



N.C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MAINTENANCE UNIT

ATTENTION: FRACTURE CRITICAL

BRIDGE INSPECTION REPORT

TYPE OF INSPECTION ROUTINE

COUNTY PASQUOTANK BRIDGE NUMBER 690019 INSPECTION CYCLE 2 YRS

ROUTE US158 ACROSS PASQUOTANK RIVER M.P. 000+000

LOCATION 0.3 MILE JCT. US17 BUS.

SUPERSTRUCTURE REINFORCED CONCRETE DECK/RC DECK GIRDERS:STEEL BASCULE SPAN

SUBSTRUCTURE EBTS:RC CAPS/RC PILES:IBTS:RC POST&BEAM/RC PILES

SPANS 5@37'.1@29'.1@130'DBL LEAF BAS.SPN.1@24'.5@37'.1@36'6.21@10

PRESENT CONDITION POOR INVENTORY RATING HIS - 0

INSPECTION DATE 12/11/01 OPERATING RATING HIS - 0

PRESENT POSTING NOT POSTED PROPOSED POSTING SV-21"/TTST-28"

Retain "Not Posted" PPA 1/23/02

COMPUTER UPDATE 1-29-02 ANALYSIS DATE 1-16-02

POSTING LETTER DATE 36° 18.089 N SPECIAL PERMIT 076° 13.033 W

OTHER SIGNS PRESENT NONE



| SIGN NOTICE ISSUED FOR | NUMBER REQUIRED |
|------------------------|-----------------|
| No WEIGHT LIMIT | |
| No SPECIAL PERMIT | |
| No DELINEATORS | |
| No NARROW BRIDGE | |
| No ONE LANE BRIDGE | |
| No LOW CLEARANCE | |

Photo Looking East

***** IDENTIFICATION *****

(1) STATE NAME - NORTH CAROLINA BRIDGE 690019
(2) STRUCTURE NUMBER (FEDERAL) 00000001390019
(5) INVENTORY ROUTE (ON/UNDER) - ON = 121001580
(2) STATE HIGHWAY DEPARTMENT DISTRICT 01
(3) COUNTY CODE 139 (4) PLACE CODE 20580
(6) FEATURES INTERSECTED - PASQUOTANK RIVER
(7) FACILITY CARRIED - US158
(9) LOCATION - 0.3 MI.E.JCT.US17 BUS.
(11) MILEPOINT 000.000
(16) LATITUDE 36 D 18.1M (17) LONGITUDE 076 D 13.0M
(98) BORDER BRIDGE STATE CODE PCT SHARE
(99) BORDER BRIDGE STRUCTURE NO. #

SUFFICIENCY RATING = 10.5
STATUS = STRUCTURALLY DEFICIENT

***** CLASSIFICATION *****

(112) NBIS BRIDGE LENGTH - YES
(104) HIGHWAY SYSTEM - NON NHS ROUTE 0
(26) FUNCTIONAL CLASS - MINOR ARTERIAL 16
(100) DEFENSE HIGHWAY - YES DEFENSE HWY 1
(101) PARALLEL STRUCTURE - RT STR OF PARALLEL BRGS R
(102) DIRECTION OF TRAFFIC - 1-WAY TRAFFIC 1
(103) TEMPORARY STRUCTURE - TEMPORARY STRUCTURE T
(110) DESIGNATED NATIONAL NETWORK - PART OF NETWORK 1
(20) TOLL - ON FREE ROAD 3
(21) MAINTAIN - STATE HIGHWAY AGENCY 01
(22) OWNER - STATE HIGHWAY AGENCY 01
(37) HISTORICAL SIGNIFICANCE - NOT ELIGIBLE 5

***** STRUCTURE TYPE AND MATERIAL *****

(43) STRUCTURE TYPE MAIN: STEEL
TYPE - MOVABLE - BASCULE CODE 316
(44) STRUCTURE TYPE APPR: CONCRETE
TYPE - STRINGER/MBEAM OR GIRDER CODE 102
(45) NUMBER OF SPANS IN MAIN UNIT 001
(46) NUMBER OF APPROACH SPANS 0034
(107) DECK STRUCTURE TYPE - OPEN GRATING CODE 3
(108) WEARINGS SURFACE / PROTECTIVE SYSTEM:
A) TYPE OF WEARING SURFACE - OTHER CODE 9
B) TYPE OF MEMBRANE - NONE CODE 0
C) TYPE OF DECK PROTECTION - NONE CODE 0

***** CONDITION *****

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

***** AGE AND SERVICE *****

(27) YEAR BUILT 1931
(106) YEAR RECONSTRUCTED 1946
(42) TYPE OF SERVICE: ON - HIGHWAY
UNDER - WATERWAY CODE 15
(28) LANES: ON STRUCTURE 02 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 008000
(30) YEAR OF ADT 2000 (109) TRUCK ADT PCT 06
(19) BYPASS, DETOUR LENGTH 01 MI

***** LOAD RATING AND POSTING *****

(31) DESIGN LOAD - H 15 2
(64) OPERATING RATING - LF HS-01 101
(66) INVENTORY RATING - LF HS-01 101
(70) BRIDGE POSTING - NO POSTING REQUIRED 5
(41) STRUCTURE OPEN, POSTED, OR CLOSED 0
DESCRIPTION - OPEN, TEMPORARY SHORING

***** GEOMETRIC DATA *****

(48) LENGTH OF MAXIMUM SPAN 0130 FT
(49) STRUCTURE LENGTH 000846 FT
(50) CURB OR SIDEWALK: LEFT 00.4 FT RIGHT 00.4 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 024.1 FT
(52) DECK WIDTH OUT TO OUT 027.4 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 026 FT
(33) BRIDGE MEDIAN - OPEN MEDIAN CODE 1
(34) SKEW 00 DEG (35) STRUCTURE FLARED NO
(10) INVENTORY ROUTE MIN VERT CLEAR 99 FT 99 IN
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 24.1 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 99 FT 99 IN
(54) MIN VERT UNDERCLEAR REF - NOT HV/RR 00 FT 00 IN
(55) MIN LAT UNDERCLEAR RT REF - NOT HWY/RR 99.9 FT
(56) MIN LAT UNDERCLEAR LT 00.0 FT

***** APPRAISAL *****

(67) STRUCTURAL EVALUATION 2
(68) DECK GEOMETRY 2
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATERWAY ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES 11

***** PROPOSED IMPROVEMENTS *****

(75) TYPE OF WORK - REPLACE FOR DEFICIENCY CODE 311
(76) LENGTH OF STRUCTURE IMPROVEMENT 000846 FT
(94) BRIDGE IMPROVEMENT COST \$ 2,744,000
(95) ROADWAY IMPROVEMENT COST \$ 274,000
(96) TOTAL PROJECT COST \$ 4,118,000
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2001
(114) FUTURE ADT 016000 (115) YEAR FUTURE ADT 2010

***** INSPECTIONS *****

(90) INSPECTION DATE 12/2001 (91) FREQUENCY 24 MO
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
A) FRACTURE CRIT DETAIL - YES - 24 MO A) 12/2001
B) UNDERWATER INSP - YES - 48 MO B) 10/1997
C) OTHER SPECIAL INSP - YES - 24 MO C) 11/2001
SCOUR - NOT EVALUATED

***** NAVIGATION DATA *****

(38) NAVIGATION CONTROL - BRIDGE PERMIT REQ CODE 1
(111) PIER PROTECTION - FUNCTIONING CODE 2
(39) NAVIGATION VERTICAL CLEARANCE 013 FT
(116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR FT
(40) NAVIGATION HORIZONTAL CLEARANCE 0090 FT

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE ROUTINE INSPECTION DATE 12/11/01
 BRIDGE NO. 690019 COUNTY PASQUOTAN ROUTE US158 OVER PASQUOTANK RIVER
 STRUCTURE TYPE REINFORCED CONCRETE DECK/RC DECK GIRDERS,STE YEAR BUILT 1931
 ROUTE ORIENTATION W To E FOR SPAN 1 THRU 6 - 8 THRU 34

