

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS		STANDARDS LIST		FINAL HYDRAULIC REPORT	
PLAN SHEETS				HYDROLOGIC DATA Date: 02/27/2013	
1	TITLE SHEET	B-5	SLOPE GRADING, EMBANKMENTS, MUCK	DRAINAGE AREA : 42.6 Sq. Mi.	
2 - 3	PRELIMINARY INFORMATION SHEETS 1-2	C-10	CURBING	CHARACTER OF TERRAIN : <u>Wooded, Steep slopes</u>	
4	TYPICAL BRIDGE SECTIONS	D-3	TREATED GUTTERS	STREAM CHARACTERISTICS : <u>Sinuuous channel, 0.6% avg slope in work area</u>	
5 - 6	TYPICAL ROADWAY SECTIONS	D-6	REINFORCED CONCRETE DROP INLET W/GRATE (DITCHES)	NATURE OF STREAMBED : <u>Gravel and cobbles</u>	
7 - 10	MISCELLANEOUS ROADWAY DETAILS 1-4	D-10	REINFORCED CONCRETE DROP INLET TOP FOR BITUMINOUS CONCRETE CURB & C	PEAK FLOW DATA	
11 - 13	TIE SHEETS 1-3	D-11	STEEL OR IRON GRATES & COVERS (TYPE A)	Q 2.33 = <u>2200 cfs</u>	Q 50 = <u>4980 cfs</u>
14 - 26	LAYOUT SHEETS 1-13	D-16	DRAINAGE DETAILS INCLUDING DROP INLETS, IRON GRATE TYPE B&C, CONC END	Q 10 = <u>3300 cfs</u>	Q 100 = <u>5860 cfs</u>
27 - 34	PROFILE SHEETS - I-91 SOUTHBOUND 1-8	E-108A	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS FOR PAVING	Q 25 = <u>4180 cfs</u>	Q 500 = <u>8125 cfs</u>
35 - 42	PROFILE SHEETS - I-91 NORTHBOUND 1-8	E-111	MINOR MAINTENANCE OPERATIONS	DATE OF FLOOD OF RECORD : <u>Unknown</u>	
43	ITEM DETAIL AND DRAINAGE SHEET	E-120	STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY	ESTIMATED DISCHARGE: <u>Unknown</u>	
44	SITE PLAN	E-134	BRIDGE NUMBER PLAQUE	WATER SURFACE ELEV.: <u>Unknown</u>	
45	BORING INFORMATION SHEET	E-139	MILE MARKER DETAILS - INTERSTATE	NATURAL STREAM VELOCITY: <u>Unknown</u>	
46 - 54	BORING LOG INFORMATION SHEETS 1-9	E-150	WARNING SIGN DETAILS	ICE CONDITIONS : <u>Minimal</u>	
55	PLAN - BRIDGE 33S	E-160	FLANGED CHANNEL STEEL SIGN POST	DEBRIS: <u>Minimal</u>	
56	PLAN - BRIDGE 33N	E-161	W-SHAPED STEEL SIGN POST	DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? <u>YES</u>	
57	BRIDGE ELEVATIONS - 33S & 33N	E-162	TUBULAR ALUMINUM SIGN POST	IS ORDINARY RISE RAPID? <u>YES</u>	
58	BRIDGE SEQUENCE OF CONSTRUCTION	E-163	TUBULAR STEEL SIGN POST	IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? <u>NO</u>	
59	BRIDGE 33S DECK REINFORCEMENT	E-193	PAVEMENT MARKING DETAILS	IF YES, DESCRIBE: _____	
60	BRIDGE 33N DECK REINFORCEMENT	E-198	DELINEATOR SAND MILE POSTS	WATERSHED STORAGE: <u>N/A</u> HEADWATERS: _____	
61	DECK PLACEMENT SEQUENCE AND DETAILS	E-199	DELINEATOR AND MILE POST MOUNTING ON BRIDGE RAIL	UNIFORM: _____	
62	TYPICAL DECK DETAILS	G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	IMMEDIATELY ABOVE SITE: _____	
63	BARRIER AND CONDUIT DETAILS	G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIUM)	EXISTING STRUCTURE INFORMATION	
64	FRAMING PLAN - BRIDGE 33S	G-19	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS	STRUCTURE TYPE: <u>Abutments, Piers and Deck</u>	
65	FRAMING PLAN - BRIDGE 33N	S-352D	GUARDRAIL APPR SECT TO CONCRETE COMBINATION BRIDGE RAIL, TL-3	YEAR BUILT: <u>1965</u>	
66 - 71	GIRDER DETAILS 1 - 6	S-383	GUARDRAIL APPROACH SECTION, GALVANIZED NETC 2 & 4 RAIL	CLEAR SPAN(NORMAL TO STREAM): <u>approx. 175' to piers at Span 2; approx 630' to abut</u>	
72 - 73	SUPERSTRUCTURE ELEV. TABLES - 33S 1 - 2			VERTICAL CLEARANCE ABOVE STREAMBED: <u>77' at SB bridge</u>	
