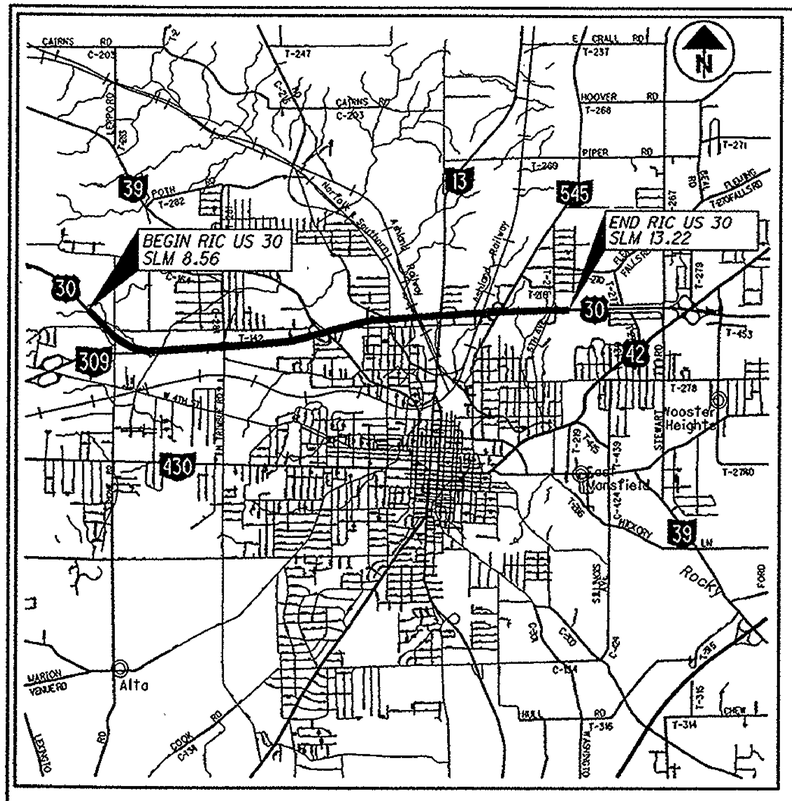
RIC - US-30-8.56
100038 PID - 23815
Dist 3 1/28/2010



LOCATION MAP

LATITUDE: 40 °46'36" LONGITUDE: 82 °31'54"

SCALE IN MILES

0 1 2 3 4

PORTION TO BE IMPROVED

INTERSTATE & DIVIDED HIGHWAY

UNDIVIDED STATE & FEDERAL ROUTES

OTHER ROADS

STATE OF OHIO, DEPARTMENT OF TRANSPORTATION

RIC-30-8.56

CITY OF MANSFIELD
CITY OF ONTARIO
SPRINGFIELD TOWNSHIP
MADISON TOWNSHIP
RICHLAND COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

RESURFACING, INCLUDING PAVEMENT PLANING, PAVEMENT REPAIRS, CONCRETE BARRIER FOR ROCK FALL AREA, GUARDRAIL REPAIR, TRAFFIC CONTROL ITEMS, AND STRUCTURE MAINTENANCE.

PROJECT EARTH DISTURBED AREA:	N/A
ESTIMATED CONTRACTOR EARTH DISTRURBED AREA:	N/A
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2008 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED IN THIS PLAN, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
DATE 10/29/09 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 11-12-09 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E033(753)

PID NO. 23815

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT ASHLAND RAILWAY

RIC-30-8.56

1/78

STRUCTURAL ENGINEERS SEAL:

STATE OF OHIO
DAVID C. MOLLENSHOTT
E-50210
REGISTERED PROFESSIONAL ENGINEER

SIGNED: David C. Mollenshott
DATE: 10/22/09

ROADWAY ENGINEERS SEAL:

STATE OF OHIO
MICHAEL JOSEPH SCHAFRATH
E-57843
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Michael J Schafrath
DATE: 10/29/09

