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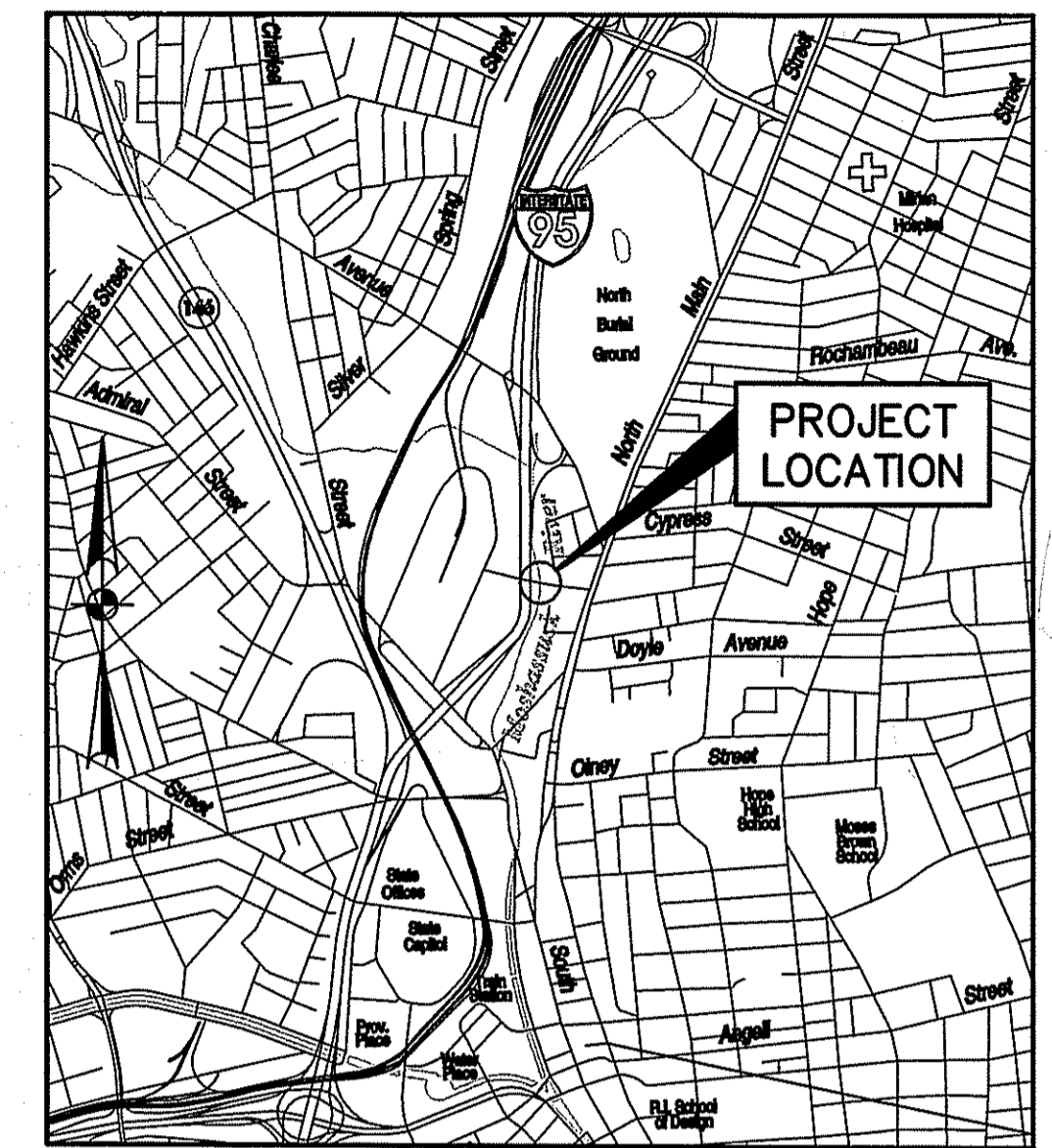
**STATE OF RHODE ISLAND
DEPARTMENT OF TRANSPORTATION**

