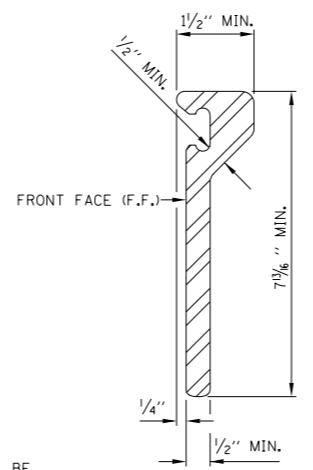
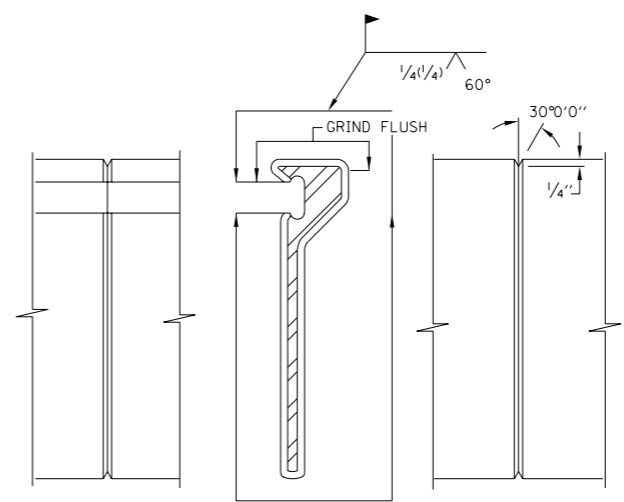


SECTION THRU EXPANSION JOINT

NOTE: 10" STUDS SHALL BE PIGGY-BACKED, BEFORE WELDING & (1)-4 1/8" (LENGTH MADE OF (1)-6 3/8"



TYPICAL SECTION THRU FRAME RAIL



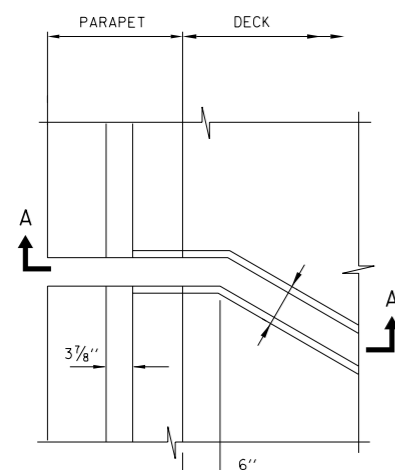
FRONT SIDE SECTION BACK SIDE
FRAME RAIL SPLICE DETAIL

NOTES:

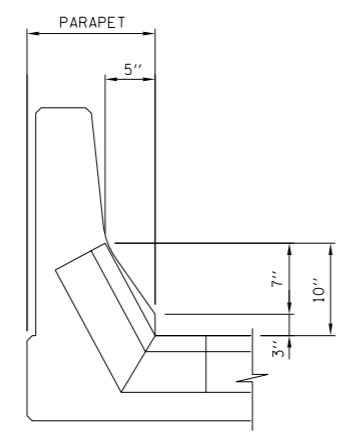
1. WORK THIS DRAWING WITH THE BASE SHEET FOR EXPANSION JOINT FRAME RAIL SYSTEM.
2. EXPANSION JOINT SHALL FOLLOW ROADWAY GRADE & CROSS SLOPE. EXPANSION JOINT TO BE SET TO GRADE BY ATTACHING FRAME RAILS TO BACKWALL AND BEAMS.
3. FRAME RAILS AND OTHER STEEL SHALL BE AASHTO M270 GRADE 36, (ASTM A36).
4. STUD ANCHORS SHALL BE AASHTO M169.
5. EXPANSION ANCHORS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
6. FRAME RAIL ASSEMBLY SHALL BE FABRICATED IN 20 FT. MAXIMUM LENGTHS. SHOP AND FIELD SPLICES SHALL BE PLACED AT CROWN BREAKS, CONSTRUCTION STAGE LINES, AND TRANSVERSE BREAKS IN DECK.
7. AT SPLICES, A CONTINUOUS GROUND SMOOTH WELD SHALL BE PROVIDED EXCEPT ON SURFACES IN LOCKING CONTACT WITH SEAL WHICH SHALL HAVE NO BURRS.
8. ALL STUD ANCHORS TO BE ELECTRIC ARC END WELDED WITH COMPLETE FUSION.
9. AFTER FABRICATION IS COMPLETE FRAME RAILS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
10. CORRESPONDING SECTIONS SHALL BE TEMPORARILY SHOP ASSEMBLED, CHECKED FOR FIT, AND MATCH MARKED WITH STENCIL AND BLACK PAINT FOR SHIPMENT.
11. NEOPRENE SEAL SHALL BE CONTINUOUS. FACTORY VULCANIZED HORIZONTAL MITERS SHALL BE REQUIRED FOR ALL SKEWS.
12. NEOPRENE SEAL SHALL BE INSTALLED CONTINUOUS, SPLICING OF SEAL IN THE FIELD IS NOT PERMITTED.
13. NEOPRENE SEAL SHALL BE BONDED TO THE FRAME RAILS WITH AN ADHESIVE MEETING THE REQUIREMENTS OF ASTM D4070.
14. SUPPORT PLATES, NUTS AND WASHERS CONNECTED TO FRAME RAILS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 OR A123.
15. SUPPORT PLATES ON STEEL GIRDERS SHALL BE WELDED IN ACCORDANCE WITH SUBSECTIONS 505.04 (q) & 505.08 (n) OF THE IDOT STANDARD SPECIFICATIONS.
16. FURNISHING AND INSTALLING EXPANSION JOINT FRAME RAIL SUPPORT SYSTEM SHALL BE INCIDENTAL TO BRIDGE EXPANSION JOINT.
17. JOINT OPENINGS SHALL BE ADJUSTED IN ACCORDANCE WITH THE FIELD ENGINEER'S INSTRUCTIONS.
18. UPON COMPLETION OF FIELD WELDING, THE CONTRACTOR SHALL CLEAN THE WELD AREA AND APPLY A COATING OF ORGANIC ZINC-RICH PAINT IN ACCORDANCE WITH SSPC-PS12.01.

NOTE:

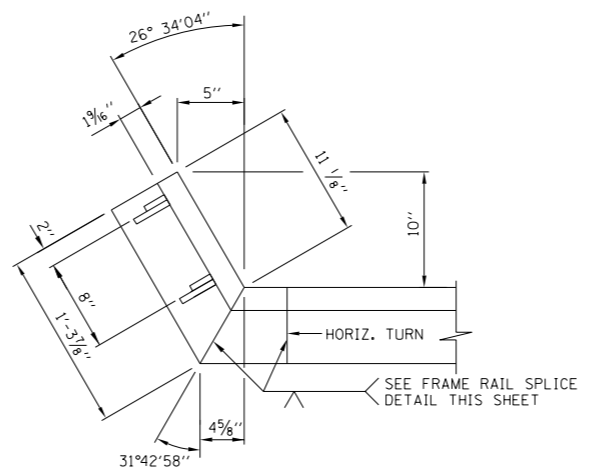
WELD ON FRONT SIDE OF FRAME MAYBE OMITTED AT STAGE CONSTRUCTION LINES



PLAN



SECTION A-A
UPTURN AT PARAPET



SECTION

NOTE TO DSE

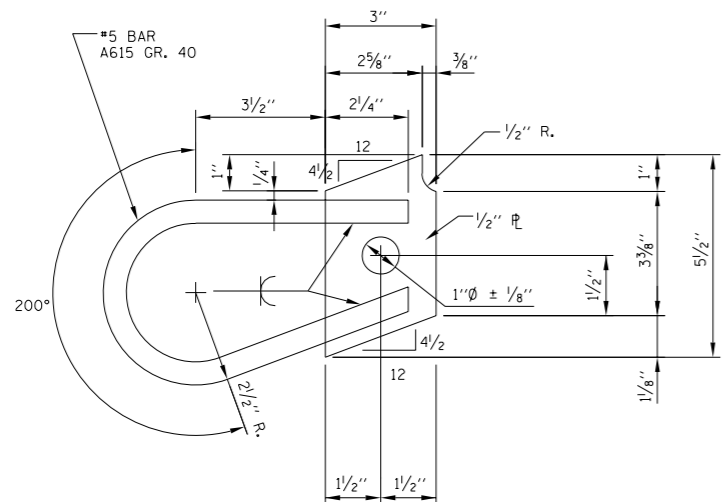
THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

APPROVED: *Jeff Daley*
CHIEF ENGINEER DATE 6-14-2006

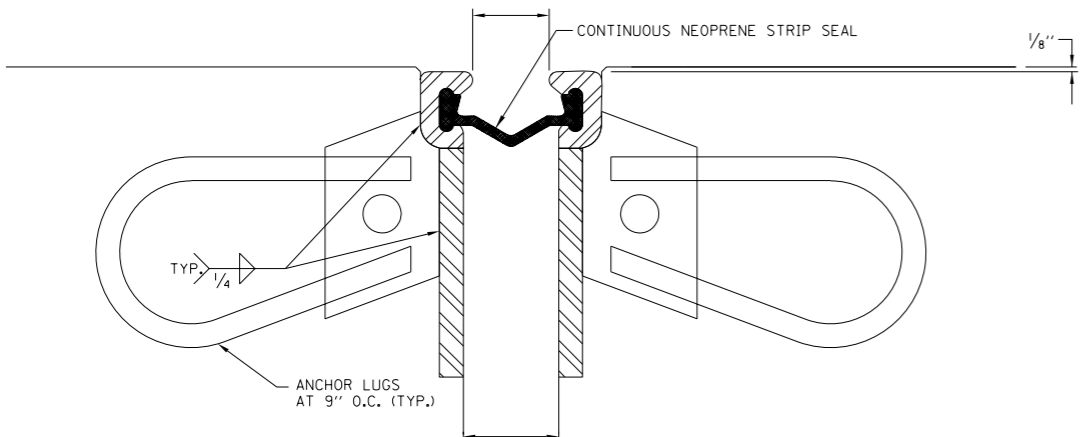
Illinois Tollway
Open Roads for a Faster Future

