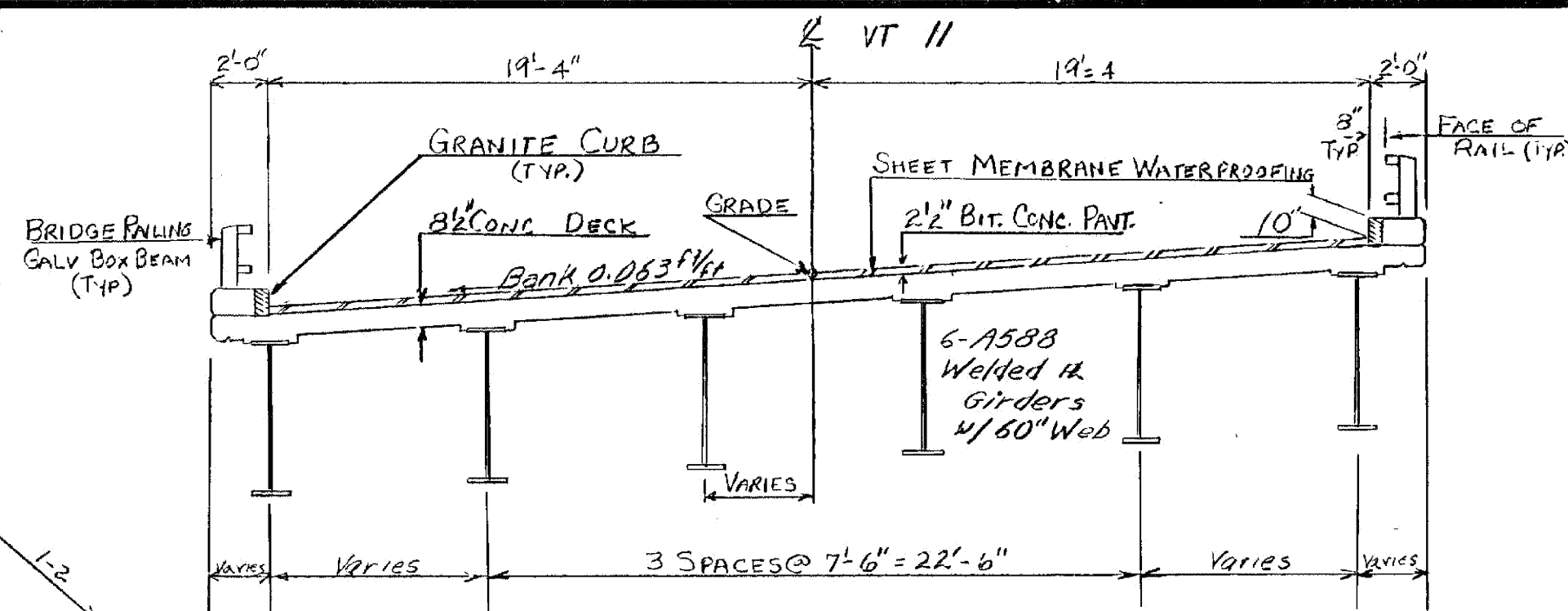


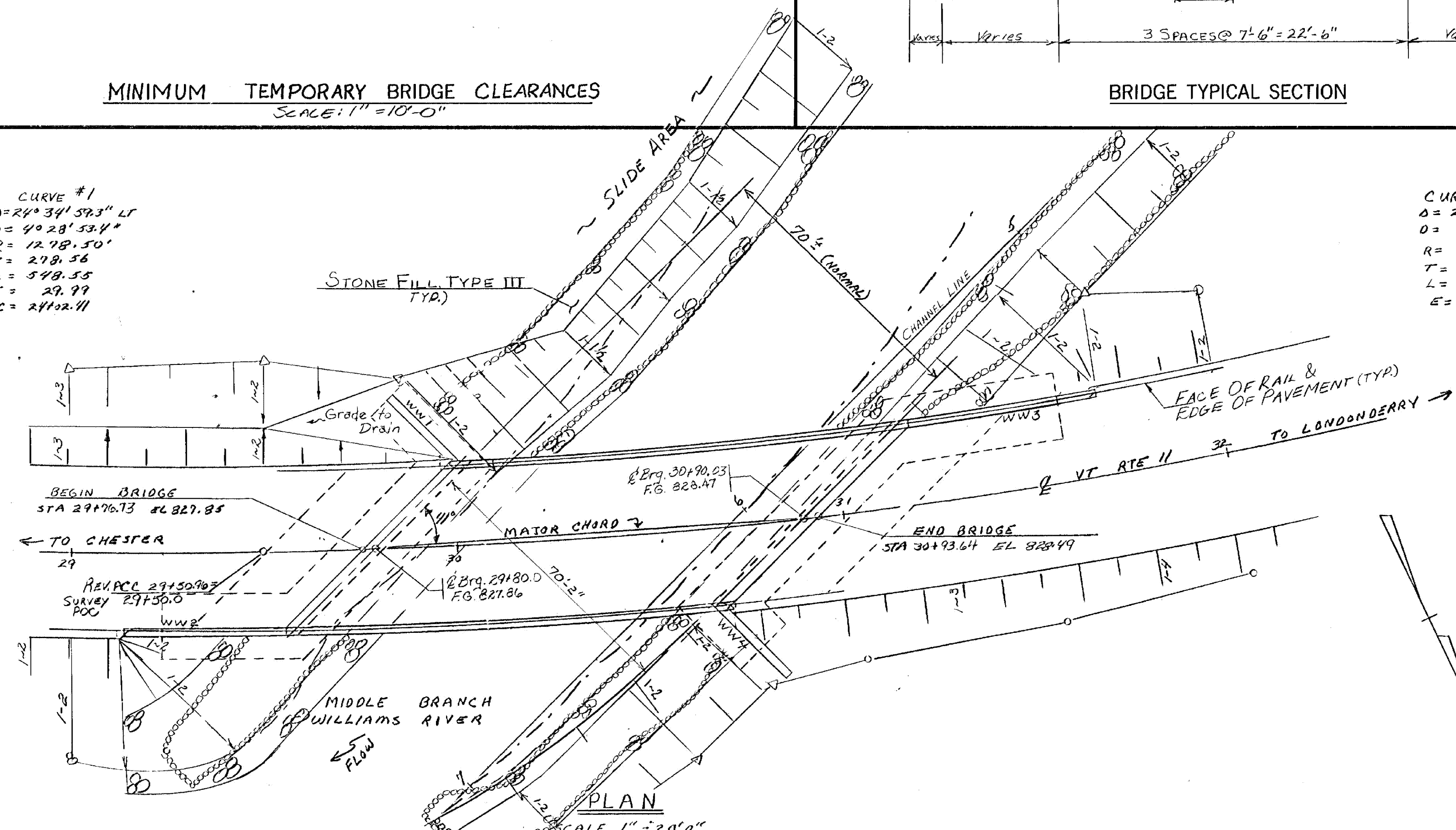
MINIMUM TEMPORARY BRIDGE CLEARANCES
SCALE: 1" = 10'-0"