**PLAN OF PROPOSED
BRIDGE REHABILITATION
INDUSTRIAL DRIVE
BRIDGE NO. 882**

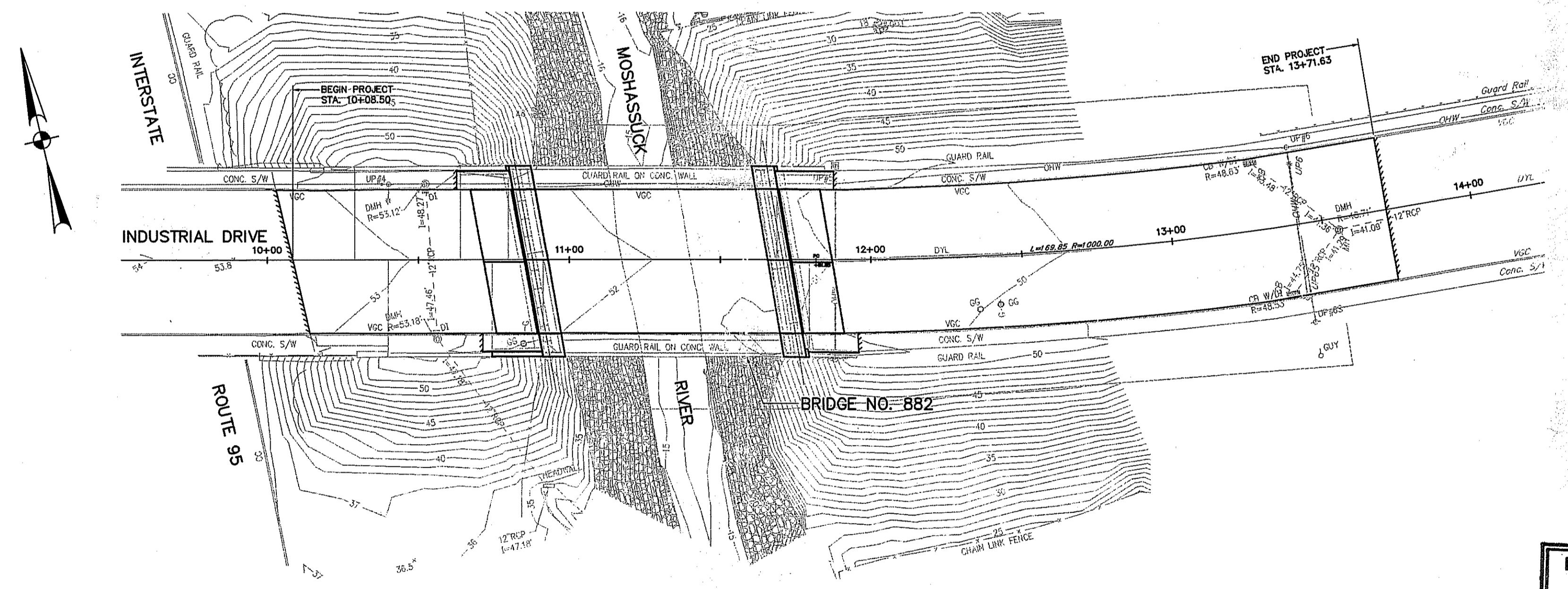
CITY OF PROVIDENCE
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. XXXX
R.I. FEDERAL AID PROJECT NO. XXX XXXX-XXX
PROJECT LENGTH 0.069 MILE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.		2004	1	26



LOCATION MAP
SCALE: 1" = 2000'



LAYOUT MAP
SCALE: 1" = 30'

DESIGN DATA

SPECIFICATIONS

SEVENTEENTH EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), DATED 2002.
THE LATEST REVISION OF AND MODIFICATIONS TO THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

DESIGN MANUAL

THE LATEST EDITION OF THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, INCLUDING ALL REVISIONS TO DATE.

DESIGN LOADING

AASHTO HS20-44 LOADING (EXISTING STRUCTURE)
AASHTO HS25-44 LOADING (REHABILITATE STRUCTURE ONLY)

MATERIALS

STRUCTURAL STEEL AND PLATES

A709 (GRADE 50)
f_y = 50 K.S.I.

REINFORCING STEEL

A615 (GRADE 60) DEFORMED
f_s = 24,000 P.S.I.