STANDARD CONSTRUCTION DRAWINGS

BP-2.5	7/18/08	RM-4.2	10/19/07	MT-97.12	4/17/09	TC-52.10	1/19/07		
BP-3.1	10/19/07	RM-4.5	10/16/09	MT-98.10	7/17/09	TC-52.20	1/19/07		
BP-5.1	7/28/00	RM-4.6	10/16/09	MT-98.11	7/17/09	TC-61.30	4/17/09		
BP-9.1	4/15/05			MT-98.20	7/17/09	TC-65.10	1/21/05		
		GSD-1-96	7/19/02	MT-98.22	7/17/09	TC-65.11	1/21/05		
DM-4.3	4/17/09	PCB-91	7/19/02	MT-98.28	7/17/09	TC-71.10	1/16/09		
DM-4.4	4/17/09	RB-1-55	2/2/59	MT-98.29	7/17/09	TC-72.20	10/16/09		
		RB-1-82	5/10/82	MT-99.20	1/16/09	TC-73.10	1/19/01		
GR-1.1	7/16/04			MT-101.60	4/17/09	TC-82.10	10/16/09		
GR-2.1	1/16/04	MT-35.10	4/20/01	MT-101.70	1/16/09				
GR-3.1	10/16/09	MT-95.30	7/17/09	MT-101.90	1/16/09				
GR-3.2	10/16/09	MT-95.50	4/17/09	MT-105.10	1/16/09				
GR-3.4	10/16/09	MT-96.11	1/16/09						
GR-4.2	1/19/07	MT-96.20	1/16/09	TC-41.20	1/19/01				
GR-5.1	4/18/03	MT-96.26	1/16/09	TC-42.10	1/19/07				
GR-6.1	4/18/03	MT-97.10	4/17/09	TC-42.20	7/16/04				

SUPPLEMENTAL SPECIFICATIONS

SS800	10/16/09
SS832	5/15/09
SS847	10/16/09

SPECIAL PROVISIONS

PLAN PREPARED BY:

DISTRICT THREE PRODUCTION DEPARTMENT

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

DESIGN FILE: I:\projects\23815\roadway\sheets\23815GT001.dgn
WORKSTATION: mschafra DATE: 10/29/2009

E033(753)
BEGIN PROJECT
BEGIN WORK
SLM 8.56
STA. 451+69

SLM 8.80
STA. 464+36 ℄ R/W USR 30
STA. 522+49.25 HOME ROAD (CR 135)

STRUCTURE NO.
RIC-30-0879

STRUCTURE NO.
RIC-309-0894

SLM 8.94 LEFT EDGE OF STRUCTURE
STA. 472+63.21 ℄ R/W USR 30
STA. 471+85.05 SR 309 WB

HOME ROAD (CR 135)

ONTARIO CORP SLM 8.80
MANSFIELD CORP SLM 8.80

SR 309 WB

SR 309 EB

BEGIN RESURFACING AT GORE OF SR309 WB RAMP AT STA 488+77

BEGIN RESURFACING AT GORE OF SR309 EB RAMP AT STA 482+15

STA 501+92 = STA 0+00 TRIMBLE RD
BEGIN ACCEL LANE
RAMP D

STA 499+25 = END ACCEL LANE
SR309 EB RAMP

STA 507+22 = STA 2+00 TRIMBLE RD
BEGIN DECEL LANE
RAMP A

MATCH LINE STA. 516+00

NOTE:
STATIONING IS CONVERTED TO SLM'S FOR REFERENCE ONLY. MANY SLM REFERENCES COME FROM THE ODOT DESTAPE ROADWAY INVENTORY. PAVEMENT QUANTITIES ARE BASED ON STATIONING.

