PERMANENT RETAINING WALL SYSTEM DATA TABLES

GEOTECHNICAL INFORMATION						
		Reinforced Soil & Random Backfill	Loose Fine Sand	Firm Fine Sand	Loose Clayey Fine Sand	Firm Clayey Fine Sand
Depth Below Existing Ground Line (ft.)	Wall No. 1 & 2	——	0'-6'	6'-33'	33'-39'	——
	Wall No. 3	——	0'-10'	10'-26'	——	26'-39'
Unit Weight (pcf)		110 pcf Moist Weight In-Place	118 pcf	118 pcf	120 pcf	110 pcf
Cohesion (psf)					122 pcf	122 pcf
Internal Friction Angle		30°	30°	32°		

NOTE: If the unit weight and /or internal friction angle of the fill proposed by the Contractor differs from that shown above, the Project Engineer will contact both the District Geotechnical Engineer and the wall designer for a possible redesign.

RETAINING WALL VARIABLES						
Wall No.	Wall Settlement			Durability Category	Concrete Properties	
	Long Term Settlement (in.)	Short Term Settlement (in.)	Differential Settlement (in.)		Precast Wall Panels	
					Class	f'c (psi)
1 & 2	2" to 3"	1" to 2"	1/16"/1"	B	IV	5500
3	2" to 3"	1" to 2"	1/16"/1"	B	IV	5500

NOTE: Design walls for the settlements noted in the table.
Long term settlement is measured from the beginning of wall Construction.

SOIL REINFORCEMENT LENGTHS FOR EXTERNAL STABILITY												
Wall No. 1 & 2	Wall Height (ft.)	0-11	12	13-14	15	16-17	18	19-20	21	22-23	24	25
	Reinforcement Length (ft.)	8	9	10	11	12	13	14	15	16	17	18
	Bearing Pressure (psf)	1984	2295	2546	2857	3108	3419	3671	3980	4233	4543	4851
Wall No. 3	Wall Height (ft.)	0-11	12	13-14	15	16-17	18	19-20	——	——	——	——
	Reinforcement Length (ft.)	8	9	10	11	12	13	14	——	——	——	——
	Bearing Pressure (psf)	2467	2467	2467	2467	2467	2467	2467	——	——	——	——

NOTE: The reinforcement strap lengths shown above are the minimum lengths required for external stability. the reinforcement lengths used in construction of the retaining walls will be the longer of that required for external or internal stability (determined by proprietary wall companies).

NOTES

1. Concrete facing panel surfaces treatment will be a fluted, trapezoid, V-groove, fractured rib 3/4" on 1 1/2" centers similar to Burke Form Liner, Pattern No. BG312 (Waterfall).

2. If required, the soil reinforcement and fasteners for the abutement back wall will be designed and furnished by proprietary wall company. The soil reinforcement will be designed to resist a horizontal load of 3.5 kips/ft of back wall width. The cost of soil reinforcement and fasteners will be included in the cost of the retaining wall system.

3. Applicable FDOT Wall Types for each wall location are listed below. See the Qualified Products List for approved wall systems and the Table of FDOT Wall Types on Index No. 5300 of the Design Standards for allowable wall type substitutions.

Wall No. 1, 2 & 3 - FDOT Wall Type 2B

4. Longitudinal dimensions shown in the plans are measured along the exterior face of the wall. Elevations shown are to the top of coping, top of leveling pad or top of wall footing.

Note: Use CADD Cell "05300".
Work this cell with Design Standards, Index No. 5300.

EXHIBIT CP-1
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

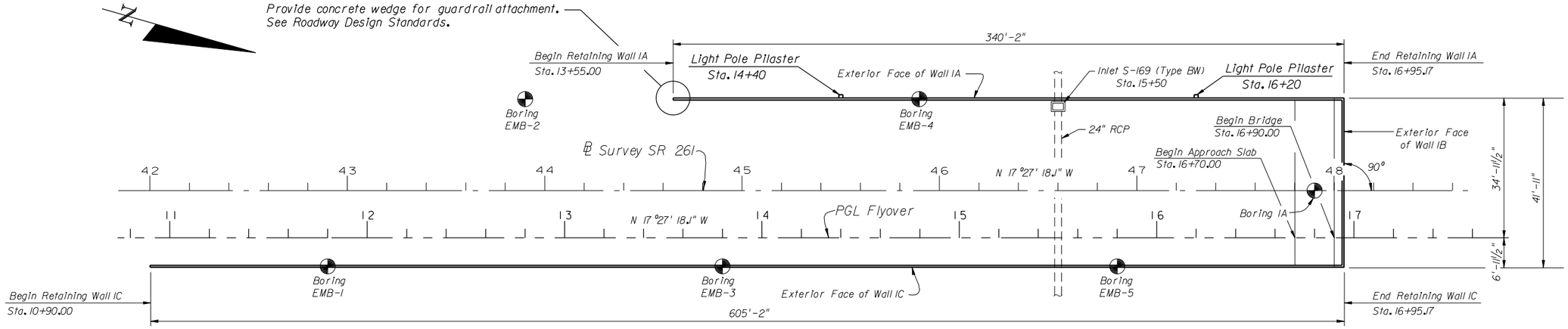
FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: WALL CONTROL DRAWINGS GENERAL NOTES

PROJECT NAME:

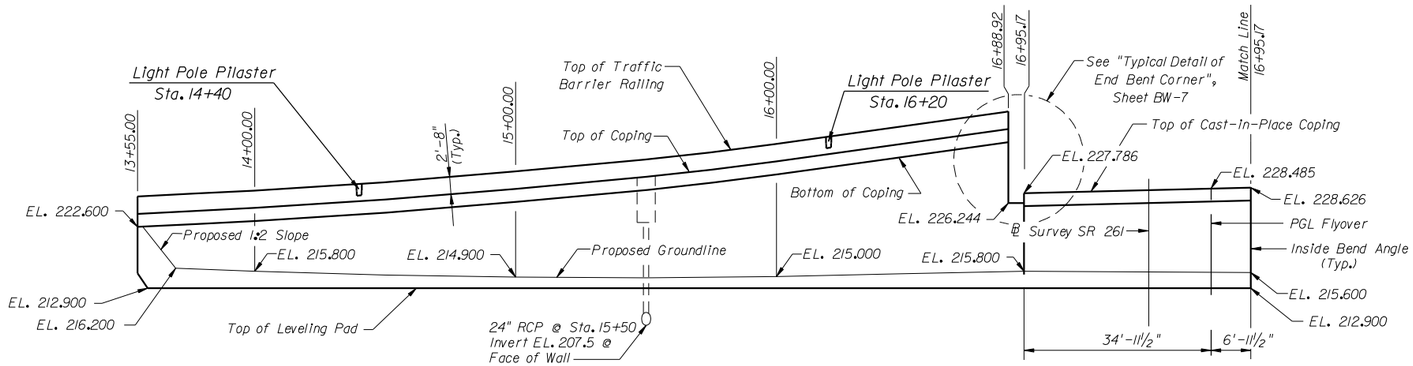
SHEET NO.



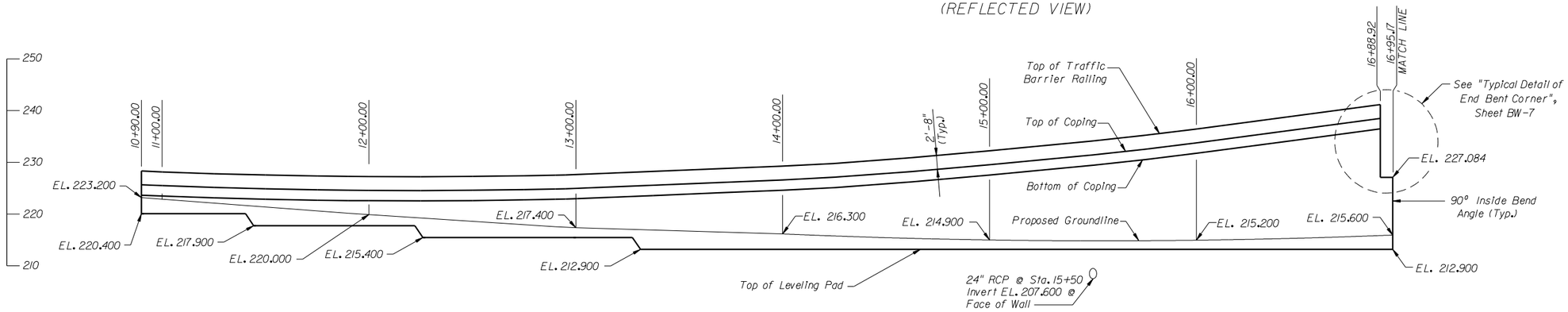
NOTES:

1. For Top of Coping Elevations see sheet BW-6.
2. Top of footing embedment depth shall be a minimum of 2'-0" (See Sheet BW-1 for details).
3. Provide ¾" open joints in Traffic Railing Barrier at a maximum of 90 ft. intervals.
4. ◓ indicates Soil Boring. See Sheets B-8 thru B-12a for boring data.
5. CPT Sounding Locations are not shown. See Sheets B-12b thru B-12q for CPT data.
6. For Additional Information regarding Drainage Structures and Utility Locations, See Roadway Plans.

PLAN



ELEVATION - WALLS IA AND IB
(REFLECTED VIEW)