EVALUATION CODE: 0 - 2 CRITICAL, 3 & 4 POOR, 5 & 6 FAIR, 7 - 9 GOOD

| INSPECTION ITEMS | | | |
|--|--------------------------------------|---|---|
| DECK ITEMS | GRADE | 45 CHANNEL & CHANNEL PROT. | a. WATERWAY b. ALIGNMENT c. SCOUR d. SLOPE PROT., RIP-RAP, DIKES, ETC. |
| 1 WEARING SURFACE | 6 | | 5 |
| 2 DECK | | | 7 |
| a. CONCRETE | 32 | | 7 |
| b. TIMBER | 00 | | |
| c. STEEL PLANK | 00 | | |
| d. OPEN GRID | 00 | | |
| NO. OF EA. TYPE SPN. | | | |
| GRADE RATES | | 50 APPROACH ROADWAY CONDITION | 6 |
| SI & A ITEM 58 | | 51 APPROACH SLABS | |
| | | 52 PAINT SYSTEM | CODE |
| | | 53 UTILITIES | |
| 3 RAILING | 6 | 54 RESPONSE TO LIVE LOAD | 7 |
| a. CONCRETE | | 55 ESTIMATED REMAINING LIFE (YEARS) | 4 |
| b. TIMBER | | | |
| c. ALUMINUM | 7 | | |
| d. STEEL | | 60 REGULATORY SIGN NOTICE ISSUED | N |
| 4 CURBS - WHEELGUARDS - PARAPETS - MEDIANS | 6 | 61 PROMPT - ACTION NOTICE ISSUED | Y |
| 5 WALKWAYS (ON OR ATTACHED TO STRUCTURE) | | 62 PRESENTLY POSTED | N |
| 6 DECK EXP JTS OR DEVICES | | 63 TOT. FIELD INSP. TIME (INCLUDE WRITE UP) (M/H) | 40 |
| a. STEEL PL. OR FINGER PL | 00 | 64 TOTAL SNOOPER INSP. TIME (HRS) | 0 |
| b. MISC. PREFAB DEVICES | 00 | 65 TOTAL TRAFFIC CONTROL TIME (M/H) | 0 |
| c. COMPRESSION SEALS | 00 | | |
| d. STANDARD JOINTS | 08 | | |
| e. OPEN JOINTS | 00 | | |
| 7 DECK DEBRIS (INCLUDE EXCESS SAND / GRAVEL) | | 70 SI&A GENERAL CONDITION RATINGS | |
| | | a. DECK | ITEM 58 5 |
| | | b. SUPERSTRUCTURE | ITEM 59 5 |
| | | c. SUBSTRUCTURE | ITEM 60 4 |
| | | d. CHANNEL & CHANNEL PROT | ITEM 61 5 |
| SUPERSTRUCTURE (FM. 1(90)b TRUSS) I | | | |
| 10 LONGITUDINAL BEAMS OR GIRDERS | 5 | | |
| 11 LONGITUDINAL JOIST OR STRINGERS | 5 | | |
| 12 INT. DIAP'S, X-FRAMES, BRACING, & CONN'S | | 71 SI&A FIELD APPRAISAL RATINGS | |
| 13 END DIAP'S, CURTAIN WALLS, & CONN'S | 5 | a. WATERWAY ADAQUACY | 8 |
| 14 FLOOR BEAMS AND CONNECTIONS | | b. APPR. RDWY. ALIGNMENT | 8 |
| 15 BEARINGS ASSEMBLIES (INCLUDE MISALIGN) | | | |
| 16 DRAINAGE SYSTEMS (ON STRUCTURES) | 6 | 72 FIELD SCOUR EVALUATION | 0 |
| 17 MOVABLE SPAN MACHINERY | 5 | | |
| USE OF INSP. ACCESSIBILITY EQUIPMENT | | | |
| SUBSTRUCTURE ITEMS, ITEM 60 (INCLUDES SCOUR) | | SNOOPER (CODE P, S, 4 or N) | N |
| 35 TIM. SUBSTR. | a. ABUT. & INT. BENT CAPS & RISERS | LADDER | Y/N N |
| | b. PILES, POST, SILLS, & BRACING | OVERSIDE LADDER | Y/N N |
| | c. BULKHEADS, WING'S, & TIE BACKS | BUCKET TRUCK | Y/N N |
| 36 CONC. SUBSTR. | a. ABUT. & BENT CAPS | BOAT | Y/N Y |
| | b. ABUT. & BENT COL'S & BREASTWALLS | OTHER (FLOAT) | Y/N Y |
| | c. ABUT. & INT. BENT PILES | | |
| | d. BACKWALLS - WING'S - RETAIN. WALL | | |
| | e. ABUT. AND BENT FOOTINGS & SILLS | | |
| 37 STEEL SUBSTR. | a. ABUT. & INT. BENT CAPS & RISERS | NOTE: | |
| | b. PILES AND BRACING AND BULKHEADS | | |
| 38 FOUNDATION PILES, TYPE MATERIAL | | | |
| 39 SLOPE PROT., RIP - RAP (INCLUDE DRAINAGE) | | | |
| 40 FENDER SYSTEM | 5 | 80 INSPECTED BY: JLO | |
| 41 DRIFT | | 81 REVIEWED BY: <i>RB</i> | |

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE ROUTINE INSPECTION DATE 12/7/99
 BRIDGE NO. 69019 COUNTY PASQUOTAN ROUTE US158 OVER PASQUOTANK RIVER
 STRUCTURE TYPE REINFORCED CONCRETE DECK/RC DECK GIRDERS;STE YEAR BUILT 1931
 ROUTE ORIENTATION W To E FOR SPAN 1THRU 6 & 8 THRU 34