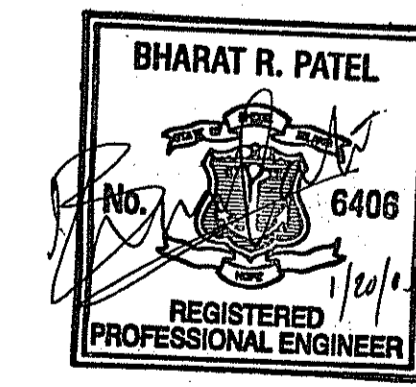
ALUMINUM

6061 - T6
f_y = 36 K.S.I.

CAST-IN-PLACE CONCRETE

CLASS HP f_c = 5,000 P.S.I.
CLASS XX f_c = 4,000 P.S.I.


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED FEB 21 2005 FILE # 05-0036
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT LOCAL REGISTRATION SITE



RI DEPARTMENT OF TRANSPORTATION	
APPROVED	DATE
DEPUTY CHIEF ENGINEER	DATE
APPROVED	DATE
CHIEF ENGINEER	DATE
APPROVED	DATE
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	DATE
DIVISION ADMINISTRATOR	DATE

PERMIT SUBMISSION

JANUARY, 2005


VANASSE HANGEN BRUSTLIN, INC.
 TRANSPORTATION LAND DEVELOPMENT
 ENVIRONMENTAL SERVICES
 PROVIDENCE, RHODE ISLAND

TRAFFIC DESIGN DATA
2001 ADT - 4200 VPD

BASE OF LEVELS
N.G.V.D. 29 & N.A.D. 88

SCALE OF DRAWINGS
AS SHOWN

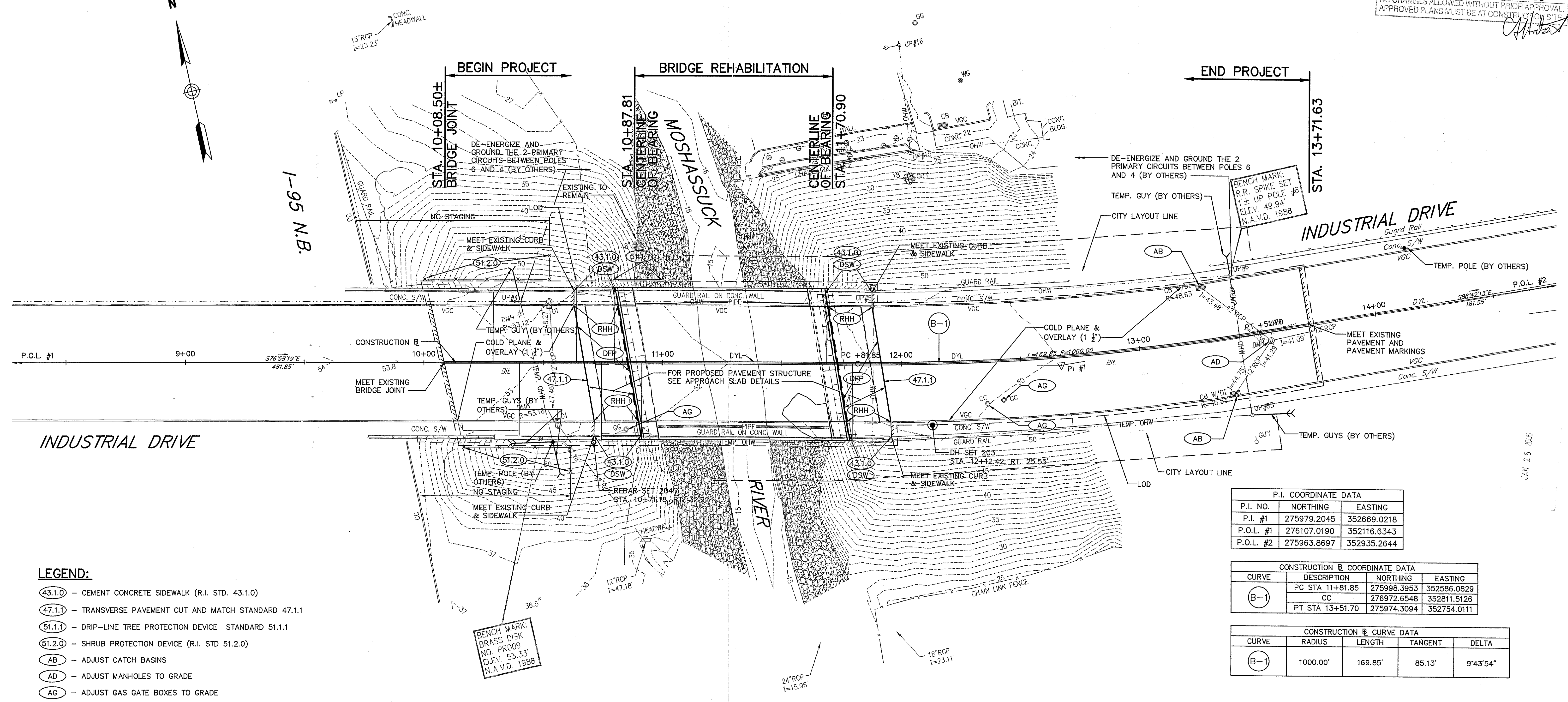
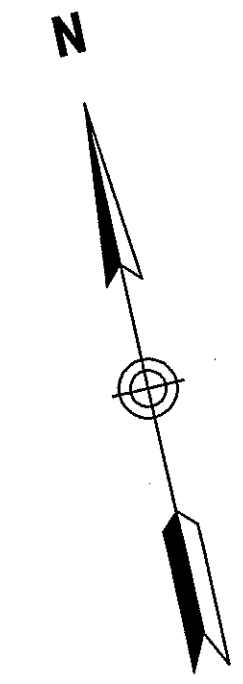
Contract Number _____
Number of Sheet 1
Total Sheets 26

