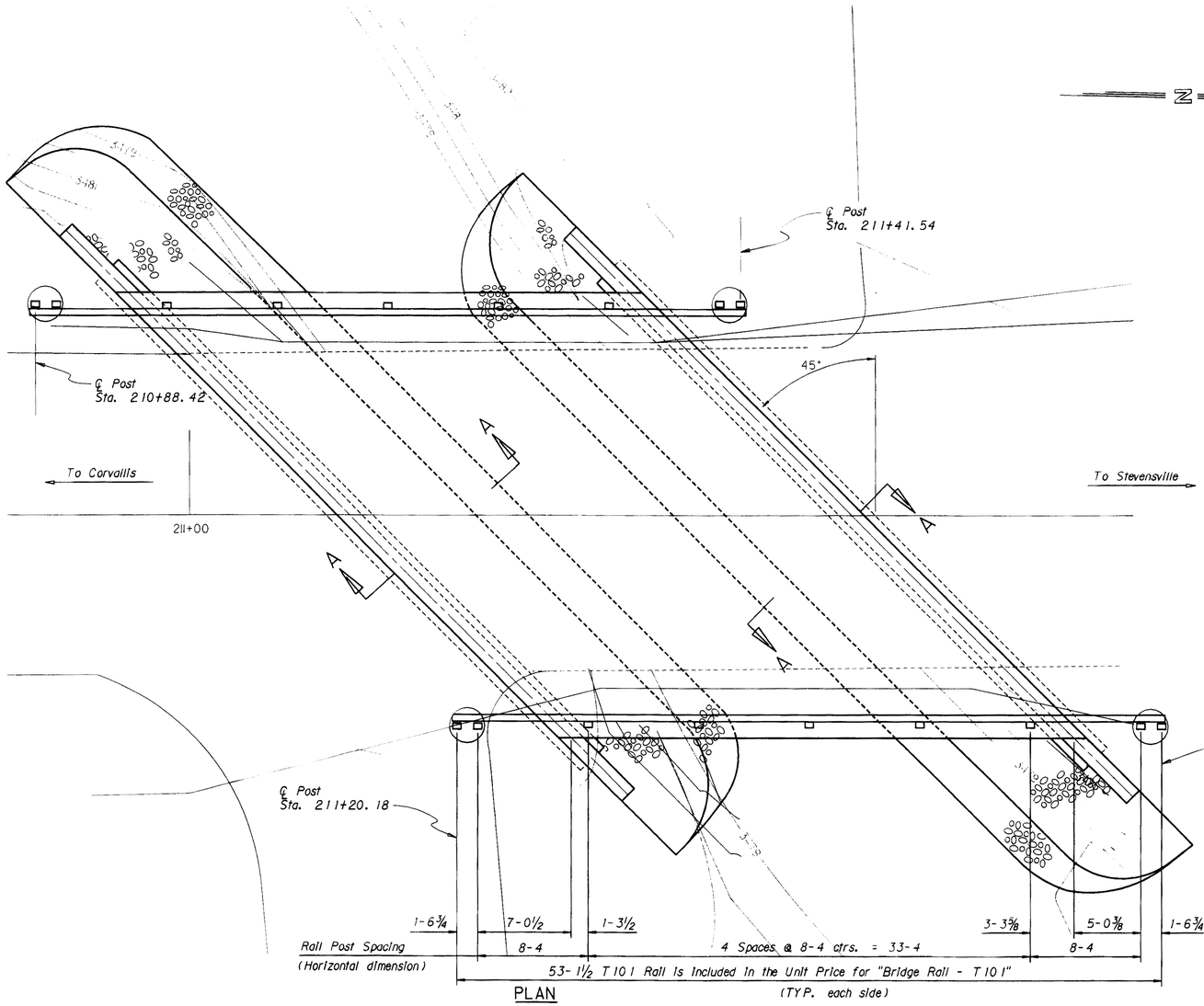
ENGINEERING CONSTRUCTION CONTRACTING BUREAU
MONTANA DEPARTMENT OF TRANSPORTATION