EVALUATION CODE: 0 - 2 CRITICAL, 3 & 4 POOR, 5 & 6 FAIR, 7 - 9 GOOD

INSPECTION ITEMS

| DECK ITEMS | | | GRADE | | | 5 |
|--|--------------------------------------|----|-------|---|--------------------------------------|----|
| 1 WEARING SURFACE | | | 6 | 45 CHANNEL & CHANNEL PROT. | a. WATERWAY | 5 |
| 2 DECK | a. CONCRETE | 32 | 5 | | b. ALIGNMENT | 7 |
| NO. OF EA. | b. TIMBER | 00 | | | c. SCOUR | 7 |
| TYPE SPN. | c. STEEL PLANK | 00 | | | d. SLOPE PROT., RIP-RAP, DIKES, ETC. | |
| GRADE | d. OPEN GRID | 00 | | 50 APPROACH ROADWAY CONDITION | | 6 |
| RATES | | | | 51 APPROACH SLABS | | |
| SI & A ITEM | | | | 52 PAINT SYSTEM | CODE | |
| 58 | | | | 53 UTILITIES | | |
| 3 RAILING | a. CONCRETE | | 6 | 54 RESPONSE TO LIVE LOAD | | 7 |
| | b. TIMBER | | | 55 ESTIMATED REMAINING LIFE (YEARS) | | 4 |
| | c. ALUMINUM | | 7 | 60 REGULATORY SIGN NOTICE ISSUED | | N |
| | d. STEEL | | | 61 PROMPT - ACTION NOTICE ISSUED | | N |
| 4 CURBS - WHEELGUARDS - PARAPETS - MEDIANS | | | 6 | 62 PRESENTLY POSTED | | N |
| 5 WALKWAYS (ON OR ATTACHED TO STRUCTURE) | | | | 63 TOT. FIELD INSP. TIME (INCLUDE WRITE UP) (M/H) | | 40 |
| 6 DECK EXP | a. STEEL PL. OR FINGER PL | 00 | | 64 TOTAL SNOOPER INSP. TIME (HRS) | | 0 |
| JTS OR | b. MISC. PREFAB DEVICES | 00 | | 65 TOTAL TRAFFIC CONTROL TIME (M/H) | | 0 |
| DEVICES | c. COMPRESSION SEALS | 00 | | | | |
| NO. OF | d. STANDARD JOINTS | 08 | 7 | | | |
| EACH | e. OPEN JOINTS | 00 | | | | |
| 7 DECK DEBRIS (INCLUDE EXCESS SAND / GRAVEL) | | | | 70 SI&A GENERAL CONDITION RATINGS | | |
| | | | | a. DECK | ITEM 58 | 5 |
| | | | | b. SUPERSTRUCTURE | ITEM 59 | 5 |
| | | | | c. SUBSTRUCTURE | ITEM 60 | 4 |
| | | | | d. CHANNEL & CHANNEL PROT | ITEM 61 | 5 |
| | | | | | | |
| SUPERSTRUCTURE (FM. 1(90)b TRUSS) I | | | | | | |
| 10 LONGITUDINAL BEAMS OR GIRDERS | | | 4 | 71 SI&A FIELD APPRAISAL RATINGS | | |
| 11 LONGITUDINAL JOIST OR STRINGERS | | | | a. WATERWAY ADAQUACY | | 8 |
| 12 INT. DIAP'S, X-FRAMES, BRACING, & CONN'S | | | | b. APPR. RDWY. ALIGNMENT | | 8 |
| 13 END DIAP'S, CURTAIN WALLS, & CONN'S | | | 5 | | | |
| 14 FLOOR BEAMS AND CONNECTIONS | | | | 72 FIELD SCOUR EVALUATION | | 0 |
| 15 BEARINGS ASSEMBLIES (INCLUDE MISALIGN) | | | | | | |
| 16 DRAINAGE SYSTEMS (ON STRUCTURES) | | | 6 | | | |
| 17 MOVABLE SPAN MACHINERY | | | 5 | USE OF INSP. ACCESSIBILITY EQUIPMENT | | |
| | | | | SNOOPER (CODE P, S, 4 or N) | | N |
| SUBSTRUCURE ITEMS, ITEM 60 (INCLUDES SCOUR) | | | | LADDER | Y/N | N |
| 35 TIM. | a. ABUT. & INT. BENT CAPS & RISERS | | | OVERSIDE LADDER | Y/N | N |
| SUBSTR. | b. PILES, POST, SILLS, & BRACING | | | BUCKET TRUCK | Y/N | N |
| | c. BULKHEADS, WING'S, & TIE BACKS | | | BOAT | Y/N | Y |
| 36 CONC. | a. ABUT. & BENT CAPS | 4 | | OTHER (FLOAT) | Y/N | Y |
| SUBSTR. | b. ABUT. & BENT COL'S & BREASTWALLS | 5 | | | | |
| | c. ABUT. & INT. BENT PILES | 5 | | SPECIAL INSPECTION REQUESTED FOR: | | |
| | d. BACKWALLS - WING'S - RETAIN. WALL | 6 | | | | |
| | e. ABUT. AND BENT FOOTINGS & SILLS | | | | | |
| 37 STEEL | a. ABUT. & INT. BENT CAPS & RISERS | | | NOTE: | | |
| SUBSTR. | b. PILES AND BRACING AND BULKHEADS | | | | | |
| 38 FOUNDATION PILES, TYPE MATERIAL | | | | | | |
| 39 SLOPE PROT., RIP - RAP (INCLUDE DRAINAGE) | | | | | | |
| 40 FENDER SYSTEM | | | 5 | 80 INSPECTED BY: <i>CWM</i> | | |
| 41 DRIFT | | | | 81 REVIEWED BY: <i>ABM</i> | | |

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES

BRIDGE # 690019 COUNTY PASQUOTANK DATE 1-16-02

THE FOLLOWING SI & A ITEMS ARE TO BE CODED TO REFLECT THE FACT THAT THE STRUCTURE IS SHORED UP:

| | | CODE | BY |
|---|-----------------------------|------------|------------|
| SI & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION | | <u>T</u> | <u>DRJ</u> |
| SI & A ITEM 59 - SUPERSTRUCTURE | | <u>4</u> | <u>DRJ</u> |
| SI & A ITEM 60 - SUBSTRUCTURE | | <u>4</u> | <u>DRJ</u> |
| SI & A ITEM 64 - OPERATING RATING | HS <u>0.0</u> BY <u>SML</u> | <u>101</u> | <u>MR</u> |
| SI & A ITEM 66 - INVENTORY RATING | HS <u>0.0</u> BY <u>SML</u> | <u>101</u> | <u>MR</u> |

COMMENTS:

ADDED BRACKETS UNDER RCDG @ SPAN PIER #1 - 25

| | | |
|--|---|--|
| Bridge I&A Form 1(82) H Revised 6/4/97 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAY Bridge Maintenance Unit Bridge Inspection Sect. | Field Inspection Report Bridge Inspection & Analysis | Bridge No. <u>690019</u> |
| | | Route <u>US158</u> County <u>PASQUOTANK</u> |
| Team Leader: JLO | | Date: 12/11/01 |
| Assisted By: | | |

| Item No. | Description |
|----------|--|
| 2 | DECK A - CONCRETE 32 - 5 - TOP COVERED WITH ASPHALT WEARING SURFACE. BOTTOM SIDE HAS HAIRLINE CRACKS WITH EFFLO VISIBLE AT SOME CRACKS. MINOR SPALLS WITH RE-STEEL EXPOSED AT PLACES. RC THICK SLAB SECTION (EAST END STRUCTURE) CRACKS, DELIMINATION SPALLS ON BOTOM SIDE WITH RE-STEEL VISIBLE. SEE PHOTOS. D OPEN GRID 2 - 5 - DOUBLE LEAF BASCULE LIFT SPAN- STUDS WELDED TO TOP OF GRID - WORN AND BENT FROM TRAFFIC. AREAS OF RUST WITH SOME BENT SECTION SEE PHOTOS. |
| 3 | RAILING - A - CONCRETE - 6- HAIRLINE CRACKS , MINOR SPALLS WITH SOME CONCRETE DETERIORATION AT PLACES SEE PHOTO. THIS IS ON RC THICK SLAB SECTION ON EAST END ONLY . |
| 4 | CURBS - 6- SPALLS WITH SOME CONCRETE DETERIORATION AT PLACES. SEE PHOTO - THIS IS ON RC THICK SLAB SECTION ON EAST END ONLY.. |
| 10 | GRIDERS (RC DECK) 4 - CRACKS OF ALL TYPE VISIBLE ON FACES AND BOTTOM SIDE THRU OUT ALL SPAN WITH RC DECK GIRDERS. SOME CRACK OPENINGS ARE UP TO 1/2" MAX. THERE IS CONCRETE DETERIORATION ON SOME FACES OVER INTERIOR BENT CAPS. DELIMINATION AT SOME CRACKS. CONDITION AND LOCATION OF CRACKS , SPALLS AND DETERIORATION SAME AS LAST INSPECTION. SEE PHOTOS. PLATE STEEL GIRDERS (BASCULE SPAN) (2 LEAF SECTIONS) 5- RUSTY WITH MINOR SECTION LOSS. HEAVY SECTION LOSS AT RIVETS WHERE STIFFNERS AND FLOOR BEAMS ARE ATTACHED. RUSTY AREAS THRU OUT . RIVETS ARE IN POOR CONDITION DUE TO PREVIOUS RUST CONDITION AND SECTION LOSS. |
| 11 | STRINGERS - BASCULE LIFT SPAN - 5 - RUSTY WITH HEAVY SECTION LOSS AT FLOOR BEAM CONNECTIONS. SEE PHOTOS. BEAM #4 HAS HEAVY SECTION LOSS AT WEST END AND HAS TWO HOLES AT CONCRETE . HOLES ARE 2" ROUND 4" FROM TOP FLANG AND ONE HOLE IS 5" FROM BOTTOM FLANGE. PROMPT ACTION ISSUED |
| 12 | INT. DIAP'S, X-FRAMS, BRACING, & CONN. - BASCULE LIFT SPAN - 5 - HEAVY SECTION LOSS AT AND ADJACENT CONCRETE COUNTER WEIGHT AREAS. SEE PHOTOS. |
| 13 | END DIAP'S & CONN. - BASCULE LIFT SPAN - 5 - HEAVY SECTION LOSS AT AND ADJACENT COUNTER WEIGHT SECTION. SEE PHOTO. REGULAR CONCRETE GIRDER SPANS SECTION. 5- SPALLED AND CRACKED AREAS WITH RE-STEEL EXPOSED . EFFLO VISIBLE AT SOME CRACKS. |
| 14 | FLOOR BEAMS & CONN. BASCULE LIFT SPAN - 5 RUSTY WITH HEAVY SECTION LOSS AT STRINGER CONNECTIONS AND AREAS NEAR CONCRETE COUNTER WEIGHT SECTION . SEE PHOTO. |
| 15 | BEARING ASSEMBLIES (INCLUDES MISALIGN) 5 (BASCULE LIFT SPAN) HEAVY SECTION LOSS AND SECTION LOSS IN AREA OF CONCRETE COUNTER WEIGHT SECTION. (CONCRETE SLAB SPANS & RC DECK GIRDER SPAN SECTION. SADDLE CAPS ADDED UNDER RC DECK GIRDERS AT REST PIER 1 (SEE PHOTO) SECTION LOSS WITH CONCRETE DETERIORATION IN INT. BT. CAPS OR RC DECK GIRDERS AND RC THICK SLAB SECTION . SEE PHOTOS. |
| 36 | A- END & INT. BT. CAPS. 4- CAN'T GET TO END BT. CAPS, DUE TO LOW CLEARANCE AND WATER DEPTH ON (WEST END). INT. BENT CAPS HAVE CRACKS AND DELIMINATION WITH UP TO 1/2" MAX OPENINGS. SPALL AND CONCRETE DETERIORATION ON SOME END OF CAPS, WITH RE-STEEL EXPOSED. B - INT. BENT PEDISTALS - 5 - UNDER RC THICK SLAB ONLY. CRACKS WITH DELIMINATION AT SOME CRACKS. SPALLS WITH DELIMINATION AROUND SPALLED AREAS. THERE IS CONCRETE DETERIORATION AT PLACES SEE PHOTOS. B- BREAST WALL (REST PIER 1 & 2 (BASCULE LIFT SPAN) 5- CRACKS AND DELIMINATION AT SOME CRACKS. MINOR SPALLS AT PLACES. SADDLE CAPS HAVE BEEN ADDED UNDER RD DECK GIRDERS AT REST PIER # 1 SEE PHOTO. C END & INT. BT. PILES - 5 - PILES AT END BT. NOT VISIBLE. MOST PILES AT INTERIOR BTS. HAVE BEEN ENCASED,. THIS INSPECTOR DOESN'T KNOW HOW FAR DOWN ENCASEMENT GOES. PILE NOT ENCASED HAVE MINOR CRACKS. |

