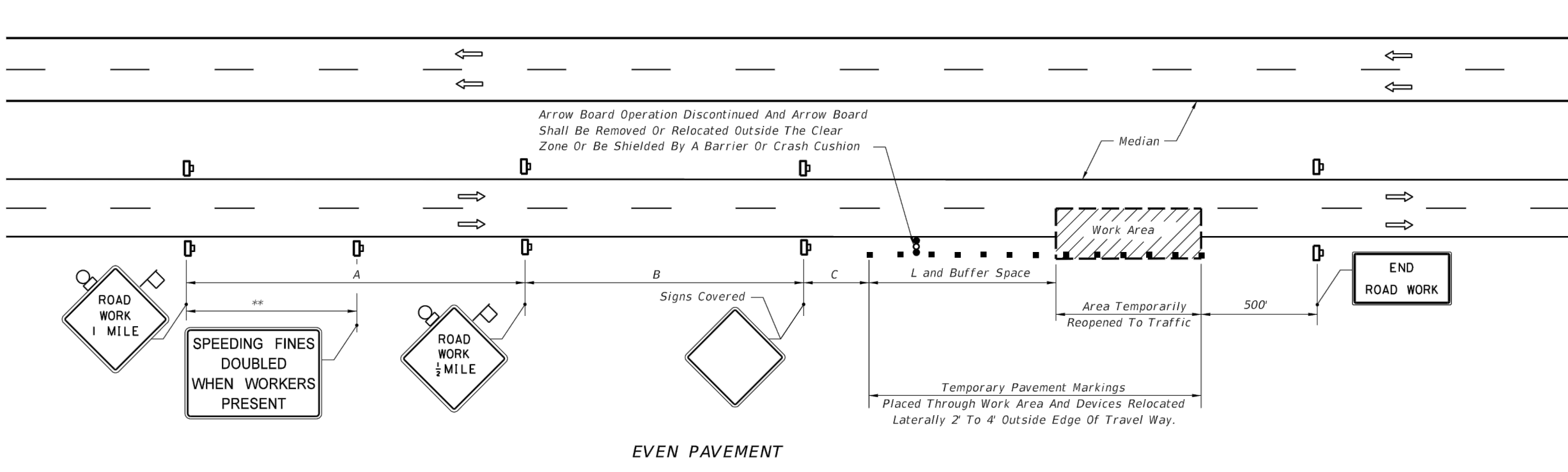
SYMBOLS

- Work Area
- Sign With 18" X 18" (Min.) Orange Flag And Type B Light
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Advance Warning Arrow Board

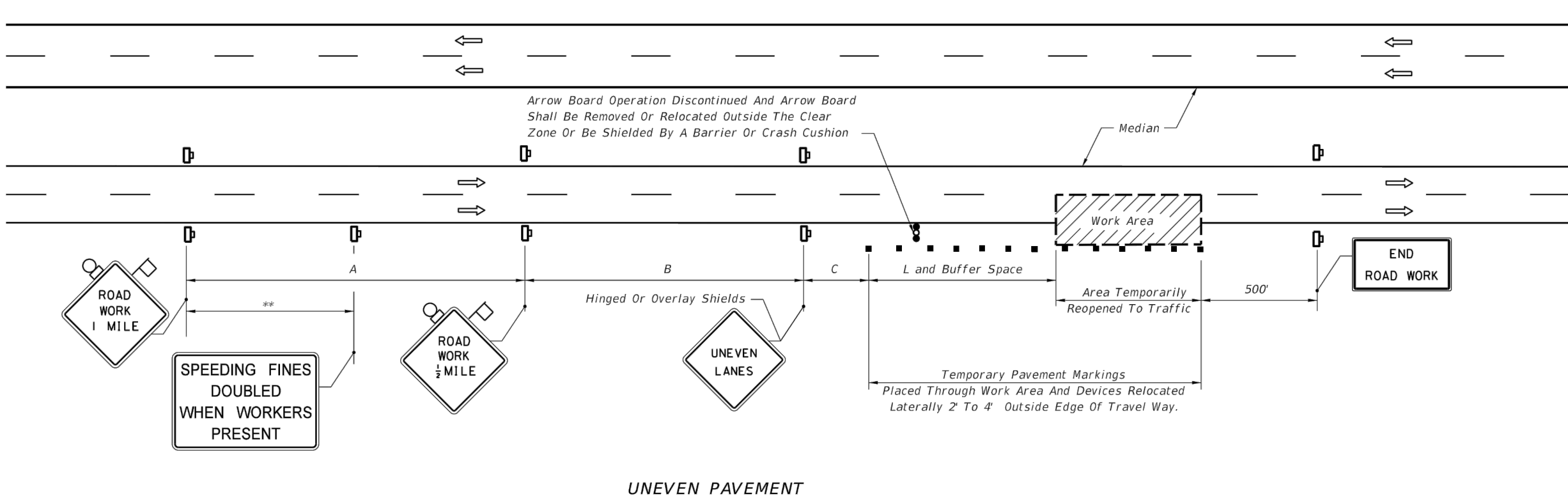
CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRUCH ON THE LANE ADJACENT TO EITHER SHOULDER AND THE AREA 2' OUTSIDE THE EDGE OF TRAVEL WAY.

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/09	FDOT 2014 DESIGN STANDARDS	613	1 of 2
MULTILANE, WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE			



EVEN PAVEMENT



UNEVEN PAVEMENT

INTERMITTENT WORK STOPPAGE - LANE REOPENED TO TRAFFIC

LAST REVISION	DESCRIPTION:	INDEX NO.	SHEET NO.
07/01/05	FDOT 2014 DESIGN STANDARDS	613	2 of 2
MULTILANE, WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE			

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LBYD Project Number
402-14-016

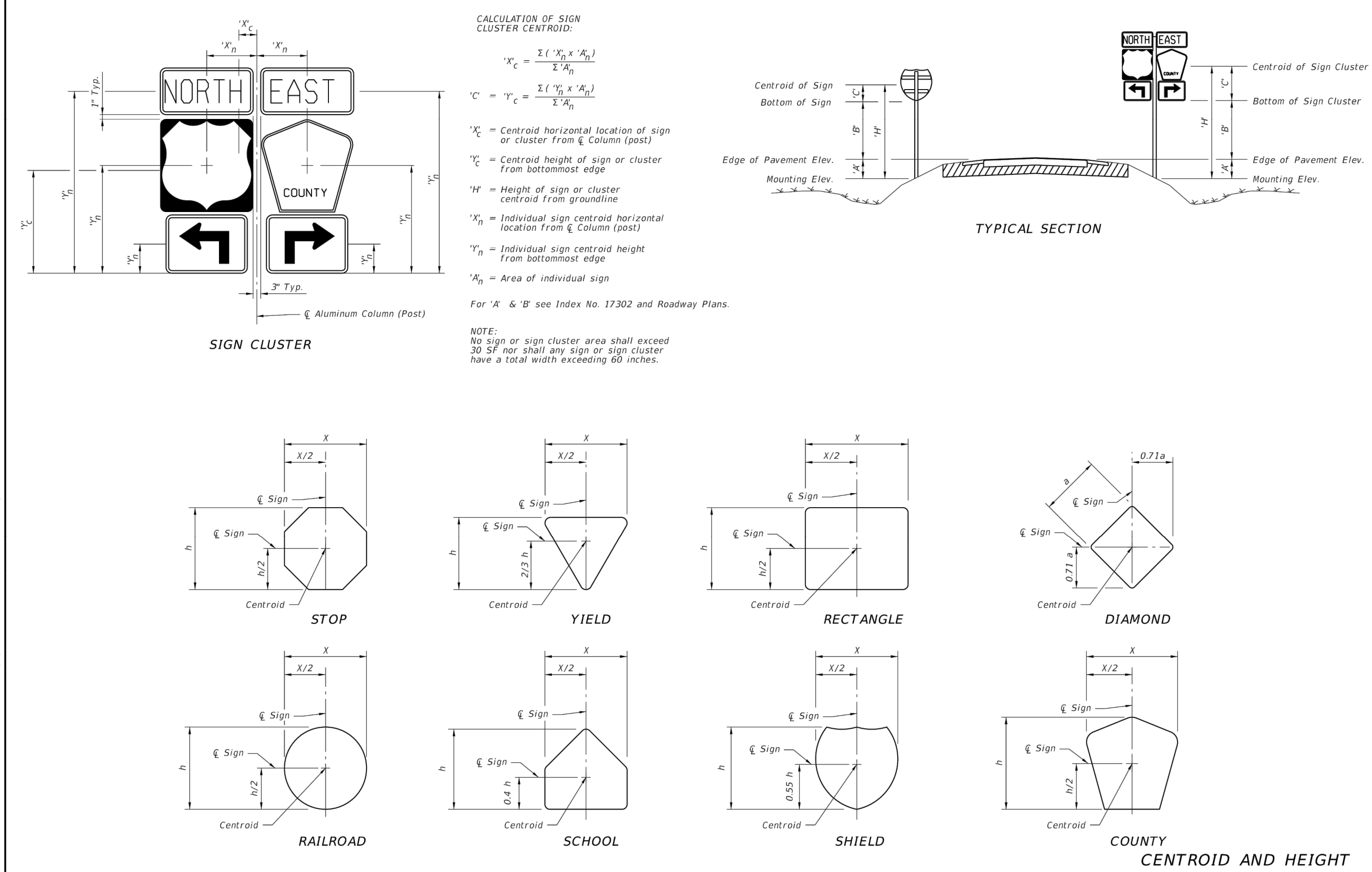
Revision No.	Date	PER CITY OF FORT PIERCE COMMENT
1	10/2/2014	

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LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

