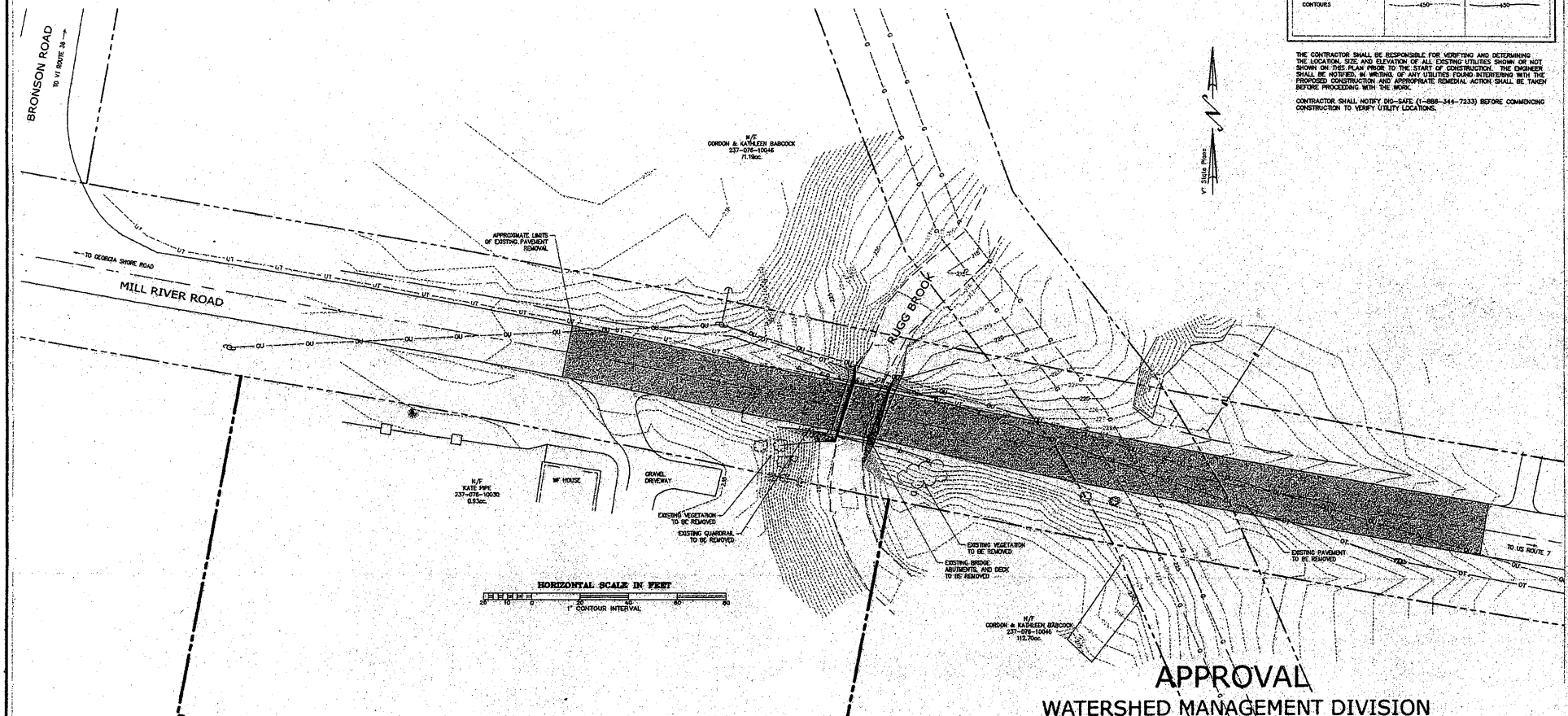

LEGEND

	EXISTING	PROPOSED
DRAINAGE MANHOLE		
CATCH BASIN		
END SECTION		
ELEVATION BENCHMARK		
WELLS		
PROPERTY LINE		
RIGHT-OF-WAY		
CENTERLINE OF ROAD		
STORMDRAIN	SD	
STREAM/DRAINAGE SWALE		
WETLAND DELINEATION		
WETLAND BUFFER		
EDGE OF WOODS		
CONTOURS	450	450

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THIS PLAN PRIOR TO THE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED, IN WRITING, OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK.

CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) BEFORE COMMENCING CONSTRUCTION TO VERIFY UTILITY LOCATIONS.

