NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PRIORITY MAINTENANCES, TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY ALLEGHANY | BRIDGE NUMBER 020031 | INSPECTION CYCLE 0 YRS

ROUTE SR1464 | ACROSS BIG PINE CREEK | M.P. 0

LOCATION 50 FT.N.JCT.SR1463

SUPERSTRUCTURE PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE E.BTS&INT.BTS:PPC CAPS/TIMBER POST & CONCRETE SILLS

SPANS 1 @ 30'-4; 1 @ 30'; 1 @ 30'-4

LONGITUDE	80° 58' 51.51" 80° 58' 51.50"	LATITUDE	36° 28' 52.41" 36° 28' 52.40"
PRESENT CONDITION	POOR	INVENTORY RATING	
INSPECTION DATE	09/12/2012	OPERATING RATING	
PRESENT POSTING	SV 23 TTST 30 SV 23 TTST 30	PROPOSED POSTING	
COMPUTER UPDATE		ANALYSIS DATE	
POSTING LETTER DATE		SUFFICIENCY RATING	

OTHER SIGNS PRESENT (4) DELINEATORS

SOUTH APPROACH LOOKING NORTH

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

NATIONAL BRIDGE INVENTORY-------- STRUCTURE INVENTORY AND APPRAISAL Update Date: 11/14/2012

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE **020031**
(8) STRUCTURE NUMBER(FEDERAL) 000000000050031
(5) INVENTORY ROUTE (ON/UNDER) - ON 31014640
(2) STATE HIGHWAY DEPARTMENT DISTRICT 1
(3) COUNTY CODE 5 (4) PLACE CODE 0
(6) FEATURE INTERSECTED - BIG PINE CREEK
(7) FACILITY CARRIED SR1464
(9) LOCATION 50 FT.N.JCT.SR1463
(11)MILEPOINT 0
(16)LAT 36° 28' 52.41" (17)LONG 80° 58' 51.51"
(98)BORDER BRIDGE STATE CODE PCT SHARE
(99)BORDER BRIDGE STRUCTURE NO

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Prestressed Concrete
TYPE - Channel Beam CODE 522
(44) STRUCTURE TYPE APPR :
TYPE - CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 3
(46) NUMBER OF APPROACH SPANS
(107)DECK STRUCTURE TYPE - 2 CODE
(108)WEARING SURFACE / PROTECTIVE SYSTEM :
(A) TYPE OF WEARING SURFACE - CODE
(B) TYPE OF MEMBRANE - CODE
(C) TYPE OF DECK PROTECTION - CODE

AGE AND SERVICE

(27) YEAR BUILT 1965
(106)YEAR RECONSTRUCTED
(42) TYPE OF SERVICE : ON - Highway
UNDER - Waterway CODE 15
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE 0
(29) AVERAGE DAILY TRAFFIC 550
(30) YEAR OF ADT 2011 (109) TRUCK ADT PCT 6%
(19) BYPASS OR DETOUR LENGTH 8 MI

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 29 FT
(49) STRUCTURE LENGTH 91 FT
(50)CURB OR SIDEWALK: LEFT .4 FT RIGHT .4 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 24.417 FT
(52) DECK WIDTH OUT TO OUT 25.667 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 20 FT
(33) BRIDGE MEDIAN - No Median CODE 0
(34) SKEW 0° (35) STRUCTURE FLARED 0
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 24.417 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad 0 FT
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad 000 FT
(56) MIN LAT UNDERCLEAR LT REF - 000 FT

NAVIGATION DATA

(38) NAVIGATION CONTROL - No Navigational Control CODE 0
(111)PIER PROTECTION - CODE
(39) NAVIGATION VERTICAL CLEARANCE 0
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR FT
(40) NAVIGATION HORIZONTAL CLEARANCE 0 FT

SUFFICIENCY RATING = 19.55
STATUS = Structurally Deficient

CLASSIFICATION — CODE

(112)NBIS BRIDGE SYSTEM - YES
(104)HIGHWAY SYSTEM Is not on NHS 0
(26) FUNCTIONAL CLASS - Local 09
(100)STRAHNET HIGHWAY - Not a STRAHNET Route 0
(101)PARALLEL STRUCTURE - No Parallel Structure N
(102)DIRECTION OF TRAFFIC - 2-way Traffic 2
(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions T
(110)DESIGNATED NATIONAL NETWORK - Not on the National Network 0
(20) TOLL On Free Road 3
(31) MAINTAIN - State Highway Agency 01
(22) OWNER - State Highway Agency 01
(37) HISTORICAL SIGNIFICANCE - Not Eligible 5

CONDITION — CODE

(58) DECK 4
(59) SUPERSTRUCTURE 4
(60) SUBSTRUCTURE 4
(61) CHANNEL & CHANNEL PROTECTION 5
(62) CULVERTS N

LOAD RATING AND POSTING — CODE

(31) DESIGN LOAD H 10 1
(63) OPERATING RATING METHOD - Load Factor
(64) OPERATING RATING - HS-1 101
(65) INVENTORY RATING METHOD - Load Factor
(66) INVENTORY RATING - HS-1 101
(70) BRIDGE POSTING - Posting Required 3
(41) STRUCTURE OPEN, POSTED ,OR CLOSED P
DESCRIPTION - Posted for Load

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION 3
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES,VERTI & HORIZ N
(71) WATERWAY ADEQUACY 7
(72) APPROACH ROADWAY ALIGNMENT 3
(36) TRAFFIC SAFETY FEATURES 0000
(113)SCOUR CRITICAL BRIDGES U

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK - CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT
(94) BRIDGE IMPROVEMENT COST
(95) ROADWAY IMPROVEMENT COST
(96) TOTAL PROJECT COST
(97) YEAR OF IMPROVEMENT COST ESTIMATE
(114)FUTURE ADT 1100 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 09/12/2012
(92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
A) FRACTURE CRIT DETAIL - NO A)
B) UNDERWATER INSP - NO B)
C) OTHER SPECIAL INSP NO C)
SCOUR

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Update Date: 11/14/2012

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
ALLEGHANY	11	1	020031	91 FEET

ROUTE CARRIED : SR1464

FEATURE INTERSECTED : BIG PINE CREEK

LOCATED : 50 FT.N.JCT.SR1463

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	550 2011	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1965	BMU			H 10

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	90	ON 2 UNDER 0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	22 FT	1 FT

SUPERSTRUCTURE : PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE : E.BTS&INT.BTS:PPC CAPS/TIMBER POST & CONCRETE SILLS

SPANS : 1 @ 30'-4; 1 @ 30'; 1 @ 30'-4

BEAMS OR GIRDERS : 10 PRESTRESSED CONCRETE CHANNEL SECTIONS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
PPC.CH/4.5 AWS		25.667 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24.417 FT	25.167 FT	LT .4 FT RT .4 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :
HS-1	HS-1	PreStrCh (Damaged)	SV 23 TTST 30 DATE 10/06/2010

