

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	P.03		P.05		P.09		P.13		P.34		OFFICE CALCS		01/NFA						
																		ROADWAY	
	LS												LS	201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	P.03
							294		43		1,637		1,680	202	23000	1,680	SY	PAVEMENT REMOVED	
													294	202	38001	294	FT	GUARDRAIL REMOVED, AS PER PLAN	P.03
					885								885	203	10000	885	CY	EXCAVATION	
					1,533								1,533	203	20000	1,533	CY	EMBANKMENT	
											2,227		2,227	204	10000	2,227	SY	SUBGRADE COMPACTION	
							406.25						406.25	606	15050	406.25	FT	GUARDRAIL, TYPE MGS	
							2						2	606	26050	2	EACH	ANCHOR ASSEMBLY, MGS TYPE B	
							2						2	606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
							4						4	606	26550	4	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							4						4	606	34600	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	
							3						3	625	32000	3	EACH	GROUND ROD	
																		EROSION CONTROL	
					60								60	601	32110	60	CY	ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER	
					140								140	601	32210	140	CY	ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER	
					2								2	659	00100	2	EACH	SOIL ANALYSIS TEST	
					290								290	659	00300	290	CY	TOPSOIL	
					2,570								2,570	659	10000	2,570	SY	SEEDING AND MULCHING	
					131								131	659	14000	131	SY	REPAIR SEEDING AND MULCHING	
					0.35								0.35	659	20000	0.35	TON	COMMERCIAL FERTILIZER	
					0.54								0.54	659	31000	0.54	ACRE	LIME	
					15								15	659	35000	15	MGAL	WATER	
													LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
													LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
													LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
													15,000	832	30000	15,000	EACH	EROSION CONTROL	
																		DRAINAGE	
					100								100	605	31100	100	FT	AGGREGATE DRAINS	
									53				53	611	06400	53	FT	15" CONDUIT, TYPE D	
																		PAVEMENT	
									12		294		306	301	56000	306	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
									7		358		365	304	20000	365	CY	AGGREGATE BASE	
									6		339		345	407	10000	345	GAL	TACK COAT	
											71		71	441	70100	71	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG70-22M	
											99		99	441	70300	99	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
									4				4	441	70500	4	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
			35										35	617	10100	35	CY	COMPACTED AGGREGATE	
																		TRAFFIC CONTROL	
													14	621	00100	14	EACH	RPM	
							20						18	621	54000	18	EACH	RAISED PAVEMENT MARKER REMOVED	
													20	626	00110	20	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	
													31.1	630	02100	31.1	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
													128.6	630	03100	128.6	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
													73.38	630	80100	73.38	SF	SIGN, FLAT SHEET	
													16	630	84900	16	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
													14	630	86002	14	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
													0.24	646	10010	0.24	MILE	EDGE LINE, 6"	
													0.11	646	10200	0.11	MILE	CENTER LINE	
													39	646	10400	39	FT	STOP LINE	
													1	646	20000	1	EACH	RAILROAD SYMBOL MARKING	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

MVC

REVIEWER

SAH 01-19-24

PROJECT ID

111085

SHEET

P.07

TOTAL

58

SEEDING AND MULCHING CALCULATIONS

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659 - SOIL ANALYSIS TEST	2 EACH
290 C.Y. x 1 TEST/10000 C.Y. = 0.029 EACH (MIN. OF 2 EACH)	
ITEM 659 - TOPSOIL	290 CU. YD.
2610 S.Y. x 111 C.Y./1000 S.Y. = 289.71 CU. YD.	
ITEM 659 - REPAIR SEEDING AND MULCHING	131 SQ. YD.
2610 S.Y. x 0.05 = 130.50 SQ. YD.	
ITEM 659 - COMMERCIAL FERTILIZER	0.35 TON
2610 S.Y. x 9 x 30 LBS/1000 S.F./2000 LB/TON = 0.35 TON	
ITEM 659 - LIME	0.54 ACRES
2610 S.Y. x (9 S.F./S.Y.)/(43560 S.F./ACRE) = 0.54 ACRES	
ITEM 659 - WATER	15 M. GAL
2610 S.Y. x 9 x 300 GAL/1000 S.F. x 2 APP./1000 S.F. = 14.09 M. GAL.	