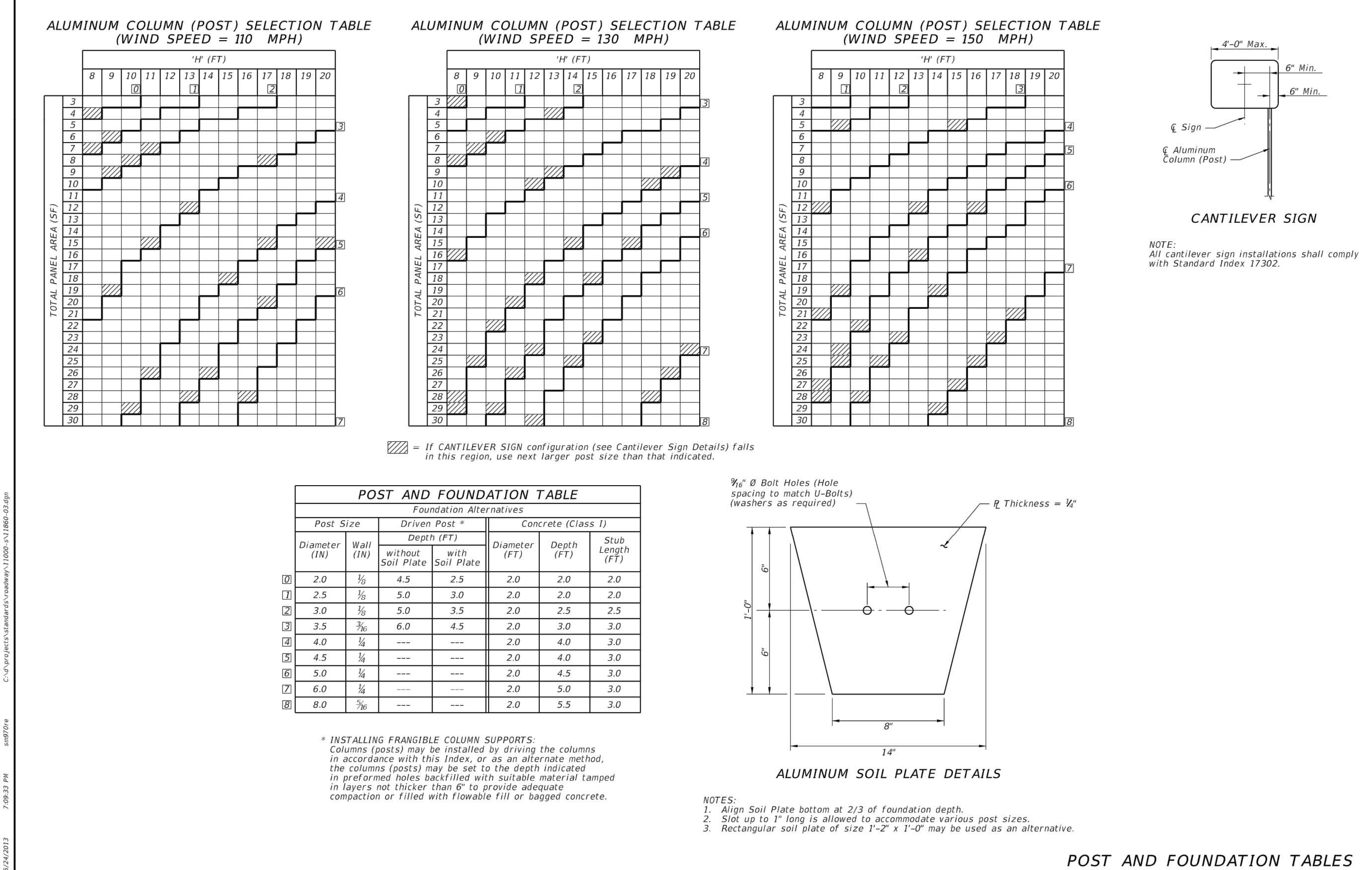
Sheet Title
FDOT DETAILS

Date	SEPTEMBER 2014
Checked By	RMW
Drawn By	MKA
Sheet Number	16
Sequence	16
Total	22

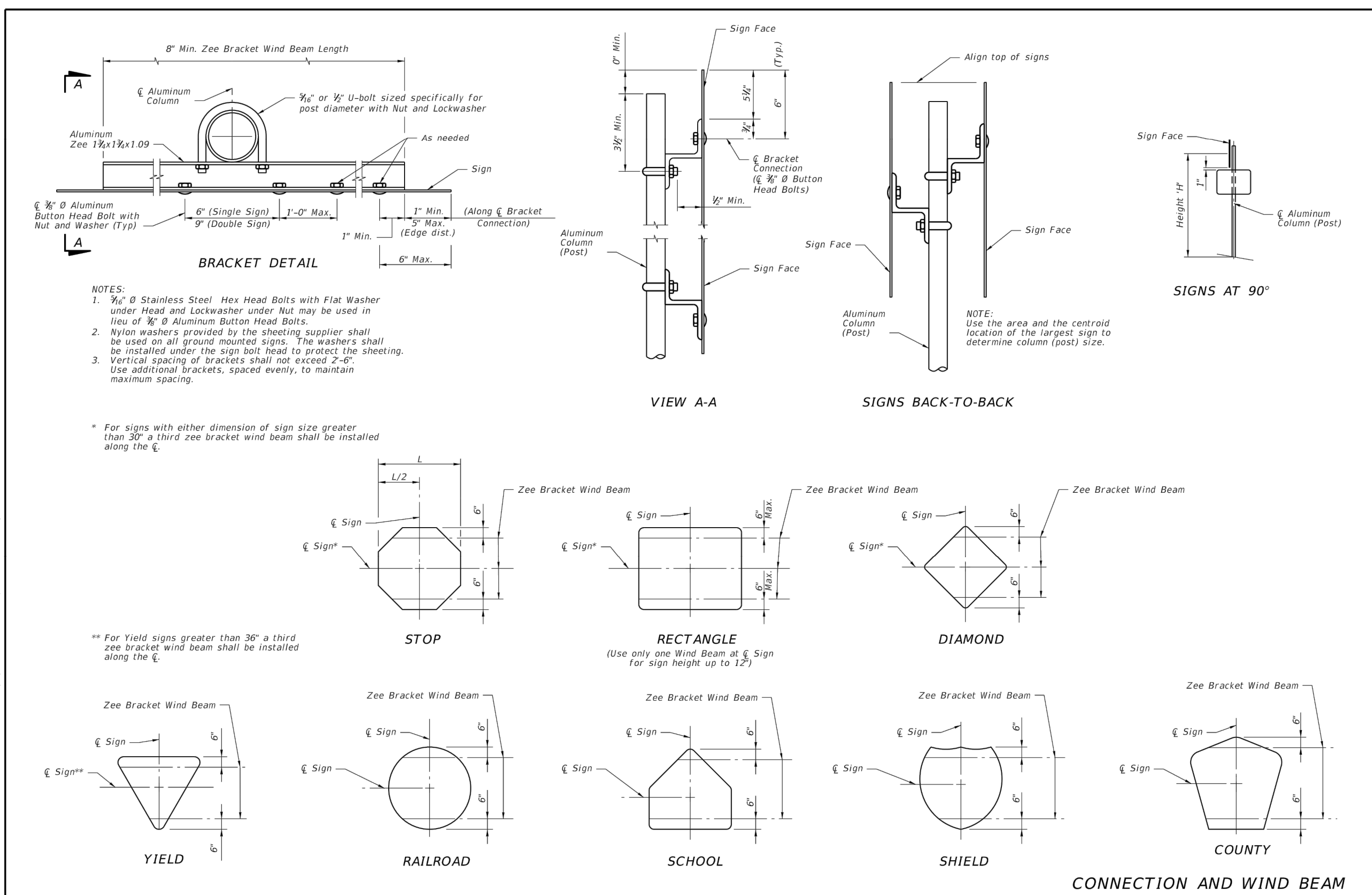
ROBERT M. WALKER
PE #70246



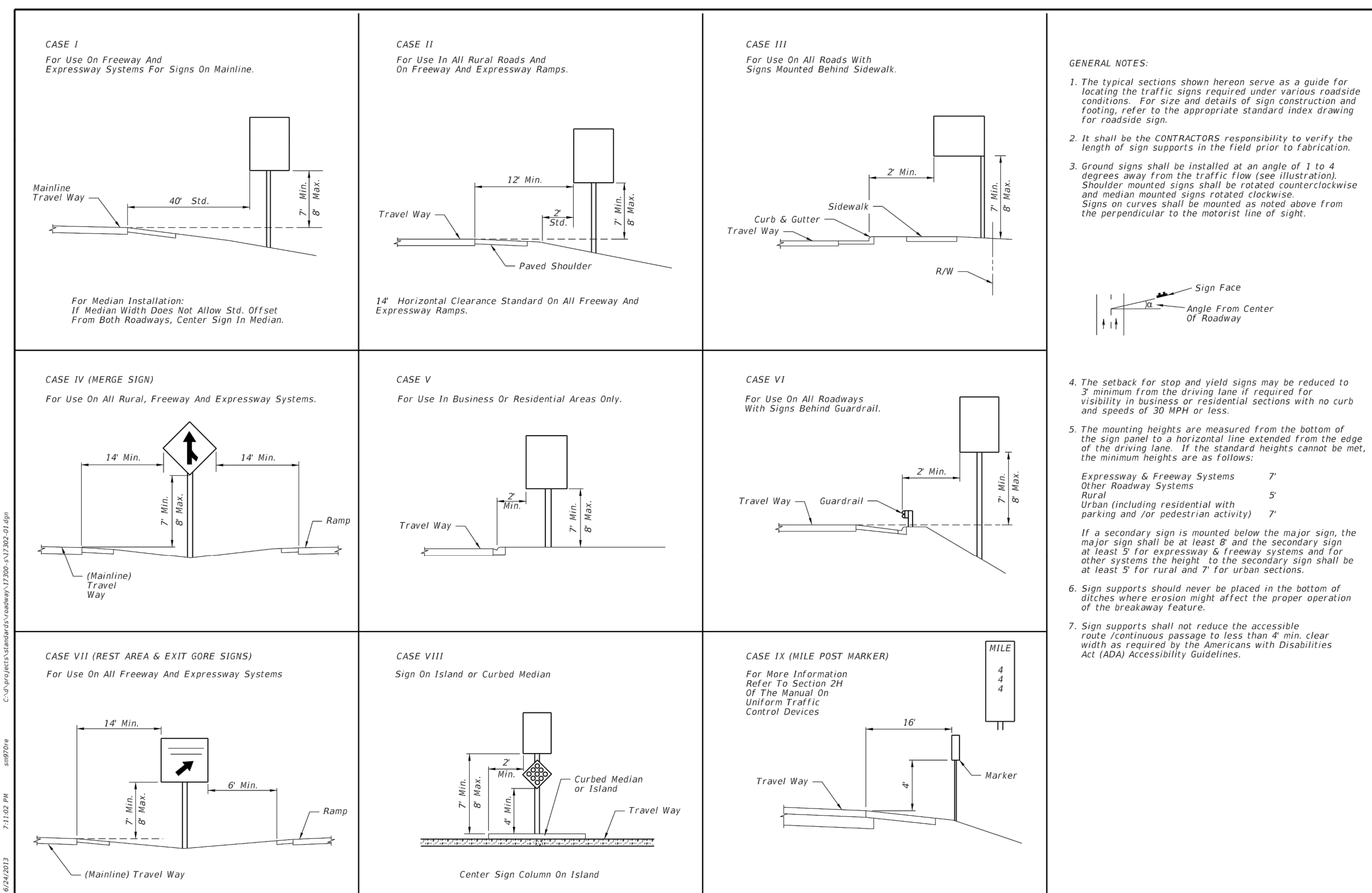
LAST REVISION 07/01/09	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 11860	SHEET NO. 2 of 8
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LAST REVISION 01/01/11	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 11860	SHEET NO. 3 of 8
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LAST REVISION 07/01/13	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 11860	SHEET NO. 4 of 8
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LAST REVISION 01/01/12	DESCRIPTION: FDOT 2014 DESIGN STANDARDS	INDEX NO. 17302	SHEET NO. 1 of 1
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402-14-016