ELEVATION - WALL IC

EXHIBIT CP-2
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

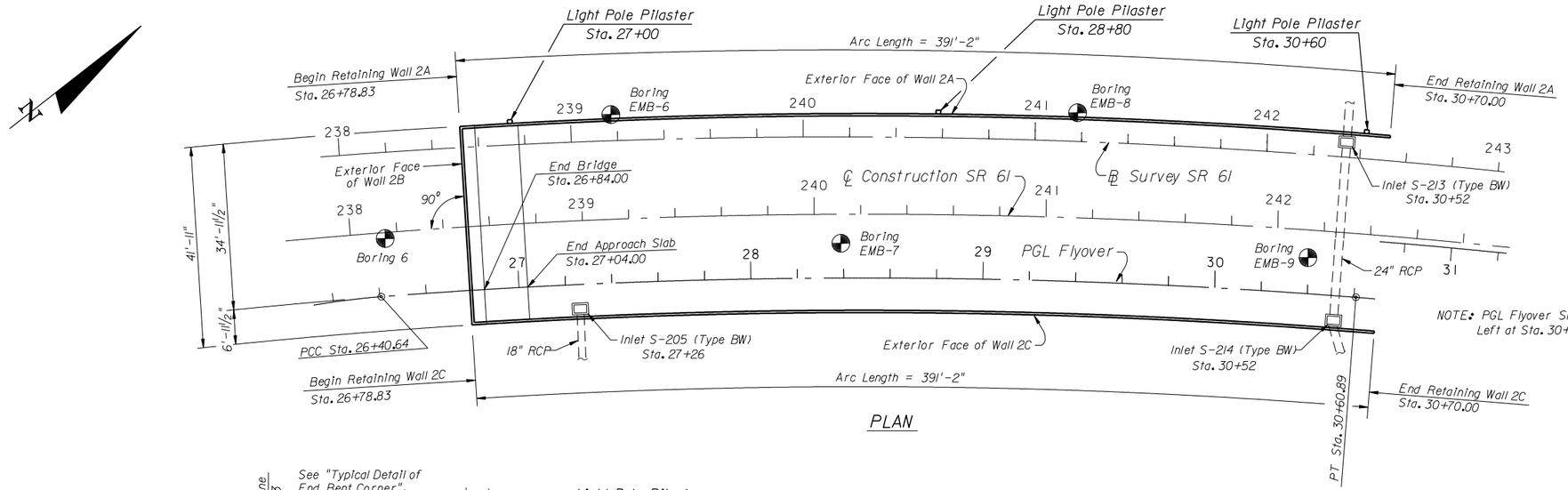
FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE:
MSE WALL No.1

PROJECT NAME:

SHEET NO.



PLAN

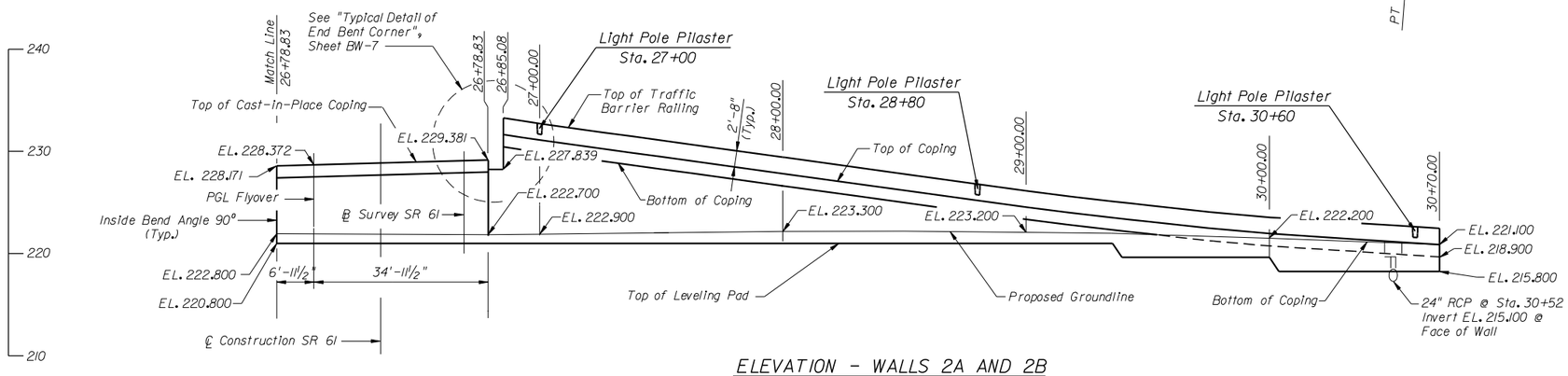
NOTE: PGL Flyover Shifts 12'-0" Left at Sta. 30+69.23

HORIZONTAL CURVE DATA

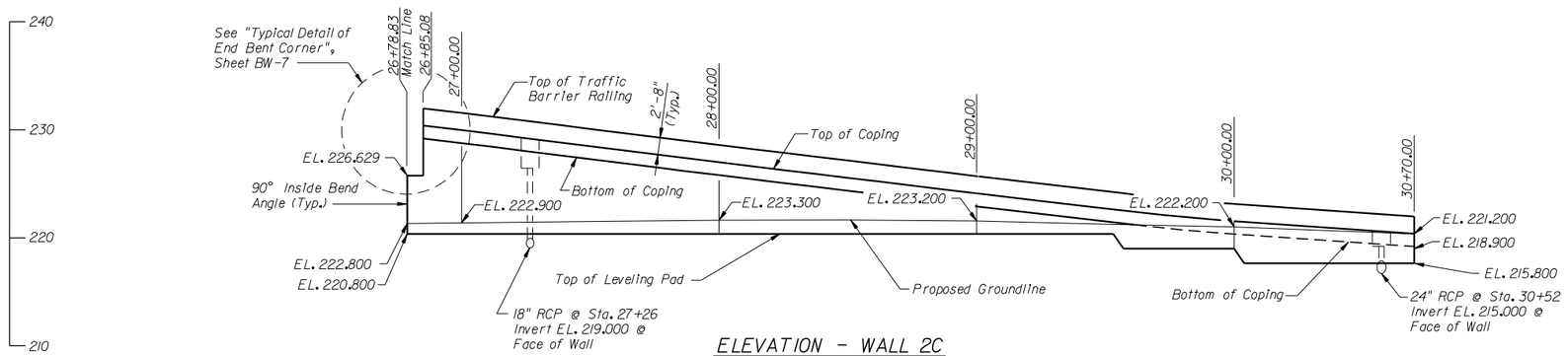
PI Sta. = 28+50.87
Δ = 4° 28' 13" Rt.
D = 1°02' 54"
T = 210.23'
L = 420.25'
R = 5,386.25'
PCC Sta. = 26+40.64
PT Sta. = 30+60.89

