

File Name: P:\1-64-AS-BUILTS\BRSS\3-27-01.DGN User: PARSONS Date Plotted: 8/23/2010 11:58:37 AM Pen Table: I-64_HALLSZEEN-DAT1-TBPlot.Drwer: 11X17_PDF_AB_PLT

GENERAL NOTES

GENERAL

BEFORE PROCEEDING WITH WORK, THE CONTRACTOR SHALL VERIFY ALL EXISTING STRUCTURE DETAILS AND DIMENSIONS WHICH ARE PERTINENT TO CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.

"SEC" REFERS TO THE SECTION IN THE STANDARD AND APPLICABLE PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE.

ALL JOINT FILLER SHALL BE IN ACCORDANCE WITH SEC 1057 FOR PREFORMED SPONGE RUBBER EXPANSION AND PARTITION JOINT FILLER EXCEPT AS NOTED.

SPECIFICATIONS

2002 - AASHTO 17TH EDITION, LOAD FACTOR DESIGN

FOUNDATION DATA

FOUNDATION LOADS SHOWN ON THE PLANS ARE SERVICE LOADS, UNLESS NOTED OTHERWISE.

PILING SHALL BE DRIVEN PRIOR TO THE CONSTRUCTION OF THE MSE WALLS AT THE END BENTS.

REINFORCED CONCRETE

PROVIDE 3/4" CHAMFERS ON ALL EXPOSED EDGES, UNLESS NOTED OTHERWISE.

PROVIDE 1 1/2" MINIMUM COVER TO REINFORCING STEEL, UNLESS NOTED OTHERWISE.

CONSTRUCTION JOINTS SHALL BE MADE ONLY AT THE LOCATIONS SHOWN IN THE PLANS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

REINFORCED CONCRETE:
 CLASS B CONCRETE: f'c = 3,000 PSI
 CLASS B-1 CONCRETE: f'c = 4,000 PSI
 CLASS B-2 CONCRETE: f'c = 4,000 PSI

REINFORCING STEEL

REINFORCING STEEL (GRADE 60) Fy=60,000 psi

ALL DIMENSIONS ARE OUT-TO-OUT. HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH CRS1 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. STIRRUP AND TIE DIMENSIONS.

E = EPOXY COATED. ALL REINFORCEMENT IN THE DECK AND ABOVE, AND ALL REINFORCEMENT THAT EXTENDS INTO THE DECK OR INTO THE SAFETY BARRIER CURB SHALL BE EPOXY COATED.

NO REINFORCING STEEL SHALL BE WELDED WITHOUT THE APPROVAL OF THE ENGINEER.

REINFORCING STEEL SPLICES NOT SHOWN ON THE PLANS SHALL BE APPROVED BY THE ENGINEER.

MECHANICAL BAR SPLICES MAY BE USED AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER IN LIEU OF LAP SPLICES. MECHANICAL BAR SPLICES SHALL BE IN ACCORDANCE WITH SEC 706.

SPIRALS MAY BE FABRICATED FROM DEFORMED BAR OR SMOOTH BAR. FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN AND DRILLED SHAFT SPIRAL. SPACERS ARE TO BE PLACED ON THE INSIDE OF THE SPIRALS.

THE FOLLOWING TABLE GIVES THE MINIMUM STAGGERED LAP SPlice LENGTH FOR REINFORCING BARS PLACED IN ACCORDANCE WITH SPECIFICATIONS UNLESS OTHERWISE NOTED.

	BAR SIZE									
	CONCRETE	#4	#5	#6	#7	#8	#9	#10	#11	
EPOXY COATED CLASS B	1'-7"	2'-0"	2'-7"	3'-6"	4'-6"	5'-9"	7'-3"	9'-0"		
CLASS B1 & B2	1'-7"	2'-0"	2'-5"	3'-0"	3'-11"	5'-0"	6'-4"	7'-9"		
BLACK REBAR CLASS B	1'-5"	1'-9"	2'-3"	3'-0"	3'-11"	5'-0"	6'-4"	7'-10"		
CLASS B1 & B2	1'-5"	1'-9"	2'-1"	2'-8"	3'-5"	4'-4"	6'-6"	6'-9"		

THESE SPLICES SHALL BE MODIFIED BY THE FOLLOWING FACTORS WHEN:
 - REINFORCING IS SPACED BY LESS THAN 6" ON CENTER.....1.25
 - TOP REINFORCEMENT IS PLACED THAT MORE THAN 12" OF CONCRETE IS CAST BELOW THE REINFORCEMENT.....1.40

CAST-IN-PLACE CONCRETE DECKS

DECK SLAB CONCRETE WILL BE PLACED IN ACCORDANCE WITH THE PLACEMENT DETAILS SHOWN ON THE PLANS.

