

PERMANENT RETAINING WALL SYSTEM DATA TABLES

GEOTECHNICAL INFORMATION						Table Date 1-01-11
		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	—	0'-6'	6'-33'	33'-39'	—
	Wall No. 2	—	0'-6'	6'-33'	33'-39'	—
Effective Unit Weight (pcf)		110 (moist weight in-place)	118	118	120	110
Cohesion (psf)		0	0	0	122	122
Internal Friction Angle		30°	30°	32°	0	0

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				Table Date 1-01-11
Wall No.	Wall Settlement			
	Long Term Settlement (in.)	Short Term Settlement (in.)	Differential Settlement	
			Longitudinal (%) (ft./100ft.)	Transverse (in.)
1	2" to 3"	1" to 2"	0.50	N/A
2	2" to 3"	1" to 2"	0.50	N/A

NOTE:
Design walls for the settlements noted in the table.
Long term settlement is measured from the end of wall fill placement.
Transverse differential settlement is measured from the face of wall to the end of the soil reinforcement.

SOIL REINFORCEMENT LENGTHS FOR EXTERNAL STABILITY												Table Date 1-01-11
Wall No. 1	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
	Factored Bearing Resistance (psf)	1984	2295	2546	2857	3108	3419	3671	3980	4233	4543	4851
Wall No. 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
	Factored Bearing Resistance (psf)	1984	2295	2546	2857	3108	3419	3671	3980	4233	4543	4851

NOTES:
1. 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).
2. The Factored Bearing Resistances shown above are the critical (lowest) values from all the load cases analyzed using LRFD methodology.

NOTES:

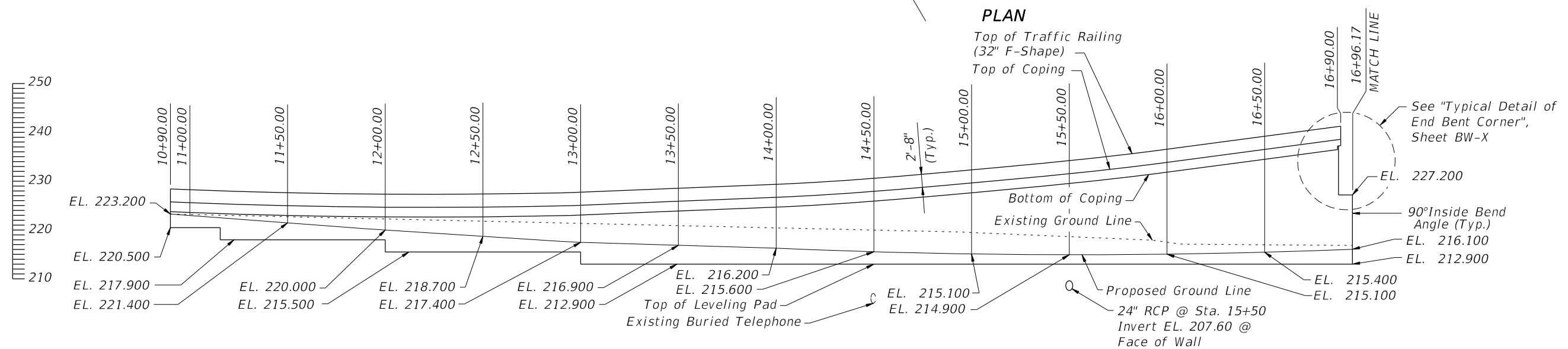
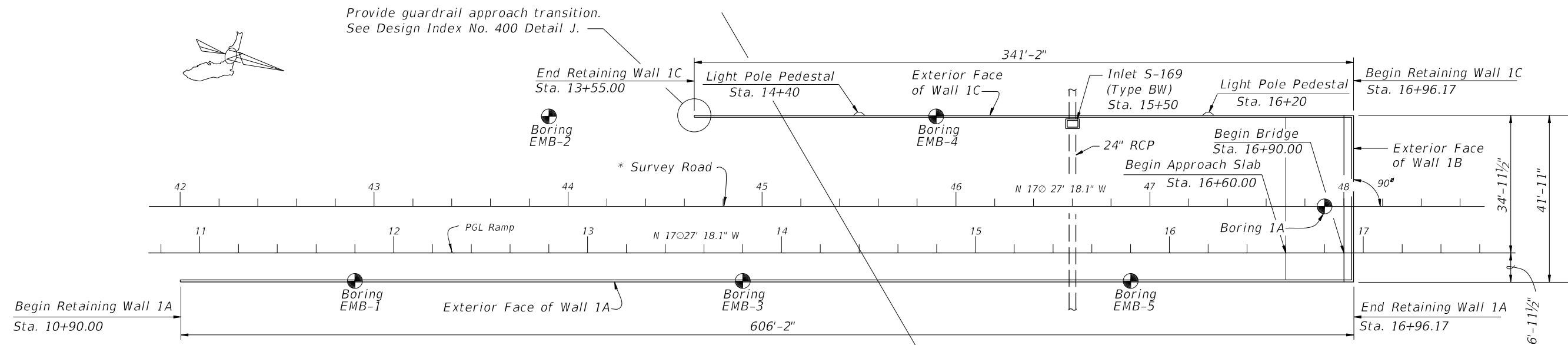
1. Concrete facing panel surfaces treatment will be a fluted, trapezoid, V-groove, fractured rib $\frac{3}{4}$ " on 1½" centers similar to Burke Form Liner, Pattern No. BG312 (Waterfall).
2. If required, the soil reinforcement and fasteners for the abutement back wall will be designed and furnished by proprietary wall company. The soil reinforcement will be designed to resist a factored 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 Design Standards Index No. 6020 for allowable wall type substitutions.

