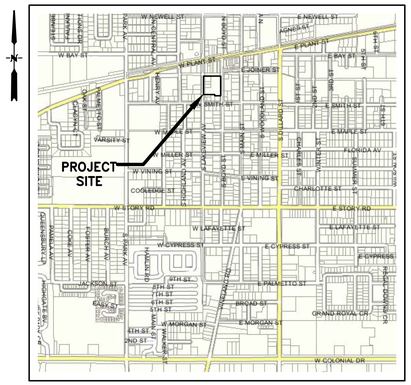
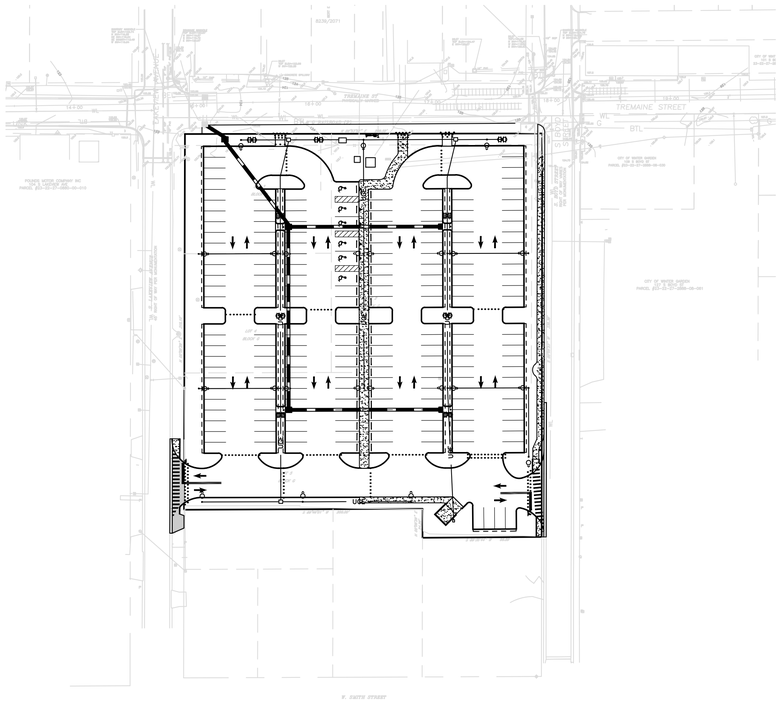
CONSTRUCTION PLANS
FOR THE
CITY OF WINTER GARDEN

BOYD STREET PARKING LOT

AUGUST 2008



VICINITY MAP



NOTES TO CONTRACTOR

1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WINTER GARDEN STANDARDS AND SPECIFICATIONS AND TO THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MOST RECENT EDITIONS.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND SETTING UP MOT PREPARED BY FDOT APPROVED WORKSITE TRAFFIC SUPERVISOR

INDEX OF SHEETS

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Irrigation Plan	IR-2

CITY OFFICIALS

MAYOR:..... JOHN REES
COMMISSIONERS:.. H. GERALD JOWERS - DISTRICT 1
BOB BUCHANAN - DISTRICT 2
HAROLD BOULER - DISTRICT 3
COLIN SHARMAN - DISTRICT 4

CITY MANAGER:..... MIKE BOLLHOEFER

GENERAL NOTES

1. EXISTING UTILITIES WERE LOCATED FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES THAT MAY EXIST, ABOVE OR BELOW GROUND. THIS IS TO INCLUDE, BUT NOT BE LIMITED TO, THE LOCATION OF STORM DRAINS AND CULVERTS, SANITARY DISPOSAL SYSTEMS (SEPTIC SYSTEMS), SANITARY SEWER, GAS, ELECTRIC, WATER AND IRRIGATION LINES.
2. BOUNDARY AND TOPOGRAPHICAL SURVEY INFORMATION PROVIDED BY SOUTHEASTERN SURVEYING
3. PRIOR TO DIGGING CONTACT THE FOLLOWING:
LAKE APOPKA NATURAL GAS - 407/656-2734
CITY OF WINTER GARDEN WATER - 407/656-4100
CITY OF WINTER GARDEN SEWER - 407/656-4100
SUNSHINE - 800-432-4770
4. CONTRACTOR SHALL IMMEDIATELY NOTIFY CITY ENGINEERING, 407/656-4111, EXT.2004, OF ANY PROBLEMS REQUIRING DEVIATION FROM THESE PLANS & SPECIFICATIONS.
5. ALL CONSTRUCTION SHALL CONFORM WITH FDOT INDEX NOS. 102, 199, 200, 201, 205, 210, 250, 281, 303, 304, 310, 500, 514, 515, 600, 620, 621, 622, 623, 624, 11860, 11862, 17346.
6. THE CITY MAY HIRE AND COMPENSATE A FIRM FOR ALL TESTING OF SOIL COMPACTION, STABILIZATION ETC. ANY SOIL TESTING WORK NOT SPECIFICALLY ORDERED BY THE CITY WILL NOT BE PAID BY THE CITY.
7. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WINTER GARDEN STANDARDS AND SPECIFICATIONS AND TO THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MOST RECENT EDITIONS.
8. REMOVE ALL UNSUITABLE MATERIAL AS REQUIRED AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
9. ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF CONSTRUCTION.
10. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE OF THE SITE DURING AND AFTER CONSTRUCTION.
11. THE CONTRACTOR SHALL PROVIDE CONTROL AND ABATEMENT OF EROSION, SEDIMENT RUNOFF AND WATER POLLUTION PER STATE AND U.S. E.P.A. & FDEP REQUIREMENTS AND STANDARD DETAILS.
12. ALL INLETS WITHIN PAVEMENT AREA SHALL HAVE TRAFFIC BEARING (H-20) GRATES WITH STEEL FRAMES.
12A. ALL STORMWATER PIPES MUST BE TV'D UPON COMPLETION AND MUST CONFORM TO CITY OF WINTER GARDEN SPECIFICATIONS.
13. ADJUST ALL EXISTING UTILITY BOXES TO FINISHED GRADE AS NECESSARY (INCLUDING METERS, VALVES, MANHOLES, CLEANOUTS, ETC.).
14. ALL STREET SIGNS AND MAILBOXES WILL BE REUSED. RELOCATE ALL MAIL BOXES AS NECESSARY.
15. SANITARY SEWER SYSTEM TO BE TV'ED IN ACCORDANCE WITH THE CITY'S APPENDIX "E" TO THE ORANGE COUNTY MANUAL OF STANDARDS & SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION
16. PROVIDE 6' HORIZONTAL CLEARANCE BETWEEN ALL SANITARY SEWER AND WATER MAINS AND BETWEEN ALL SANITARY SEWER AND STORM MAINS. ALSO PROVIDE A MINIMUM OF 18" VERTICAL CLEARANCE AT CROSSINGS. IF CLEARANCE REQUIREMENTS CANNOT BE MET, THE UTILITIES CONSTRUCTION MUST COMPLY WITH THE UTILITY SEPARATION CLEARANCE MITIGATION ON SHEET 4.
17. ALL WALKS SHALL HAVE A CROSS-SLOPE OF 1/4 INCH PER FOOT AND SHALL NOT EXCEED A LONGITUDINAL SLOPE OF 1:20, EXCEPT AT DESIGNATED RAMPS THAT SHALL NOT EXCEED 1:12. PROVIDE A TACTIBLE WARNING SURFACE AT ALL RAMPS PER A.D.A. THE CONTRACTOR SHALL INSURE THAT ALL PROVISIONS OF THE A.D.A. AND THE FLORIDA ACCESSIBILITY CODE ARE MET.
18. ALL EXISTING WATER MAINS, STORM SEWER AND SANITARY SEWER LINES TO BE REPLACED SHALL BE REMOVED, UNLESS OTHERWISE NOTED.
19. EXISTING STREET BRICKS SHALL BE REMOVED BY HAND AND SALVAGED AND TRANSPORTED TO THE CITY STORAGE FACILITY AND STACKED. BRICKS REQUIRED FOR THIS PROJECT IF ANY MUST BE BRICKS SALVAGED FROM STREET DEMOLITION.
20. THE CONTRACTOR SHALL BE RESPONSIABLE FOR OBTAINING ALL REQUIRED DEWATER PERMIT APPROVALS AND MEETING REGULATIONS SET FORTH INFAC 62-621 REGARDING DISCHARGE.

