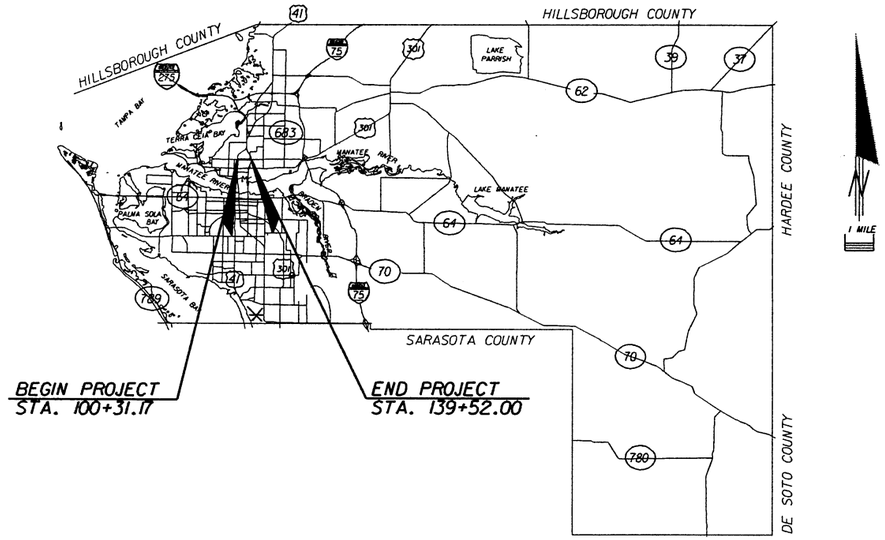
MANATEE COUNTY, FLORIDA
17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
COUNTY PROJECT NO. 6035261

NO.	INDEX OF SHEETS
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3.4	DRAINAGE MAP
5.6	TYPICAL SECTION
7-9	SUMMARY OF DRAINAGE STRUCTURES
10	REFERENCE POINTS
11-21	PLAN AND PROFILE
22-27	POND DETAILS
28	ROADWAY SOIL SURVEY
29-37	CROSS SECTIONS
38	STORMWATER POLLUTION PREVENTION PLAN
39-48	UTILITY ADJUSTMENTS
49-59	MANATEE COUNTY UTILITIES
60-71	SIGNING AND PAVEMENT MARKING
72-78	SIGNALIZATION
79-90	LIGHTING



GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2008.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2007, AS AMMENDED BY CONTRACT DOCUMENTS.

MANATEE COUNTY TRANSPORTATION HIGHWAY & DRAINAGE STANDARDS DATED 2007.

MANATEE COUNTY UTILITY STANDARDS AND SPECIFICATIONS DATED NOVEMBER, 1999.

AT LEAST 72 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL CONTACT THE LOCAL MAINTENANCE FDOT ENGINEER'S OFFICE TO SECURE GENERAL USE PERMIT AND/OR OTHER PERMITS AS REQUIRED FOR WORKING WITHIN THE DEPARTMENT'S RIGHT-OF-WAY.

LENGTH OF PROJECT	
	FEET
ROADWAY	3920.83
BRIDGES	N/A
NET LENGTH OF PROJ.	3920.83
EXCEPTIONS	N/A
GROSS LENGTH OF PROJ.	3920.83

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

MANATEE COUNTY PROJECT MANAGER : PAUL SCHAMELL

FEBRUARY 12, 2009

PLANS PREPARED BY:

WADETRIM
8745 Henderson Road, Suite 220
Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952
Vendor No. 59-2417170

ROADWAY PLANS
ENGINEER OF RECORD: JEFFREY D. TRIM, P.E.
P.E. NO.: 42106

PLOT DATE: $$$$$$$SYTIME$$$$$$$ DESIGN FILE: $$$$$$$$$$$$$$$ROADSPECIFICATION$$$$$$$$$$$$$$$ PLOT FILE: $$$$$$$$PRF SPECIFICATIONS$$$$$$$$

ROADWAY			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
101-1	Mobilization	LS	1
102-1	Maintenance of Traffic	LS	1
102-3	Commercial Matl for Drwy Maint	CY	800
	Utility Coordination	LS	1
	Railroad Coordination	LS	1
104-10-2	Synthetic Bales	LF	1,050
104-11	Floating Turbidity Barrier	LF	50
104-12	Staked Turbidity Barrier	LF	80
104-13-1	Staked Silt Fence (Type III)	LF	10,600
104-15	Soil Tracking Prevention Device	EA	2
104-16	Rock Bags	EA	550
110-1-1	Clearing & Grubbing	AC	15.1
110-3	Removal of Exist. Struct. (Bridge Remnants)	LS	1
110-4	Removal of Exist. Conc. Pvmt.	SY	3,500
110-7-1	Mailbox (Furnish & Install)	EA	15
120-1	Regular Excavation	CY	35,659
120-4	Excavation, Subsoil	CY	5,231
120-6	Embankment	CY	13,636
160-8	12" Stabilized Sub-base	SY	24,664
285-701	4" Type ABC-III Base	SY	591
285-709	10" Limerock Base	SY	20,294
334-1-14	2" Type S-1 Asphalt Concrete (Inc. Tack Coat)	TN	2,086
334-1-14	1" Type S-III Asphalt Concrete	TN	1,043
400-1-2	Class I Concrete (Endwalls)	CY	8.00
400-1-15	Class I Concrete (Misc)	CY	10
400-4-1	Class IV Concrete (Culverts)	CY	27
416-1-6	Reinforcing Steel	LB	3,400
425-1-351	Inlets (Curb) (Type P-5) (<10')	EA	23
425-1-361	Inlets (Curb) (Type P-8) (<10')	EA	2
425-1-451	Inlets (Curb) (Type J-5) (<10')	EA	3
425-1-521	Inlet (Dt Bot) (Type C) (<10')	EA	4
425-1-541	Inlet (Dt Bot) (Type D) (<10')	EA	8
425-1-581	Inlet (Dt Bot) (Type H) (<10')	EA	2
425-1-900	Diversion Structure (Attenuation Pond)	EA	1
425-2-41	Manholes (P-7) (<10')	EA	7
425-2-71	Manholes (J-7) (<10')	EA	6
430-175-101	Pipe Storm Sewer Culv (Opt. Mtl.) (15")	LF	127
430-175-101	Pipe Storm Sewer Culv (Opt. Mtl.) (18")	LF	1788
430-175-101	Pipe Storm Sewer Culv (Opt. Mtl.) (24")	LF	688
430-175-102	Pipe Storm Sewer Culv (Opt. Mtl.) (30")	LF	983
430-175-102	Pipe Storm Sewer Culv (Opt. Mtl.) (36")	LF	195
430-175-103	Pipe Storm Sewer Culv (Opt. Mtl.) (42")	LF	427
430-175-201	Pipe Storm Sewer Culv (Opt. Mtl.) (14"x23")	LF	88
430-175-204	Pipe Storm Sewer Culv (Opt. Mtl.) (43"x68")	LF	96
430-175-205	Pipe Storm Sewer Culv (Opt. Mtl.) (58"x91")	LF	105
430-963-2	Pipe, Polyvinyl Chloride (8")	LF	29
430-984-129	MES (Optional Round) (24" SD)	EA	1
430-984-133	MES (Optional Round) (30" SD)	EA	1
430-984-642	MES (Conc Pipe Ellip) (43"x68") (SD)	EA	3
430-984-645	MES (Conc Pipe Ellip) (58"x91") (SD)	EA	2
	ConSpan or Equal Structure (64'x7'x16')	LS	1
515-1-2	Pipe Handrail (Aluminum)	LF	60
520-1-10	Type F Curb & Gutter	LF	8,012
522-1	4" Concrete Sidewalk	SY	3,899
522-2	6" Concrete Sidewalk	SY	1,525
530-3-3	Rip-Rap (Rubble) (Bank & Shore)	TN	366.8
547-70-2	Rip-Rap (Fabric Formed Conc) (10")	SY	63
570-1-2	Sodding (Performance Turf) (Incl. Mowing)	SY	19,335

SEWER IMPROVEMENTS			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
555-1-2	Directional Bore	LF	200
1050-11-223	San. Sewer (F&I)(PVC)(DR-18)(C-900)(6")(Inc Ftgs)	LF	1,458
1060-15	Manhole Rim & Cover	EA	9
1060-15	Core Bore Exist. MH	EA	1
1060-15	Manhole Rim Adjustment	EA	3
1060-15	Cleaning & Sealing Manhole (Fiberglass)	EA	2
1060-15	Cleaning & Sealing Manhole (Sewpercoat)	EA	7
1080-11-36	Air Release Assembly (F&I) (6")	EA	2

WATER IMPROVEMENTS			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
110-3	Removal of Existing Structure (Vault)	LS	1
1000-6	Utility Work-Water (Master Meter Assembly)	LS	1
1050-11-92	Water Service Conn. (F&I) (HDPE) Cl 200 (1")	EA	14
1050-11-423	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (6") (Inc Ftgs)	LF	937
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (8")	LF	1,274
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (12")	LF	178
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (16")	LF	64
1050-16-224	Pipe Removal (Less than 18")	LF	2,089
1055-14-414	Bend (DI) (45 Degree) (12")	EA	3
1055-14-414	Bend (DI) (45 Degree) (12") (Cut-In)	EA	1
1055-14-414	Bend (DI) (45 Degree) (16")	EA	2
1055-14-414	Bend (DI) (45 Degree) (16") (Cut-In)	EA	2
1055-14-424	Tee (DI) (8"x6")	EA	2
1055-14-424	Tee (DI) (12"x6")	EA	5
1055-14-424	Tee (DI) (12"x12")	EA	1
1055-14-424	Tee (DI) (16"x12")	EA	1
1055-14-434	Reducer (DI) (8"x6")	EA	1
1055-14-434	Reducer (DI) (12"x8")	EA	1
1055-14-494	Sleeve (DI) (16")	EA	2
1060-14-21	Water Meter Box (Relocate)	EA	11
1080-11-34	Valve Assembly Gate (F&I) (CI) (250 PSI) (6")	EA	11
1080-11-44	Valve Assembly Gate (F&I) (CI) (250 PSI) (8")	EA	1
1080-11-44	Valve Assembly Gate (F&I) (CI) (250 PSI) (12")	EA	3
1080-11-44	Valve Assembly Butterfly (F&I) (CI) (250 PSI) (16")	EA	2
1644-13	Fire Hydrant Assembly (Standard) (F&I) (6")	EA	2
1644-53	Fire Hydrant Assembly (Relocate)	EA	1

SIGNING AND PAVEMENT MARKING			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
700-20-11	Sign Single Post (Less than 12 SF)	AS	44
700-20-12	Sign Single Post (12 - 20 SF)	AS	15
700-20-41	Sign Single Post, (Relocate)	AS	19
706-3	Retro-Reflective Pavement Markers	EA	366
711-11-160	Pavement Messages, Thermoplastic (School)	EA	2
711-11-160	Pavement Messages, Thermoplastic (R.R. Markings)	EA	4
711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	EA	24
711-11-170	Directional Arrows, Thermoplastic	EA	6
711-11-161	Guide Lines, Thermoplastic (White)	LF	1,261
711-11-241	Skip Traffic Stripe, 10'-30' Yellow, Thermoplastic	LF	1,071
711-11-123	Solid Traffic Stripe, 12" White, Thermoplastic (Crosswalk)	LF	2,289
711-11-125	Solid Traffic Stripe, 24" White, Thermoplastic (Stop Bar)	LF	564
711-11-224	Solid Traffic Stripe, 18" Yellow, Thermoplastic (Chevron)	LF	208
711-11-111	Solid Traffic Stripe, 6" White, Thermoplastic	NM	1.290
711-11-211	Solid Traffic Stripe, 6" Yellow, Thermoplastic	NM	1.838

SIGNALIZATION			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
555-1-2	Directional Bore (6" to <12")	LF	90
630-1-12	Conduit (F&I) (Underground)	LF	265
630-1-22	Conduit (Furnish) (Underground)	LF	130
632-7-1	Cable (Signal) (F&I)	PI	1
635-1-11	Pull & Junction Boxes	EA	9
649-31-202	M/Arm F&I (E3-T2)	EA	2
650-51-313	Signal Traffic (F&I) (3 Sct 1 Way) (Special)	AS	2
650-51-613	Signal Traffic (F&I) (6 Sct 2 Way) (Special)	AS	2
653-191	Signal Pedestrian (LED) (Countdown) (1-Way)	AS	4
659-101	Signal Head Auxiliaries (Back Plates 3 Sct)	EA	2
659-118	Signal Head Auxiliaries (Back Plates 5 Sct)	EA	2
660-2-102	Loop Assembly (F&I) (Type B)	AS	4
660-2-106	Loop Assembly (F&I) (Type F)	AS	6
665-13	Detector Pedestal (F&I) (Det w/ sign only)	EA	4
670-5-410	Traffic Cntrl Assembly (Modify)	AS	1
690-10	Remove Traffic Signal Head Assembly	EA	4
690-20	Remove Pedestrain Assembly	EA	4
690-32-1	Pole Removal (Shallow) (Direct Burial)	EA	2
690-70	Remove Pedestrain Detector Assembly	EA	4
690-90	Remove Cabling and Conduit	PI	1
690-100	Remove Miscellaneous Signal Equipment	PI	1

LIGHTING			
FDOT PAY ITEM	DESCRIPTION	UNIT	QUANTITY
715-1-12	Conductor (F&I) (Insulated) (No. 6)	LF	7,824
715-1-13	Conductor (F&I) (Insulated) (No. 4)	LF	16,212
715-2-11	Conduit (F&I Underground) (PVC SCH 40) (2")	LF	7,905
715-7-11	Load Center (F&I) (Secondary Voltage)	EA	2
715-14-11	Pull Box (F&I) (Roadside) (Moulded)	EA	130
715-14-42	Pull Box (Relocate) (Sidewalk)	EA	2
715-500-1	Pole Cable Distribution System (Conventional)	EA	94
715-516-112	Light Pole Comp (F&I) (Ornamental) (MH 12')	EA	93
715-540-000	Light Pole Comp (Relocate)	EA	1

PAY ITEMS FOOTNOTES

110-4 INCLUDES 250 SY EXISTING ROADWAY CONCRETE BASE REMOVAL

104-13-1 BASED ON REPLACEMENT EVERY 12 MONTHS

160-6 LBR 60 REQUIRED

400-1-15 INCLUDES 5 CY FOR MISCELLANEOUS CONSTRUCTION, AS DIRECTED BY THE ENGINEER.

425-1-9008 INCLUDES COST FOR TYPE B FENCE AND FENCE GATE.

522-1 INCLUDES ADDITIONAL CONCRETE UNDER HANDRAIL

530-3-3 BASED ON 1.5' THICKNESS

639-2-1 PAYMENT SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR

1000-6 STANDARD MANATEE COUNTY MASTER METER ASSEMBLY AND ALL APPURTANCES.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDS	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDS	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE #42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADETRIM

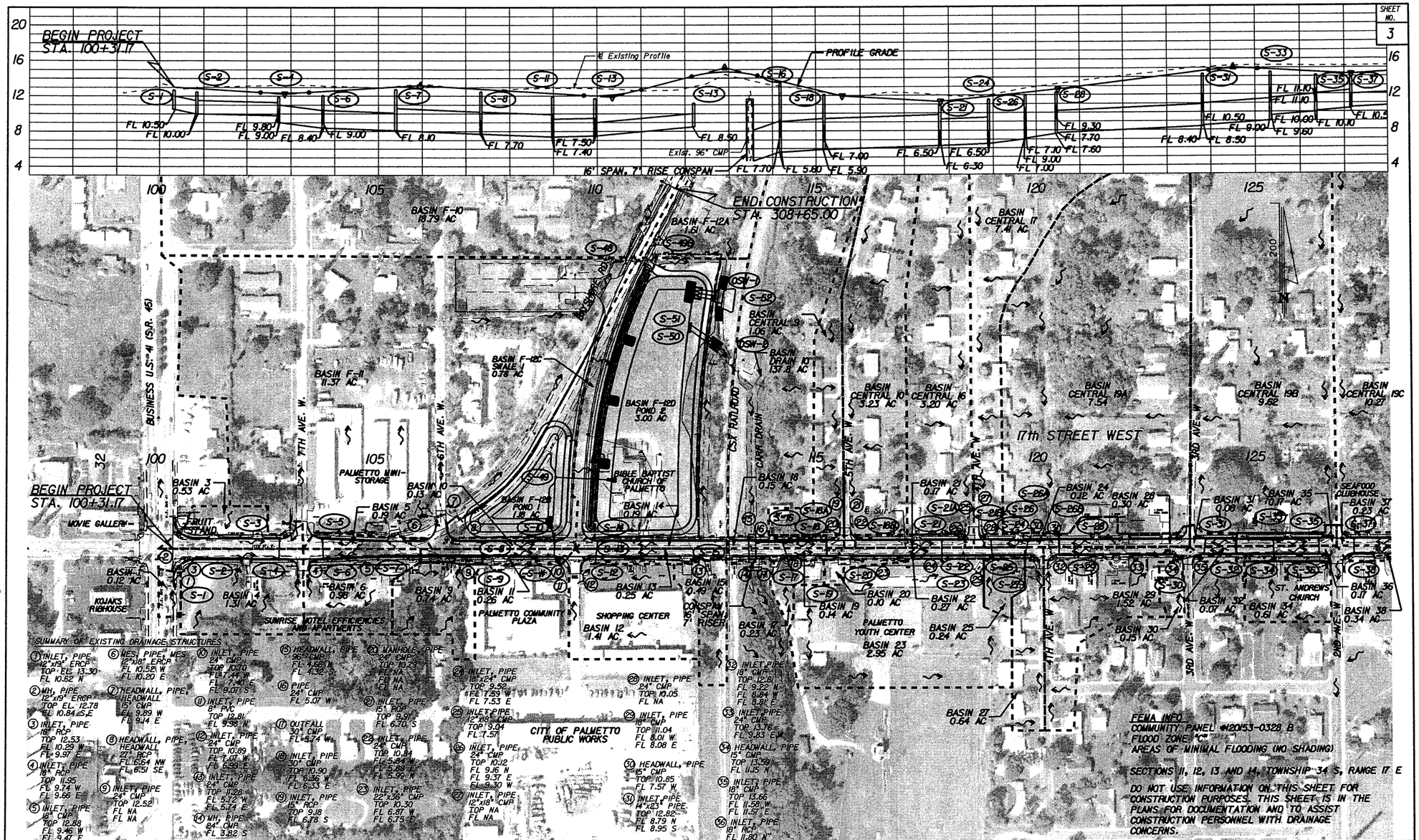
6745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3662

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

SUMMARY OF PAY ITEMS

SHEET NO. 3



SUMMARY OF EXISTING DRAINAGE STRUCTURES

① INLET, PIPE 12"x18" ERCP TOP EL. 13.30 FL 10.62 W
② MH, PIPE 12"x15" ERCP TOP EL. 12.78 FL 10.84 S,E
③ INLET, PIPE 18" RCP TOP 12.53 FL 10.29 W FL 9.97 E
④ INLET, PIPE 18" RCP TOP 11.95 FL 9.74 W FL 9.66 E
⑤ INLET, PIPE 18" CMP TOP 12.88 FL 9.46 W FL 9.47 E
⑥ MES, PIPE 12"x18" ERCP FL 10.58 W FL 10.20 E
⑦ HEADWALL, PIPE, HEADWALL 15" CMP FL 9.89 W FL 9.14 E
⑧ HEADWALL, PIPE, HEADWALL 27" RCP FL 6.64 NW FL 6.51 SE
⑨ INLET, PIPE 24" CMP TOP 12.52 FL NA FL NA
⑩ INLET, PIPE 24" CMP TOP 10.10 FL 7.44 W FL 7.40 E FL 9.07 S
⑪ INLET, PIPE 8" PVC FL 9.38 N
⑫ INLET, PIPE 24" CMP TOP 10.89 FL 6.72 W FL 6.69 E
⑬ INLET, PIPE 24" CMP TOP 11.28 FL 5.72 W FL 5.74 E
⑭ MH, PIPE 24" CMP FL 3.82 S
⑮ HEADWALL, PIPE 36" CMP FL 4.66 N FL 4.32 S
⑯ PIPE 24" CMP FL 5.07 W
⑰ OUTFALL 30" CMP FL 4.74 W
⑱ INLET, PIPE 30" CMP TOP 10.90 FL 6.33 E
⑲ INLET, PIPE 15" RCP TOP 9.18 FL 6.78 S
⑳ MANHOLE, PIPE 24" CMP TOP 10.73 FL NA FL NA FL NA
㉑ INLET, PIPE 15" RCP TOP 9.91 FL 6.70 S
㉒ INLET, PIPE 24" CMP TOP 10.84 FL 5.84 W FL 5.88 E FL 5.99 N
㉓ INLET, PIPE 22"x36" CMP TOP 10.30 FL 6.97 W FL 6.75 E
㉔ INLET, PIPE 18"x24" CMP TOP 9.52 FL 7.59 W FL 7.53 E
㉕ INLET, PIPE 12"x15" CMP TOP 9.04 FL 7.57
㉖ INLET, PIPE 24" CMP TOP 10.12 FL 9.46 N FL 9.37 E FL 9.30 W
㉗ INLET, PIPE 12"x18" CMP TOP NA FL NA
㉘ INLET, PIPE 24" CMP TOP 10.05 FL NA
㉙ INLET, PIPE 18" CMP TOP 11.04 FL 8.01 W FL 8.08 E
㉚ HEADWALL, PIPE 15" CMP TOP 10.85 FL 7.57 W
㉛ INLET, PIPE 24"x23" PIPE TOP 12.82 FL 8.79 N FL 8.95 S
㉜ INLET, PIPE 18" CMP TOP 12.81 FL 9.22 N FL 8.84 W FL 8.81 E
㉝ INLET, PIPE 24" CMP TOP 13.78 FL 9.23 E W
㉞ HEADWALL, PIPE 15" CMP TOP 13.59 FL 11.15 N
㉟ INLET, PIPE 18" CMP TOP 13.66 FL 11.59 W FL 11.57 E
㊱ INLET, PIPE 18" RCP FL 11.80 N

FEMA INFO
COMMUNITY PANEL #120153-0328 B
FLOOD ZONE(S): "C"
AREAS OF MINIMAL FLOODING (NO SHADING)

SECTIONS 11, 12, 13 AND 14, TOWNSHIP 34 S, RANGE 17 E

DO NOT USE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

DESIGNED BY	MR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

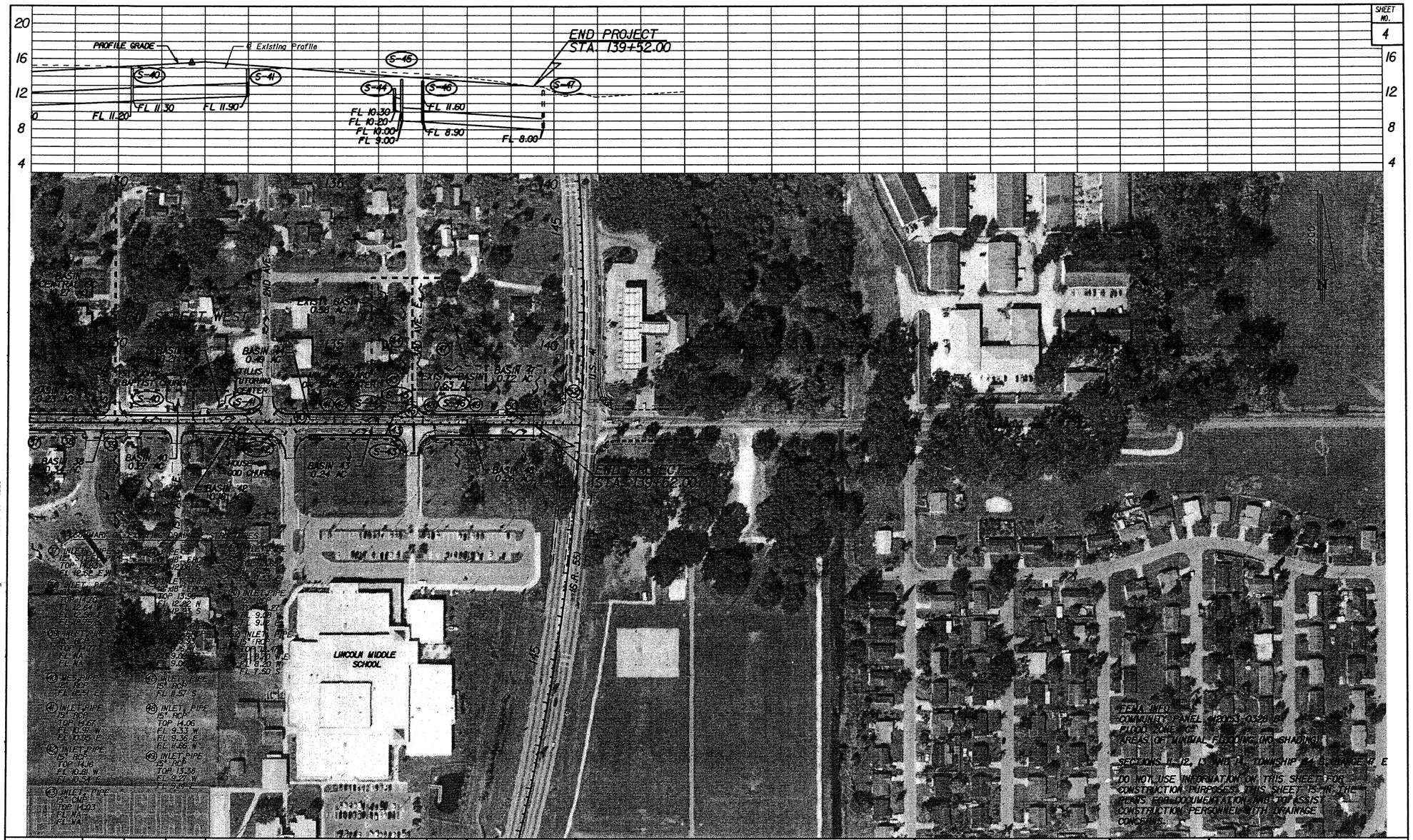
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

DRAINAGE MAP

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mx2880\dlm\CADD-data\DRAPROBI.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 4



PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Mts2008\01\n\CADD-data\DRMPR002.dgn PLOT FILE: PLOTFILE.
PLOT DATE: 2/11/2009

DESIGNED BY	MR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17th STREET WEST

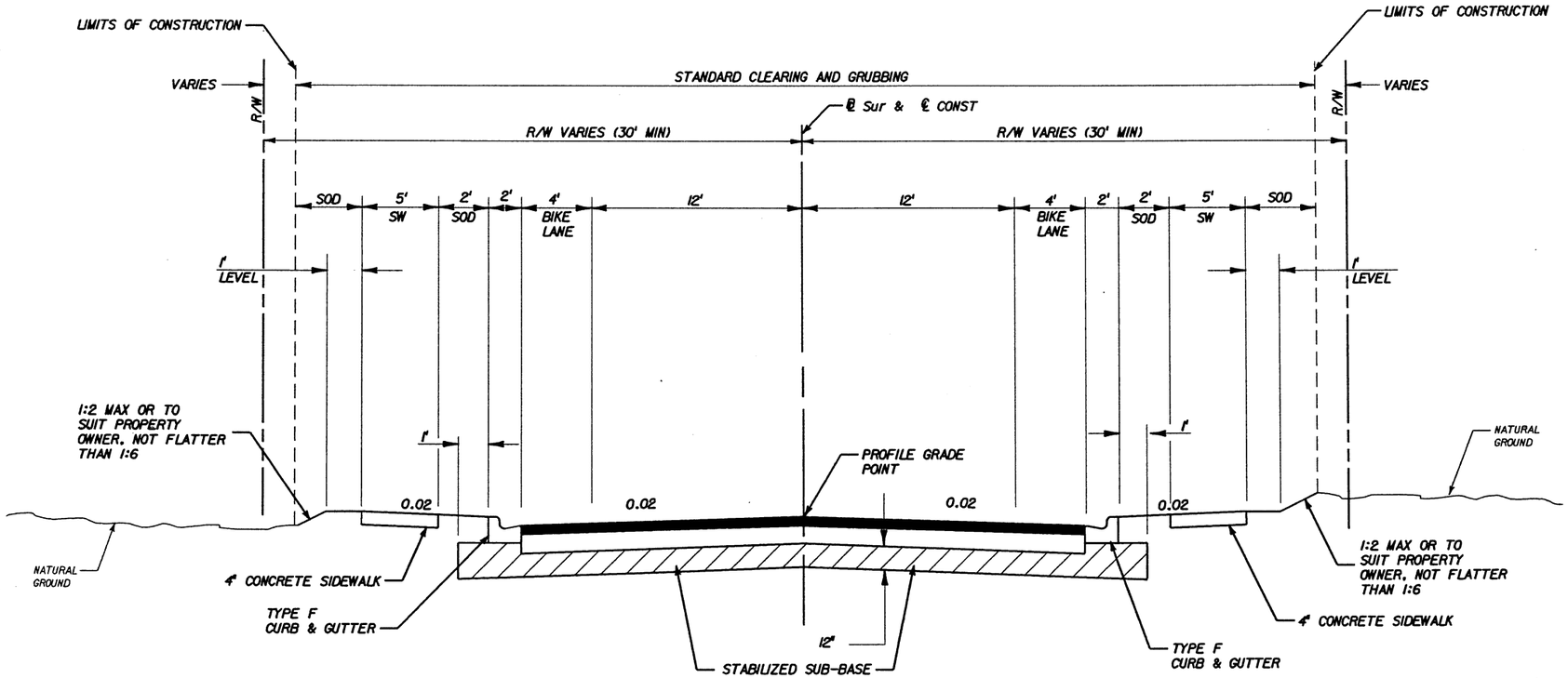
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

DRAINAGE MAP



TYPICAL SECTION
17th STREET WEST
STA. 100+31.17 TO STA. 139+52.00

NEW CONSTRUCTION

12" STABILIZED SUB-BASE SHELL MARL BLENDED WITH SANDY SUB-GRADE MINIMUM LBR 60, 98% T180 AASHTO.
10" BASE COURSE LIMEROCK (OR APPROVED EQUAL) COMPACTED TO 98% T180 AASHTO OR 8" SOIL CEMENT.
2" STRUCTURAL COURSE TYPE S-I WITH PRIME COAT.
1" SURFACE COURSE TYPE S-III.

TRAFFIC DATA

DESIGN SPEED = 35 MPH

NOTE: SEE MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS GENERAL NOTES SECTION 400.1 AND 400.2 FOR PAVEMENT SPECIFICATIONS.

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2808\Bim\CADD-data\Tgpw-d01.dgn PLOT FILE: PLOTFILE.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

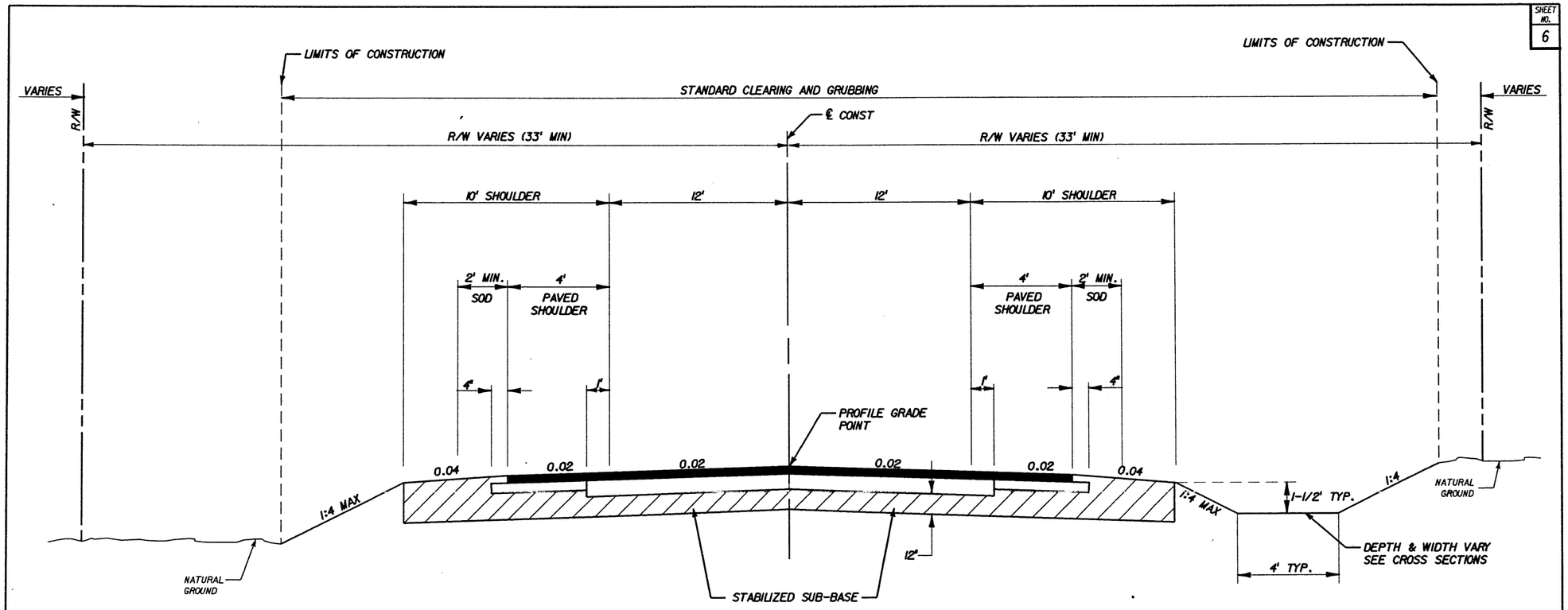
17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

TYPICAL SECTION



TYPICAL SECTION
BAYSHORE ROAD
STA. 300+00.00 TO STA. 308+65.00

TRAFFIC DATA

DESIGN SPEED = 45 MPH

NOTE: SEE MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS GENERAL NOTES SECTION 400.1 AND 400.2 FOR PAVEMENT SPECIFICATIONS.

NEW CONSTRUCTION

12" STABILIZED SUB-BASE SHELL MARL BLENDED WITH SANDY SUB-GRADE MINIMUM LBR 60, 98% T180 AASHTO.
10" BASE COURSE LIMEROCK (OR APPROVED EQUAL) COMPACTED TO 98% T180 AASHTO OR 8" SOIL CEMENT.
2" STRUCTURAL COURSE TYPE S-I WITH PRIME COAT.
1" SURFACE COURSE TYPE S-III.

SHOULDER PAVEMENT

4" ABC-III BASE OR APPROVED EQUAL.
2" STRUCTURAL COURSE TYPE S-I WITH PRIME COAT.
1" SURFACE COURSE TYPE S-III.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

TYPICAL SECTION

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2008\Dlm\CADD-data*gpw-d02.dgn PLOT FILE: PLOTFILE.

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN (RCP)										CURB INLETS			MANHOLE		MITERED END SECTION				DITCH BOTTOM INLETS			STRAIGHT ENDWALL	RIP RAP	FABRIC-FORMED CONCRETE	REMARKS
						15"	18"	14"x23"	24"	30"	36"	42"	43"x68"	58"x91"		J-5 <10'	P-5 <10'	P-6 <10'	P-7 <10'	J-7 <10'	24" 4ul	30" 4ul	43"x68" 4ul	58"x91" 4ul	C <10'	D <10'	H <10'	CY	TN	SY	
P	1	100+32.64	RT	INLET, PIPE	1		75										1													
F																														
P	2	100+84.44	RT	MANHOLE, PIPE	1		189												1											
F																														
P	3	102+74.75	LT	INLET, PIPE	1		47										1													
F																														
P	4	102+72.91	RT	INLET, PIPE	1				100									1												
F																														
P	5	103+71.75	LT	INLET, PIPE	1		46										1													
F																														
P	6	103+73.25	RT	INLET, PIPE	1				167								1													
F																														
P	7	105+40.00	RT	MANHOLE, PIPE	1					195									1											
F																														
P	8	107+35.00	RT	MANHOLE, PIPE	1					164									1											
F																														
P	9	107+35.00	RT	INLET, PIPE	1		17																			1				
F																														
P	10	109+00.87	LT	INLET, PIPE, MES	1					29							1					1								
F																														
P	11	108+98.63	RT	PIPE, INLET, PIPE	1					35							1													29 LF OF 8" PVC
F																														
P	12	109+94.00	RT	INLET, PIPE	1				16																	1				
F																														
P	13	109+94.82	RT	INLET, PIPE	1				96								1													
F																														
P	14	109+99.50	LT	INLET, PIPE	1		35										1													
F																														
P	15	112+20.00	RT	INLET, PIPE	1		226																			1				
F																														
P	15A	113+48.44		CONSPAN	1																									16'x7'x64' CONSPAN
F																														
P	16	114+18.00	LT	MANHOLE, PIPE	1							64							1											
F																														
P	17	114+32.00	RT	INLET, PIPE	1		45																			1				
F																														
P	18	115+18.50	LT	INLET, PIPE	1							101				1														3.5'x9' J-BOTTOM
F																														
P	18A	115+43.00	LT	MANHOLE															1											
F																														
P	18B	115+83.00	LT	MANHOLE															1											PARTIAL
F																														
P	19	115+18.50	RT	INLET, PIPE	1		35										1													
F																														
P	20	116+00.00	RT	INLET, PIPE	1		83																			1				
F																														
P	21	117+80.00	LT	INLET, PIPE	1							262				1														
F																														
P	21A	118+30.00	LT	MANHOLE															1											PARTIAL
F																														
P	21B	118+73.50	LT	MANHOLE															1											PARTIAL
F																														
SUB-TOTALS		PLAN QUANTITY				0	798	0	379	423	0	427	0	0	2	9	1	3	5	0	1	0	0	0	5	0	0	0	0		
		FINAL QUANTITY																												

SHEET NO. 7

PLOT FILE: P:\Mx2008\Bin\CADD-data\roundr-d01.dgn
PLOT FILE: .PLOTFILE.
PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	CRL	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, P.E.#42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SUMMARY OF DRAINAGE STRUCTURES

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN (RCP)										CURB INLETS			MANHOLE		MITERED END SECTION				DITCH BOTTOM INLETS			STRAIGHT ENDWALL	RIP RAP	FABRIC-FORMED CONCRETE	REMARKS
						15"	18"	14"x23"	24"	30"	36"	42"	43"x68"	58"x91"		J-5 <10'	P-5 <10'	P-6 <10'	P-7 <10'	J-7 <10'	24" 4sl	30" 4sl	43"x68" 4sl	58"x91" 4sl	C <10'	D <10'	H <10'	CY	TN	SY	
P	22	117+80.00	RT	INLET, PIPE	1			35										1												
F																														
P	23	117+80.00	RT	INLET, PIPE	1			13																	1					
F																														
P	24	118+90.00	LT	INLET, PIPE	1						110					1														
F																														
P	25	118+93.58	RT	INLET, PIPE	1			40																	1					MODIFIED
F																														
P	26	119+75.00	LT	MANHOLE, PIPE	1						85									1										
F																														
P	26A	120+14.00	LT	MANHOLE, PIPE	1	11													1											
F																														
P	26B	120+21.75	LT	ENDWALL																							1			
F																														
P	27	119+68.70	RT	INLET, PIPE	1		32										1													
F																														
P	28	120+46.50	LT	INLET, PIPE	1					72							1													
F																														
P	29	120+46.50	RT	INLET, PIPE	1		35										1													
F																														
P	30	123+15.84	RT	INLET, PIPE	1		64																		1					MODIFIED
F																														
P	31	123+82.00	LT	INLET, PIPE	1					336							1													
F																														
P	32	123+78.00	RT	INLET, PIPE	1		35										1													
F																														
P	33	125+34.00	LT	MANHOLE, PIPE	1					152									1											
F																														
P	34	125+34.00	RT	ENDWALL, PIPE	1		43																				1			
F																														
P	35	126+36.00	LT	INLET, PIPE	1				102								1													
F																														
P	36	126+36.00	RT	INLET, PIPE	1		35										1													
F																														
P	37	127+15.00	LT	INLET, PIPE	1				79								1													
F																														
P	38	127+15.00	RT	INLET, PIPE	1		35										1													
F																														
P	40	130+32.00	LT	INLET, PIPE	1		317										1													
F																														
P	41	132+93.24	LT	INLET, PIPE	1		267										1													
F																														
P	42	133+38.61	RT	INLET, PIPE	1		65										1													
F																														
P	43	136+17.00	RT	INLET, PIPE	1	50											1													
F																														
P	44	136+36.00	LT	INLET, PIPE	1	18											1													
F																														
P	45	136+52.50	LT	MANHOLE, PIPE	1	48													1											
F																														
P	46	137+00.00	LT	MANHOLE	1														1											
F																														
SUB-TOTALS				PLAN QUANTITY		127	928	88	181	560	195	0	0	0	1	14	1	4	1	0	0	0	0	2	1	0	2	0	0	
				FINAL QUANTITY																										

SHEET NO. 8

PLOT FILE: PLOTFILE.

