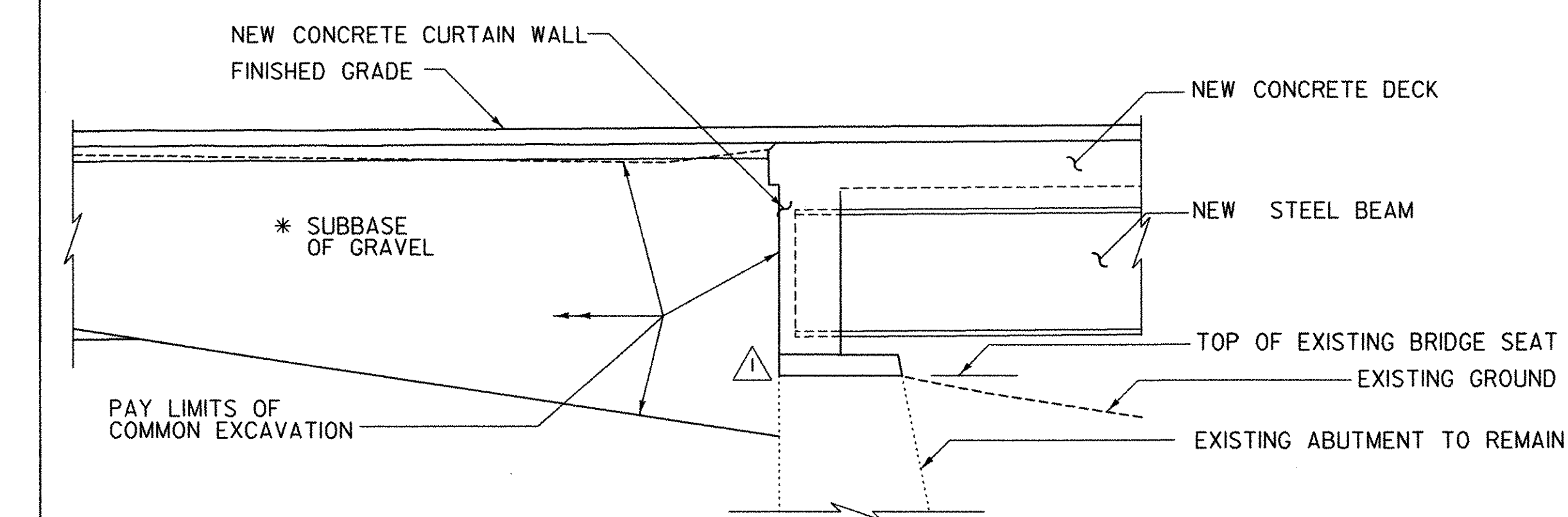


TYPICAL ROADWAY SECTION

SCALE 1/2" = 1'-0"
1 0 1 2

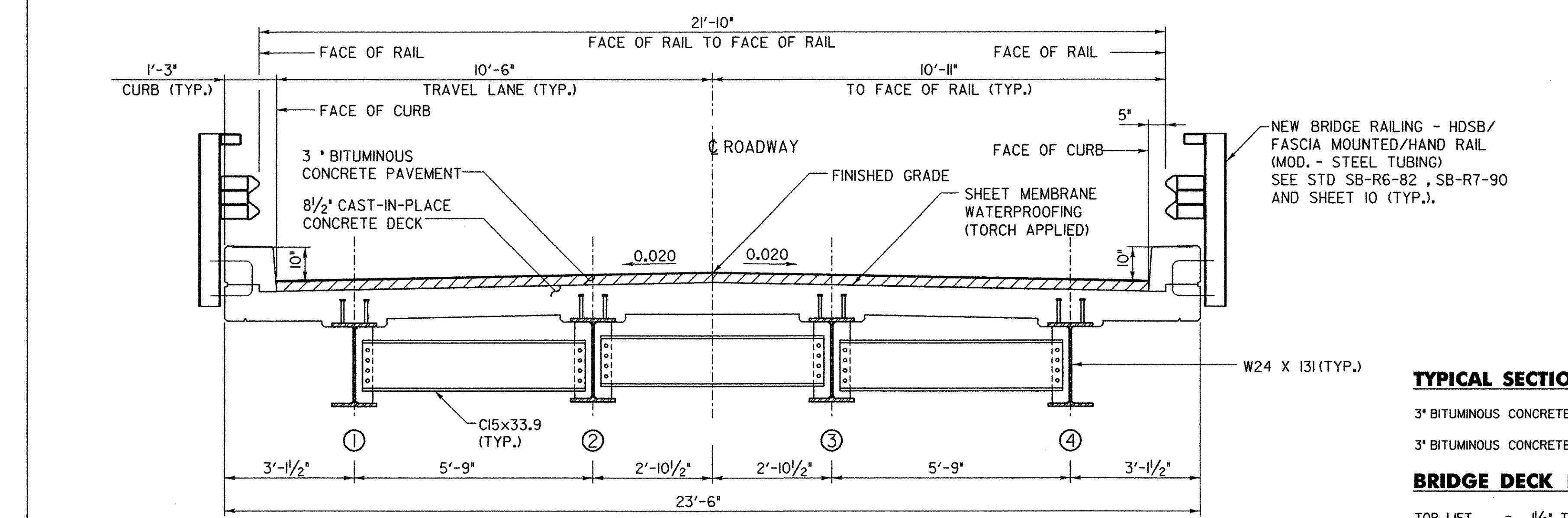
* FOR MATERIAL DEPTH DETAILS SEE SHEET 6
** ROADWAY WIDTH VARIES THROUGHOUT PROJECT. REFER TO PLAN SHEET AND ROADWAY CROSS SECTIONS FOR WIDTHS AT SPECIFIC STATIONS.



TYPICAL ABUTMENT SECTION

SCALE 1/2" = 1'-0"
1 0 1 2

NOTES:
THE PAY LIMITS OF STRUCTURE EXCAVATION AND GRANULAR BACKFILL FOR THE NEW WING WALLS, SHALL BE AS SHOWN ON SHEET 18.



TYPICAL BRIDGE SECTION

SCALE 1/2" = 1'-0"
1 0 1 2

* NOTE: ALL BITUMINOUS CONCRETE PAVEMENT SHALL BE PG-58-34

FINAL HYDRAULICS REPORT

HYDROLOGIC DATA

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

02.33= _____ 050= _____
 010= _____ 0100= _____
 025= _____ 0500= _____

DATE OF FLOOD OF RECORD: _____
 WATER SURFACE ELEV.: _____ ESTIMATED DISCHARGE: _____
 NATURAL STREAM VELOCITY @ Q: _____
 ICE CONDITIONS: _____ DEBRIS: _____
