

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS						FINAL HYDRAULIC REPORT																																																																																													
PLAN SHEETS						STANDARDS LIST						HYDROLOGIC DATA						PROPOSED STRUCTURE																																																																																	
<p>1 TITLE SHEET</p> <p>2 PRELIMINARY INFORMATION SHEET</p> <p>3-4 PROJECT NOTES</p> <p>5-7 QUANTITY SHEETS</p> <p>8 LEGEND SHEET</p> <p>9-10 TYPICAL SECTIONS</p> <p>11-12 SURVEY TIE SHEETS</p> <p>13-14 LAYOUT SHEETS</p> <p>15-17 PROFILE SHEETS</p> <p>18-19 TRAFFIC CONTROL SHEETS</p> <p>20 TRAFFIC SIGN SUMMARY SHEET</p> <p>21 BORING INFORMATION SHEET</p> <p>22-25 BORING LOG SHEETS</p> <p>26 PLAN AND ELEVATION SHEET</p> <p>27 SURVEY LAYOUT</p> <p>28 FRAMING PLAN</p> <p>29 GIRDER DETAILS</p> <p>30 CAMBER DIAGRAM AND DEFLECTIONS TABLE</p> <p>31 DECK REINFORCING PLAN</p> <p>32 CLOSURE POUR DETAILS</p> <p>33 BRIDGE END DETAILS</p> <p>34 APPROACH SLAB DETAILS</p> <p>35 ABUTMENT 1 PLAN</p> <p>36 ABUTMENT 1 REINFORCING DETAILS</p> <p>37 ABUTMENT 2 PLAN</p> <p>38 ABUTMENT 2 REINFORCING DETAILS</p> <p>39 WINGWALL DETAILS</p> <p>40-41 PIER CAP DETAILS</p> <p>42 DRILLED SHAFT AND COLUMN DETAILS</p> <p>43 REINFORCING STEEL SCHEDULE</p> <p>44-50 MAINLINE CROSS SECTIONS</p> <p>51-53 HALPIN ROAD CROSS SECTIONS</p> <p>54 BANKING DIAGRAM & MATERIAL TRANSITION</p> <p>55-57 CHANNEL CROSS SECTIONS</p> <p>58 EPSC PLAN NARRATIVE</p> <p>59-60 EPSC EXISTING CONDITIONS SITE PLAN</p> <p>61-62 EPSC CONST. CONDITIONS SITE PLAN</p> <p>63-64 EPSC FINAL CONDITIONS SITE PLAN</p> <p>65-67 EPSC DETAILS</p>						<p>B-5 SLOPE GRADING, EMBANKMENTS, MUCK 06-01-1994</p> <p>B-71 STANDARD FOR RESIDENTIAL AND COMMERCIAL DRIVES 07-08-2005</p> <p>D-4 VARIOUS DRAINAGE DETAILS 08-13-2007</p> <p>E-121 STANDARD SIGN PLACEMENT CONVENTIONAL ROAD 08-08-1995</p> <p>E-127 ROUTE MARKINGS AT RURAL INTERSECTIONS 08-08-1995</p> <p>E-195 SHARED USE PATH PAVEMENT MARKINGS AND SIGN DETAILS 06-09-2008</p> <p>G-1 STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS) 02-10-2014</p> <p>G-1D STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIAN) 02-10-2014</p> <p>G-19 GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS 11-15-2002</p> <p>S-360a BRIDGE RAILING, GALVANIZED NETC 2 RAIL 04-23-2012</p> <p>S-360b GUARDRAIL APPROACH SECTION, GALVANIZED NETC 2 RAIL 04-23-2012</p> <p>T-10 CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING 08-06-2012</p> <p>T-17 TRAFFIC CONTROL MISCELLANEOUS DETAILS 08-06-2012</p> <p>T-28 CONSTRUCTION SIGN DETAILS 08-06-2012</p> <p>T-30 CONSTRUCTION SIGN DETAILS 08-06-2012</p> <p>T-42 BRIDGE NUMBER PLAQUE 04-09-2014</p> <p>T-45 SQUARE TUBE SIGN POST AND ANCHOR 01-02-2013</p>						