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 04/29/15 1 of 6
BY C. Brunelle
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT# SA-04-011-2015 ISSUED HEREWITH

Preliminary

CROSS CONSULTING ENGINEERS, P.C.
103 Fairfax Rd.
St. Albans, Vermont 05478
Tel. 802-524-2113
Fax. 802-524-9931

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PROJECT: 14079
DATE: 2015-04-05
DESIGN: PJG
DRAWN: PJG
CHECKED: PHC
APPROVED: PHC

Existing Conditions & Demo Plan

Town Of Georgia, VT
Georgia, VT
Bridge Replacement
Mill River Road
Georgia, VT

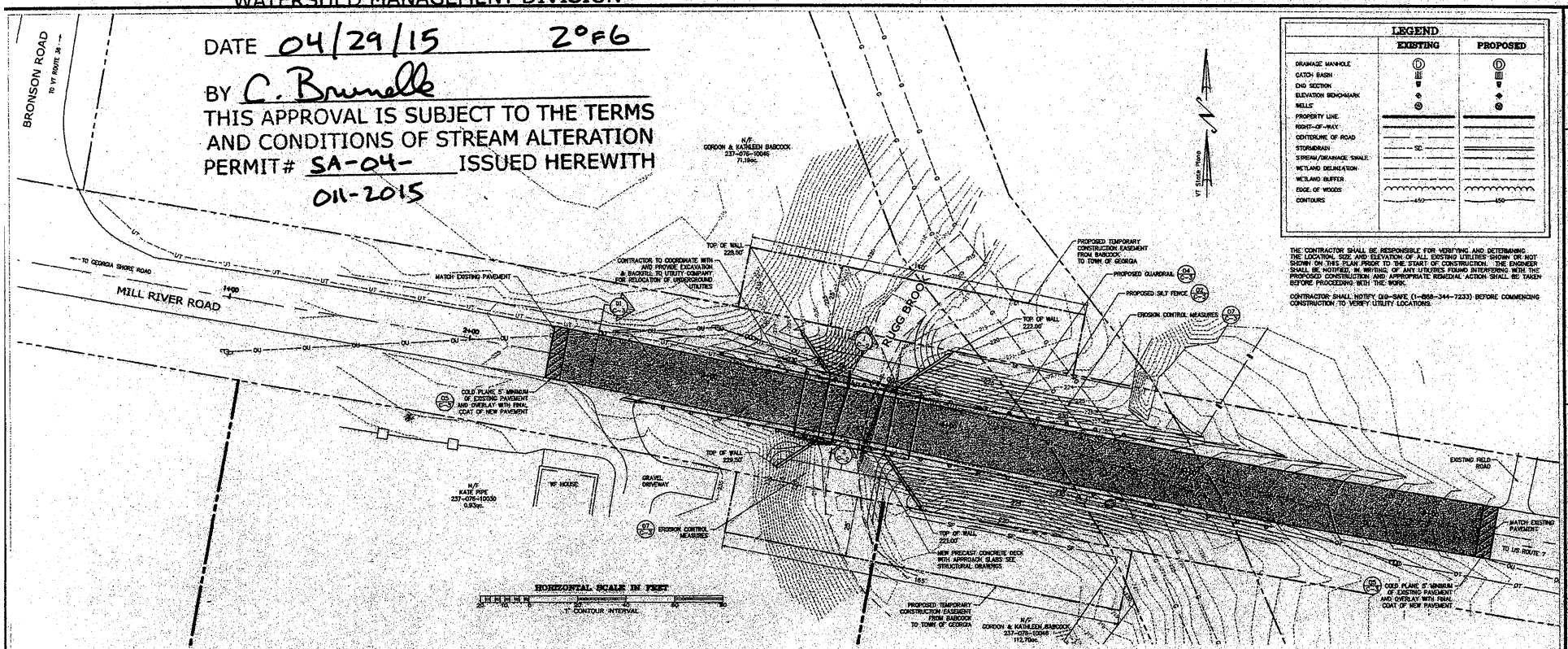
CIVIL
C-1

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 04/29/15 2 OF 6

BY C. Brunelle

THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT# SA-04-011-2015 ISSUED HEREWITH



LEGEND	EXISTING	PROPOSED
DRAINAGE MANHOLE		
CATCH BASIN		
CNG SECTION		
ELEVATION BENCHMARK		
WELLS		
PROPERTY LINE		
RIGHT-OF-WAY		
CENTERLINE OF ROAD		
STORMDRAIN	SD	
STREAM/DRAINAGE SWALE		
WETLAND DELINEATION		
WETLAND BUFFER		
EDGE OF WOODS		
CONTOURS	450	450

