

| STATE OF | PROJECT | SHEET NO. | TOTAL SHEETS |
|----------|----------------|-----------|--------------|
| S.D. | P-B 0244(11)27 | 1 | 7 |

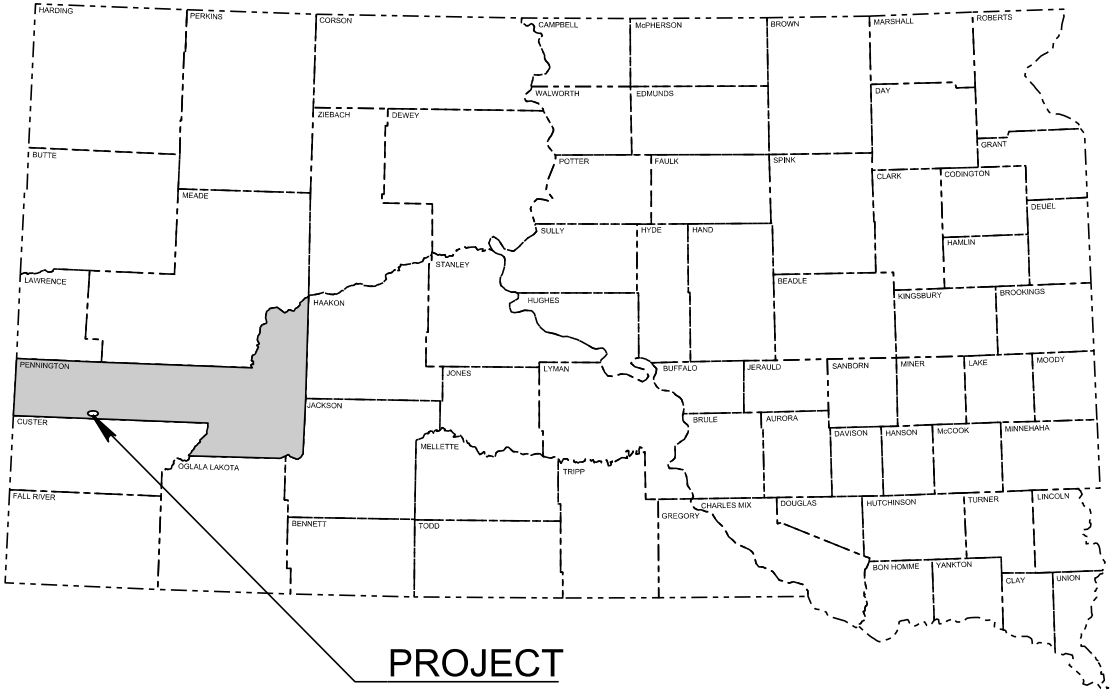
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
PROJECT P-B 0244(11)27
SD HIGHWAY 244
PENNINGTON COUNTY

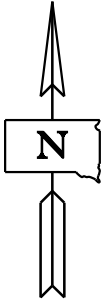
STRUCTURAL STEEL
PCN 08UD

INDEX OF SHEETS -

Sheet 1 Layout Map and Index
Sheet 2 Estimate of Structure Quantities
Sheet 3 to 7 Str. No. 52-261-428 98' - 10 9/16" Comp. Steel Girder Bridge

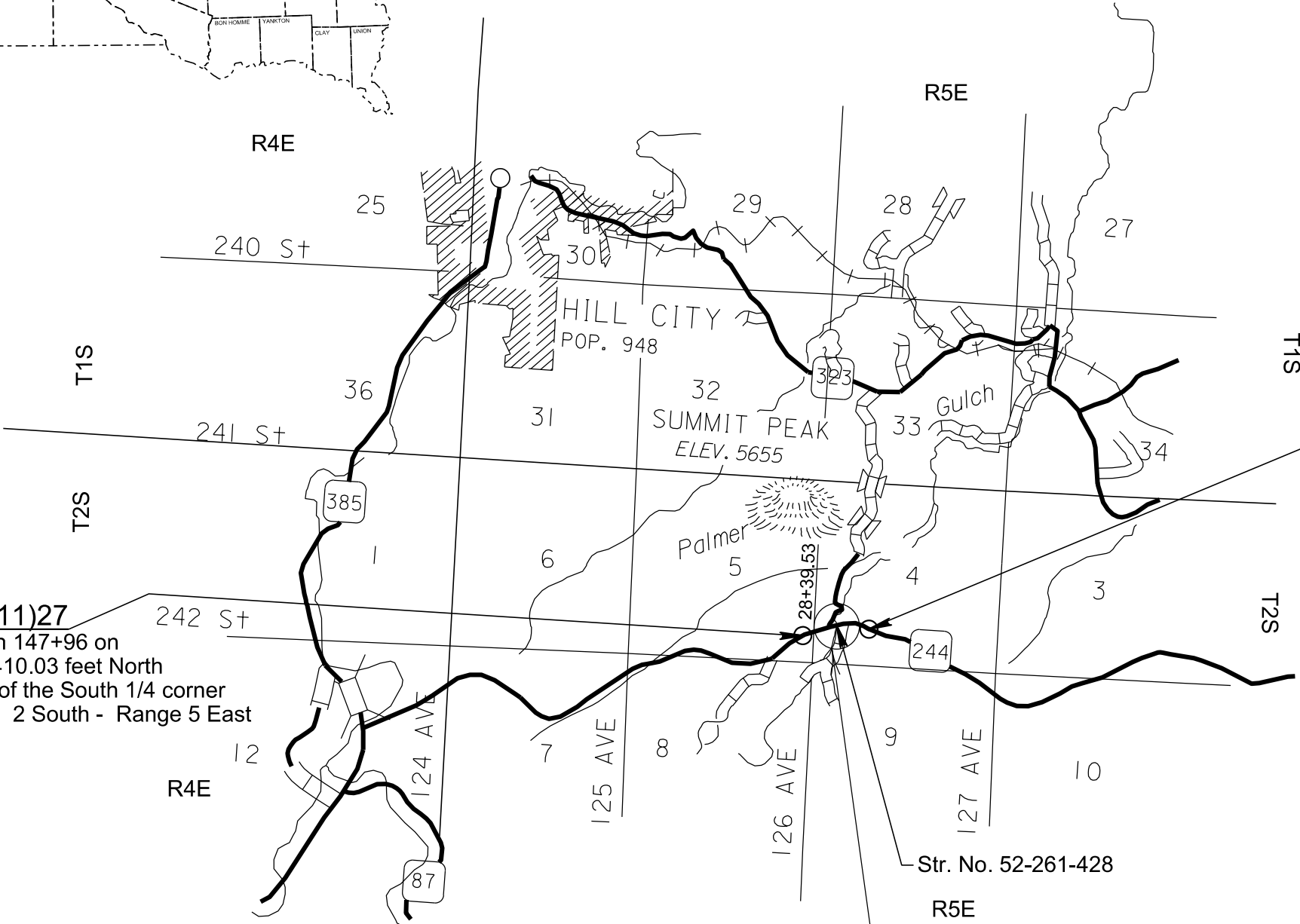


PROJECT



BEGIN P-B 0244(11)27
Station 20+60 = Station 147+96 on
project 9-1(3) located 410.03 feet North
and 1985.75 feet East of the South 1/4 corner
of Section 5 -Township 2 South - Range 5 East
of the B.H.M.
MRM 26.00 + 0.817

END P-B 0244(11)27
Station 41+60 = Station 170+42.34 on
Project 9-1(3) Located 1465.98 feet North
and 1373.96 feet West of the South 1/4 corner
of Section 4 -Township 2 South - Range 5 East
of the B.H.M.
MRM 27.09 + 0.114



Sta. 34 + 84.14 to 35 + 83.02
Str. No. 52-261-428
98' - 10 9/16" Comp. Steel Girder Bridge

| | | | |
|----------|----------------|-----------|--------------|
| STATE OF | PROJECT | SHEET NO. | TOTAL SHEETS |
| S.D. | P-B 0244(11)27 | 2 | 7 |