AFTER GIRDERS ARE PLACED AND BEFORE SCREEDS ARE SET, A PROFILE SHALL BE TAKEN ALONG EACH GIRDER TO COMPARE THE FIELD CONDITION TO THE ESTIMATED CONDITION SHOWN ON THE PLANS. IF THE ACTUAL CONDITION VARIES SIGNIFICANTLY FROM THAT SHOWN ON THE PLANS SUCH THAT EXCESSIVE HAUNCHES OR DEFICIENT SLAB THICKNESSES WOULD RESULT, THE ENGINEER WILL MAKE APPROPRIATE ADJUSTMENTS TO THE DECK GRADES.

PRESTRESSED GIRDERS

PRESTRESSED GIRDERS ARE DESIGNED AS SIMPLY SUPPORTED SPANS FOR NON-COMPOSITE DEAD LOADS AND AS CONTINUOUS SPANS FOR COMPOSITE DEAD LOADS AND LIVE LOADS. GIRDERS ARE DESIGNED FOR SERVICE LOAD STRESSES WITH ULTIMATE CAPACITIES CHECKED BY LOAD FACTOR DESIGN.

PRESTRESSING FORCE OF STRANDS AND MINIMUM CONCRETE STRENGTH AT RELEASE AND 28 DAY SHALL BE AS SHOWN ON THE GIRDER DETAIL SHEETS.

PRESTRESSING STRANDS SHALL BE LOW-RELAXATION HIGH-STRENGTH SEVEN-WIRE STEEL STRANDS CONFORMING TO AASHTO M203 GRADE 270, UNLESS NOTED OTHERWISE.

THE LOCATION OF HOLD DOWN DEVICES, LIFTING DEVICES, AND ANY INSERTS PLACED PRIOR TO CASTING, WILL BE SHOWN ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL SATISFACTORILY SECURE OR BRACE ALL GIRDERS PRIOR TO PLACEMENT OF THE DECK AND/OR DIAPHRAGMS. STEEL MIDSPAN DIAPHRAGMS WILL BE INSTALLED DURING GIRDER ERECTION.

PRESTRESSED CONCRETE: CLASS A-1 CONCRETE:
 f'c = (SEE PRESTRESSED GIRDER SHEETS)
 f's = 270,000 PSI (LOW RELAXATION)

STRUCTURAL STEEL

STRUCTURAL STEEL FOR DIAPHRAGMS AND PILING SHALL CONFORM TO AASHTO M270 GRADE 36.

DESIGN LOADING

LIVE LOADING
 DESIGN VEHICLE HS20-44 MODIFIED

DEAD LOADING
 NORMAL WEIGHT CONCRETE 150 PCF
 STRUCTURAL STEEL 490 PCF

WEARING SURFACE
 INTEGRAL 1" INTEGRAL WITH DECK
 FUTURE 35 PSF WEARING SURFACE

SEISMIC
 SEISMIC PERFORMANCE CATEGORY B
 ACCELERATION COEFFICIENT = 0.10
 IMPORTANCE CLASSIFICATION = 1.0
 SOIL PROFILE TYPE I (S = 1.0)

GIRDER LOAD RATING
 INVENTORY RATING = 49.7 TONS
 OPERATING RATING = 82.9 TONS
 LOAD FACTOR DESIGN METHOD USED

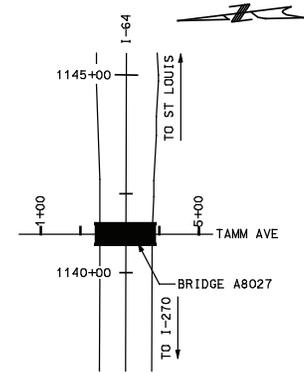
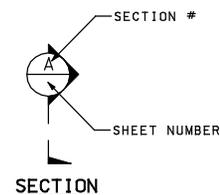
AESTHETIC DETAILS