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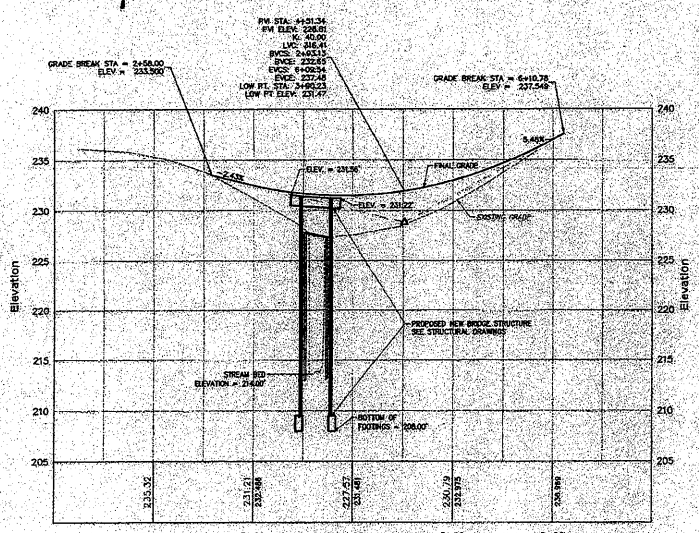
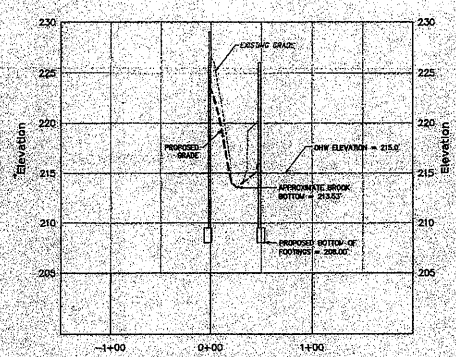
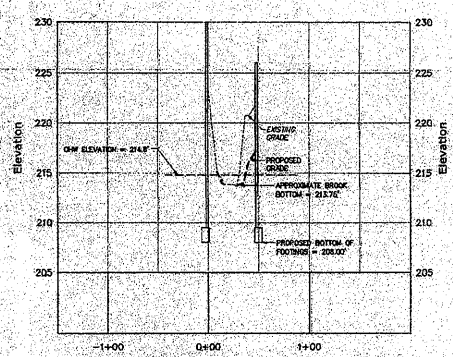


Alignment – (Mill River Road) 1+00 to 7+00 Profile
Horizontal Scale: 1" = 60'
Vertical Scale: 1" = 6'



Rugg Brook Northern Section –1+50 to 2+00 Profile
Horizontal Scale: 1" = 60'
Vertical Scale: 1" = 6'

1 C-2 Rugg Brook Northern Section
NOT TO SCALE



Rugg Brook Southern Section –1+50 to 2+00 Profile
Horizontal Scale: 1" = 60'
Vertical Scale: 1" = 6'

2 C-2 Rugg Brook Southern Section
NOT TO SCALE

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103 Fairfax Rd.
St. Albans, Vermont 05478
Tel: 802-524-2133
Fax: 802-524-6803

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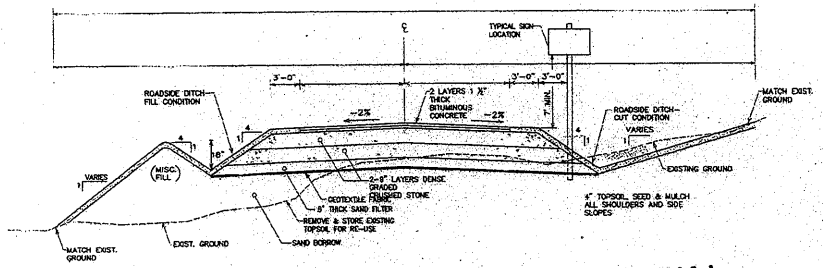
PROJECT: 14079
DATE: 2015-04-05
DESIGN: PJG
DRAWN: PJG
CHECKED: PHC
APPROVED: PHC

Overall Site Plan

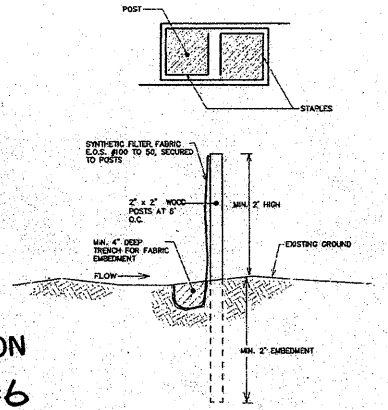
Town Of Georgia, VT
Georgia, VT
Bridge Replacement
Mill River Road
Georgia, VT