ESTIMATE OF STRUCTURE QUANTITES

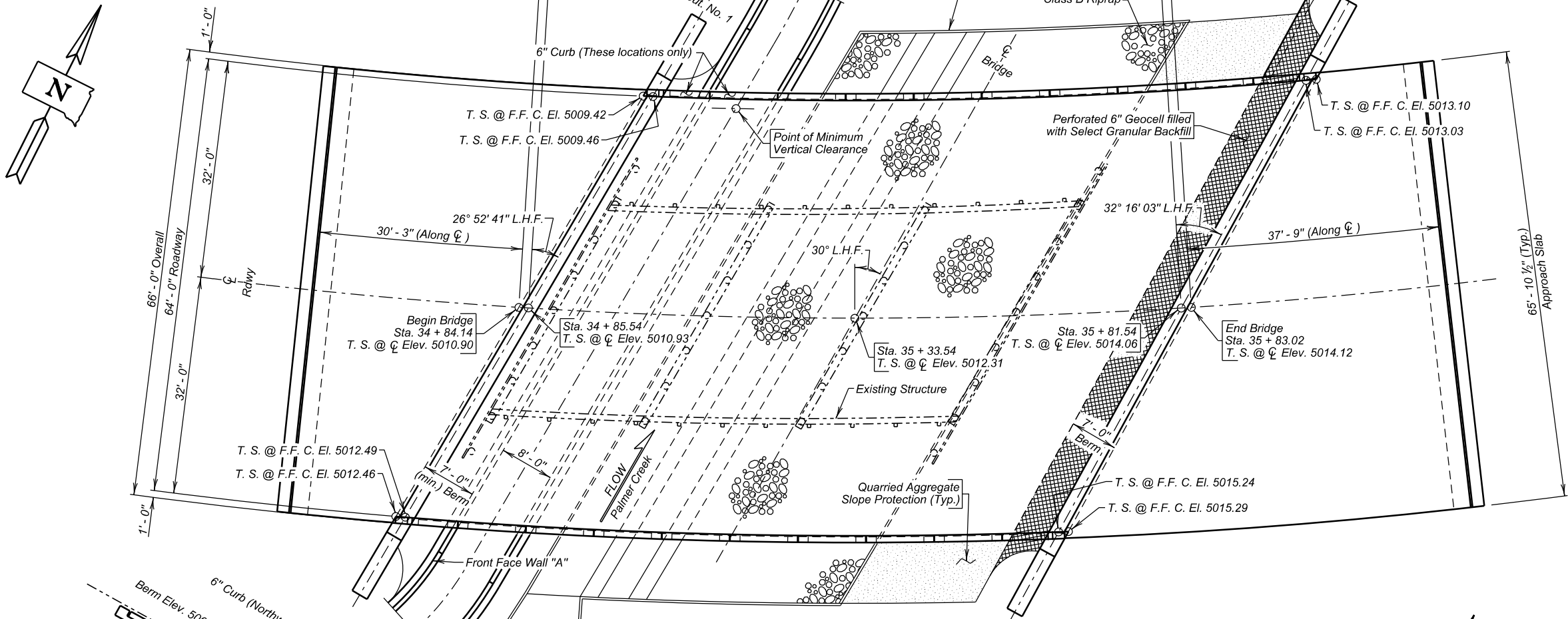
Str. No. 52-261-428

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|---------------------------|----------|------|
| 410E0025 | Structural Steel, Furnish | Lump Sum | LS |

The elevations shown in these plans are based on the National Geodetic Survey (NGS) North American Vertical Datum of 1988 (NAVD88).

NOTES:
T.S. @ ∇ El. = Top of Slab at Centerline Elevation
T.S. @ F.F. of C. El. = Top of Slab at Front Face of Curb Elevation

| STATE OF | PROJECT | SHEET NO. | TOTAL SHEETS |
|----------|----------------|-----------|--------------|
| S.D. | P-B 0244(11)27 | 3 | 7 |

