# CONTRACT DRAWINGS



# US 301 (SR 43) AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301) FOR

# MANATEE COUNTY, FLORIDA **COUNTY PROJECT NUMBER: 6061960**

#### RELATED STANDARDS AND SPECIFICATIONS

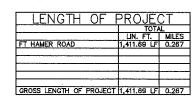
- MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FLORIDA GREEN BOOK), (2010),
- FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2012),
- AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN
- FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009),
- CHAPTER 14-96 AND 14-97, FLORIDA ADMINISTRATIVE CODE RULE FOR
- CHAPTER 14-86, FLORIDA ADMINISTRATIVE CODE RULE FOR FDOT DRAINAGE
- FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,
- SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMITTING (ERP) INFORMATION MANUAL, LATEST EDITION
- MANATEE COUNTY DRAINAGE MANUAL, LATEST EDITION AND STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL (JUNE 2007).

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION.
THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

# UTILITY WARNING NOTE

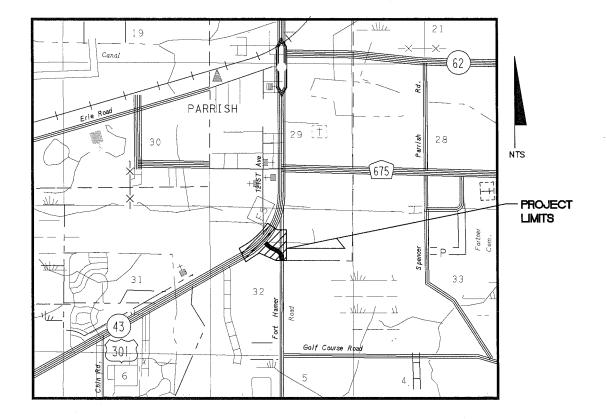
ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

	SUMMARY OF REVISIONS
DATE	DESCRIPTION



ROAD CLASSIFICATION: FT HAMER ROAD - URBAN ARTERIAL ROAD CLASSIFICATION: US 301 -- URBAN ARTERIAL ROAD CLASSIFICATION: 60TH STREET EAST - URBAN LOCAL ROAD CLASSIFICATION: DORIS STREET EAST - URBAN LOCAL DESIGN SPEED: 45 MPH (FT HAMER ROAD) 45 MPH (US 301)





#### COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS LIGHTING AND COMMUNICATIONS PLANS

#### INDEX OF ROADWAY PLANS

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	SURVEY NOTES
3	LEGEND AND ABBREVIATIONS
4	DRAINAGE MAP
5	EXISTING STRUCTURE DATA
6	PROPOSED DRAINAGE STRUCTURE DATA
7-10	TYPICAL SECTIONS
11	SUMMARY OF QUANTITIES
12-13	GENERAL NOTES
14-16	PLAN AND PROFILE - FT HAMER ROAD
17	PLAN AND PROFILE CONNECTOR ROAD
18-21	PLAN - US HIGHWAY 301
22	INTERSECTION DETAIL
23	RETENTION—DETENTION POND A
24	POND TYPICAL SECTIONS
25	DRAINAGE DETAILS
26-31	CROSS SECTIONS FT HAMER ROAD
32-33	CRÒSS SECTIONS - CONNECTOR ROAD
34-38	CROSS SECTIONS US 301
39-40	ROADWAY SOILS SURVEY
41-48	EROSION CONTROL
<del>4</del> 9-50	STORMWATER POLLUTION PREVENTION PLAN
51-57	MAINTENANCE OF TRAFFIC
58-65	UTILITY ADJUSTMENTS
66-74	SIGNING AND PAVEMENT MARKING

PLANS PREPARED BY:

FL. LICENSE NO.

DATE: 8-15-2012

# **SURVEYOR'S REPORT**

# FORT HAMER ROAD @ US 301 MANATEE COUNTY PROJECT NO. 6061960

# I hereby certify that:

- 1. I am a Professional Surveyor and Mapper, registered in the State of Florida, holding Certificate No. PSM 4295 and that I am acting on behalf of ZNS Engineering, L.C., a corporation authorized to offer services of registered Surveyors and Mappers in the State of Florida, holding L.B. No. 6982.
- 2. This certificate is made to Topographic Survey of Ft Hamer Road @ US 301, prepared for roadway improvements.
- 3. I hereby certify that the survey prepared under my direct supervision (Project No. 6061960) is to the best of my knowledge, information and belief, a true and correct representation of the existing improvements shown.
- 4. The bearings shown are based on the survey baseline of US 301 assumed to be N 60° 16′ 13" E from Station 483+51.62 to Station 528+51.81 as shown the Baseline Control Survey in the construction plans prepared for US 301 improvements prepared by Wilson Miller.
- 5. Elevations shown are based on 1929 NGVD. The Benchmarks these elevations are derived from are:
  - Manatee County Benchmark #111-29-26, Elevation= 46.210
  - FDOT Benchmark #31, Elevation= 46.13
- 6. Improvements such as, but not limited to, landscape features and subsurface improvements have not been located except as shown. The location of all subsurface improvements (utilities) should be verified in the field prior to any excavation.

Date: July 8, 2010

James N. Gatch, Jr. PSM

Professional Surveyor and Mapper Florida License No. 4295

TOMMY L. FULTON, PE FL REG NO 39722

Cardno

DRAWN Q.C. APPROVED

**SURVEY NOTES** 

00193-008-003 2-2-2012 SHEET NO:

		·
		MANATEE COUNTY
_		RAABIATEE COUNTY

**US 301 AND FT. HAMER ROAD** INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

# **EXISTING SYMBOLS LEGEND**

DENTIFICATION  OFFICIAL RECORD BOOK  P9 PAGE  PPM PAGE	id	IDENTIFICATION
PG PAGE  PP'N PERMANENT REFERENCE MONUMENT  (b) LICENSED BUSINESS  (p) PLAT  (p) FIELD  C.M. CONCRETE MONUMENT  Fdo't FLORIDA DEPARTMENT OF TRANSPORTATION  CONC. CONCRETE  WW W METER VALVE  FH □ FIRE HYDRANT  WM □ WATER NETER  BEP → BACK FLOW PREVNIER  RECLAM WATER NETER  RE W RECLAM WATER VALVE  slight SION  ref □ REFLECTOR  TEL O TELEPHONE PEDESTAL  MHOTP ○ CABLE TELEVISION MANHOLE  CIP ○ CABLE TELEVISION MA		
PPM PERMANENT REFERENCE MONUMENT  (b) LICENSED BUSINESS  (p) PLAT  (F) FIELD  C.In. CONCRETE MONUMENT  FIDIDA DEPARTMENT OF TRANSPORTATION  CONC. CONCRETE  WY™ WATER VALVE  FH C FIRE HYDRANT  WM □ WATER METER  BFP BACK \$1.0W PREVENTER  RECLAIM WATER VALVE  signd SIGN  ref RECLAIM WATER VALVE  signd SIGN  ref REFLECTOR  TEL O TELEPHONE PEDESTAL  MHCTP D CABLE TELEVISION MANHOLE  CIP D CABLE TELEVISION PEDESTAL  MHCTP D CABLE TELEVISION PEDESTAL  MHCTP D CABLE TELEVISION PEDESTAL  MHCTP D CABLE TELEVISION PEDESTAL  WM MIT STUD OUT (UNKNOWN UTILITY)  GBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT FOLE  WOOD POWER POLE  GUY ANCHOR  EXISTING BURIED DRAINAGE PIPE  HOG WIFE OR BARBED WIRE FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING BLEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  CIRCUS WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)		
Ub LICENSED BUSINESS  (p) PLAT  (f) FIELD  C.Ph. CONCRETE MONUMENT  Fidot FLORIDA DEPARTMENT OF TRANSPORTATION  CONC. CONCRETE  WW W MATER VALVE  FH □ FIRE HYDRANT  WM □ WATER NATUR  BFP → BACK FLOW PREVNIER  RECLAM WATER VALVE  sign □ SIGN  TOF □ REFLECTOR  TEL □ TELEPHONE PEDESTAL  MHCTP □ CABLE TELEVISION MANHOLE  CTP □ CABLE TELEVISION MANHOLE  CTP □ CABLE TELEVISION MANHOLE  CTP □ GATE POST  FOC □ and/or FOC □ STUB GUT (UNKNOWN UTILITY)  CBC □ CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD DIGHT POLE  WOOD UGHT POLE  WOOD UGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TIREE  BURIED 20" FORCE MAIN LINE  BURIED 10" FORCE MAIN LINE  WOOD PLASTIC FENCE LINE  CHAIN LINK FENCE  CHAIN LINK FE		
(p) PLAT (f) FIELD  c.n. CONCRETE MONUMENT Folot FLORIDA DEPARTMENT OF TRANSPORTATION  conc. CONCRETE  WV → WATER VALVE FH ← FIRE HYDRANT  wn → WATER METER  BFP → BACK FLOW PREVENTER  REI_ w → RECLAIM WATER METER  RE _ w → RECLAIM WATER WETER  RELOTED CABLE TELEVISION MANHOLE  CTP ← CABLE TELEVISION MANHOLE  CTP ← CABLE TELEVISION PEDESTAL  MICHOP ← CABLE TELEVISION MENDING  FOC □ and/or FOC ← FIBER OPITIC CABLE  WONTORING WELL  4*PYC ← STUB OUT (UNKNOWN UTILITY)  CBC   CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 26* PORTABLE WATER LINE  EXISTING BURIED DRAIMAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SUPFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LUCY OAK WITH (TREE QUALITY)  HARD  HA		
(F) C.m. CONCRETE MONUMENT Fdot FLORIDA DEPARTMENT OF TRANSPORTATION CONC. CONCRETE WV → WATER VALVE FH ← FIRE HYDRANT Wm □ WATER METER BFP -0 BACK FLOW PREVENTER REM □ RECLAIM WATER VALVE sign □ SIGN Fef ← RECLAIM WATER VALVE sign □ SIGN Fef ← RECLAIM WATER VALVE Sign □ SIGN Fef ← RECLAIM WATER VALVE SIGN ■ REFLECTOR TEL ○ TELEPHONE PEDESTAL MHCTP ○ CABLE TELEVISION MANHOLE CITP ○ CABLE TELEVISION PEDESTAL MMAIL BOX GP ● GATE POST FOC □ and/or FOC ● FIBER OPTIC CABLE WONDITORING WELL 4*TPVC ● STUB OUT (UNKNOWN UTILITY) COSC I CONCRETE BLOCK COLUMN METAL LIGHT POLE WOOD LIGHT POLE WOOD LIGHT POLE WOOD POWER POLE GUY ANCHOR EXISTING TREE BURIED 16* FORCE MAIN LINE BURIED 16* FORCE MAIN LINE EXISTING BURIED DRAINAGE PIPE HOG WIRE OR BARRED WIRE FENCE LINE WOOD OR PLASTIC FENCE LINE WOOD ROPERSOUND CABLE TELEVISION LINE UNDERGROUND CABLE TELEVISION LINE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LAUREL OAK WITH (TREE QUALITY) PINE WITH (TREE QUALITY)		•
C.II.  fidot conc. conc. conc. CONCRETE WV   MATER VALVE FH  FH  FH  FIRE HYDRANT WITH BFP  BFP  BACK FLOW PREVENTER REV.  RECLAIM WATER WETER REV.  RECLAIM WATER VALVE Sign  SIGN FIG  REFLECTOR TEL O TELEPHONE PEDESTAL MH-TIP  CABLE TELEVISION MANHOLE CTP  CABLE TELEVISION MANHOLE CTP  CABLE TELEVISION PEDESTAL MH-TIP  CABLE TELEVISION MANHOLE CTP  CABLE TELEVISION MANHOLE  CTP  CABLE TELEVISION MANHOLE  CTP  CABLE TELEVISION MANHOLE  CTP  CABLE TELEVISION MANHOLE  WOOD DIGHT POLE WOOD DIGHT POLE WOOD POWER POLE GUY ANCHOR EXISTING TREE  BURIED 16" FORCE MAIN LINE BURIED 20" PORTABLE WATER LINE EXISTING BURIED DRAINAGE PIPE HOG WIRE OR BARBED WIRE FENCE LINE CHAIN LINK FENCE LINE UNDERGROUND CABLE TELEMISION LINE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LIVE OAK WITH (TREE QUALITY) AND WITH (TREE QUALITY) PINE WITH (TREE QUALITY)		
Fidot CONCRETE WY → WATER VALVE FH □ FIRE HYDRANT WITH HADRANT WATER METER BFP → BACK FLOW PREVENTER RESWITH RECLAIM WATER VALVE SIGN REFLECTOR TEL 0 TELEPHONE PEDESTAL WHICTP ○ CABLE TELEVISION MANHOLE CITP ○ CABLE TELEVISION PEDESTAL WITH B □ MAIL BOX GP ● GATE POST FIDER OPTIC CABLE MONITORING WELL  4*PVC ● STUB OUT (LUNKNOWN UTILITY) COSC I CONCRETE BLOCK COLUMN METAL LIGHT POLE WOOD LIGHT POLE WOOD POWER POLE GUY ANCHOR EXISTING TIERE BURIED 16* FORCE MAIN LINE BURIED 20* PORTABLE WATER LINE EXISTING BURIED DRAINAGE PIPE HOG WIRE OR BARBED WIRE FENCE LINE WOOD OR PLASTIC FENCE LINE CHAIN LINK FENCE LINE UNDERGROUND CABLE TELEVISION LINE UNDERGROUND CARRY TO THE CABLE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TO OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LEVE OAK WITH (TREE QUALITY) PALM WITH (TREE QUALITY)		
CONCRETE  WV № WATER VALVE  FH Q FIRE HYDRANT  WM □ WATER METER  BFP → BACK FLOW PREVENTER  RECLAIM WATER METER  REQLAIM WATER METER  REQLAIM WATER METER  RECLAIM WATER VALVE  sign □ SIGN  ITEL ○ TELEPHONE PREDESTAL  MHCTP ○ CABLE TELEVISION MANHOLE  CTP ○ CABLE TELEVISION PROFESTAL  MAL BOX  GP □ GATE POST  FOC □ and/or FOC □ FIBER OPTIC CABLE  MONITORING WELL  A"PV □ STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  WETAL LICHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARRED WIRE FENCE LINE  WOOD OF PLASTIC FENCE LINE  UNDERGROUND VERIZON LINE		
WV ™ □ WATER VALVE  FH □ FIRE HYDRANT  Wm □ WATER METER  BFP BACK FLOW PREVENTER  RE w ™ RECLAIM WATER METER  RE w ™ RECLAIM WATER VALVE  sign □ SIGN  ref □ REFLECTOR  TEL ○ TELEPHONE PEDESTAL  MHCTP □ CABLE TELEVISION MANHOLE  CTP □ CABLE TELEVISION PEDESTAL  MAIL BOX  OP □ GATE POST  FOC □ and /or FOC □ FIBER OPTIC CABLE  W MONITORING WELL  4"PVC STUB GUT (UNKNOWN UTILITY)  CBC □ CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 10" FORCE MAIN LINE  BURIED 10" FORCE MAIN LINE  BURIED 10" FORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OF PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
FH		
BFP - ○ RE → □ RECLAIM WATER METER  RE → □ RECLAIM WATER VALVE  sign □ SIGN  ref → REFLECTOR  TEL ○ TELEPHONE PEDESTAL  MHCTP □ CABLE TELEVISION MANHOLE  CTP □ CABLE TELEVISION PEDESTAL  MHCTP □ CABLE TELEVISION PEDESTAL  MHCTP □ CABLE TELEVISION PEDESTAL  MHCTP □ CABLE TELEVISION PEDESTAL  MM L BOX  OP ● GATE POST  FOC □ and/or FOC ● FIBER OPTIC CABLE  MONITORING WELL  4"PVC ● STUB OUT (UNKNOWN UTILITY)  CBC □ CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD DOWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  INDEX  HAPLE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	FH Q	FIRE HYDRANT
RELAIM WATER METER  RELAIM WATER VALVE  sign d  sign d  sign d  sign d  ref	wm □	WATER METER
RECLAIM WATER VALVE  sign q SIGN  ref	BFP -O-	BACK FLOW PREVENTER
sign d ref  REFLECTOR TEL O TELEPHONE PEDESTAL  MHCTP O CABLE TELEVISION MANHOLE  CTP O CABLE TELEVISION PEDESTAL  MAL BOX  CP GATE POST  FOC and/or FOC FIBER OPTIC CABLE  MONITORING WELL  4"PVC STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD LIGHT POLE  GUY ANCHOR  EXISTING TREE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LUVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	REwm □	RECLAIM WATER METER
ref □ TELEO TELEPHONE PEDESTAL  MHCTP ○ CABLE TELEVISION MANHOLE  CTP ○ CABLE TELEVISION PEDESTAL  MAIL BOX  CP GATE POST  FOC □ and/or FOC □ FIBER OPTIC CABLE  MONITORING WELL,  4"PVC □ STUB OUT (UNKNOWN UTILITY)  CBC □ CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND VERIZON LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PICE  PICE  PICE  PICE  PICE  TITLE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LAUREL OAK WITH (TREE QUALITY)  PICE  PICE  PICE  PICE  PALM WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	. RE <sub>qv</sub> ⋈	RECLAIM WATER VALVE
TEL O  MHCTP O  CABLE TELEVISION MANHOLE  CTP O  CABLE TELEVISION PEDESTAL  MAL BOX  GP GATE POST  FIGER OPTIC CABLE  MONITORING WELL  4"PVC STUB OUT (UNKNOWN UTILITY)  CBC I  CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WRE OR BARRED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	sign □	SIGN
MHCTP O CTP D CABLE TELEVISION MANHOLE  CTP D CABLE TELEVISION PEDESTAL  MAIL BOX  OP GATE POST  FISER OPTIC CABLE  MONITORING WELL  4"PVC STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OP PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LEVE OAK WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	•	REFLECTOR
CTP O  MAIL BOX  GP •  GATE POST  FOC □ and/or FOC •  FISER OPTIC CABLE  MONITORING WELL  4"PVC •  STUB OUT (UNKNOWN UTILITY)  CSC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING BLEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PICED  PICED  PICED  PICED  PICED  HOTO  GROW  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	TEL O	TELEPHONE PEDESTAL
mb ☐ MAIL BOX  GP • GATE POST FOC □ and/or FOC ● FIBER OPTIC CABLE  MONITORING WELL  4"PVC ● STUB OUT (UNKNOWN UTILITY)  GBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  HODE  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	MHCTP Ø	CABLE TELEVISION MANHOLE
GP GATE POST FOC Gand/or FOC FIBER OPTIC CABLE  MONITORING WELL  STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  GROUP  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	CTP Ø	CABLE TELEVISION PEDESTAL
FIDER OPTIC CABLE  MONITORING WELL  4"PVC STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  UNDERGROUND VERIZON LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	mb ☐	MAIL BOX
MONITORING WELL  4"PVC STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PIGES  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	GP ●	GATE POST
STUB OUT (UNKNOWN UTILITY)  CBC I CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  ISO(B)  INCO)  MAPLE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	FOC 🛘 and/or FOC 🌑	FIBER OPTIC CABLE
CBC I  CONCRETE BLOCK COLUMN  METAL LIGHT POLE  WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  ILOCKS)  LAUREL OAK WITH (TREE QUALITY)  PICOS  PICOS  PICOS  PICOS  PICOS  PICOS  PICOS  PALM WITH (TREE QUALITY)  PICOS  PICOS  PALM WITH (TREE QUALITY)  PICOS  PICOS  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PICOS  PICOS  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	₩	MONITORING WELL
METAL LIGHT POLE WOOD LIGHT POLE WOOD POWER POLE GUY ANCHOR EXISTING TREE  BURIED 16" FORCE MAIN LINE BURIED 20" PORTABLE WATER LINE EXISTING BURIED DRAINAGE PIPE HOG WIRE OR BARBED WIRE FENCE LINE WOOD OR PLASTIC FENCE LINE CHAIN LINK FENCE LINE UNDERGROUND CABLE TELEVISION LINE UNDERGROUND VERIZON LINE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LIVE OAK WITH (TREE QUALITY) LAUREL OAK WITH (TREE QUALITY) PICO PINE WITH (TREE QUALITY)	4"PVC ●	STUB OUT (UNKNOWN UTILITY)
WOOD LIGHT POLE  WOOD POWER POLE  GUY ANCHOR  EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  PIGED  PIGED  PINE WITH (TREE QUALITY)  PICED  POLYMER  POLYMER  POLYMER  GUY ANCHOR  BURIED 16" FORCE MAIN LINE  EXISTING ELEVATION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PICED  PICED  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	CBC I	CONCRETE BLOCK COLUMN
WOOD POWER POLE GUY ANCHOR EXISTING TREE  BURIED 16" FORCE MAIN LINE BURIED 20" PORTABLE WATER LINE EXISTING BURIED DRAINAGE PIPE HOG WRE OR BARBED WIRE FENCE LINE WOOD OR PLASTIC FENCE LINE CHAIN LINK FENCE LINE UNDERGROUND CABLE TELEVISION LINE UNDERGROUND VERIZON LINE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LIVE OAK WITH (TREE QUALITY) LOCID LAUREL OAK WITH (TREE QUALITY) PRICED CITCUS WITH (TREE QUALITY) PINE WITH (TREE QUALITY) PALM WITH (TREE QUALITY) PALM WITH (TREE QUALITY)		METAL LIGHT POLE
GUY ANCHOR EXISTING TREE  BURIED 16" FORCE MAIN LINE BURIED 20" PORTABLE WATER LINE EXISTING BURIED DRAINAGE PIPE HOG WRE OR BARBED WIRE FENCE LINE WOOD OR PLASTIC FENCE LINE CHAIN LINK FENCE LINE UNDERGROUND CABLE TELEVISION LINE WATER SURFACE AND/OR JURISDICTIONAL LINE TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL) LIVE OAK WITH (TREE QUALITY)  HOGGO LAUREL OAK WITH (TREE QUALITY)  HOGGO CITCUS WITH (TREE QUALITY) PINE WITH (TREE QUALITY) PALM WITH (TREE QUALITY)	$\bigotimes$	WOOD LIGHT POLE
EXISTING TREE  BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PAGE)  MAPLE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)	Ø	
BURIED 16" FORCE MAIN LINE  BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  PACE  LIVE OAK WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	•	
BURIED 20" PORTABLE WATER LINE  EXISTING BURIED DRAINAGE PIPE  HOG WRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PIGO  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	£3	EXISTING TREE
EXISTING BURIED DRAINAGE PIPE  HOG WIRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  Hacib)  MAPLE WITH (TREE QUALITY)  PIGE)  PIGE)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		BURIED 16" FORCE MAIN LINE
HOG WRE OR BARBED WIRE FENCE LINE  WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  Pacib)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PICE  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		BURIED 20" PORTABLE WATER LINE
WOOD OR PLASTIC FENCE LINE  CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LOCKD  Hack)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		EXISTING BURIED DRAINAGE PIPE
CHAIN LINK FENCE LINE  UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LOCKD  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
UNDERGROUND CABLE TELEVISION LINE  UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  PAG(b)  MAPLE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
UNDERGROUND VERIZON LINE  WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITCUS WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
WATER SURFACE AND/OR JURISDICTIONAL LINE  TOP OF BANK  TOE OF SLOPE  BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  Laurel OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PIGE  PIGE  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	ug-verizon	
TOP OF BANK TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITCUS WITH (TREE QUALITY)  PIGES  PIGES  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
TOE OF SLOPE BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PO(0)  PINE WITH (TREE QUALITY)  PO(0)  PALM WITH (TREE QUALITY)		·
BENCH MARK  EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LOCKD  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PICO  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
EXISTING ELEVATION (TYPICAL)  LIVE OAK WITH (TREE QUALITY)  LOC(b)  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PI(b)  PALM WITH (TREE QUALITY)	<u> </u>	
LIVE OAK WITH (TREE QUALITY)  LOCKD  LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PICO  PINE WITH (TREE QUALITY)  PICO  PALM WITH (TREE QUALITY)	, s	
LAUREL OAK WITH (TREE QUALITY)  MAPLE WITH (TREE QUALITY)  CITRUS WITH (TREE QUALITY)  PI(b)  PALM WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)	, Kori	EXISTING ELEVATION (TYPICAL)
MAPLE WITH (TREE QUALITY)  cit(b)  CITRUS WITH (TREE QUALITY)  pl(b)  PINE WITH (TREE QUALITY)  pl(b)  PALM WITH (TREE QUALITY)	lo(b)	
CITRUS WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
PINE WITH (TREE QUALITY)  PALM WITH (TREE QUALITY)		
pl(b) PALM WITH (TREE QUALITY)		
ORNAMENTAL WITH (TREE QUALITY)	· ·	
	ann(b)	ORNAMENTAL WITH (TREE QUALITY)

INVERT ELEVATION MITER END SECTION JUNCTION BOX (DRAINAGE) CONTROL STRUCTURE (DRAINAGE) CURB. INLET GRATE INLET WATER VALVE FORCE MAIN

# PROPOSED SYMBOLS LEGEND

PROPOSED GUTTER FLOW PROPOSED WIDENING EXIST PAVEMENT TO BE REMOVED MILL AND RESURFACE PROPOSED RIPRAP



# PROPOSED LINEWORK LEGEND

<u></u>	PROPOSED	PAVEMENT LINE
52+00	PROPOSED	© OF CONSTRUCTION
	PROPOSED	SHOULDER
	PROPOSED	STORM PIPE AND FLOW DIRECTION
	PROPOSED	RIGHT OF WAY

# **ABBREVATIONS**

	ASVE BCCCOOL V TO I I I I I I I I I I I I I I I I I I	DENOTES AYENUE DENOTES AVENUE DENOTES BENCHMARK DENOTES CONCRETE MONUMNET DENOTES CONCRETE MONUMET DENOTES CONCRETE DENOTES CONSTRUCT DENOTES DUCTILE IRON PIPE DENOTES DRIVE DENOTES DRIVE DENOTES DRIVE DENOTES ELEVATION DENOTES ELEVATION DENOTES ELEVATION DENOTES FOUND DENOTES FOUND DENOTES FOR PAVEMENT DENOTES FOR DATE DENOTES FOR DATE DENOTES INSOME DENOTES HORIZONTAL DENOTES HIGH POINT DENOTES INSIDE DIAMETER / DIMENSION DENOTES INVERT DENOTES IRON ROD DENOTES ARC LENGTH DENOTES LICENSED BUSINESS DENOTES LICENSED BUSINESS DENOTES LICENSED SURVEYOR DENOTES MAXIMUM DENOTES MAXIMUM DENOTES MAXIMUM DENOTES NOTH DENOTES NOTH DENOTES NOTH DENOTES NATIONAL GEODETIC SURVEY DENOTES OFFICIAL RECORD BOOK DENOTES PROFILE GRADE LINE DENOTES PROFILE GRADE POINT DENOTES PROFILE GRADE LINE DENOTES PROFILE GRADE LINE DENOTES PROFILE GRADE LINE DENOTES PROFILE GRADE LINE DENOTES PROFILE GRADE POINT DENOTES SANITARY SEWER LINE DENOTES STREET DENOTES SANITARY SEWER LINE DENOTES STREET DENOTES SOUTH DENOTES SIDEWALK DENOTES SUPPLIAL DENOTES SOUTH DENOTES SUPPLIAL DENOTES S
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NOTE: LOWERCASE TEXT DESIGNATES EXISTING AND UPPERCASE DESIGNATES PROPOSED IN PLAN SET 1

**MANATEE COUNTY** 

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

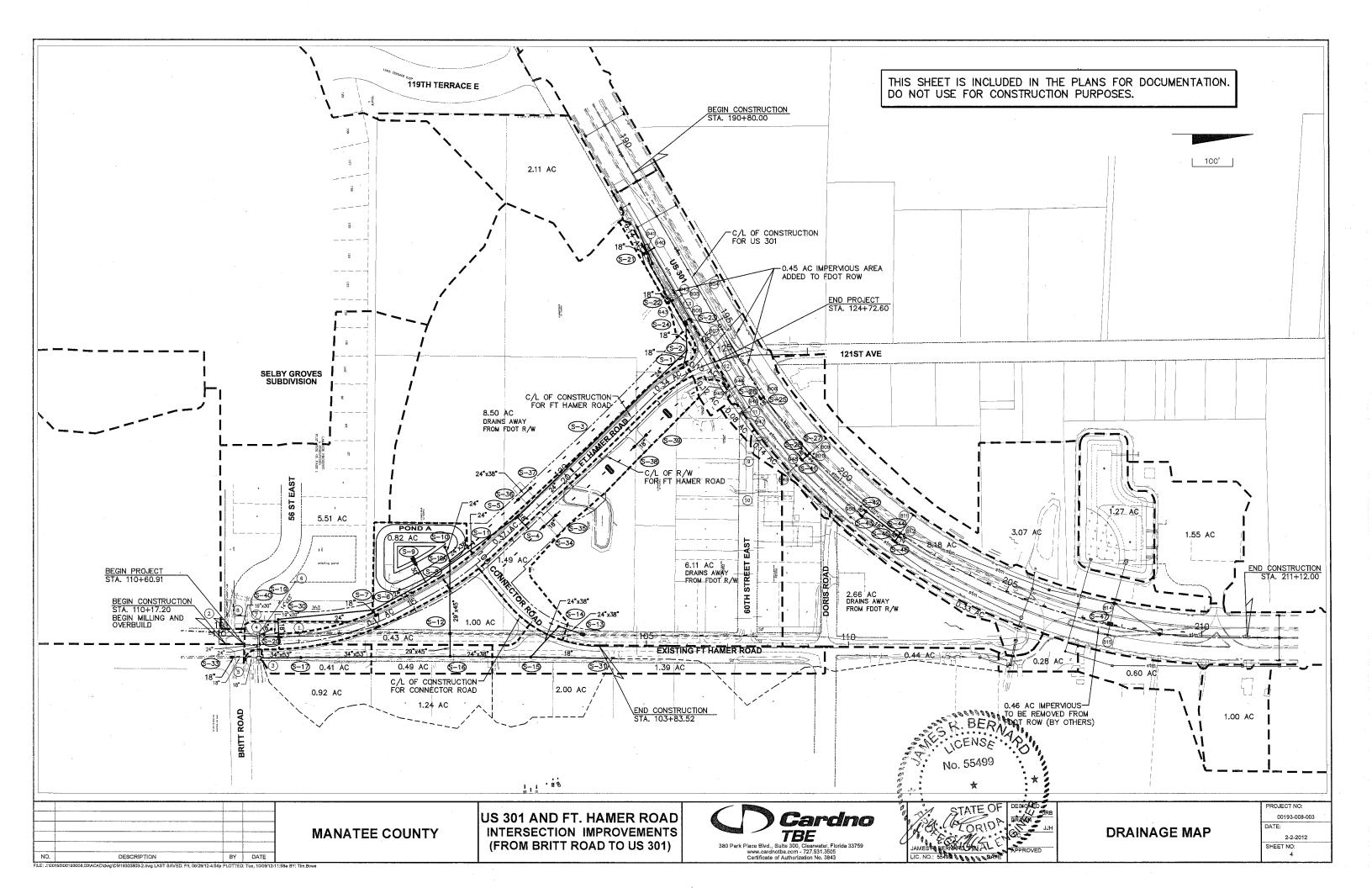


DRAWN TLF Q.C. APPROVED

**LEGEND AND ABBREVIATIONS** 

00193-008-003 2-2-2012 SHEET NO:

TOMMY L. FULTON, P.E. LIC. NO.: 39722



#### MITER END SECTION ( 1 )TO BE REMOVED PIPE pipe1 - 14"x23" hercp mes - inv. el. = 40.19n.w. inv. el. = 40.77 s.e. inv. el. = 39.49(2) pipe2 - 19"x30" rcp TO BE REMOVED mes - inv. el. = 40.43s. inv. el. = 39.49(3) TO BE REMOVED pipe3 - 19"x30" rcp mes - inv, el, = 41.41inv. el. = 39.49 JUNCTION BOX pipe4 - 24" rcp w. inv. el. = 39.49 (4)e. inv. el. = 39.65rim el. = 44.12 INV (N) 39.50 (18" RCP) pipe5 - 24" rcp w. inv. el. = 3**9**.49 ADD RESTRICTOR PLATES e. inv. el. = 39.62(SEE S-40) pipe6 - 12"x18" rcp TO BE REMOVED s. inv. el. = 41.56 (5)rim el. = 43.35pipe7 - 18" rcp n. inv. el. = 39.62CONTROL STRUCTURE pipe8 - 12"x18" rcp (6) e. inv. el. = 41.10pipe9 - 18" rcp grate el. = 43.98 s. inv. el. = 40.07CURB INLET n. inv. el. = 42.29 TO BE REMOVED s. inv. el. = 42.47pipe11 - 15" cpp n. inv. el. = 43.70 TO BE REMOVED s. inv. el. = 43.66 inv. el. = 45.58s. inv. el. = 41,15eop el. = 45.08pipe 12 - 15" rcp n. inv. el. = 42.65 s. inv. el. = 42.42 (8) inv. el. = 45.33n. inv. el. = 40.75 eop el. = 44.83 pipe 13 - 15" cpp n. inv. el. = 44.04s. inv. el. = 43.99w. inv. el. = 40.75(9) pipe 14 - 18" rcp n. inv. el. = 42.88 s. inv. el. = 42.62 top el. = 45.98n. flow el. = 45.31s. flow el. = 45.34pipe15 - 18" rcp n. inv. el. = 43.11 s. inv. el. = 43.12 (10)top el. = 46.18 n. flow el. = 45.49 pipe16- 15" rcp s. inv. el. = 43.43s. flow el. = 45.55pipe17- 24" cmp/24" rcp REMOVED BY OTHERS n. inv. el. = 42.93GRATE INLET (11) REMOVED BY OTHERS pipe18- 14" 23" rcp REMOVED BY OTHERS s. inv. el. = 44.18grate el. = 46.02 n. inv. el. = 43.99 s. inv. el. = 43.85 pipe19 - 24" cmp n. inv. el. = 43.46 s. inv. el. = 43.75. REMOVED BY OTHERS (12) REMOVED BY OTHERS grate el. = 46.09 n. inv. el. = 43.89 s. inv. el. = 43.90(13) REMOVED BY OTHERS grate el. = 46.03 n. inv. el. = 44.13 s. inv. el. = 44.11

US 301 EXISTING DRAINAGE STRUCTURE 940 (950)

mh type p-7 mh type p-8 rim el 45.56 rim el 47.07 t/slb el 44.06 fl 38.80 (rt) fl 40.90 (rt)TO BE REMOVED fl 38.80 (bk) fl 39.70 (ah) fl 39.70 (bk) INV (SE) 40.17 (18" RCP)

(941) TO BE REMOVED

dbi type "d" grate el 44.90 fi 41.50 (It)

942 mh type p-7 rim el 46.44 t/slb el 44.94 fl 41.80 (rt) fl 39.50 (ah) fl 39.50 (bk)

(943) TO BE REMOVED

dbi type "d" grate el 45.50 fl 42.50 (It)

944

mh type p-7 rim el 48.33 t/slb el 46.83 fl 43.50 (rt) fl 39.30 (ah) fl 39.30 (bk)

945

dbi type "d" grate el 46.20 fl 43.60 (lt)

946

mh type p-7 rim el 48.15 t/slb el 46.65 fi 43.00 (rt) fl 39.20 (ah) fl 39.20 (bk)

947

dbi type "d" grate el 45.70 fl 43.10 (lt)

948

mh type p-7 rim el 47.61 fl 42.80 (rt) fl 39.00 (ah fl 39.00 (bk)

(949)

dbi type "d" fl 42.90 (lt) 803

curb inlet type p-6 ep el 45.07 fl 36.30 (lt) INV (E) 42.49 (15" RCP) 804)

(814)

ep el 44.68

fl 31.10 (It)

fl 39.30 (rt)

fl 35.40 (ah)

fl 31.10 (bk)

ep el 46.44

fl 41.70 (lt)

(815)

index no 200 & 211

curb inlet type p-6

curb inlet type j-6 (8' dia)

curb inlet type p-5 ep el 45.67 fl 40.90 (rt)

805

mh type j-7 (5'dia) rim el 46.92 t/slb el 45.42 fi 40.80 (lt) fl 35.90 (ah) fl 35.90 (bk)

806

curb inlet type p-5 (olt a, (4'dia) ep el 46.93 fl 36.20 (it)

(807)

mh type j-8 (8'dia) rim el 47.25 fl 35.70 (rt) fl 34.00 (ah) fl 35.70 (bk)

(808)

TO BE MODIFIED (SEE S-25) dbi type "d" (rotated) grote el 44.72 fl 33.80 (ah) fl 33.80 (bk) INV (SE) 41.00 (18" RCP)

809

curb inlet type p-5 ep el 45.49 fl 40.70 (rt)

(810)

TO BE MODIFIED (SEE S-27) dbi type "d" w/ j-bott (6'dia) grate el 44.19 fl 40.60 (lt) fl 33,60 (bk) fl 33.60 (ah) INV (SE) 40.50 (24" RCP)

(811)

curb inlet type p-5 ep el 44.59 fl 41.50 (ah) fl 41.50 (bk) fl 39.80 (rt)

(812)

TO BE MODIFIED (SEE S-44) dbi type "d" w/ j-bott (6'dia) 11 39.70 (It)
11 33.40 (ab) R. BERN
11 33.40 (5) R. BERN
11 X 10 R grate el 43.29

DRAWN

JAMES REFINARD, RETATE APPROVED APPROVE SHEET NO:

PROJECT NO:

00193-008-003

2-2-2012

NO. DESCRIPTION BY DATE

MANATEE COUNTY

**US 301 AND FT. HAMER ROAD** INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

Cardno TBE

380 Park Place Blvd., Suite 300, Clearwater, Flo www.cardnotbe.com - 727,531,3505 Certificate of Authorization No. 3843

STA 123+92.45 17.25' LT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 47.00 INV (W) 43.00 (18" RCP) S-2 STA 124+17.62 51.40' LT CONST STORM MANHOLE TYPE P-8 FDOT INDEX 200, 201 RIM EL 47.40 INV (E) 42.92 (18" RCP) INV (W) 42.92 (18" RCP) INV (SE) 42.42 (24" RCP) S-3 STA 121+20.00 23.50' LT CONST STORM MANHOLE TYPE P-8 FDOT INDEX 200, 201 RIM EL 49.32 INV (NW) 41,17 (24" RCP) INV (SE) 41.17 (24" RCP) S-4 STA 118+41.60 23.00' RT CONST PIPE PLUG FDOT INDEX 280 INV (SW) 43.50 (18" RCP) STA 118+41.60 17.25' LT CONST CURB INLET TYPE 6 FDOT INDEX 200, 211 EOP EL 47.95 INV (NW) 40.06 (24" RCP) INV (NE) 43.34 (18" RCP) INV (SE) 38.00 (24" RCP) (S-6) STA 114+05.00 17.25' LT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 46.68 INV (SW) 42.60 (18" RCP) S-7 STA 114+05.05 31.81' LT CONST STORM MANHOLE TYPE P-8 FDOT INDEX 200, 201 RIM EL 46.20 INV (NE) 42.49 (18" RCP) INV (NW) 40.09 (24" RCP) INV (S) 40.09 (24" RCP) (s-8) STA 115+55.04 34.25' LT CONST STORM MANHOLE TYPE P-8 FDOT INDEX 200, 201 RIM EL 47.56 INV (NW) 36.88 (24" RCP) INV (SE) 39.80 (24" RCP) INV (SW) 36.38 (30" RCP) STA 115+55.04 92.83' LT CONST MITERED END SECTION (2:1) FDOT INDEX 272 INV (NE) 36.29 (30" RCP) (S-10) STA 116+50.00 81.00' LT CONST DITCH BOTTOM INLET TYPE G (MOD) FDOT INDEX 200, 233 (SEE DRAINAGE DETAILS) (S-10A) STA 116+38.76 46.57' LT CONST STORM MANHOLE TYPE J-7 (5'x5') FDOT INDEX 200, 201 RIM EL 45.50 INV (W) 40.78 (24" RCP) INV (E) 40.36 (29"x45" ERCP) INV (NW) 40.78 (24"x38" ERCP)

STA 117+18.55 44.47' LT CONST STRAIGHT CONC. ENDWALL FDOT INDEX 250 INV (SE) 42.24 (24"x38" ERCP) (S-12) STA 115+47.03 107.09' RT CONST DITCH BOTTOM INLET TYPE D ALT B J-BOTTOM (3.5'x6')FDOT INDEX 200, 232 GRATE EL 44.25 INV (W) 39.82 (29"x45" ERCP) INV (E) 39.82 (29"x45" ERCP) (S-13) STA 103+41.27 C/L CONNECTOR ROAD 25.94' LT CONST MITERED END SECTION (4:1) WITH GRATE FDOT INDEX 273 INV (S) 42.50 (24"x38" ERCP) (S-14) STA 102+67.75 C/L CONNECTOR ROAD 29.19' LT CONST DITCH BOTTOM INLET TYPE D ALT B J-BOTTOM (5'x6') FDOT INDEX 200, 232 GRATE EL 44.50 3/4" FULL HEIGHT SLOT (SW) 44.00 INV (N) 40.73 (24"x38" ERCP) INV (SÉ) 40.73 (24"x38" ERCP) (S-15) STA 102+38.87 C/L CONNECTOR ROAD 69.09' RT CONST DITCH BOTTOM INLET TYPE D ALT B J-BOTTOM (5'x6') FDOT INDEX 200, 233 GRATE EL 43.50 3/4" FULL HEIGHT SLOT (E) 43.00 INV (NW) 40.26 (24"x38" ERCP) INV (N) 40.94 (18" RCP) INV (S) 39.84 (29"x45" ERCP) (S-16) STA 115+20.33 156.57' RT CONST DITCH BOTTOM INLET TYPE D ALT B J-BOTTOM (5'X6') FDOT INDEX 200, 232 GRATE EL 43.50 3/4" FULL HEIGHT SLOT (E) 43.00 INV (W) 39.64 (29"x45" ERCP) INV (N) 39.64 (29"x45" ERCP INV (S) 39.22 (34"x53" ERCP) (S-17) STA 112+00.05 36.51' RT CONST DITCH BOTTOM INLET TYPE D ALT B J-BOTTOM (3.5'x6')FDOT INDEX 200, 232 **GRATE EL 43.10** 3/4" FULL HEIGHT SLOT (E) 42.50 IŃV (N) 38.71 (34"x53" ÈRĆP) INV (S) 38.71 (34"x53" ERCP) S-18) STA 111+05.00 33.50' RT CONST MODIFIED STRAIGHT ENDWALL FDOT INDEX 250 MATCH EXISTING WALL HIEGHT WDTH = 9.5'DOWEL INTO EXISTING WEST WALL TO REMAIN INV (N) 38.57 (34"x53" ERCP) S-19 STA 111+31.00 38.00' LT CONST DITCH BOTTOM INLET TYPE C FDOT INDEX 200, 232

(S-20) STA 111+12.00 18.00' LT CONST MEDIAN OPENING FLUME FDOT INDEX 283 S-21 STA 192+65.00 74.56' RT CONST DITCH BOTTOM INLET TYPE D FDOT INDEX 200, 232 GRATE EL 44.90 INV (NW) 40.25 (18" RCP) (S-22) STA 194+00.00 82.00' RT CONST DITCH BOTTOM INLET TYPE D FDOT INDEX 200, 232 GRATE EL 45.50 INV (NW) 42.91 (18" RCP) (S-23) STA 194+63.10 55.25' RT CONST PIPE PLUG FDOT INDEX 280 S-24 STA 194+63.10 68.25RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 46.67 INV (E) 43.06 (18" RCP) (S-25) STA 197+20.00 0.00' RT CONST STORM MANHOLE PARTIAL (TOP ONLY) TYPE P-7 RIM EL 46.41 inv (ne) 33.80 (30" rcp) inv (sw) 33.80 (30" rcp) INV (SE) 41.00 (18" RCP) (S-26) STA 197+20.00 8.25' RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 46.09 INV (NW) 41.10 (18" RCP) (S-27) STA 199+00.00 00.00' RT CONST STORM MANHOLE PARTIAL (TOP ONLY) TYPE J-8 RIM EL 45.67 inv (ne) 33.60 (42" rcp) inv (sw) 33.60 (30" rcp) inv (nw) 40.60 (24" rcp INV (SE) 40.50 (24" RCP) (S-28) STA 199+00.00 8.25' RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 45.55 INV (NW) 40.60 (24" RCP) INV (SE) 40.60 (18" RCP) (S-29) STA 111+49.98 17.25' LT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 44.36 INV (W) 41.16 (18" RCP) (S-30) STA 111+50.00 62.00' LT CONST STORM MANHOLE TYPE P8 FDOT\_INDEX\_200, 201 RIM EL 44.68 INV (N) 40.57 (24" RCP) INV (E) 41.07 (18" RCP)

(S-31) STA 104+00.00 29.27' RT CONST STORM MANHOLE TYPE P8 FDOT INDEX 200, 201 RIM EL 45.85 INV (S) 41.32 (18" RCP) INV (N) MATCH EXISTING (S-32) STA 192+96.19 67.59' RT CONST CURB INLET TYPE 9 FDOT INDEX 200, 214 FOP FL 45.04 INV (W) 42.62 (15" RCP) (S-33) STA 110+28.44 31.82' RT CONST MITERED END SECTION (4:1) FDOT INDEX 273 INV (N) 40.10 (18" RCP) (S-34) STA 118+70.00 45.00' RT CONST MITERED END SECTION (4:1) FDOT INDEX 273 INV (NW) 45.20 (18" RCP) (S-35) STA 119+17.00 45.00' RT CONST MITERED END SECTION (4:1) FDOT INDEX 273 INV (SE) 45.30 (18" RCP) (S-36 STA 118+70.00 47.00' LT CONST MITERED END SECTION (4:1) WITH GRATE FDOT INDEX 273 INV (NW) 44.24 (24"x38" ERCP) (S-37 STA 119+17.00 47.00' LT CONST MITERED END SECTION (4:1) WITH GRATE FDOT INDEX 273 INV (SE) 44.36 (24"x38" ERCP) STA 121+70.00 55.00' RT CONST MITERED END SECTION (4:1) FDOT INDEX 273 INV (NW) 45.90 (18" RCP) (S-39) STA 122+16.00 55.00' RT CONST MITERED END SECTION (4:1) FDOT INDEX 273 INV (SE) 46.00 (18" RCP) MODIFY EXISTING DRAINAGE STRUCTURE (SEE NOTE) (S-41) STA 199+00.00 24.75' RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 47.25 INV (NW) 40.70 (18" RCP) (S-42) STA 201+00.00 8.25' RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 EOP EL 44.95 INV (NE) 40.10 (18" RCP" INV (SE) 40.10 (18" RCP) S R. BERNS SR. BERNY

S-43 STA 201+00.00 24.75' RT CONST CURB INLET TYPE 5 FDOT INDEX 200, 211 FOP FL 46.65 INV (NW) 40.20 (18" RCP) (S-44) STA 202+00.00 0.00' RT CONST STORM MANHOLE PARTIAL (TOP ONLY) TYPE J-8 RIM EL 44.79 inv (ne) 33.40 (42\* rcp) inv (sw) 33.40 (42" rcp) inv (nw) 39.70 (24" rcp) INV (SE) 39.70 (24" RCP) (S-45) STA 202+00.00 8,25' RT CONST CURB INLET TYPE 6 FDOT INDEX 200, 211 EOP EL 44.65 INV (NW) 39.80 (24" RCP) INV (SE) 39.80 (18" RCP) INV (SW) 39.80 (18" RCP) (S-46) STA 202+00.00 24.75' RT CONST CURB INLET TYPE 6 FDOT INDEX 200, 211 FOP FL 46.35 INV (NW) 39.90 (18" RCP) (S-47) STA 207+70.00 3.00' LT DITCH BOTTOM INLET TYPE B (W/ TRAVERSABLE DOUBLE SLOT) FDOT INDEX 200, 231 GRATE EL 43.66 inv (e) 40.92 (24" rcp) inv (w) 40.80 (24" rcp)

NOTE: FOR STRUCTURE (S-40)

ESIGNED

DRAWN JJ

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MARIE R BERNATO PE. LIENNO SAISO ON ALL

Cardno

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www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843

380 Park Place Blvd., Suite 30

INSTALL TWO (2) 1/4" THICK STEEL FLOW RESTRICTOR PLATES WITH 19-3/4" DIAMETER OPENINGS OVER THE OPENINGS OF THE EXISTING 24" OUTLET PIPES (E). CENTER PLATES HORIZONTALLY AND MATCH EXISTING PIPE INVERT ELEVATIONS. ATTACH EACH PLATE WITH 4-1/2"x3" BOLTS WITH WELDED IN PLACE NUTS. SEAL ANY GAPS BETWEEN PLATES AND JUNCTION BOX WALLS USING NON-SHRINK GROUT.