Wall No. 1 & 2 - FDOT Wall Type 2B
4. Concrete for Coping and/or Junction Slab shall be Class II (f'c = 3,400 psi) without Calcium Nitrite.
5. See Design Standards Index No. 6020 for General Notes And Details.
6. 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.

ESTIMATED QUANTITIES			
WALL NO.	ITEM	UNIT	QUANTITY
1	Retaining Wall System, Permanent, Excluding Barrier	SF	15,497
	Concrete Traffic Railing With Junction Slab (32" F-Shape)	LF	934
2	Retaining Wall System, Permanent, Excluding Barrier	SF	7,798
	Concrete Traffic Railing With Junction Slab (32" F-Shape)	LF	770

BRIDGE NO. XXXXXX

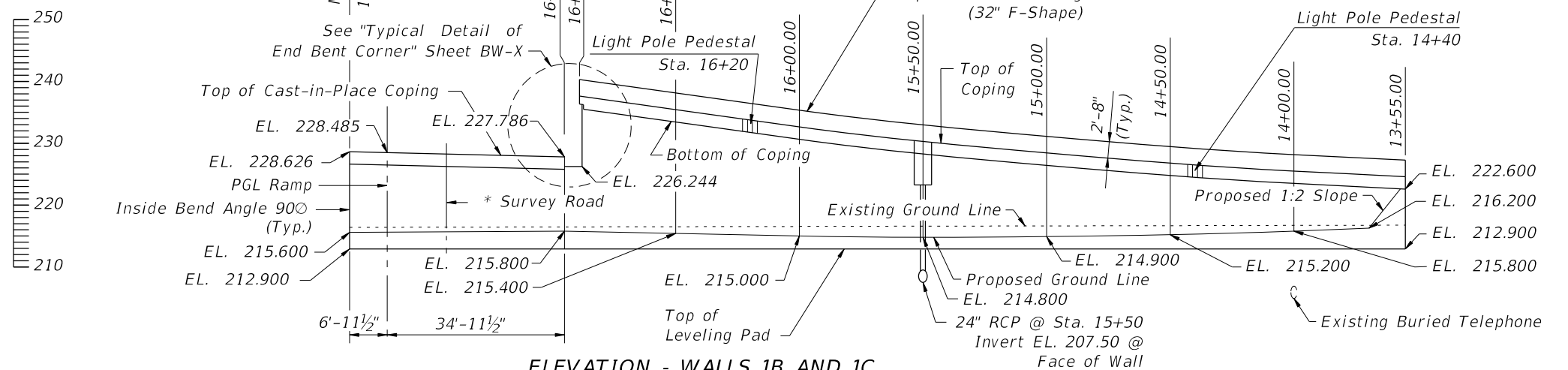
REVISIONS						<div>STRUCTURES DESIGN OFFICE</div> <div>CENTRAL OFFICE</div> <div>605 SUWANNEE STREET, MS 33</div> <div>TALLAHASSEE, FLORIDA 32599-0450</div>	DRAWN BY:	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET TITLE: <div>MSE WALLS EXAMPLE 1</div> <div>PERMANENT MSE WALLS (SHEET 1 OF 5)</div>		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY:						
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ELEVATION - WALL 1A