EXPANSION JOINT
FRAME RAIL AND SEAL
ALTERNATIVE A

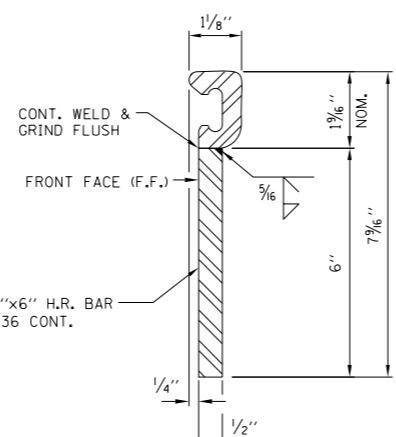
DATE 5-12-2005 STANDARD NO. BASE SHEET



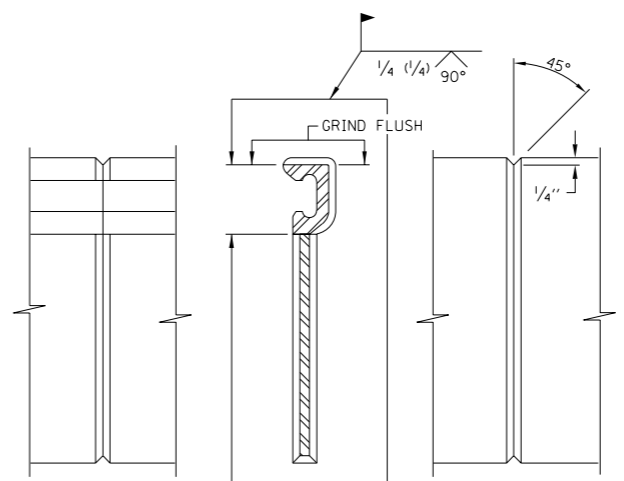
ANCHOR LUG DETAIL



SECTION THRU EXPANSION JOINT

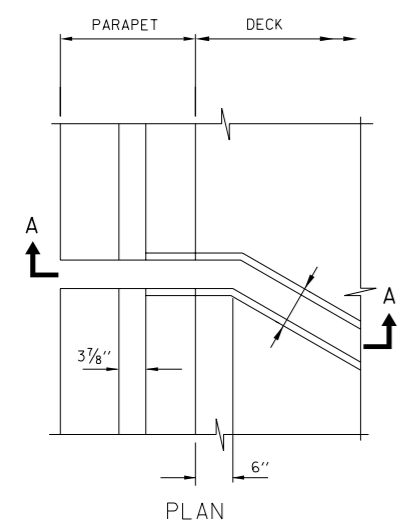


TYPICAL SECTION THRU FRAME RAIL

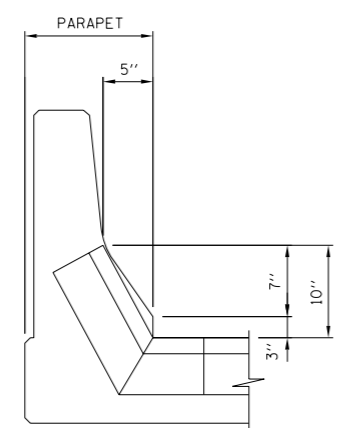


FRONT SIDE SECTION BACK SIDE
FRAME RAIL SPLICE DETAIL

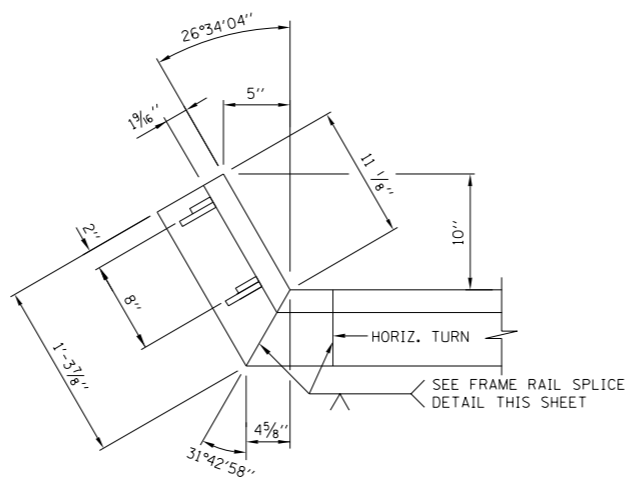
NOTE:
WELD ON FRONT SIDE OF FRAME MAYBE OMITTED AT STAGE CONSTRUCTION LINES.



PLAN



SECTION A-A



SECTION

UPTURN AT PARAPET

NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

NOTES:

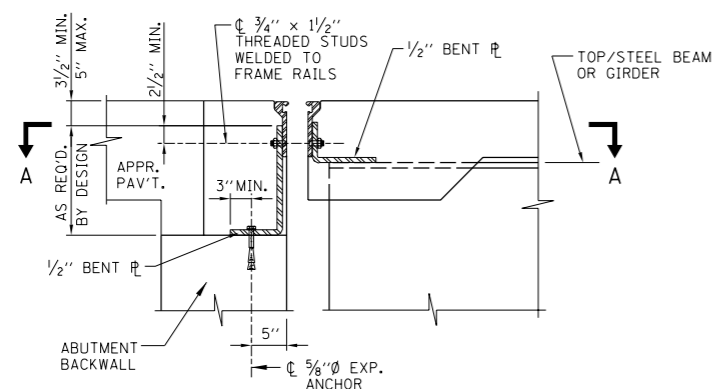
1. WORK THIS DRAWING WITH THE BASE SHEET FOR EXPANSION JOINT FRAME RAIL SYSTEM.
2. EXPANSION JOINT SHALL FOLLOW ROADWAY GRADE & CROSS SLOPE. EXPANSION JOINT TO BE SET TO GRADE BY ATTACHING FRAME RAILS TO BACKWALL AND BEAMS.
3. AT SPLICES, A CONTINUOUS GROUND SMOOTH WELD SHALL BE PROVIDED EXCEPT ON SURFACES IN LOCKING CONTACT WITH SEAL WHICH SHALL HAVE NO BURRS.
4. FRAME RAILS AND OTHER STEEL SHALL BE AASHTO M270 GRADE 36, (ASTM A36).
5. ANCHOR LUGS SHALL BE AASHTO M169.
6. EXPANSION ANCHORS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
7. FRAME RAIL ASSEMBLY SHALL BE FABRICATED IN 20 FT. MAXIMUM LENGTHS. SHOP AND FIELD SPLICES SHALL BE PLACED AT CROWN BREAKS, CONSTRUCTION STAGE LINES, AND TRANSVERSE BREAKS IN DECK.
8. AFTER FABRICATION IS COMPLETE FRAME RAILS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
9. CORRESPONDING SECTIONS SHALL BE TEMPORARILY SHOP ASSEMBLED, CHECKED FOR FIT, AND MATCH MARKED WITH STENCIL AND BLACK PAINT FOR SHIPMENT.
10. NEOPRENE SEAL SHALL BE CONTINUOUS. FACTORY VULCANIZED HORIZONTAL MITERS SHALL BE REQUIRED FOR ALL SKEWS.
11. NEOPRENE SEAL SHALL BE INSTALLED CONTINUOUS. SPLICING OF SEAL IN THE FIELD IS NOT PERMITTED.
12. NEOPRENE SEAL SHALL BE BONDED TO THE FRAME RAILS WITH AN ADHESIVE MEETING THE REQUIREMENTS OF ASTM D4070.
13. SUPPORT PLATES ON STEEL GIRDERS SHALL BE WELDED IN ACCORDANCE WITH SUBSECTIONS 505.04 (q) & 505.08 (n) OF THE IDOT STANDARD SPECIFICATIONS.
14. FURNISHING AND INSTALLING EXPANSION JOINT FRAME RAIL SUPPORT SYSTEM SHALL BE INCIDENTAL TO BRIDGE EXPANSION JOINT.
15. JOINT OPENINGS SHALL BE ADJUSTED IN ACCORDANCE WITH THE FIELD ENGINEER'S INSTRUCTIONS.
16. SUPPORT PLATES, NUTS, AND WASHERS CONNECTED TO FRAME RAILS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AND A123.
17. UPON COMPLETION OF FIELD WELDING, THE CONTRACTOR SHALL CLEAN THE WELD AREA AND APPLY A COATING OF ORGANIC ZINC-RICH PAINT IN ACCORDANCE WITH SSPC-PS12.01.

APPROVED: *Jeff Daley*
CHIEF ENGINEER DATE 6-14-2006

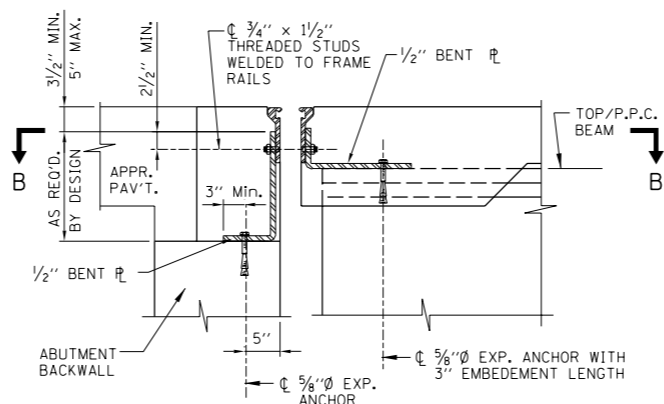
Illinois Tollway
Open Roads for a Faster Future

EXPANSION JOINT
FRAME RAIL AND SEAL
ALTERNATIVE B

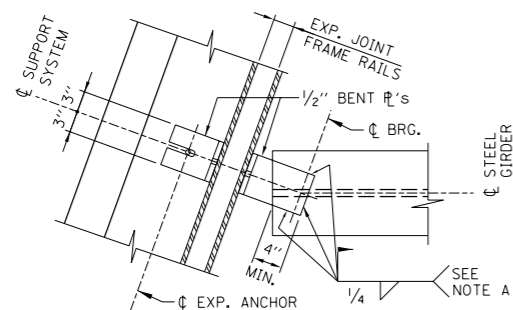
DATE 5-12-2005 STANDARD NO. BASE SHEET



TYPICAL SECTION THRU EXP. JOINT AND SUPPORT SYSTEM AT STEEL GIRDERS



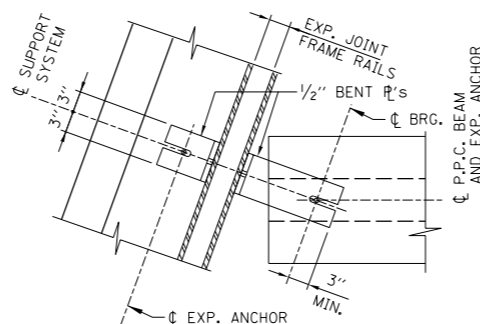
TYPICAL SECTION THRU EXP. JOINT AND SUPPORT SYSTEM AT P.P.C. BEAMS



SECTION A-A

NOTE A:

FIELD WELD AFTER SUPPORT SYSTEM IS ADJUSTED FOR THE OPENING AND HEIGHT REQUIREMENTS AND THE BENT PLATE ON THE OPPOSITE SIDE IS SECURED IN PLACE WITH EXPANSION ANCHOR INTO THE CONCRETE.