As-Built Drawings

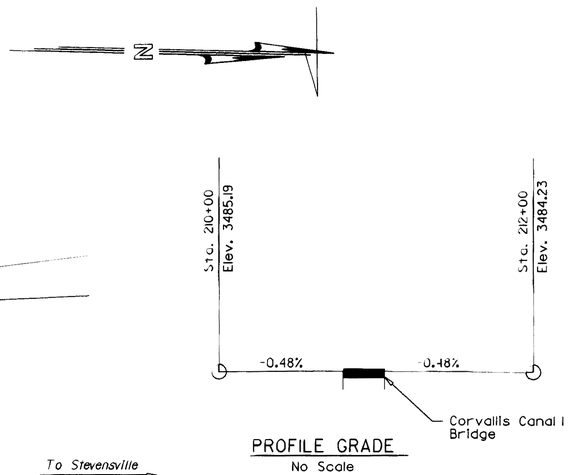
The following are as-built drawings for the structures. MDT provides them for informational purposes only. They do not include drawings for modifications to the structures, such as joint replacements and guardrail revisions and may not completely represent current conditions. Thus, some of the information contained in these documents may be out of date or not applicable with regard to the advertised project. The contractor should not rely solely on the as-built drawings provided for bidding purposes nor does any data in these files supersede the data in the contract documents.

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MONTANA	STPS 269-1(11)5	B3	B24

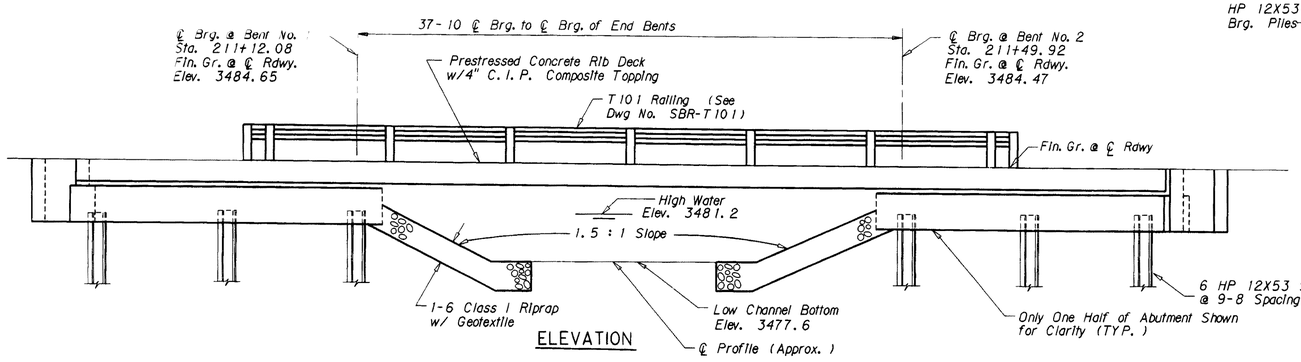
CORVALLIS NO. & SO.



PLAN



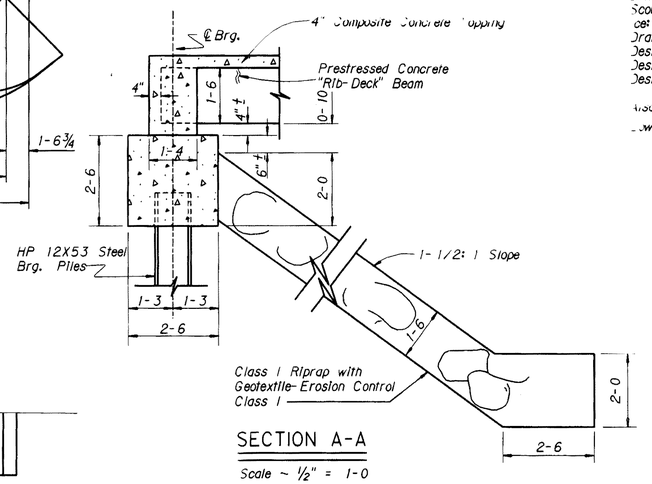
PROFILE GRADE
No Scale



ELEVATION

Rail Post Spacing (Horizontal dimension)	1-6¾	7-0½	1-3½	4 Spaces @ 8-4 ctrs. = 33-4	3-3⅜	5-0⅜	1-6¾
		8-4				8-4	

53- 1½ T101 Rail Is Included In the Unit Price for "Bridge Rail - T101" (TYP. each side)



SECTION A-A
Scale ~ ½" = 1-0

NOTES

FINISHED GRADE: Finished grade of bridge at centerline roadway is the same as the Profile Grade shown on Road Plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Transportation and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1995 Edition, and any amendments, thereto, and Special Provisions govern unless otherwise noted. Design prepared in accordance with 1992 AASHTO Specifications, and any amendments thereto.

