

# RIVERVIEW BOULEVARD BRIDGE OVER McLEWIS BAYOU

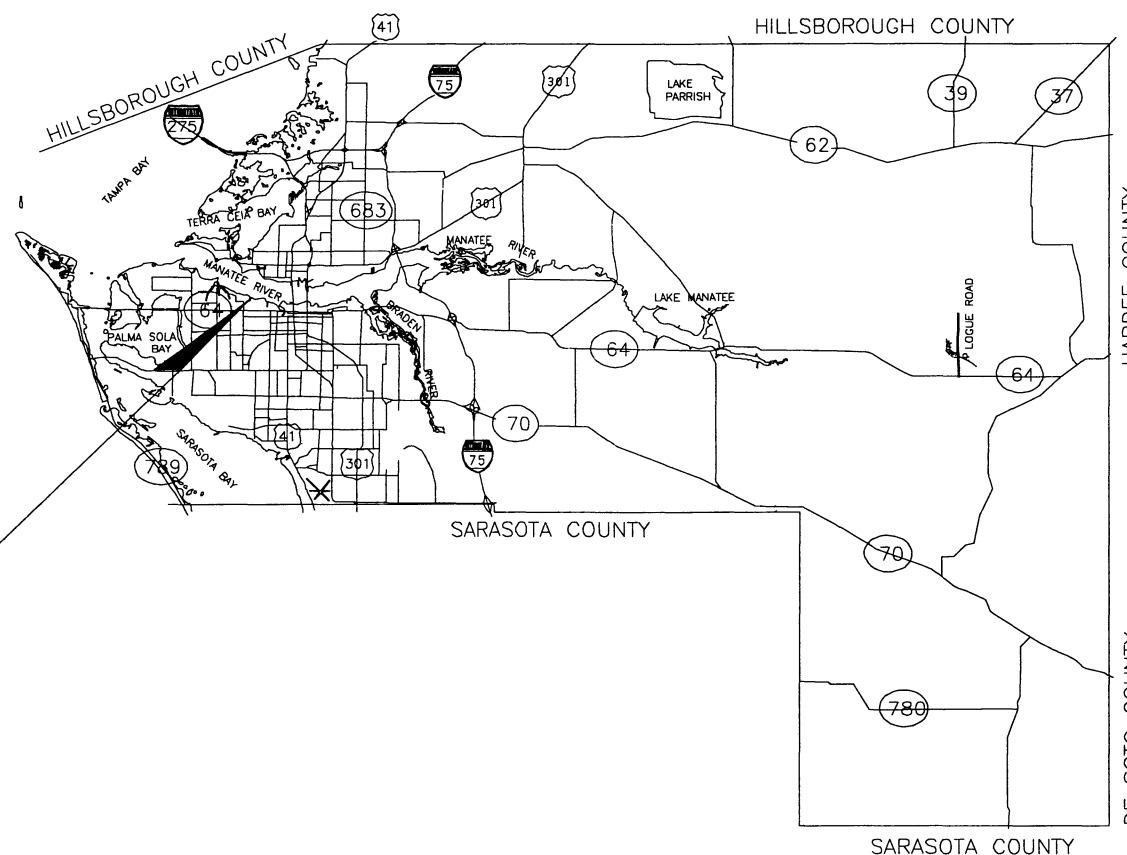
## BRIDGE NO. 134019

### MANATEE COUNTY PROJECT NO. 6013260

#### NO. INDEX OF SHEETS

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BRIDGE NO. 134019



#### GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION,  
DESIGN STANDARDS DATED JANUARY 2008 ALONG  
WITH CURRENT STANDARDS MODIFICATIONS

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

MANATEE COUNTY TRANSPORTATION DEPARTMENT  
HIGHWAY & DRAINAGE STANDARDS DATED JUNE, 2007

MANATEE COUNTY UTILITY STANDARDS AND SPECIFICATIONS  
DATED MARCH, 2009.

#### REVISIONS

LENGTH OF PROJECT	
	FEET
ROADWAY	176'
BRIDGES	35'
NET LENGTH OF PROJ.	211'
EXCEPTIONS	N/A
GROSS LENGTH OF PROJ.	211'

MANATEE COUNTY PROJECT MANAGER : STEVE SERBATY



ATTENTION IS DIRECTED TO THE FACT THAT  
THESE PLANS MAY HAVE BEEN ALTERED IN  
SIZE BY REPRODUCTION. DO NOT USE SCALED  
DATA.

PLANS PREPARED BY:

**WADETRIM**

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TAMPA, FLORIDA 33634  
813.882.8368 FAX 813.884.6960  
CONTRACT NO. C-992826TC  
VENDOR NO. 59-2417170  
CERTIFICATE OF AUTHORIZATION NO. 3952

ENGINEER OF RECORD:  
ROBERT R. BREEN, PE

ROADWAY PLANS  
APPROVED BY: ROBERT R. BREEN

DATE: 7/22/09

P.E. NO.: 61064

**BID PLANS 07/21/09**

SUMMARY OF QUANTITIES				
ITEM NO.	FDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	101-1	MOBILIZATION	LS	1
2	102-1	MAINTENANCE OF TRAFFIC	LS	1
3	104-11	TURBIDITY BARRIER FLOATING	LF	165
4	104-13-1	SILT FENCE STAKED (TYPE III)	LF	464
5	110-1-1	CLEARING AND GRUBBING	LS	1
6	110-3	REMOVAL OF EXISTING STRUCTURE	LS	1
7	120-1	REGULAR EXCAVATION	CY	95
8	120-5	CHANNEL EXCAVATION	CY	135
9	120-6	EMBANKMENT	CY	100
10	160-4	TYPE B STABILIZATION	SY	581
11	285-704	OPTIONAL BASE, GROUP 04	SY	495
12	334-1-11	ASPHALTIC CONCRETE, TRAFFIC A (SP-9.5 OR S-III)	TN	187.5
13	339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN	16.3
14	360-1	CONCRETE APPROACH SLABS W/REINFORCEMENT	EA	2
15	370-1	BRIDGE APPROACH EXPANSION JOINT	LF	70
16	400-4-4	CONCRETE CLASS IV (SUPERSTRUCTURE)	CY	25
17	400-4-5	CONCRETE CLASS IV (SUBSTRUCTURE)	CY	35
18	400-7	BRIDGE FLOOR GROOVING	SY	210
19	400-144	CLASS V FINISH	SF	925
20	415-1-4	REINFORCING STEEL (SUPERSTRUCTURE)	LB	1505
21	415-1-5	REINFORCING STEEL (SUBSTRUCTURE)	LB	3160
22	450-3-25	PRESTRESSED SLAB UNITS, WIDTH 60", THICKNESS 15" (7 PIECES)	LF	244
23	455-14-3	CONCRETE SHEET PILING, 10"x30" (62 PIECES)	LF	995
24	455-14-5	CONCRETE SHEET PILING, SPECIAL, CORNER (5 PIECES)	LF	100
25	455-34-5	PRESTRESSED CONCRETE PILING, 24" SQ	LF	280
26	455-143-5	TEST PILES-PRESTRESSED CONCRETE, 24" SQ	LF	70
27	521-5-1	CONCRETE TRAFFIC RAILING, BRIDGE 32" F SHAPE	LF	118
28	530-3-3	RIP RAP-RUBBLE, BANK AND SHORE	TN	14
29	536-1-1	GUARDRAIL, ROADWAY	LF	313
30	536-2	GUARDRAIL-SHOP BENT PANELS	LF	12.5
31	536-85-24	GUARDRAIL END ANCHORAGE ASSEMBLY-PARALLEL	EA	3
32	536-85-25	GUARDRAIL END ANCHORAGE ASSEMBLY-TYPE II	EA	1
33	570-1-2	PERFORMANCE TURF	SY	287
34	706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	6
35	711-11-121	THERMOPLASTIC, STANDARD, WHITE, SOLID 6"	LF	422
36	711-11-221	THERMOPLASTIC, STANDARD, YELLOW, SOLID 6"	LF	422
37		UTILITY COORDINATION	LS	1
38		MISCELLANEOUS WORK AND CLEAN UP	LS	1
		DISCRETIONARY WORK (ROADWAY)		

39	425-2-71	MANHOLE, J-7, <10'	EA	1
40		UTILITY PIPE, DIRECTIONAL BORE, HDPE DR-11 CLASS 160, WATER, 8.0"	LF	165
41		UTILITY PIPE, REMOVE & DISPOSE, 8.0"	LF	160
42		UTILITY FIXTURES, F&I, 8.0", GATE VALVE ASSEMBLY	EA	2
		DISCRETIONARY WORK (WATERMAIN)		

43		UTILITY PIPE, DIRECTIONAL BORE, HDPE DR-11 CLASS 160, SEWER, 4.0"	LF	195
44		UTILITY PIPE, REMOVE & DISPOSE, 4.0"	LF	198
45		UTILITY FIXTURES, F&I, 4.0", PLUG VALVE ASSEMBLY	EA	2
		DISCRETIONARY WORK (SANITARY SEWER)		

PAY ITEM NOTES:

110-1-1 CLEARING AND GRUBBING SHALL INCLUDE THE COST OF REMOVAL AND DISPOSAL OF THE EXISTING ASPHALT PAVEMENT, GUARDRAIL, CONCRETE POST AND TREES. THIS PAY ITEM ALSO INCLUDES THE SELECTIVE CLEARING OF EXOTIC AND NUISANCE SPECIES IDENTIFIED BY THE ENGINEER.

110-3 REMOVAL OF EXISTING STRUCTURES SHALL INCLUDE THE COST OF REMOVAL AND DISPOSAL OF THE EXISTING CONCRETE BRIDGE, INCLUDING BUT NOT LIMITED TO PILES, ABUTMENTS, RETAINING WALLS AND RIP RAP.

334-1-11 TYPE SP-9.5 (TRAFFIC LEVEL A) CAN BE SUBSTITUTED AT NO ADDITIONAL COST.

450-3-25 PRESTRESSED SLAB UNITS SHALL INCLUDE THE COST OF THE POST TENSIONING SYSTEM AND THE NON-SHRINK GROUT REQUIRED FOR ASSEMBLY.

455-14-3 PRECAST CONCRETE SHEET PILE SHALL INCLUDE ALL LABOR AND MATERIALS, INCLUDING FILTER CLOTH & PRESSURE GROUTING AS SHOWN IN THE PLANS.

455-143-5 TEST PILES (24" SQ) WILL BE PAID FOR BASED ON THE LENGTH OF PILING FURNISHED AND DRIVEN, THE COUNTY WILL INCUR THE COST OF THE PDA TESTING REQUIRED TO DEVELOP THE DRIVING CRITERIA. ANY REQUIRED PILE SPLICES SHALL BE INCIDENTAL.

530-3-3 RIPRAP-RUBBLE (BANK AND SHORE) SHALL INCLUDE THE COST TO FURNISH AND INSTALL FILTER FABRIC.

536-1-1 GUARDRAIL SHALL INCLUDE ALL LABOR AND MATERIALS, INCLUDING SPECIAL  
536-2 GUARDRAIL POSTS & END SHOES AS REQUIRED TO INSTALL THE GUARDRAIL  
536-85-24 AS SHOWN IN THE PLANS.  
536-85-25



PREPARED BY:



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Certificate of Authorization No. 3062

RIVERVIEW BOULEVARD BRIDGE  
OVER MCLEWIS BAYOU

BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

SUMMARY OF QUANTITIES

REVISION		DATE
	BY	DATE
SURVEYED	ZNS	3/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

SEAL

ROBERT R. BREEN, PE No.61064

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, UTILITIES, AND EXISTING CONDITIONS BEFORE STARTING WORK. THE CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION
2. CONSTRUCTION DEBRIS SHALL BE KEPT OUT OF THE CHANNEL AT ALL TIMES.