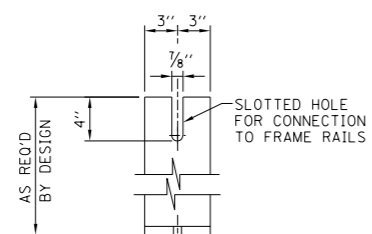
SECTION B-B

NOTE:

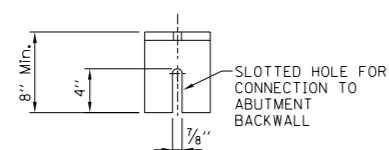
1. WORK THIS DRAWING WITH THE BASE SHEETS FOR EITHER EXPANSION JOINT FRAME RAIL AND SEAL ALTERNATIVE A OR ALTERNATIVE B.

NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

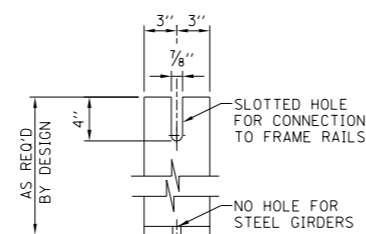


ELEVATION

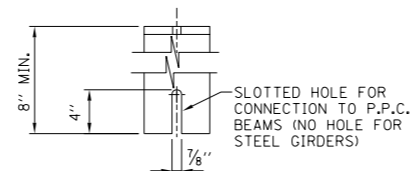


PLAN

BENT SUPPORT PLATE AT ABUTMENT



ELEVATION



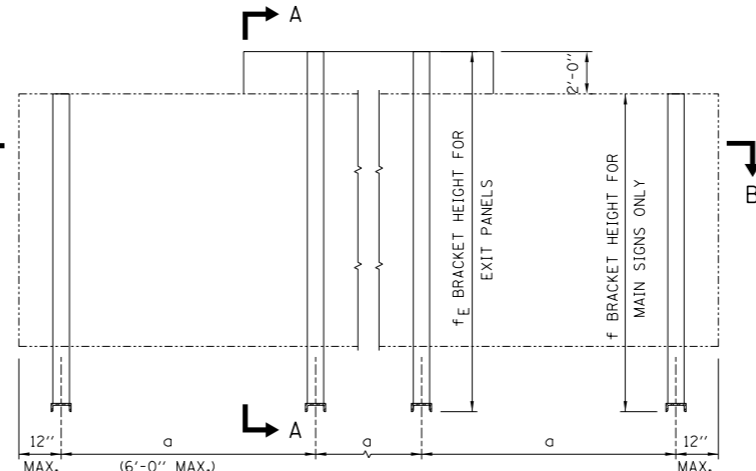
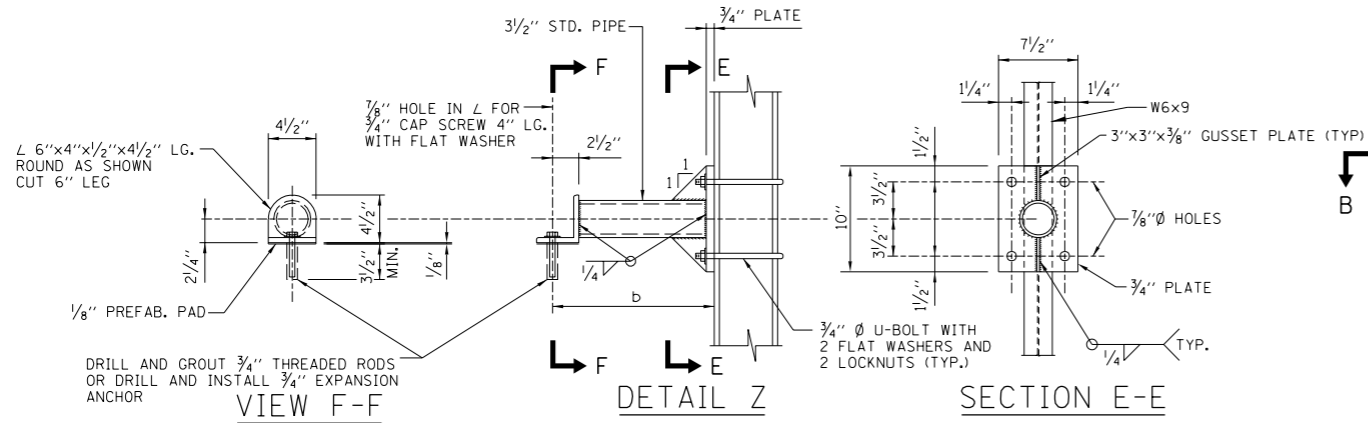
PLAN

BENT SUPPORT PLATE AT BRIDGE DECK

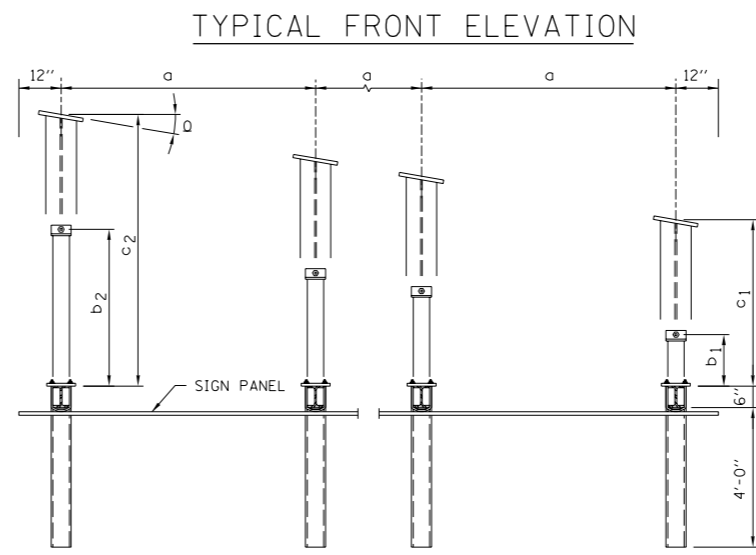
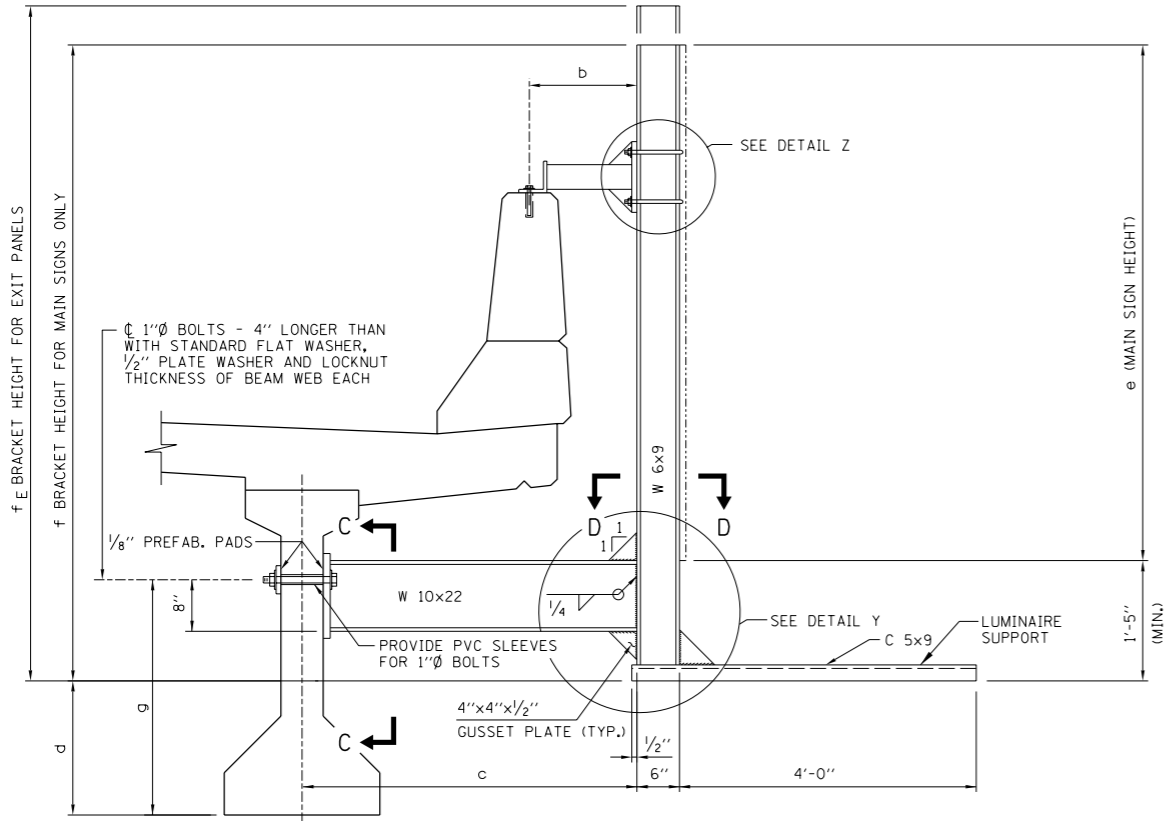
APPROVED *Jeff Daley* CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future
 EXPANSION JOINT
 FRAME RAIL
 SUPPORT SYSTEM
 DATE 5-12-2005 STANDARD NO. BASE SHEET