RHODE ISLAND SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, THE 1998 STANDARD DETAILS, AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.

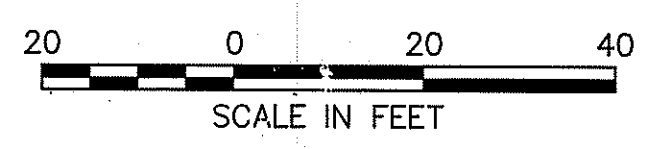
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED FEB 21 2005 FILE # 05-0036
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.



LEGEND:

- (43.1.0) - CEMENT CONCRETE SIDEWALK (R.I. STD. 43.1.0)
- (47.1.1) - TRANSVERSE PAVEMENT CUT AND MATCH STANDARD 47.1.1
- (51.1.1) - DRIP-LINE TREE PROTECTION DEVICE STANDARD 51.1.1
- (51.2.0) - SHRUB PROTECTION DEVICE (R.I. STD 51.2.0)
- (AB) - ADJUST CATCH BASINS
- (AD) - ADJUST MANHOLES TO GRADE
- (AG) - ADJUST GAS GATE BOXES TO GRADE
- (DFP) - REMOVE AND DISPOSE FLEXIBLE PAVEMENT
- (DSW) - REMOVE AND DISPOSE SIDEWALKS
- (RHH) - REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING STRAIGHT, CIRCULAR, ALL TYPE
- DYL - DOUBLE EPOXY RESIN PAVEMENT MARKINGS YELLOW (2-6 INCH LINES)
- LOD - LIMIT OF DISTURBANCE



P.I. COORDINATE DATA		
P.I. NO.	NORTHING	EASTING
P.I. #1	275979.2045	352669.0218
P.O.L. #1	276107.0190	352116.6343
P.O.L. #2	275963.8697	352935.2644

CONSTRUCTION @ COORDINATE DATA			
CURVE	DESCRIPTION	NORTHING	EASTING
(B-1)	PC STA 11+81.85	275998.3953	352586.0829
	CC	276972.6548	352811.5126
	PT STA 13+51.70	275974.3094	352754.0111

CONSTRUCTION @ CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
(B-1)	1000.00'	169.85'	85.13'	9°43'54"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION INDUSTRIAL DRIVE BRIDGE NO. 882