DESIGN FILE: P:\Mta2000\0in\CADD-data\vaundr-d02.dgn

PLOT DATE: 2/11/2009

DESIGNED BY	CRL	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, P.E.#42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634

Engineer of Record: Jeffrey D. Trim , PE No.: 42106

Certificate of Authorization No.: 3952

ENGINEER

Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261

Dwg. Date January 8, 2009

SUMMARY OF DRAINAGE STRUCTURES

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN (RCP)										CURB INLETS				MANHOLE		MITERED END SECTION					DITCH BOTTOM INLETS			STRAIGHT ENDWALL	RIP RAP	FABRIC-FORMED CONCRETE	REMARKS
						15"	18"	14"x23"	24"	19"x30"	30"	36"	42"	43"x68"	58"x91"	J-5 <10'	J-6 <10'	P-5 <10'	P-6 <10'	P-7 <10'	J-7 <10'	14"x23" 2:1	24" 4:1	30" 4:1	43"x68" 4:1	58"x91" 4:1	C <10'	D <10'	H <10'	CY	TN		
P	48	307+02.00	LT	INLET, PIPE	1		62																				1						
F																																	
P																																	
F																																	
P	498	306+96.11	RT	ENDWALL	1				12																					2			
F																																	
P	49	301+61.00	LT	INLET, PIPE, MES	1				116														1				1						MODIFIED
F																																	
P	50	305+77.88	RT	INLET, PIPE, MES	1										50											1			1			32	10" ARMORFORM
F																																	FILTER FABRIC LINING
P	51	305+91.06	RT	INLET, PIPE, MES	1										55											1			1			31	10" ARMORFORM
F																																	FILTER FABRIC LINING
P	52	306+91.85	RT	DIVERSION STR, PIPE, MES	3									96										3						188		RUBBLE (BANK AND
F																																	SHORE PROTECTION)
SUB-TOTALS		PLAN QUANTITY				0	62	0	128	0	0	0	0	96	105	0	0	0	0	0	0	0	1	0	3	2	2	0	2	2	188	63	
		FINAL QUANTITY																															
TOTALS		PLAN QUANTITY				127	1788	88	688	0	983	195	427	96	105	3	0	23	2	7	6	0	1	1	3	2	4	6	2	4	188	63	
		FINAL QUANTITY																															

SHEET NO. 9

DESIGNED BY	CRL	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, P.E.#42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

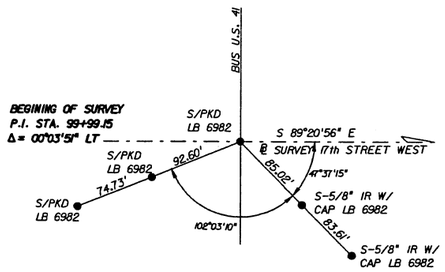
WADETRIM

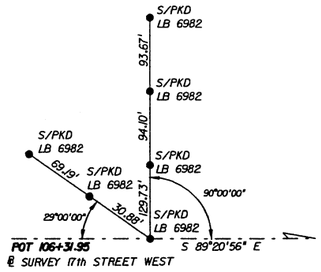
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3662

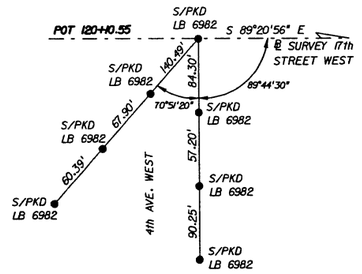
ENGINEER
Jeffrey D. Trim, PE No. 42106

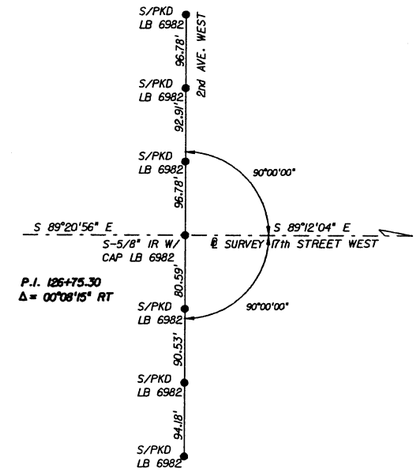
Proj. No. 6035261
Dwg. Date January 8, 2009

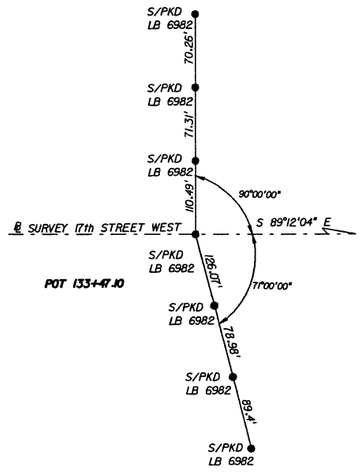
SUMMARY OF DRAINAGE STRUCTURES

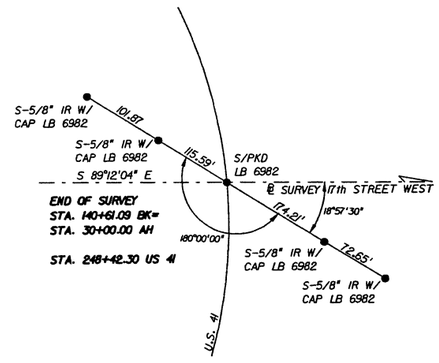












DESIGN FILE: P:\Mtce2888\0im\CADD-data\wrpoints01.dgn PLOT FILE: PLOTFILE
PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

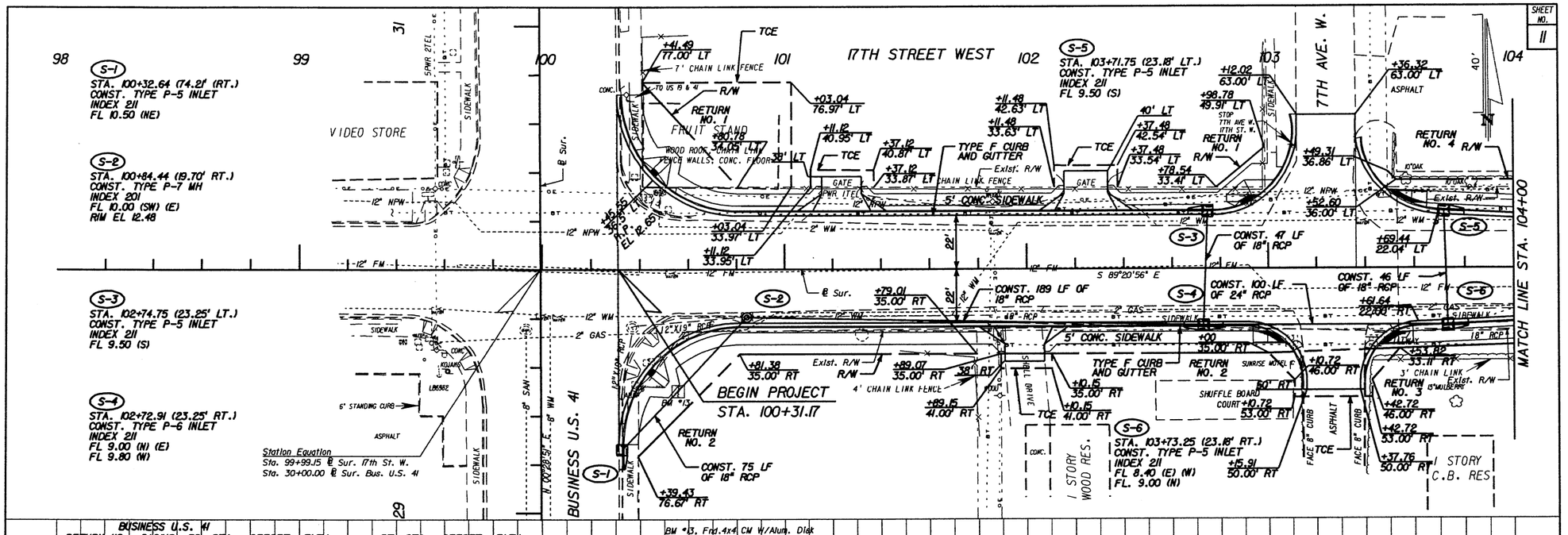
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

REFERENCE POINTS

SHEET NO. 11



BUSINESS U.S. 41											
	RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.		PT. STA.	OFFSET	ELEV.	
18	1	50'	100+30.77	71.62' LT	12.53 (EXIST.)		100+80.77	22.00' LT	12.45	18
	2	50'	100+31.39	71.96' RT	12.77 (EXIST.)		100+81.39	22.00' RT	12.44	
	7th AVE. W RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.		PT. STA.	OFFSET	ELEV.	
16	1	35'	102+77.02	22.00' LT	11.89		103+12.02	57.00' LT	12.28	16
	2	25'	102+90.92	22.00' RT	11.85		103+15.91	46.94' RT	13.15	
	3	25'	103+37.76	47.00' RT	13.55		103+61.63	22.02' RT	12.06	
	4	35'	103+36.15	58.30' LT	12.22		103+69.44	22.04' LT	12.08	

BM #3, Fnd.4x4 CM W/Alum. Disk 51.00' RT Sta 100+55.16 EL 13.001

14 GENERAL NOTES

1. EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMIT SHALL BE REMOVED UNLESS OTHERWISE NOTED.
12 2. SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT PORTIONS OF SOME DRAINAGE STRUCTURES EXTEND INTO THE STABILIZED PORTION OF THE ROADBED AND EXTREME CAUTION WILL NECESSARY IN STABILIZATION OPERATIONS AT THESE LOCATIONS.
10 3. SOME OF THE DRAINAGE STRUCTURES HAVE OPTIONAL CULVERT MATERIALS. WHEN OPTIONAL MATERIALS ARE ALLOWED, ONE OF THE OPTIONAL MATERIALS HAS BEEN USED AS THE BASIS OF THE PAY QUANTITIES. THE MATERIAL SELECTED AS THE BASIS OF PAY QUANTITIES IS IDENTIFIED ON THE TABULATION OF CROSS DRAIN, STORM SEWER, OR CROSS DRAIN/STORM SEWER) OPTIONAL MATERIALS SHEET. ALL OPTIONS ARE DESCRIBED, AND DESIGN AND INSTALLATION INFORMATION FOR EACH OPTION IS PROVIDED ON THIS SHEET.
8 4. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE ENGINEER SHOULD NOTIFY THE DISTRICT LOCATION SURVEYOR, WITHOUT DELAY, BY TELEPHONE.
6 5. EXISTING DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE REPLACED AT THE SAME LOCATION AND WIDTH, UNLESS OTHERWISE SHOWN IN THE PLANS.
4

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

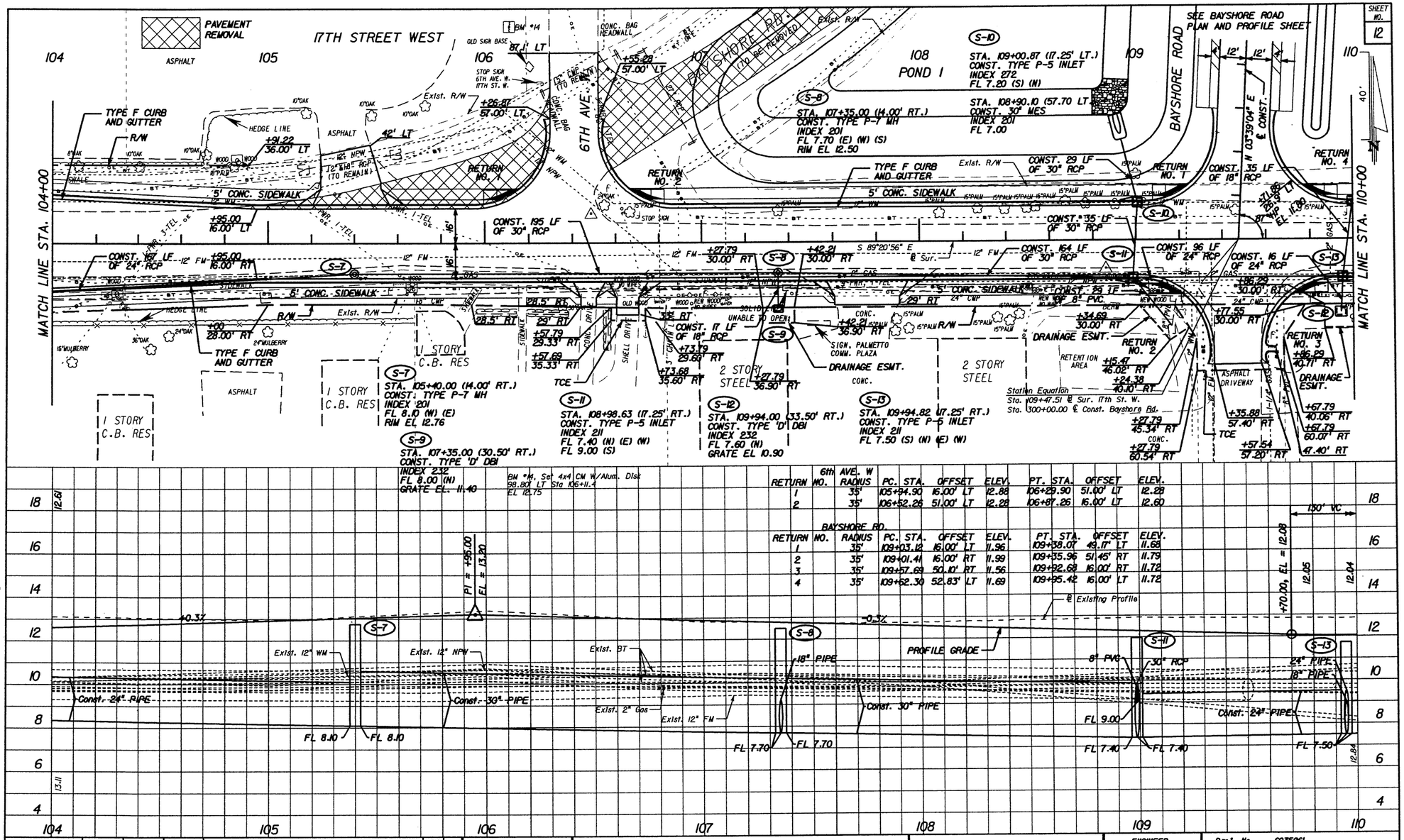
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603529I
Dwg. Date January 8, 2009

PLAN AND PROFILE

PLOT DATE: 2/12/2009
DESIGN FILE: P:\Mta2009\Wim\CADD-data\plan-dd01.dgn
PLOT FILE: PLOTFILE.



RETURN NO.		6th AVE. W RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1		35'	105+94.90	16.00' LT	12.88	106+29.90	51.00' LT	12.28
2		35'	106+52.26	51.00' LT	12.28	106+87.26	16.00' LT	12.60

RETURN NO.		BAYSHORE RD. RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1		35'	109+03.12	16.00' LT	11.96	109+38.07	49.17' LT	11.68
2		35'	109+01.41	16.00' RT	11.99	109+35.96	51.45' RT	11.79
3		35'	109+57.69	50.10' RT	11.56	109+92.68	16.00' RT	11.72
4		35'	109+52.30	52.83' LT	11.69	109+95.42	16.00' LT	11.72

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

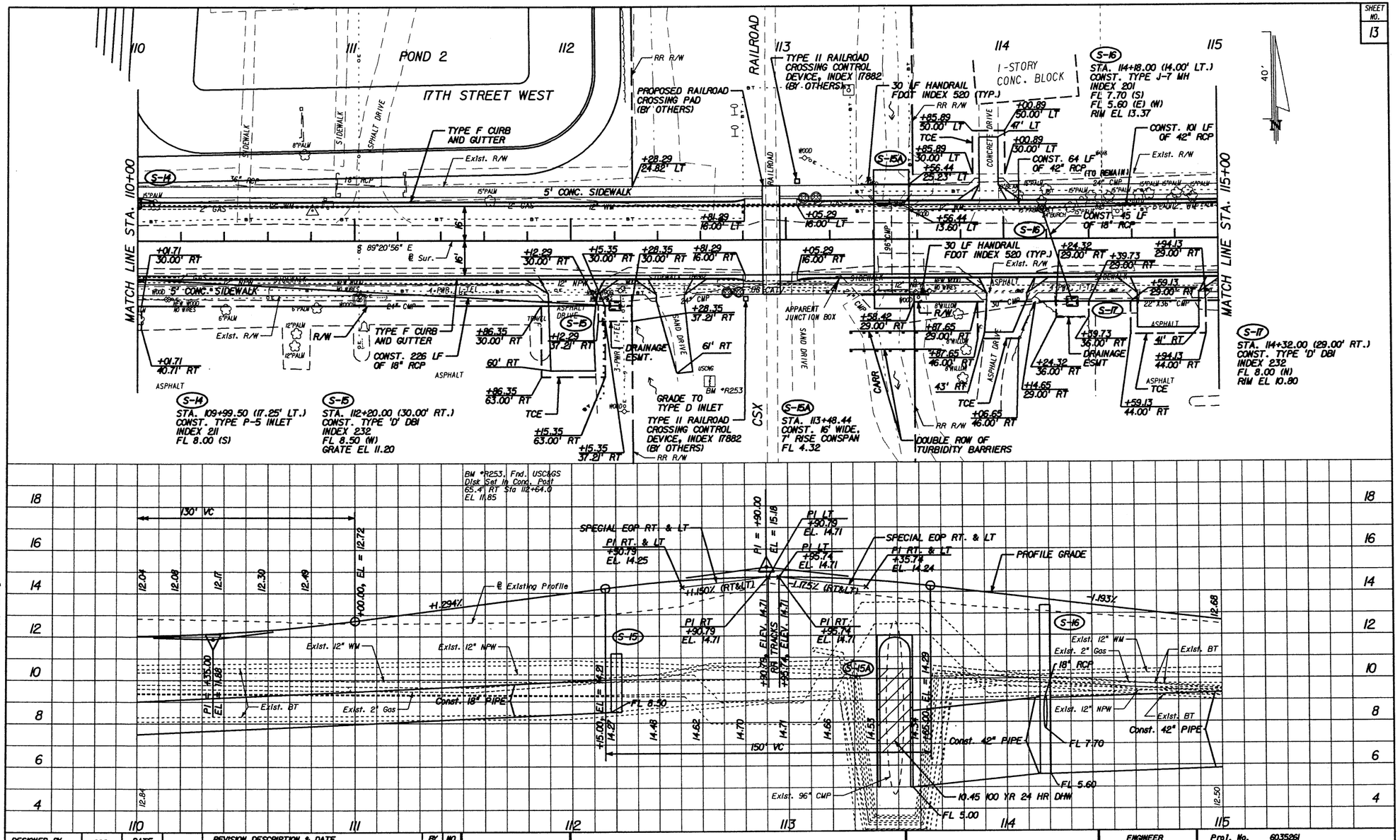
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PROFILE

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mx2000\Bim\C4DD-data\plpr-d02.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 13



				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

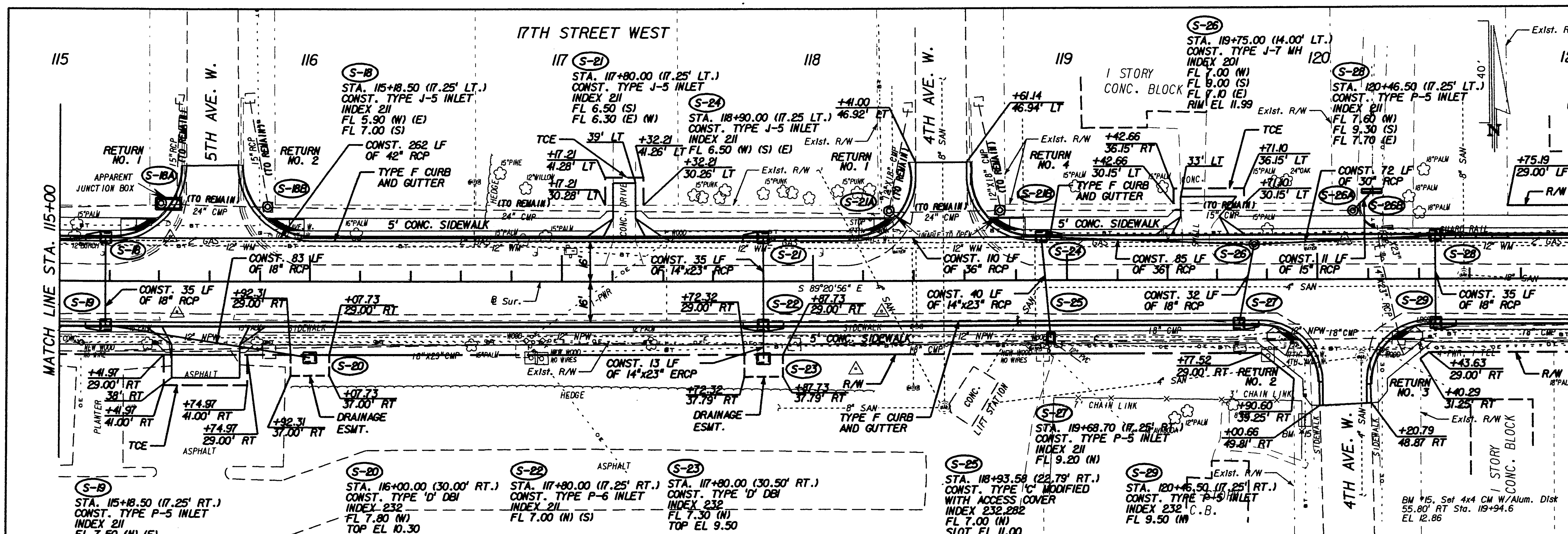
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603528I
Dwg. Date January 8, 2009

PLAN AND PLOFILE

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2000\dlm\CADD-data\plprr-d83.dgn PLOT FILE: PLOTFILE.



5th AVE. W

RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	30'	115+20.88	16.00' LT	12.11	115+50.88	45.81' LT	9.98 (EXIST.)
2	30'	115+71.27	46.00' LT	10.00 (EXIST.)	116+01.27	16.00' LT	11.52

4th AVE W

RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	118+15.98	16.00' LT	11.16	118+40.98	40.93' LT	9.96
2	25'	119+76.96	16.00' RT	11.96	120+01.96	40.44' RT	12.50
3	25'	120+19.15	41.49' RT	12.49	120+44.14	16.00' RT	12.30
4	25'	118+61.14	40.99' LT	9.96	118+86.14	16.00' LT	11.51

S-18A
STA. 115+43.00 (30.00' LT.)
CONST. MH TYPE 'J-7' (3.5'x9.0')
INDEX 201
RIM EL 11.50

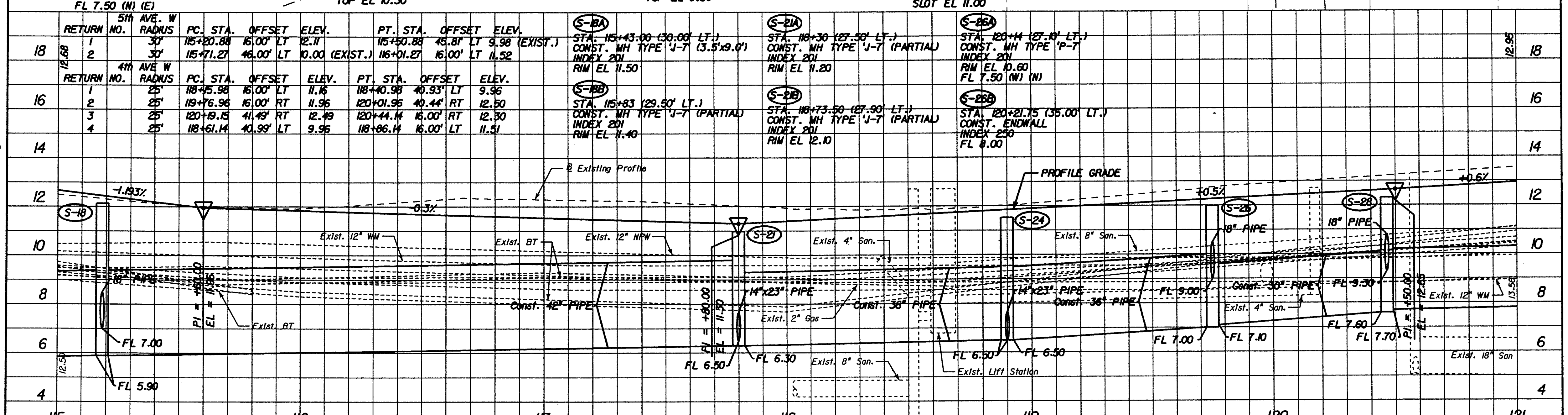
S-18B
STA. 115+83 (29.50' LT.)
CONST. MH TYPE 'J-7' (PARTIAL)
INDEX 201
RIM EL 11.40

S-21A
STA. 118+30 (27.50' LT.)
CONST. MH TYPE 'J-7' (PARTIAL)
INDEX 201
RIM EL 11.20

S-21B
STA. 118+73.50 (27.90' LT.)
CONST. MH TYPE 'J-7' (PARTIAL)
INDEX 201
RIM EL 12.10

S-26A
STA. 120+14 (27.10' LT.)
CONST. MH TYPE 'P-7'
INDEX 201
RIM EL 10.60
FL 7.50 (W) (N)

S-26B
STA. 120+21.75 (35.00' LT.)
CONST. ENDWALL
INDEX 250
FL 8.00



DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim, PE No.: 42106
Certificate of Authorization No.: 3952

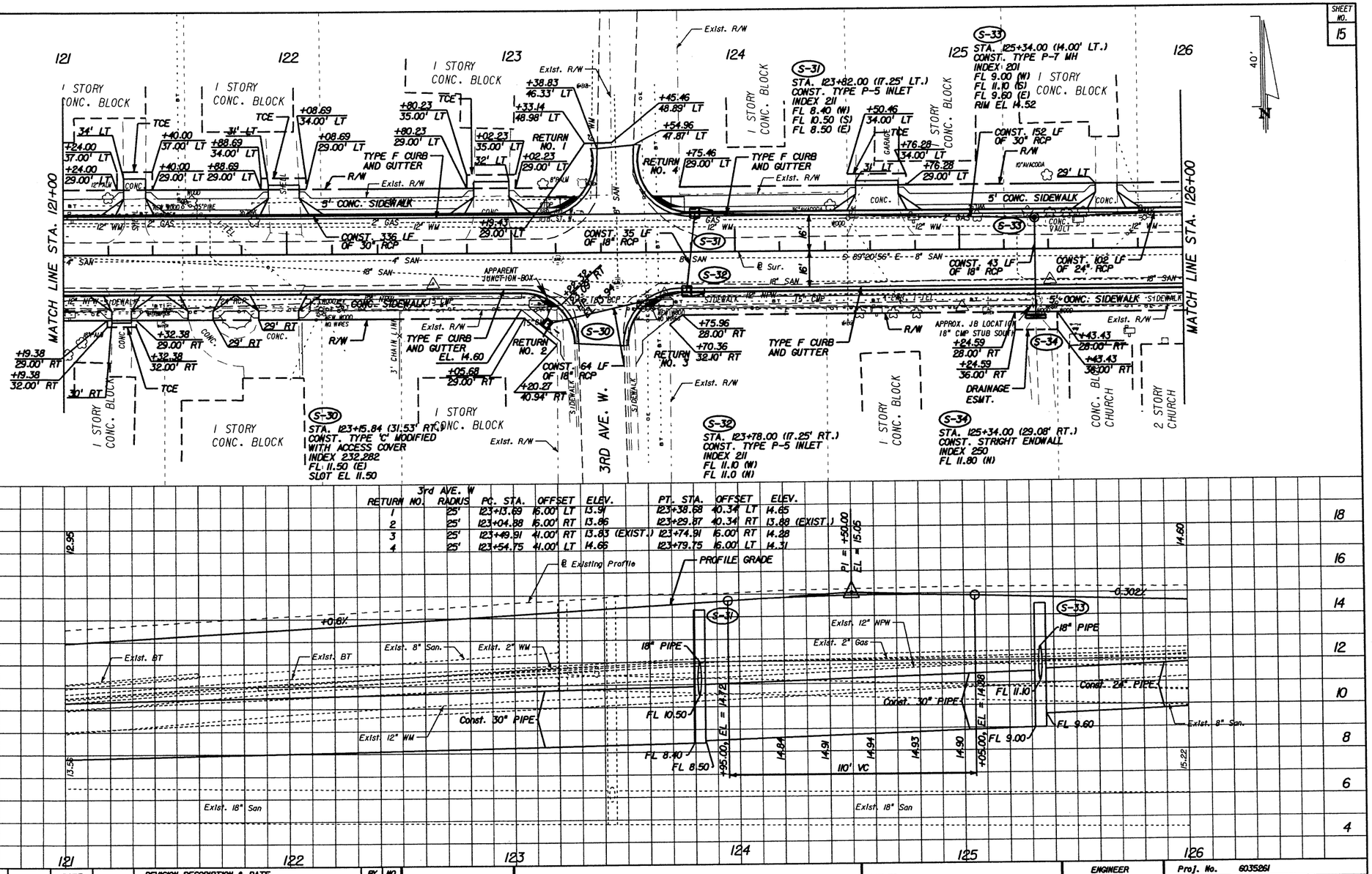
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PROFILE

PLOT FILE: _PLOTFILE_
DESIGN FILE: P:\Mte2080\01m\CADD-data\plprrd04.dgn
PLOT DATE: 2/11/2009

SHEET NO. 15



RETURN NO.	RADIUS	PC. STA.	OFFSET		ELEV.	PT. STA.	OFFSET		ELEV.
1	25'	123+13.69	16.00'	LT	13.91	123+38.68	40.34'	LT	14.65
2	25'	123+04.88	16.00'	RT	13.86	123+29.87	40.34'	RT	13.88 (EXIST.)
3	25'	123+49.91	41.00'	RT	13.83 (EXIST.)	123+74.91	16.00'	RT	14.28
4	25'	123+54.75	41.00'	LT	14.66	123+79.75	16.00'	LT	14.31

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

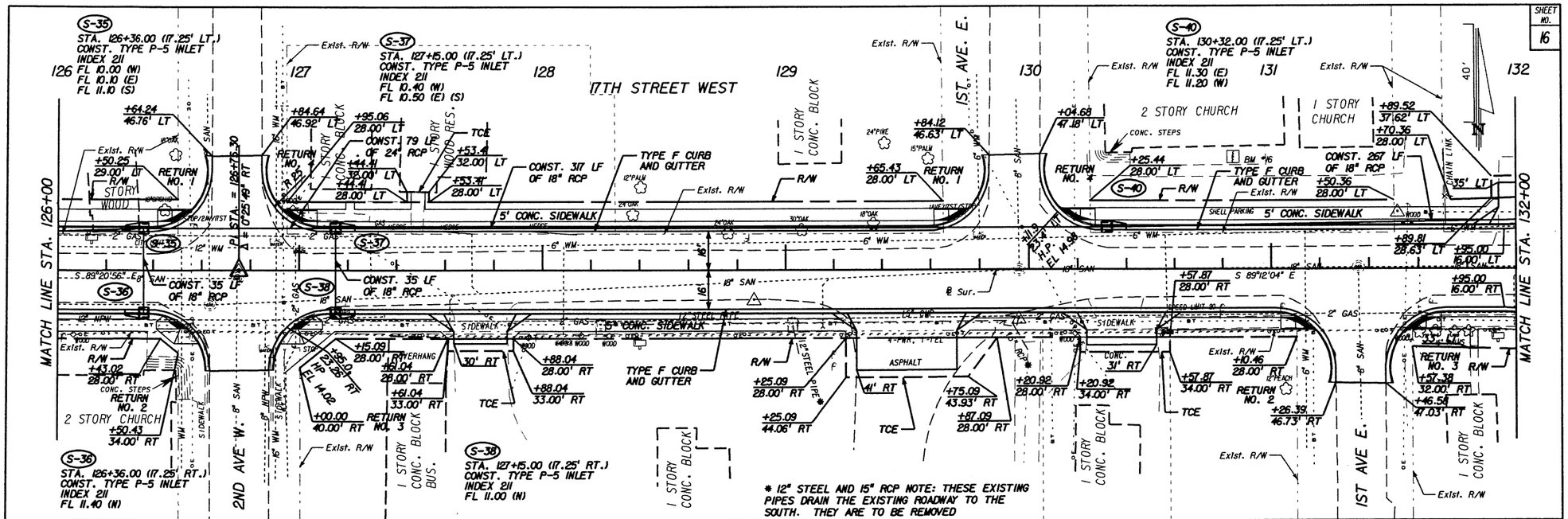
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PLAN AND PROFILE

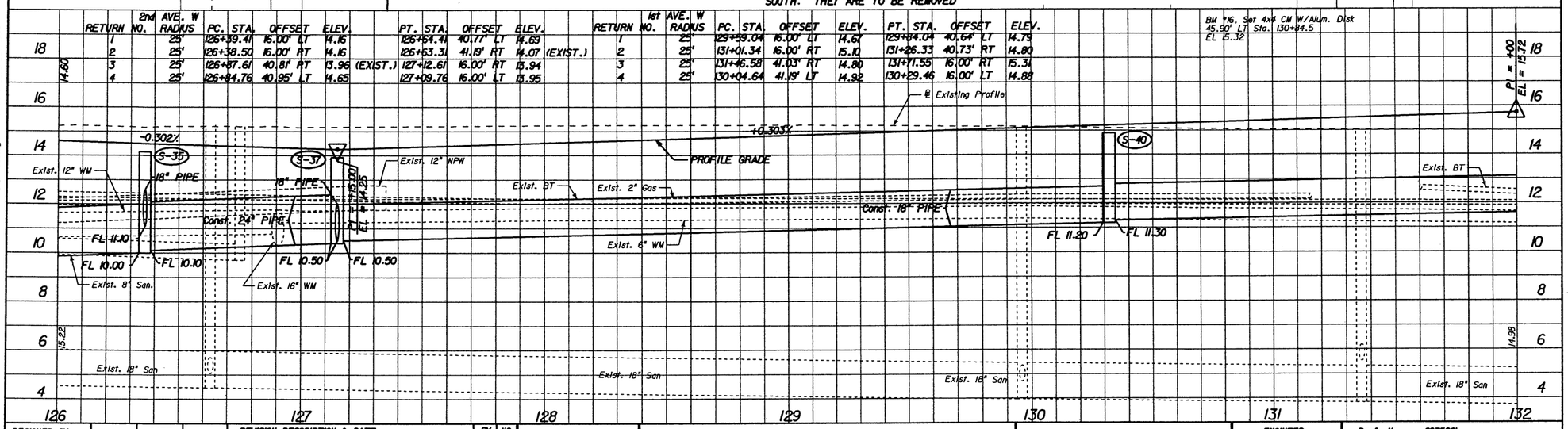
PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Mtce2008\01m\CADD-data\plprr1d05.dgn
PLOT DATE: 2/11/2009

SHEET NO. 16



RETURN NO.	2nd AVE. W RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	126+59.41	16.00' LT	14.16	126+64.41	40.77' LT	14.69
2	25'	126+38.50	16.00' RT	14.16	126+63.31	41.19' RT	14.07 (EXIST.)
3	25'	126+87.61	40.81' RT	13.96 (EXIST.)	127+12.61	16.00' RT	13.94
4	25'	126+84.76	40.95' LT	14.65	127+09.76	16.00' LT	13.95

RETURN NO.	1st AVE. W RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	129+59.04	16.00' LT	14.67	129+84.04	40.64' LT	14.79
2	25'	131+01.34	16.00' RT	15.10	131+26.33	40.73' RT	14.80
3	25'	131+46.58	41.03' RT	14.80	131+71.55	16.00' RT	15.31
4	25'	130+04.64	41.19' LT	14.92	130+29.46	16.00' LT	14.88



DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

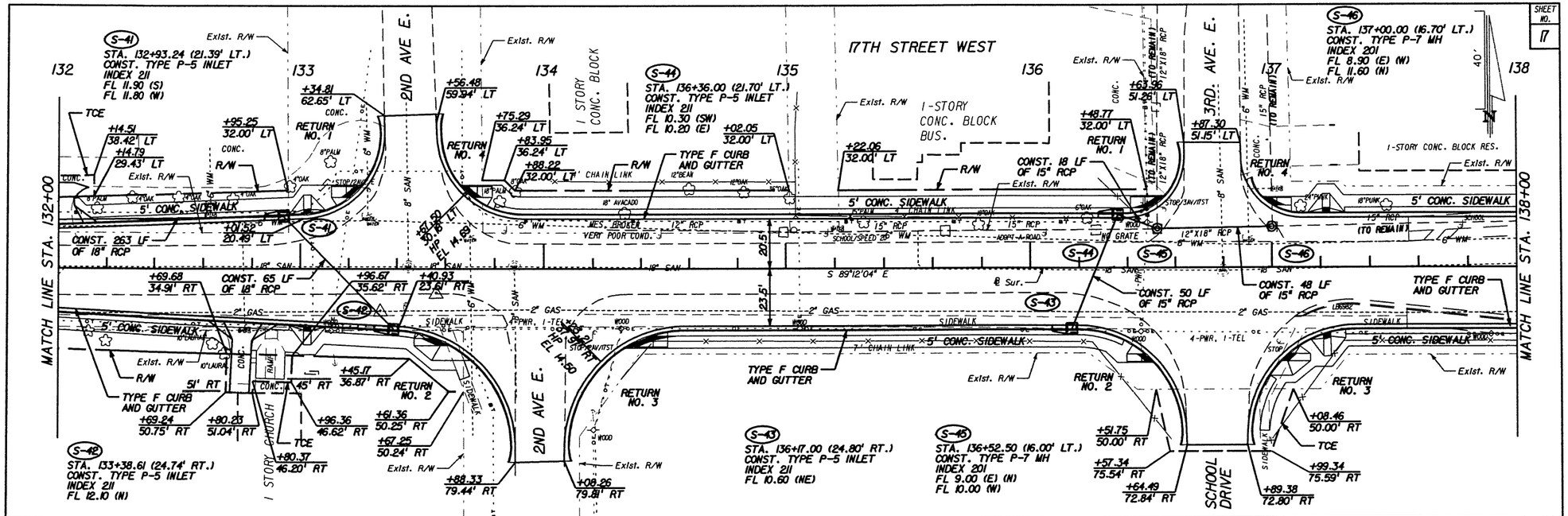
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

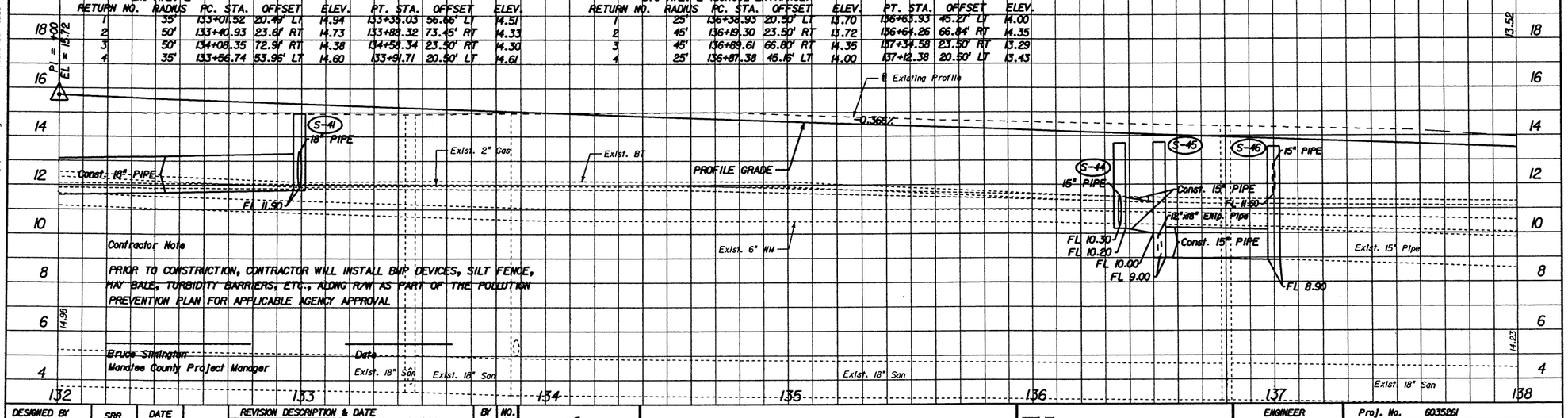
PLAN AND PROFILE

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mtx2008\0in\CADD-data\plpr-d06.dgn
PLOT FILE: PLOTFILE.



2nd AVE. E RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	35'	133+01.52	20.49' LT	14.94	133+35.03	56.66' LT	14.51
2	50'	133+40.93	23.61' RT	14.73	133+88.32	73.45' RT	14.33
3	50'	134+08.35	72.91' RT	14.38	134+58.34	23.50' RT	14.30
4	35'	133+56.74	53.96' LT	14.60	133+91.71	20.50' LT	14.61

3rd AVE. E (SCHOOL ENTRANCE) RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	136+38.93	20.50' LT	13.70	136+63.93	45.27' LT	14.00
2	45'	136+89.30	23.50' RT	13.72	136+64.26	66.84' RT	14.35
3	45'	136+89.61	66.80' RT	14.35	137+34.58	23.50' RT	13.29
4	25'	136+87.38	45.46' LT	14.00	137+12.38	20.50' LT	13.43



Contractor Note

PRIOR TO CONSTRUCTION, CONTRACTOR WILL INSTALL BMP DEVICES, SILT FENCE, HAY BALE, TURBIDITY BARRIERS, ETC., ALONG R/W AS PART OF THE POLLUTION PREVENTION PLAN FOR APPLICABLE AGENCY APPROVAL

Bruce Stinnette
Manatee County Project Manager

Date

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PROFILE

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mts2008\01\m\CADD-data\plpr-d07.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 18

17TH STREET WEST

17TH STREET EAST

MATCH LINE STA. 138+00

138 | 139 | 140

Exist R/W

TYPE F CURB AND GUTTER

34' LT

5' CONC. SIDEWALK

SPEED LIMIT 30

SIGN-SCHOOL

15" RCP (TO REMAIN)

6" WM

18" SAN

S 89°12'04" E

20.5'

23.5'

2" GAS

5' CONC. SIDEWALK

CHAIN LINK

WOOD

15" DIA/PALM

6" DIA/PALM

24" RCP (TO REMAIN)

30" RCP (TO REMAIN)

ALUM

PALMETTO LIMIT

285

284

℄ Sur.

CURVE 2

U.S. 41

BFP 6"

(2)BFP

IMPROVEMENTS FROM MANATEE COUNTY PROJECT 6035260

BM #01

Station Equation
Sta. 140+61.09 ℄ Sur. 17th St. W
Sta. 284+42.30 ℄ Sur. U.S. 41

℄ Sur. Curve 2 Data
P.I. STA. 289+97.14
Δ = 40° 15' 20" LT.
D= 1° 10' 00"
T= 1799.90'
L= 3450.48'
R= 4911.07'
P.C.= STA. 271+97.24
P.T.= 306+47.72
e = NC

END PROJECT
STA. 139+52.00

BM #01.
Fnd 4"x4" Conc. Monument
W/FDOT Brass Disk
57.0' RT Sta 30+91.5
Elev. 12.99

13.52

14.23

-0.36%

℄ Existing Profile

PI = 452
EL = 12.96

PROFILE GRADE

15" PIPE

Exist. 2" Gas

Exist. 15" Pipe

Exist. 6" WM

FL 8.00

FL 9.00

Exist. 18" San

18 | 16 | 14 | 12 | 10 | 8 | 6 | 4

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PLOT

PLOT FILE: P:\Mtce2080\01m\CADD-data\plpr-d00.dgn
PLOT DATE: 2/11/2009

SHEET NO. 19

17TH STREET WEST

POND 1

S-49

302

303

304

305

BAYSHORE ROAD

PAVEMENT REMOVAL

Exist. R/W

40'

POSSIBLE DEWATERING SITE

10' SHOULDER

4' PAVED SHOULDER

CONST. 116 LF OF 24" RCP

R 80

℄ CONST.

12'

12'

CURVE 1

Exist. R/W

MATCH LINE STA. 306+00

R 101

N 03°39'04" E

RC STA. 109+47.51

10' SHOULDER

4' PAVED SHOULDER

SWALE 1

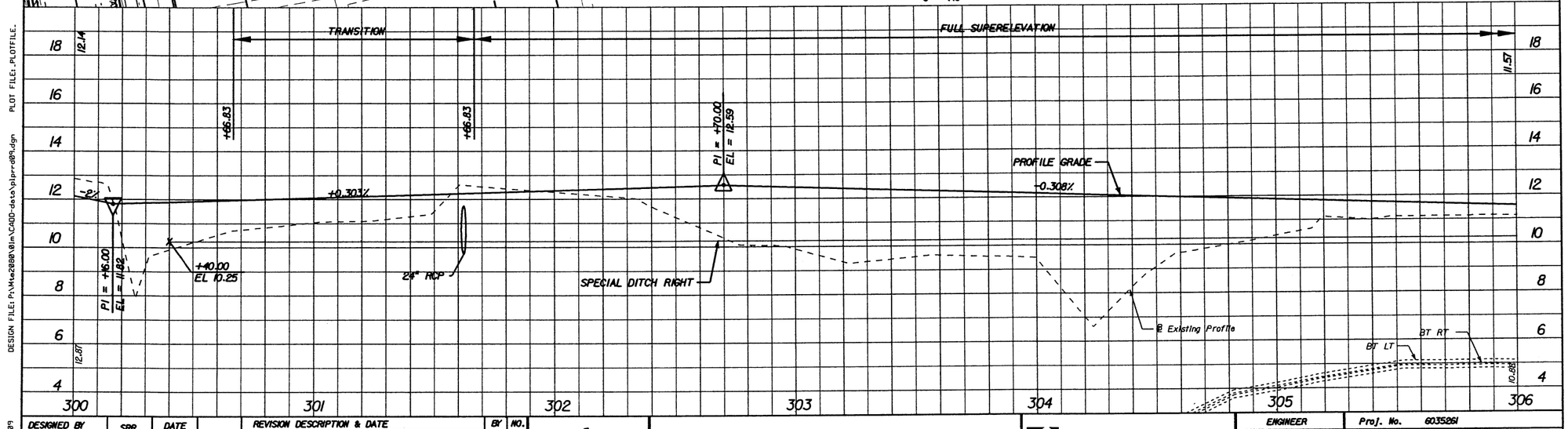
S 89° 20' 56" E

GAS

POND 2

Station Equation
Sta. 109+47.51 ℄ Sur. 17th St. W.
Sta. 300+00.00 ℄ Const. Bayshore Rd.

℄ CONST. Curve 1 Data
P.I. STA. 304+35.53
Δ = 25° 07' 16" RT
D= 4° 45' 03"
T= 268.70'
L= 528.77'
R= 1206.00'
P.C.= STA. 301+66.83
P.T.= STA. 306+95.60
e = RC



PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Mtw2008\0in\CADD-data\plprod09.dgn
PLOT DATE: 2/11/2009

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PROFILE

SHEET NO. 20

S-48 STA. 307+02 (27.50' LT.)
CONST. DBI TYPE C
INDEX 232
GRATE 9.00
FL 6.50 (N&S)

ADJUST EXISTING DBI GRATE TO ELEVATION 11.00

CONNECT 18" RCP TO EXISTING DBI FL 5.90

CONST. 35 LF OF 18" RCP

STA. 307+29, 27.2' LT
CONNECT TO EXISTING 18" RCP
FDOT INDEX 280
FL 7.94

CONST. 27 LF OF 18" RCP

307 308 309

BAYSHORE ROAD

20th STREET WEST

40'

MATCH LINE STA. 306+00

REMOVE EXISTING ENDWALL

CURVE 1

N 28°46'21" E

EXTEND 12 LF OF 24" RCP

S-498

PT STA. +95.60

R/W

+13.04
33.00' RT

31.5' RT

10' SHOULDER

4' PAVED SHOULDER

31.5' LT

10' SHOULDER

4' PAVED SHOULDER

℄ CONST.

12'

+30

10'

ASPHALT (TO REMAIN)

SHELL

CRUSHED CMP (TO REMAIN)

Exist. R/W

END CONSTRUCTION
STA. 308+65.00
MATCH EXIST. PAVT.

℄ CONST. Curve 1 Data
P.I. STA. 304+35.53
Δ = 25° 07' 16" RT
D= 4° 45' 03"
T= 268.70'
L= 528.77'
R= 1206.00'
P.C.= STA. 301+66.83
P.T.= STA. 306+95.60
e = RC

S-498 STA. 306+96.11 (30.00' RT.)
CONST. STRAIGHT ENDWALL
INDEX 250
FL 5.60 (W)

FULL SUPERELEVATION

TRANSITION

+95.60

+95.60

11.57

PROFILE GRADE

-0.308%

+0.3%

PI = +65.00
EL = 11.55

@ Existing Profile

+60.00
EL 10.25

SPECIAL DITCH RIGHT

24" RCP

PI = +35.00
EL = 11.16

BT LT

BT RT

10.86

END CONSTRUCTION
STA. 308+65.00
MATCH EXIST. PAVT.