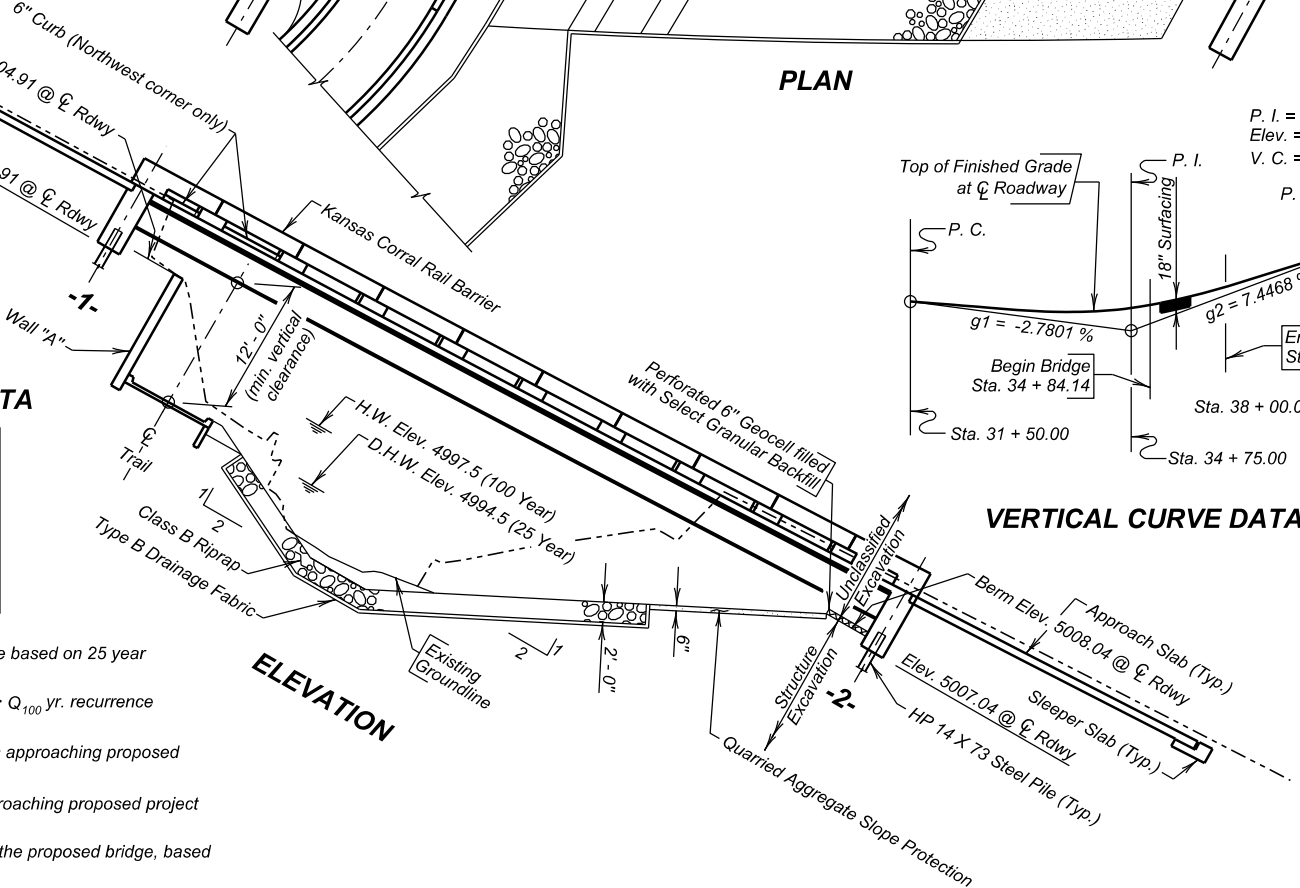


PLAN

HYDRAULIC DATA

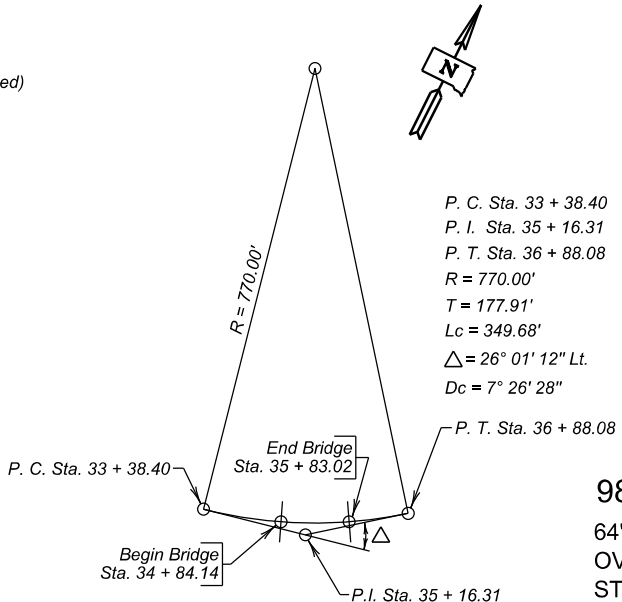
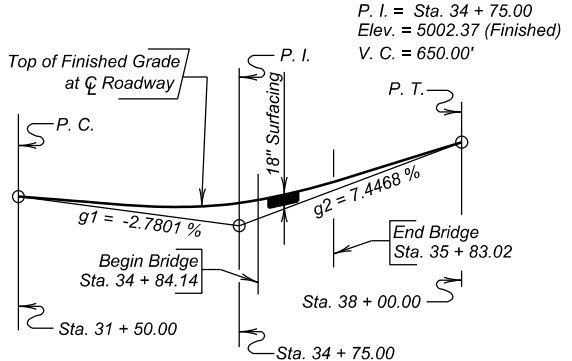
| | |
|-----------|----------------|
| Q_d | 556 cfs |
| A_d | 103 sq. ft. |
| V_d | 5.4 fps |
| Q_F | 556 cfs |
| Q_{100} | 1689 cfs |
| Q_{OT} | $>Q_{100}$ cfs |
| V_{max} | 6.2 fps |

Q_d = Design discharge for the proposed bridge based on 25 year frequency. El. 4994.5.
 Q_{OT} = Overlapping discharge and frequency $> Q_{100}$ yr. recurrence interval. El. 5009.0. @ Sta. 33 + 26 ±
 Q_F = Designated peak discharge for the basin approaching proposed project based on 25 year frequency.
 Q_{100} = Computed discharge for the basin approaching proposed project based on 100 year frequency. El. 4997.9.
 V_{max} = Maximum computed outlet velocity for the proposed bridge, based on 100 year frequency.



ELEVATION

VERTICAL CURVE DATA



HORIZONTAL CURVE DATA

GENERAL DRAWING

FOR
98' - 10 9/16" COMP. STEEL GIRDER BRIDGE
64' - 0" ROADWAY
OVER PALMER CREEK
STA. 34 + 84.14 TO STA. 35 + 83.02
STR. NO. 52-261-428
PCN 08UD
30° L.H.F. SKEW
SEC. 4-T2S-R5E
P-B 0244(11)27
HL-93

PENNINGTON COUNTY
S. D. DEPT. OF TRANSPORTATION

NOVEMBER 2021

- X071 -

1 OF 5

PLANS BY:
OFFICE OF BRIDGE DESIGN, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

| | | | |
|-------------------------------|-------------------------------|------------------|-------------------------------------|
| DESIGNED BY BB PENN08UD | CK. DES. BY PW 08UDTA01 | DRAFTED BY BT | Steve A. Johnson BRIDGE ENGINEER |
|-------------------------------|-------------------------------|------------------|-------------------------------------|

ESTIMATE OF STRUCTURE QUANTITIES

| DESCRIPTION | QUANTITY | UNIT | REMARKS |
|----------------------------|----------|------|-----------------|
| ΔStructural Steel, Furnish | Lump Sum | LS | See Spec. Prov. |

Δ For informational purposes only, the estimated weight of structural steel is 296,688 pounds.

BRIDGE SPECIFICATIONS

- Design Specifications: AASHTO LRFD Bridge Design Specifications, 9th Edition.
- Construction Specifications: South Dakota Standard Specifications for Roads and Bridges, 2015 Edition and required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.
- All welding and welding inspections will be in conformance with the latest edition of AASHTO/AWS D1.5/D1.5M Bridge Welding Code unless noted otherwise in the plans.

BRIDGE DESIGN LOADING

- AASHTO HL-93.
- Dead Load includes 22 psf for future wearing surface on the roadway.

DESIGN MATERIAL STRENGTHS

Structural Steel (ASTM A709 Gr. 50WT2) $f_y = 50,000$ psi

CONNECTION OF GIRDER TO PILE

- Steel for the bearing plates will conform to ASTM A709 Gr. 50.
- Payment for furnishing the bearing plates will be incidental to the contract lump sum price for Structural Steel, Furnish.

GIRDERS

- Structural steel will conform to ASTM A709 Gr. 50WT2. Angles in the diaphragms will conform to ASTM A588 Grade 50.
- Bolts, nuts and washers will conform to ASTM F3125, Grade A325, Type 3.
- Shear connectors will be provided, but not installed. Shear connectors shown are for information only and will be field welded to the girders under a future contract.
- Shear connectors will conform to Section 7.3 Type B of the Bridge Welding Code. The shear connectors that will be attached to the girder will be 7/8-inch diameter x 5 inches long and will conform to ASTM 108, Gr. 1015, 1018, or 1020. The connectors will meet the following minimum mechanical property requirements for Type B studs,

| | |
|-------------------|--------|
| Tensile Strength | 60 ksi |
| Yield Strength | 60 ksi |
| Elongation | 20% |
| Reduction of Area | 50% |

- The cost of welding and weld inspection will be incidental to the contract lump sum price for Structural Steel, Furnish.
- See Diaphragm Details for the notes concerning diaphragms.
- Structural steel used in all girders will comply with the Charpy-V-Notch toughness requirements set forth in Section 970 of the Construction Specifications. Material greater than 1 1/2 inches in thickness will require frequency (P) testing in lieu of heat lot (H) testing.
- All structural steel surfaces of the superstructure will be blast cleaned to a commercial finish, in accordance with SSPC SP6, at the fabricator. Abrasives used for blast cleaning will be clean dry sand, steel shot, mineral grit or manufactured grit. Fins, tears, slivers, and burred or sharp edges will be removed by grinding and then re-blasted to achieve the specified finish.
- Dead Load camber and curvature will be achieved by heating the girders. Do not induce or correct camber or curvature in girders by cold bending without prior approval from the Engineer.

BOLT TESTING

The certified mill test reports for all bolts used on the project will include the test results for all the testing specified in section 972.2 D of the Construction Specifications. Some of these tests are supplemental tests that must be requested at the time the bolts are ordered. It is the responsibility of the Contractor to notify the bolt supplier of these requirements.

DELIVERY OF STRUCTURAL STEEL

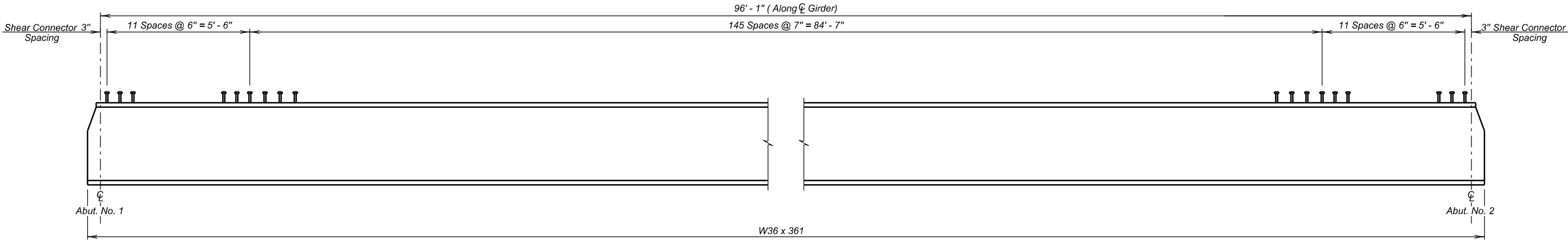
- All structural steel will be delivered to the job site. Refer to the Special Provision for Contract Time for storage and delivery timeframe requirements. The contact person regarding delivery arrangements is Custer Area Engineer, Rich Zacher at (605) 673-4948.
- All costs involved with the transportation of the structural steel to the job site will be included in the contract lump sum price for Structural Steel, Furnish.