DESIGN DESIGNATION

	BETWEEN 8.56 TO 8.80	BETWEEN 8.80 TO 9.13	BETWEEN 9.13 TO 9.82	BETWEEN 9.82 TO 10.74
CURRENT ADT (2010)	18000	18000	33300	36960
DESIGN YEAR ADT (2022)	19600	19600	37440	39880
DESIGN HOURLY VOLUME (2022)	1960	1960	3370	3590
DIRECTIONAL DISTRIBUTION	52%	52%	56%	60%
TRUCKS (24 HOUR B&C)	26%	26%	18%	17%
Td	15%	15%	10%	10%
DESIGN SPEED	65 MPH	55 MPH	55 MPH	55 MPH
LEGAL SPEED	65 MPH	55 MPH	55 MPH	55 MPH

DESIGN FUNCTIONAL CLASSIFICATION:
URBAN OTHER FREEWAY AND EXPRESSWAY (ALL SECTIONS)
NHS PROJECT YES (ALL SECTIONS)

END RESURFACING OF RAMP J AT 13+08
END RESURFACING OF RAMP H-2 AT 7+20
END RESURFACING OF RAMP HL-2 AT 7+38
END RESURFACING OF RAMP HR-2 AT 7+60
RAMP HL-2
RAMP H-2
RAMP H-1
RAMP HR-2
RAMP J
STA. 0+00 SR 39
STA 574+70 = END DECEL LANE
BEGIN DECEL LANE
RAMP J
MATCH LINE STA. 577+50
SR 39
RAMP HL-1
RAMP HR-1
RAMP GR-1
RAMP GL-1
STA 571+21 = 14+60 END LANE ACCEL GR-1 RAMP
RAMP I
END RESURFACING OF RAMP I AT 0+92
RAMP GR-2
RAMP GL-2
STRUCTURE NO.
RIC-30-1074
STA. 566+90.57
END RESURFACING OF RAMP GR-2 AT 0+60
END RESURFACING OF RAMP G-2 AT 0+30
END RESURFACING OF RAMP GL-2 AT 0+60
RAMP G-2
RAMP G-1

TRIMBLE ROAD
SLM 9.83
STA. 518+93.02 ℄ R/W USR 30
STA. 50+00 TRIMBLE ROAD
STRUCTURE NO.
RIC-30-0982
RAMP D
RAMP B
RAMP A
RAMP C
STA 530+56 = STA 2+00 TRIMBLE RD
BEGIN DECEL LANE
RAMP B
STA 535+88 = STA 0+00 TRIMBLE RD
END ACCEL LANE
RAMP C
STA 552+10 = END ACCEL LANE
RAMP HL-1
STA 557+11 = STA 15+61 SR39
BEGIN DECEL LANE
RAMP GL-1
MATCH LINE STA. 516+00

HORIZONTAL SCALE IN FEET
0 100 200 400
CALCULATED MJS
CHECKED ADB

DESIGN FILE: I: \projects\23815\roadway\sheets\23815GB001.dgn
WORKSTATION:mschafra DATE:10/30/2009

SCHEMATIC / DESIGN DESIGNATION

RIC-30-8.56

RIC-30-0879 SFN 7001053 (CO CC1)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	1127	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
516	45305	1	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	56
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	56

RIC-30-0894 SFN 7001894 (CO CC1)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	11300	2	CU YD	PORTIONS OF STRUCTURE REMOVED (PARAPET)	
511	46001	2	CU YD	CLASS C CONCRETE, AS PER PLAN (PARAPET REPAIR)	55
512	10100	933	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

RIC-30-0982 SFN 7001088 (CO CC1)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	11300	1	CU YD	PORTIONS OF STRUCTURE REMOVED (ABUTMENT SEAT)	
509	10000	551	POUND	EPOXY COATED REINFORCING STEEL	
511	45701	1	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)	55
511	43201	6	CU YD	CLASS C CONCRETE, PIER, AS PER PLAN (REPAIR)	55
512	10100	840	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	10300	1593	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
516	46700	3	EACH	RESET BEARING	
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	56

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DATE 10/09
REVIEWED RDN

DRAWN GTS
REVISED KRB

DESIGNED GTS
CHECKED DJV

STRUCTURE SUMMARY

RIC-30-8.56

DESIGN FILE: I:\projects\23815\structures\strsum.dgn
WORKSTATION:ksalay
DATE:11/2/2009