18 16 14 12 10 8 6 4

306 307 308 309

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

PLAN AND PLOFILE

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2008\Bim\CADD-data\plpr-d18.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 21

PAVEMENT REMOVAL

40'

Exist. R/W

Exist. R/W

304

EXIST. BAYSHORE ROAD

303

℄ CONST.

PROP. BAYSHORE ROAD

17th STREET WEST

Exist. R/W

POND 1

12 FM

℄ Sur.

DESIGN FILE: P:\Mta2008\01m\CADD-data\bayshore-util\gu.dgn PLOT FILE: .PLOTFILE.

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADETRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authortzation No.: 3952

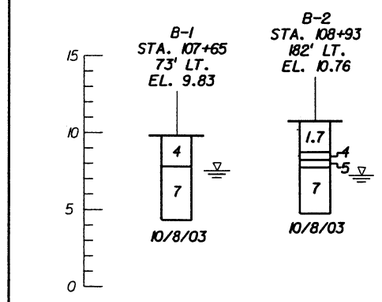
ENGINEER

Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261

Dwg. Date January 8, 2009

PLAN AND PROFILE



STAGE	A (SF)	A (AC)	VOL. (AC-FT)	TOT. VOL. (AC-FT)
4.00	9,055	0.208	-----	-----
7.00	14,697	0.337	0.789	0.789
7.82	17,452	0.394	0.297	1.086
11.50	28,397	0.652	1.890	2.976

SHW = NHL = 7.00 N.G.V.D.
25 YR. DHW = 10.79 N.G.V.D.

AREA AT CONTROL EL. 7.00 N.G.V.D. = 14,697 SF.
AREA AT OVERFLOW EL. 7.82 N.G.V.D. = 17,452 SF.

S-10
STA. 109+00.87 (17.25' LT.)
CONST. TYPE P-5 INLET
INDEX 211
FL 7.20 (S) (N)

STA. 108+90.70 (57.70' LT)
CONST. 30" MES
INDEX 272
FL 7.00

S-49
STA. 301+61.00 (52.33' LT.)
CONST. DBI TYPE C
MODIFIED
INDEX
FL 6.00

STA. 301+61.00 (74.33' RT)
CONST. 24" MES
INDEX 272
FL 5.25

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	CRL	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

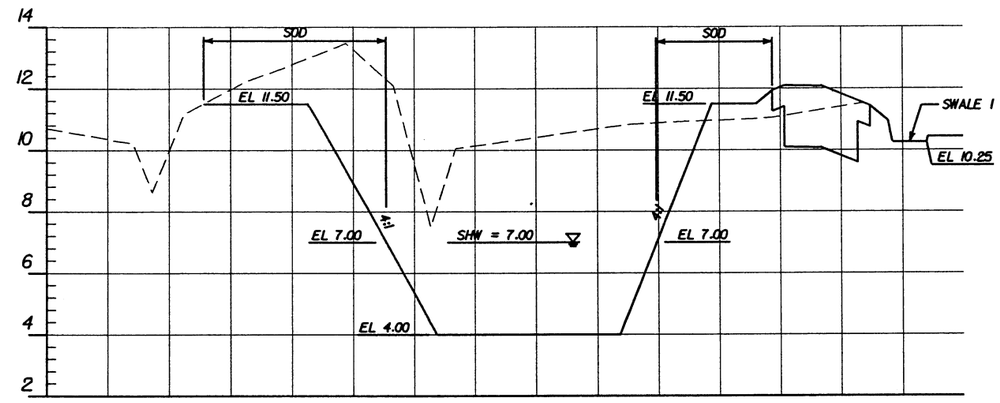
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

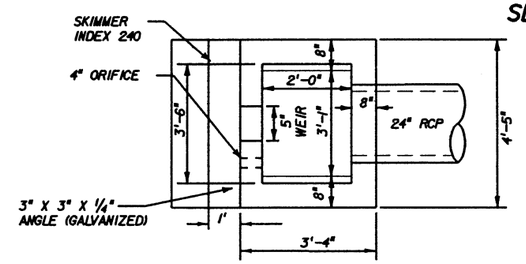
POND DETAILS POND 1

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mta2980\dlm\CADD-data\data-d01.dgn PLOT FILE: PLOTFILE.

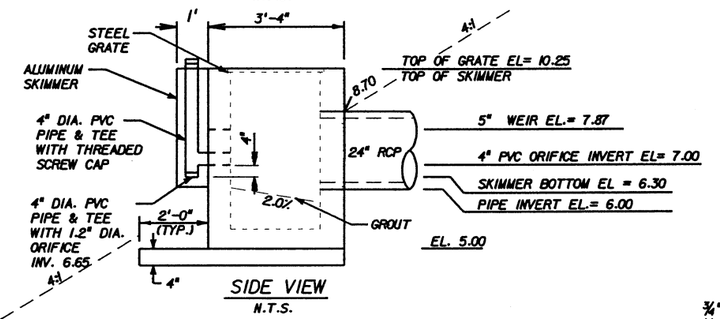


SECTION A-A
NTS

NOTE : DO NOT SOD BELOW SHW EL=7.00

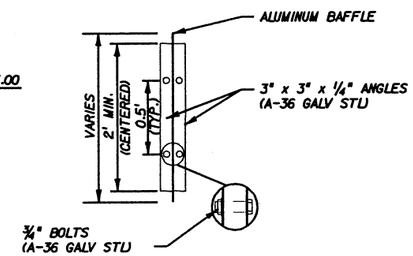


TOP VIEW
N.T.S.



SIDE VIEW
N.T.S.

POND 1



ANGLE DETAIL
N.T.S.

DITCH BOTTOM INLET TYPE 'C' (MODIFIED) (S-49)

(SEE INDEX No. 232)

POND 1

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	MR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date January 8, 2009

POND DETAILS

SHEET NO. 24

Station Equation
Sta. 108+45.51 @ Str. 17th St. W.
Sta. 300+00.00 @ Const. Baseline Sta.

POSSIBLE DEWATERING SITE

@ CONST. Curve 1 Data
P.I. STA. 304+35.53
Δ = 25° 07' 16" RT.
D = 4° 45' 03"
T = 268.70'
L = 528.77'
R = 1206.00'
P.C. = STA. 301+66.83
P.T. = STA. 306+95.60

BAYSHORE ROAD

303 304 305 306 307

N 63°39'04" E

10.25 11.25 11.25 11.25 11.25 11.25 11.25 11.25 11.50

R35 R5 R5 R35 R35 R35 R35 R35 R35

TOB

SWALE 1

RIP RAP 92.0 TW

RIP RAP 46.0 TW

RIP RAP 46.0 TW

RIP RAP 46.0 TW

B-7 +30.81 74.62' LT

B-8 +76.15 77.53' LT

B-5

B-6

B-3

B-4

B-1

B-2

B-8

B-3 +36.26 77.77' RT

B-4 +86.02 142.58' RT

4.00

R 88.0'

6' CHAIN LINK FENCE

12' MAINTENANCE BERM

@ Surface

PROP. R/W

@ CONST.

PROP. R/W

Existing R/W

RAILROAD

ASPHALT DRIVE

SIDEWALK

CONST. 105 LF OF 58"x91" ERCP

INV. 5.25

INV. 5.25

CONST. 96 LF OF 43"x68" ERCP

INV. 5.35

INV. 5.20

CEMENT FABRIC

FLOATING TURBIDITY BARRIER

RIP RAP 56 TW

RIP RAP 92.0 TW

RIP RAP 56 TW

48" OVERFLOW WEIR
WEIR EL. 10.75 (TYP.)

POND 2

B-3 10/8/03 STA. 111+28 560' LT. EL. 8.03

B-4 10/8/03 STA. 112+67 560' LT. EL. 9.87

B-5 10/8/03 STA. 110+62 370' LT. EL. 10.78

B-6 10/8/03 STA. 111+80 370' LT. EL. 9.66

B-1 10/8/03 STA. 110+32 82' LT. EL. 11.88

B-8 10/8/03 STA. 111+75 87' LT. EL. 10.80

S-50 STA. 305+77.88 (174+40' RT.)
CONST. MODIFIED 4 GRATE H BOX
SEE DETAIL
FL 5.25

S-51 STA. 305+94.06 (170.68' LT.)
CONST. MODIFIED 4 GRATE H BOX
SEE DETAIL
FL 5.25

S-52 STA. 306+91.85 (205.36' LT.)
CONST. DIVERSION STRUCTURE
SEE DETAIL
FL 5.35

STAGE	A (SF)	A (AC)	VOL. (AC-FT)	TOT. VOL. (AC-FT)
4.00	67,283	1.544	-----	-----
5.00	72,593	1.666	1.605	1.605
7.00	83,473	1.916	3.540	5.142
11.50	107,930	2.477	9.810	14.947

SHW = NHL = 7.00 N.G.V.D.
25 YR. DHW = 10.55 N.G.V.D.

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2000\01m\CADD-data\data-d02.dgn
PLOT FILE: PLOTFILE.

DESIGNED BY	CRL	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17th STREET WEST

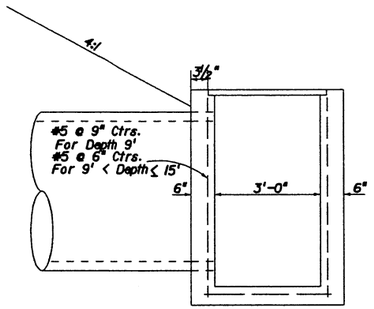
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
6745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3652

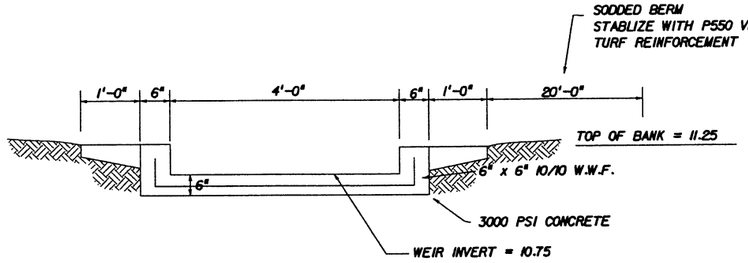
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

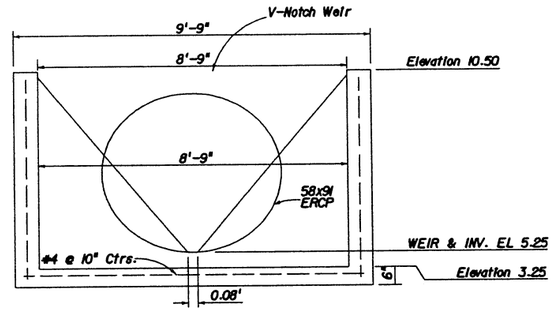
POND DETAILS
SWALE 1 POND 2



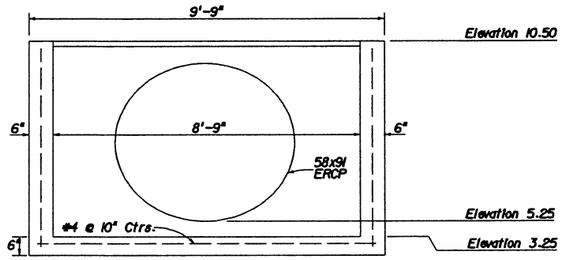
PARTIAL SECTION



OVERFLOW WEIR
NTS



WEIR STRUCTURE SECTION
TYPE H INLET (A)
NTS
S-50

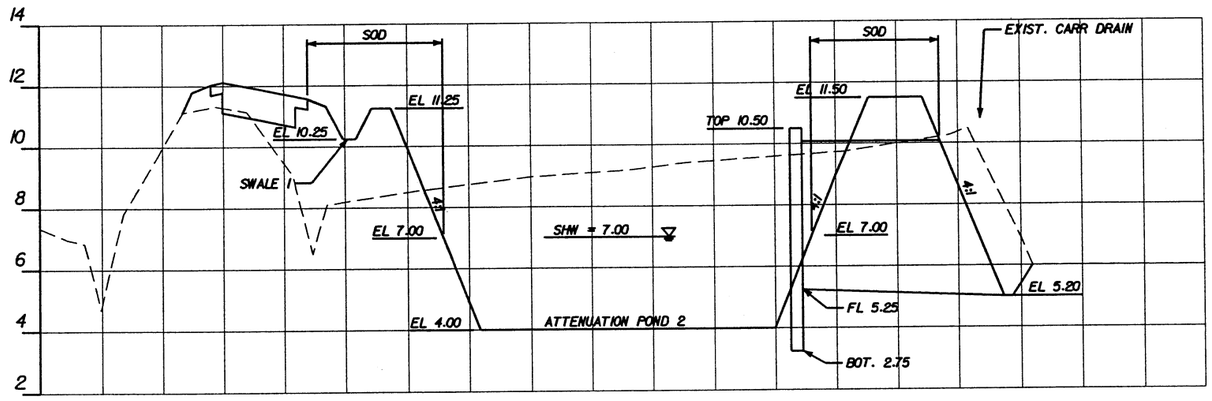


STRUCTURE SECTION
TYPE H INLET (B)
NTS
S-51

DITCH BOTTOM INLET H (4-GRATE)

INLETS

NOTE : DO NOT SOD BELOW SHW EL = 7.00



SECTION A-A
NTS

ATTENUATION SWALE 1 & POND 2

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	MR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

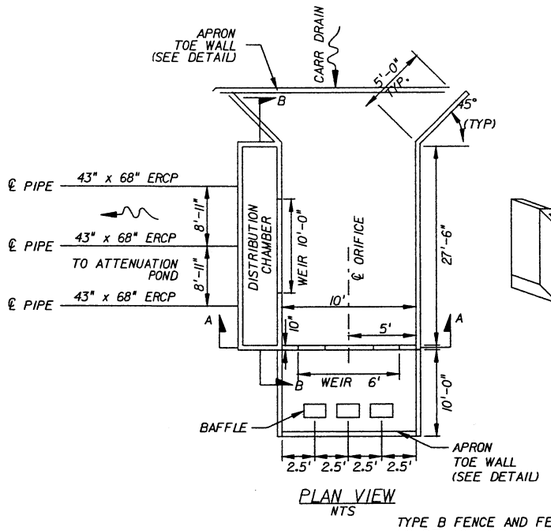
17TH STREET WEST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3862

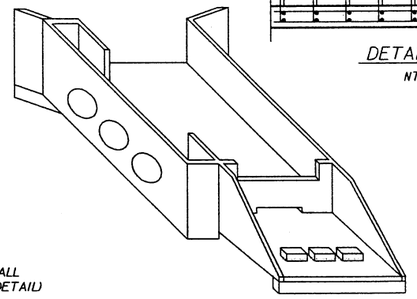
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date January 8, 2009

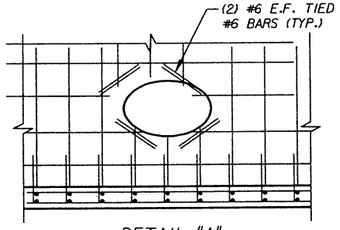
POND DETAILS



PLAN VIEW
NTS



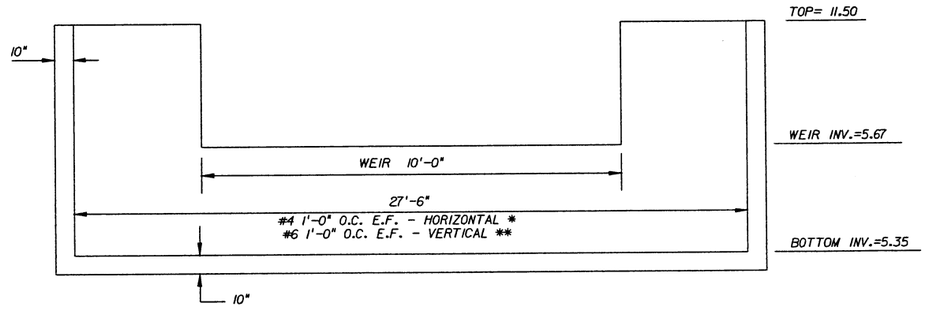
ORTHOGONAL VIEW
NTS



DETAIL "A"
NTS

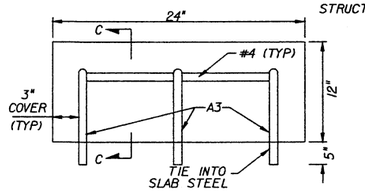
BAR SCHEDULE											
SIZE	DESCRIPTION	LENGTH FT	LENGTH IN	TYPE BAR	B FT	B IN	C FT	C IN	D FT	D IN
4	A1	2	4	10	1	2	1	2	--	--
4	A2	3	0	10	1	6	1	6	--	--
4	A3	2	10	11	0	6	1	2	1	2
6	B1	2	4	10	1	2	1	2	--	--
6	B2	3	0	10	1	6	1	6	--	--

* USE BAR A1 & A2 ON ENDS
** USE BAR B1 & B2 ON ENDS

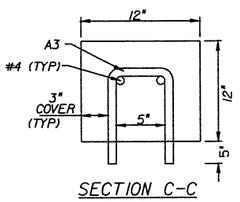


SECTION B-B
NTS

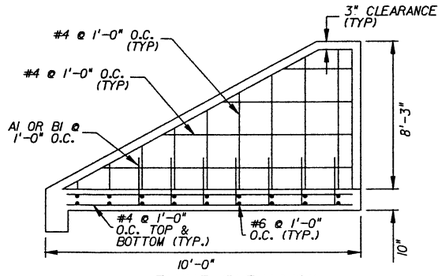
TYPE B FENCE AND FENCE GATE TO BE INCLUDED IN COST OF STRUCTURE.



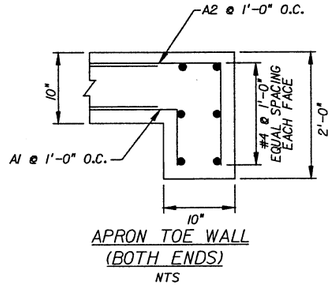
BAFFLE DETAIL
NTS



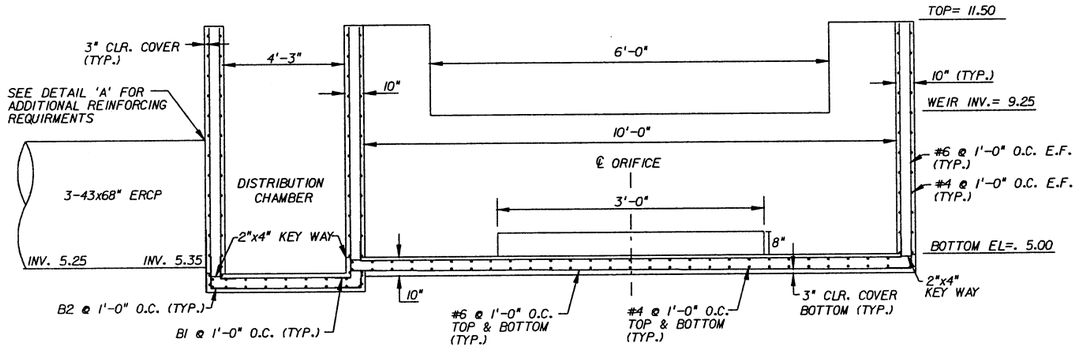
SECTION C-C
NTS



FLUME ELEVATION
NTS



APRON TOE WALL (BOTH ENDS)
NTS



SECTION A-A
NTS

S-52

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	MR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

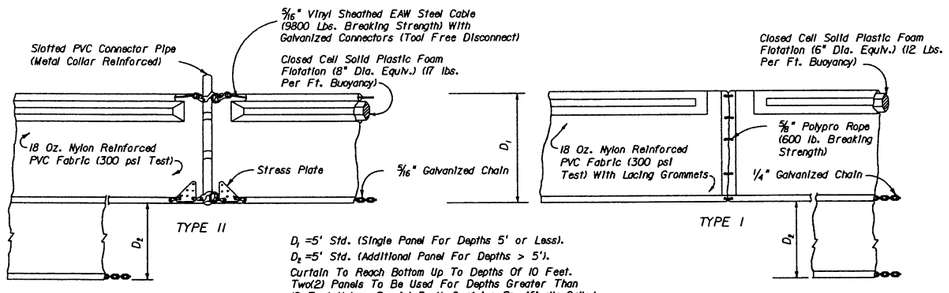
17TH STREET WEST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3852

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date January 8, 2009

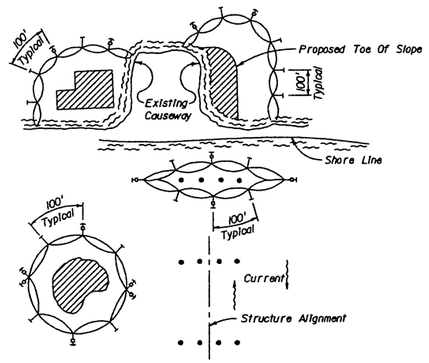
POND DETAILS



D_1 =5' Std. (Single Panel For Depths 5' or Less).
D_2 =5' Std. (Additional Panel For Depths > 5').
Curtain To Reach Bottom Up To Depths Of 10 Feet. Two(2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer.

NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

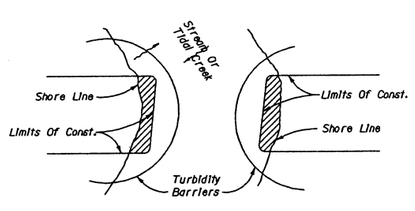
FLOATING TURBIDITY BARRIERS
N.T.S.



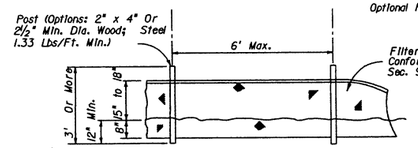
LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

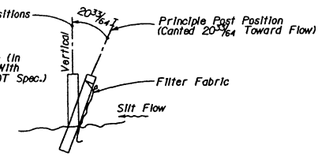
TURBIDITY BARRIER APPLICATIONS
N.T.S.



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.



ELEVATION

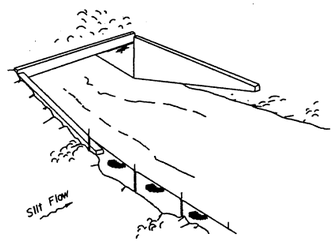


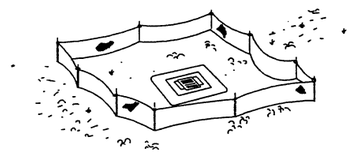
SECTION

Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

TYPE III SILT FENCE

Silt Fence Protection In Ditches with Intermittent Flow





Type III Silt Fence Protection Around Ditch Bottom Inlets.

Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

TYPE III SILT FENCE
N.T.S.

GENERAL NOTES

1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.
3. Contractor will provide silt fence pollution prevention measure along R/W prior to construction
4. Contracto will request pollution prevention device inspection prior to commencement of construction from appropriate agencies

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	MR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3652

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date January 8, 2009

POND DETAILS

MANATEE COUNTY, FLORIDA
CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

DATE OF SURVEY: 10/8/03 – 10/18/03

ROAD NO.: 17th Street West

SUBMITTED BY: Nicholas T. Korecki, P.E.

COUNTY: Manatee

SURVEY BEGINS STA. : 100+31.172 SURVEY ENDS STA. : 140+24.507
(STATIONING REFERENCED TO 17th STREET WEST)
AND BAYSHORE ROAD TO STA. 308+65.000

	ORGANIC CONTENT		SIEVE ANALYSIS RESULTS % PASSING STANDARD U.S. SIEVE							ATTERBERG LIMITS				
STRATUM NO.	NO. OF TESTS	% ORGANIC	NO. OF TESTS	SIZE 10	SIZE 20	SIZE 40	SIZE 60	SIZE 100	SIZE 200	NO. OF TESTS	LIQUID LIMIT	PLASTICITY INDEX	AASHTO GROUP	DESCRIPTION
1	--	nil	2	100	99-100	95-97	84-87	37-47	10-12	--	NP	NP	(A-3/A-2-4)	FINE SAND TO SLIGHTLY SILTY FINE SAND (Dark gray or brown)
2	--	nil	--	--	--	--	--	--	--	--	NP	NP	(A-3/A-2-4)	FINE SAND TO SLIGHTLY SILTY FINE SAND (Gray, dark gray or dark brown with variable content of finely divided organic material)
3	1	3.8	1	100	99	96	85	53	19	--	NP	NP	(A-3/A-2-4/A-8)	SLIGHTLY ORGANIC TO ORGANIC FINE SAND (Dark brown or dark gray)
4	2	7.3-13.0	1	100	98	93	81	44	21	1	48	25	(A-8)	HIGHLY ORGANIC FINE SAND TO SLIGHTLY SILTY FINE SAND OR HIGHLY ORGANIC SILT (Dark brown or dark gray)
5	--	nil	1	98	93	81	44	21	15	--	NP	NP	(A-3/A-2-4)	FINE SAND, SLIGHTLY SILTY TO SILTY FINE SAND (Brown or gray with variable content of rock and shell fragments)
6	--	nil	--	--	--	--	--	--	--	--	NP	NP	(A-4)	CEMENTED SILT (Light gray or yellow)
7	--	nil	1	100	100	100	94	78	65	1	60	40	(A-7-6)	CLAY (Gray, green or greenish-gray)
8	--	nil	5	100	99-100	92-95	81-85	45-59	20-31	5	25-39	10-20	(A-2-6)	CLAYEY FINE SAND (Light brown, light gray, gray and brown, dark brown, dark gray or pale brownish-gray)
9	--	nil	2	100	93-100	88-97	76-86	47	14-21	1	NP	NP	(A-2-4)	SILTY TO SLIGHTLY CLAYEY FINE SAND (Brown and gray)
10	--	--	--	--	--	--	--	--	--	--	--	--	--	ASPHALT PAVEMENT
11	--	--	--	--	--	--	--	--	--	--	--	--	--	CONCRETE

EMBANKMENT AND SUBGRADE MATERIAL

- The material from Strata Number 1, 2, 5 and 9 appears satisfactory for use in the embankment when utilized in accordance with FDOT Index Nos. 500 and 505.
- The material from Stratum Number 3 appears satisfactory for use in the embankment when utilized in accordance with FDOT Index Nos. 500 and 505. The material from Stratum Number 3 may not be used in the subgrade portion of the roadbed where exhibiting an excessive Organic Content.
- The material from Stratum Number 4 is MUCK A-8 material and shall be removed in accordance with FDOT Index No. 500.
- The material from Strata Number 6, 7 and 8 is plastic A-2-6/A-7-6/A-4 material and shall be removed in accordance with FDOT Index No. 500.
- The material from Stratum Number 10 is Asphalt Pavement.
- The material from Stratum Number 11 is Concrete.

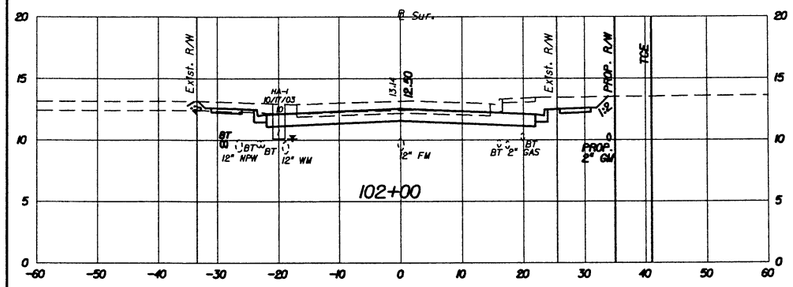
REVISIONS										NAME	DATE		NAME	DATE
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DESIGNED BY			DRAWN BY	ROB	12/03
									CHECKED BY			CHECKED BY	NTK	12/03
									SUPERVISED BY	NICHOLAS T. KORECKI, P.E.				

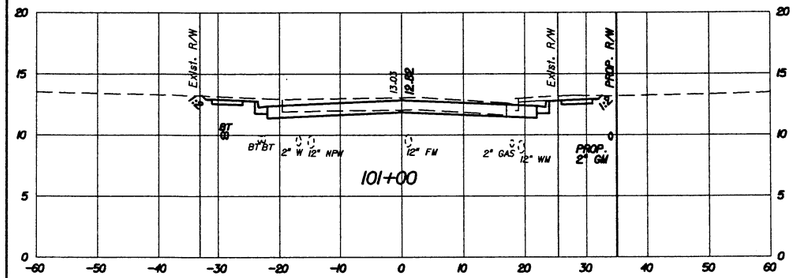
DESIGNERS ENGINEERING SERVICES, INCORPORATED

ROAD NO.	COUNTY	PROJECT NO.
17th STREET WEST	MANATEE	DES 034798

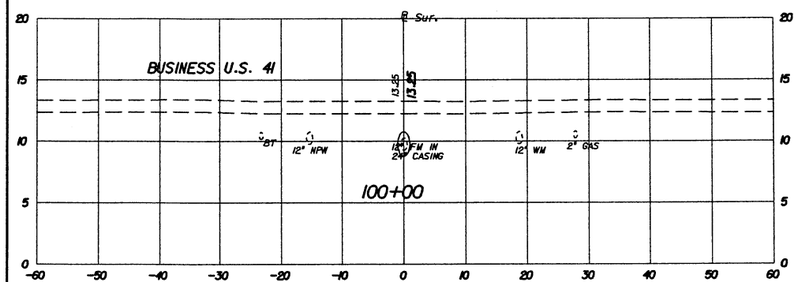
ROADWAY SOILS SURVEY

034798-SSURV.dwg 5/12/2006 12:17:23 PM

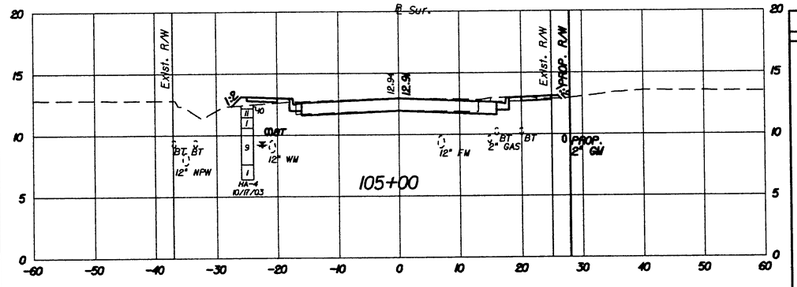


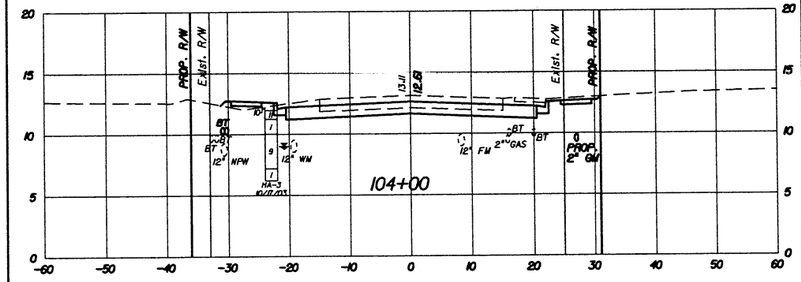


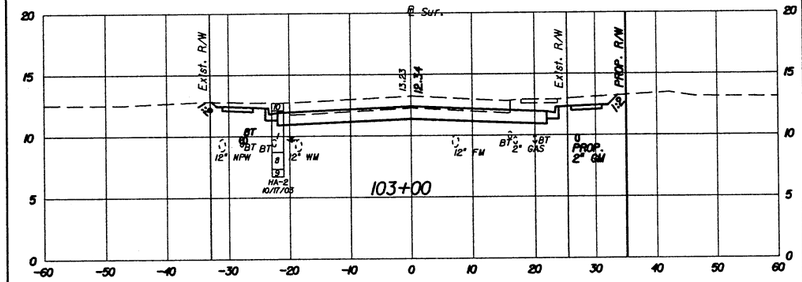
BEGIN EARTHWORK
BEGIN PROJECT
STA. 100+31.17



SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
0		97		0	
	0		306		0
0		68		0	
	0		87		0
0		0		0	
	0		0		0
0		0		0	
	0		0		0







SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
0		40		3	
	0		202		9
0		69		2	
	0		313		4
0		100		0	
	0		365		0

17th STREET WEST

SHEET NO. 29

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BOG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BOG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

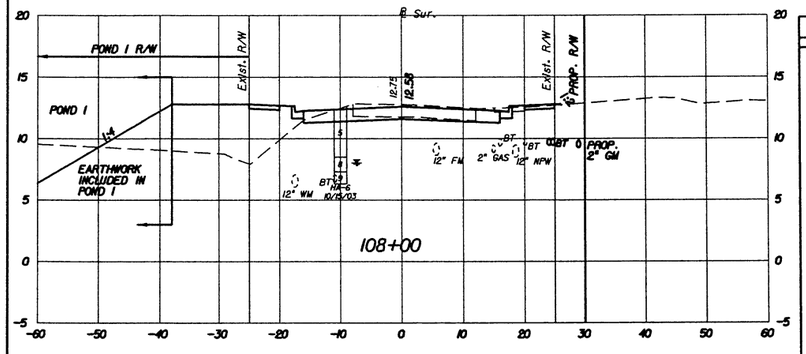
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

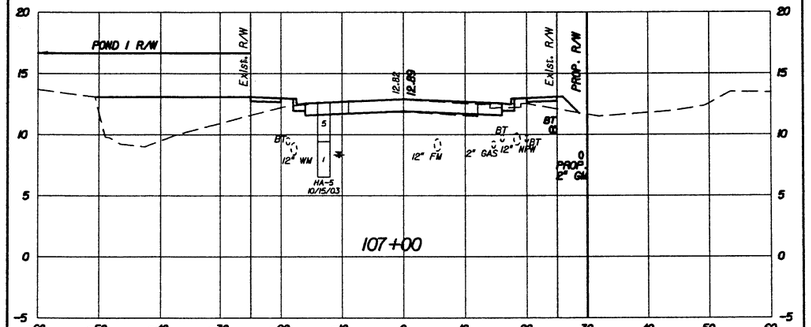
ENGINEER
Jeffrey D. Trim, PE No. 42106

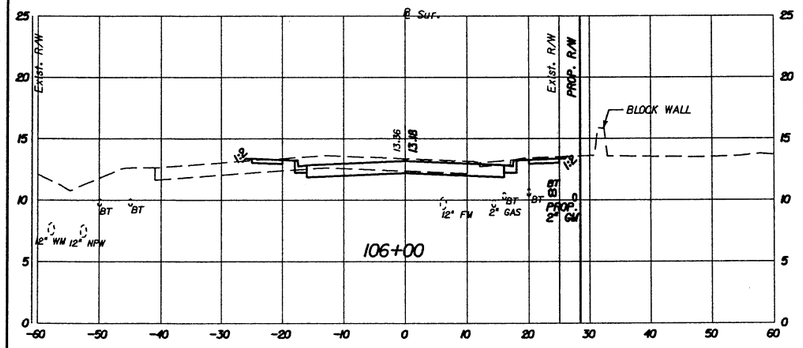
Proj. No. 6035261
Dwg. Date January 8, 2009

CROSS SECTIONS

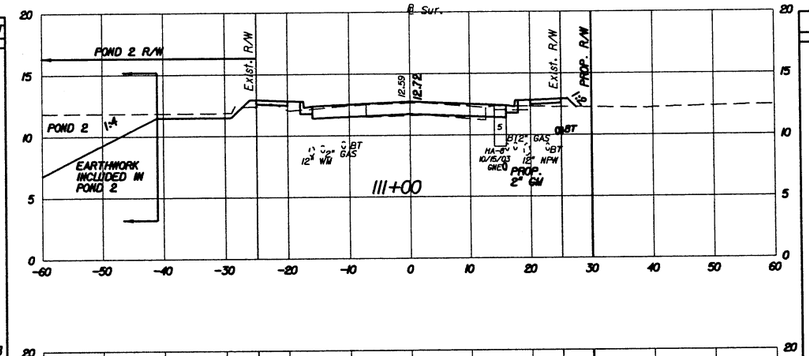
PLOT DATE: 2/11/2009
DESIGN FILE: P:\M4e2008\0lm\CADD-data\r-dsr-d01.dgn
PLOT FILE: .PLOTFILE.

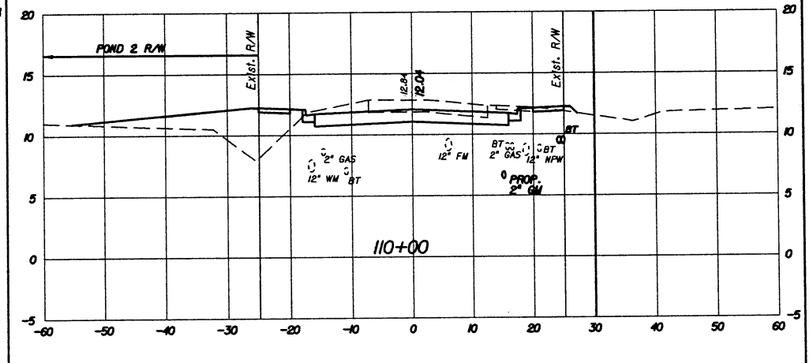


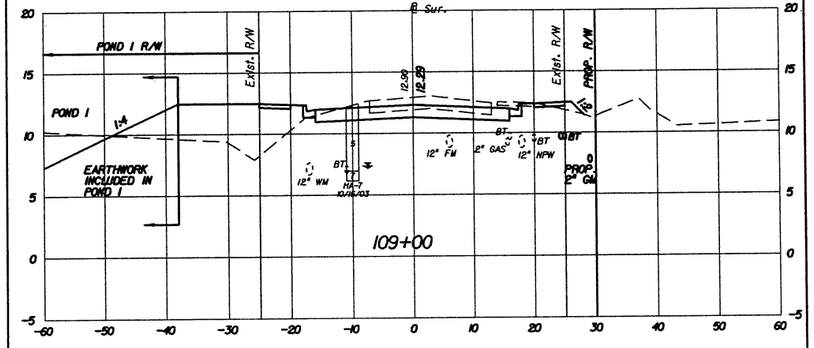




SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0		46		53	
	0		144		128
0		32		16	
	0		154		31
0		51		1	
	0		169		7







SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0		36		9	
	0		233		76
0		90		32	
	0		287		135
0		65		41	
	0		206		174

17th STREET WEST

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

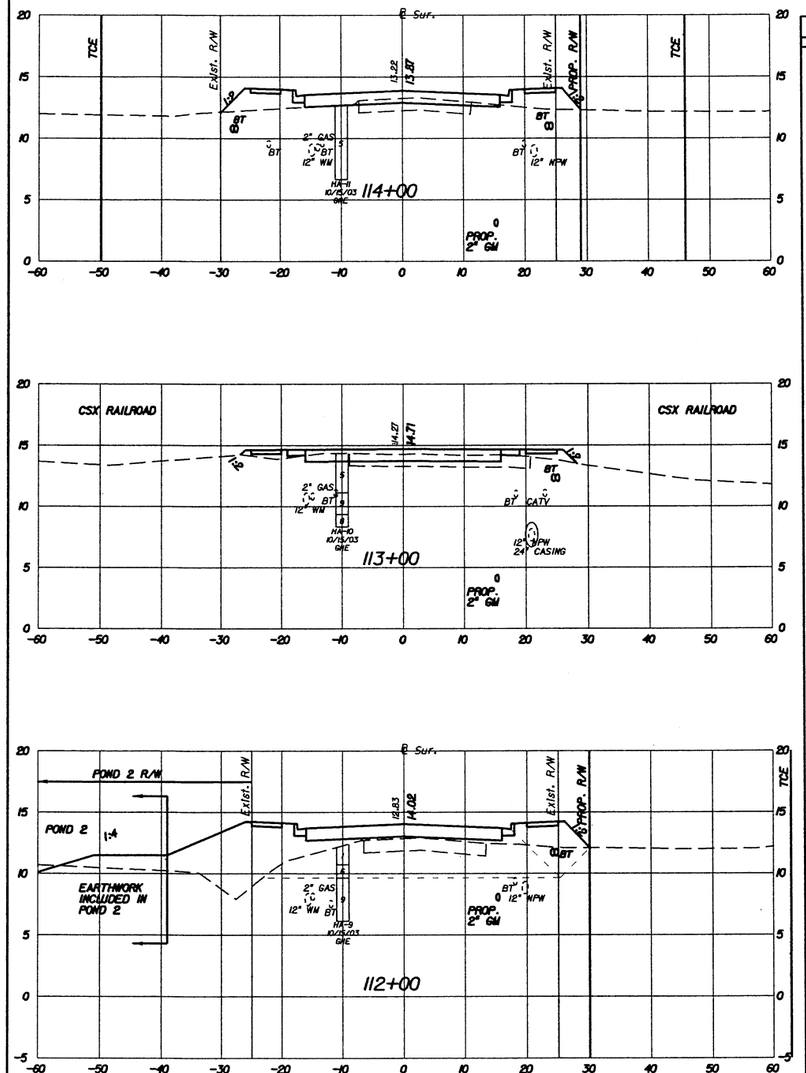
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

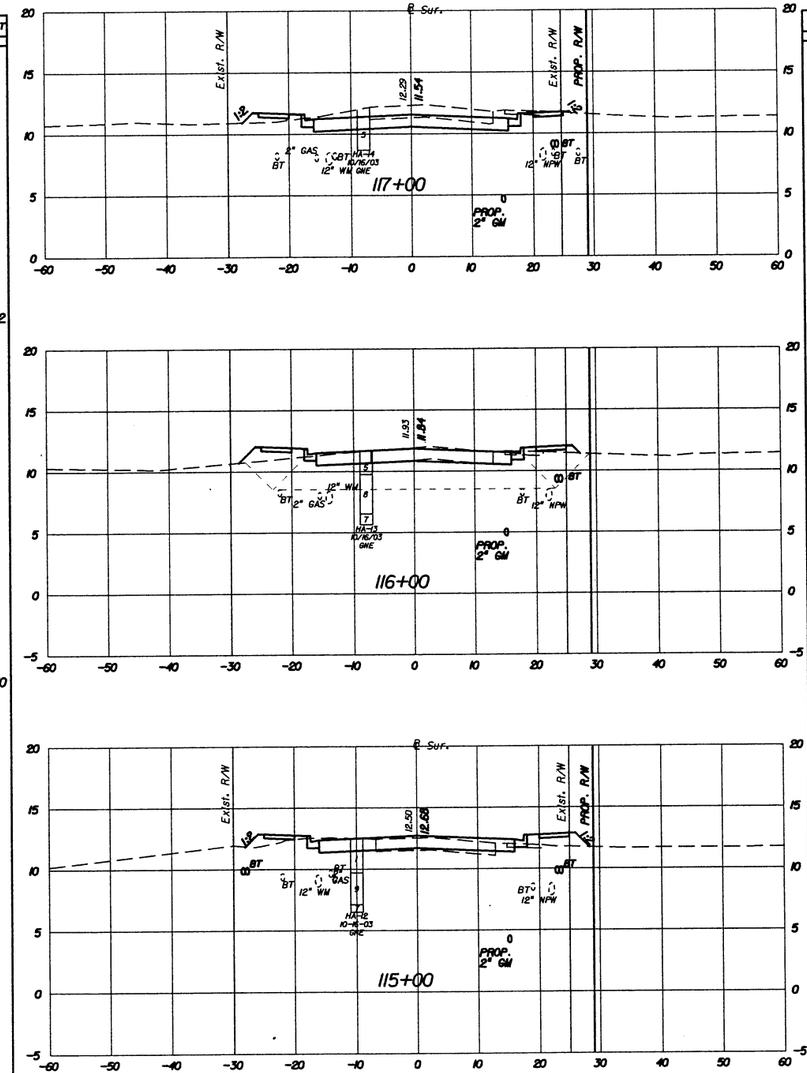
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035251
Dwg. Date January 8, 2009

CROSS SECTIONS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Wia2800\dlm\CADD-data\x-cross-d02.dgn
PLOT FILE: .PLOTFILE.





SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0	0	20	100	42	122
0	0	34	206	24	250
111	206	20	100	111	222
	206		104		222

SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0	222	73	226	1	231
120	222	49	152	124	259
0	0	33	98	16	107

17th STREET WEST

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

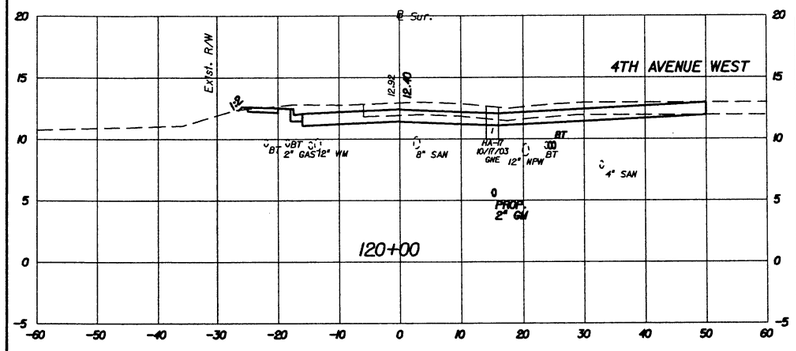
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

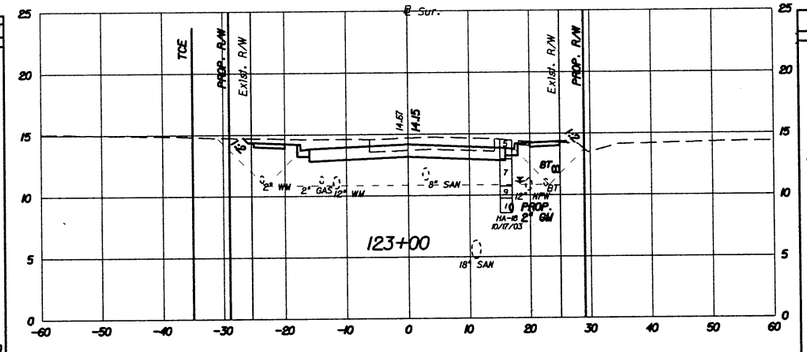
Proj. No. 6035061
Dwg. Date January 8, 2009

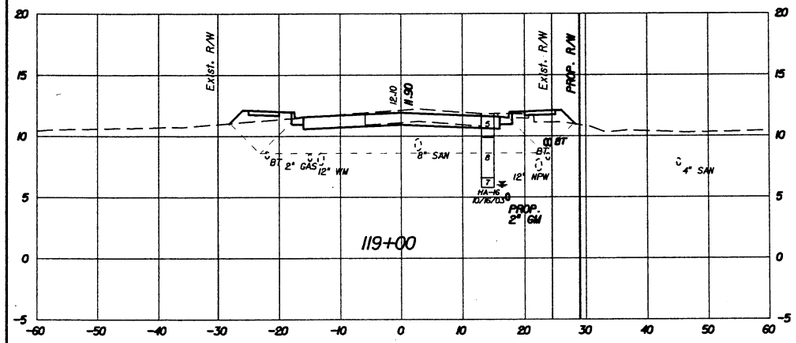
CROSS SECTIONS

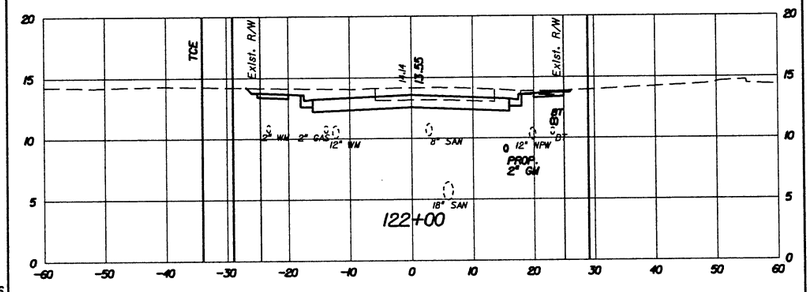
SHEET NO. 32

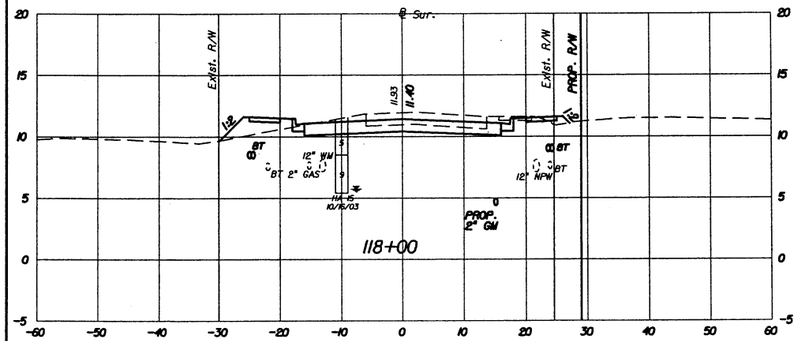


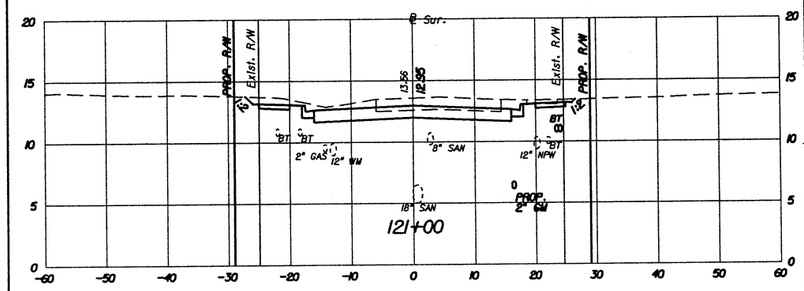
SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0		101		1	
	222		250		250
120		34		134	
	222		143		276
0		43		15	
	0		215		30











SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
136		69		136	
	252		252		252
0		67		0	
	0		235		0
0		60		0	
	0		298		2

17th STREET WEST

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

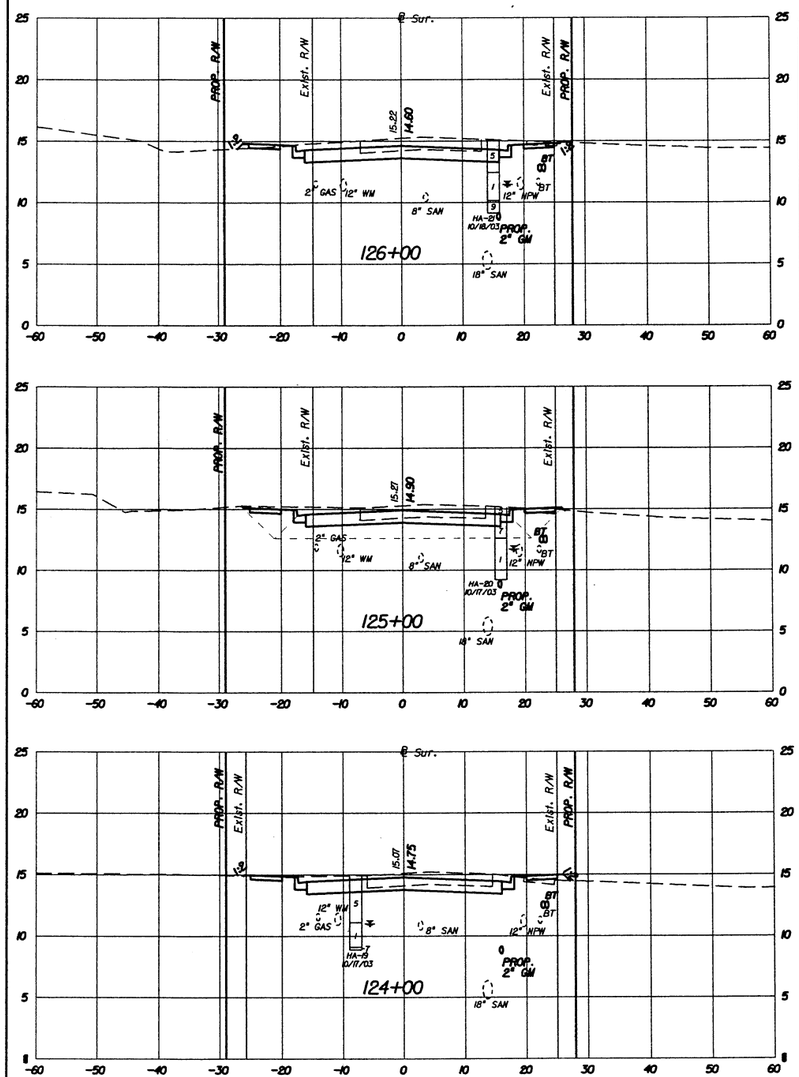
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

CROSS SECTIONS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2000\01in\CADD-data\v-dsar-004.dgn
PLOT FILE: PLOTFILE.



SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0	0	74	0	0	0
65	120	69	265	65	120
120	252	239	239	122	254
0	0	60	0	1	0
0	0	73	0	0	0
0	0	81	285	0	0
0	0	309	0	0	0
0	0	86	0	0	0
0	0	296	0	0	0

17th STREET WEST

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

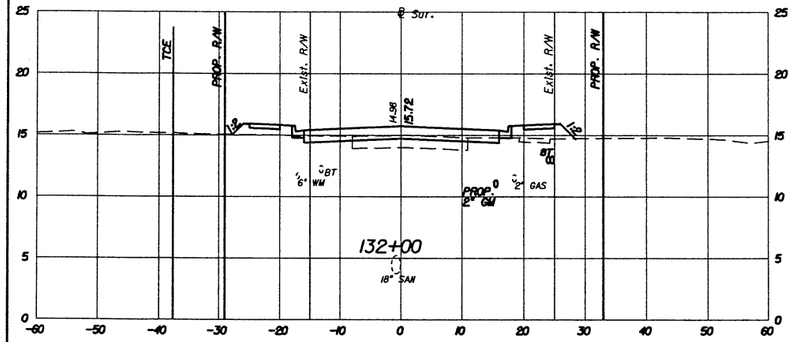
ENGINEER
Jeffrey D. Trim, PE No. 42106

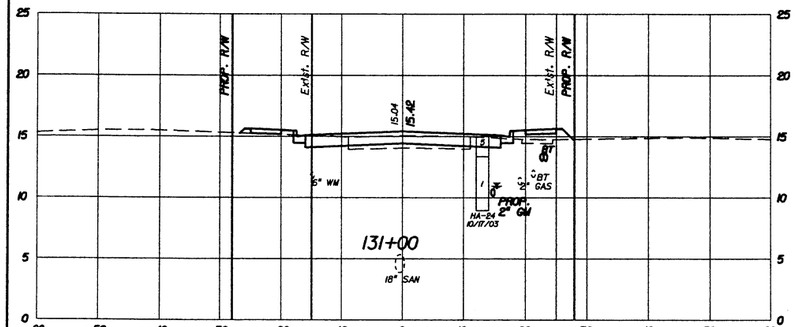
Proj. No. 6035261
Dwg. Date January 8, 2009

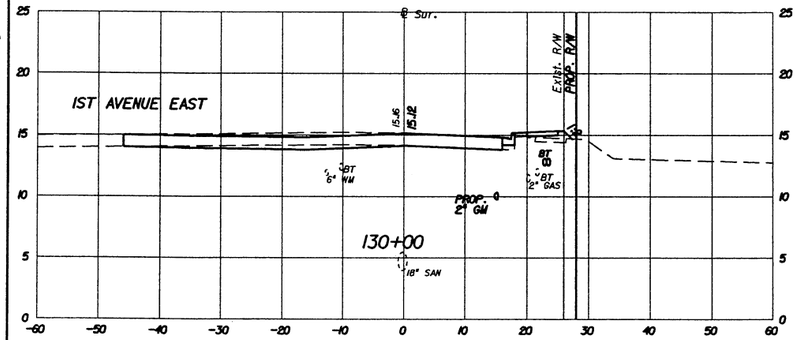
CROSS SECTIONS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mis2008\01in\CADD-data\r-dsar-d05.dgn PLOT FILE: PLOTFILE.

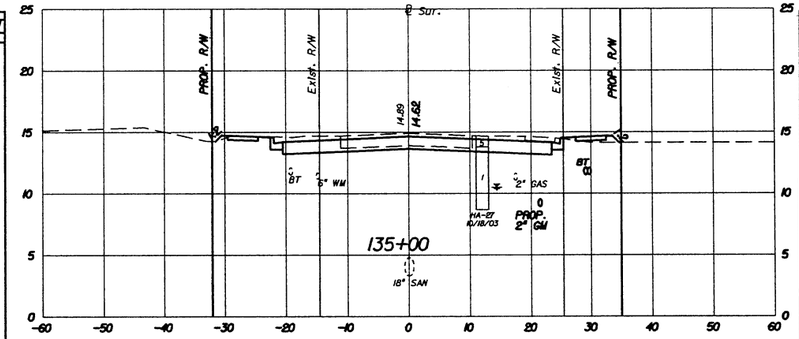
SHEET NO. 34

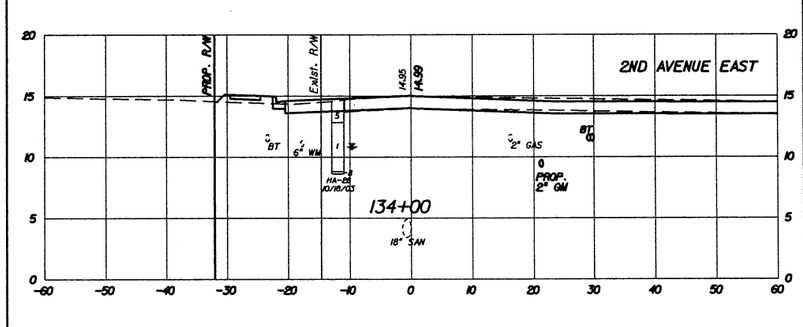


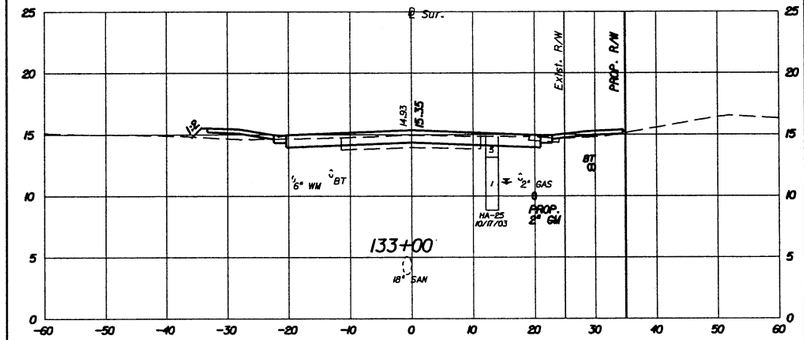




SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0		26		7	
0		111		20	
0		34		4	
0		198		9	
0		73		1	
0		270		2	







SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
0		79		0	
0		304		2	
0		85		1	
0		241		7	
0		45		3	
0		131		19	

17th STREET WEST

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

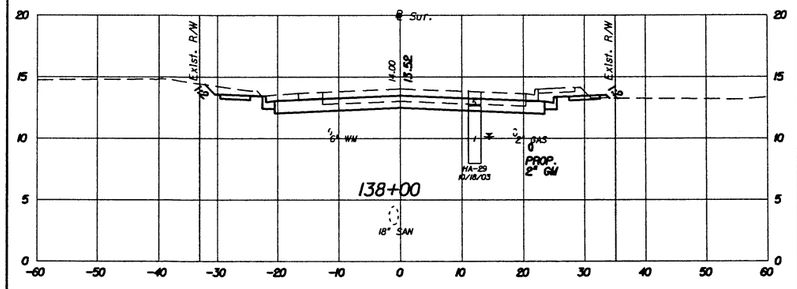
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

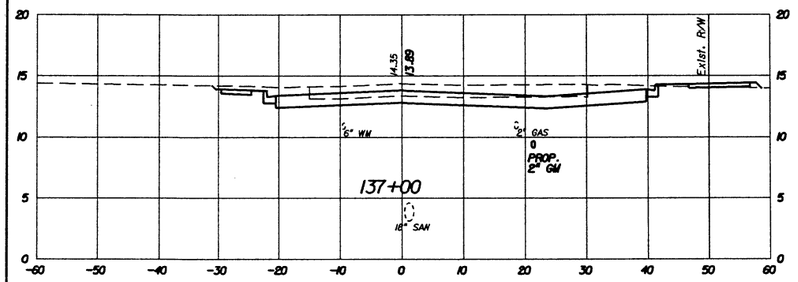
ENGINEER
Jeffrey D. Trim, PE No. 42106

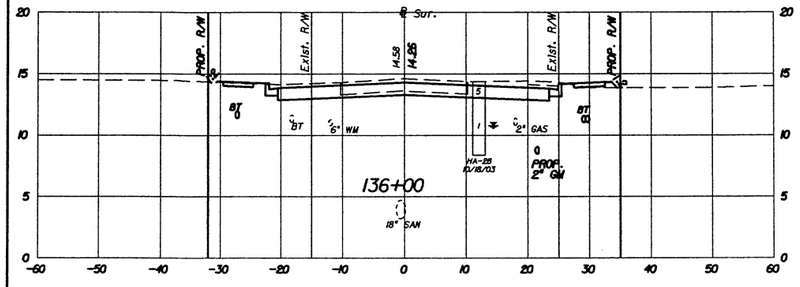
Proj. No. 6035261
Dwg. Date January 8, 2009

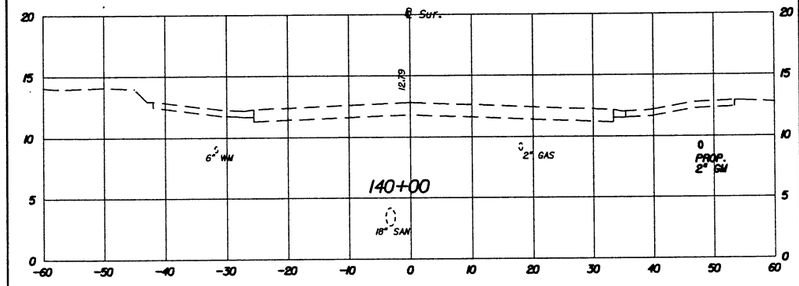
CROSS SECTIONS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mte2080\0in\CADD-data\v-dsar-d86.dgn
PLOT FILE: PLOTFILE.

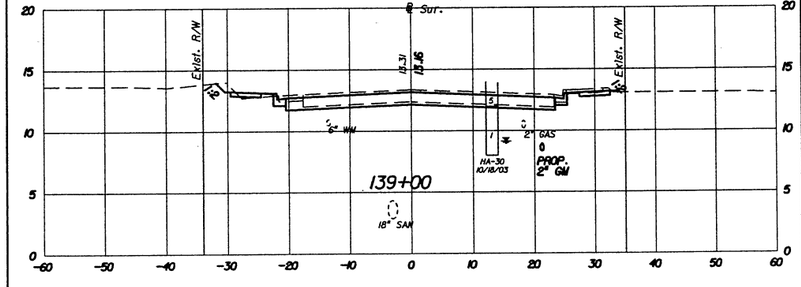








END EARTHWORK
END PROJECT
STA. 139+52.00



	SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
	A	V	A	V	A	V
	0		46		1	
		0		259		2
	0		94		0	
		0		319		0
	0		78		0	
		0		294		0
	0		0		0	
		0		26		2
	0		14		1	
		0		111		4

17th STREET WEST

DESIGN FILE: P:\Mta2868\03dm\CADD-data\r-dksr-d07.dgn PLOT FILE: PLOTFILE.
PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SAR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

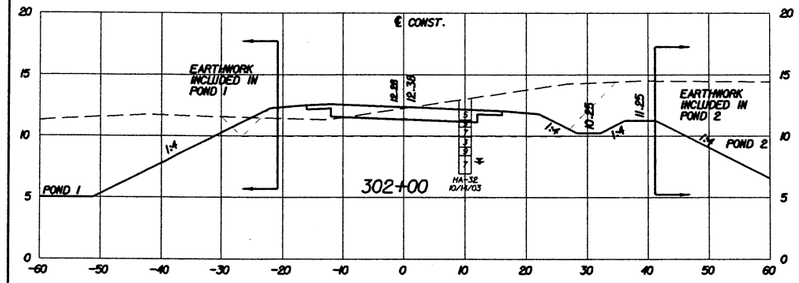
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

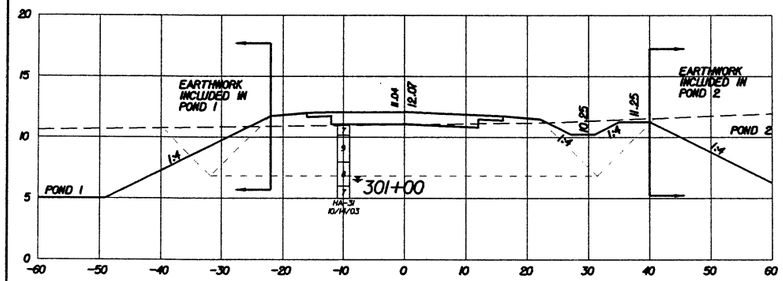
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

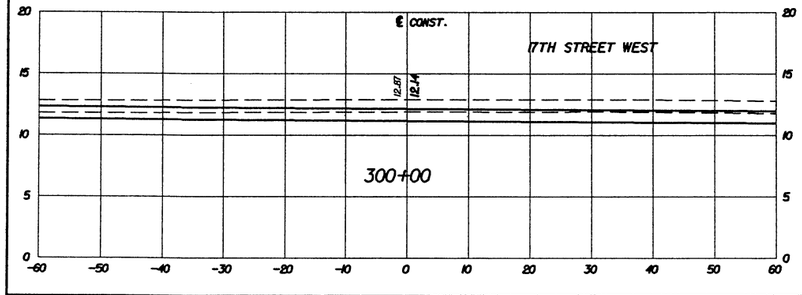
Proj. No. 6035261
Dwg. Date January 8, 2009

CROSS SECTIONS

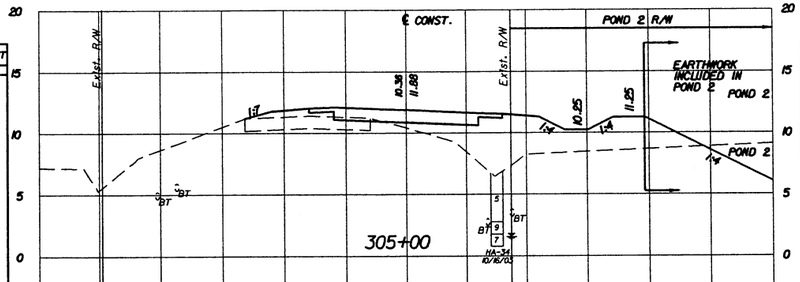


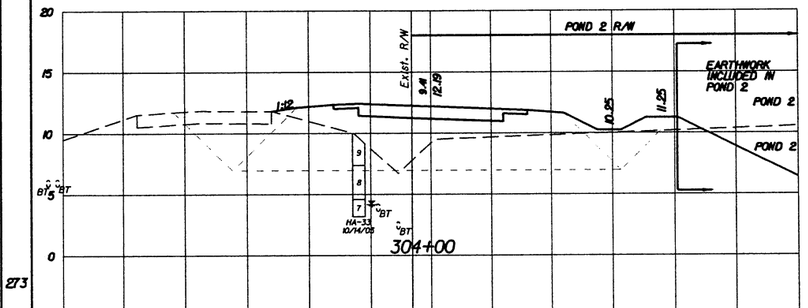


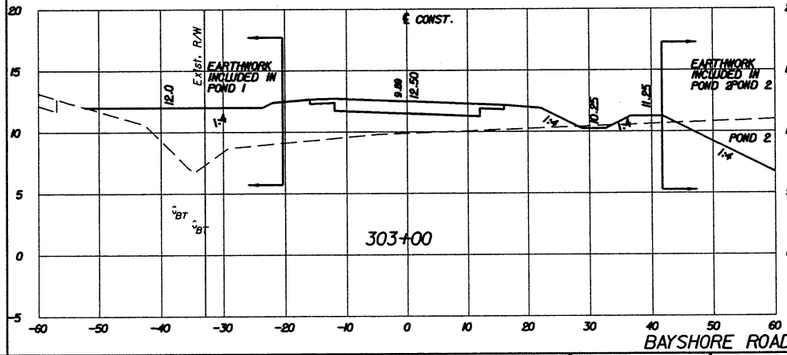
BEGIN EARTHWORK
STA. 300+53.53



	SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
	A	V	A	V	A	V
302+00	82		150		93	
301+00		711		331		759
BEGIN EARTHWORK STA. 300+53.53	302		29		317	
300+00		260		25		273
	0		0		0	
	0		0		0	







	SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
	A	V	A	V	A	V
305+00	0		2		81	
304+00		381		15		715
303+00	206		6		305	
BAYSHORE ROAD		381		33		806
	0		12		130	
	152		300		413	

DESIGN FILE: P:\Mis2008\0lin\CADD-data\r-dxr-d00.dgn PLOT FILE: PLOTF
PLOT DATE: 2/11/2009

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

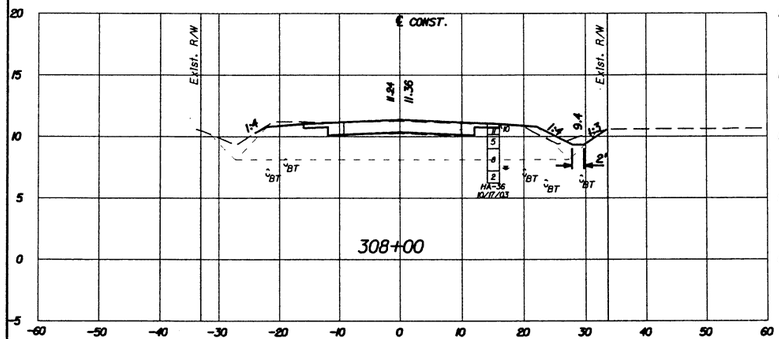
17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

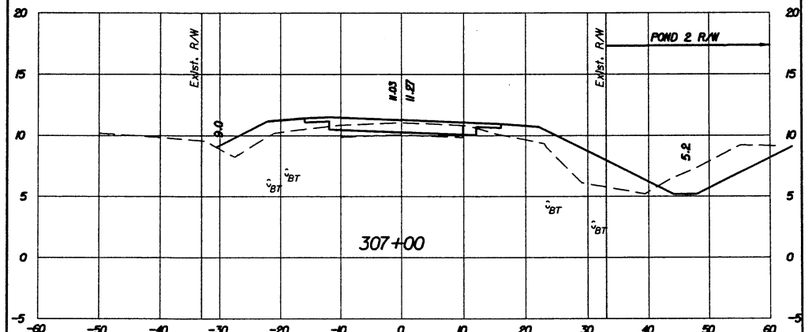
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

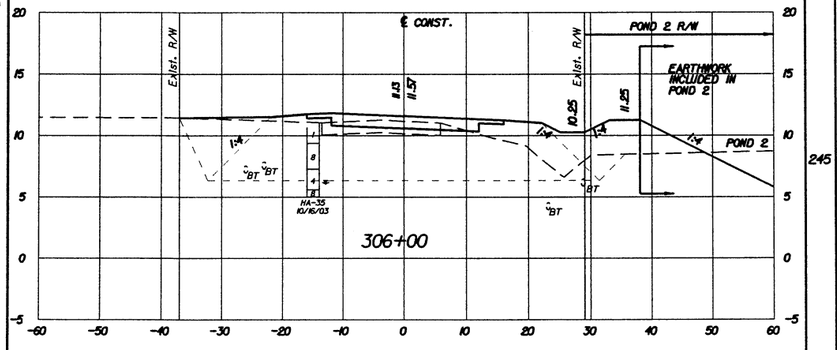
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

CROSS SECTIONS







END EARTHWORK
END CONSTRUCTION
STA. 308+65.00

BAYSHORE ROAD

	SUBSOIL EXC. A	SUBSOIL EXC. V	REGULAR EXC. A	REGULAR EXC. V	EMBANKMENT A	EMBANKMENT V
	129		33		132	
		239		178		359
	0		55		62	
	454		120		219	
	245		10		56	
	454		22		254	
	0		0		0	
		155		40		159

SUMMARY OF EARTHWORK

DESCRIPTION	CY P	CY F
ROADWAY EXCAVATION, 17th ST. W	8533	
ROADWAY EXCAVATION, BAYSHORE RD.	1064	
REGULAR EXCAVATION, POND 1	4957	
REGULAR EXCAVATION, POND 2	21105	
TOTAL REGULAR EXCAVATION	**35659**	
EMBANKMENT, 17th ST. W	3128	
EMBANKMENT, BAYSHORE RD.	3957	
EMBANKMENT, POND 1	543	
EMBANKMENT, POND 2	777	
SUBSOIL EXCAVATION, 17th ST. W.	2044	
SUBSOIL EXCAVATION, BAYSHORE RD.	3187	
TOTAL SUBSOIL EXCAVATION	**5231**	
TOTAL EMBANKMENT	**13636**	

Earthwork has been calculated using the Limerock base option. If another option is constructed, there shall not be any revision to the earthwork quantities for which payment is made by Plan Quantity.

SHEET NO. 37

PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Wtw2288\01m\CADD-data\rdwy-dsn-d01.dgn
PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

CROSS SECTIONS

SHEET NO. 38

STORM WATER POLLUTION PREVENTION PLAN/BEST MANAGEMENT PRACTICES

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:

17TH STREET WEST
BETWEEN BUSINESS US 41 AND US 41
PALMETTO, FL 34220

SECTION 13, T34S, R17E
LONGITUDE 82°32'30"
LATITUDE 27°32'30"

SECTION 11-14, T34S R17E

OWNER NAME AND ADDRESS:

MANATEE COUNTY
1022 26TH AVENUE EAST
BRADENTON, FL 34208

DESCRIPTION:

THIS PROJECT WILL CONSIST OF:

RECONSTRUCTION OF 17TH STREET WEST BETWEEN BUSINESS US 41 AND US 41 IN MANATEE COUNTY AND CITY OF PALMETTO. THE ROAD IS CURRENTLY A TWO LANE, "RURAL SECTION" ROAD. THE PROPOSED ROAD WILL ALSO HAVE TWO LANES. THE MAJOR DIFFERENCE WILL BE THAT THE PROPOSED ROADWAY WILL BE A TWO LANE "URBAN SECTION" WITH TURNING LANES AT THE MAJOR INTERSECTIONS. CONSEQUENTLY THE INCREASE IN IMPERVIOUS AREA WILL BE DUE TO THE ADDITIONAL SIDEWALK, BICYCLE LANES AND TURNING LANES. IN CONJUNCTION WITH THE ROADWAY IMPROVEMENTS MANATEE COUNTY WOULD LIKE TO PROVIDE ADDITIONAL STORAGE CAPACITY IN AN OFF LINE ATTENUATION POND ALONG CARR DRAIN TO HELP REDUCE SOME OF THE FLOODING IN THE AREA. THE PROPOSED STORMWATER SYSTEM WOULD CONSIST OF TWO PONDS AND ONE SWALE

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING AND GRUBBING; INSTALLING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; GRADING EXCAVATION FOR THE SEDIMENTATION POND, STORM SEWER, UTILITIES, AND RETENTION PONDS

SOILS:

SEE ATTACHED DRAINAGE REPORT

SITE MAPS:

* SEE ATTACHED DRAINAGE REPORT

* SEE ATTACHED CONSTRUCTION PLANS FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

SITE AREA:

1. TOTAL AREA OF SITE = 24 +/- ACRES
2. TOTAL IMPERVIOUS AREA OF SITE = 18.6 +/- ACRES

NAME OF RECEIVING WATERS: CARR DRAIN TO MANATEE RIVER

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. THE CONSTRUCTION PLANS HAVE BEEN PREPARED TO INSTRUCT THE CONTRACTOR OR PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS AS PER PLAN AS WELL AS ENSURING THE THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL STATE AND LOCAL LAWS. REFER TO "CONTRACTORS REQUIREMENTS" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

THE PROPOSED WESTERN DRAINAGE SYSTEM WOULD TAKE THE ROADWAY AND OFF-SITE DRAINAGE FROM U.S. BUSINESS 41 AND DISCHARGE TO A TWO CELLED POND SYSTEM AT THE BIBLE BAPTIST CHURCH PROPERTY JUST NORTHWEST OF THE CARR DRAIN AND 17TH STREET WEST. THE FIRST CELL, 32B, WOULD PROVIDE WATER QUALITY TREATMENT AND THE SECOND CELL, F-12B, WOULD PROVIDE WATER QUANTITY ATTENUATION. THE EASTERN MOST PROPOSED DRAINAGE SYSTEM WILL DISCHARGE DIRECTLY INTO THE FOOT RIGHT-OF-WAY FROM ABOUT 3RD AVENUE EAST TO U.S. 41. THE CENTRAL PORTION OF THE PROJECT FROM THE RAILROAD RIGHT-OF-WAY TO 3RD AVENUE EAST WILL BE DIRECTLY DISCHARGED INTO THE CARR DRAIN.

REFER TO "CONTRACTORS REQUIREMENTS" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN AN EFFORT TO ENSURE COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS REGARDING EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

C.O.E. DREDGE/FILL PERMIT	* N/A
S.W.F.W.M.D. E.R.P. PERMIT	*
MANATEE COUNTY DEVELOPMENT PERMIT	*

CONTROLS

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED OR MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: _____

TITLE: _____
CORPORATE OFFICER, GENERAL PARTNER, PROPRIETOR, EXECUTIVE OFFICER, OR DULY ELECTED OFFICIAL

DATE: _____

CONTRACTOR'S REQUIREMENTS

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENT OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. PENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM, PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES, TURBIDITY BARRIERS AND HAY BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT
4. BASIN
5. CONSTRUCTION SEDIMENTATION
6. BASIN
7. CONTINUE CLEARING AND GRUBBING
8. STOCK PILE TOP SOIL IF REQUIRED
9. PERFO RM PRELIMINARY GRADING ON SITE AS REQUIRED
10. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
11. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTERS
12. APPLY BASE TO PARKING AREAS
13. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
14. COMPLETE FINAL PAVING
15. REMOVE ACCUMULATED SEDIMENT FROM BASINS WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND TH E SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES, TURBIDITY BARRIERS AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE SEDIMENT AND EROSION CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN IN THE SEDIMENT AND EROSION CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. STRAW BALE BARRIER: STRAW BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS
   B. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.

2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL RECONCENTRATE AFTER RELEASE.

5. STOCKPILING MATERIALS: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.

6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW/ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 30 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH B ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQU ATE TO PREVENT MOVEMENT OF SEED AND MULCH.

10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA (S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.

11. TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED V EGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AT MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAPS: A SEDIMENT TRAP IS USUALLY INSTALLED IN A DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA WITH THE FOLLOWING LIMITATIONS.
   A. THE SEDIMENT TRAP MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE VELOCITY OF FLOW AT DESIGN CAPACITY OF THE OUTLET WILL EXCEED THE PERMISSIBLE VELOCITY OF THE RECEIVING CHANNEL OR AREA.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASIN. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASING CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SITE SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ON SITE DURING CONSTRUCTION:

CONCRETE	FERTILIZERS	WOOD
ASPHALT	PETROLEUM BASED PRODUCTS	MASONRY BLOCKS
TAR	CLEANING SOLVENTS	ROOFING MATERIALS
DETERGENTS	PAINTS	METAL STUDS

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND/OR STATE RECOMMENDED METHOD FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAG OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURES' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (I.E. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECOCURRING AND HOW TO CLEAN UP THE SPILLS IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

SPILL CONTROL PRACTICES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:
THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITH OUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE SEEDING CAPACITY OR AT THE END OF THE JOB.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY AND INCIDENTS OF NON-COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

* IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:
* WATER FROM WATER LINE FLUSHING.
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIES AS PART OF THIS CERTIFICATION.

SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUBCONTRACTOR
		SUBCONTRACTOR
		SUBCONTRACTOR
		SUBCONTRACTOR
		OWNER REPRESENTITIVE

Contractor Note

PRIOR TO CONSTRUCTION, CONTRACTOR WILL INSTALL BMP DEVICES, SILT FENCE, HAY BALE, TURBIDITY BARRIERS, ETC., ALONG R/WAS PART OF THE POLLUTION PREVENTION PLAN FOR APPLICABLE AGENCY APPROVAL

_____ _____
Paul Schamel, Manatee County Project Manager — Date

DESIGN FILE: P:\Mta2080\dm\CADD-data\BMP-SWPPP01.dgn PLOT FILE: PLOTFILE.
PLOT DATE: 2/12/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	CRL	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

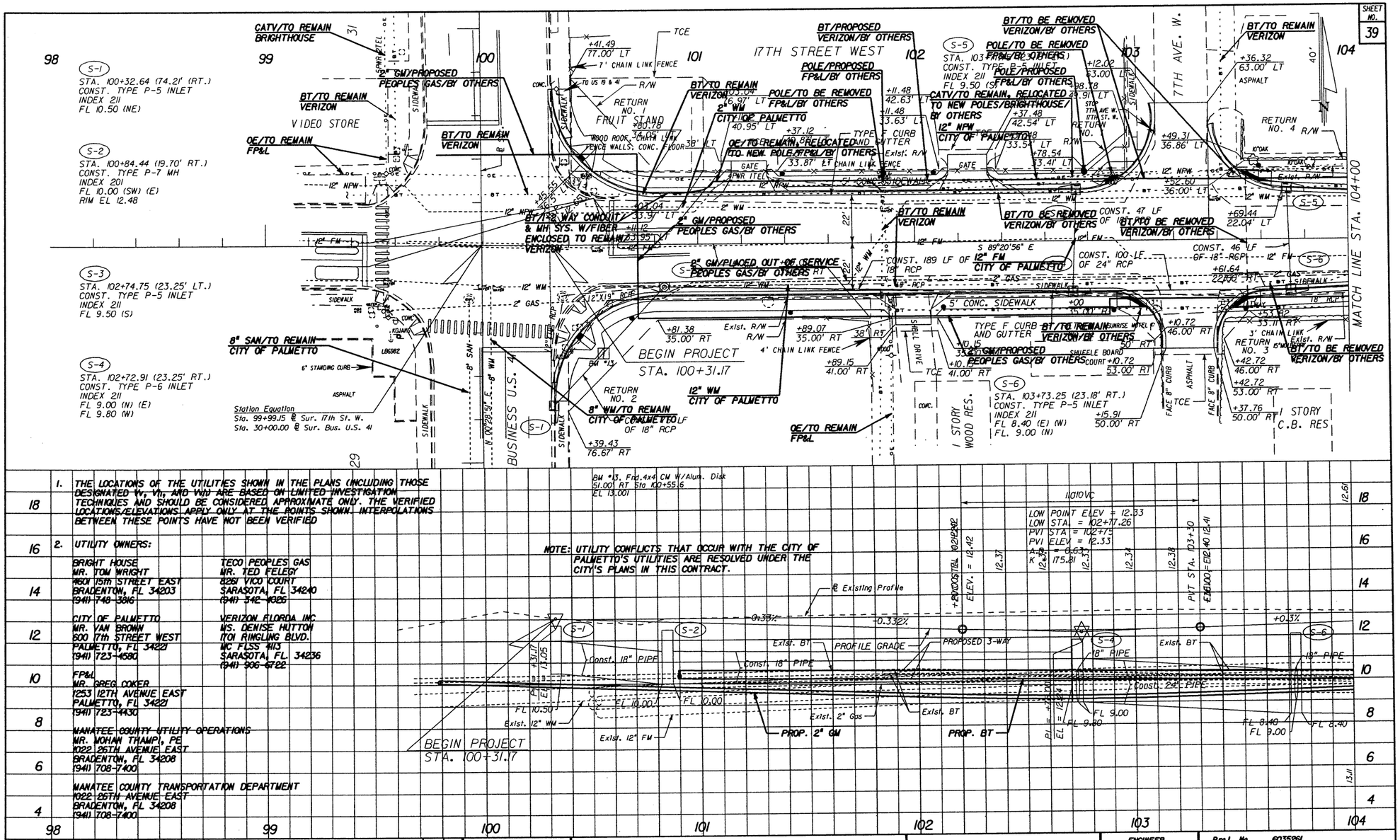
17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

STORMWATER POLLUTION PREVENTION PLAN



1. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh, AND Vh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED

2. UTILITY OWNERS:

BRIGHT HOUSE
MR. TOM WRIGHT
4601 15th STREET EAST
BRADENTON, FL 34203
(941) 748-3816

CITY OF PALMETTO
MR. VAN BROWN
600 17th STREET WEST
PALMETTO, FL 34221
(941) 723-4580

FP&L
MR. GREG COKER
1253 12TH AVENUE EAST
PALMETTO, FL 34221
(941) 723-4430

MANATEE COUNTY UTILITY OPERATIONS
MR. MOHAN THAMPI, PE
1022 26TH AVENUE EAST
BRADENTON, FL 34208
(941) 708-7400

MANATEE COUNTY TRANSPORTATION DEPARTMENT
1022 26TH AVENUE EAST
BRADENTON, FL 34208
(941) 708-7400

TECO PEOPLES GAS
MR. TED FELEGY
2261 VICO COURT
SARASOTA, FL 34240
(941) 342-4626

VERIZON FLORIDA INC
MS. DENISE HUTTON
1701 RINGLING BLVD.
MC FLSS 4N3
SARASOTA, FL 34236
(941) 906-6722

DESIGNED BY	-	DATE	-	
CHECKED BY	-	DATE	-	
DRAWN BY	KDR	DATE	1/09	
CHECKED BY	BDG	DATE	1/09	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106			

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

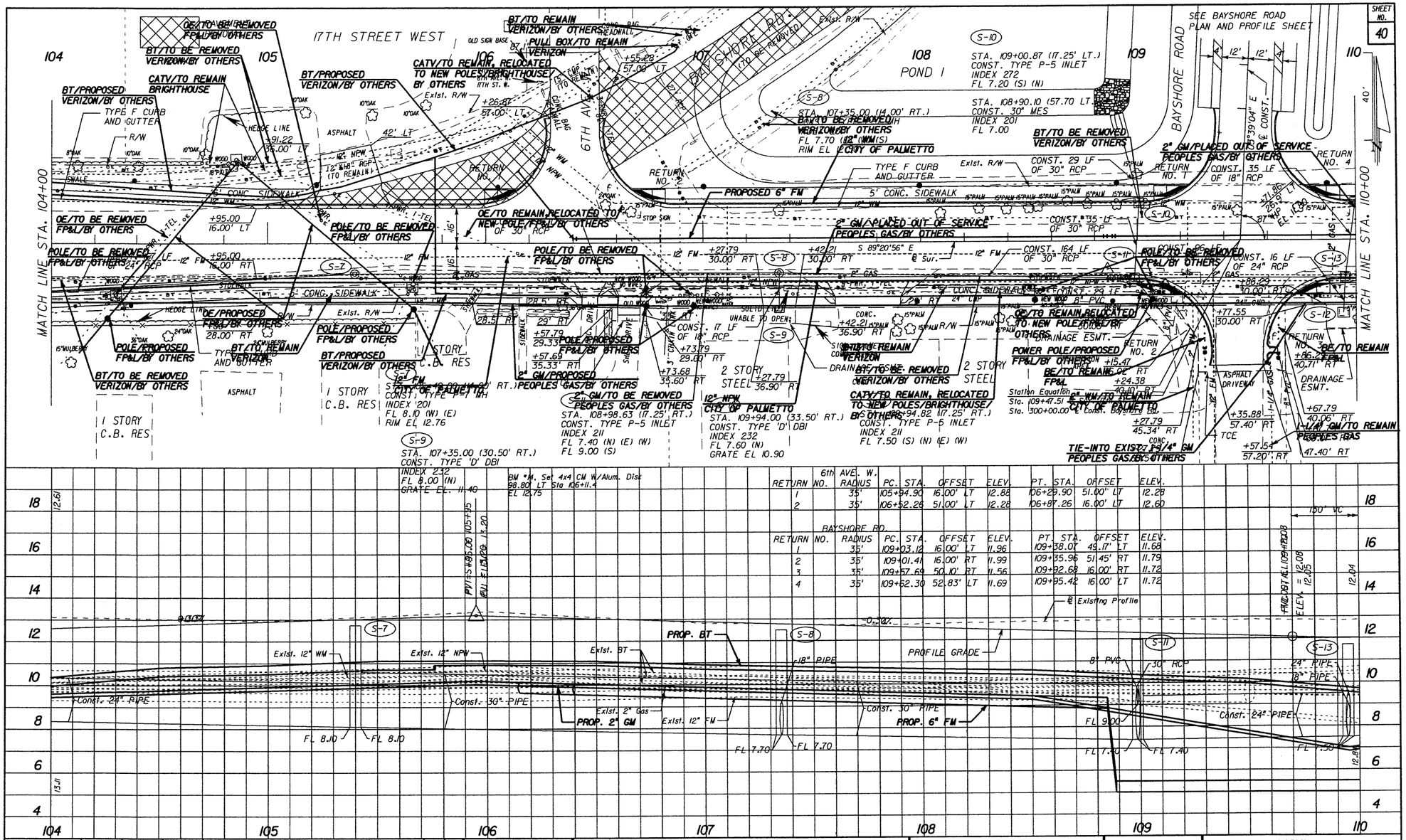
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/12/2009
DESIGN FILE: P:\Mta2080\0in\CADD-data\utadj01.dgn
PLOT FILE: PLOTFILE.