EROSION CONTROL

1. THE CONTRACTOR SHALL CONTROL EROSION IN ACCORDANCE WITH PERMIT REQUIREMENTS. THE CONTRACTORS EROSION CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO THE USE OF FLOATING TURBIDITY BARRIER, STAKED SILT FENCE AND SYNTHETIC BALES.
2. THE CONTRACTOR SHALL PERFORM DAILY SITE INSPECTIONS FOR ANY POTENTIAL EROSION PROBLEMS. IF ANY POTENTIAL EROSION PROBLEMS ARE ENCOUNTERED OR HAVE OCCURED, THE CONTRACTOR SHALL INSTALL PROPER EROSION CONTROL MEASURES IMMEDIATELY.

MAINTENANCE OF TRAFFIC

1. MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SHALL CONFORM TO FDOT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "DESIGN STANDARDS" DATED 2008 (600 SERIES), AS A MINIMUM.
2. THE CONTRACTOR SHALL OBTAIN A RIGHT OF WAY USE PERMIT FROM THE COUNTY PRIOR TO ALL ROAD CLOSURE.
3. THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY AND RESCUE AGENCIES LOCATED IN THE PROJECT VICINITY TWO WEEKS IN ADVANCE OF ANY ROAD AND/OR WATERWAY CLOSURES OR RESTRICTIONS.
4. ALL EXISTING MANATEE COUNTY SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED AND REINSTALLED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL MAINTAIN BOAT TRAFFIC. THE BRIDGE SHALL ONLY REMAIN CLOSED MONDAY - FRIDAY BETWEEN THE HOURS OF 7 AM - 4PM. THE BRIDGE SHALL BE OPEN TO BOAT TRAFFIC AT ALL OTHER TIMES AND 24 HRS ON WEEKENDS. IF IT IS NECESSARY TO CLOSE THE BAYOU, THE CONTRACTOR SHALL NOTIFY THE COUNTY AND PLACE DOOR HANGERS ON ALL AFFECTED PARTIES SOUTH OF THE BRIDGE SEVEN DAYS PRIOR TO CLOSURE.

STRUCTURAL SPECIFICATIONS & DESIGN CRITERIA

STANDARD SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", 2007 EDITION, AND SUPPLEMENT THERETO, WITH MODIFICATIONS AS CONTAINED HEREIN. WHEREVER IN THE STANDARD SPECIFICATIONS THE TERM SECRETARY OR DIRECTOR OF ENGINEERING IS USED, THE MEANING SHALL BE THE COUNTY ENGINEER OR HIS APPOINTED REPRESENTATIVE.

THE FOLLOWING FLORIDA DEPARTMENT OF TRANSPORTATION "DESIGN STANDARDS", 2008 EDITION, SHALL BE REFERRED TO AND FOLLOWED ACCORDINGLY:

TRAFFIC RAILING-32" F SHAPE (INDEX No. 420)  
NOTES AND DETAILS FOR PRECAST CONCRETE SHEET PILES (INDEX No. 20400)  
PRECAST CONCRETE SHEET PILE TYPE "A"-10 INCH THICK (INDEX No. 20410)  
PRECAST CONCRETE SHEET PILE TYPE "B"-VARIABLE ANGLE CORNER PILE (INDEX No. 20430)  
NOTES AND DETAILS FOR PRESTRESSED CONCRETE PILES (INDEX No. 20600)  
SQUARE PRESTRESSED CONCRETE PILE SPLICES (INDEX No. 20601)  
24" SQUARE PRESTRESSED CONCRETE PILE (INDEX No. 20624)  
APPROACH SLABS (RIGID PAVEMENT APPROACHES) (INDEX No. 20910)  
STANDARD BAR BENDING DETAILS (INDEX No. 21300)

DESIGN VEHICLE: HL-93

FOUNDATION:

FOUNDATION DESIGN IS BASED UPON SUBSURFACE SOILS INVESTIGATION, PROJECT NO 387-15026, DATED APRIL 11, 2001, BY P.S.I. THE PILING SHALL BE INSTALLED ACCORDING TO THIS REPORT AND SECTION 455-7 OF THE F.D.O.T. STANDARD SPECIFICATIONS. PILE DRIVING ANALIZER SHALL BE USED TO DETERMINE THE PILE CAP. THE COUNTY WILL PROVIDE MONITORING.

PILE DESIGN CAPACITIES:

24" SQUARE PRESTRESSED PILES SHALL BE DRIVEN TO ACHIEVE THE FOLLOWING MINIMUM CAPACITIES: VERTICAL: 80 TONS  
LATERAL: 4 TONS

REINFORCING STEEL:

REINFORCING STEEL SHALL CONFORM TO ASTM 615, GRADE 60.

PRESTRESSED PILES:

THE PILES SHALL BE 24" SQUARE AND DRIVEN TO A MINIMUM TIP DEPTH OF APPROXIMATELY 20 FT. THE PILES SHALL ALSO CONFORM TO ALL FDOT SPECIFICATIONS FOR 24" SQUARE PRE-STRESSED PILING.

PRECAST PRESTRESSED FLAT SLABS: THE PRECAST PRESTRESSED FLAT SLAB UNITS SHALL BE IN ACCORDANCE WITH SECTION 450 OF THE F.D.O.T 2007 SPECIFICATIONS.

CONCRETE:

CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 346 OF THE F.D.O.T. 2007 SPECIFICATIONS.

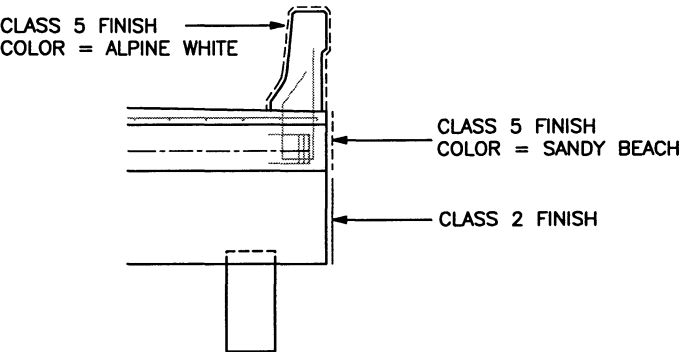
CLASS	LOCATION	MINIMUM 28 DAY COMPRESSION STRENGTH (PSI)
IV	PRESTRESSED FLAT SLABS	5500
IV	CAST-IN-PLACE ( SUPERSTRUCTURE )	5500
IV	CAST-IN-PLACE ( SUBSTRUCTURE )	5500
V	PRESTRESSED PILES	6000
II	BARRIER RAIL	3400

FINISHES:

SHEET PILE AND PILE CAPS SHALL RECEIVE A CLASS 2 APPLIED FINISH.

PARAPET BARRIER, WING POSTS AND DECK EDGE SHALL RECEIVE AN ALGAE RESISTANT CLASS 5 APPLIED FINISH AS MANUFACTURED BY THORO OR AN APPROVED EQUAL

APPROACH SLABS SHALL RECEIVE A CLASS 4 APPLIED FINISH.



SURFACE FINISH DETAIL

THE COST TO APPLY THE CLASS 2 FINISH SHALL BE INCIDENTAL TO PAY ITEM 400-4-5

SUBMITTALS:

CONTRACTOR SHALL SUBMIT THE FOLLOWING SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL:

- CONCRETE MIX DESIGNS
- CLASS 5 FINISH
- SHEET PILES
- APPROACH SLABS
- PRECAST PRESTRESSED FLAT SLABS
- FM & WM PIPE AND FITTINGS

BEFORE/ DURING /AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOUR (4) SETS OF "AS-BUILT" PLANS CERTIFIED BY AN ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.THE DRAWINGS SHALL INCLUDE CROSS SECTIONS OF Mc LEWIS BAYOU EXTENDING 50 FEET UP STREAM AND DOWN STREAM OF THE BRIDGE. CROSS SECTIONS SHALL BE TAKEN AT 25 FOOT INTERVALS.

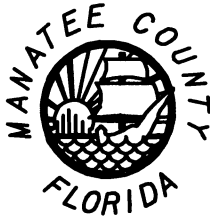
CONSTRUCTION:

ALL SHEET PILE JOINTS AND WEEP HOLES SHALL BE BACKED WITH FILTER CLOTH.

GUARDRAIL CONSTRUCTION SHALL CONFORM TO INDEX 400 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "DESIGN STANDARDS", 2008 EDITION AND SUPPLEMENTS THERETO.

ALL IRRIGATIONS SYSTEMS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL PLACE SOD OVER ALL DAMAGED OR IMPROVED AREAS AFFECTED BY THE WORK. THE SOD SHALL MATCH THE TYPE OF SURROUNDING GRASS TO THE GREATEST EXTENT POSSIBLE.



PREPARED BY:



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RIVERVIEW BOULEVARD BRIDGE  
OVER McLEWIS BAYOU  
BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

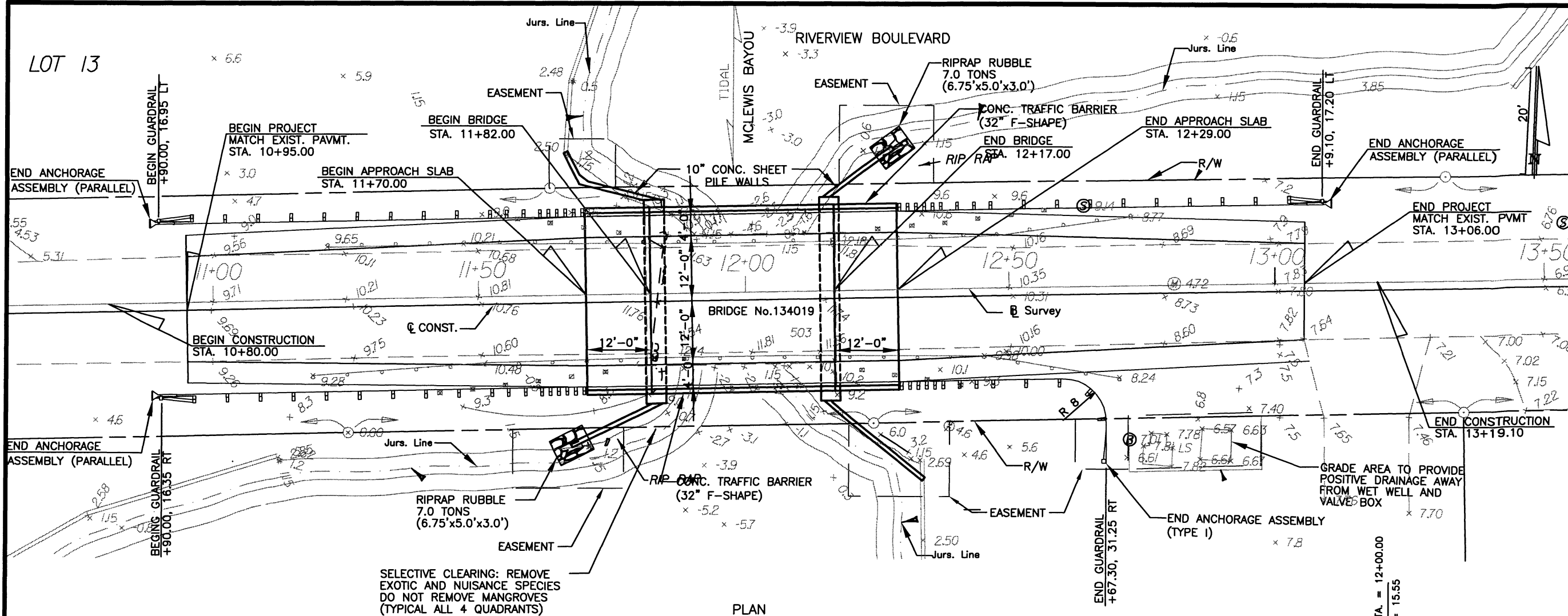
GENERAL NOTES

REVISION	BY	DATE
SURVEYED	ZNS	3/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