REVISIONS



- NOTES:**
1. ALL STRUCTURE STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-270 GRADE 36.
 2. ALL CAP SCREWS, BOLTS, U-BOLTS, WASHERS AND LOCKNUTS SHALL BE IN ACCORDANCE WITH SUBSECTION 733.02 OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232.
 3. ALL FABRICATION SHALL BE COMPLETE AND READY FOR ASSEMBLY BEFORE GALVANIZING. NO PUNCHING, DRILLING, CUTTING, NOR WELDING SHALL BE PERMITTED AFTER GALVANIZING.
 4. ALL STRUCTURAL STEEL PLATES, SHAPES AND CONNECTIONS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A-123.
 5. CONTRACTOR SHALL FIELD CHECK ALL BRIDGE DIMENSIONS SHOWN ON PLANS BEFORE SUBMITTING SHOP DRAWINGS.
 6. THE COST OF FURNISHING AND INSTALLING THE BEARING PADS AS HEREIN SPECIFIED SHALL BE INCIDENTAL TO BRIDGE (CONCRETE) MOUNTED SIGN SUPPORT.
 7. PRE-FAB BEARING PADS: FABRIC BEARING PADS SHALL CONSIST OF A FABRIC AND RUBBER BODY MADE WITH NEW, UNVULCANIZED RUBBER AND UNUSED FABRIC FIBERS.
 8. METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH SUBSECTION 733.10 (b) OF THE IDOT STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR OVERHEAD SIGN STRUCTURE - BRIDGE (CONCRETE) MOUNTED.
 9. SIGN STRUCTURE WIRING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
 10. CENTER LINE OF EXPANSION ANCHOR INTO PARAPET SHALL BE AT LEAST 12" TO CENTERLINE OF OPEN JOINT IN PARAPET. ENGINEER SHALL VERIFY THE MINIMUM DISTANCES BETWEEN EXPANSION ANCHORS & PARAPET PRIOR TO ERECTION OF SIGN SUPPORT.

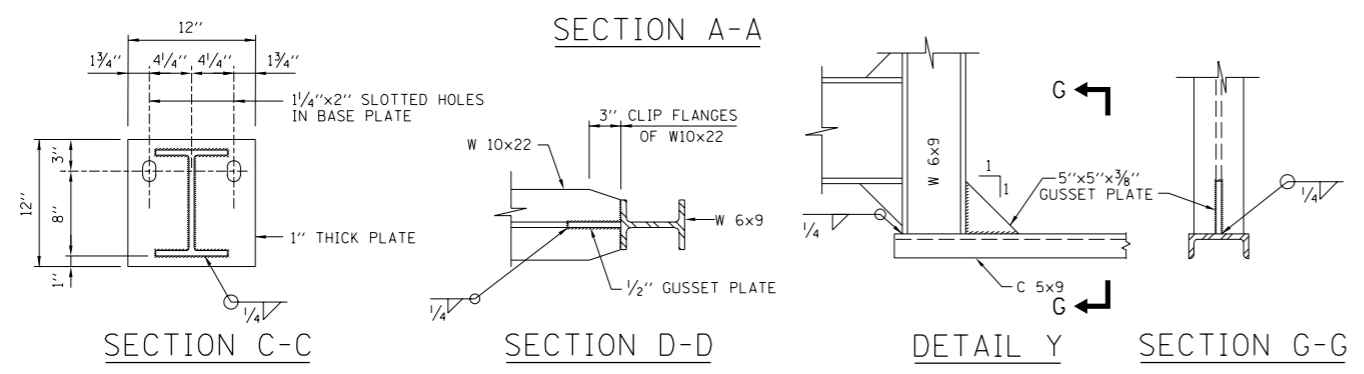


BILL OF MATERIAL

OVERHEAD SIGN STRUCTURE - BRIDGE (CONCRETE) MOUNTED	LIN. FT.
---	----------

NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

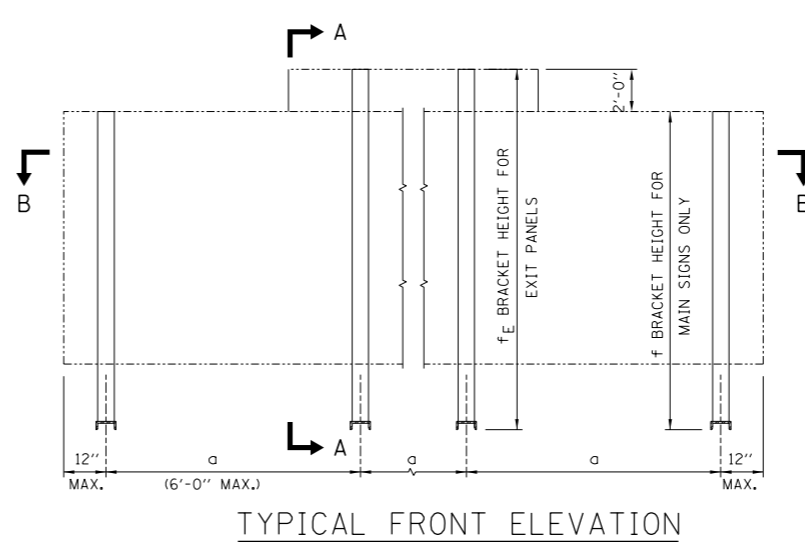
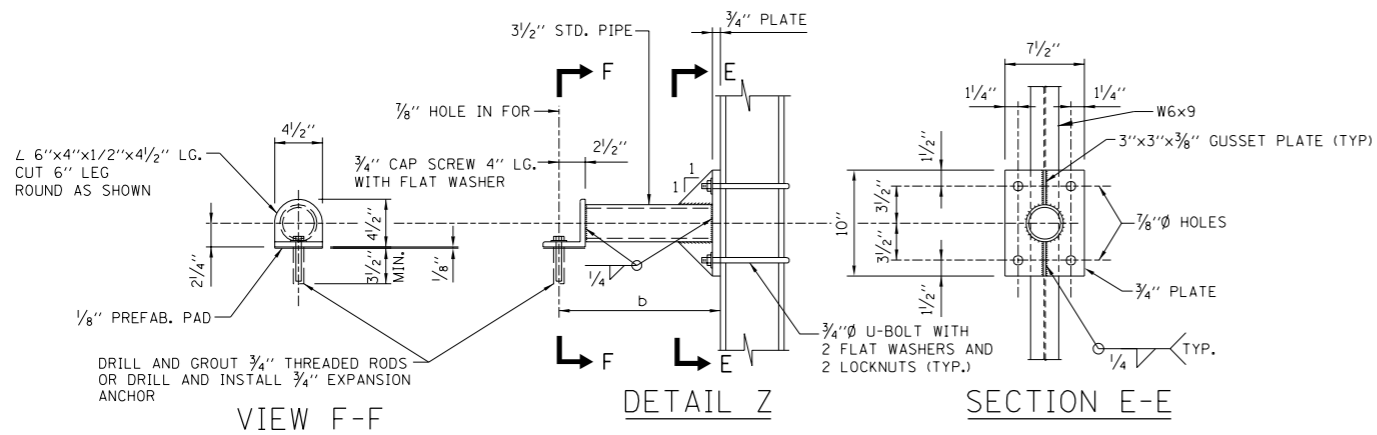


APPROVED: *Jeff Daley*
 CHIEF ENGINEER
 DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