<p>Date: 11/01/2013</p> <p>DRAINAGE AREA: 114 sq mi</p> <p>CHARACTER OF TERRAIN: wooded, mountainous, rural</p> <p>STREAM CHARACTERISTICS: semi-alluvial, straight, not braided or anabranching</p> <p>NATURE OF STREAMBED: mostly cobbles</p> <p>PEAK FLOW DATA</p> <p>Q 2.33 = 3,370 cfs Q 50 = 13,070 cfs</p> <p>Q 10 = 8,450 cfs Q 100 = 15,360 cfs</p> <p>Q 25 = 11,230 cfs Q 500 = 21,590 cfs</p> <p>DATE OF FLOOD OF RECORD: unknown</p> <p>ESTIMATED DISCHARGE: unknown</p> <p>WATER SURFACE ELEV.: unknown</p> <p>NATURAL STREAM VELOCITY: @ Q50 = 6.2 fps</p> <p>ICE CONDITIONS: light to moderate</p> <p>DEBRIS: moderate</p> <p>DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? no</p> <p>IS ORDINARY RISE RAPID? no</p> <p>IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? no</p> <p>IF YES, DESCRIBE:</p> <p>WATERSHED STORAGE: <1% HEADWATERS: UNIFORM: X</p> <p>IMMEDIATELY ABOVE SITE:</p> <p>EXISTING STRUCTURE INFORMATION</p> <p>STRUCTURE TYPE: 3 simple spans - straight beam/curve deck</p> <p>YEAR BUILT: 1934</p> <p>CLEAR SPAN(NORMAL TO STREAM): 110.0 ft</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: 10.2 ft</p> <p>WATERWAY OF FULL OPENING: 773.5 sf</p> <p>DISPOSITION OF STRUCTURE: Remove and replace</p> <p>TYPE OF MATERIAL UNDER SUBSTRUCTURE: gravel</p> <p>WATER SURFACE ELEVATIONS AT:</p> <p>Q2.33 = 258.0 VELOCITY = 7.2 fps</p> <p>Q10 = 261.6 " 9.1 fps</p> <p>Q25 = 263.6 " 9.4 fps</p> <p>Q50 = 264.3 " 9.5 fps</p> <p>Q100 = 265.0 " 9.4 fps</p> <p>LONG TERM STREAMBED CHANGES: none noted</p> <p>immediate vicinity of the abutments.</p> <p>IS THE ROADWAY OVERTOPPED BELOW Q100: yes</p> <p>FREQUENCY: Q3.2</p> <p>RELIEF ELEVATION: 259.0</p> <p>DISCHARGE OVER ROAD @Q100: 7,910 cfs</p> <p>UPSTREAM STRUCTURE</p> <p>TOWN: New Haven DISTANCE: 19,060 ft</p> <p>HIGHWAY #: Town Highway 4 STRUCTURE #: 11</p> <p>CLEAR SPAN: 100 ft CLEAR HEIGHT: 24.2 ft</p> <p>YEAR BUILT: 1969 FULL WATERWAY: unknown</p> <p>STRUCTURE TYPE: Prestressed Concrete T Beam</p> <p>DOWNSTREAM STRUCTURE</p> <p>TOWN: New Haven DISTANCE: 7,060 ft</p> <p>HIGHWAY #: US Route 7 STRUCTURE #: ##</p> <p>CLEAR SPAN: 253 ft CLEAR HEIGHT: 21 ft</p> <p>YEAR BUILT: 1960 FULL WATERWAY: unknown</p> <p>STRUCTURE TYPE: 3 Span Rolled Beam</p>						<p>STRUCTURE TYPE: 2 span curved steel plate girder</p> <p>CLEAR SPAN(NORMAL TO STREAM): 86.1 ft</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: 10.2 ft</p> <p>WATERWAY OF FULL OPENING: 821.0 sf</p> <p>WATER SURFACE ELEVATIONS AT:</p> <p>Q2.33 = 257.9 VELOCITY= 7.2 fps</p> <p>Q10 = 261.9 " 9.0 fps</p> <p>Q25 = 263.3 " 9.5 fps</p> <p>Q50 = 264.1 " 9.8 fps</p> <p>Q100 = 264.9 " 10.1 fps</p> <p>IS THE ROADWAY OVERTOPPED BELOW Q100: yes</p> <p>FREQUENCY: Q3.2</p> <p>RELIEF ELEVATION: 259.0</p> <p>DISCHARGE OVER ROAD @Q100: 7,250 cfs</p> <p>AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 260.6</p> <p>VERTICAL CLEARANCE: -3.5 ft.