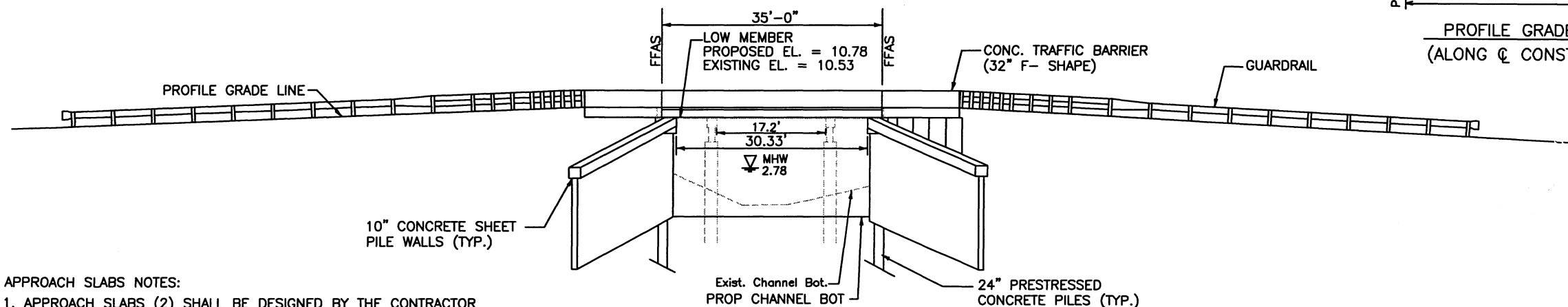
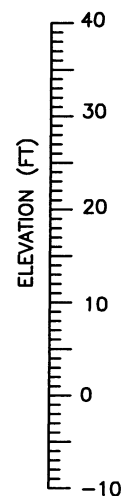
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LOT 13



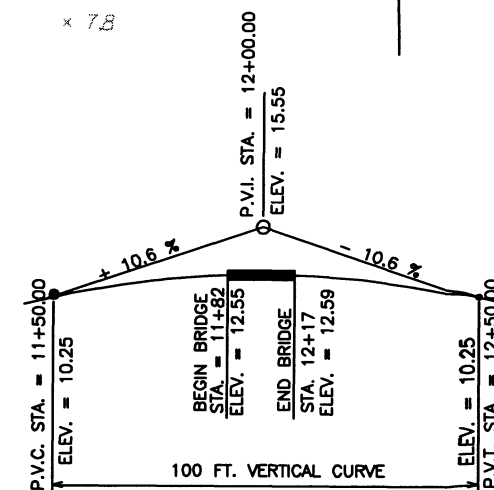
PLAN



ELEVATION

APPROACH SLABS NOTES:

1. APPROACH SLABS (2) SHALL BE DESIGNED BY THE CONTRACTOR FOR HL-93 LIVE LOAD.
2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE APPROACH SLABS FOR ENGINEER'S APPROVAL.



PROFILE GRADE DATA  
(ALONG  $\mathcal{C}$  CONSTRUCTION)



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BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

PLAN AND ELEVATION

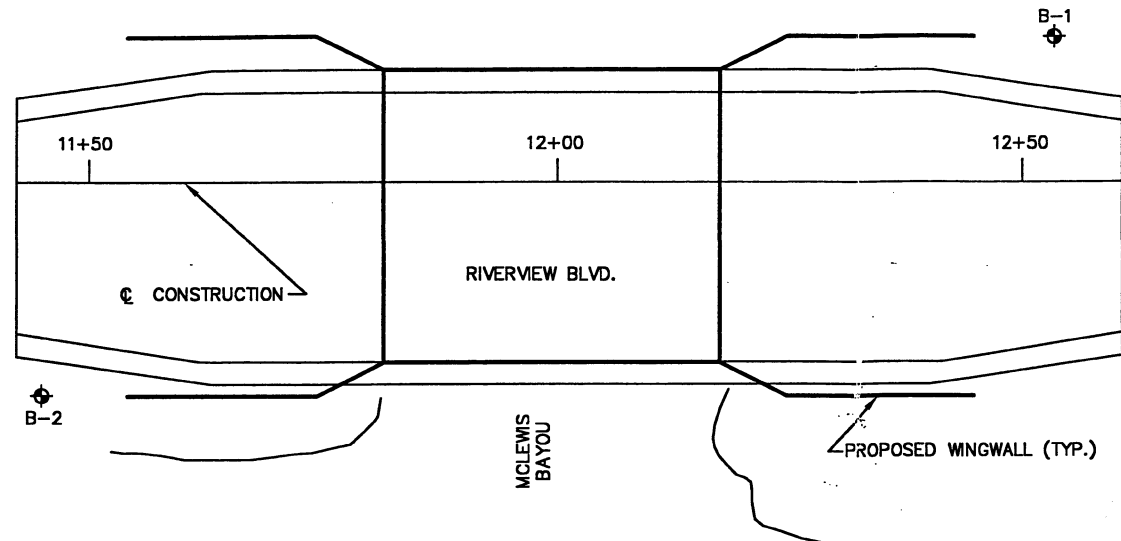
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CHECKED	LSM	7/09

SEAL

ROBERT R. BREEN, PE No. 61064

SHEET 4 OF 14

*Robert R. Breen*



## BORING LOCATION PLAN

0 20'  
PLAN SCALE

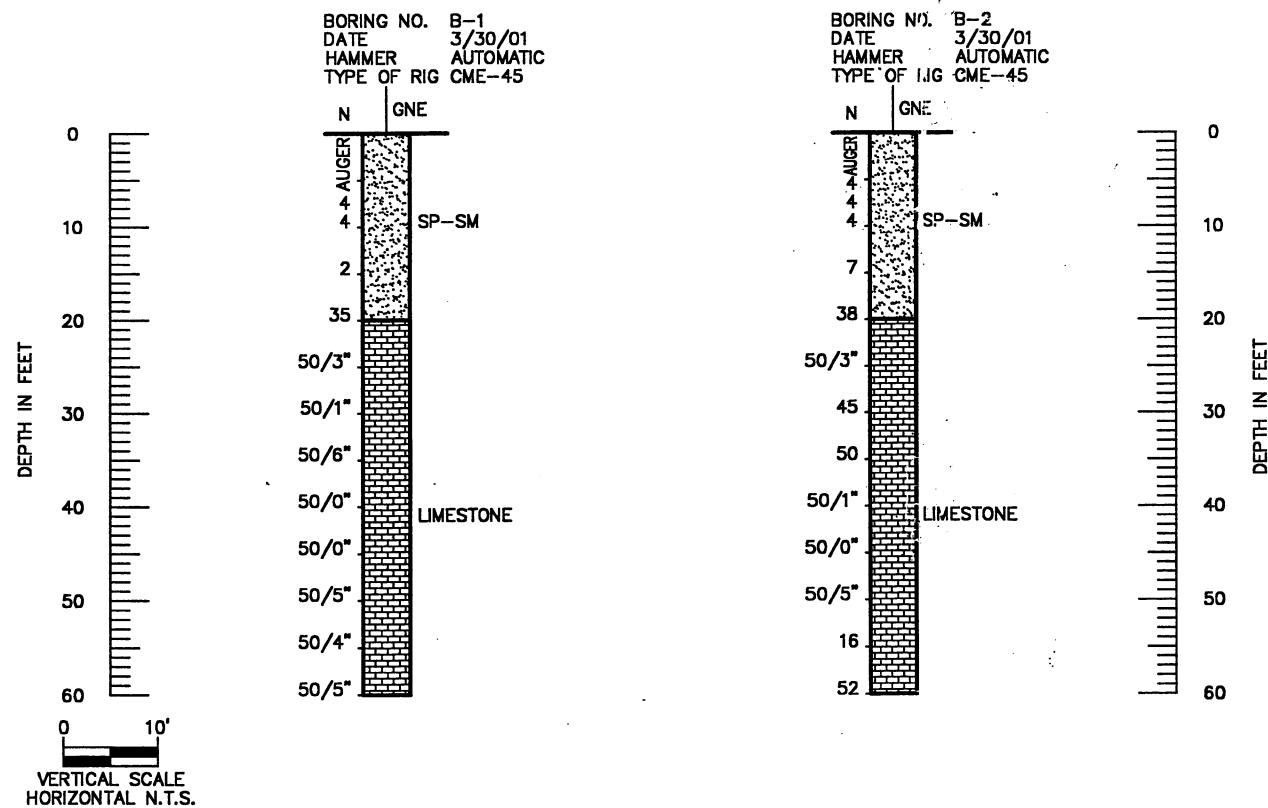


## LEGEND

- (SP-SM), GRAY AND BROWN SLIGHTLY SILTY FINE SAND WITH SHELL INTERMIXED
- (LIMESTONE), GRAY INDURATED SILTY CLAY TO CLAYEY SILT, WEATHERED LIMESTONE

### NOTES:

- WATER TABLE
- NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12" PENETRATION. (UNLESS OTHERWISE NOTED.)
- APPROXIMATE SPT BORING LOCATION
- 50/6" FIFTY BLOWS FOR SIX INCHES



### ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: MODERATELY AGGRESSIVE

### SOIL

RESISTIVITY: 1600 OHMS-CM  
CHLORIDES: < 80 PPM  
SULFATES: < 288 PPM  
pH: 7.21

GRANULAR MATERIALS- RELATIVE DENSITY	SPT (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	5-10
MEDIUM	11-30
DENSE	31-50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/FT.)
VERY SOFT	LESS THAN 2
SOFT	3-4
FIRM	5-8
STIFF	9-15
VERY STIFF	16-30
HARD	GREATER THAN 30

REVISIONS					
Date	By	Description	Date	By	Description

Drawn by	KM	Date	4/01
Checked by	JAS		
Designed by			
Checked by			
Approved by	SAM A. FUSCO, P.E.		