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

EARTHWORK AND SEEDING TABLE			
SHEET NO.	203		659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CU YD	CU YD	SQ YD
S.R. 179			
P.14	27	58	159
P.15	44	90	131
P.16	91	139	214
P.17	109	138	223
P.18	68	92	158
P.19	86	121	167
P.20	223	283	319
P.21	61	86	111
P.23	20	47	72
P.24	14	24	35
P.25	50	87	114
P.26	68	145	225
P.27	19	51	196
P.28	5	30	115
P.29	0	33	95
P.30	0	70	156
P.31	0	39	80
TOTALS CARRIED TO GENERAL SUMMARY	885	1,533	2,570

DRAINAGE CALCULATIONS

ITEM 605 - AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

STA. 203+30 RT.	6.0 FT
STA. 203+55 LT.	5.5 FT
STA. 203+80 RT.	5.5 FT
STA. 204+05 LT.	5.5 FT
STA. 204+30 RT.	5.5 FT
STA. 204+55 LT.	5.5 FT
STA. 204+80 RT.	10.0 FT
STA. 205+05 LT.	5.0 FT
STA. 205+30 RT.	5.0 FT
STA. 205+55 LT.	5.0 FT
STA. 207+05 RT.	5.0 FT
STA. 207+55 RT.	5.5 FT
STA. 208+05 RT.	8.5 FT
STA. 208+55 RT.	11.0 FT
STA. 209+05 RT.	11.0 FT
TOTAL =	99.5 FT
USE:	100 FT

THE FOLLOWING QUANTITY IS CARRIED TO THE GENERAL SUMMARY:

ITEM 605, AGGREGATE DRAINS	100 FT
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ROCK CHANNEL PROTECTION CALCULATIONS

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER

RCP-1		
(43' L X 8' W) - (π1 ¹² X 7 PILES) X 2.5' DEEP / 27 =		29.82 CU. YD.
RCP-2		
(43' L X 8' W) - (π1 ¹² X 7 PILES) X 2.5' DEEP / 27 =		29.82 CU. YD.
TOTAL =		59.64 CU. YD.
		(USE 60 CU. YD.)
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER		
RCP-1		
(38.5' + 42.75')/2 X 23.3' X 2.0' DEEP / 27 =		70.11 CU. YD.
RCP-2		
(42.5' + 38.5')/2 X 23.3' X 2.0' DEEP / 27 =		69.90 CU. YD.
TOTAL =		140.01 CU. YD.
		(USE 140 CU. YD.)