</p> <p>SCOUR: 3.5' Contraction & 15.0' Pier Scour @ Q100</p> <p>REQUIRED CHANNEL PROTECTION: Type IV Stone Fill</p> <p>PERMIT INFORMATION</p> <p>AVERAGE DAILY FLOW: 200 cfs DEPTH OR ELEVATION: 250.0</p> <p>ORDINARY LOW WATER: 15 cfs 256.5</p> <p>ORDINARY HIGH WATER: 2030 cfs</p> <p>TEMPORARY BRIDGE REQUIREMENTS</p> <p>STRUCTURE TYPE: no temporary bridge is needed</p> <p>CLEAR SPAN(NORMAL TO STREAM): n/a</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: n/a</p> <p>WATERWAY AREA OF FULL OPENING: n/a</p> <p>ADDITIONAL INFORMATION</p> <p>TRAFFIC MAINTENANCE NOTES</p> <p>1. MAINTAIN TRAFFIC ON DETOUR OFF BRIDGE DURING BRIDGE CLOSURE PERIOD. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.</p> <p>DESIGN VALUES</p> <p>1. DESIGN LIVE LOAD HL-93</p> <p>2. FUTURE PAVEMENT dp: 0.0 INCH</p> <p>3. ABUTMENT BEARING TO BEARING LENGTH (TWO SPANS) L: 164.00 FT</p> <p>(82.00 - 82.00) FT (ALONG MAJOR CHORD)</p> <p>4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ: ---</p> <p>5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX) fy: ---</p> <p>6. PRESTRESSED CONCRETE STRENGTH f'c: ---</p> <p>7. PRESTRESSED CONCRETE RELEASE STRENGTH f'cr: ---</p> <p>8. CONCRETE, HIGH PERFORMANCE CLASS AA f'c: ---</p> <p>9. CONCRETE, HIGH PERFORMANCE CLASS A f'c: 4.0 KSI</p> <p>10. CONCRETE, HIGH PERFORMANCE CLASS B f'c: 4.0 KSI</p> <p>11. CONCRETE, CLASS C f'c: ---</p> <p>12. REINFORCING STEEL fy: 60 KSI</p> <p>13. STRUCTURAL STEEL AASHTO M270 fy: 50 KSI</p> <p>14. SOIL UNIT WEIGHT γ: 0.140 KCF</p> <p>15. NOMINAL BEARING RESISTANCE OF SOIL qn: ---</p> <p>16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: ---</p> <p>17. NOMINAL BEARING RESISTANCE OF ROCK qn: 70.0 KSF</p> <p>18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: 0.45</p> <p>19. NOMINAL AXIAL PILE RESISTANCE qp: 410 KIP</p> <p>20. PILE YIELD STRENGTH ASTM A572 fy: 50 KSI</p> <p>21. PILE SIZE HP 14 X 102</p> <p>22. EST. PILE LENGTH (INCLUDING 2'-0" EMBEDMENT IN PILE CAP) Lp: 80 FT</p> <p>23. PILE RESISTANCE FACTOR φ: 0.65</p> <p>24. LATERAL PILE DEFLECTION Δ: 1.2 IN</p> <p>25. BASIC WIND SPEED V3s: ---</p> <p>26. MINIMUM GROUND SNOW LOAD pg: ---</p> <p>27. SEISMIC DATA PGA: 9% Ss: 0.19 Si: 0.052</p> <p>PROJECT NAME: NEW HAVEN</p> <p>PROJECT NUMBER: BRF 0183(1)</p> <p>FILE NAME: z10j070rebarschedule.xls PLOT DATE: 6/23/2015</p> <p>PROJECT LEADER: G.K.DONINGTON DRAWN BY: S.BROWN</p> <p>DESIGNED BY: S.BROWN CHECKED BY: A.STOCKIN</p> <p>PRELIMINARY INFORMATION SHEET SHEET 2 OF 67</p>																																																																																	
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