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



FLORIDA DEPARTMENT OF TRANSPORTATION  
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID.
-	MANATEE	-

SHEET TITLE:	REPORT OF CORE BORINGS	SHEET NO.
PROJECT NAME:	RIVERVIEW BOULEVARD BRIDGE NO. 134019	5

DATE: 07/01/01 BY: J. L. BREEN, PE No. 61064 PROJECT: RIVERVIEW BOULEVARD BRIDGE OVER MCLEWIS BAYOU



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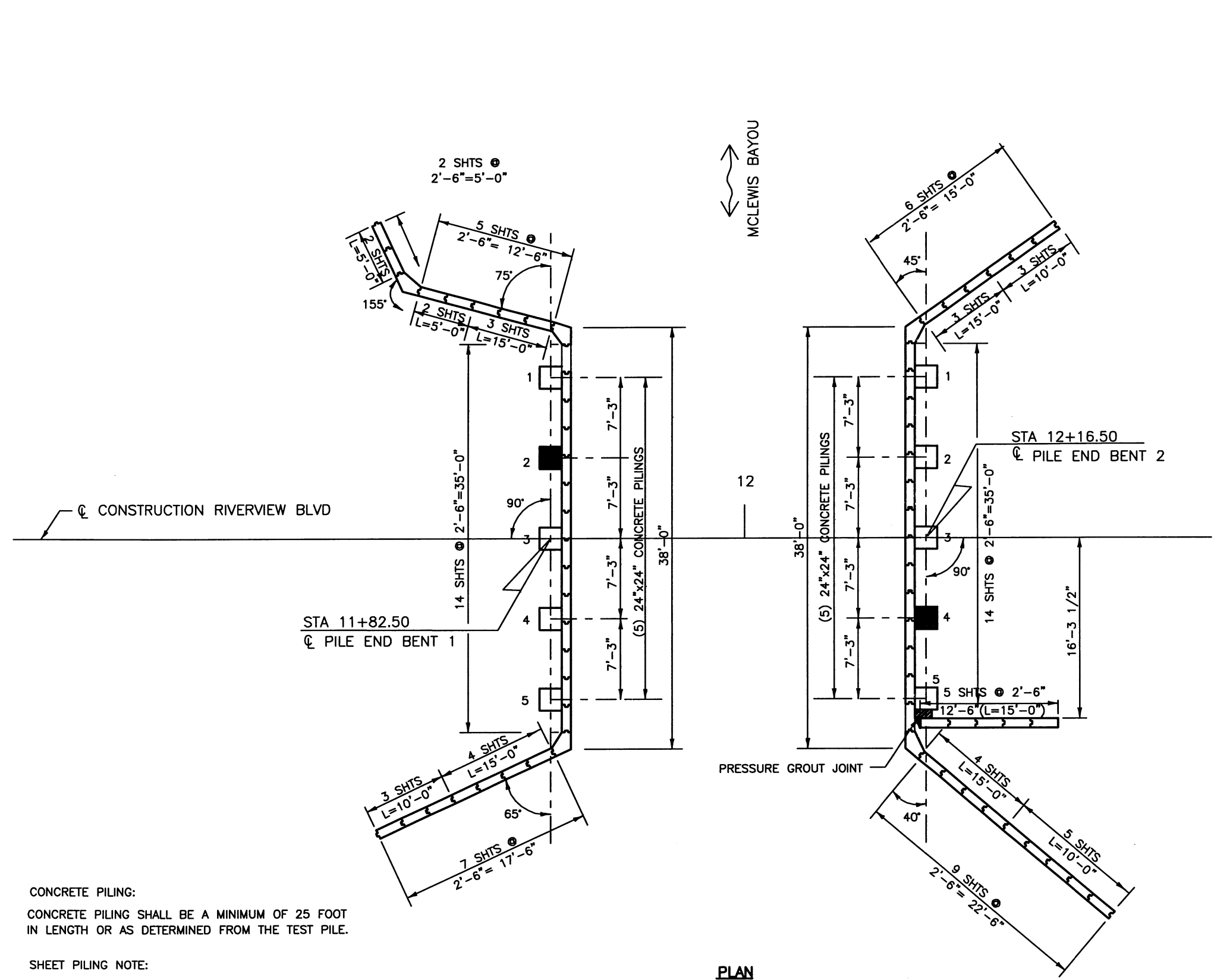
FOUNDATION LAYOUT

REVISION		DATE
	BY	DATE
SURVEYED	ZNS	7/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

SEAL

ROBERT R. BREEN, PE No. 61064

SHEET 6 OF 14



PLAN

CONCRETE PILING:  
CONCRETE PILING SHALL BE A MINIMUM OF 25 FOOT  
IN LENGTH OR AS DETERMINED FROM THE TEST PILE.

SHEET PILING NOTE:  
CONTRACTOR TO PROVIDE SHOP DRAWINGS TO THE  
ENGINEER OF RECORD FOR HIS APPROVAL.

ALL SHEET PILE JOINTS AND WEEP HOLES SHALL BE  
BACKED WITH FILTER CLOTH.

SHEET PILE		
TYPE	LENGTH FT	NUMBER
2'-6"	20	28
2'-6"	15	19
2'-6"	10	15
CORNER	20	5

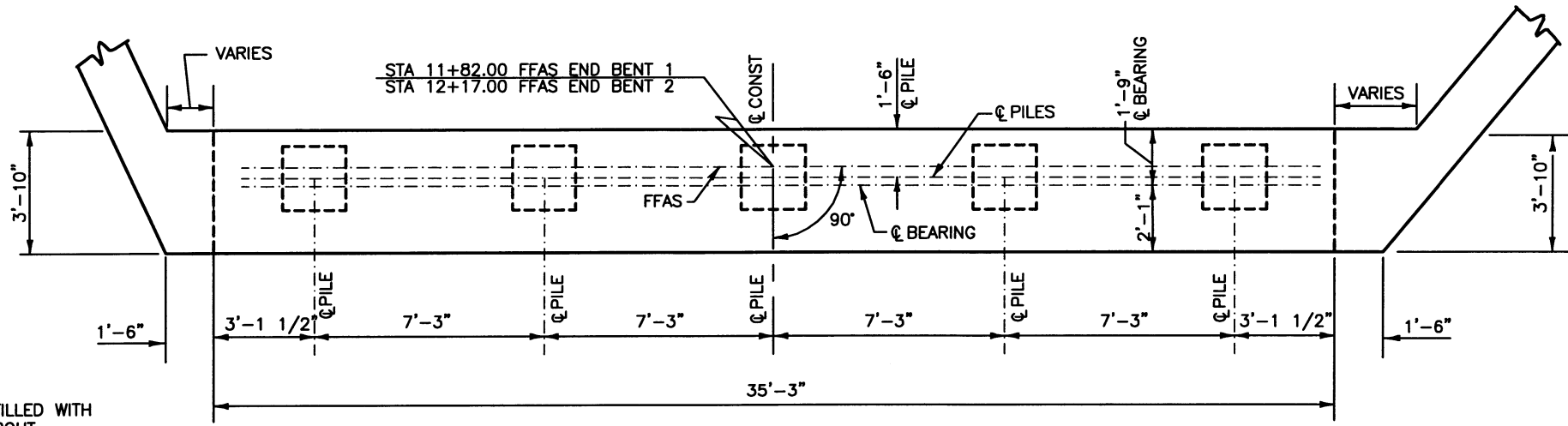
TEST PILE TABLE		
LOCATION	PILE NUMBER	LENGTH FT
EB-1	2	35
EB-2	4	35

LEGEND

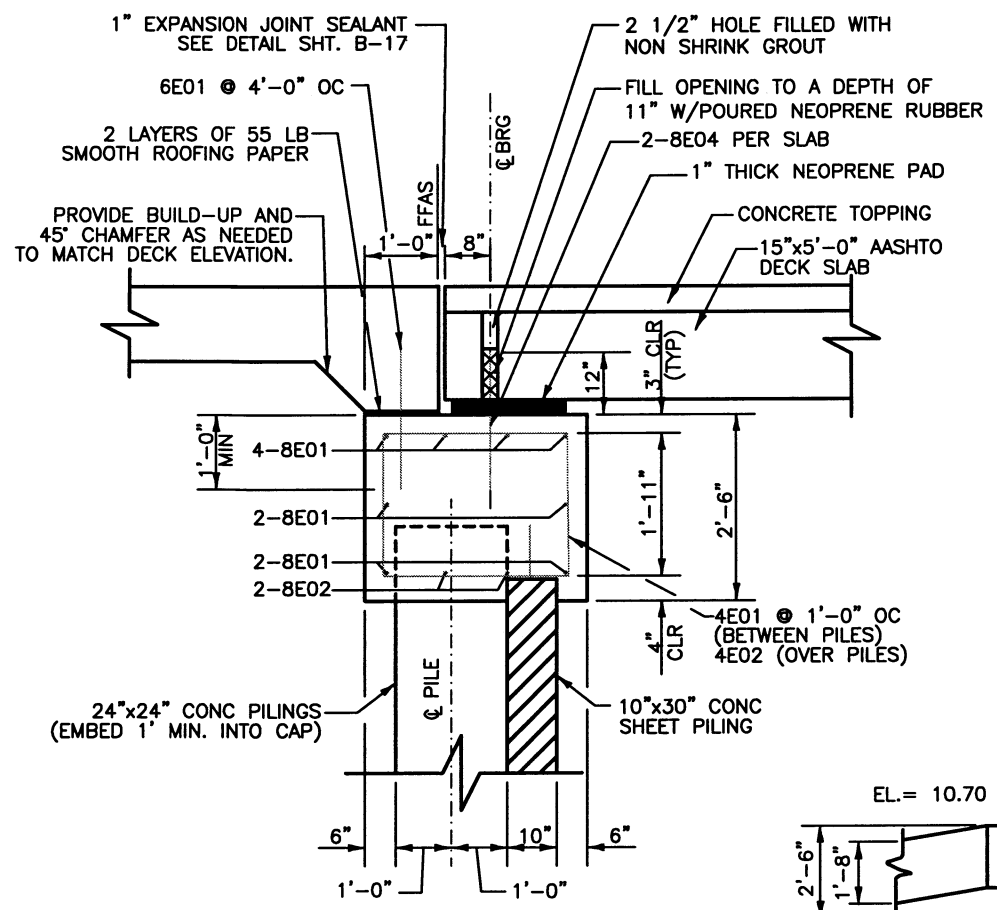
TEST PILE

NEW PILE

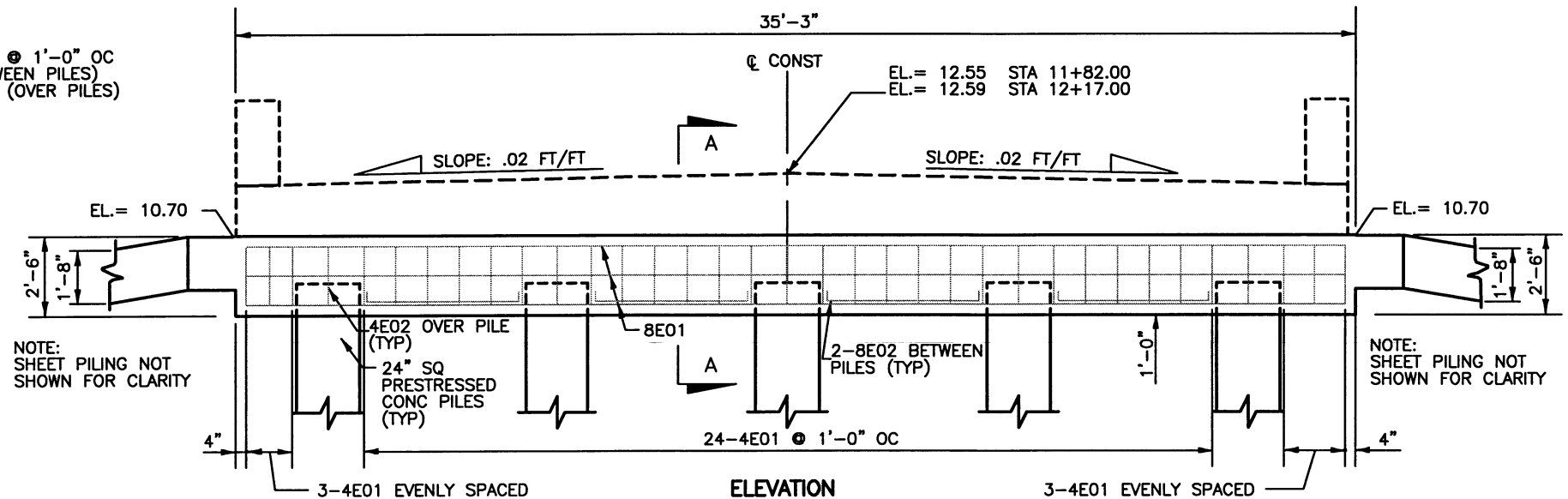
ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CLASS IV CONCRETE (SUBSTRUCTURE)	CY	35
REINFORCING STEEL (SUBSTRUCTURE)	LB	3160



PLAN  
SCALE: 1"=5'-0"



SECTION A-A  
SCALE: 1"=5'-0"



ELEVATION  
SCALE: 1"=5'-0"