ALL EXPOSED VERTICAL CONCRETE SURFACES INCLUDING FACE AND BOTTOM OF EXTERIOR GIRDERS, BARRIERS, PARAPETS, EDGE OF DECK SLAB, END BENTS, WING WALLS, AND INTERMEDIATE BENTS SHALL BE TREATED WITH OPAQUE CONCRETE STAIN PER SEC 1059. EXCEPTIONS INCLUDE INTERIOR GIRDERS, BOTTOM AND TOP OF DECK SLAB, CURBING AND THE TRAFFIC SIDE OF BARRIERS ADJACENT TO THE ROADWAY.

ROUTE I-64	STATE MO	DISTRICT 6
JOB NO. J610978		
COUNTY STLCO/STLCITY		

INDEX OF DRAWINGS

- S3-27-01 - GENERAL NOTES, INDEX OF DRAWINGS, & LOCATION PLAN
- S3-27-02 - GENERAL PLAN & ELEVATION
- S3-27-03 - TYPICAL SECTION
- S3-27-04 - FOUNDATION PLAN
- S3-27-05 - ENGINEERING GEOLOGY 1
- S3-27-05A - ENGINEERING GEOLOGY 2
- S3-27-05B - ENGINEERING GEOLOGY 3
- S3-27-06 - END BENT 1 PLAN & ELEVATION
- S3-27-07 - END BENT 3 PLAN & ELEVATION
- S3-27-08 - END BENT DETAILS
- S3-27-09 - VERTICAL DRAIN AT END BENTS
- S3-27-10 - WINGWALL ELEVATION & DETAILS
- S3-27-11 - BENT 2 PLAN & ELEVATION
- S3-27-12 - BENT 2 DETAILS
- S3-27-13 - DRILLED SHAFT DETAILS
- S3-27-14 - FRAMING PLAN & BEARING DETAILS
- S3-27-15 - P/S GIRDER DETAILS
- S3-27-16 - INTERMEDIATE DIAPHRAGM DETAILS
- S3-27-17 - BENT 2 DIAPHRAGM DETAILS
- S3-27-18 - SLAB ELEVATIONS, HAUNCHING DIMENSIONS & CAMBER
- S3-27-19 - PRECAST PRESTRESSED PANEL DETAILS
- S3-27-20 - TYPICAL SLAB REINFORCING SECTION
- S3-27-21 - SLAB PLAN
- S3-27-22 - APPROACH SLAB DETAILS
- S3-27-23 - BARRIER CURB DETAILS 1
- S3-27-24 - BARRIER CURB DETAILS 2
- S3-27-25 - 8" ORNAMENTAL FENCE DETAILS
- S3-27-26 - 6" ORNAMENTAL FENCE DETAILS
- S3-27-27 - CONDUIT PLAN
- S3-27-28 - AS-BUILT FOUNDATION DATA
- S3-27-29 - OVERHEAD SIGN DETAILS 1
- S3-27-30 - OVERHEAD SIGN DETAILS 2



BRIDGE DESCRIPTION

(76' - 76') PRESTRESSED CONCRETE GIRDER

LOCATION PLAN

CITY OF ST. LOUIS **A8027**

AS-BUILT

DESIGNED BY: JCB	ISSUE RECORD		DATE
	NO.	DESCRIPTION	
DRAFTED BY: JCB	C	100% REVIEW SUBMITTAL	22MAR07
	D	RELEASED FOR CONSTRUCTION	05APR07
CHECKED BY: BGZ	1	MODIFIED P/S GIRDER NOTE/ADDED GIRDER LOAD RATING	02MAY07
	2	ADDED OVERHEAD SIGN / DELETED NOT FOR CONSTRUCTION	31JUL07
	AB	AS-BUILT	12MAR10