REFERENCES SHALL BE MADE TO STANDARD DRAWINGS:

BP-3.1	DATED	10/19/07
GSD-1-96	DATED	7/19/02
FB-1-82	DATED	5/10/82
RB-1-55	DATED	2/2/59

REFERENCES SHALL BE MADE TO SUPPLEMENTAL SPECIFICATION:

847 DATED 10/16/09

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE BID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING PLANS:

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

STRUCTURE #	PLAN NAME	DATE
RIC-30-0879	RIC-30-3.74/RIC-C.H.135	1976
RIC-30-0894	RIC-30-3.74/RIC-C.H.135	1976
RIC-30-0982	RIC-30-1.40	1962
RIC-30-1074	RIC-30SR-6.21/RIC-30R-0.00B	1955
RIC-30-1133	RIC-30R-3.00	1956
RIC-30-1219	RIC-30R-3.00	1956
RIC-30-1235	RIC-30R-3.00	1956
RIC-30-1283	RIC-30-4.74	1970

THE FOLLOWING PLANS ARE ALSO AVAILABLE:

PLAN NAME	DATE
RIC-30-(9.17-12.32)	1977
RIC-30-3.47	1987
RIC-30-12.37	1985
TRIMBLE ROAD (C.H. 281)	1979

DESIGN DATA:

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 PSI
REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
STRUCTURAL STEEL - ASTM A709 GRADE 50W OR GRADE 50 - YIELD STRENGTH 50,000 PSI
A709 GRADE 36 - YIELD STRENGTH 36,000 PSI

DECK PROTECTION METHOD:

SUPERPLASTICIZED DENSE CONCRETE OVERLAY
SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES:

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

CONSTRUCTION CLEARANCE:

MAINTAIN A CONSTRUCTION CLEARANCE OF 13'-0" FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 22'-0" FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL.

ITEM 202-REMOVAL MISC.: SUBDECK

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN TO REMOVE THE EXISTING WOOD PLYWOOD AND BEAMS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE FOOT FOR THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DESIGNED KRB | CHECKED DJV
DRAWN KRB | REVISED
REVIEWED RDN | DATE 10/09
STRUCTURE TITLE NUMBER

STRUCTURE NOTES

RIC-30-8.56

DESIGN FILE: I:\projects\23815\structures\strnotes.dgn
WORKSTATION:ksaley
DATE:11/2/2009

ITEM 202 - REMOVAL MISC.: PORTION OF STEEL BEAM

THIS ITEM SHALL BE USED TO REMOVE A PORTION OF THE STEEL BEAM ON STRUCTURE RIC-30-1074 AT THE LOCATIONS INDICATED IN THE PLAN.

1) DRILL COPE HOLES AT LOCATIONS INDICATED ON PLAN.
2) SAW CUT AREA OF STEEL BEAM TO BE REMOVED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 202 - REMOVAL MISC.: PORTION OF STEEL BEAM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - REMOVAL MISC.: COMPRESSION SEAL

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING COMPRESSION SEAL BETWEEN THE DECK AND BACKWALL/APPROACH SLAB.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM, WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)

ITEM 511 - CLASS C CONCRETE, AS PER PLAN (PARAPET REPAIR)

THESE ITEMS SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR EACH OF THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS C CONCRETE, PIER, AS PER PLAN (REPAIR)

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

ALL EXCAVATION REQUIRED TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THIS ITEM.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR EACH OF THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CONCRETE, MISC.: BACKWALL REPAIR

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE CONCRETE SHALL BE THE SAME TYPE AS USED IN THE SUPERPLASTICIZED DENSE CONCRETE OVERLAY AS PER 847.06.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.04 OR SUPPLY THE ENGINEER WITH "AS-BUILT" DRAWINGS MEETING 513.04 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. IF NECESSARY, THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE "AS-BUILT" DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS, STAMPED AND DATED, ALONG WITH MICROFILM, TO THE STRUCTURAL, WELDING AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

COST TO REMOVE EXISTING CROSS FRAME MEMBERS AND ALL NECESSARY GRINDING SHALL BE INCLUDED IN THIS ITEM.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: 4 X 4 X 5/16 ANGLE, 3 X 3 X 5/16 ANGLE.