Form 1(82) H (cont.)
Revised 6/4/97

Bridge No. 690019

County PASQUOTANK

Date: 12/11/01

Field Inspection Report (cont.)

By: JLO

| Item No. | Description |
|----------|--|
| 40 | FENDER SYSTEM - 5 - DIVERS GRADE. |
| 45 | CHANNEL & CHANNEL PROT. A - WATERWAY - 5 - HIGH WATER MARKS ON CAPS. |
| 62 | PRESENTLY POSTED - NOT POSTED. |

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



ROADWAY APPROACH

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



WEARING SURFACE



WEARING SURFACE

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



WEARING SURFACE

PATCHED AREAS



DRAIN HOLES STOPPED UP

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



EXPANSION JOINT AT BT#1



EXPANSION JOINT #3 AT BT#5

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



ARMS AT BT#5 SPAN #6

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



EXPANSION JOINT #4 AT REST PIER#1



JOINT AT WEST LIFT (EAST SIMILAR)

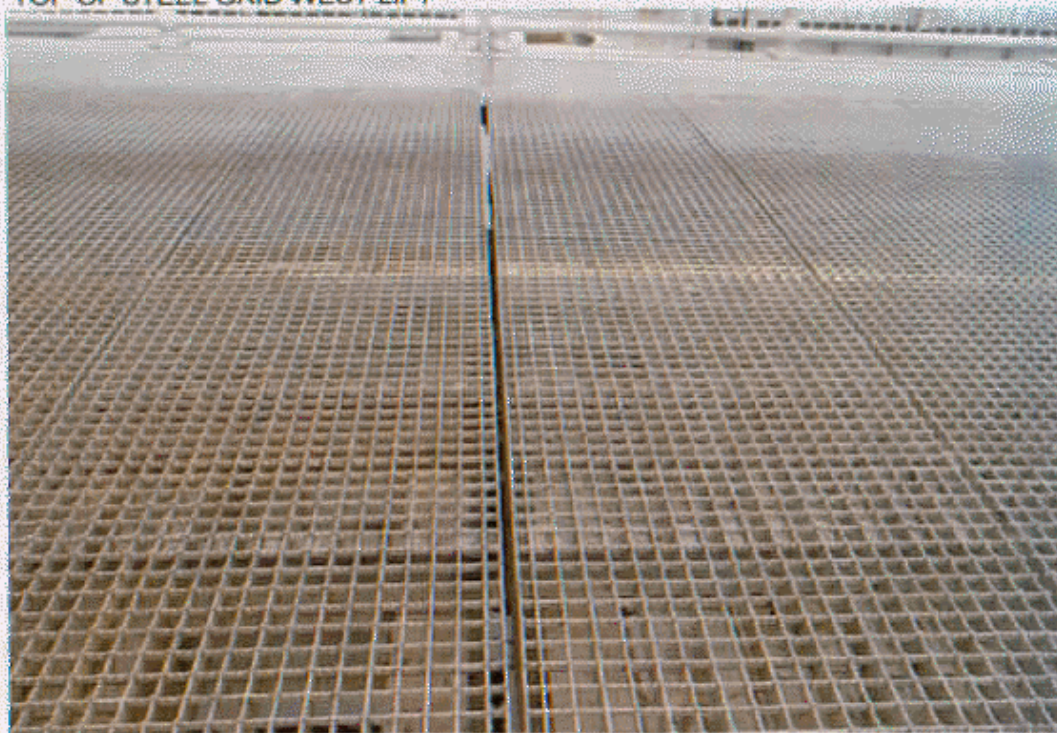
BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



TOP OF STEEL GRID WEST LIFT

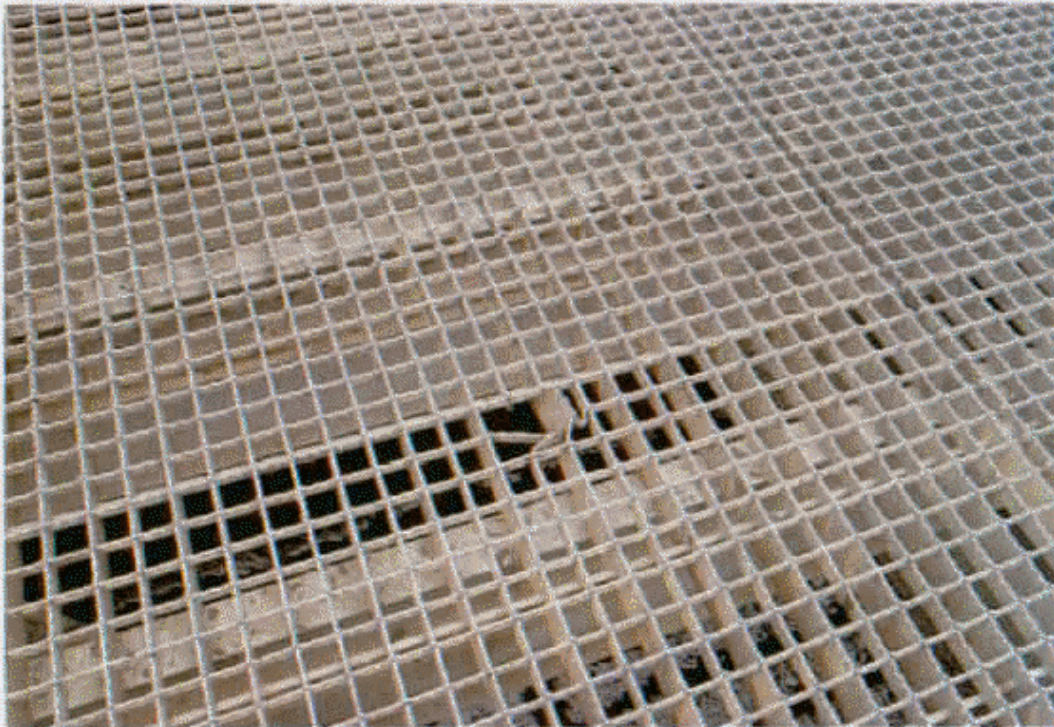


CENTER JOINT BETWEEN STEEL GRIDS

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



EAST LIFT HOLE IN STEEL GRID RIGHT LANE



WEARING SURFACE SPALLED LEFT LANE SPAN #7 AT BENT#6

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



STEEL RAIL STOPS AND RC RAIL STARTS AT BENT#11

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



CURB DETERIORATION RIGHT SIDE AT BENT#16 (SIMILAR AT BENT#18)