NOTES:

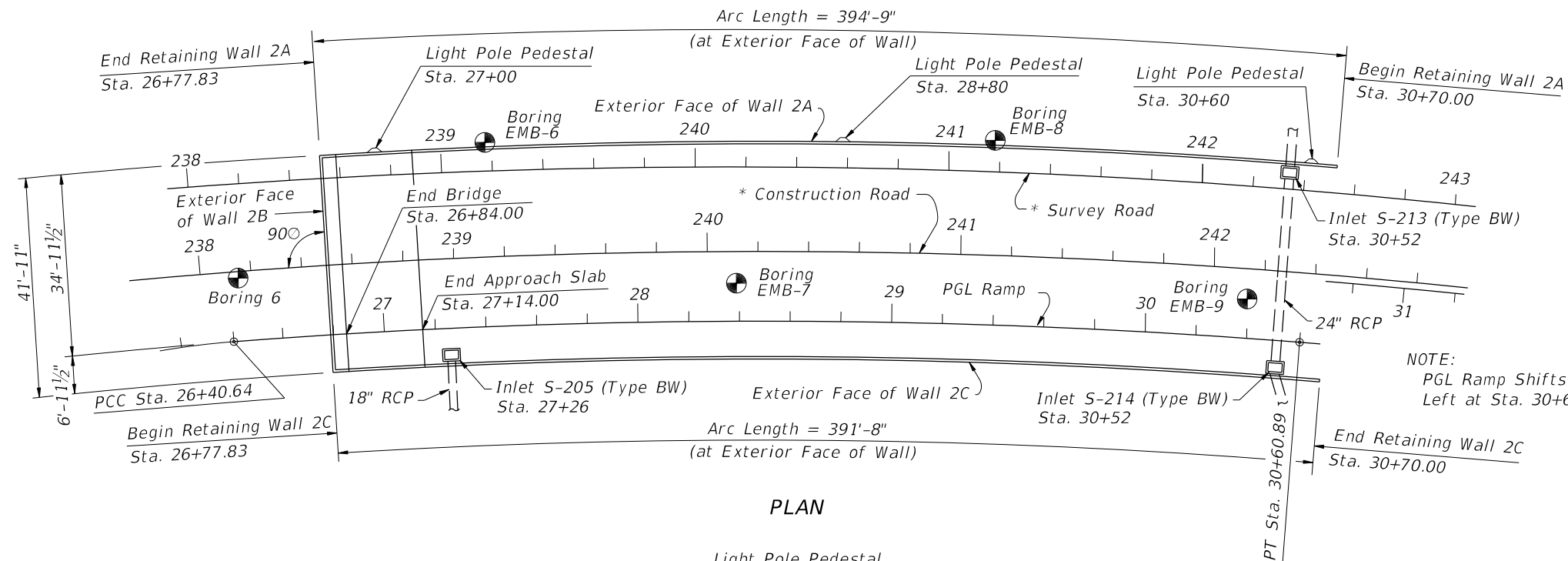
1. For Top of Coping Elevations see Sheet BW-X.
2. Top of Leveling Pad shall be a minimum of 2'-0" below Proposed Ground Line.
3. Provide 3/4" open joints in Traffic Railing at a maximum of 90 ft. intervals.
4. indicates Soil Boring. See Sheets B-XX thru B-XX for boring data.
5. For Additional Information regarding Drainage Structures and Utility Locations, See Roadway Plans.