REVISION	PER CITY OF FORT PIERCE COMMENT
10/2/2014	

FAMILY DOLLAR
LA CABANA, LLC
1712 ORANGE AVENUE, FORT PIERCE, FL 34950

Sheet Title
FDOT DETAILS

Date
SEPTEMBER 2014

Checked By
RMW

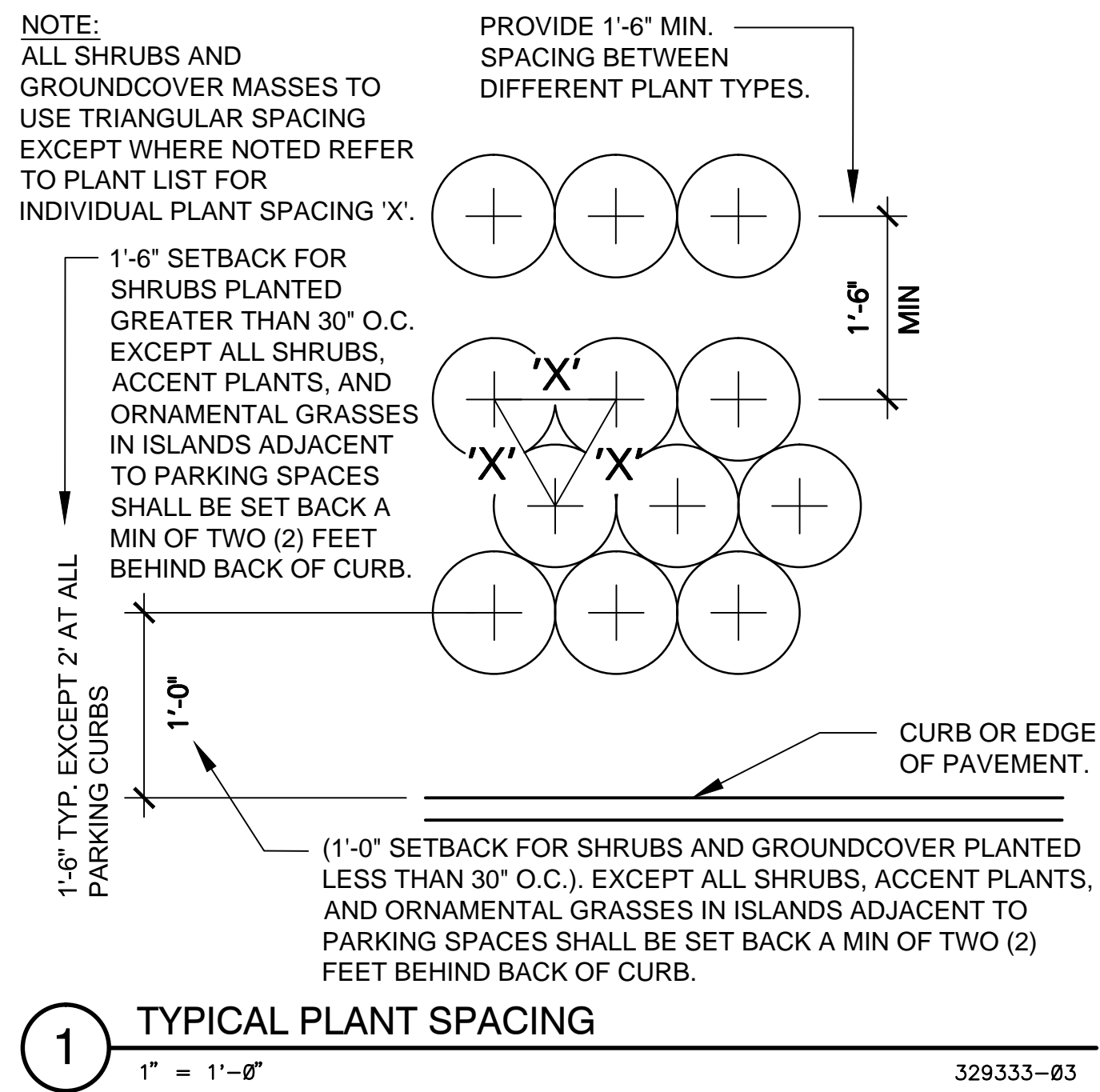
Drawn By
MKA

Sheet Number
C-11.5

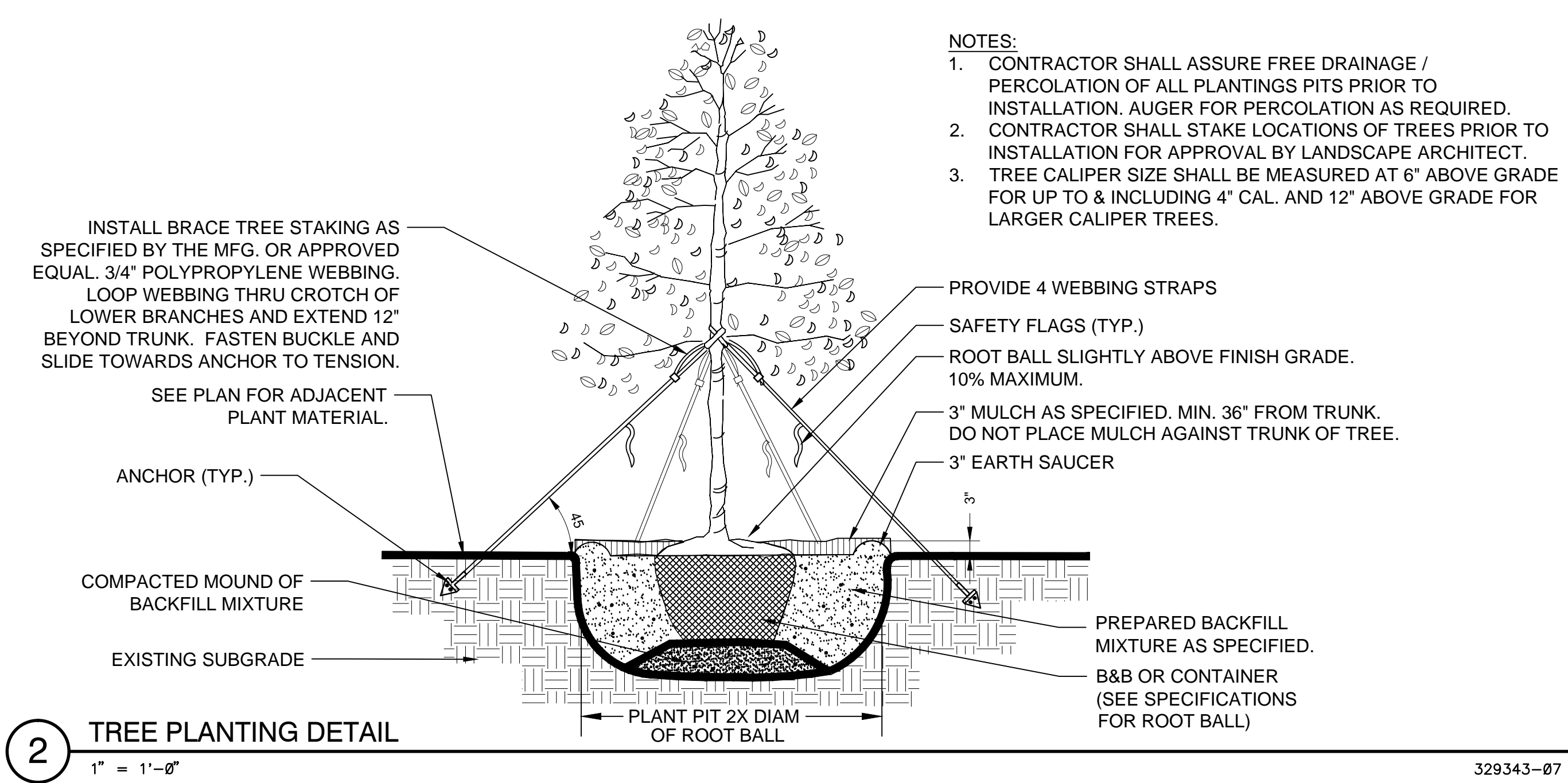
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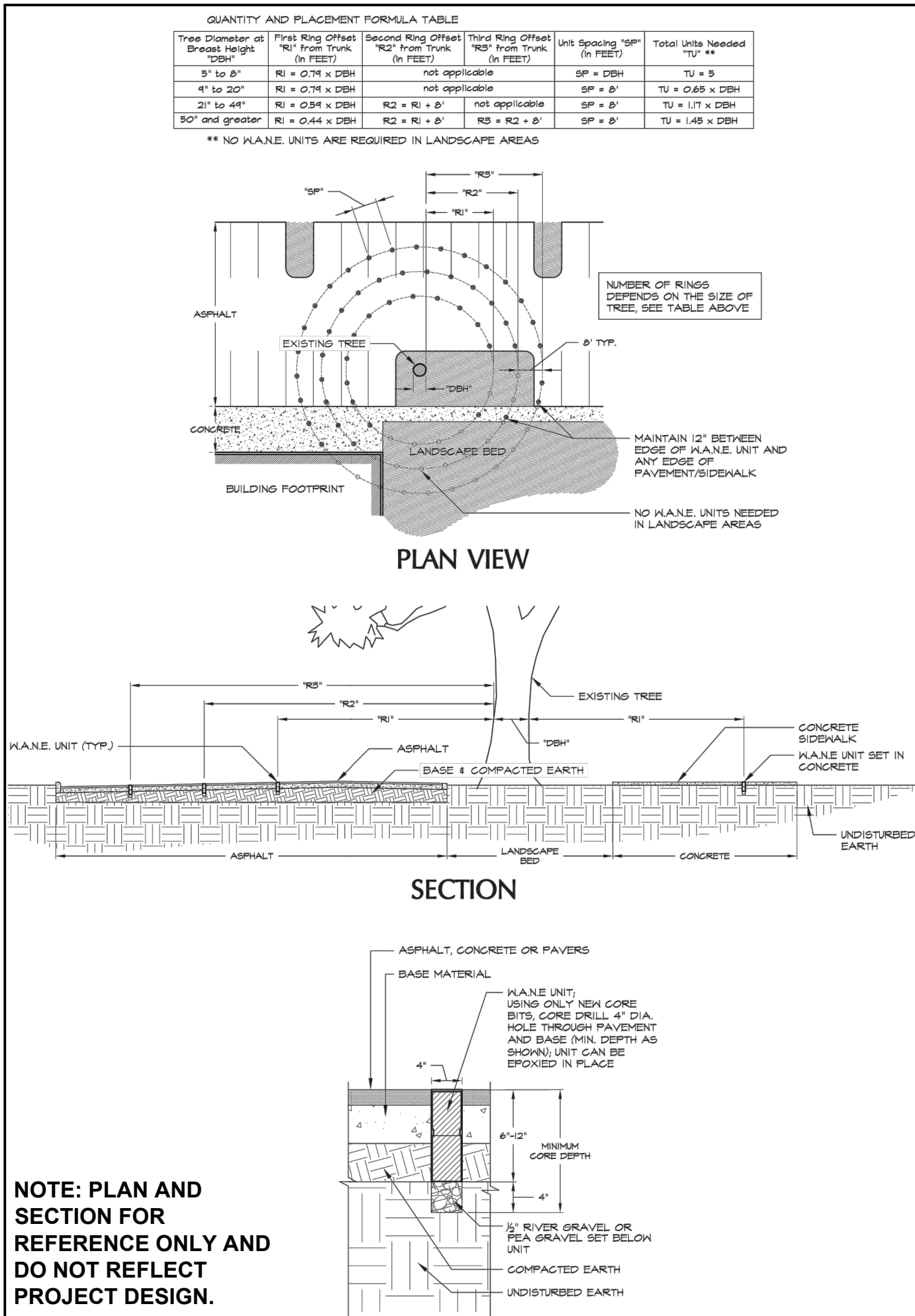
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 PE #70246