ITEM SPECIAL - STRUCTURE, MISC.: TIMBER SUBDECKING

THIS ITEM SHALL INCLUDE THE SUPPLYING OF MATERIAL AND THE INSTALLATION OF THE TIMBER SUBDECK. ALL WORK SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE 4 X 4'S CONFORMING TO ITEM 711.26 OF THE CMS SHALL BE GRADE 2 OR BETTER, TREATED IN ACCORDANCE WITH 712.06. THE PLYWOOD SHEETING SHALL BE 3/4" CCA TREATED PLYWOOD.

THE SCREWS SHALL BE 3" GALVANIZED WOOD SCREWS WITH GALVANIZED FENDER WASHERS. SPACING OF THE SCREWS SHALL BE A MAXIMUM OF 1'-9".

FIELD MEASUREMENTS SHALL BE TAKEN FOR VERIFICATION BEFORE ANY FABRICATION IS PERFORMED.

THE TIMBER SUBDECK SHALL BE CLEANED OF ANY FALLEN DEBRIS AFTER ALL OTHER WORK ON THE STRUCTURE IS COMPLETED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM SPECIAL- STRUCTURE, MISC.: TIMBER SUBDECKING WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
KRB	KRB	RDN	10/09
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJV			

STRUCTURE NOTES

RIC-30-8.56

DESIGN FILE: I:\projects\23815\structures\strnotes.dgn
WORKSTATION:ksalay DATE:11/2/2009

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR REPOSITIONING EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN THE BRIDGE BEARING AS WELL AS ITS CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARING, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PAD (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARING TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARING IS VERTICALLY ALIGNED AT 60° F (15° C), LUBRICATING SLIDING SURFACES, REASSEMBLY OF THE BEARING, AND RESETTING OF THE BEARING. ASSURE THE BEARING IS SHIMMED ADEQUATELY AND THAT NO BEAMS AND/ OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL A NEW BEARING OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARING. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516-REFURBISH BEARING DEVICE, AS PER PLAN

ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN (2" NOMINAL THICKNESS)

ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN (2 ½" NOMINAL THICKNESS)

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING OVERLAY AS PER DETAILS IN THE PLANS.

THE THICKNESS OF THE EXISTING CONCRETE OVERLAY TO BE REMOVED SHALL BE AS SPECIFIED IN THE PLANS.

THE EXISTING OVERLAY SHALL BE SAW CUT 1" DEEP AT THE LOCATIONS SHOWN IN THE PLANS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN (2" THICK)

ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN (2 ½" THICK)

ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), AS PER PLAN

THESE ITEMS SHALL BE APPLIED WITH A THICKNESS OF 2" TO THE DRIVING AND PASSING LANES OF THE DECK IN EACH DIRECTION AT STRUCTURES RIC-30-1074, RIC-30-1133, RIC-30-1219, AND RIC-30-1235. THESE ITEMS SHALL BE APPLIED WITH A THICKNESS OF 2 ½" TO THE LANES OF THE DECK IN EACH DIRECTION AT STRUCTURE RIC-30-1283.

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION 847 "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING SCARIFICATION AND CHIPPING" WITH THE FOLLOWING REVISIONS:

THE THICKNESS OF THE EXISTING CONCRETE OVERLAY REMOVED AND PROPOSED OVERLAY SHALL BE AS SPECIFIED IN THE PLANS.

ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED BY ASTM C-127.

ALL SAW CUTTING REQUIRED TO PERFORM THE ABOVE WORK, AS OUTLINED ON THE STRUCTURE DETAIL SHEETS, SHALL BE INCLUDED IN THESE ITEMS.

