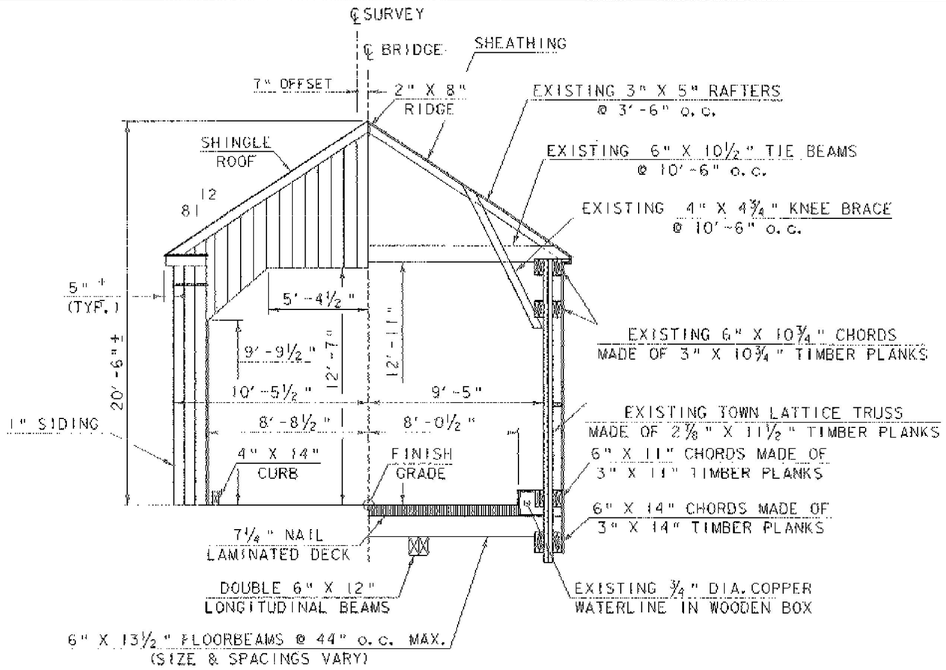
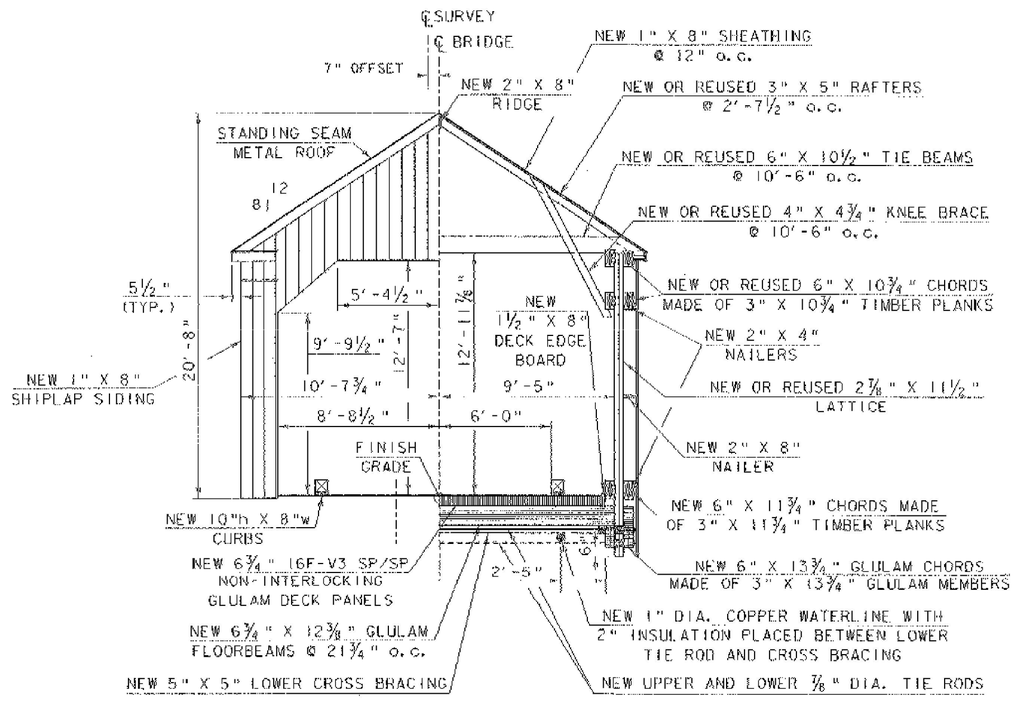



## EXISTING TYPICAL BRIDGE SECTION

SCALE: ¼" = 1'-0"




## NEW TYPICAL BRIDGE SECTION

SCALE: ¼" = 1'-0"

## EXISTING STRUCTURE*

1. STRUCTURE TYPE: WOODEN (TOWN LATTICE) COVERED BRIDGE OVERALL LENGTH: 132'-0" INVENTORY RATING: N/A
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS: N/A
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM: 106'
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM): 2200 SF VERTICAL CLEARANCE ABOVE STREAMBED: 25'
5. WATER SURFACE ELEVATION @ Q 2.33: 350.5 WATER SURFACE ELEVATION @ Q 100: 358.7
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD: 367.0 YEAR: 1927 ESTIMATED DISCHARGE: N/A
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE? NO IF NOT, AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR? 05 ELEV 352.0
   ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF: UNLIMITED
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL: WEST ABUTMENT ON LEDGE, EAST ABUTMENT ON UNKNOWN
9. DISPOSITION OF STRUCTURE: REHABILITATE

* NOTE: THE YADT BASED THE EXISTING STRUCTURE HYDRAULIC DATA ON THE EFFECTS OF THE COVERED BRIDGE IN PLACE ONLY. THE DATA DOES NOT TAKE INTO ACCOUNT THE EFFECT OF THE EXISTING TEMPORARY BRIDGE.