STATE PLANE COORDINATES

	N	E
PCC		
PI	(Not Available)	
PT		



ELEVATION - WALLS 2A AND 2B
(REFLECTED VIEW)



ELEVATION - WALL 2C

NOTES:

1. For Top of Coping Elevations see sheet BW-6.
2. Top of footing embedment depth shall be a minimum of 2'-0" (See Sheet BW-1 for details).
3. Provide ¾" open joints in Traffic Railing Barrier at a maximum of 90 ft. intervals.
4. ◓ indicates Soil Boring. See Sheets B-8 thru B-12a for boring data.
5. CPT Sounding Locations are not shown. See Sheets B-12b thru B-12q for CPT data.
6. For Additional Information regarding Drainage Structures and Utility Locations, See Roadway Plans.

EXHIBIT CP-3
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: MSE WALL NO. 2

PROJECT NAME:

SHEET NO.

WALL No. 1A

PGL Flyover Station	Exposed Face of Wall 1A Offset from PGL Flyover (ft.)	Top of Coping Elevation @ Wall 1A (ft.)
13+55.00	34.958	224.600
13+75.00	34.958	224.969
14+00.00	34.958	225.503
14+25.00	34.958	226.116
14+50.00	34.958	226.809
14+75.00	34.958	227.583
15+00.00	34.958	228.436
15+25.00	34.958	229.370
15+50.00	34.958	230.383
15+75.00	34.958	231.477
16+00.00	34.958	232.650
16+25.00	34.958	233.904
16+50.00	34.958	235.390
16+75.00	34.958	236.848
16+88.92	34.958	237.615
16+93.50	34.958	-

WALL No. 1C

PGL Flyover Station	Exposed Face of Wall 1C Offset from PGL Flyover (ft.)	Top of Coping Elevation @ Wall 1C (ft.)
10+90.00	6.958	225.647
11+00.00	6.958	225.486
11+25.00	6.958	225.139
11+50.00	6.958	224.872
11+75.00	6.958	224.685
12+00.00	6.958	224.578
12+25.00	6.958	224.551
12+50.00	6.958	224.604
12+75.00	6.958	224.737
13+00.00	6.958	224.950
13+25.00	6.958	225.243
13+50.00	6.958	225.616
13+75.00	6.958	226.069
14+00.00	6.958	226.603
14+25.00	6.958	227.216
14+50.00	6.958	227.909
14+75.00	6.958	228.683
15+00.00	6.958	229.536
15+25.00	6.958	230.470
15+50.00	6.958	231.483
15+75.00	6.958	232.577
16+00.00	6.958	233.750
16+25.00	6.958	235.004
16+50.00	6.958	236.323
16+75.00	6.958	237.648
16+88.92	6.958	238.477
16+93.50	6.958	-

WALL No. 2A

PGL Flyover Station	Exposed Face of Wall 2A Offset from PGL Flyover (ft.)	Top of Coping Elevation @ Wall 2A (ft.)
26+78.83	34.958	-
26+85.08	34.958	239.246
27+00.00	34.958	238.327
27+25.00	34.958	236.948
27+50.00	34.958	235.569
27+75.00	34.958	234.191
28+00.00	34.958	232.812
28+25.00	34.958	231.433
28+50.00	34.958	230.055
28+75.00	34.958	228.676
29+00.00	34.958	227.297
29+25.00	34.958	226.058
29+50.00	34.958	224.927
29+75.00	34.958	223.891
30+00.00	34.958	222.950
30+25.00	34.958	222.109
30+50.00	34.958	221.525
30+70.00	22.958	221.121

WALL No. 2C

PGL Flyover Station	Exposed Face of Wall 2C Offset from PGL Flyover (ft.)	Top of Coping Elevation @ Wall 2C (ft.)
26+78.83	6.958	-
26+85.08	6.958	238.015
27+00.00	6.958	237.310
27+25.00	6.958	236.055
27+50.00	6.958	234.804
27+75.00	6.958	233.554
28+00.00	6.958	232.314
28+25.00	6.958	231.102
28+50.00	6.958	229.890
28+75.00	6.958	228.678
29+00.00	6.958	227.466
29+25.00	6.958	226.258
29+50.00	6.958	225.127
29+75.00	6.958	224.091
30+00.00	6.958	223.150
30+25.00	6.958	222.307
30+50.00	6.958	221.656
30+70.00	18.958	221.201

