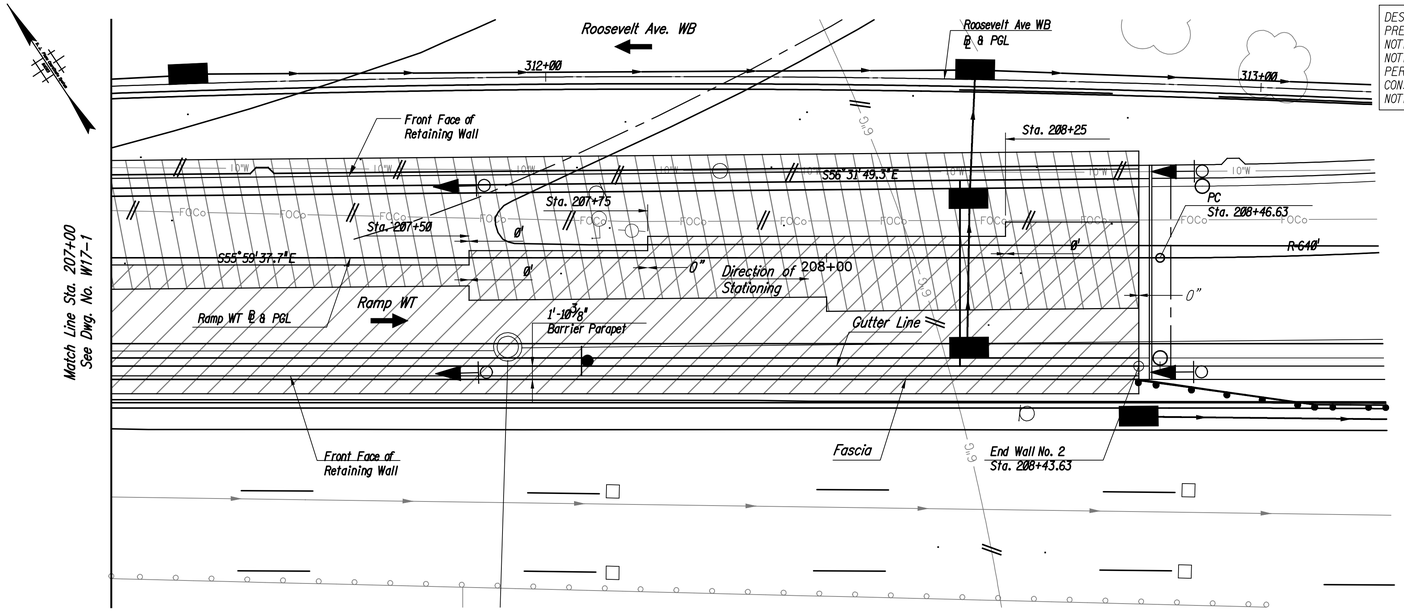
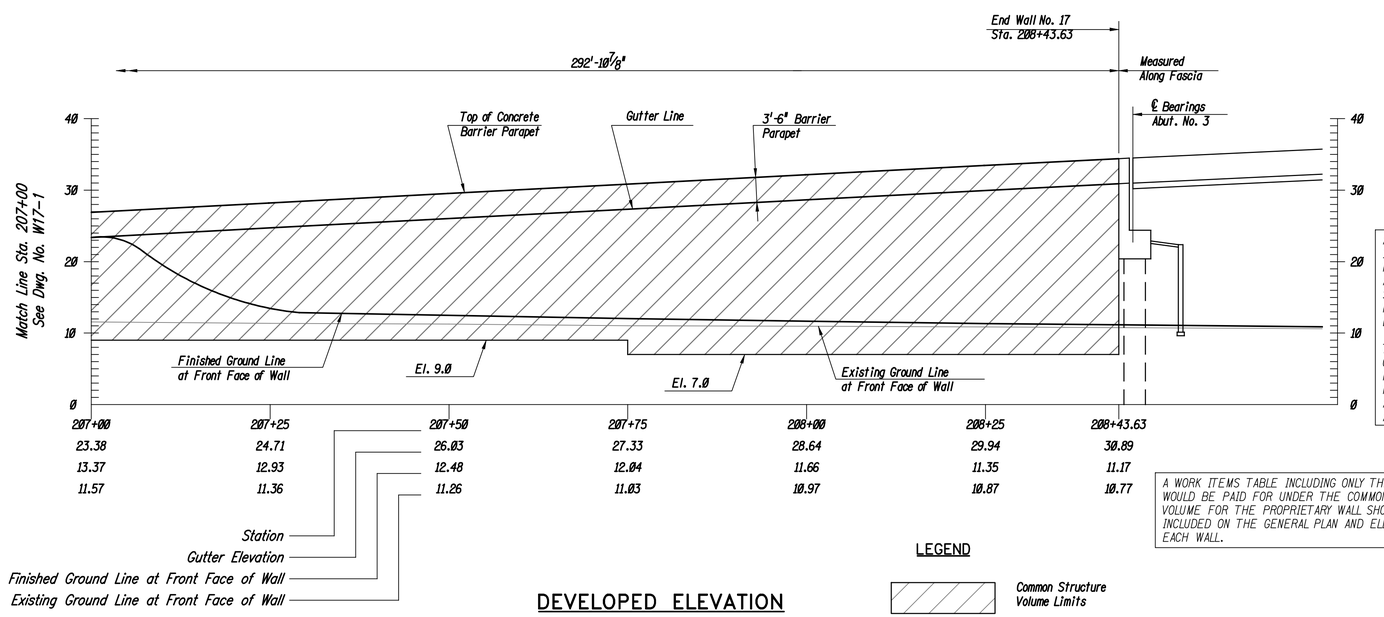