TAX LIABILITY

The South Dakota Department of Transportation (SDDOT) is a South Dakota sales tax-exempt government entity. Therefore, a Certificate of Exemption will be provided to the successful bidding party which excuses the party from paying sales tax on the materials being furnished to the SDDOT. It is the responsibility of bidding parties to contact the SD Department of Revenue at 1-800-829-9188 to determine tax licensure requirements. A South Dakota Contractors Excise Tax License is not required for this pre-purchase contract as it is not considered a reality improvement.

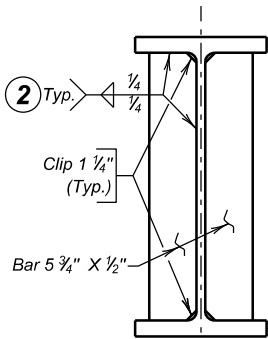
ESTIMATE OF STRUCTURE QUANTITIES AND NOTES
FOR
98' - 10 9/16" COMP. STEEL GIRDER BRIDGE
STR. NO. 52-261-428
NOVEMBER 2021

| STATE OF | PROJECT | SHEET NO. | TOTAL SHEETS |
|----------|----------------|-----------|--------------|
| S.D. | P-B 0244(11)27 | 5 | 7 |

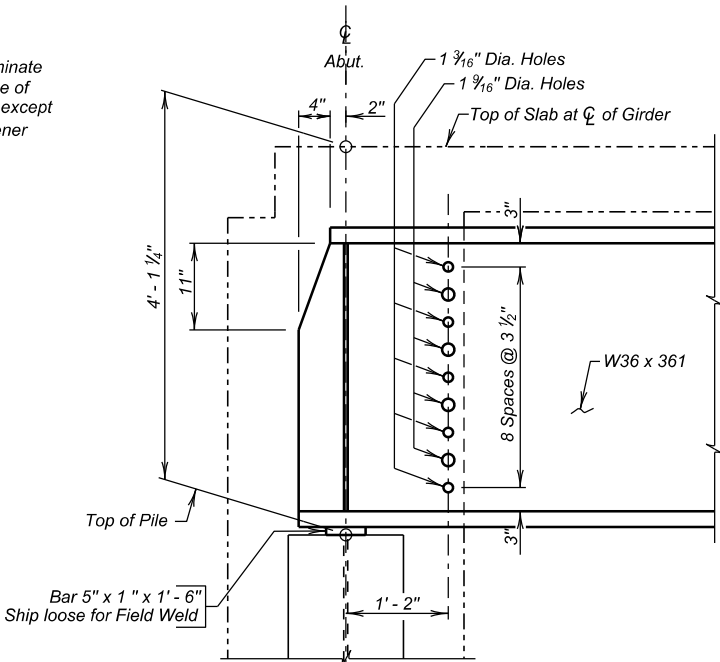


GIRDER LAYOUT

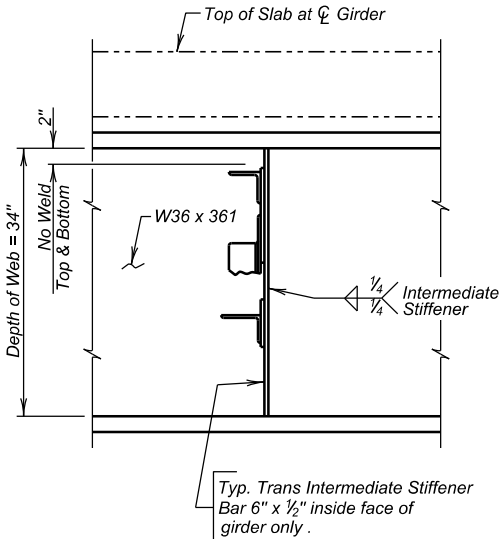
2 NOTE: All fillet welds will terminate $\frac{1}{2}$ " from edge of stiffener, edge of flange, or clip as appropriate, except weld from clip to edge of stiffener at top flange.



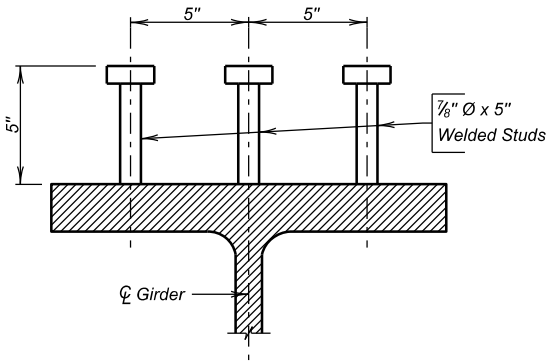
END VIEW



TYPICAL SECTION AT ABUTMENTS
(Parallel to Centerline of Girders)



TYPICAL SECTION AT DIAPHRAGM STIFFENER



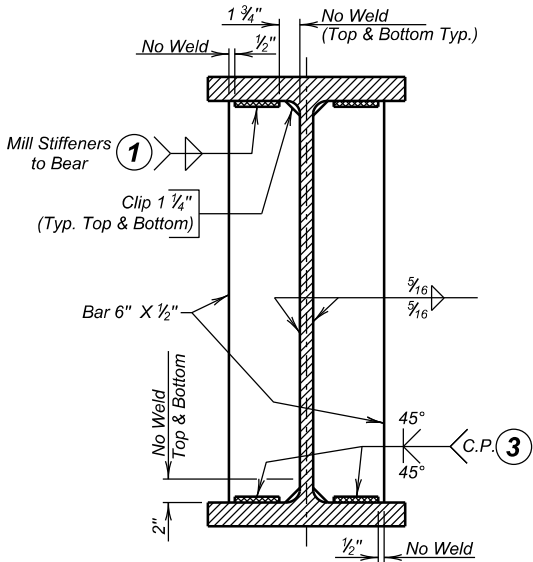
SHEAR CONNECTOR DETAILS

Welded Stud Shear Connectors are spaced as shown on Girder Layout. Shear Connectors will be field installed and are shown here for informational purposes only. Payment for providing Shear Connectors will be included in the Lump Sum bid for Structural Steel, Furnish. 504 Shear Connectors per Girder.

NOTES:

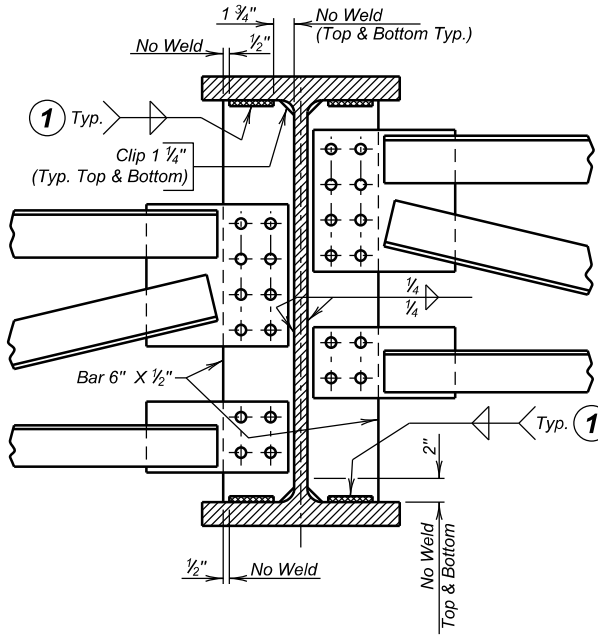
- See DIAPHRAGM DETAILS Sheet for Diaphragm Details.
- See FRAMING DIAGRAM, CAMBER, & ERECTION DATA Sheet for spacing of Diaphragms, Stiffeners, and Girder Camber.
- All dimensions shown are horizontal or vertical.
- All Stiffeners and Girder Ends will be made normal to flanges, except bearing stiffeners at abutments will be vertical.
- Stiffeners to have tight fit top and bottom.
- Dimensions shown are for steel temperature of 45° F.