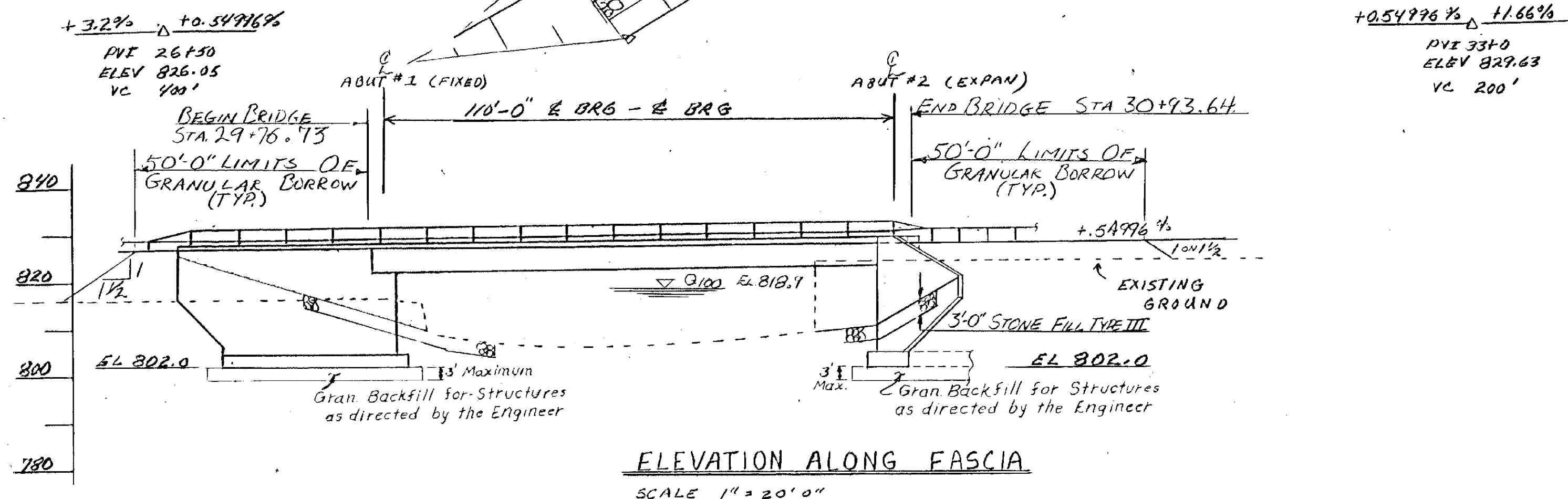
BRIDGE TYPICAL SECTION

CURVE #1
Δ = 24° 34' 52.3" LF
D = 40 28' 53.4"
R = 12 78' 50"
T = 278.56
L = 578.55
A = 29.97
PC = 2112.11

CURVE #2
Δ = 24° 28' 02.2" LF
D = 40 15' 00"
R = 13 48' 14"
T = 292.33
L = 585.74
E = 31.33



PLAN
SCALE 1" = 20'-0"



ELEVATION ALONG FASCIA
SCALE 1" = 20'-0"

EXISTING STRUCTURE

1. STRUCTURE TYPE	STEEL PONY TRUSS	OVERALL LENGTH	77'	INVENTORY RATING	H-13
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	26'				
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	26'				
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1278 sq. ft.	VERTICAL CLEARANCE ABOVE STREAMBED	11.0'		
5. WATER SURFACE ELEVATION @ Q 2.33	813.5	WATER SURFACE ELEVATION @ Q 50	818.8		
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD	Unknown	YEAR	1976	ESTIMATED DISCHARGE	
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE? YES IF NOT, AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR?	ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF				
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL	Silty sand w/ some gravel				
9. DISPOSITION OF STRUCTURE	REMOVE				

NEW STRUCTURE

STRUCTURE GEOMETRY:	SIMPLE SPAN	OVERALL LENGTH	117'
1. STRUCTURE TYPE	WELDED COMPOSITE PLATE GIRDER		
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	117'		
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER	13.7'		
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	107.5'		
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1006 sq. ft.		
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES?	NO		

HYDRAULIC DATA:

1. Q 2.33	1150 cfs	WATER ELEVATION	813.1	VELOCITY	8.1 fps
Q 10	2650 cfs	WATER ELEVATION	815.2	VELOCITY	9.8 fps
Q 25	3700 cfs	WATER ELEVATION	816.6	VELOCITY	11.9 fps
Q 50	4700 cfs	WATER ELEVATION	817.8	VELOCITY	12.9 fps
Q 100	5650 cfs	WATER ELEVATION	818.9	VELOCITY	13.7 fps

2. DRAINAGE AREA 27.13 sq. mi. CHARACTER OF TERRAIN Rolling to Hilly

3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM? No

4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? Yes IS ORDINARY RISE RAPID? Yes