SHEET NO. 40

PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Mte2008\01\m\CADD-data\vutadr-d02.dgn
PLOT DATE: 2/11/2009

DESIGNED BY	-	DATE	-
CHECKED BY	-	DATE	-
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

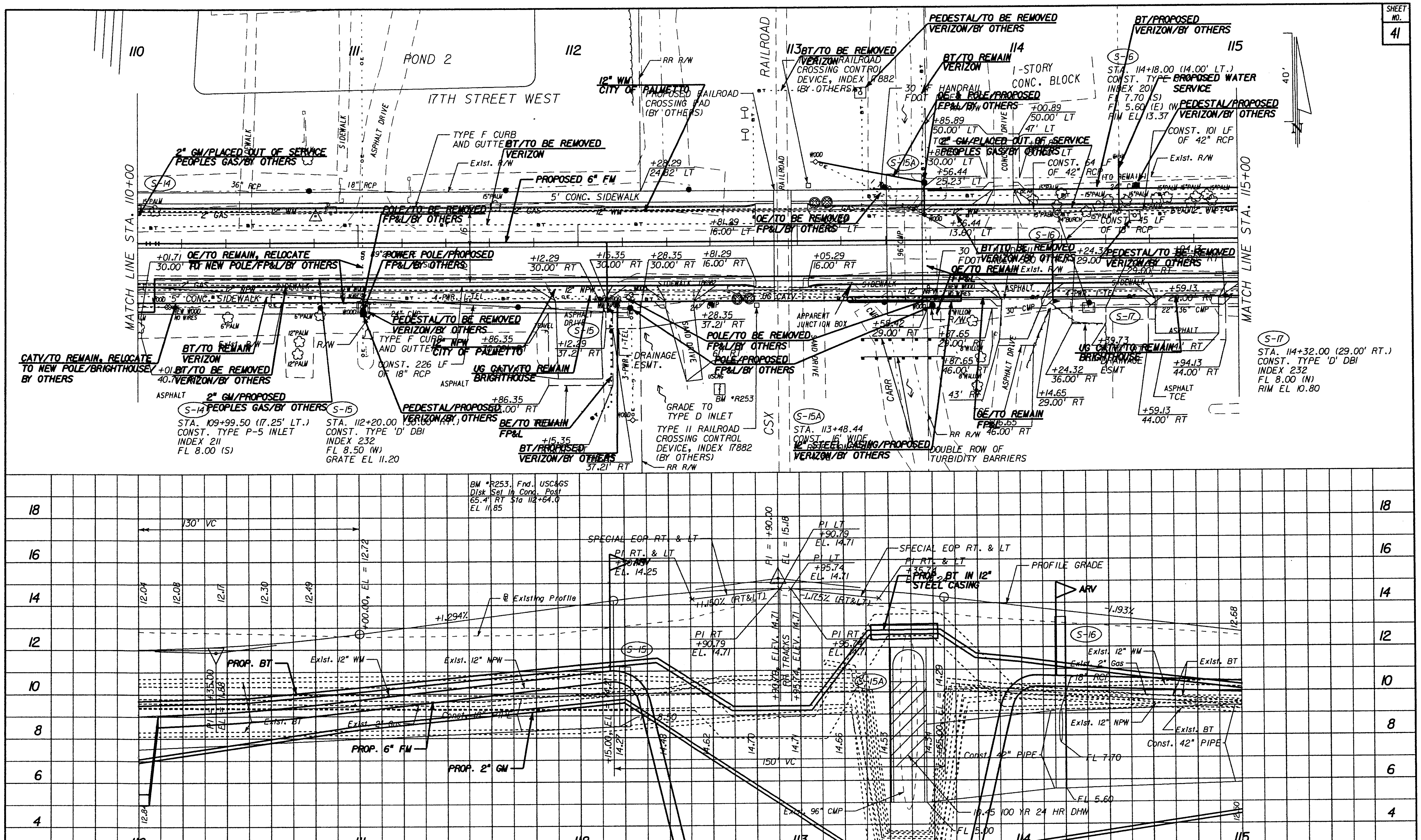
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

SHEET NO. 41



DESIGNED BY	-	DATE	-
CHECKED BY	-	DATE	-
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

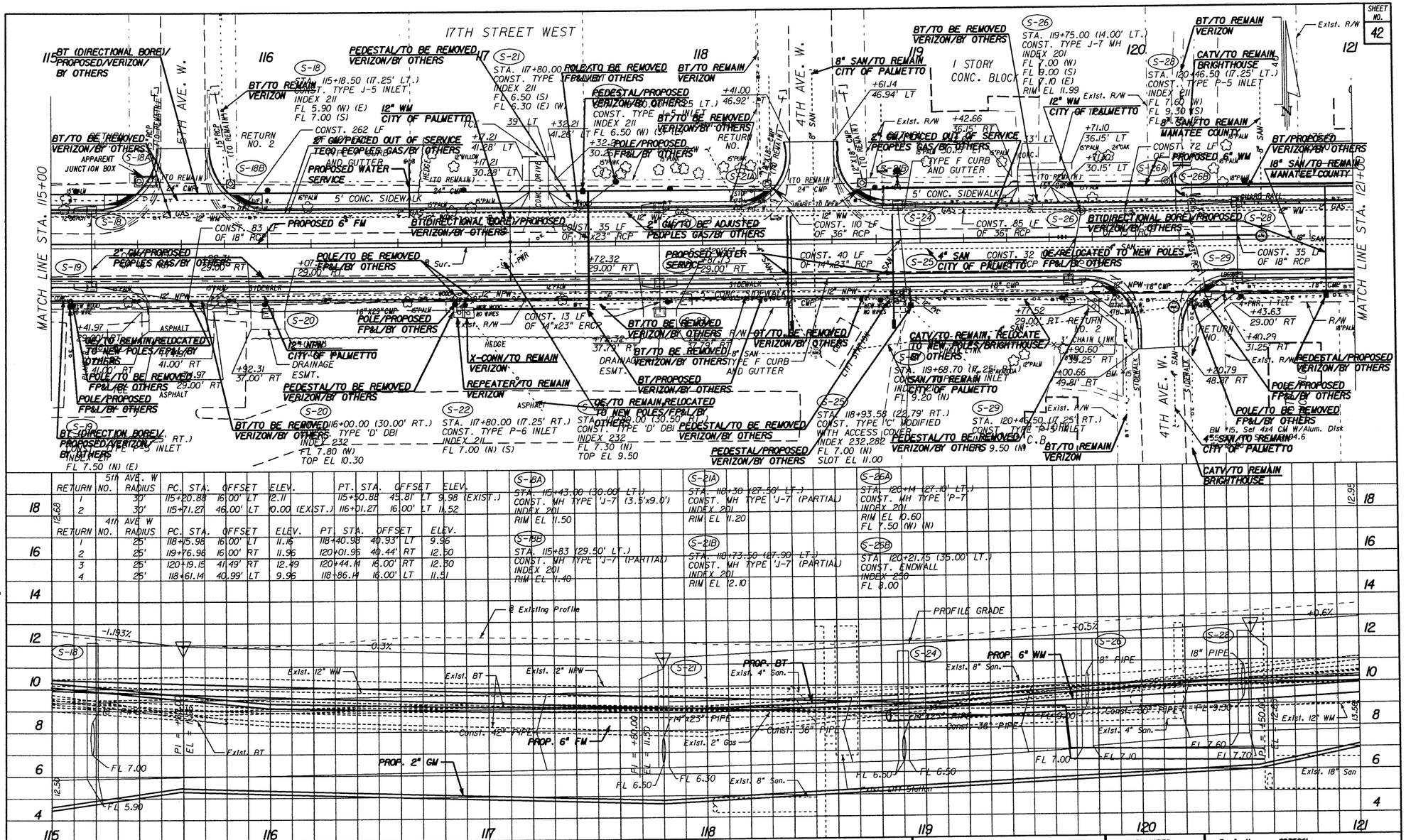
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mte2080\01m\CADD-data\utadrd03.dgn PLOT FILE:_PLOTFILE_



RETURN NO.	5th AVE. W RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	30'	115+20.88	16.00' LT	12.11	115+50.88	45.81' LT	9.98 (EXIST.)
2	30'	115+71.27	46.00' LT	10.00 (EXIST.)	116+01.27	16.00' LT	11.52

RETURN NO.	4th AVE W RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	118+15.98	16.00' LT	11.16	118+40.98	40.93' LT	9.96
2	25'	119+76.96	16.00' RT	11.96	120+01.96	40.44' RT	12.50
3	25'	120+19.15	41.49' RT	12.49	120+44.14	16.00' RT	12.30
4	25'	118+61.14	40.99' LT	9.96	118+86.14	16.00' LT	11.51

S-18A STA. 115+43.00 (30.00' LT.)
CONST. MH TYPE 'J-7 (3.5'x9.0')
INDEX 201
RIM EL 11.50

S-18B STA. 115+83 (29.50' LT.)
CONST. MH TYPE 'J-7 (PARTIAL)
INDEX 201
RIM EL 11.40

S-21A STA. 118+30 (27.50' LT.)
CONST. MH TYPE 'J-7 (PARTIAL)
INDEX 201
RIM EL 11.20

S-21B STA. 118+73.50 (27.90' LT.)
CONST. MH TYPE 'J-7 (PARTIAL)
INDEX 201
RIM EL 12.10

S-26A STA. 120+14 (27.10' LT.)
CONST. MH TYPE 'P-7
INDEX 201
RIM EL 10.60
FL 7.50 (W) (N)

S-26B STA. 120+21.75 (35.00' LT.)
CONST. ENDWALL
INDEX 250
FL 8.00

DESIGNED BY	-	DATE	-	
CHECKED BY	-	DATE	-	
DRAWN BY	KDR	DATE	1/09	
CHECKED BY	BDG	DATE	1/09	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106			

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

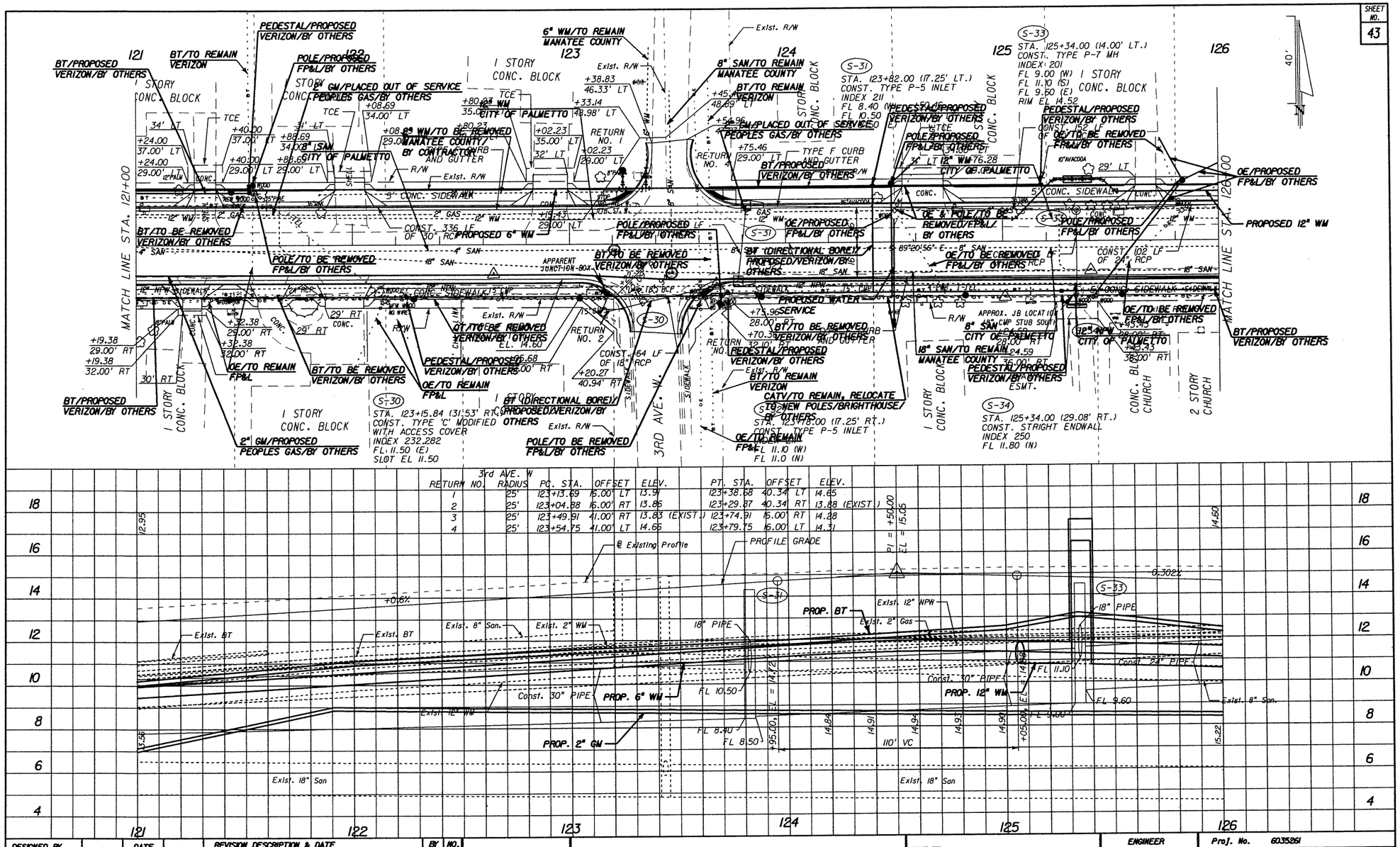
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035251
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\M\a2008\01\m\CADD-data\utadr-d04.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 43



DESIGNED BY	-	DATE	-	
CHECKED BY	-	DATE	-	
DRAWN BY	KDR	DATE	1/09	
CHECKED BY	BDG	DATE	1/09	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106			

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

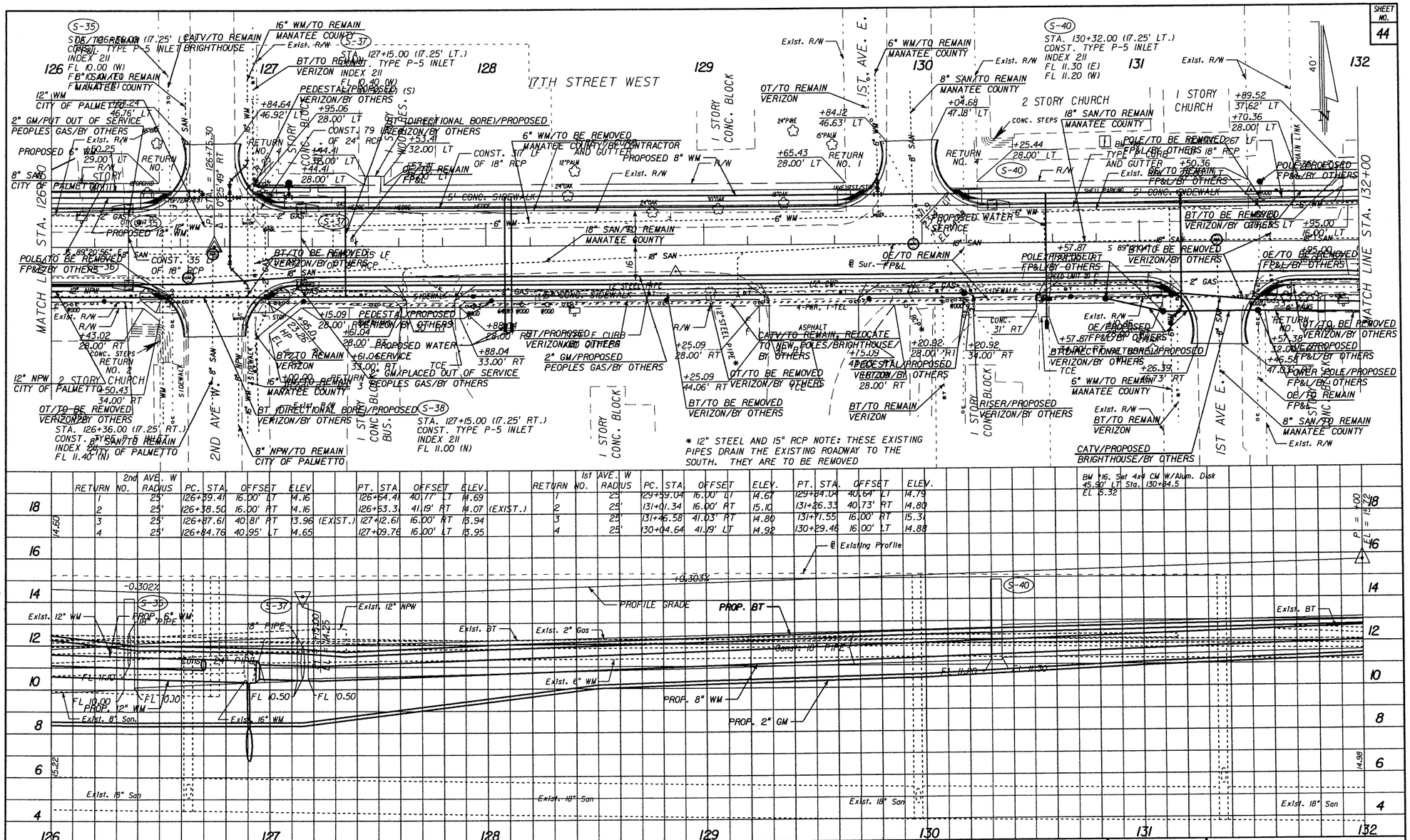
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mva2080\dlm\CADD-data\uta-dgn\uta-d05.dgn PLOT FILE: PLOTFILE.

SHEET NO. 44



RETURN NO.	2nd AVE. W NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
	1	25'	126+39.41	16.00' LT	14.16	126+64.41	40.77' LT	14.69
	2	25'	126+38.50	16.00' RT	14.16	126+63.31	41.19' RT	14.07 (EXIST.)
	3	25'	126+87.61	40.81' RT	13.96 (EXIST.)	127+12.61	16.00' RT	13.94
	4	25'	126+84.76	40.95' LT	14.65	127+09.76	16.00' LT	13.95

RETURN NO.	1st AVE. W NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
	1	25'	129+59.04	16.00' LT	14.67	129+84.04	40.64' LT	14.79
	2	25'	131+01.34	16.00' RT	15.10	131+26.33	40.73' RT	14.80
	3	25'	131+46.58	41.03' RT	14.80	131+71.55	16.00' RT	15.31
	4	25'	130+04.64	41.19' LT	14.92	130+29.46	16.00' LT	14.88

BM #16, Set 4x4 CM W/Alum. Disk 45.90' LT Sta. 130+84.5 EL 15.32

DESIGNED BY	-	DATE	-	
CHECKED BY	-	DATE	-	
DRAWN BY	KDR	DATE	1/09	
CHECKED BY	BDG	DATE	1/09	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106			

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

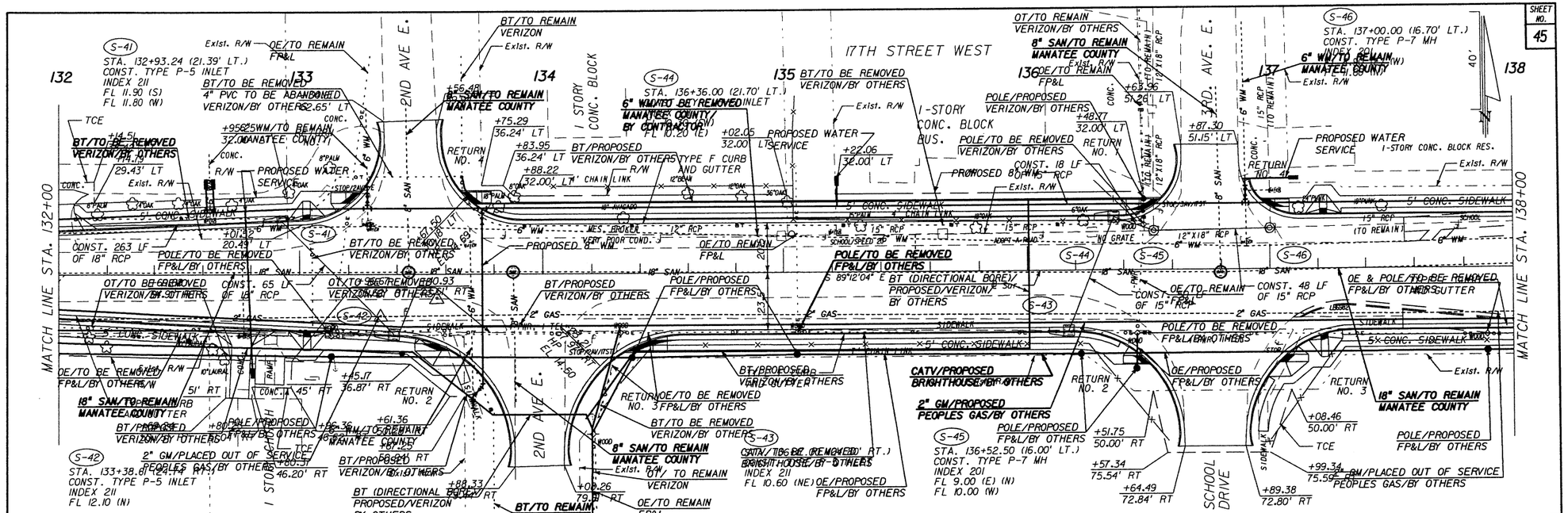
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

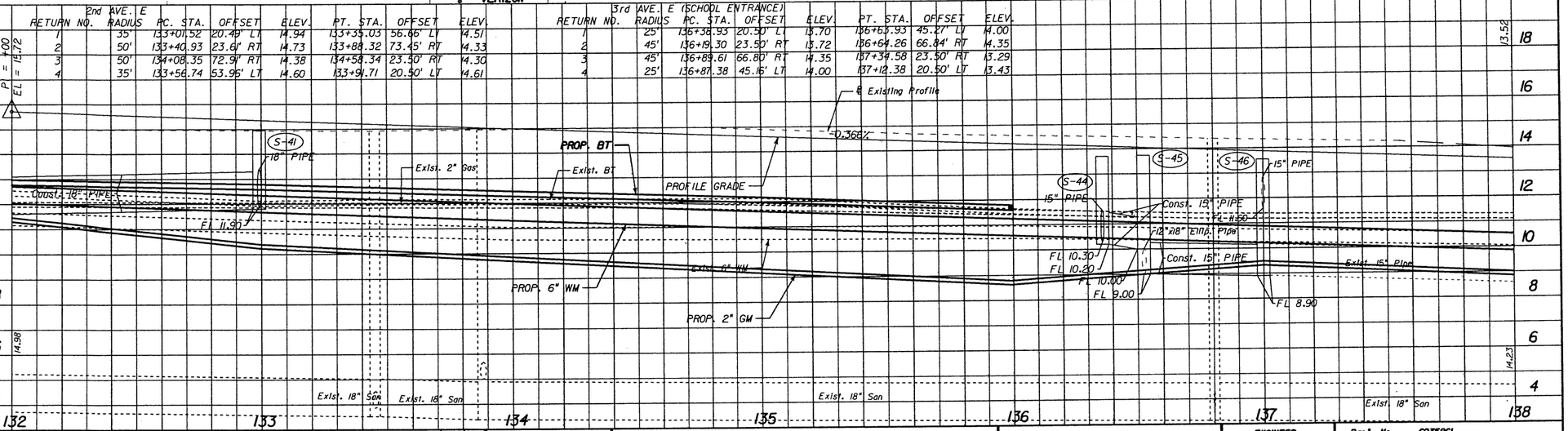
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mis2880\Utln\CADD-data\utadr-d06.dgn
PLOT FILE: PLOTFILE.





				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	-	DATE	-			
CHECKED BY	-	DATE	-			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

SHEET NO. 46

17TH STREET WEST

138 139 140

18" SAN./TO REMAIN MANATEE COUNTY

6" WM TO BE REMOVED MANATEE COUNTY/ BY CONTRACTOR

CURB AND GUTTER

PROPOSED 8" WM

Exist R/W

34' LT

5' CONC. SIDEWALK

30 MPH

SPEED LIMIT 30

SCHOOL

15" RCP (TO REMAIN)

6" WM

18" SAN

20.5'

23.5'

S 89°12'04" E

OE/PROPOSED FP&L/BY OTHERS

2" GM/PROPOSED PEOPLES GAS/BY OTHERS

2" GAS

5' CONC. SIDEWALK

OE/TO BE REMOVED FP&L/BY OTHERS

TYPE F CURB AND GUTTER

Exist R/W

2" GM/PLACED OUT OF SERVICE PEOPLES GAS/BY OTHERS

CATV/PROPOSED BRIGHTHOUSE/BY OTHERS

CATV/TO BE REMOVED BRIGHTHOUSE/BY OTHERS

END PROJECT

STA. 139+52.00

PALMETTO LIMIT

30" RCP (TO REMAIN)

15" RCP (TO REMAIN)

24" RCP (TO REMAIN)

285

284

℄ Sur.

CURVE 2

US. 41

BM #01

Station Equation

Sta. 140+61.09 ℄ Sur. 17th St. W

Sta. 284+42.30 ℄ Sur. U.S. 41

6" WM/TO REMAIN MANATEE COUNTY

17TH STREET EAST

BFP 6"

(2)BFP

6" WM/TO REMAIN CITY OF PALMETTO

IMPROVEMENTS FROM MANATEE COUNTY PROJECT 6035260

2" GM/TO REMAIN PEOPLE'S GAS

40'

℄ Sur. Curve 2 Data

P.I. STA. 289+97.14

Δ = 40° 15' 20" LT.

D= 1° 10' 00"

T= 1799.90'

L= 3450.48'

R= 4911.07'

P.C.= STA. 271+97.24

P.T.= 306+47.72

e = NC

BM #01.
Fnd 4"x4" Conc. Monument
W/FDOT Brass Disk
57.01 RT Sta 30+91.5
Elev. 12.99

18 16 14 12 10 8 6 4

13.52

14.23

℄ Existing Profile

-0.366%

P.I. = 1+52
El. = 12.96

IMPROVEMENTS FROM MANATEE COUNTY PROJECT 6035260

PROFILE GRADE

15" PIPE

Exist. 2" Gas

Exist. 15" Pipe

Exist. 6" WM

PROP. 8" WM

END PROJECT
STA. 139+52.00

FL 8.00

FL 9.00

PROP. 2" GM

Exist. 18" San

138 139 140

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	-	DATE	-			
CHECKED BY	-	DATE	-			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

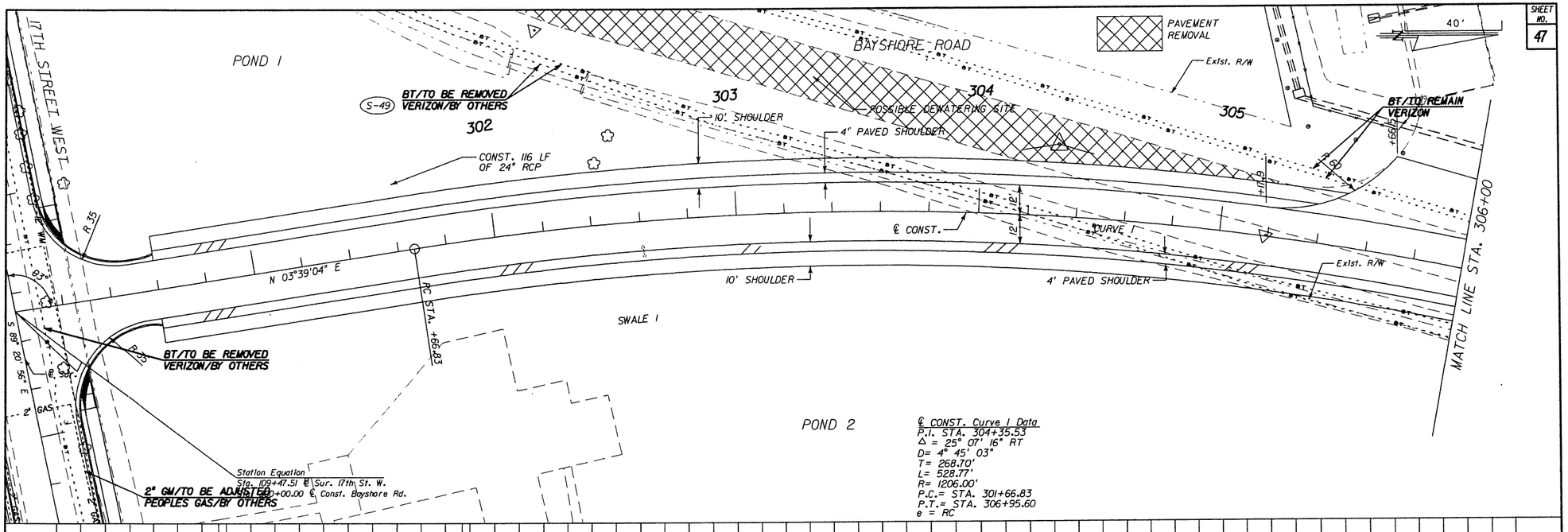
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2000\dlm\CADD-data\utadr-d08.dgn
PLOT FILE: PLOTFILE.



PLOT FILE: PLOTFILE.
DESIGN FILE: P:\M\tc2008\01\m\CADD-data\tcadr-d09.dgn
PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	-	DATE	-			
CHECKED BY	-	DATE	-			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

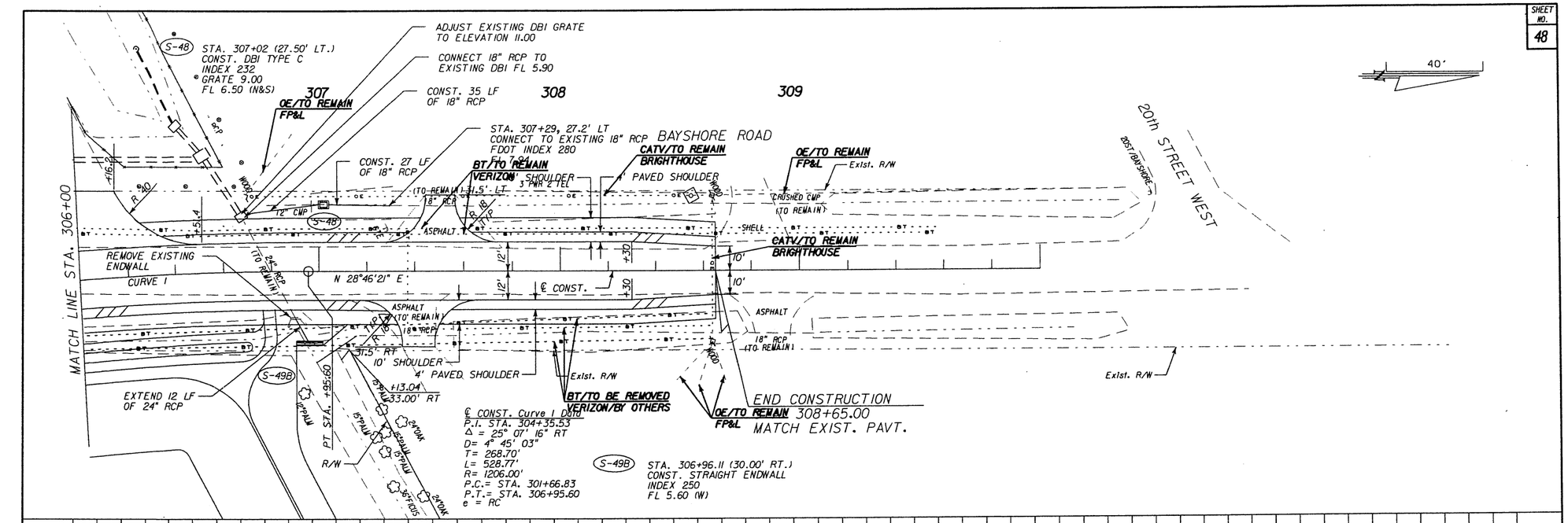
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

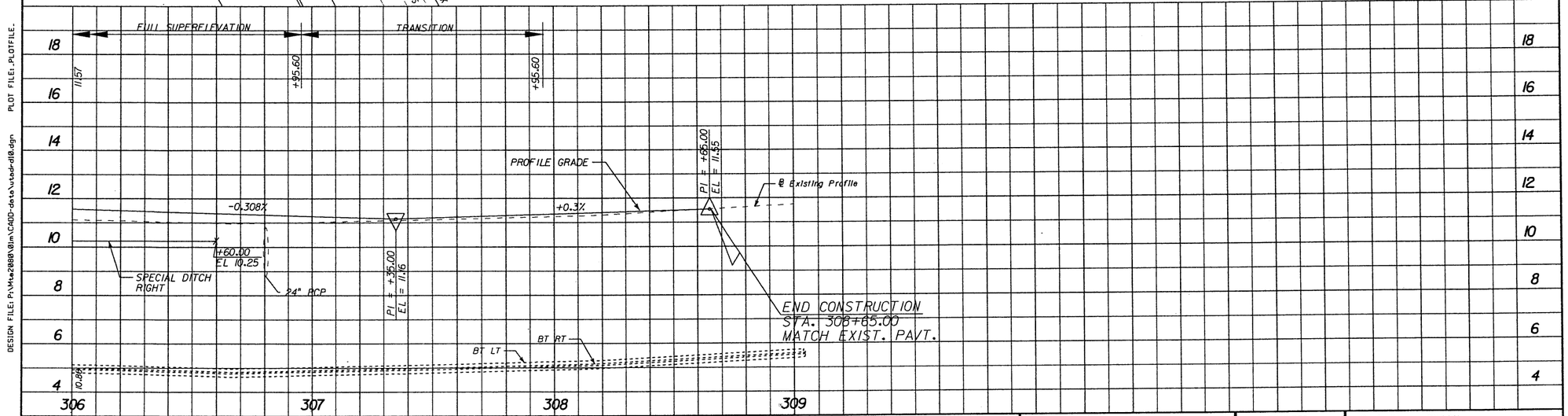
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035251
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS





				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	-	DATE	-			
CHECKED BY	-	DATE	-			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

UTILITY ADJUSTMENTS

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mte2008\01m\CADD-data\utadrdl0.dgn
PLOT FILE: PLOTFILE.

TABULATION OF QUANTITIES

BID ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			53		54		55		56		57		58		59						
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
WATER																					
110-3	Removal of Existing Structure (Vault)	LS	0		0		0		1		0		0		0		1		1		
1000-6	Utility Work-Water (Master Meter Assembly)	LS	0		0		0		1		0		0		0		1		1		
1050-11-92	Water Service Conn. (F&I) (HDPE) CI 200 (1")	EA	0		1		4		1								14		14		
1050-11-423	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (6") (Inc Ftgs)	LF	0		0		217		500		140		80		0		937		937		
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (8")	LF	0		0		0		0		509		600		165		1274		1274		
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (12")	LF	0		0		0		87		91		0		0		178		178		
1050-11-424	Pipe (CI/DI) (Epoxy) (F&I) Class 50 (16")	LF	0		0		0		0		64		0		0		64		64		
1050-16-224	Pipe Removal (Less than 18")	LF	0		24		150		288		730		742		155		2089		2089		
1055-14-414	Bend (DI) (45 Degree) (12")	EA	0		0		0		3		0		0		0		3		3		
1055-14-414	Bend (DI) (45 Degree) (12") (Cut-In)	EA	0		0		0		1		0		0		0		1		1		
1055-14-414	Bend (DI) (45 Degree) (16")	EA	0		0		0		0		2		0		0		2		2		
1055-14-414	Bend (DI) (45 Degree) (16") (Cut-In)	EA	0		0		0		0		2		0		0		2		2		
1055-14-424	Tee (DI) (8"x6")	EA	0		0		0		0		2		3		0		5		5		
1055-14-424	Tee (DI) (12"x6")	EA	0		0		0		0		1		0		0		1		1		
1055-14-424	Tee (DI) (12"x12")	EA	0		0		0		0		1		0		0		1		1		
1055-14-424	Tee (DI) (16"x12")	EA	0		0		0		0		1		0		0		1		1		
1055-14-434	Reducer (DI) (8"x6")	EA	0		0		0		0		0		0		1		1		1		
1055-14-434	Reducer (DI) (12"x8")	EA	0		0		0		0		1		0		0		1		1		
1055-14-494	Sleeve (DI) (16")	EA	0		0		1		0		0		0		0		1		1		
1060-14-21	Water Meter Box (Relocate)	EA	0		0		2		1		3		5		0		11		11		
1080-11-34	Valve Assembly Gate (F&I) (CI) (250 PSI) (6")	EA	0		0		1		1		4		4		1		11		11		
1080-11-44	Valve Assembly Gate (F&I) (CI) (250 PSI) (8")	EA	0		0		0		0		1		0		0		1		1		
1080-11-44	Valve Assembly Gate (F&I) (CI) (250 PSI) (12")	EA	0		0		0		2		1		0		0		3		3		
1080-11-44	Valve Assembly Butterfly (F&I) (CI) (250 PSI) (16")	EA	0		0		0		0		2		0		0		2		2		
1644-13	Fire Hydrant Assembly (Standard) (F&I) (6")	EA	0		0		1		0		1		0		0		2		2		
1644-53	Fire Hydrant Assembly (Relocate)	EA	0		0		0		1		0		0		0		1		1		
SEWER																					
555-1-2	Directional Bore																				
1050-11-223	San. Sewer (F&I) (PVC) (DR-18) (C-900X6") (Inc Ftgs)	LF	0		100		0		0		0		0		0		100		100		
1060-15	Manhole Rim & Cover	LF	400		500		558		0		0		0		0		1458		1458		
1060-15	Core Bore Exist. MH	EA	0		0		1		1		3		3		1		9		9		
1060-15	Manhole Rim Adjustment	EA	0		0		0		1		0		0		0		1		1		
1060-15	Cleaning & Sealing Manhole (Fiberglass)	EA	0		0		1		1		1		0		0		3		3		
1060-15	Cleaning & Sealing Manhole (Sawpercoat)	EA	0		0		1		1		0		0		0		2		2		
1080-11-36	Air Release Assembly (F&I) (6")	EA	0		0		0		0		3		3		1		7		7		
		EA	0		2		0		0		0		0		0		2		2		

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mt+2089\01\n\CADD-data\TABDWM01.DGN PLOT FILE: .PLOTFILE.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	CRL	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM. PE 42106					

MANATEE COUNTY FLORIDA

17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

GENERAL NOTES

1) THE LOCATION OF EXISTING UTILITIES, AS SHOWN ON THE PLANS, ARE APPROXIMATE AND ARE BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNERS (S). THE UTILITY LOCATIONS ARE SHOWN ON THE PLANS AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL NOTIFY THE OWNERS(S) OF THE UTILITY FOR LOCATION AND STAKING OF THEIR UNDERGROUND FACILITIES BEFORE EXCAVATING.

2) FLORIDA STATUE 553.857 (1978) REQUIERES THAT BEFORE EXCAVATING, NOTICE BE GIVEN TO THE UTILITY OWNER(S) A MINIMUM OF FIVE DAYS, EXCLUDING SATURDAY, SUNDAY AND LEGAL HOLIDAYS. NOT ALL UTILITY COMPANIES ARE MEMBERS OF "SUNSHINE STATE ONE CALL." (800) 282-8811. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ALL HIS SUBCONTRACTORS TO CONTACT SUNSHINE ONE CALL CENTER OF FLORIDA.

3) THE CONTRACTOR SHALL NOTIFY THE ELECTRIC UTILITY AT LEAST 48 HOURS PRIOR TO ANY INSTALLATION THAT IS WITHIN TEN FEET OF AN ENERGIZED ELECTRICAL CONDUCTOR(S). EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES IN PERFORMANCE OF ANY WORK AROUND THE PRIMARY HIGH VOLTAGE COMPONENTS.

4) ALL EXISTING ASBESTOS CEMENT WATER MAINS TO BE ABANDONED SHALL BE CUT AND ABANDONED IN ACCORDANCE WITH FAC 17-251, FS 455.300 AND MANATEE COUNTY REQUIREMENTS. THE COST FOR THIS WORK IS TO BE INCLUDED IN THE COST FOR THE WATER MAINS. THE ABESTOS CEMENT WATER MAINS SHALL BE ABANDONED WITHIN THE RIGHT OF WAY OR TO THE POINT OF CONNECTION WITH NEW WATER MAIN. THE LOCATION OF THE ASBESTOS CEMENT WATER MAIN SHOWN ON THE PLANS ARE BASED ON INFORMATION FURNISHED BY THE UTILITY OWNER.

5) ALL VALVE BOXES AND MANHOLES NOTED ON THE PLANS SHALL BE ADJUSTED BY THE CONTRACTOR TO PROPOSED ELEVATIONS. THE EXISTING WATER MAIN VALVES ON THE WATER MAINS TO BE ABANDONED SHALL BE PLUGGED OR CAPPED AND SHALL BE PLACED IN THE CLOSED POSITION (NO FLOW THROUGH THE VALVE).

6) ALL FITTINGS FOR THE PROPOSED WATER MAINS, RECLAIMED WATER MAINS AND SANITARY SEWER FORCE MAINS SHALL BE DIP RESTRAINED JOINT FITTINGS, UNLESS OTHERWISE DIRECTED BY THE COUNTY.

7) THE WATER MAINS, RECLAIMED WATER MAINS, SANITARY SEWER, AND SANITARY SEWER FORCE MAIN SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE MANATEE COUNTY SPECIFICATIONS AND FDEP REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS TO PERFORM THE SAMPLING AND TESTING IN ACCORDANCE WITH MANATEE COUNTY SPECIFICATIONS AND FDEP REQUIREMENTS.

8) ALL RECLAIMED WATER MAINS SHALL BE CONSTRUCTED TO THE SAME STANDARDS AS THE POTABLE WATER MAINS EXCEPT FOR THE COLOR CODING AND THE DISINFECTION REQUIREMENTS. THE RECLAIMED WATER LINES ARE NOT REQUIRED TO BE DISINFECTED AND THE COLOR CODING FOR RECLAIMED WATER MAINS SHALL BE PURPLE (SEE MANATEE COUNTY STANDARDS).

9) A MINIMUM HORIZONTAL SEPARATION OF 5 FEET IS REQUIRED WHEN RECLAIMED WATER LINES ARE INSTALLED PARALLEL TO THE POTABLE WATER MAINS OR SANITARY SEWER LINES. A MINIMUM VERTICAL SEPERATION OF 18" IS REQUIRED BETWEEN A NON-POTABLE LINE AND A POTABLE WATER MAIN.

10) THE CONTRACTOR SHALL DEWATER THE PIPE TRENCH TO A DEPTH OF 6 INCHES MINIMUM BELOW THE BOTTOM OF THE PIPE TRENCH AND SHALL MAINTAIN THE DEWATERING UNTIL THE PIPE TRENCH IS BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. THE RUNOFF FROM THE DEWATERING OPERATION SHALL BE DISPOSED OF IN ACCORDANCE WITH MANATEE COUNTY, FDEP AND SWFWMD REQUIREMENTS.

11) EXISTING WATER METERS SHALL BE RELOCATED BY THE CONTRACTOR TO THE NEW RIGHT OF WAY LINE.

12) THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS OF THE TRENCH SAFETY ACT (FLA STATUES SECTION 553.60ET. SEQ.) AND STANDARDS 29 C.F.R.. SECTION 1926.650. SUB-PART P. WHICH SHALL APPLY TO THIS PROJECT.

13) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING WATER AND SEWER SERVICES TO PROPERTY OWNERS AT ALL TIMES. THE CONTRACTOR SHALL INSTALL TEMPORARY SERVICES AS REQUIRED. THE CONTRACTOR SHALL NOTIFY RESPECTIVE PROPERTY OWNERS A MINIMUM OF 24 HOURS IN ADVANCE OF ANY WORK REQUIRING A DISRUPTION OF WATER OR SANITARY SEWER SERVICES.

14) THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH CUT SHEETS FOR THE PROPOSED WATER MAINS AND RECLAIMED WATER MAINS TO BE INSTALLED ACROSS 17TH ST. W. APPROVAL BY THE ENGINEER IS REQUIRED PRIOR TO THE INSTALLATION OF THE PROPOSED WATER MAINS AND RECLAIMED WATER MAINS ACROSS 17TH ST. W. SEE TYPICAL UTILITY ROADWAY CROSSING DETAIL.

15) ALL WATER MAINS, RECLAIMED WATER MAINS, SANITARY SEWERS AND SANITARY SEWER FORCE MAINS INSTALLED SHALL HAVE TYPE A-2 PIPE BEDDING UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE ENGINEER.

16) CONTRACTOR SHALL MAKE ALL CONNECTIONS TO THE EXISTING WATER MAINS, SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER MAINS.

17) ALL RESTORATION SHALL CONFORM TO MANATEE COUNTY STANDARDS.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	DB	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035861
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

LENGTHS FOR THRUST RESTRAINT

Horizontal & Vertical Up Bends

PIPE SIZE (IN)	BEND 90	45	22.5	11.25	DEADENDS
4	40	18	9	5	80
6	50	20	10	5	100
8	60	25	15	10	125
10	75	30	15	10	145
12	80	35	20	10	170
16	90	40	20	10	180
18	100	40	20	10	195
20	110	45	25	15	210
24	120	50	25	15	240
30	140	60	30	15	270
36	160	65	35	20	300

NOTES:

1.) LENGTH OF RESTRAINT IS MINIMUM RESTRAINT ON EACH SIDE OF FITTING (ft).

2.) LENGTH OF RESTRAINT BASED ON 180 PSI WATER PRESSURE.

3.) RESTRAIN TO NEXT FULL JOINT BEYOND GIVEN LENGTH.

4.) ALL VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.