 DOES THE STREAM REACH MAXIMUM HIGHWATER 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 _____

PROPOSED STRUCTURE

STRUCTURE TYPE: STEEL BEAMS WITH COMPOSITE CONCRETE DECK (2 SPAN CONTINUOUS)
 CLEAR SPAN (NORMAL TO STREAM): 109 FT.
 VERTICAL CLEARANCE ABOVE STREAMBED: _____
 WATERWAY OF FULL OPENING: _____

WATER SURFACE ELEV. @ 02.33= _____ VELOCITY= _____
 010= _____
 025= _____
 050= _____
 0100= _____

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

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: _____
 VERTICAL CLEARANCE @ Q25: _____

SCOUR: _____
 REQUIRED CHANNEL PROTECTION: _____

EXISTING STRUCTURE

STRUCTURE TYPE: TWO SPAN STEEL BEAM WITH CONCRETE DECK YEAR BUILT: 1940
 CLEAR SPAN (NORMAL TO STREAM): 109 FT.
 VERTICAL CLEARANCE ABOVE STREAMBED: _____
 WATERWAY OF FULL OPENING: _____
 DISPOSITION OF STRUCTURE: REMOVE EXISTING SUPERSTRUCTURE
 EXISTING ABUTMENTS AND PIER ARE TO REMAIN