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE I & A FORM1 (90)A

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection - Contract
BRIDGE NO. 020031 COUNTY ALLEGHANY ROUTE SR1464 OVER BIG PINE CREEK
STRUCTURE TYPE PRESTRESSED CONCRETE CHANNELS
ROUTE ORIENTATION S - N SPANS 1 @ 30'-4; 1 @ 30'; 1 @ 30'-4

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM			
DECK ITEMS			GRADES
1. WEARING SURFACE			F
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	3	F
	b. TIMBER		
	c. STEEL PLANK		
	d. OPEN GRID		
3. RAILING	a. CONCRETE		
	b. TIMBER		
	c. ALUMINUM		
	d. STEEL		F
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			F
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)			
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER		
	b. MISC PREFAB		
	c. COMPRESSION SEAL		
	d. STANDARD JOINTS	2	F
	e. OPEN JOINTS		
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			F
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59			
10. LONGITUDINAL BEAMS OR GIRDERS			P
11. LONGITUDINAL JOIST OR STRINGERS			
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S			
13. END DIAP'S, CURTAIN WALLS, & CONN'S			F
14. FLOOR BEAMS AND CONNECTIONS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			
16. DRAINAGE SYSTEM (ON STRUCTURE)			F
17. MOVABLE SPAN MACHINERY			
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)			
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		
	b. PILES, POST, SILLS, & BRACING		F
	c. BULKHEADS, WING'S, & TIE BACKS		F
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS		G
	b. ABUT. & BENT COL'S BREASTWALLS		
	c. ABUT. & INT. BENT PILES		
	d. BACKWALLS, WING'S, RETAIN. WALLS		
	e. ABUT. & BENT FOOTINGS & SILLS		G
37. STEEL SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		
	b. PILES, BRACING, AND BULKHEADS		
38. FOUNDATION PILES TYPE MATERIAL			
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			
40. FENDER SYSTEMS			
41. DRIFT			G

ITEM 61		
45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G
	b. ALIGNMENT	G
	c. SCOUR	F
	d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
50. APPROACH ROADWAY CONDITION		F
51. APPROACH SLABS		
52. PAINT SYSTEM	CODE	
53. UTILITIES		
54. RESPONSE TO LIVE LOAD		G
55. ESTIMATED REMAINING LIFE		8
60. REGULATORY SIGN NOTICE ISSUED		NO
61. PROMPT-ACTION NOTICE ISSUED		YES
62. PRESENTLY POSTED		YES
63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		5
64. TOTAL SNOOPER INSP. TIME (HRS)		
65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)		

70. SI&A GENERAL CONDITION RATINGS		
a. DECK	ITEM 58	4
b. SUPERSTRUCTURE	ITEM 59	4
c. SUBSTRUCTURE	ITEM 60	5
d. CHANNEL & CHANNEL PROT.	ITEM 61	5

71. SI&A FIELD APPRAISAL RATINGS	
a. WATERWAY ADAQUACY	7
b. APPR. RDWY. ALIGNMENT	3
72. FIELD SCOUR EVALUATION	L

USE OF INSP. ACCESSIBILITY EQUIPMENT		
SNOOPER (CODE S, 4, OR N)	HRS	NO
LADDER		NO
BUCKET TRUCK		NO
BOAT		NO
OTHER		NO

SPECIAL INSPECTION REQUESTED FOR

NOTE

80. INSPECTED BY: Robert Pruett
81. REVIEWED BY:

Bridge I&A Form 1(82)H **State of North Carolina** **Dept. of Transportation** **Division of Highways**	**FIELD INSPECTION REPORT** **Bridge Inspecion & Analysis**	

Team Leader **R. PRUETT**

Assisted By **HMK**

Item No.	Grade	
1	F	THERE ARE LONGITUDINAL CRACKS UP TO 1/4" WIDE X 20' LONG ALONG THE CHANNEL GIRDER EDGES [SEE PHOTO]. THERE ARE FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE ABOVE BENTS 1 AND 2 [SEE PHOTOS]. THE WEARING SURFACE AT THE CENTERLINE ABOVE BENT 1 HAS A 2' LONG X 6" WIDE X 2" DEEP POTHOLE [SEE PHOTO].
2a	F	THE DECK HAS WATER STAINING BETWEEN THE EDGES OF EACH CHANNEL. THE UNDERSIDE OF THE CHANNELS HAVE AREAS OF SPALLS WITH EXPOSED REBAR THROUGHOUT. THE WORST AREAS ARE IN THE UNDERSIDE OF CHANNEL 1 IN SPAN 2 AND CHANNEL 10 IN SPAN 2. THE SPALLS ARE UP TO 4" LONG X 1" WIDE X 1" DEEP WITH EXPOSED REBAR OF THE FULL LENGTH OF THE SPANS [SEE PHOTO].
3d	F	PEELING PAINT AND SURFACE RUST ALONG THE WEST BRIDGE RAIL [SEE PHOTO].
4	F	THE CURBS ARE WEATHERED WITH EXPOSED SURFACE COARSE AGGREGATE. THERE ARE RANDOM EDGE SPALLING THROUGHOUT BOTH CURBS. SPAN 3 CURBS ARE WIDER THAN OTHER SPANS [SEE PHOTO]. THERE ARE RANDOM WRAP-AROUND HAIRLINE CRACKS THROUGHOUT BOTH CURBS [SEE PHOTO].
6d	F	THE JOINTS ARE LEAKING AT THE BENTS AND ABUTMENTS.
7	F	DEBRIS AND VEGETATION BLOCKING DRAINAGE IN ALL SPANS [SEE PHOTO].
10	P	THE ENDS OF THE CHANNEL LEGS HAVE VERTICAL/DIAGONAL CRACKS UP TO 1/16" WIDE AT THE FOLLOWING LOCATIONS: WEST LEG OF CHANNEL 4, 8' FROM BENT 1 IN SPAN 1 WEST LEG OF CHANNEL 9, 6' FROM BENT 1 IN SPAN 1 BOTH LEGS OF CHANNEL 4 AT BENT 1 IN SPAN 2 EAST LEG OF CHANNEL 6 AT BENT 1 IN SPAN 2 WEST LEG OF CHANS 7 AND 8 AT BENT 1 IN SPAN 2 BOTH LEGS OF CHANNEL 10 AT BENT 1 IN SPAN 2 EAST LEG OF CHANNEL 7 AND 8 AT BENT 2 IN SPAN 3 WEST LEG OF CHANNEL 3 AT END BENT 2 IN SPAN 3 EAST LEG OF CHANNEL 4 AT END BENT 2 IN SPAN 3 THE WEST LEG OF CHANNEL 10 IN SPAN 2 AT BENT 2 HAS A 4'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED REBAR [SEE PHOTO, PRIORITY MAINTENANCE]. THE EAST LEG OF CHANNEL 9 IN SPAN 2 AT BENT 2 HAS A 3'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED REBAR [SEE PHOTO, PRIORITY MAINTENANCE]. THE WEST LEG OF CHANNEL 7 AT BENT 2 IN SPAN 3 HAS A 8" LONG X 2" HIGH X 2" DEEP CORNER DELAMINATION [SEE PHOTO]. THERE IS A PATCHED AREA ON THE WEST LEG OF CHANNEL 10 IN SPAN 3 [SEE PHOTO]. THE EAST LEG OF CHANNEL 9 HAS A PATCHED AREA WITH EFFLORESCENCE. THE WEST LEG OF CHANNEL 4 IN SPAN 1, APPROXIMATELY 8' FROM BENT 1, HAS LONGITUDINAL CRACKS. THE TOP EDGE OF THE CHANNEL 2 WEST LEG IN SPAN 3 HAS LONGITUDINAL CRACKS WITH EFFLORESCENCE [SEE PHOTO]. PREVIOUSLY NOTED PRIORITY MAINTENANCES FOR CHANNELS 1, 6, 9, AND 10 HAVE BEEN PATCHED.