PROVIDENCE RHODE ISLAND

HIGHWAY GENERAL PLAN

CHECKED BY _____ DATE _____ SCALE AS SHOWN

VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

J:\71362\cad\ev\dem\71362HGP.dwg

JAN 25 2005

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.		2004	6	26

GENERAL NOTES -- BRIDGE

- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
 - * THE LATEST EDITION OF AND MODIFICATIONS TO THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 - * THE SEVENTEENTH EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, DATED 2002.
 - * THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
 IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.
- DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDRETH OF A FOOT OR ONE-EIGHTH OF AN INCH, EXCEPT STRUCTURAL STEEL DIMENSIONS WHICH ARE TO THE NEAREST ONE-SIXTEENTH OF AN INCH.
- ALL ELEVATIONS ARE REFERENCED TO NGVD 29 AND NAD 88.
- ANGLES ARE SHOWN TO THE NEAREST SECOND.
- ALL ABUTMENTS, PIERS, AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
- ALL ITEMS NOT REFERENCED FOR MODIFICATION WILL BE "EXISTING TO REMAIN" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ANY STRUCTURAL MEMBERS DAMAGED DURING REMOVAL OF DETERIORATED CONCRETE, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, TO THE ENGINEER'S SATISFACTION.
- ANY DAMAGE TO EXISTING STATE OR PRIVATE PROPERTY CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST THE STATE.
- THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL IN HIS FIELD YARD OR AT A SITE APPROVED BY THE ENGINEER. THE EQUIPMENT AND MATERIAL SHALL BE PLACED IN A STORAGE AREA SO AS NOT TO CAUSE A SAFETY HAZARD.
- TEMPORARY PROTECTIVE SHIELD**
DEBRIS SHIELDS SHALL BE PROVIDED AND INSTALLED TO PROTECT MOTORISTS, PEDESTRIANS, WATERWAY, ETC. FROM ANY DEMOLITION OR CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE TEMPORARY PROTECTIVE SHIELD. ALL PLANS FOR THE PROTECTIVE SHIELD SHALL BE STAMPED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER.
- FIELD CONDITIONS MAY EXIST WHICH DEVIATE FROM THE TYPICAL AND THEORETICAL DIMENSIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY.
- THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTION TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS DURING ALL PHASED CONSTRUCTION UNTIL THE TOTAL STRUCTURE IS IN PLACE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ELEVATIONS, DIMENSIONS, DETAILS, ANGLES, STRUCTURAL MEMBER SIZES AND LAYOUTS AS SHOWN ON THESE PLANS. THIS PRIOR FIELD VERIFICATION IS ESPECIALLY PERTINENT FOR PRE-FABRICATED STRUCTURAL ITEMS AND WORK IN THE VICINITY OF UTILITIES.
- CONTRACTOR SHALL CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO STARTING THE WORK TO VERIFY LOCATIONS OF EXISTING UTILITIES.

GENERAL NOTES -- HIGHWAY

- STOCKPILING OF DEMOLISHED MATERIALS WILL NOT BE ALLOWED ON STATE PROPERTY OVERNIGHT UNLESS APPROVED BY THE ENGINEER AND COORDINATED WITH RIDOT LANDSCAPE DEPARTMENT. IF ANY STOCKPILING OF MATERIALS IS ALLOWED, THE CONTRACTOR WILL REPAIR THE AREA AT NO ADDITIONAL COST TO THE STATE.
- ASPHALT EMULSION TACK COAT SHALL BE APPLIED BEFORE THE PLACEMENT OF NEW PAVEMENT ON ANY COURSE WHICH HAS BEEN OPENED TO TRAFFIC, OR ANY COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN THREE NIGHTS, AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER ITEM CODE 403.0300, "ASPHALT EMULSION TACK COAT".

GENERAL NOTES--DRAINAGE

- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL AT NO EXPENSE TO THE STATE.
- THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROLS BEFORE CONSTRUCTION ACTIVITIES COMMENCE.
- ALL ACCUMULATED SEDIMENT THAT RESULTS FROM THE CLEANING OPERATION MUST BE REMOVED FROM THE PROJECT AND DISPOSED PROPERLY IN AN AREA OUTSIDE OF RIDEM OR CRMC JURISDICTION AT NO ADDITIONAL COST TO THE STATE.

GENERAL NOTES--PAVEMENT MARKINGS

- FINAL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.
- THE CONTRACTOR SHALL INSTALL 4 INCH TEMPORARY FAST-DRYING WATERBORNE PAVEMENT MARKINGS AT THE COMPLETION OF EACH DAY'S PAVING OPERATION BEFORE OPENING LANES FOR TRAFFIC.