ROJECT NO

SHEET NO:

00193-008-003

2-2-2012

PROPOSED DRAINAGE

STRUCTURE DATA

**MANATEE COUNTY** 

NO

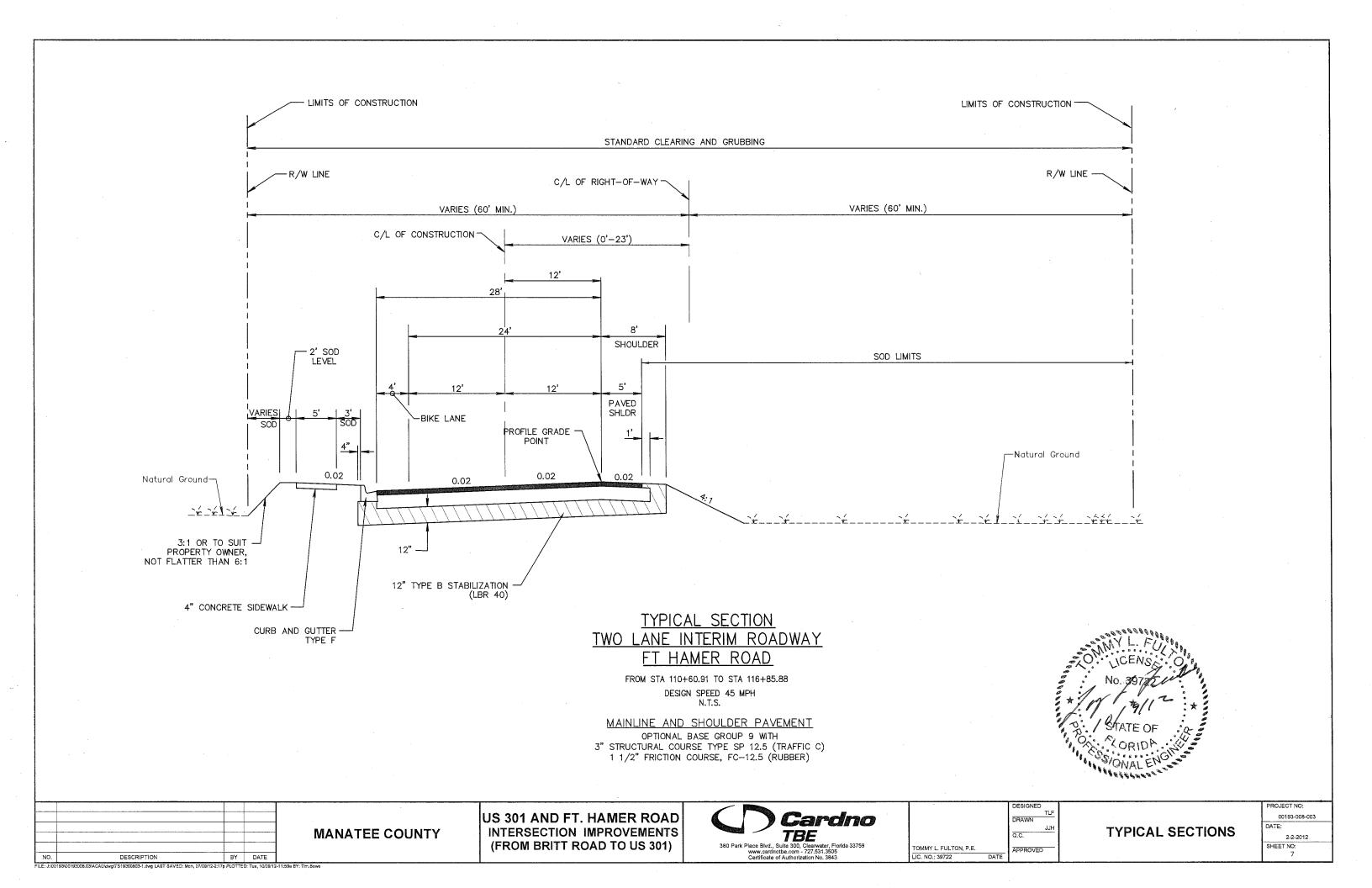
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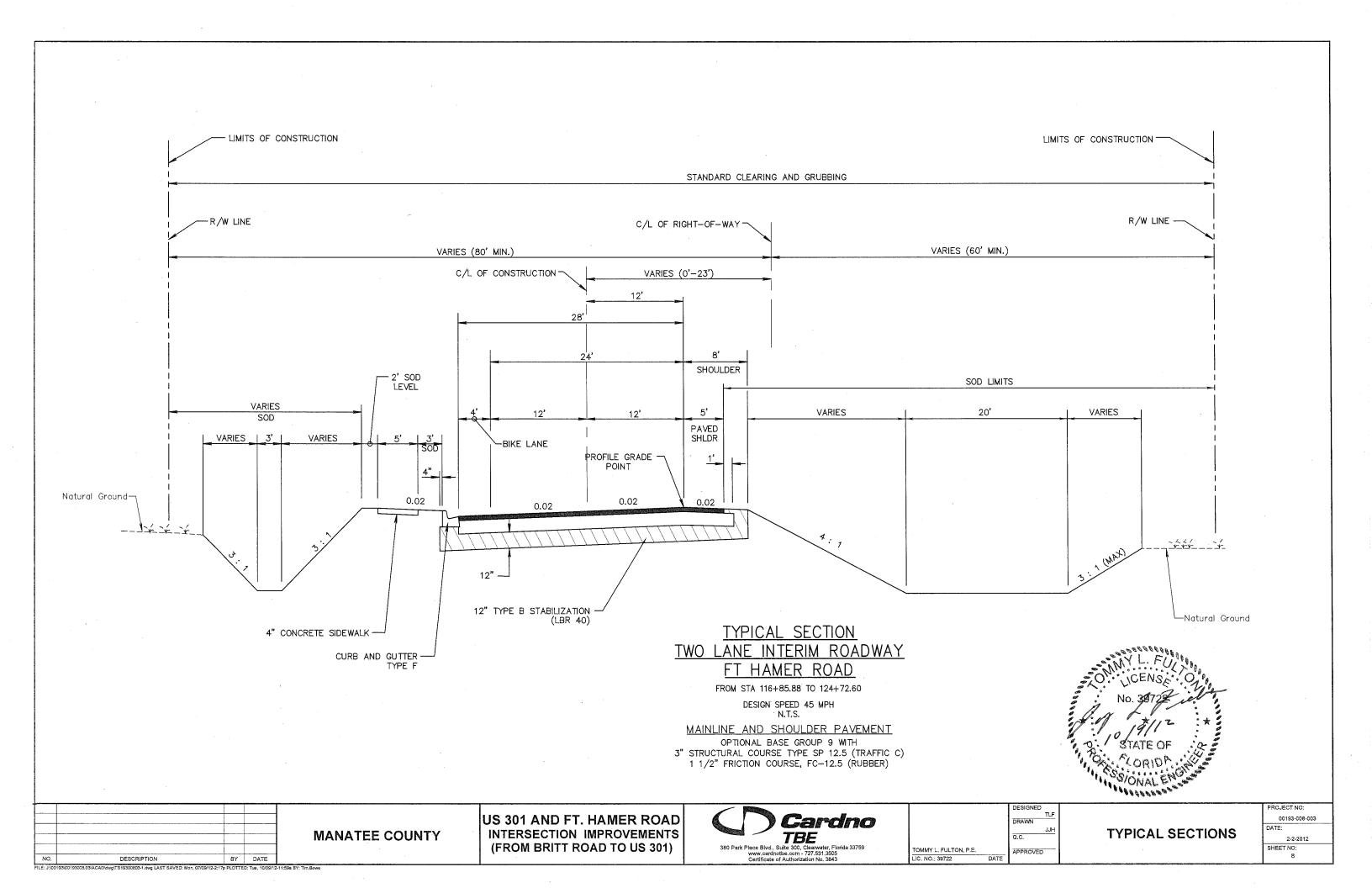
BY DATE

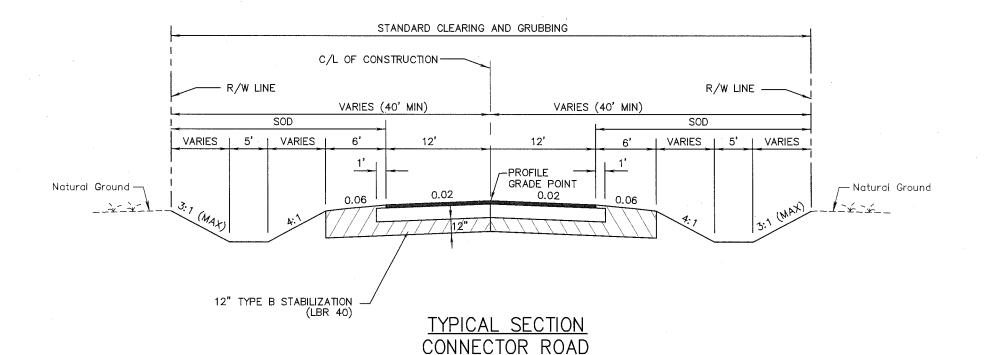
US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

GRATE EL 43.75

3/4" FULL HEIGHT SLOT (N) 43.00 INV (SE) 39.75 (18" RCP)







MAINLINE PAVEMENT

FROM STA 100+00 TO 103+83.52

DESIGN SPEED 30 MPH
N.T.S.

OPTIONAL BASE GROUP 9 WITH
1 1/2" STRUCTURAL COURSE TYPE SP 12.5 (TRAFFIC C)
1 1/2" FRICTION COURSE, FC-12.5 (RUBBER)

NO. 39732 J. A. STATE OF STATE

NO. DESCRIPTION BY DATE
FILE: J:00193/0019308.03ACAD/dwg1TS19300803-1.dwg LAST SAVED: Mon, 07/08/12-2:17p PLOTTED: Tue, 10/09/12-11:59a BY: Tim.Bowe

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



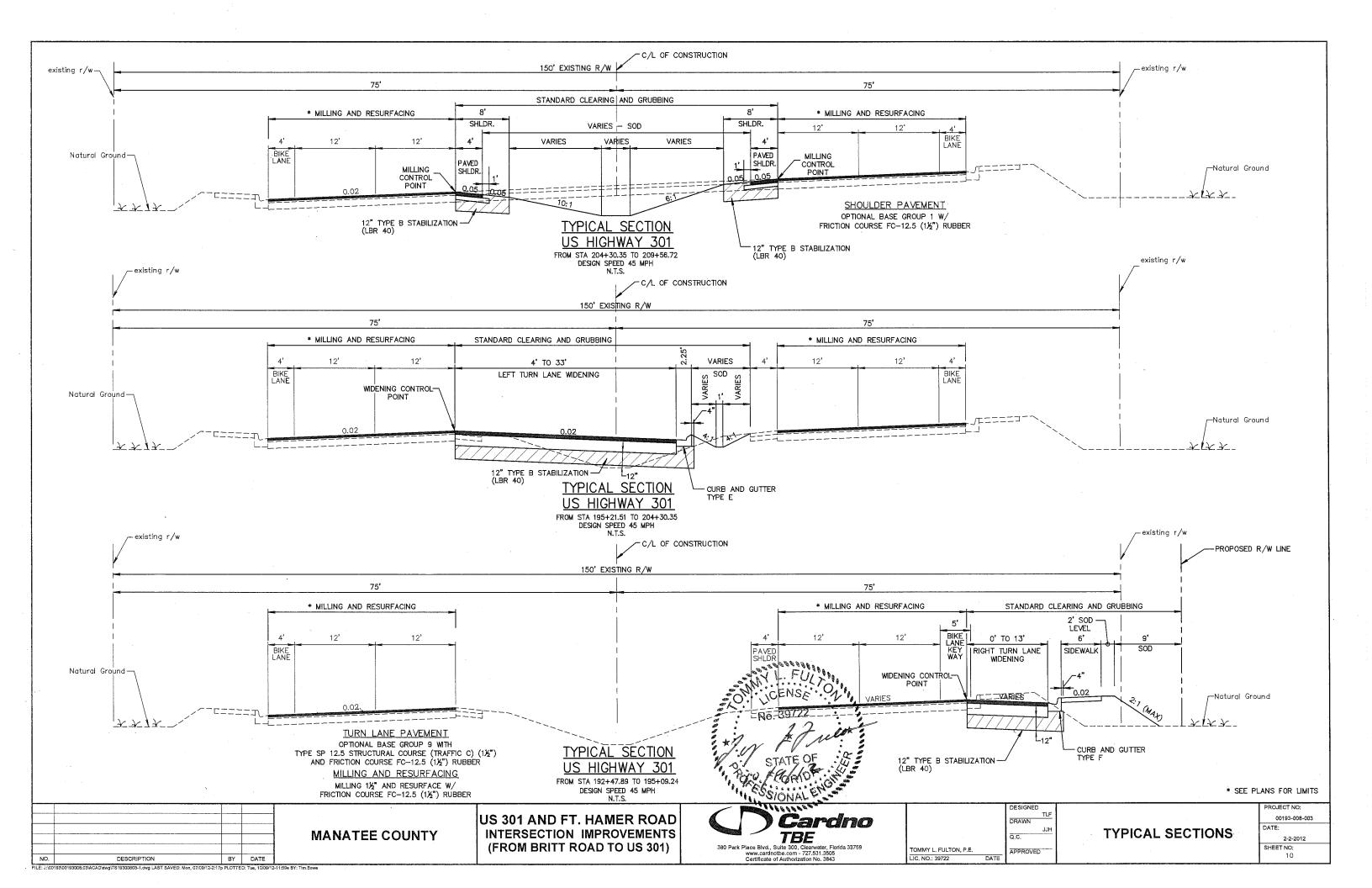
DES	SIGNED
	TLF
DRA	AWN
	JJH
<u>a.c</u>	
1	
TOMMY L. FULTON, P.E. APP	ROVED
LIC, NO.; 39722 DATE	

TYPICAL SECTIONS

PROJECT NO:
00193-008-003

DATE:
2-2-2012

SHEET NO:
9



# SUMMARY OF QUANTITIES

			QUANTIT
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
102-3	COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE	CY	100
104-10-3	SEDIMENT BARRIER	LF	5,823
104-11	FLOATING TURBIDITY BARRIER	LF.	101
104-15	SOIL TRACKING PREVENTION DEVICE	EA	2
104-18	INLET PROTECTION SYSTEM	EA	40
107-1	LITTER REMOVAL	AC	14.0
107-2	MOWING	AC	4.3
110-1-1	CLEARING AND GRUBBING (9.5 AC)	LS	1
110-4	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	1,529
110-7-1	MAILBOX, FURNISH & INSTALL SINGLE	EA	5
120-1	REGULAR EXCAVATION	CY	8,678
120-4	SUBSOIL EXCAVATION	CY	200
120-6	EMBANKMENT	CY	7,538
121-70	FLOWABLE FILL (CONTINGENCY)	CY	10
160-4	TYPE B STABILIZATION	SY	14,538
162-1-11	PREPARED SOIL LAYER, 6"	SY	25,721
285-701	OPTIONAL BASE, BASE GROUP 1	SY	485
285-709	OPTIONAL BASE, BASE GROUP 9	SY	12,397
286-1	TURNOUT CONSTRUCTION	SY	727
327-70-6	MILLING EXIST ASPH PAVT, 1-1/2" AVG DEPTH	SY	11,947
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C (1-1/2")	TN	512
334-1-13	SUPERPAVE ASPHALTIC CONC. TRAFFIC C (3")	TN	978
337-7-33	ASPHALTIC CONCRETE FRICTION COURSE, TRAFFIC C. FC-12.5, RUBBER (1.5")	TN	2,060
400-2-2	CONCRETE CLASS II, ENDWALLS	CY	6.9
425-1201	INLETS, CURB, TYPE 9, <10'	EA	1
425-1351	INLETS, CURB, TYPE P-5, <10'	EA	12
425-1361	INLETS, CURB, TYPE P-6, <10'	EA	5
425-1511	INLETS, DT BOT, TYPE B, <10'	EA	1
425-1521	INLETS, DT BOT, TYPE C, <10'	EA	1
425-1541	INLETS, DT BOT, TYPE D, <10'	EA	2
425-1543	INLETS, DT BOT, TYPE D, J BOT, <10'	EA	5
425-1579	INLETS, DITCH BOTTOM, TYPE G, MODIFY	EA	1
425-2-43	MANHOLES, P-7, PARTIAL, <10'	EA	1
425-2-61	MANHOLES, P-8, <10'	EA	6
425-2-71	MANHOLES, J-7, <10'	EA	1
425-2-93	MANHOLES, J-8, PARTIAL	EA	2
425-11	MODIFY DRAINAGE STRUCTURE	EA	1
30-174-118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" SD	LF	94
30-174-230	PIPE CULVERT, OPTIONAL MATERIAL, OTHER - ELLIP/ARCH, 30" SD (24"X38")	LF	47
30-175-115	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 15" S/CD	LF	97
30-175-118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" S/CD	LF	694
30-175-124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24" S/CD	LF	1,416
30-175-130	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 30" S/CD	LF	59
30-175-230	PIPE CULVERT, OPTIONAL MATERIAL, OTHER - ELLIP/ARCH, 30" S/CD (24"X38")	LF	244
30-175-236	PIPE CULVERT, OPTIONAL MATERIAL, OTHER - ELLIP/ARCH, 36" S/CD (29"X45")	LF	435
30-175-242	PIPE CULVERT, OPTIONAL MATERIAL, OTHER - ELLIP/ARCH, 42" S/CD (34"X53")	LF	471
30-982-133	MITERED END SECT, OPTIONAL ROUND, 30" CD	EA	1
30-984-125	MITERED END SECT, OPTIONAL ROUND, 18" SD	EA	5
30-984-633	MITERED END SECT, OPTIONAL /ELLIP /ARCH, 30" SD (24"X38" SD)	EA	3
430-830	PIPE FILLING AND PLUGGING - PLACE OUT OF SERVICE	CY	8
520-1-7	CONCRETE CURB & GUTTER, TYPE E	LF	1,027
520-1-10	CONCRETE CURB & GUTTER, TYPE F	LF	1,967
522-1	SIDEWALK CONCRETE, 4" THICK	SY	901
522-2	SIDEWALK CONCRETE, 6" THICK	SY	255
	CONCRETE CORE DITCH BLOCKS	CY	27.8
524-3	CONCRETE CORE DITOR BEOCKS	CI	27.0

# SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
530-3-4	RIP RAP, RUBBLE, F&I, DITCH LINING	TN	10
570-1-2	PERFORMANCE TURF, SOD (INCL. FERT. AND WATER)	SY	25,721
700-20-11	SIGN SINGLE POST, F&I, LESS THAN 12SF	AS	- 33
700-20-12	SIGN SINGLE POST, F&I,12-20 SF	AS	4
700-20-40	SIGN SINGLE POST, RELOCATE	AS	3
700-20-60	SIGN SINGLE POST, REMOVE	AS	11
700-48-48	SIGN PANELS, RELOCATE, 15 OR LESS	EA	4
700-48-58	SIGN PANELS, REPLACE, 15 OR LESS	AS	2
705-10-1	TYPE I OBJECT MARKER	EA	2
705-10-4	TYPE 4 OBJECT MARKER	EA	5
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	289
711-11-111	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	LF	6,811
711-11-122	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8"	LF	1,596
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF	137
711-11-124	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18"	LF	1,580
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	91
711-11-131	THERMOPLASTIC, STANDARD, WHITE, SKIP, 6"	LF	845
711-11-151	THERMOPLASTIC, STANDARD, WHITE, DOT/GUIDELINE/6-10 GAP EXT, 6"	LF	459
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE	EA	8
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	23
711-11-211	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	LF	6,917
711-11-224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18"	LF	153
711-11-251	THERMOPLASTIC, STANDARD, YELLOW, DOT/GUIDELINE/6-10 GAP EXT, 6"	LF	302
	SON CENSO		
	No. 39722		- Heater
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	STATE STATE STATE OF THE STATE		
	STATE STATE STATE		

NO. DESCRIPTION BY DATE

**MANATEE COUNTY** 

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



DESIGNED
TLF
DRAWN
JJH
Q.C.
LIC. NO.: 39722
DATE

SUMMARY OF QUANTITIES

PROJECT NO:
-00193-008-003

DATE:
2-2-2012

SHEET NO:

#### **GENERAL NOTES**

- 1. STATION AND OFFSET INFORMATION FOR PROPOSED RIGHT-OF-WAY IS BASED ON THE C/L OF R/W. EXCEPT FOR POND. STATION AND OFFSET FOR ALL CONSTRUCTION COMPONENTS ARE BASED ON THE C/L OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL FIELD VERIFY ANY AND ALL EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION, AND SHALL NOTIFY THE ENGINEER PROMPTLY OF ANY
- 3. THE CONSTRUCTION LENGTHS INDICATED IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
- 4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME THESE DRAWINGS WERE PREPARED, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT SIZE, LOCATION, DEPTH, HEIGHT, ELEVATION, DIMENSION, AND EXTENT OF ALL UNDERGROUND AND OVERHEAD FACILITIES AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY THAT MAY AFFECT SUCH FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION OF CONSTRUCTION SCHEDULING BETWEEN THE CONTRACTOR AND ALL UTILITY AGENCIES.
  - NOTE: THIS INCLUDES MEETING WITH UTILITY AGENCIES PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONTRACTORS CONSTRUCTION SCHEDULE.
- 6. EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES. THE FOLLOWING UTILITIES MAY HAVE LINES AND FACILITIES WITHIN THE PROJECT AREA.
  - TECO/PEOPLES GAS
  - FLORIDA POWER AND LIGHT TRANSMISSION FLORIDA POWER AND LIGHT DISTRIBUTION
  - VERIZON OF FLORIDA INC.
  - MANATEE COUNTY UTILITY OPERATIONS
- BRIGHTHOUSE NETWORKS, ILC.
- PEACE RIVER ELECTRIC COOPERATIVE, INC.
- 941.342.4028 (DAN SHANAHAN)
- 941.316.6288 (MARK BYERS) 941.723.4430 (GREG COKER)
- 941.906.6722 (DENISE HUTTON)
- 941.792.8811 EXT 5002 (KATHY McMAHON
- 941.748.3818 FXT 24051 (ALFX FLEMING)
- 863.767.4602 EXT 4602 (JERRY TWIGGS)
- 7. ABOVE GROUND AND/OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL (1-800-432-4770) AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES, UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY. ALL UTILITY OWNERS MAY NOT BE A MEMBER, REQUIRING DIRECT CONTACT THE CONTRACTOR SHALL FURTHER COORDINATE WITH UTILITY OWNERS TO RESOLVE CONFLICTS THAT MAY ARISE IN THE FIELD DURING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S FAILURE TO CALL "SUNSHINE STATE ONE CALL" AND THE UTILITY OWNERS.
- 8. ALL EXISTING WATER MAINS, SANITARY SEWER, AND OTHER UTILITIES SHALL REMAIN IN SERVICE UNTIL THE RELOCATED UTILITIES ARE PLACED IN SERVICE.
- 9. ALL EXISTING AND PROPOSED UTILITY AND STORM SEWER STRUCTURES WHOSE TOPS WILL BE EXPOSED WITHIN ANY SIDEWALK OR PAVED AREA SHALL BE ADJUSTED SO THAT THE TOP SURFACE OF COVERS OR FRAMES SHALL BE FLUSH WITH THE SIDEWALK OR PAVEMENT SURFACE. ALL EXISTING AND PROPOSED UTILITY AND STORM SEWER STRUCTURES WHOSE TOPS WILL BE EXPOSED WITHIN UNPAVED AREAS SUBJECT TO VEHICULAR, BICYCLE, OR PEDESTRIAN TRAFFIC SHALL BE ADJUSTED. SO THAT THE TOP SURFACE OR COVERS OR FRAMES SHALL BE NO MORE THAN ONE INCH ABOVE THE FINISHED GRADE. WHERE SODDING IS APPLIED, "FINISHED GRADE" SHALL BE THE NOMINAL HEIGHT OF GRASS AFTER THE SOD IS FIRMLY
- 10. SEPARATE PAYMENT SHALL BE MADE ONLY FOR THE !TEMS OF WORK LISTED AND IDENTIFIED BY APPROPRIATE PAY ITEM ON THE BID FORM. THE COST OF ANY RELATED WORK NOT SPECIFICALLY IDENTIFIED, BUT WHICH IS REQUIRED FOR SATISFACTORY COMPLETION OF THE WORK, SHALL BE CONSIDERED TO BE INCLUDED IN THE CONTRACT PRICE FOR THE APPROPRIATE BID ITEM
- 11. THE CONTRACTOR SHALL HAVE A FOREMAN, OR RESPONSIBLE PARTY, ON SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. ALL WORKERS ON THE JOB SITE WILL BE COURTEOUS TO THE PUBLIC AT ALL TIMES, AND SHALL REFER ANY QUESTIONS OR CONCERNS TO THE CONTRACTOR'S FOREMAN OR THE COUNTY INSPECTOR. THE FOREMAN SHALL SPEAK AND UNDERSTAND ENGLISH AND SHALL BE AVAILABLE AT ALL TIMES FOR TIMELY RESOLUTION OF PROJECT-RELATED ISSUES.

- 12. STATION LOCATIONS FOR STORM DRAIN INLETS AND MANHOLES REFERENCE THE CENTER OF THE SPECIFIED STRUCTURE BOTTOM. THE PROPOSED LENGTHS OF PIPE SHOWN ON THE PLANS ARE MEASURED FROM THE CENTER OF EACH DRAINAGE STRUCTURE. FOR PIPES WITH MITERED END SECTIONS, THE PROPOSED LENGTHS SHOWN ON THE PLANS INCLUDE THE LENGTH OF THE MITERED END SECTION. PAYMENT FOR PIPE SHALL NOT NCLUDE THE LENGTH OF THE MITERED END SECTION, AS SPECIFIED BY DIMENSION "F" AS SHOWN IN FDOT INDEX 272 AND 273. PAYMENT SHALL BE FROM INSIDE STRUCTURE WALL TO INSIDE STRUCTURE WALL. ANY EXTRA PIPE LENGTH LISTED SHALL BE CONSIDERED CONTINGENT.
- 13. ALL EXISTING STORM PIPES WITHIN THE AFFECTED RIGHT-OF-WAY CORRIDOR ARE TO REMAIN UNLESS OTHERWISE NOTED IN THE PLAN VIEW, EXISTING DATA STRUCTURE SHEET OR IN THE CROSS SECTIONS TO BE REMOVED.
- 14. IN ACCORDANCE WITH FDOT INDEX 205 AND FDOT STANDARD SPECIFICATION 941. ALL PROPOSED STORM DRAIN PIPES WILL BE REINFORCED CONCRETE (RCP) CLASS III
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL AND SEDIMENT CONTROL, IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, THROUGHOUT THE DURATION OF THE PROJECT AND ALL ASPECTS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE RESTORATION EFFORTS THAT MAY BE REQUIRED AS A RESULT OF CONSTRUCTION. THE CONTRACTOR SHALL USE WHATEVER METHODS, CONFORMING TO APPLICABLE STANDARDS, NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT.
- 16. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCES AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE/BARRIER. STOCKPILE AREAS SHALL INCLUDE SILT FENCE AROUND THE
- 17 THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN THE RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORWMATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, PROPOSED DITCHES, AND EXISTING AND PROPOSED STORM SEWERS.
- 18, DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFFSITE SEDIMENT TRANSPORT AND TO ENSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
- 19 CONTRACTOR SHALL CHECK ALL FROSION AND SILTATION CONTROL DEVICES WEEKLY. AND AFTER EACH RAINFALL, AND REPAIR AND REPLACE THEM AS REQUIRED. MAINTENANCE AND INSPECTION OF THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION CONTROL SHALL BE INCLUDED IN THE COST OF PAY ITEMS LISTED.
- 20. BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE DURING CONSTRUCTION. BANK PROTECTION MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER. EROSION CONTROL FABRIC SHALL BE USED FOR EROSION PROTECTION WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UNLESS OTHERWISE SPECIFIED IN THE PLANS, UPON COMPLETION OF CONSTRUCTION, ALL BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONFIGURATION AND PROTECTED FROM EROSION.
- 21. WHERE EXCAVATION IS REQUIRED FOR CONSTRUCTION OF SIDEWALK, ALL STUMPS, ROOTS, ETC. SHALL BE REMOVED COMPLETELY FROM THE SIDEWALK AREA. ALL STUMPS WITHIN THE PROJECT LIMITS SHALL BE REMOVED COMPLETELY AND REPLACED WITH COMPACTED BACKFILL BEFORE THE AREA IS FILLED. TREE ROOTS IN AREA OF PROPOSED SIDEWALK, RAMP, OR DRIVEWAY REPLACEMENT SHALL BE GROUND OUT TO A DEPTH OF 1-FOOT BELOW BOTTOM OF NEW SIDEWALK OR DRIVEWAY. ALL PRUNED ROOT DEBRIS SHALL BE REMOVED FROM THE SUB-BASE MATERIAL PRIOR TO POURING CONCRETE, ASPHALT, OR APPLICATION OF OTHER SPECIFIED MATERIALS. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRURRING
- 22. ALL STUMPS, ROOTS, AND OTHER DEBRIS PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE GROUND SHALL BE REMOVED TO A DEPTH OF 1—FOOT BELOW THE COMPLETED SURFACE. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRUBBING.

- 23. THE CONTRACTOR SHALL REMOVE ALL DRIVEWAYS, SIDEWALKS, CURBS, AND ALL ABANDONED UTILITY LINES, PIPES, STRUCTURES, FLUMES AND OTHER SUBTERRANEAN OBJECTS TO A MINIMUM DEPTH OF FOUR (4) FEET BELOW GRADE, OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- 24. ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM CLEARING AND GRUBBING
- 25. THE OVERALL SITE PREPARATION AND MECHANICAL DENSIFICATION WORK FOR THE CONSTRUCTION OF THE ROADWAY, SHOULD BE IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD INDEX REQUIREMENTS.
- 26. ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE ENGINEER. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS, OR WHERE SPECIFICALLY DIRECTED BY THE ENGINEER.
- 27. THE CONTRACTOR WILL BACKFILL AREAS TO BE SODDED WITH CLEAN FILL TO MAINTAIN PROPER GRADE OF THE PLANTING AREA, AND THE SOD SHALL BE PROPERLY CUT-IN AND TAMPED, THE COST OF WHICH IS INCLUDED IN THE PAY ITEM FOR SOD.
- 28. SOD STABILIZATION SHALL OCCUR WITHIN 72 HOURS OF ACHIEVING FINAL GRADE. ALL SLOPES STEEPER THAN 3:1 SHALL INCLUDE SOD STAPLING OR STAKING, THE COST OF WHICH IS INCLUDED IN THE PAY ITEM FOR PERFORMANCE TURF, SOD (SY).
- 29. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST OF ALL SHEETING, SHORING, AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING, AND BRACING IS REQUIRED.
- 30. UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE, AT A SUITABLE SITE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMITS AND PERMITTING FEES REQUIRED FOR THE TRANSPORT AND DISPOSAL OF UNSUITABLE
- 31. BORROW MATERIAL REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR, FROM BORROW AREAS PROVIDED BY THE
- 32. THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY. ANY PRIVATELY OWNED FEATURES LOCATED ON PRIVATE PROPERTY AND OUTSIDE THE DESIGNATED AREA OF CONSTRUCTION WHICH ARE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IN A TIMELY MANNER AT THE EXPENSE OF THE CONTRACTOR. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- 33. EXISTING ROADWAY MATERIALS SUCH AS SHELL, MARL, OR LIMEROCK SUITABLE OR SUCH MAY BE UTILIZED IN THE PREPARATION OF STABILIZED SUBGRADE.
- 34. THE CONTRACTOR SHALL DISTURB NO MORE GROUND THAN WHAT IS NECESSARY FOR CONSTRUCTION. NO OPEN EXCAVATED TRENCH, OR OTHER UNSAFE CONDITION, WILL BE LEFT OVERNIGHT. ALL WORK SITES WILL BE COMPLETELY RESTORED WITHIN SEVEN (7) CALENDAR DAYS OF THE CONCRETE POUR FOR SIDEWALK. THE INTENT OF THIS PROVISION IS TO "SAFE-UP" THE PROJECT SITE AS WORK PROGRESSES, AND SHALL INCLUDE REMOVING FORMS, FILLING HOLES, GRADING, AND REMOVAL OF DERRIS.
- 35. ALL SIDEWALK DAMAGED BY THE CONTRACTOR OR SUBCONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER.

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BY DATE

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



DESIGNED DRAWN Q.C. APPROVED DATE

TOMMY L. FULTON, P.E.

UC NO : 39722

**GENERAL NOTES** 

ROJECT NO 00193-008-003 2-2-2012

12

SHEET NO:

#### **GENERAL NOTES-CONTINUED**

- 36. TEMPORARY PAVEMENT MARKINGS ON NEW ASPHALT SHALL BE PAINT, AND NOT THERMOPLASTIC.
- 37. UPON WRITTEN APPROVAL FROM MANATEE COUNTY, THE CONTRACTOR MAY CLOSE TO THROUGH—TRAFFIC THAT PORTION OF SIDE STREETS WITHIN THE LIMITS OF CONSTRUCTION. ACCESS FOR LOCAL TRAFFIC WITH DESTINATIONS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED. IF IT BECOMES NECESSARY DURING CONSTRUCTION TO TEMPORARILY PROHIBIT ACCESS TO LOCAL TRAFFIC, THE CONTRACTOR SHALL, ON EACH SEPARATE OCCASION, NOTIFY ALL AFFECTED PROPERTY OWNERS AND AREA EMERGENCY SERVICES AT LEAST THREE DAYS (72 HOURS) IN ADVANCE.
- 38. NO STABILIZING WILL BE REQUIRED FOR PAVED TURNOUTS TO PRIVATE PROPERTY
- 39. ANY UNSUITABLE MATERIAL EXCAVATED MAY BE USED TO FLATTEN SLOPES IN AREAS APPROVED BY THE COUNTY PROJECT MANAGER.
- 40. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE STAKE—OUT OF THE PROJECT, I.E., LINE, GRADE, SLOPE, UTILITY RELOCATIONS OR ANY OTHER STAKE—OUT THAT MAY BE REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK.
- 41. OVERALL CLEAN—UP SHALL BE ACCOMPLISHED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY PROJECT MANAGER. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MOBILITATION.
- 42. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY PROJECT MANAGER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- 43. ANY U.S.C. AND G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY:

DIRECTOR, CHARTING AND GEODETIC SERVICES 6001 EXECUTIVE BLVD ATTN C172 ROCKVILLE, MARYLAND 20852 PHONE: (301) 443—8319

- 44. DRIVEWAY LOCATION AND WIDTH MAY BE FIELD ADJUSTED DURING CONSTRUCTION BY THE COUNTY PROJECT MANAGER IN COORDINATION WITH REQUESTS FROM PROPERTY OWNERS.
- 45. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH CURRENT FDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND THE DESIGN STANDARDS.
- 46. ANY WATER WELLS FOUND WITHIN THE LIMITS OF PROPOSED RIGHT-OF-WAY SHALL BE ABANDONED BY A FLORIDA LICENSED WATER WELL CONTRACTOR IN ACCORDANCE WITH RULE 40D-3.531(2), F.A.C. ALSO REFER TO 40D-40.301(1)(F, H), F.A.C. THE COST OF ABANDONING ANY WELLS SHALL BE INCLUDED IN THE COST OF CLEARING AND GRUBBING.
- 47. AT LEAST 21 DAYS PRIOR TO THE COMMENCEMENT OF ANY DEWATERING ACTIVITY, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER AND TO THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT. THE DEWATERING PLAN SHALL INCLUDE DESCRIPTIONS AND GRAPHICS AS NEED TO IDENTIFY THE LOCATION OF THE DEWATERING SITES AND THE SEDIMENT SUMP, EXPECTED DURATION OF THE DEWATERING PERIOD, METHODS TO RETAIN OR DETAIN DISCHARGE, METHODS OF ISOLATING THE DEWATERING AREAS, FLOW PATH AND POINTS OF DISCHARGE OF THE WATER. THIS PLAN SHALL INCLUDE DESIGN COMPUTATIONS, LAYOUT, TYPE, AND SPACING OF DEWATERING DEVICES, NUMBER AND SIZE OF PUMPS AND OTHER EQUIPMENT, WITH A DESCRIPTION OF THE INSTALLATION AND OPERATING PROCEDURES. WELLPOINT PUMP DISCHARGE SHALL BE CONTROLLED TO PREVENT EROSION, UNDERMINING, AND ALL OTHER DAMAGE, AND BE PIPED TO APPROVED LOCATIONS.
- 48. THE CONTRACTOR SHALL COMPLY WITH ANY AND ALL APPLICABLE REGULATIONS AND PERMITTING REQUIREMENTS CONCERNING GROUNDWATER PUMPAGE AND DISCHARGE. DEPENDING ON THE DURATION OF THE DEWATERING NEEDED, A WATER USE PERMIT MAY BE REQUIRED FOR DEWATERING. REFER TO 40D—4.301(1) (E), F.A.C.
- 49. CONSTRUCTION OF "WEDGE" SHAPED PAVEMENT SECTIONS SHALL BE AVOIDED. PAVEMENT SECTIONS SHALL HAVE A MINIMUM OF 2-FEET IN WIDTH TO ALLOW COMPACTION OF THE FULL BASE AND ASPHALT PAVEMENT AREAS.

- 50. STAKING OF ROW: CONTRACTOR SHALL STAKE ALL ROW CORNERS AND INTERMITTENT ROW STAKES TO CLEARLY DEFINE THE ROW LOCATION FOR ALL CONTRACTOR, UTILITIES, AND COUNTY REPRESENTATIVES. THE ROW SHALL BE STAKED WITHIN 20 DAYS FROM NTP AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. PAYMENT FOR STAKING OF ROW WILL BE INCLUDED IN PAY ITEM 101-1, MOBILIZATION.
- 51. RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR. PAYMENT FOR RECORD DRAWINGS WILL BE INCLUDED IN PAY ITEM 101-1, MOBILIZATION.

### MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1. REGULATORY SPEED ALONG US 301 IS 45 MPH.
- THE COST OF MAINTENANCE OF TRAFFIC OPERATIONS SHALL BE INCLUDED UNDER THE LUMP SUM PAY ITEM FOR MAINTENANCE OF TRAFFIC, UNLESS A SEPARATE PAY ITEM IS PROVIDED.
- THE CONTRACTOR SHALL PROVIDE FOR THE SAFE MOVEMENT OF PEDESTRIANS AND VEHICLES THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING DELIVERIES AND DROP—OFFS. IN WORK ZONES.
- 4. THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN, SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER (WITH ADVANCED FDOT MOT CERTIFICATION) FOR REVIEW PRIOR TO IMPLEMENTATION OF THE MAINTENANCE OF TRAFFIC PLAN FOR EACH PHASE OF CONSTRUCTION. MOT PLAN SHALL BE DESIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (LATEST EDITION) AS WELL AS THE FDOT SERIES 600 STANDARD INDEXES. THE PLAN SHALL BE SUBMITTED WITHIN 30 DAY'S AFTER CONTRACT AWARD. THE COST OF ALL LABOR AND MATERIALS REQUIRED FOR MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR MAINTENANCE OF TRAFFIC. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "DESIGN STANDARDS, INDEX SERIES 600". AS AMENDED BY THE SPECIFICATIONS FOR THIS PROJECT.
- 5. ACCESS SHALL BE CONTINUOUSLY MAINTAINED AT ALL SIDE STREETS AND DRIVEWAYS FOR THE DURATION OF THE PROJECT, UNLESS PREVIOUSLY APPROVED BY MANATEE COUNTY.
- 6. FOR SIDE STREET INTERSECTIONS, LANE CLOSURE SHALL BE LIMITED TO ONE LANE AT ALL TIMES. AT A MINIMUM, ONE-LANE, TWO-WAY OPERATION SHALL BE MAINTAINED THROUGH THE USE OF FLAGGERS. TWO-LANE, TWO-WAY OPERATION SHALL BE MAINTAINED DURING PERIODS OF LANE CLOSURE RESTRICTIONS AND WHEN CONSTRUCTION ACTIVITIES ARE BEYOND THE LIMITS OF THE INTERSECTIONS.
- 7. DURING PERIODS OF LANE CLOSURES, THE CONTRACTOR SHALL PROVIDE AN FDOT CERTIFIED WORK SITE TRAFFIC SUPERVISOR FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF TRAFFIC CONTROL DEVICES (E.G. BARRICADES, SIGNS, ARROW PANELS, ETC.) AS OUTLINED IN THE FDOT STANDARD SPECIFICATIONS AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
- 8. THE CONTRACTOR SHALL NOTIFY ALL LOCAL LAW ENFORCEMENT PRIOR TO A LANE CLOSURE THAT WILL EXCEED TWO HOURS.
- 9. TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS
  MAY REQUIRE THE ENGINEER TO RESTRICT OR REMOVE LANE CLOSURE OR CHANNELIZATION.
  UNDER THESE CONDITIONS, THE CONTRACTOR SHALL RESPOND AND PROVIDE ADJUSTMENTS
  AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL ALSO RESPOND
  WITHIN THE CONSTRAINTS OUTLINED IN THE STANDARD SPECIFICATIONS UPON
  NOTIFICATION BY THE ENGINEER OF ANY REQUESTS FOR CORRECTION, IMPROVEMENT,
  OR MODIFICATION TO THE TRAFFIC CONTROL PLAN AND/OR DEVICES. THE COST
  OF THIS SERVICE SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR MAINTENANCE
  OF TRAFFIC.
- 10. TEMPORARY PAYEMENT SHALL CONSIST OF 1° STRUCTURAL COURSE TYPE SP (TRAFFIC C) OVER OPTIONAL BASE GROUP 4 OVER A COMPACTED SUBGRADE.



MANATEE COUNTY

BY DATE

DESCRIPTION

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



DESIGNED
TLF
DRAWN
JJF
Q.C.
APPROVED

TOMMY L. FULTON, P.E.

