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ESTIMATED TRAFFIC DATA
US ROUTE 7 NB 2030 ADT : 2910

HYDROLOGIC DATA

DRAINAGE AREA= _____
 CHARACTER OF TERRAIN= _____
 CHARACTER & TYPE OF STREAM= _____
 NATURE OF STREAMBED= _____

Q2.33= _____ cms Q50= _____ cms
 Q10= _____ cms Q100= _____ cms
 Q25= _____ cms Q500= _____ cms

DATE OF FLOOD OF RECORD= _____
 WATER SURFACE ELEV.= _____ ESTIMATED DISCHARGE= _____
 NATURAL STREAM VELOCITY @ Q50 = _____ mps
 ICE CONDITIONS= _____ DEBRIS= _____
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? _____
 IS ORDINARY BASE RAPID? _____
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? _____
 IF YES, DESCRIBE. _____

WATERSHED STORAGE _____ HEADWATERS _____ UNIFORM THROUGHOUT WATERSHED _____
 IMMEDIATELY ABOVE SITE _____

PROPOSED STRUCTURE

STRUCTURE TYPE= N/A
 CLEAR SPAN (NORMAL TO STREAM)= N/A
 VERTICAL CLEARANCE ABOVE STREAMBED= N/A
 WATERWAY OF FULL OPENING= N/A

WATER SURFACE ELEV. @ Q2.33= _____ VELOCITY= _____ mps
 Q10= _____ " = _____ mps
 Q25= _____ " = _____ mps
 Q50= _____ " = _____ mps
 Q100= _____ " = _____ mps

IS THE ROADWAY OVERTOPPED BELOW THE Q100? N/A FREQUENCY= N/A
 RELIEF ELEVATION= N/A DISCHARGE OVER ROAD @ Q100= N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE= _____
 VERTICAL CLEARANCE @ Q100 = _____ m

SCOUR= Channel = N/A
 REQUIRED CHANNEL PROTECTION= N/A

EXISTING STRUCTURE

STRUCTURE TYPE= Two span contin. curved plate girder bridge YEAR BUILT= 1973
 CLEAR SPAN (NORMAL TO STREAM)= N/A
 VERTICAL CLEARANCE ABOVE STREAMBED= N/A
 WATERWAY OF FULL OPENING= N/A
 DISPOSITION OF STRUCTURE= N/A

TYPE OF MATERIAL UNDER SUBSTRUCTURE= N/A

WATER SURFACE ELEV. @ Q2.33= _____ VELOCITY= _____ mps
 Q10= _____ " = _____ mps
 Q25= _____ " = _____ mps
 Q50= _____ " = _____ mps
 Q100= _____ " = _____ mps

LONG TERM STREAM BED CHANGES= N/A

IS THE ROADWAY OVERTOPPED BELOW THE Q100? N/A FREQUENCY= N/A
 RELIEF ELEVATION= N/A DISCHARGE OVER ROAD @ Q100= N/A

UPSTREAM STRUCTURE= TOWN= N/A DISTANCE= _____
 HIGHWAY NO.= _____ STRUCTURE NO.= _____
 STRUCTURE TYPE= _____
 CLEAR SPAN= _____ CLEAR HEIGHT= _____
 YEAR BUILT= _____ FULL WATERWAY= _____

DOWNSTREAM STRUCTURE= TOWN= N/A DISTANCE= _____
 HIGHWAY NO.= _____ STRUCTURE NO.= _____
 STRUCTURE TYPE= _____
 CLEAR SPAN= _____ CLEAR HEIGHT= _____
 YEAR BUILT= _____ FULL WATERWAY= _____

PERMIT INFORMATION

AVERAGE DAILY FLOW= N/A
 ORDINARY LOW WATER= _____ cms ELEV.= _____
 ORDINARY HIGH WATER= _____ cms ELEV.= _____

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE= N/A
 CLEAR SPAN (NORMAL TO STREAM)= N/A
 VERTICAL CLEARANCE ABOVE STREAMBED= N/A
 WATERWAY OF FULL OPENING= N/A

DESIGN CRITERIA

- DESIGN LIVE LOAD AASHTO MS-18
- DESIGN SPAN 30,500 mm ± 26,800 mm = 57,300 mm
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL _____ ON LEDGE N/A
- ALLOWABLE LOAD FOR PILING _____ TYPE _____ N/A ESTIMATED LENGTH _____ N/A
- STRUCTURAL STEEL AASHTO GRADE AASHTO M 270M, GRADE 250
- REINFORCING STEEL GRADE 420
- CONCRETE, HIGH PERFORMANCE CLASS A $f_c = 30$ MPa
- CONCRETE, HIGH PERFORMANCE CLASS B $f_c =$ N/A
- DESIGN METHOD _____

TRAFFIC MAINTENANCE

- IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE YES OR ON TEMPORARY BRIDGE N/A
- TEMPORARY BRIDGE REQUIREMENTS= ONE OR TWO WAY N/A TRAFFIC CONTROL SIGNALS REQUIRED N/A

MINIMUM CLEAR SPAN (NORMAL TO STREAM)= N/A VERTICAL CLEARANCE ABOVE STREAMBED= N/A
 WATERWAY AT FULL OPENING= N/A
 ARE SIDEWALKS REQUIRED? N/A IF SO, ON WHAT SIDE? N/A

LOAD FACTOR LOAD RATING (LFD) (METRIC TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK				
	M	MS	3S2	6 AXLE	3A, STR. 4A, STR. 5A, SEMI
INVENTORY A=2.17 B=1.00					
POSTED A=1.55 B=1.40					
OPERATING A=1.30 B=1.67					

STRENGTH RF = $\frac{0.95 M_N - 1.3 M_{DL}}{A \times M_{LL+1}}$ SERVICEABILITY RF = B $\frac{0.95 F_y S_{LL+1} - M_{DL} \frac{S_{LL+1}}{S_N} - M_{SOL} \frac{S_{LL+1}}{S_{SOL}}}{1.67 M_{LL+1}}$

NOTE:
ALL DIMENSIONS ARE IN MILLIMETERS (mm)
UNLESS OTHERWISE NOTED.



**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of **BENNINGTON** Bridge No. **13N**
 Highway No. _____ Log Sta. _____
 Surv. Sta. _____
US ROUTE 7 NB OVER VT ROUTE 279 EB
PRELIMINARY INFORMATION SHEET
 Designed By **M. CHENETTE** Drawn By **A. THIBAUT**
 Checked By _____ Date _____ Bridge Design Supervisor
M. CHENETTE 11/09 **G. BOGUE** Date 11/09
 PROJECT **BENNINGTON** PROJECT NO. **NH F019-(154)**
 L.G.C. info _____
 Bridge Sheet No. BR700 Sheet 257 of 468

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