CIVIL
C-2

SHEET C-2 OF 3

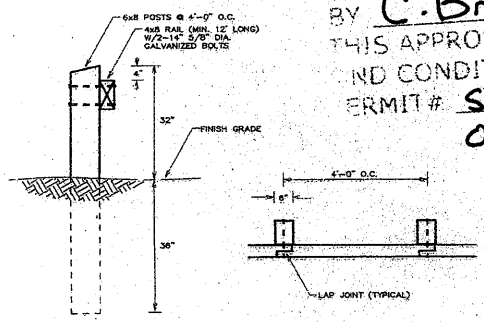


01 Typical Road Section
C-3 NOT TO SCALE

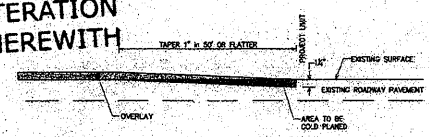


02 Silt Fence
C-3 NOT TO SCALE

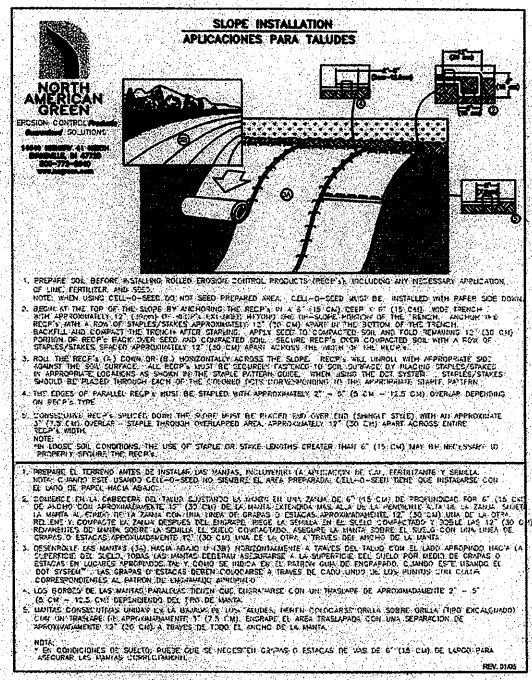
APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 04/29/15 3 of 6
BY C. Brunelle
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # SA-04-011-2015 ISSUED HEREWITH



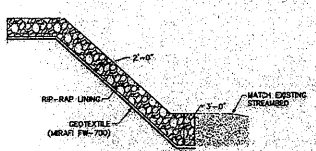
04 Guardrail
C-3 NOT TO SCALE



05 Cold Planing
C-3 NOT TO SCALE

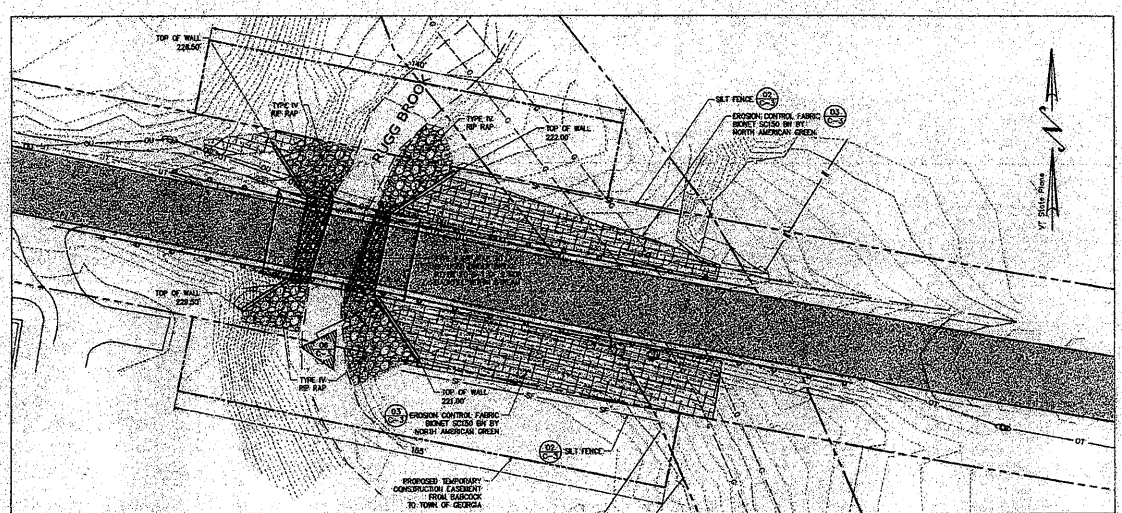


03 Slope Stabilization Fabric
C-3 NOT TO SCALE



EMBANKMENT SECTION ALONG SLOPE

06 Rip Rap Slope Protection
C-3 NOT TO SCALE



07 Erosion Site Plan
C-3 SCALE: 1" = 20'

HORIZONTAL SCALE IN FEET
20 10 0 20 40 60 80
1' CONTOUR INTERVAL

Preliminary

PROJECT: 14079
DATE: 2015-04-05
DESIGN: PJG
DRAWN: PJG
CHECKED: PHC
APPROVED: PHC

CROSS CONSULTING ENGINEERS, P.C.
TEL 802-334-2113
FAX 802-334-9881
133 Fairfax Rd.
St. Albans, Vermont 05478