Bridge I&A Form 1(82)H **State of North Carolina** **Dept. of Transportation** **Division of Highways**	**FIELD INSPECTION REPORT** **Bridge Inspecion & Analysis**	

Team Leader **R. PRUETT**

Assisted By **HMK**

Item No.	Grade	
10A	NO	THERE ARE NO CURVED GIRDERS.
13	F	THERE ARE SPALLS WITH EXPOSED REBAR IN CHANNEL END DIAPHRAGMS AT THE END BENTS AND BENTS [SEE PHOTO].
16	F	DEBRIS AND VEGETATION BLOCKING DRAINAGE IN ALL SPANS [SEE PHOTO].
35b	F	ALL POSTS HAVE CHECKS THROUGHOUT. THE BASE OF PILE 5 AT ABUTMENT 2 HAS A 2' HIGH X 2 1/2" WIDE X 1 1/2" DEEP SPLINTERING [SEE PHOTO]. THE BOTTOM OF SOUTHWEST CORNER OF PILE 1 AT BENT 2 IN SPAN 3 HAS A 1'-0" HIGH X 2 1/2" WIDE X 1" DEEP SPLINTERING [SEE PHOTO]. THE BASE OF PILE 1 AT ABUTMENT 1 HAS A 2' HIGH X 3" WIDE X 3/4" DEEP SPLINTERING [SEE PHOTO]. THE SOLDIER PILE AT NORTHWEST WINGWALL HAS A 7" WIDE X 6" DEEP X 1'-4" HIGH DECAYED AREA [SEE PHOTO]. THE CROSS BRACING ADJACENT TO MID-HEIGHT OF PILE 6 AT BENT 2 HAS A 6" HIGH X 11" WIDE X 1" DEEP DECAYED AREA [SEE PHOTO].
35c	F	THERE ARE AREAS OF SOFTNESS AND CHECKS THROUGHOUT. THE 9TH AND 14TH BOARD FROM THE BOTTOM AT THE EAST END OF ABUTMENT 2 HAVE A 5'-6" LONG X 4" HIGH X 1 1/2" DEEP DECAYED AREA. THE TOP EAST END OF ABUTMENT 2 BULKHEAD HAS ROTATED OUT.
36a	G	THE CAPS ARE WEATHERED WITH WATER STAINING THROUGHOUT.
36e	G	THE SILLS ARE WEATHERED WITH WATER STAINING THROUGHOUT. THE EAST END OF BENT 1 SILL HAS A 1'-8" LONG X 1'-4" WIDE X 8" HIGH CORNER SPALL [SEE PHOTO]. THERE IS A VERTICAL HAIRLINE CRACK IN ABUTMENT 1 SILL ADJACENT TO PILE 2 [SEE PHOTO].
45c	F	THERE ARE AREAS OF BANK EROSION ALONG THE UP AND DOWNSTREAM BANKS.
50	F	THE NORTH APPROACH HAS UNEVEN PAVEMENT WITH UP TO 1/2" DIFFERENCE THROUGHOUT [SEE PHOTO]. THE CENTERLINE OF NORTH APPROACH HAS A TRANSVERSE CRACK UP TO 1/8" WIDE WITH A 10" WIDE X 2" LONG X 1" DEEP SPALL [SEE PHOTO]. THE NORTH APPROACH ADJACENT TO ABUTMENT 2 HAS A FULL WIDTH TRANSVERSE CRACK UP TO 1" WIDE WITH DELAMINATION [SEE PHOTO]. THE CENTERLINE OF NORTH APPROACH ADJACENT TO ABUTMENT 2 HAS A 9" LONG X 4" WIDE X 1 1/2" DEEP BROKEN ASPHALT WEARING SURFACE [SEE PHOTO]. THE SOUTH APPROACH ADJACENT TO ABUTMENT 1 HAS A FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE WITH DELAMINATION [SEE PHOTO]. THE SOUTH APPROACH HAS MAP CRACKING UP TO 1/4" WIDE THROUGHOUT [SEE PHOTO].

Bridge I&A Form 1(82)H **State of North Carolina** **Dept. of Transportation** **Division of Highways**	**FIELD INSPECTION REPORT** **Bridge Inspecion & Analysis**	

Team Leader	**R. PRUETT**
Assisted By	**HMK**

Item No.	Grade	
62	**YES**	SV 23; TTST 30

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 020031 County ALLEGHANY Date: 09/12/2012

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
2816	Asphalt Surface Repair or Replacement	SY	380	1/2" DIFFERENCE OF UNEVEN PAVEMENT THROUGHOUT THE NORTH APPROACH. TRANSVERSE CRACK UP TO 1/8" WIDE WITH A 10" WIDE X 2" LONG X 1" DEEP SPALL IN THE CENTERLINE OF NORTH APPROACH. FULL WIDTH TRANSVERSE CRACK UP TO 1" WIDE WITH DELAMINATION IN THE NORTH APPROACH ADJACENT TO ABUTMENT 2. 9" LONG X 4" WIDE X 1 1/2" DEEP BROKEN ASPHALT WEARING SURFACE AT THE CENTERLINE OF NORTH APPROACH ADJACENT TO ABUTMENT 2. LONGITUDINAL CRACKS UP TO 1/4" WIDE X 20' LONG ALONG THE CHANNEL GIRDER EDGES. FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE ABOVE BENTS 1 AND 2. 2' LONG X 6" WIDE X 2" DEEP SPALL IN THE ASPHALT WEARING SURFACE AT THE CENTERLINE ABOVE BENT 1. FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE WITH DELAMINATION IN THE SOUTH APPROACH ADJACENT TO ABUTMENT 1. MAP CRACKING UP TO 1/4" WIDE THROUGHOUT THE SOUTH APPROACH.	
3306	Maintain Concrete Superstructure Components	SF	1	3'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN EAST LEG OF CHANNEL 9 (TOP SPALL) [PRIORITY MAINTENANCE]	
3306	Maintain Concrete Superstructure Components	SF	1	4'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN WEST LEG OF CHANNEL 10 (BOTTOM SPALL) [PRIORITY MAINTENANCE]	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 020031 County ALLEGHANY Date: 09/12/2012