CURB DETERIORATION AT RIGHT SIDE LAST THREE SPANS

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BOTTOM OF DECK



BOTTOM OF DECK

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BOTTOM OF DECK (EFFLO)



BOTTOM OF DECK

690019

BRIDGE # 127

PASQUOTANK COUNTY

12/11/01



BOTTOM OF STEEL GRID



SAME AS ABOVE

#690019

BRIDGE ~~690019~~

PASQUOTANK COUNTY

12/11/01



CENTER JOINT BETWEEN EAST AND WEST LIFT



EXCESS DIRT ON BOTTOM FLANGE OF FLOOR BEAMS

#690019
BRIDGE

PASQUOTANK COUNTY

12/11/01



STRINGER ATTACHED TO FLOORBEAM



SAME AS ABOVE

#690019

BRIDGE

PASQUOTANK COUNTY

12/11/01



HOLE IN FLOORBEAM WHERE ARM WENT THRU

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



CENTER OF FLOOR BEAM AT BEAM #4 WEST END



SAME AS ABOVE

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



STRINGER #6 AT WEST END HEAVY SECTION LOSS WEBB 3/16" FLANGE 5"



SAME AS ABOVE

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BEAM #4 AT EAST END HAS HEAVY SECTION LOSS AT WEBB AND FLANGE
WEBB HAS TWO HOLES 2" ROUND ONE HOLE IS 4" FROM TOP FLANGE AND
THE OTHER HOLE 5" FROM BOTTOM FLANGE THE BOTTOM FLANGE HAS
1" SECTION LOSS ON BOTH SIDES BACK FROM CONCRETE 4" (PA)

DEPARTMENT of TRANSPORTATION

DIVISION of HIGHWAYS

BRIDGE MAINTENANCE UNIT

STRUCTURE DATA FILE

COUNTY RASQUOTANK BRIDGE NO. 690019

CONTENTS:

DATA CARD

STRUCTURE DATA WORK SHEETS

STREAM BED SOUNDINGS & PROFILE SKETCH

FORM 501 OR 502

FORM BMD - 9

RETURNED PROMT ACTION NOTICE SHOWING REPAIRS

OTHER SKETCHES AND NOTES SHOWING STRUCTURE DETAILS

PHOTOGRAPHS

NOTE: STRUCTURE ANALYSIS-CHECK

 ✓ YES or NO

WHEN PLANS ARE AVAILABLE

FIELD INSPECTOR

DATE BY

B80028

BRIDGE MAINTENANCE UNIT
DATA ON EXISTING STRUCTURE

RUN DATE 01/29/02

COUNTY: PASQUOTANK DIV.: 01 DIST.: 1 STRUCTURE NUMBER: 69 0019 LENGTH: 846 FEET

ROUTE CARRIED: US158 FEATURE INTERSECTED: PASQUOTANK RIVER

LOCATED: 0.3 MI.E.JCT.US17 BUS. BRIDGE NAME:

FUNC. CLASS: MAU SYST.ON: FA SYST.UNDER: ADT & YR: 8000 00 RAIL TYPE: LT 109 RT 109

BUILT: 1931 BY: SHPWC PROJ: 1720 FED.AID PROJ: 234 DESIGN LOAD: H-15

REHAB: 1946 BY: SHPWC PROJ: 1711 ALIGNMENT: TAN SKEW: 090 LANES: ON 02 UNDER 00

NAVIGATION: VC 013 FT HC 0090 FT HT.CRN.TO BED: 45 FT WATER DEPTH: 41 FT

SUPERSTRUCTURE: REINFORCED CONCRETE DECK/RC DECK GIRDERS;STEEL BASCULE SPAN

SUBSTRUCTURE: EBTS:RC CAPS/RC PILES:IBTS:RC POST&BEAM/RC PILES

SPANS: 5@37',1@29',1@130'DBL.LEAF BAS.SPN,1@24',5@37',1@36'6,21@10

BEAMS OR GIRDERS: BAS.SPN:11LNS.I-BEAMS;APPR.SPNS:4 LINES RCDG

FLOOR: OPEN STEEL GRID ENCROACHMENTS: DECK (OUT TO OUT): 027.4

CLEAR ROADWAY: 024.1 BETWEEN RAILS: 024 .9 SIDEWALK OR CURB: LT 00.4 RT 00.4

VERT.CL.OVER: 99 FT 99 IN VERT.CL.UNDER: 00 FT 00 IN HOR.CL.UNDER: 00.0 FT SPECIAL PERMIT:

INV.RTG.: HS- 1 OPE.RTG.: HS- 1 CONTR.MEMBER: POSTED: SV -- TTST -- DATE --

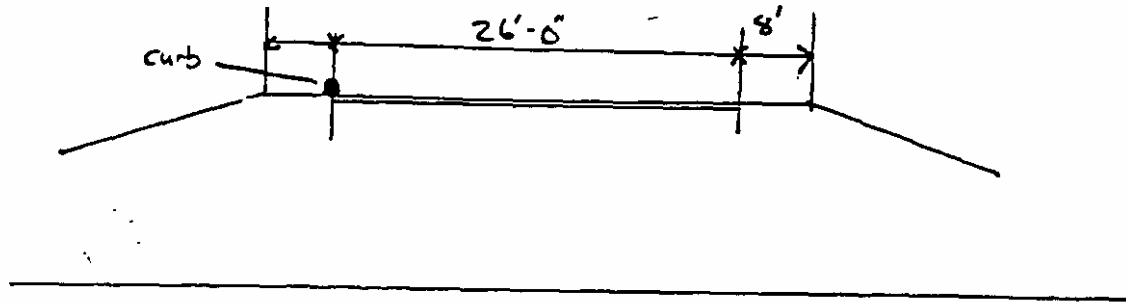
SYSTEM: 8 URBAN-PRIMARY GREEN LINE ROUTE: NO, BUT HAS ALLOW. WTS

2ND OPENING: 3RD OPENING: 4TH OPENING: 5TH OPENING:

REMARKS:

BRIDGE NO. 19 COUNTY Pasquotank DATE 12/11/01 BY JLO

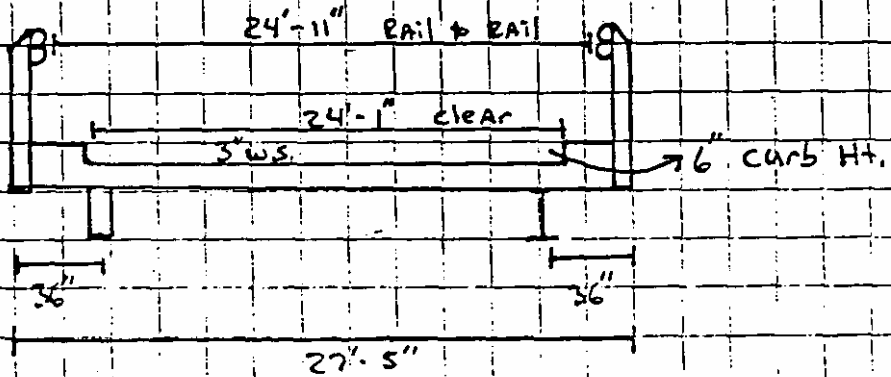
APPROACH ROADWAY WIDTH (SEE ITEM 32)



