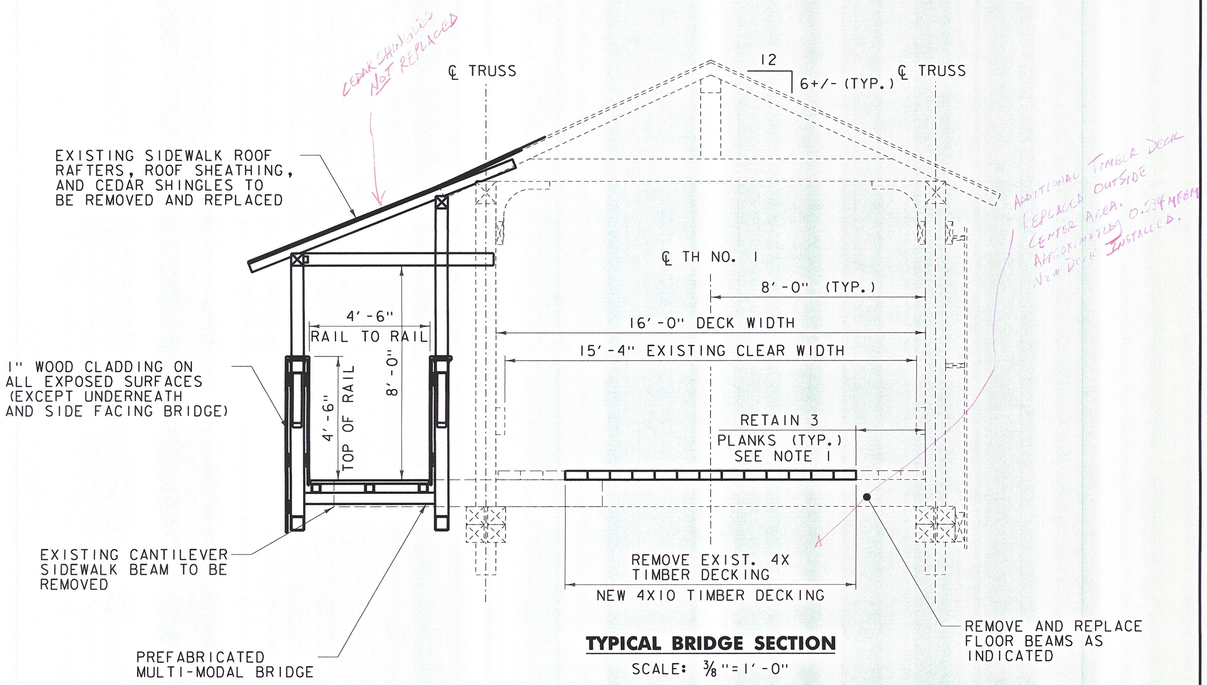
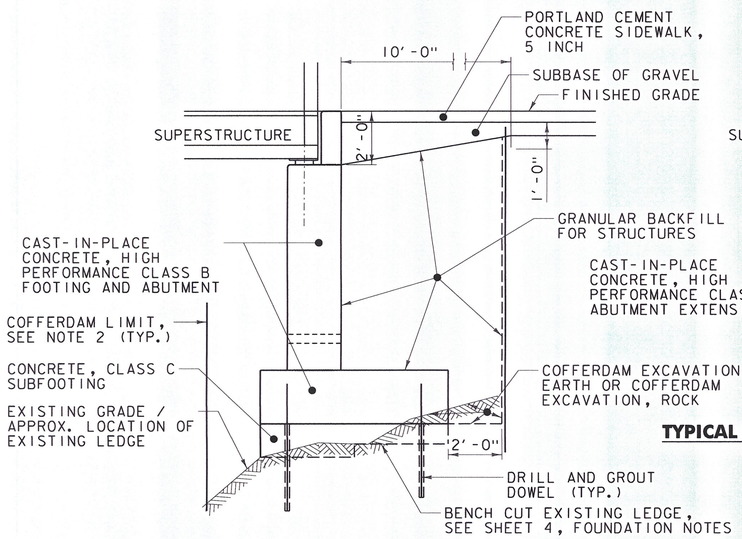


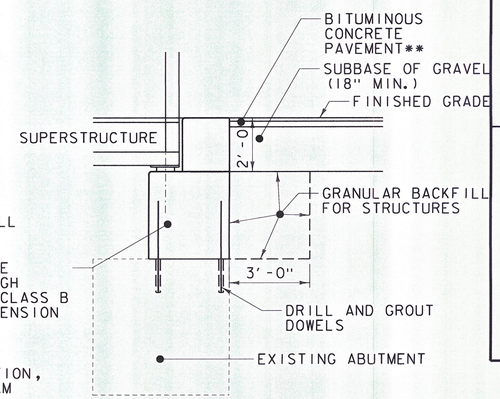
TYPICAL BRIDGE SECTION

SCALE: 3/8"=1'-0"



TYPICAL NORTH ABUTMENT EXTENSION SECTION

SCALE: 3/8"=1'-0"



TYPICAL SOUTH ABUTMENT EXTENSION SECTION

SCALE: 3/8"=1'-0"

** 1½" TYPE IV OVER 2½" TYPE II

FINAL HYDRAULICS REPORT

HYDROLOGIC DATA

DRAINAGE AREA: SEE ADDITIONAL COMMENTS
CHARACTER OF TERRAIN:
CHARACTER & TYPE OF STREAM:

NATURE OF STREAMBED:

Q2.33: _____ Q50: _____
Q10: _____ Q100: _____
Q25: _____ Q500: _____

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

WATERSHED STORAGE _____ HEADWATERS _____ UNIFORM THROUGHOUT WATERSHED
IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

STRUCTURE TYPE: KING POST TRUSS & BURR ARCH COVERED BRIDGE YEAR BUILT: 1833
CLEAR SPAN (NORMAL TO STREAM): 90-FEET PERP. TO ABUTMENT FACES
VERTICAL CLEARANCE ABOVE STREAMBED: 16-FEET AVG.
WATERWAY OF FULL OPENING:
DISPOSITION OF STRUCTURE: TO REMAIN (WITH REPAIRS)

TYPE OF MATERIAL UNDER SUBSTRUCTURE:

WATER SURFACE ELEV. @ Q2.33: _____ ft VELOCITY:
Q10: _____ ft
Q25: _____ ft
Q50: _____ ft
Q100: _____ ft

LONG TERM STREAM BED CHANGES:

IS THE ROADWAY OVERTOPPED BELOW THE Q100? _____ FREQUENCY:
RELIEF ELEVATION: _____ DISCHARGE OVER ROAD @ Q100:

UPSTREAM STRUCTURE: TOWN: WAITSFIELD DISTANCE: 1.0 MI.
HIGHWAY NO.: VT 100 STRUCTURE NO.: B178
NOTE:

DOWNSTREAM STRUCTURE: TOWN: WAITSFIELD DISTANCE: 1.3 MI.
HIGHWAY NO.: TH NO. 15 STRUCTURE NO.: B25
NOTE:

PROPOSED STRUCTURE

STRUCTURE TYPE: EXISTING KING POST TRUSS & BURR ARCH COVERED BRIDGE. PROPOSED STEEL PEDESTRIAN TRUSS ON DOWNSTREAM SIDE.

CLEAR SPAN (NORMAL TO STREAM): AS EXISTING
VERTICAL CLEARANCE ABOVE STREAMBED: AS EXISTING
WATERWAY OF FULL OPENING: AS EXISTING

WATER SURFACE ELEV. @ Q2.33: _____ ft VELOCITY:
Q10: _____ ft
Q25: _____ ft
Q50: _____ ft
Q100: _____ ft

IS THE ROADWAY OVERTOPPED BELOW THE Q100? _____ FREQUENCY:
RELIEF ELEVATION: _____ DISCHARGE OVER ROAD @ Q100:

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE:
VERTICAL CLEARANCE @ Q 25:

SCOUR:
REQUIRED CHANNEL PROTECTION:

ADDITIONAL COMMENTS

NO HYDROLOGIC OR HYDRAULIC ANALYSIS HAS BEEN PERFORMED. THE REHABILITATION WILL NOT CHANGE THE CLEAR OPENING SIZE OF THE BRIDGE.

TEMPORARY BRIDGE SKETCH

NOT TO SCALE

DESIGN CRITERIA:
1. DESIGN LIVE LOAD AASHTO PEDESTRIAN, 85 PSF
2. DESIGN SPAN 103'-11" ℄ BEARING TO ℄ BEARING
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 4 KSF ON LEDGE 10 KSF
4. ALLOWABLE LOAD FOR PILING N/A TYPE N/A ESTIMATED LENGTH N/A
5. STRUCTURAL STEEL GRADE ASTM A 500, GRADE B
6. REINFORCING STEEL GRADE 60
7. CONCRETE HIGH PERFORMANCE CLASS B f'c=3500 PSI
CLASS C f'c=3000 PSI

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? SEE NOTES IF YES, ON EXISTING STRUCTURE _____ OR ON TEMPORARY BRIDGE
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY N/A TRAFFIC CONTROL SIGNALS REQUIRED
MINIMUM CLEAR SPAN (NORMAL TO STREAM): _____ VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY OF FULL OPENING:
ARE SIDEWALKS REQUIRED? _____ IF SO, ON WHAT SIDE?
STRUCTURE TYPE:

ADDITIONAL DECK PLANKS REMOVED (0.534 MFBM) AND NEW DECKING INSTALLED DUE TO PLANK CONDITION AND FIELD FITTING GAPS ON BRIDGE SIDES.

NOTES:

1. RETAIN 3 DECK PLANKS EACH SIDE, OR AS DIRECTED BY THE ENGINEER. REMOVAL AND REINSTALLATION OF ADDITIONAL DECK PLANKS WILL BE NECESSARY FOR REPLACEMENT OF FLOOR BEAMS INDICATED IN THESE DRAWINGS. PAYMENT FOR REMOVAL AND REINSTALLATION OF DECK PLANKS REQUIRED FOR REPLACEMENT OF FLOORBEAMS WILL BE INCIDENTAL TO ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE".
2. COFFERDAM SIZE TO BE DETERMINED BY THE CONTRACTOR.
3. THE PAY LIMITS OF "COFFERDAM EVACATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING.

12/2015

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (GPS)

PLOTTED 12/30/2014

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PROFESSIONAL SEAL

FINAL PLANS

TOWN OF WAITSFIELD
9 BRIDGE STREET
WAITSFIELD, VT

VILLAGE COVERED BRIDGE REHAB. & BRIDGE STREET STORMWATER IMPROVEMENTS

SHEET TITLE

PRELIMINARY INFORMATION SHEET

DRAWN BY	DATE
RHB/JDG	DEC. 2014
CHECKED BY	D&K PROJECT #
EPD	620922
PROJ. ENG.	D&K ARCHIVE #
RHB	620922

SHEET NUMBER

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