1 TYPICAL PLANT SPACING

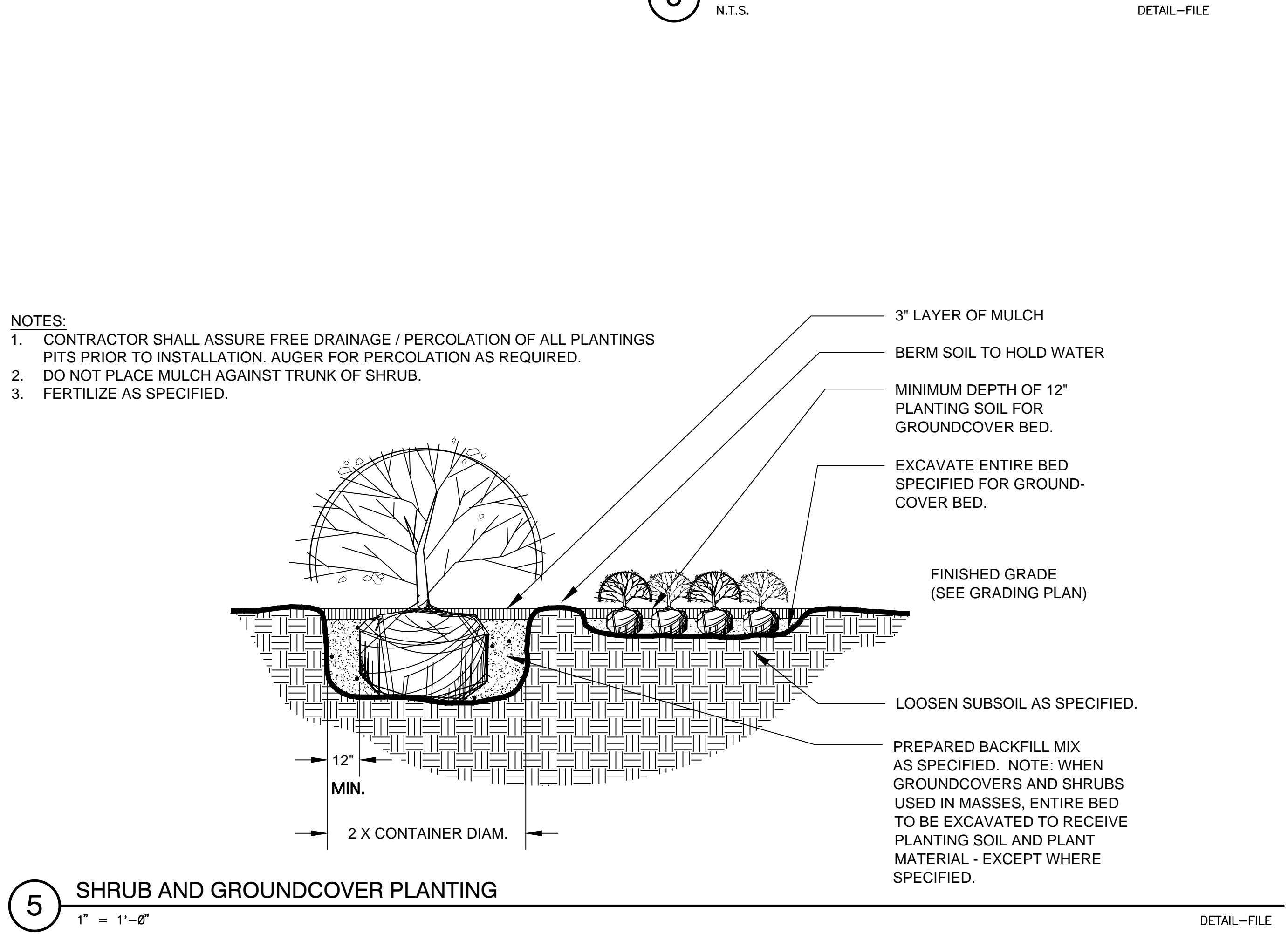
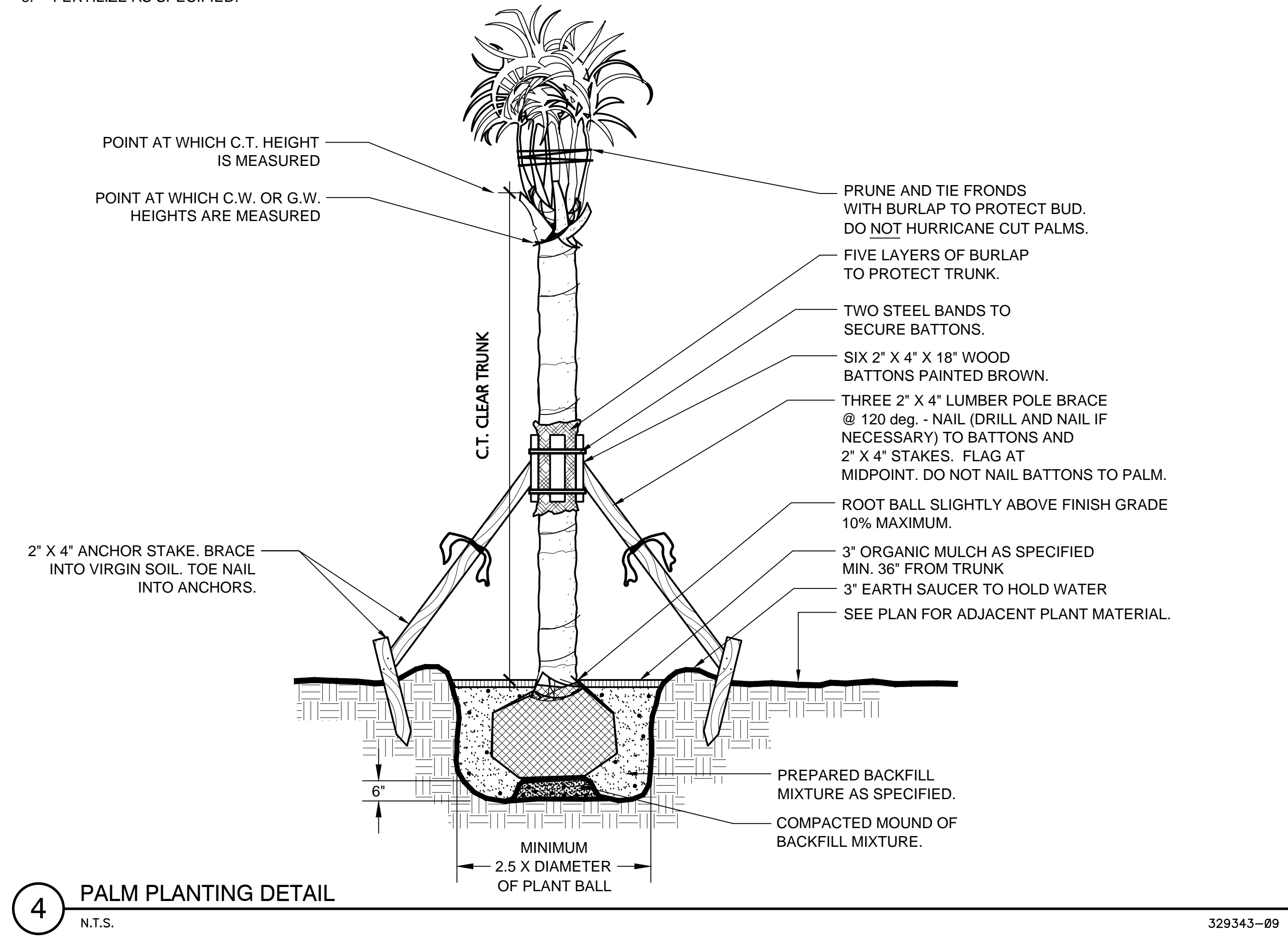


2 TREE PLANTING DETAIL



3 W.A.N.E. 3000 ROOT AERATION SYSTEM

- NOTES:
1. FINAL TREE STAKING AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT.
2. SABAL PALMS SHALL HAVE BOOTS REMOVED.
3. CONTRACTOR SHALL ASSURE FREE DRAINAGE / PERCOLATION OF ALL PLANTINGS PITS PRIOR TO INSTALLATION. AUGER FOR PERCOLATION AS REQUIRED.
4. NO SCRAPED OR SCARRED TRUNKS ARE PERMITTED.
5. BRACING MAY BE MODIFIED FOR URBAN CONDITIONS. TO BE APPROVED BY LANDSCAPE ARCHITECT.
6. FERTILIZE AS SPECIFIED.



Prepared By:
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FAMILY DOLLAR
1706 ORANGE AVE.
FORT PIERCE, FL 34950

Ginevra L. Anuszkiewicz
Registered Landscape Architect
LA6667068

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
1	10/03/2014	CITY COMMENTS / CIVIL BASE UPDATE

Date: **OCTOBER 3, 2014**
Job No.: **0210**
Drawn By: **GLA**
Checked By: **CJA**