THRUST BLOCK DIMENSIONS — B ft. x d inches												
PIPE SIZE (IN.)	90° BEND		45° BEND		22.5° BEND		11.25° BEND		DEAD END & TEE		45° WYE	
	B	d	B	d	B	d	B	d	B	d	B	d
4	1.3	3½	1.0	3½	0.7	3½	0.4	3½	1.1	3½	1.0	3½
6	1.9	4½	1.5	3½	1.1	3½	0.8	3½	1.6	4	1.5	3¾
8	2.6	6¾	1.9	4¾	1.4	3½	1.0	3½	2.2	6½	1.8	4½
10	3.2	7¾	2.4	6	1.7	4¾	1.2	3½	2.7	6½	2.3	5½
12	3.8	9¼	2.8	6¾	2.0	5	1.5	3¾	3.2	7¾	2.7	6½
14	4.5	11	3.3	9	2.4	6	1.7	4¼	3.8	9¼	3.2	7¾
16	5.1	12½	3.8	9¼	2.7	6½	1.9	4¾	4.3	10½	3.6	8¾
18	5.7	13¾	4.2	10¼	3.0	7¼	2.2	5½	4.8	11¾	4.1	10
20	6.4	15½	4.7	11½	3.4	8¼	2.4	6	5.4	13	4.8	11
24	7.8	18½	5.6	13½	4.0	9¾	2.9	7	6.4	15½	5.4	13
30	9.9	23	7.0	17	5.0	12	3.6	8¾	8.0	19¼	6.7	16
36	11.4	27½	8.4	20¼	6.0	14½	4.3	10½	9.6	23	8.1	19½

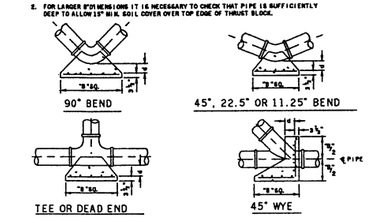
REINFORCEMENT MAT SCHEDULE

FOR DIMS BETWEEN 5.75' & 11.5' USE #4 @ 8" EACH WAY

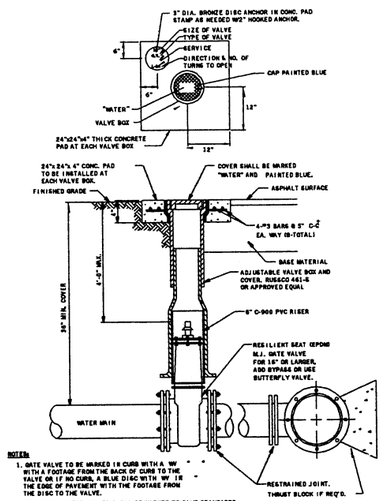
FOR DIMS LESS THAN 5.75' USE #3 @ 8" EACH WAY

NOTES:

1. THIS TABLE IS BASED ON WATER PRESSURE=180 PSI WITH AN ALLOWABLE SOIL BEARING PRESSURE=2000 PSF, CONCRETE STRENGTH f'c=3000 PSI, REINFORCEMENT f'=60.0 KSI THRUST BLOCK CAST AGAINST FIRM UNDISTURBED OR COMPACTED SOIL.
2. FOR LARGER B'd'S DIMENSIONS IT IS NECESSARY TO CHECK THAT PIPE IS SUFFICIENTLY DEEP TO ALLOW 15" MIN. SOIL COVER OVER TOP EDGE OF THRUST BLOCK.



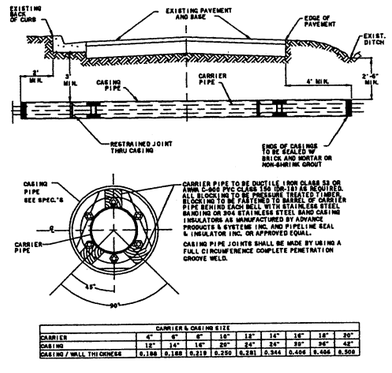
THRUST BLOCK DETAILS



NOTES:

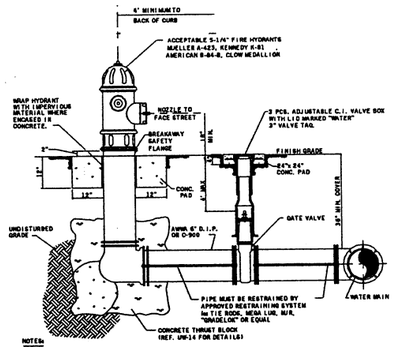
1. GATE VALVE TO BE MARKED IN CURB WITH A 'W' WITH A FOOTAGE FROM THE BACK OF CURB TO THE VALVE OR IF NO CURB, A BLUE DISC WITH 'W' IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.
   a. RECLAIMED WATER VALVES SHALL BE MARKED TO SAME STANDARDS AS THE POTABLE WATER VALVES. THE DISK AND VALVE BOX CAP FOR THE RECLAIMED WATER VALVE SHALL BE PAINTED PURPLE. THE VALVE BOX CAP SHALL BE MARKED "RECLAIMED WATER," AND SHALL BE A SQUARE VALVE CASTING.
   b. SANITARY SEWER FORCE MAIN VALVES SHALL BE MARKED TO THE SAME STANDARDS AS THE POTABLE WATER VALVES. THE DISK AND VALVE BOX CAP FOR THE SANITARY SEWER FORCE MAIN VALVES SHALL BE PAINTED GREEN. THE VALVE BOX CAP SHALL BE MARKED "SEWER."
2. ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS ESTABLISHED IN THE FIELD.
3. WATER, RECLAIMED WATER, OR SANITARY SEWER VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".

GATE VALVE, BOX, COVER AND TAG



CARRIER & CASING SIZE									
CARRIER	4"	6"	8"	12"	16"	20"	24"	30"	36"
CASING	12"	14"	16"	20"	24"	30"	36"	42"	48"
CASING / WALL THICKNESS	0.188	0.188	0.219	0.250	0.281	0.344	0.406	0.406	0.500

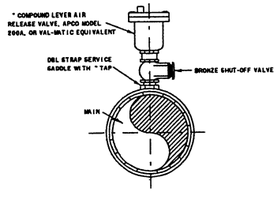
JACK & BORE UNDER FDOT OWNED ROADS



NOTES:

1. WEEPHOLES TO BE PLUGGED WITH BRASS PLUGS.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF 6'-6" OFF EDGE OF PAVEMENT AND 16'-0" MAX. FROM BACK OF CURB WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED, SHALL BE LOCATED BETWEEN THE SIDEWALK AND EDGE OF ROAD.
3. HYDRANTS SHALL BE PAINTED SAFETY YELLOW. HYDRANT SHALL BE ALL CAST IRON CONSTRUCTION.
4. PAY ITEMS FOR FIRE HYDRANT ASSEMBLIES SHALL INCLUDE HYDRANT, VALVE, PIPING, MJ/MJ TEE & HARNESSING, VALVE BOX & CONCRETE ENCASEMENTS.
5. FIRE HYDRANTS SHALL BE PREFERABLY PLACED SO THAT STORM WATER FLOWS AWAY FROM & NOT TOWARDS THE HYDRANT.
6. FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR WATER LINES. IF EXTENSIONS ARE REQUIRED, THE COST SHALL BE INCLUDED IN THE PRICE BID.
7. FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
8. RAISED REFLECTIVE PAVEMENT MARKER (BLUE) SHALL BE INSTALLED AT CENTERLINE OF PAVEMENT ADJACENT TO EACH HYDRANT.
9. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/8" CHAMFER.

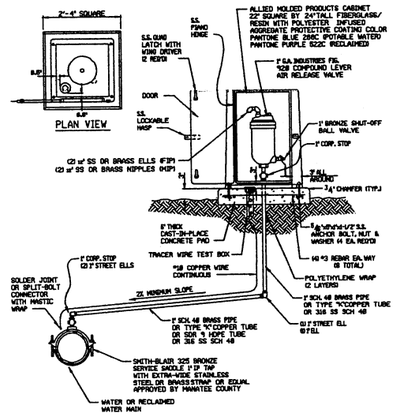
TYPICAL FIRE HYDRANT ASSEMBLY



NOTES:

1.) ALL PIPE STUBS, NIPPLES AND HARDWARE TO BE 304 STAINLESS STEEL.
2.) AIR RELEASE VALVES TO BE INSTALLED AT HIGH POINTS OF MAIN AS DIRECTED BY THE ENGINEER.
3.) ALL PIPE APPURTENANCES AND SIZING IN ACCORDANCE WITH SPECIFIC DEVICE APPLICATION.

AIR RELEASE VALVE DETAIL



NOTES:

1. AIR RELEASE VALVES TO BE INSTALLED AT HIGH POINTS ALONG WATER MAINS WHERE SPECIFICALLY INDICATED ON THE PLANS.
2. ANY VENT ORIFICE TO BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION FOR WATER MAIN SIZES.
3. ALL INCIDENTAL FITTINGS AND HARDWARE TO BE STAINLESS STEEL.
4. ALL PIPE THREADS TO BE SEALED AIR TIGHT.
5. VENT PIPE TO BE LAID ACCURATELY ON SLOPE, WITHOUT HIGH OR LOW POINTS.

ABOVE- GROUND AIR RELEASE VALVE ASSY. FOR 12 INCH AND SMALLER WATER MAIN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	DB	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

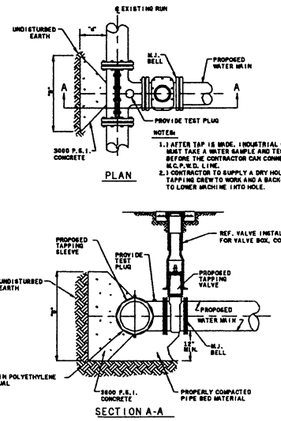
ENGINEER

Jeffrey D. Trim, PE No. 42106

Proj. No. 6035861

Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

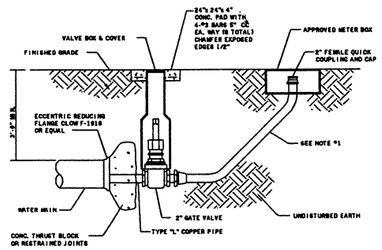


SEE THRUST BLOCK DETAILS FOR DIMENSIONS "B" & "d"

NOTES:
3.1 NO CUTS SHALL BE MADE BEFORE:
(A) A TEST OF 150 P.S.I. FOR 60 MINUTES IS MADE.
(B) ALL FITTINGS TO BE WRAPPED WITH 20 MIL VISQUEEN AT THRUST BLOCK.
(C) ALL TAPS TO BE MADE BY M.C.P.W.D.
AND MATERIAL TO BE FURNISHED BY THE INFRASTRUCTURE CONTRACTOR.

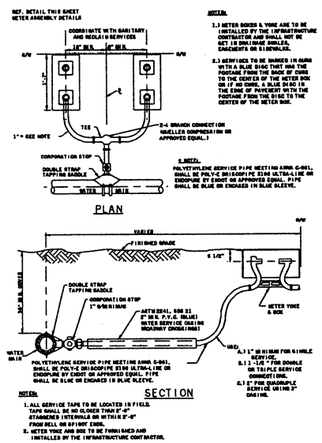
2.1 ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN BEING TAPPED & PLACED NO CLOSER THAN 2'-0" OR (3) MAIN PIPE DIAMETERS (WHICH EVER IS LARGER) FROM A JOINT OR FITTING.

TAPPING SLEEVE & VALVE BLOCKING DETAIL



NOTES:
1. POLYETHYLENE SERVICE PIPE MEETING AWWA C-901, SHALL BE POLY-E DRISCOPIPE 5100 ULTRA-LINE OR ENDOPURE BY ENDOT OR APPROVED EQUAL. PIPE SHALL BE BLUE OR ENCASED IN BLUE SLEEVE.
2. IF FUTURE WATER MAIN EXTENSION BEYOND THIS PLUG IS POSSIBLE, PROVIDE A MAIN-LINE GATE VALVE BETWEEN THIS PLUG & THE LAST SERVICE BUT THE DISTANCE BETWEEN THE MAIN-LINE VALVE & THE PLUG SHALL NOT EXCEED 40 FEET.
3. THIS DETAIL TO BE USED FOR ALL WATER MAINS 16"DIA. OR SMALLER.

END OF LINE 2" BLOW-OFF ASSEMBLY



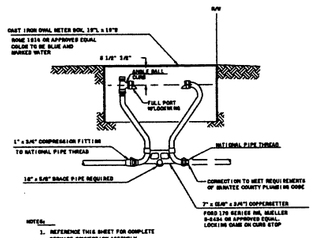
NOTES:
1. ALL SERVICE TAPS TO BE LOCATED IN FIELD. TAPS SHALL BE NO CLOSER THAN 2'-0" STAGGERED INTERVALS OR WITHIN 2'-0" FROM BELL OR SPIGOT ENDS.
2. METER YOKE AND BOX TO BE FURNISHED AND INSTALLED BY THE INFRASTRUCTURE CONTRACTOR.

TYPICAL WATER SERVICE CONNECTION

NOTES:
1.1 METER BOXES & YOKE ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, EASEMENTS OR SIDEWALKS.

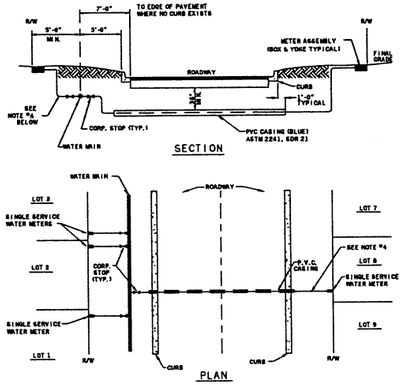
2.1 SERVICES TO BE MARKED IN CURB WITH A BLUE DIAG THAT RUN FROM THE CENTER OF THE METER BOX TO THE CENTER OF THE METER BOX OR IF NO CURB, A BLUE DIAG IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE SIAG TO THE CENTER OF THE METER BOX.

3. MATL:
POLYETHYLENE SERVICE PIPE MEETING AWWA C-901, SHALL BE POLY-E DRISCOPIPE 5100 ULTRA-LINE OR ENDOPURE BY ENDOT OR APPROVED EQUAL. PIPE SHALL BE BLUE OR ENCASED IN BLUE SLEEVE.



NOTES:
1. REFERENCE THIS SHEET FOR COMPLETE SERVICE CONNECTION ASSEMBLY.
2. FORD 170 62W-66 NL MUELLER B-24344 OR APPROVED EQUAL, COPPER 180 EXT. ANGLE VALVE, FIP OUTLET W/ 7" NUT. ALL VALVES SHALL BE FULL PORT 5/8"x 3/4", OR 3/4"-OR 1" METERS. NONE OF VALVES SHOULD NOT BE USED!
3. METER BOX AND YOKE ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, EASEMENTS OR SIDEWALKS.

METER YOKE DETAIL



NOTES:
1. WATER METER SERVICE SHALL BE LOCATED TO AVOID CONFLICT WITH FPL TRANSFORMER LOCATIONS.
2. FPL ELECTRICAL CONDUCTOR AND TRANSFORMER MAY BE ON EITHER SIDE OF THE ROADWAY.
3. ALL METER BOX & YOKE ASSEMBLIES TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR.
4. POLYETHYLENE SERVICE PIPE MEETING AWWA C-901 SHALL BE POLY-E DRISCOPIPE 5100 ULTRA-LINE OR ENDOPURE BY ENDOT OR APPROVED EQUAL. PIPE SHALL BE BLUE OR ENCASED IN BLUE SLEEVE.
5. EXACT METER LOCATIONS SHALL BE COORDINATED WITH OTHER UTILITY SERVICES.
6. WHERE POSSIBLE WATER MAINS SHALL BE LOCATED ON THE SOUTHERLY AND EASTERLY SIDE OF ROADS.

SINGLE WATER SERVICE

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	DB	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

SHEET NO. 53

PAVEMENT REMOVAL

17TH STREET WEST

SEE BAYSHORE ROAD PLAN AND PROFILE SHEET

MATCH LINE STA. 104+00

MATCH LINE STA. 110+00

104 105 106 107 108 109 110

ASPHALT

TYPE F CURB AND GUTTER

R/W

HEDGE LINE

+91.22 36.00' LT

42' LT

5' CONC. SIDEWALK

+95.00 16.00' LT

CONST. 167 LF 12" FM +95.00 16.00' RT

12" FM

5' CONG. SIDEWALK

Exist. R/W

+00 28.00' RT

TYPE F CURB AND GUTTER

BEGIN UTILITY CONSTRUCTION STA 106+15.00

1 STORY C.B. RES

1 STORY C.B. RES +40 C.B. RES 45° BEND

+15, 33' LT 6" PLUG

STOP SIGN 6TH AVE. W. 17TH ST. W.

Exist. R/W

+26.87 57.00' LT

CONC. BAG HEADWALL

6TH AVE. W

RETURN NO. 1

RETURN NO. 2

CONST. 195 LF OF 30" RCP

CONST. 167 LF OF 24" RCP

+95.00 16.00' RT

+27.79 30.00' RT

+42.21 30.00' RT

S 89°20'56" E

℄ Sur.

CONST. 164 LF OF 30" RCP

CONST. 96 LF OF 24" RCP

CONST. 16 LF OF 24" RCP

+86.29 30.00' RT

+77.55 30.00' RT

24" CMP

28.5' RT

29' RT

+57.79 29.33' RT

+57.69 35.33' RT

TCE

SHELL DRIVE

CONST. 17 LF OF 18" RCP

+73.79 29.60' RT

+73.68 35.60' RT

2 STORY STEEL +27.79 36.90' RT

UNABLE TO OPEN

CONC. +42.21 36.90' RT

SIGN. PALMETTO COMM. PLAZA

DRAINAGE ESMT.

2 STORY STEEL

CONST. 29 LF OF 30" RCP

CONST. 35 LF OF 30" RCP

CONST. 29 LF OF 30" RCP

CONST. 35 LF OF 18" RCP

+89, 2 LT 1 - 45° BEND

+85, 2 LT 1 - 45° BEND

6" PVC FM (DR-18)

TYPE F CURB AND GUTTER

5' CONC. SIDEWALK

+34.69 30.00' RT

DRAINAGE ESMT.

RETURN NO. 2

RETENTION AREA

+15.47 46.02' RT

+24.38 40.10' RT

Station Equation

Sta. 109+47.51 ℄ Sur. 17th St. W.

Sta. 300+00.00 ℄ Const. Bayshore Rd.

+27.79 45.34' RT

CONC. +27.79 60.54' RT

ASPHALT DRIVEWAY

+35.88 57.40' RT

TCE

+57.54 57.20' RT

RETURN NO. 3

+46.49 40.71' RT

DRAINAGE ESMT.

+67.79 40.06' RT

+67.79 60.07' RT

47.40' RT

RETURN NO. 4

CONST. 35 LF OF 18" RCP

N 03°39'04" E ℄ CONST.

12' 12'

40'

EL 10.90

BAYSHORE ROAD

POND 1

108

109

110

S-7 STA. 105+40.00 (14.00' RT.) CONST. TYPE P-7 MH INDEX 201 FL 8.10 (W) (E) RIM EL 12.76

S-8 STA. 107+35.00 (14.00' RT.) CONST. TYPE P-7 MH INDEX 201 FL 7.70 (E) (W) (S) RIM EL 12.50

S-9 STA. 107+35.00 (30.50' RT.) CONST. TYPE 'D' DBI INDEX 232 FL 8.00 (N) GRATE EL. 11.40

S-10 STA. 109+00.87 (17.25' LT.) CONST. TYPE P-5 INLET INDEX 272 FL 7.20 (S) (N)

STA. 108+90.10 (57.70 LT. CONST. 30" MES INDEX 201 FL 7.00

S-11 STA. 108+98.63 (17.25' RT.) CONST. TYPE P-5 INLET INDEX 211 FL 7.40 (N) (E) (W) FL 9.00 (S)

S-12 STA. 109+94.00 (33.50' RT.) CONST. TYPE 'D' DBI INDEX 232 FL 7.60 (N) GRATE EL 10.90

S-13 STA. 109+94.82 (17.25' RT.) CONST. TYPE P-5 INLET INDEX 211 FL 7.50 (S) (N) (E) (W)

BM "M. Set 4x4 CM W/Alum. Disk 98.80' LT Sta 106+11.4 EL 12.75

6th AVE. W								
RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	35'	105+94.90	16.00' LT	12.88	106+29.90	51.00' LT	12.28
2	35'	106+52.26	51.00' LT	12.28	106+87.26	16.00' LT	12.60

BAYSHORE RD.								
RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	35'	109+03.12	16.00' LT	11.96	109+38.01	49.17' LT	11.68
2	35'	109+01.41	16.00' RT	11.99	109+35.96	51.45' RT	11.79
3	35'	109+57.69	50.10' RT	11.56	109+92.68	16.00' RT	11.72
4	35'	109+62.30	52.83' LT	11.69	109+95.42	16.00' LT	11.72

PI = +95.00 EL = 13.20

+0.3%

-0.3%

℄ Existing Profile

PROFILE GRADE

Exist. 12" WM

Exist. 12" NPW

Exist. BT

Exist. 2" Gas

Exist. 12" FM

18" PIPE

36" MIN

8" PVC

30" RCP

24" PIPE

8" PIPE

Const. 24" PIPE

Const. 30" PIPE

FL 8.10

FL 8.10

FL 7.70

FL 7.70

6" PVC FM

FL 9.00

FL 7.40

FL 7.40

FL 7.50

+70.00, EL = 12.08

12.05

12.04

12.84

150' VC

12.61

13.11

BEGIN UTILITY CONSTRUCTION STA 106+15.00

REVISION DESCRIPTION & DATE	BY	NO.

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM. PE 42106		

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY. FLORIDA

WADETRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634

Engineer of Record: Jeffrey D. Trim , PE No.: 42106

Certificate of Authorization No.: 3952

ENGINEER

Jeffrey D. Trim. PE No. 42106

Proj. No. 6035261

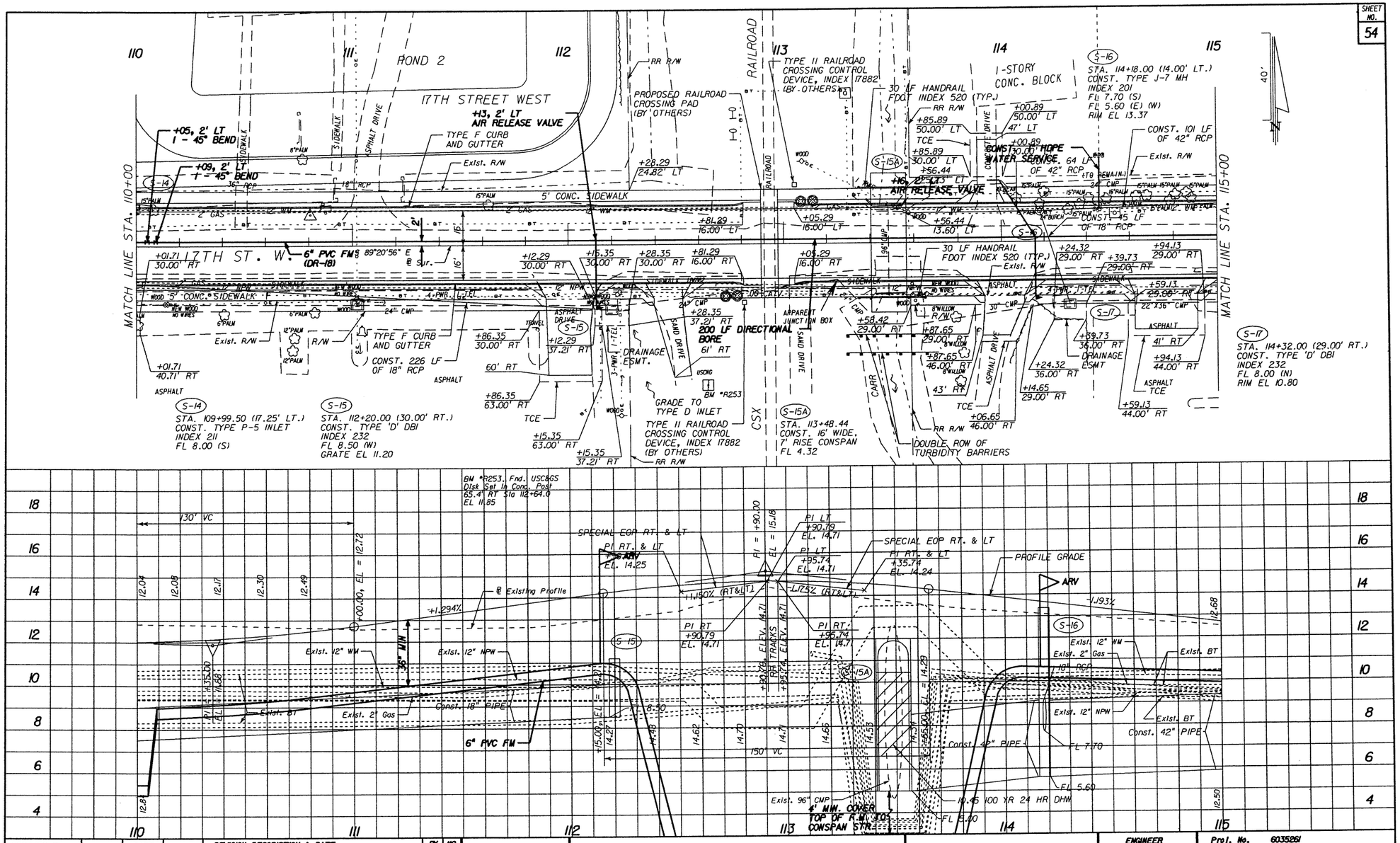
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/11/2009

DESIGN FILE: P:\Mta2080\0in\CADD-data\utsepr-d02.dgn

PLOT FILE: .PLOTFILE.



				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SAR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

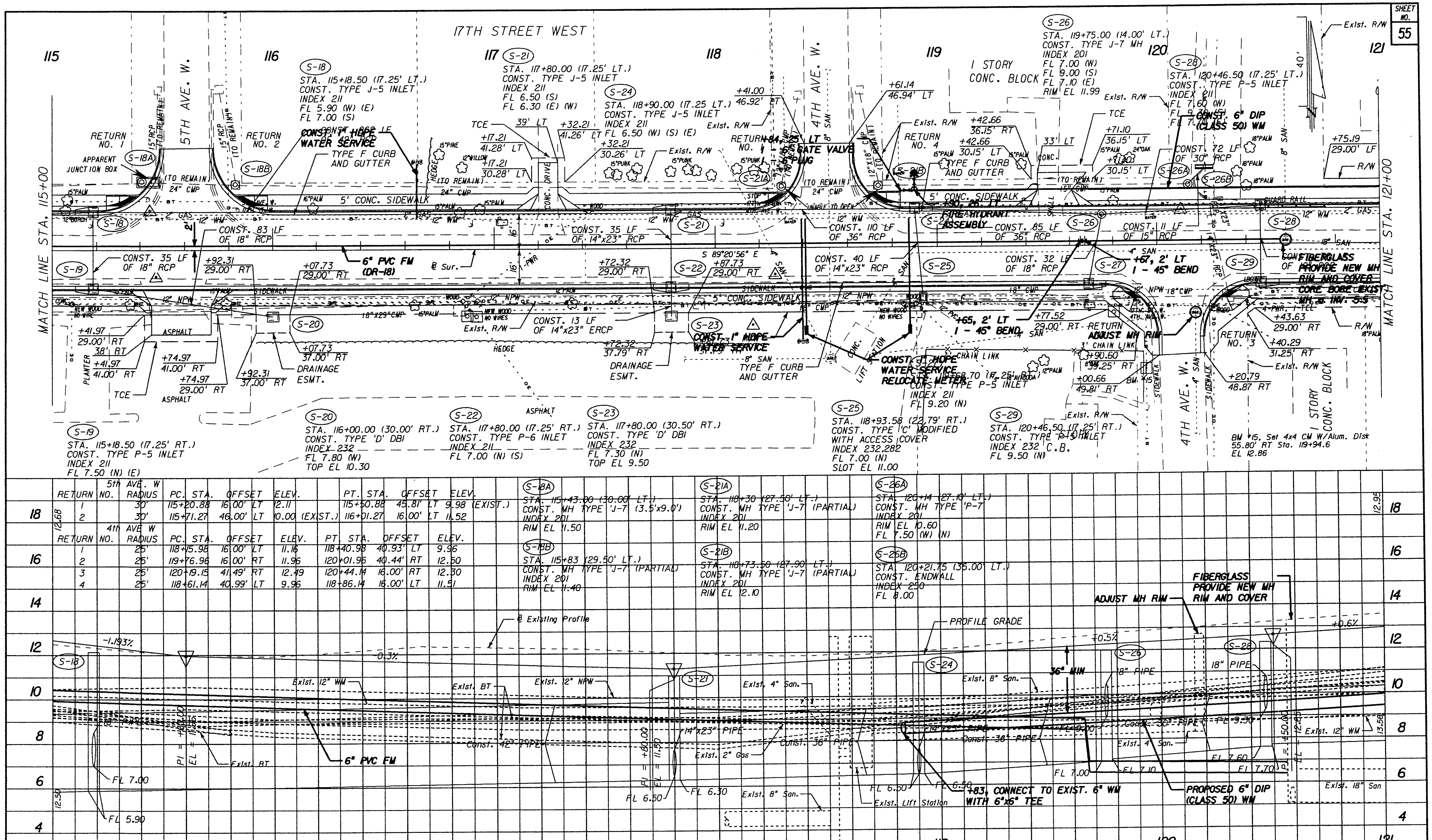
WADETRIM
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/12/2009
DESIGN FILE: P:\Mua2888\dlm\CADD-data\ucopr03.dgn
PLOT FILE: .PLOTFILE.



5th AVE. W

RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	30'	115+20.88	16.00' LT	12.11	115+50.88	45.81' LT	9.98 (EXIST.)
2	30'	115+71.27	46.00' LT	10.00 (EXIST.)	116+01.27	16.00' LT	11.52

4th AVE W

RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	118+15.98	16.00' LT	11.16	118+40.98	40.93' LT	9.96
2	25'	119+76.96	16.00' RT	11.96	120+01.96	40.44' RT	12.50
3	25'	120+19.15	41.49' RT	12.49	120+44.14	16.00' RT	12.30
4	25'	118+61.14	40.99' LT	9.96	118+86.14	16.00' LT	11.51

SHEET NO. 55

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE | BY | NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

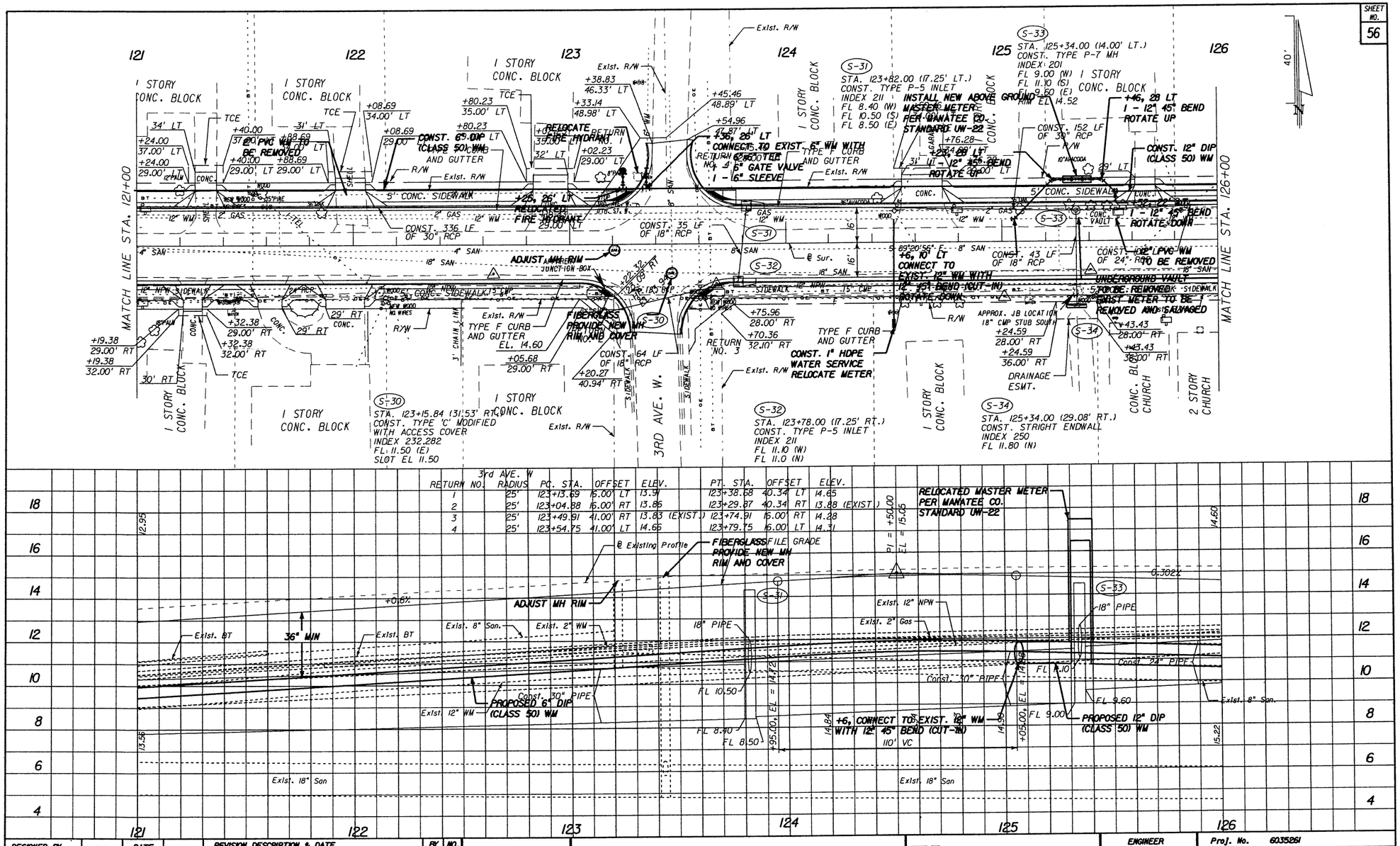
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mte2080\01m\CADD-data\utcprd04.dgn PLOT FILE: .PLOTFILE.

SHEET NO. 56



PLOT FILE: PLOTFILE.
DESIGN FILE: P:\Mta2008\0in\CADD-data\utcpr085.dgn
PLOT DATE: 2/11/2009

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

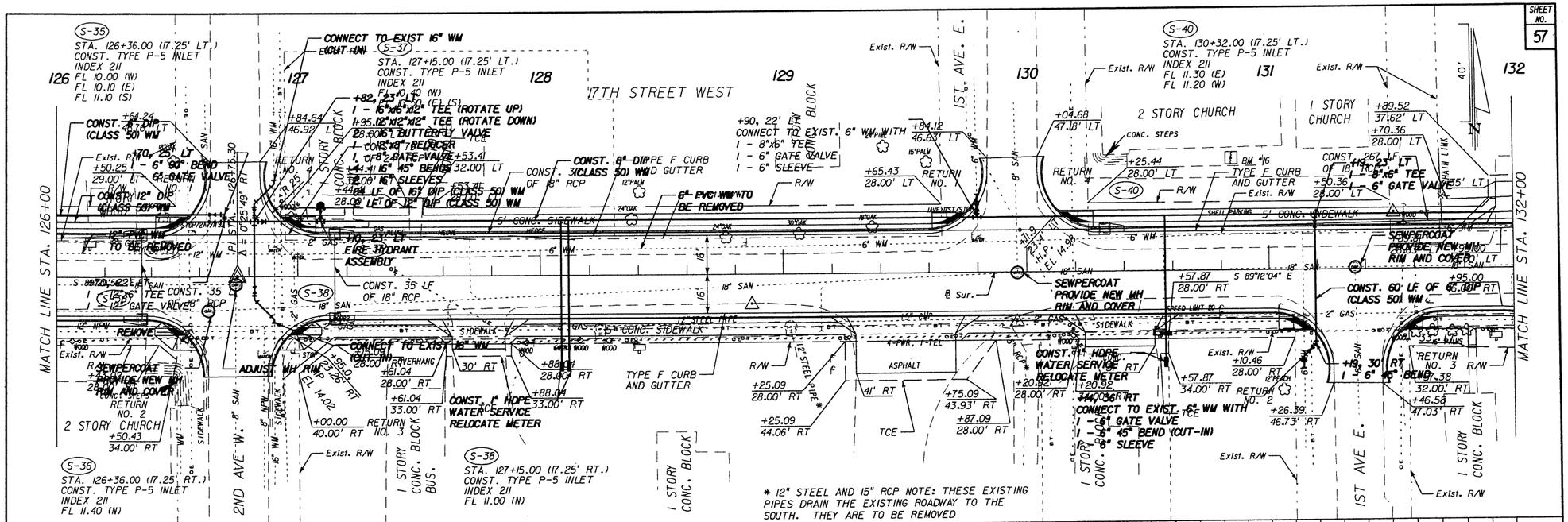
WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES



DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mke2008\01\n\CADD-data\utcpr-d86.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 58

17TH STREET WEST

MATCH LINE STA. 132+00

MATCH LINE STA. 138+00

2ND AVE. E.

3RD. AVE. E.

1-STORY CONC. BLOCK BUS.

SCHOOL DRIVE

(S-41) STA. 132+93.24 (21.39' LT.) CONST. TYPE P-5 INLET INDEX 211 FL 11.90 (S) FL 11.80 (W)

(S-42) STA. 133+38.61 (24.74' RT.) CONST. TYPE P-5 INLET INDEX 211 FL 12.10 (N)

(S-43) STA. 136+17.00 (24.80' RT.) CONST. TYPE P-5 INLET INDEX 211 FL 10.60 (NE)

(S-44) STA. 136+36.00 (21.70' LT.) CONST. TYPE P-5 INLET INDEX 211 FL 10.30 (SW) FL 10.20 (E)

(S-45) STA. 136+52.50 (16.00' LT.) CONST. TYPE P-7 MH INDEX 201 FL 9.00 (E) (N) FL 10.00 (W)

(S-46) STA. 137+00.00 (16.70' LT.) CONST. TYPE P-7 MH INDEX 201 FL 8.90 (E) (W) FL 11.60 (N)

2nd AVE. E RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	35'	133+01.52	20.49' LT	14.94	133+35.03	56.86' LT	14.51
2	50'	133+40.93	23.61' RT	14.73	133+88.32	73.45' RT	14.33
3	50'	134+08.35	72.91' RT	14.38	134+58.34	23.50' RT	14.30
4	35'	133+56.74	53.96' LT	14.60	133+91.71	20.50' LT	14.61

3rd AVE. E (SCHOOL ENTRANCE) RETURN NO.	RADIUS	PC. STA.	OFFSET	ELEV.	PT. STA.	OFFSET	ELEV.
1	25'	136+38.93	20.50' LT	13.70	136+63.93	45.27' LT	14.00
2	45'	136+19.30	23.50' RT	13.72	136+64.26	66.84' RT	14.35
3	45'	136+89.61	66.80' RT	14.35	137+34.58	23.50' RT	13.29
4	25'	136+87.38	45.16' LT	14.00	137+12.38	20.50' LT	13.43

SEWPERCOAT PROVIDE NEW MH RIM AND COVER

CONST. 80 LF OF 6" DIP (CLASS 50) WM

6" PVC WM TO BE REMOVED

CONST. 50 LF OF 15" RCP

CONST. 263 LF OF 18" RCP

CONST. 65 LF OF 18" RCP

CONST. 1" HDPE WATER SERVICE RELOCATE METER

CONST. 8" DIP (CLASS 50) WM

CONST. 8"x6" TEE

CONST. 6" GATE VALVE

CONST. 6" 45° BEND (CUT AND

CONST. 6" SLEEVE

CONST. 1" HDPE CONC. BLOCK RES. WATER SERVICE RELOCATE METER

TYPE F CURB AND GUTTER

RETURN NO. 1

RETURN NO. 2

RETURN NO. 3

RETURN NO. 4

Exist. 18" San

Exist. 2" Gas

Exist. 6" WM

Exist. BT

Const. 18" PIPE

FL 11.90

PROFILE GRADE

0.368%

36" MIN (TYP)

PROPOSED 8" DIP (CLASS 50) WM

Const. 15" PIPE

FL 10.30

FL 10.20

FL 10.00

FL 9.00

FL 8.90

Exist. 15" Pipe

18"x18" Entr. Pipe

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mtce2080\01\m\CADD-data\rtscp-d07.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 59

17TH STREET WEST

+65, 27' LT
CONNECT TO EXIST. 6" WM WITH
1 - 8"x6" REDUCER
1 - 6" GATE VALVE
1 - 6"x6" BEND
1 - 6" SLEEVE

CONST. 8" DIP TYPE F CURB (CLASS 50) WM AND GUTTER
34' LT

6" PVC WM TO BE REMOVED

SEWPERCOAT
PROVIDE NEW MH RIM AND COVER

TYPE F CURB AND GUTTER

END PROJECT
STA. 139+52.00

MATCH LINE STA. 138+00

END UTILITY CONSTRUCTION
STA 140+00

17TH STREET EAST

IMPROVEMENTS FROM MANATEE COUNTY PROJECT 6035260

BM #01

Station Equation
Sta. 140+61.09 @ Sur. 17th St. W
Sta. 284+42.30 @ Sur. U.S. 41

℄ Sur. Curve 2 Data
P.I. STA. 289+97.14
Δ = 40° 15' 20" LT.
D= 1° 10' 00"
T= 1799.90'
L= 3450.48'
R= 4911.07'
P.C.= STA. 271+97.24
P.T.= 306+47.72
e = NC

BM #01.
Fnd 4"x4" Conc. Monument
W/4"BOT Brass Disk
57.01 RT Sta 30+91.5
Elev. 12.99

SEWPERCOAT
PROVIDE NEW MH RIM AND COVER

END UTILITY CONSTRUCTION
STA 140+00

IMPROVEMENTS FROM MANATEE COUNTY PROJECT 6035260

℄ Existing Profile

-0.366%

36" MIN (TYP)

PROFILE GRADE

15" PIPE

Exist. 2" Gas

Exist. 15" Pipe

Exist. 6" WM

PROPOSED 6" DIP (CLASS 50) WM

FL 9.00

FL 9.00

END PROJECT
STA. 139+52.00

+5, CONNECT TO EXIST. 6" WM WITH 6" SLEEVE

Exist. 18" San

138 139 140

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

MANATEE COUNTY UTILITIES

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2880\Blm\CADD-data\utcpr-d08.dgn
PLOT FILE: .PLOTFILE.

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			62		63		64		65		66		67		68		69						
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
700-20-11	Sign Single Post (Less than 12 SF)	AS	4		7		4		7		2		8		4		2		38				
700-20-12	Sign Single Post (12-20 SF)	AS	2		0		0		1		0		3		6		2		14				
700-20-41	Sign Single Post, (Relocate)	AS	2		3		0		5		0		4		3		2		19				
706-3	Retro-Reflective Pavement Markers	EA	46		40		24		34		32		36		88		24		324				
711-11-160	Pavement Messages, Thermoplastic (School)	EA	0		0		0		0		0		1		0		1		2				
711-11-160	Pavement Messages, Thermoplastic (R.R. Markings)	EA	0		0		4		0		0		0		0		0		4				
711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	EA	3		3		4		3		2		4		4		1		24				
711-11-170	Directional Arrows, Thermoplastic	EA	3		0		0		0		0		0		2		1		6				
711-11-151	Guide Lines, Thermoplastic (White)	LF	210		224		137		194		100		275		71		50		1261				
711-11-241	Skip Traffic Stripe, 10'-30' Yellow, Thermoplastic	LF	0		0		0		354		431		286		0		0		1071				
711-11-123	Solid Traffic Stripe, 12" White, Thermoplastic (Crosswalk)	LF	523		320		0		234		144		312		636		0		2171				
711-11-125	Solid Traffic Stripe, 24" White, Thermoplastic (Stop Bar)	LF	75		58		80		41		25		78		188		0		545				
711-11-224	Solid Traffic Stripe, 18" Yellow, Thermoplastic (Chevron)	LF	39		17		0		0		0		0		152		10		208				
711-11-111	Solid Traffic Stripe, 6" White, Thermoplastic	NM	0.085		0.132		0.158		0.148		0.145		0.123		0.108		0.083		0.982				
711-11-211	Solid Traffic Stripe, 6" Yellow, Thermoplastic	NM	0.206		0.288		0.183		0.123		0.076		0.189		0.379		0.078		1.522				

DESIGN FILE: P:\Mta2008\Gin\CADD-data\tabsqe01.dgn PLOT FILE: .PLOTFILE.