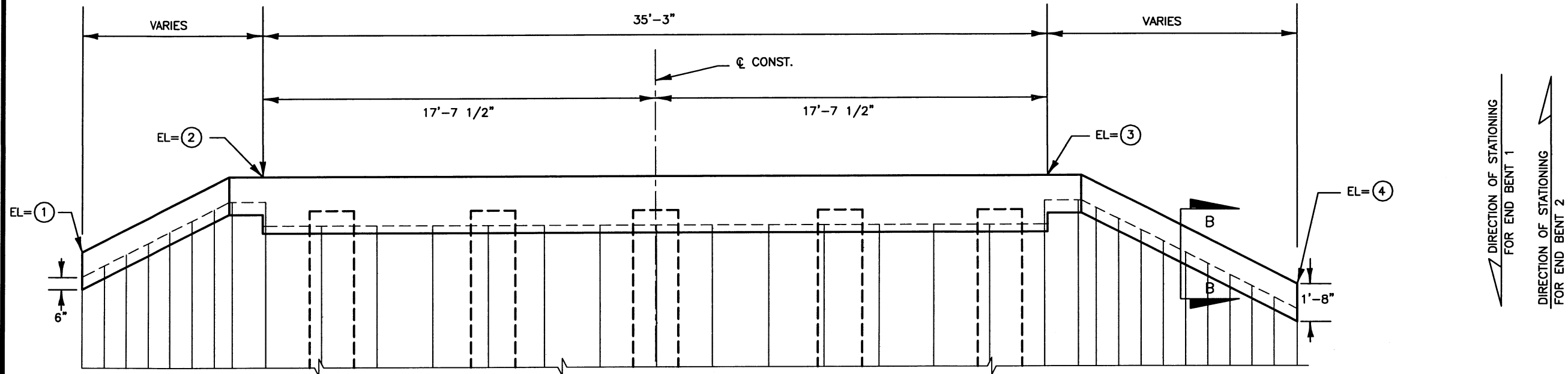


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**RIVERVIEW BOULEVARD BRIDGE  
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**END BENTS 1 & 2**

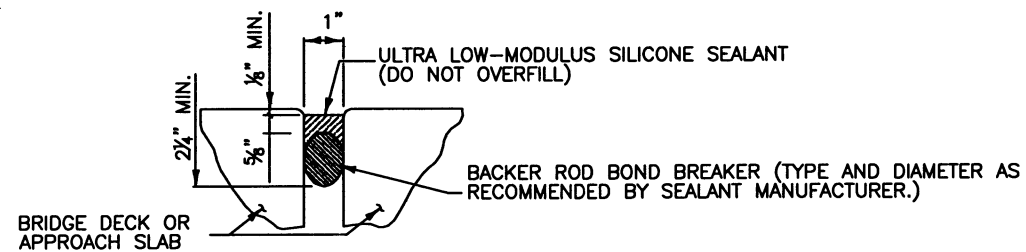
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SEAL  
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SHEET 7 OF 14

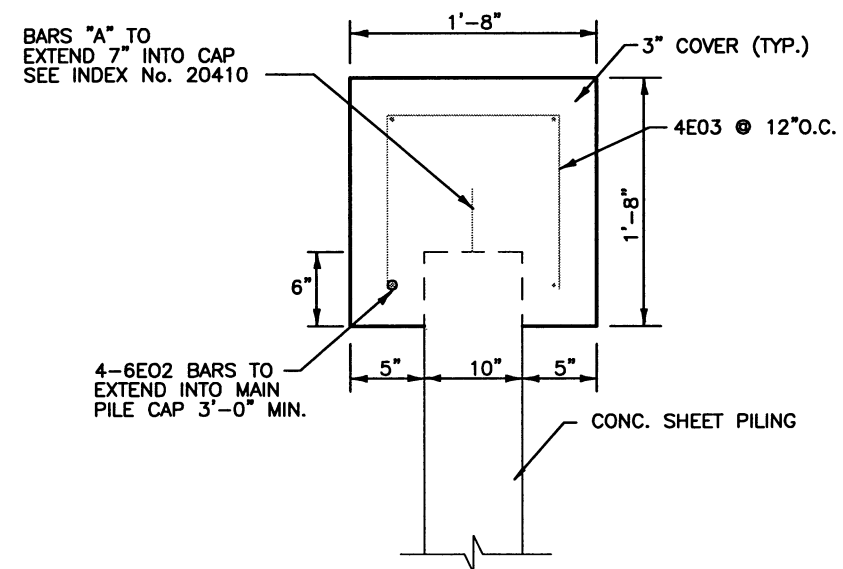


**END BENT ELEVATION**  
SCALE: 1"=5'-0"

TABLE OF ELEVATIONS				
END BENT NO.	①	②	③	④
1	2.60	10.70	10.70	2.50
2	2.50	10.70	10.70	2.69



**EXPANSION JOINT DETAIL**  
N.T.S.



**SECTION B-B**  
SCALE: 1"=1'-3"



PREPARED BY:



**WADETRIM**

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Certificate of Authorization No. 3062

RIVERVIEW BOULEVARD BRIDGE  
OVER MCLEWIS BAYOU  
BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

END BENTS DETAILS

REVISION		DATE
SURVEYED	BY	DATE
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

SEAL

*Robert R. Breen*

ROBERT R. BREEN, PE No.61064

SHEET 8 OF 14





PREPARED BY:

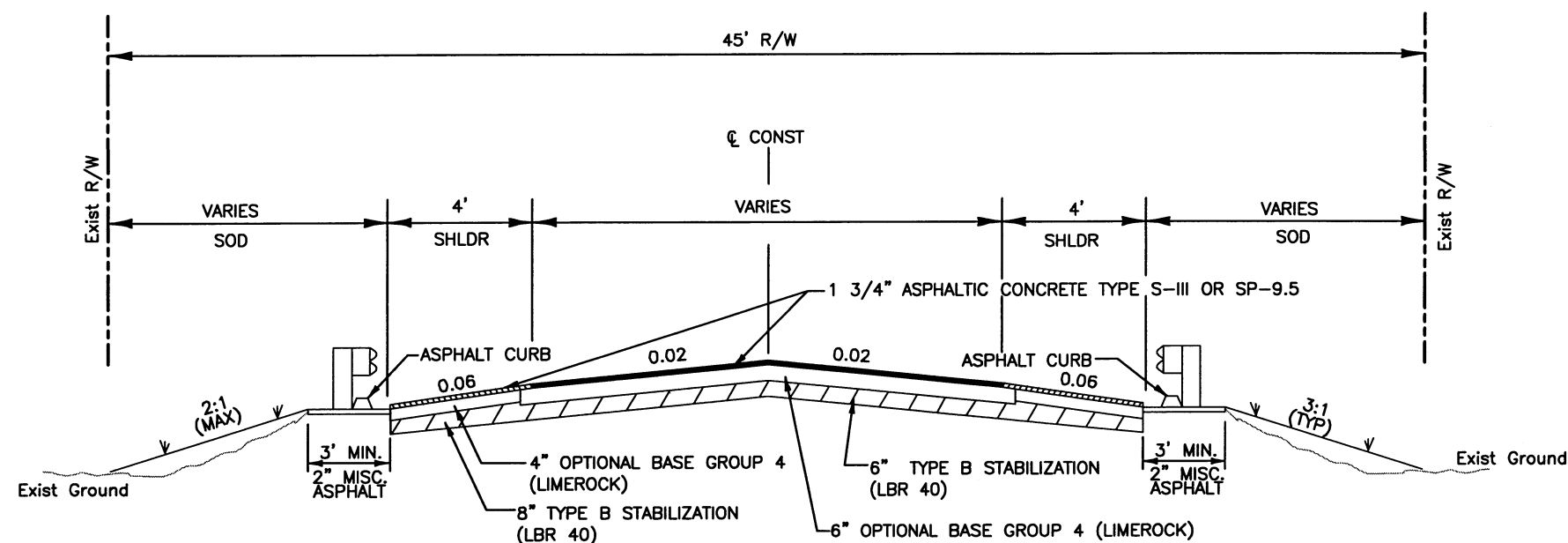


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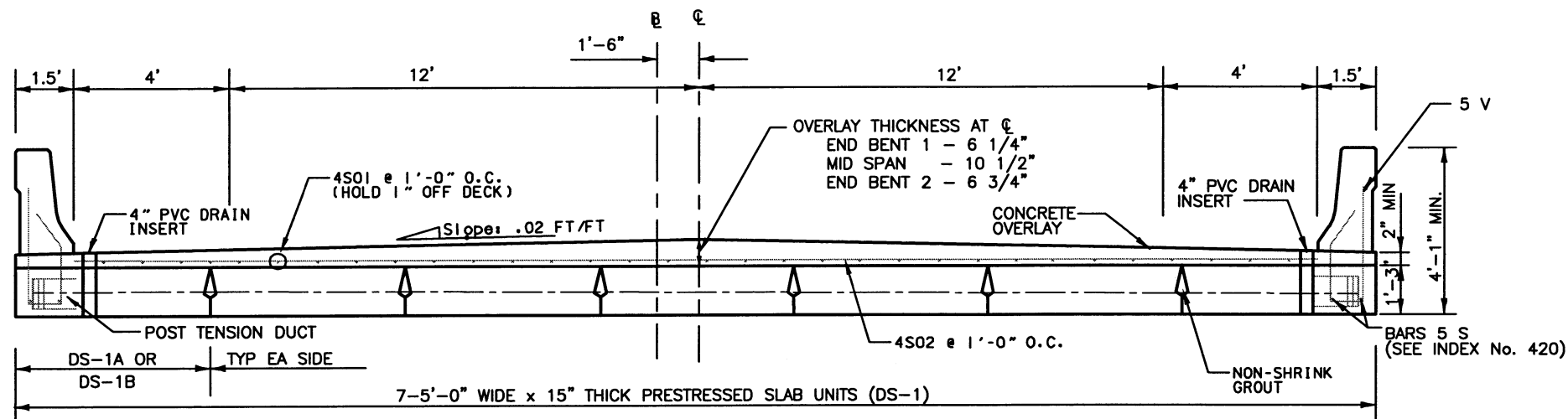
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RIVERVIEW BOULEVARD BRIDGE  
OVER MCLEWIS BAYOU  
BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

TYPICAL SECTIONS



**ROADWAY TYPICAL**  
STA 10+95.00 TO STA 11+70.00  
STA 12+29.00 TO STA 13+06.00



**BRIDGE TYPICAL**  
(LOOKING UP STATION)

**ESTIMATED QUANTITIES**

ITEM	UNIT	QUANTITY
CLASS IV CONCRETE (SUPERSTRUCTURE)	CY	25
REINFORCING STEEL (SUPERSTRUCTURE)	LB	1505

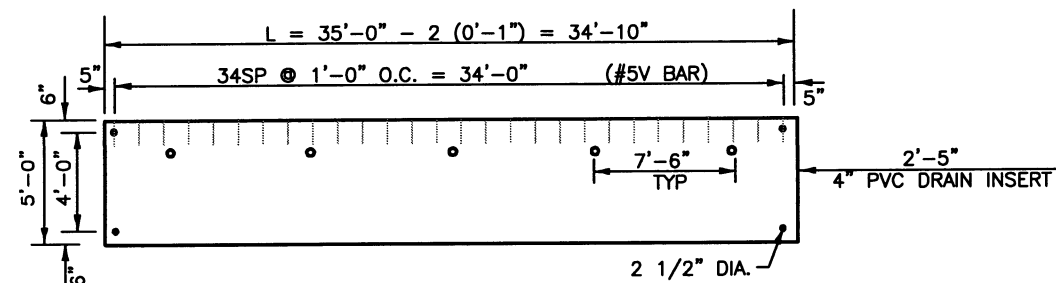
**SUPERSTRUCTURE NOTES:**

- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR THE PRESTRESSED SLAB UNITS AND POST TENSION SYSTEM TO THE ENGINEER OF RECORD FOR HIS APPROVAL.
- A VARIABLE DEPTH CONCRETE OVERLAY SHALL BE PLACED ON TOP OF THE PRESTRESSED SLAB UNITS.