5. NATURE OF NATURAL STREAMBED Gravel - Boulders

6. ESTIMATED SCOUR DEPTH 2'-4" COMMENT ON: DRIFT Mod. ICE Mod.

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

9. VERTICAL CLEARANCE ABOVE Q 100 11'

10. ALLOWABLE WATER SURFACE ELEVATION 820.0 LIMITED BY Low Bridge Seat

11. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No IF YES, DESCRIBE

12. AVERAGE DAILY LOW FLOW 30 cfs DEPTH 81.81' AVERAGE DAILY HIGH FLOW 40 cfs DEPTH 81.81'

13. STREAMBANK OR CHANNEL PROTECTION REQUIRED Stone Fill Type III

14. DISTANCE TO EXISTING UPSTREAM STRUCTURE 2200' SPAN 26' WATERWAY AREA OF FULL OPENING 1278 sq. ft. Q

15. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE 1300' SPAN 117' WATERWAY AREA OF FULL OPENING 1006 sq. ft. Q

ALLOWABLE STRESSES:

1. DESIGN LIVE LOAD AASHTO	H 25-44			
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL	4.2 KSF	ON LEDGE		
3. ALLOWABLE LOAD FOR PILING		TYPE	ESTIMATED LENGTH	
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A 588	TENSION	27,000 psi		
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60	TENSION	24,000 psi	COMPRESSION 20,000 psi	
6. ALLOWABLE STRESS FOR CONCRETE CLASS A 1c	3500 psi	1c	1400 psi	
	CLASS B 1c	3500 psi	1c	1400 psi

TRAFFIC MAINTENANCE:

1. IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE No OR ON TEMPORARY BRIDGE YES	
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED No	
MINIMUM CLEAR SPAN 40'	MINIMUM CLEAR HEIGHT 6'
ARE SIDEWALKS REQUIRED? NO IF SO, ON WHAT SIDE? N/A	MINIMUM WATERWAY AREA 240 SF

STANDARDS

5B-R4A-82	6-18-82 R
5B-R4B-82	12-28-81
5CB-D1-75	9-14-81 R
5CB-D4-76	1-8-76 R
5CB-D6-73	1-3-79 R
5CB-D7-71	12-15-76 R
5CB-D9-71	1-27-75 R

INDEX OF SHEETS

BR100-PRELIMINARY INFORMATION
BR101-BRIDGE QUANTITY SHEET
BR102-BORING SHEET
BR103-TYP BRIDGE SECT. & SLAB REINF
BR104-GIRDER ELEVATION & FRAMING PLAN
BR105-APPROACH SLABS & TYPICAL CROSS FRAME & END DIAPHRAGM DETAILS
BR106-BEARING DEVICE DETAILS
BR107-ABUTMENT #1 DETAILS
BR108-WINGWALLS 1&2 DETAILS
BR109-ABUTMENT #2 DETAILS
BR110-WINGWALLS 3&4 DETAILS
BR111-REINFORCING STEEL SCHEDULE

STRESS LEVELS	LOAD RATING (TONS)						
	H	HS	352	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	41	45					
0.55 Fy =							
POSTED	64		80	66	67	75	
0.67 Fy =							
OPERATING			97	112	81	82	91
0.75 Fy =							

RECOMMENDED FOR APPROVAL *W.M. Smith* 7/8/80 STRUCTURES ENGINEER DATE

RECOMMENDED FOR APPROVAL *William Jones* 7/8/80 CHIEF OF DESIGN DATE

APPROVED BY *S.J. Gage* P.E. SEP 08 1980 DIRECTOR OF ENGINEERING & CONSTRUCTION DATE

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF	CHESTER	Bridge No.	45
Log Sta.	94+92	Log Sta.	94+92
HIGHWAY NO.	VT. RTE 11	Surv. Sta.	30+0
VI RTE 11 OVER MIDDLE BRANCH WILLIAMS RIVER			
PRELIMINARY INFORMATION SHEET			
Designed by	GVS 10/12/79	Drawn by	GVS
Checked by	D.R. LANDRY date 10/23/79	Bridge Design Supervisor	R.S. HAUPT date 11-79
PROJECT	CHESTER	PROJECT NO.	BRF 016-1(6)
Bridge Sheet No.	BR100	Sheet	13 of 75

STATEWIDE - SOUTHEAST REGION
BHF MEMB(21)

SHEET 13 OF 34
BRIDGE 45
FOR REFERENCE ONLY