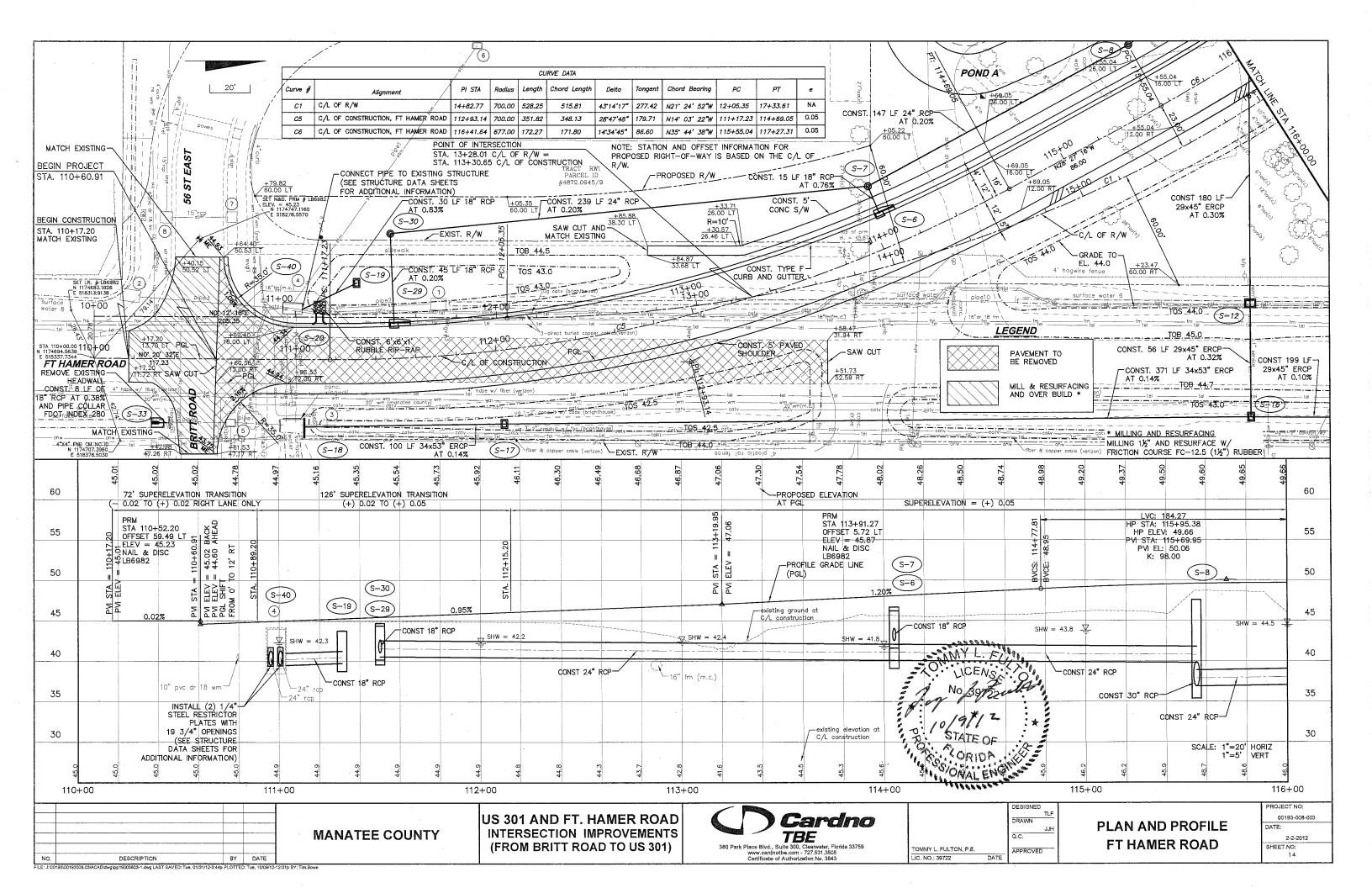
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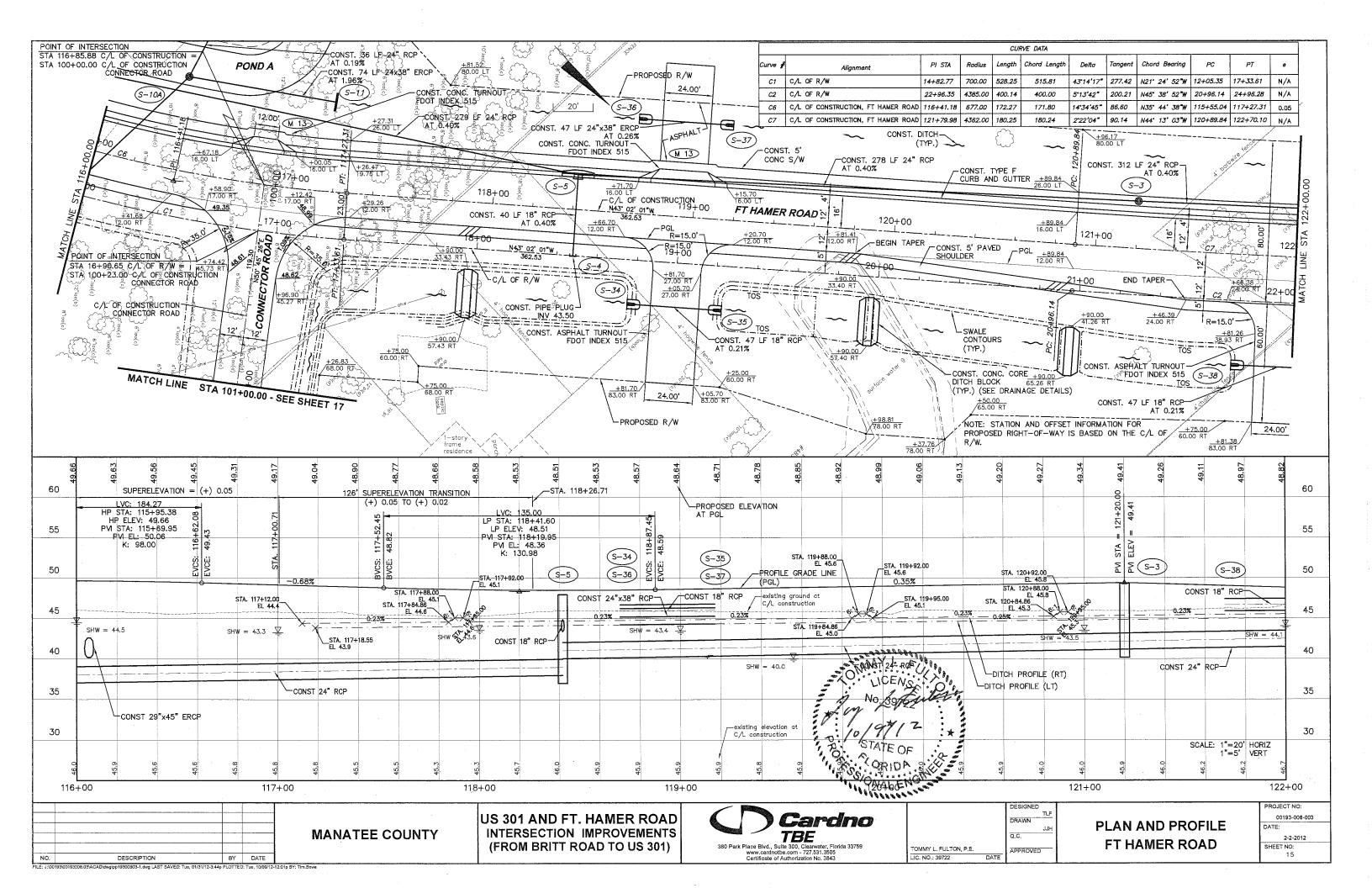
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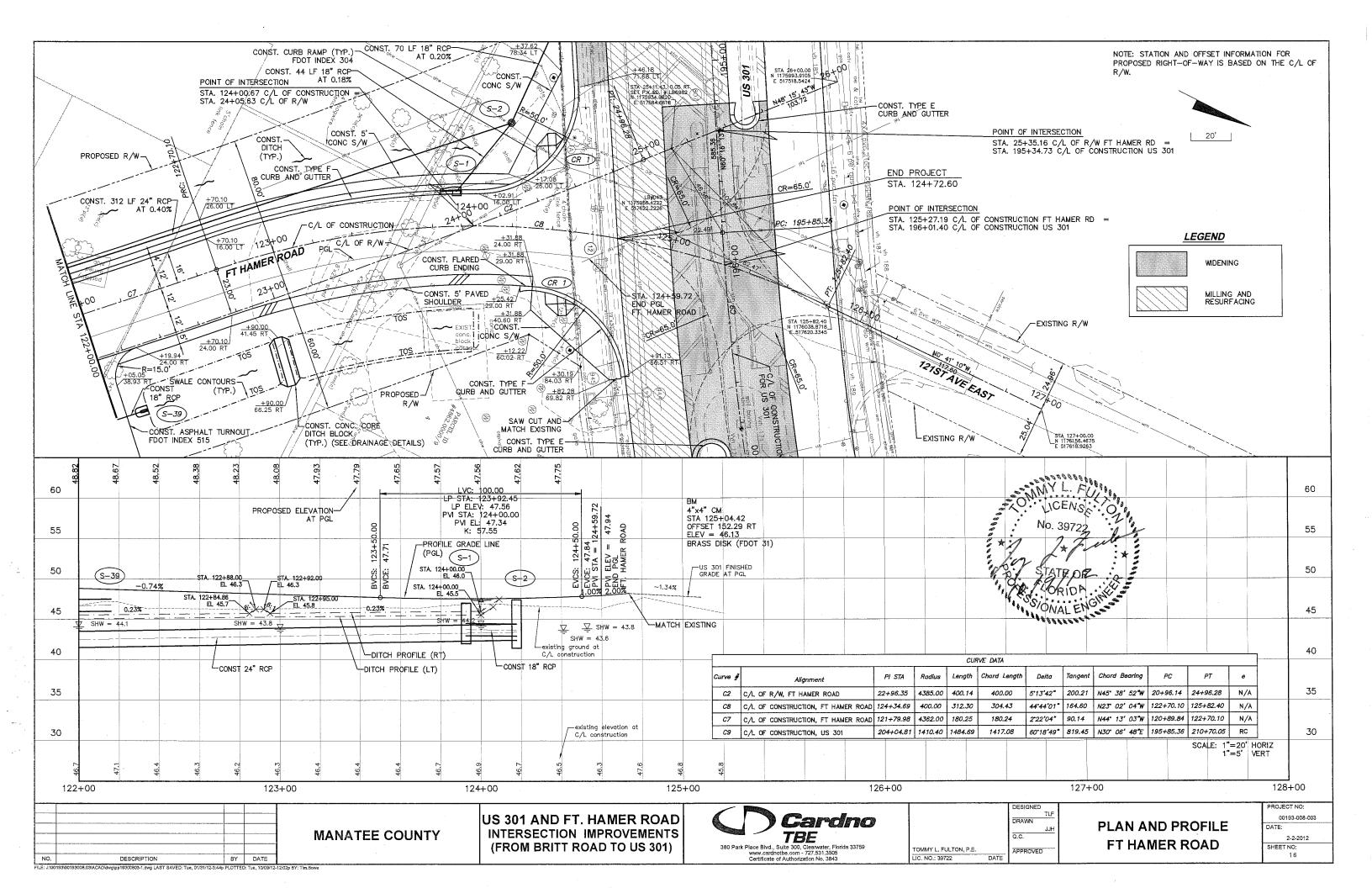
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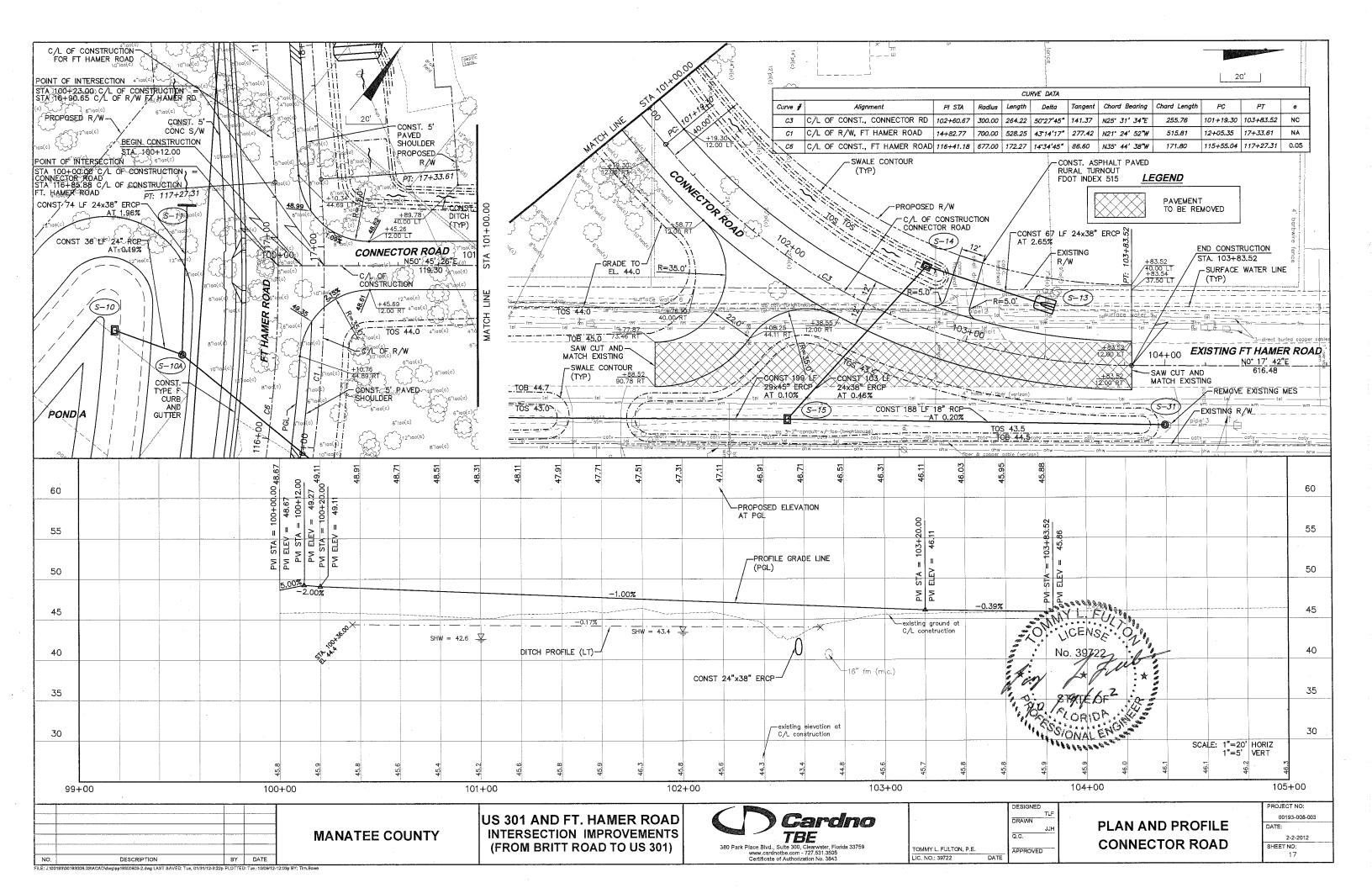
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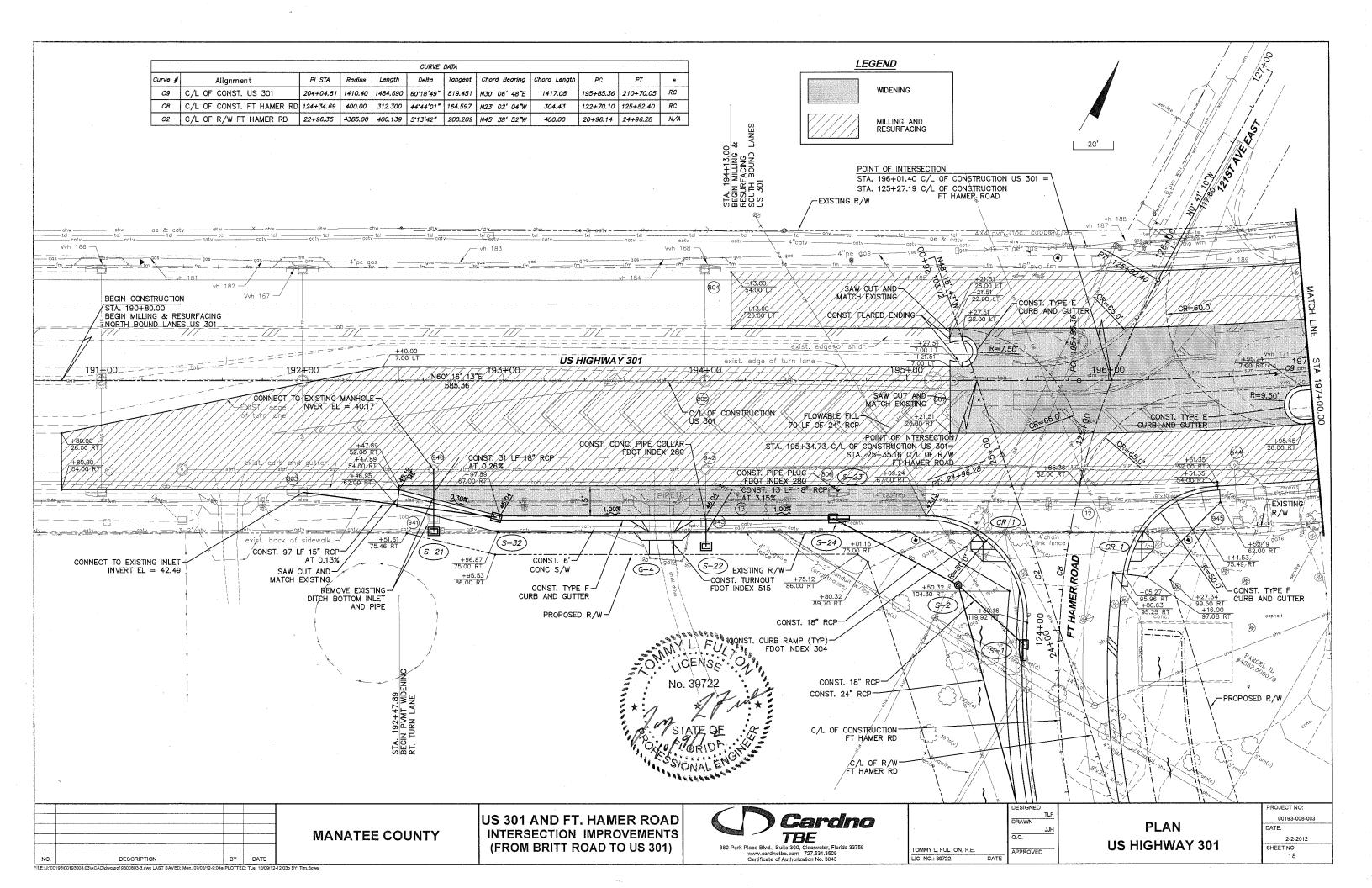
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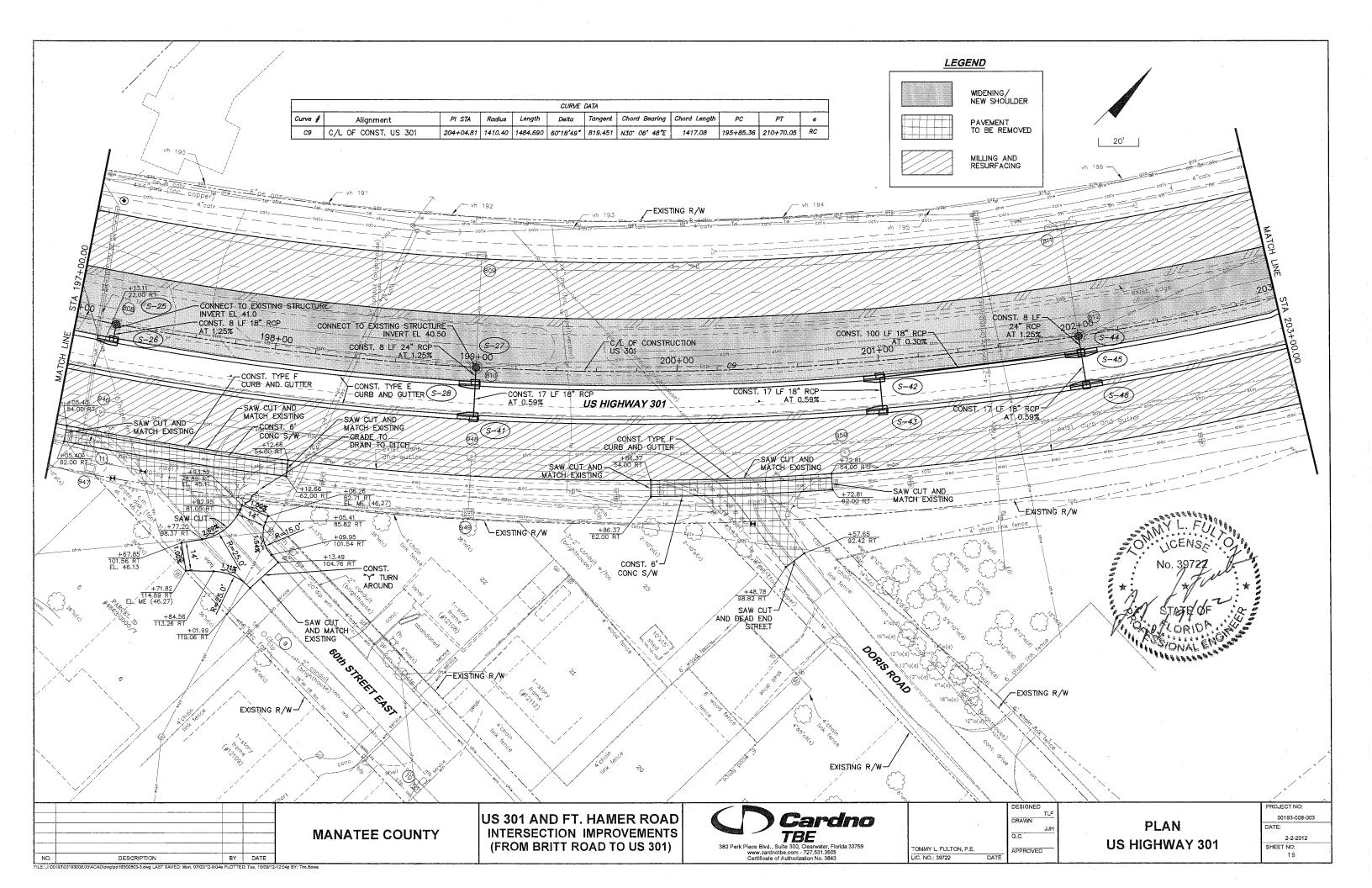


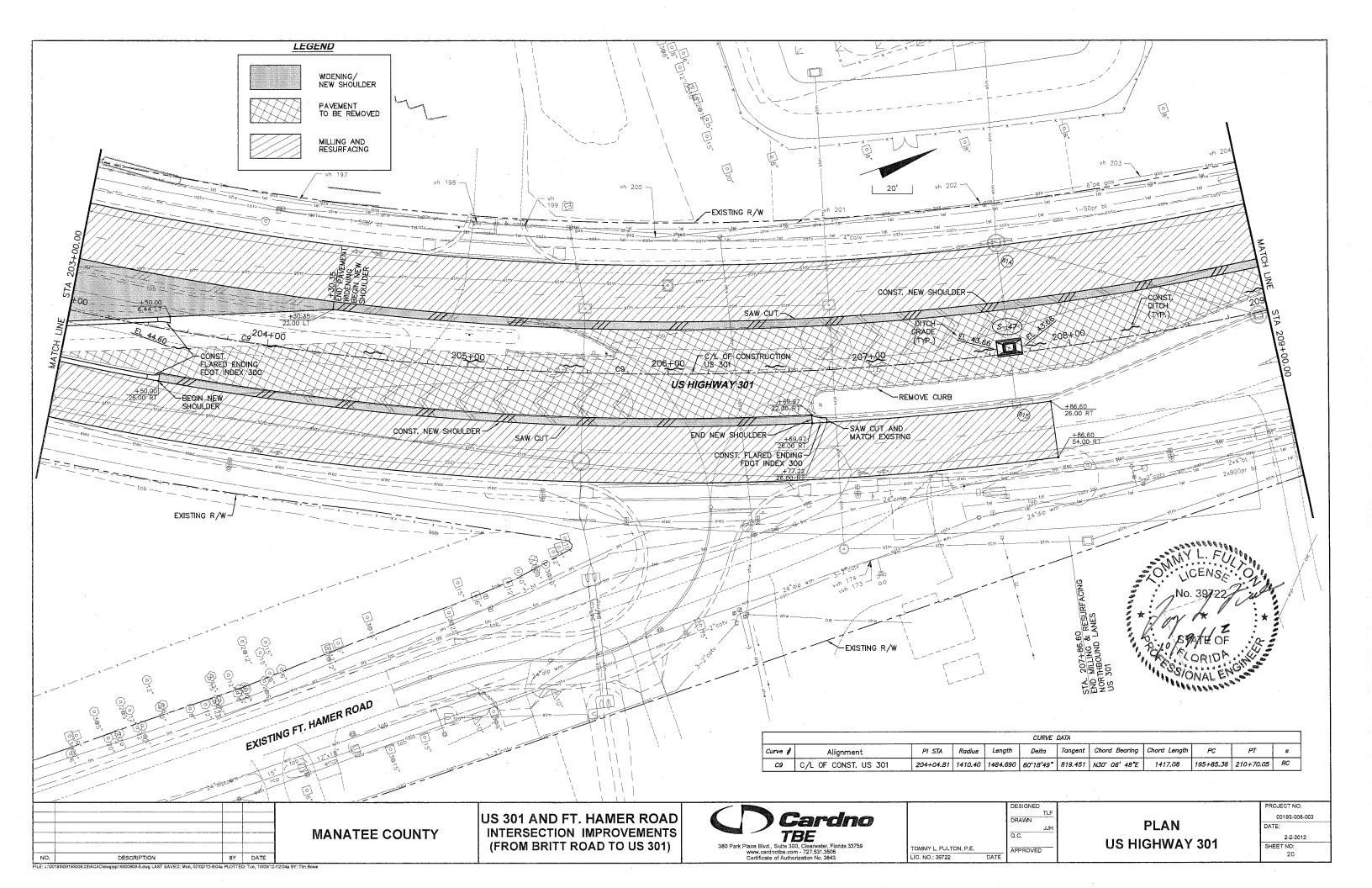


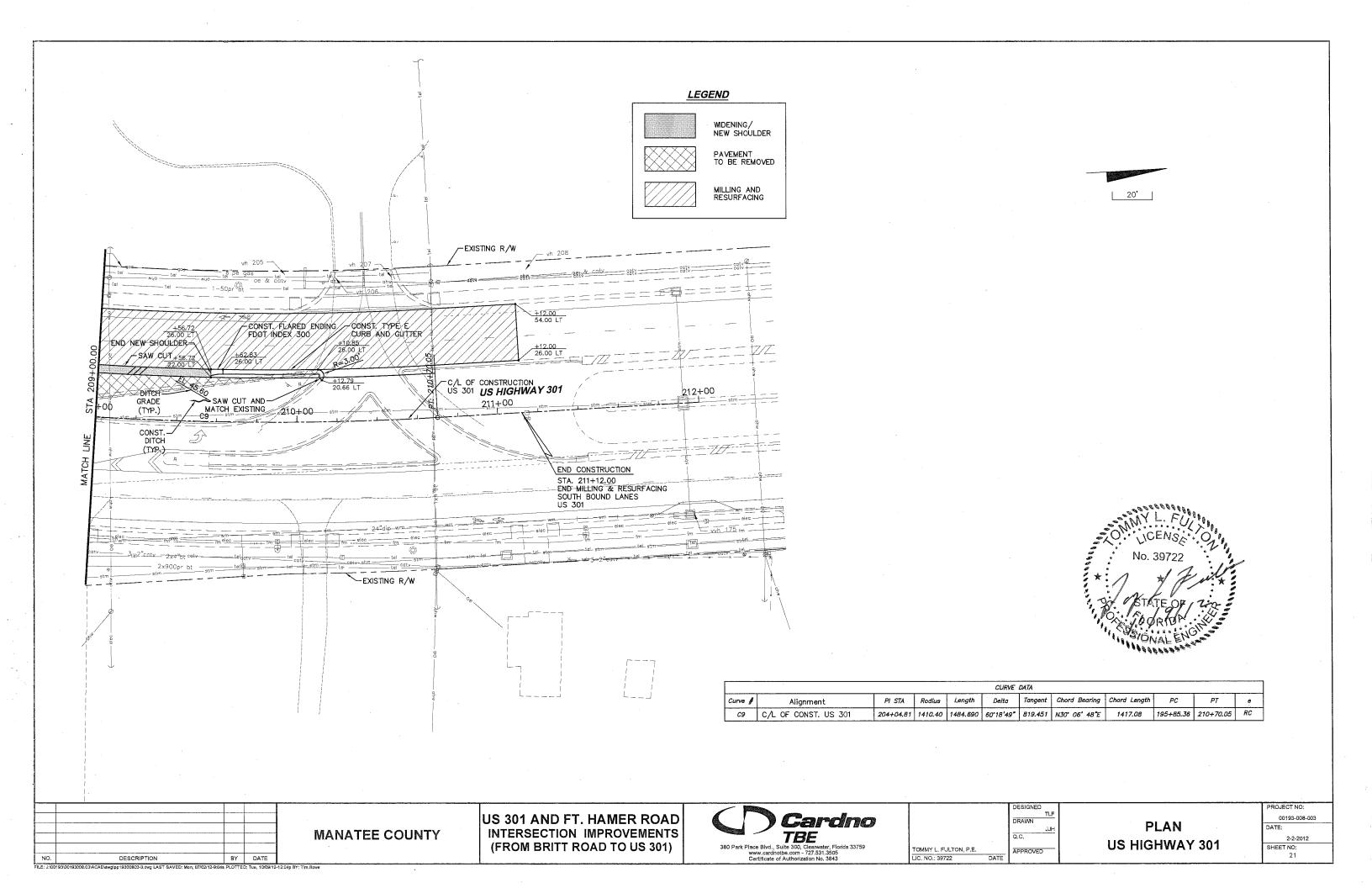


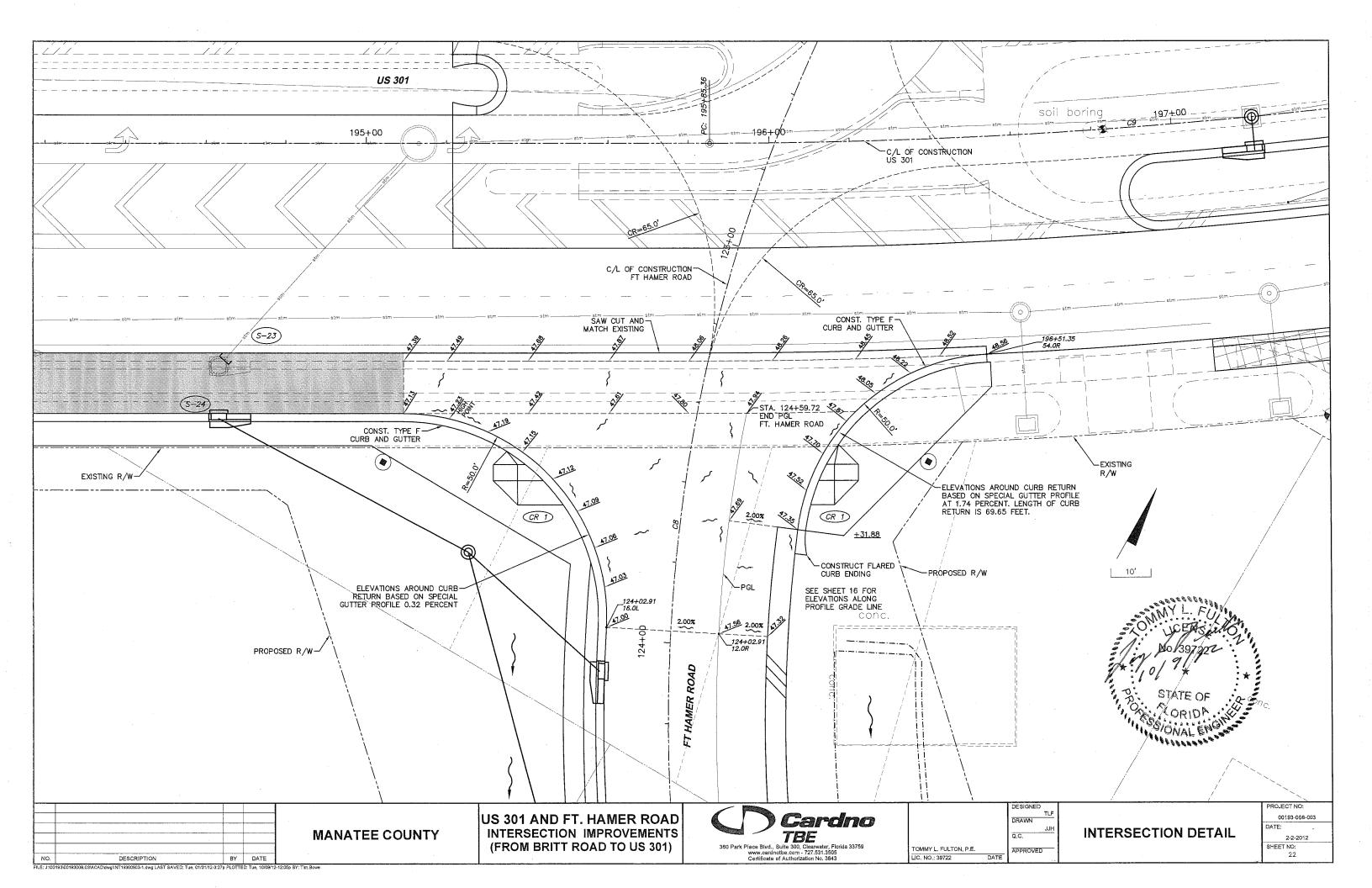


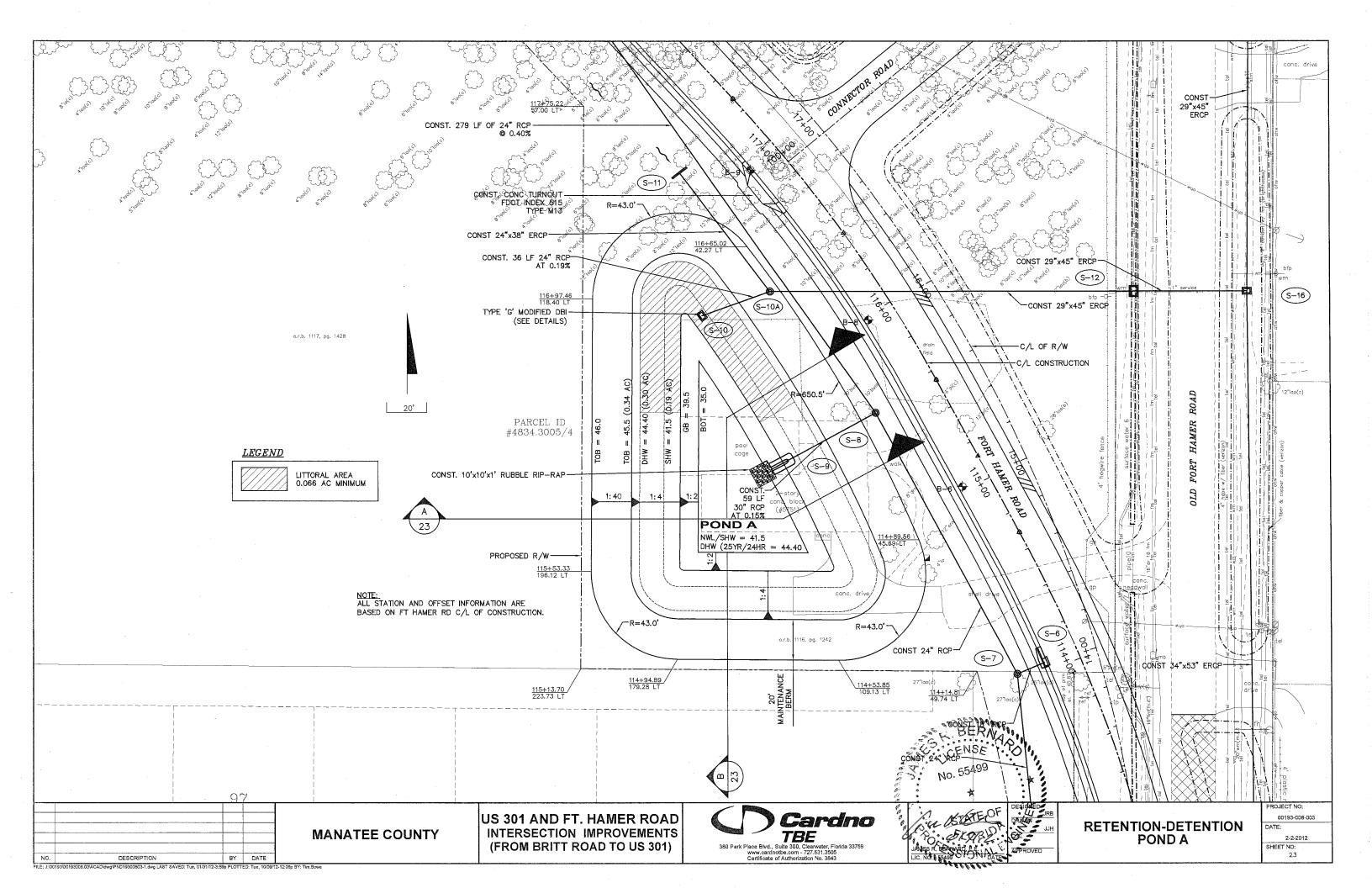


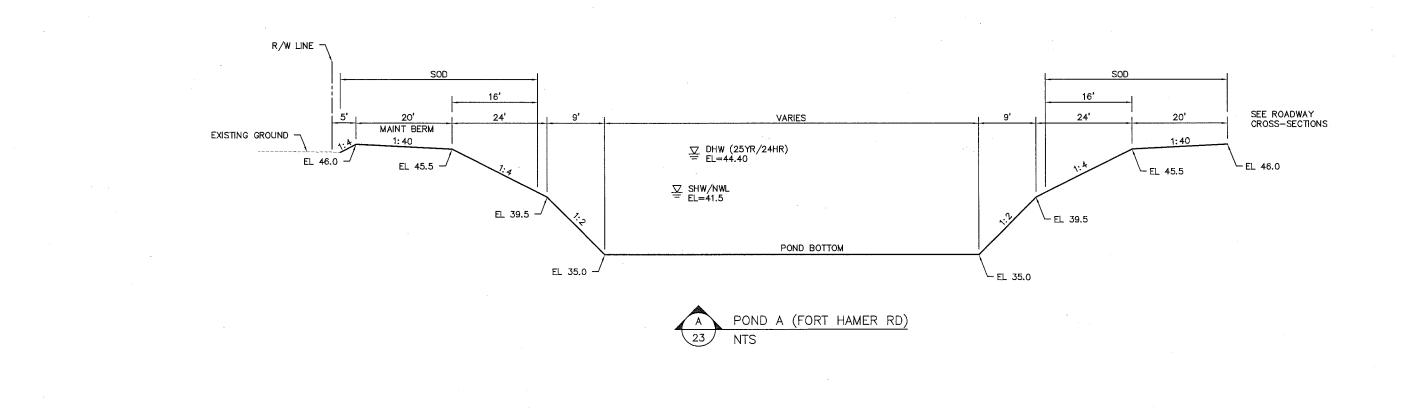


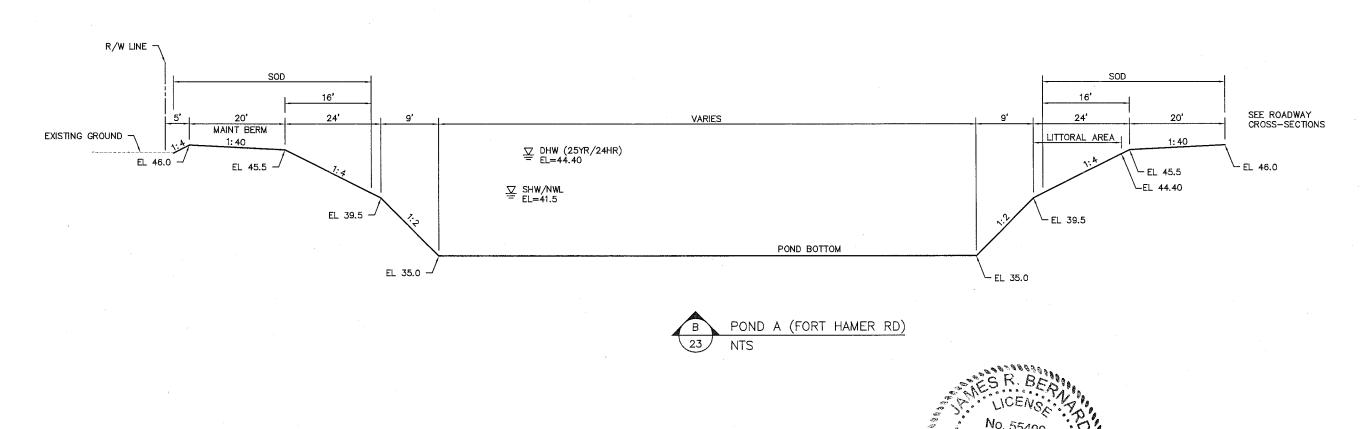












MANATEE COUNTY

US 301 AND FT. HAMER ROAD
INTERSECTION IMPROVEMENTS
(FROM BRITT ROAD TO US 301)



PRAWN JJH
Q.C.
APPROVED

APPROVED

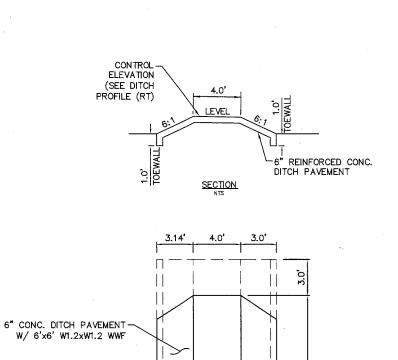
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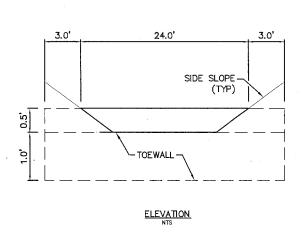
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00193-008-003

DATE:
2-2-2012

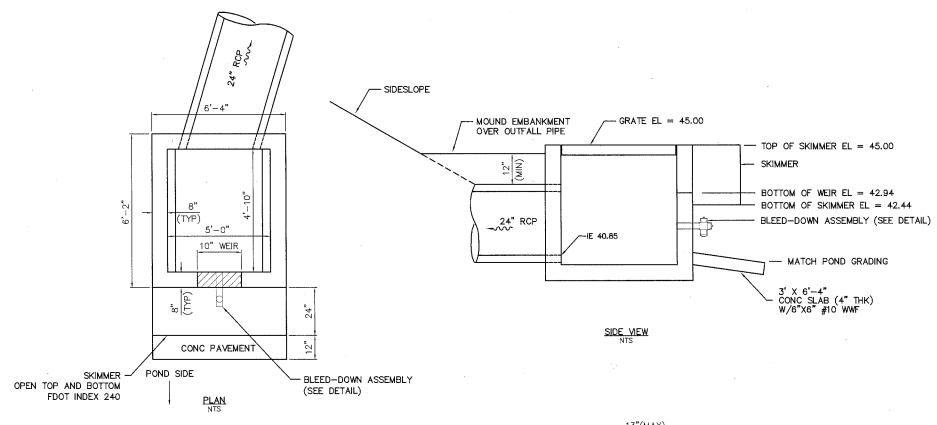
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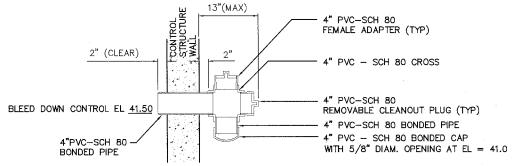
PLAN NTS

DITCH BLOCK DETAIL



#### NOTES:

- 1) COST FOR ALL FEATURES AND APPURTENANCES SHOWN ON THIS SHEET, EXCEPT OUTFALL PIPE, SHALL BE INCLUDED IN THE COST OF THE CONTROL STRUCTURE.
- 2) SEE FDOT STANDARD INDEX 240 FOR SKIMMER MATERIAL AND ATTACHMENT DETAILS.



BLEED-DOWN ASSEMBLY DETAIL



**OUTFALL CONTROL STRUCTURE** MODIFIED TYPE "G" MLETY FOOT INDEX 233

No. 55499

DRAINAGE DETAILS

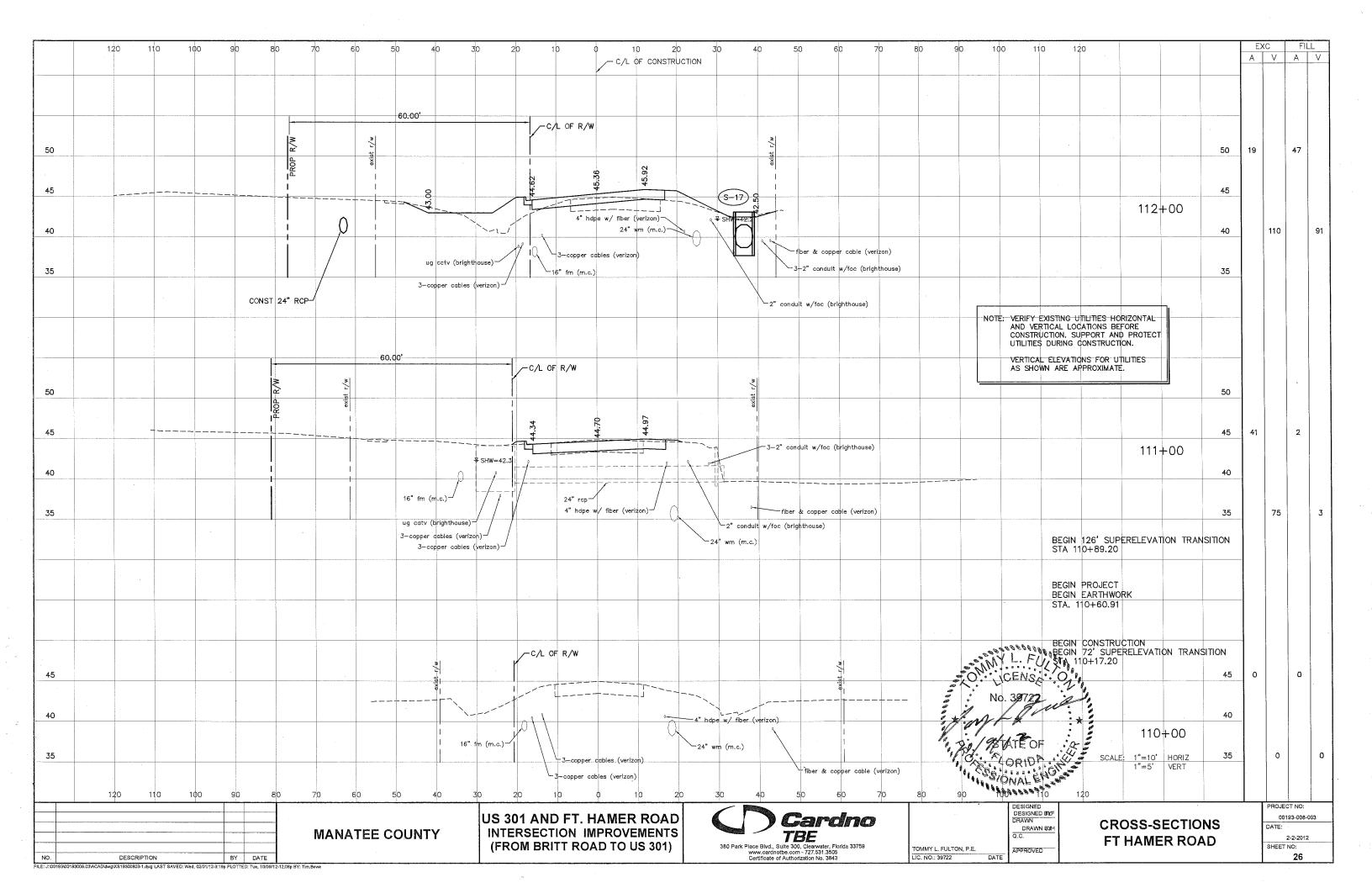
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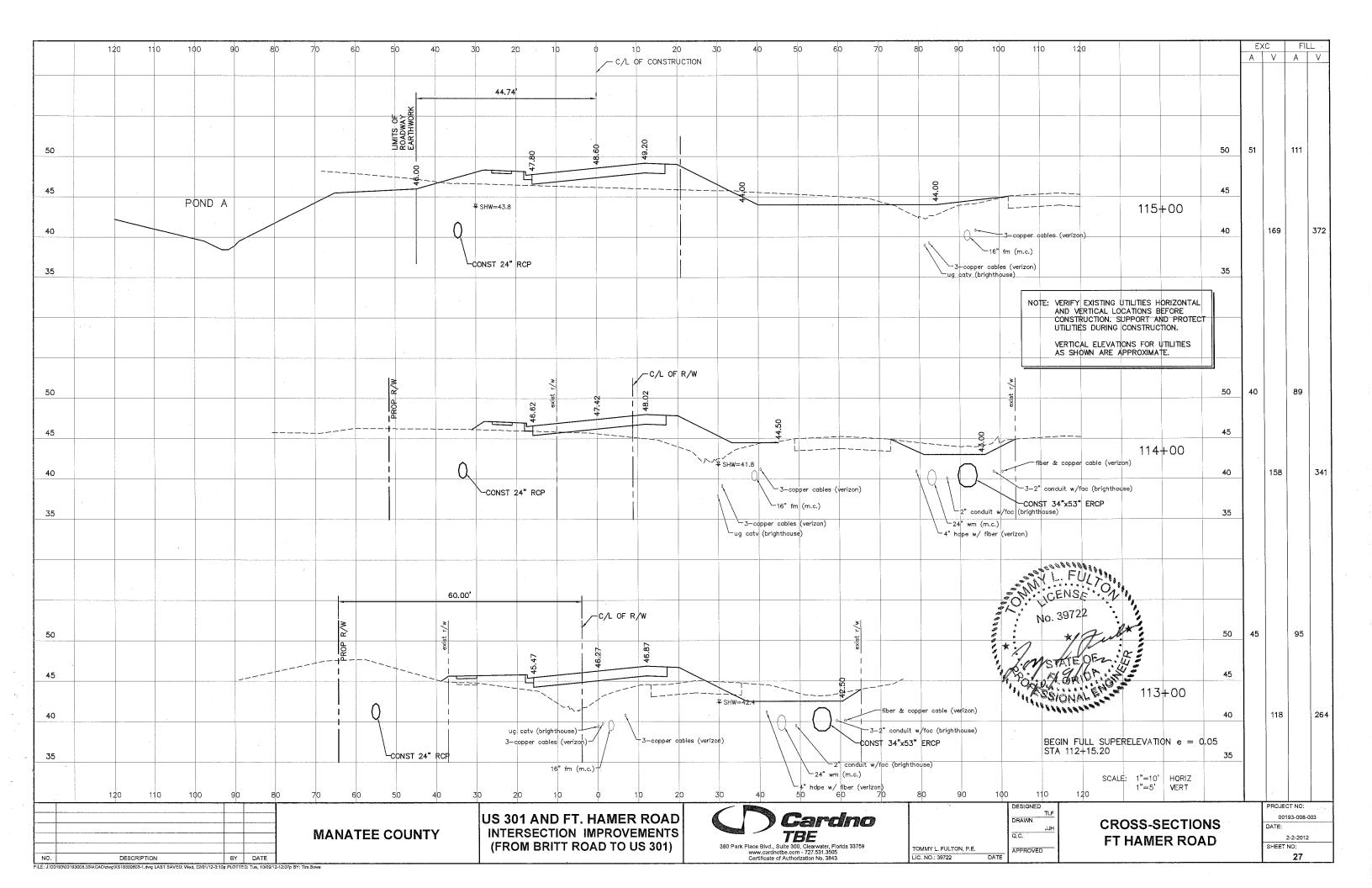
MANATEE COUNTY