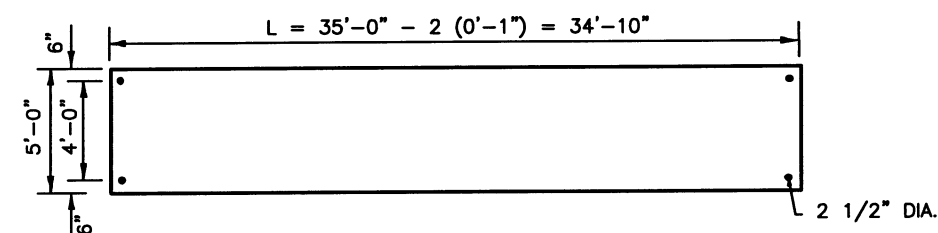
REVISION		DATE
BY	DATE	
SURVEYED	ZNS	7/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

SEAL

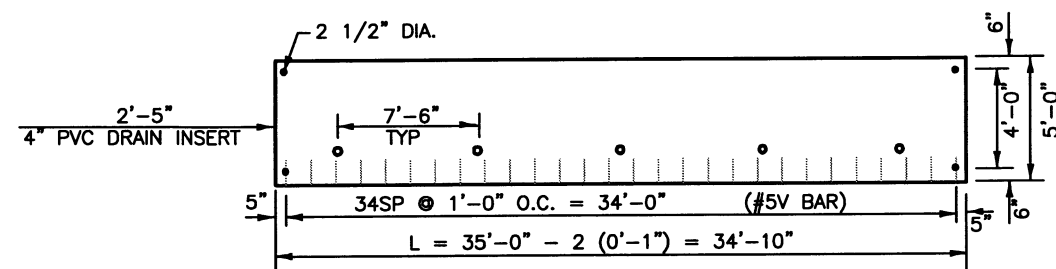
ROBERT R. BREEN, PE No. 61064



MK DS-1A (1) REQUIRED



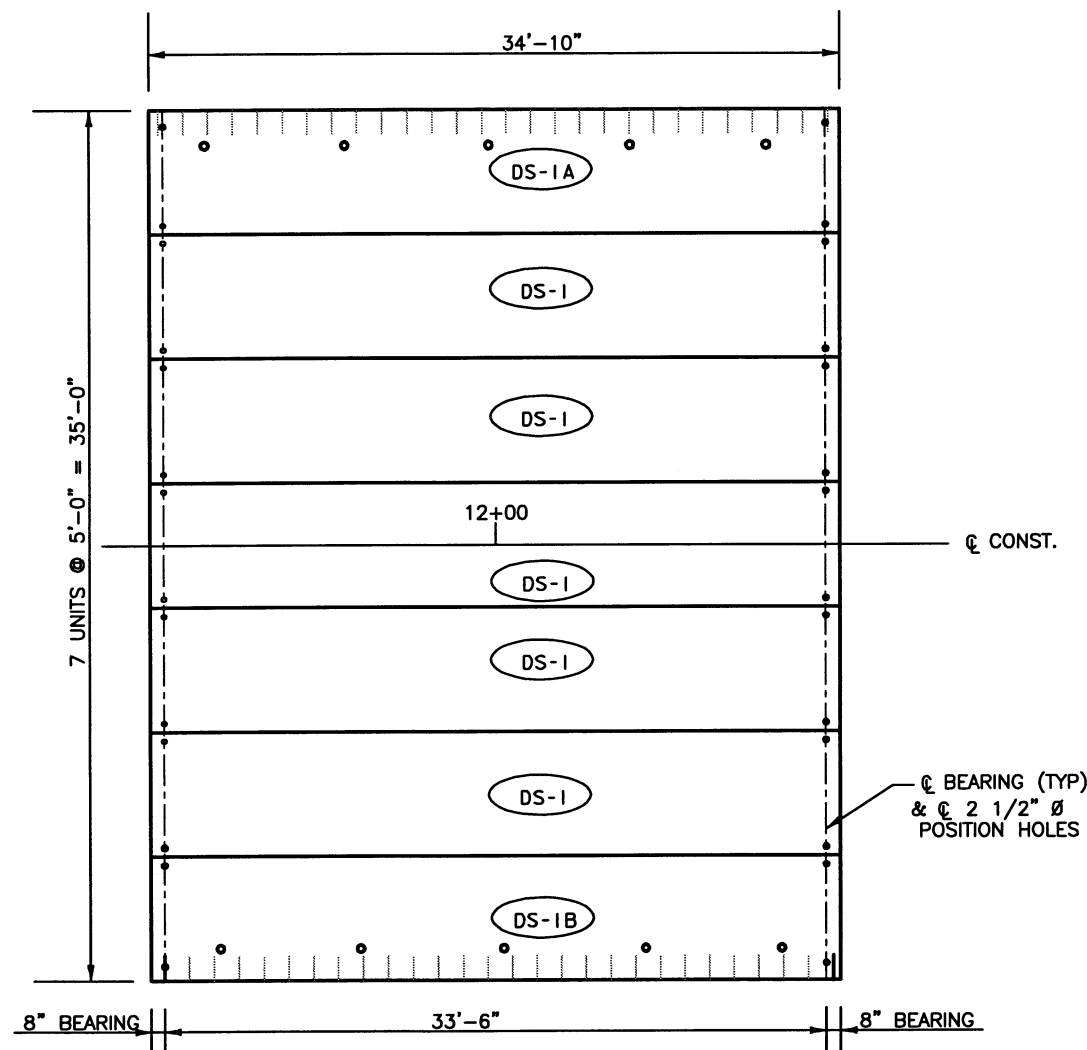
MK DS-1 (5) REQUIRED



MK DS-1B (1) REQUIRED

#### DECK SLAB NOTES

1. DECK SLAB SHALL BE DESIGNED BY THE CONTRACTOR FOR HL-93 LIVE LOAD, FUTURE WEARING SURFACE (15 LB/SF) AND ALL DEAD LOADS AS SHOWN IN THE PLANS.
2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE DECK SLAB UNITS FOR THE ENGINEERS APPROVAL.
3. 5V BARS SHALL BE OF SUFFICIENT LENGTH TO ACCOMODATE THE TOPPING.
4. THE COST OF (28) BEARING PADS, POURED NEOPRENE RUBBER AND 70 LF OF EXPANSION JOINT SEALANT SHALL BE INCLUDED IN THE UNIT PRICE FOR PRESTRESSED SLAB UNITS.
5. THE BEARING PADS SHALL BE 1" THICK AND HAVE A HARDNESS OF 50 DUROMETER.



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RIVERVIEW BOULEVARD BRIDGE  
OVER MCLEWIS BAYOU

BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

FRAMING PLAN

REVISION		DATE
SURVEYED	BY	DATE
DESIGNED	ZNS	7/01
DRAWN	RRB	7/09
CHECKED	Y.L.	7/09
	LSM	7/09

SEAL

ROBERT R. BREEN, PE No. 61064

SHEET 10 OF 14

\\manatee\cadd\1104\110401104\110401104.dwg 11/11/09 11:04:01 AM 11/11/09 11:04:01 AM 11/11/09 11:04:01 AM

END BENT 1

M A R K		LENGTH		NO	TYP	STY	B			C			D			E			F			H			J			K			N	O
S/ZE	DESCR	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	NO	ANG
4	4E01	11	3	30	4	4.5		1	11		3	4																				
4	4E02	7	2	5	11			3	4		1	11		1	11																	
4	4E03	25	0	8	1			25	0																							
6	6E01	2	0	9	1			2	0																							
6	6E02	3	6	39	11			1	2		1	2		1	2																	
8	8E01	34	7	8	1			34	7																							
8	8E02	7	1	8	11			5	1		1	0		1	0																	
8	8E04	2	0	14	1			2	0																							

END BENT 2

M A R K		LENGTH		NO	TYP	STY	B			C			D			E			F			H			J			K			N	O
SIZE	DESCR	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	NO	ANG
4	4E01	11	3	30	4	4.5		1	11		3	4																				
4	4E02	7	2	5	11			3	4		1	11		1	11																	
4	4E03	25	0	8	1			25	0																							
6	6E01	2	0	9	1			2	0																							
6	6E02	3	6	39	11			1	2		1	2		1	2																	
8	8E01	34	7	8	1			34	7																							
8	8E02	7	1	8	11			5	1		1	0		1	0																	
8	8E04	2	0	14	1			2	0																							

SUPERSTRUCTURE

M A R K		LENGTH		NO	TYP	STY	B			C			D			E			F			H			J		K		N	O
SIZE	DESCR	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	NO	ANG	
4	4S01	34	4	33	1			34	4																					
4	4S02	32	0	35	1			32	0																					



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RIVERVIEW BOULEVARD BRIDGE  
OVER MCLEWIS BAYOU  
BRIDGE No. 134019  
MANATEE COUNTY, FLORIDA