Sheet Title
PLANTING DETAILS

Sheet No.
L2

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA
BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION, INCLUDING UNDERGROUND UTILITIES, PRIOR TO INITIATING PLANTING INSTALLATION. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT IMMEDIATELY. FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION SHALL CONFORM TO MEET FEDERAL, STATE, AND LOCAL CODES, REGULATIONS AND ORDINANCES.
- IT SHALL BE THE LANDSCAPE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY "SUNSHINE" AND ANY OTHER INTERESTED AGENCIES OR PARTIES OF HIS INTENT TO EXCAVATE AND TO OBTAIN FROM ALL AGENCIES OR OTHER INTERESTED PARTIES LOCATIONS OF ALL EXISTING UTILITIES OF EVERY KIND IN THE AREAS WHERE HE INTENDS OR PLANS TO EXCAVATE. SUCH LOCATIONS SHALL BE OBTAINED PRIOR TO STARTING CONSTRUCTION AND SHALL BE MAINTAINED DURING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND THE COST FOR SUCH ARE TO BE INCLUDED AS PART OF THE BID.
- CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL EXISTING GRASSES, GROUNDCOVERS, AND SHRUBS WHERE NEW PLANTINGS ARE PROPOSED. CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL TO BE REMOVED AND/OR PROTECTED ITEMS WITH OWNER'S REPRESENTATIVE PRIOR TO BID. THIS MAY INCLUDE BUT NOT BE LIMITED TO: SOD, SOIL, PLANT MATERIAL, STUMPS, ETC. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY TREES DAMAGED WITH SAME SPECIES AND SIZE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
- THE OWNER OR LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT TO REJECT ANY AND ALL WORK AND MATERIALS WHICH, IN HIS OPINION, DO NOT MEET THE REQUIREMENTS OF THE PLANTING PLAN, DETAILS, AND THESE SPECIFICATIONS.
- THE LANDSCAPE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL WORK AS SHOWN ON THE PLAN AND CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY CONFLICTS AND ADJUST AS PER THE LANDSCAPE ARCHITECT'S OR OWNER'S DIRECTION.
- THE LANDSCAPE CONTRACTOR SHALL CONTROL RUNOFF AND EROSION DURING CONSTRUCTION THROUGH THE USE OF SEDIMENT BASINS, STRAW OR HAY BALES AS APPROPRIATE. THE LANDSCAPE CONTRACTOR SHALL SPRINKLE OR OTHERWISE MANUALLY APPLY WATER TO AFFECTED CONSTRUCTION AREA TO CONTROL BOTH SIGNIFICANT WIND EROSION AND FUGITIVE DUST.
- THE LANDSCAPE CONTRACTOR SHALL ASSURE DRAINAGE AND PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION OF PLANT MATERIAL. CONTRACTOR SHALL FILL ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE THAT PROPER DRAINAGE AND PERCOLATION IS AVAILABLE. CORRECT IF REQUIRED TO ASSURE PERCOLATION. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL PLANTS DUE TO INADEQUATE DRAINAGE CONDITIONS.
- EXCEPT FOR PLANTINGS IN SURFACE WATER MANAGEMENT AREAS, THE SPECIFIED DEPTH OF ORGANIC MULCH, MEASURED AFTER WATERING-IN, SHALL BE PLACED AND MAINTAINED AROUND ALL NEWLY INSTALLED CANOPY TREES, ACCENT TREES, PALM TREES, AND SHRUBS. EACH TREE SHALL HAVE ORGANIC MULCH NO LESS THAN 36 INCHES BEYOND ITS TRUNK IN ALL DIRECTIONS; HOWEVER, THE MULCH SHALL BE KEPT AWAY FROM THE TRUNKS AND STEMS OF PLANTS SO AS TO AVOID CONDITIONS THAT MAY BE CONDUVIVE TO COLLAR ROT, BASAL CANKER OR OTHER FUNGI.
- THE LANDSCAPE CONTRACTOR SHALL EXAMINE THE SOILS OF ALL PLANTING AREAS PRIOR TO SUBMITTING BIDS FOR THE SUITABILITY TO SUSTAIN HEALTHY PLANT GROWTH AS CALLED FOR ON THE PLANTING PLAN, DETAILS, AND THESE SPECIFICATIONS. ANY REQUIRED AMENDMENTS AND ADDITIVES SHALL BE INCLUDED AS PART OF THE BID.
- NO SUBSTITUTIONS SHALL BE MADE TO THE PLANTING PLAN, DETAILS OR THESE SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.
- GUYING / STAKING PRACTICES SHALL NOT PERMIT NAILS, SCREWS, WIRES, ETC., TO PENETRATE OUTER SURFACE OF TREE OR PALM. TREES OR PALMS REJECTED DUE TO THIS PRACTICE SHALL BE REPLACED WITH INSPECTOR ON SITE.
- TREE INSTALLATION: ALL REQUIRED TREES SHALL BE INSTALLED 1'-2" ABOVE FINISHED GRADE. TREES INSTALLED OR BURIED TOO DEEPLY SHALL BE RESET TO THIS STANDARD. REMOVE THE TOP 1/3 OF THE WIRE BASKET ON ALL B&B TREE STOCK.
- PLANT MATERIAL
 - ALL TREES, PALMS, SHRUBS, GROUND COVERS AND OTHER PLANTS SHALL CONFORM TO THE STANDARD OF FLORIDA NO. 1 OR BETTER AS GIVEN IN THE LATEST EDITION OF GRADES AND STANDARDS FOR NURSERY PLANTS BY FLORIDA DEPARTMENT OF AGRICULTURE, PART I AND II. PLANT MATERIAL SHALL ALSO CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. (ANSI) BULLETIN Z 60.1 - 1990 AND AS REVISED. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
 - ALL CONTAINER AND CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. CONTRACTOR SHALL PROVIDE LARGER CONTAINER MATERIAL IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. BOTH MINIMUM DIMENSIONAL SPECIFICATION AND MINIMUM CONTAINER SPECIFICATION SHALL BE MET.
 - ALL PLANTS SHALL BE CONTAINER GROWN EXCEPT AS NOTED ON PLAN. BARE ROOT TREES ARE NOT ACCEPTABLE. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY PRIOR TO PLANTING. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE BURLAP REMOVED. WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED PRIOR TO INSTALLATION.
 - SOD SHALL MEET AMERICAN SOD PRODUCERS ASSOCIATION STANDARDS FOR NURSERY GROWN SOD FOR THICKNESS OF CUT, PAD SIZE, STRENGTH OF SECTIONS, MOISTURE CONTENT AND THATCH. SOD SHALL BE GUARANTEED TO BE UNIFORM IN COLOR, LEAF TEXTURE, AND SHOOT DENSITY AND FREE OF WEEDS, DISEASE, FUNGUS, INSECTS OR OTHER IMPERFECTIONS AND SUFFICIENTLY KNITTED TO SUSTAIN GROWTH. SOD SHALL BE MOWED FOR FINAL ACCEPTANCE.
 - TYPICALLY, SHRUB AND GROUND COVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING).
- QUANTITIES, LOCATION AND SUBSTITUTIONS: THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL ALL PLANTS AS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN THE QUANTITIES LISTED ON THE PLANT SCHEDULE. IN THE EVENT OF A VARIATION BETWEEN THE PLANT SCHEDULE AND THE ACTUAL NUMBER OF PLANTS SHOWN ON THE PLANTING PLAN, THE HIGHER QUANTITY SHALL PREVAIL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST THE NUMBER AND LOCATIONS OF THE DESIGNATED TYPES AND SPECIES OF PLANTS TO BE USED AT ANY OF THE LOCATIONS SHOWN. THE OWNER SHALL RECEIVED A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE PLANT MATERIAL. NO SUBSTITUTION OF PLANT MATERIAL, TYPES, SPECIFICATIONS OR SIZES WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO NOT ACCEPT PLANT MATERIAL THAT DOES NOT, IN THE OPINION OF THE OWNER AND/OR LANDSCAPE ARCHITECT, MEET THE SPECIFICATIONS HEREIN.
- IRRIGATION: UNLESS SPECIFICALLY NOTED OTHERWISE ON SHEET IR-1, ALL PROPOSED PLANT BEDS SHALL BE IRRIGATED WITH AN AUTOMATIC, UNDERGROUND IRRIGATION SYSTEM. SYSTEM SHALL BE EQUIPPED WITH A RAIN SENSOR DEVICE CONNECTED TO AN IRRIGATION CONTROLLER(S), AS PER STATE OF FLORIDA REGULATIONS. AFTER PLANT ESTABLISHMENT, THE CONTROLLER SHALL BE PROGRAMMED TO OPERATE IN COMPLIANCE WITH APPLICABLE WATERING RESTRICTIONS. IRRIGATION SHALL PROVIDE 100% COVERAGE TO PROPOSED PLANT BEDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, AND PERMITTING THE IRRIGATION SYSTEM IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE BUILDING CODES. THE COST OF INSTALLATION, PERMITTING, AND CREATING AS-BUILT DRAWINGS SHALL BE INCLUDED IN THE BID PRICE FOR IRRIGATION.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING ALL EXISTING AND PROPOSED PLANT MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
- IRRIGATION LINES SHALL BE TUNNELED BENEATH TREE ROOTS OF EXISTING TREES, RATHER THAN TRENCHED.
- SEE IRRIGATION SHEETS IR 1 FOR IRRIGATION REQUIREMENTS.
- FERTILIZATION: PROVIDE FERTILIZER UNIFORM IN COMPOSITION, DRY, AND IN A FREE FLOWING CONDITION FOR APPLICATION BY SUITABLE EQUIPMENT, AND DELIVER IN UNOPENED BAGS OR CONTAINERS, EACH FULLY LABELED.
 - FERTILIZE TREES, SHRUBS, AND GROUND COVERS WITH "MILORGANITE" OR AN APPROVED COMPLETE FERTILIZER. APPLY "MILORGANITE" FERTILIZER AT THE FOLLOWING RATE:
 - 5.00 LBS. OR 14.50 CUPS / PALM
 - 3.00 LBS. OR 8.70 CUPS / 12-16" MATERIAL
 - 2.00 LBS. OR 5.80 CUPS / 8-12" MATERIAL
 - 0.69 LBS. OR 2.00 CUPS / 6-8" MATERIAL
 - 0.19 LBS. OR 1/2 CUP / 3 GAL. MATERIAL
 - 0.10 LBS. OR 1/4 CUP / 1 GAL. MATERIAL
 - FERTILIZE TURF COMPLYING WITH THE STATE FERTILIZER LAWS. THE FERTILIZER SHALL BE CHEMICALLY DESIGNATED WITH 12-8-8. PROVIDE AT LEAST 50% OF THE PHOSPHORIC ACID FROM NORMAL SUPER PHOSPHATE OR AN EQUIVALENT SOURCE PROVIDING A MINIMUM OF TWO UNITS OF SULFUR. THE AMOUNTS OF SULFUR AND ALL OTHER CHEMICAL SHALL BE INDICATED ON THE QUANTITATIVE ANALYSIS CARD ATTACHED TO THE UNOPENED BAG.
- SOIL PREPARATION AND SOIL MIX**
 - CONTRACTOR TO ENSURE TOTAL WEED ERADICATION. ANY HERBICIDE APPLIED SHALL BE BY A LICENSED PEST AND CONTROL OPERATOR OF LAWN AND ORNAMENTAL. APPROVED HERBICIDE SHALL BE APPLIED ACCORDING TO MANUFACTURER'S RATE AND SPECIFICATION WITHIN LIMITS OF ALL AREAS TO BE PLANTED. PROTECT EXISTING PLANTS TO REMAIN FROM OVERSPRAY OR SPRAY WITHIN ROOT ZONE.
 - BEFORE PLACING TOPSOIL, RAKE SUBSOIL SURFACE CLEAR OF STONES (1 INCH DIAMETER AND LARGER), DEBRIS, RUBBISH, REMAINS OF REMOVED PLANT