IN ADDITION TO THE ABOVE REQUIREMENTS, THE FOLLOWING REVISIONS SHALL APPLY TO THE WORK PERFORMED IN THE DRIVING LANES OF STRUCTURES RIC-30-1219 AND RIC-30-1235:

(SEE 847.17) THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN 1 ½ HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.

(SEE 847.18) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

(SEE 847.19) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE ORIGINAL DECK CONCRETE THICKNESS IS SOUND.

(SEE 847.25) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR 1D, AS PER CMS 511.17 METHOD (B) MEMBRANE CURING. IF THE CURING COMPOUND CAN NOT BE PLACED WITHIN THE SAME SHORT TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL AT THE NEXT AVAILABLE SHORT TERM CLOSURE PERIOD, APPLY THE MEMBRANE CURING COMPOUND.

(SEE 847.25) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI (4.2 Mpa).

(SEE 847.26) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 9:30 AM.

(SEE 847.27) FOR EACH PHASE THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 650 PSI (4.5 Mpa). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.2 Mpa).

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
KRB	KRB	RDN	10/09
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJV			

STRUCTURE NOTES

RIC-30-8.56

DESIGN FILE: i:\projects\23815\structures\strnotes.dgn
WORKSTATION:ksalay DATE:11/2/2009

STRUCTURE FILE NO.	BRIDGE NO.	LOCATION	BRIDGE TYPE	SKEW	BRIDGE LIMITS	DECK WIDTH	PROPOSED WORK
7001053	RIC-30-0879	UNDER HOME ROAD	4-SPAN STEEL BEAM	39° 01′ 48″	304′-4″±	42′-6″±	DECK & SUBSTRUCTURE SEALING, REFURBISH BEARING
7001894	RIC-30-0894	UNDER S.R. 309	4-SPAN STEEL BEAM	34° 30′ 00″	285′-6″±	28′-6″±	DECK & SUBSTRUCTURE SEALING, PARAPET REPAIR
7001088	RIC-30-0982	UNDER TRIMBLE ROAD	4-SPAN STEEL BEAM	3° 50′ 00″	200′-6″±	59′-0″±	DECK & SUBSTRUCTURE SEALING, PILE ENCASEMENT, ABUTMENT REPAIR, RESET BEARINGS
7001118	RIC-30-1074	OVER S.R. 39	3-SPAN STEEL BEAM	47° 26′ 00″	200′-1″±	27′-6″± LT. 3′-0″ MEDIAN PARAPET 39′-6″± RT.	CONCRETE OVERLAY, SUBDECKING, STRUCTURAL STEEL REPAIR, ABUTMENT BACKWALL REPAIR, REFURBISH BEARINGS
7001142	RIC-30-1133	OVER BOWMAN STREET	3-SPAN STEEL BEAM	3° 10′ 00″	174′-0″±	27′-6″± LT. 3′-0″ MEDIAN PARAPET 27′-6″± RT.	CONCRETE OVERLAY, SUBDECKING, ABUTMENT BACKWALL REPAIR
7001169	RIC-30-1156R	OVER NORFOLK SOUTHERN R.R. & S.R. 13	13-SPAN PRESTRESS BEAM	22° 26′ 00″	1631′-11″±	52′-0″±	NO STRUCTURE WORK
7001185	RIC-30-1156L	OVER NORFOLK SOUTHERN R.R. & S.R. 13	13-SPAN PRESTRESS BEAM	22° 26′ 00″	1631′-11″±	52′-0″±	NO STRUCTURE WORK
7001207	RIC-30-1212	SPUR TRACK	3-SPAN STEEL BEAM	10° 30′ 00″	186′-4″	52′-0″± LT. 2′-6″ MEDIAN PARAPET 52′-0″± RT.	NO STRUCTURE WORK
7001231	RIC-30-1219	OVER ASHLAND RAILWAY	3-SPAN STEEL BEAM	23° 17′ 00″	256′-11″±	39′-6″± LT. 3′-0″ MEDIAN PARAPET 39′-6″± RT.	CONCRETE OVERLAY, ABUTMENT REPAIR, ABUTMENT BACKWALL REPAIR
7001266	RIC-30-1235	OVER S.R. 545	3-SPAN STEEL BEAM	33° 54′ 27″	200′-7″±	39′-6″± LT. 3′-0″ MEDIAN PARAPET 39′-6″± RT.	CONCRETE OVERLAY, SUBDECKING, PARAPET REPAIR, SLOPE REPAIR, ABUTMENT BACKWALL REPAIR, RESET BEARINGS
7001290	RIC-30-1283	UNDER 5TH AVENUE	6-SPAN STEEL BEAM	20° 05′ 20″	288′-6″±	42′-6″±	CONCRETE OVERLAY, DECK & SUBSTRUCTURE SEALING, PILE ENCASEMENT, PIER PATCHING, ABUTMENT REPAIR, RESET BEARINGS