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE #42106					

MANATEE COUNTY FLORIDA

17th STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035251
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

SHEET NO. 61

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS 70 PLAN	70 FINAL	71 PLAN	71 FINAL	TOTAL THIS SHEET PLAN	TOTAL THIS SHEET FINAL	GRAND TOTAL PLAN	GRAND TOTAL FINAL	REF. SHEET
700-20-11	Sign Single Post (Less than 12 SF)	AS	4		2		6		44		
700-20-12	Sign Single Post (12-20 SF)	AS	0		1		1		15		
700-20-41	Sign Single Post, (Relocate)	AS	0		0		0		19		
706-3	Retro-Reflective Pavement Markers	EA	28		14		42		366		
711-11-160	Pavement Messages, Thermoplastic (School)	EA	0		0		0		2		
711-11-160	Pavement Messages, Thermoplastic (R.R. Markings)	EA	0		0		0		4		
711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	EA	0		0		0		24		
711-11-170	Directional Arrows, Thermoplastic	EA	0		0		0		6		
711-11-151	Guide Lines, Thermoplastic (White)	LF	0		0		0		1261		
711-11-241	Skip Traffic Stripe, 10'-30' Yellow, Thermoplastic	LF	0		0		0		1071		
711-11-123	Solid Traffic Stripe, 12" White, Thermoplastic (Crosswalk)	LF	118		0		118		2289		
711-11-125	Solid Traffic Stripe, 24" White, Thermoplastic (Stop Bar)	LF	19		0		19		564		
711-11-224	Solid Traffic Stripe, 18" Yellow, Thermoplastic (Chevron)	LF	0		0		0		208		
711-11-111	Solid Traffic Stripe, 6" White, Thermoplastic	MM	0.208		0.100		0.308		1.290		
711-11-211	Solid Traffic Stripe, 6" Yellow, Thermoplastic	MM	0.216		0.100		0.316		1.838		

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE #42106					

MANATEE COUNTY FLORIDA

17th STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

SHEET NO. 62

98 | 99 | 100 | BUSINESS U.S. 41 | 101 | 102 | 103 | 7th AVE W. | 104

M3-1 24x12 | M4-3 24x12 | M1-4 24x24 | M4-5 24x12 | M6-3 21x15 | M1-4 24x24
NORTH BUSINESS 41 TO 19
700-20-12

M3-1 24x12 | M4-3 24x12 | M1-4 24x24 | M6-1R 21x15
NORTH BUSINESS 41
SOUTH BUSINESS 41
M3-3 24x12 | M4-3 24x12 | M1-4 24x24 | M6-1L 21x15
700-20-12

17th STREET W.

STA. 100+44
STA. 100+80
STA. 100+80

R3-16 | 700-20-11 | 24x30
LANE ENDS

STOP R1-1 | 700-20-11 | 30x30
STA. 103+09

6" DBL. YELLOW W/BI-DIR. YELLOW RPMS @ 40 C/C
6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C
2'-4' SKIP WHITE
700-20-41
STA. 103+80

6' TYP.
12" WHITE
24" WHITE
2'-4' SKIP WHITE
6" WHITE W/BI-DIR. C/R RPM'S @ 20' O.C.
6" WHITE
DIRECTIONAL ARROWS (TYP.)
2'-4' SKIP WHITE
BIKE LANE MARKINGS (TYP.)

136' LT
36' LT
6'
12" WHITE
24" WHITE
6" WHITE
℄ CONST.
18" YELLOW W/BI-DIR. YELLOW RPM'S
12" WHITE
6'
36' RT
111' RT
24" WHITE
STA. 103+50
STOP R1-1 | 700-20-11 | 30x30

+51.3 | +81.4 | +12.1 | +05.4 | +26.3 | +43.6 | +65.3 | +77 | +89.4 | +91.9 | +78.6 | +81 | +31 | +69 | +74 | +71
12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12'
2.5% | 4% | d 5.8

BEGIN SIGNING AND PAVEMENT MARKING STA. 99+70.74

BIKE LANE MARKINGS (TYP.)
6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C
18" YELLOW W/BI-DIR. YELLOW RPM'S
6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

R3-16 | 700-20-11 | 24x30
LANE AHEAD

ADOPT-A-ROAD SIGN
LITTER CONTROL
Trash Trucks Suck
Salt Cedar
700-20-41

8th AVE. W

MATCH LINE STA. 104+00

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009 | DESIGN FILE: P:\Mar2008\81im\CADD-data\plansp81.dgn | PLOT FILE: PLOTFILE.

SHEET NO. 63

104 105 106 107 108 109 110

6th AVE W.

130' LT

17th STREET W.

STA. 107+20

STA. 108+60

SEE BAYSHORE ROAD SIGNING AND PAVMENT MARKING

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

6" WHITE

24" WHITE

12" WHITE

2'-4' SKIP WHITE

BIKE LANE MARKINGS (TYP.)

30' LT

6'

STOP R1-1 700-20-11 30x30

STA. 106+16

W14-3 36x48x48 NO PASSING ZONE

R2-1 700-20-11 24x30 SPEED LIMIT 30

+19 12' +96 +15.3 +62.4 +94.3 +87.3 +37.3 +50.7 +00.7 +51.4 +01.4 +92.6 +95.4

℄ CONST.

MATCH LINE STA. 104+00

MATCH LINE STA. 110+00

18" YELLOW W/BI-DIR. YELLOW RPM'S

STA. 104+96

W6-3 700-20-11 36x36

STA. 105+60

700-20-41

STA. 107+00

FUNCTIONAL ROUTE

700-20-41

STA. 107+80

DO NOT PASS R4-1 700-20-11 24x30

SPEED LIMIT 30 R2-1 700-20-11 24x30

STA. 109+71

STOP R1-1 700-20-11 30x30

STA. 109+70

600 17th STREET W. PUBLIC WORKS

700-20-41

130' RT

+30 RT

40'

N

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mta2888\0lm\CADD-data\plansp02.dgn PLOT FILE: PLOTFILE.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADE TRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634

Engineer of Record: Jeffrey D. Trim , PE No.: 42106

Certificate of Authorization No.: 3962

ENGINEER

Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261

Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

SHEET NO. 64

110 111 112 113 114 115

40'

17th STREET W.

CSX RAILROAD

MATCH LINE STA. 110+00

MATCH LINE STA. 115+00

2'-4' SKIP WHITE

6" WHITE

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

24" WHITE

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

6" WHITE

24" WHITE

STA. 114+14

W10-1

700-20-11

18" DIA.

STA. 114+64

W10-1

700-20-11

36" DIA.

PAVEMENT MESSAGES (RR) (TYP.)

BIKE LANE MARKING (TYP.)

℄ CONST.

PAVEMENT MESSAGES (RR) (TYP.)

+45.4 12' +23 +79.4 +80.6 +73 +81 ±05 ±14 +53.6 +98.1

BIKE LANE MARKINGS (TYP.)

6" WHITE

24" WHITE

6" WHITE

24" WHITE

6" WHITE

STA. 111+23

STA. 111+73

MULTIPLE BUSINESS SIGN (TO REMAIN)

W10-1

700-20-11

36" DIA

W10-1

700-20-11

18" DIA

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADETRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER

Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I

Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mse2008\01in\CADD-data\plansp03.dgn PLOT FILE: PLOTFILE.

SHEET NO. 65

115 | 116 | 117 | 118 | 119 | 120 | 121

5th AVE W. | 17th STREET W. | 4th AVE W

MATCH LINE STA. 115+00 | MATCH LINE STA. 121+00

R4-1 700-20-11 24x30 — DO NOT PASS — STA. 115+10

R1-1 700-20-11 30x30 — STOP — STA. 115+40

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

STREET NAME SIGNS 700-20-41

2'-4' SKIP WHITE

24" WHITE

12" WHITE

30' LT

6'

+21.6 | +34.4 | +78.8 | +01.2 | +51.2 | 12' | 4' | ±16 | 12' | ±86.1 | ±36.1 | ±24.5 | ±74.5 | +45.6

℄ CONST.

700-20-41 — STA. 117+00

SPEED LIMIT 30 — R2-1 700-20-11 24x30 — STA. 118+00

10'-30' SKIP YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

6" WHITE

R1-1 700-20-11 30x30 — STOP — STA. 118+33

130' LT

30'

6'

24" WHITE

12" WHITE

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40 C/C

10'-30' SKIP YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

2'-4' SKIP WHITE

6" WHITE

10'-30' SKIP YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

6" WHITE

BIKE LANE MARKINGS (TYP.)

STA. 119+00

700-20-41

2'-4' SKIP WHITE

STREET NAME SIGNS 700-20-41

12" WHITE

30' RT

6"

24" WHITE

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

4th AVE W.

130' RT

STA. 120+25

R1-1 700-20-11 30x30 — STOP

6" WHITE

STA. 115+80

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

700-20-41

STA. 115+10

PASS WITH CARE — R4-2 24x30 700-20-12

W14-3 PASSING ON PASSING ZONE 36x48x48

STA. 118+00

SPEED LIMIT 30 — R2-1 700-20-11 24x30

DESIGN FILE: P:\Mtw2088\Bim\CADD-data\plansp84.dgn PLOT FILE: .PLOTFILE.

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41

MANATEE COUNTY, FLORIDA

WADETRIM

8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER

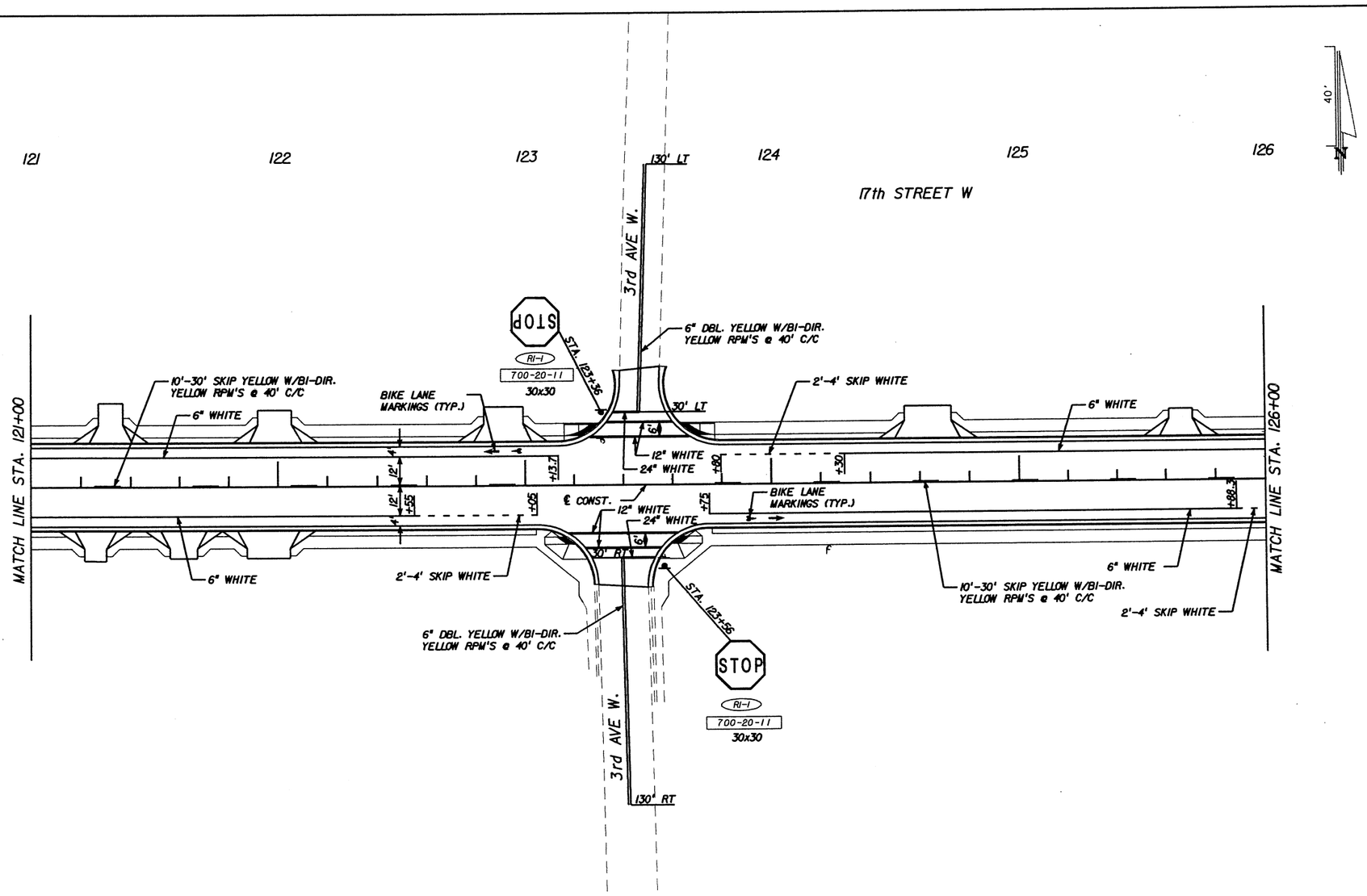
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035861

Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

SHEET NO. 66



				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mx2800\03\m\CADD-data\plans03.dgn PLOT FILE: .PLOTFILE.

SHEET NO. 67

126 127 128 129 130 131 132

17th STREET W

2nd AVE W.

1st AVE W.

130' LT

130' RT

MATCH LINE STA. 126+00

MATCH LINE STA. 132+00

STOP
R1-1
700-20-11
30x30

PALMETTO CITY LIMITS
700-20-41
700-20-11

STA. 126+57

STA. 128+40

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

700-20-41
NO DUMPING PENALTY MAX FINE $ / OR 60 DAYS

STA. 128+90

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

STOP
R1-1
700-20-11
30x30

STA. 129+77

W14-3
36x48x48
ROAD NARROWS AHEAD

R4-2
24x30
PASS WITH CARE

STA. 130+30

PAVEMENT MESSAGES (SCHOOL)

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

W6-3
700-20-11
36x36

FTP-36
700-20-11
24x30
END SCHOOL ZONE

STA. 131+71

STA. 131+97

40'

6' 30' LT

6' 30' RT

6" WHITE

2'-4' SKIP WHITE

12" WHITE

24" WHITE

BIKE LANE MARKINGS (TYP.)

℄ CONST.

10'-30' SKIP YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

2'-4' SKIP WHITE

+39.3 +38.3 +09.7 +59.7 +12.6 +8 +93 +59 +29.6 +79.6 +51.3 +01.3 +71.6 +95 +96

STA. 126+02

SPEED LIMIT 30
R2-1
700-20-11
24x30

700-20-41

STA. 126+35

STA. 126+94

STOP
R1-1
700-20-11
30x30

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

STA. 130+10

DO NOT PASS
R4-1
700-20-11
24x30

STA. 130+60

AHEAD
W16-9 S1-1
36x20 36x36
700-40-2

2'-4' SKIP WHITE

STA. 131+00

700-20-41

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

STA. 131+54

STOP
R1-1
700-20-11
30x30

STA. 131+96

FTP44
30x36

SCHOOL SPEED LIMIT 20
SCHOOL DAYS 8:15 - 8:45 3:20 - 3:50
700-20-12

FTP32
24x36

DESIGN FILE: P:\Mts2008\01m\CADD-data\plansp06.dgn PLOT FILE: PLOTFILE.

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

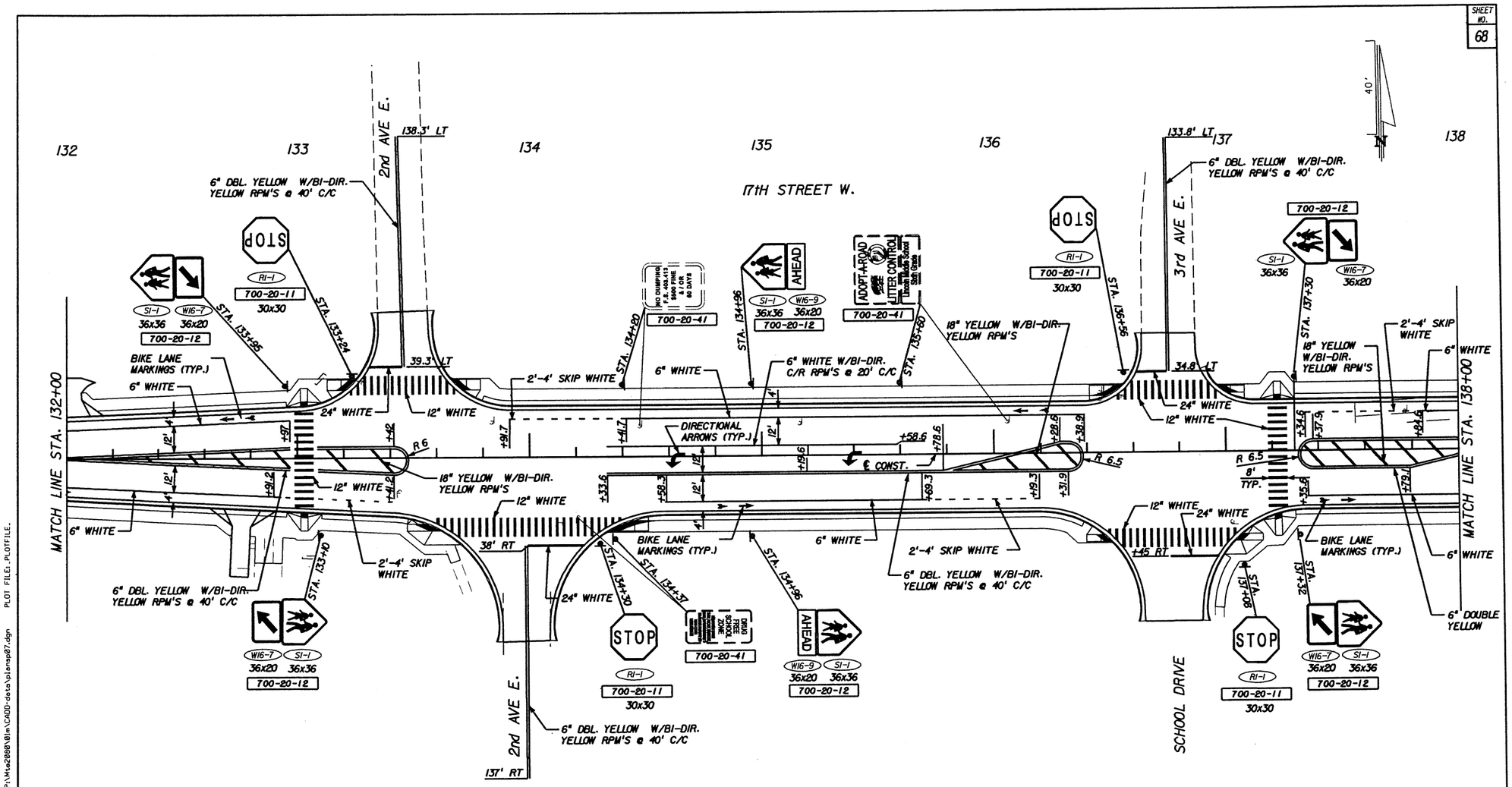
WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

SHEET NO. 68



				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2080\0in\CADD-data\plansp07.dgn
PLOT FILE: PLOTFILE.

17th STREET W.

17th STREET E.

138

139

140

U.S. 41

40'

SCHOOL SPEED LIMIT 20 — FTP44 30x36

SCHOOL DAYS 8:15 - 9:15 3:20 - 3:50 — FTP32 24x36

700-20-12

700-20-41

NO DUMPING F.S. 403.413 $500 FINE &/OR 60 DAYS IN JAIL

SPEED LIMIT 30 — R2-1 — 700-20-11 — 24x30

S1-1 36x36 — W16-9 AHEAD 36x20 — 700-20-12

STA. 138+40

STA. 139+24

STA. 138+10

STA. 138+40

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

BIKE LANE MARKINGS (TYP.)

6" WHITE

24" WHITE

+27.4

SCHOOL

PAVEMENT MESSAGES (SCHOOL) (TYP.)

+78

12'

12'

12'

+29.1

+49.1

+44.1

MATCH LINE STA. 138+00

6" WHITE

STA. 138+20

6" WHITE W/BI-DIR. C/R RPM'S @ 20' C/C

+52 MEET EXIST MARKINGS

2'-4' SKIP WHITE

NO DUMPING F.S. 403.413 $500 FINE &/OR 60 DAYS IN JAIL

END SCHOOL ZONE

700-20-41

FTP-36

700-20-11

24x30

18" YELLOW W/BI-DIR. YELLOW RPM'S

PALMETTO CITY LIMIT

TO REMAIN

ONLY

ONLY

ONLY

Station Equation
Sta. 140+61.09 @ Sur. 17th St. W.
Sta. 284+42.30 @ Sur. U.S. 41

END SIGNING AND PAVEMENT MARKING
STA. 139+94.10

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BOG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BOG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM. PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2030\0in\CADD-data\plansp08.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 70

40'

17TH STREET WEST

BAYSHORE ROAD

Exist. R/W

301 302 303 304 305

W14-3
700-20-11
36x48x48
NO PASSING ZONE

STOP
R1-1
700-20-11
30x30

STA. 300+30

STA. 301+00

24" WHITE

6" WHITE

℄ CONST.

12'

12'

4.5'

+30'

6'

12" WHITE

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @40' C/C

6" WHITE

STA. 302+00

STA. 301+00

DO NOT PASS
R4-1
700-20-11
24x30

SPEED LIMIT 40
R2-1
700-20-11
24x30

Exist. R/W

MATCH LINE STA. 306+00

4

4

PLOT DATE: 2/12/2009 DESIGN FILE: P:\Mtx2088\0in\CADD-data\plansp09.dgn PLOT FILE: _PLOTFILE_

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

40'

MATCH LINE STA. 306+00

SPEED LIMIT 40
R2-1
700-20-11
24x30
STA. 306+00

308

309

310

BAYSHORE ROAD

6" DBL. YELLOW W/BI-DIR. YELLOW RPM'S @ 40' C/C

3 PWR 2 TEL

18" RCP (TO REMAIN)

24" RCP (TO REMAIN)

DBI

6" WHITE

12" CWP

ASPHALT

SHELL

CRUSHED CMP (TO REMAIN)

STA. 310+00

W1-2L
700-20-12
36x36

R4-1
24x30
DO NOT PASS

20TH ST.

(057 / BAYSHORE)

END SIGNING AND PAVEMENT MARKING
STA. 310+00.00

12'

10'

±30

℄ CONST.

ASPHALT (TO REMAIN)

18" RCP

Exist. R/W

15'PALM

12'PALM

24'OAK

35'PINE

NO PASSING ZONE

W14-3
700-20-11
36x48x48

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authortzation No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

SIGNING AND PAVEMENT MARKING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mar2008\0in\CADD-data\plansp10.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 72

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS 75 PLAN	75 FINAL	TOTAL THIS SHEET PLAN	TOTAL THIS SHEET FINAL	GRAND TOTAL PLAN	GRAND TOTAL FINAL	REF. SHEET
555-1-2	Directional Bore (6" TO <12")	LF	90		90		90		
630-1-12	Conduit (F&I) (Underground)	LF	265		265		265		
630-1-22	Conduit (Furnish) (Underground)	LF	130		130		130		
632-7-1	Cable (Signal) (F&I)	PI	1		1		1		
635-1-11	Pull & Junction Boxes	EA	9		9		9		
649-31-202	M/Arm (F&I) (E3-T2)	EA	2		2		2		
650-51-313	Signal Traffic, 12" (F&I) (3 Sct 1Way) (Special)	AS	2		2		2		
650-51-513	Signal Traffic, (F&I) (5 Sct 1Way) (Special)	AS	2		2		2		
653-191	Signal Pedestrian (LED) (Countdown) (1-Way)	AS	4		4		4		
659-101	Signal Head Auxiliaries (Back Plates 3 Sct)	EA	2		2		2		
659-118	Signal Head Auxiliaries (Back Plates 5 Sct)	EA	2		2		2		
660-2-102	Loop Assembly (F&I) (Type B)	AS	4		4		4		
660-2-106	Loop Assembly (F&I) (Type F)	AS	6		6		6		
665-13	Detector Pedestal (F&I) (Det w/sign only)	EA	4		4		4		
670-5-410	Traffic Cntrl Assembly (Modify)	AS	1		1		1		
690-10	Remove Traffic Signal Head Assembly	EA	4		4		4		
690-20	Remove Pedestrian Assembly	EA	4		4		4		
690-32-1	Pole Removal (Shallow) (Direct Burial)	EA	2		2		2		
690-70	Remove Pedestrian Detector Assembly	EA	4		4		4		
690-90	Remove Cabling and Conduit	PI	1		1		1		
690-100	Remove Miscellaneous Signal Equipment	PI	1		1		1		

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	FAS/PJS	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2008

SIGNALIZATION

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2060\0in\CADD-data\Y460SG01.dgn PLOT FILE: PLOTFILE.

MANATEE COUNTY GENERAL NOTES

1. CONTACT MANATEE COUNTY PROJECT MANAGEMENT DEPARTMENT BEFORE STARTING WORK, CHECKING FOR UPDATES ON STANDARDS OR OTHER INFORMATION.

2. ONE WEEK PRIOR TO THE BEGINNING OF THE TRAFFIC SIGNAL INSTALLATION, LOOP CUTTING OR TURN ON OF A NEW SIGNAL, THE CONTRACTOR SHALL NOTIFY:

   MANATEE COUNTY PROJECT MANAGEMENT DEPARTMENT
   1026 26TH AVENUE EAST
   BRADENTON, FLORIDA 34208
   PHONE: (941) 708-7450

   MANATEE COUNTY TRAFFIC MANAGEMENT DEPARTMENT
   1026 26TH AVENUE EAST
   BRADENTON, FLORIDA 34208
   PHONE: (941) 708-7463

3. ALL F.D.O.T. SPECIFICATIONS WILL BE FOLLOWED, EXCEPT WHEN F.D.O.T. AND MANATEE COUNTY SPECIFICATIONS DIFFER, MANATEE COUNTY SPECIFICATIONS TAKE PRECEDENCE. IF MANATEE COUNTY IS MORE STRINGENT. MANATEE COUNTY TRAFFIC SIGNAL SPECIFICATIONS WILL BE SUPPLIED TO THE CONTRACTOR BY THE PROJECT MANAGEMENT DEPARTMENT.

4. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR THE SIGNAL MAINTENANCE, TIMING AND OPERATION OF ANY AND ALL SIGNALS AND SIGNAGE FROM THE COMMENCEMENT TO THE ACCEPTANCE OF THE PROJECT (I.E.: EXISTING LOOPS CUT, SYSTEM COMMUNICATION TERMINATED, LANE OR PAVEMENT MODIFICATIONS, PEDESTRIAN MODIFICATIONS). MANATEE COUNTY WILL ASSIST IN PROVIDING EXISTING SYSTEM TIMINGS WHEN POSSIBLE.

5a. THE SIGNAL CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO TROUBLE CALLS TWENTY-FOUR HOURS A DAY, SEVEN DAYS A WEEK FOR THE DURATION OF THE PROJECT. THE PRIME CONTRACTOR SHALL PROVIDE CONTACT NUMBERS OF THE SIGNAL CONTRACTOR TO THE TRAFFIC MANAGEMENT DIVISION AT COMMENCEMENT OF PROJECT. FURTHERMORE, WITHIN TWO HOURS OF NOTIFICATION OR DOCUMENTED ATTEMPTED NOTIFICATIONS, THE SIGNAL CONTRACTOR SHALL BE ON SITE MAKING NEEDED REPAIRS OR MODIFICATIONS. FAILURE TO MEET THE TIME REQUIREMENTS SHALL GIVE THE COUNTY, AT ITS DISCRETION, THE RIGHT TO REQUEST ASSISTANCE FROM THE MANATEE COUNTY SHERIFF'S DEPARTMENT TO CONTROL TRAFFIC FOR THE PERIOD OF TIME UNTIL THE CONTRACTOR RESPONDS AND MAKES THE NEEDED REPAIRS, THE COST FOR THE MANATEE COUNTY SHERIFF'S OFFICE SHALL BE THE RESPONSIBILITY OF THE PRIME CONTRACTOR.

5b. THE SIGNAL CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES IN WRITING WITHIN 48 HOURS OF THE CONTRACT START DATE. THE CONTRACTOR SHALL GIVE THE LOCATION, START DATE, AND EMERGENCY CONTACT NUMBERS FOR AFTER HOURS REPAIRS.

   MANATEE COUNTY TRAFFIC MANAGEMENT
   2904 12TH ST. CT. E.
   BRADENTON, FLORIDA 34208
   PHONE: (941) 708-7510

   FLORIDA HIGHWAY PATROL
   P.O. BOX 20009
   BRADENTON, FL 34203
   (941) 751-7646

   FLORIDA HIGHWAY PATROL
   P.O. BOX 20009
   BRADENTON, FL 34203
   (941) 751-7646

6. EXISTING SIGNALIZATION SHALL REMAIN IN PLACE TO THE EXTENT POSSIBLE, INCLUDING VEHICLE ACTUATION AND PEDESTRIAN SIGNAL OPERATION, AND SHALL BE USED FOR MAINTENANCE OF TRAFFIC AS REQUIRED.

7. ALL ACTUATED PHASES SHALL BE MAINTAINED DURING THE PROJECT WITH THE USE OF VIDEO OR MICROWAVE DETECTORS OR THE INSTALLATION OF LOOPS WITHIN 48 HOURS FROM WHEN THEY WERE DAMAGED.

8. THE CONTRACTOR SHALL MAINTAIN COMMUNICATION BETWEEN THE INTERSECTION AND THE COMPUTERIZED SIGNAL SYSTEM, VIA DEDICATED VERIZON TELEPHONE LINES THROUGH THE DURATION OF THE PROJECT AND FOR ANY ADDITIONAL COSTS RELATED TO MAINTAINING COMMUNICATIONS. THE COUNTY WILL CLEARLY MARK THE VERIZON SERVICE OR COUNTY INTER CONNECT POINT PRIOR TO THE CONTRACTOR DOING ANY WORK AT THE INTERSECTION. THE CONTRACTOR WILL CONTACT THE PROJECT MANAGEMENT DEPARTMENT ONE WEEK PRIOR TO ANY WORK WHICH MAY CAUSE DISRUPTION OF PHONE OR INTERCONNECT SERVICE TO ESTABLISH A TEMPORARY SERVICE POINT. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING SUCH FIELD MODIFICATIONS WITH VERIZON OR THE TRAFFIC MANAGEMENT DIVISION.

9. PRIOR TO ORDERING MATERIALS, THE SIGNAL CONTRACTOR SHALL CONTACT THE TRAFFIC MANAGEMENT DIVISION THROUGH THE PROJECT MANAGEMENT DEPARTMENT AND VERIFY CURRENT COLOR CODES TO BE USED FOR SIGNAL AND INTERCONNECT CABLE.

10. WHEN A CONTRACTOR IS WORKING ON A SIGNAL IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING SIGNAL EQUIPMENT, LOOPS, HOME RUNS OR TURNING ON OF NEW SIGNALS) WHERE A LANE IS CLOSED, THE PROJECT MANAGER MAY REQUIRE AN OFF DUTY LAW ENFORCEMENT OFFICER TO DIRECT TRAFFIC. THE HOURLY RATE OF PAY FOR AN OFF-DUTY LAW ENFORCEMENT OFFICER CAN BE OBTAINED FROM THE LOCAL LAW ENFORCEMENT OFFICE. THE COST OF THE OFFICER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

11. FIVE WORKING DAYS PRIOR TO INITIAL INSPECTION OF THE PROJECT THE CONTRACTOR SHALL FURNISH THE INSPECTION TWO COMPLETE SETS OF AS-BUILTS AND IMSA INSPECTION FORMS AND THE PROJECT MANAGEMENT DEPARTMENT AND TRAFFIC MANAGEMENT DIVISION ONE COMPLETE SET OF EACH AS-BUILT PLANS. AS-BUILT PLANS SHALL CLEARLY INDICATE THE LOCATION OF THE INSTALLED POLES, CONDUIT, PULL BOXES, GROUND RODS, LOOP WINDOWS AND MEG READINGS FOR BOTH GROUND RODS AND LOOPS.

12. UPON PASSING THE FINAL INSPECTION THE CONTRACTOR SHALL SEND A WRITTEN REQUEST TO THE PROJECT MANAGEMENT DEPARTMENT AND TO THE TRANSPORTATION DEPARTMENT TO TRANSFER MAINTENANCE FROM THE CONTRACTOR TO MANATEE COUNTY. MANATEE COUNTY SHALL RESPOND WITHIN 5 WORKING DAYS TO ESTABLISH A TIME TABLE FOR THE TRANSFER OF MAINTENANCE RESPONSIBILITY.

13. UNLESS OTHERWISE NOTED ALL REMOVED EQUIPMENT EXCEPT CONCRETE POLES SHALL BE TURNED OVER TO MANATEE COUNTY AND DELIVERED TO THE TRAFFIC MANAGEMENT DIVISION, LOCATED AT 2904 12TH STREET COURT EAST, BRADENTON, FLORIDA, 34208, AS DIRECTED BY THE ENGINEER. CONCRETE POLES SHALL BE DISPOSED OF BY THE SIGNAL CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR.

14. EFFECTIVE MARCH 1, 1995, IN CONFORMANCE WITH F.D.O.T. MAST ARM POLICY, ALL NEW SIGNALS INSTALLED IN MANATEE COUNTY WEST OF I-75 SHALL BE SUPPORTED BY MAST ARMS WITH THE SIGNAL HEAD(S) VERTICALLY INSTALLED AND RIGIDLY ATTACHED TO THE MAST ARM, UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL POWER COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. ANY FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR THE ELECTRICAL POWER SERVICE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS OF THE ELECTRICAL SERVICE.

16. THE CONTRACTOR SHALL CONTACT THE LOCAL POWER COMPANY FOR THEIR ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES AT SIGNAL POLE(S), SUCH AS THE INSTALLATION OF SPAN WIRE, SIGNAL CABLE, FIBERGLASS INSULATORS, AND SIGNAL POLES.

17. F.D.O.T. BID ITEM 639-1-22 (ELECTRICAL POWER SERVICE) SHALL INCLUDE THE COST OF ALL SPECIAL IMPACT CONNECTION FEES CHARGED BY LOCAL POWER COMPANIES FOR ELECTRICAL SERVICE CONNECTION.

18. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR, VIA SUNSHINE STATE ONE CALL OF FLORIDA, INC., IN COORDINATION WITH UNDERGROUND AND OVERHEAD UTILITIES. A MINIMUM OF 48 HOURS PRIOR TO DIGGING.

19. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND IN ALL CASES WHERE JOINT USE POLES ARE CALLED FOR.

20. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE IN CLOSE PROXIMITY TO THE SIGNAL POLE FOUNDATION OR CONDUIT RUN, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR WILL HAND DIG THE FIRST 48 INCHES OF THE HOLE FOR THE POLE FOUNDATION OR THE CONDUIT RUN.

21. THE CONTRACTOR IS TO DE-WATER THE POLE FOUNDATION EXCAVATION IF THE ELEVATION OF WATER IS HIGHER THAN THE ELEVATION OF THE POLE BASE.

22. MAST ARMS SHALL BE CONSTRUCTED OF ONE CONTINUOUS SECTION UP TO 50' (15.24m) IN LENGTH AND OF A TWO SECTION CONSTRUCTION FROM 50' (15.24m) TO 100' (30.49m) IN LENGTH.

23. THE ELEVATION OF THE TOP OF THE MAST ARM BASE(S) SHALL BE SIX INCHES (15.24cm) ABOVE EXISTING GRADE. IF LOCATED DIRECTLY BEHIND SIDEWALK, AT SIDEWALK GRADE.

24. ITEM 700-89-XAA (SIGN ELECTRICAL POWERED), SHALL INCLUDE SIGN ASSEMBLY AND MOUNTING HARDWARE ONLY. ALL SIGNS SHALL REQUIRE BLOCK NUMBERS.

25. INTERNALLY ILLUMINATED SIGNS SHALL BE RIGIDLY ATTACHED TO THE POLE AS SHOWN ON THE PLANS.

26. THE CABINET SHALL BE COMPATIBLE WITH THE MANATEE COUNTY COMPUTERIZED TRAFFIC SIGNAL SYSTEM, F.D.O.T. BID ITEM NUMBER 670-5-110 (ACTUATED SOLID STATE CONTROLLER ASSEMBLY). THIS CABINET SHALL INCLUDE A ACP 340 SURGE PROTECTOR. THE CABINET SHALL HAVE A "MANATEE COUNTY" COMPATIBLE COMMUNICATIONS INTERFACE PANEL INSTALLED AND WIRED BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

27. THE CONTROLLER CABINET BASE SHALL BE AT LEAST 2' HIGH AND THE SAME ELEVATION AS THE CENTER OF THE ROADWAY OR GREATER. THE CABINET DOOR SHALL OPEN TOWARDS OR PARALLEL TO THE RIGHT-OF-WAY LINE AND AWAY FROM TRAFFIC.

28. ITEM 670-5-110 (ACTUATED SOLID STATE CONTROLLER ASSEMBLY), SHALL INCLUDE ADDITIONAL COST OF LABOR, CONCRETE AND OTHER MATERIALS FOR THE CONTROLLER BASE, PAD, AND STEPS AS REQUIRED.

29. ALL LOCAL AND MASTER CONTROLLERS SHALL BE SUPPLIED WITH INTERNAL F.S.K. ASSEMBLIES, SHALL ALSO INCLUDE AN EXTERNAL U.S. ROBOTICS SPORTSTER 33.6 FAX MODEM (MODEL 0459) OR A MANATEE COUNTY APPROVED EQUIVALENT, UNLESS OTHERWISE SPECIFIED. LOCAL CONTROLLERS SHALL INCLUDE THE NECESSARY HARDWARE AND FIRMWARE FOR TBC AND CLOSED LOOP OPERATION, UNLESS OTHERWISE SPECIFIED.

30. WHEN INSTALLING GROUND WIRE IN CONTROLLER CABINETS, THE COPPER GROUND WIRE SHALL NOT COME IN CONTACT WITH THE ALUMINUM CABINET, EXCEPT AT THE TERMINATION POINT.

31. THE CABINET SHALL BE INSTALLED WITH THREE 2" (5.08cm) SPARE CONDUITS. THESE CONDUITS SHALL BE CAPPED IN THE PROPER PULL BOX.

32. THE SIGNAL CONTRACTOR SHALL SIZE THE ELECTRICAL SUPPLY WIRE TO PREVENT A VOLTAGE DROP AT THE SIGNAL HEADS AS SPECIFIED IN SECTION 210-19 OF THE N.E.C.

33. THE CABINET FIELD WIRING, INCLUDING SIGNAL HEAD WIRING AND LEAD-INS, (CABLES NEUTRALS AND SPARES) SHALL BE IDENTIFIED FOR DIRECTION AND OR PHASE WITH CLEARLY MARKED WEATHERPROOF TAGS. THE PROPOSED TAGGING SYSTEM SHALL BE IN ACCORDANCE WITH THE F.D.O.T STANDARD SPECIFICATIONS. WHITE AND WHITE WITH A BLACK WILL BE USED AS A NEUTRAL ONLY.

34. ALL CONDUITS UNDER ROADWAYS, DRIVEWAYS, AND TRAFFIC BEARING SURFACES, SHALL BE INSTALLED PRIOR TO INSTALLATION OF THE ROADWAY BASE AND SURFACE. THESE CONDUITS SHALL BE 2" (5.08cm) MINIMUM IN DIAMETER, UNLESS SPECIFIED IN PLANS. ALL CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND FIELD ADJUSTMENT MAY BE NECESSARY.

35. A SPARE 2" (5.08cm) UNDERGROUND CONDUIT RUN SHALL BE PROVIDED FOR EACH SIGNAL POLE. THE CONDUIT SHALL BE CAPPED IN A PULL BOX.

36. A MANUAL PUSH BUTTON CORD AND CABINET KEYS SHALL BE FURNISHED IN ALL CONTROLLER CABINETS.

37. BID ITEM NUMBER 630-1-XAB (CONDUIT), SHALL MEASURE AS LENGTH OF TRENCH FOR MULTIPLE RUNS OF CONDUIT.

38. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING.

39. ALL ELECTRICAL WIRING, INCLUDING ROADWAY LOOP WIRE AND SHIELDED LEAD-IN CABLE, SHALL COMPLY WITH ALL APPROPRIATE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION.

40. #14 XHHW PULL WIRE SHALL BE INSTALLED IN ALL CONDUITS. IT LEAST 2' (60.96cm) OF PULL WIRE SHALL BE ACCESSIBLE AT EACH CONDUIT TERMINATION AND SECURED IN THE PULL BOX OR PLACE OF TERMINATION.

41. ALL PULL BOXES AND LIDS SHALL BE TRAFFIC BEARING AND NON-METALLIC TYPE. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER (WHERE THERE IS NO CURB AND GUTTER, PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT).

42. THE LOOP WIRE SHALL BE I.M.S.A. 51-3 OR EQUIVALENT TYPE XHHW HIGH DENSITY CROSS-LINKED POLYETHYLENE INSULATED WIRE, RATED FOR 600 VOLTS. DETECTOR LEAD-IN CABLE SHALL BE I.M.S.A. 50-2 OR EQUIVALENT.

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mta2000\dlm\CADD-data\GNOTESSG01.dgn PLOT FILE: PLOTFILE.

DESIGNED BY	FAS/PJS	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2008

SIGNALIZATION

MANATEE COUNTY GENERAL NOTES (CONT.)

43. WHENEVER MORE THAN TWO INDUCTANCE LOOPS ARE CONNECTED TO THE SAME DETECTOR, THEY SHALL BE WIRED IN SERIES.

44. ALL LOOPS SHALL HAVE INDIVIDUAL LEAD-INS TO THE CABINET. LOOP SPLICES SHALL BE CRIMPED, SOLDERED AND SHRINK WRAPPED TO F.D.O.T. SPECIFICATIONS.

45. NO HOME RUNS SHALL BE CUT IN THE ROADWAY. ALL HOME RUNS SHALL BE IN CONDUIT.

46. BID ITEM NUMBER 665-13 (PEDESTRIAN DETECTOR), SHALL INCLUDE THE ADDITIONAL COST OF LABOR AND MATERIALS REQUIRED FOR INSTALLATION OF A PEDESTRIAN SIGNAL SIGN; R10-3B. THIS SIGN SHALL CONTAIN INTERNATIONAL SYMBOLS AND BE MOUNTED ABOVE EACH PEDESTRIAN ACTUATED SIGNAL SIGN FTP-25-04.

47. ALL PEDESTRIAN SIGNALS SHALL BE LIGHT EMITTING DIODES (L.E.D.) WITH INTERNATIONAL SYMBOL LENS, UNLESS OTHERWISE SPECIFIED.

48. ALL SIGNAL HEADS INSTALLED ON MAST ARM POLES SHALL BE 12" L.E.D. RED, YELLOW, AND GREEN BALLS AND RED, YELLOW, AND GREEN ARROWS. ALL SIGNAL HEADS ON SPAN INTERSECTIONS WILL HAVE 12" OPTICAL (FULL VISABILITY) RED, YELLOW, AND GREEN BALLS AND RED, YELLOW, AND GREEN ARROWS.

49. THE EXTERNAL COLOR OF SIGNAL HOUSING SHALL BE BLACK. ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS. ALL SIGNALS SHALL BE CAST ALUMINUM.

50. ALL SIGNAL HEADS SHALL HAVE POLYCARB LOUVERED BACK PLATES INSTALLED, PER THE MANUFACTURERS RECOMMENDATIONS.

51. THE CONTRACTOR SHALL HAVE AN I.M.S.A. CERTIFIED LEVEL II (ELECTRONICS OR ELECTRICAL) ON THE JOB SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. ALL SIGNAL INSTALLATION TECHNICIANS SHALL HAVE A MINIMUM OF I.M.S.A. LEVEL I CERTIFICATION.

52. ALL MATERIALS, EQUIPMENT, AND OTHER CONTRACTOR SUPPLIED ITEMS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO THE MANUFACTURERS RECOMMENDATION, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY MANATEE COUNTY.

53. ALL CINCH JONES CONNECTORS WILL BE REMOVED. SIGNALS WILL BE WIRED DIRECTLY TO TERMINAL IN DISCONNECT.

54. All PEDESTRIAN PUSH BUTTONS TO SHALL BE ORIENTATED TO COMPLY WITH THE AMERICAN DISABILITIES ACT (A.D.A.).

55. ALL CONCRETE STRAIN POLES SHALL BE INSTALLED WITH THE PROPER RAKE SPECIFIED BY THE MANUFACTURER OR ENGINEER OF RECORD.

56. CONTRACTOR SHALL SUPPLY ALL MATERIAL SUBMITTALS TO MANATEE COUNTY TRANSPORTATION MAINTENANCE PRIOR TO CONSTRUCTION FOR APPROVAL.

57. ALL CONTROLLER CABINET DOORS DIAGRAMS SHALL REFLECT THE CURRENT, CORRECT DATA AND DOCUMENTATION.

GROUND ROD INSTALLATION SPECIFICATIONS

1. ALL SIGNAL POLES, METAL PEDESTRIAN POLES, AND ELECTRICAL SERVICES MUST HAVE A MINIMUM OF 20' OF GROUND ROD. POLE-MOUNTED CABINETS MUST HAVE AT LEAST 50' OF GROUND ROD. ALL GROUNDS SHALL BE SUPPLEMENTED BY ADDITIONAL GROUND RODS AS NECESSARY TO REACH A MEASUREMENT OF LESS THAN 25 OHMS TO GROUND.

2. GROUND RODS FOR POLES, SERVICE, AND PAD SHALL BE PLACED A MINIMUM OF 6' APART.

3. BOND TOP AND BOTTOM SPANS TO THE BOND WIRE IN THE POLE AND TO THE POLE GROUND ROD IF NO BOND WIRE IS AVAILABLE, USE A #6 THHN COPPER WIRE RUN INSIDE THE POLE TO BOND SPANS TOGETHER.

4. ALL GROUND ROD ASSEMBLIES FOR POLES, SERVICES, CABINETS, AND OTHER RELATED EQUIPMENT SHALL BE BONDED TOGETHER TO FORM AN INTERSECTION GROUNDING SYSTEM USING #6 THHN BARE COPPER WIRE.