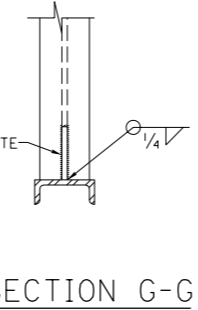
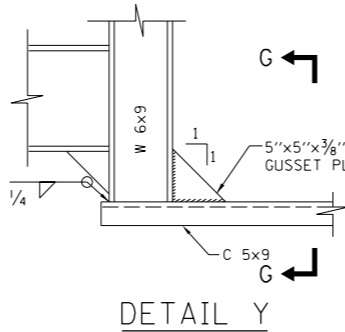
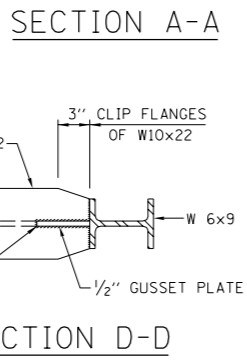
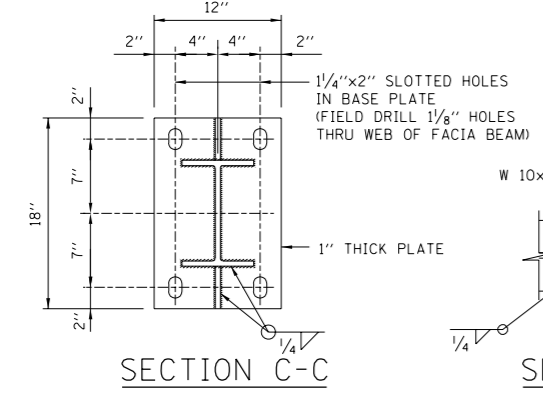
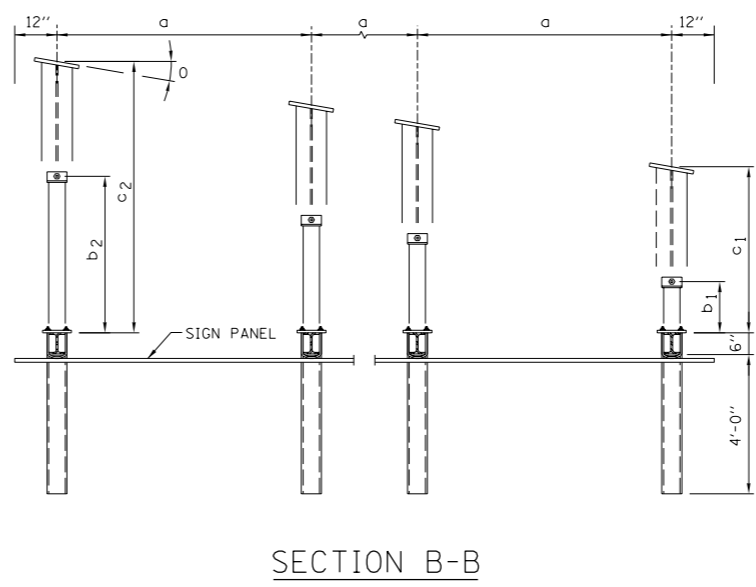
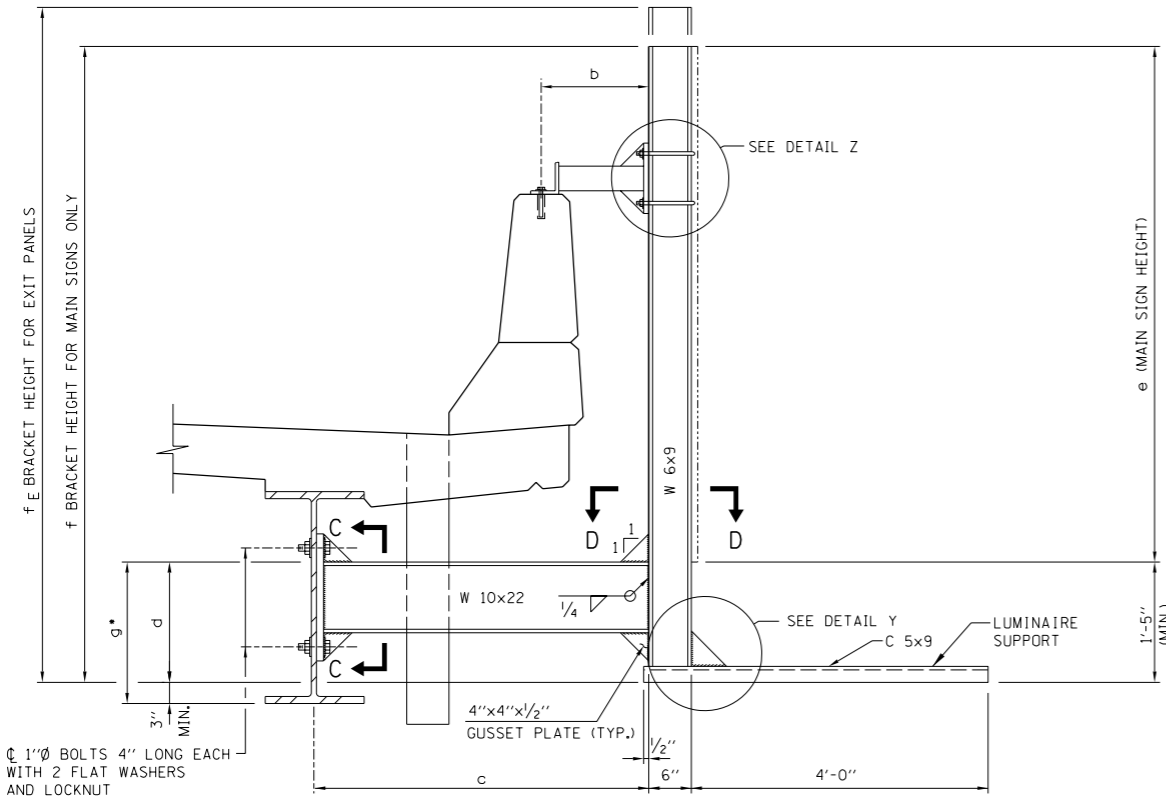
BRIDGE (CONCRETE) MOUNTED SIGN SUPPORT

DATE	STANDARD NO.
5-12-2005	BASE SHEET



NOTES:

1. ALL STRUCTURE STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-270 GRADE 36.
2. ALL CAP SCREWS, BOLTS, U-BOLTS, WASHERS AND LOCKNUTS SHALL BE IN ACCORDANCE WITH SUBSECTION 733.02 OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232.
3. ALL FABRICATION SHALL BE COMPLETE AND READY FOR ASSEMBLY BEFORE GALVANIZING. NO PUNCHING, DRILLING, CUTTING, NOR WELDING SHALL BE PERMITTED AFTER GALVANIZING.
4. ALL STRUCTURAL STEEL PLATES, SHAPES AND CONNECTIONS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A-123.
5. CONTRACTOR SHALL FIELD CHECK ALL BRIDGE DIMENSIONS SHOWN ON PLANS BEFORE SUBMITTING SHOP DRAWINGS.
6. ALL HOLES DRILLED IN BRIDGE BEAM OR PLATE GIRDER SHALL BE LOCATED IN THE MIDDLE HALF OF THE WEB. THERE SHALL NOT BE ANY HOLES DRILLED IN THE WEB OF BEAM OR PLATE GIRDER CLOSER TO THE FLANGE THAN THE DEPTH OF BEAM DIVIDED BY FOUR (4) OR ONE-FOURTH (1/4) THE DEPTH OF THE BEAM. THE ENGINEER MAY ADJUST DIMENSION "g" TO MEET THE ABOVE CONDITION AND TO KEEP THE SIGN LEVEL.
7. THE COST OF FURNISHING AND INSTALLING THE BEARING PADS AS HEREIN SPECIFIED SHALL BE INCIDENTAL TO BRIDGE (STEEL) MOUNTED SIGN SUPPORT.
8. PRE-FAB BEARING PADS: FABRIC BEARING PADS SHALL CONSIST OF A FABRIC AND RUBBER BODY MADE WITH NEW, UNVULCANIZED RUBBER AND UNUSED FABRIC FIBERS.
9. METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH SUBSECTION 733.10 (b) OF IDOT STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR OVERHEAD SIGN STRUCTURE - BRIDGE (STEEL) MOUNTED.
10. SIGN STRUCTURE WIRING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
11. CENTER LINE OF EXPANSION ANCHOR INTO PARAPET SHALL BE AT LEAST 12" TO CENTER LINE OF OPEN JOINT IN PARAPET. ENGINEER SHALL VERIFY THE MINIMUM DISTANCES BETWEEN EXPANSION ANCHORS & PARAPET PRIOR TO ERECTION OF SIGN SUPPORT.



BILL OF MATERIAL

OVERHEAD SIGN STRUCTURE - BRIDGE (STEEL) MOUNTED	LINEAR FT.
--	------------

NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

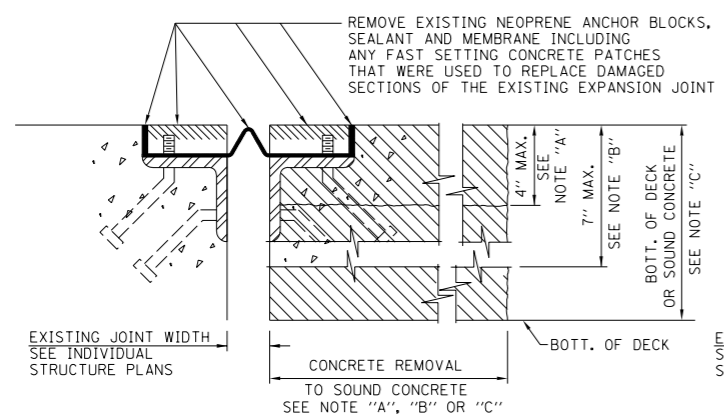
APPROVED: *Jeff Daley*
 CHIEF ENGINEER
 DATE 6-14-2006

Illinois Tollway
 Open Roads for a Faster Future

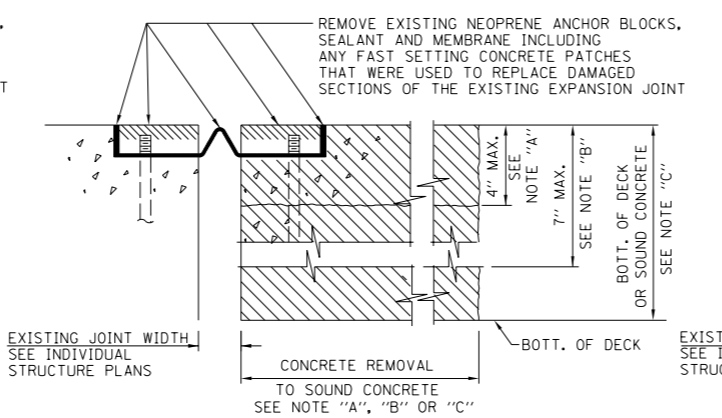
BRIDGE (STEEL) MOUNTED
 SIGN SUPPORT

DATE 5-12-2005 STANDARD NO. BASE SHEET

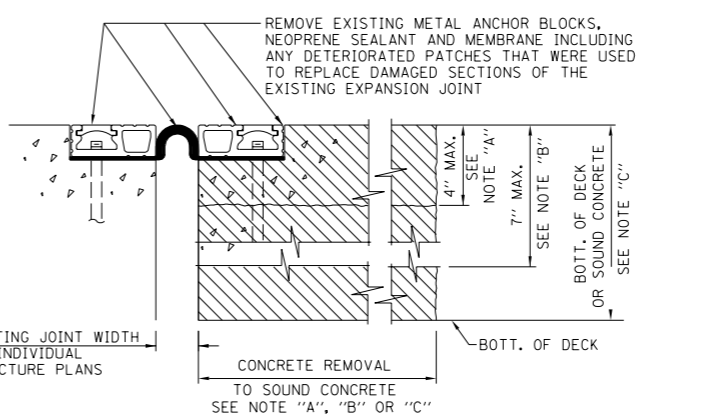
REVISIONS



EXISTING NEOPRENE EXPANSION JOINT



EXISTING NEOPRENE EXPANSION JOINT



EXISTING NEOPRENE EXPANSION JOINT

NOTE A:

REPAIR EXISTING JOINT BLOCKOUTS OR UNSOUND CONCRETE REMOVALS LESS THAN OR EQUAL TO 4" IN DEPTH WITH NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTE B:

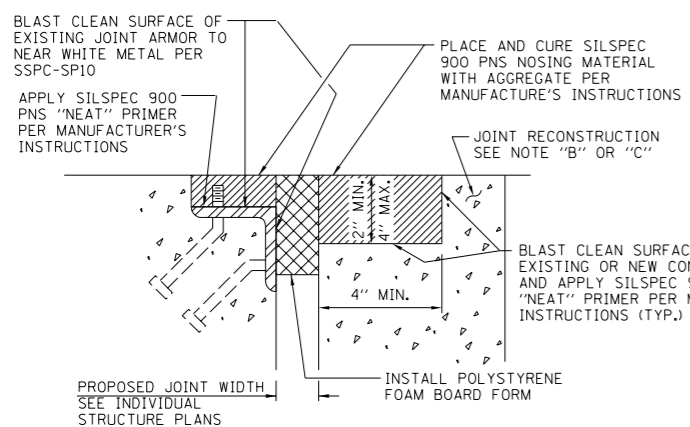
WHEN DEPTH OF UNSOUND CONCRETE IS GREATER THAN 4" BUT LESS THAN 7", REMOVE BOTH SOUND AND UNSOUND CONCRETE TO A UNIFORM DEPTH OF 7" AND RECONSTRUCT THE JOINT WITH A 2" x 4" BLOCKOUT FOR NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTE C:

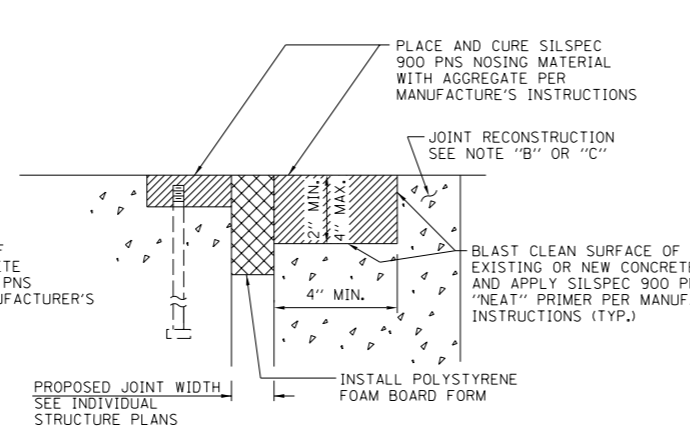
SHOULD THE DEPTH OF UNSOUND CONCRETE EXCEED 7", REMOVE THE DETERIORATED CONCRETE TO THE BOTTOM OF THE BRIDGE DECK OR SOUND CONCRETE AS DETERMINED BY THE ENGINEER. THE JOINT SHALL BE RECONSTRUCTED WITH A 2" x 4" BLOCKOUT FOR NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTES:

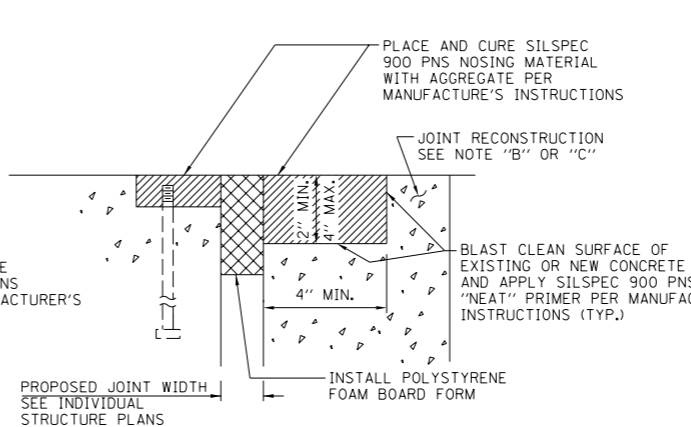
1. NEW CONCRETE SHALL BE CURED IN ACCORDANCE WITH SUBSECTION 1020.13 (d) (3) OF THE IDOT STANDARD SPECIFICATIONS PRIOR TO PLACING THE NOSING MATERIAL.
2. SAWCUT (2") AND REMOVE UNSOUND CONCRETE AND RECONSTRUCT THE EXISTING JOINT OPENING WITH NOSING MATERIAL IN ACCORDANCE WITH NOTES A, B AND C.



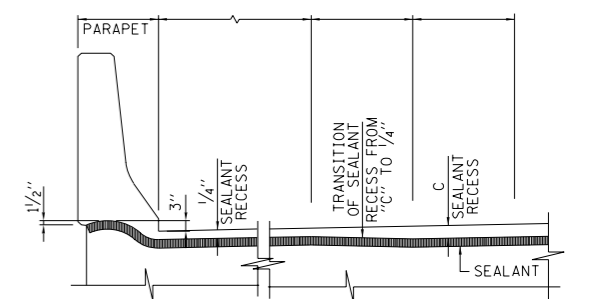
EXISTING JOINT RECONSTRUCTION



EXISTING JOINT RECONSTRUCTION



EXISTING JOINT RECONSTRUCTION



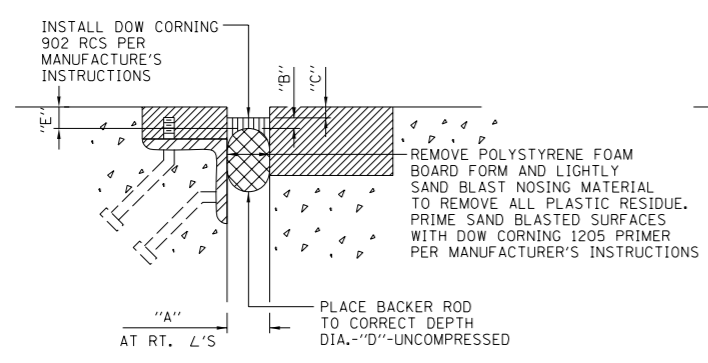
SEALANT TREATMENT AT SHOULDERS AND PARAPETS

DIMENSION TABLE:

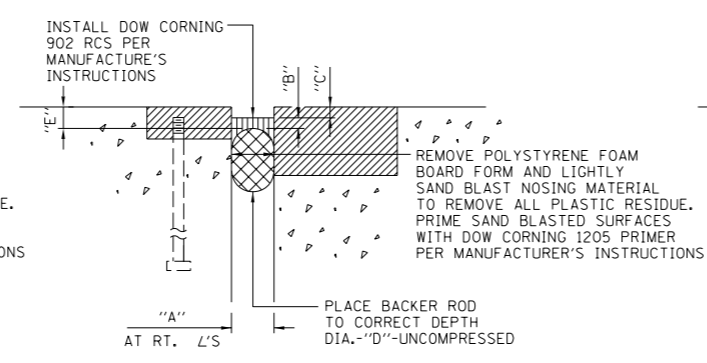
A	B	C	D	E
JOINT OPENING	SEALANT THICKNESS	RECESS SEALANT	BACKER ROD DIA.	TOTAL DEPTH
1"	1/2"	1/2"	1/4"	1"
1 1/2"	1/2"	1/2"	2"	1"
2"	1/2"	1/2"	3"	1"
2 1/2"	1/2"	1/2"	3"	1"
3"	1/2"	3/4"	4"	1 1/4"
4"	5/8"	3/4"	5"	1 3/8"
5"	5/8"	3/4"	6"	1 3/8"

NOTE TO DSE

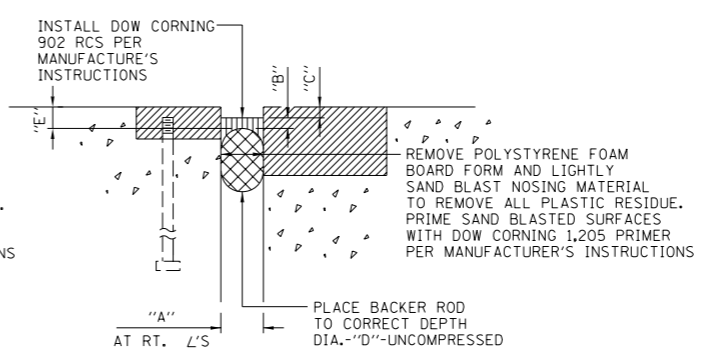
THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.