3 Alternately, Mill Stiffeners to Bear & use $\frac{5}{16}$ " Fillet Weld, same as at Top Flange.



DETAILS OF STIFFENERS AT BEARINGS
(Exterior Girder shown)

1 NOTE: All fillet welds attaching diaphragm or bearing stiffeners to girder flanges, will terminate $\frac{1}{2}$ " from edge of stiffener, edge of flange, or clip as appropriate. Weld size to be $\frac{5}{16}$ ".



DETAILS OF STIFFENERS AT INTERMEDIATE DIAPHRAGMS
(Interior Girder shown)

GIRDER LAYOUT DETAILS

FOR

98' - 10 9/16" COMP. STEEL GIRDER BRIDGE

64' - 0" ROADWAY
OVER PALMER CREEK
STA. 34 + 84.14 TO STA. 35 + 83.02
STR. NO. 52-261-428

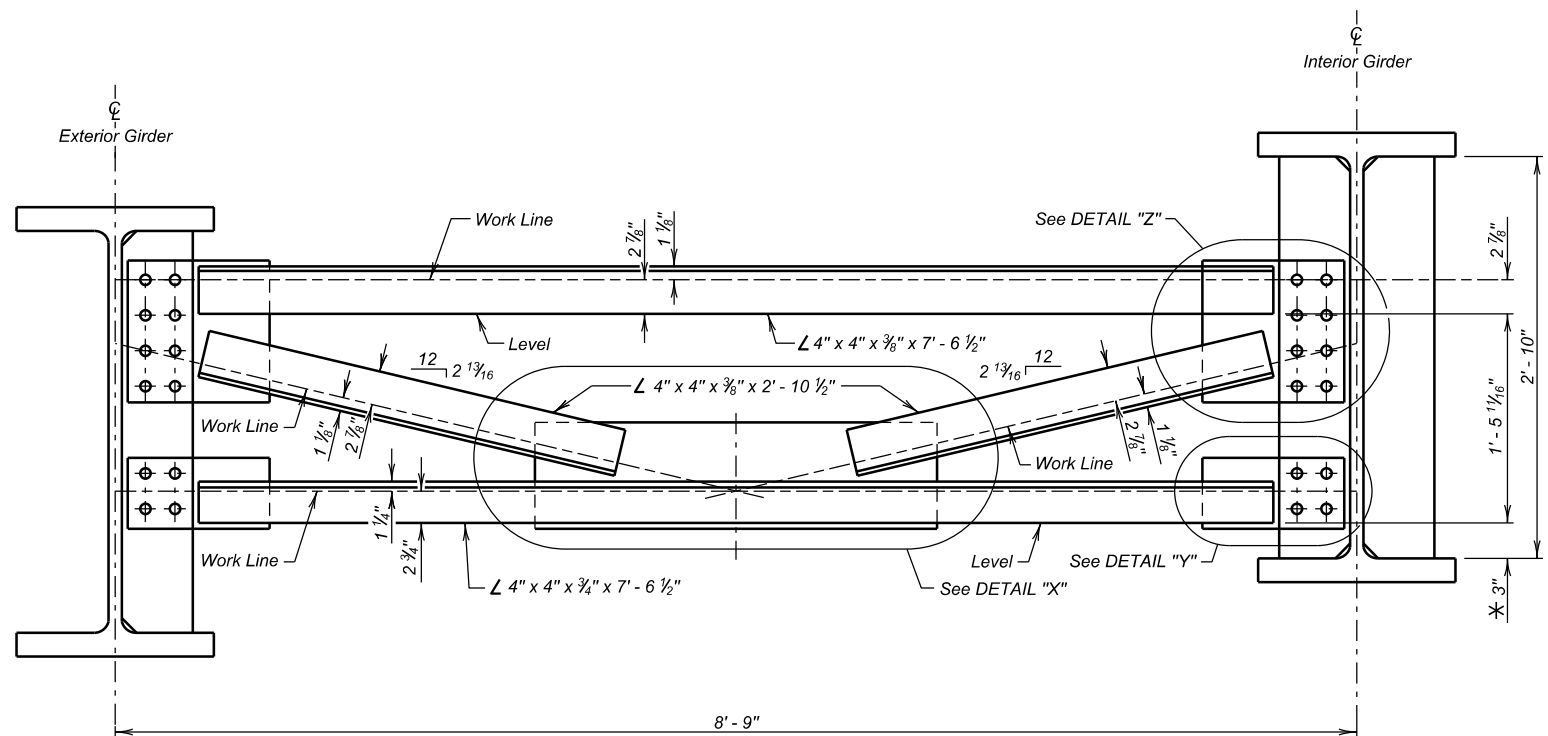
30° L.H.F. SKEW
SEC. 4-T2S-R5E
P-B 0244(11)27
HL-93

PENNINGTON COUNTY
S. D. DEPT. OF TRANSPORTATION
NOVEMBER 2021

3 OF **5**

| | | | |
|-------------------------------|-------------------------------|------------------|-------------------------------------|
| DESIGNED BY BB PENN08UD | CK. DES. BY PW 08UDTA03 | DRAFTED BY BT | Steve A. Johnson BRIDGE ENGINEER |
|-------------------------------|-------------------------------|------------------|-------------------------------------|

| | | | |
|----------|----------------|-----------|--------------|
| STATE OF | PROJECT | SHEET NO. | TOTAL SHEETS |
| S.D. | P-B 0244(11)27 | 6 | 7 |

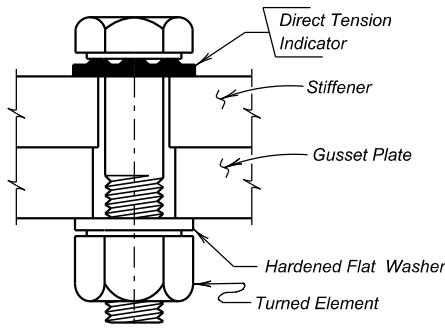


DIAPHRAGM DETAIL
(Weight of One Unit = 393 lbs.)