REINFORCING BAR LIST

REVISION		DATE
	BY	DATE
SURVEYED	ZNS	07/01
DESIGNED	RRE	07/09
DRAWN	YL	07/09
CHECKED	LSM	07/09

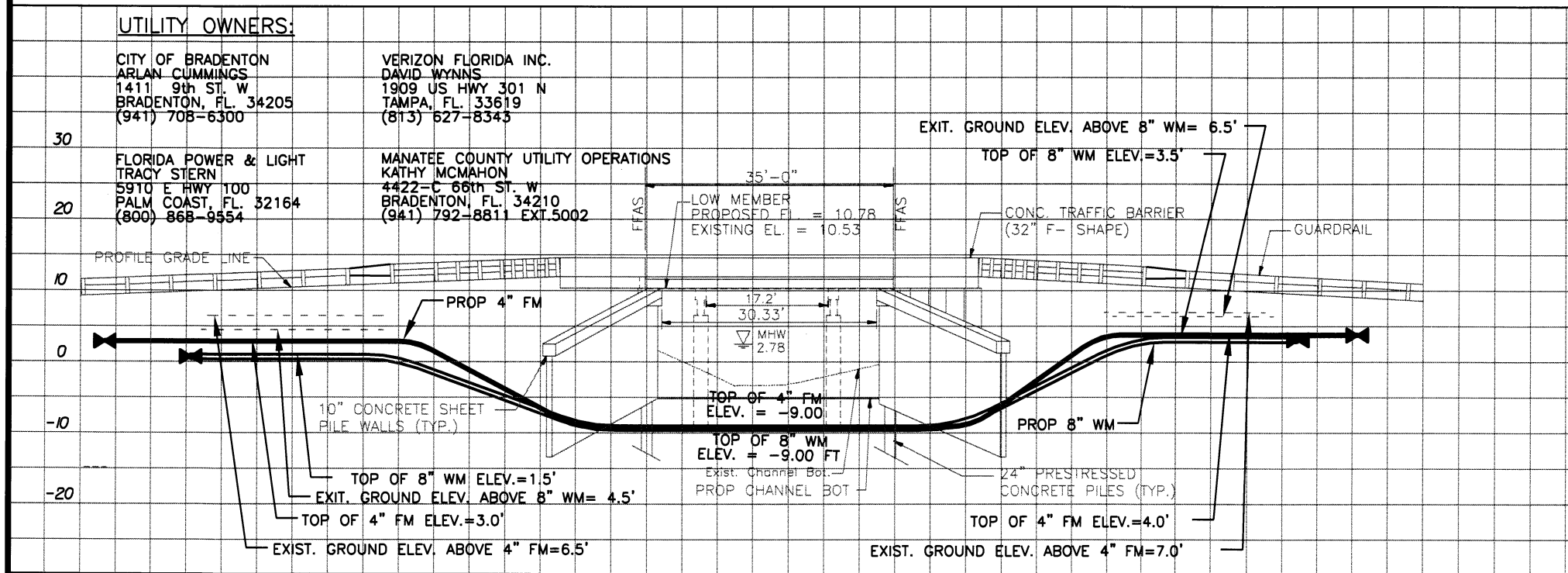
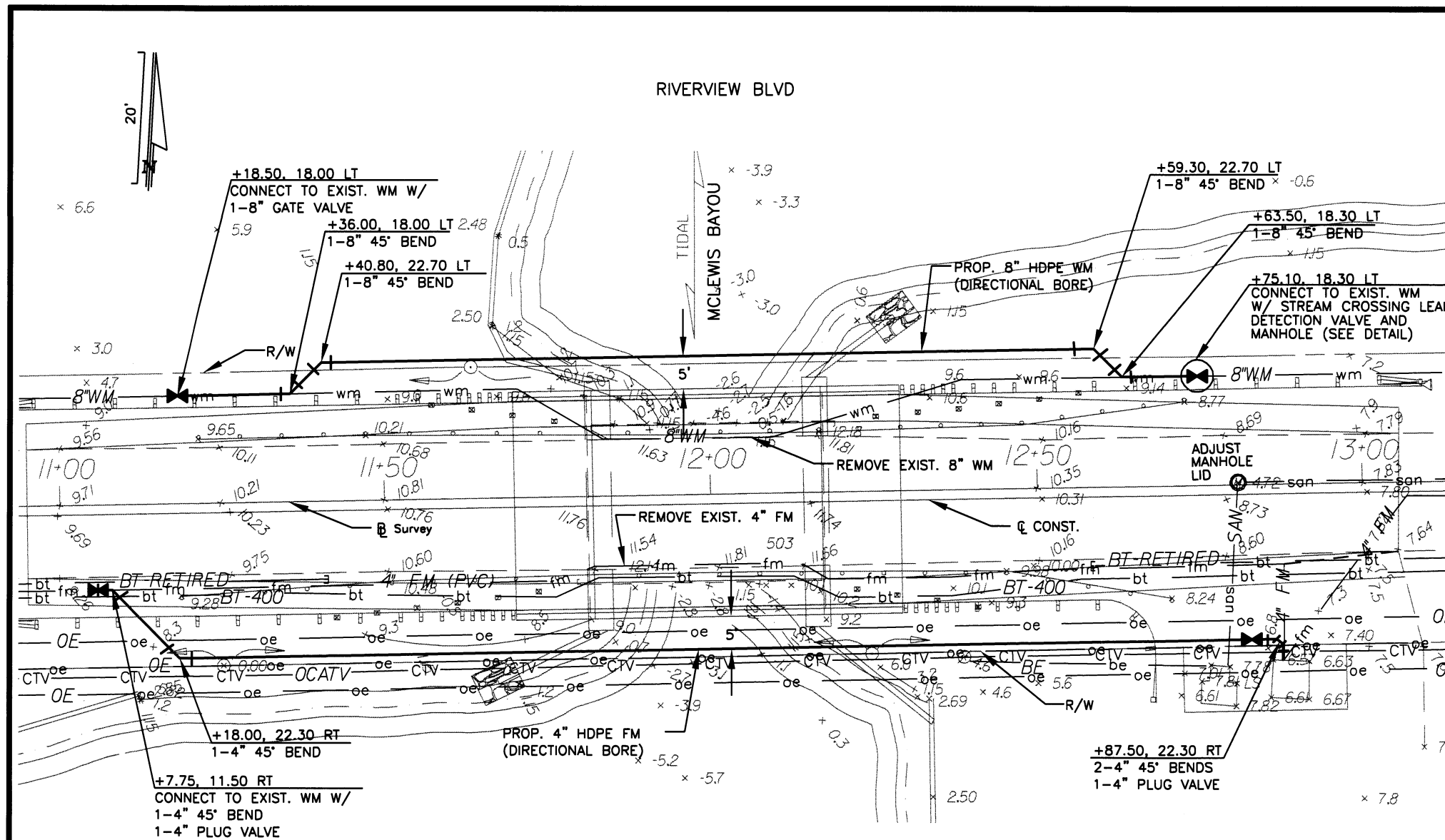
SEAL

Note : All Steel this sheet shall  
be Grade 60.

*Robert R. Breen*

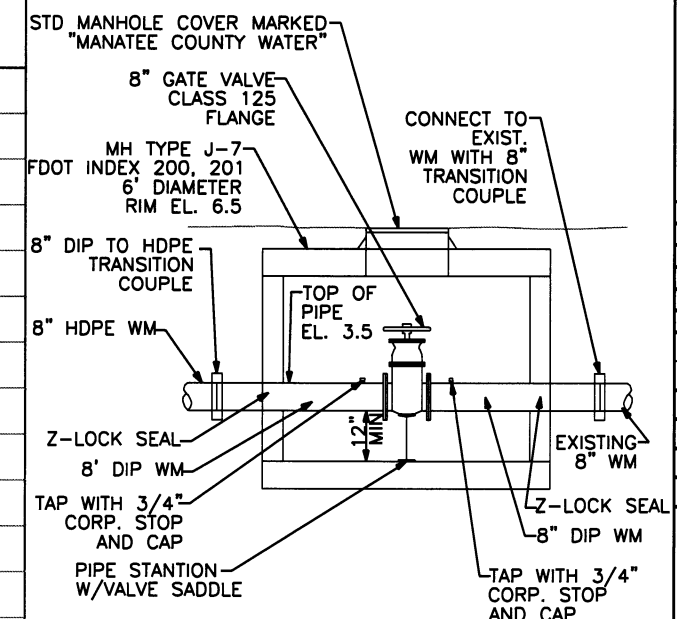
ROBERT R. BREEN, PE No.61064

SHEET 11 OF 14

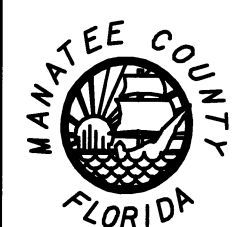


# UTILITY WORK

1. CONTRACTOR SHALL PROVIDE BYPASS WATER SERVICE DURING CONSTRUCTION AND RECONNECT ANY AFFECTED WATER SERVICES TO THE PROPOSED 8" WATERMAIN.
2. THE CONTRACTOR SHALL REMOVE APPROX. 160 L.F. OF EXISTING 8" WM AND INSTALL SUBAQUEOUS, 165 LF OF 8" HDPE DR-11 CLASS 160 PIPE. THE PRICE FOR INSTALLATION INCLUDES FITTINGS, RESTORATION, TESTING, DEWATERING, EXCAVATION INCLUDING ROCK AND ANY WORK INFERRED OR SPECIFICALLY CALLED FOR IN THE DRAWINGS OR SPECIFICATIONS.
3. THE CONTRACTOR SHALL REMOVE APPROX. 198 L.F. OF EXISTING 4" FM AND INSTALL SUBAQUEOUS, 195 LF OF 4" HDPE DR-11 CLASS 160 PIPE. THE PRICE FOR INSTALLATION INCLUDES FITTINGS, RESTORATION, TESTING, DEWATERING, EXCAVATION INCLUDING ROCK AND ANY WORK INFERRED OR SPECIFICALLY CALLED FOR IN THE DRAWINGS OR SPECIFICATIONS.
4. PIPE SHALL BE GREEN FOR FM AND BLUE FOR POTABLE WATER.
5. EXPOSED D.I.P. SHALL BE GIVEN TWO COATS OF FACTORY APPLIED EPOXY FOR A TOTAL DFM OF 11 MILS. GREEN FOR FM AND BLUE FOR POTABLE WATER.
6. PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIALS FOR APPROVAL.
7. THE CONTRACTOR SHALL SEQUENCE THE UTILITY WORK TO MINIMIZE INTERRUPTIONS AND INCONVENIENCE TO UTILITY CUSTOMERS.
8. ALL WORK MUST MEET OR EXCEED CURRENT MANATEE COUNTY STANDARDS.
9. RECORD DRAWINGS SHALL BE CERTIFIED BY A FLORIDA LICENSED SURVEYOR AND MAPPER AND BY THE ENGINEER OF RECORD.
10. ALL REQUIRED TESTING OF THE 8" WM AND 4" FM SHALL BE COMPLETED PRIOR TO CUT-IN. ALL TEMPORARY PLUGS AND FITTINGS REQUIRED FOR TESTING SHALL BE INCLUDED IN THE UNIT PRICE OF THE PIPE.
11. THE CONTRACTOR SHALL NOT SHUT DOWN THE LIFTSTATION FOR MORE THAN 2 HOURS TO ACCOMMODATE THE FOREMAIN RECONNECTION.
12. THE COST OF ADJUSTING MANHOLE LIDS AND VALVE COVERS SHALL BE INCIDENTAL TO THE WORK.



STREAM CROSSING LEAK DETECTION  
VALVE AND MANHOLE  
N.T.S.