WALL No. 3

SR 61 ℄ Construction Station	Exposed Face of Wall 3 Offset from SR 61 ℄ Construction (ft.)	Top of Coping Elevation @ Wall 3 (ft.)
265+20.00	69.708	212.650
265+40.00	69.708	212.210
265+42.48	69.708	212.160
265+60.00	68.550	211.810
265+80.00	67.227	211.400
266+00.00	65.905	211.000
266+20.00	64.582	210.590
266+40.00	63.260	210.190
266+60.00	61.938	209.780
266+80.00	60.615	209.380
267+00.00	59.293	209.010
267+20.00	57.970	208.670
267+23.96	57.708	208.610
267+40.00	57.708	208.330
267+60.00	57.708	208.030
267+80.00	57.708	207.770
268+00.00	57.708	207.550
268+20.00	57.708	207.350
268+40.00	57.708	207.210
268+60.00	57.708	207.090
268+80.00	57.708	207.010
269+00.00	57.708	206.970
269+20.00	57.708	206.970
269+40.00	57.708	207.010
269+60.00	57.708	207.090
269+80.00	57.708	207.210
270+00.00	57.708	207.350
270+20.00	57.708	207.550
270+40.00	57.708	207.770
270+60.00	57.708	208.030
270+80.00	57.708	208.330
271+00.00	57.708	208.670
271+20.00	57.708	209.050
271+25.00	57.708	209.150

NOTES:

1. *Offsets are given to the exterior face of the proprietary wall (See Sheet BW-1 for detail).*
2. *Top of Coping Elevation detail shown on Sheet BW-1.*
3. *For existing and proposed ground elevations for all walls, see Sheets BW-2 thru BW-5.*

EXHIBIT CP-4
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

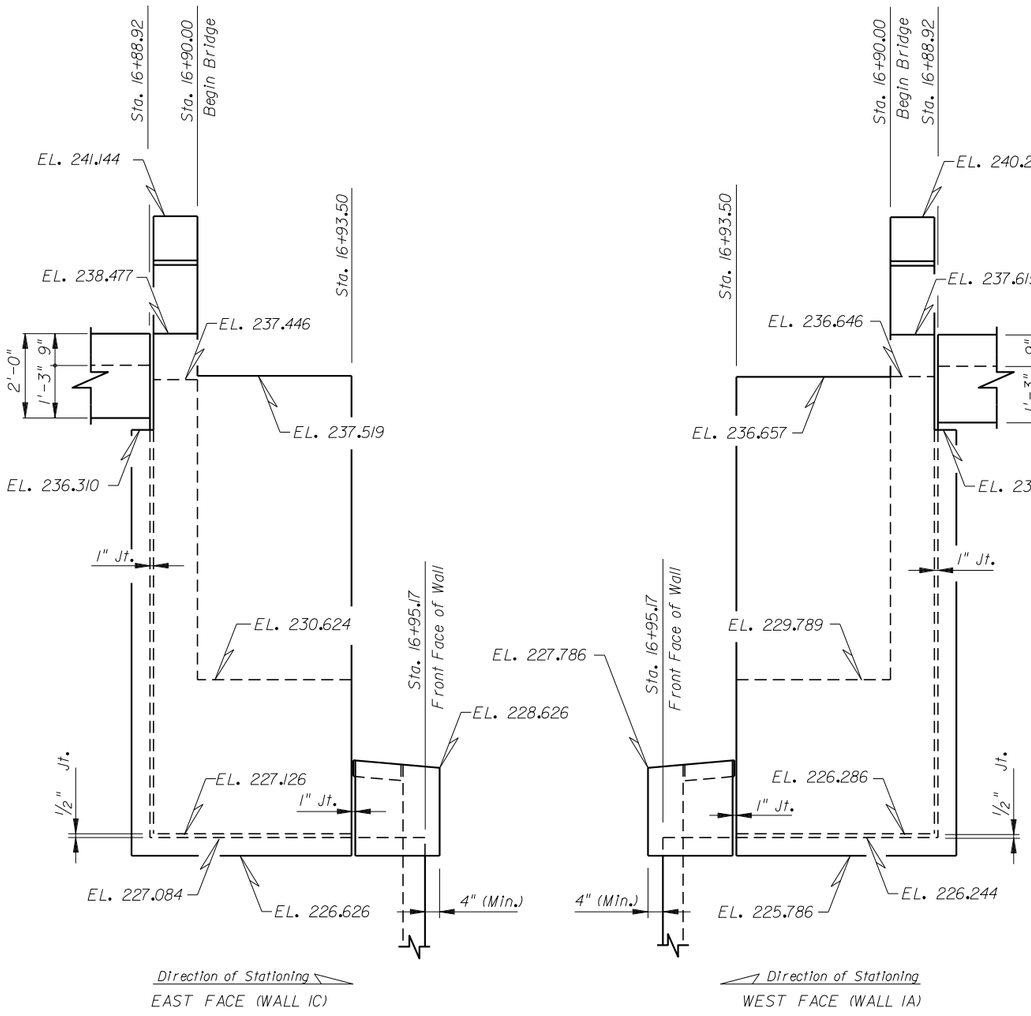
ENGINEER OF RECORD:

FLORIDA DEPARTMENT OF TRANSPORTATION

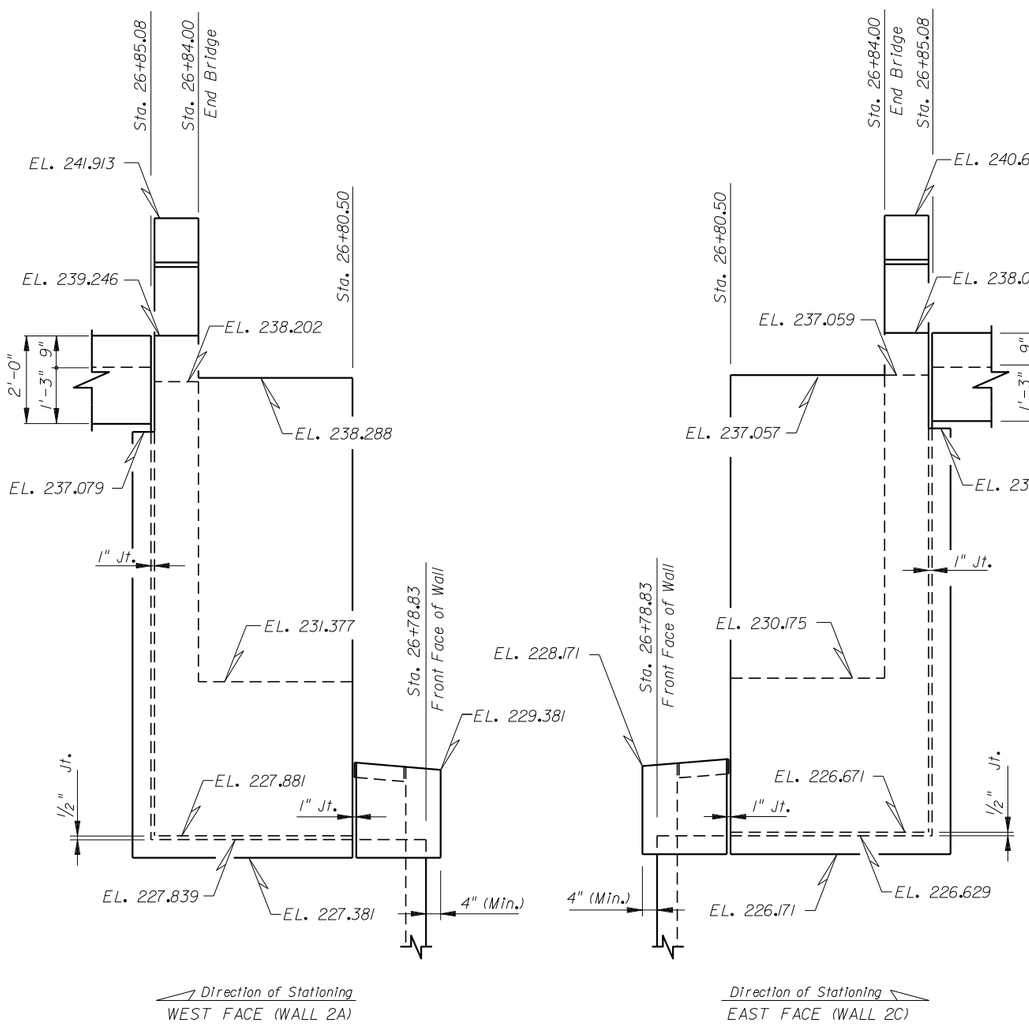
ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: MSE WALL ELEVATIONS

SHEET NO.



END BENT NO. 1



END BENT NO. 7

EXHIBIT CP-5
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: MSE WALL MISCELLANEOUS DETAILS

PROJECT NAME:

SHEET NO.

TEMPORARY RETAINING WALL SYSTEM DATA TABLES

GEOTECHNICAL INFORMATION						
		Reinforced Soil & Random Backfill	Loose Fine Sand	Firm Fine Sand	Loose Clayey Fine Sand	Firm Clayey Fine Sand
Wall No. 1 & 2	Depth Below Existing Ground Line (ft.)	——	0'-9'	9'-23'	23'-37'	37'-45'
	Unit Weight (pcf)	110 pcf	118 pcf	118 pcf	120 pcf	110 pcf
	Cohesion (psf)	0	0	0	0	0
	Internal Friction Angle	30°	34°	34°	35°	30°
Wall No. 3 & 4	Depth Below Existing Ground Line (ft.)	——	0'-10'	10'-15'	15'-17'	17'-45'
	Unit Weight (pcf)	110 pcf	116 pcf	118 pcf	120 pcf	116 pcf
	Cohesion (psf)	0	0	0	4177 pcf	0
	Internal Friction Angle	30°	32°	34°	0	34°

NOTE: If the unit weight and/or internal friction angle of the fill proposed by the contractor differs from that shown above, the Project Engineer will contact both the District Geotechnical Engineer and the Wall Designer for a possible redesign.

RETAINING WALL VARIABLES				
Wall No.	Wall Settlement			Air Contaminants Classification
	Long Term Settlement (in.)	Short Term Settlement (in.)	Differential Settlement (in./ft.)	
1 & 2	1/2"	3/8"	1/16"/1'	Extremely Aggressive
3 & 4	1/2"	1/4"	1/16"/1'	Extremely Aggressive

NOTE: Design walls for the settlements noted in the table.
Long term settlement is measured from the beginning of wall construction.

SOIL REINFORCEMENT LENGTHS FOR EXTERNAL STABILITY							
Walls 1 thru 4	Wall Height (ft.)	5'-0"	5'-6"	6'-0"	6"-6"	7'-0"	7'-6"
	Reinforcement Length (ft.)	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"
	Bearing Pressure (psf)	1082	1241	1426	1648	1454	1623

NOTE: The reinforcement strap lengths shown above are the minimum lengths required for external stability. The reinforcement lengths used in the construction of the retaining walls will be the longer of that required for external or internal stability (determined by proprietary wall companies).