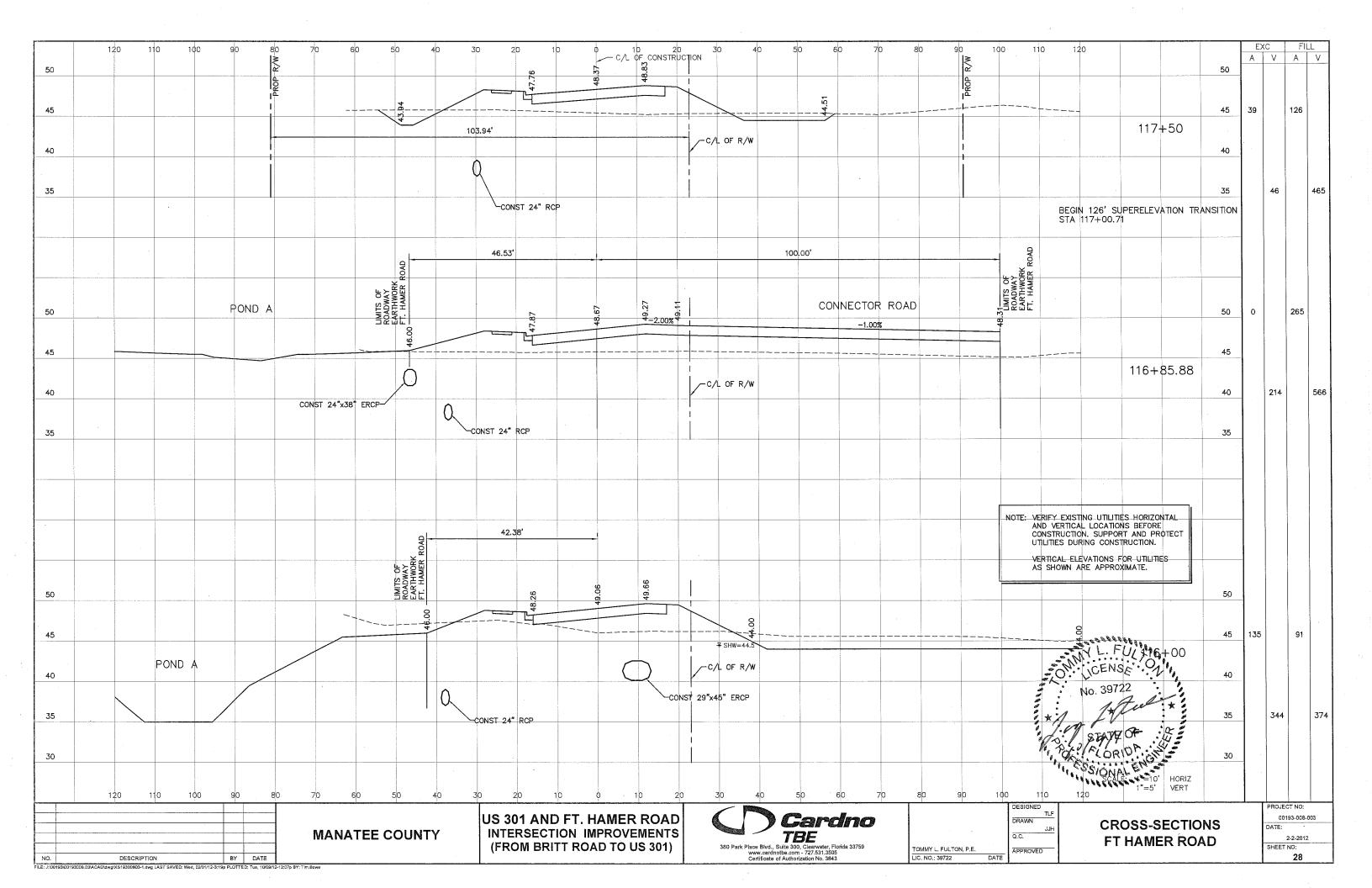
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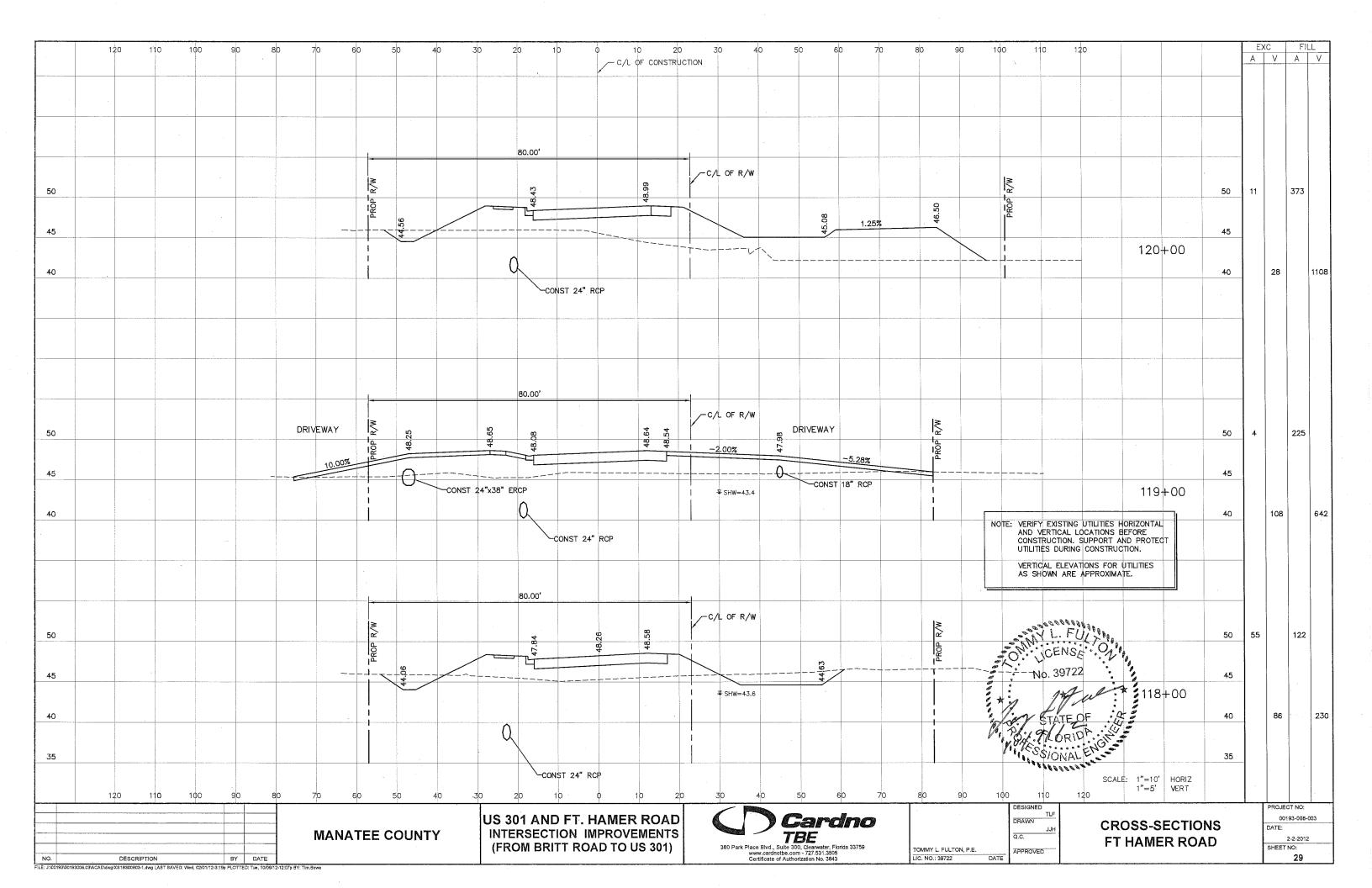
US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

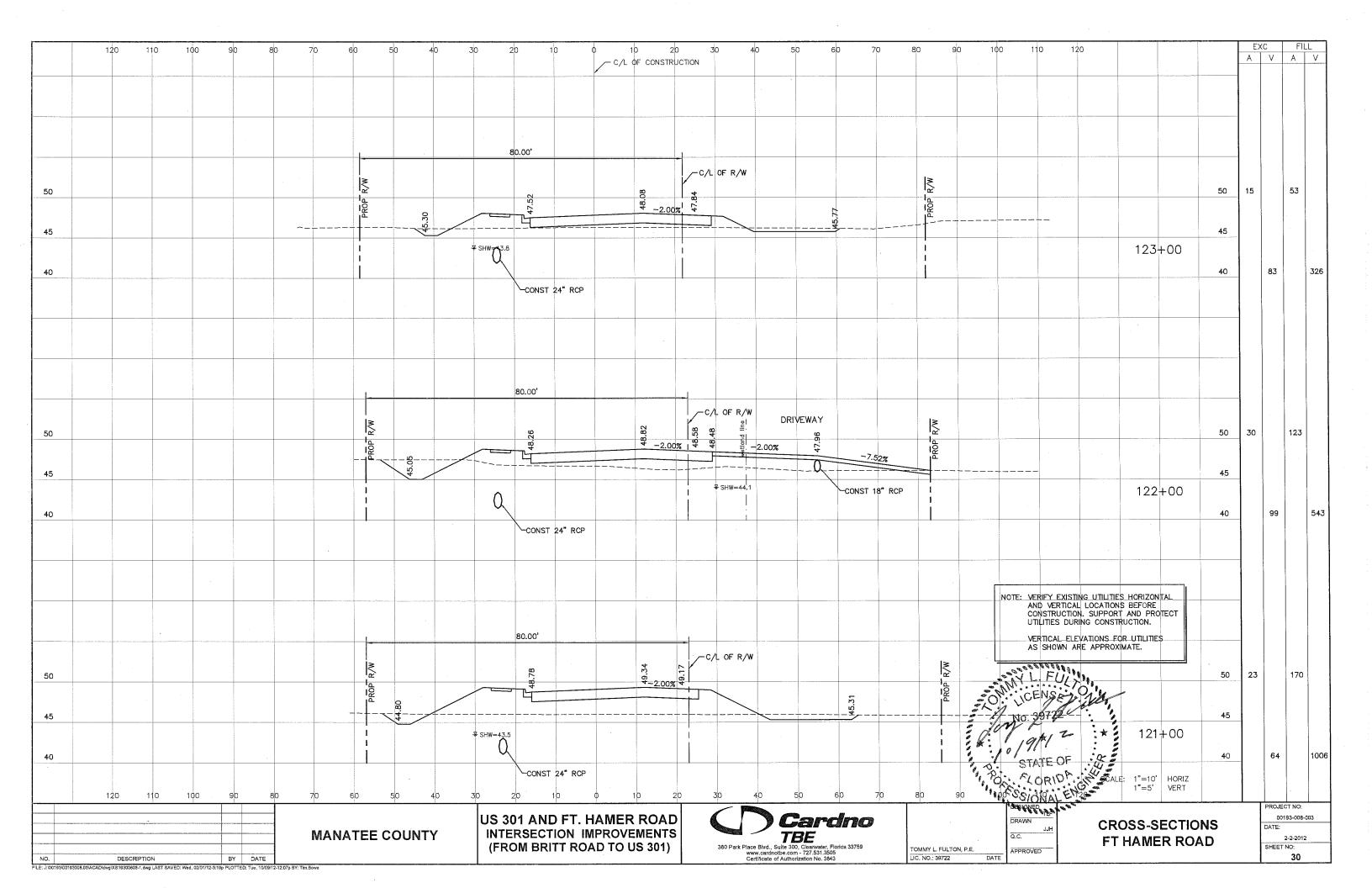


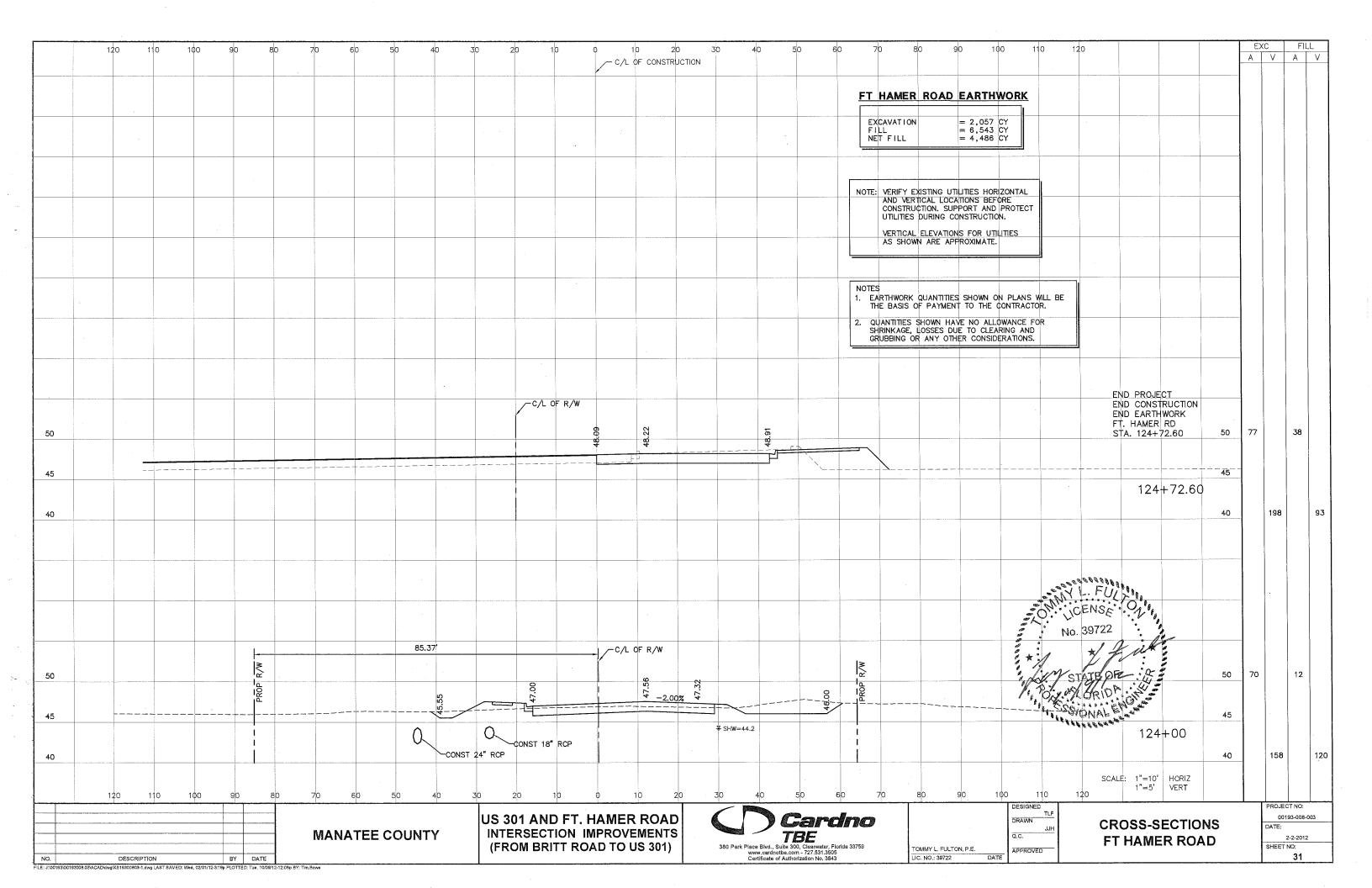


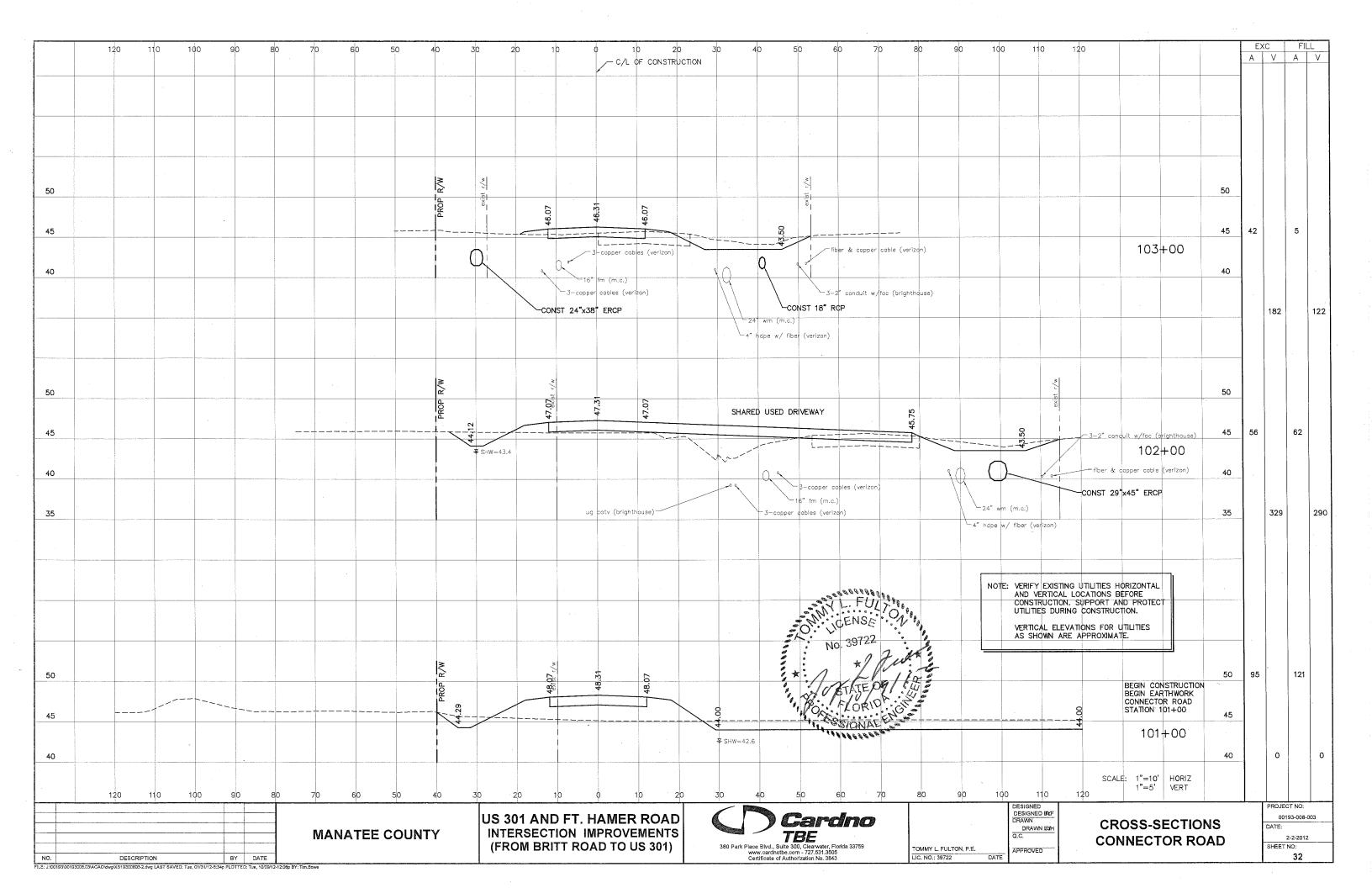


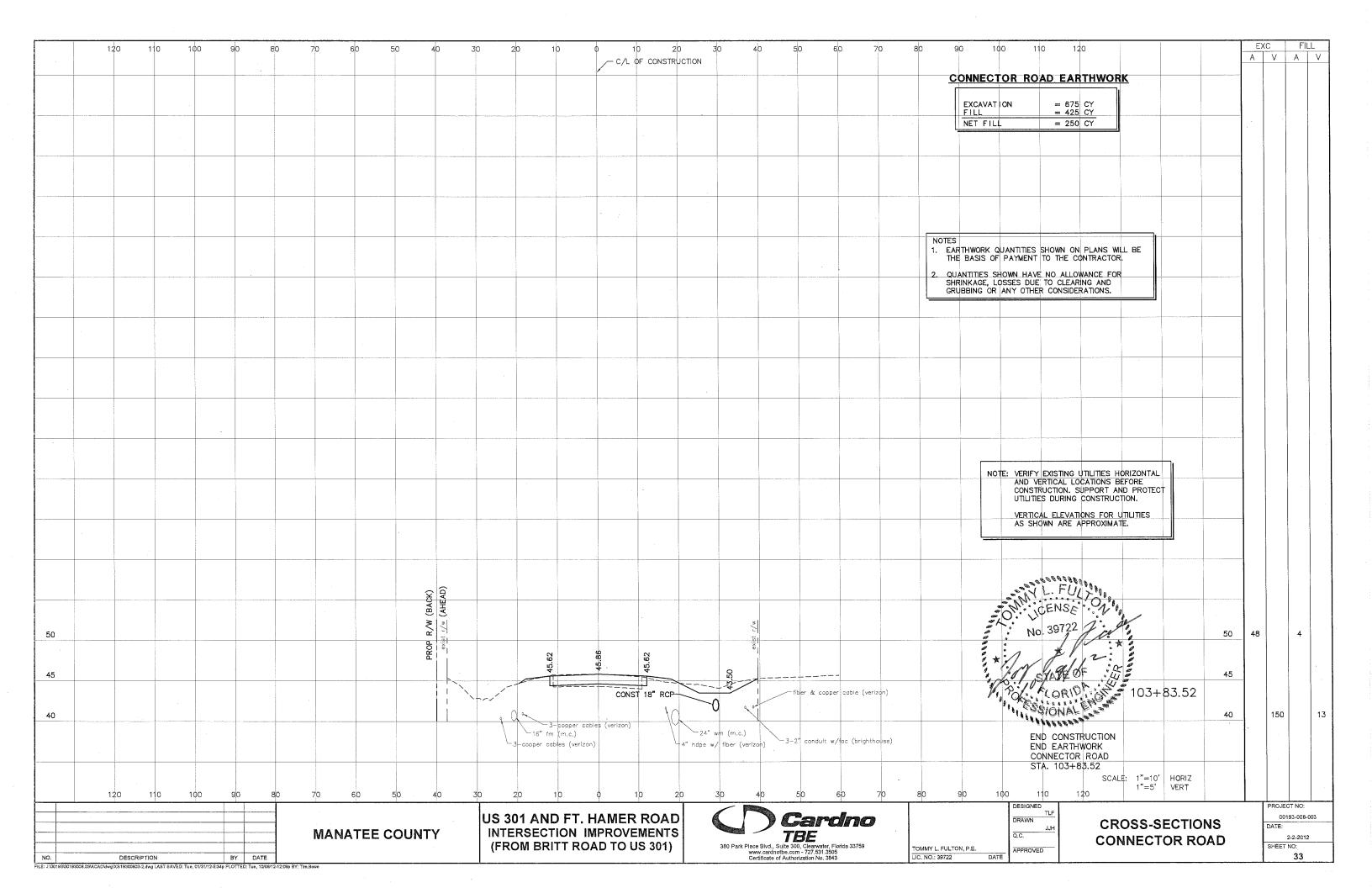


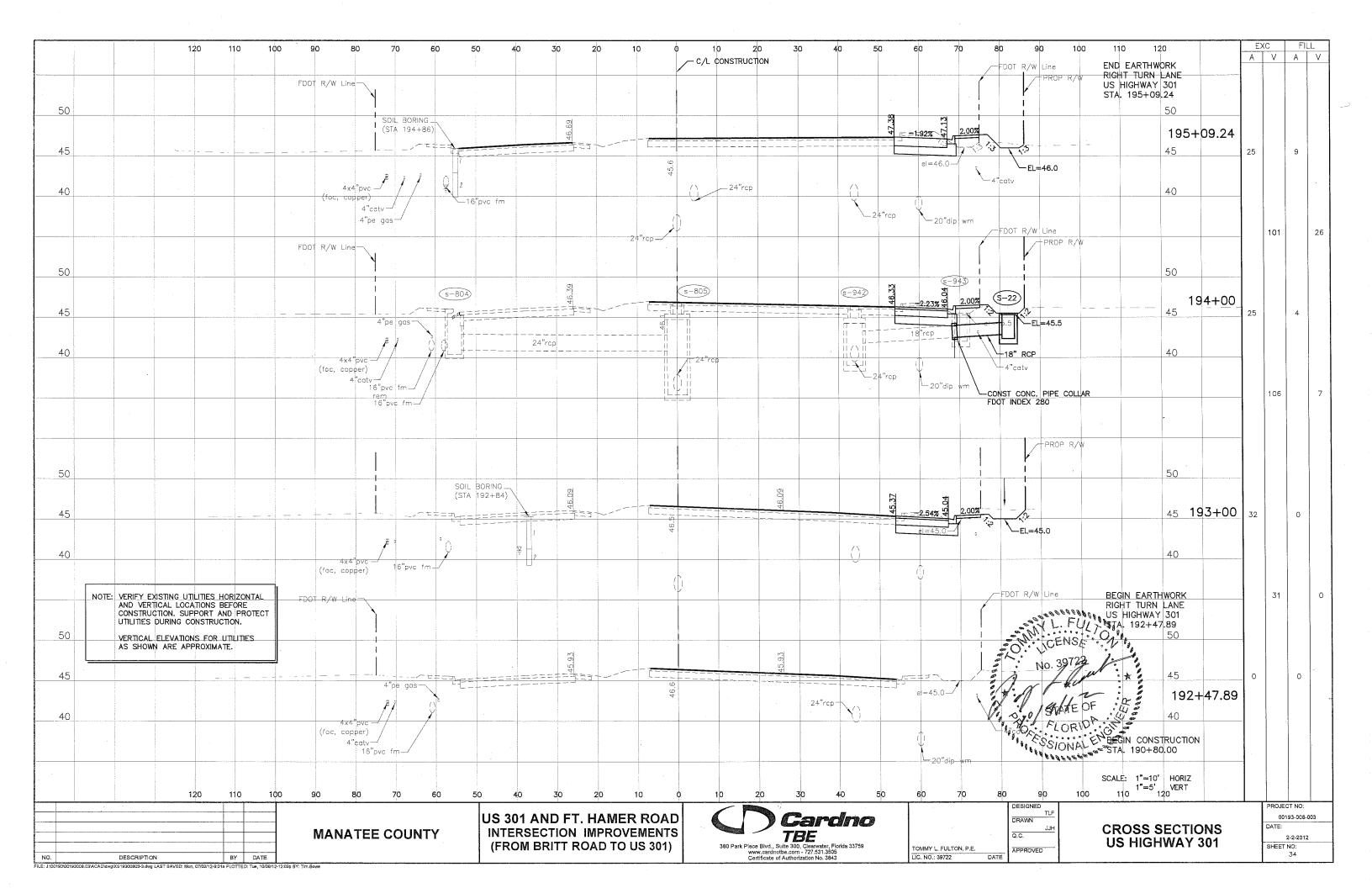


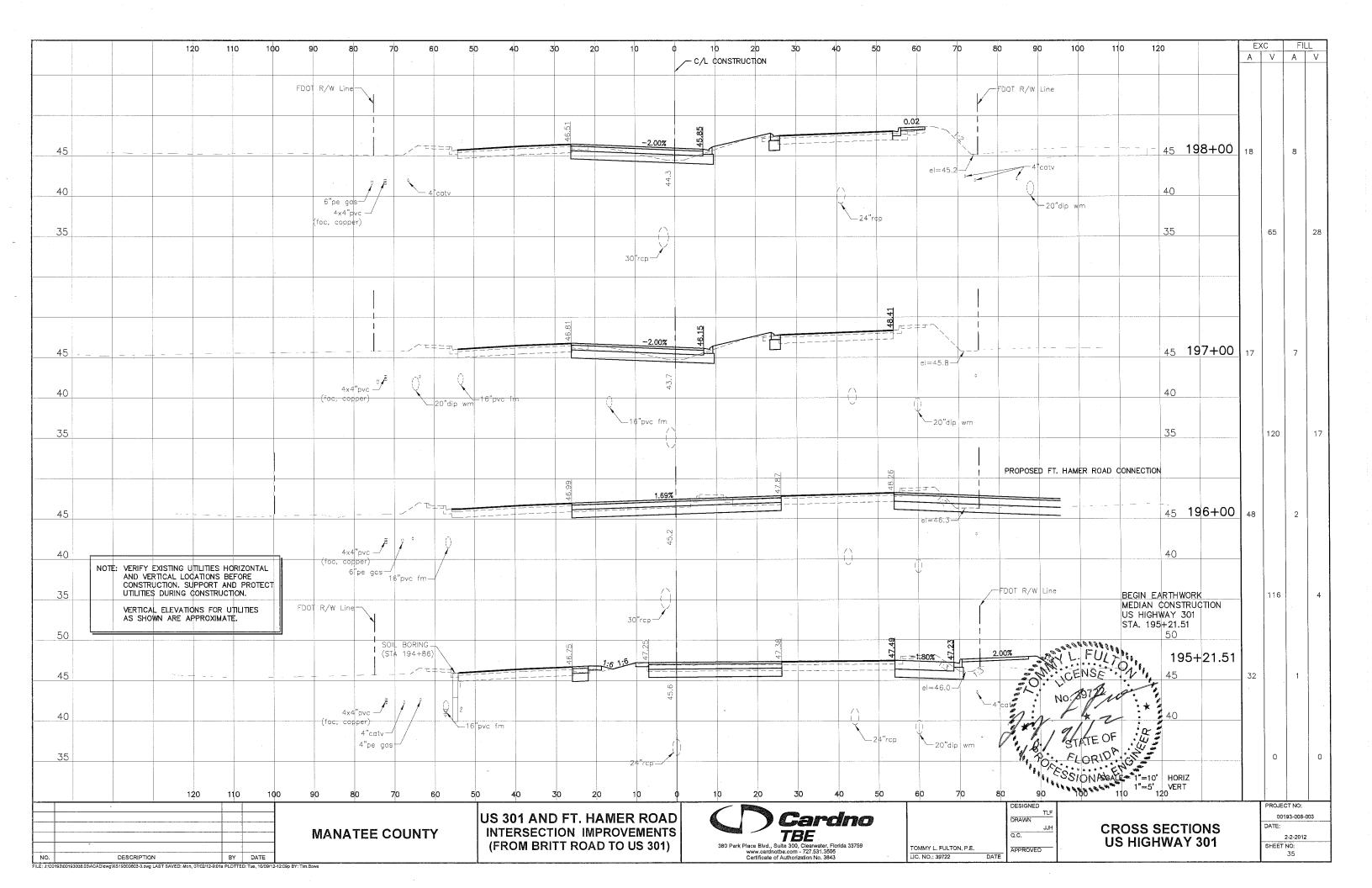


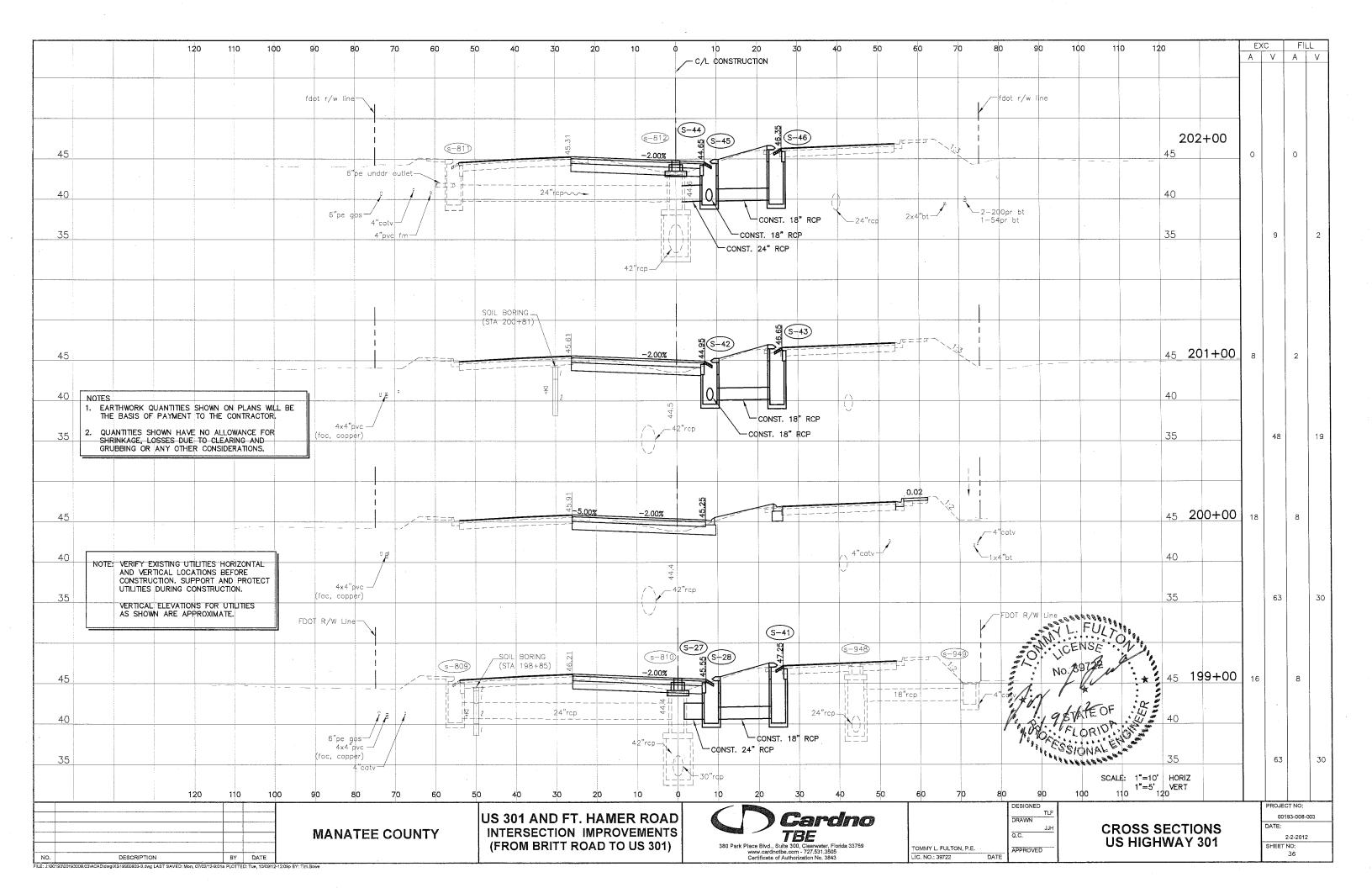


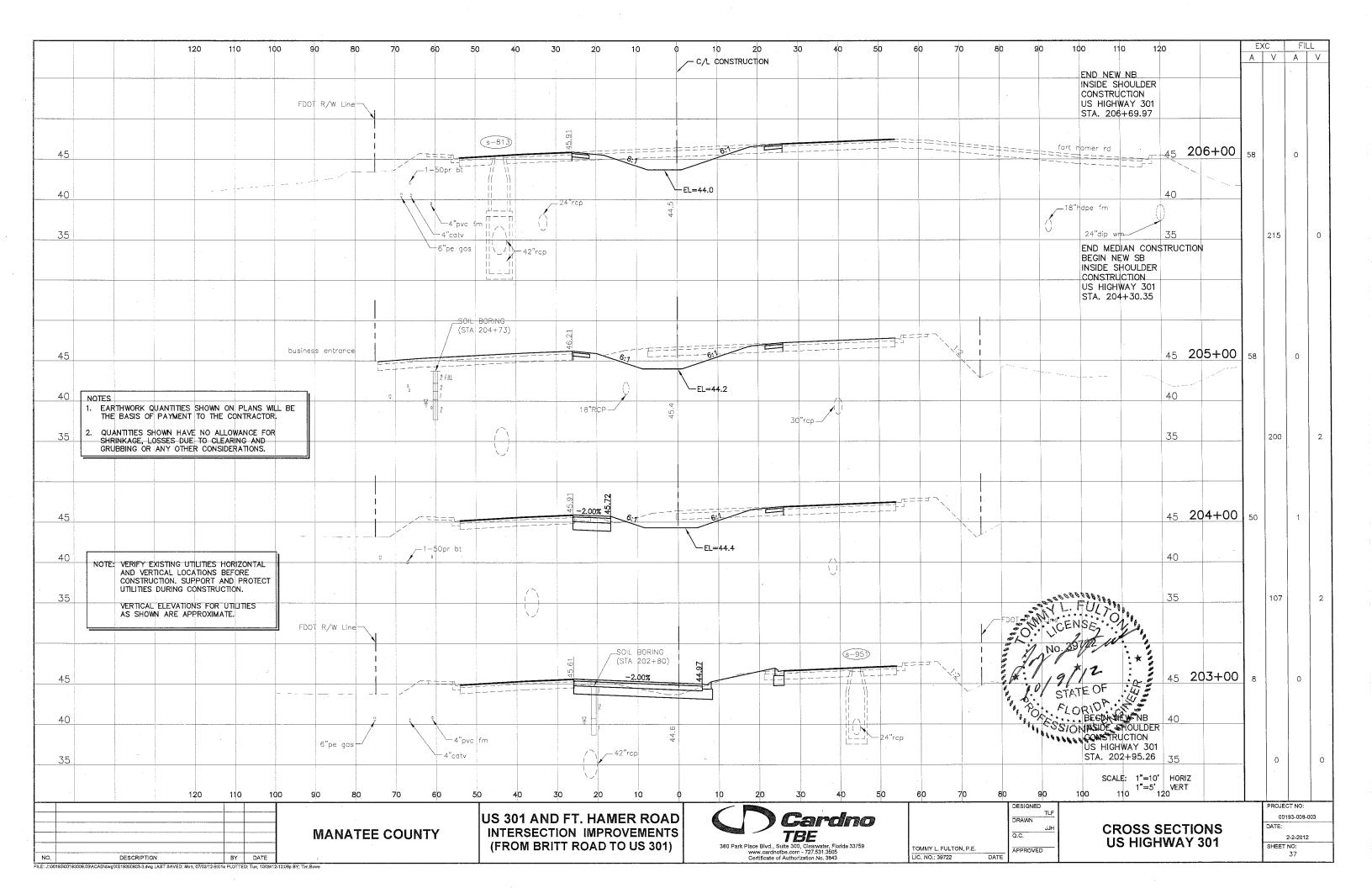


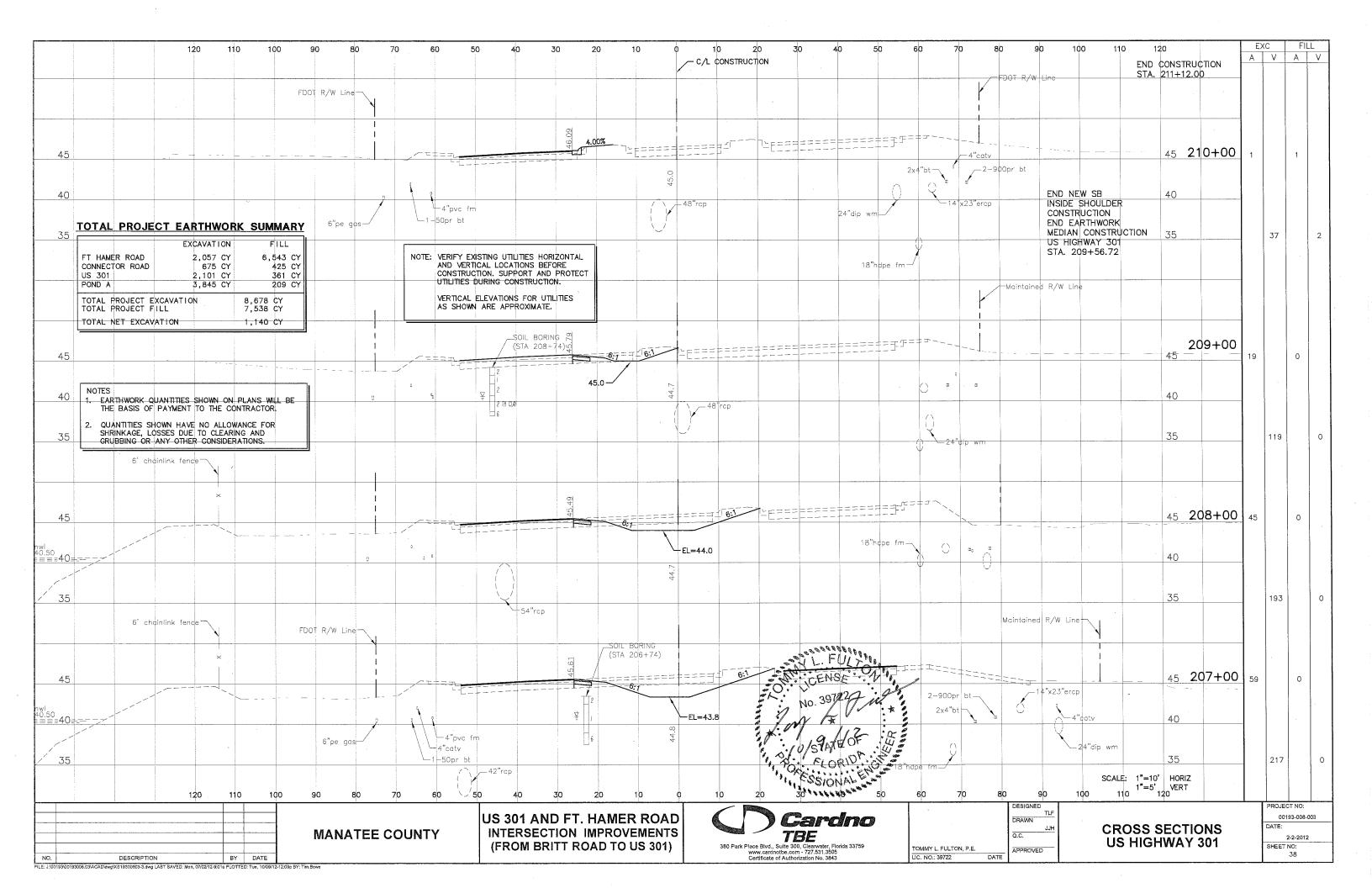


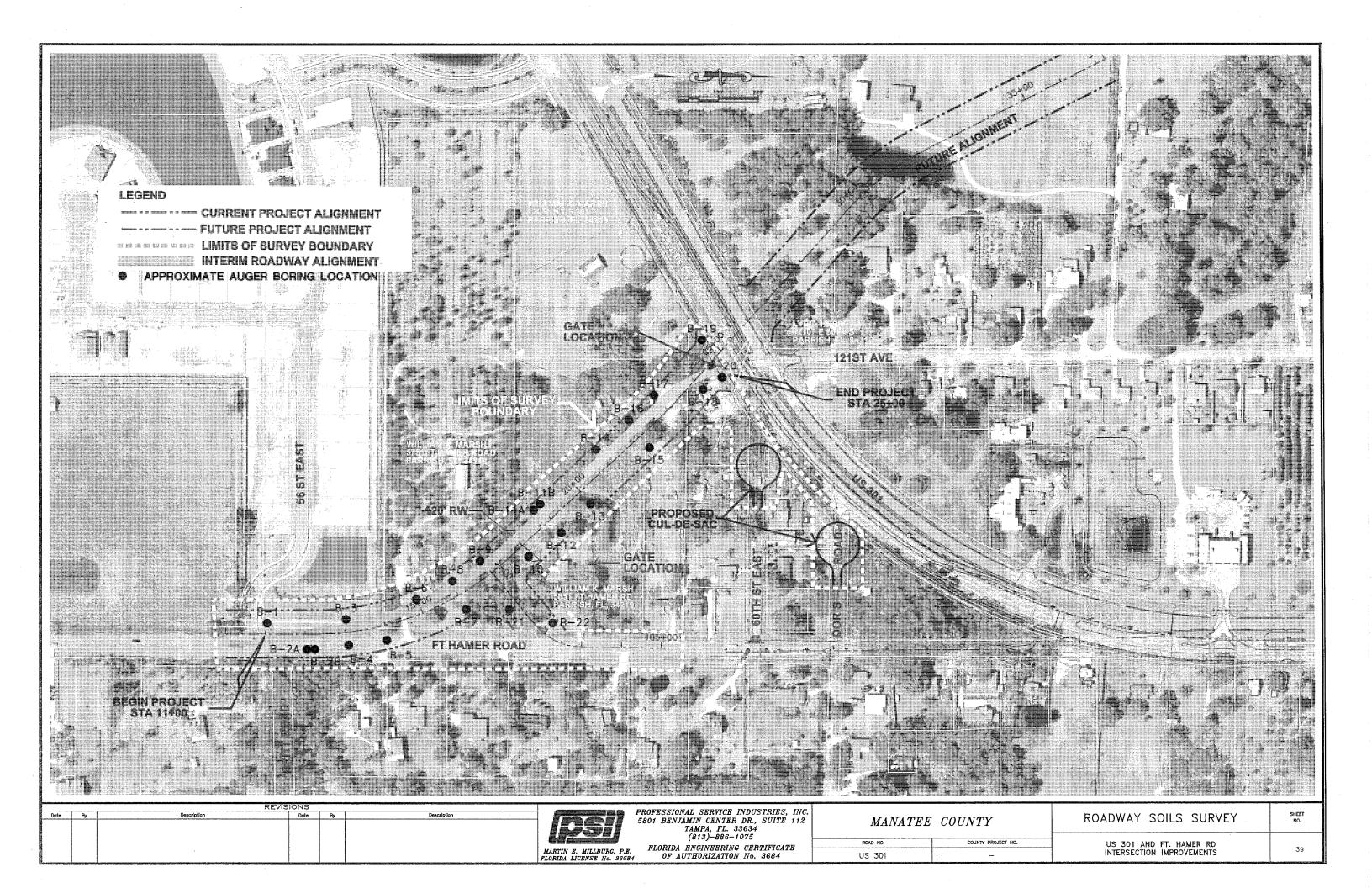


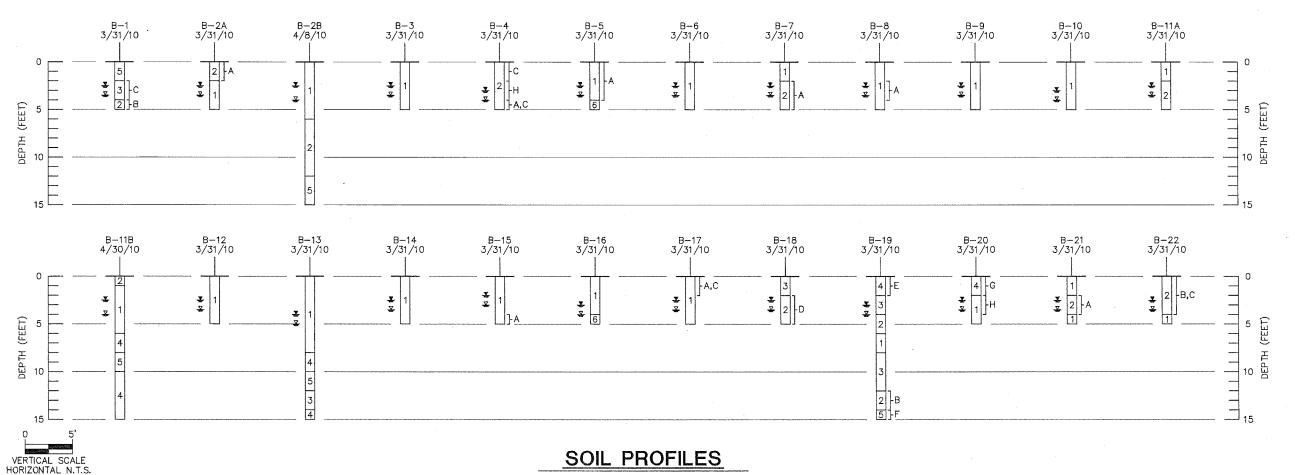












# **LEGEND**

- 1. LIGHT TO DARK GRAY, BROWN FINE SAND (A-3)
- 2. LIGHT TO DARK BROWN SLIGHTLY SILTY SAND (A-2-4) NON PLASTIC
- 3. BROWN, LIGHT TO DARK GRAY SLIGHTLY SILTY/CLAYEY SAND (A-2-4) PLASTIC
- 4. BROWN, GRAY CLAYEY SAND (A-2-6)
- 5. GRAY SANDY CLAY (A-6)
- 6. DARK BROWN SILTY ORGANIC SAND (A-8)
- A-3 AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW
- GROUNDWATER LEVEL, DATE OBSERVED
- ESTIMATED SEASONAL HIGH GROUNDWATER LEVEL
- A TRACE ROOTS; ORGANICS (<5%)
- B SMALL CEMENTED SANDS (ROCK) (<1")
- C SHELL FRAGMENTS
- D STRONG CHEMICAL/GAS ODOR
- E WITH LIMEROCK BASE
- F VERY SMALL ROUNDED QUARTZ PEBBLES
- G BLUE-GREEN CLAY FILL
- H ROCK (>1")