REINFORCING STEEL: Use deformed reinforcing steel of the deformed type and meeting the requirements of ASTM Specification A615, Grade 60 (AASHTO M-31).

CAST IN PLACE CONCRETE: Use Class "AD" for all substructure concrete and Class "BD Modified" for all superstructure concrete unless otherwise approved.

STRUCTURE EXCAVATION: The measurement and payment of Structure Excavation is included in other Items. Calculated structure excavation from berm elevation. Estimated quantity is 40 CY.

TRAFFIC CONTROL PLAN AND SEQUENCE OF OPERATIONS: See Traffic Control Sheet in Road Plans and "Special Provisions".

UTILITIES: For location of utilities, see the appropriate Road Plan sheet.

STRUCTURAL STEEL: All Structural Steel is measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated weight = 756 lbs. A 36.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 Pay Factor (p.s.i.)	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000
"BD Modified"	3900	3500

STREAM DATA

Drift:	Light
Scour:	None
Ice:	Light
Drainage Area:	7.47 Sq. Mi.
Design Flow :	225 cfs
Design Flow Elev:	3481.2
Design Velocity:	3.9 fps

Also see Hydraulic Data Summary sheet.

Low Beam Elev. 3482.33

DESIGNED	5/11/95	B. H. S.
DRAWN	5/11/95	M. S. L.
CHECKED	5/11/95	W. R. D.
APPROVED		
REVISED		
REVISED		

PREPARED BY
FORSGREN ASSOCIATES / P.A.
WEST YELLOWSTONE, MT
FOR

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

BRIDGE OVER CORVALLIS CANAL I

AT STA. 211+31

FEDERAL AID PROJECT NO. STPS 269-1(11)5

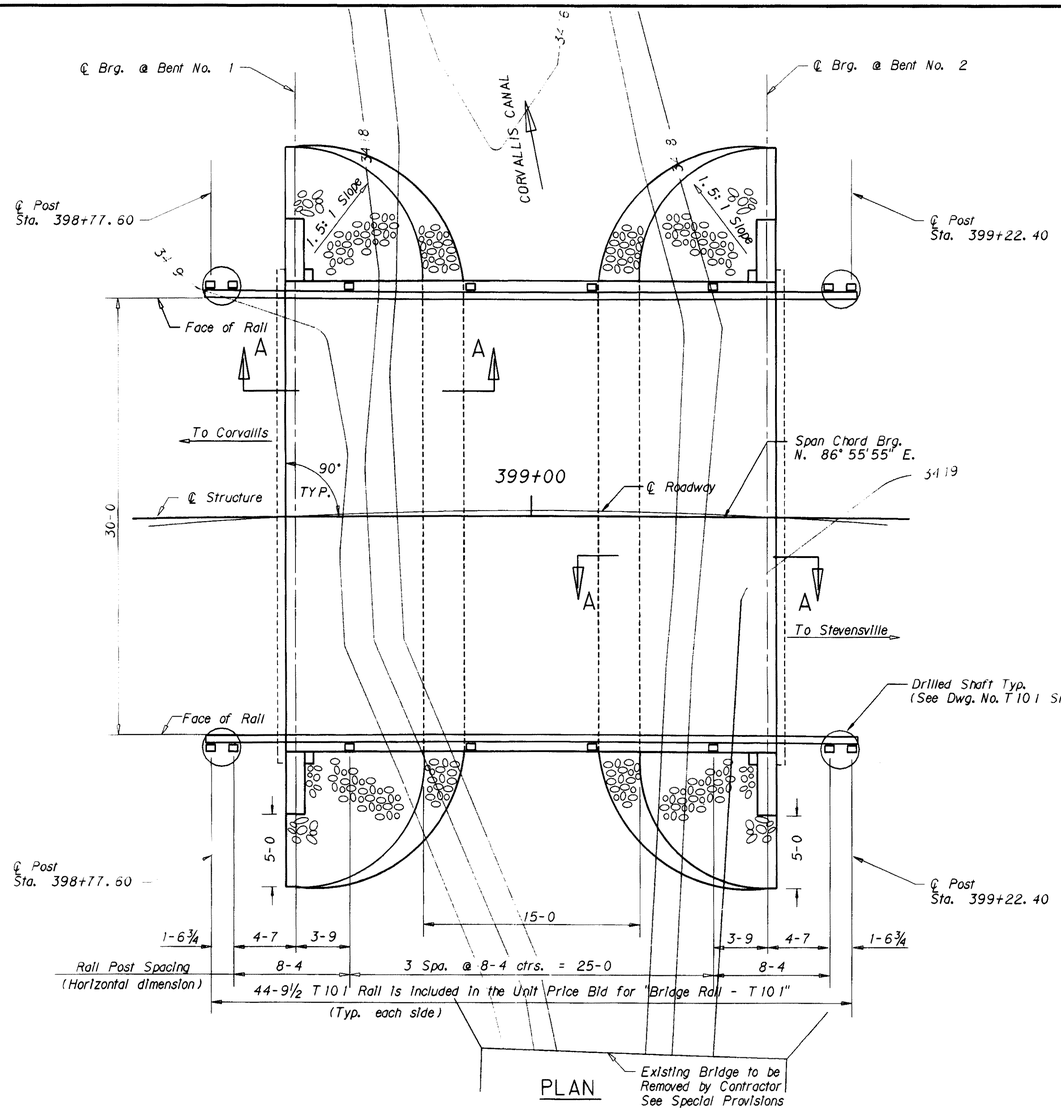
RAVALLI COUNTY

GENERAL LAYOUT

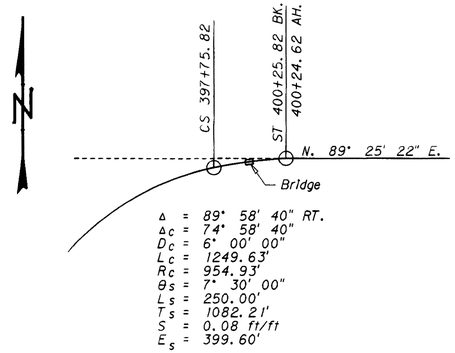
Scale ~ 1" = 5'-0" (except as noted)

DRAWING NO. 16121

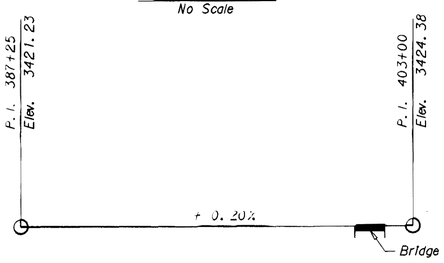
DATE: 18-Jul-96 14:08
PLOT SCALE 1=5
USER: MSL
MONTANA CADD
F:\DMS2\9504\1\CORE-MAL\CC_1.DGN