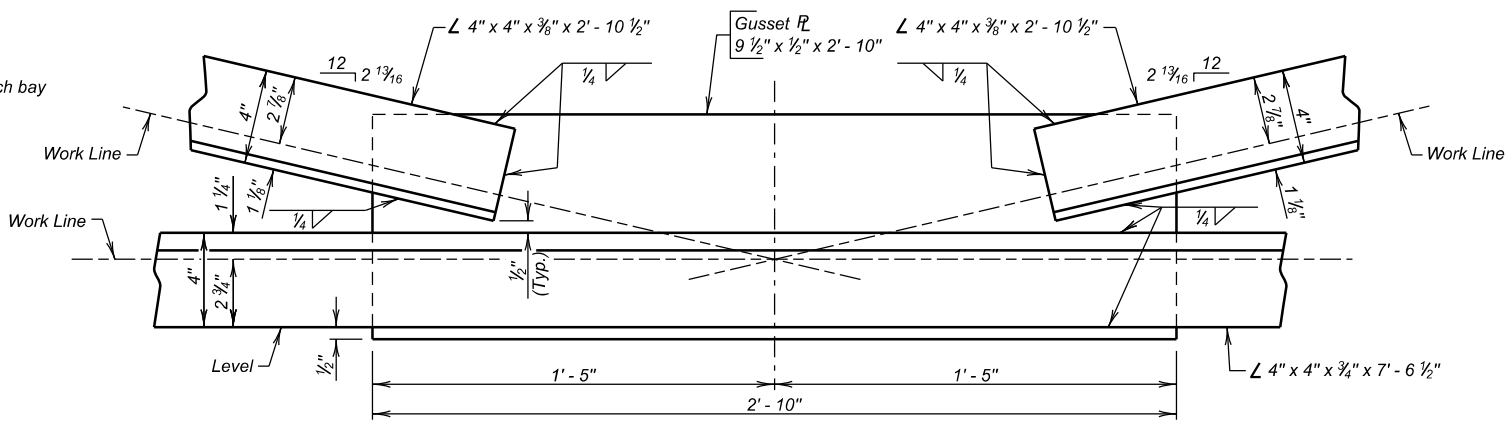
* 3" above high girder in each bay

GENERAL NOTES

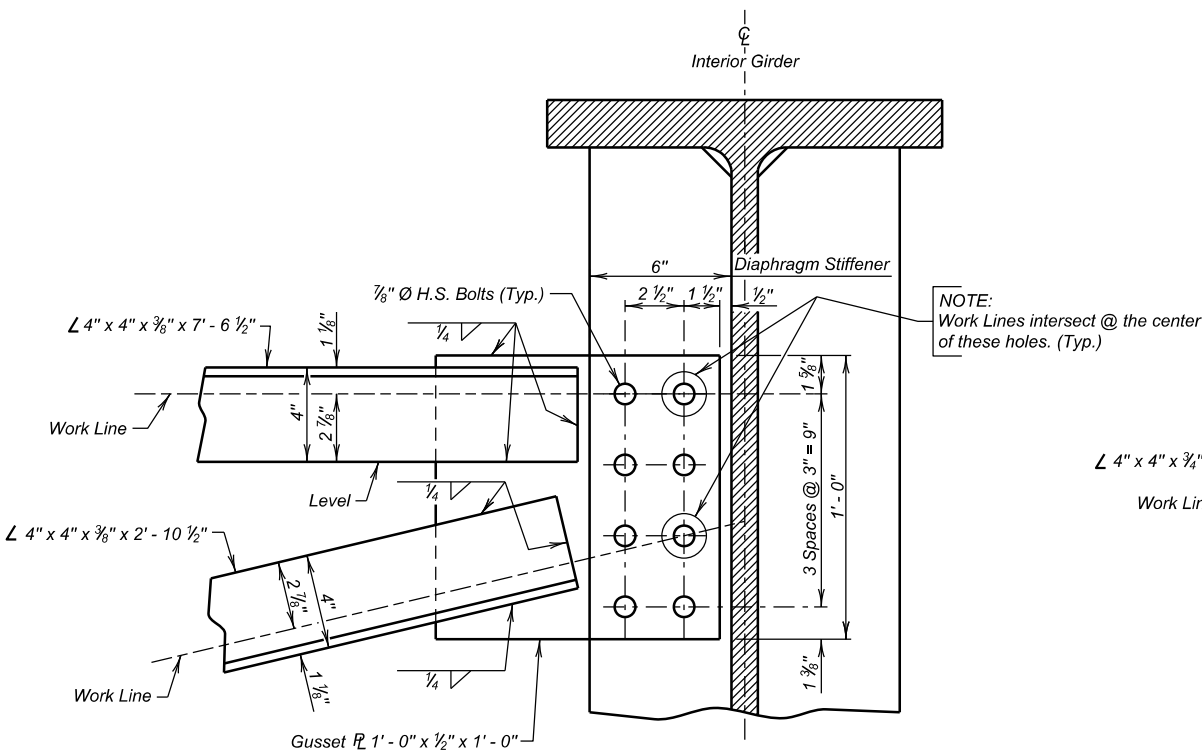
1. The Steel Diaphragms are included in the quantity for Structural Steel, Furnish.
2. Use 1 1/8" Ø bolt holes in the 1/2" gusset plates. Use 1 3/16" Ø bolt holes in the stiffener plates.
3. The 7/8" High Strength bolts, nuts, and washers will conform to ASTM F3125 Grade A-325, Type 3. The bolts will be the heavy hexagon head structural type with heavy semi-finished hexagon nut and hardened washer.
4. Terminate all welds 1/2" from the edges of the gusset plates.



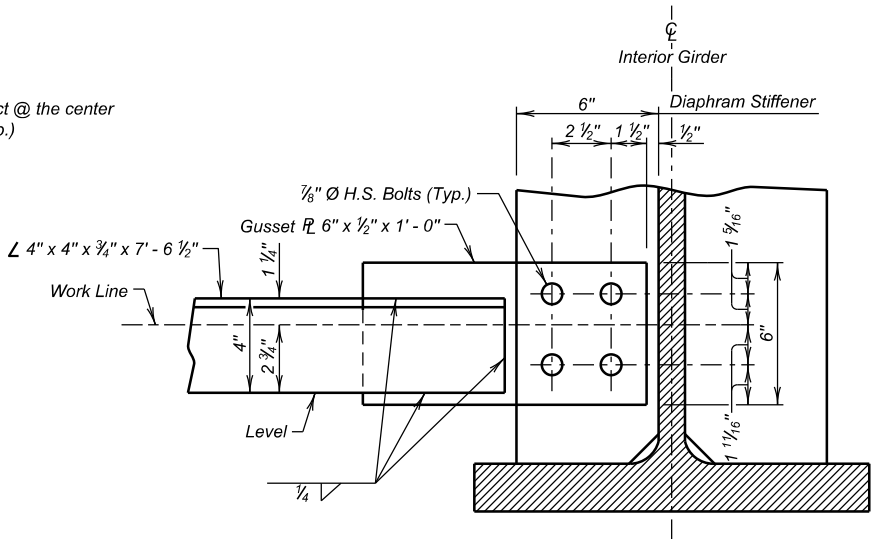
**DIRECT TENSION INDICATOR
DETAIL**



DETAIL "X"



DETAIL "Z"



DETAIL "Y"