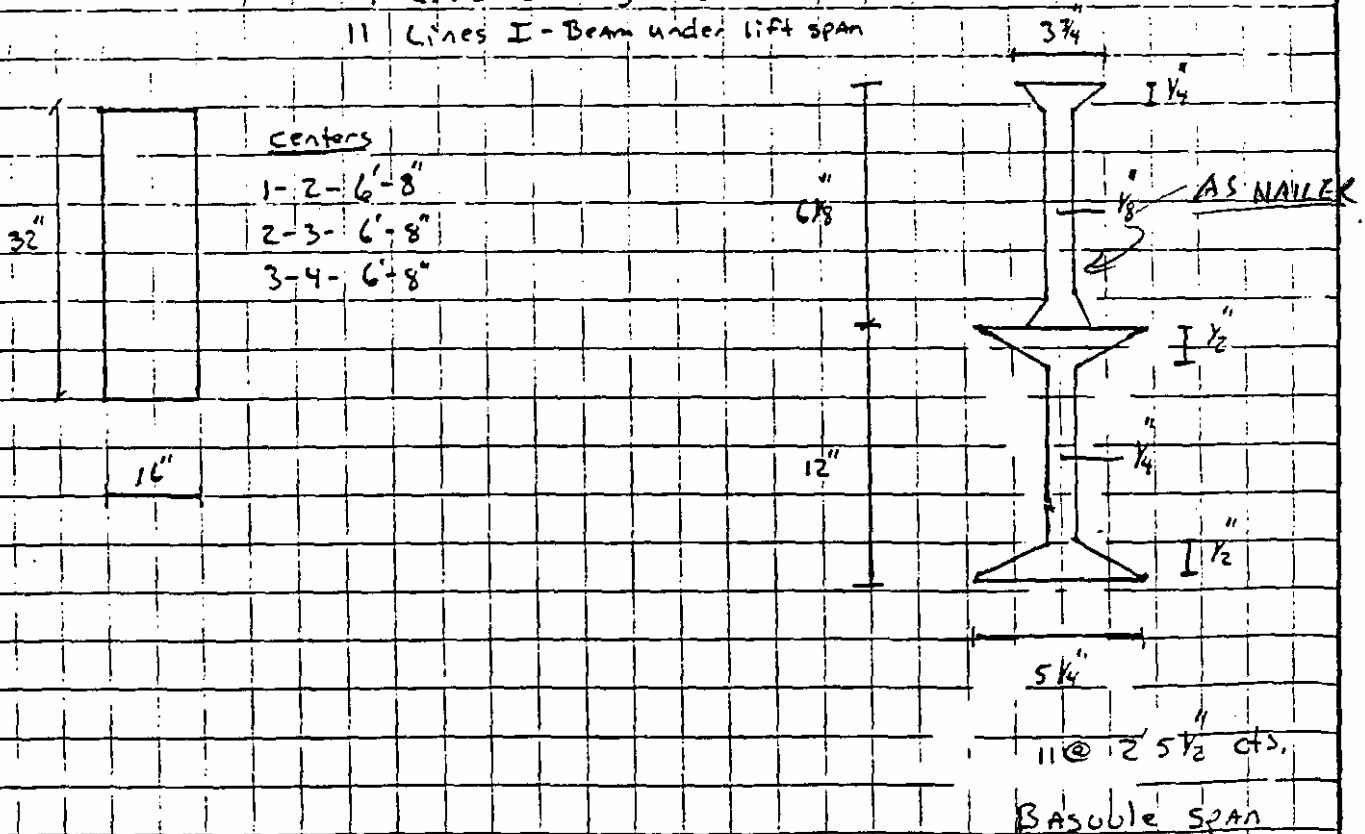
See Attached Sheet

‡

See PLANS



4 Lines conc. girders
11 Lines I-Beam under lift span



DIVISION OF HIGHWAYS

HIGHWAY BUILDING

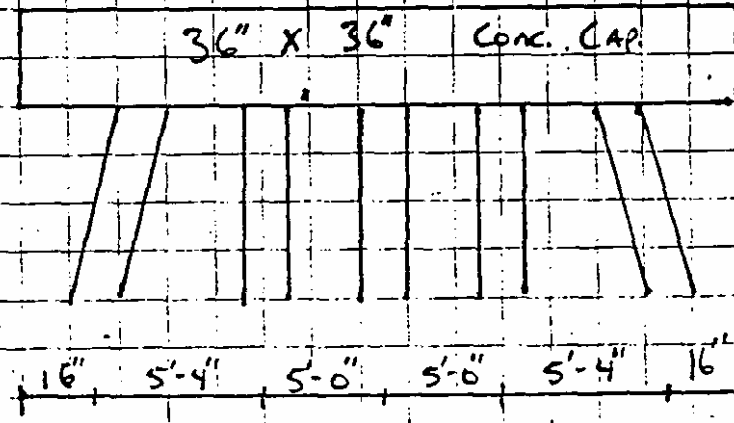
P. O. BOX 25201

RALEIGH, NORTH CAROLINA 27611

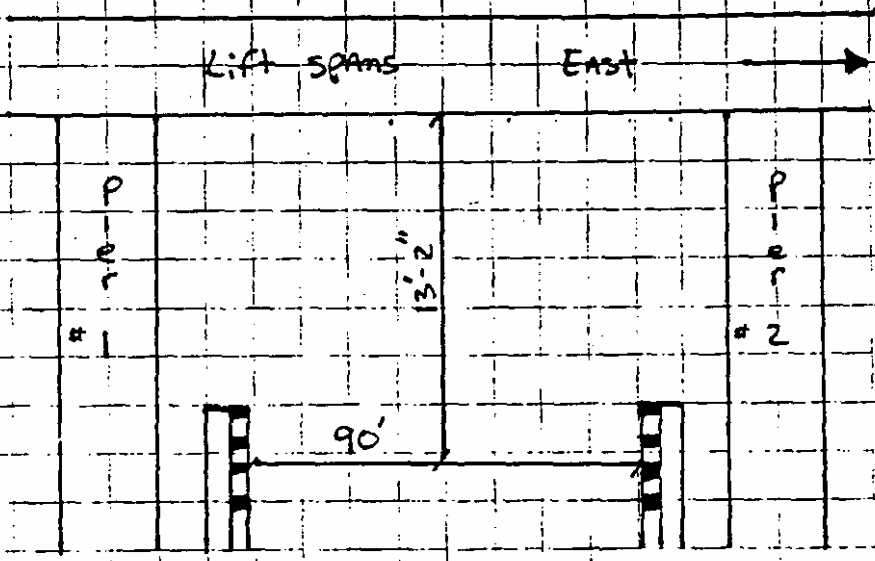
PREPARED BY QLO DATE 12/11/01 STATION _____

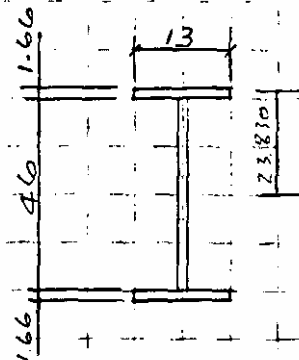
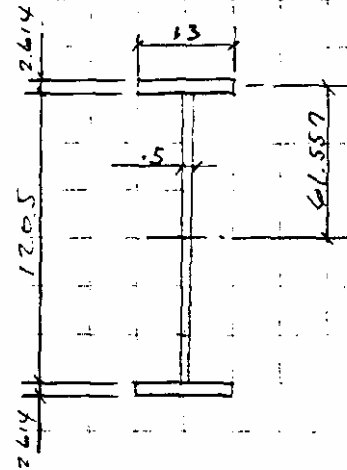
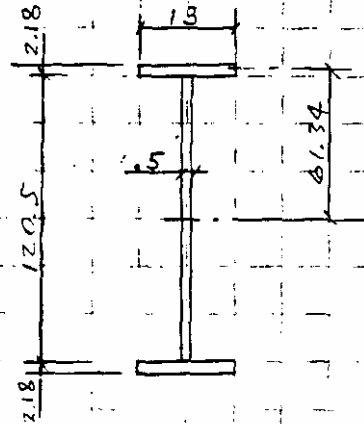
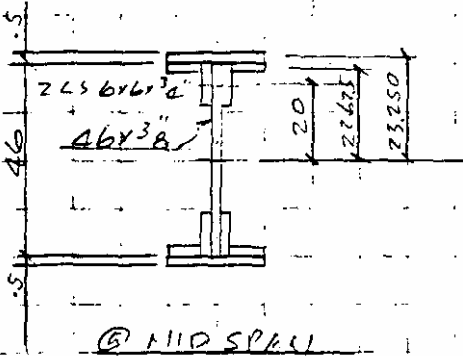
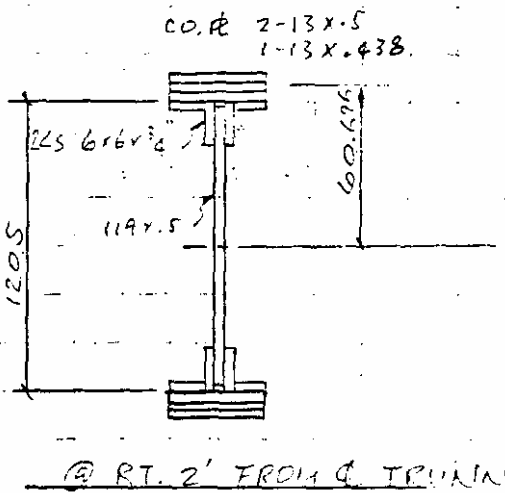
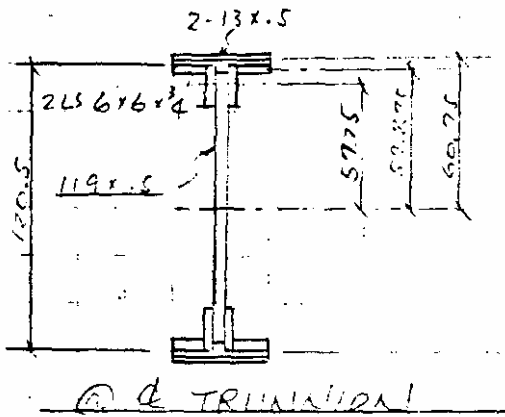
CHECKED BY _____ DATE _____ STR NO. _____ SHEET _____ OF _____