NOTES

1. Applicable FDOT Wall Types for each wall location are listed below. See the Qualified Products List for approved wall systems.

Wall No. 1, 2, 3 & 4: FDOT Wall Type 3

Note: Use CADD Cell "05301".
Work this cell with Design Standards, Index No. 5301.

EXHIBIT CP-6
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

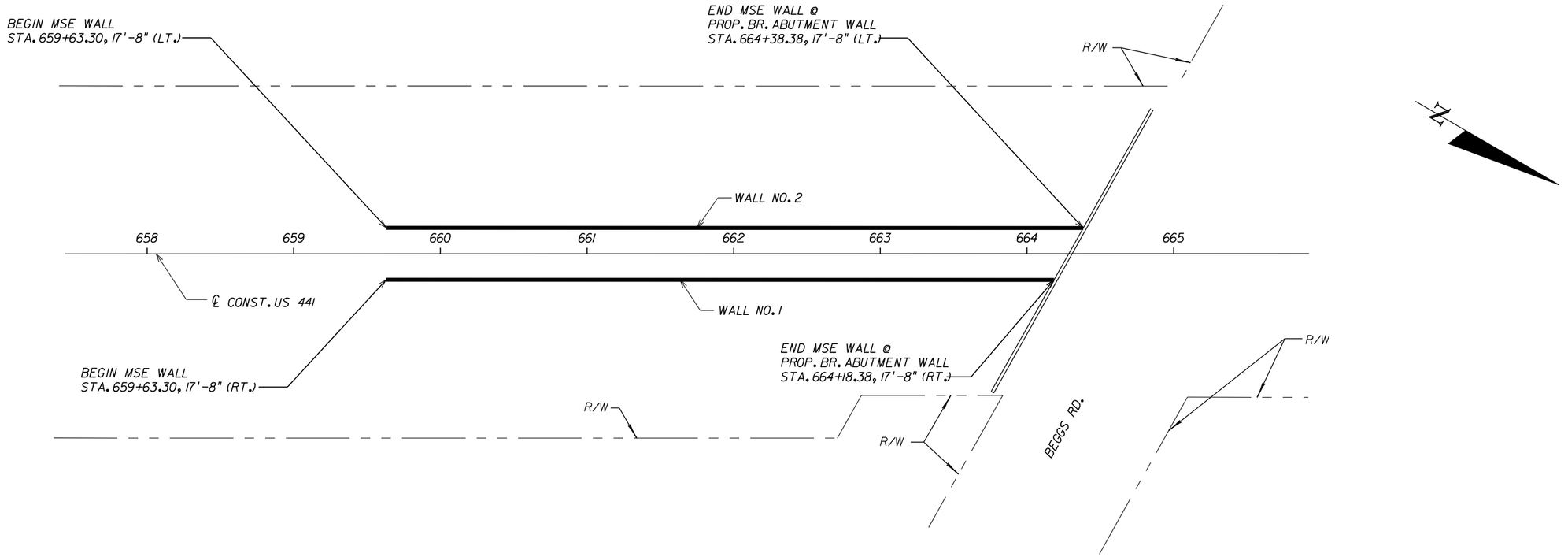
FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

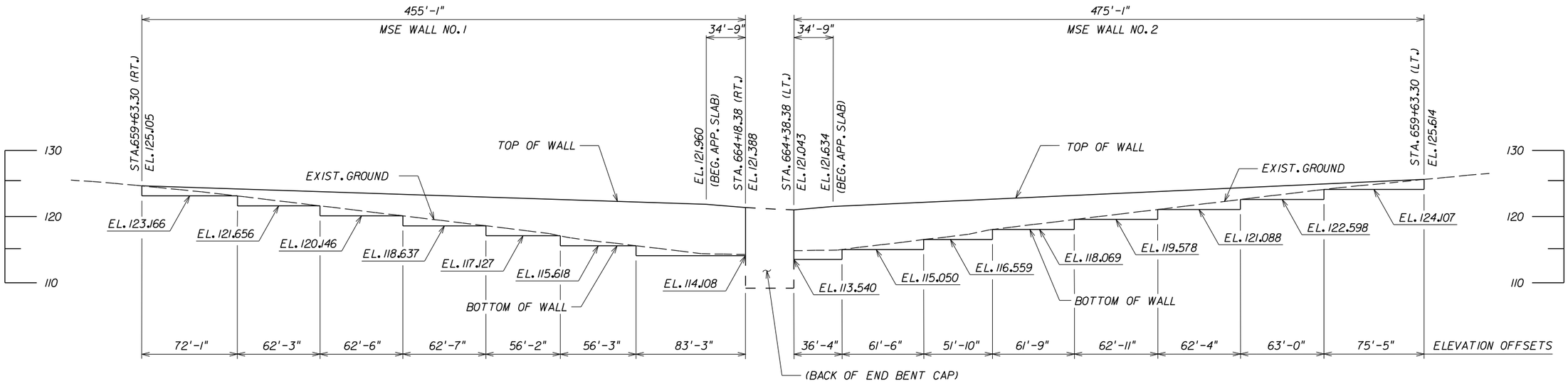
SHEET TITLE: TEMPORARY WALL CONTROL DRAWINGS GENERAL NOTES

PROJECT NAME:

SHEET NO.