TYPE "I" JOINT REPLACEMENT DETAILS



TYPE "II" JOINT REPLACEMENT DETAILS

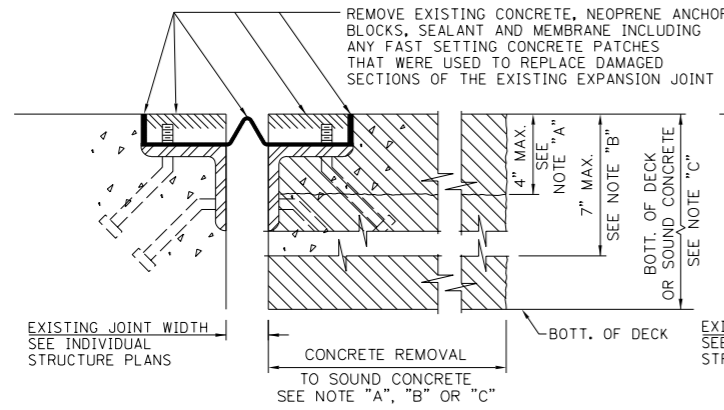


TYPE "III" JOINT REPLACEMENT DETAILS

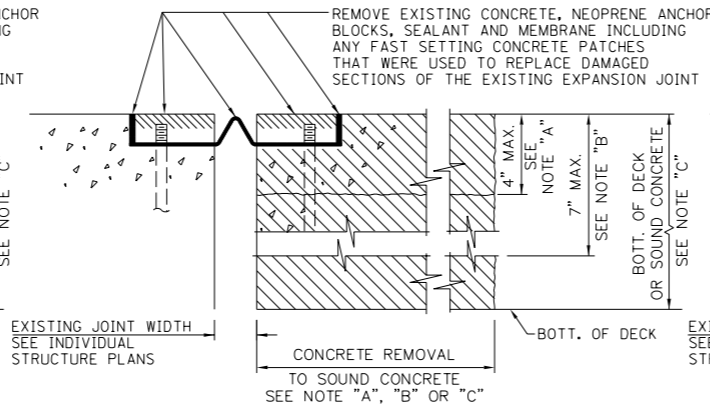
APPROVED *Jeff Daley* CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

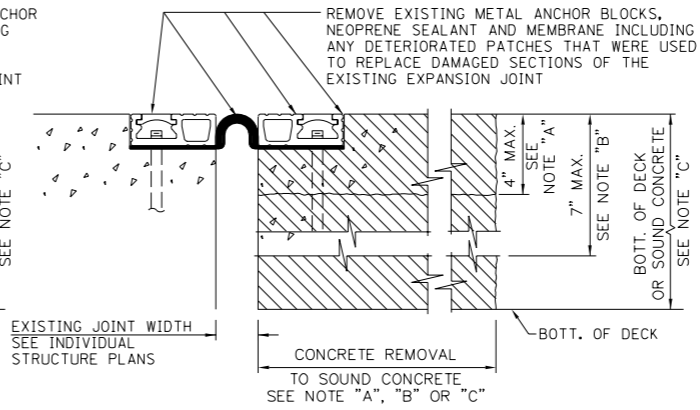
BRIDGE EXPANSION JOINTS
 ALTERNATIVE A REPLACEMENT
 AND CONSTRUCTION DETAILS
 DATE 5-12-2005 STANDARD NO. BASE SHEET



EXISTING NEOPRENE EXPANSION JOINT



EXISTING NEOPRENE EXPANSION JOINT



NOTE A:

REPAIR EXISTING JOINT BLOCKOUTS OR UNSOUND CONCRETE REMOVALS LESS THAN OR EQUAL TO 4" IN DEPTH WITH NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTE B:

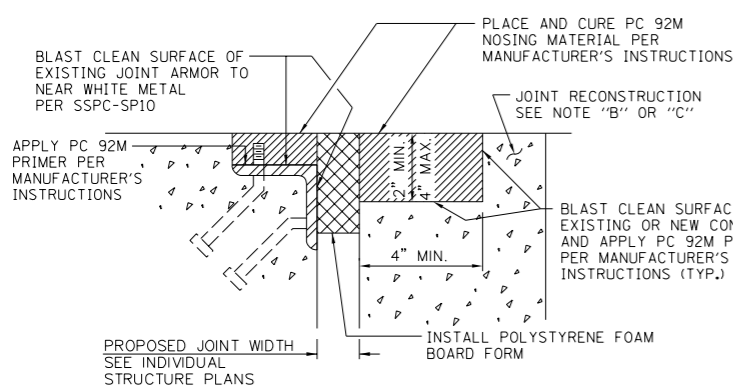
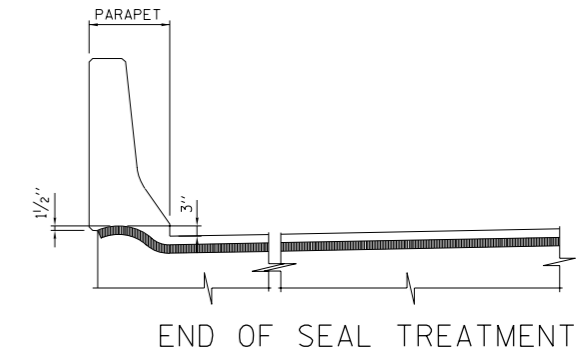
WHEN DEPTH OF UNSOUND CONCRETE IS GREATER THAN 4" BUT LESS THAN 7", REMOVE BOTH SOUND AND UNSOUND CONCRETE TO A UNIFORM DEPTH OF 7" AND RECONSTRUCT THE JOINT WITH A 2" x 4" BLOCKOUT FOR NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTE C:

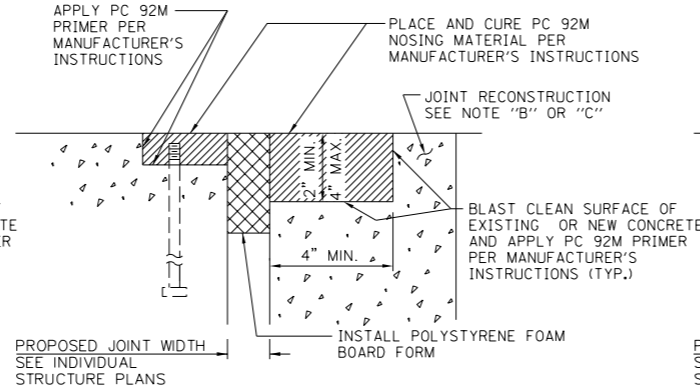
SHOULD THE DEPTH OF UNSOUND CONCRETE EXCEED 7", REMOVE THE DETERIORATED CONCRETE TO THE BOTTOM OF THE BRIDGE DECK OR SOUND CONCRETE AS DETERMINED BY THE ENGINEER. THE JOINT SHALL BE RECONSTRUCTED WITH A 2" x 4" BLOCKOUT FOR NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION ----

NOTES:

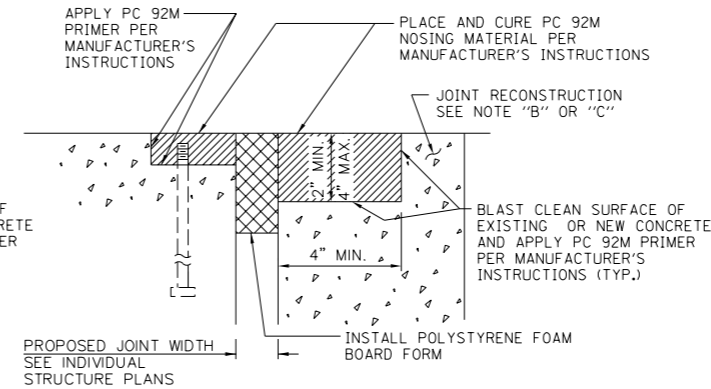
1. NEW CONCRETE SHALL BE CURED IN ACCORDANCE WITH SUBSECTION 1020.13 (d) (3) OF THE IDOT STANDARD SPECIFICATIONS PRIOR TO PLACING THE NOSING MATERIAL.
2. SAWCUT (2") AND REMOVE UNSOUND CONCRETE AND RECONSTRUCT THE EXISTING JOINT OPENING WITH NOSING MATERIAL IN ACCORDANCE WITH NOTES A, B AND C.