74 - 75	SUPERSTRUCTURE ELEV. TABLES - 33N 1 - 2			WATERWAY OF FULL OPENING: <u>N/A, Since existing structure not modeled</u>	
76	SUPERSTRUCTURE DETAILS			DISPOSITION OF STRUCTURE: <u>to be removed above existing ground</u>	
77	BRIDGE BEARING DETAILS - PIERS			TYPE OF MATERIAL UNDER SUBSTRUCTURE: <u>sand and gravel</u>	
78	BRIDGE BEARING DETAILS - ABUTMENTS			WATER SURFACE ELEVATIONS AT:	
79 - 80	EXPANSION JOINT DETAILS 1 - 2			Q2.33 = <u>399.1</u>	VELOCITY = <u>5.6 fps</u>
81 - 82	BRIDGE DRAINAGE SHEETS 1 - 2			Q10 = <u>400.2</u>	" <u>6.6 fps</u>
83	APPROACH SLAB DETAILS			Q25 = <u>401.0</u>	" <u>7.2 fps</u>
84 - 85	F-SHAPE BARRIER TRANSITION DETAILS			Q50 = <u>401.6</u>	" <u>7.7 fps</u>
86	ABUTMENT 1 PLAN			Q100 = <u>402.2</u>	" <u>8.1 fps</u>
87	ABUTMENT 1 ELEVATION & SECTION			LONG TERM STREAMBED CHANGES: <u>Stream was relocated during construction of exist. bridges. Channel remained relatively stable. Right bank scour at bend upstream of I-91 bridges.</u>	
88	ABUTMENT 1 FOOTING PLAN			IS THE ROADWAY OVERTOPPED BELOW Q100: <u>NO</u>	
89	ABUTMENT 1 WINGWALLS			FREQUENCY: _____	
90 - 91	ABUTMENT 1 REINFORCEMENT SHEETS 1-2			RELIEF ELEVATION: _____	
92	ABUTMENT 1 WINGWALL REINFORCEMENT			DISCHARGE OVER ROAD @Q100: _____	
93	ABUTMENT 2 PLAN			UPSTREAM STRUCTURE	
94	ABUTMENT 2 ELEVATION			TOWN: <u>Not Modeled</u> DISTANCE: _____	
95	ABUTMENT 2 SECTION			HIGHWAY #: _____ STRUCTURE #: _____	
96	ABUTMENT 2 FOOTING PLAN			CLEAR SPAN: _____ CLEAR HEIGHT: _____	
97	ABUTMENT 2 WINGWALLS			YEAR BUILT: _____ FULL WATERWAY: _____	
98 - 99	ABUTMENT 2 REINFORCEMENT SHEETS 1-2			STRUCTURE TYPE: _____	
100 - 101	ABUTMENT 2 WINGWALL REINFORCEMENT SHEETS 1-2			DOWNSTREAM STRUCTURE	
102	PIER 1 FOOTING PLAN & SECTION			TOWN: <u>Not Modeled</u> DISTANCE: _____	
103	PIER 1 ELEVATION & SECTION			HIGHWAY #: _____ STRUCTURE #: _____	
104	PIER 1 REINFORCEMENT			CLEAR SPAN: _____ CLEAR HEIGHT: _____	
105	PIER 2 FOOTING PLAN & SECTION			YEAR BUILT: _____ FULL WATERWAY: _____	
106	PIER 2 ELEVATION & SECTION			STRUCTURE TYPE: _____	
107	PIER 2 REINFORCEMENT			LRFR LOAD RATING FACTORS	
108	PIER 3 FOOTING PLAN & SECTION			LOADING LEVELS	
109	PIER 3 ELEVATION & SECTION			TRUCK	
110	PIER 3 REINFORCEMENT			H-20 HL-93 3S2 6 AXLE 3A STR. 4A STR. 5A SEM	
111 - 113	SB ABUTMENT DETAILS SHEETS 1-3			TONNAGE	
114 - 117	SB PIER DETAILS SHEETS 1-4			INVENTORY	
118	ABUTMENT 3 PLAN			POSTING	
119	ABUTMENT 3 ELEVATION & SECTION			OPERATING	
120	ABUTMENT 3 FOOTING PLAN			COMMENTS:	
121	ABUTMENT 3 WINGWALLS				
122 - 123	ABUTMENT 3 REINFORCEMENT SHEETS 1-2				
124	ABUTMENT 3 WINGWALL REINFORCEMENT				
125	ABUTMENT 4 PLAN				
126	ABUTMENT 4 ELEVATION				
127	ABUTMENT 4 SECTION				
128	ABUTMENT 4 FOOTING PLAN				
129	ABUTMENT 4 WINGWALLS				
130 - 131	ABUTMENT 4 REINFORCEMENT SHEETS 1-2				
132 - 133	ABUTMENT 4 WINGWALL REINFORCEMENT SHEETS 1-2				
134	PIER 4 FOOTING PLAN & SECTION				
135	PIER 4 ELEVATION & SECTION				
136	PIER 4 REINFORCEMENT				
137	PIER 5 FOOTING PLAN & SECTION				
138	PIER 5 ELEVATION & SECTION				
139	PIER 5 REINFORCEMENT				
140	PIER 6 FOOTING PLAN & SECTION				
141	PIER 6 ELEVATION & SECTION				
142	PIER 6 REINFORCEMENT				
143 - 145	NB ABUTMENT DETAILS SHEETS 1-3				
146 - 149	NB PIER DETAILS SHEETS 1-4				
150 - 152	CROSS SECTIONS - I-91 SOUTHBOUND 1-3				
153 - 156	CROSS SECTIONS - I-91 NORTHBOUND 1-4				