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3306	Maintain Concrete Superstructure Components	SF	82	SPALLS UP TO 4" LONG X 1" WIDE X 1" DEEP WITH EXPOSED REBAR IN THE UNDERSIDE OF CHANNEL 1 IN SPAN 2 AND CHANNEL 10 IN SPAN 2. THERE ARE OTHER SPALLED AREAS. SPALLS WITH EXPOSED REBAR IN CHANNEL END DIAPHRAGM AT END BENTS AND BENTS. 8" LONG X 2" HIGH X 2" DEEP CORNER DELAMINATION IN THE WEST LEG OF CHANNEL 7 AT BENT 2. 4' LONG X 3" WIDE X 3" HIGH X WITH EXPOSED REBAR IN THE WEST LEG OF CHANNEL 10 AT BENT 2 IN SPAN 2.	
3310	Maintenance/Repair/Replacement of Standard Bridge Expansion Joints	LF	52	JOINTS ARE LEAKING DUE TO WATER STAINING ON THE CAPS.	
3322	Maint to Steel Handrail	LF	91	PEELING PAINT AND SURFACE RUST ALONG THE WEST BRIDGE RAIL.	
3332	Maint Drainage System - Bridge	LF	182	DEBRIS AND VEGETATION BLOCKING DRAINAGE IN ALL SPANS.	
3344	Repair / Replace Timber Substructure Components	LF	8	1'-0" HIGH X 2 1/2" WIDE X 1" DEEP SPLINTERING NEAR THE BOTTOM OF SOUTHWEST CORNER OF PILE 1 AT BENT 2 IN SPAN 3. 6" HIGH X 11" WIDE X 1" DEEP DECAYED AREA IN THE CROSS BRACING ADJACENT TO MID-HEIGHT OF PILE 6 AT BENT 2. 2' HIGH X 3" WIDE X 3/4" DEEP SPLINTERING NEAR THE BASE OF PILE 1 AT ABUTMENT 1. 7" WIDE X 6" DEEP X 1'-4" HIGH DECAYED AREA IN THE SOLDIER PILE AT NORTHWEST WINGWALL. 2' HIGH X 2 1/2" WIDE X 1 1/2" DEEP SPLINTERING IN THE BAS OF PILE 5 AT ABUTMENT 2.	
3346	Repair / Maintain Timber Wings & Blkhds	SF	4	5'-6" LONG X 4" HIGH X 1 1/2" DEEP DECAYED AREA EAST END OF ABUTMENT 2 IN 9TH AND 14TH BOARD FROM THE BOTTOM.	
3348	Maintain Concrete Substructure Components	LF	2	1'-8" LONG X 1'-4" WIDE X 8" HIGH CORNER SPALL IN THE EAST END OF BENT 1 SILL.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 020031 County ALLEGHANY Date: 09/12/2012

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3376	Clean/Wash Bridge Decks	SF	363	DEBRIS AND VEGETATION BLOCKING DRAINAGE IN ALL SPANS.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 020031 County ALLEGHANY

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:		
Beams and Girders	Bent/Span No. 1	CHANNEL 10

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
09/14/2012	R. PRUETT	H. KOKSTEIN

Details

4'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN WEST LEG OF CHANNEL 10 (BOTTOM SPALL) [PRIORITY MAINTENANCE]

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:		
Beams and Girders	Bent/Span No. 1	CHANNEL 9

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
09/14/2012	R. PRUETT	H. KOKSTEIN

Details

3'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN EAST LEG OF CHANNEL 9 (TOP SPALL) [PRIORITY MAINTENANCE]

4'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN CHANNEL 10 (BOTTOM SPALL) [PRIORITY MAINTENANCE]

3'-0" LONG X 3" WIDE X 3" HIGH SPALL WITH EXPOSED STRAND IN CHANNEL 9 (TOP SPALL) [PRIORITY MAINTENANCE]

1/2" DIFFERENCE OF UNEVEN PAVEMENT THROUGHOUT THE NORTH APPROACH

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

TRANSVERSE CRACK UP TO 1/8" WIDE WITH A 10" WIDE X 2" LONG X 1" DEEP SPALL IN THE CENTERLINE OF NORTH APPROACH

FULL WIDTH TRANSVERSE CRACK UP TO 1" WIDE WITH DELAMINATION IN THE NORTH APPROACH ADJACENT TO ABUTMENT 2

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

9" LONG X 4" WIDE X 1 1/2" DEEP BROKEN ASPHALT WEARING SURFACE AT THE CENTERLINE OF NORTH APPROACH ADJACENT TO ABUTMENT 2

LONGITUDINAL CRACKS UP TO 1/4" WIDE X 20' LONG ALONG THE CHANNEL GIRDER EDGES (SPAN 3 SHOWN)

FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE ABOVE BENT 2

FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE ABOVE BENT 1

2' LONG X 6" WIDE X 2" DEEP POTHOLE IN THE ASPHALT WEARING SURFACE AT THE CENTERLINE ABOVE BENT 1

PEELING PAINT AND SURFACE RUST ALONG THE WEST BRIDGE RAIL

FULL WIDTH TRANSVERSE CRACKS UP TO 1/2" WIDE WITH DELAMINATION IN THE SOUTH APPROACH ADJACENT TO ABUTMENT 1

MAP CRACKING UP TO 1/4" WIDE THROUGHOUT THE SOUTH APPROACH (SOUTHBOUND LANE SHOWN)

DEBRIS AND VEGETATION BLOCKING DRAINAGE (SPAN 1 SHOWN)

HORIZONTAL MISALIGNMENT OF THE WEST CURB IN SPAN 3 AT BENT 2 WITH REPSECT TO SPANS 1 AND 2

RANDOM WRAP-AROUND HAIRLINE CRACKS THROUGHOUT BOTH CURBS (WEST CURB SHOWN)