RECORD DRAWING

These RECORD DRAWINGS have been prepared, in part, on the basis of information compiled and furnished by others. The ENGINEER will not be responsible for any errors or omissions which have been incorporated into this document as a result.

Marci D. Chandler
Florida PE #63034

AR Miller Engineering, Inc.
1516 Hillcrest Street, Suite 212
Orlando, Florida 32803
(407) 841-4084
E.B.# 3479

0825-387

ACAD FILE: 1-4

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DEMOLITION NOTES:

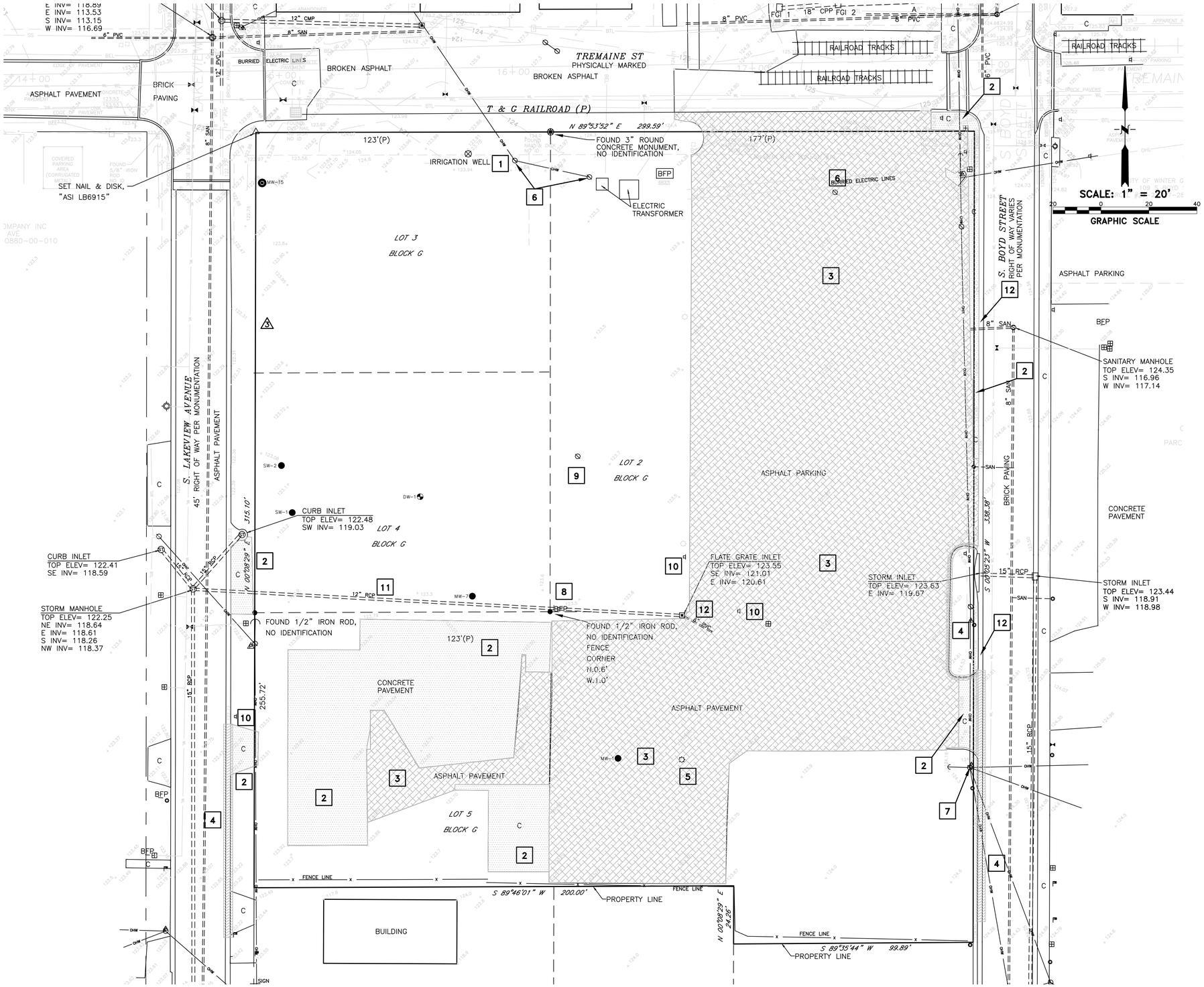
1. CAP IRRIGATION WELL PER ST. JOHNS RIVER WATER MANAGEMENT DISTRICT REQUIREMENTS.
2. REMOVE EXISTING CONCRETE PAVEMENT AND BASE.
3. REMOVE EXISTING ASPHALTIC PAVEMENT AND BASE.
4. REMOVE EXISTING CONCRETE CURB.
5. REMOVE EXISTING LIGHT POLE (BY CITY OF WINTER GARDEN).
6. REMOVE EXISTING UTILITY POLE (BY CITY OF WINTER GARDEN).
7. RELOCATE EXISTING UTILITY POLE, CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES.
8. REMOVE EXISTING BACKFLOW PREVENTER (BY CITY OF WINTER GARDEN).
9. REMOVE EXISTING POWER POLE (BY R. C. STEVENS).
10. REMOVE EXISTING SIGN (BY CITY OF WINTER GARDEN).
11. REMOVE EXISTING 12" RCP.
12. EXISTING CONC. CURB TO REMAIN

LEGEND:

- MONITORING WELL LOCATION, INSTALLED BY AEI
- EXISTING MONITORING WELLS, INSTALLED BY HSA
- DEEP MONITORING WELL LOCATION, INSTALLED BY HSA

NOTE:

THE SIX (6) MONITORING WELLS LOCATED WITHIN THE PROJECT AREA MUST BE PROTECTED AND MAINTAINED IN PRE-DEMOLITION CONDITIONS. THE SITE CONTRACTOR WILL BE REQUIRED TO REPLACE ANY MONITORING WELLS THAT ARE DAMAGED AND BECOME UN-USEABLE.



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DATE	REVISION	NAME	CHECKED
2/12/09	3 REVISION #3	E.R.E.	M.D.C.
6/12/09	As-Builts	E.R.E.	M.D.C.

CITY OF WINTER GARDEN

AR Miller Engineering, Inc.
1516 Hillcrest Street, Suite 212
Orlando, Florida 32803
(407) 841-4084
E.B. #3479

BOYD STREET PARKING

DEMOLITION PLAN

DRAWN BY	DATE	CHECKED BY	DATE	SCALE	HORIZ. : 1" = 20'
E.R.E.	8/22/08	M.D.C.	8/22/08		

JOB NO. 0825-387

SHEET 2 of 6

ACAD FILE: 0825-387

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GEOMETRY NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO VERIFY ALL GEOMETRY AND LAYOUT PRIOR TO CONSTRUCTION.
3. UPON REQUEST BY THE CONTRACTOR TO A.R. MILLER ENGINEERING, INC. A FINAL CADD FILE WILL BE PROVIDED FOR SITE LAYOUT.