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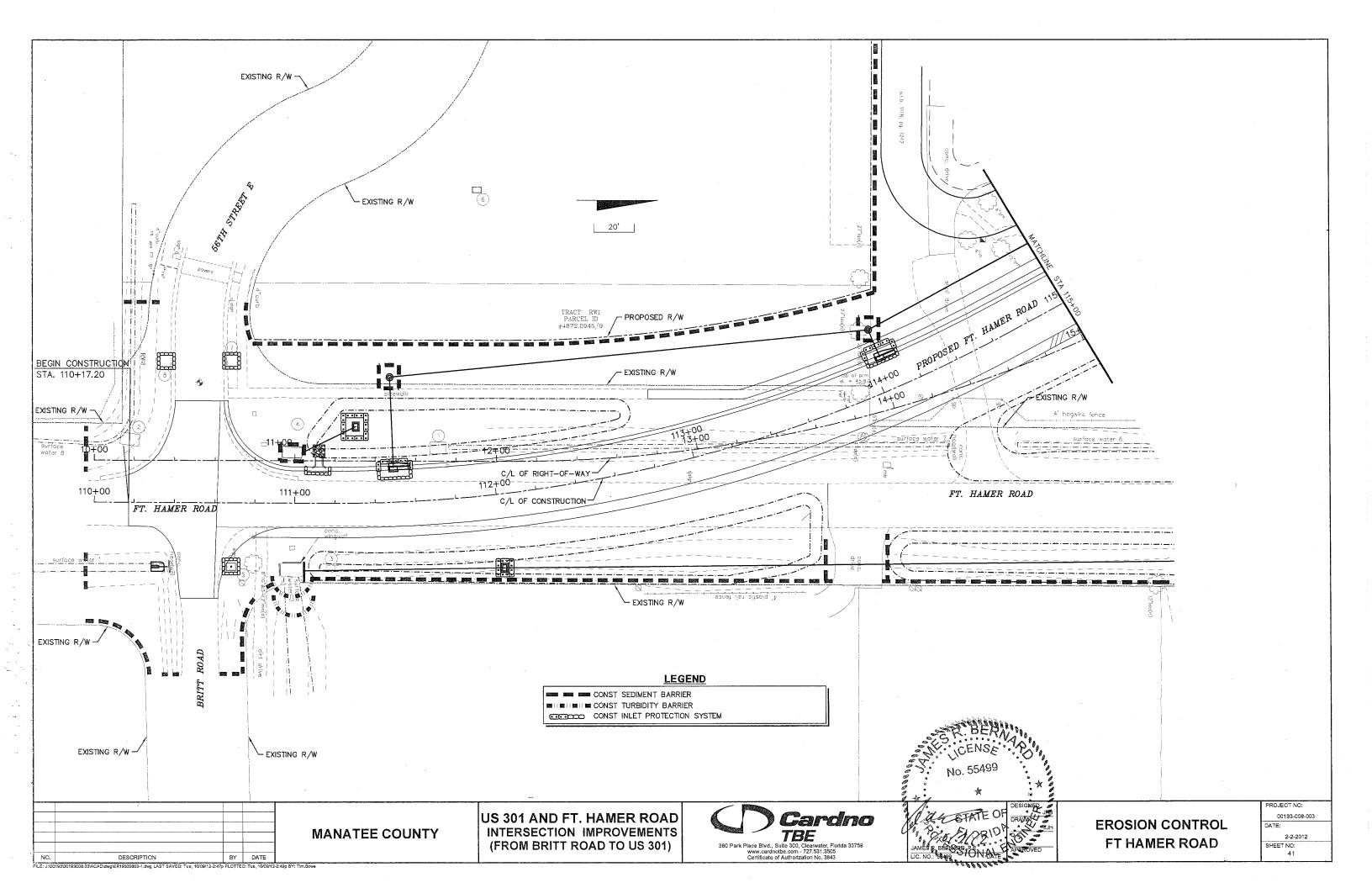
PROFESSIONAL SERVICE INDUSTRIES, INC. 5801 BENJAMIN CENTER DR., SUITE 112 TAMPA, FL. 33634 (813)-886-1075 FLORIDA ENGINEERING CERTIFICATE OF AUTHORIZATION No. 3684

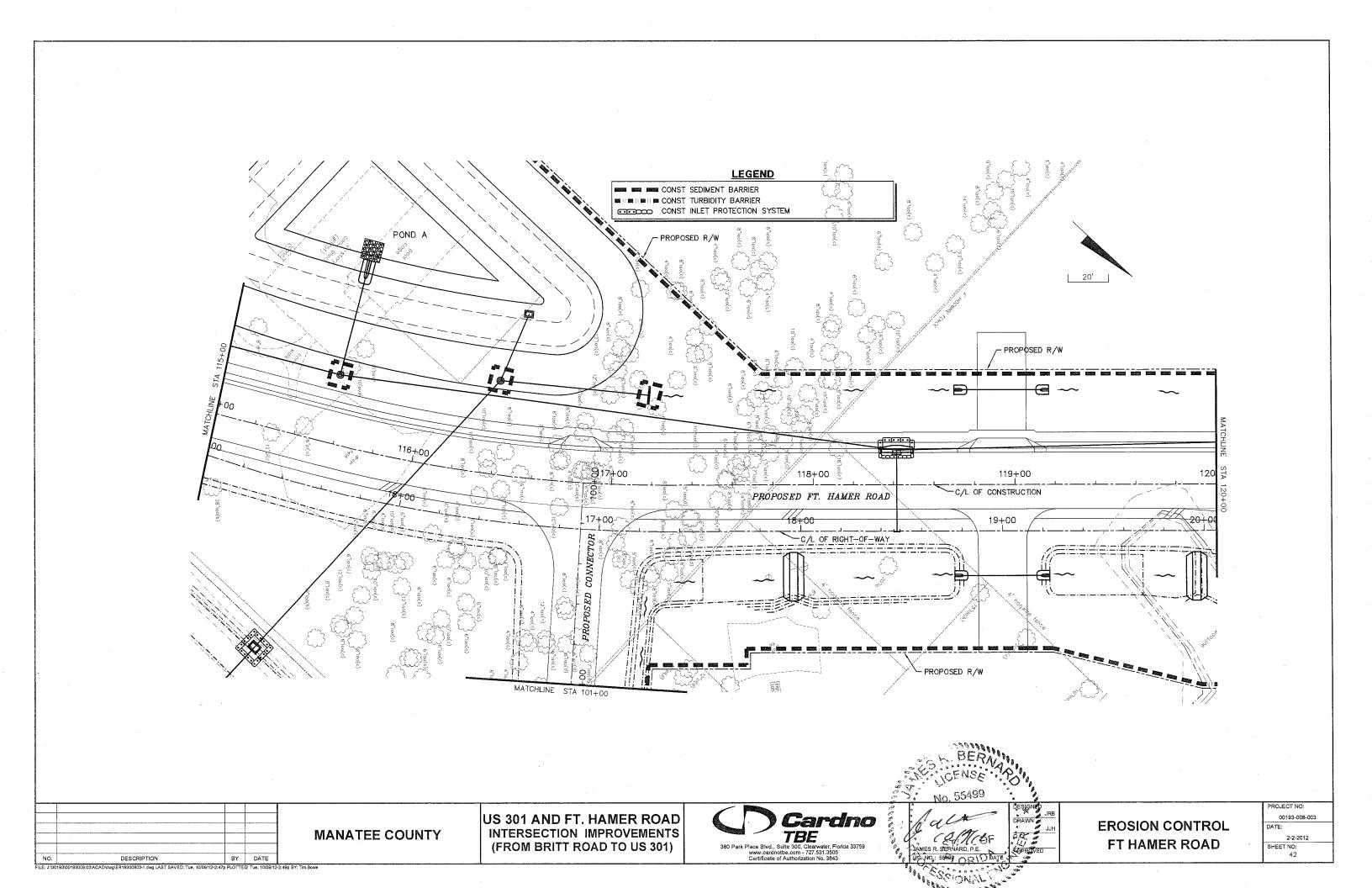
MANATEE	COUNTY
ROAD NO.	COUNTY PROJECT
US 301	

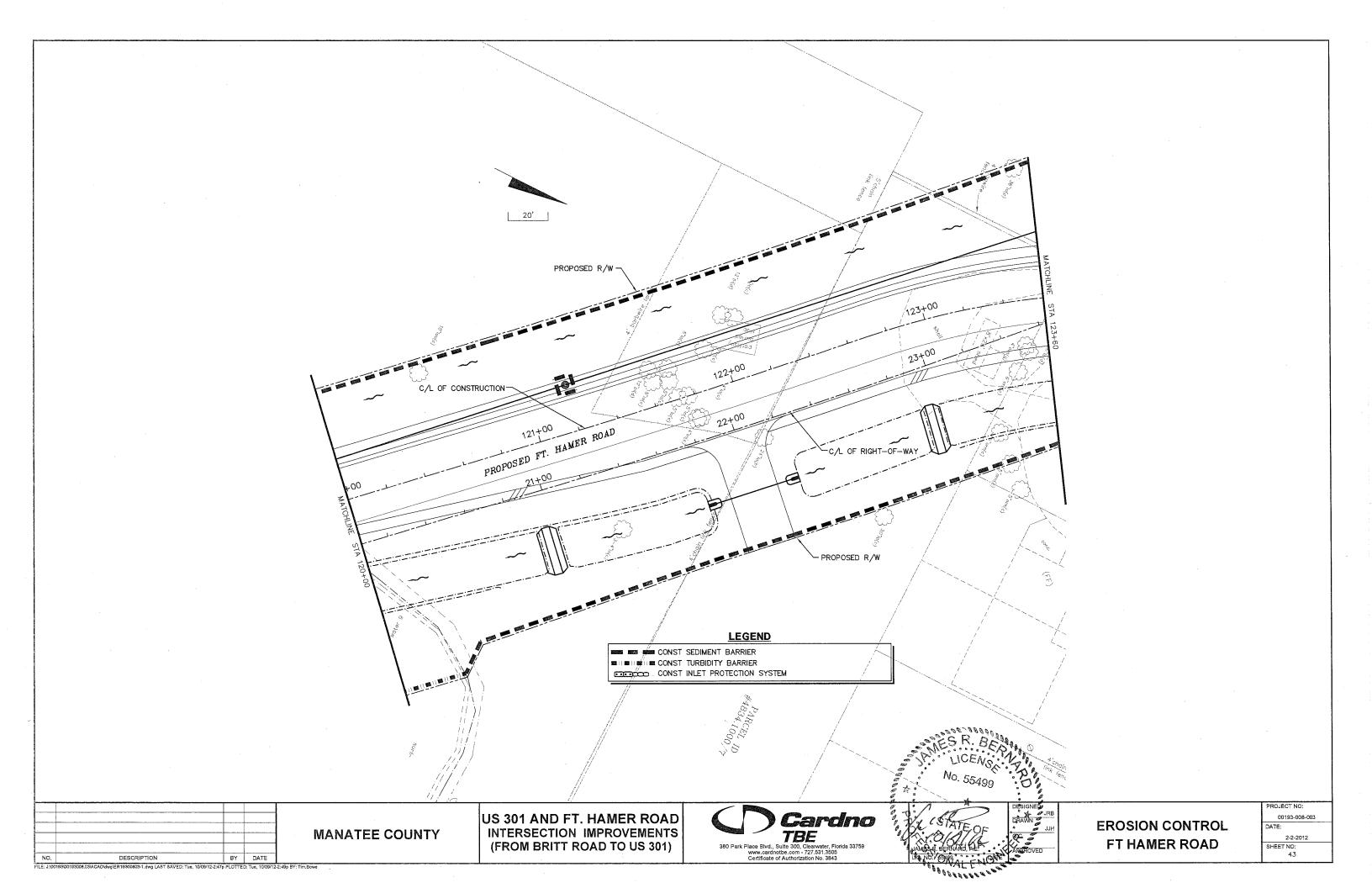
ROADWAY SOILS SURVEY

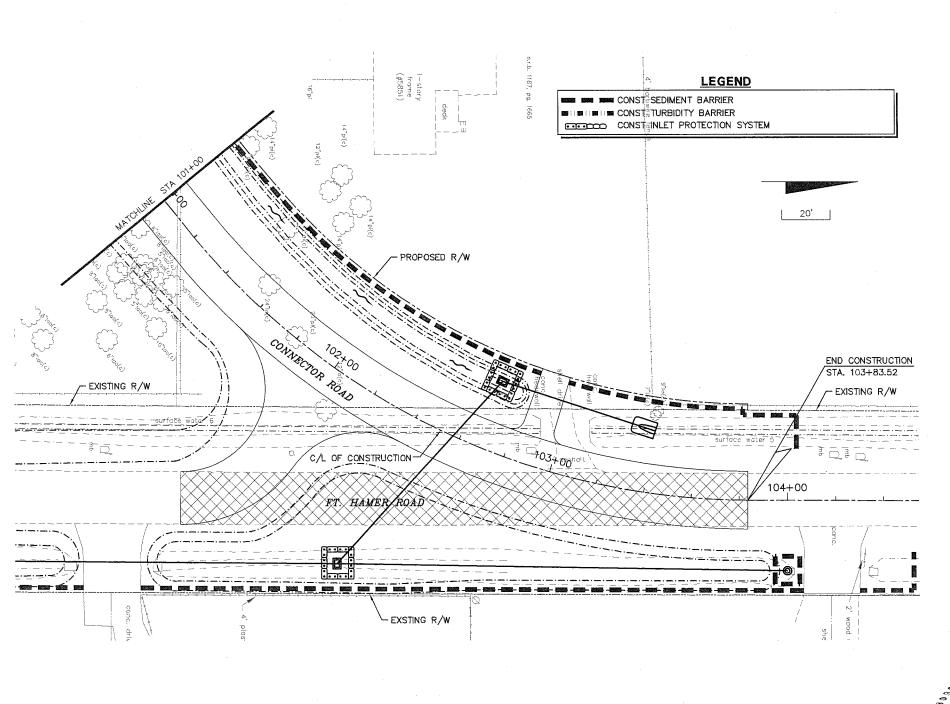
US 301 AND FT. HAMER RD INTERSECTION IMPROVEMENTS

40









380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.3505
Certificate of Authorization No. 3843

EROSION CONTROL CONNECTOR ROAD

PROJECT NO:
00193-008-003

DATE:
2-2-2012

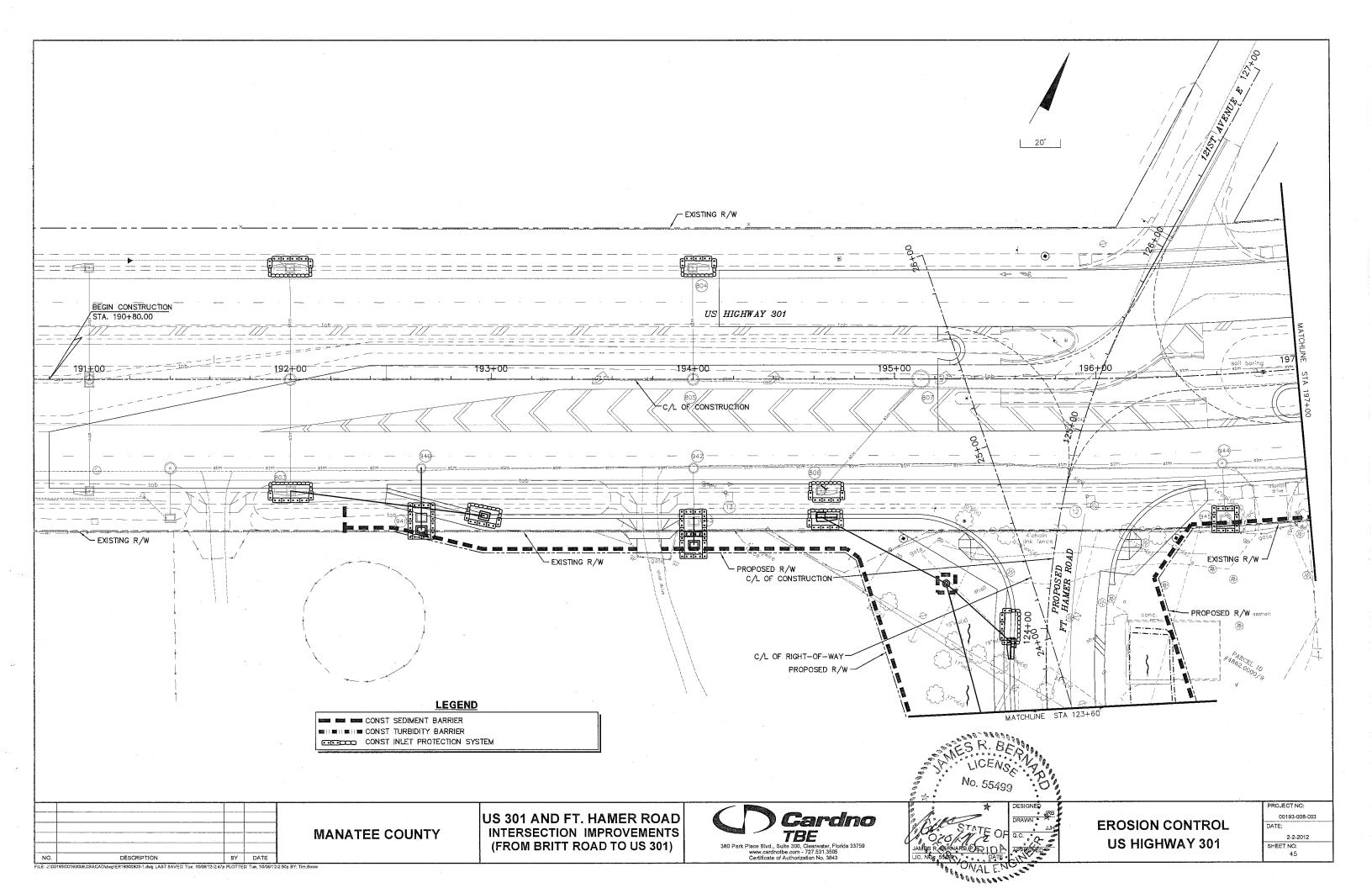
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44

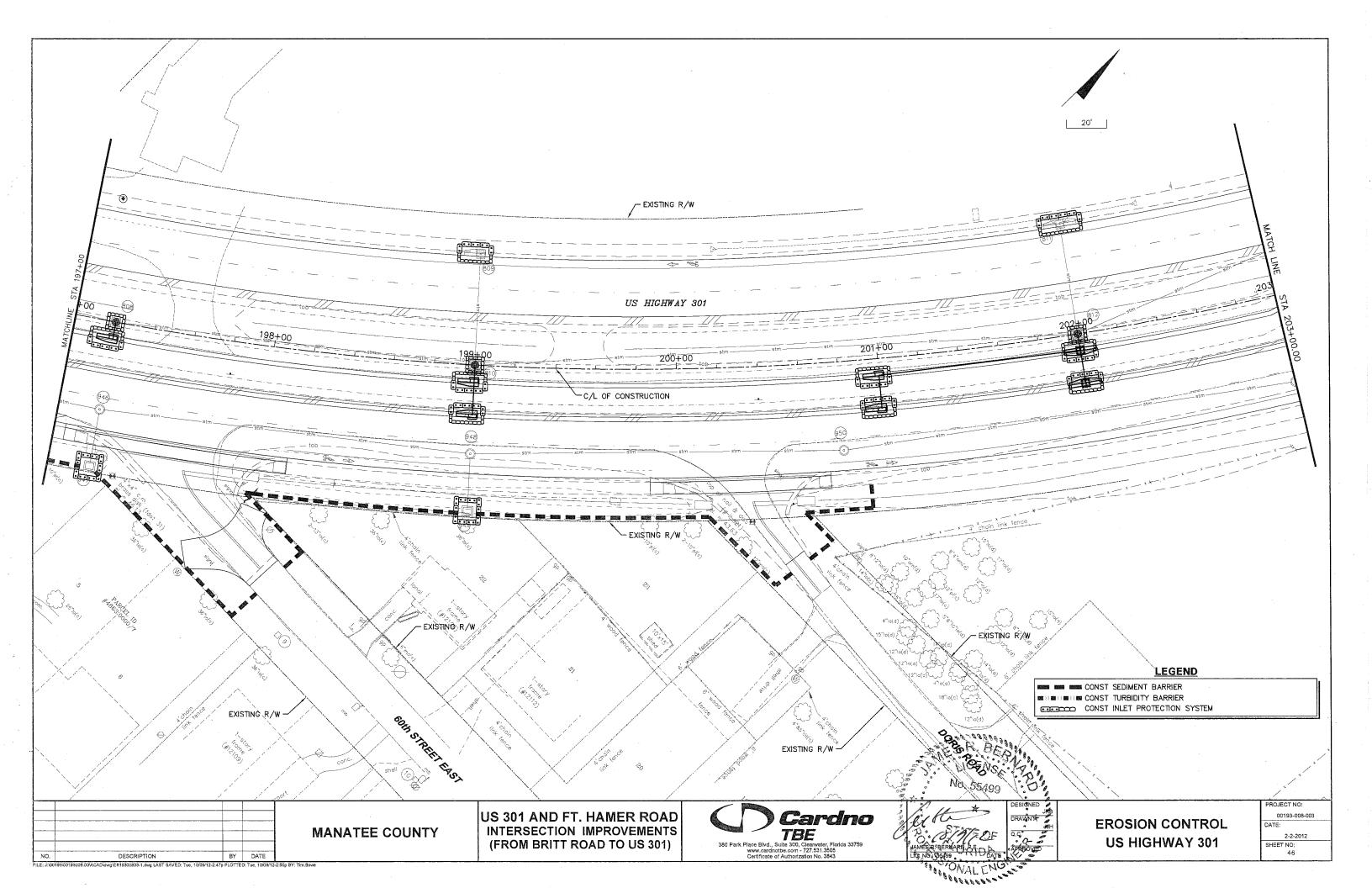
MANATEE COUNTY

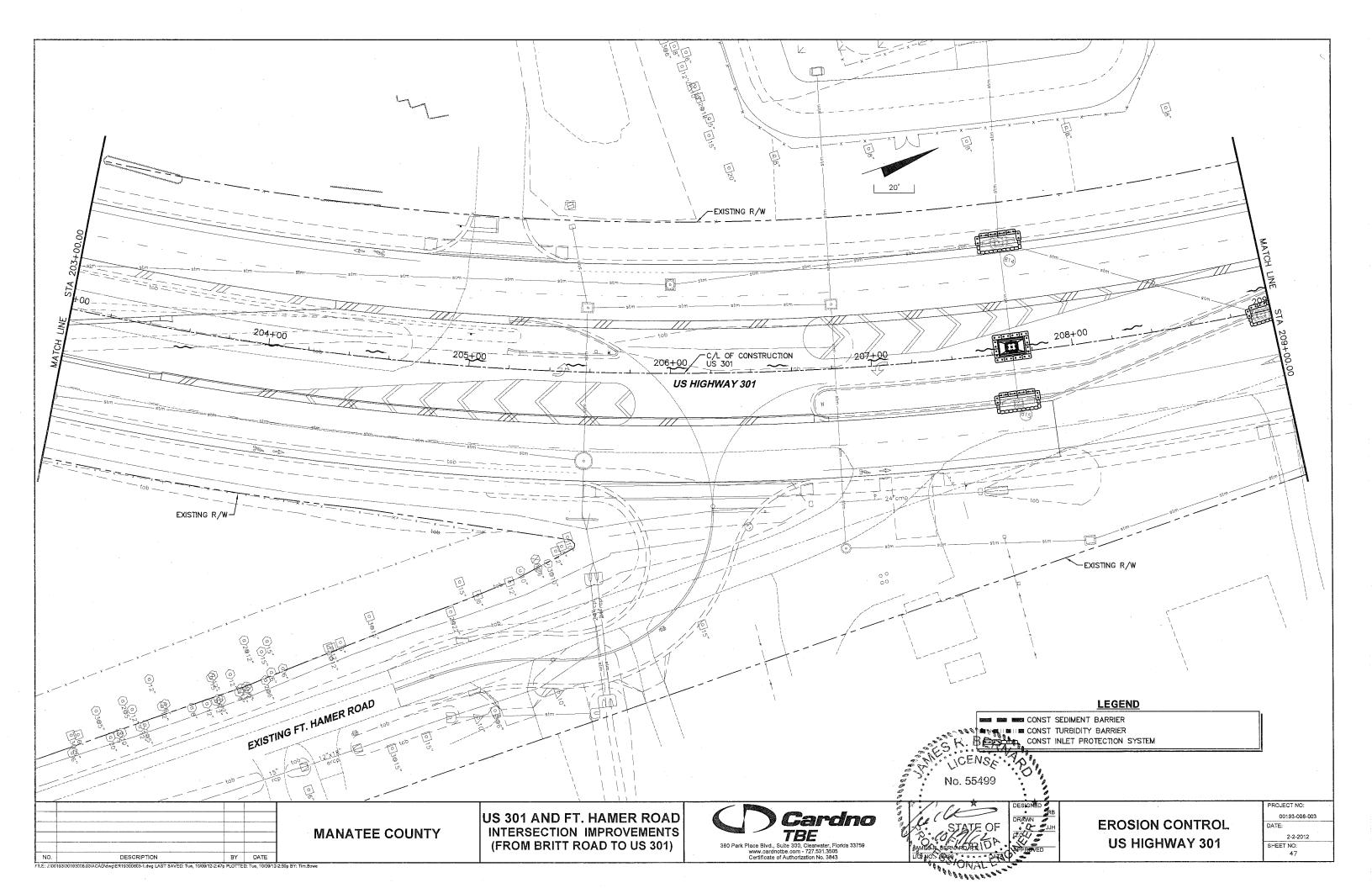
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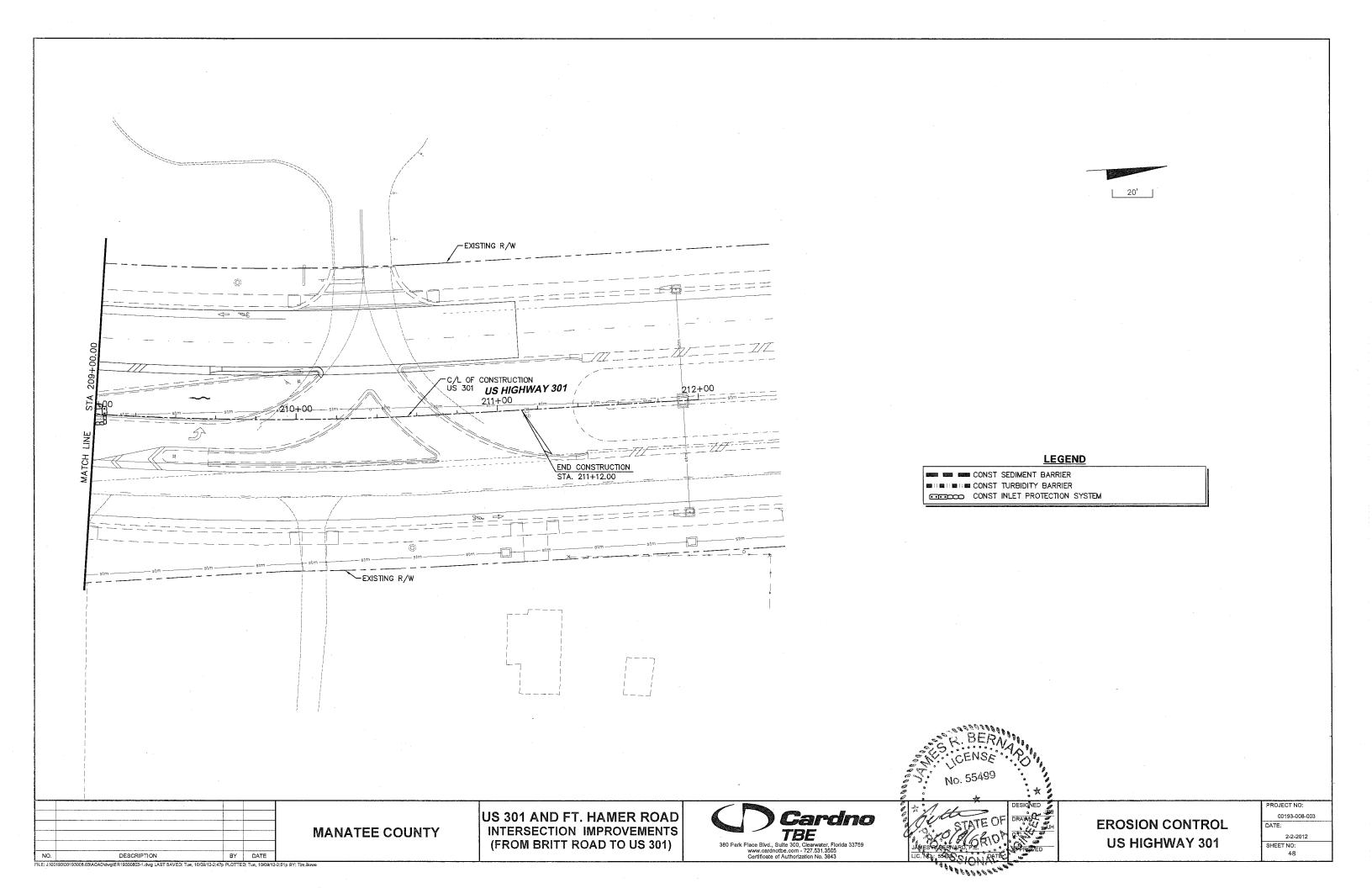
BY DATE

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)









#### SITE DESCRIPTION

#### A. CONSTRUCTION ACTIVITY

THIS A ROADWAY IMPROVEMENT PROJECT. CONSTRUCTION ACTIVITIES ARE CLEARING, STORM SEWER INSTALLATION, UNDERGROUND UTILITY
INSTALLATION AND RELOCATION, POND CONSTRUCTION, EARTHWORK,
PAVING, INSTALLATION OF CURB AND GUTTER, SIDEWALK CONSTRUCTION, ROADWAY LIGHTING INSTALLATION AND SIGNAL INSTALLATION.

#### PROJECT LIMITS:

THE PROJECT LIMITS ARE FROM THE INTERSECTION OF FT. HAMER ROAD AND BRITT ROAD/56TH STREET EAST TO THE INTERSECTION OF US HIGHWAY 301 AND 121ST AVENUE IN MANATEE COUNTY FLORIDA. THE PROJECT LENGTH IS APPROXIMATELY 0.276 MILES.

#### PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF 1) RECONSTRUCTING AND REALIGNING AN EXISTING ROAD (FT. HAMER ROAD) AS A TWO-LANE INTERIM ROADWAY IN ADVANCE OF A FUTURE FOUR-LANE ULTIMATE ROADWAY, 2) CONSTRUCTING A TWO-LANE CONNECTING ROADWAY (CONNECTOR ROAD) BETWEEN THE RELALIGNED FT. HAMER ROAD AND REMAINDER OF THE EXISTING ROAD, AND 3) ADDING LEFT AND RIGHT TURN LANES TO AN EXISTING ROADWAY (US HIGHWAY 301). A CLOSED AND OPEN CONVEYANCE SYSTEM WILL COLLECT THE STORMWATER RUNOFF AND CONVEY IT TO A STORMWATER MANAGEMENT FACILITY (POND) FOR TREATMENT AND ATTENUATION. ALSO, PROJECT INCLUDES CONSTRUCTION AND/OR RELOCATION OF UNDERGROUND

#### MAJOR SOIL DISTURBING ACTIVITIES:

CLEARING, GRUBBING, EXCAVATION AND GRADING ACTIVITIES FOR THE CONSTRUCTION OF PROPOSED ROADWAYS, POND AND WETLAND MITIGATION

C. TOTAL PROJECT AREA: 10.44 ACRES

TOTAL AREA TO BE DISTURBED: 7.98 ACRES

### RUNOFF DATA

PROPOSED ROADWAYS (IMPERVIOUS AREA) WILL INCREASE THE RUNOFF. HOWEVER, THE PROPOSED PONDS WILL PROVIDE ATTENUATION TO OFFSET THE INCREASED RUNOFF.

PRE CONSTRUCTION "C" (RATIONAL METHOD)= 0.20

POST CONSTRUCTION "C" (RATIONAL METHOD)= 0.90

#### SOIL DATA

THE USDA'S SOIL SURVEY OF MANATEE COUNTY (2003) HAS CLASSIFIED THE SOILS TYPES WITHIN THE PROJECT LIMITS AS 1) FLEMINGTON FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES AND 2) PAISELY FINE SAND.

## DRAINAGE\_AREA

3.69 ACRES

#### RECEIVING WATERS

RUNOFF FROM THE IMPROVED FT. HAMER ROAD RIGHT-OF-WAY (PROPOSED ROADWAY TO POND A) DRAINS TO GAMBLE CREEK AND ULTIMATELY DISCHARGES INTO THE MANATEE RIVER.

#### WETLANDS AREAS

NONE. SURFACE WATER IMPACTS TO CATTLE POND AND EXISTING DITCHES.

**MANATEE COUNTY** 

### CONTROLS

#### A. SEQUENCE OF MAJOR ACTIVITIES

- 1. INSTALL STAKED SILT FENCE AND TURBIDITY BARRIER AS SHOWN ON THE EROSION CONTROL PLAN AND CONSTRUCTION DRAWING PRIOR TO START OF CONSTRUCTION ACTIVITIES
- INSTALL ANY REQUIRED STABILIZED CONSTRUCTION ENTRANCE. INSTALL SEDIMENT CONTROLS FOR DEWATERING OPERATIONS.
- STABILIZE, MAINTAIN, AND REPLACE EROSION AND SEDIMENT AS DIRECTED BY
- 5. PERFORM WEEKLY INSPECTION OF EROSION AND SEDIMENT AND AFTER EVERY RAINFALL
- 6. REMOVE ALL SEDIMENTS THAT HAVE MIGRATED OFF SITE AS DIRECTED BY THE
- WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE EROSION PROTECTION DEVICES AND CONSTRUCTION ENTRANCE AS

### B. EROSION AND SEDIMENT (E & S) CONTROLS CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL REVIEW THE SITE SPECIFIC EROSION CONTROL PLAN. THE CONTRACTOR MAY ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS OR SITE CONDITIONS. ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL SEDIMENT THAT HAS MIGRATED OFF-SITE. SUITABLE EROSION CONTROL DEVICES FOR THESE ACTIVITIES ARE SPECIFIED IN THE PLANS AND ACCORDING TO "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 2010, SECTION 104. THE CONSTRUCTION ENGINEER IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE NEEDED AND DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES. IF DEEMED NECESSARY BY THE CONSTRUCTION ENGINEER, THE CONTRACTOR MAY BE RESPONSIBLE FOR CONSTRUCTION OF A 15' X 30' x 1" STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTED OF NON-POUROUS STONE TO CLEAN THE TIRES OF VEHICLES THAT WILL BE REQUIRED TO LEAVE THE PROJECT SITE, SEE DETAIL OF "SOIL TRACKING PREVENTION DEVICE TYPE A" FDOT INDEX 106.

#### C. STABILIZATION PRACTICES:

DURING CONSTRUCTION THE CONTRACTOR WILL PROVIDE STABILIZATION FOR AREAS WHICH HAVE BEEN CLEARED AND NOT REWORKED WITHIN FOURTEEN (14) CALENDAR DAYS. THE CONTRACTOR MAY UTILIZE TEMPORARY SEEDING OR TEMPORARY SODDING IN ACCORDANCE WITH SECTION 575 OF THE "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 2010.

X	TEMPORARY	SODDING	OR S	EEDING
X	PERMANENT	SODDING	OR S	EEDING
	BUFFER ZON	NES		
	PRESERVATION	ON OF NA	TURAL	RESOURCES

DOOK DAGE

### STRUCTURAL PRACTICES:

X	ROCK BAGS
X	SILT BARRIERS
<u>X</u>	SYNTHETIC BALES
	BERMS
	DIVERSION, INTERCEPTOR, OR PERIMETER DITCHES
	PIPE SLOPE DRAINS
	FLUMES
	ROCK BEDDING AT CONSTRUCTION EXIT
	TIMBER BEDDING AT CONSTRUCTION EXIT
	DITCH LINER
X	SEDIMENT TRAPS
	SEDIMENT BASINS
	STORM INLET SEDIMENT TRAP
	STONE OUTLET STRUCTURES
X	CURBS AND GUTTERS
X	STORM SEWERS
	VELOCITY CONTROL DEVICES
X	TURBIDITY BARRIER
	RIP RAP
X	"GEO-HAY" OR EQUIVALENT SYNTHETIC INLET PROTECTIO
OTHER:	

## DESCRIPTION OF STORM WATER MANAGEMENT:

THERE IS ONE STORM WATER MANAGEMENT FACILITY (POND) DESIGNED FOR THIS PROJECT TO PROVIDE TREATMENT AND ATTENUATION. POND A WILL BE LOCATED WEST OF THE REALIGNED FT. HAMER ROAD. STORM WATER RUNOFF FROM THE MAJORITY OF FT. HAMER ROAD WILL BE CONVEYED TO POND A FOR TREATMENT AND ATTENUATION, POND A WILL BE WET.

# US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



#### F. WASTE DISPOSAL:

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ANY CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER. NO SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS SHALL BE DISCHARGED TO WETLANDS OR BURIED ON SITE. ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN DUMPSTERS PER LOCAL SOLID WASTE REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF TWICE A WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO THE APPROPRIATE COUNTY FOR DUMPING.

#### OFFSITE VEHICLE TRACKING:

SUITABLE MEASURES SUCH AS STABILIZED CONSTRUCTION ENTRANCES SHOULD BE PROVIDED AS REQUIRED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS DIRECTED BY THE CONSTRUCTION INSPECTOR AND ENGINEER TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM OR TO THE SITE WILL BE COVERED WITH A TARPAULIN AT ALL TIMES.

#### SANITARY WASTE:

THIS PROJECT IS IN AN URBAN AREA. THE CONTRACTOR WILL PROVIDE APPROPRIATE PORTABLE SANITARY DEVICES. THE CONTRACTOR SHALL REMOVE SANITARY WASTE IN ACCORDANCE WITH "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2010" SECTION 7-6, AND STATE AND LOCAL REGULATIONS.

#### I. HAZARDOUS WASTE:

ALL HAZARDOUS WASTE MATERIALS, IF ENCOUNTERED, WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THESE PRACTICES ARE FOLLOWED.

#### J. WATER QUALITY MONITORING (MIXING ZONES):

THE STATE WATER QUALITY STANDARD FOR CONSTRUCTION ACTIVITIES PROHIBIT A TURBIDITY INCREASE OF GREATER THAN 29 NTU'S ABOVE AMBIENT CONDITIONS AT THE COMPLIANCE LOCATION OF THE MIXING ZONES. TO MAINTAIN THIS STANDARD, TURBIDITY MONITORING SHALL OCCUR DURING ALL IN-WATER CONSTRUCTION ACTIVITIES AT EACH COMPLIANCE AND BACKGROUND STATION. THE FOLLOWING PROCEDURE SHALL BE USED:

FREQUENCY: TWICE A DAY, AT LEAST 4 HOURS APART DURING ACTUAL CONSTRUCTION OPERATIONS.

LOCATIONS: ALL STATIONS SHALL BE SAMPLED AT 2 FEET ABOVE THE BOTTOM, MID-DEPTH, AND AT THE SURFACE OR AS DIRECTED BY PERMITTING AGENCIES. IF WATER IS LESS THAN THREE FEET DEEP, ONLY MID-DEPTH SAMPLES ARE REQUIRED.

BACKGROUND: 500 FEET UP-CURRENT FROM THE CONSTRUCTION ACTIVITY AND OUTSIDE OF ANY TURBIDITY PLUME FROM THE CONSTRUCTION ACTIVITY.

COMPLIANCE: 300 FEET DOWN CURRENT FROM THE CONSTRUCTION ACTIVITY WITHIN ANY VISIBLE TURBIDITY PLUME OR AS DIRECTED BY PERMITTING AGENCIES.

METHOD: ALL SAMPLES SHALL BE COLLECTED WITH A KEMMERER, VAN DORN, OR SIMILAR SAMPLER WHICH IS DESIGNED TO COLLECT IN SITU WATER SAMPLES.

REPORTING: ALL MONITORING DATA SHALL BE SUBMITTED WITHIN ONE WEEK OF ANALYSIS WITH DOCUMENTS CONTAINING THE FOLLOWING INFORMATION:

- 2. DATES OF SAMPLING AND ANALYSIS
- 3. LOCATION OF SAMPLE (I.E., STATION AND WATER COLUMN LOCATION)
  4. A STATEMENT DESCRIBING THE METHODS USED IN COLLECTION,
  HANDLING, STORAGE, AND ANALYSIS OF THE SAMPLES
- MAP INDICATING THE SAMPLING LOCATIONS
- 6. A STATEMENT BY THE INDIVIDUAL RESPONSIBLE FOR IMPLEMENTATION OF THE SAMPLING PROGRAM CONCERNING THE AUTHENTICITY, PRECISION, LIMITS OF DETECTION AND ACCURACY OF DATA.



STORMWATER POLLUTION PREVENTION PLAN

00193-008-003 DATE

> 2-2-2012 SHEET NO:

49

NO BY DATE FILE: J:100193/00193008.03/ACAD\dwg\SWPPP19300803-1.dwg LAST SAVED; Frl, 01/13/12-3:12p PLOTTED; Tue, 10/09/12-12:12p BY: Tim.Bowe MONITORING REPORTS SHALL INCLUDE INFORMATION ON THE GENERAL ANTECEDENT

IF MONITORING REVEALS VIOLATIONS OF THE STATE WATER QUALITY STANDARD FOR TURBIDITY, CONSTRUCTION ACTIVITIES SHALL CEASE IMMEDIATELY AND NOT RESUME CORRECTIVE MEASURES HAVE BEEN TAKEN AND TURBIDITY HAS RETURNED TO ACCEPTABLE LEVELS. ANY SUCH OCCURRENCE SHALL ALSO BE IMMEDIATELY REPORTED TO THE REGULATORY AGENCIES.

IN THE EVENT THAT STATE WATER QUALITY STANDARDS ARE EXCEEDED, THE CONTRACTOR SHALL IMPLEMENT A CONTINGENCY PLAN WHICH COMPLIES WITH THE PROJECT SWFWMD/FDEP ERP AND NPDES REQUIREMENTS AT NO ADDITIONAL COST.

#### APPROVED STATE, LOCAL PLANS, OR STORM WATER PERMITS:

SWFWMD ERP FDOT DRIVE WAY AND DRAINAGE CONNECTION AND UTILITY PERMITS

#### III. MAINTENANCE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING AN INSPECTION REPORT AFTER ANY 1/2" RAINFALL OR WEEKLY IF NO RAIN EVENT OCCURRED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAINFALL.

#### IV. 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
- 2. PAVEMENT WASH WATERS (WHERE NO SPILL OR LEAKS OF TOXIC OR VEHICLE AND HAZARDOUS MATERIALS HAVE OCCURRED)
- 3. UNCONTAMINATED GROUNDWATER FROM DEWATÉRING ACTIVITIES

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

# V. MATERIAL MANAGEMENT PRACTICES

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

# A. GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT:

STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB ON SITE. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS UNDER A ROOF OR OTHER CONTAINED ENCLOSURE. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE.

#### B. <u>HAZARDOUS PROJECTS</u>

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL OPENED CONTAINERS. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE KEPT ON-SITE IN THE CONSTRUCTION OFFICE TRAILER. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS OR LOCAL STATE RECOMMENDED METHODS OF PROPER DISPOSAL SHALL BE FOLLOWED. THE CONTRACTOR MUST IDENTIFY A DESIGNATED FUEL TANK STORAGE AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, AND WETLANDS.

### CONCRETE TRUCKS

CONTRACTOR SHALL DESIGNATE AN AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, AND WETLANDS FOR DISCHARGE OF SURPLUS CONCRETE OR DRUM WASH WATER AND SHALL INSTALL A CONTAINMENT BERM AROUND THIS AREA TO PREVENT RUNOFF TO THE REMAINDER OF THE SITE. HARD DEBRIS SHALL BE DISPOSED OF BY CONTRACTOR UPON COMPLETION OF THE PROJECT.

#### SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIALS 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 AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION CLEANUP SUPPLIES.
- 2. 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 SIZE.
- THE SPILL PREVENTION PLAN WILL BE PREPARED BY THE CONTRACTOR AND KEPT IN THE CONSTRUCTION OFFICE TRAILER AND WILL INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE ARE OTHERS. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. ALL SPILLS AND RESPONSES WILL BE REPORTED TO THE APPROPRIATE AGENCY.
- THE SITE SUPERINTENDENT WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE 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 IN THE OFFICE TRAILER ON SITE.

DESIGN Cardno rwater, Florida 33759

SALANDON BOSE

STORMWATER POLLUTION PREVENTION PLAN

00193-008-003 DATE: 2-2-2012

50

SHEET NO:

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

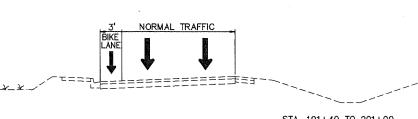
380 Park Place Blvd., Suite 300, Clearwater, Flo www.cardnotbe.com - 727,531,3505 Certificate of Authorization No. 3843

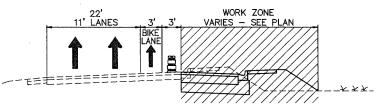
# **CONSTRUCTION PHASING NOTES US HWY 301:**

INSTALL INITIAL PROJECT SIGNING ON US 301 AS NECESSARY FOR PHASE I WHILE MAINTAINING THE EXISTING TRAFFIC PATTERNS. REDUCE NORTHBOUND LANE WIDTHS AND SHIFT TRAFFIC. SOUTHBOUND TRAFFIC WILL REMAIN NORMAL TRAFFIC PATTERN. CLOSE DORIS ROAD AND 60TH STREET EAST AT US 301.

CONSTRUCT RIGHT TURN LANE (NORTHBOUND), EMBANKMENT, DRAINAGE AND TURNOUT TO FT. HAMER ROAD.

CONSTRUCT ROAD IMPROVEMENTS, SIDEWALKS AND EMBANKMENT AT DORIS ROAD AND AT 60TH STREET EAST TERMINAL POINTS.





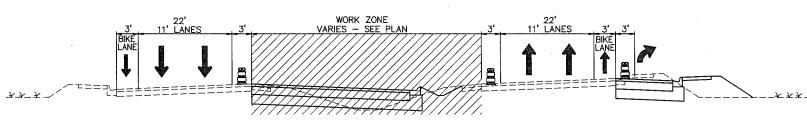
STA. 191+40 TO 201+00

### PHASE II:

MODIFY THE PHASE I SIGNAGE AS NECESSARY FOR PHASE II.

REDUCE SOUTHBOUND LANE WIDTHS AND SHIFT TRAFFIC. KEEP NEWLY CONSTRUCTED NORTHBOUND RIGHT TURN LANE CLOSED. CONSTRUCT LEFT TURN LANE (SOUTHBOUND), EMBANKMENT, AND DRAINAGE.

OPEN ROADWAY AT THE INTERSECTION OF FT. HAMER ROAD AND US 301



STA, 190+80 TO 202+00

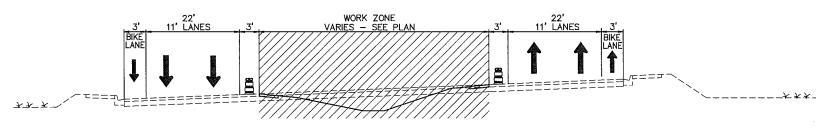
MODIFY THE PHASE II SIGNAGE AS NECESSARY FOR PHASE III. REDUCE NORTHBOUND AND SOUTHBOUND LANE WIDTHS AND SHIFT TRAFFIC. CLOSE MEDIAN OPENING ON US 301 AT EXISTING FT HAMER RD.