7" WIDE X 6" DEEP X 1'-4" HIGH DECAYED AREA IN THE SOLDIER PILE AT NORTHWEST WINGWALL

2' HIGH X 2 1/2" WIDE X 1 1/2" DEEP SPLINTERING IN THE BASE OF PILE 5 AT ABUTMENT 2

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

5'-6" LONG X 4" HIGH X 1 1/2" DEEP DECAYED AREA EAST END OF ABUTMENT 2 IN 9TH BOARD FROM THE BOTTOM (BOARD 14 SIMILAR)

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

1'-0" HIGH X 2 1/2" WIDE X 1" DEEP SPLINTERING NEAR THE BOTTOM OF SOUTHWEST CORNER OF PILE 1 AT BENT 2 IN SPAN 3

8" LONG X 2" HIGH X 2" DEEP CORNER DELAMINATION IN THE WEST LEG OF CHANNEL 7 AT BENT 2 IN SPAN 3

4' LONG X 3" WIDE X 3" HIGH X WITH EXPOSED REBAR IN THE WEST LEG OF CHANNEL 10 AT BENT 2 IN SPAN 2

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

SPALLS UP TO 4" LONG X 1" WIDE X 1" DEEP WITH EXPOSED REBAR IN THE UNDERSIDE OF CHANNEL 10 IN SPAN 2 (CHANNEL 1 IN SPAN 2 SIMILAR)

6" HIGH X 11" WIDE X 1" DEEP DECAYED AREA IN THE CROSS BRACING ADJACENT TO MID-HEIGHT OF PILE 6 AT BENT 2

LONGITUDINAL CRACKS WITH EFFLORESCENCE IN THE TOP EDGE OF THE CHANNEL 2 WEST LEG IN SPAN 3

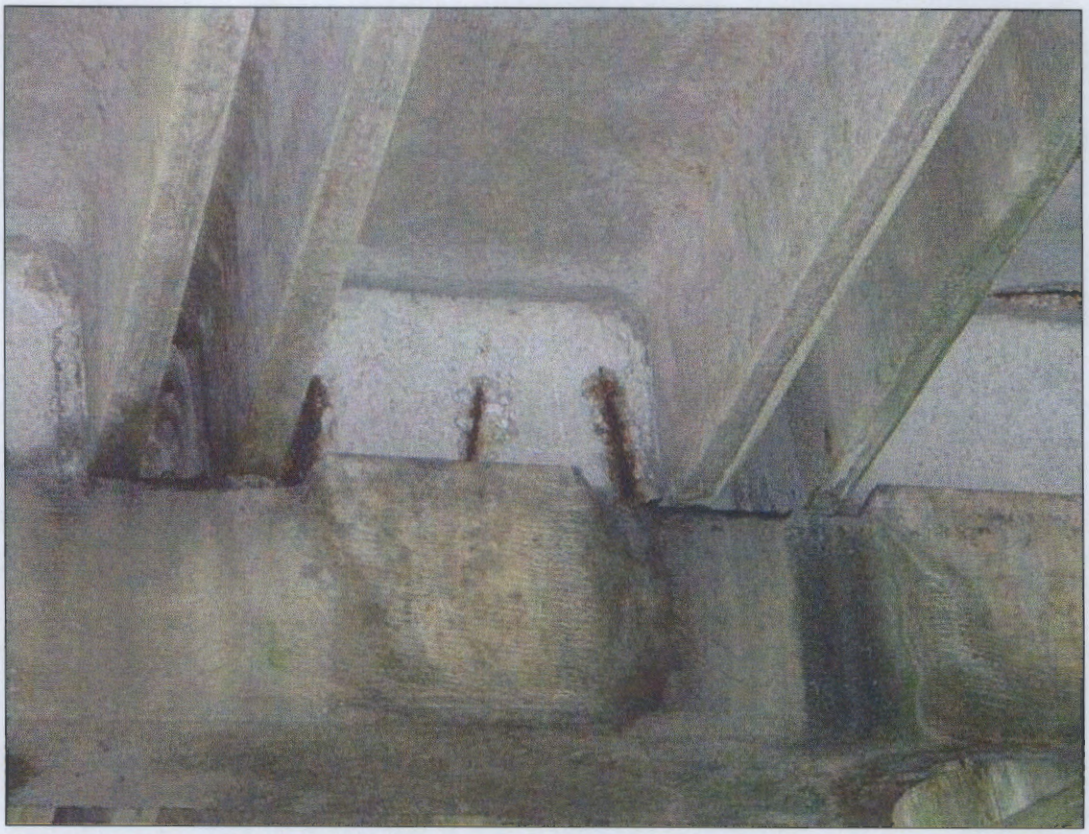
PATCH REPAIR AREA ON THE WEST LEG OF CHANNEL 10 IN SPAN 3

Structure 020031 County ALLEGHANY Date: 09/12/2012 Condition Photos

2' HIGH X 3" WIDE X 3/4" DEEP SPLINTERING NEAR THE BASE OF PILE 1 AT ABUTMENT 1

1'-8" LONG X 1'-4" WIDE X 8" HIGH CORNER SPALL IN THE EAST END OF BENT 1 SILL

LONGITUDINAL CRACK IN THE WEST LEG OF CHANNEL 4 IN SPAN 1, APPROXIMATELY 8' FROM BENT 1

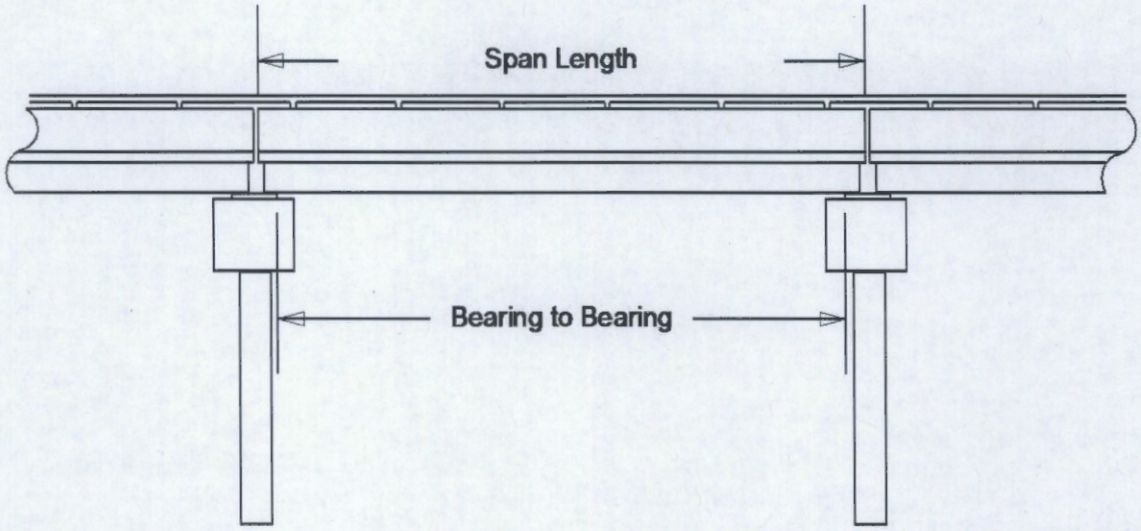


SPALLS WITH EXPOSED REBAR IN CHANNEL 9 END DIAPHRAGM AT BENT 1 IN SPAN 1 (OTHERS SIMILAR)