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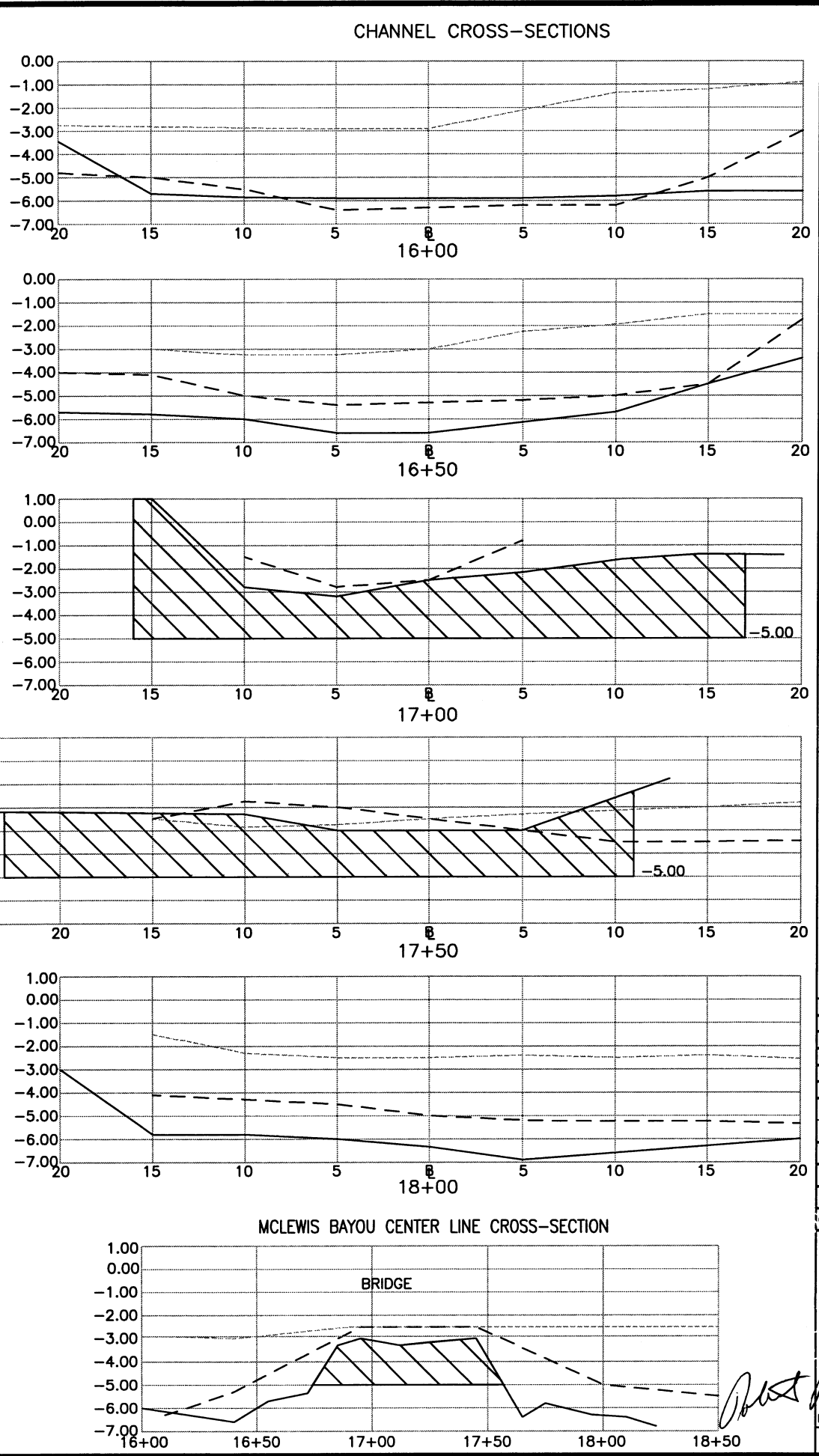
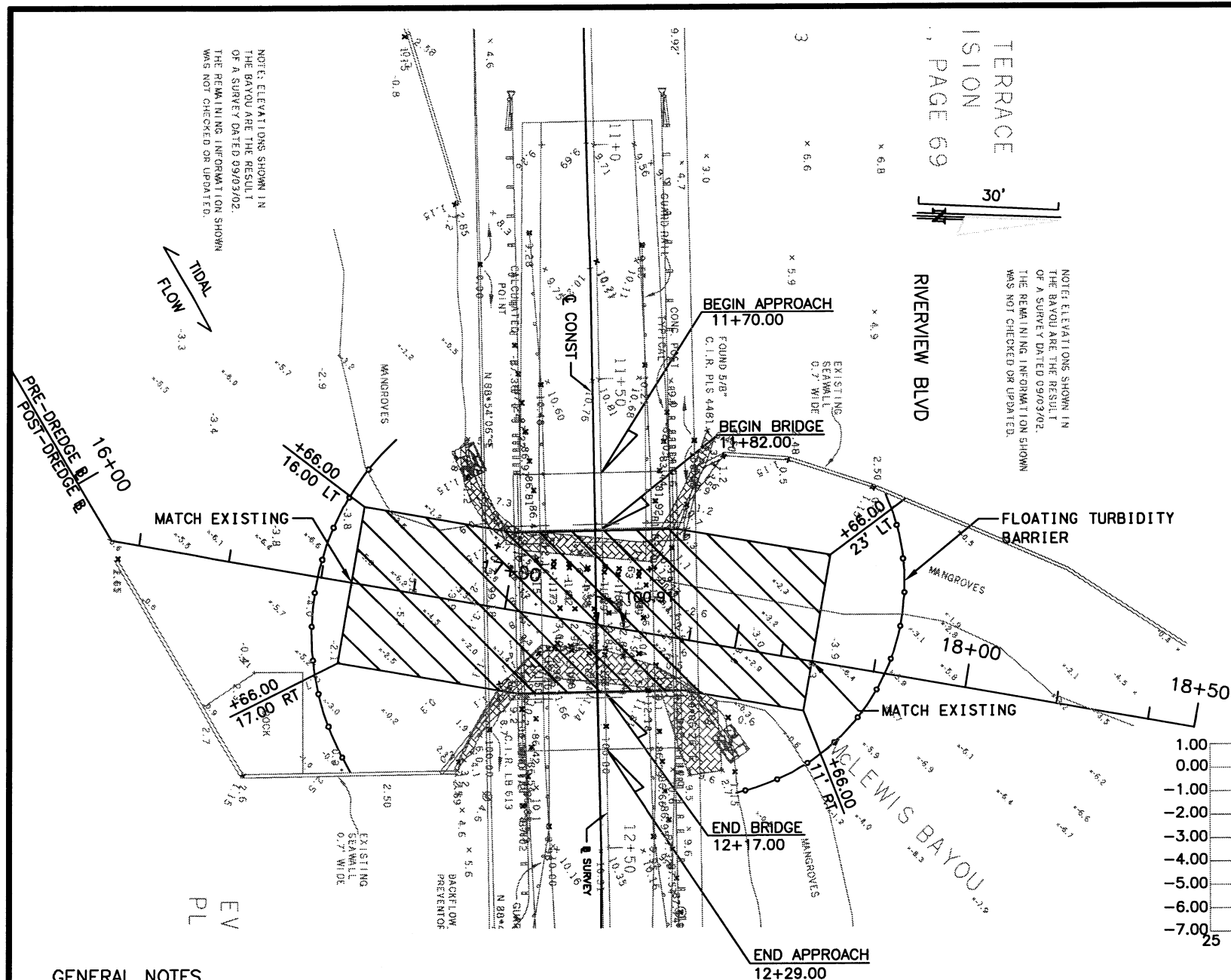
UTILITY RELOCATION

REVISION	BY	DATE
SURVEYED	ZNS	7/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

SEAL

ROBERT R. BREEN, PE No.61064

SHEET 12 OF 14



# GENERAL NOTES

1. This plan represents a modification to Environmental Resource Permit (ERP), DEP Project No. 41-01488573-001 issued to Manatee County December 17, 1999. All applicable conditions of the original permit shall be met during the performance of this work. The Contractor shall also meet the requirements of other permits related to the replacement of the Riverview Boulevard bridge such as DEP, ACOE and US Coast Guard.
2. Work to be performed during this activity includes hydraulic or mechanical dredging of approximately 135 cubic yards of sediment from 0.08 acres of submerged lands in order to restore the channel to a navigable depth of -5.0' below mean low water within the vicinity of the Riverview Boulevard over the McLewis Bayou bridge. Work to be performed under this permit modification shall only extend to the limits shown on this plan.
3. Dredged sediments are to be transported via pumping, barge or hauling in watertight trucks to the spoil site designated in the original application located near the intersection of 1st Avenue North and 39th Street West to the south of this project.
4. Soil erosion and sedimentation control and monitoring measures required by the permit will be implemented for this work including but not limited to; staked and floating turbidity barrier, staked silt fence, soil tracking prevention devices, turbidity monitoring and reporting. The County representative shall direct the Contractor to implement or modify any of the above features as necessary to preserve environmental quality.

## LEGEND

- PROPOSED LIMITS OF DREDGING
- 9/3/02 (CURRENT)
- POST-DREDGE
- PRE-DREDGE

**MANATEE COUNTY  
FLORIDA**

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**RIVERVIEW BOULEVARD BRIDGE  
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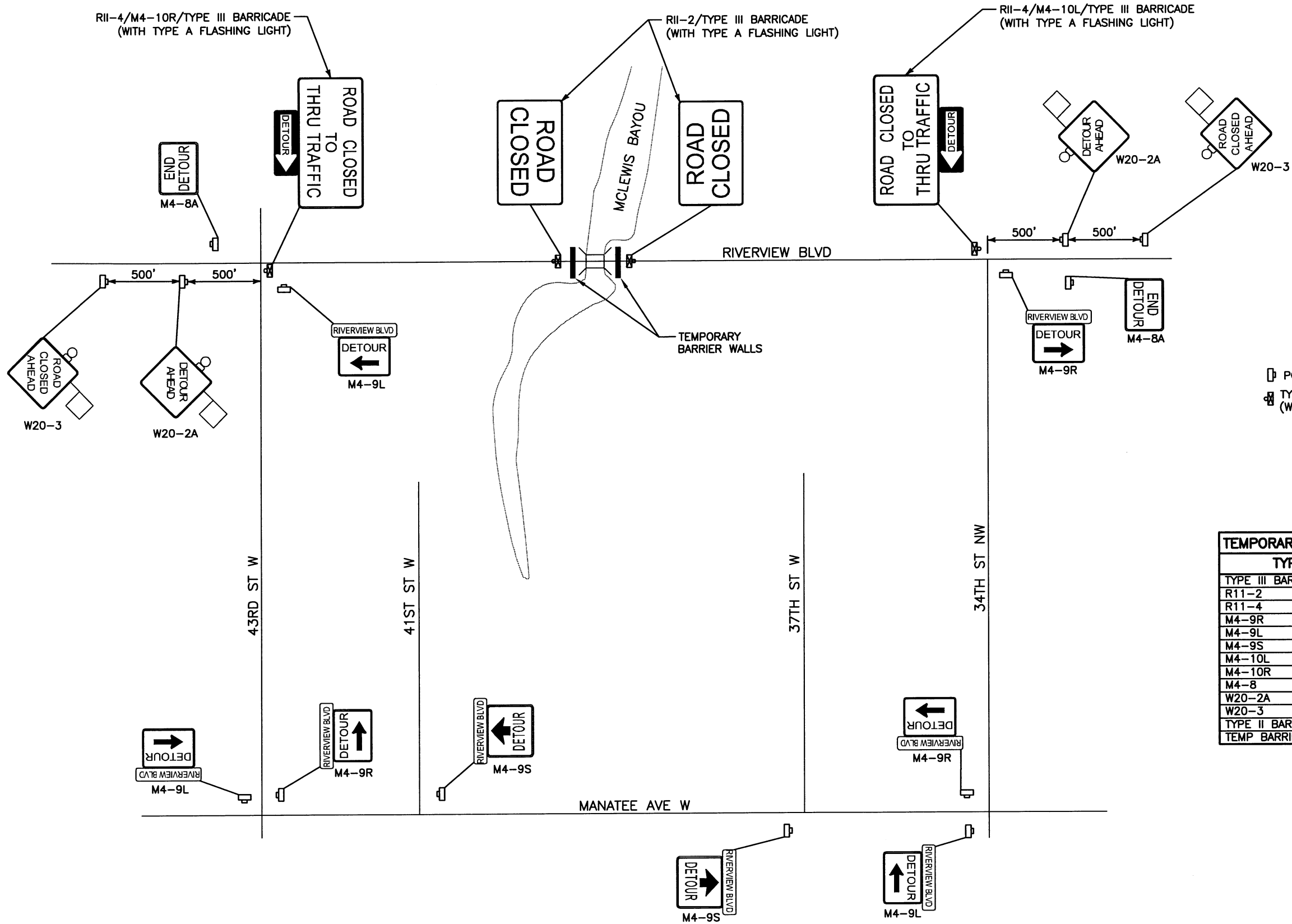
**PROPOSED DREDGING PLAN**

REVISION		DATE
SURVEYED	ZNS	7/01
DESIGNED	RRB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/09

**SEAL**

ROBERT R. BREEN, PE No. 61064

**SHEET 13 OF 14**



- POST MOUNTED SIGN
- ▣ TYPE III BARRICADE (WITH TYPE A FLASHING LIGHT)

TEMPORARY SIGNING & BARRICADES	
TYPE	QUANTITY
TYPE III BARRICADE/R11-4	4
R11-2	2
R11-4	2
M4-9R	3
M4-9L	3
M4-9S	2
M4-10L	1
M4-10R	1
M4-8	2
W20-2A	2
W20-3	2
TYPE II BARRICADE	20 AS NEEDED
TEMP BARRIER WALL	40 LF



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**RIVERVIEW BOULEVARD BRIDGE  
 OVER MCLEWIS BAYOU**

BRIDGE No. 134019  
 MANATEE COUNTY, FLORIDA

**DETOUR PLAN**

REVISION		DATE
	BY	DATE
SURVEYED	ZNS	7/01
DESIGNED	RFB	7/09
DRAWN	YL	7/09
CHECKED	LSM	7/08

SEAL

*Robert R. Breen*

ROBERT R. BREEN, PE No.61064