ELEVATION - WALLS 1B AND 1C

BRIDGE NO. XXXXXX

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PLAN

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

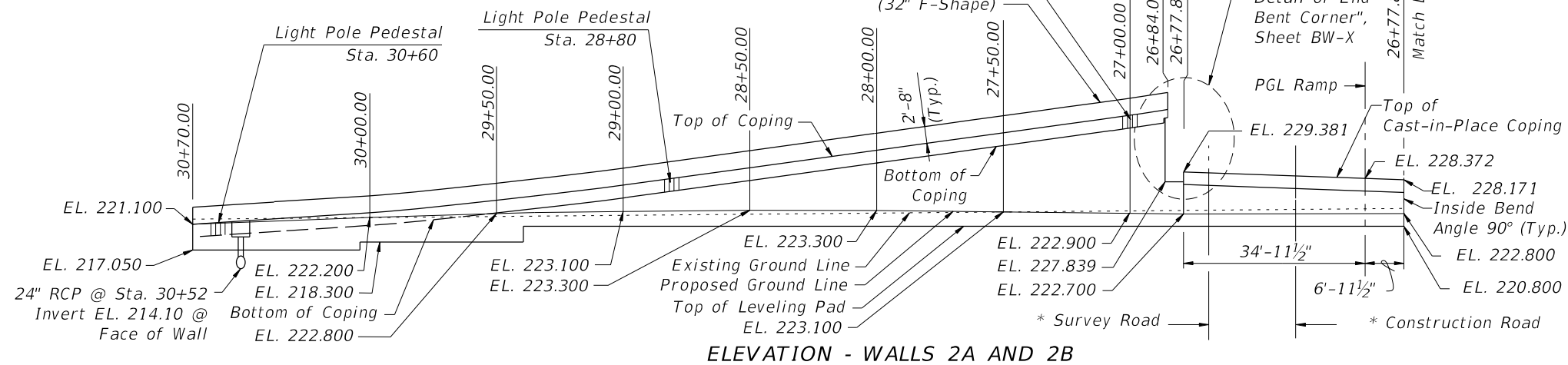
NOTE:
PGL Ramp Shifts 12'-0"
Left at Sta. 30+69.23

STATE PLANE COORDINATES

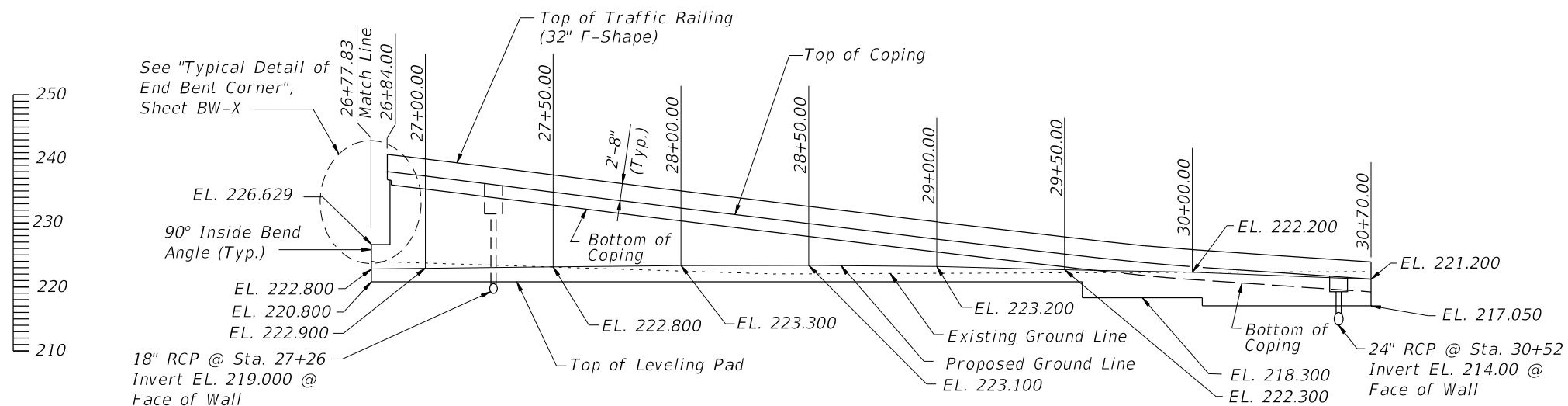
N E
PCC
PI (Not Available)
PT

NOTES:

1. For Top of Coping Elevations see sheet BW-X.
2. Top of Leveling Pad shall be a minimum of 2'-0" below Proposed Ground Line.
3. Provide $\frac{3}{4}$ " open joints in Traffic Railing at a maximum of 90 ft. intervals.
4. indicates Soil Boring. See Sheets B-XX thru B-XX for boring data.
5. For Additional Information regarding Drainage Structures and Utility Locations, See Roadway Plans.



