

EXISTING STRUCTURE

1. STRUCTURE TYPE	2-SPAN CONCRETE T-BEAM BRIDGE	OVERALL LENGTH	78'	INVENTORY RATING	H 15
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	37' - 36'				
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	35' - 34'				
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	730 FT ²	VERTICAL CLEARANCE ABOVE STREAMBED	13'		
5. WATER SURFACE ELEVATION @ Q 2.33	446.29	WATER SURFACE ELEVATION @ Q 100	450.89		
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD	UNKNOWN	YEAR		ESTIMATED DISCHARGE	
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE?	YES	IF NOT AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR?			
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL	UNKNOWN				
9. DISPOSITION OF STRUCTURE	TO BE REMOVED				

NEW STRUCTURE

1. STRUCTURE TYPE	CONDITIONALLY BEEN CAST IN PLACE FLAT CONC. SLAB	OVERALL LENGTH	44.68'
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	44.68'		
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER	13'		
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	40'		
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	480 SF		
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES?	NO		

HYDRAULIC DATA

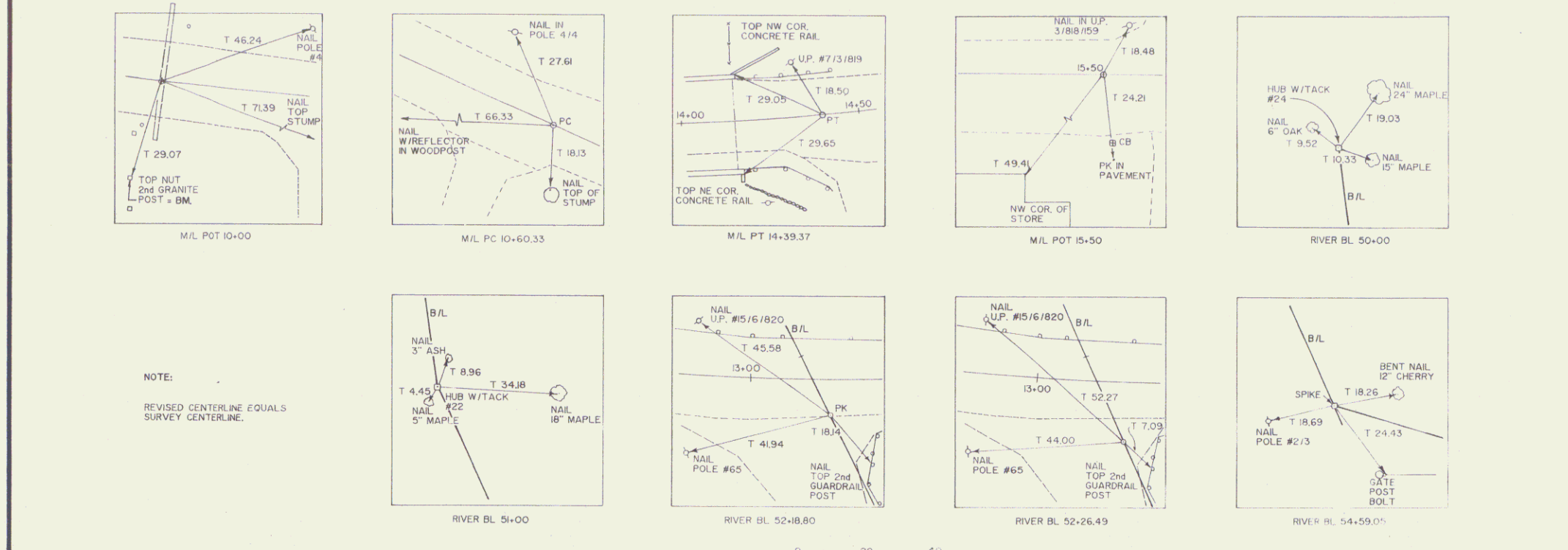
1. Q 2.33	550 cfs	WATER ELEVATION	447.3	VELOCITY	8.8 fps
Q 10	1600 cfs	WATER ELEVATION	449.4	VELOCITY	10.0 fps
Q 25	2300 cfs	WATER ELEVATION	450.5	VELOCITY	12.0 fps
Q 50	2850 cfs	WATER ELEVATION	452	VELOCITY	12.6 fps
Q 100	3300 cfs	WATER ELEVATION	454.8	VELOCITY	13.0 fps
2. DRAINAGE AREA	15.08 SQ MI	CHARACTER OF TERRAIN	ROLLING		
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM?	YES				
4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY?	YES	IS ORDINARY RISE RAPID?	YES		
5. NATURE OF NATURAL STREAMBED	GRAVEL				
6. ESTIMATED SCOUR DEPTH	3.0'	COMMENT ON: DRIFT	MED.	ICE LIGHT	
7. WILL ALL WATER PASS THROUGH NEW STRUCTURE?	YES	IF NOT WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR?	N/A		
8. ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF	N/A				
9. ALLOWABLE WATER SURFACE ELEVATION	456.0	LIMITED BY LOW POINT OF SUPERSTRUCTURE @ SOUTHWEST CORNER			
10. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS?	NO	IF YES DESCRIBE			
11. ORDINARY LOW WATER	0.0'	DEPTH	2'		
12. STREAMBANK OR CHANNEL PROTECTION REQUIRED	YES - TYPE IV STONE				
13. DISTANCE TO EXISTING UPSTREAM STRUCTURE	0.8 MI	SPAN	29 FT	WATERWAY AREA OF FULL OPENING	200 SQ. FT. @ Q
14. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE	N/A	SPAN		WATERWAY AREA OF FULL OPENING	0