DIAPHRAGM DETAILS

FOR

98' - 10 9/16" COMP. STEEL GIRDER BRIDGE

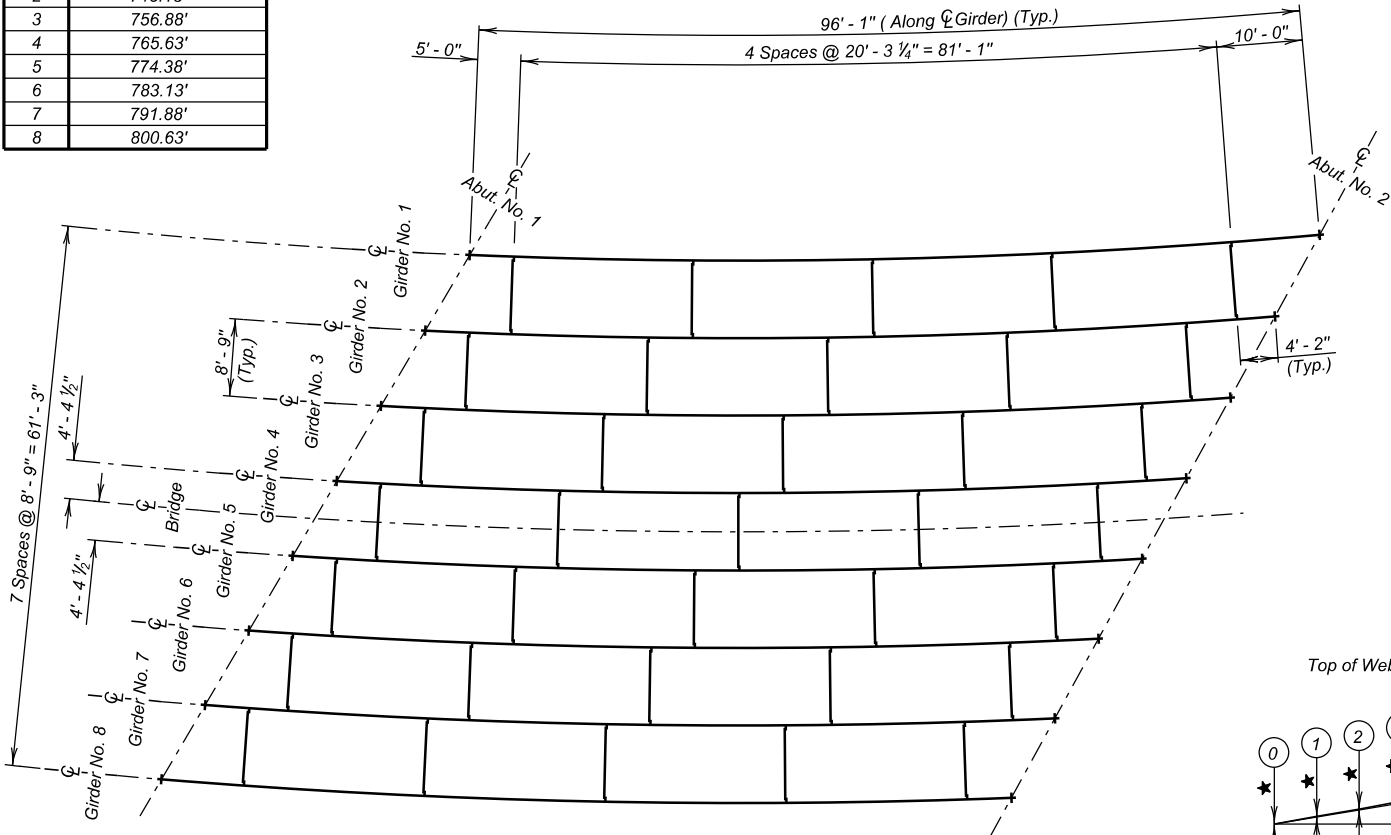
64' - 0" ROADWAY
OVER PALMER CREEK
STA. 34 + 84.14 TO STA. 35 + 83.02
STR. NO. 52-261-428

30° L.H.F. SKEW
SEC. 4-T2S-R5E
P-B 0244(11)27
HL-93

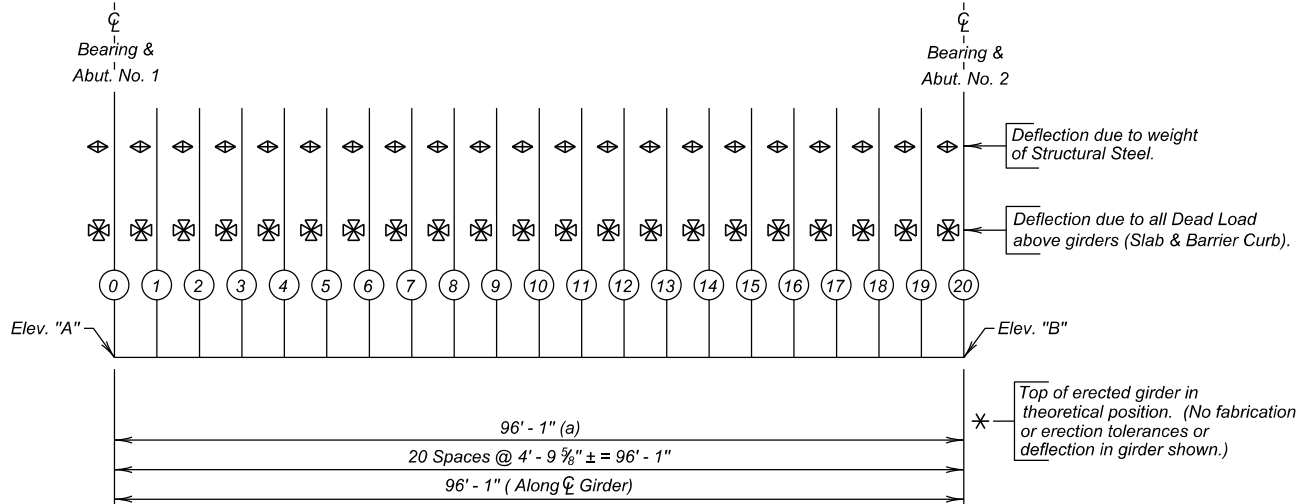
PENNINGTON COUNTY
S. D. DEPT. OF TRANSPORTATION
NOVEMBER 2021

| | | | |
|-------------------------------|-------------------------------|------------------|-------------------------------------|
| DESIGNED BY BB PENN08UD | CK. DES. BY PW 08UDTA04 | DRAFTED BY BT | Steve A. Johnson BRIDGE ENGINEER |
|-------------------------------|-------------------------------|------------------|-------------------------------------|

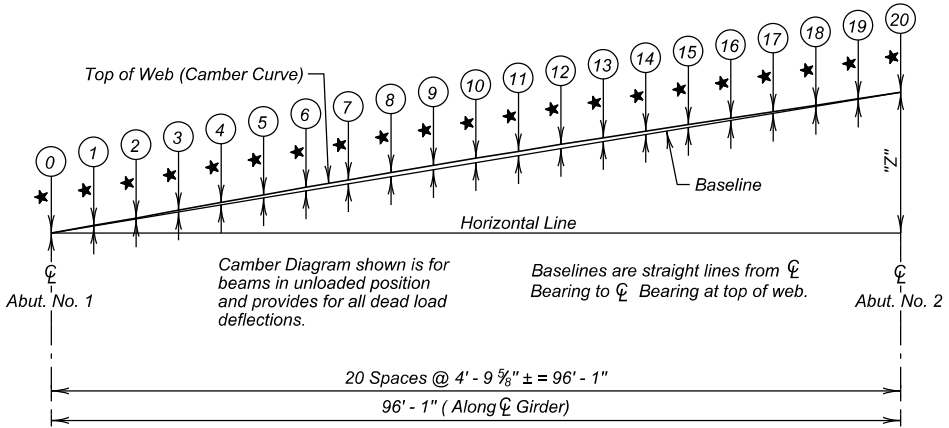
| Girder No. | RADIUS |
|------------|---------|
| 1 | 739.38' |
| 2 | 748.13' |
| 3 | 756.88' |
| 4 | 765.63' |
| 5 | 774.38' |
| 6 | 783.13' |
| 7 | 791.88' |
| 8 | 800.63' |



FRAMING DIAGRAM



GIRDER ERECTION DIAGRAM



CAMBER CUTTING DIAGRAM
(Heat camber into webs of all girders as shown)

| Girder No. | CAMBER DIMENSIONS |
|------------|-------------------|
| | "Z" |
| 1 | 3.544' |
| 2 | 3.417' |
| 3 | 3.296' |
| 4 | 3.180' |
| 5 | 3.070' |
| 6 | 2.963' |
| 7 | 2.862' |
| 8 | 2.765' |

NOTE:
These elevations and slopes occur at a time after girder erection is completed but prior to any placement of concrete. Slopes shown are an imaginary straight line between points at beam ends and are (+) towards increasing stations.