VERTICAL HAIRLINE CRACK IN ABUTMENT 1 SILL ADJACENT TO PILE 2

Structure Data Worksheet

County: ALLEGHANY **Structure No:** 020031 **Date:** 09/12/2012 **Inspected By:** RAP



Span No	Span Length	Bearing to Bearing	Comments
1	30'-4"	29'-5"	NBIS LENGTH = 87'-6"
2	30'-0"	29'-4"	
3	30'-4"	29'-4"	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 020031 **County:** ALLEGHANY **Date:** 09/12/2012 **By:** RAP

Record sounding from top of rail. Other location if needed:

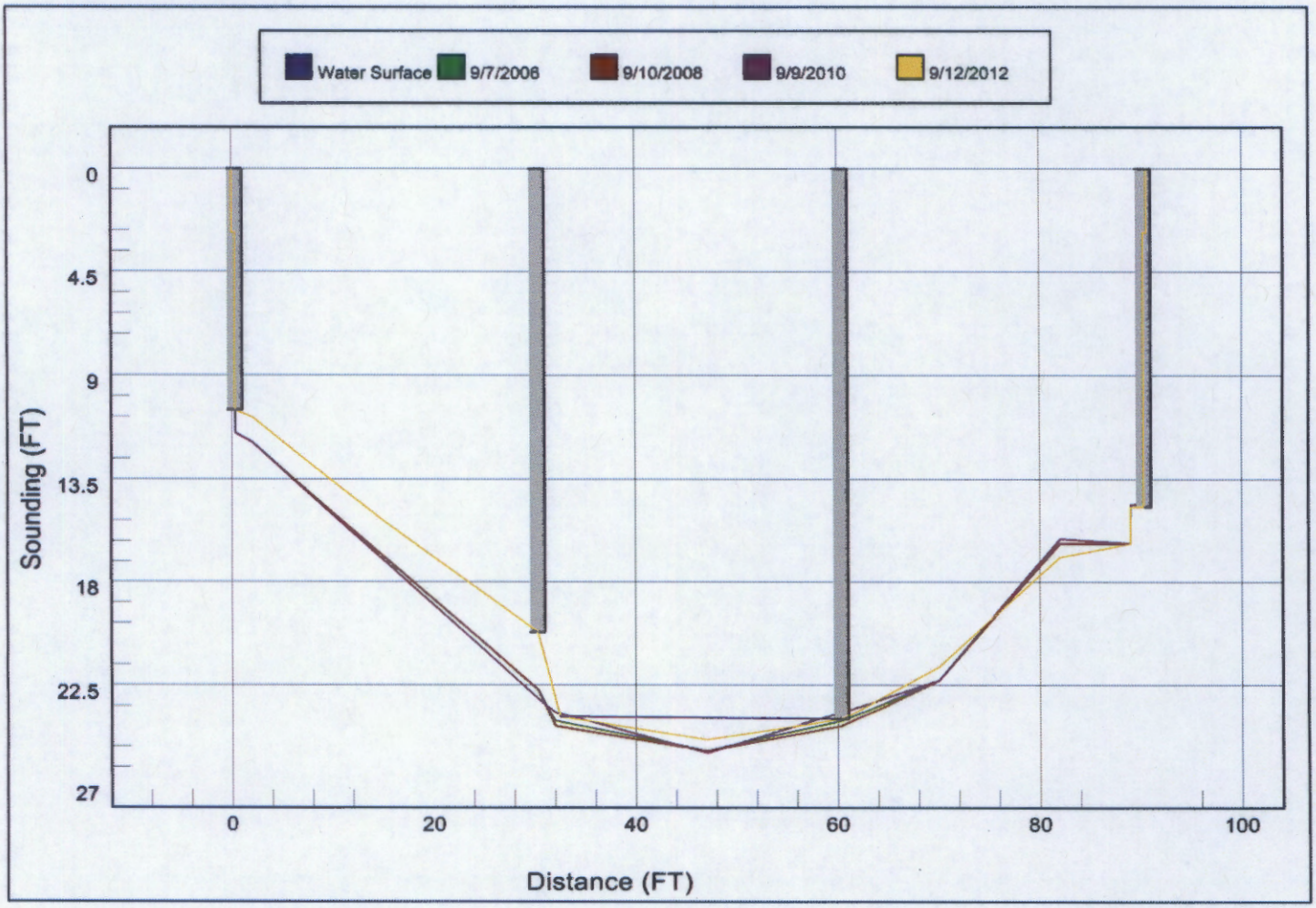
Distance from Highwater Mark to top of rail: **Location of Highwater Mark:**

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	0				
0.001	2.8	TOP OF FILL FACE			
0.299	2.8	TOP OF FILL FACE			
0.3	4.3	Top of Cap			
0.301	10.5	FACE OF ABUTMENT 1			
2.001	10.8	GROUNDLINE	2.001	11.5	FACE OF FOOTING
15	15.3	GROUNDLINE			
30.3	20.2	BENT 1	30.3	23.3	BENT 1
32.5	23.9	Water Surface/Water Edge (WSWE)			
47	24.9	STREAMBED			
60.3	24	WATER SURFACE/WATER EDGE (WSWE), BENT 2	60.3	22	BENT 2
70	21.7	GROUNDLINE			
82	16.9	GROUNDLINE			
88.999	16.3	FACE OF FOOTING	88.999	14.3	FACE OF FOOTING
89	14.7	TOP OF FOOTING			
90.299	14.7	TOP OF FOOTING, FACE OF ABUTMENT 2			
90.3	4.3	Top of Cap			
90.301	2.8	TOP OF FILL FACE			
90.599	2.8	TOP OF FILL FACE			
90.6	0				

Bridge: 020031 County ALLEGHANY Date: 09/12/2012

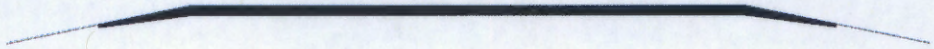
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

SR 1464



Roadway	20ft Wide	2 Paved Lanes	Looking North
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	10ft Wide		10ft Unpaved
Left Guardrail			
Right Guardrail			