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DESIGNED KRB
DRAWN KRB
CHECKED DJV
REVIEWED RDN
DATE 10/09
REVISED

STRUCTURE INFORMATION

RIC-30-8.56

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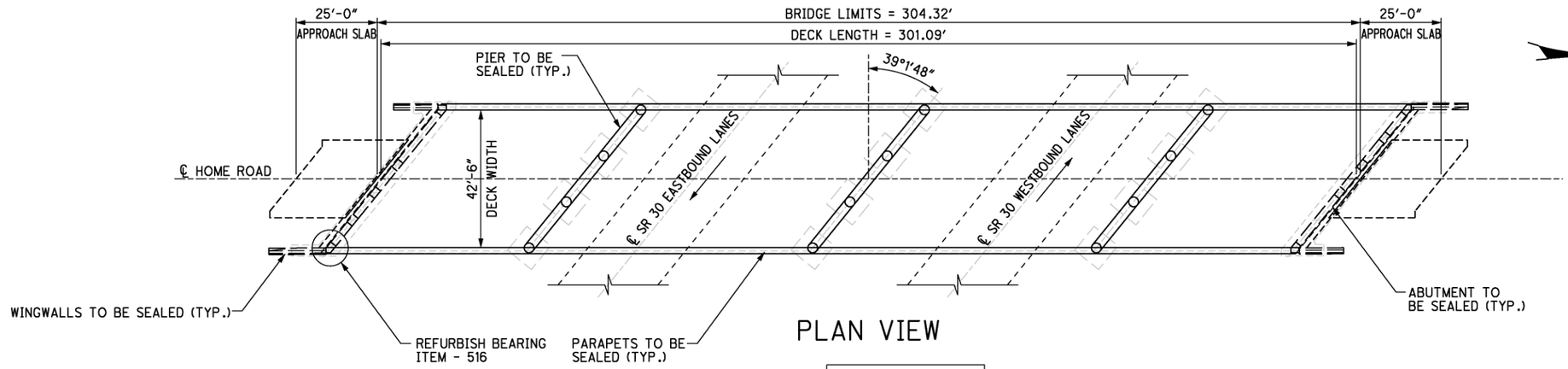
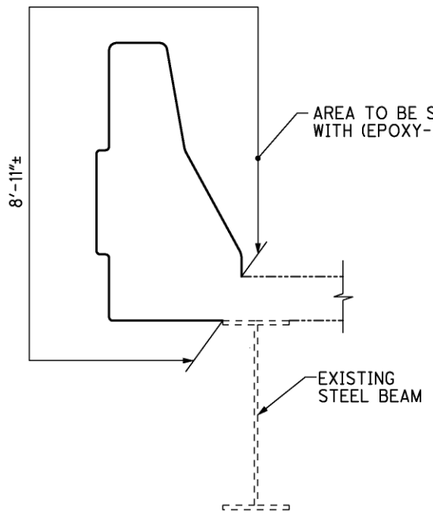
DESIGN FILE: I:\projects\23815\structures\strinfor.dgn
WORKSTATION:kscloy DATE:11/2/2009