GRADING NOTES:

1. ALL WALKS SHALL HAVE A MAXIMUM CROSS-SLOPE OF 1:50 (2.00%) AND SHALL NOT EXCEED A LONGITUDINAL SLOPE OF 1:20 (5.00%). CONTRACTOR TO VERIFY THE SLOPES PRIOR TO POURING OF PAVEMENT. ANY CONCRETE SLOPE FOUND TO BE IN EXCESS OF THESE SLOPES, WITH A ZERO ALLOWABLE TOLERANCE, SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE AND WITH NO DELAY TO THE PROJECT. THE CONTRACTOR SHALL INSURE THAT ALL PROVISIONS OF A.D.A. AND THE STATE OF FLORIDA ACCESSIBILITY CODE ARE MET.
2. THE FILL FOR EXCAVATION ON PLANTING BEDS, DRIVEWAYS AND FOUNDATIONS TO BE FERTILE, FRIABLE WELL-DRAINED MATERIAL FREE OF DEBRIS (WOOD RESIDUE, STONES, ETC.). FILL TO BE COMPACTED TO SUPPLY A STABLE PLANTING SITE CAPABLE OF SUPPORTING A LAWN. GRADING TO BE CONSTRUCTED WITH SIDE SLOPES NOT EXCEEDING 3:1; NO MORE THAN 5% PASSING A #200 SIEVE.

STRUCTURE TABLE:

(1) CONST. TYPE 'C' INLET, OPEN BOTTOM, GRAVEL FILLED
TOP EL. = ~~123.50~~ 123.42
W. INV. EL. = ~~119.55~~ 119.57
STRUCTURE BOTTOM EL. = ~~117.55~~ 117.57

(2) CONST. TYPE 'D' INLET, OPEN BOTTOM, GRAVEL FILLED
TOP EL. = ~~123.40~~ 123.43
E. INV. EL. = ~~119.55~~ 119.56
N. INV. EL. = ~~119.55~~ 119.56
STRUCTURE BOTTOM EL. = ~~117.55~~ 117.56

(3) CONST. TYPE 'C' INLET, OPEN BOTTOM, GRAVEL FILLED
TOP EL. = ~~123.50~~ 123.36
W. INV. EL. = ~~119.55~~ 119.54
STRUCTURE BOTTOM EL. = ~~117.55~~ 117.54

(4) CONST. TYPE 'D' INLET, OPEN BOTTOM, GRAVEL FILLED
TOP EL. = ~~123.40~~ 123.38
E. INV. EL. = ~~119.55~~ 119.56
S. INV. EL. = ~~119.55~~ 119.56
NW. INV. EL. = ~~119.55~~ 119.57
STRUCTURE BOTTOM EL. = ~~117.55~~ 117.56

(5) CONST. TYPE 'D' INLET
TOP EL. = ~~124.50~~ 124.55
WIER EL. = ~~121.80~~ 121.55
SE. INV. EL. = ~~119.55~~ 119.54
NW. INV. EL. = ~~119.55~~ 119.40
STRUCTURE BOTTOM EL. = ~~117.55~~ 117.53

PIPE TABLE:

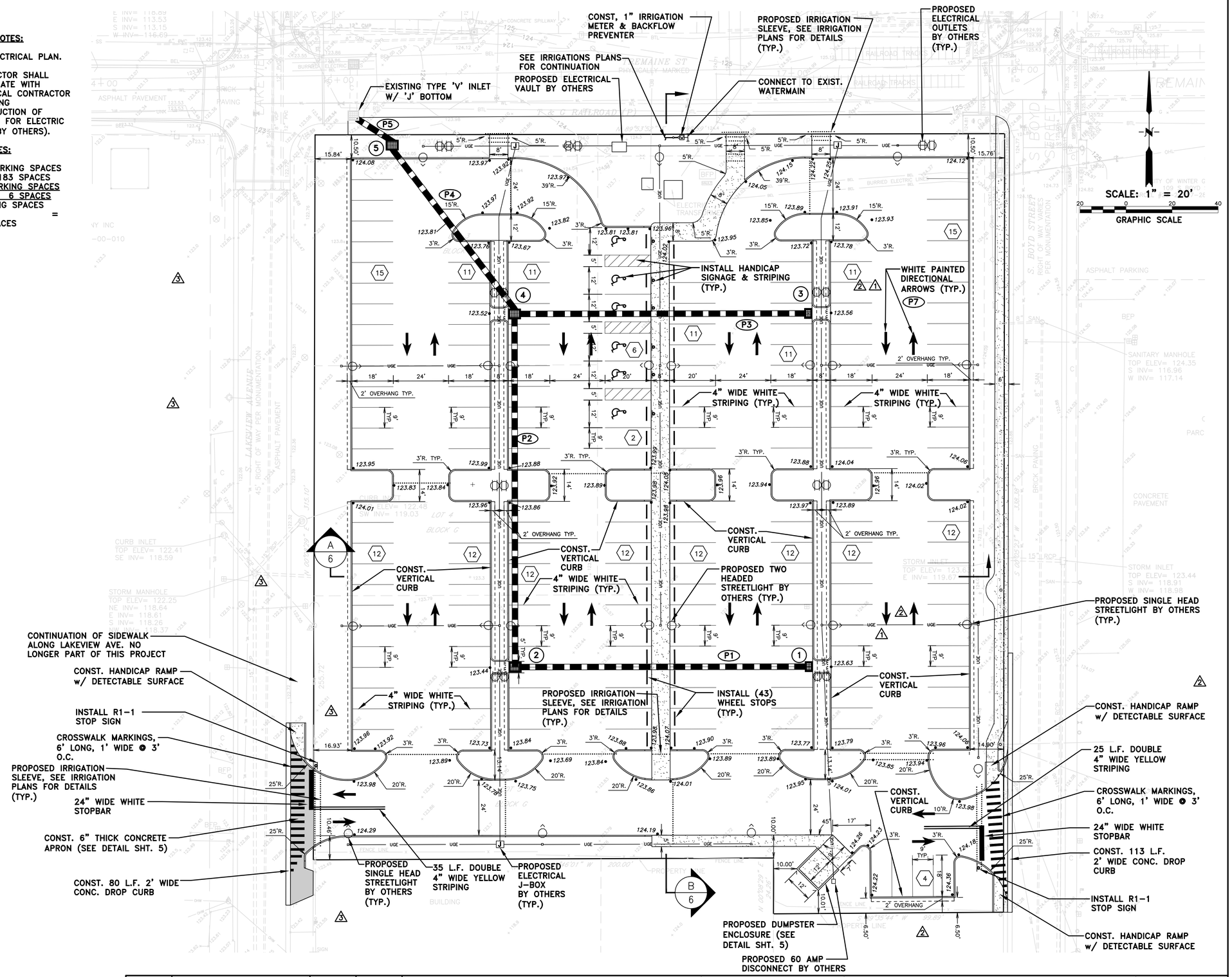
(P1) CONST. 129 L.F. 24" SLOTTED RCP @ 0.00%
(P2) CONST. 154 L.F. 24" SLOTTED RCP @ 0.00%
(P3) CONST. 129 L.F. 24" SLOTTED RCP @ 0.00%
(P4) CONST. 90 L.F. 24" SLOTTED RCP @ 0.00%
(P5) CONST. 25 L.F. 24" RCP @ 0.20%

ELECTRICAL NOTES:

1. SEE ELECTRICAL PLAN.
2. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING CONSTRUCTION OF SLEEVES FOR ELECTRIC LINES (BY OTHERS).