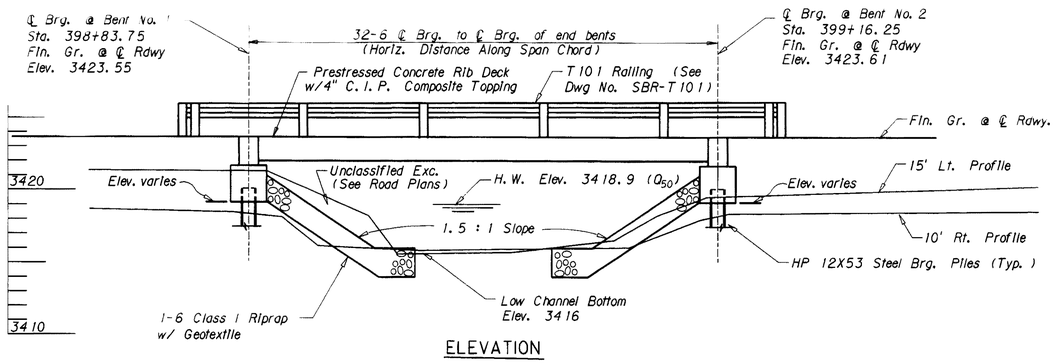
PLAN



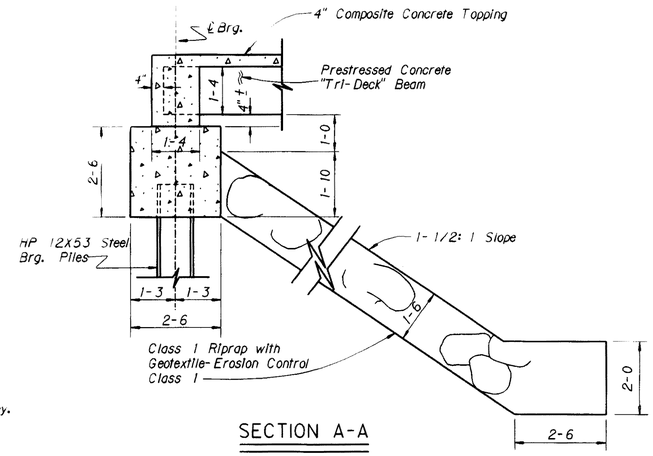
HORIZ. ALIGN.
No Scale



PROFILE GRADE
No Scale



ELEVATION



SECTION A-A

Scale ~ ½" = 1-0

STREAM DATA

Drift:	Light
Scour:	None
ice:	Light
Drainage Area:	12.7 Sq. Mi.
Base Flood Flow (100 yr.):	256 cfs
Base Flood Stage:	3419.0
Base Flood Velocity:	3.7 fps

Also see Hydraulic Data Summary sheet.

Low Beam Elev. 3421.32

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MONTANA	STPS 269-1(11)5	B7	B24

CORVALLIS NO. & SO.

NOTES

FINISHED GRADE: Finished grade of bridge at centerline roadway is the same as the Profile Grade shown on Road Plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Transportation and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1995 Edition, and any amendments, thereto, and Special Provisions govern unless otherwise noted. Design prepared in accordance with 1992 AASHTO Specifications, and any amendments thereto.

REINFORCING STEEL: Use reinforcing steel of the deformed type and meeting the requirements of ASTM Specification A615, Grade 60 (AASHTO M-31).

CAST IN PLACE CONCRETE: Use Class "AD" for all substructure concrete and Class "BD Modified" for all superstructure concrete unless otherwise approved.

STRUCTURE EXCAVATION: The measurement and payment of Structure Excavation is included in other items. Calculate structure excavation from berm elevation. Estimated quantity is 15 CY.

TRAFFIC CONTROL PLAN AND SEQUENCE OF OPERATIONS: See Traffic Control Sheet in Road Plans and "Special Provisions".

UTILITIES: For location of utilities, see the appropriate Road Plan sheet.

STRUCTURAL STEEL: All Structural Steel is measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated weight = 530 lbs. A 36.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 Pay Factor (p.s.i.)	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000
"BD Modified"	3900	3500

DESIGNED	1/31/92	W.R.D.
DRAWN	2/10/92	M.J.J.
CHECKED	1/28/94	W.R.D.
APPROVED		
REVISED		
REVISED		

PREPARED BY

FORSGREN ASSOCIATES / P.A.