PLAN



207+00	207+25	207+50	207+75	208+00	208+25	208+43.63
23.38	24.71	26.03	27.33	28.64	29.94	30.89
13.37	12.93	12.48	12.04	11.66	11.35	11.17
11.57	11.36	11.26	11.03	10.97	10.87	10.77

DEVELOPED ELEVATION

LEGEND

Common Structure Volume Limits

Coincident Common Structure Volume Limits

A WORK ITEMS TABLE INCLUDING ONLY THE ITEMS THAT WOULD BE PAID FOR UNDER THE COMMON STRUCTURE VOLUME FOR THE PROPRIETARY WALL SHOULD BE INCLUDED ON THE GENERAL PLAN AND ELEVATION FOR EACH WALL.

FOUNDATION EXCAVATION	C.Y.
PRECAST CONCRETE WALL PANEL	S.F.
SELECT BACKFILL	C.Y.
SOIL REINFORCING ELEMENTS	L.F.
LEVELING PAD	L.F.
DRAINAGE BLANKET	C.Y.
8" UNDERDRAIN	L.F.
BARRIER PARAPET	L.F.
ANCHOR SLAB	L.F.
IMPERVIOUS MEMBRANE	S.F.
3" RMC	L.F.

DESIGNER/DESIGN ENGINEER (DE) IS DEFINED HEREIN AS THE PREPARER OF THE CONTRACT DOCUMENTS.
NOTES TO DE ARE ITALICIZED.
NOTE TO DESIGN ENGINEER: INCLUDE THE FOLLOWING NOTES ON ALL PERTINENT CONTRACT DRAWINGS REGARDING THE DESIGN AND CONSTRUCTION OF PROPRIETARY RETAINING WALLS. ADDITIONAL NOTES SHALL BE INCLUDED AS NECESSARY.

GENERAL NOTES:

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION WITH INTERIMS THROUGH CURRENT EDITIONS AND AS MODIFIED BY THE 2007 NEW JERSEY TURNPIKE AUTHORITY DESIGN MANUAL, SECTION 2, THROUGH CURRENT UPDATES.

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION AND AS MODIFIED BY THE 2007 NEW JERSEY TURNPIKE AUTHORITY DESIGN MANUAL, SECTION 2, THROUGH CURRENT UPDATES, FOR MODIFICATIONS APPROPRIATE TO LOAD FACTOR DESIGN (LFD).

2007 NEW JERSEY TURNPIKE AUTHORITY DESIGN MANUAL THROUGH CURRENT UPDATES.

CONSTRUCTION SPECIFICATIONS:

2004 NEW JERSEY TURNPIKE AUTHORITY STANDARD SPECIFICATIONS, 6TH EDITION AS AMENDED AND AUGMENTED BY THE SUPPLEMENTARY SPECIFICATIONS.

DESIGN METHOD:

(DE SHALL ENTER MSE WALL AND/OR PREFABRICATED MODULAR WALL HERE, AS APPLICABLE.)

- LOAD AND RESISTANCE FACTOR DESIGN (LRFD): PROPRIETARY WALL

(APPLIES TO BOTH MSE AND PREFABRICATED MODULAR WALLS.

- LOAD FACTOR DESIGN (LFD): INTERNAL STRENGTH AND STABILITY FOR BARRIER PARAPET AND MOMENT SLAB SYSTEM

(APPLIES TO BOTH MSE AND PREFABRICATED MODULAR WALLS.)

- ALLOWABLE STRESS DESIGN (ASD): EXTERNAL STABILITY FOR MOMENT SLAB

IMPACT LOAD:

LOAD FACTOR DESIGN (LFD) AND ALLOWABLE STRESS DESIGN (ASD): VEHICULAR IMPACT LOAD APPLIED TO THE BARRIER PARAPET AND THE MOMENT SLAB SYSTEM SHALL BE AS PER AASHTO STANDARD SPECIFICATION, SECTION 2.7.1.3

SEISMIC LOAD:

SEISMIC DESIGN IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION WITH INTERIMS THROUGH 2008 AND AS MODIFIED BY THE 2007 NEW JERSEY TURNPIKE AUTHORITY DESIGN MANUAL, SECTION 2, THROUGH CURRENT UPDATES UNLESS OTHERWISE NOTED HEREIN. DETAILING SHALL BE IN ACCORDANCE WITH SEISMIC PERFORMANCE ZONE 2, WHERE APPLICABLE.