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Details

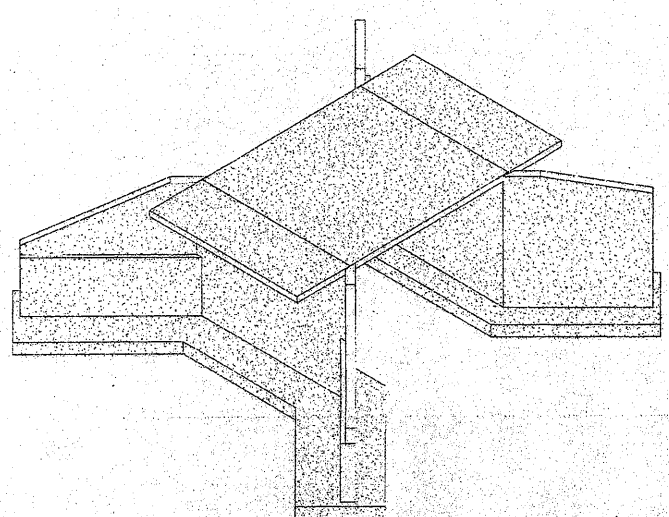
Town Of Georgia, VT
Georgia, VT
Bridge Replacement
Mill River Road
Georgia, VT

CIVIL
C-3

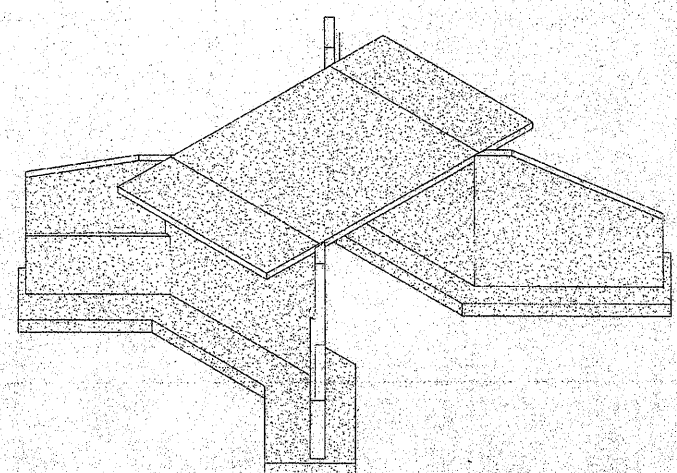
STRUCTURAL DESIGN PARAMETERS	
TOWN:	GEORGIA, VERMONT
MINIMUM BRIDGE DESIGN LOADS:	HL-93 LRFD LOADS
GEOTECHNICAL:	
DESIGN SOIL BEARING CAPACITY:	5,000 PSF

STRUCTURAL DRAWING LEGEND NOT ALL MAY APPLY DATUM OF 0'-0" MAY ALSO BE USED	
	FOOTING LIMIT
F-1 [100'-0"]	FOOTING MARK [BOTTOM OF FOOTING ELEVATION]
TOF	TOP OF FOOTING
BOF	BOTTOM OF FOOTING
	CONCRETE FOUNDATION WALL
W-1	FOUNDATION WALL TAG
WJ	FOUNDATION WALL CRACK CONTROL JOINT
SOG-1	SLAB ON GRADE TAG
TOC	TOP OF CONCRETE
TOW	TOP OF WALL
UNO	UNLESS NOTED OTHERWISE
V.F.	VERIFY IN FIELD
CL	CLEAR
℄	CENTERLINE

STRUCTURAL SHEET LIST	
S-0.1	Structural Cover Sheet
S-1.1	Bridge Plans
S-1.2	Sections



3D View- Northeast
NOT TO SCALE



3D View- Southwest
NOT TO SCALE

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 04/29/15 4 of 6
BY C. Brunelle
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT# SA-04-011-2015 ISSUED HEREWITH