PLAN VIEW TEMP. MSE WALL NOS. 1 & 2



EXPANDED ELEVATION VIEWS (TEMP. MSE WALL NOS. 1 & 2, LOOKING AT FRONT FACE OF WALL)

EXHIBIT CP-7
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

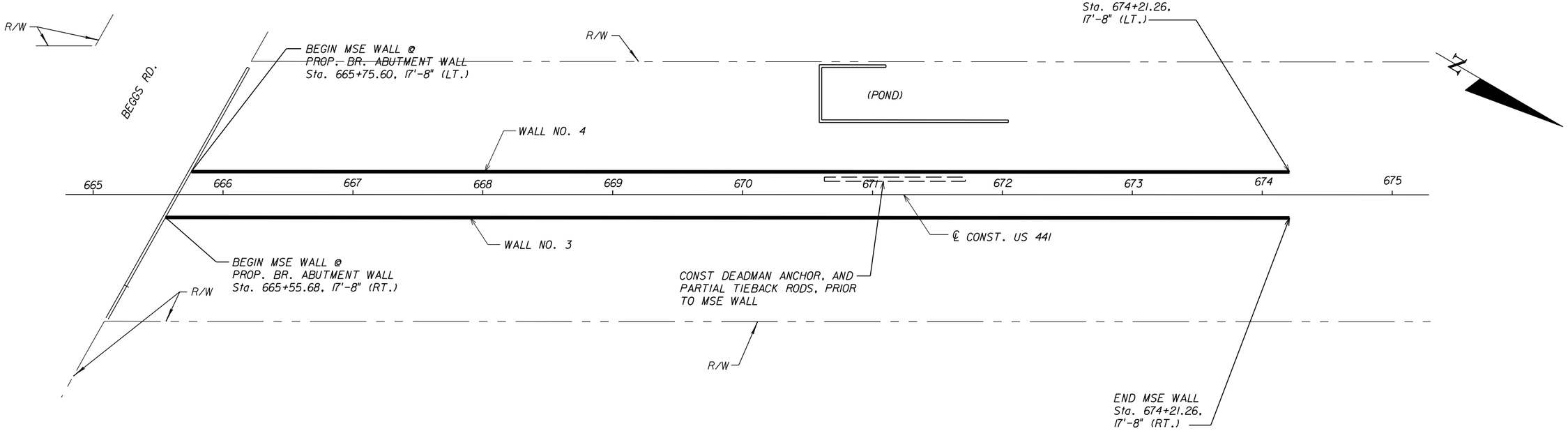
FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

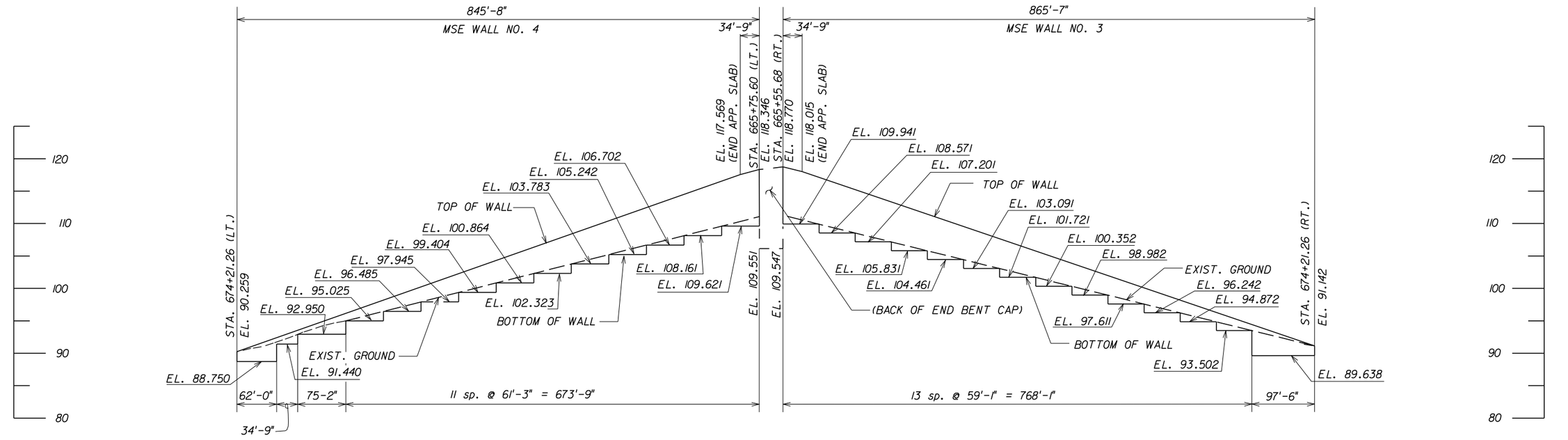
SHEET TITLE: TEMPORARY MSE WALL NOS. 1 & 2

PROJECT NAME:

SHEET NO.



PLAN VIEW TEMP. MSE WALL NOS. 3 & 4



EXPANDED ELEVATION VIEWS (TEMP. MSE WALL NOS. 3 & 4, LOOKING AT FRONT FACE OF WALL)

EXHIBIT CP-8
Date: 1/1/06

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by		
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: TEMPORARY MSE WALL NOS. 3 & 4

PROJECT NAME:

SHEET NO.