PARKING NOTES:

STANDARD PARKING SPACES = 183 SPACES
HANDICAP PARKING SPACES = 6 SPACES
TOTAL PARKING SPACES = 189 SPACES



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Florida PE #63034

ACAD FILE: 0825-387

DATE	REVISION	NAME	CHECKED
10/2/08	(1) REVISION #1	A.R.M.	A.R.M.
11/21/08	(2) REVISION #2	E.R.E.	M.D.C.
2/12/09	(3) REVISION #3	E.R.E.	M.D.C.
6/12/09	As-Builts	E.R.E.	M.D.C.
3/15/10	Revised Weir As-Builts	E.R.E.	M.D.C.

CITY OF WINTER GARDEN

AR Miller Engineering, Inc.
1516 Hillcrest Street, Suite 212
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E.B. #3479

BOYD STREET PARKING GEOMETRY, GRADING AND DRAINAGE PLAN

DRAWN BY	DATE	CHECKED BY	DATE	SCALE	HORIZ. : 1" = 20'
E.R.E.	8/22/08	M.D.C.	8/22/08		

JOB NO. 0825-387
SHEET 3 of 6

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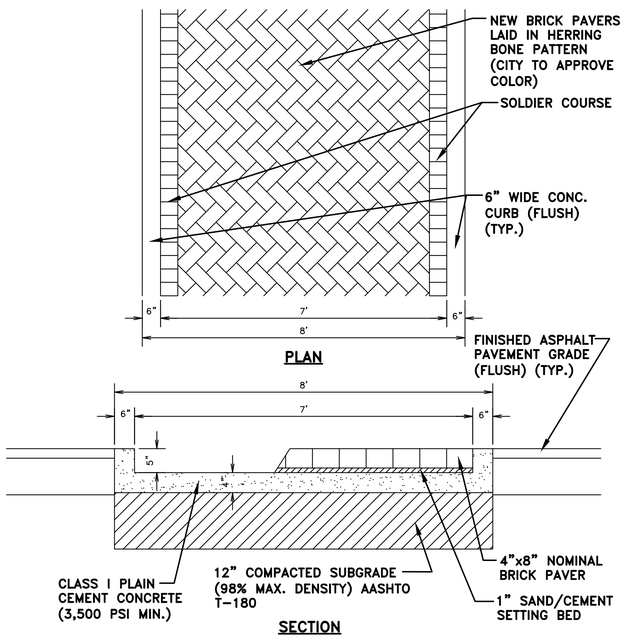
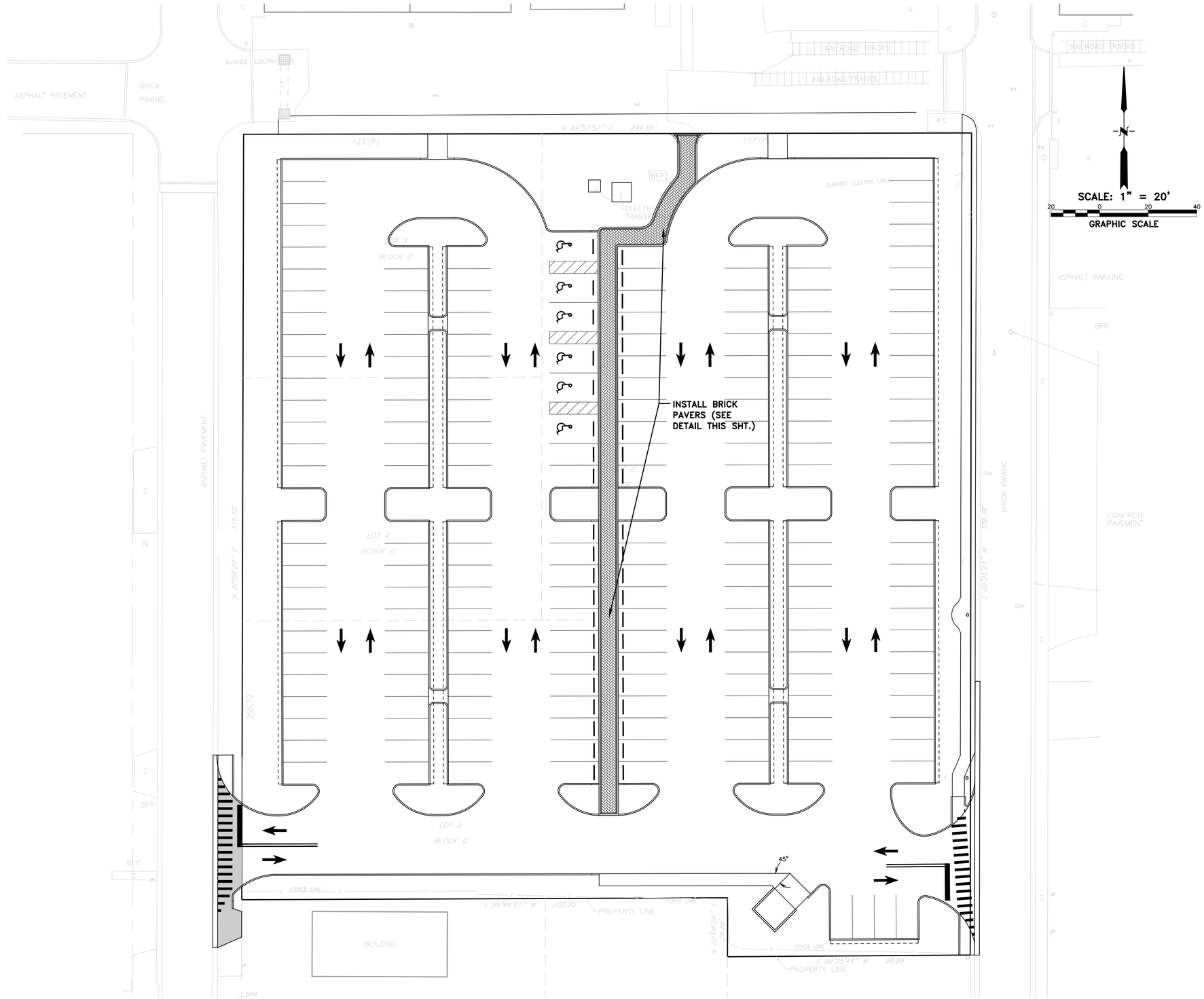


TYPICAL BRICK WALK DETAIL
N.T.S.



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DATE	REVISION	NAME	CHECKED
6/12/09	As-Builts	E.R.E.	M.D.C.