Preliminary

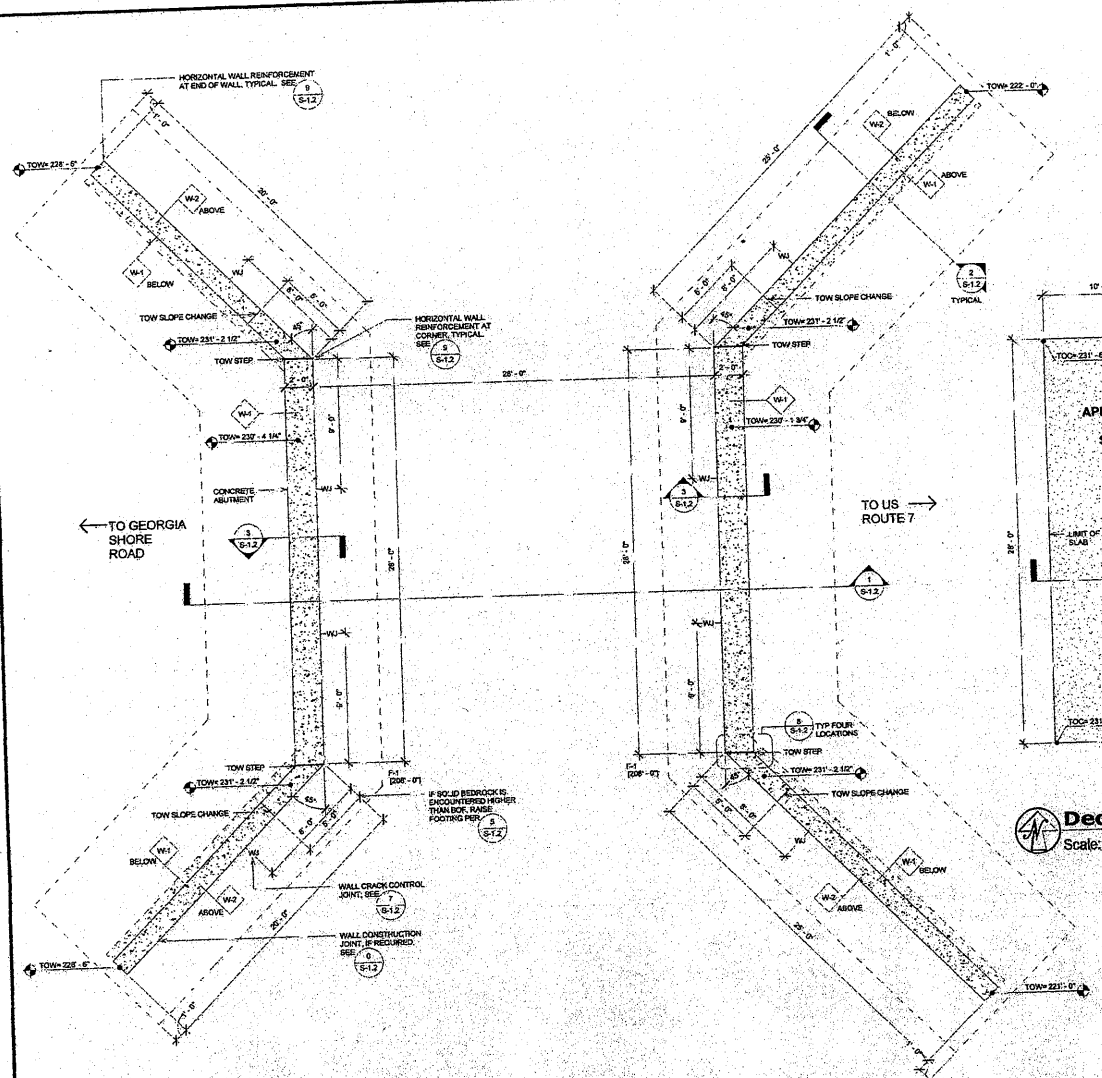
PROJECT: 14079
DATE: 2016-04-05
DESIGNED BY: BD
DRAWN: BD
CHECKED: PG
APPROVED: PHC

CCE CROSS CONSULTING ENGINEERS, P.C.
Tel. 802-524-2333
Fax. 802-524-9461
103 Fairfax Rd.
St. Albans, Vermont 05478

Structural Cover Sheet

Town of Georgia
Georgia, VT
Bridge Replacement
Mill River Road
Georgia, VT

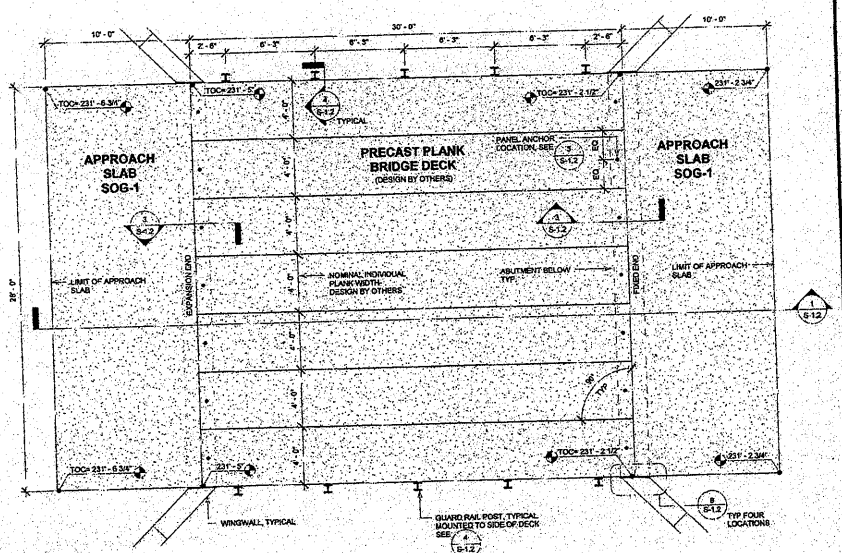
STRUCTURAL
S-0.1



Abutment and Wingwall Plan

Scale: 1/4" = 1'-0"