ELEVATION - WALLS 2A AND 2B



ELEVATION - WALL 2C

BRIDGE NO. XXXXXX

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID			

WALL No. 1A

PGL Ramp Station	Exposed Face of Wall 1A Offset from PGL Ramp (ft.)	Top of Coping Elevation @ Wall 1A (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+90.00	6.958	238.477
16+93.50	6.958	-

WALL No. 2A

PGL Ramp Station	Exposed Face of Wall 2A Offset from PGL Ramp (ft.)	Top of Coping Elevation @ Wall 2A (ft.)
26+78.83	34.958	-
26+84.00	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. 1C

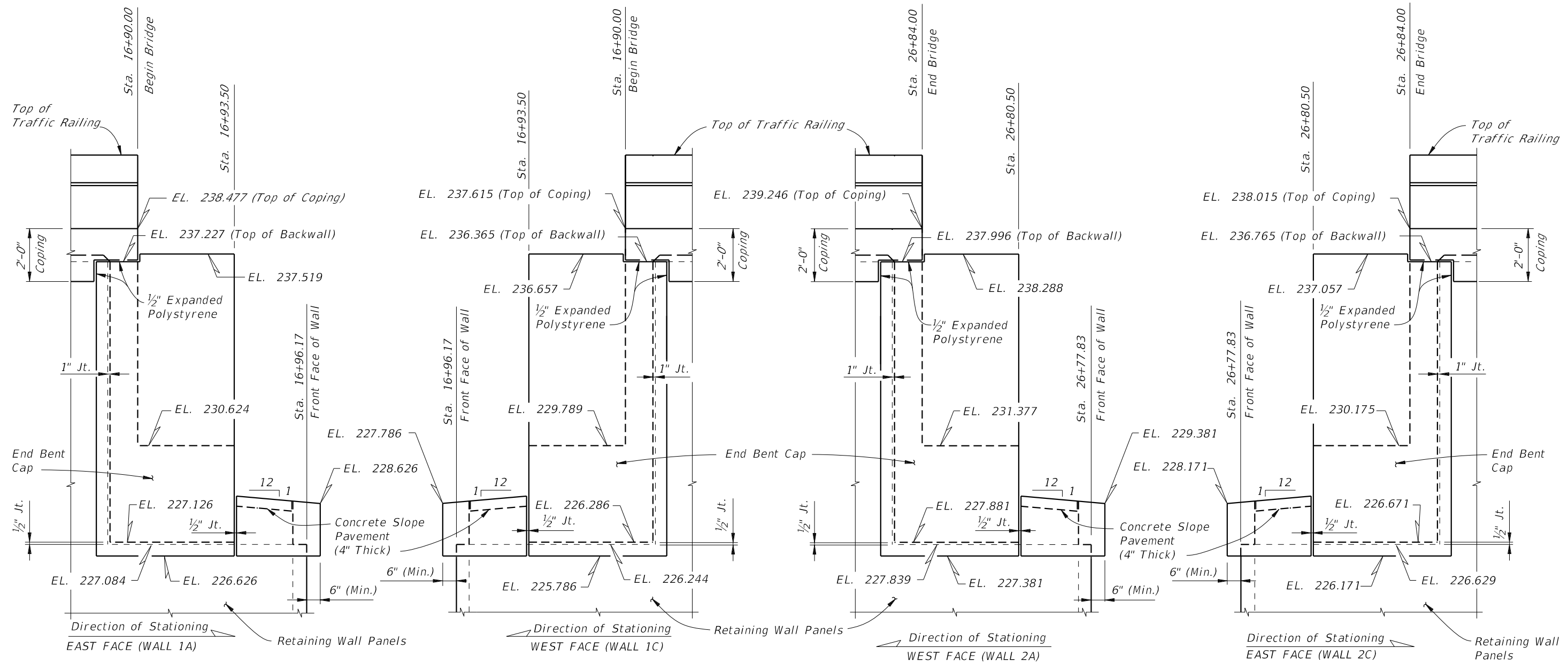
PGL Ramp Station	Exposed Face of Wall 1C Offset from PGL Ramp (ft.)	Top of Coping Elevation @ Wall 1C (ft.)
13+55.00	34.958	224.600
13+75.00	34.958	224.969
14+00.00	34.958	225.503
14+25.00	34.958	226.116
14+50.00	34.958	226.809
14+75.00	34.958	227.583
15+00.00	34.958	228.436
15+25.00	34.958	229.370
15+50.00	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+90.00	34.958	237.615

WALL No. 2C

PGL Ramp Station	Exposed Face of Wall 2C Offset from PGL Ramp (ft.)	Top of Coping Elevation @ Wall 2C (ft.)
26+78.83	6.958	-
26+84.00	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

- NOTES:
1. Offsets are given to the exterior face of the proprietary wall.
2. For proposed ground elevations for all walls, see Sheets BW-X and BW-X.

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END BENT NO. 1

END BENT NO. 7

NOTE:
1/2" and 1" Joints to be
Preformed Joint Filler,
unless otherwise shown.

BRIDGE NO. XXXXXX

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