CONSTRUCT MEDIAN, EMBANKMENT AND DRAINAGE

# PHASE IV:

MODIFY THE PHASE III SIGNAGE AS NECESSARY FOR PHASE IV.

MILL 3/4" AND RESURFACE WITH FC-5 (80LB/SY) ALL AREAS ALONG US 301 AFFECTED BY TEMPORARY STRIPING INSTALL STRIPING AS SHOWN ON PLANS AND TO MATCH ORIGINAL CONFIGURATIONS WHERE NOT SHOWN ON PLANS. OPEN ROADWAY COMPLETELY



STA. 202+80 TO 211+12



MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

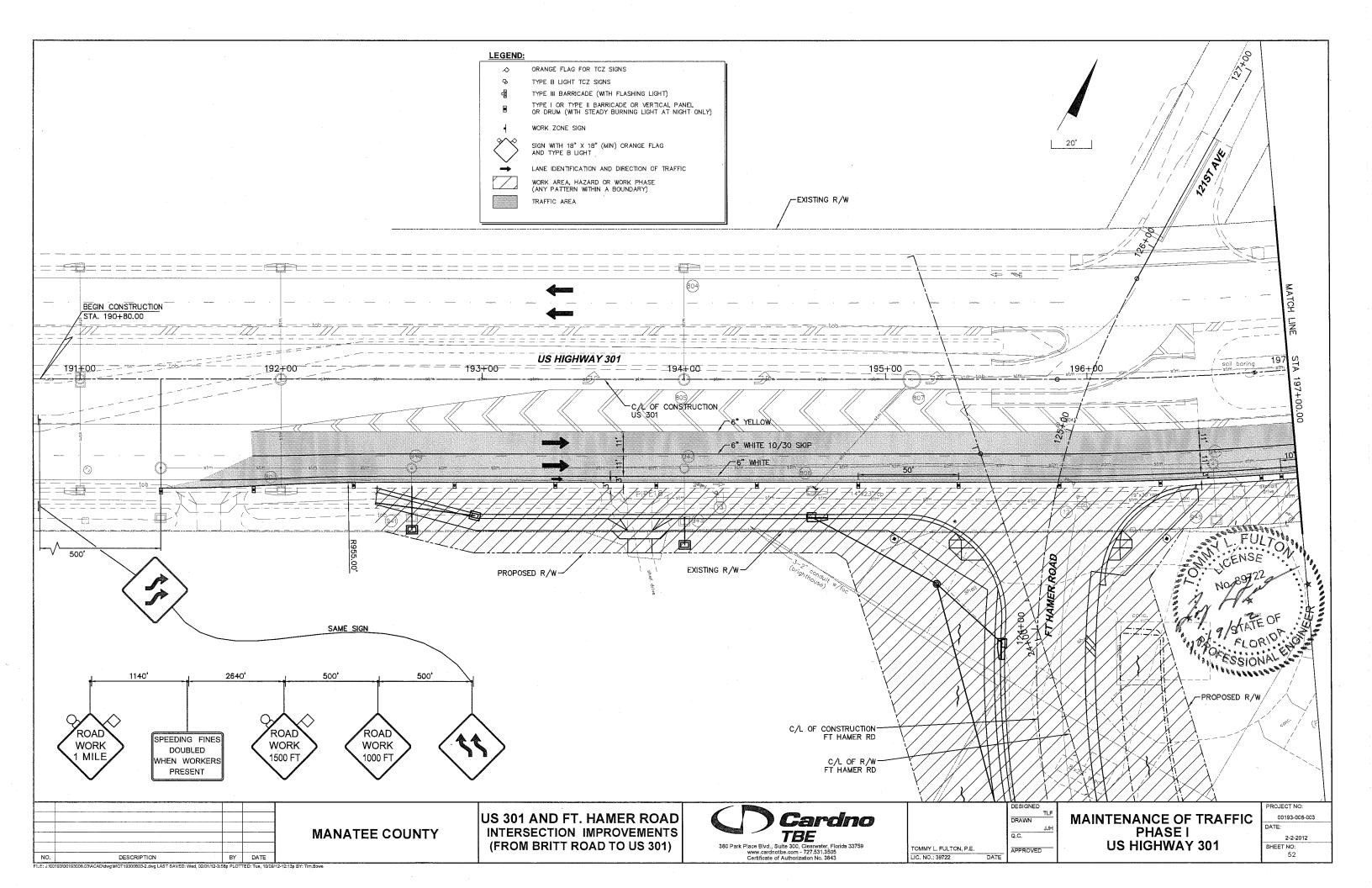


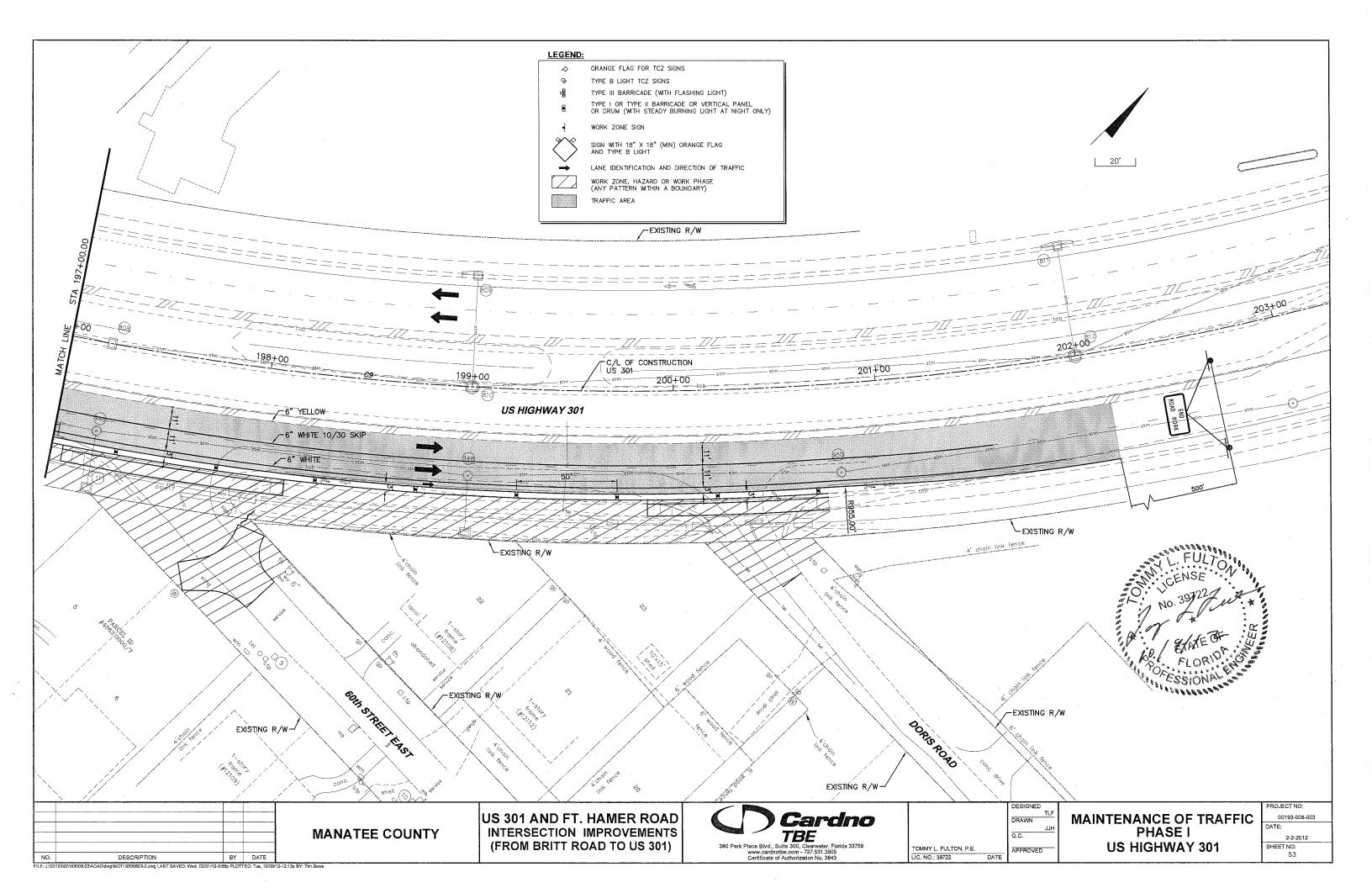
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	TLF
DRAWN	
	JJH
Q.C.	

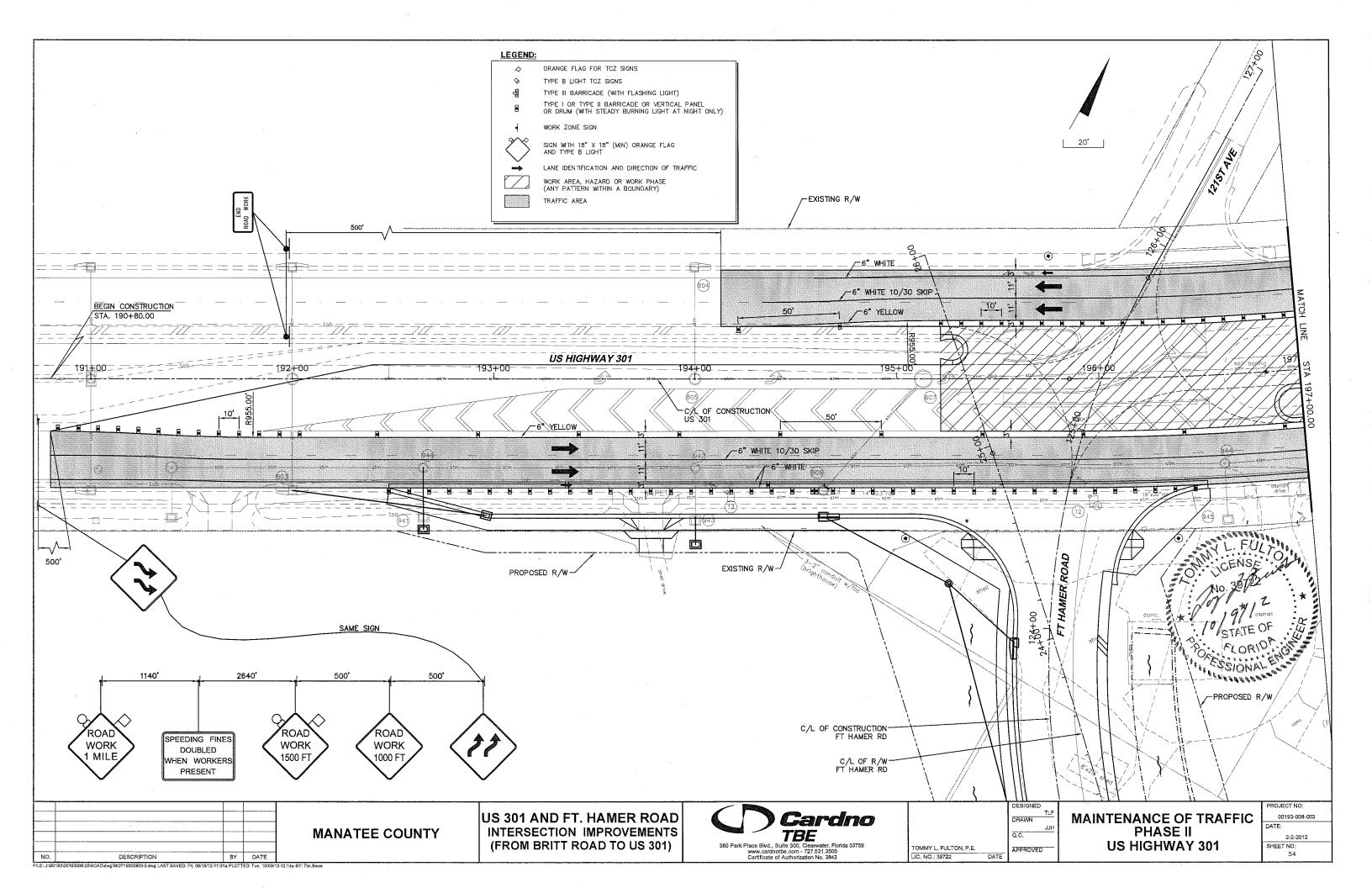
TOMMY L. FULTON, P.E. LIC. NO.: 39722

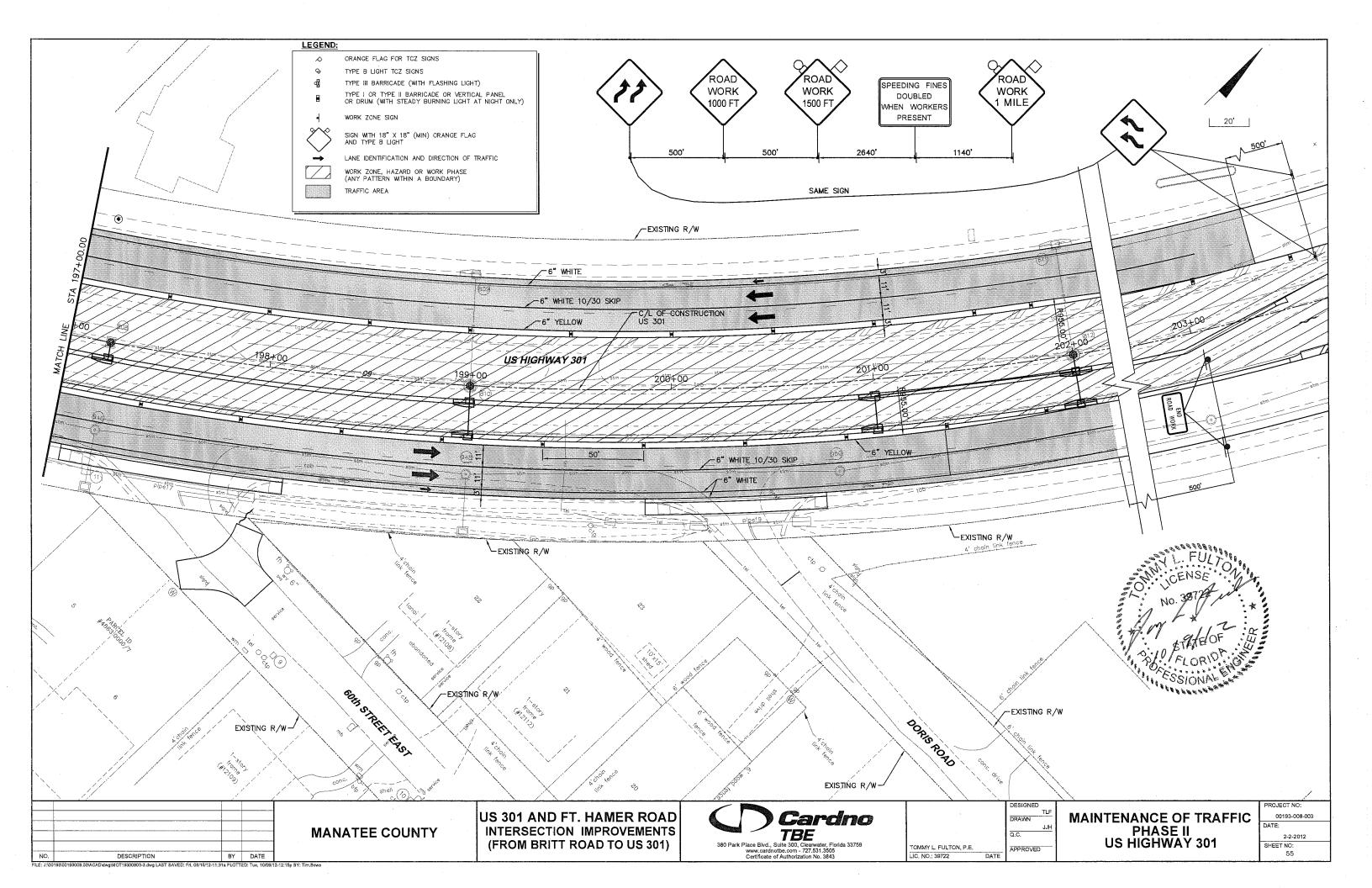
MAINTENANCE OF TRAFFIC PHASING NOTES US 301

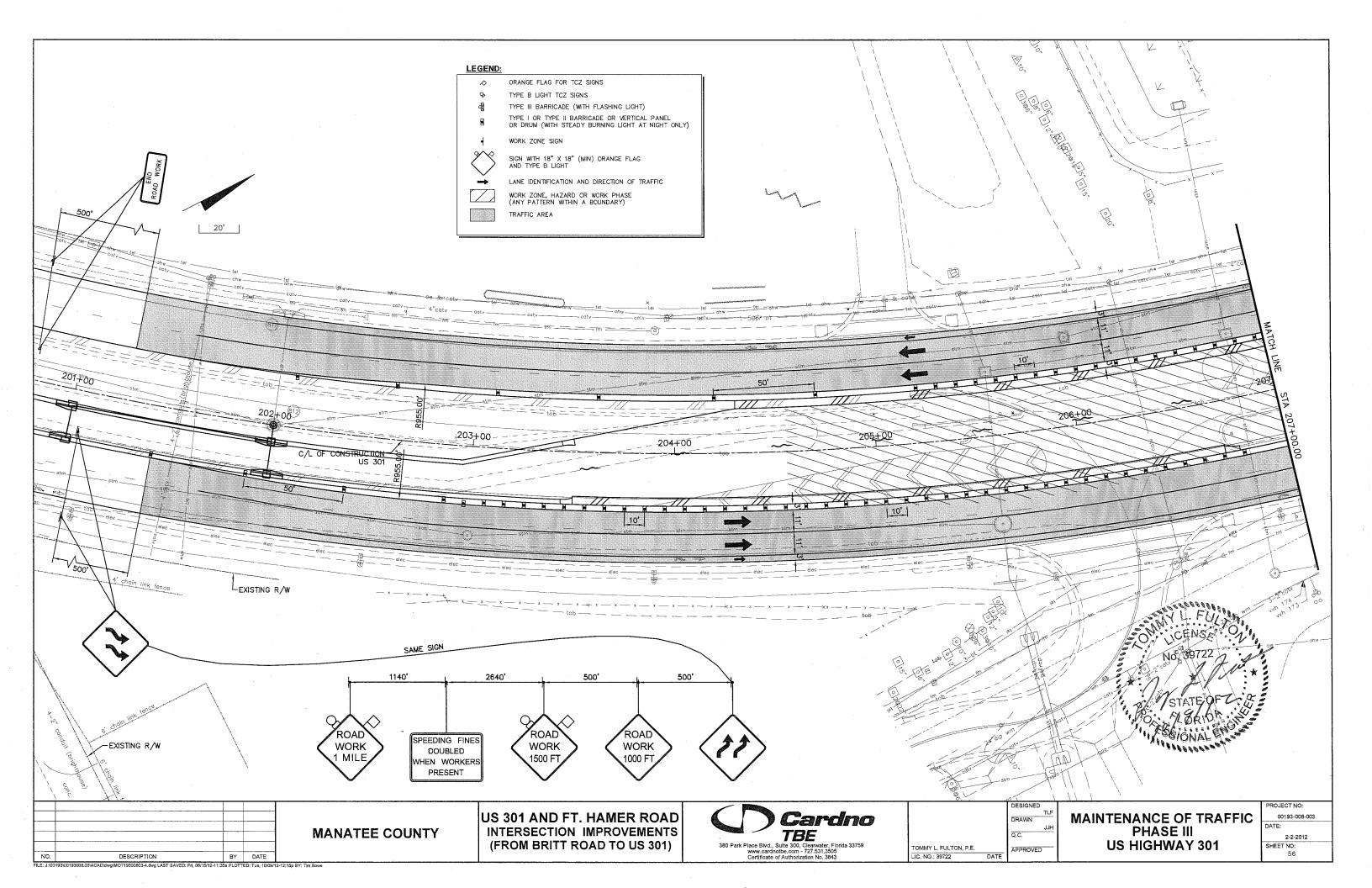
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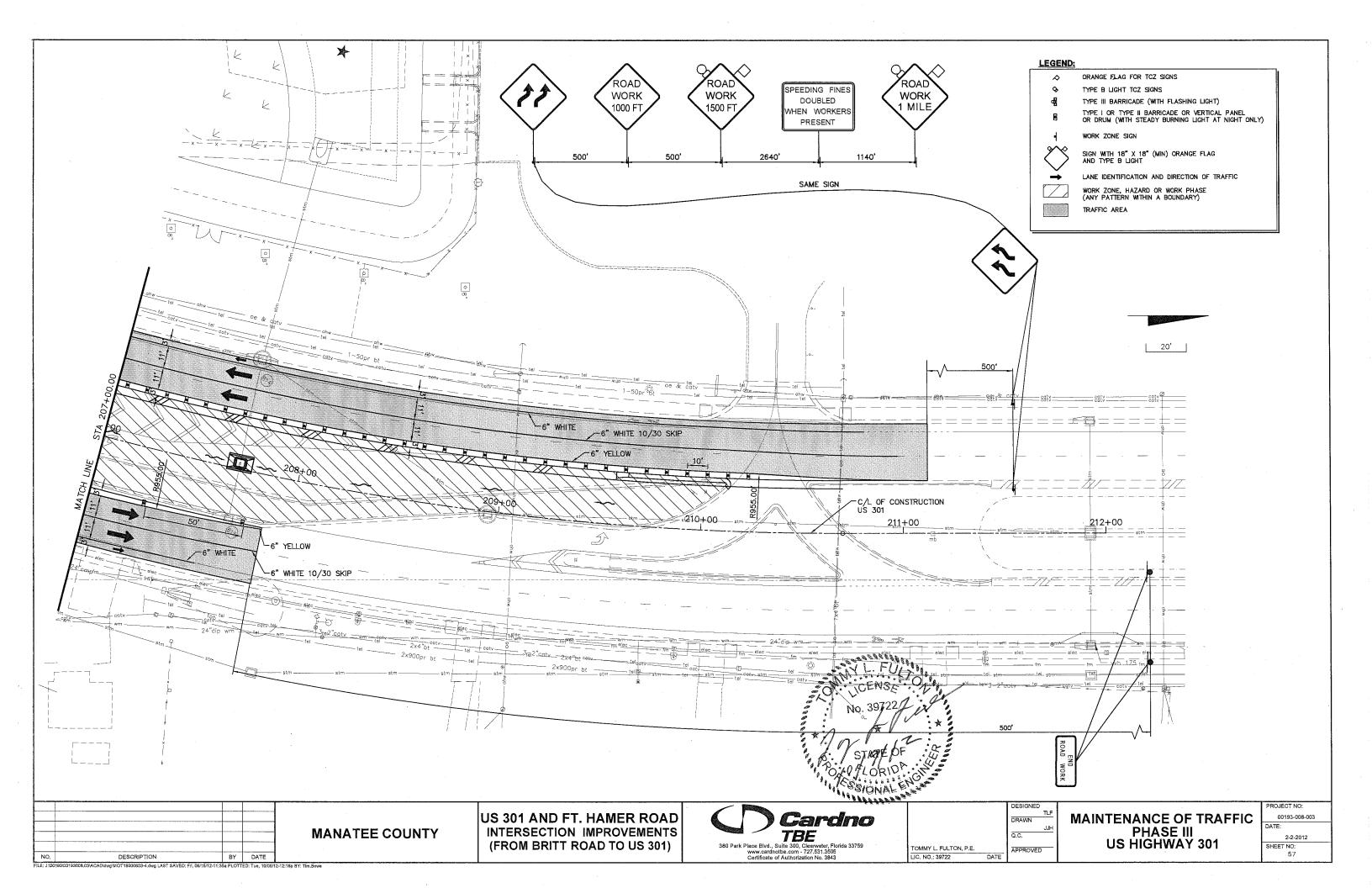