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1516 Hillcrest Street, Suite 212
Orlando, Florida 32803
(407) 841-4084
E.B. #3479

BOYD STREET PARKING
BRICK PAVING
PLAN

DRAWN BY	DATE	CHECKED BY	DATE	SCALE
E.R.E.	8/22/08	M.D.C.	8/22/08	HORIZ. : 1" = 20'

JOB NO. 0825-387

SHEET 3A
3 of 6

ACAD FILE: 0825-387

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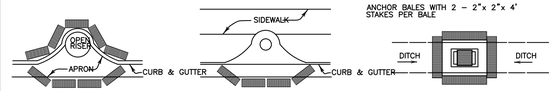
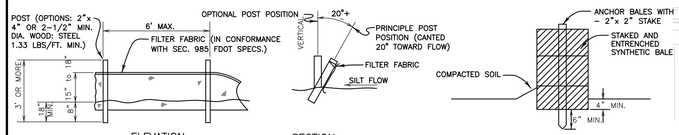


PARTIAL INLET COMPLETED INLET DITCH BOTTOM INLET

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

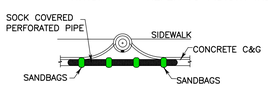


ELEVATION SECTION CROSS–SECTION OF PROPERLY INSTALLED SYNTHETIC BALE

TYPE III SILT FENCE

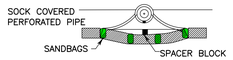
EROSION PROTECTION DETAIL

N.T.S. REFER TO F.D.O.T. INDEX No. 102



① *CURB INLET SEDIMENT BARRIER*

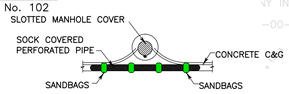
To be used in this way where there is no potential for this type of inlet protection to cause major flooding



② *CURB INLET SEDIMENT BARRIER*

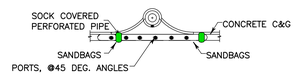
inlet protection has spacer block to allow more flow to go into inlet during construction, to be used in areas where inlet protection could cause flooding during large rainfall amounts

A combination of 2, 3, and 4 may be used in areas where it is necessary to prevent flooding



③ *CURB INLET SEDIMENT BARRIER*

existing structure manhole is replaced by slotted manhole that allows water into inlet during construction, to be used in areas where inlet protection could cause flooding during large rainfall amounts

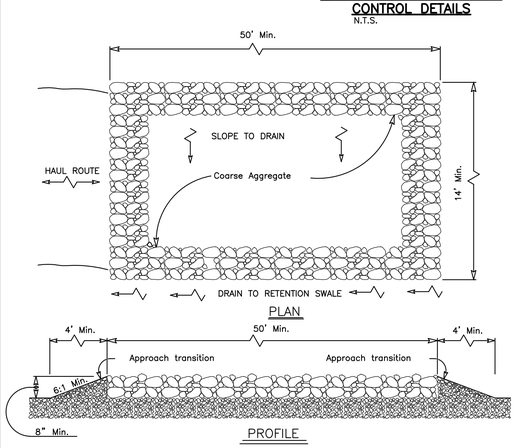


④ *CURB INLET SEDIMENT BARRIER*

inlet protection has ports at 45 degree angles to allow more flow to go into inlet during construction, to be used in areas where inlet protection could cause flooding during large rainfall amounts

NEW CURB INLET EROSION CONTROL DETAILS

N.T.S.



SOIL TRACKING PREVENTION DEVICE

N.T.S.

GENERAL NOTES

1. The length of the type 1 construction exit shall be no less than 50'.
2. The coarse aggregate should be F.D.O.T. size #1.
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit shall be graded to allow drainage to the dry retention swale.

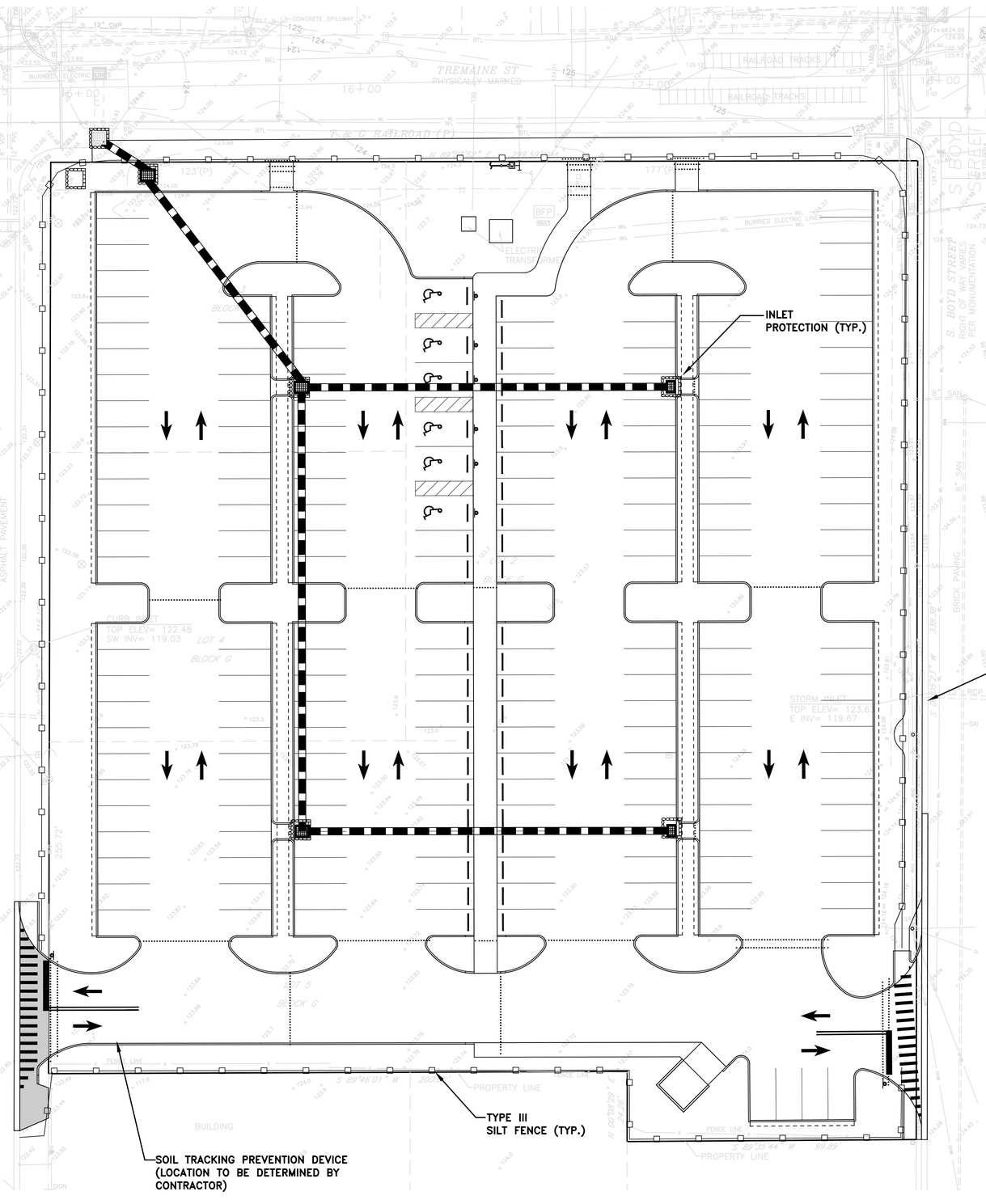
CONTRACTOR CERTIFICATION:

" I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN THEREUNDER."

NAME: **TITLE:**

CONTRACTING FIRM: **ADDRESS:**

TELEPHONE # : **DATE:**



SCALE: 1" = 20'

20 0 20 40

GRAPHIC SCALE

LEGEND:

- DISTURBED AREA
- ROCK BAGS
- CURB INLET PROTECTION
- SILT FENCE
- SOIL TRACKING PREVENTION DEVICE

NPDES NOTES:

1. LOCATION OF SILT FENCE IS APPROXIMATE ONLY, AND SHOULD BE ADJUSTED BY THE CONTRACTOR IN THE FIELD AS NECESSARY.
2. CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY AND AFTER EACH RAINFALL GREATER THAN 0.5 INCHES. A RAIN GAUGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNTS.
3. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL IF IT BECOMES NECESSARY TO MEET STATE AND LOCAL STANDARDS.
4. SITE AREA DISTURBED: 1.20 ACRES
5. SITE LOCATION: S33, T22S, R29E. ORANGE COUNTY, FL

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6/12/09	As–Builts	E.R.E.	M.D.C.