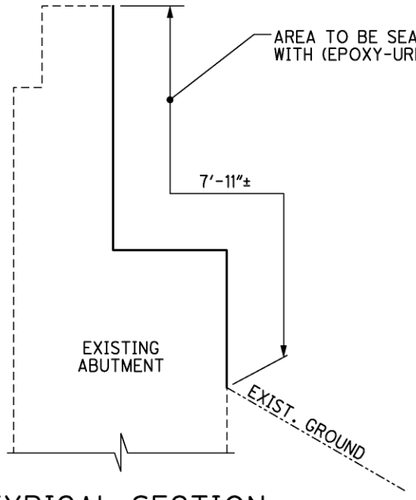


PLAN VIEW



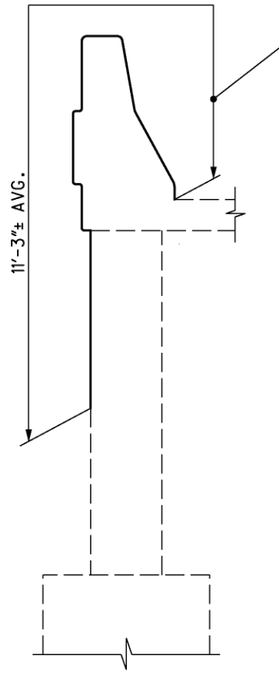
TYPICAL SECTION AT PARAPET

LENGTH = 301'-1"±



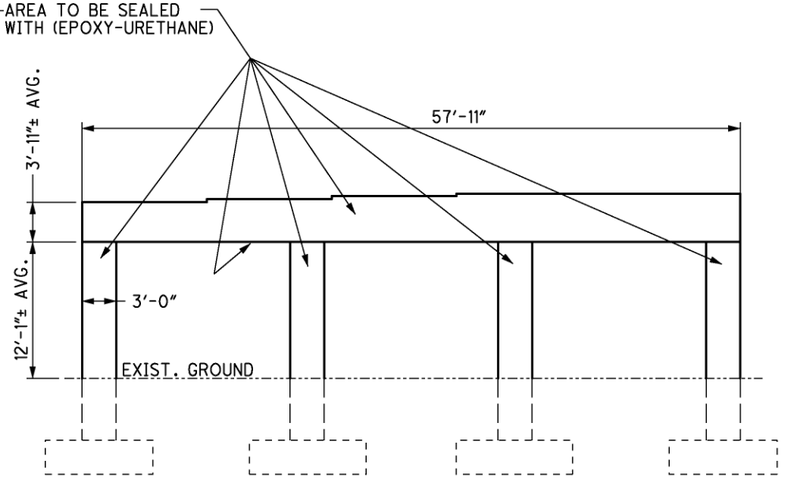
TYPICAL SECTION AT ABUTMENT

(ABUTMENTS ARE 56'-11"± LONG)



TYPICAL SECTION AT WINGWALL

LENGTH = 15'-2"± AVG.



PIER ELEVATION VIEW

PIER WIDTH = 3'-0"

ITEM	QUANTITY	UNIT	DESCRIPTION
512	1127	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
516	1	EACH	REFURBISH BEARING DEVICE, AS PER PLAN
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET

NOTES:

1) THE PARAPETS, ABUTMENTS AND ALL EXPOSED AREAS OF THE WINGWALLS AND PIER CAPS AND COLUMNS SHALL BE SEALED WITH ITEM 512.

2) REFURBISH BEARING WITH ITEM 516.

3) GUARDRAIL NOT SHOWN.

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
GTS	GTS	RDN	10/09
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJV	KRB	7001053	

PLAN VIEW
RIC-30-0879 UNDER HOME ROAD

RIC-30-8.56

1 / 1

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DESIGN FILE: I:\projects\23815\structures\RIC30\ric300879.dgn
WORKSTATION:ksalay
DATE:11/2/2009