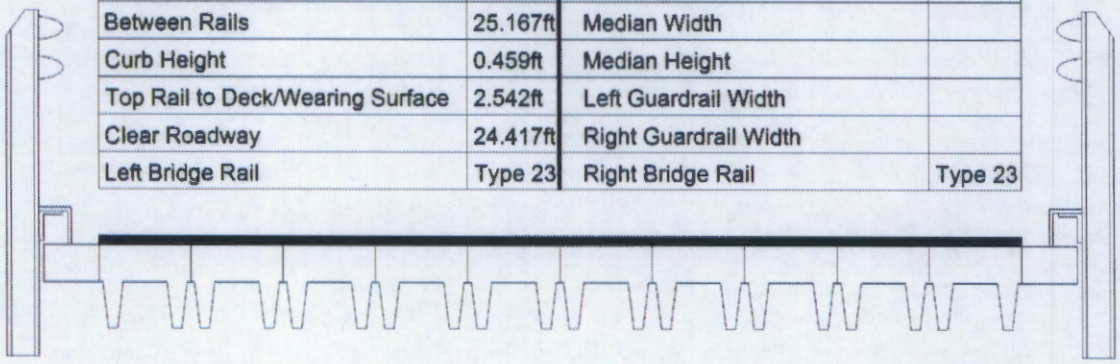
VERIFIED 9/09/10 G.ROBBINS
VERIFIED 9/12/12 BY KCI

Title	Description
APRW	APPROACH RODAWY

Bridge No:	Drawn By:	Date:	File Name:
020031	G.R.R.	09/10/2008	S0130001157

Bridge Inspection Field Sketch

Deck Width/Out to Out	25.667ft	Wearing Surface	0.375ft
Between Rails	25.167ft	Median Width	
Curb Height	0.459ft	Median Height	
Top Rail to Deck/Wearing Surface	2.542ft	Left Guardrail Width	
Clear Roadway	24.417ft	Right Guardrail Width	
Left Bridge Rail	Type 23	Right Bridge Rail	Type 23



Measurements for Span #	1	SPAN 2 & 3 SIMILAR	
Deck Thickness	0.417	Left Overhang	
Top of Rail to Bottom of Beam	4.250	Right Overhang	

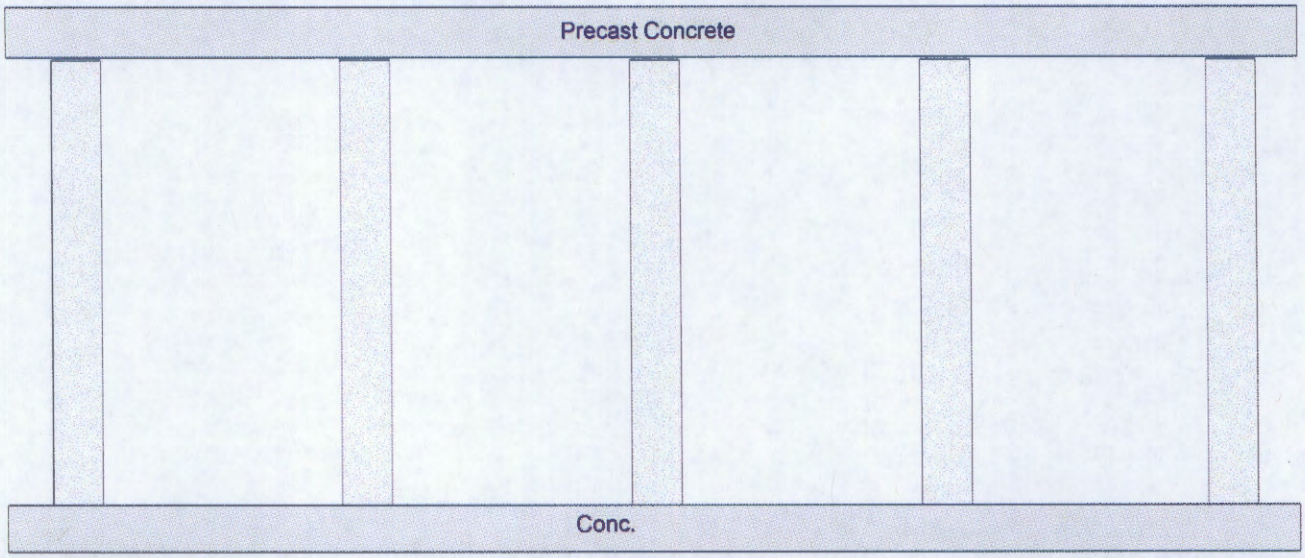
No. of Channels	10
Leg Width	2 1/2 in.
Leg Height	12 in.
Leg to Leg (Centers)	21 1/2 in.
Channel Width	30 in.
Channel Height	17 in.
Comments	

VERIFIED 9/9/10 DWELBORN
VERIFIED 9/12/12 BY KCI

Title	Description
TS	SUPER

Bridge No:	Drawn By:	Date:	File Name:
020031	DCW	09/10/2008	S0126001021

Bridge Inspection Field Sketch



Cap Information			Material Precast Concrete			
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.
26 ft.	1.333 ft.	1 ft.	1.417 ft.	0.5 ft.	.5 ft.	.5 ft.

Subcap Information			Material		
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.

Sill Information			Material
Length	Width	Height	

Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
2	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
3	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
4	Timber	5.750 ft.	1 ft.			Vertical	No	No	No	No
5	Timber		1 ft.			Vertical	No	No	No	No

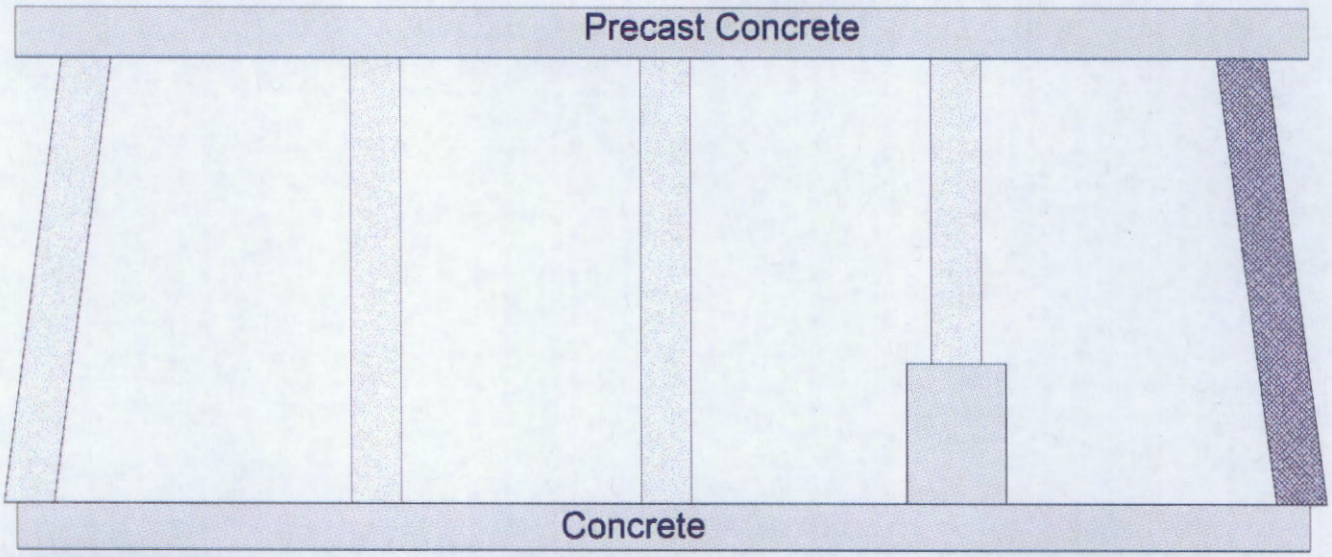
VERIFIED 9/09/10 G.ROBBINS
VERIFIED 9/12/12 BY KCI