- MATERIAL, AND ALL REMAINING CONSTRUCTION DEBRIS TO A DEPTH OF 6". CONTAMINATED SOILS SHALL BE REMOVED AND REPLACED TO THEIR FULL DEPTHS AND EXTENTS.
- SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES.
 - A LICENSED PEST AND CONTROL OPERATOR OF LAWN AND ORNAMENTAL SHALL APPLY APPROVED PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH THE MANUFACTURER'S RATE AND SPECIFICATIONS.
 - PLANTING LANDSCAPE BEDS (SHRUBS AND GROUNDCOVERS): ALL LANDSCAPE BEDS TO BE MULCHED SHALL BE ROUGH GRADED TO AN ELEVATION OF 16 TO 17 INCHES BELOW THE TOP OF ADJACENT HARDSCAPE OR FINAL FINISHED GRADE TO PROVIDE ROUGH 12 INCHES OF BACKFILL MIXTURE, 3 INCHES OF MULCH WITH A 2 INCH REVEAL ON THE CURB, ADJOINING SIDEWALK, OR OTHER HARDSCAPE FEATURE. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS AND SOD AREAS. IF NECESSARY, THE GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.
 - PLANTING LAWNS: SODDED AREAS SHALL BE ROUGH GRADED TO AN ELEVATION 5 TO 6 INCHES BELOW THE TOP OF THE ADJACENT HARDSCAPE OR FINAL FINISHED GRADE TO ALLOW FOR 4 INCHES OF COMPACTED BACKFILL MIXTURE AND 1 INCH TO 1.5 INCHES OF SOD. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS AND SOD AREAS. IF NECESSARY, THE GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.
 - FINISH GRADE ALL PREPARED TOPSOIL AREAS TO A SMOOTH, EVEN SURFACE ASSURING POSITIVE DRAINAGE AWAY FROM THE STRUCTURES AND ELIMINATE ANY LOW AREAS WHICH MAY COLLECT WATER. SEE CIVIL GRADING PLANS.
 - BACKFILL MIXTURE:**
 - TREES, ROYAL PALMS, SHRUBS, AND GROUNDCOVERS: 1/3 SAND, 1/3 TOPSOIL, 1/3 PEAT HUMUS.
 - ALL OTHER PALMS: 3/4 SAND, 1/4 TOPSOIL
 - SAND SHALL BE CLEAN, SILICA, SALT-FREE AND CONTAINING NO EXTRANEIOUS MATTER.
 - TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS THAT WOULD BE HARMFUL TO PLANT GROWTH, SHALL BE FREE OF NEMATODES, SHALL BE OF UNIFORM QUALITY, AND SHALL BE FRIABLE FERTILE SOIL WITH REPRESENTATIVE CHARACTERISTICS OF AREA SOILS. IT SHOULD BE FREE OF HEAVY CLAY, SILT, STONE, EXCESS LINE, SHELL ROCK, PLANT ROOTS, WEEDS, DEBRIS OR OTHER FOREIGN MATTER. IT SHALL NOT CONTAIN NOXIOUS PLANT GROWTH (SUCH AS BERMUDA, TORPEDO OR NUT GRASS). IT SHALL TEST BETWEEN THE PH RANGE OF 5.0 TO 6.5 UNLESS OTHERWISE SPECIFIED AND CONTAIN NO TOXIC RESIDUE OR SUBSTANCES THAT WOULD ENDANGER PLANT GROWTH. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH NOT LESS THAN 4".
 - PEAT HUMUS SHALL BE DECOMPOSED PEAT WITH NO IDENTIFIABLE FIBERS OR IF AVAILABLE, MUCH MAY BE SUBSTITUTED AND SHALL BE FREE FROM STONES, EXCESSIVE PLANT ROOTS, DEBRIS OR OTHER FOREIGN MATTER. MUCK SHALL NOT BE OVERLY SATURATED WITH WATER. HUMUS SHALL BE OF GOOD QUALITY, MATURE, DARK COLOR, OF HUMUS-LIKE QUALITY, AND HAVE PLEASANT SOIL SMELL.
 - BACKFILL MIX SAMPLES AND LABORATORY SOIL TESTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT OF RECORD FOR APPROVAL. CONTRACTOR SHALL TAKE RESPONSIBILITY FOR PERFORMING PERCOLATION TESTS PRIOR TO BACKFILLING WITH APPROVED PLANTING SOIL.
 - MULCH:** ALL MULCH BED QUANTITIES TO BE DETERMINED BY CONTRACTOR. CONTRACTOR SHALL MULCH ALL PLANT MATERIAL THROUGHOUT AND COMPLETELY TO A THREE (3) INCH DEPTH WITH CLEAN, WEED FREE MELALEUCA WOOD CHIPS. PLANT BEDS WITHIN STORMWATER BASINS SHALL BE MULCHED WITH PINE STRAW MULCH.
 - TREE PROTECTION:** PROTECT ALL TREES AND PALMS TO REMAIN WITH TREE BARRICADES. IMMEDIATELY FOLLOWING VEGETATION REMOVAL, EXISTING SLOPES GREATER THAN 3 TO 1 SHALL BE PROTECTED FROM EROSION AS REQUIRED BY LOCAL CODE. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE BARRICADED AREA: VEHICULAR AND PEDESTRIAN TRAFFIC; STORAGE OF CONSTRUCTION MATERIALS; PLACEMENT OF EXCAVATED MATERIALS OR TRASH; AND ANY ACTIVITIES THAT MAY DISTURB THE ROOT SYSTEM WITHIN THE BARRICADED AREA.
 - ALL REQUIRED TREE REMOVAL OR RELOCATION PERMITS SHALL BE PROCURED BY CONTRACTOR, PRIOR TO COMMENCEMENT OF WORK.
 - ALL PROTECTED TREES SHALL BE TRIMMED IN A MANNER CONSISTENT WITH THE "AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS, ANSI, A300, CURRENT EDITION."
 - MAINTENANCE:** THE CONTRACTOR IS RESPONSIBLE FOR COMPLETE MAINTENANCE OF ALL PROPOSED PLANTING AREAS (INCLUDING WATERING, SPRAYING, MULCHING, MOWING, FERTILIZING, ETC.) THROUGHOUT THE ENTIRE COURSE OF THE PROJECT. LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY OWNER'S REPRESENTATIVE.
 - FINAL ACCEPTANCE:** CONTRACTOR TO REQUEST INSPECTION OF PROJECT IN WRITING. IF ALL WORK IS SATISFACTORY AND COMPLETE IN ACCORDANCE WITH CONDITIONS OF CONTRACT DOCUMENTS, THEN THE OWNER AND LANDSCAPE ARCHITECT SHALL DECLARE SUBSTANTIALLY COMPLETE. SUBSTANTIAL COMPLETION CONSTITUTES THE BEGINNING OF THE GUARANTEE PERIOD.
 - WARRANTY / GUARANTEE PERIOD:** CONTRACTOR TO WARRANT AND GUARANTEE PLANT MATERIAL FOR A ONE (1) YEAR PERIOD FOLLOWING DATE OF SUBSTANTIAL COMPLETION. PRIOR TO ISSUING SUBSTANTIAL COMPLETION NOTICE THE CONTRACTOR SHALL SUBMIT TO THE OWNER COPIES OF AS BUILT PLANS / DOCUMENTS AND COPIES OF AN ANNUALIZED MAINTENANCE AND OPERATION MANUAL DETAILING ALL SCHEDULES, NURSERY PRACTICES, WATERING REQUIREMENTS, FERTILIZATION, TRIMMING, ETC. FOR ALL PLANT MATERIALS AND PLANT AREAS OF THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TREE STAKES AND GUY WIRES FROM TREES WHICH ARE ESTABLISHED AT THE END OF ONE (1) YEAR GUARANTEE PERIOD. TREES WHICH HAVE BEEN REPLACED SHALL REMAIN STAKED FOR ONE (1) FULL GROWING SEASON, AND THE OWNER SHALL BE RESPONSIBLE FOR REMOVING TREE STAKES AND GUY WIRES.

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FAMILY DOLLAR

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FORT PIERCE, FL 34950

Ginevra L. Anuszkiewicz
Registered Landscape Architect
LA6667068

PERMIT SUBMITTAL

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△		
△	10/03/2014 CITY COMMENTS / CIVIL BASE UPDATE	
REV	DATE	DESCRIPTION

Date:	OCTOBER 3, 2014
Job No.:	0210
Drawn By:	GLA
Checked By:	CJA

Sheet Title

LANDSCAPE
NOTES

Sheet No.

L3

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Sheet Title

IRRIGATION PLAN

Sheet No.

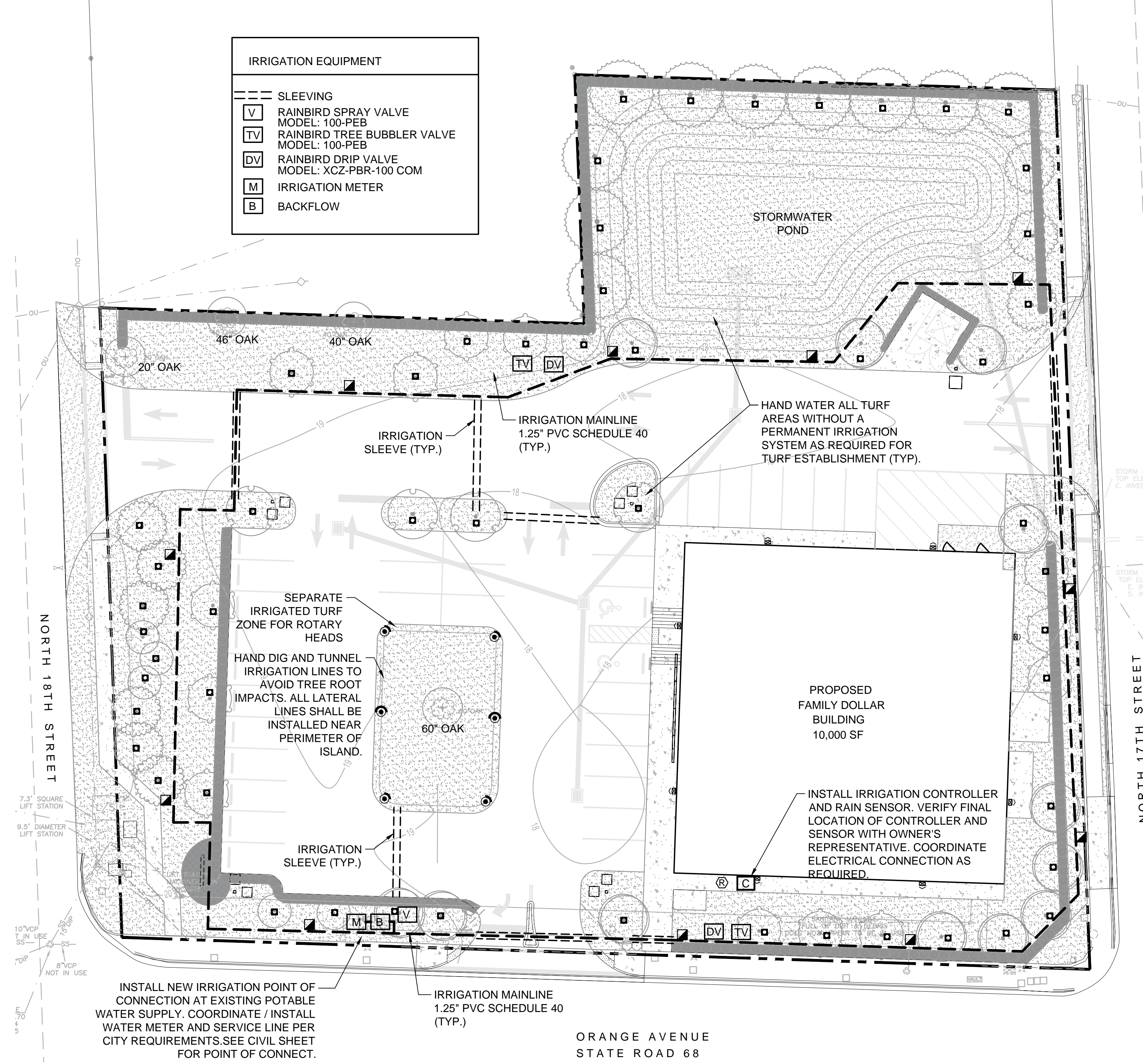
IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION	QTY	PRECIP	PSI	GPM	
■	SHRUB DRIPLINE 0.6 GPH @ 18" O.C. (2.3 L/H @ 0.46M) Dripline with 0.60 gph emitters at 18" O.C., row spacing at 18" O.C.	2,850 s.f.	0.69 in/h	25	20	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	ARC	PSI	GPM	RADIUS
⊙	Rain Bird R-1724 RD-1806-SAM-P45 Turf Rotator, 17'-24' Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	2	180	40	1.73	23'
⊙	Rain Bird R-1724 RD-1806-SAM-P45 Turf Rotator, 17'-24' Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	4	90	40	0.87	23'
■	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4.0" pop-up with pressure regulating device.	54	360	30	0.50	1'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				
■	Rain Bird 44-LRC 1" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, and 2-Piece Body.	11				
⊠	Rain Bird ESP4ME with (1) ESP-SM3 7 Station, Hybrid Modular Outdoor Controller. For Residential or Light Commercial Applications.	1				
Ⓡ	Rain Bird WR2-RC Wireless Rain Sensor Combo, includes 1 receiver and 1 rain sensor transmitter.	1				