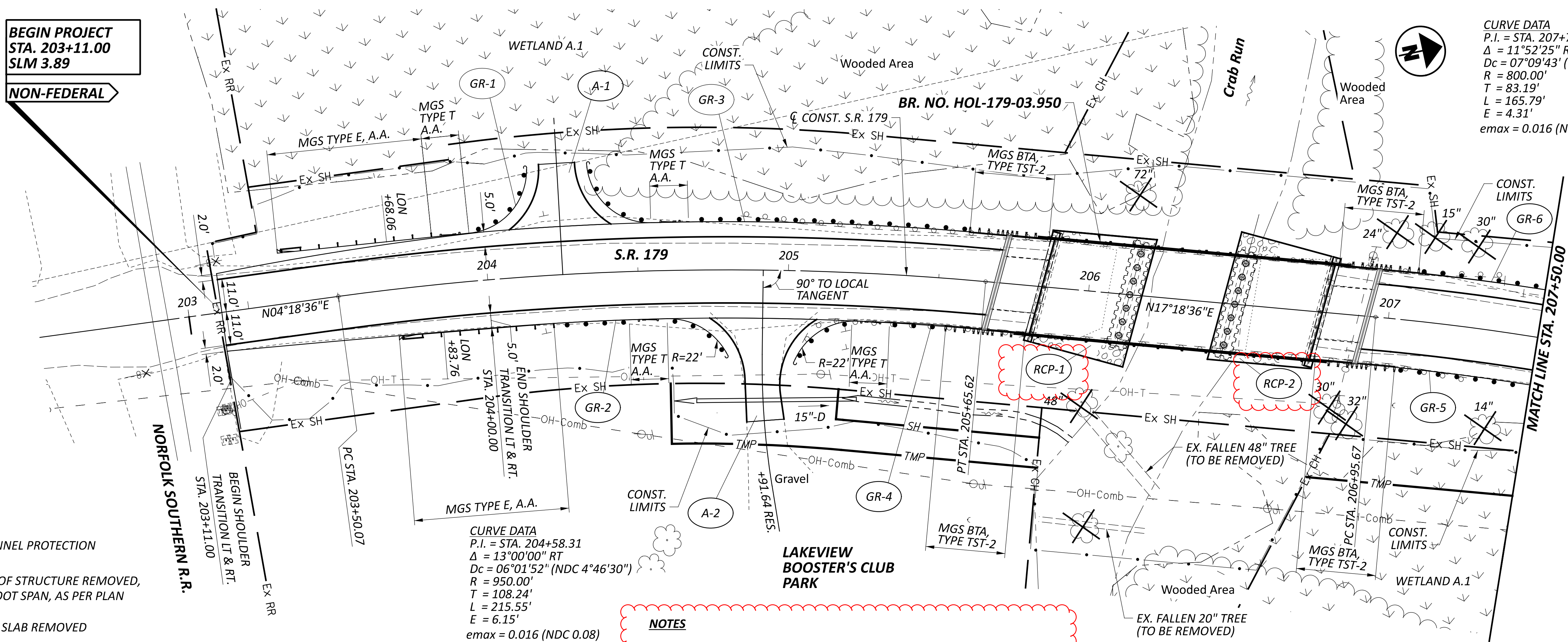


LEGEND

- ROCK CHANNEL PROTECTION
- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- APPROACH SLAB REMOVED
- WETLAND AREA

BEGIN PROJECT
STA. 203+11.00
SLM 3.89

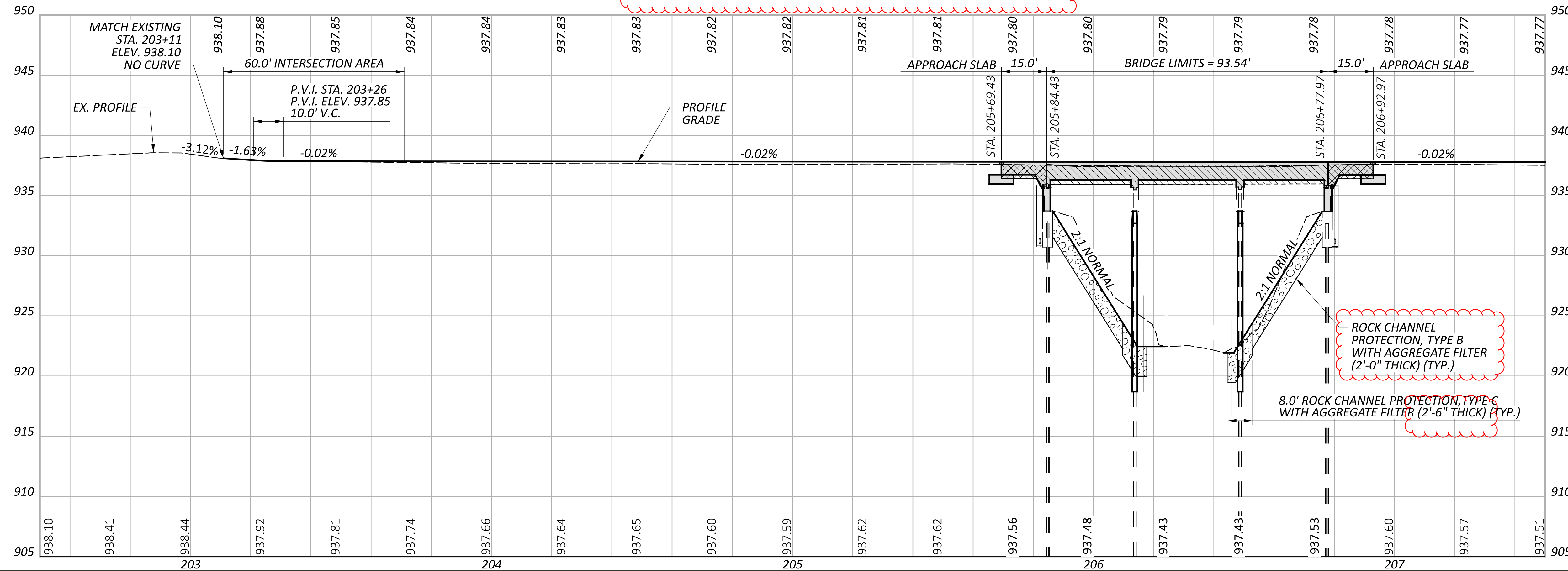
NON-FEDERAL



CURVE DATA
P.I. = STA. 207+78.86
 $\Delta = 11^\circ 52' 25''$ RT
 $D_c = 07^\circ 09' 43''$ (NDC $4^\circ 46' 30''$)
 $R = 800.00'$
 $T = 83.19'$
 $L = 165.79'$
 $E = 4.31'$
 $e_{max} = 0.016$ (NDC 0.08)

NOTES

- FOR DRIVEWAY DETAILS, SEE SHEETS P.34-P.35.
- FOR RCP-1 AND RCP-2 QUANTITIES, SEE CALCULATIONS ON SHEET P.09



PLAN AND PROFILE
STA. 202+50 TO STA. 207+50

DESIGN AGENCY



DESIGNER

MVC

REVIEWER

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P.11

TOTAL

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