STRUCTURAL STEEL NOTES

- FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS.
- STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270 (ASTM DESIGNATION A 709) GRADE 50 OR UNLESS OTHERWISE NOTED. STRUCTURAL TUBE SECTIONS SHALL CONFORM TO ASTM DESIGNATION A500 GRADE B.
- FOR SIZE AND LOCATION OF ANCHOR BOLTS, SEE ABUTMENT DRAWINGS.
- UNLESS OTHERWISE SPECIFIED, THE UPPER SURFACES OF GIRDER TOP FLANGES SHALL BE FREE OF PAINT, OIL OR OTHER IMPURITIES THAT WOULD IN ANY WAY REDUCE THE BOND OF CONCRETE TO STEEL.
- SHOP DRAWINGS FOR ALL FABRICATED STEEL, BEARINGS AND FALSEWORK SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT REVIEW.
- BEARING STIFFENERS SHALL BE FABRICATED AS SHOWN ON THE PLANS AND SHALL BE PLACED ON EACH SIDE OF THE GIRDERS.
- AASHTO M 270 (ASTM DESIGNATION A 709), GRADE 50 STEEL USED FOR PLATES, AND ALL SUPPORT DIAPHRAGM MEMBERS SHALL MEET THE ZONE 2 LONGITUDINAL CHARPY V-NOTCH TEST OF 15 FT.-LBS. AT 40°F AS SPECIFIED IN TABLE S1 "TOUGHNESS REQUIREMENTS" AS PER AASHTO DESIGNATION M 223 (ASTM DESIGNATION A 572) OF THE AASHTO STANDARD SPECIFICATIONS FOR TRANSPORTATION MATERIALS AND METHODS OF SAMPLING AND TESTING. SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T 243 (ASTM DESIGNATION A 673). THE (H) FREQUENCY OF HEAT TESTING SHALL BE USED.
- STRUCTURAL STEEL SHALL BE PREPARED IN ACCORDANCE WITH SECTION 824 OR THE STANDARD SPECIFICATIONS.
- HIGH STRENGTH BOLTS SHALL CONFORM TO AASHTO DESIGNATION M 164 (ASTM DESIGNATION A 325). THE CONTRACTOR SHALL REFER TO THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, SECTION 824.03.5 "CONNECTIONS USING HIGH STRENGTH BOLTS" FOR MATERIAL AND INSTALLATION REQUIREMENTS.
- WASHERS MEETING AASHTO STANDARDS M 293 (ASTM DESIGNATION F 436) ARE TO BE USED OVER ALL HOLES THAT ARE MORE THAN 1/16" IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
- WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE ANSI/AASHTO/AWS D1.5-2002 AND APPLICABLE SUPPLEMENTAL AWS PUBLICATIONS. ALL SHOP CONNECTIONS SHALL BE WELDED. WELDING PROCEDURES AND TECHNIQUES TO BE USED IN FABRICATION AND ERECTION OF GIRDERS SHALL BE AS SHOWN ON THE SHOP DRAWINGS.
- WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL.
- NO SHOP FILLET WELD SHALL BE LESS THAN 1/4".
- ALL SHEAR STUD CONNECTORS SHALL BE WELDED BY THE AUTOMATIC TIMED ELECTRIC ARC PROCESS.
- PRIOR TO FABRICATION, ALL MATERIALS SHALL BE BLAST-CLEANED TO AT LEAST SSPC-SP6 TO REMOVE ALL OIL, DIRT, GREASE, MILL SCALE AND OTHER DELETERIOUS MATERIALS FROM THE SURFACES OF THE STEEL TO BE FABRICATED.
- ALL CORNERS AND EDGES OF STEEL WHICH HAVE BEEN FLAME CUT OR OTHERWISE HARDENED SHALL BE SOFTENED BY GRINDING OR BLAST-CLEANING.
- ALL SHOP FABRICATING MAJOR BRIDGE STEEL COMPONENTS SHALL BE CBR CATEGORY CERTIFIED IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM OR EQUIVALENT. SHOPS FABRICATING MINOR STEEL COMPONENTS (SUCH AS EXPANSION JOINTS, STEEL RAILING, AND BEARINGS) SHALL BE AT A MINIMUM OF SBR CATEGORY CERTIFIED.
- WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.