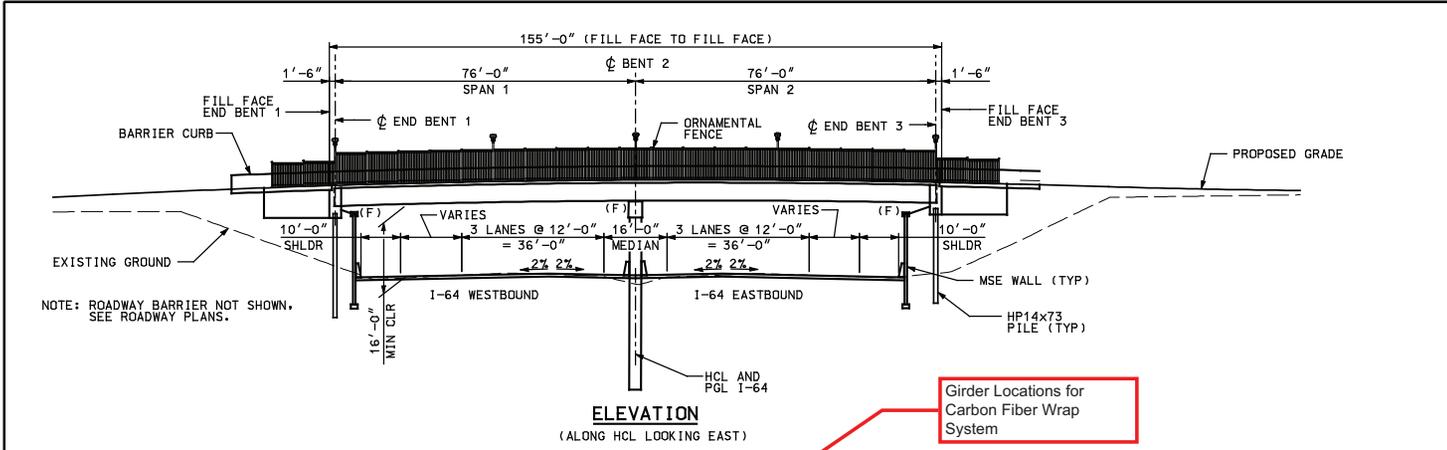


THE NEW I-64 PROJECT
 BRIDGE 27
 TAMM AVENUE OVER I-64
 GENERAL NOTES, INDEX OF DRAWINGS,
 & LOCATION PLAN

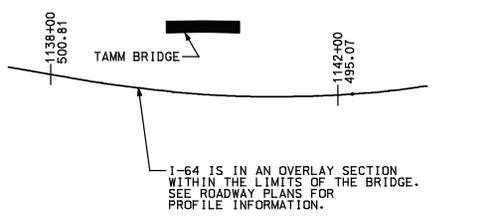
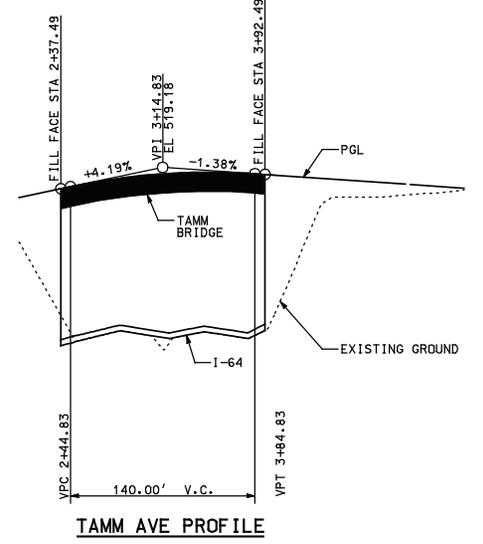
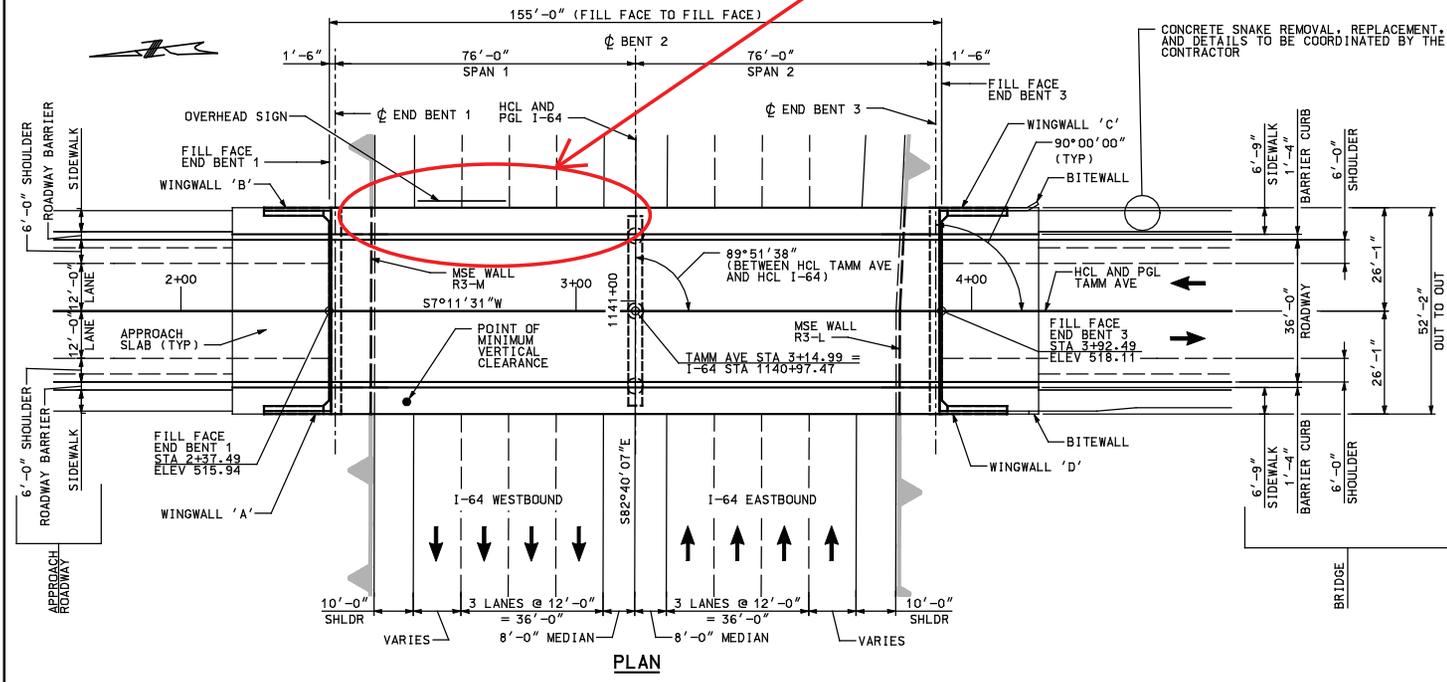


DRAWING NUMBER
S3-27-01

ROUTE I-64	STATE MO	DISTRICT 6
JOB NO. J610978		
COUNTY STLCO/STLCITY		



Girder Locations for Carbon Fiber Wrap System



I-64 IS IN AN OVERLAY SECTION WITHIN THE LIMITS OF THE BRIDGE. SEE ROADWAY PLANS FOR PROFILE INFORMATION.

- NOTES:**
- FOR LOCATIONS AND DETAILS OF OVERHEAD GUIDE AND STREET SIGNS, SEE DRAWINGS S3-27-29 AND S3-27-30.
 - THE DESIGN AND INSTALLATION OF ALL SHORING AND TEMPORARY WORKS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - (F) = FIXED

CITY OF ST. LOUIS A8027

AS-BUILT

ISSUE RECORD		
NO.	DESCRIPTION	DATE
C	100% REVIEW SUBMITTAL	22MAR07
D	RELEASED FOR CONSTRUCTION	05APR07
1	ADDED OVERHEAD SIGN / DELETED NOT FOR CONSTRUCTION	31JUL07
AB	AS-BUILT FDC-051, FDC-341	12MAR10