FOUNDATION NOTES:
1.) EXCAVATE TO THE SPECIFIED ELEVATIONS WITH A SMOOTH-EDGED BUCKET & MINIMIZE DISTURBANCE TO EXISTING SOIL. TO REMAIN. IF BEDROCK IS ENCOUNTERED WITHIN THE EXCAVATION LIMITS, STEP THE FOOTING AND BOTTOM OF WALL PER THE DETAIL, PROVIDED.
2.) ABUTMENT AND WINGWALL LAYOUT IS BY THE CONTRACTOR.
3.) CURE CONCRETE PER THE SPECIFICATIONS.
4.) BACKFILL ABUTMENTS AND WINGWALLS ONLY AFTER THEY HAVE ACHIEVED 100% OF THE CONCRETE DESIGN STRENGTH. CONTRACTOR MAY TAKE ADDITIONAL STUNDERS AT THEIR EXPENSE.
5.) BREAK OFF EXPOSED FORM TIES AND PARGE HOLES SMOOTH



Deck Plan

Scale: 1/4" = 1'-0"

DECK NOTES:
1.) PRECAST PANEL DECKING DESIGN IS BY OTHERS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. UPON APPROVAL, PROVIDE A STATE OF VERMONT PE STAMPED SET OF SHOP DRAWINGS.
2.) BRIDGE DESIGN LOADS: THIS BRIDGE IS LOCATED ON A CLASS II (FUTURE CLASS 1) TOWN HIGHWAY. DESIGN VEHICLE: HL-93 TRUCK PER THE VERMONT STRUCTURES DESIGN MANUAL.

SLAB ON GRADE SCHEDULE				
TAG	THICKNESS	CONSTRUCTION DETAILS	VOLUME	Comments
SOG-1	1' - 0"	#8 @ 6" LONGITUDINAL(SHORT) #6@12" TRANSVERSE(LONG)	20.7 CY	APPROACH SLABS. ALL REBAR EPOXY COATED. SURFACE FINISH: ROUGH.

CONCRETE WALL SCHEDULE			
TAG	WIDTH	REINFORCING	VOLUME
W-1	2' - 0"	#8@8" VERT TO 6'-0" #8@18" VERT TO TOW INSIDE FACE #6 @16" VERT OUTSIDE FACE #6@12" HORIZ EACH FACE	145 CY
W-2	1' - 4"	#5@16" VERT OUTSIDE FACE #5@16" VERT INSIDE FACE #6@12" HORIZ EACH FACE	39 CY
Grand total			184 CY

FOOTING SCHEDULE				
TAG	THICKNESS	WIDTH	REINFORCEMENT	VOLUME
F-1	2' - 0"	12' - 0"	#6@6" SHORT, #6@ 12" LONG (TOP) #6@10" SHORT #5@12" LONG (BOT)	127 CY
Grand total				127 CY

QUANTITIES INDICATED IN SCHEDULES ARE A GUIDELINE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS

Preliminary

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 04/29/15 5 of 6
BY C. Brunelle
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT# SA-04-011-2015 ISSUED HEREWITH

PROJECT: 14079
DATE: 2015-04-06
DESIGNED BY: BD
DRAWN BY: BD
CHECKED: PG
APPROVED: PHC

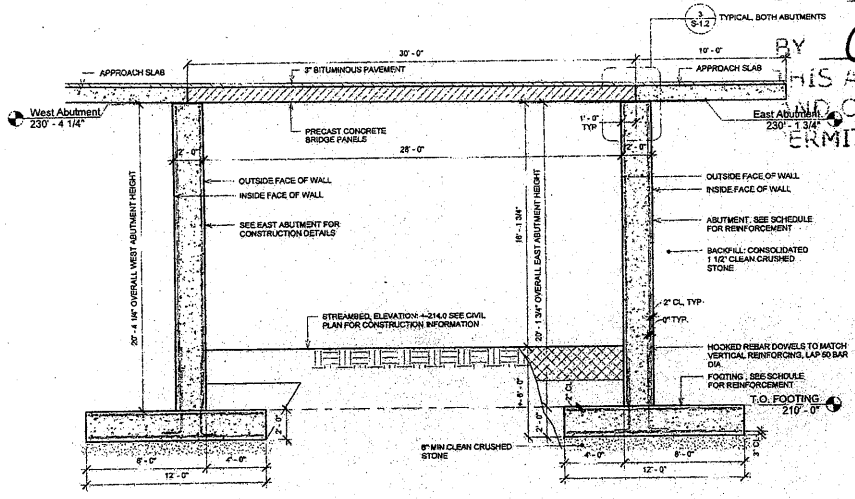
CROSS CONSULTING ENGINEERS, P.C.
Tel. 802-524-3113
Fax. 802-524-9461
193 Fairfax Rd.
St. Albans, Vermont 05478