GENERAL NOTES--MAINTENANCE AND PROTECTION OF TRAFFIC

- TEMPORARY CONSTRUCTION SIGNS AND BARRICADES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY SECTION OPEN TO TRAFFIC.
- UNLESS OTHERWISE SPECIFIED, TEMPORARY CONSTRUCTION SIGNS SHALL CONFORM TO SECTION M-16 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY CONSTRUCTION SIGN PANELS SHALL BE 3/4" THICK EXTERIOR GRADE PLYWOOD CONFORMING TO SECTION M-16 OF THE STANDARD SPECIFICATIONS.
- SIGN RADII AND BORDERS SHALL BE AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2003 EDITION, AND SUBSEQUENT ADDENDA.
- UNLESS OTHERWISE INDICATED, SIGN MOUNTINGS SHALL BE R.I. STD. 24.3.0.
- ALL SIGNS SHALL BE LOCATED IN AREAS THAT ARE VISIBLE TO MOTORISTS, FREE FROM OBSTRUCTIONS AND SHALL BE APPROVED BY THE ENGINEER.

CONCRETE NOTES

- CLASSES OF CONCRETE SHALL BE HP AND XX AS DESCRIBED IN THE LATEST REVISION OF TABLES (1) AND (2) UNDER SECTION 601 "PORTLAND CEMENT CONCRETE" OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS.
- ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED PORTLAND CEMENT CONCRETE. ALL CONCRETE SHALL BE MODIFIED WITH A CALCIUM NITRATE BASED CORROSION INHIBITOR AT A RATE OF 4 GALLONS/CY IN ACCORDANCE WITH SPECIAL PROVISION 605.
- REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 31 (ASTM DESIGNATION A 615) GRADE 60, EPOXY COATED BARS. ALL REINFORCING STEEL SHALL BE EPOXY COATED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF EPOXY COATED REINFORCING SHALL ALSO BE EPOXY COATED.
- EPOXY COATING FOR REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 284 (ASTM DESIGNATION D 3963).
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL #4 BARS SHALL BE LAPPED 23 INCHES, ALL #5 BARS SHALL BE LAPPED 30 INCHES, ALL #6 BARS SHALL BE LAPPED 36 INCHES AND ALL #7 BARS SHALL BE LAPPED 41 INCHES. FOR HORIZONTAL BARS WITH 12 INCHES OR MORE OF CONCRETE BELOW THE BAR, THE LAP LENGTHS SHALL BE 33 INCHES FOR #4 BARS, 41 INCHES FOR #5 BARS, 50 INCHES FOR #6 BARS, 56 INCHES FOR #7 BARS AND 73 INCHES FOR #8 BARS.

IF THE ABOVE BARS ARE SPACED 6 INCHES OR MORE ON CENTER, THE LAP LENGTH SHALL BE 80% OF THE LAP LENGTH GIVEN ABOVE. ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE PLANS.
- UNLESS OTHERWISE SPECIFIED ALL REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)	MINIMUM COVER	3"
STIRRUPS, TIES AND SPIRALS		1 1/2"
DECK SLABS (WITHOUT WEARING SURFACE)	TOP	2 1/2" (+1/4", -0")
	BOTTOM	1" (+1/8", -0")
ALL OTHER BARS		2"
- ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION A 307, UNLESS OTHERWISE NOTED AND SHALL BE METALIZED IN A MANNER APPROVED BY THE ENGINEER. SUCH APPROVAL DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PREVENT CONCRETE STAINS OR DISCOLORATIONS.
- HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE, AND THE UNDERSIDE OF ALL CONCRETE DECK SLABS OUTSIDE OF THE FASCIA BEAM, SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS.
- ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM 3/4" CHAMFER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME AS THE SURFACES ARE APPROVED AND ACCEPTED BY THE ENGINEER. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- ALL JOINT SEALANT SHALL BE POLYURETHANE BASE UNLESS OTHERWISE DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). COLOR OF THE SEALANT WHERE NOT EXPOSED SHALL BE AT THE DISCRETION OF THE CONTRACTOR.
- UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE PREFORMED NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RHODE ISLAND STATE STANDARD SPECIFICATIONS.
- EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE STANDARD SPECIFICATION, UNLESS OTHERWISE INDICATED ON THE PLANS.
- PLACEMENT AND CURING OF BRIDGE DECK CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 814 OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION AND IN ACCORDANCE WITH THE SEQUENCE AND PHASES AS SHOWN ON THE PLANS.
- IN ACCORDANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS, ALL METAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST TWO INCHES FROM THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF A CONTRACTOR PROPOSES TO USE THEM HE MUST SUBMIT A CATALOG CUT AND OTHER NECESSARY INFORMATION TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED FLUSH TO ADJACENT SURFACES WITH AN APPROVED CEMENT MORTAR TO THE SATISFACTION OF THE ENGINEER.
- HAND-HELD VIBRATORS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS WHEN USED TO CONSOLIDATE CONCRETE AROUND EPOXY-COATED REINFORCEMENT AND EMBEDMENTS.
- ANY REINFORCING STEEL WHICH IS TO REMAIN SHALL BE INSPECTED FOR RUST AND THEN CLEANED IN ACCORDANCE WITH SECTION 817 OF THE STANDARD SPECIFICATIONS. THOSE BARS THAT HAVE LOST 20 PERCENT OR MORE OF THEIR ORIGINAL CROSS SECTIONAL AREA SHALL BE SUPPLEMENTED BY NEW BARS SPICED IN PLACE. NEW BARS SHALL BE LAPPED SUFFICIENTLY IN ACCORDANCE WITH NOTE 5 ABOVE OR APPROVED MECHANICAL COUPLERS TO DEVELOP THE FULL STRENGTH OF THE BAR. IF NECESSARY, ADDITIONAL CHIPPING WILL BE REQUIRED TO PROVIDE THIS LAP WITH THE APPROVAL OF THE ENGINEER.
- THE CONCRETE MIX FOR THE DECK AND THE APPROACH SLAB SHALL CONTAIN ONE GALLON PER CUBIC YARD OF ECLIPSE, SHRINKAGE REDUCTION ADMIXTURE IN ACCORDANCE WITH SECTION 604 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.