Bent/Abutment #: 1 Similar Bents: 2

Title	Description
SUB 1&2	SUB AB 1& 2

Bridge No:	Drawn By:	Date:	File Name:
020031	G.R.R.	09/10/2008	S0130001154

Bridge Inspection Field Sketch



Cap Information			Material Precast Concrete			
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.
26.000 ft.	1.333 ft.	1.000 ft.	1.417 ft.	1.417 ft.	.500 ft.	.500 ft.

Subcap Information			Material		
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.

Sill Information			Material
Length	Width	Height	

Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	5.833 ft.	1 ft.			Battered	No	No	No	No
2	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
3	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
4	Timber	5.750 ft.	1 ft.			Vertical	No	No	No	Yes
5	Timber		1 ft.			Battered	No	Yes	No	No

VERIFIED 9/09/10 G.ROBBINS
VERIFIED 9/12/12 BY KCI

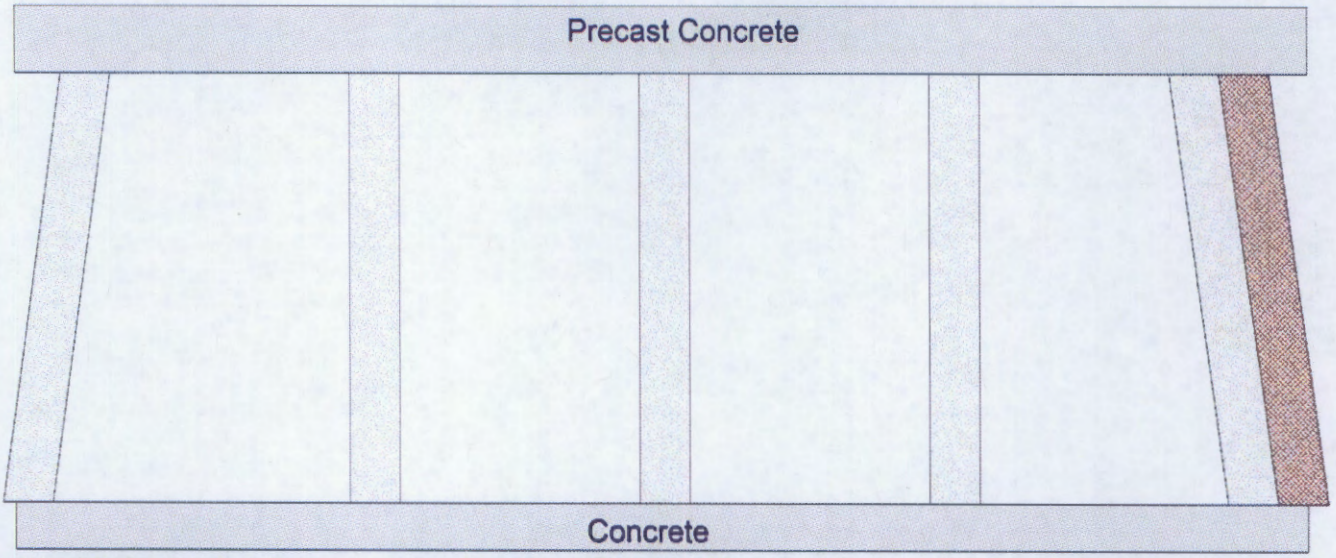
Bent/Abutment #: 1 Similar Bents:

Title
SUB P 1

Description
SUB PIER 1

Bridge No: 020031 **Drawn By:** G.R.R. **Date:** 09/10/2008 **File Name:** S0130001155

Bridge Inspection Field Sketch



Cap Information			Material Precast Concrete			
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.
26.000 ft.	1.333 ft.	1.333 ft.	1.417 ft.	1.417 ft.	.500 ft.	.500 ft.

Subcap Information			Material		
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.

Sill Information			Material
Length	Width	Height	

Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	5.833 ft.	1 ft.			Battered	No	No	No	No
2	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
3	Timber	5.833 ft.	1 ft.			Vertical	No	No	No	No
4	Timber	5.750 ft.	1 ft.			Vertical	No	No	No	No
5	Timber	1 ft.	1 ft.			Battered	No	No	No	No
6	Timber		1 ft.			Battered	No	Yes	No	No

VERIFIED 9/09/10 G.ROBBINS
VERIFIED 9/12/12 BY KCI

Bent/Abutment #: 2 Similar Bents:

Title
SUB P 2

Description
SUB PIER 2

Bridge No: 020031 **Drawn By:** G.R.R. **Date:** 09/10/2008 **File Name:** S0130001156

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

SOUTH APPROACH LOOKING NORTH

LOOKING DOWNSTREAM (WEST)

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

LOOKING UPSTREAM (EAST)

NORTH APPROACH LOOKING SOUTH

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

NORTHWEST POSTING (SOUTHEAST SIMILAR)

EAST BRIDGE RAIL (WEST SIMILAR)

BENT 2 ELEVATION WITH TEMPORARY REPAIR TO PILE 5

SPAN 1 SUPERSTRUCTURE

ABUTMENT 2 ELEVATION

SPAN 2 SUPERSTRUCTURE

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

BENT 1 ELEVATION WITH TEMPROARY REPAIR AROUND THE BASE OF PILE 4

WEST ELEVATION

EAST ELEVATION

CHANNEL 1 BEARING AT ABUTMENT 1 (OTHERS SIMILAR)

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

LOOKING DOWNSTREAM (WEST) FROM BELOW

LOOKING UPSTREAM (EAST) FROM BELOW

TEMPORARY REPAIR ADJACENT TO PILE 5 AT BENT 2

ABUTMENT 1 ELEVATION

Structure 020031 County ALLEGHANY Date: 09/12/2012 Structure Photos

SPAN 1 SUPERSTRUCTURE