PEAK GROUND ACCELERATION COEFFICIENT (PGA): XXXX
SHORT-PERIOD SPECTRAL ACCELERATION COEFFICIENT (S_S): XXXX
LONG-PERIOD SPECTRAL ACCELERATION COEFFICIENT (S_1): XXXX
SITE CLASS FOR CHARACTERIZING THE SEISMIC HAZARD: AS PER AASHTO 3.10.3.1.

(NOTE TO DESIGNER: WHERE SITE SPECIFIC RESPONSE SPECTRA IS USED FOR A CONTRACT, THE DESIGN OF A PROPRIETARY WALL SHALL INCLUDE SUFFICIENT INFORMATION IN TABULAR FORM HERE TO DEFINE THE SPECTRA.)

MATERIALS:

CONCRETE	CLASS	DESIGN STRENGTH
BARRIER PARAPETS AND MOMENT SLABS	A	4,000 PSI
PRECAST CONCRETE WALL PANELS	P	5,000 PSI
PREFABRICATED MODULAR WALL UNITS	P	4,000 PSI
LEVELING PADS	C	5,000 PSI
SIDEWALKS	B	3,500 PSI

REINFORCEMENT STEEL

ASTM A615, GRADE 60 - PRECAST CONCRETE PANELS
ASTM A615, GRADE 60, EPOXY COATED - BARRIER PARAPETS, MOMENT SLABS & SIDEWALKS

WALL PANEL SHAPE AND FINISH:

WALLS SHALL HAVE A PLAIN FINISH AND WALL PANELS SHALL BE RECTANGULAR IN SHAPE

HORIZONTAL JOINTS BETWEEN PANELS SHALL BE STAGGERED AND VERTICAL JOINTS BETWEEN PANELS SHALL BE ALIGNED TO ACCOMMODATE DIFFERENTIAL SETTLEMENT.

(NOTE TO DESIGNER: INCLUDE FOLLOWING NOTE WHEN USING MSE WALLS)

FOUNDATIONS:

(NOTE TO DESIGNER: INCLUDE FOLLOWING NOTES ONLY AS APPLICABLE)

MECHANICALLY STABILIZED EARTH (MSE) WALLS FOR ABUTMENTS:

NOMINAL BEARING RESISTANCE.....X TSF.

FACTORED BEARING RESISTANCE.....X TS

NOMINAL LATERAL LOAD FROM ABUTMENT XX KIPS/LINEAR FOOT OF WALL.

CALCULATED POST DESIGN SETTLEMENT FOR (MSE) RETAINING WALL NO. XX IS __ INCHES.

ADDITIONAL NOTES TO DESIGNER:
IF THERE ARE NO REQUIREMENTS FOR ROADWAY LIGHTING OR POWER DISTRIBUTION IN THE VICINITY OF A PROPRIETARY WALL AND THE WALLS ARE NOT CONTIGUOUS WITH A BRIDGE STRUCTURE, CONDUITS NEED NOT BE PROVIDED IN THE BARRIER PARAPET ATOP THE WALL. NJTA PROJECT ENGINEER WILL MAKE DETERMINATION.

THE ASSUMED POST CONSTRUCTION SETTLEMENT THAT WAS CALCULATED THROUGH DESIGN FOR THE TYPE STUDY AND FOUNDATION REPORTS SHOULD BE INCLUDED IN THE GENERAL NOTES FOR RETAINING WALLS. IF WALL SETTLEMENTS VARY ALONG LENGTH OF WALL REPORT SETTLEMENTS BY STATION AND OFFSET (TO FF WALL).

0 1/2 1 2 3 4

ORIGINAL SIZE IN INCHES

S-5 / S-8

NEW JERSEY TURNPIKE AUTHORITY

ROADWAY NAME

PROJECT DESCRIPTION

CONTRACT NO.

RETAINING WALL NO. XX, M.P. XX
GENERAL PLAN AND ELEVATION -1-

NAME OF CONSULTANT
ADDRESS
CERTIFICATE OF AUTHORIZATION NO. XXXXXXXXX

SCALE: 1" = 10'
DATE: MAY 2008

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JOHN DOE
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. XXXXXXXXXXX

	BY	DATE
MADE	XXX	XX-XX-XX
TRACED	XXX	XX-XX-XX
CHECKED	XXX	XX-XX-XX
SUPERVISED	X.XXXX	

No.	DATE	REVISION
0	5-08	ORIGINAL SHEET
0	12/10	REISSUED DRAWING

SAMPLE PLAN REVISION

FILE NAME: XXXX