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BOYD STREET PARKING
EROSION CONTROL PLAN
+ DETAILS

DRAWN BY	DATE	CHECKED BY	DATE	SCALE	HORIZ. : 1" = 20'
E.R.E.	8/22/08	M.D.C.	8/22/08		

JOB NO. 0825–387

SHEET 4 of 6

ACAD FILE: 0825–387

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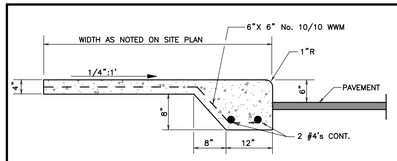
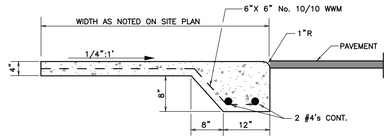


RAISED SIDEWALK DETAIL
N.T.S.



FLUSH SIDEWALK DETAIL
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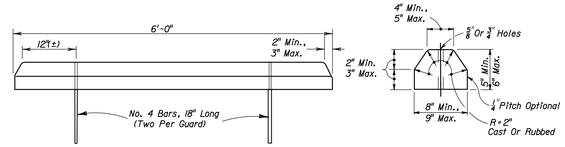
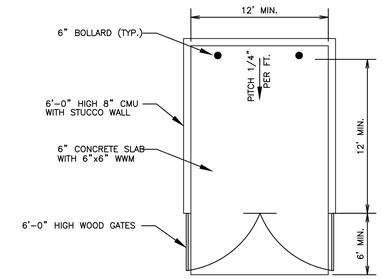
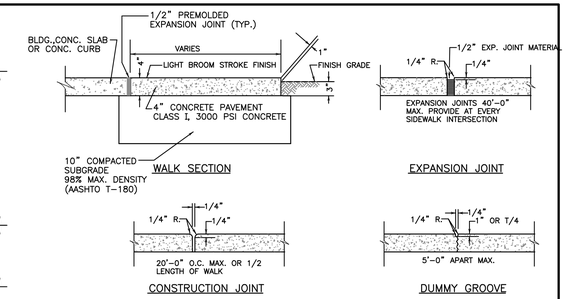
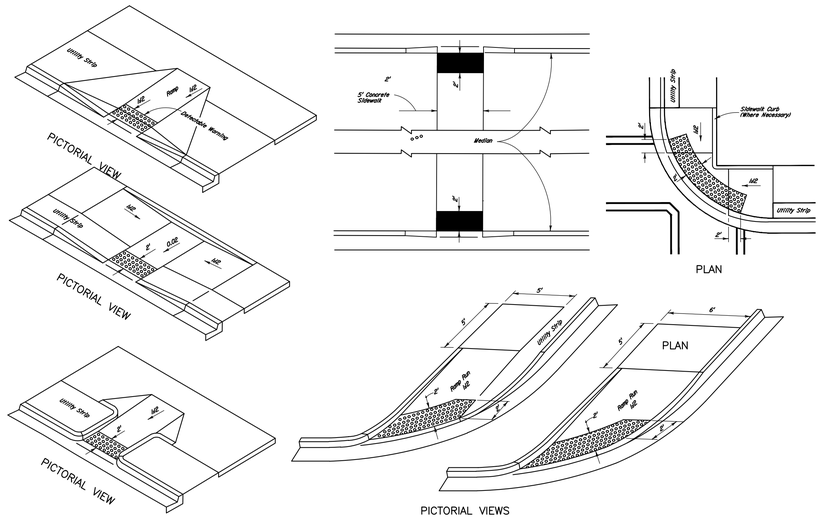


BUMPER STOP DETAIL
N.T.S.

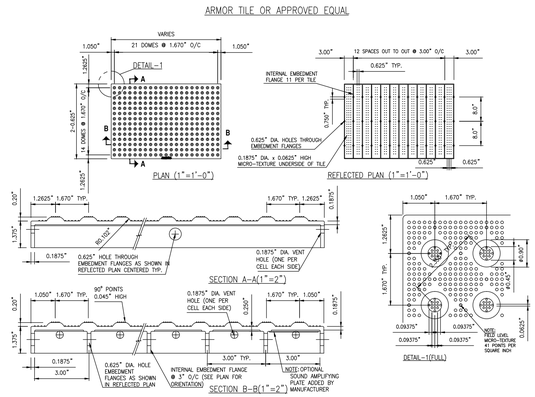


DUMPSTER ENCLOSURE DETAIL
N.T.S.



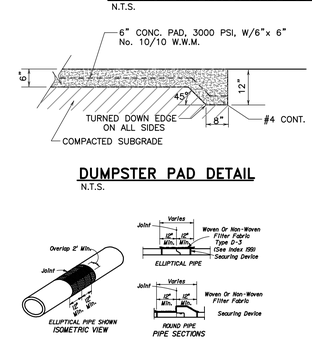


TYPICAL PLACEMENT OF DETECTABLE WARNING ON CURB RAMPS
N.T.S.



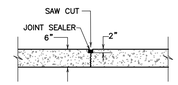
NOTE:
1. CURB RAMP DETECTABLE WARNING TILE SHALL BE ARMOR TILE OR EQUAL.

CURB RAMP DETECTABLE WARNING DETAIL
N.T.S.



DUMPSTER PAD DETAIL
N.T.S.

FILTER FABRIC JACKET
N.T.S. F.D.O.T. INDEX No. 280

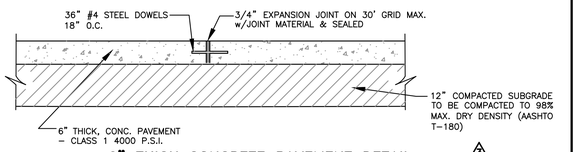


CRACK CONTROL JOINT

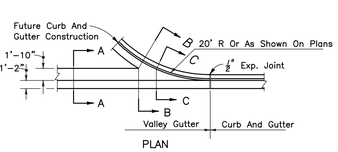
4" THICK SIDEWALK DETAILS

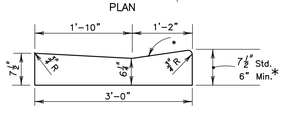
NOTE: MAX. JOINT SPACING SHALL BE AS FOLLOWS:

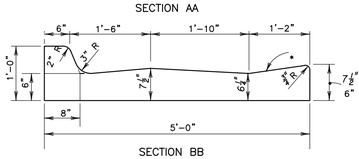
- EXPANSION JOINTS 30' O.C. MAX.
- CRACK CONTROL JOINTS 10' O.C. MAX.
- DOWELS SHALL BE SMOOTH AND SHALL BE GREASED ON ONE SIDE OR SLEEVED.

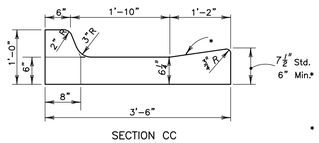


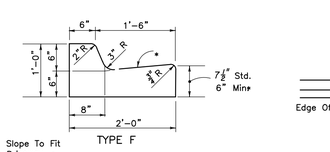
6" THICK CONCRETE PAVEMENT DETAIL
N.T.S.