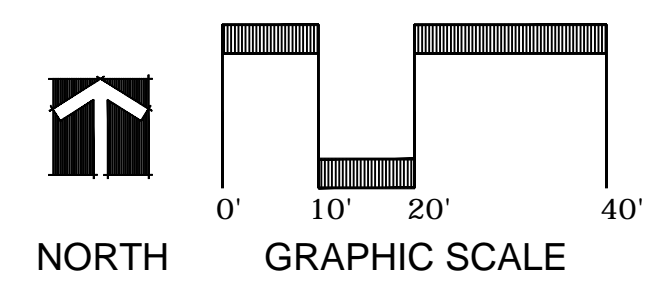
IRRIGATION NOTES

- ALL WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL REGULATIONS AND CODES FOR THE LOCATION OF WORK. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED TO COMPLETE WORK. THE COST FOR SUCH ARE TO BE INCLUDED AS PART OF THE BID.
- AUTOMATIC UNDERGROUND IRRIGATION SYSTEM SHALL BE CONTRACTOR DESIGNED AND INSTALLED. FINAL CONSTRUCTION PLANS SHALL MEET APPROVED PERMIT REQUIREMENTS AND BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL INSPECT THE SITE AND VERIFY CONDITIONS AND DIMENSIONS PRIOR TO DESIGN AND CONSTRUCTION. THE IRRIGATION CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS AND MATERIAL CUT SHEET UPON INSTALLATION COMPLETION AS A TERM OF FINAL ACCEPTANCE. THIS COST SHALL BE ACCOMMODATED IN THE BID.
- IRRIGATION PLANS ARE SCHEMATIC REPRESENTATIONS ONLY. FIELD ADJUST LINES TO AVOID CONFLICT WITH UTILITIES.
- IRRIGATION SHALL BE COORDINATED WITH THE PLANTING PLAN AND SITE IMPROVEMENTS AND SHALL BE DESIGNED WITH TRIANGULAR SPACING GIVING HEAD TO HEAD COVERAGE. COORDINATE IRRIGATION HEAD LAYOUT WITH NEW PLANT MATERIALS. LOCATE SPRAY HEADS 30" FROM BASE OF TREE. DO NOT ALTER HEAD LOCATION, PIPE LAYOUT, OR VALVE LOCATION WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER. NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES OCCUR BETWEEN THE PLANS AND FIELD CONDITIONS.
- COORDINATE IRRIGATION POINTS OF CONNECTION AND LOCATION OF AUTOMATIC CONTROL VALVES WITH PROJECT MANAGER. COORDINATE ALL WORK WITH OTHER TRADES, I.E. ELECTRICAL, MASONRY, ETC.
- USE 45 ELLS INSTEAD OF 90 ELLS ON ALL MAINLINES 2-1/2" AND LARGER. INSTALL CONCRETE THRUST BLOCKS AT ALL MAINLINE CHANGES IN DIRECTION. POUR MINIMUM OF 1 CUBIC FOOT OF CONCRETE ON UNDISTURBED SOIL. WRAP PIPE IN PLASTIC WRAP PRIOR TO COVERING WITH CONCRETE.
- ALL COMPONENTS OF IRRIGATION SYSTEM SHALL BE INSTALLED AND PROPERLY ADJUSTED TO PROVIDE ADEQUATE COVERAGE AND MINIMIZATION OF OVER SPRAY ONTO WALKS, BUILDINGS, PARKING AREAS, ETC.
- INSTALL ALL IRRIGATION PIPE AND CONTROL WIRES IN MINIMUM 4" PVC SLEEVE BELOW ALL PAVED SURFACES UNLESS OTHERWISE INDICATED ON THE PLANS. INSTALL SLEEVES PRIOR TO PLACEMENT OF PAVEMENTS AND PAVEMENT SUB-BASE. IRRIGATION SLEEVING TO BE A MINIMUM OF SCHEDULE 40 PVC AND SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SLEEVING INSTALLATION UNLESS THIS WORK IS IN THE IRRIGATION SCOPE OF WORK. SLEEVING SHALL BE CLEARLY MARKED, FLAGGED, OR OTHERWISE DELINEATED ABOVE GRADE TO AVOID DAMAGE AND PROVIDE EAST OF LOCATION FOR FUTURE WORK.
- ALL VALVE BOXES AND COVERS SHALL HAVE LOCKING LIDS AND A WATERPROOF, FADE-RESISTANT TAG. ALL QUICK COUPLERS SHALL BE INSTALLED IN UNDERGROUND LOCKING VALVE BOXES.
- CONTRACTOR TO INSTALL CONTROLLER, PUMP EQUIPMENT, AND ALL IRRIGATION ACCESSORIES AS REQUIRED. CONTRACTOR TO FURNISH CONTROL WIRES FROM VALVES TO CONTROLLER. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING 110 VOLT SERVICE FROM BUILDING AND CONNECTION TO CONTROLLER SERVICE.
- THE RAIN SHUTOFF DEVICE SHALL BE INSTALLED TO MEET LOCAL CODES AND/OR MINIMUM MANUFACTURER'S RECOMMENDATIONS. OBSTRUCTIONS, VANDALISM AND EASE OF SERVICE SHALL BE CONSIDERED IN LOCATING THE DEVICE. ALL WIRING BETWEEN THE RAIN SWITCH AND THE IRRIGATION CONTROLLER SHALL BE ENCLOSED IN 1/2" PVC ELECTRICAL CONDUIT. VERIFY FINAL LOCATION WITH OWNER'S REPRESENTATIVE.
- IRRIGATION HEADS IN PLANTING BEDS SHALL BE 12" POP-UP MINIMUM AND 6" POP-UP MINIMUM IN SOD AREAS. SUBSTITUTIONS(S) SHALL BE ISSUED TO THE CLIENT FOR COMPARABLE POP-UP SPRAYS. VERIFY REMAINING TYPE(S), IF NECESSARY. INSTALL QUICK COUPLERS AS REQUIRED OR AS NOTED. IRRIGATION SHALL PROVIDE 100% HEAD TO HEAD COVERAGE WITH POP UP HEADS.
- PIPE SIZING SHALL BE DETERMINED BY THE FRICTION LOSS METHOD AND WATER VELOCITY SHALL NOT EXCEED 5 CUBIC FEET PER SECOND. CONSTANT PRESSURE PIPING SHALL BE SCH 40 PVC.
- VERIFY ACTUAL PRESSURE PRIOR TO CONSTRUCTION AND NOTIFY OWNER'S REPRESENTATIVE IF DIFFERENCES ARISE BETWEEN ACTUAL PRESSURE AND DESIGN PRESSURE.
- BACKFLOW PREVENTOR SHALL BE REQUIRED PER INDUSTRY STANDARDS AND APPLICABLE CODES.
- THE IRRIGATION SYSTEM SHALL BE PROPERLY MAINTAINED AND CONTRACTOR TO PROGRAM AUTOMATIC CONTROLLER CONSISTENT WITH WATER SCHEDULES ESTABLISHED BY THE PREVAILING WATER MANAGEMENT DISTRICT, OR THE CITY, WHICHEVER IS MORE RESTRICTIVE.
- THESE PLANS DO NOT EXPRESS OR IMPLY IN ANY WAY ANY TYPE OF TRADE WARRANTY OR MATERIAL GUARANTEE FROM THE MANUFACTURER AND NEITHER OFFERS ANY TYPE OF INSTALLATION WARRANTY NOR GUARANTEE OF ANY TYPE FOR THE FINISHED WORK. STARTING FROM THE DAY THE CONTRACTOR SIGNS CONTRACT CONTINUING IN PERPETUITY THE LANDSCAPE ARCHITECT HAVING NEITHER AFFILIATION WITH NOR CONTROL OVER EITHER THE CONTRACTOR OR HIS STAFF WILL BE HELD HARMLESS FOR ACTIONS OF THE CONTRACTOR AND HIS STAFF THAT MAY DAMAGE PROPERTY OR CAUSE PERSONAL BODILY INJURY. BY ACCEPTING THIS CONTRACT THE CONTRACTOR ACKNOWLEDGES HIS LIABILITY TO PAY THE FULL AMOUNT OF ANY AND ALL DAMAGE CLAIMS FILED AGAINST THE OWNER'S PROPERTY, PROPERTY ADJACENT TO THE OWNER'S PROPERTY OR FOR ANY AND ALL PERSONAL INJURIES THAT RESULT DURING OR FROM THE INSTALLATION OF OR SUBSEQUENT OPERATION OF THIS SPRINKLER SYSTEM. CONTRACTOR SHALL INDEMNIFY THE LANDSCAPE ARCHITECT AND PAY ALL LEGAL FEES, FINES, COURT SETTLEMENTS, ANY AND ALL OTHER COSTS MENTIONED OR NOT MENTIONED HEREIN THAT MAY HAVE RESULTED FROM PROPERTY DAMAGE, PERSONAL BODILY INJURY OR ANY OTHER DAMAGE OR INJURY CAUSED DURING THE INSTALLATION OR OPERATION OF THIS SPRINKLER SYSTEM.
- THE PURPOSE OF THIS IRRIGATION PLAN IS TO PROVIDE A PHYSICAL LAYOUT OF IRRIGATION EQUIPMENT TO ASSIST THE CONTRACTOR IN ACCURATELY ESTIMATING THE MATERIAL COST TO BID THE SPRINKLER SYSTEM. THE DESIGN INTENT IS TO PROVIDE THE CONTRACTOR WITH A DIAGRAMMATIC LAYOUT OF SPRINKLER EQUIPMENT, WHICH WILL PROVIDE ADEQUATE WATER COVERAGE FOR THE LANDSCAPE MATERIALS WITHIN THE SCOPE OF WORK UNDER THIS CONTRACT. THESE PLANS AND THE MATERIALS SPECIFIED ARE SUBJECT TO CHANGE WITHOUT NOTICE. PRIOR TO BIDDING THIS CONTRACT THE CONTRACTOR WILL VERIFY ALL IRRIGATION MATERIAL MODEL NUMBERS, DIMENSIONS, COMPATIBILITY OF COMPONENT ASSEMBLIES, MAINLINE AND ZONE HYDRAULICS, ELECTRICAL COMPONENTS, WIRING, ALL SLEEVES, WATER AND ELECTRICAL SOURCES, WATER PRESSURE AND G.P.M. AVAILABLE AND APPLICABLE SITE CONDITIONS, WHICH MAY ADVERSELY AFFECT EITHER THE COST OR PERFORMANCE OF THIS SPRINKLER SYSTEM. IF A CONFLICT IS FOUND THE CONTRACTOR WILL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING AND WILL NOT START THE WORK UNTIL THE OWNER HAS RESOLVED THE CONFLICT AND ISSUED IN WRITING A "NOTICE TO PROCEED". IF A CONFLICT IS FOUND AFTER THE CONTRACT HAS BEEN SIGNED THE CONTRACTOR WILL RESOLVE THE CONFLICT AT HIS OWN EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER. SLEEVING UNDER SIDEWALKS MAY NOT BE SHOWN OR CALLED OUT DUE TO LACK OF SPACE ON PLANS. ONCE A BID HAS BEEN GIVEN TO THE OWNER FROM THE CONTRACTOR CHANGE ORDERS FOR EITHER ADDITIONAL MATERIALS OR TO CHANGE TO MATERIALS THAT ARE NOT FOUND ON THIS PLAN IS NOT ACCEPTABLE AND WILL NOT BE ALLOWED.
- GUARANTEE: LANDSCAPE CONTRACTOR SHALL WARRANTY LAWNS AFTER INSTALLATION FOR 45 DAYS FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. WARRANTY TREES AND SHRUBS FOR ONE YEAR FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. MAINTAIN MATERIALS AFTER INSTALLATION FOR 45 DAYS FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. REPLACE ALL UNHEALTHY OR DEAD PLANT MATERIAL FOUND DURING WARRANTY PERIOD. WARRANTY IRRIGATION SYSTEM MATERIALS AND LABOR FOR ONE YEAR FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE.
- TEMPORARY IRRIGATION FOR LANDSCAPE MATERIAL WITHOUT IRRIGATION: CONTRACTOR SHALL COORDINATE AND PROVIDE PROVISIONS FOR TEMPORARY IRRIGATION. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING ALL EXISTING AND PROPOSED PLANT MATERIAL TO SUPPLEMENT RAINFALL AS REQUIRED DURING CONSTRUCTION AND 90 DAY PLANT ESTABLISHMENT PERIOD (90 DAYS AFTER FINAL ACCEPTANCE). LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS UNTIL PLANT MATERIAL IS FULLY ESTABLISHED. CONTRACTOR SHALL REPLACE ANY PLANT MATERIAL LOST FROM INADEQUATE WATERING DURING 90 DAY ESTABLISHMENT PERIOD.