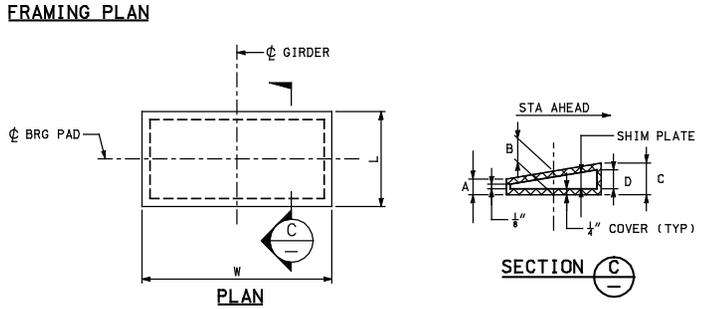
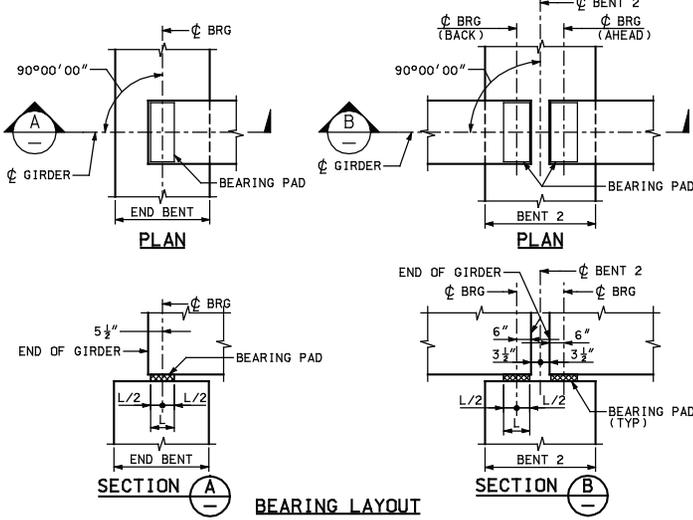
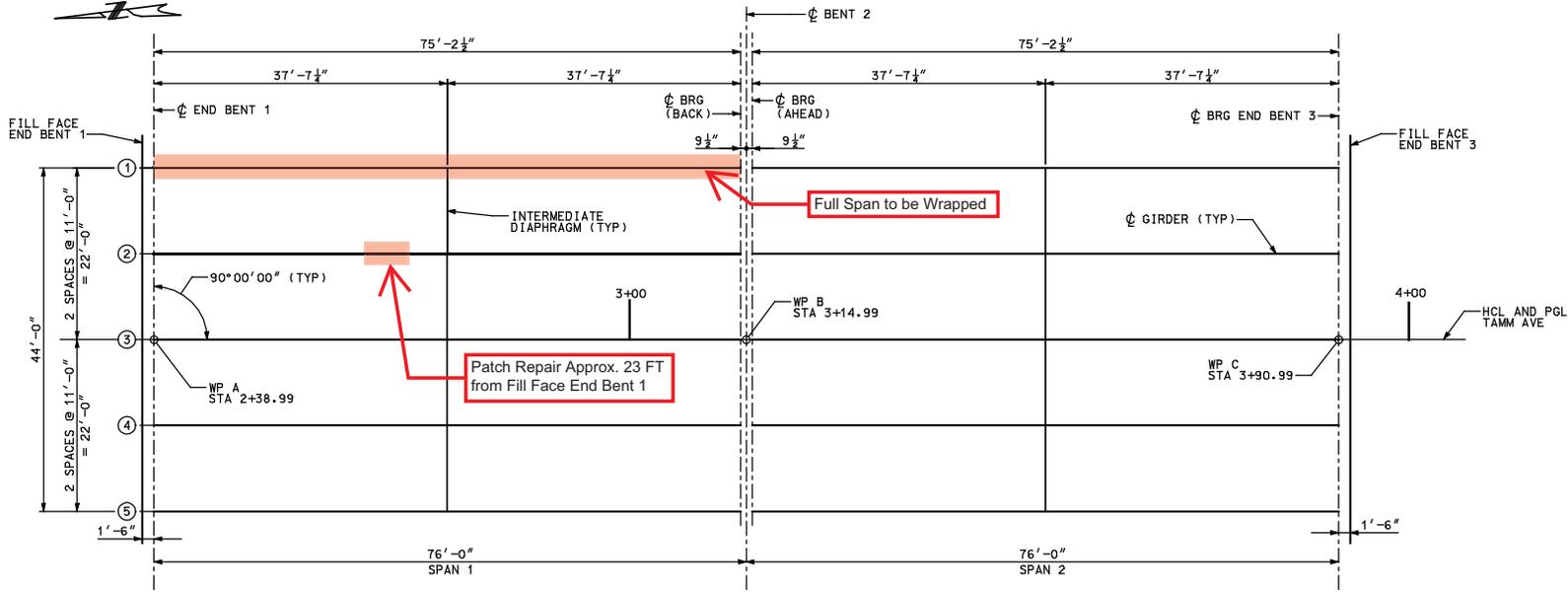
THE NEW I-64 PROJECT
BRIDGE 27
TAMM AVENUE OVER I-64
GENERAL PLAN & ELEVATION