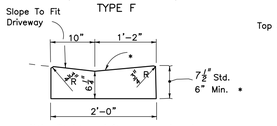


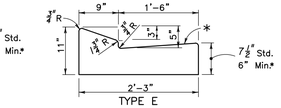


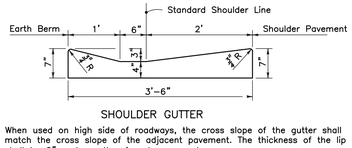








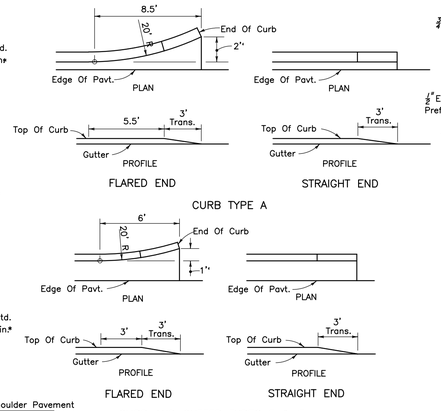




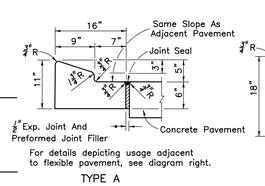
* When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.

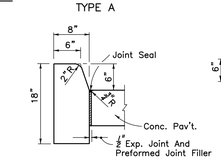
CONCRETE CURB AND GUTTER

Note: For use adjacent to concrete or flexible pavement, concrete shown. For details depicting usage adjacent to flexible pavement, see diagram right. Expansion joint, preformed joint filler and joint seal are required between curb & gutter and concrete pavement only, see diagram right.



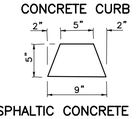
CURB AND GUTTER ENDINGS



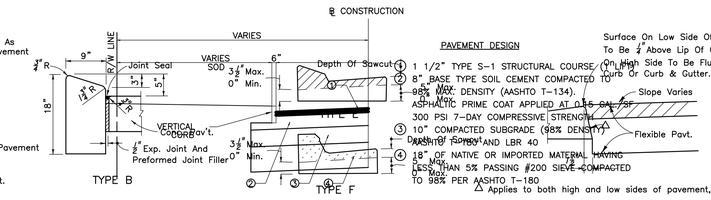


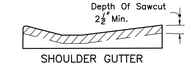
Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

CONCRETE CURB



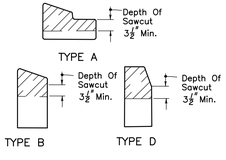
ASPHALTIC CONCRETE CURB



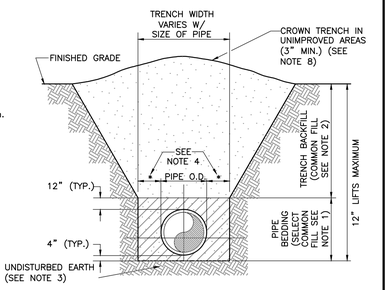


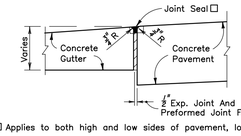
Sawcuts should be avoided within valley gutter and within curb and gutter endings.

CONTRACTION JOINT IN CURB AND GUTTER



CONTRACTION JOINT IN CURB





GENERAL NOTES

1. For curb,gutter,and curb and gutter provide 1/8" – 1/4" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers. Curb,gutter and curb & gutter expansion joints shall be located in accordance with Section 520 of the standard specifications.
2. Ends of Curbs Types B and D shall transition from full to zero heights in 3 feet.

NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINNING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINNING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR UTILITIES CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

STANDARD BEDDING DETAIL
N.T.S.

RECORD DRAWING

These RECORD DRAWINGS have been prepared, in part, on the basis of information compiled and furnished by others. The ENGINEER will not be responsible for any errors or omissions which have been incorporated into this document as a result.

Marci D. Chandler
Florida PE #63034

DATE	REVISION	NAME	CHECKED
2/12/09	3 REVISION #3	E.R.E.	M.D.C.
6/12/09	As-Builts	E.R.E.	M.D.C.

CITY OF WINTER GARDEN

AR Miller Engineering, Inc.
1516 Hillcrest Street, Suite 212
Orlando, Florida 32803
(407) 841-4084
E.B. #3479

BOYD STREET PARKING

GENERAL DETAILS

DRAWN BY	DATE	CHECKED BY	DATE	SCALE
E.R.E.	8/22/08	M.D.C.	8/22/08	AS SHOWN

JOB NO. 0825-387

SHEET 5 of 6

ACAD FILE: 0825-387

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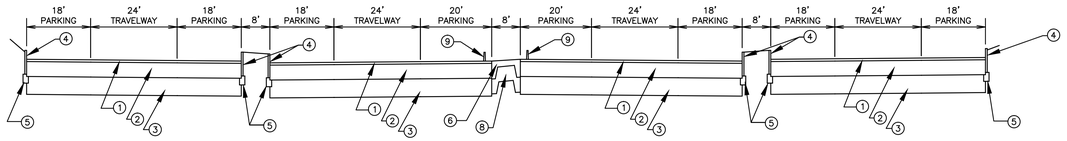
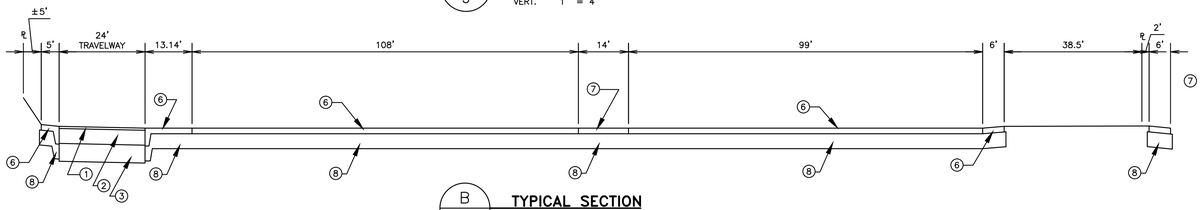


A/3 **TYPICAL SECTION**
HORIZ. 1" = 20'
VERT. 1" = 4'



B/3 **TYPICAL SECTION**
HORIZ. 1" = 20'
VERT. 1" = 4'

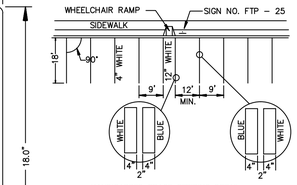
PAVEMENT SECTION LEGEND

1. 1-1/2" TYPE S-1 STRUCTURAL COURSE (2 LIFTS)
2. 8" BASE TYPE SOIL CEMENT COMPACTED TO 98%% MAX. DENSITY (AASHTO T-134). ASPHALTIC PRIME COAT APPLIED AT 0.15 GAL./SF 300 PSI 7-DAY COMPRESSIVE STRENGTH
3. 10" COMPACTED SUBGRADE (98% DENSITY) AASHTO T-180 AND LBR 40
4. VERTICAL CURB
5. 6" STABILIZED BASE (FBV 75)
6. 4" THICK CONCRETE WALK , CLASS I, 3000 PSI w/ THICKEND EDGE ADJACENT TO ASPHALT PAVEMENT
7. 4" THICK CONCRETE WALK, CLASS I, 3000 PSI
8. 10" COMPACTED SUBGRADE, 98% MAX. DENSITY (AASHTO T-180)
9. BUMPER STOP

NOTES:

1. ALL LETTERS ARE 1" SERIES "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND & BORDER.
4. ONE(1) SIGN REQUIRED FOR EACH PARKING SPACE.
5. INSTALLATION HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

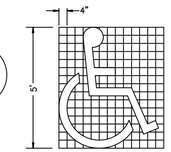
HANDICAP PARKING SIGNAGE
N.T.S.



HANDICAPPED SPACE STRIPING DETAIL (90°PARKING)
N.T.S.

NOTE:
CRITERIA FOR PAVEMENT MARKINGS ONLY, NOT WHEELCHAIR RAMP LOCATIONS.
FOR RAMP CRITERIA, SEE ROADWAY DESIGN INDEX NO. 304.