IRRIGATION EQUIPMENT	
---	SLEEVING
V	RAINBIRD SPRAY VALVE MODEL: 100-PEB
TV	RAINBIRD TREE BUBBLER VALVE MODEL: 100-PEB
DV	RAINBIRD DRIP VALVE MODEL: XCZ-PBR-100 COM
M	IRRIGATION METER
B	BACKFLOW

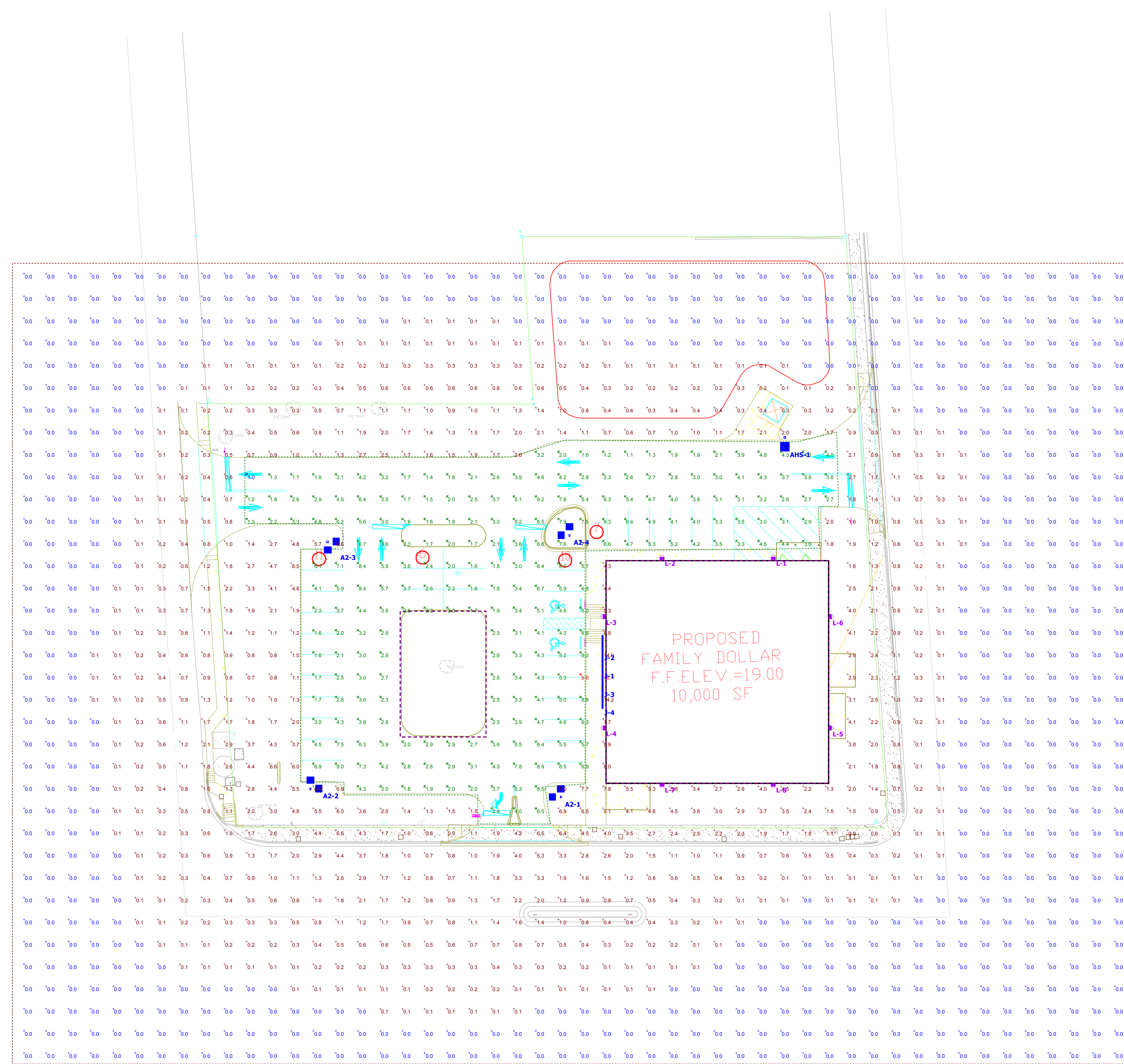


- NOTES:
- SEE SHEETS L1, L2, AND L3 FOR LANDSCAPE PLAN, NOTES, AND DETAILS.
 - IRRIGATION LINES SHALL BE TUNNELED BENEATH TREE ROOTS OF EXISTING TREES, RATHER THAN TRENCHED.
 - CONTRACTOR SHALL TEMPORARILY IRRIGATE NON-IRRIGATED LAWN AREAS AND OTHER NON-IRRIGATED PLANT MATERIAL AS REQUIRED FOR ESTABLISHMENT.
 - IRRIGATION SCHEDULE: WATER PLANT MATERIAL PER THE FOLLOWING SCHEDULE:
 - 1-30 DAYS - WATER EVERY OTHER DAY, SATURATING THE SOIL TO A DEPTH OF 3 FEET.
 - 30-90 DAYS - WATER TWICE A WEEK, SATURATING THE SOIL TO A DEPTH OF THREE (3) FEET.
 - AFTER ESTABLISHMENT: CONTRACTOR TO PROGRAM AUTOMATIC CONTROLLER TO ALLOW FOR THE EQUIVALENT OF 1" OF WATER PER WEEK, OR PER SITE AND PLANTINGS NEEDS FOR BEST PLANT HEALTH.
 - ESTIMATED IRRIGATION DEMAND / USAGE: 15 GALLONS PER MINUTE
QUANTITY OF WATER APPLIED SHOULD BE ADJUSTED IN ACCORDANCE TO RAINFALL. QUANTITY OF WATER SHALL BE ADJUSTED IN ACCORDANCE WITH ANY RESTRICTIONS BY THE PREVAILING WATER MANAGEMENT DISTRICT.
 - ESTIMATED IRRIGATION ZONES (5 TOTAL):
TREE BUBBLER ZONES: 2 ZONES @ 14 GPM +/-
SHRUB / GROUND COVER DRIP ZONES: 2 ZONES @ 12 GPM +/-
TURF ROTARY ZONE: 1 ZONE @ 7 GPM +/-
 - ALL BUBBLERS, SHRUB AREAS, AND TURF AREAS SHALL BE ON SEPARATE ZONES.
 - IRRIGATION HEADS, CONTROLLERS, AND ACCESSORIES SHALL BE HUNTER, RAIN BIRD, OR TORO COMMERCIAL GRADE PRODUCTS.
 - IRRIGATION DESIGN SHALL MEET OR EXCEED THE MINIMUM COMPLIANCE SET FORTH WITHIN THE STANDARDS AND SPECIFICATIONS FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS PUBLISHED BY THE FLORIDA IRRIGATION SOCIETY AS AMENDED.



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Plan View
 Scale - 1" = 25'

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	L	8	Lithonia Lighting	DSXW1 LED 20C 1000 40K T3M INVOLT	DSXW1 LED WITH 2 LIGHT ENGINES, 20 LED's, 1000mA DRIVER, 4000K LED, TYPE 3 MEDIUM OPTIC	LED	1	DSXW1_LED_20C_1000_40K_T3M_M_VOLT.ies	5843.019	0.95	75
	A2	4		KAD 320M SR3 (PULSE START)	Area Luminaire, 320W MH, High Performance SR3 Reflector, Full Cutoff MEETS THE 'NIGHTTIME FRIENDLY' CRITERIA	ONE 320-WATT CLEAR ED-28 METAL HALIDE, HORIZONTAL POSITION.	1	KAD_320M_SR3_(PULSE_START).ies	29700	0.72	736
	AHS	1		KAD 320M R3 HS (PULSE START)	Area Luminaire, 400W MH, R3 Reflector, Full Cutoff, Housewide Shield MEETS THE 'NIGHTTIME FRIENDLY' CRITERIA	ONE 400-WATT CLEAR BT-37 PULSE START METAL HALIDE, HORIZONTAL POSITION.	1	KAD_400M_R3_HS_(PULSE_START).ies	29700	0.72	456
	J	4	Lithonia Lighting	TDMW 1 32	8FT WET LOCATION ENCLOSURE WITH (1) T8 LAMP, 50% DR HIGH IMPACT ACRYLIC LENS	ONE 32-WATT T8 LINEAR FLUORESCENT	1	DMW_1_32.ies	2900	0.75	72

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Calc Zone #2	+	1.1 fc	16.1 fc	0.0 fc	N/A	N/A	0.1:1
Parking	✱	3.9 fc	9.6 fc	1.0 fc	9.6:1	3.9:1	0.4:1

Luminaire Locations										
No.	Label	Location						Aim		
		X	Y	Z	MH	Orientation	Tilt	X	Y	Z
1	A2	122.50	6.75	25.00	25.00	180.00	0.00			
2	A2	10.00	10.55	25.00	25.00	270.00	0.00			
3	A2	17.80	121.45	25.00	25.00	0.00	0.00			
4	A2	126.40	124.35	25.00	25.00	180.00	0.00			
1	AHS	223.10	168.25	25.00	25.00	180.00	0.00	223.10	166.88	0.00
1	J	141.31	66.97	10.50	10.50	180.00	0.00			
2	J	141.31	75.22	10.50	10.50	180.00	0.00			
3	J	141.31	58.72	10.50	10.50	180.00	0.00			
4	J	141.31	50.60	10.50	10.50	180.00	0.00			
1	L	217.88	113.98	11.50	11.50	0.00	0.00	217.88	113.98	0.00
2	L	167.88	113.98	11.50	11.50	0.00	0.00	167.88	113.98	0.00
3	L	141.88	87.85	14.50	14.50	270.00	0.00	141.88	87.85	0.00
4	L	141.88	37.85	14.50	14.50	270.00	0.00	141.88	37.85	0.00
5	L	243.69	37.73	11.50	11.50	90.00	0.00	243.69	37.73	0.00
6	L	243.69	87.73	11.50	11.50	90.00	0.00	243.69	87.73	0.00
7	L	167.88	12.23	11.50	11.50	180.00	0.00	167.88	12.23	0.00
8	L	217.88	12.23	11.50	11.50	180.00	0.00	217.88	12.23	0.00

Disclaimer
 This lighting design is not a professional engineering drawing and is provided for informational purposes only, without warranty as to accuracy, completeness, reliability or otherwise. Acuity Brands Lighting is not responsible for specifying the lighting or illumination requirements for any specific project. It is the obligation of the end-user to consult with a professional engineering advisor to determine whether this lighting design meets the applicable project requirements for lighting system performance, safety, suitability and effectiveness for use in a particular application. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual field performance to differ from the calculated photometric performance represented in this lighting design. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this lighting design.

Note
 1. Readings shown are based on a total LLF as shown at grade.
 2. Please refer to the "luminaire locations" table for mounting heights.
 3- Product information can be obtained at www.Lithonia.com or through SL Bagby.
 4- Product must be Acuity Brands/Lithonia Lighting and all pricing must originate from National accounts program at SL Bagby in Charlotte, NC Phone 704 334 2821.

Designer
 Kirk Frazier
 Date
 9/11/2014
 Scale
 Not to Scale
 Drawing No.
 80049014A1
 Summary

Family Dollar - Ft Pierce