TRAFFIC DATA - I-91 NB					
YEAR	ADT	DHV	% D	% T	ADTT
2013	7300	1200	100	15.2	1200
2033	8900	1400	100	22.2	2100
Design Speed: 65 mph					

TRAFFIC DATA I-91 SB					
YEAR	ADT	DHV	% D	% T	ADTT
2013	7300	1500	100	10.8	1300
2033	8900	1900	100	15.4	2200
Design Speed: 65 mph					

Concrete Materials Summary		
Unit	Material Grade	
Bridge Deck	HPC Class A Low Cement (see special provisions)	
Barrier	HPC, Low Shrinkage (see special provisions)	
Prestressed Beams	HPC, Class SCC	
Abutments	HPC, Class A	
Wings	HPC, Class A	
Footings	HPC, Class B	
Columns	HPC, Class B	
Pier Caps	HPC, Class B	
Subfootings	Concrete Class C	
Approach Slab	HPC, Class B	

AS BUILT "REBAR" DETAIL		
LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

TEMPORARY BRIDGE PROFILE ALONG TEMP CL	
BOTTOM OF BEAMS ELEV. = 0.00 FT	
0.00 FT (MIN)	0.00 FT (MIN)
OPENING 0.00 FT (MIN)	

PILE DRIVING AND TESTING REQUIREMENTS			
1. NOMINAL PILE DRIVING CAPACITY	SEE TABLE	Rock:	SEE TABLE
2. PILE TEST RESISTANCE FACTOR	SEE TABLE	φ:	SEE TABLE
3. MINIMUM PILE TIP ELEVATION	SEE TABLE		
4. 0			