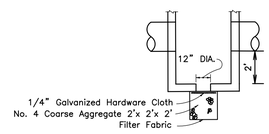
PAVEMENT MARKING FOR WHEELCHAIR RAMPS
N.T.S.



* USE OF PAVEMENT SYMBOL IN HANDICAPPED PARKING SPACES IS OPTIONAL. WHEN USED, THIS SYMBOL SHALL BE 3 TO 5 FEET HIGH AND BLUE IN COLOR.

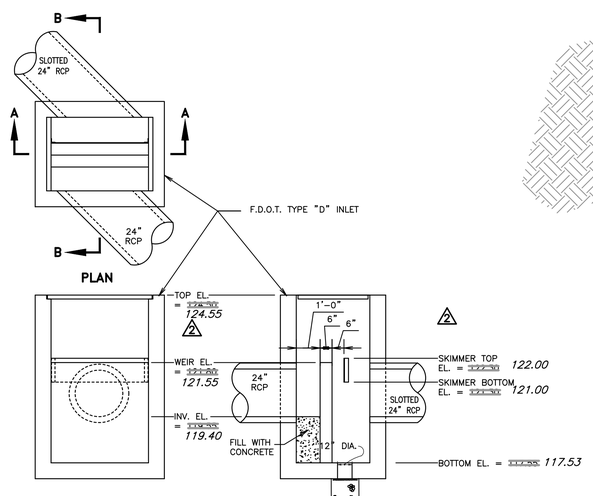
HANDICAPPED PAVEMENT SYMBOL
N.T.S.

HANDICAP SIGNAGE & PAVEMENT STRIPING
N.T.S.

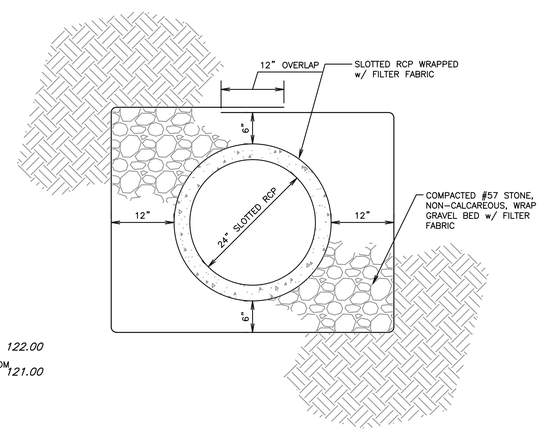


NOTE: Sump bottom appropriate for all manhole and inlet types. Cost for sump bottom to be included in the contract unit price for inlet or manhole.

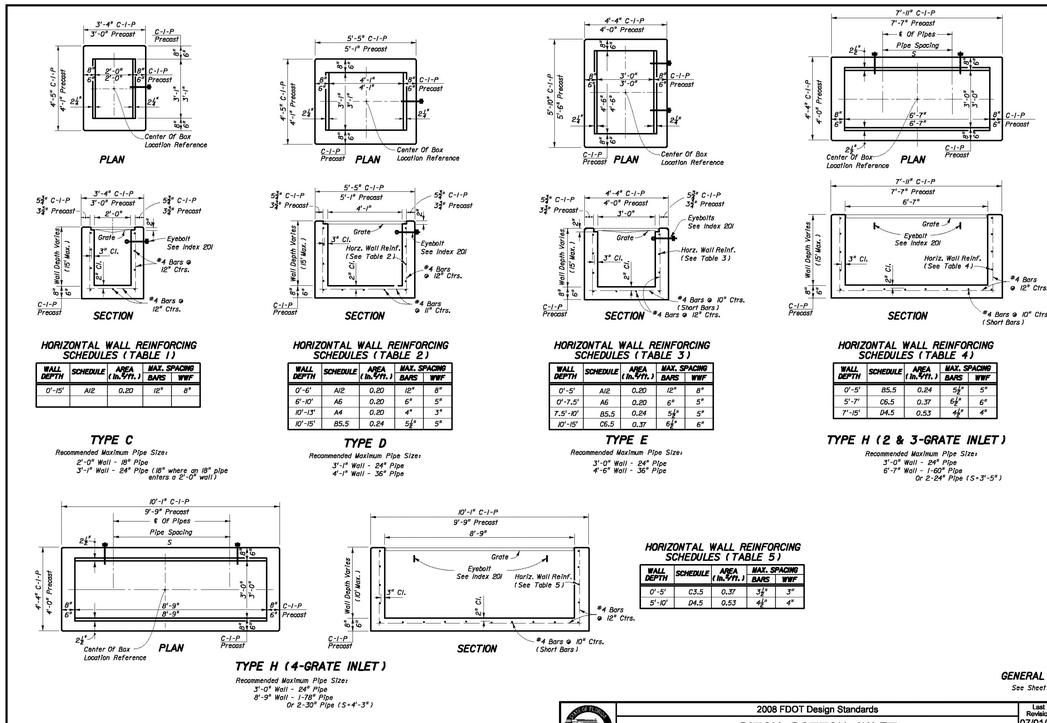
OPEN BOTTOM INLET DETAIL
N.T.S. F.D.O.T. INDEX No. 201



STRUCTURE "5" DETAIL
N.T.S.



SLOTTED RCP EXFILTRATION PIPE
N.T.S.



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

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

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

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (In.²/Ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-6'	A12	0.20	12"	8"
6'-10'	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5½"	5"

TYPE D
Recommended Maximum Pipe Sizes
3'-1" Wall - 24" Pipe
4'-1" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

WALL DEPTH	SCHEDULE	AREA (In.²/Ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	A12	0.20	12"	8"
0'-7.5'	A6	0.20	6"	5"
7.5'-10'	B5.5	0.24	5½"	5"
10'-15'	C6.5	0.37	6½"	6"

TYPE E
Recommended Maximum Pipe Sizes
3'-0" Wall - 24" Pipe
4'-6" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 4)

WALL DEPTH	SCHEDULE	AREA (In.²/Ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	B5.5	0.24	5½"	5"
5'-7'	C6.5	0.37	6½"	6"
7'-15'	D4.5	0.53	4½"	4"

TYPE H (2 & 3-GRATE INLET)
Recommended Maximum Pipe Sizes
3'-0" Wall - 24" Pipe
6'-7" Wall - 1-60" Pipe
Or 2-24" Pipe (5'-3"-5")

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 5)

WALL DEPTH	SCHEDULE	AREA (In.²/Ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	C3.5	0.37	3½"	3"
5'-10'	D4.5	0.53	4½"	4"

GENERAL NOTES
See Sheet 2 of 6.

2008 FDOT Design Standards
DITCH BOTTOM INLET
TYPES C, D, E & H
Last Revision 07/01/05
Sheet No. 1 of 6
Index No. 232

RECORD DRAWING

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Marci D. Chandler
Florida PE #63034

DATE	REVISION	NAME	CHECKED
10/2/08	1 REVISION #1	A.R.M.	A.R.M.
11/21/08	2 REVISION #2	E.R.E.	M.D.C.
6/12/09	As-Builts	E.R.E.	M.D.C.
3/15/10	Revised Weir As-Builts	E.R.E.	M.D.C.

CITY OF WINTER GARDEN

AR Miller Engineering, Inc.
1516 Hillcrest Street, Suite 212
Orlando, Florida 32803
(407) 841-4084
E.B. #3479

BOYD STREET PARKING
GENERAL DETAILS

DRAWN BY	DATE	CHECKED BY	DATE	SCALE	AS SHOWN
E.R.E.	8/22/08	M.D.C.	8/22/08		

JOB NO. 0825-387
SHEET 6
6 of 6

ACAD FILE: 0825-387

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