Bents (5) Pile - see plans for brace bents



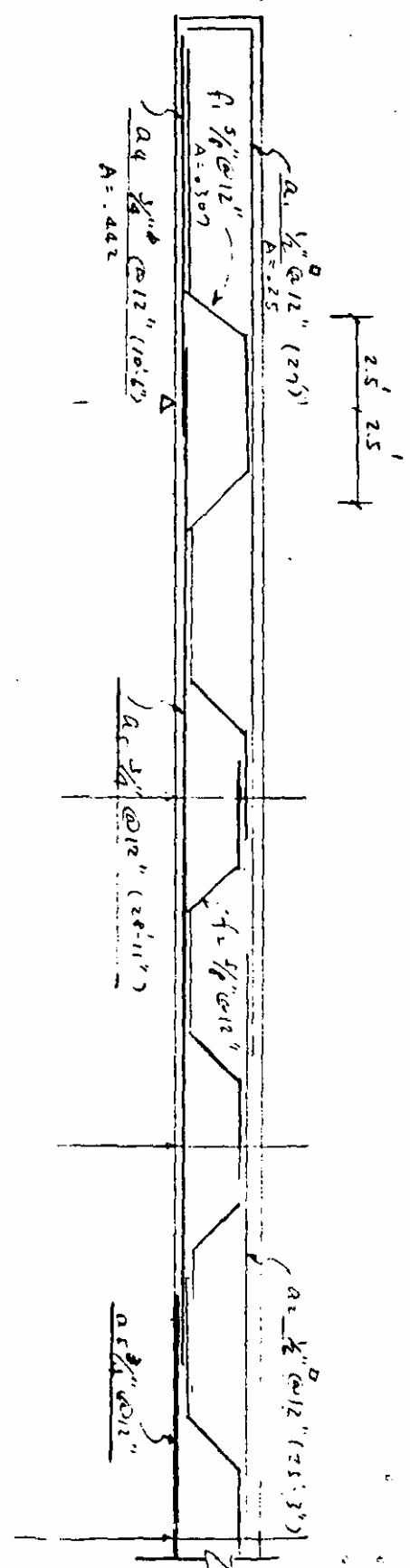
Vertical Clearance & Horizontal Clearance





STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 HIGHWAY BUILDING
 P. O. BOX 25201
 RALEIGH, NORTH CAROLINA 27611

SUBJECT MONO. SLAB PROJECT BR. # 19
7-SPAN PASQUOTANK COUNTY
 PREPARED BY S. LEE DATE 2-4-98 STATION _____
 CHECKED BY _____ DATE _____ STR NO. _____ SHEET _____ OF _____



STREAM BED SOUNDINGS
(SEE NEXT SHEET FOR PROFILE SKETCH)

BR. INSP. WORKSHEET (1/1/90)

Revised 10/9/98

Bridge #: 690019 COUNTY PASQUOTANK DATE 12/11/01 BY: JLO

RECORD SOUNDINGS FROM TOP OF RAIL. OTHER LOCATION IF NEEDED: 7" CURB HT.

DISTANCE HIGHWATER MARK TO TOP OF RAIL: 34" LOCATION H. W. MARK: RAIL

NOTE: Draft a Stream Bed Profile sketch and record soundings at the stream face of abutments, C/L of piers, WE, WS, and major contour changes on the downstream side. Record soundings at the stream face abutments and C/L piers on the upstream side.

| DOWNSTREAM | | | UPSTREAM | | |
|--------------------|----------|-------------|--------------------|----------|-------------|
| DISTANCE (Station) | SOUNDING | DESCRIPTION | DISTANCE (Station) | SOUNDING | DESCRIPTION |
| 0 | 7.4 | WS & WE | | | WS & WE |
| 600 | 7.4 | WS & WE | | | WS & WE |
| 0 | 5.5 | EBT1 | 0 | 7 | EBT1 |
| 0 | 7.4 | WS & WE | | | |
| 37 | 14.7 | BT1 | | | |
| 74 | 20.0 | BT2 | | | |
| 111 | 33.5 | BT3 | | | |
| 148 | 43.0 | BT4 | | | |
| 185 | 48.0 | BT5 | | | |
| 238 | 37.7 | PIER1 | 238 | 43.9 | PIER1 |
| 315 | 46.0 | LIFT SPAN | | | |
| 392 | 40.2 | PIER2 | 392 | 39.2 | PIER2 |
| 445 | 31.0 | BT6 | | | |
| 482 | 26.0 | BT7 | | | |
| 519 | 22.7 | BT8 | | | |
| 556 | 15.5 | BT9 | | | |
| 593 | 12.8 | BT10 | | | |
| 600 | 7.4 | WS & WE | | | |
| 640 | 7.6 | BT12 | 640 | 5.5 | BT12 |
| 650 | 6.0 | BT13 | | | |
| 660 | 6.2 | BT14 | | | |
| 670 | 5.9 | BT15 | | | |
| 680 | 6.0 | BT16 | | | |
| 690 | 6.0 | BT17 | | | |
| 700 | 6.3 | BT18 | | | |
| 710 | 5.4 | BT19 | | | |
| 720 | 5.1 | BT20 | | | |
| 730 | 5.1 | BT21 | | | |
| 740 | 5.3 | BT22 | | | |
| 750 | 5.0 | BT23 | | | |
| 760 | 6.0 | BT24 | 760 | 5.2 | BT24 |
| 770 | 6.0 | BT25 | | | |
| 780 | 6.0 | BT26 | | | |
| 790 | 6.3 | BT27 | | | |
| 800 | 6.2 | BT28 | | | |
| 810 | 6.0 | BT29 | | | |
| 820 | 6.0 | BT30 | | | |
| 830 | 5.7 | BT31 | | | |
| 840 | 5.7 | EBT2 | 840 | 1.0 | EBT2 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

690019

County:

PASQUOTANK

Date: 12/11/01

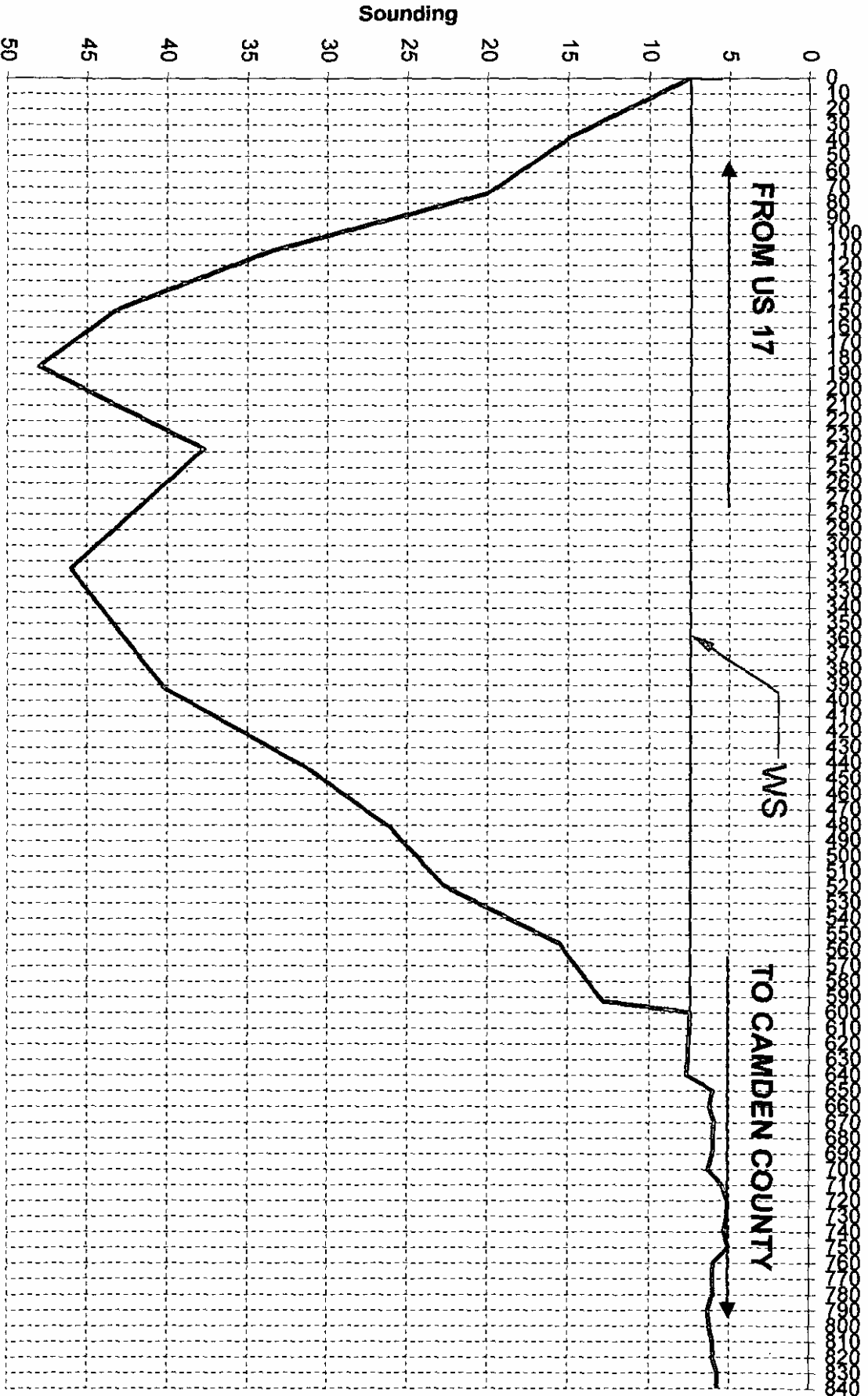
By: JLO Page 2

of 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 (Sounding)

Distance (Station)



BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



LOOKING WEST

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



END BENT #1



BENT #1

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



RIGHT END OF BENT #1

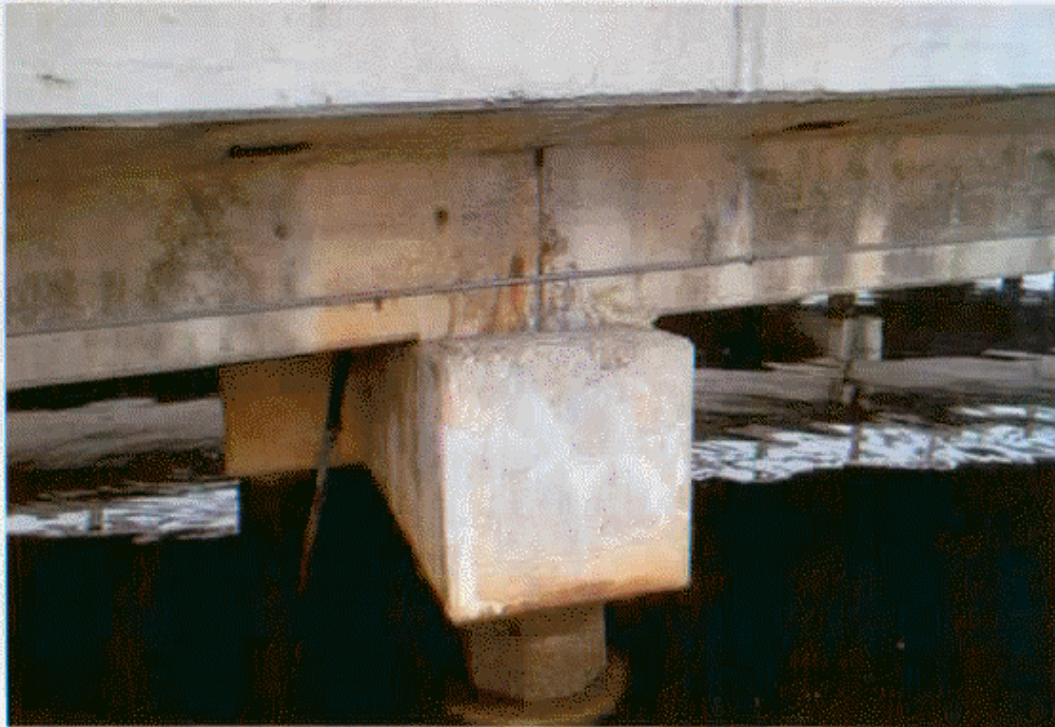
BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #2



RIGHT END OF BENT #2

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



RIGHT SIDE GIRDER #4 AT BENT #2 SPAN #3
CRACKED, SPALLED AND DELMINATED

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #3



RIGHT SIDE OF BENT #3 (GIRDER #4 AT BENT #3 SPAN #4 DETERIORATION)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #4



RIGHT END OF BENT #4

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



LEFT END OF BENT #4 CAP (SIMILAR AT BENT #2 CAP)



LEFT SIDE OF GIRDER #1 AT BENT #4 (DETERIORATION)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #5 CAP SPALLED UNDER GIRDER #1

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #5



LEFT END OF BENT #5 (GIRDER #1 CRACKED, SPALLED AND DELMINATED)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



REST PIER #1



REST PIER #2

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



REST PIER #1 RIGHT SIDE OF GIRDER #1 CRACKED, SPALLED AND DELMINATED

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BOTTOM OF GIRDER #2 SPAN #6 AT REST PIER#1 AT SUPPORT BEAM PLATE
AND CRACK AT BOTTOM OF GIRDER

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



LEFT SIDE OF SUPPORT BEAM AT REST PIER #1 FOR GIRDER #1



RIGHT SIDE OF SUPPORT BEAM AT REST PIER #1 FOR GIRDER #1

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



AT REST PIER #2 UNDER GIRDER #1 CRACKED, SPALLED AND DELMINATED



RIGHT BOTTOM EDGE OF GIRDER #1 SPAN #7 CRACKED & DELMINATED
FROM REST PIER #2 TO MID SPAN

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #6

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #6 CAP BOTTOM EDGE OVER PILE #2 AND #3
CRACKED, SPALLED AND DELMINATED

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #7



RIGHT END OF BENT #7 (LEFT END SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #8



RIGHT END OF BENT #8 (LEFT END SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #9



RIGHT END BENT #9 (LEFT END SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #10



RIGHT END OF BENT #10 (LEFT END SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #11 WEST FACE



RIGHT END OF BENT #11 (LEFT END SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #15



BENT #11 EAST FACE

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



EXTERIOR OF LEFT CURB BETWEEN BENT #14 AND BENT #15
HEAVY DETERIORATION WITH RE-STEEL EXPOSED

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



RIGHT END OF BENT #18 (LEFT END SIMILAR)



WEST FACE OF BENT#18 CAP (CRACKED, SPALLED AND DELMINATED AND WITH RE-STEEL EXPOSED)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #24

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



WEST FACE OF BENT #25 CAP (CRACKED, SPALLED AND DELMINATED WITH RE-STEEL EXPOSED)



PEDESTAL #3 AT BENT #25 (PEDESTAL #2 SIMILAR)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT #25



RIGHT END OF BENT #25 (HEAVY DETERIORATION)

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



BENT#30



RIGHT END BENT#30

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



LOOKING NORTH UPSTREAM



LOOKING SOUTH DOWNSTREAM

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



LOOKING NORTH THRU FENDER



LOOKING SOUTH THRU FENDER

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



NORTH SIDE LOOKING WEST



SOUTH SIDE LOOKING WEST

BRIDGE # 690019

PASQUOTANK COUNTY

12/11/01



UTILITIES RIGHT SIDE