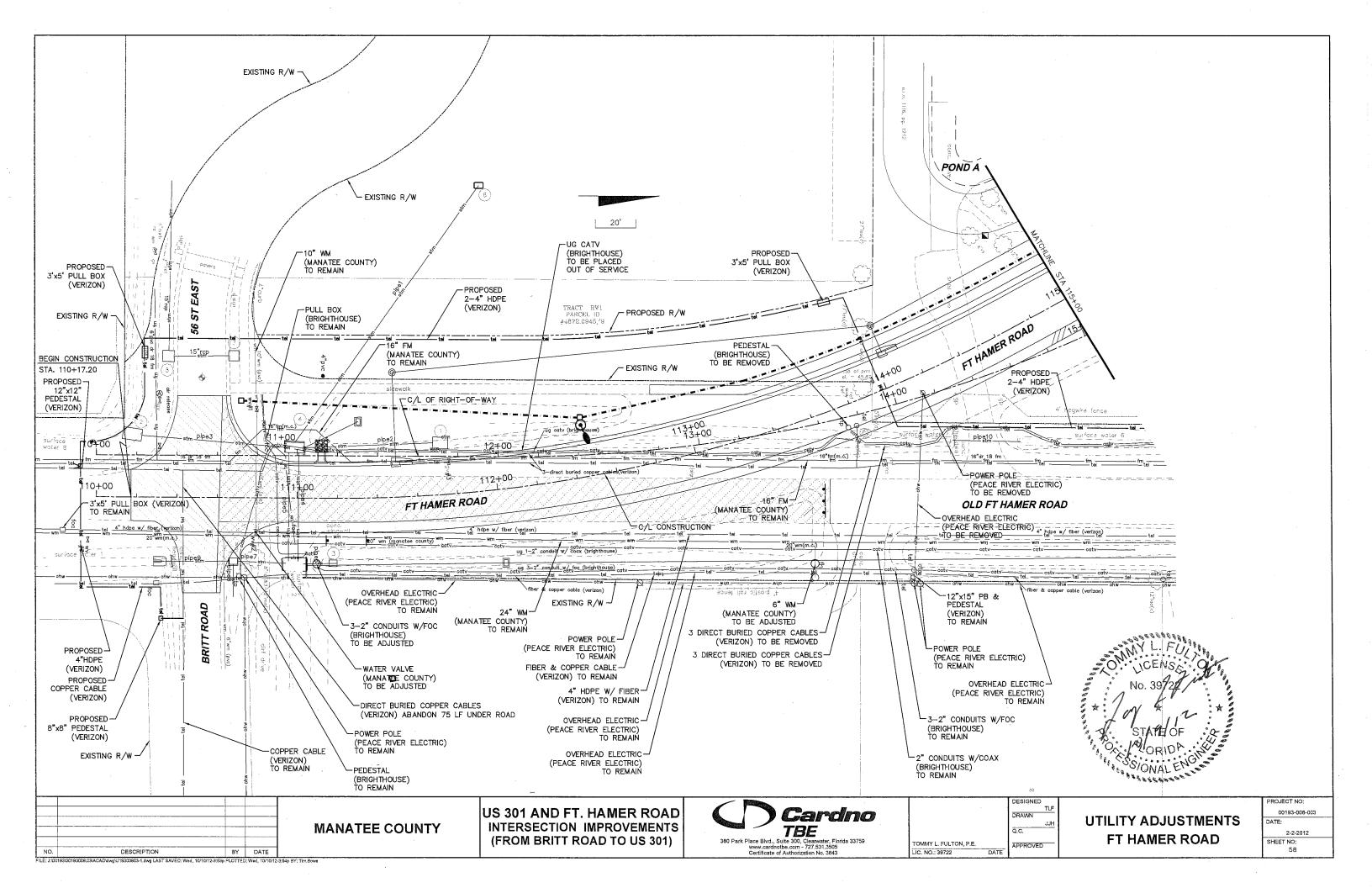


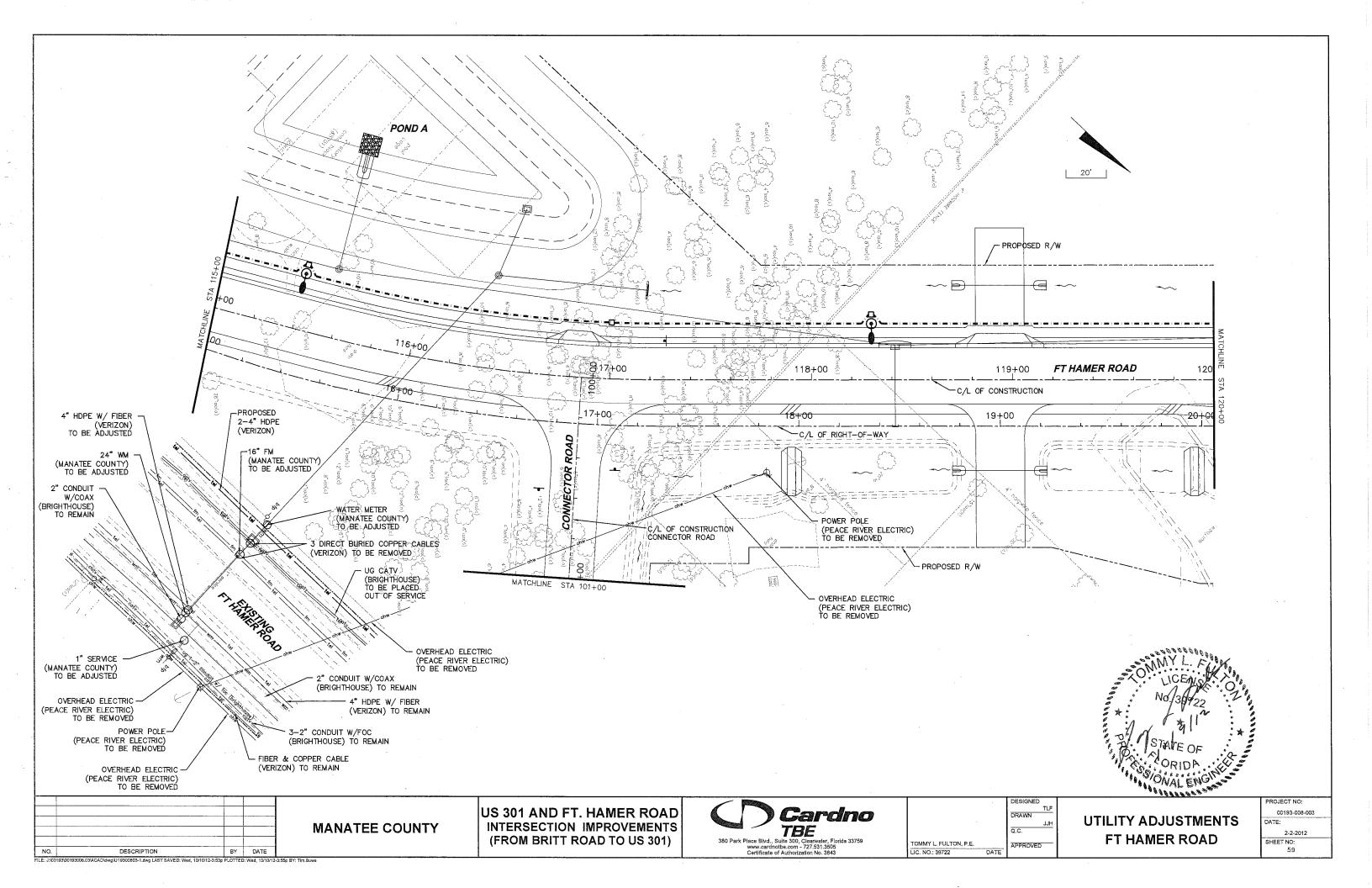


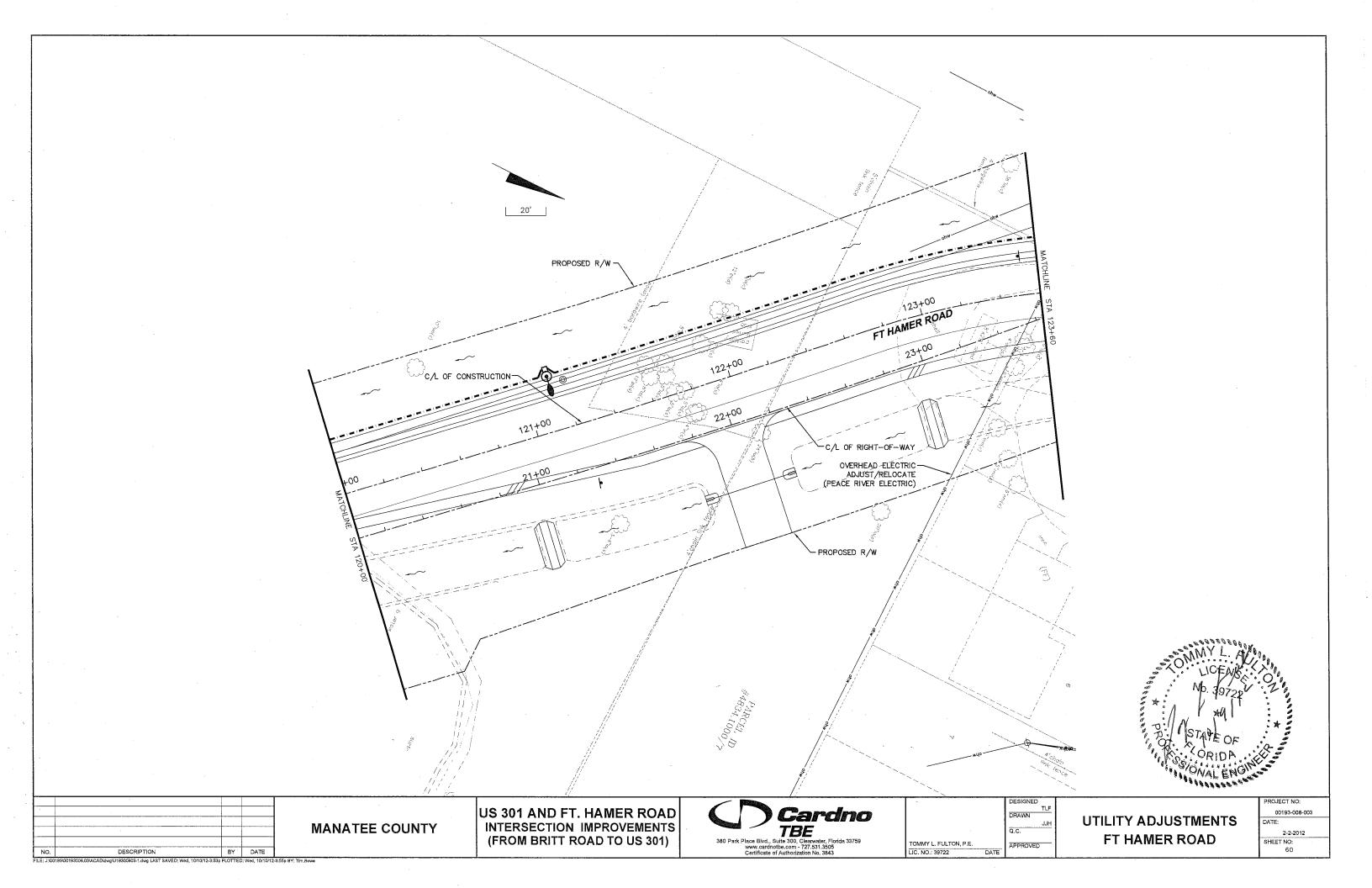


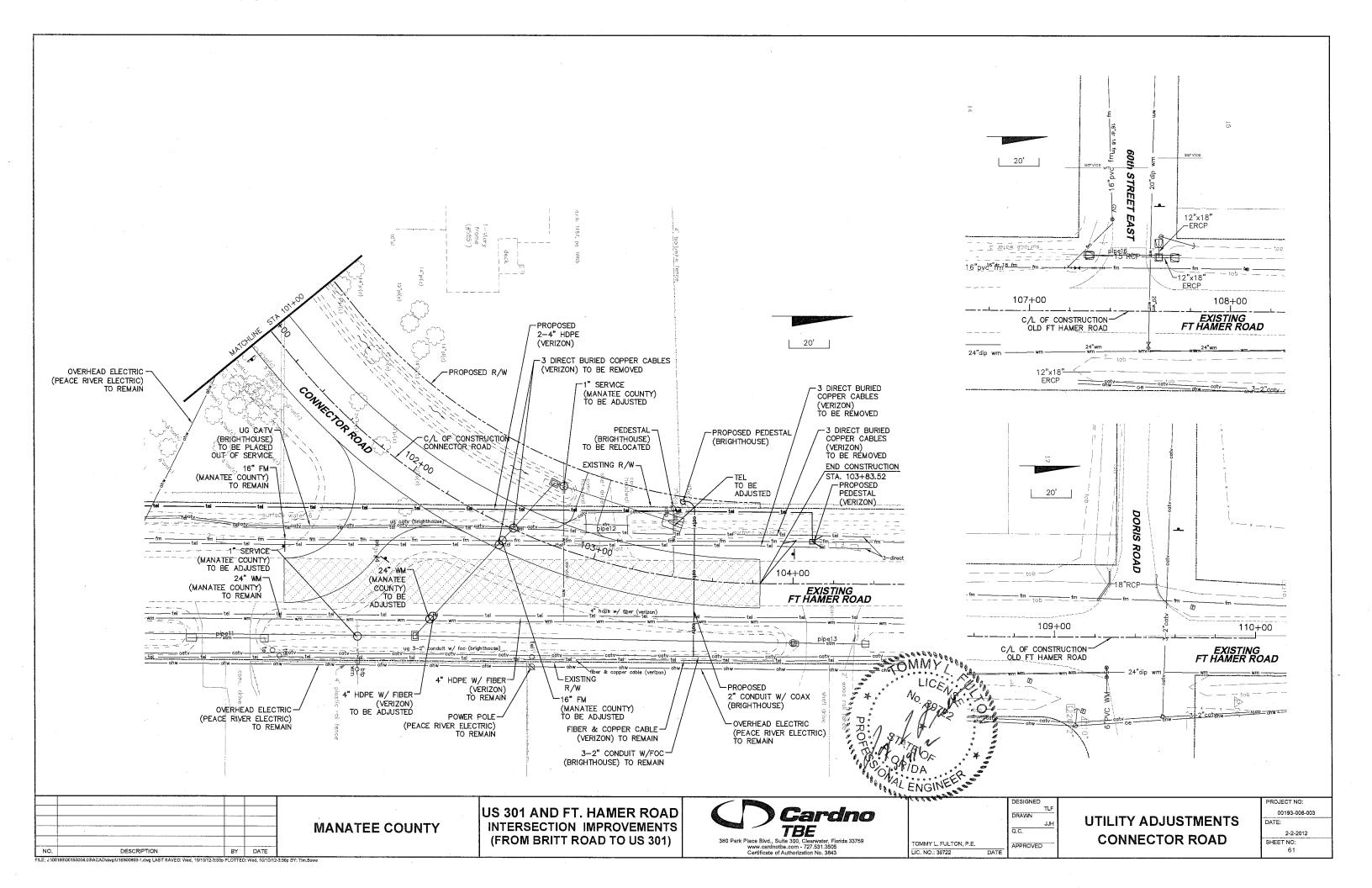


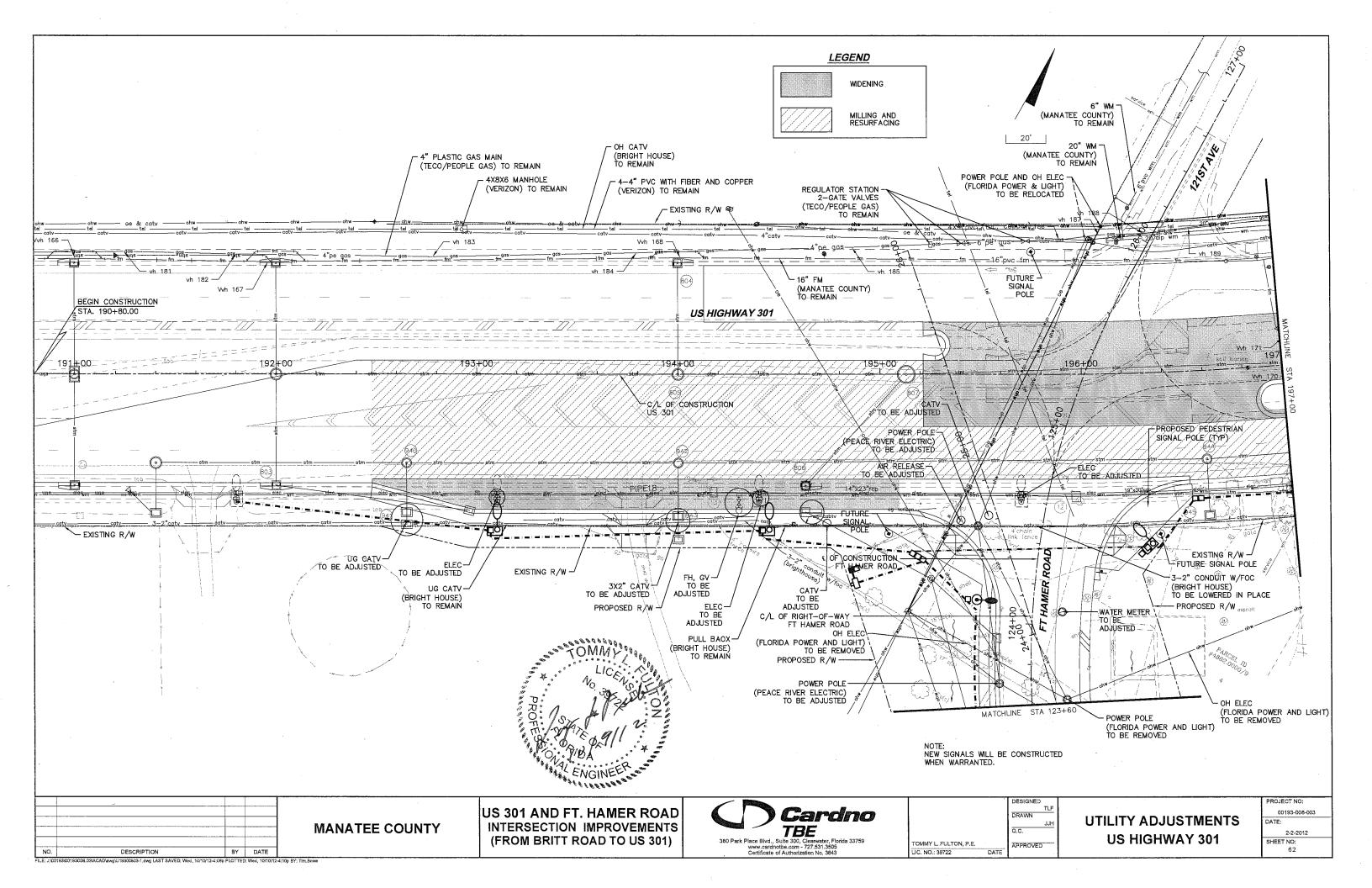


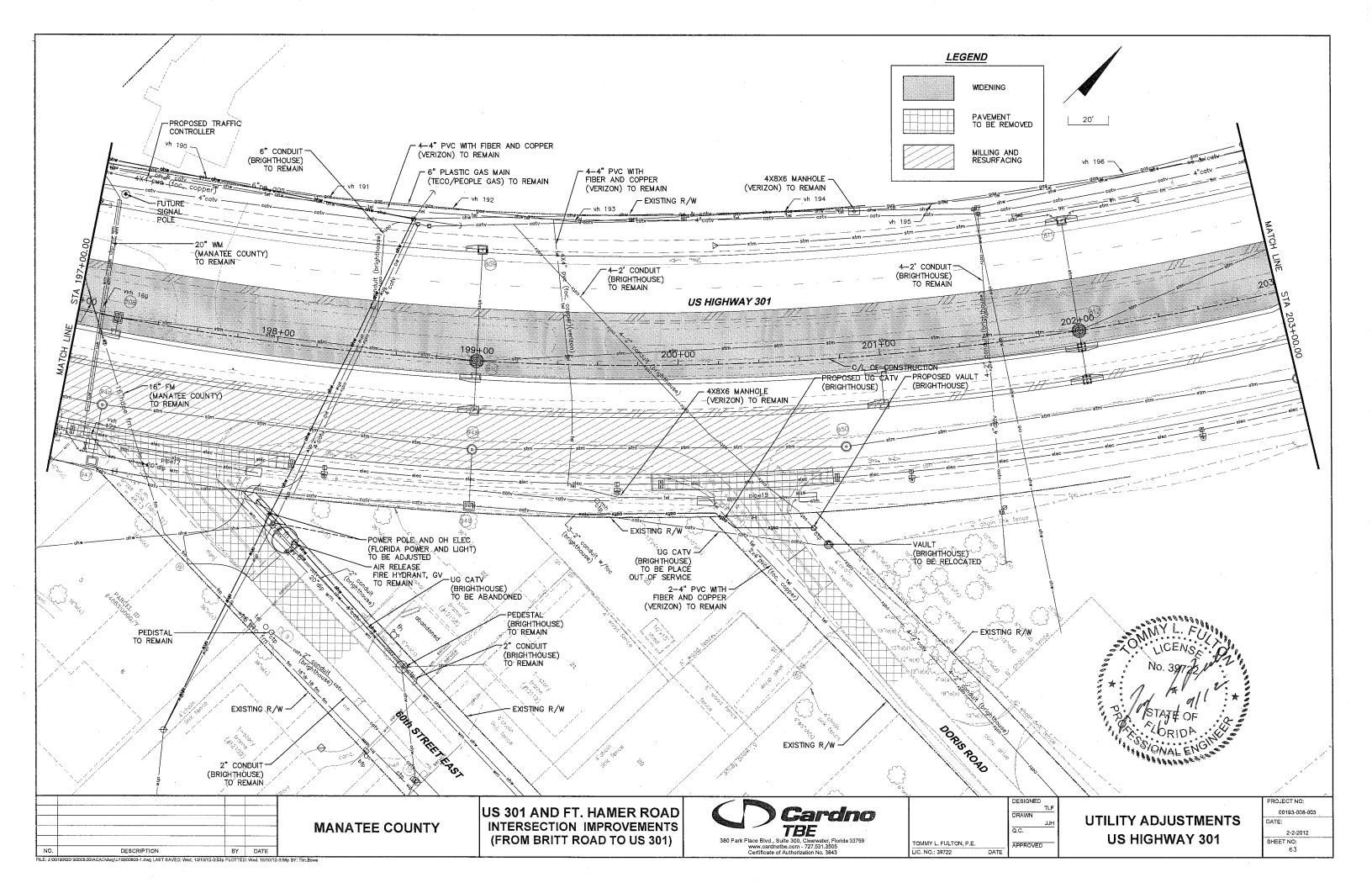


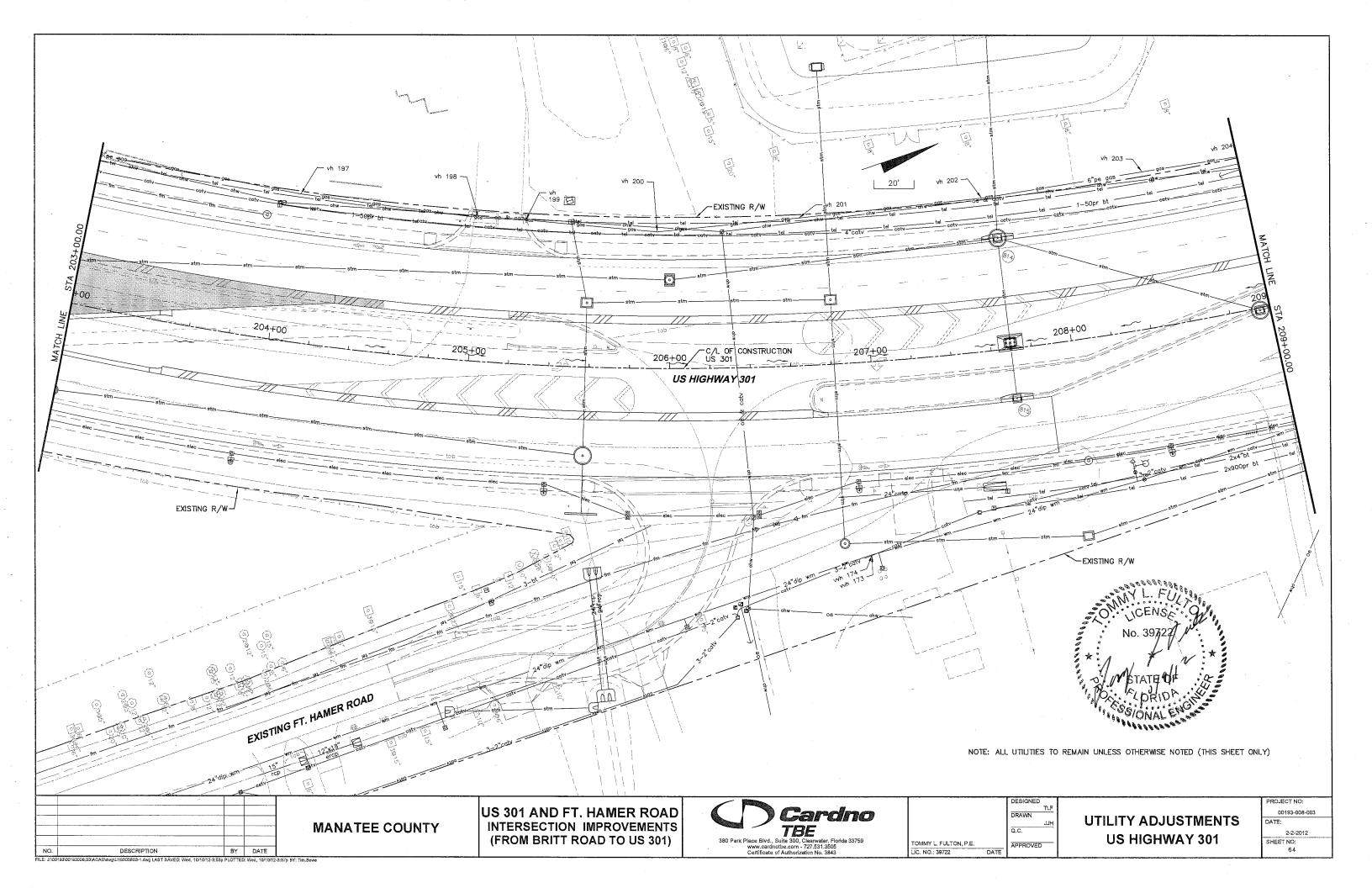


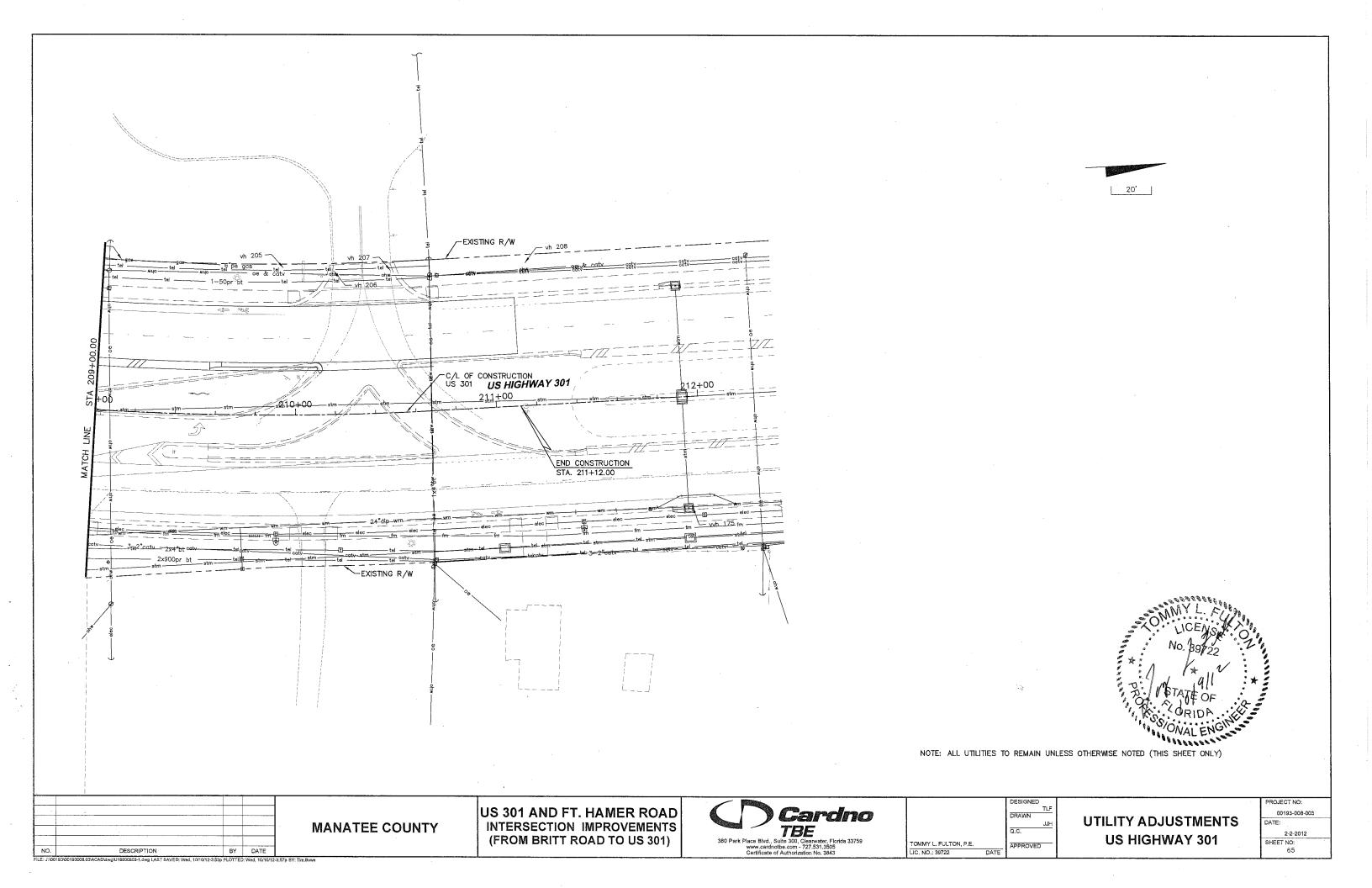






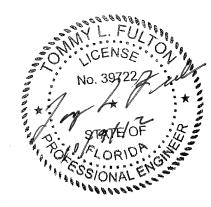






# SIGNING AND PAVEMENT MARKING GENERAL NOTES

- 1. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2010), AND FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS (DATED 2010), AND THE FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION.
- PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN IN THE PLANS AND THE APPROPRIATE FDOT DESIGN STANDARDS INDEX.
- PAVEMENT MARKING DIRECTIONAL ARROWS SHALL BE SPACED AS PER FDOT DESIGN STANDARDS INDEX 17346.
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LENGTH OF COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.
- REFER TO FDOT DESIGN STANDARDS INDEX NO. 17352 FOR RETRO—REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS.
- 6. ALL PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- 7. ALL THERMOPLASTIC PAVEMENT MARKINGS SHALL BE CERTIFIED LEAD FREE.
- 8. TEMPORARY PAINTED PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO OPENING LANES TO TRAFFIC. PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN IN THE PLANS AND THE APPROPRIATE FDOT DESIGN STANDARDS INDEX.
- EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED BY HYDROBLASTING.
- 10. SIGN LOCATIONS SHOWN ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE COUNTY REPRESENTATIVE.
- 11. ALL ROUTE MARKER AUXILIARIES SHALL MATCH THE COLOR COMBINATION OF THE RESPECTIVE ROUTE MARKER THEY SUPPLEMENT.
- 12. ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET, AND METHOD OF INSTALLATION.
- 13. CAUTION SHALL BE EXERCISED WHILE RELOCATING EXISTING SIGNS SO AS TO PREVENT DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE COUNTY REPRESENTATIVE, THEY SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 14. CONTRACTOR SHALL USE W-SHAPE STEEL POSTS FOR MULTI-POST SIGNS. ALL COLUMNS (POSTS) FOR SINGLE COLUMN GROUND SIGNS SHALL BE ALUMINUM ROUND TUBE.
- 15. ALL SINGLE POST AND MULTI-POST SIGNS WITHIN THE LIMITS OF THE PROJECT SHALL BE REMOVED UNLESS OTHERWISE SHOWN IN THE PLANS. REMOVAL INCLUDES REMOVING FOUNDATIONS AND BACKFILLING THE HOLES LEFT AFTER REMOVAL.
- 16. ANY SIGN MOUNTED OVER A SIDEWALK SHALL HAVE A STANDARD CLEARANCE OF 8'.
- 17. STREET NAME SIGNS THAT ARE NOT SHOWN IN THE GUIDE SIGN WORK SHEET SECTION OF THE PLANS SHALL BE AS PER MANATEE COUNTY DESIGN REQUIREMENTS.
- 18. SIGNS THAT ARE EMBEDDED IN ASPHALT/CONCRETE SHALL BE INSTALLED IN PIPE SLEEVES.
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL SIGNS THAT ARE TO BE PERMANENTLY REMOVED IN THIS PRODUCT.
- 20. UNLESS OTHERWISE NOTED IN PLANS, ALL CROSS WALKS ALONG MAJOR STREET SHALL BE 10-FEET IN WIDTH AND CROSS WALKS ACROSS SIDE STREETS SHALL BE 6-FEET IN WIDTH. MEASUREMENTS SHALL BE FROM INSIDE TO INSIDE OF 12-INCH STRIPES.



NO. DESCRIPTION BY DATE

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



DESIGNED TL
DRAWN
JJ
Q.C.

APPROVED

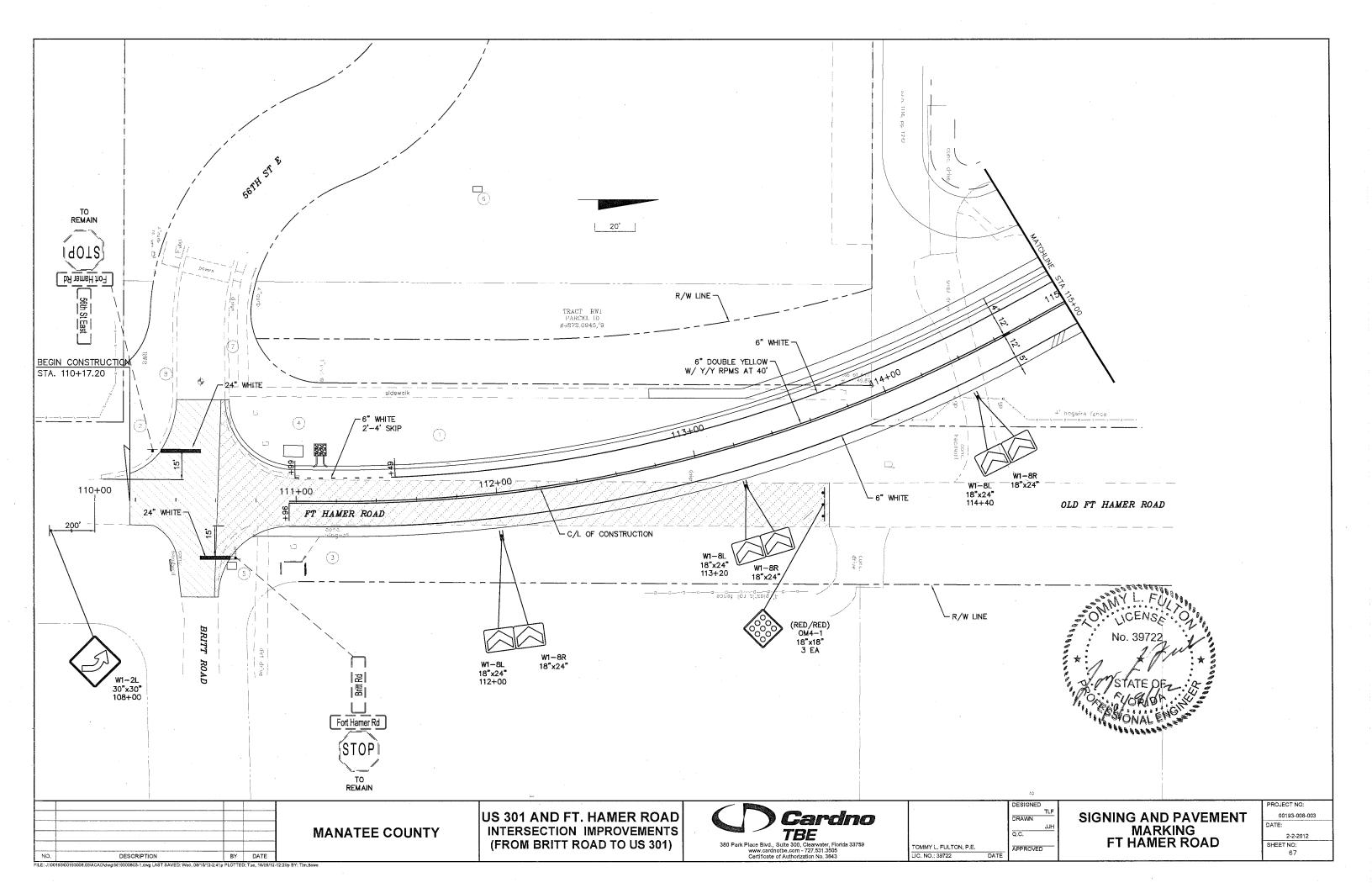
TOMMY L. FULTON, P.E.

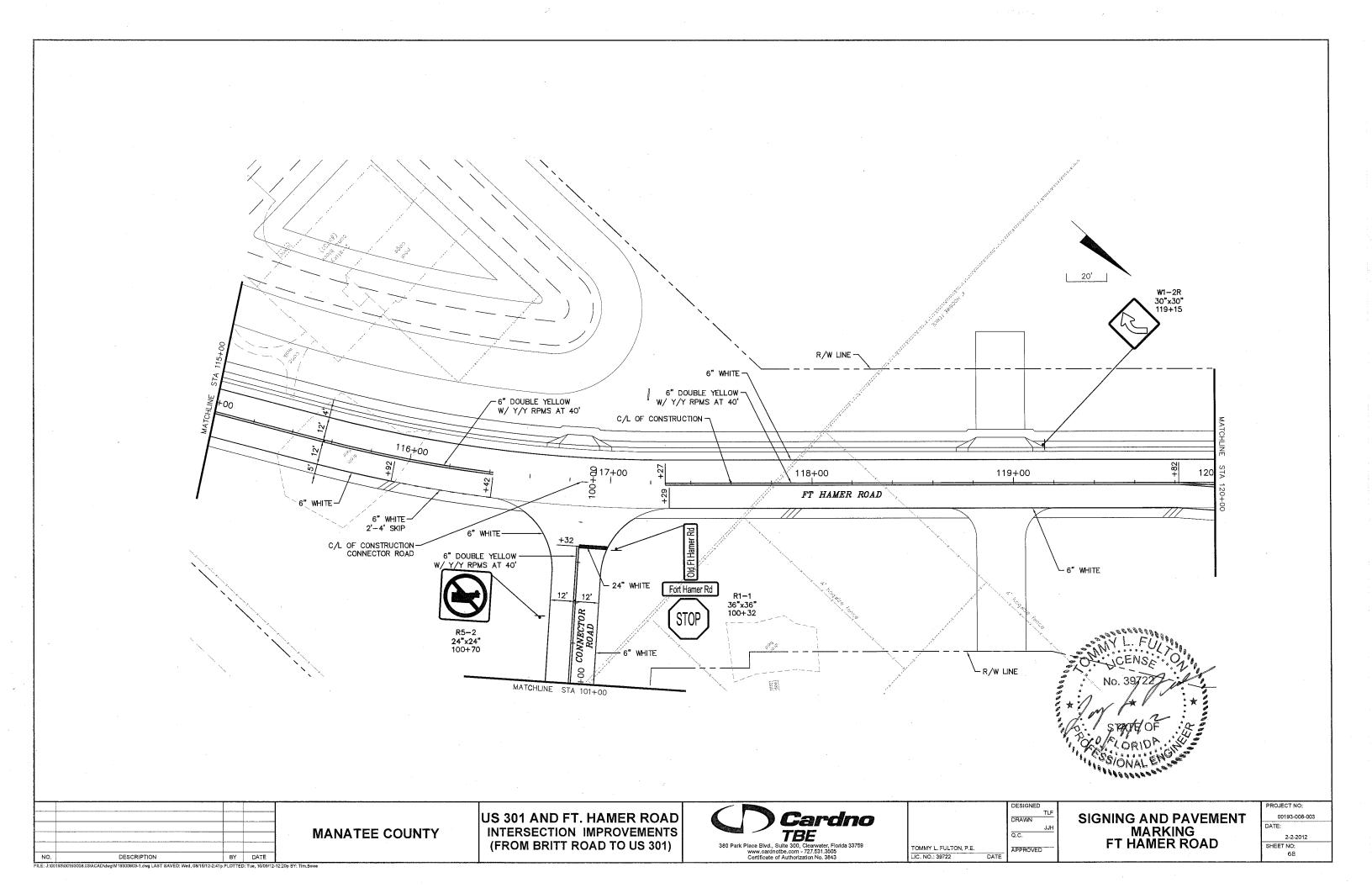
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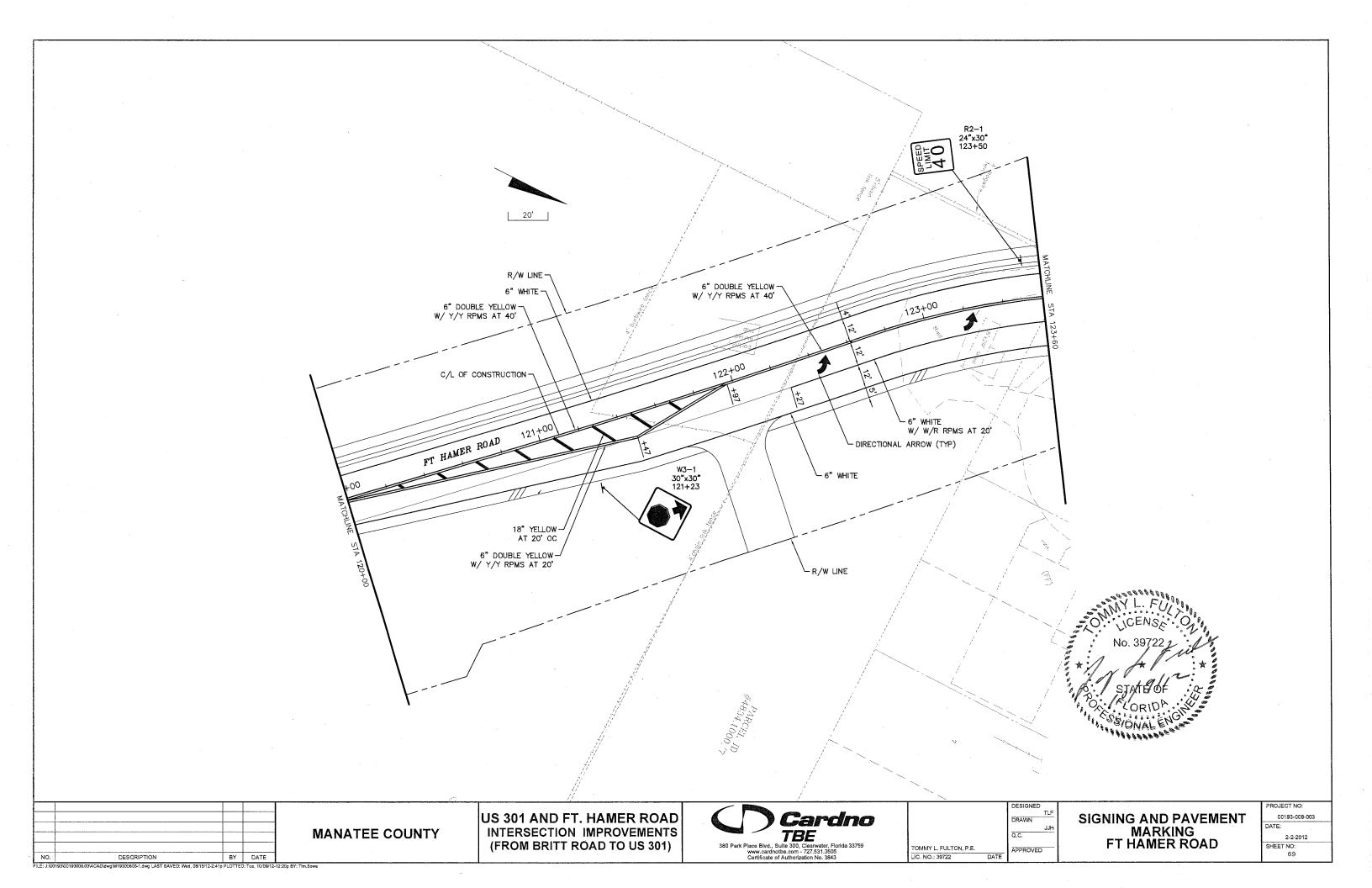
SIGNING AND PAVEMENT MARKING FT HAMER ROAD PROJECT NO: 00193-008-003 DATE: 2-2-2012

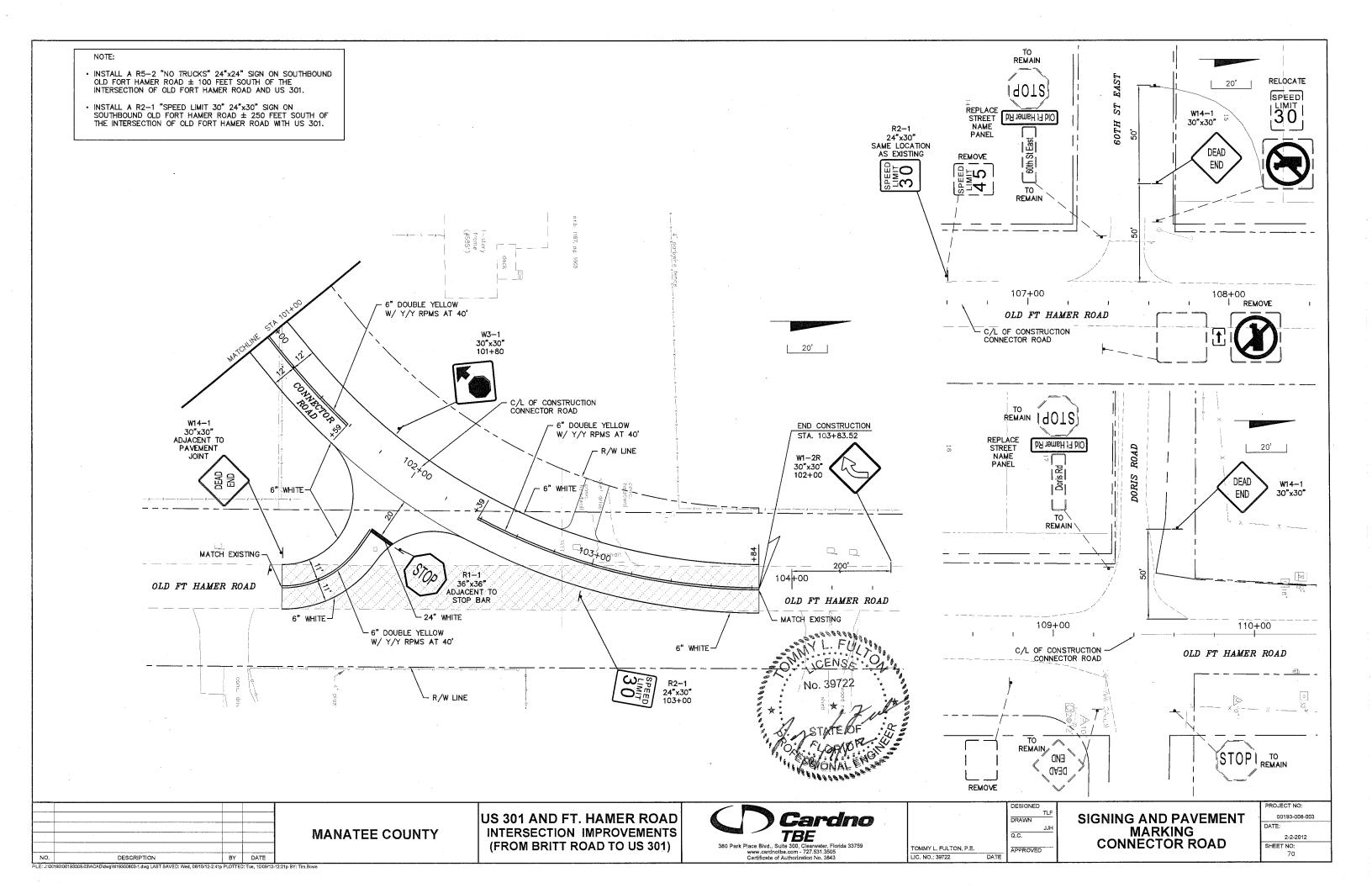
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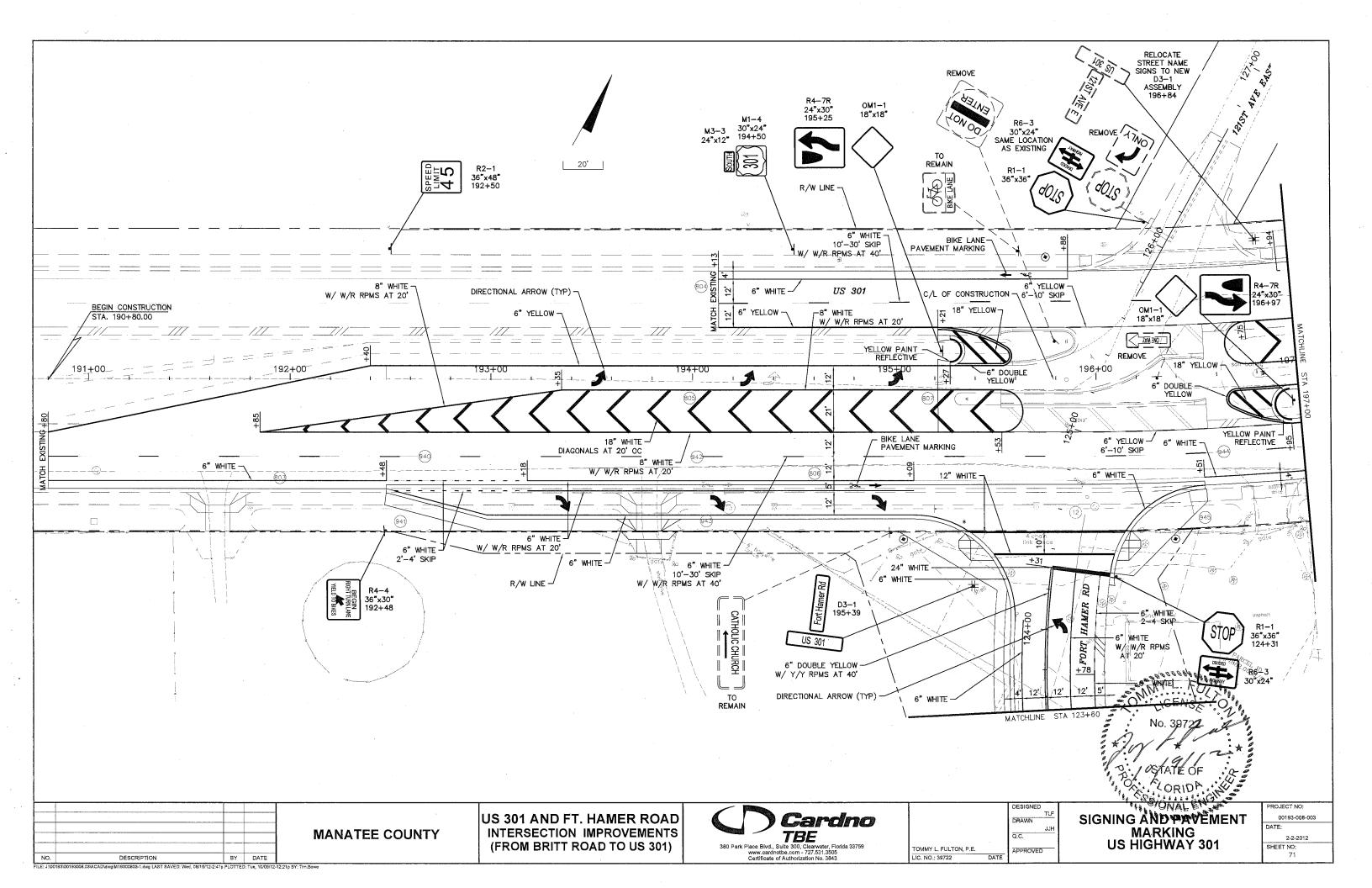
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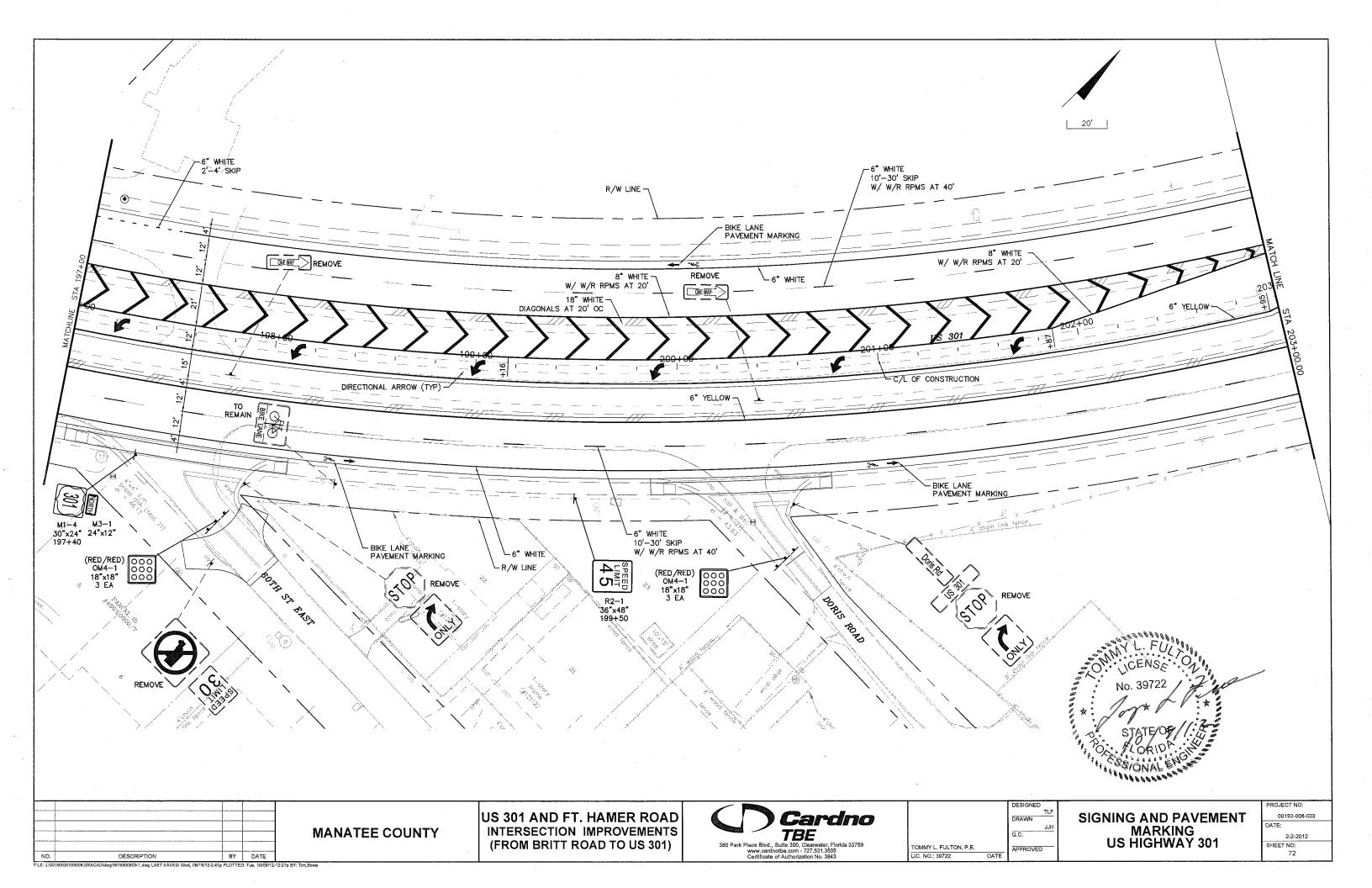


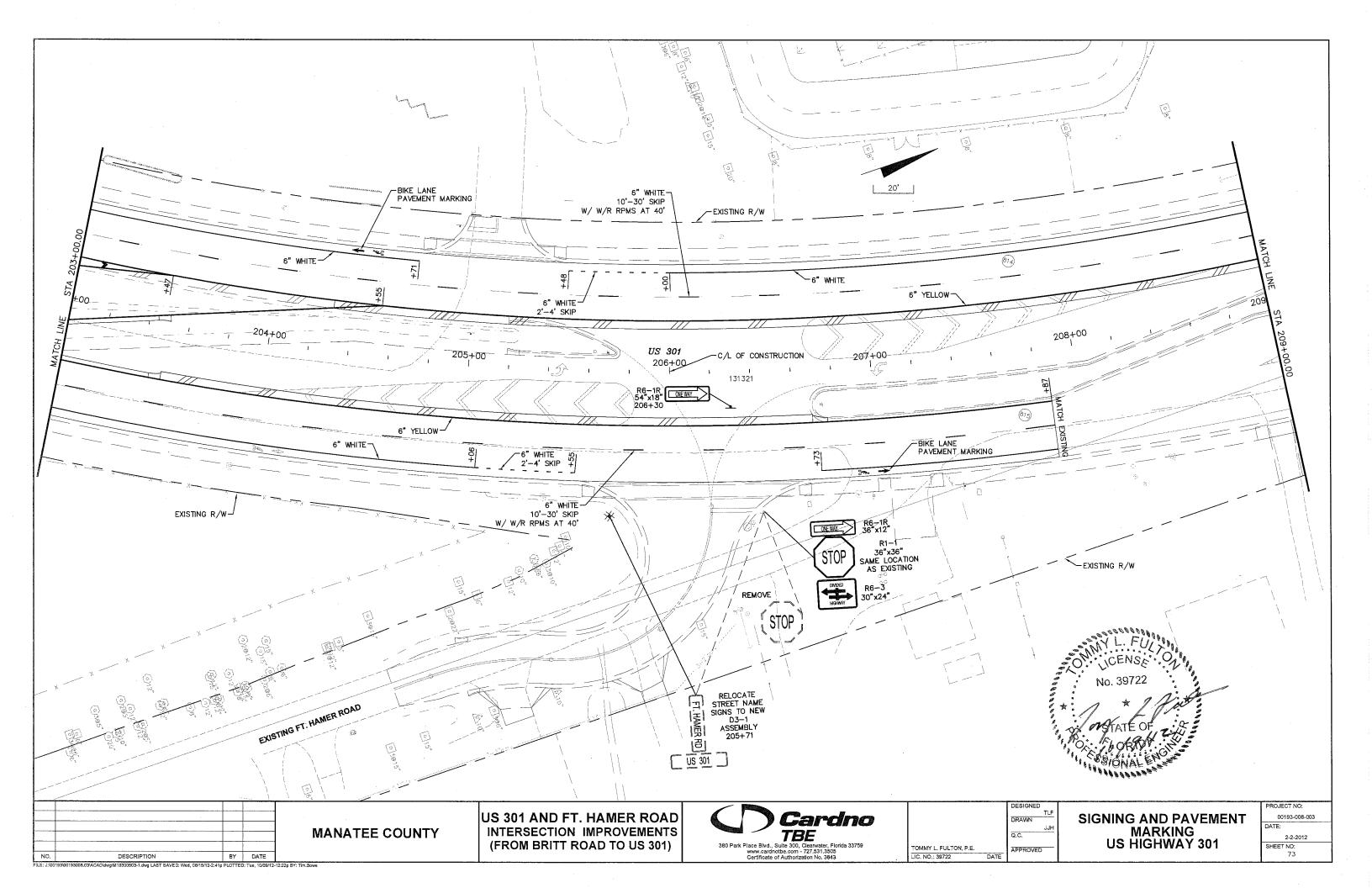


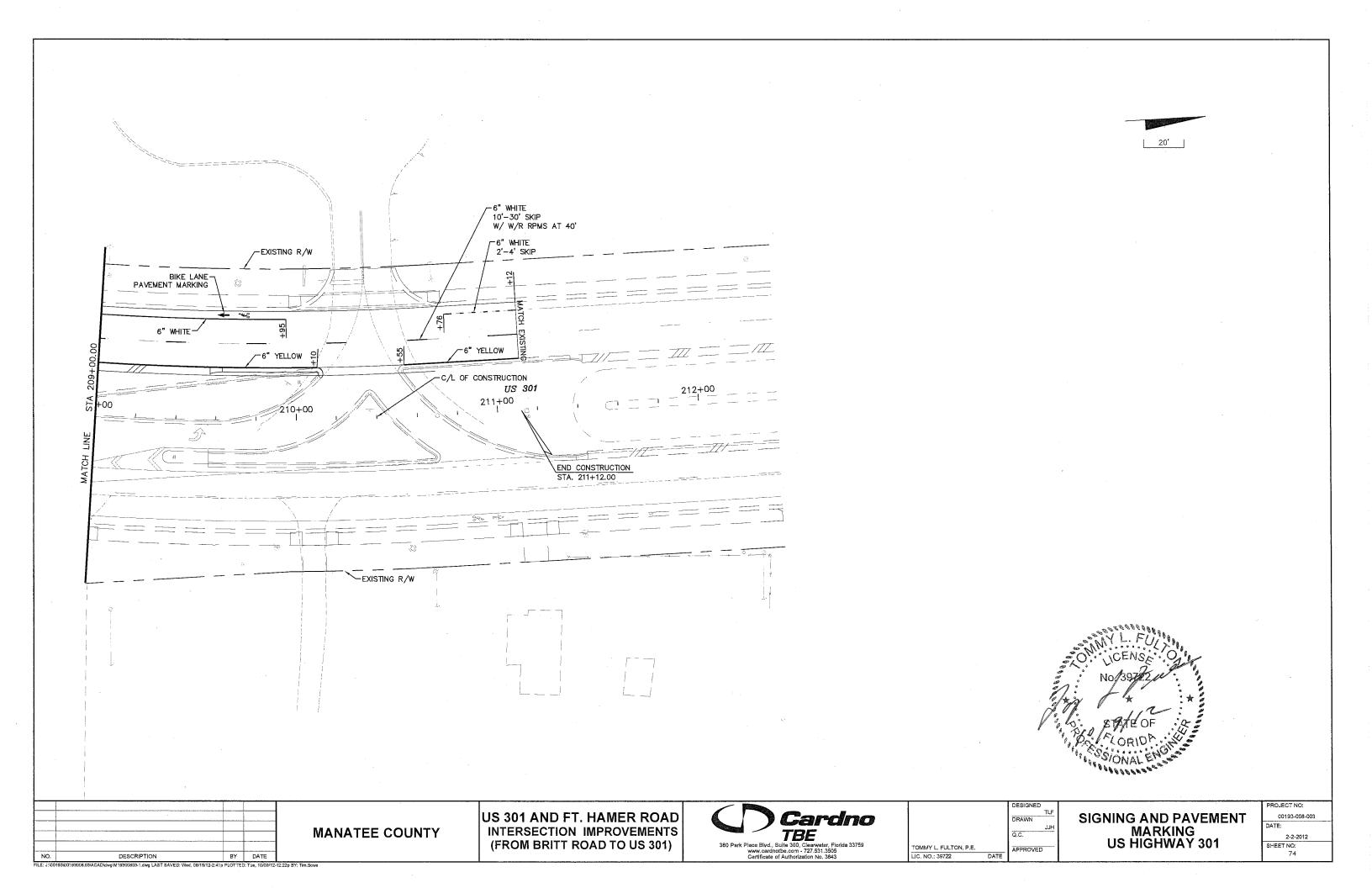












CONTRACT DRAWINGS



# US 301 (SR 43) AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301) FOR

# MANATEE COUNTY, FLORIDA **COUNTY PROJECT NUMBER: 6061960** LIGHTING AND COMMUNICATIONS PLANS

#### RELATED STANDARDS AND SPECIFICATIONS

#### DESCRIPTION

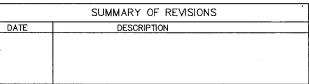
- MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FDOT GREEN BOOK), (MAY 2009),
- FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2010),
- AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004),
- FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009),
- FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,
- FDOT PLANS PREPARATION MANUAL.
- MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS (2007).
- FDOT MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES (2010)

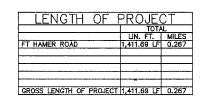
ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION.
THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA

### UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT PROCEED WITH CAUTION — THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

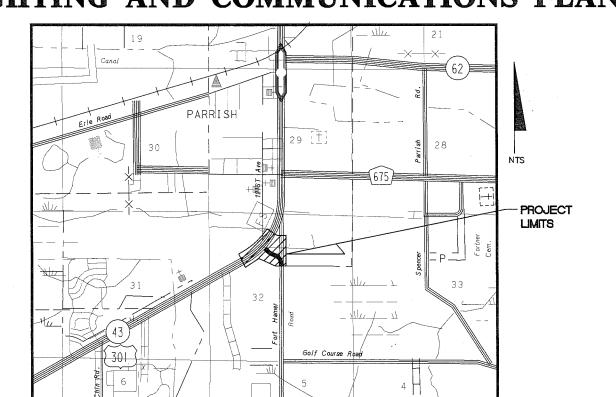
	SUMMARY OF REVISIONS
DATE	DESCRIPTION
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ROAD CLASSIFICATION: FT HAMER ROAD - URBAN ARTERIAL ROAD CLASSIFICATION: US 301 - URBAN ARTERIAL ROAD CLASSIFICATION: 60TH STREET EAST - URBAN LOCAL ROAD CLASSIFICATION: DORIS STREET EAST - URBAN LOCAL DESIGN SPEED: 45 MPH (FT HAMER ROAD) 45 MPH (US 301)





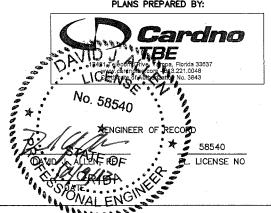
#### COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS LIGHTING AND COMMUNICATIONS PLANS

#### INDEX OF LIGHTING PLANS

SHEET NO	SHEET DESCRIPTION
L1	COVER SHEET
L-2	TABULATION OF QUANTITIES
L-3	GENERAL NOTES
L-4	POLE DATA AND LEGEND
L-5 THRU L-8	LIGHTING AND COMMUNICATION PLAN
L-9 THRU L-10	SERVICE POINT DETAILS
L11	MODIFIED SLAB DETAIL
L12	LIGHT POLE RELOCATION DETAILS

PLANS PREPARED BY:



DATE: 2-2-2012 SCALE: HORIZ: N/

1. FILE: J:100193100193008.031ACAD\dwg\100%Lighting\CV19300803-1LIT.dwg LAST SAVED: Tue, 10/09/12-3:08p PLOTTED: Tue, 10/09/12-3:11p BY: Tim.Bowe

### TABULATION OF QUANTITIES

PAY	DESCRIPTION	UNIT										SHEET	NUMBER	s									T/	TAL HIS_		PAND TAL	REF.
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			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	1 1
555-1-2	DIRECTIONAL BORE, 6" TO LESS THAN 12"	LF							120														120		120		
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL, NO. 6	LF	840		1605		1155		400														4000		4000		
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO. 4	LF							1620														1620		1620		
715-1-70	LIGHTING CONDUCTORS, REMOVE	LF							1740														1740		1740		
715-2-11	CONDUIT, F&I, UNDERGROUND	1						1																			
	LIGHTING CONDUIT	LF	280		535		385	1	620							<b></b>							1820		1820		
	3" COMMUNICATION CONDUIT	LF	410		495		365	<u> </u>	5/0		1			<b>-</b>		<u> </u>							1780		1780	<b>†</b>	
715-4-123	LIGHT POLE COMPLETE, F&I, I30 MPH, 50'	EA	1 7		2		1		1					<b> </b>						1	<u> </u>		5		5	<del>                                     </del>	<del>                                     </del>
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	EA	1						<del>                                     </del>							<u> </u>		<del> </del>		<del>                                     </del>	<u> </u>	<b> </b>	7		<del>1 7</del>	<del> </del>	1
715-14-11	LIGHTING - PULL BOX, F&I, ROADSIDE - MOULDED	EA	1		2		2		8	ļ	<del> </del>					<u> </u>		<del>                                     </del>		1	<b>†</b>	<u> </u>	13		13	<del>                                     </del>	
715-14-51	LIGHTING - PULL BOX, REMOVE, ROADSIDE	EA			<del>                                     </del>		<u> </u>		3	<b>†</b>	<u> </u>				<b> </b>			1		<del>                                     </del>	<b></b>	<b>†</b>	.3		3		<del>                                     </del>
715-31-1	LIGHTING ROUTINE MAINTENANCE	LU				1		<del> </del>	3		† · · · · ·				1	<u> </u>				<del>-  </del>		<del> </del>	.3		-3	1	<del></del>
7/5-500-/	POLE CABLE DISTRIBUTION SYSTEM, CONVENTIONAL	EA	<del>                                     </del>		2		<b>—</b> , —		4	<del>                                     </del>	<u> </u>	†			1					<del> </del>	<u> </u>	1	8		8	<del>                                     </del>	1
7/5-540-000	LIGHT POLE COMPLETE, RELOCATE	EA	<del>                                     </del>		† <b>-</b>		<b> </b>		3		<del>                                     </del>	<b></b>			1	<u> </u>				1			.3		3	<del>                                     </del>	
783-5-1	FIBER OPTIC PULL BOX	EA		<b>†</b>	· · · · · · ·			<b> </b>	<del>                                     </del>		<del> </del>			1	<del>                                     </del>	1				1			2		2	<b>†</b>	
783-6-1	FIBER OPTIC SPLICE BOX	EA	1 ,	<del>                                     </del>	†			<b>†</b>	2		<del>                                     </del>			<u> </u>	·	<u> </u>				+		-	3	<del> </del>	3	<del> </del>	<del> </del>
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#### PAY ITEM FOOTNOTES:

- I. PAY ITEM 555-I-2:
  CONDUITS INSTALLED WITH THE DIRECTIONAL BORE METHOD SHALL BE HDPE WITH A MINIMUM SIZE OF TWO INCHES, UNLESS OTHERWISE NOTED IN THE PLANS. HDPE CONDUIT AND THE TRANSITION COUPLING SHALL BE UL LISTED. ALL DIRECTIONAL BORE SHALL INCLUDE A SPARE CONDUIT WHERE BOTH ENDS SHALL SWEEP UP INTO A PULL BOX AND CAPPED WITH A WATER TIGHT CAP.
- 2. PAY ITEM 715-1-12 AND 715-1-13:
  THIS PAY ITEM SHALL INCLUDE CONDUCTORS AS INDICATED IN THE PLANS AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS. PAYMENT SHALL BE MADE BASED ON LINEAR FOOT OF SINGLE CONDUCTOR.
- 3. PAY ITEM 715-1-70:
  THIS PAY ITEM INCLUDES THE COST OF REMOVAL OF THE EXISTING LIGHTING CONDUCTORS AND THE DELIVERY AND UNLOADING OF THE REMOVED CONDUCTORS AT THE MANATEE SIGNAL SHOP. THE EXISTING CONDUITS THAT CONTAIN THE CONDUCTORS TO BE REMOVED SHALL BE SEALED AT BOTH ENDS WITH A WATER TIGHT CAP.
- 4. PAY ITEM 715-2-11:

  THIS PAY ITEM SHALL INCLUDE CONDUIT, ELBOWS, SWEEPS, CONNECTING HARDWARE, TRENCHING, AND BACKFILL AS INDICATED IN THE PLANS AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS. THE LINEAR FOOT PRICE FOR CONDUIT SHALL ALSO INCLIDE THE COST OF RESTORING CUT PAVEMENT, SIDEWALK, SOD, ETC., TO ITS ORIGINAL CONDITION. SOD SHALL BE REPLACED IN LIKE KIND OF THE ADJACENT SURROUNDINGS. THE CONDUIT SHALL BE A MINIMUM OF 2 INCHES, UNLESS OTHERWISE NOTED IN THE PLANS.