TYPE OF MATERIAL UNDER SUBSTRUCTURE: _____

WATER SURFACE ELEV. @ 02.33= _____ VELOCITY= _____
 010= _____
 025= _____
 050= _____
 0100= _____

LONG TERM STREAM BED CHANGES: _____

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

STRENGTH RF = $\frac{\phi M_N - 1.3M_{DL}}{A \times M_{LL+I}}$

*SERVICEABILITY RF = B $\left[\frac{.95F_y S_{LL+I} - M_{DL} \frac{S_{LL+I}}{S_{DL}} - M_{SDL} \frac{S_{LL+I}}{S_{DL}}}{1.67 M_{LL+I}} \right]$

LOAD FACTOR LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK						
	H	HS	3S2	6 AXLE	3A STR	4A STR	5A SEMI
INVENTORY	50	58					
A=2.17 B=1.00							
POSTED	70	82	109		38	79	103
A=1.55 B=1.40							
OPERATING		97	130	125	45	94	
A=1.30 B=1.67							

DESIGN CRITERIA:

1. DESIGN LIVE LOAD AASHTO HS-25-44
 2. DESIGN SPAN 114.0 FT.
 3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL N/A ON LEDGE N/A
 4. ALLOWABLE LOAD FOR PILING N/A TYPE ESTIMATED LENGTH N/A
 5. STRUCTURAL STEEL AASHTO M20M/M270, GRADE 50 W
 6. REINFORCING STEEL GRADE 60
 7. CONCRETE, HIGH PERFORMANCE CLASS A f_c 4000 psi
 CONCRETE, HIGH PERFORMANCE CLASS B f_c 3500 psi

TRAFFIC MAINTENANCE:

1. IS TRAFFIC TO BE MAINTAINED? NO IF YES, ON EXISTING STRUCTURE N/A OR ON TEMPORARY BRIDGE N/A
 EXISTING BRIDGE TO BE CLOSED, TRAFFIC TO BE DETOURED AROUND CONSTRUCTION SITE

2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY N/A TRAFFIC CONTROL SIGNALS REQUIRED N/A

MINIMUM CLEAR SPAN (NORMAL TO STREAM): _____ VERTICAL CLEARANCE ABOVE STREAMBED: _____
 WATERWAY OF FULL OPENING: _____
 ARE SIDEWALKS REQUIRED? _____ IF SO, ON WHAT SIDE? _____
 STRUCTURE TYPE: _____

TYPICAL SECTIONS

3" BITUMINOUS CONCRETE PAVEMENT (TYPE III)
 3" BITUMINOUS CONCRETE PAVEMENT (TYPE I)

BRIDGE DECK PAVEMENT

TOP LIFT = 1/2" TYPE III
 BOTTOM LIFT = 1/2" TYPE IV
 EMULSIFIED ASPHALT BETWEEN LIFTS

* NOTE: ALL BITUMINOUS CONCRETE PAVEMENT SHALL BE PG-58-34

REVISIONS

NO.	DESCRIPTION	BY & DATE
1	CONCRETE ABUTMENT CAP ADDED TO TYPICAL ABUTMENT SECTION	APG 2/3/04

DuBois & King
 engineering planning management development

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of CHESTER Bridge No. 11
 Highway No. TH 5 Log Sta. -
 Surv. Sta. -
 CHURCH STREET OVER WILLIAMS RIVER

PRELIMINARY INFORMATION SHEET

Designed By B. C. AUSTIN Drawn By G. J. WOJCIECHOWSKI
 Checked By J. TUCKER Date 03/01 Bridge Design Supervisor J. TUCKER Date 03/01

PROJECT CHESTER PROJECT NO. BHO 1442 (32)
 I.G.C. Info. ...Z1365p12 .dgn
 D & K DWG NO. 11345 Sheet 2 of 22