## NEW STRUCTURE

STRUCTURE GEOMETRY:

1. STRUCTURE TYPE: WOODEN (TOWN LATTICE) COVERED BRIDGE OVERALL LENGTH: 133'-7½"
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS: N/A
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER: 25'
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM: 106'
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM): 2200 SF
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? YES

HYDRAULIC DATA:

1. Q 2.33: 5000 CFS WATER ELEVATION: 350.5 VELOCITY: 4.1 FPS
   Q 10: 9600 CFS WATER ELEVATION: 354.9 VELOCITY: 6.1 FPS
   Q 25: 12400 CFS WATER ELEVATION: 356.4 VELOCITY: 7.5 FPS
   Q 50: √ 14400 CFS WATER ELEVATION: 357.5 √ VELOCITY: 8.9 FPS
   Q 100: 16800 CFS WATER ELEVATION: 358.7 VELOCITY: 10.4 FPS
2. DRAINAGE AREA: 459 SQ. MI. CHARACTER OF TERRAIN: VARIES FROM ROLLING HILLS IN HEADWATERS TO WIDE VALLEYS AT THE SITE
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM? N/A
4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? NO IS ORDINARY RISE RAPID? NO
5. NATURE OF NATURAL STREAMBED: SILTY SAND
6. ESTIMATED SCOUR DEPTH: Q100= 4'-0" Q500= 8'-0" COMMENT ON DRIFT: SLIGHT ICE: MODERATE
7. WILL ALL WATER PASS THROUGH NEW STRUCTURE? NO IF NOT, WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR? 05 ELEV 352.0
   ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF: UNLIMITED
8. VERTICAL CLEARANCE ABOVE Q: 25 ± 1.1'
9. ALLOWABLE WATER SURFACE ELEVATION: 357.5 LIMITED BY: LOWER CHORD OF EXISTING BRIDGE
10. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO IF YES, DESCRIBE:
11. ORDINARY LOW WATER: 425 CFS DEPTH: 6.9 FT. ORDINARY HIGH WATER: 2150 CFS DEPTH: 8.0 FT. ELEV 341.0
12. AVERAGE DAILY FLOW: 1000 CFS STREAMBANK OR CHANNEL PROTECTION REQUIRED: STONE FILL TYPE III
13. DISTANCE TO EXISTING UPSTREAM STRUCTURE: 0.8 MI. SPAN: 110' WATERWAY AREA OF FULL OPENING: N/A 0
14. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE: 1.4 MI. SPAN: 225' WATERWAY AREA OF FULL OPENING: N/A 0

ALLOWABLE STRESSES:

1. DESIGN LIVE LOAD AASHTO: H 20 (OPERATING PER WORKING STRESS)
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: N/A ON LEDGE: 10 KSF
3. ALLOWABLE LOAD FOR PILING: N/A TYPE: N/A ESTIMATED LENGTH: N/A
4. STRUCTURAL STEEL AASHTO GRADE: N/A
5. REINFORCING STEEL GRADE 60: N/A
6. CONCRETE CLASS A f'c: N/A
   CLASS B f'c: 3500 PSI

TRAFFIC MAINTENANCE:

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

NOTE: NA = INFORMATION NOT AVAILABLE
N/A = INFORMATION NOT APPLICABLE TO PROJECT

### LOAD FACTOR LOAD RATING (TONS)

| LOADING LEVELS (LOAD FACTOR) | TRUCK | | | | | | |
|---|---|---|---|---|---|---|---|
| | H* | HS | 3S2 | 6 AXLE | 3A. STR. | 4A. STR. | 5A. SEMI |
| INVENTORY | 16 | | | | | | |
| POSTED OPERATING | 20 | | | | | | |

*FLOOR BEAMS IN BENDING GOVERN

### TRAFFIC DATA

| YEAR | ADT | DHV | % D | % T | ADTT |
|---|---|---|---|---|---|
| 1992 | 600 | 85 | 5 | --- | --- |
| 2012 | 840 | 120 | 6 | 53 | --- |

18 kip ESAL for flexible pavement from 1992 to 2012: 312,000
18 kip ESAL for flexible pavement from -- to -- : --
Design speed: 20 mph

## PRELIMINARY INFORMATION SHEET (1)

PROJECT NAME: BRANDON
PROJECT NUMBER: BHZ 1443 (22)

FILE NAME: 87I137\Structures\s1137pi1.1 PLOT DATE: 16-MAY-2002
PROJECT MANAGER: R.R. WHITCOMB DRAWN BY: G. ROY
DESIGNED BY: T. SUMNER CHECKED BY: T. SUMNER
SHEET 2 OF 51