5. FINAL ELEVATION; THE UPPER END OF THE GROUND ROD SHALL BE 6" BELOW GROUND ELEVATION. MARK GROUND ROD LOCATION WITH PERMANENT MARKER SUCH AS AN EPOXIED STICKER LOCATED ON THE NEAREST CURB, OR PROVIDE AS BUILT DRAWINGS WITH THE LOCATION OF GROUND RODS MARKED.

MATERIAL AND EQUIPMENT

1. GROUND ROD SHALL BE COPPER COATED STEEL 5/8" IN DIAMETER BY 10' IN LENGTH WITH THREADED ENDS.

2. COUPLINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND SHALL BE THREADED WRENCH TIGHT.

3. GROUNDING CONDUCTOR MUST BE #6 OR LARGER THHN BARE COPPER.

4. CONNECTING DEVICES SHALL BE NON-CORROSIVE SPLIT BOLTS, CLAMPS, PRESSURE CONNECTORS, OR OTHER APPROVED MEANS TO ENSURE A POSITIVE CONNECTION.

5. MEGGER, GROUND RESISTANCE TESTER, OR OTHER APPROVED MEANS WILL BE USED TO ACQUIRE THE GROUND ROD RESISTANCE. A MEMBER OF THE TRAFFIC MANAGEMENT DIVISION STAFF SHALL BE PRESENT DURING THE TEST READING.

PROCEDURES

1. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC., A MINIMUM OF 48 HOURS BEFORE GROUND ROD INSTALLATION BEGINS.

2. USE AN ADAPTER ON GROUND RODS WHEN DRIVING TO PREVENT DAMAGE TO THE THREADS.

FDOT GENERAL NOTES

EXISTING EQUIPMENT OWNERS: FDOT

SIGNAL TO BE MAINTAINED BY: MANATEE COUNTY

FOR PAVEMENT MARKINGS, SEE PAVEMENT MARKING PLANS.

THE INSTALLATION OF CONDUIT AND PULL BOXES IS TO BE COORDINATED WITH UTILITY COMPANIES AS DIRECTED BY PROJECT ENGINEER.

FDOT PAY ITEM NOTES

630-1-12:

IN LIEU OF THE INSTALLATION OF NEW CONDUIT, EXISTING CONDUIT (IF NOT DAMAGED) MAY BE RE-USED, AS DIRECTED BY THE PROJECT ENGINEER.

PAYMENT SHALL INCLUDE THE COST OF TRENCHING AND ALL CONDUIT IN TRENCH.

ALL CONDUIT UNDER PROPOSED ROADWAY AND/OR SIDEWALK SHALL BE INSTALLED PRIOR TO INSTALLATION OF ROADWAY BASE AND SURFACE OF CONCRETE.

632-7-1:

COMPLETELY REWIRE INTERSECTION AT SIGNAL AT BUSINESS U.S. 41 AT 17TH STREET WEST.

SIGNAL CABLE SHALL BE SPLICED TO A SEPARATE CABLE (FOR EACH SIGNAL HEAD) IN THE BASE OF MAST ARM STRUCTURES. EACH SEPARATE CABLE SHALL HAVE A MINIMUM OF 0.5 FT. DIAMETER LOOP FOR FUTURE SPLICING. THE CABLES SHALL BE CONNECTED USING B-CAP (EPOXY FILLED) TWIST WIRE NUTS. A PERMANENT MARKING SHALL BE PLACED ON THE WIRE DESIGNATING THE PHASE USED. SPARE CONDUCTORS SHALL BE CONNECTED TOGETHER USING B-CAP (EPOXY FILLED) TWIST WIRE NUTS AND GROUNDED INSIDE BASE OF POLE.

VERIFY THE COLOR CODE OF SIGNAL CABLE WITH THE MAINTAINING AGENCY PRIOR TO WIRING INTERSECTION.

USE A MINIMUM OF 7 CONDUCTOR SIGNAL CABLE

635-1-11:

APPROPRIATELY SIZE EACH PULL BOX SO THE COMMUNICATION AND/OR INTERCONNECT CABLE DOES NOT EXCEED MANUFACTURERS RECOMMENDED BENDING RADIUS.

USE CONCRETE PULL BOXES WITH POLYMER LIDS.

PULL BOXES TO HAVE IDENTIFYING COVER LOGOS AS FOLLOWS: TRAFFIC SIGNAL (ALL SIGNAL FUNCTIONS), TRAFFIC CONTROL (ALL LOOP AND/OR VIDEO DETECTION) AND COMMUNICATIONS (INTERCONNECT).

COMMUNICATIONS (INTERCONNECT) PULL BOXES TO BE THIRTY SIX INCHES (36") (LONG) X TWENTY FOUR INCHES (24") (WIDE) X EIGHTTEEN INCHES (18") (DEPTH).

649-31-202:

USE THREE 2" AND ONE 3/4" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARILY SEAL.

650-51-313 AND 650-51-513:

THIS ITEM SHALL INCLUDE ALL SUPPORTING HARDWARE NECESSARY TO RIGIDLY MOUNT SIGNAL HEAD TO MAST ARM (ATTACHMENT BANDS SHALL BE STAINLESS STEEL ONLY). SIGNAL HEAD SUPPORTING TUBE SHALL BE CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FT.

SIGNAL HEAD RED AND GREEN SECTIONS SHALL BE APPROVED LED TYPE.

653-181:

PEDESTRIAN SIGNALS SHALL BE SINGLE-SECTION, INTERNATIONAL SYMBOL, L.E.D. HEADS.

MOUNTING HEIGHT OF PEDESTRIAN SIGNALS SHALL BE 9'-6" ABOVE GRADE.

659-101 AND 659-118:

SIGNAL BACK PLATES SHALL BE POLYCARBONATE (OR EQUIVALENT) LOUVERED.

660-2-102 AND 660-2-106:

PERMANENTLY MARK EACH LOOP PER PHASE AND PER VEHICLE MOVEMENT AT EACH SPLICE POINT AND AT THE CABINET TERMINATION POINT.

THE HOLD DOWN MATERIAL (NON-METALLIC) SHALL BE A MINIMUM OF ONE INCH (1") AND A MAXIMUM OF TWO INCHES (2") IN LENGTH.

THIS ITEM SHALL INCLUDE LOOP LEAD-IN WIRE FROM LOOP PULL BOX TO CONTROLLER UNLESS NOTED OTHERWISE ON PLAN SHEET.

665-11 AND 665-13:

USE PEDESTRIAN BUTTON SIGNAL SIGN FTP-68B-06. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.

670-5-410, 670-5-411, AND 670-5-412:

MODIFY EXISTING CONTROLLER ADDING LOOP HARNESSES, CIRCUIT BOARD (WHEN REQUIRED), AND PERFORM ANY CABINET AND FIELD WIRING NECESSARY FOR NEW LOOPS.

CORE-DRILL EXISTING CONTROLLER CABINET BASE AND INSTALL NEW CONDUITS IF SPARE CONDUIT STUB-OUTS CANNOT BE USED. INSTALL NEW CONDUITS INTO THE EXISTING FOUNDATION AS REQUIRED IN PLANS. WHEN ADDITIONAL CONDUITS ARE REQUIRED, THE CONDUIT SHALL BE A MINIMUM OF 3" IN DIAMETER. LOCATE NEW CONDUITS SO THEY WILL NOT OBSTRUCT THE MAINTENANCE OF EQUIPMENT IN THE CABINET OR THE ANCHORING OF THE CABINET FLANGE TO THE CONCRETE FOUNDATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING INTERNAL CABINET AND EQUIPMENT FROM DUST AND DEBRIS CAUSED BY CORE DRILLING.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	FAS/PJS	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

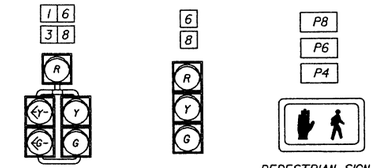
WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2008

SIGNALIZATION

SIGNAL HEAD DETAILS

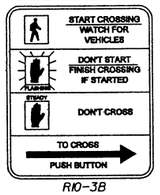


5-SECT. TRAFFIC SIGNAL (LED) 2 AS. 650-51-513

3-SECT. TRAFFIC SIGNAL (LED) 2 AS. 650-51-313

PEDESTRIAN SIGNAL 1 WAY (LED) 4 AS. 653-181

PED SIGNAL SIGNS



R10-3B

FTP-25-04

ALL SIGNAL HEADS REQUIRE LOUVERED, POLYCARBONATE BACKPLATES.

659-101 2 EA 659-118 2 EA

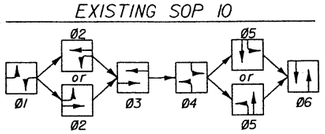
CONTROLLER OPERATION NOTES

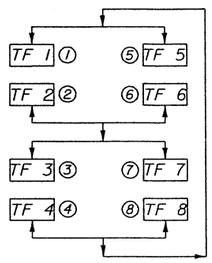
1. MAJOR STREET IS BUSINESS U.S. 41, PHASES 1, 2 & 3 (MOVEMENTS 1, 2, 5 & 6) AND MINOR STREET IS 17TH STREET WEST, PHASES 4, 5 & 6 (MOVEMENTS 3, 4, 7 & 8).
2. EXISTING CONTROLLER TIMINGS AT 17TH STREET WEST AND BUSINESS U.S. 41 INTERSECTION ARE TO REMAIN.

SIGNALIZATION NOTES

1. ANY BUS. U.S. 41 LOOP LEAD-INS CUT DUE TO NEW CONSTRUCTION ARE TO BE REPLACED IN THE NEW PAVEMENT AND THE COST IS TO BE PAID FOR UNDER ITEM 660-2-106.
2. RELOCATE THE EXISTING POLE MOUNTED, INTERNALLY ILLUMINATED SIGNS TO POLES 1 & 2. COST INCLUDED IN PAY ITEM 649-31-202.
3. LOOPS L-1, L-3, L-5 & L-7 ARE TYPE F AND ARE 40' IN LENGTH.

EXISTING SOP 10





REMOVAL PAY ITEMS

690-10	4 EA
690-20	4 EA
690-70	4 EA
690-90	1 PI
690-100	1 PI
690-32-1	2 EA

CONTROLLER TIMINGS

TIMING FUNCTION									
MOVEMENT NUMBER		1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	7	20	7	7	7	20	7	7
	EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	MAXIMUM GREEN 1	15	35	16	25	15	35	16	25
	MAXIMUM GREEN 2	20	50	21	34	24	50	24	34
	YELLOW CLEARANCE	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0
	ALL RED	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
	PEDESTRIAN WALK		7		7		7		7
	PED. CLEARANCE		18		18		18		18
	RECALL		MIN				MIN		

DESIGNED BY	FAS/PJS	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

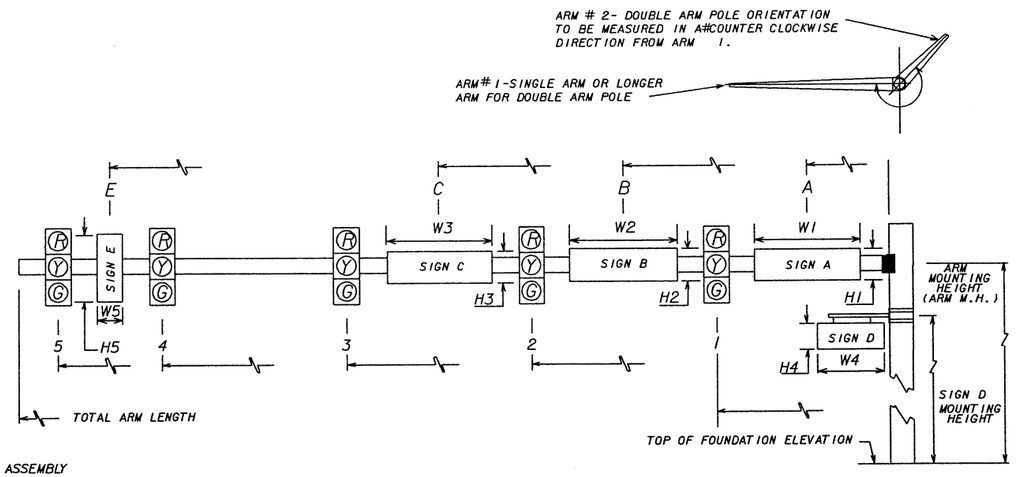
Proj. No. 6035261
Dwg. Date January 8, 2008

SIGNALIZATION

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2008\01m\CADD-data\plansg01.dgn
PLOT FILE: PLOTFILE.

SHEET NO.
76

SPECIAL INSTRUCTIONS					
ID NO.	PED. BUTTON		PED. SIGNALS		HANDHOLE LOCATION



* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY
** INDICATES FUTURE SIGNAL LOCATIONS FOR MAST ARM DESIGN.

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUNDATION ELEVATION	RDWY ARM NO.	CROWN ELEV.	SIGNAL DATA													TOTAL ARM LENGTH	ARM M.H.	∠ BETWEEN DUAL ARMS 90/270
						SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	DISTANCE FROM POLE												
									1	*	2	*	3	*	4	*	5	*			
1	157	100+56.20	13.10	1	12.94	V	Y	Y							22.5	3	32.5	5	43	20	
				1**	12.94	V	Y	Y					24.5	3	32.5	3	40.5	3	43	20	
2	157	100+48.30	13.15	1	13.37	V	Y	Y							28.5	3	38.5	5	46	20	
				1**	13.37	V	Y	Y					22.0	3	33.0	3	44.0	3	46	20	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	

ID NO.	RDWY ARM NO.	SIGN DATA															PAINT COLOR
		DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN															
		A	H1	W1	B	H2	W2	C	H3	W3	D	H4	W4	E	H5	W5	
1	1										POLE	Reloc.	Exist.				
	1**													36.5	2'-6"	3'-0"	
2	1										POLE	Reloc.	Exist.				
	1**													38.5	2'-6"	3'-0"	
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																
	1																
	2																

PLOT FILE: _PLOTFILE_
DESIGN FILE: P:\Mte2080\01m\CADD-data\210B.dgn
PLOT DATE: 2/11/2009

DESIGNED BY	FAS/PJS	DATE		
CHECKED BY	BDG	DATE	1/09	
DRAWN BY	KDR	DATE	1/09	
CHECKED BY	BDG	DATE	1/09	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106			

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2008

SIGNALIZATION

STANDARD MAST ARM ASSEMBLIES DESIGN TABLE

STRUCTURE ID NUMBERS	ASSEMBLY NUMBERS (1)	FIRST ARM			SECOND ARM			UF (deg)	POLE				SPECIAL DRILLED SHAFT DATA[4]			
		ARM TYPE	FAA (ft.)[2]	FBA (in.)[2]	ARM TYPE	FAA (ft.)[2]	FBA (in.)[2]		POLE TYPE	UAA (ft.)[3]	UB (ft.)	UCA (in.)[3]	DA (ft.)	DB (ft.)	RA	RB
1	E3-T2	E3	33.3	7.48					T2	22	20	12.92				
2	E3-T2	E3							T2	22	20	12.92				

TABLE NOTES:

(1) Assembly Number Legend
Single Arm
E# - T# = Arm Number - Pole Number
Double Arm
E# - E# - T# = First Arm Number - Second Arm Number - Pole Number

(2) If an entry appears in columns "FAA" and "FBA", a shorter arm is required. This is obtained by removing length from the arm tip. For these cases the mast arm length shall be shortened from "FA" to "FAA" and the are tip diameter shall be increased from "FB" to "FBA".

(3) If an entry appears in columns "UAA" and "UCA", a shorter pole is required. This is obtained by removing length from the pole tip. For these cases the pole height shall be shortened from "UA" to "UAA" and the pole tip diameter shall be increased from "UC" to "UCA".

(4) The foundations for Standard Mast Arm Assemblies are pre-designed and are based upon the following conservative soil criteria which covers the great majority of soil types found in Florida. Only complete the "Special Drilled Shaft Data" information if site conditions dictate drilled shafts in soils with lesser strength properties.

Classification = Cohesionless (Fine Sand)
Friction Angle = 30 Degrees (30°)
Unit Weight = 50 lbs./cu. ft. (assumed saturated)

GENERAL NOTES:

(1) Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.

(2) Work this sheet with "Roadway and Traffic Design Standards" Index Nos. 17743 and 17745.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	FAS/PJS	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

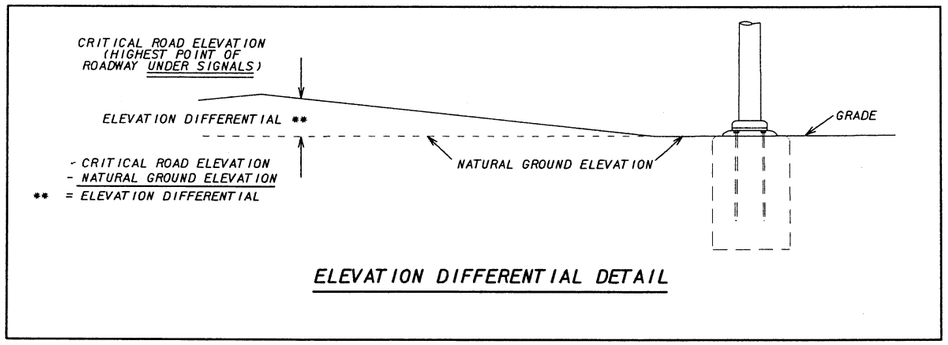
17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8746 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

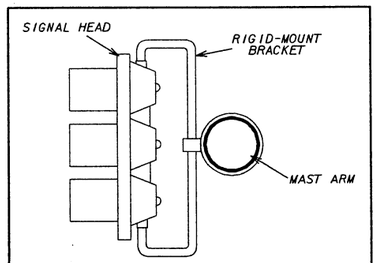
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2008

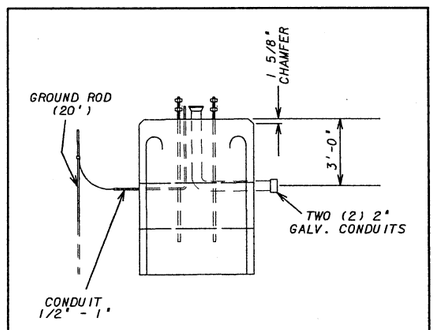
SIGNALIZATION



ELEVATION DIFFERENTIAL DETAIL



SIGNAL HEAD BRACKET ATTACHMENT DETAIL



FOUNDATION DETAIL

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mta2008\01in\CADD-data\MASTARM SHEETS.dgn PLOT FILE: .PLOTFILE.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	FAS/PJS	DATE				
CHECKED BY	BOG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BOG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2008

SIGNALIZATION

SHEET NO. 79

TABULATION OF QUANTITIES

BID ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			83		84		85		86		87		88		89		90						
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
715-1-12	Conductor (F&I) (Insulated) (No. 6)	LF	2370		3924		1530		0		0		0		0		0		7824		7824		
715-1-13	Conductor (F&I) (Insulated) (No. 4)	LF	0		0		960		3600		3000		3918		3615		1119		16212		16212		
715-2-11	Conduit (F&I Underground) (PVC SCH 40) (2")	LF	790		1254		830		1200		1000		1253		1205		373		7905		7905		
715-7-11	Load Center (F&I) (Secodary Voltage)	EA	0		1		0		0		0		1		0		0		2		2		
715-14-11	Pull Box (F&I) (Roadside) (Moulded)	EA	14		22		10		20		15		23		20		6		130		130		
715-14-42	Pull Box (Relocate) (Sidewalk)	EA	2		0		0		0		0		0		0		0		2		2		
715-500-1	Pole Cable Distribution System (Conventional)	EA	11		14		10		14		12		14		13		6		94		94		
715-516-112	Light Pole Comp (F&I) (Ornamental) (MH 12')	EA	10		14		10		14		12		14		13		6		93		93		
715-540-000	Light Pole Comp (Relocate)	EA	1		0		0		0		0		0		0		0		1		1		

PLOT FILE: P:\Mtce2008\Bin\CADD-data\tabqt01.dgn PLOT FILE: PLOTFILE_

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3852

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

POLE DATA

POLE NO.	CIRCUIT	STATION	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM
1	A-I	100+69, 33.25' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
2	A-II	100+65, 34.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
3	A-I	101+39, 31.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
4	A-II	101+39, 31.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
5	A-I	102+09, 31.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
6	A-II	102+13, 31.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
7	A-I	102+78, 31.5' LT BL 17th ST. W	150	12'	9.50'	715-5116-112
8	A-II	102+85, 31.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
9	A-I	103+59, 32' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
10	A-II	103+59, 32' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
11	A-I	104+39, 28.25' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
12	A-II	104+39, 28.25' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
13	A-I	105+19, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
14	A-II	105+19, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
15	A-I	106+05, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
16	A-II	106+05, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
17	A-I	107+00, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
18	A-II	107+00, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
19	A-III	107+96, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
20	A-IV	107+96, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
21	A-III	108+92, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
22	A-IV	108+92, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
23	A-III	109+88, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
24	A-IV	109+88, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
25	A-III	110+79, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
26	A-IV	110+79, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
27	A-III	111+65, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
28	A-IV	111+69, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
29	A-III	112+51, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
30	A-IV	112+59, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
31	B-I	113+40, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
32	B-II	113+40, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
33	B-I	114+26, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
34	B-II	114+26, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
35	B-I	115+13, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
36	B-II	115+13, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
37	B-I	115+99, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
38	B-II	115+99, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
39	B-I	116+91, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
40	B-II	116+91, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
41	B-I	117+85, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
42	B-II	117+85, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
43	B-I	118+80, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
44	B-II	118+80, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
45	B-I	119+67, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
46	B-II	119+67, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
47	B-I	120+52, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
48	B-II	120+52, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
49	B-I	121+43, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
50	B-II	121+43, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112

POLE DATA

POLE NO.	CIRCUIT	STATION	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM
51	B-I	122+24, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
52	B-II	122+24, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
53	B-I	123+05, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
54	B-II	123+05, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
55	B-I	123+91, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
56	B-II	123+91, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
57	B-I	124+79, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
58	B-II	124+79, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
59	B-I	125+56, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
60	B-II	125+56, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
61	B-III	126+26, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
62	B-IV	126+26, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
63	B-III	127+18, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
64	B-IV	127+18, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
65	B-III	128+02, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
66	B-IV	128+02, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
67	B-III	128+86, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
68	B-IV	128+86, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
69	B-III	129+66, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
70	B-IV	129+76, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
71	B-III	130+48, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
72	B-IV	130+70, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
73	B-III	131+30, 25.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
74	B-IV	131+63, 25.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
75	B-III	132+13, 26.8' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
76	B-IV	132+53, 28.6' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
77	B-III	132+94, 30.4' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
78	B-IV	133+43, 33.4' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
79	B-III	133+89, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
80	B-IV	134+43, 33' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
81	B-III	134+71, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
82	B-IV	135+37, 33' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
83	B-III	135+52, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
84	B-IV	136+30, 35' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
85	B-III	136+33, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
86	B-III	137+14, 30.5' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
87	B-IV	137+32, 33' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
88	B-III	138+07, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
89	B-IV	138+18, 33' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
90	B-III	138+98, 30' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112
91	B-IV	139+01, 33' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
92	B-IV	139+85, 33.5' RT, BL 17th ST. W	150	12'	9.50'	715-5116-112
93	B-III	139+88, 31.1' LT, BL 17th ST. W	150	12'	9.50'	715-5116-112

POLE DATA

DESIGNED BY	SRR	DATE	
CHECKED BY	BDG	DATE	1/09
DRAWN BY	KDR	DATE	1/09
CHECKED BY	BDG	DATE	1/09
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

CONVENTIONAL LIGHTING DESIGN CRITERIA

Average Initial Intensity	1.0 Foot Candles
Uniformity Ratio Avg./Min.	4:1 Or Less
Max./Min.	10:1 Or Less
Wind Speed	90 MPH

LEGEND

SYMBOLS	DESCRIPTION
●	150 watt high pressure sodium luminaire. GE Patriarch luminaire, tradition standard globe with internal light shield (house side), GE aluminum non-tapered pole, standard color, meets or exceeds wind speed design criteria with mounting foundation not to exceed 30" depth. Integral regulator type ballast wired for 480 volt operation. Pole mounting height 12 ft. Use GE curve 452128 (Patriarch) or equal.
○	Existing pole and luminaire to remain.
○	Existing pole and luminaire to be removed.
—•—	Schedule 40 PVC conduit with THW or THWN conductors inside (conduit and conductor size as shown on plan sheets). Run one (1) 6 AWG or 4 AWG (see plans) copper bond conductor (TW green insulation) inside conduit with other conductors.
⬭	Rigid galvanized steel conduit, directional bored under pavement with THW or THWN conductors inside (conduit and conductor size as shown on plan sheets). Extend conduit beyond edge of pavement to pull boxes. Run one (1) 6 AWG or 4 AWG (see plans) copper bond conductor (TW green insulation) inside conduit with other conductors.
□	Pull box. For specifications see Section 635 of Standard Specifications For Road And Bridge Construction.
▯○	Distribution point. For requirements see Index No. 17504 of Design Standards.

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Wtea2008\01in\CADD-data\pdsl101.dgn PLOT FILE: PLOTFILE.

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

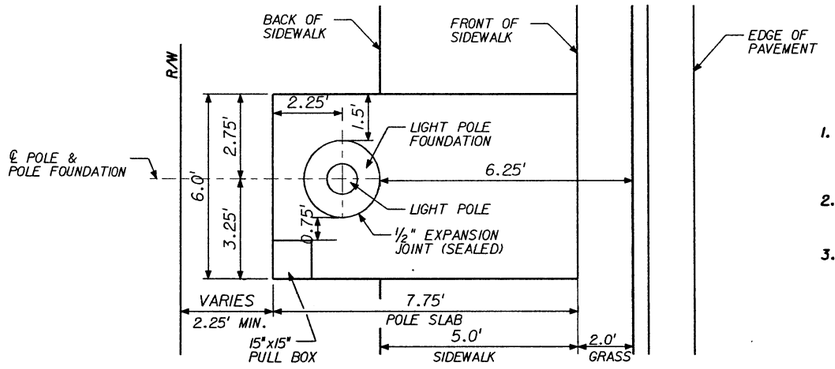
17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

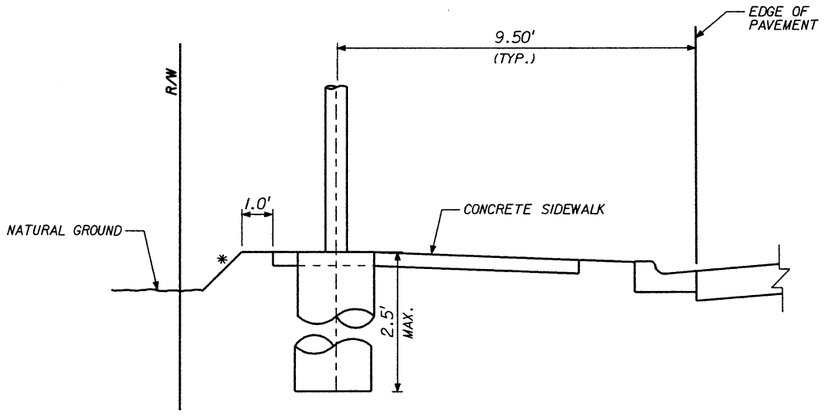
LIGHTING



POLE SLAB DETAIL
NTS

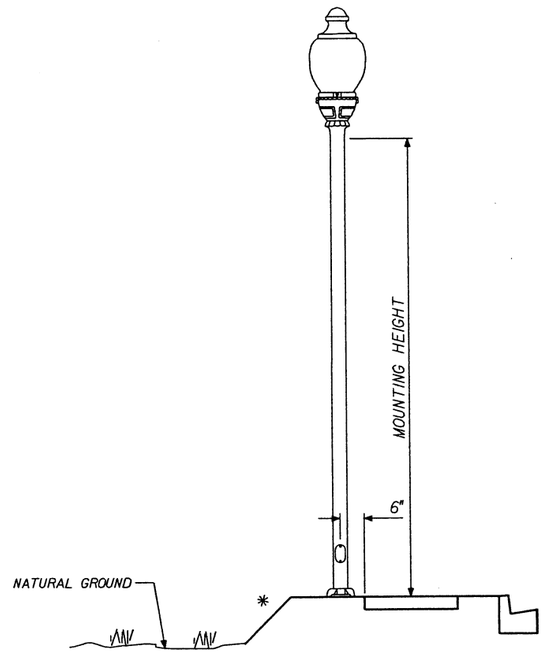
NOTES:

1. THE POLE SLAB DETAILS SHOWN ON THIS SHEET ARE FOR THOSE AREAS WHERE R/W AND/OR SLOPES PREVENT THE USE OF STANDARD SLAB DETAIL, AS SHOWN ON INDEX NO. 17500.
2. FOR POLE LOCATIONS IN OR ADJACENT TO THE SIDEWALK, CONCRETE SLABS ARE TO BE PAID FOR AS CONCRETE SIDEWALK 4" THICK.
3. ALL PADS NOT LOCATED IN SIDEWALK AREA, ARE STANDARD PADS FOR PULL BOXES AND SHALL BE INSTALLED AS PER STANDARD INDEX NO. 17500, SHEET 2 OF 3.



* SLOPES IN VARIOUS LOCATIONS ARE TO BE ADJUSTED TO ACCOMMODATE INSTALLATION OF POLES. DRESS SLOPES 1' BACK OF POLE SLAB.

POLE INSTALLATION
NTS



GE PATRIARCH LUMINAIRE WITH TRADITIONAL GLOBE AND ALUMINUM NON-TAPERED POLE OR EQUAL.

LUMINARIE DETAIL
NTS

DETAILS

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BOG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BOG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM. PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST
FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

SHEET NO. 83

98 99 100 101 102 103 104

17th STREET W.

7th AVE. W.

40'

N

STA. 100+33, 67' LT
RELOCATE PULL BOX

STA. 100+69, 33.25' LT
POLE NO. 1, CKT. A-I

R/W

STA. 101+39, 31.5' LT
POLE NO. 3, CKT. A-I

Exist. R/W

STA. 102+09, 31.5' LT
POLE NO. 5, CKT. A-I

STA. 102+78, 31.5' LT
POLE NO. 7, CKT. A-I

STA. 103+59, 32' LT
POLE NO. 9, CKT. A-I

R/W

12" NPW
12" WM
2" GAS
12" FM
8" SAN
8" WM
BT
OE
OHP
@ Sur.

MATCH LINE STA. 104+00

STA. 100+65, 34.5' RT
POLE NO. 2, CKT. A-II

STA. 101+39, 31.5' RT
POLE NO. 4, CKT. A-II

STA. 102+13, 31.5' RT
POLE NO. 6, CKT. A-II

STA. 102+85, 31.5' RT
POLE NO. 8, CKT. A-II

STA. 103+59, 32' RT
POLE NO. 10, CKT. A-II

R/W

STA. 100+44, 56' RT
RELOCATE LIGHT POLE
AND PULL BOX

BEGIN LIGHTING
STA. 100+33

BUSINESS U.S. 41

NOTE: ALL CONDUCTORS ARE 3 #6 IN 2"
CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mtce2008\Olm\CADD-data\plan181.dgn
PLOT FILE: _PLOTFILE_

SHEET NO. 84

104 105 106 107 108 109 110

6th AVE. W.

17th STREET W.

BAYSHORE ROAD

POND 1

Exist. R/W

R/W

STA. 104+39, 28.25' LT
POLE NO. 11, CKT. A-I

STA. 105+19, 25.5' LT
POLE NO. 13, CKT. A-I

STA. 106+05, 25.5' LT
POLE NO. 15, CKT. A-I

STA. 107+00, 25.5' LT
POLE NO. 17, CKT. A-I

STA. 107+96, 25.5' LT
POLE NO. 19, CKT. A-III

STA. 108+92, 25.5' LT
POLE NO. 21, CKT. A-III

STA. 109+88, 25.5' LT
POLE NO. 23, CKT. A-III

STA. 109+88, 25.5' RT
POLE NO. 24, CKT. A-IV

STA. 108+92, 25.5' RT
POLE NO. 22, CKT. A-IV

STA. 107+96, 25.5' RT
POLE NO. 20, CKT. A-IV

STA. 107+00, 25.5' RT
POLE NO. 18, CKT. A-II

STA. 106+05, 25.5' RT
POLE NO. 16, CKT. A-II

STA. 105+19, 25.5' RT
POLE NO. 14, CKT. A-II

STA. 104+39, 28.25' RT
POLE NO. 12, CKT. A-II

MATCH LINE STA. 104+00

MATCH LINE STA. 110+00

12" WM

12" NPW

12" FM

6 #6 IN 2" CONDUIT

@ Sur.

2" GAS

1-1/4" GAS

107+40
SERVICE POINT "A"
100 AMP MAIN BREAKER
CKT. A-I 15 AMP BREAKER
CKT. A-II 15 AMP BREAKER
CKT. A-III 15 AMP BREAKER
CKT. A-IV 15 AMP BREAKER

NOTE: ALL CONDUCTORS ARE 3 #6 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009 DESIGN FILE: P:\Mtce2080\Dan\CADD-data\plan102.dgn PLOT FILE: PLOTFILE.

SHEET NO. 85

110 | 111 POND 2 | 112 | 113 | 114 | 115

40'

N

Exist. RR R/W

17th STREET W.

STA. 110+79, 25.5' LT
POLE NO. 25, CKT. A-III

STA. 111+65, 25.5' LT
POLE NO. 27, CKT. A-III

STA. 112+51, 25.5' LT
POLE NO. 29, CKT. A-III

RAILROAD

DRAIN

STA. 113+40, 25.5' LT
POLE NO. 31, CKT. B-I

3 #4 IN 2" CONDUIT

STA. 114+26, 25.5' LT
POLE NO. 33, CKT. B-I

Exist. R/W

MATCH LINE STA. 110+00

MATCH LINE STA. 115+00

2" GAS | 12" WM | 2" GAS | 12" WM | 2" GAS | 12" WM

℄ Sur.

STA. 112+59, 25.5' RT
POLE NO. 30, CKT. A-IV

STA. 113+40, 25.5' RT
POLE NO. 32, CKT. B-II

3 #4 IN 2" CONDUIT

2" GAS | 12" NPW | 12" NPW | UG CATV | 12" NPW

R/W

R/W

STA. 111+69, 25.5' RT
POLE NO. 28, CKT. A-IV

STA. 110+79, 25.5' RT
POLE NO. 26, CKT. A-IV

STA. 114+26, 25.5' RT
POLE NO. 34, CKT. B-II

CSX

CARR

Exist. RR R/W

Exist. RR R/W

NOTE: ALL CONDUCTORS ARE 3 #6 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2000\dlm\CADD-data\plan1d03.dgn
PLOT FILE: _PLOTFILE_

SHEET NO. 86

17th STREET W.

115 116 117 118 119 120 121

5th AVE. W.

4th AVE. W.

4th AVE. W.

40'

N

MATCH LINE STA. 115+00

MATCH LINE STA. 121+00

STA. 115+13, 25.5' LT
POLE NO. 35, CKT. B-I

STA. 115+99, 25.5' LT
POLE NO. 37, CKT. B-I

STA. 116+91, 25.5' LT
POLE NO. 39, CKT. B-I

STA. 117+85, 25.5' LT
POLE NO. 41, CKT. B-I

STA. 118+80, 25.5' LT
POLE NO. 43, CKT. B-I

STA. 119+67, 25.5' LT
POLE NO. 45, CKT. B-I

STA. 120+52, 25.5' LT
POLE NO. 47, CKT. B-I

Exist. R/W

R/W

2" GAS

12" WM

8" SAN

4" SAN

12" NPW

16" NPW

℄ Sur.

Lift station

STA. 115+13, 25.5' RT
POLE NO. 36, CKT. B-II

STA. 115+99, 25.5' RT
POLE NO. 38, CKT. B-II

STA. 116+91, 25.5' RT
POLE NO. 40, CKT. B-II

STA. 117+85, 25.5' RT
POLE NO. 42, CKT. B-II

STA. 118+80, 25.5' RT
POLE NO. 44, CKT. B-II

STA. 119+67, 25.5' RT
POLE NO. 46, CKT. B-II

STA. 120+52, 25.5' RT
POLE NO. 48, CKT. B-II

NOTE: ALL CONDUCTORS ARE 3 #4 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

DESIGN FILE: P:\M44288\01m\CADD-data\plan\t04.dgn PLOT FILE: PLOTFILE.

PLOT DATE: 2/11/2009

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

LIGHTING

SHEET NO. 87

17th STREET W.

3rd AVE. W.

121 122 123 124 125 126

40'

N

MATCH LINE STA. 121+00

MATCH LINE STA. 126+00

STA. 121+43, 25.5' LT
POLE NO. 49, CKT. B-I

STA. 122+24, 25.5' LT
POLE NO. 51, CKT. B-I

STA. 123+05, 25.5' LT
POLE NO. 53, CKT. B-I

STA. 123+91, 25.5' LT
POLE NO. 55, CKT. B-I

STA. 124+79, 25.5' LT
POLE NO. 57, CKT. B-I

STA. 125+56, 25.5' LT
POLE NO. 59, CKT. B-I

R/W

2" WW

12" WW 2" GAS

4" SAN 18" SAN 8" SAN

@ Sur.

12" NPW

STA. 121+43, 25.5' RT
POLE NO. 50, CKT. B-II

STA. 122+24, 25.5' RT
POLE NO. 52, CKT. B-II

STA. 123+05, 25.5' RT
POLE NO. 54, CKT. B-II

STA. 123+91, 25.5' RT
POLE NO. 56, CKT. B-II

STA. 124+79, 25.5' RT
POLE NO. 58, CKT. B-II

STA. 125+56 25.5' RT
POLE NO. 60, CKT. B-II

NOTE: ALL CONDUCTORS ARE 3 #4 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 603526I
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mtce2008\Bim\CADD-data\plan\l05.dgn PLOT FILE: PLOTFILE.

SHEET NO. 89

17th STREET W

132 133 134 135 136 137 138

40'

N

2ND AVE E.

3RD. AVE. E.

STA. 132+24, 30.4' LT
POLE NO. 77, CKT. B-III

STA. 132+13, 26.8' LT
POLE NO. 75, CKT. B-III

STA. 133+69, 30' LT
POLE NO. 79, CKT. B-III

STA. 134+71, 30' LT
POLE NO. 81, CKT. B-III

STA. 135+52, 30' LT
POLE NO. 83, CKT. B-III

STA. 136+33, 30' LT
POLE NO. 85, CKT. B-III

STA. 137+14, 30.5' LT
POLE NO. 86, CKT. B-III

R/W

Exist. R/W

@ Sur.

MATCH LINE STA. 132+00

MATCH LINE STA. 138+00

STA. 132+53, 28.6' RT
POLE NO. 76, CKT. B-IV

STA. 133+43, 33.4' RT
POLE NO. 78, CKT. B-IV

STA. 134+43, 33' RT
POLE NO. 80, CKT. B-IV

STA. 135+37, 33' RT
POLE NO. 82, CKT. B-IV

STA. 136+30, 35' RT
POLE NO. 84, CKT. B-IV

STA. 137+32, 33' RT
POLE NO. 87, CKT. B-IV

SCHOOL DRIVE

2ND AVE E.

NOTE: ALL CONDUCTORS ARE 3 #4 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADE TRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

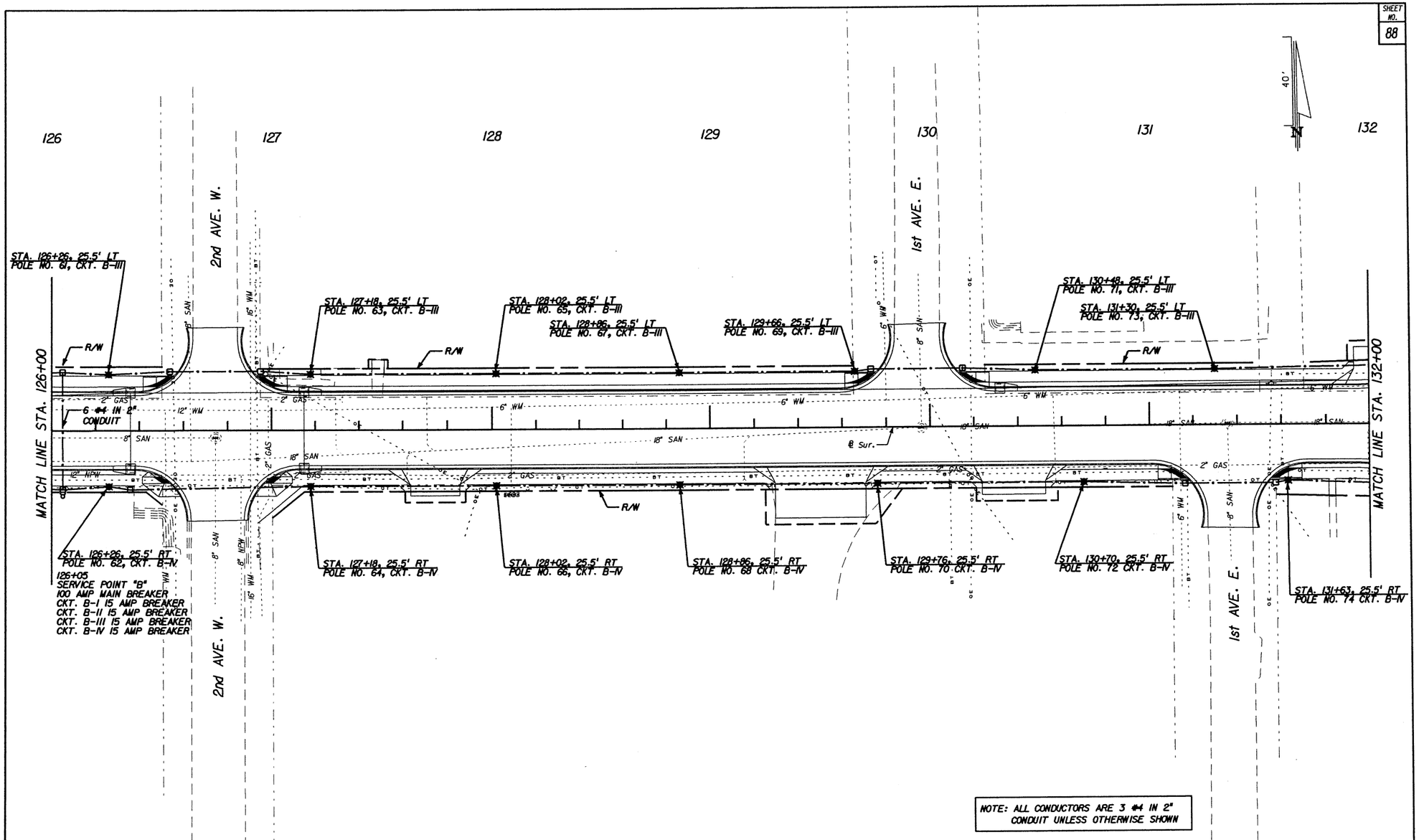
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2080\01m\CADD-data\plan1a07.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 88



NOTE: ALL CONDUCTORS ARE 3 #4 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3962

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mtc2080\Bim\CADD-data\plans\l26.dgn
PLOT FILE: PLOTFILE.

SHEET NO. 90

138 | 139 | 140

17TH STREET WEST

17TH STREET EAST

40'

N

STA. 139+88, 34.1' LT
POLE NO. 93, CKT. B-III

STA. 138+07, 30' LT
POLE NO. 88, CKT. B-III

STA. 138+98, 30' LT
POLE NO. 90, CKT. B-III

Exist. R/W

6" WM

12)BFP

6" WM

6" WM

18" SAN

@ Sur.

2" GAS

MATCH LINE STA. 138+00

2" GAS

Exist. R/W

STA. 138+18, 33' RT
POLE NO. 89, CKT. B-IV

STA. 139+01, 33' RT
POLE NO. 91, CKT. B-IV

STA. 139+85, 33.5' RT
POLE NO. 92, CKT. B-IV

2" GAS

2" GAS

6" WM

U.S. 41

END LIGHTING
STA. 139+88

NOTE: ALL CONDUCTORS ARE 3 #4 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

				REVISION DESCRIPTION & DATE	BY	NO.
DESIGNED BY	SRR	DATE				
CHECKED BY	BDG	DATE	1/09			
DRAWN BY	KDR	DATE	1/09			
CHECKED BY	BDG	DATE	1/09			
SUPERVISED BY	JEFFREY D. TRIM. PE 42106					

MANATEE COUNTY FLORIDA

17TH STREET WEST

FROM BUSINESS U.S. 41 TO U.S. 41
MANATEE COUNTY, FLORIDA

WADETRIM
8745 Henderson Road, Suite 220, Tampa, FL 33634
Engineer of Record: Jeffrey D. Trim , PE No.: 42106
Certificate of Authorization No.: 3952

ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035261
Dwg. Date January 8, 2009

LIGHTING

PLOT DATE: 2/11/2009
DESIGN FILE: P:\Mta2008\01in\CADD-data\plan138.dgn PLOT FILE: PLOTFILE.