REINFORCEMENT NOTE

THE CONTRACTOR'S BAR FABRICATOR SHALL VERIFY THE CORRECTNESS IN PREPARING HIS ORDER LISTS AND BENDING DIAGRAMS. ANY EXPENSE INCIDENT TO REVISION OF MATERIAL AS SHOWN ON THE ORDER LISTS AND BENDING DIAGRAMS IN ORDER TO MAKE IT COMPLY WITH THE DESIGN DRAWINGS SHALL BE BORNE BY THE CONTRACTOR. SHOP DRAWINGS FOR ALL REINFORCEMENT DETAILS AND SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.

UTILITY NOTES

- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. THE COST OF THIS SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE. ANY DAMAGE TO EXISTING UTILITIES SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COST OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR.
- NO CONSTRUCTION EQUIPMENT OR PERSONNEL SHALL BE PERMITTED WITHIN A TEN (10) FOOT RADIUS OF THE ENERGIZED OVERHEAD LINES.

SPECIAL NOTE TO CONTRACTOR

- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, DETAILS, ANGLES, STRUCTURAL MEMBER SIZES AND LAYOUTS AS SHOWN ON THESE PLANS. THIS PRIOR FIELD VERIFICATION IS ESPECIALLY PERTINENT FOR PRE-FABRICATED STRUCTURAL ITEMS AND WORK IN THE VICINITY OF UTILITIES.
- THE CONTRACTOR IS ADVISED THAT THE EXISTING BRIDGE ABUTMENTS AND WALLS ARE MOST VULNERABLE TO DAMAGE DUE TO HEAVY TRUCK AND EQUIPMENT LOADINGS ON THEIR RESPECTIVE BACKFILLS DURING THE SUPERSTRUCTURE AND SUBSTRUCTURE MODIFICATIONS. THEREFORE, THE CONTRACTOR SHALL ENSURE THAT HE LIMITS THE LOCATION OF HEAVY EQUIPMENT AS PROPOSED. ANY SUCH DAMAGE TO THE ABUTMENTS AND WALLS SHALL BE REPAIRED AND/OR REPLACED AT THE SOLE EXPENSE OF THE CONTRACTOR.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED FEB 21 2005 FILE # 05-0036
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

JAN 25 2005

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
BRIDGE REHABILITATION INDUSTRIAL DRIVE BRIDGE NO. 882		
PROVIDENCE	RHODE ISLAND	
GENERAL NOTES		
CHECKED BY _____ DATE _____ SCALE AS SHOWN		

VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

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