ALLOWABLE STRESSES:

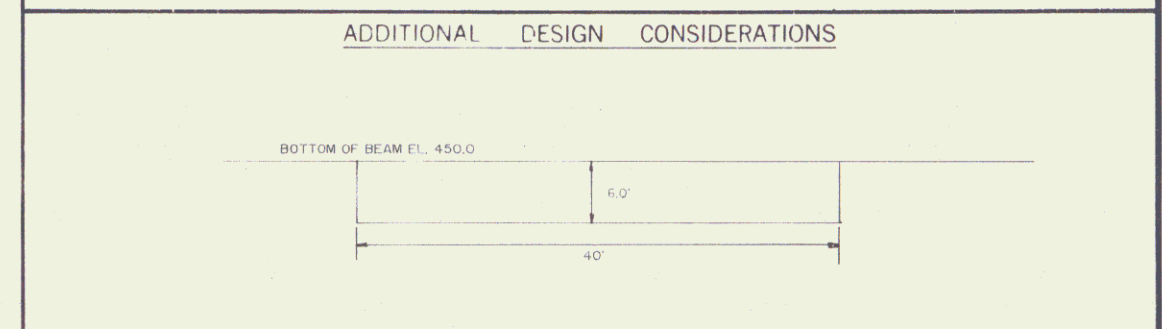
1. DESIGN LIVE LOAD	AASHTO HS 25-44	ON LEDGE	
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL		ESTIMATED LENGTH	
3. ALLOWABLE LOAD FOR PILING		TYPE	
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A	N/A	TENSION	N/A
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION	23,000 psi	COMPRESSION	20,000 psi
6. ALLOWABLE STRESS FOR CONCRETE CLASS A	f _c 4000 psi	f _c	1600 psi
	CLASS B f _c 3500 psi	f _c	1400 psi

TRAFFIC MAINTENANCE:

1. IS TRAFFIC TO BE MAINTAINED?	YES	IF YES, ON EXISTING STRUCTURE	OR ON TEMPORARY BRIDGE	✓
2. TEMPORARY BRIDGE REQUIREMENTS	ONE OR TWO WAY ONE WAY	TRAFFIC CONTROL SIGNALS REQUIRED	YES	
	MINIMUM CLEAR SPAN	50'	MINIMUM CLEAR HEIGHT	5.5'
	ARE SIDEWALKS REQUIRED?	NO	IF SO, ON WHAT SIDE?	N/A

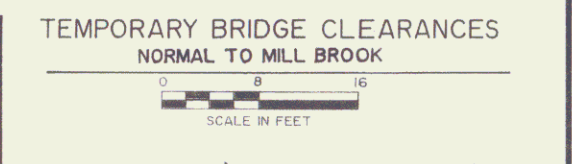


NOTE:
REVISED CENTERLINE EQUALS SURVEY CENTERLINE.



LOAD RATING (TONS)

STRESS LEVELS	TRUCK					
	H	HS	3S2	6 AXLE	3A STR	4A STR
INVENTORY						
POSTED						
OPERATING						



RECOMMENDED FOR APPROVAL

STRUCTURES ENGINEER	DATE
CHIEF OF DESIGN	DATE
DIRECTOR OF ENGINEERING & CONSTRUCTION	DATE

STATE OF VERMONT AGENCY OF TRANSPORTATION

TOWN OF	TOWNSHEND	Bridge No.	18
Log Sta.		Surv. Sta.	
HIGHWAY NO.	30		
VT. ROUTE 30 OVER MILL BROOK			
PRELIMINARY INFORMATION, TIES, TYP. SEC. TH 25 AND BRIDGE			
Designed by	C.F.C.	Drawn by	K.R.D. / W.J.R.

REVISIONS

NO.	DESCRIPTION	BY & DATE

TOWNSHEND
BRF-BST 015-1(17)
R.O.W. SHEET 4 OF 9 SHEETS