DRAWING NUMBER
S3-27-02

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ROUTE I-64	STATE MO	DISTRICT 6
JOB NO. J610978		
COUNTY STLCO/STLCITY		



	L	W	A	B	C	D	NUMBER REQUIRED
END BENT 1	9"	22 1/2"	5/8"	3/4"	7/8"	5/8"	5
BENT 2 (BACK)	10"	22 1/2"	5/8"	3/4"	7/8"	5/8"	5
BENT 2 (AHEAD)	10"	22 1/2"	5/8"	5/8"	5/8"	1/8"	5
END BENT 3	9"	22 1/2"	5/8"	5/8"	5/8"	1/8"	5
TOTAL BEARINGS							20

NOTE:

1. WORK THIS DRAWING WITH DRAWING Nos. S3-27-15 THRU S3-27-17.
2. FOR OVERHEAD SIGN MOUNTING DETAILS, SEE DRAWING No. S3-27-29.

BEARING NOTES:

1. NEOPRENE ELASTOMERIC PADS SHALL BE 60 DUROMETER.
2. THE SHIM PLATE SHALL BE PLACED BETWEEN LAYERS OF ELASTOMERIC AND MOLDED TOGETHER TO FORM AN INTEGRAL UNIT.
3. LAMINATED NEOPRENE BEARING PAD SHALL BE IN ACCORDANCE WITH SECTION 716.

CITY OF ST. LOUIS **A8027**

AS-BUILT

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ISSUE RECORD		
NO.	DESCRIPTION	DATE
C	100% REVIEW SUBMITTAL	22MAR07
D	RELEASED FOR CONSTRUCTION	05APR07
1	OVERHEAD SIGN REFERENCE NOTE ADDED	31JUL07
AB	AS-BUILT	12MAR10