Bridge Plans

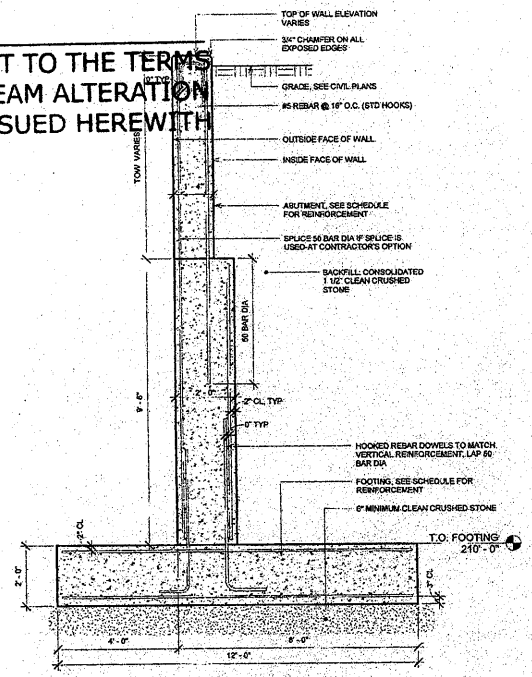
Town of Georgia
Georgia, VT
Bridge Replacement

STRUCTURAL
S-1.1

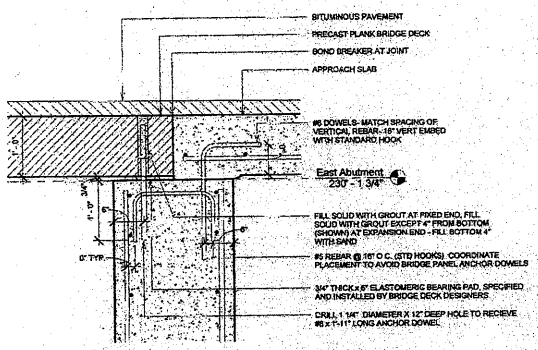
APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 04/29/15 6"x6"
BY C. Brunelle
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # SA-04-011- ISSUED HEREWITH
2015



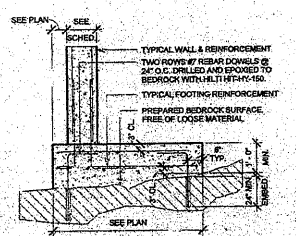
1 S-1.2 **Overall Bridge Section**
Scale: 1/4" = 1'-0"



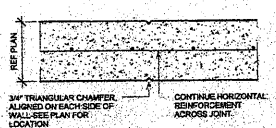
2 S-1.2 **Typical Wingwall Section**
Scale: 1/2" = 1'-0"



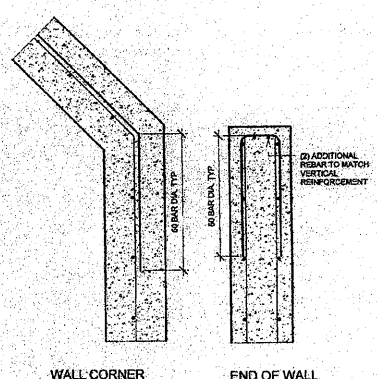
3 S-1.2 **Bearing Section**
Scale: 1" = 1'-0"



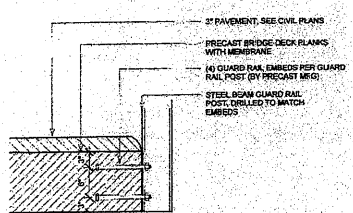
5 S-1.2 **Footing on Bedrock Section**
NOT TO SCALE



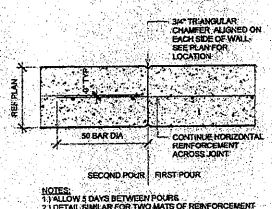
7 S-1.2 **Wall Control Joint (WJ)**
Scale: 1" = 1'-0"



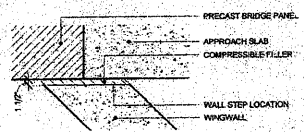
9 S-1.2 **Wall Horizontal Reinforcing**
Scale: 1" = 1'-0"



4 S-1.2 **Guardrail Attachment**
Scale: 1" = 1'-0"



6 S-1.2 **Wall Construction Joint**
Scale: 1" = 1'-0"



8 S-1.2 **Typical Wall Intersection**
Scale: 3/4" = 1'-0"

Preliminary

PROJECT: 14079
DATE: 2015-04-05
DESIGNED BY: BD
DRAWN: BD
CHECKED BY: PHC
APPROVED: PHC

CROSS CONSULTING ENGINEERS, P.C.
Tel: 802-524-2113
Fax: 802-524-9681
102 Fairfax Rd.
St. Albans, Vermont 05478

Sections

Town of Georgia
Georgia, VT
Bridge Replacement
Mill River Road
Georgia, VT

STRUCTURAL
S-1.2