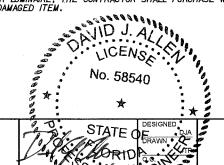
THE 3 INCH COMMUNICATION CONDUIT SHALL FOLLOW SECTION 783 SPECIFICATIONS FOR I.T.S. CONDUIT AND INCLUDE, BUT NOT LIMITED TO; PULL CHORD, LOCATE WIRE, ROUTE MARKERS AND WARNING TAPE UNDER THIS PAY ITEM. THE COMMUNICATION CONDUIT IS FOR FUTURE USE AND THE ENDS SHALL BE CAPPED IN EACH FIBER OPTIC PULL BOX AND SPLICE BOX.

5. PAY ITEM 715-4-123: THIS PAY ITEM SHALL INCLUDE THE POLE, LUMINAIRE WITH LAMP, ANCHOR BOLTS WITH LOCK NUTS AND WASHERS, VIBRATION DAMPENING DEVICE, FRANGIBLE TRANSFORMER TYPE BASE, AND FOUNDATION AS INDICATED IN THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS. THE COST OF BREAK-AWAY WATERTIGHT, IN-LINE FUSE HOLDERS, THE STRAIN RELIEF, AND THE SURGE ARRESTOR PER DESIGN STANDARDS INDEX 17500, SHALL BE PAID FOR UNDER PAY ITEM 715-500-1.

THIS PAY ITEM INCLUDES THE COST OF 0.71 CUBIC YARDS OF CONCRETE PER SLAB AROUND POLE FOUNDATION AND PULL BOX.
THE COST FOR ALL REINFORCING STEEL AND TIES SHALL BE INCLUDED UNDER THIS PAY ITEM. FOR MORE INFORMATION, REFER
TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 17500 FOR SLAB DETAILS. THE LAYOUT
OF THE SLAB ON THE PLANS ARE SCHEMATIC AND THE ORIENTATION MAY BE MODIFIED AS APPROVED BY THE ENGINEER.
AT LOCATIONS WHERE THE SLAB ENCROACHES THE SIDEWALK, RETAINING WALL OR TRAIL, THE SLAB SHALL BE MODIFIED TO END
ADJACENT TO THE SIDEWALK OR RETAINING WALL. SEE MODIFIED SLAB DETAIL SHEET FOR MORE INFORMATION. PULL BOX TO BE PAID
FOR UNDER 715-14-11.

#### PAY ITEM FOOTNOTES CONTINUED:

- 6. PAY ITEM 715-7-||:
  THIS PAY ITEM FOR THE UNDERGROUND SERVICE SHALL INCLUDE METER BASE, NEMA 3R ENCLOSED CIRCUIT BREAKER ON THE LINE
  AND LOAD SIDE OF METER AT RISER POLE, WEATHERHEADS, FUSED CONTROL POWER TRANSFORMERS, ENCLOSURES, PANEL BOARDS,
  BREAKERS, FUSES, LIGHTNING PROTECTOR, PHOTO-ELECTRIC ASSEMBLY, CONDUIT AND FEEDER CONDUCTORS FROM POWER COMPANY
  POINT OF SERVICE TO LIGHTING CONTROL PANEL, PULL BOXES, AND ALL MISCELLANEOUS HARDWARE FOR A COMPLETE INSTALLATION
  AS PER PLANS AND STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 1/504. SHALL INCLUDE THE
  COST OF FURNISHING AND INSTALLING TYPE P-II CONCRETE SERVICE PEDESTAL POLES FOR BOTH THE POWER SERVICE AND LOAD
  CENTER ASSEMBLY. PAY ITEM INCLUDES ALL COSTS ASSOCIATED WITH THE CONNECTION OF PEACE RIVER ELECTRIC COOPERATIVE
  POWER SERVICE
- 7. PAY ITEM 715-14-11:
  PAY ITEM 715-14-11:
  PAY ITEM SHALL INCLUDE THE COST OF 0.43 CUBIC YARDS OF CONCRETE PER SLAB AROUND STAND ALONE PULL BOXES.
  ALSO, THE COST FOR ALL REINFORCING STEEL AND TIES SHALL BE INCLUDED UNDER THIS PAY ITEM. FOR MORE INFORMATION,
  REFER TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 17500 FOR SLAB DETAILS.
  THE PULL BOXES SHALL HAVE STREET LIGHTING STAMPED IN RAISED LETTERING ON THE PULL BOX COVERS. AT LOCATIONS
  WHERE THE SLAB ENCROACHES THE SIDEWALK OR RETAINING WALL, THE SLAB SHALL BE MODIFIED TO END ADJACENT
  TO THE SIDEWALK, RETAINING WALL OR TRAIL. SEE MODIFIED SLAB DETAIL SHEET FOR MORE INFORMATION. PULL BOXES
  SHALL NOT BE INSTALLED IN THE SIDEWALK.
- 8. PAY ITEM 715-31-1:
  THIS PAY ITEM IS FOR THE COST OF CLEANING AND RELAMPING ONLY THE RELOCATED POLES AND LUMINAIRES PRIOR TO REINSTALLING.
- 3. PAY ITEM 715-500-1: THE COST OF BREAK-AWAY WATERTIGHT, IN-LINE FUSE HOLDERS, THE STRAIN RELIEF, AND THE SURGE ARRESTOR PER STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 17500.
- 10. PAY ITEM 715-540-000:
  THIS PAY ITEM INCLUDES THE COST OF REMOVAL AND DISPOSAL OF THE EXISTING LIGHT POLE FOUNDATION, LIGHT POLE CONCRETE PAD AND POLE CABLE DISTRIBUTION SYSTEM. ALSO INCLUDED IS THE COST TO FILL IN THE VOID LEFT BY THE FOUNDATION AND COMPACT THE SOIL. FOR MORE INFORMATION, SEE THE LIGHT POLE RELOCATION DETAILS SHEET. THE CONTRACTOR SHALL PERFORM DUE DILIGENCE WHEN REMOVING, STORING AND INSTALLING THE RELOCATED POLES. IF THE CONTRACTOR DAMAGES THE POLES AND / OR LUMINAIRE, THE CONTRACTOR SHALL PURCHASE WITH HIS OWN MONEY A NEW POLE AND / OR LUMINAIRE EQUIVALENT TO THE DAMAGED ITEM.



TABULATION OF QUANTITIES

PROJECT NO: 00193-008-003 DATE: 03-08-2011 SHEET NO: L-2

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



### ROADWAY LIGHTING GENERAL NOTES

- 1. SPARE CONDUIT AT PAVEMENT CROSSINGS SHALL BE CAPPED AT BOTH ENDS.
- 2. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, EQUIPMENT SPECIFICATION OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
  - A. LUMINAIRE AND LUMINAIRE PHOTOMETRICS
  - B. POLE SHOP DRAWINGS
  - C. TRANSFORMER BASE SHOP DRAWING
  - D. FUSE HOLDER, FUSE, SURGE ARRESTOR AT TRANSFORMER BASE AND/OR PULL BOXES
  - E. LOAD CENTER SERVICE POINT EQUIPMENT
  - F. PULL BOXES AND LIDS
  - G. POWER SERVICE POLE SHOP DRAWING
  - H. POWER SERVICE CONDUCTORS AND CONDUIT

SEVEN (7) COPIES OF SHOP DRAWINGS AND DESIGN DATA FOR ROADWAY LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN ACCORDANCE WITH THE SPECIFICATIONS.

- 3. THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OWNER(S) FOR LOCATION AND STAKING OF UNDERGROUND FACILITIES BEFORE FXCAVATING.
- 4. STATE OF FLORIDA STATUTE 556 (2008) REQUIRES THAT BEFORE EXCAVATING, NOTICE BE GIVEN TO SUNSHINE STATE ONE CALL OF FLORIDA, INC. (SSOCOF) AT 1-800-432-4770 A MINIMUM OF TWO (2) FULL BUSINESS DAYS BEFORE WORK BEGINS. NOT ALL UTILITY COMPANIES ARE MEMBERS OF SSOCOF.
- 5. THE LOCATION OF THE POLES, CONDUCTORS, CONDUITS, JUNCTION BOXES AND SERVICE POLES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE CONTRACTOR TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS.
- 6. ALUMINUM POLES, LUMINAIRES, AND BASES SHALL BE FABRICATED IN ACCORDANCE WITH AASHTO'S "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", AND SHALL HAVE BEEN TESTED BY FHWA APPROVED METHODS (LATEST EDITION). CERTIFICATION FOR TESTS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.
- 7. SHOP DRAWING SUBMITTAL DATA SHALL INCLUDE A COMPUTER PRINTOUT SHOWING HORIZONTAL FOOT—CANDLE LEVELS TO BE OBTAINED USING THE SUBMITTED LUMINAIRES ON THIS PROJECT. AT FINAL INSPECTION THE CONTRACTOR SHALL VERIFY THE HORIZONTAL FOOT—CANDLE LEVELS ON THE ROADWAY WITH AN APPROVED, CURRENTLY CALIBRATED LIGHT METER AND SUBMIT THE REPORT FOR APPROVAL. THE PRINT OUT SHALL INCLUDE AN ANALYSIS OF EACH SEPARATE TYPICAL SECTION.
- 8. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE AND THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROPERLY GROUNDED AND BONDED PER THE NATIONAL ELECTRICAL CODE REQUIREMENTS.
- 9. INSTALL LIGHTNING ARRESTORS, PROPERLY GROUNDED, IN POWER (SECONDARY) ENTRANCES, ON OUTSIDE OF ENCLOSURE.
- 10. IN ACCORDANCE WITH NEC, IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACOID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL IDENTIFYING CIRCUIT FOR EACH LUMINAIRE AT ACCESS HANDHOLE FOR EACH POLE.
- 11. THE CONTRACTOR SHALL NOTIFY PEACE RIVER ELECTRIC COOPERATIVE AT LEAST 48 HOURS PRIOR TO ANY INSTALLATION THAT IS WITHIN THE DISTANCE PER CURRENT OSHA REQUIREMENTS OF ENERGIZED ELECTRICAL CONDUCTORS. PEACE RIVER ELECTRIC COOPERATIVE AND PROGRESS ENERGY, AT ITS OPTION, SHALL ASSIST THE FDOT CONTRACTOR TO COVER UP ENERGIZED CONDUCTORS AT INSTALLATION SITES OR TAKE OTHER SAFETY PRECAUTIONS AS NECESSARY. EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES IN PERFORMANCE OF WORK AROUND THE PRIMARY HIGH VOLTAGE COMPONENTS.
- 12. PULLING INSTRUCTIONS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY THE NATIONAL ELECTRICAL CODE OR NATIONAL ELECTRICAL SAFETY CODE FOR CABLE USED.
- 13. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND REQUEST UTILITY COMPANIES TO LOCATE AND STAKE UNDERGROUND UTILITIES PRIOR TO EXCAVATING.
- 14. THE CONTRACTOR SHALL FURNISH AND INSTALL AN ALUMINUM IDENTIFICATION TAG ON EACH ROADWAY LIGHTING STANDARD. TAGS SHALL BE 2 INCH x 8 INCH IN SIZE WITH BLACK LETTERS ON YELLOW BACKGROUND, ATTACHED WITH RIVETS (NO SCREWS). NUMBERS SHALL BE AS SHOWN ON THE POLE DATA SHEET AND THE POLE IDENTIFICATION TAG DETAIL. COST OF TAGS SHALL BE INCLUDED IN THE BID ITEMS FOR LIGHT POLE COMPLETE. BOTTOM OF THE TAG SHALL BE 60 INCHES ABOVE THE FINISHED GRADE.
- 15. THE CONTRACTOR SHALL USE THE CONCRETE FOUNDATION ON INDEX 17515.

BY DATE

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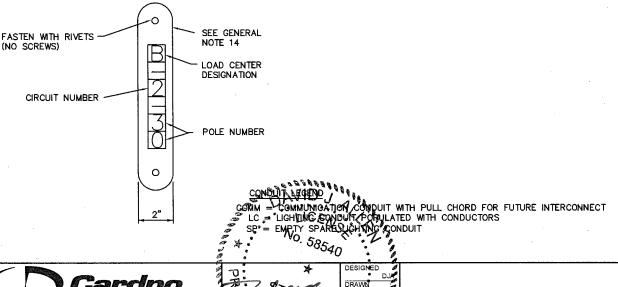
NO.

DESCRIPTION

- 16. ALL CONDUITS UNDER ROADWAY (AND/OR SIDEWALK) SHALL BE INSTALLED PRIOR TO INSTALLATION OF ROADWAY BASE AND SURFACE (OR CONCRETE). EXCEPT WHERE OTHERWISE SPECIFIED IN THE PLANS.
- 17. DIRECTIONAL BORE OPERATIONS, IF USED, SHALL MEET THE REQUIREMENTS OF FDOT'S UTILITY ACCOMMODATION MANUAL (LATEST EDITION).
- 18. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN TWO FEET OF THE LIGHTING POLE FOUNDATIONS OR CONDUIT RUN, AS DETERMINED BY THE CONTRACTOR AND/OR ENGINEER, THE CONTRACTOR WILL HAND DIG THE FIRST 4 FEET OF THE HOLE FOR THE POLE FOUNDATION AND CONDUIT RUN.

- 19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS THAT REQUIRES THE PREPARATION AND APPROVAL OF AN EROSION CONTROL PLAN THAT ADDRESSES PREVENTION, CONTROL AND ABATEMENT OF WATER POLLUTION.
- 20. ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CAN NOT BE BACKFILLED IN THE SAME WORK PERIOD.
- 21. THE LIGHTING CONDUIT SHALL ONLY ENTER PULL BOXES DESIGNATED FOR STREET LIGHTING AND BYPASS ALL OTHER PULL BOXES. THE COMMUNICATIONS CONDUIT SHALL ENTER ONLY THE PULL BOXES DESIGNATED FOR FIBER OPTIC AND SHALL BYPASS ALL OTHER PULL BOXES.
- 22. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
- THE LIGHTING SYSTEM WILL BE MAINTAINED BY MANATEE COUNTY UPON FINAL ACCEPTANCE. THE CONTRACTOR SHALL SUBMIT THE AS—BUILT PLANS TO THE ENGINEER, PRIOR TO FINAL ACCEPTANCE.
- 24. THE CONTRACTOR SHALL NOTIFY MANATEE COUNTY BEFORE ANY TRENCHING OR DIGGING AT ALL SIGNALIZED INTERSECTIONS SO THAT ALL UNDERGROUND LOOP LEAD—INS AND ELECTRICAL CABLES CAN BE IDENTIFIED AND MARKED APPROPRIATELY.
- 5. HANDHOLE COVERS FOR POLES SHALL BE LOCATED OPPOSITE APPROACHING TRAFFIC.
- 26. ALL EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- 7. THE CONDUCTORS AT THE POLE HANDHOLES AND PULL BOXES SHALL BE LOOPED IN THE POLE AND PULL BOXES WITH SUFFICIENT LENGTH TO COMPLETELY REMOVE CONNECTORS AND SPLICES ONE FOOT OUTSIDE OF THE HANDHOLE AND PULL BOXES TO MAKE CONNECTIONS AND SPLICES ACCESSIBLE FOR CHANGING FUSES AND TROUBLE SHOOTING THE SYSTEM.
- THE LIGHT POLES SHALL NOT BE PLACED IN THE BOTTOM OF DITCHES. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR AN APPROVED OFFSET ADJUSTMENT.
- 29. CONDUIT LOCATION AS SHOWN ON THE PLANS IS SCHEMATIC. CONDUIT SHALL BE PLACED WITHIN THE RIGHT-OF-WAY BUT CAN BE ADJUSTED TO FIT AROUND EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL ALSO AVOID THE PROPOSED MAST ARM AND STRAIN POLE FOUNDATIONS.
- 30. ALL LIGHT POLES SHALL HAVE A PULL BOX INSTALLED BY THE POLE FOUNDATION PER STANDARD INDEX 17500. SHEET 3 OF 3 AND THE MODIFIED SLAB DETAIL SHEET UNLESS SHOWN OTHERWISE IN THE PLANS.
- THE CONTRACTOR SHALL COORDINATE WITH PEACE RIVER ELECTRIC COOPERATIVE, INC. REPRESENTATIVE DAVID MCCLINTOCK AT 863-767-4621 PRIOR TO CONSTRUCTION FOR THE FINAL POWER POINT OF SERVICE LOCATION.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION PRIOR TO BIDDING TO SEE IF THE COUNTY HAS CHANGED THE LUMINAIRE LAMP TYPE. THE NEW LAMP MUST MATCH THE LUMEN INTENSITY AND PHOTOMETRIC CURVE AS STATED ON THE POLE DATA SHEET. THIS WILL ALLOW THE POLE SPACING TO REMAIN AS SHOWN IN THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE POWER COMPANY PROVIDING THE POWER FOR THE LIGHTING IF THERE ARE ANY PROCESSING OR OTHER FEES REQUIRED. THESE FEES SHALL BE INCLUDED UNDER PAY ITEM FOR THE LOAD CENTER. ALSO, THE COST FOR INSPECTION AND PERMITS FOR THE POWER SERVICE SHOULD BE INCLUDED.
- 34. THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING ALONG US 301 WHERE THE EXISTING LIGHTING CIRCUITS WILL BE OFF DUE TO LIGHT POLE RELOCATION. THE CONTRACTOR SHALL USE HPS LUMINAIRES AND SHALL MEET THE LIGHTING CRITERIA FOR 1.5 AVERAGE FOOT CANDLES AND UNIFORMITY RATIO STATED IN THE FDOT PLANS PREPARATION MANUAL. TEMPORARY LIGHTING SHALL BE INCLUDED IN PAY ITEM 102-1 OF THE ROADWAY PLANS.





BRATENCIOSES

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



**GENERAL NOTES** 

PROJECT NO:
00193-008-003

DATE:
03-08-2011

SHEET NO:

L-3

### FT HAMER PROPOSE POLE DATA

POLE NO.	CIRCUIT	STATION/OFFSET	ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
1	A-/	124+10, 28.0' LT	8'	400	50'	7/5-4-123
2	A-/	121+13 <b>,</b> 28.0' LT	8'	- 400	50'	715-4-123
3	A-/	118+30 <b>,</b> 28.0'LT	8'	400	50'	7/5-4-123
4	A-/	115+40, 28.0' LT	8'	400	50'	7/5-4-/23
5	A-1	112+46, 25.8' LT	8'	400	50'	7/5-4-/23
	*					
		·				

### US 301 RELOCATED POLE DATA

POLE NO.	CIRCUIT	STATION/OFFSET	ARM	ШМINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
128	C-1	193+10, 77.0' RT	_	-	-	7/5-540-000
129	C-2	194+45, 77.0' RT	-	-	-	715-540-000
130 *	C-1	196+33, 84.6' RT	-	-	-	715-540-000

<sup>\*</sup> LUMINAIRE SHALL BE ORIENTATED AS SHOWN ON THE PLANS.

BY DATE

## **MANATEE COUNTY**

**US 301 AND FT. HAMER ROAD** INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



#### 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 Veiling Luminance Ratio 0.3% Or Less Wind Speed

I30 MPH

### LEGEND

SYMBOLS

#### DESCRIPTION



400 watt high pressure sodium clear flat glass cobra head luminaire. Designed for full cutoff Type III distribution. Integral regulator type ballast wired for 480 volt operation. Mounting height of 50 ft and 8 ft arm. Designed using GE photometric curve 451002 and 50,000 lumens.



Existing position of pole and luminaire to be relocated.



Final position of relocated pole and luminaire.

Schedule 40 PVC conduit with RHW-2 or XHHW conductors inside (conduit and conductor size as shown on plan sheets). Run one (I) 6 AWG copper bond conductor (RHW-2 green insulation) inside conduit with other conductors.



HDPE conduit, directional bored under pavement with RHW-2 or XHHW conductors inside (conduit and conductor size as shown on plan sheets). Extend conduit beyond edge of pavement to pull boxes. Run one (I) 6 AWG copper bond conductor (RHW-2 green insulation) inside conduit with other conductors. All directional bore shall included an empty spare conduit as shown in the plans.

Pull box. For specifications see Section 635 of Standard Specifications For Road And Bridge Construction.

Distribution point. For requirements see FDOT Design Standards Index No. 17504.

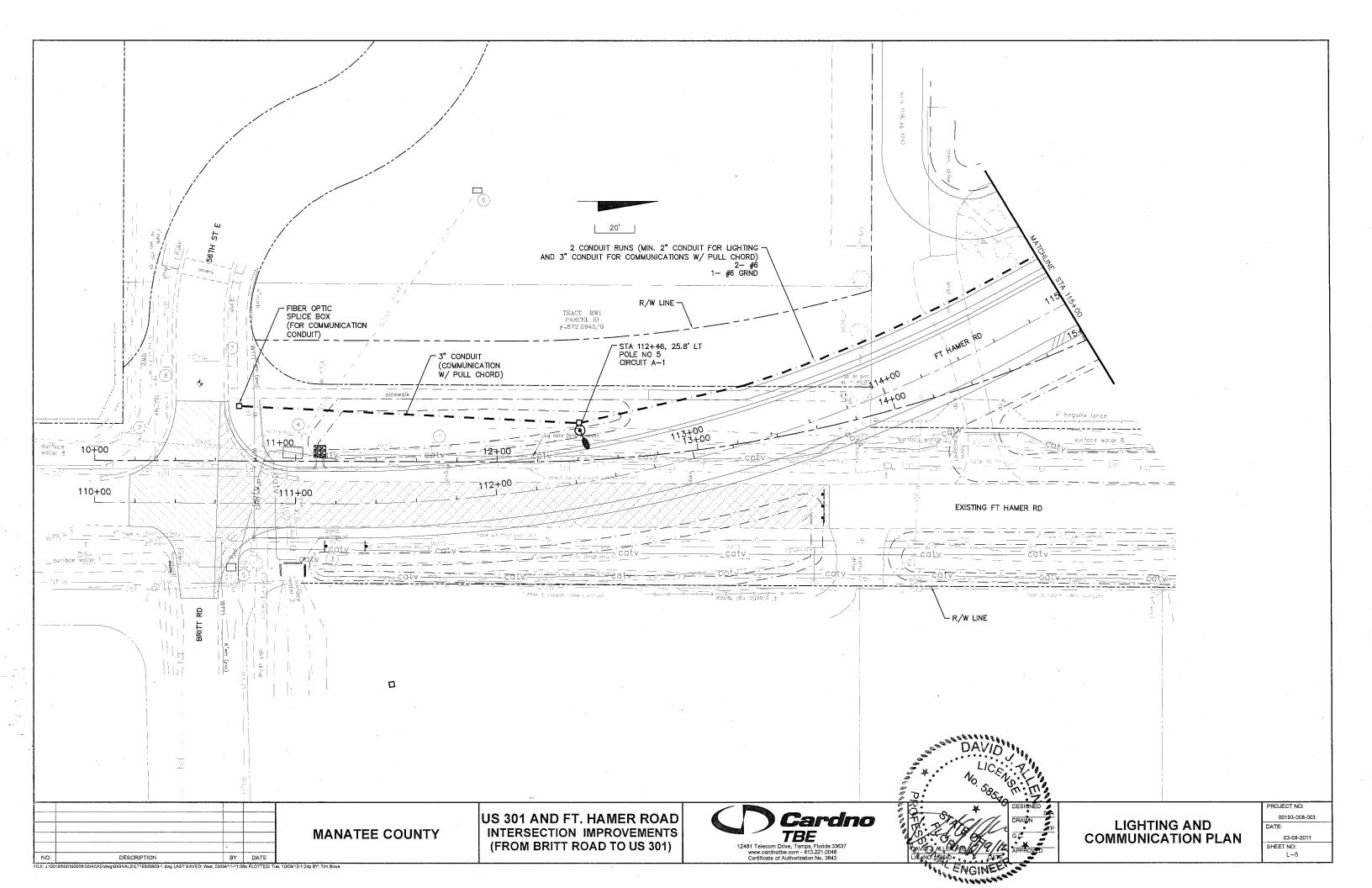
COMM = COMMUNICATIONS CONDUIT WITH PULL CHORD
LC = LIGHTING CONDUIT POPULATED WITH CONDUCTORS
SP = EMPTY SPARE LIGHTING CONDUIT

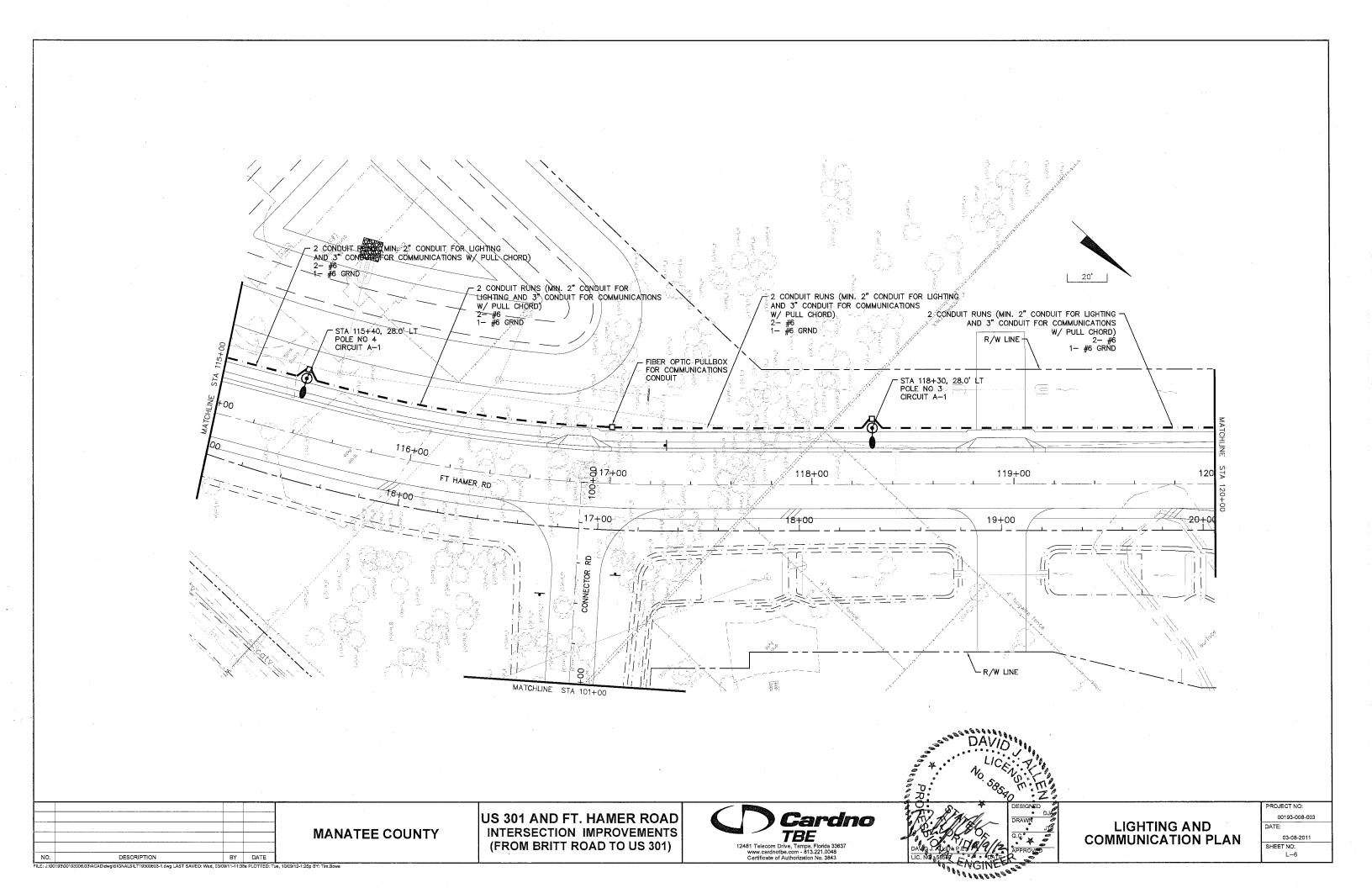


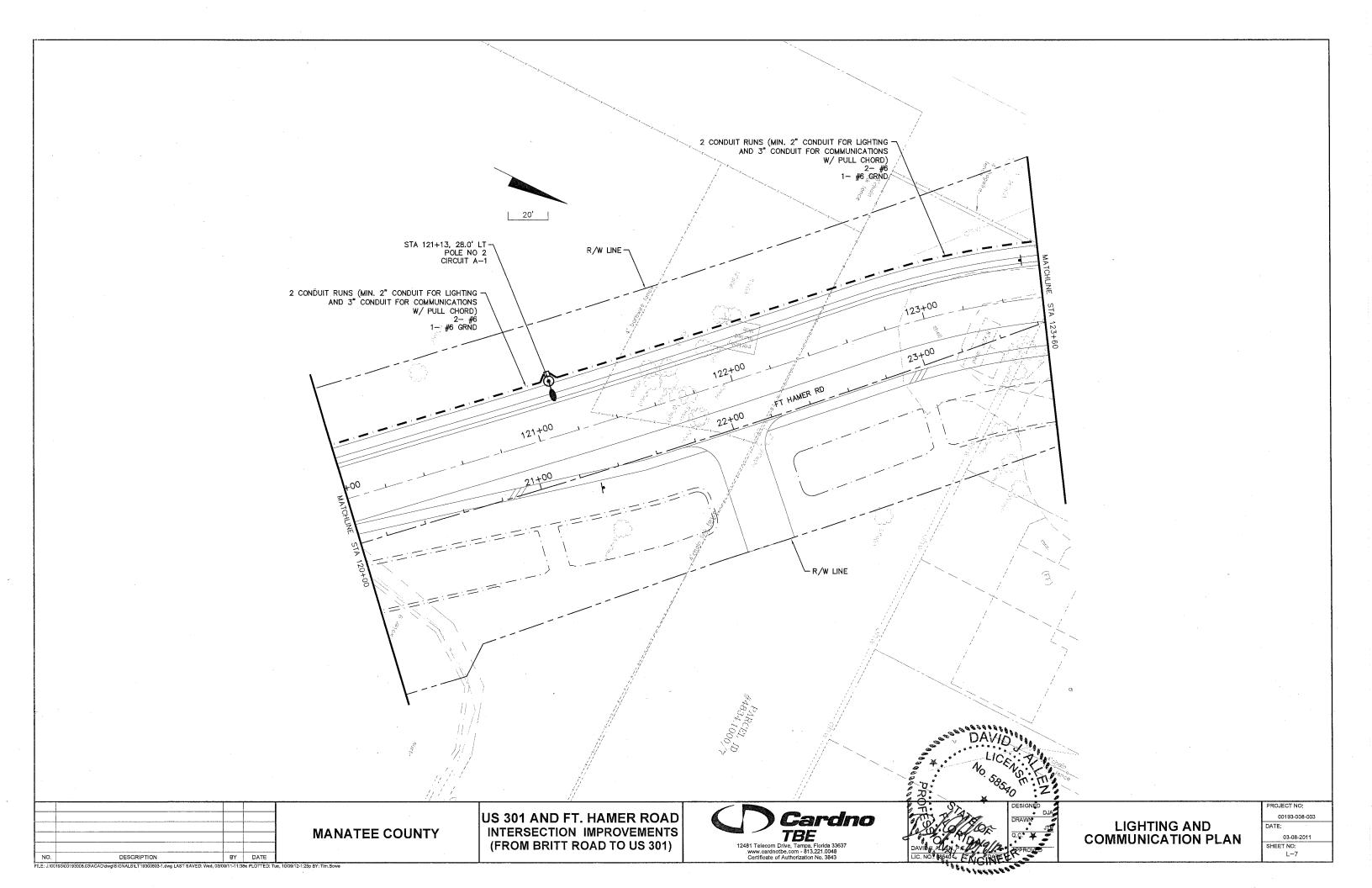
**POLE DATA AND** LEGEND

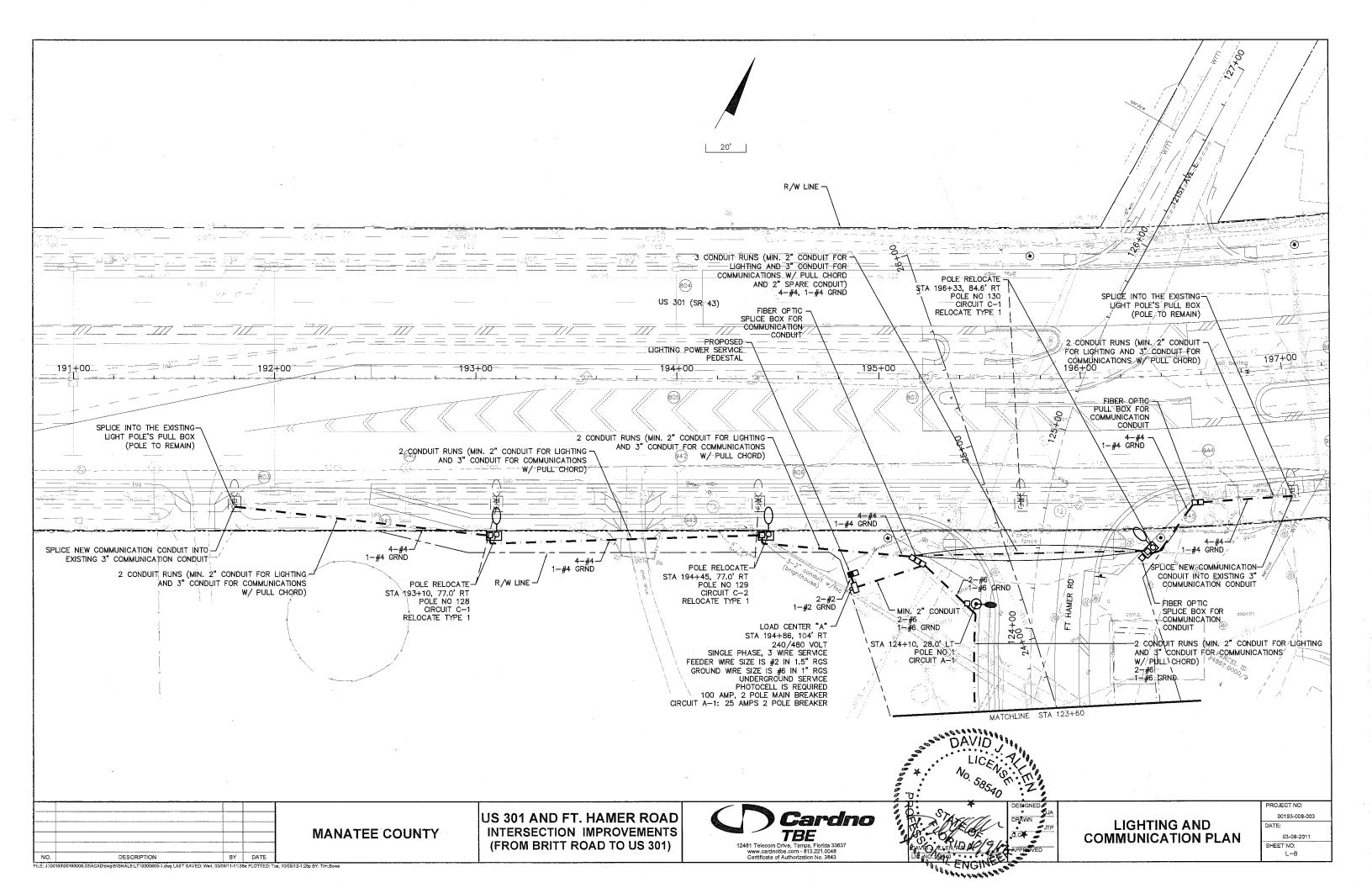
00193-008-003 03-08-2011 SHEET NO:

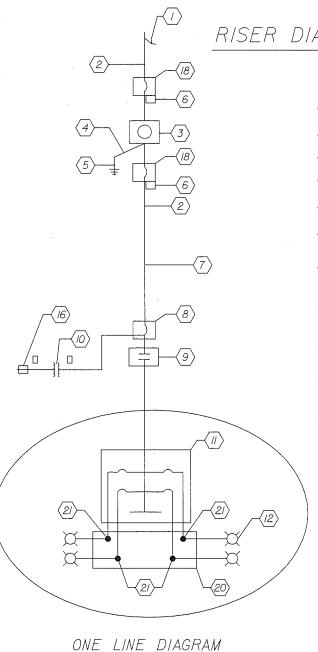
L-4







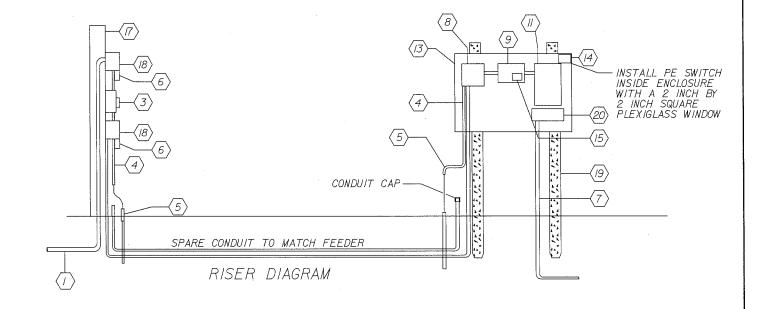




## RISER DIAGRAM AND SCHEMATIC

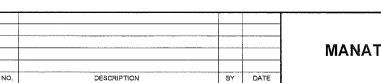
#### KEYED NOTES:

- 240/480V SINGLE PHASE 3-WIRE PRECO UNDERGROUND SERVICE CONNECTION.
- (2) SEE FEEDER SIZE IN PLANS
- METER SOCKET BY CONTRACTOR. METER BY PRECO.
- 4 INSULATED #6 COPPER GROUND WIRE IN I" RIGID GALVANIZED STEEL.
- (5) COPPER CLAD GROUND ROD %" DIA. 40 FEET LONG.
- 6 LIGHTNING ARRESTOR
- CONDUITS FOR THE CONDUCTORS COMPOSING THE LIGHTING CIRCUITS. THE CONTRACTOR SHALL DETERMINE THE NUMBER OF NECESSARY CONDUIT DROPS.
- (8) MAIN CIRCUIT BREAKER 2-POLE, 480V. SEE PLANS FOR SIZE.
- 9 2-POLE, ELECTRICALLY HELD CONTACTOR. SAME SIZE AS MAIN CIRCUIT BREAKER.
- (10) CONTROL TRANSFORMER I KVA, SINGLE PHASE, 480V PRIMARY 120V SECONDARY.
- PANELBOARD, 480V, SINGLE PHASE. 3-WIRE WITH GROUND BAR AND CIRCUIT BREAKERS. SEE PLANS FOR CIRCUIT BREAKER SIZES.
- (12) ROADWAY LUMINAIRE CONNECTED TO A CIRCUIT.
- POST-MOUNTED 3R STAINLESS STEEL ENCLOSURE WITH LOCKABLE HINGED DOOR, SIZE PER EQUIPMENT REQUIREMENT.
- (14) PHOTO ELECTRIC CELL SWITCH INSIDE ENCLOSURE.
- (15) 'HAND-OFF-AUTOMATIC' SELECTOR SWITCH.
- 30 AMP, 2-POLE FUSEBLOCK WITH 20 AMP FUSES FOR CONTROL VOLTAGE.
- (17) 12' PEDESTAL CONCRETE POLÉ
- (18) 600V, 2-POLE S/N HEAVY DUTY NEMA 3R ENCLOSED BREAKER.
- CONCRETE SUPPORT POSTS WITH GALVANIZED UNISTRUT TO SUPPORT ELECTRICAL EQUIPMENT.
- WIRE TROUGH FOR BRANCH CIRCUIT WIRE MECHANICAL CONNECTION TO CIRCUIT BREAKER WIRE
- (21) MECHANICAL CONNECTION



#### NOTES:

THE CONTRACTOR SHALL COORDINATE WITH THE POWER COMPANY
ON THE DESIRED LOCATION OF THE DISCONNECT ON THE LINE SIDE OF THE METER CAN.

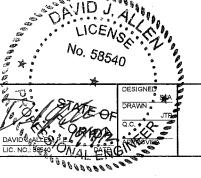


(NTS)

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

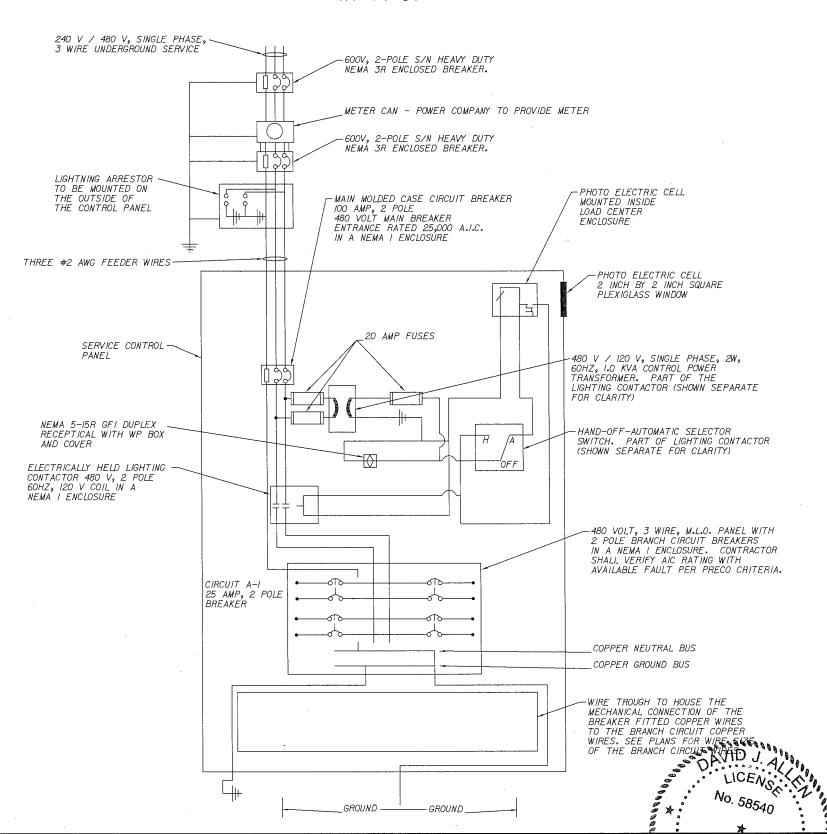




SERVICE POINT DETAILS

PROJECT NO: 00193-008-003 DATE: 03-08-2011 SHEET NO:

# ROADWAY LIGHTING WIRING DIAGRAM FOR LOAD CENTER "A" N. T. S.



- . REFER TO THE 2010 FDOT STANDARD DESIGN INDEX 17504 FOR ADDITIONAL SERVICE POINT DETAILS.
- 2. CONTRACTOR SHALL FURNISH A NEMA 3R ENCLOSURE SIZED FOR THE EQUIPMENT FURNISHED.
- 3. THE CIRCUIT PANEL SHALL HAVE AT LEAST 12 CIRCUIT BREAKER BAYS FOR FUTURE USE.

MANATEE COUNTY

NO.

DESCRIPTION

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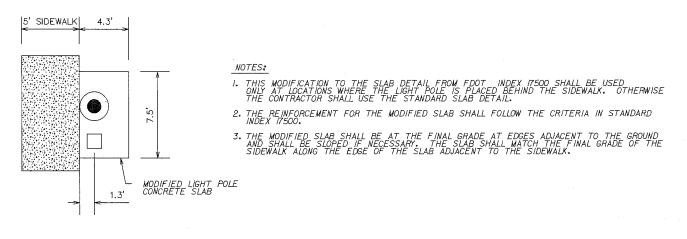
BY DATE

**US 301 AND FT. HAMER ROAD** INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)



SERVICE POINT DETAILS

PROJECT NO: 00193-008-003 DATE: 03-08-2011 SHEET NO: L-10

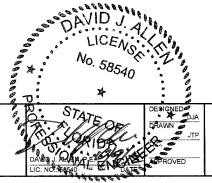


MODIFIED SLAB DETAIL
NTS

MANATEE COUNTY

US 301 AND FT. HAMER ROAD INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)

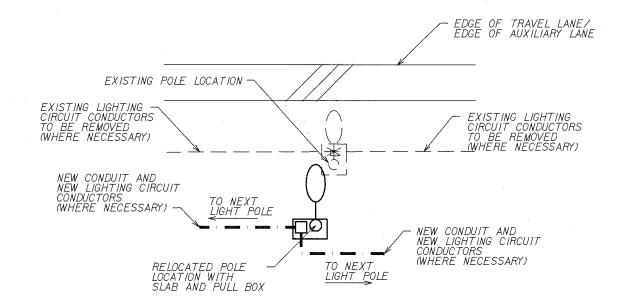




MODIFIED SLAB DETAIL PROJECT NO:
00193-008-003

DATE:
03-08-2011

SHEET NO:
L—11



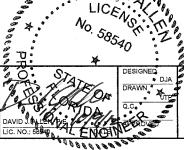
- I. PAY ITEM 715-540-00 SHALL INCLUDE THE COST TO RELOCATE LIGHT
  POLES AS SHOWN IN THE PLANS AND POLE DATA SHEET, PROVIDE A
  NEW CONCRETE POLE FOUNDATION PER DESIGN STANDARDS INDEX 17515,
  PROVIDE A NEW CONCRETE SLAB PER DESIGN STANDARDS INDEX 17500 AND/OR
  MODIFIED SLAB DETAIL, REMOVE THE EXISTING POLE FOUNDATION, REMOVE THE
  EXISTING CONCRETE SLAB AND REMOVE THE EXISTING PULL BOX.
- 2. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW CONDUIT AND CONDUCTORS FROM THE PROPOSED RELOCATED LIGHT POLE PULL BOX TO THE NEXT LIGHT POLE AS SHOWN IN THE PLANS.
- 3. THE CONTRACTOR SHALL REMOVE THE EXISTING CONDUCTORS FOR THE OLD LIGHT POLE LOCATION TO THE LIGHT POLE THAT WILL HAVE NEW CONDUCTORS INSTALLED.
- 4. THE CONTRACTOR SHALL PERFORM DUE DILIGENCE WHEN WORKING WITH THE EXISTING LIGHTING CONDUCTORS. THE CONTRACTOR SHALL COORDINATE WITH THE MAINTAINING AGENCY FOR ACCESS TO THE EXISTING LOAD CENTERS TO TURN OFF/ON BREAKERS.

POLE RELOCATE TYPE 1

N.T.S.

**US 301 AND FT. HAMER ROAD** INTERSECTION IMPROVEMENTS (FROM BRITT ROAD TO US 301)





LIGHT POLE **RELOCATION DETAIL** 

LEGEND

EXISTING LIGHT POLE TO BE RELOCATED AND CONCRETE SLAB AND PULL BOX TO BE REMOVED

RELOCATED LIGHT POLE WITH NEW CONCRETE SLAB

AND NEW PULL BOX

00193-008-003 03-08-2011 SHEET NO: L-12

DRAWN UTP

*NOTES*:

5. THE US 301 AND FT HAMER CIRCUITS SHALL BE TESTED TO VERIFY BOTH THE EXISTING AND THE NEW STREET LIGHTING WORK BEFORE FINAL ACCEPTANCE.

6. THE CONTRACTOR SHALL COORDINATE ALL WORK EFFORTS CONCERNING THE EXISTING ROADWAY LIGHTING WITH THE MAINTAINING AGENCY.

7. THE CONTRACTOR SHALL TERMINATE THE CONDUIT AT THE EXISTING LIGHT POLE TO REMAIN PULL BOX, AS SHOWN IN THE PLANS. THE NEW CONDUCTORS SHALL REPLACE THE EXISTING LIGHTING CIRCUIT CONDUCTORS THAT ARE CONNECTED TO THE EXISTING LIGHT POLE CABLE DISTRIBUTION SYSTEM.

BY DATE