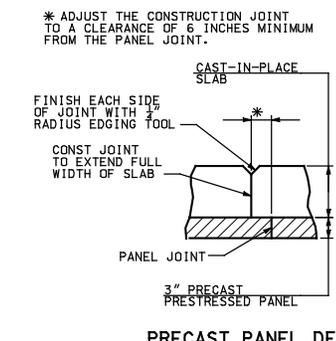
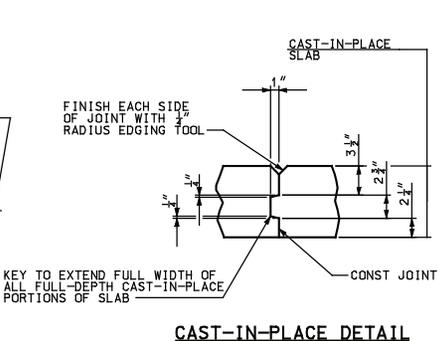
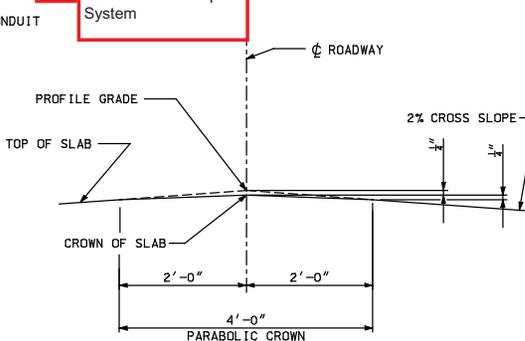
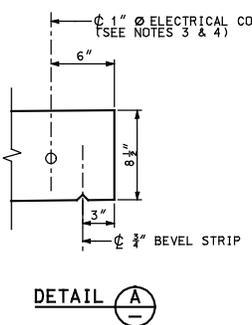
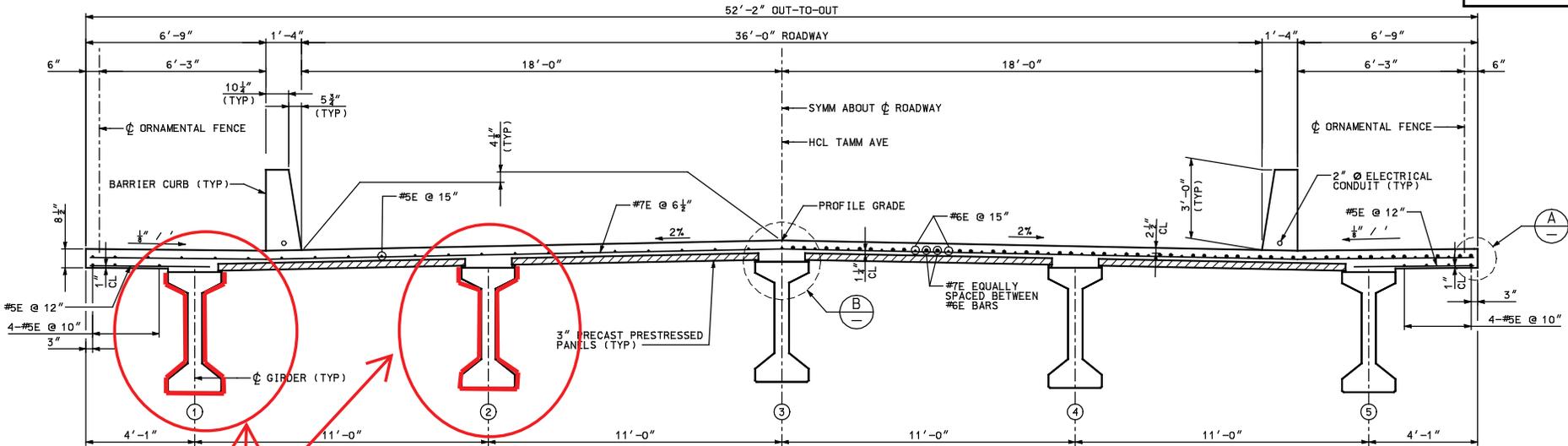


THE NEW I-64 PROJECT
BRIDGE 27
TAMM AVENUE OVER I-64
FRAMING PLAN & BEARING DETAILS



DRAWING NUMBER
S3-27-14

ROUTE I-64	STATE MO	DISTRICT 6
JOB NO. J610978		
COUNTY STLCO/STLCITY		



* ADJUST THE CONSTRUCTION JOINT TO A CLEARANCE OF 6 INCHES MINIMUM FROM THE PANEL JOINT.

- NOTES:**
1. ALL CONCRETE FOR CAST-IN-PLACE PORTIONS OF SLAB SHALL BE CLASS B-2.
 2. WORK THIS DRAWING WITH DRAWING Nos. S3-27-18, S3-27-19, S3-27-21, AND S3-27-23 THRU S3-27-26.
 3. FOR CONDUIT PLAN, SEE DRAWING No. S3-27-21.
 4. FOR CONDUIT DETAILS, SEE LIGHTING PLANS.
 5. FOR OVERHEAD SIGN ATTACHMENT DETAILS, SEE DRAWINGS Nos. S3-27-29 AND S3-27-30.

CITY OF ST. LOUIS A8027

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ISSUE RECORD		
DESIGNED BY: JCB	NO.	DATE
	C	22MAR07
	D	05APR07
	1	02MAY07
	2	31JUL07
	AB	12MAR10



THE NEW I-64 PROJECT
BRIDGE 27
TAMM AVENUE OVER I-64
TYPICAL SLAB REINFORCING SECTION



AS-BUILT
DRAWING NUMBER
S3-27-20