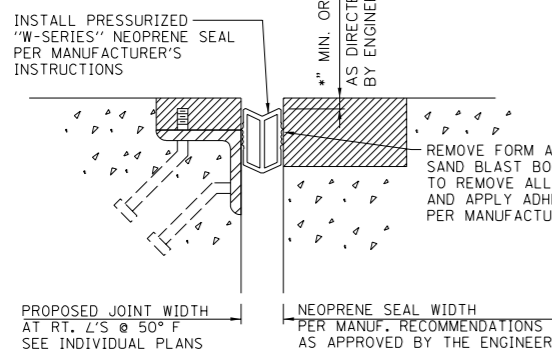
EXISTING JOINT RECONSTRUCTION



EXISTING JOINT RECONSTRUCTION

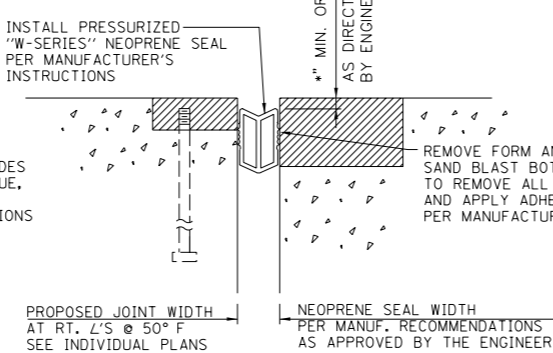


EXISTING JOINT RECONSTRUCTION



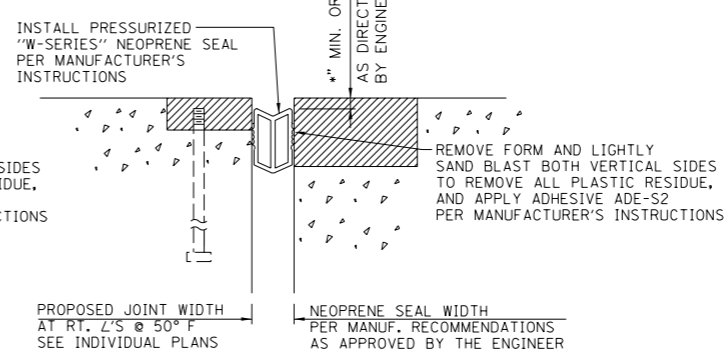
PROPOSED JEENE EXPANSION JOINT

TYPE "I" JOINT REPLACEMENT DETAILS



PROPOSED JEENE EXPANSION JOINT

TYPE "II" JOINT REPLACEMENT DETAILS



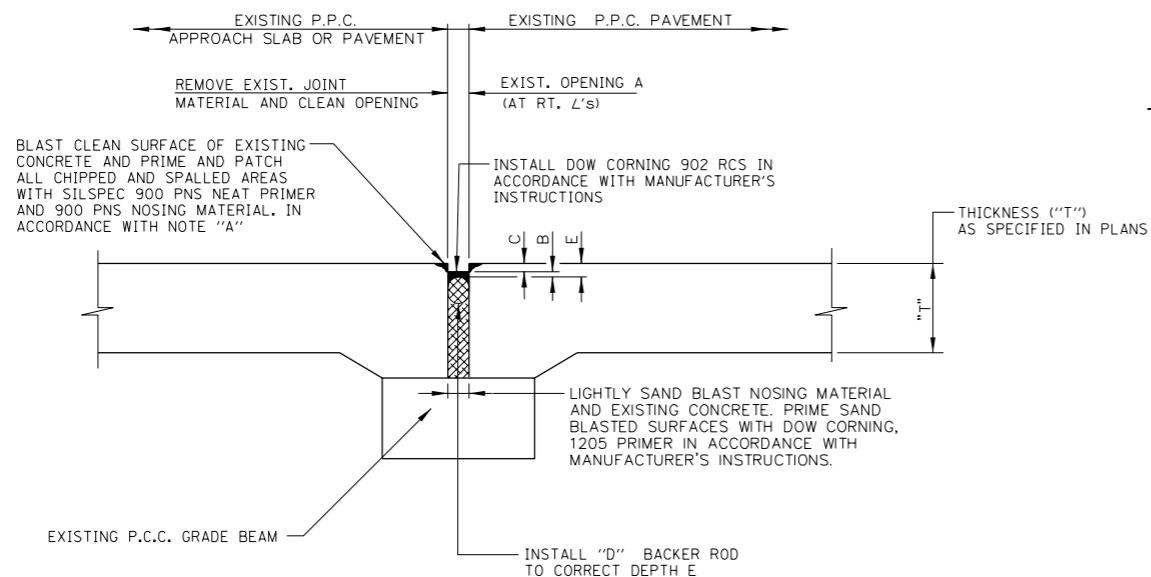
PROPOSED JEENE EXPANSION JOINT

TYPE "III" JOINT REPLACEMENT DETAILS

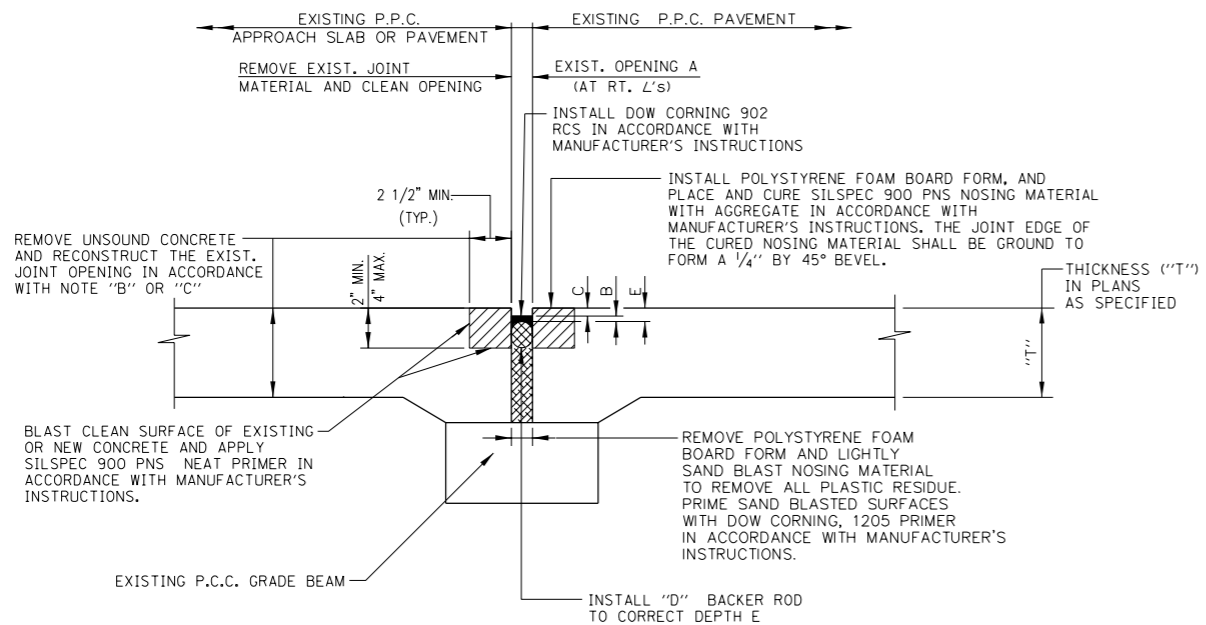
NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS \"NOTE TO DSE\" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

APPROVED: *Jeff Daley*
 CHIEF ENGINEER
 DATE: 6-14-2006

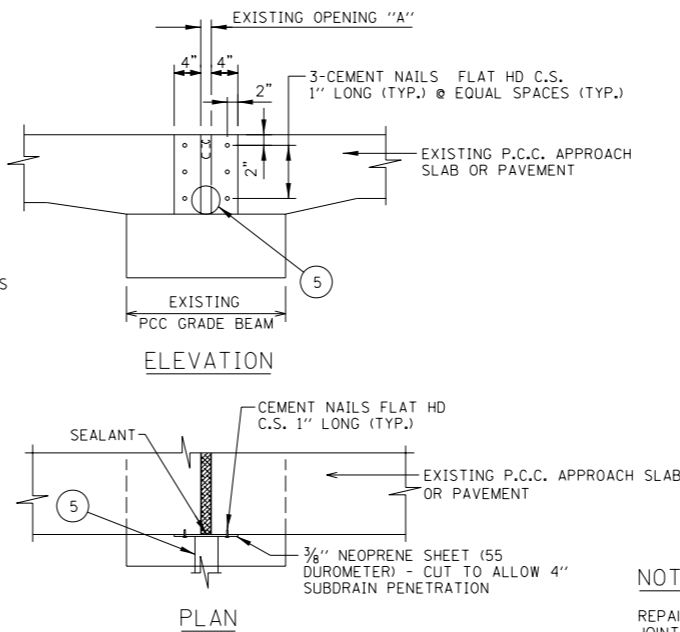


CONCRETE PRESSURE RELIEF JOINT REPAIR - TYPE I



CONCRETE PRESSURE RELIEF JOINT REPAIR - TYPE II

EXISTING CONCRETE PRESSURE RELIEF JOINT REPAIR DETAILS



END CAP DETAILS

DIMENSION TABLE:

A	B	C	D	E
JOINT OPENING	SEALANT THICKNESS	RECESS/SEALANT	BACKER ROD DIA.	TOTAL DEPTH
1"	1/2"	1/2"	1/4"	1"
1 1/2"	1/2"	1/2"	2"	1"
2"	1/2"	1/2"	3"	1"
2 1/2"	1/2"	1/2"	3"	1"
3"	1/2"	3/4"	4"	1 1/4"
4"	5/8"	3/4"	5"	1 3/8"
5"	5/8"	3/4"	6"	1 3/8"

NOTE A:

REPAIR CHIPS AND SPALLS, UP TO 1" IN DEPTH, ALONG THE EDGES OF THE EXISTING JOINT OPENING WITH NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND THE STANDARD SPECIFICATIONS.

NOTE B:

SAW CUT (2") AND REMOVE UNSOUND CONCRETE UP TO 4" IN DEPTH AND RECONSTRUCT THE EXISTING JOINT OPENING WITH NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND THE STANDARD SPECIFICATIONS.

NOTE C:

WHERE THE DEPTH OF UNSOUND CONCRETE EXCEEDS 4" REMOVE THE DETERIORATED CONCRETE TO THE BOTTOM OF THE SLAB OR TO SOUND CONCRETE AS DETERMINED BY THE ENGINEER. THE JOINT SHALL BE RECONSTRUCTED WITH A 2" x 2 1/2" BLOCKOUT FOR NOSING MATERIAL IN ACCORDANCE WITH THESE DETAILS AND THE STANDARD SPECIFICATIONS.

NOTES FOR EXISTING CONCRETE PRESSURE RELIEF JOINT REPAIR:

1. NEW CONCRETE SHALL BE CURED IN ACCORDANCE WITH SUBSECTION 1020.13 (d) (3) OF THE IDOT STANDARD SPECIFICATIONS PRIOR TO PLACING THE NOSING MATERIAL.
2. THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR CONCRETE PRESSURE RELIEF JOINT REPAIR TYPE I SHALL CONSIST OF REMOVING ALL EXISTING JOINT MATERIAL; PATCHING THE EDGES OF THE OPENING WHERE REQUIRED; INSTALLING END CAPS AND OUTLET SUBDRAINS AND SEALING THE EXISTING OPENING.
3. THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR CONCRETE PRESSURE RELIEF JOINT REPAIR TYPE II SHALL CONSIST OF REMOVING ALL EXISTING JOINT MATERIAL AND UNSOUND CONCRETE; RECONSTRUCTING THE EXISTING OPENING WITH FORMED CONCRETE AND NOSING MATERIAL; INSTALLING END CAPS AND OUTLET SUBDRAIN AND SEALING THE RECONSTRUCTED OPENING. ANY CONCRETE REMOVAL AND JOINT RECONSTRUCTION BEYOND A 2 1/2" WIDE BY 4" DEEP POCKET FOR THE NOSING MATERIAL SHALL BE PAID FOR AS "FORMED CONCRETE REPAIR" IN ACCORDANCE WITH IDOT SPECIFICATION GBSP#1.
4. FOR ADDITIONAL REQUIREMENTS SEE STANDARD SPECIFICATIONS.
5. OUTLET SUBDRAIN (4") FROM EDGE OF PAVEMENT TO NEW OR EXISTING SUBSURFACE PAVEMENT DRAIN (INDIRECTLY PAID FOR UNDER EXISTING CONCRETE PRESSURE RELIEF JOINT REPAIR).

NOTE TO DSE

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DSE PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES ARE CONTAINED W/IN THE ICAPP MANUAL RESOURCE CD OR AVAILABLE FROM THE AUTHORITY. THE DSE SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION & INSERTION INTO A CONTRACT. THIS "NOTE TO DSE" SHALL BE REMOVED BY THE DSE PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

APPROVED: *Jeff Daley*
 CHIEF ENGINEER
 DATE: 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

PRESSURE RELIEF JOINT REPAIR
 BASE SHEET

DATE: 5-12-2005
 STANDARD NO.: BASE SHEET