| GIRDER ERECTION ELEVATIONS AND SLOPES | | | |
|---------------------------------------|----------------------------|----------|------------|
| Girder No. | ELEVATIONS (Top of Girder) | | SLOPES (%) |
| | "A" | "B" | |
| 1 | 5009.524 | 5013.068 | 3.668 |
| 2 | 5009.918 | 5013.335 | 3.558 |
| 3 | 5010.320 | 5013.616 | 3.433 |
| 4 | 5010.728 | 5013.908 | 3.313 |
| 5 | 5011.142 | 5014.211 | 3.197 |
| 6 | 5011.562 | 5014.525 | 3.086 |
| 7 | 5011.987 | 5014.849 | 2.980 |
| 8 | 5012.418 | 5015.182 | 2.877 |

| ★ CAMBER DIMENSIONS | | | | | | | | |
|---------------------|------------|---------|--------|--------|---------|---------|--------|--------|
| | Girder No. | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0 | 0" | 0" | 0" | 0" | 0" | 0" | 0" | 0" |
| 1 | 0" | 1/16" | 1/8" | 1/8" | 1/8" | 1/8" | 3/16" | 3/16" |
| 2 | 1/16" | 3/16" | 1/4" | 5/16" | 5/16" | 5/16" | 3/8" | 7/16" |
| 3 | 1/8" | 5/16" | 3/8" | 7/16" | 7/16" | 1/2" | 9/16" | 5/8" |
| 4 | 1/4" | 7/16" | 5/8" | 3/4" | 1 1/16" | 1 1/16" | 3/4" | 7/8" |
| 5 | 3/8" | 1/2" | 3/4" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 6 | 7/16" | 1 1/16" | 1 1/8" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/4" |
| 7 | 3/4" | 1 1/8" | 1 1/4" | 1 1/4" | 1 1/8" | 1 1/8" | 1 1/8" | 1 3/8" |
| 8 | 1 1/16" | 1 1/8" | 1" | 1 1/8" | 1 1/8" | 1 1/4" | 1 1/8" | 1 1/8" |
| 9 | 1 1/8" | 1 1/8" | 1" | 1 1/8" | 1 1/8" | 1 1/4" | 1 1/8" | 1 1/8" |
| 10 | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/4" | 1 1/8" | 1 1/8" | 1 1/8" |
| 11 | 1 1/2" | 1 1/8" | 1" | 1 1/8" | 1 1/8" | 1 1/4" | 1 1/8" | 1 1/8" |
| 12 | 1 1/2" | 1 1/8" | 1" | 1 1/8" | 1 1/8" | 1 1/4" | 1 1/8" | 1 1/8" |
| 13 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 14 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 15 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 16 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 17 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 18 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 19 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |
| 20 | 1 1/2" | 1 1/8" | 1" | 1" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" |

| ♦ TOTAL STEEL DEFLECTION | | | | | | | | |
|--------------------------|------------|---------|---------|---------|---------|---------|---------|---------|
| | Girder No. | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0 | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" |
| 1 | -0.153" | -0.158" | -0.162" | -0.163" | -0.163" | -0.165" | -0.172" | -0.182" |
| 2 | -0.306" | -0.317" | -0.324" | -0.326" | -0.327" | -0.331" | -0.344" | -0.365" |
| 3 | -0.439" | -0.456" | -0.466" | -0.469" | -0.471" | -0.476" | -0.495" | -0.526" |
| 4 | -0.573" | -0.595" | -0.608" | -0.613" | -0.614" | -0.622" | -0.646" | -0.688" |
| 5 | -0.676" | -0.704" | -0.719" | -0.725" | -0.727" | -0.735" | -0.764" | -0.815" |
| 6 | -0.779" | -0.812" | -0.830" | -0.837" | -0.839" | -0.849" | -0.881" | -0.942" |
| 7 | -0.843" | -0.879" | -0.900" | -0.907" | -0.909" | -0.920" | -0.955" | -1.024" |
| 8 | -0.906" | -0.947" | -0.970" | -0.977" | -0.980" | -0.991" | -1.028" | -1.106" |
| 9 | -0.925" | -0.969" | -0.993" | -1.001" | -1.004" | -1.014" | -1.052" | -1.135" |
| 10 | -0.944" | -0.991" | -1.016" | -1.024" | -1.027" | -1.038" | -1.076" | -1.164" |
| 11 | -0.919" | -0.966" | -0.991" | -0.999" | -1.002" | -1.012" | -1.049" | -1.138" |
| 12 | -0.893" | -0.941" | -0.966" | -0.974" | -0.976" | -0.986" | -1.021" | -1.112" |
| 13 | -0.825" | -0.872" | -0.894" | -0.902" | -0.904" | -0.913" | -0.945" | -1.032" |
| 14 | -0.757" | -0.802" | -0.823" | -0.830" | -0.833" | -0.840" | -0.869" | -0.952" |
| 15 | -0.654" | -0.693" | -0.712" | -0.718" | -0.720" | -0.726" | -0.750" | -0.825" |
| 16 | -0.550" | -0.585" | -0.601" | -0.606" | -0.608" | -0.613" | -0.632" | -0.698" |
| 17 | -0.420" | -0.447" | -0.459" | -0.463" | -0.465" | -0.468" | -0.483" | -0.535" |
| 18 | -0.290" | -0.309" | -0.318" | -0.321" | -0.321" | -0.324" | -0.334" | -0.371" |
| 19 | -0.145" | -0.155" | -0.159" | -0.160" | -0.161" | -0.162" | -0.167" | -0.186" |
| 20 | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" |

| ✱ TOTAL CONCRETE DEFLECTION | | | | | | | | |
|-----------------------------|------------|---------|---------|---------|---------|---------|---------|---------|
| | Girder No. | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0 | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" |
| 1 | -0.318" | -0.351" | -0.370" | -0.378" | -0.379" | -0.379" | -0.382" | -0.389" |
| 2 | -0.635" | -0.701" | -0.740" | -0.756" | -0.758" | -0.758" | -0.764" | -0.778" |
| 3 | -0.916" | -1.009" | -1.065" | -1.087" | -1.090" | -1.090" | -1.100" | -1.124" |
| 4 | -1.197" | -1.317" | -1.389" | -1.418" | -1.422" | -1.422" | -1.436" | -1.471" |
| 5 | -1.415" | -1.556" | -1.641" | -1.675" | -1.680" | -1.680" | -1.697" | -1.745" |
| 6 | -1.634" | -1.795" | -1.893" | -1.932" | -1.938" | -1.938" | -1.958" | -2.019" |
| 7 | -1.770" | -1.944" | -2.051" | -2.094" | -2.100" | -2.099" | -2.122" | -2.196" |
| 8 | -1.906" | -2.094" | -2.209" | -2.255" | -2.262" | -2.260" | -2.286" | -2.372" |
| 9 | -1.949" | -2.143" | -2.261" | -2.308" | -2.315" | -2.313" | -2.339" | -2.436" |
| 10 | -1.992" | -2.191" | -2.313" | -2.361" | -2.368" | -2.366" | -2.393" | -2.500" |
| 11 | -1.939" | -2.136" | -2.255" | -2.302" | -2.309" | -2.306" | -2.332" | -2.444" |
| 12 | -1.887" | -2.081" | -2.198" | -2.244" | -2.250" | -2.246" | -2.271" | -2.388" |
| 13 | -1.744" | -1.927" | -2.035" | -2.078" | -2.083" | -2.079" | -2.101" | -2.217" |
| 14 | -1.602" | -1.773" | -1.873" | -1.912" | -1.917" | -1.913" | -1.932" | -2.046" |
| 15 | -1.383" | -1.533" | -1.620" | -1.653" | -1.657" | -1.654" | -1.669" | -1.773" |
| 16 | -1.164" | -1.294" | -1.367" | -1.395" | -1.398" | -1.395" | -1.407" | -1.500" |
| 17 | -0.889" | -0.989" | -1.045" | -1.066" | -1.069" | -1.066" | -1.075" | -1.149" |
| 18 | -0.614" | -0.684" | -0.723" | -0.738" | -0.739" | -0.737" | -0.742" | -0.798" |
| 19 | -0.307" | -0.342" | -0.361" | -0.369" | -0.370" | -0.369" | -0.371" | -0.399" |
| 20 | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" | 0.000" |

FRAMING DIAGRAM, CAMBER, & ERECTION DATA
FOR
98' - 10 9/16" COMP. STEEL GIRDER BRIDGE
64' - 0" ROADWAY
OVER PALMER CREEK
STA. 34 + 84.14 TO STA. 35 + 83.02
STR. NO. 52-261-428
30° L.H.F. SKEW
SEC. 4-T2S-R5E
P-B 0244(11)27
HL-93

PENNINGTON COUNTY
S. D. DEPT. OF TRANSPORTATION
NOVEMBER 2021