WEST YELLOWSTONE, MT

FOR

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

BRIDGE OVER CORVALLIS CANAL II

AT STA. 399+00

FEDERAL AID PROJECT NO. STPS 269-1(11)5

RAVALLI COUNTY

GENERAL LAYOUT

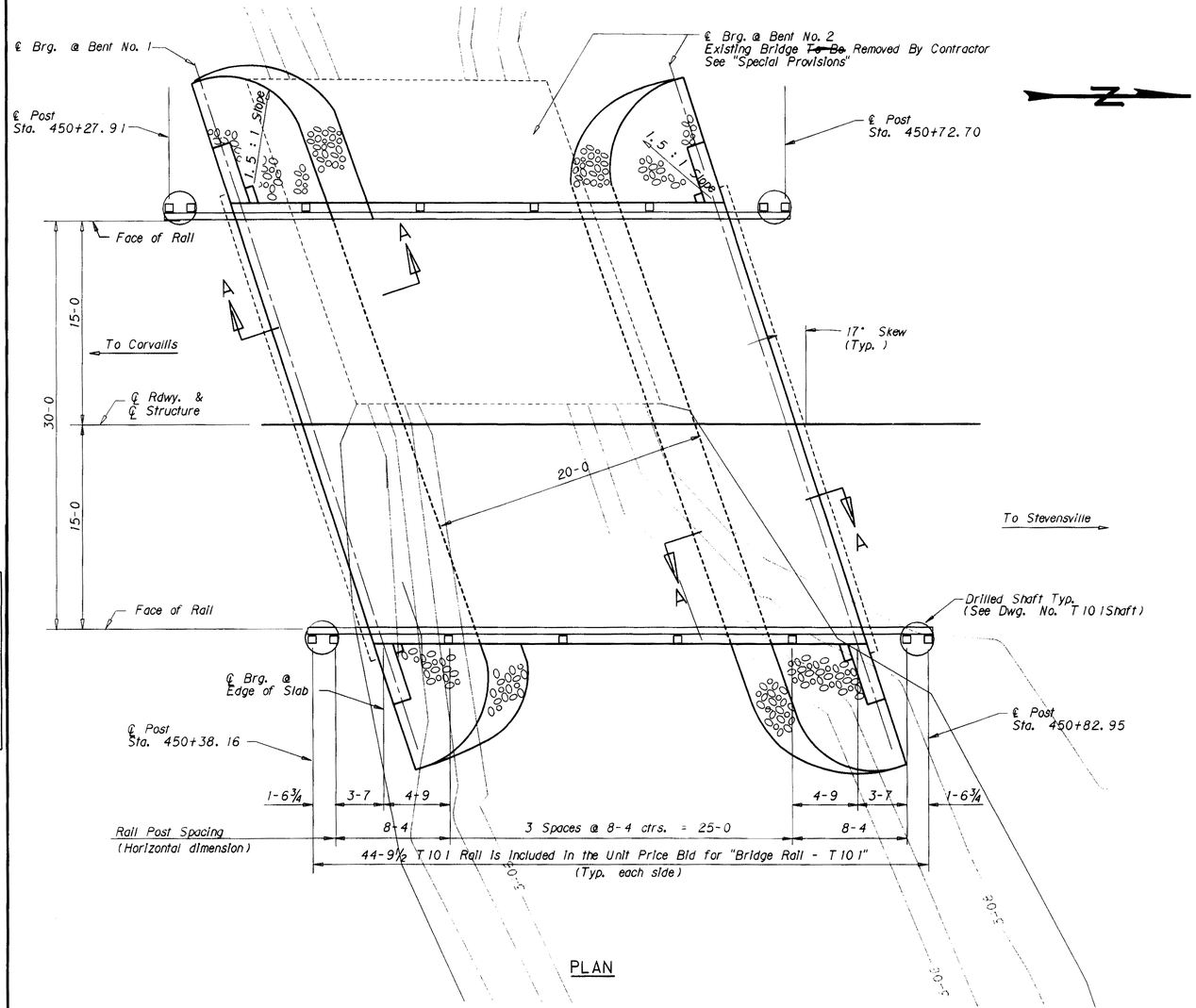
Scale ~ 1" = 5'-0" (except as noted)

DRAWING NO. 16125

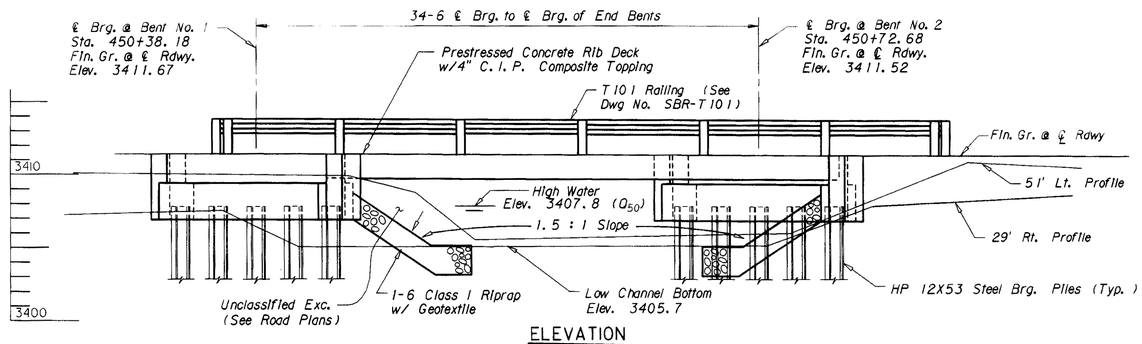
DATE: 18-Jul-96 14:10
PLOT SCALE: 1.00 '/ In.
USER: CJR
\95041\CORCNL2\CORLT01.DRG
MONTANA DEPT. OF TRANSPORTATION
CADD PILOT SYSTEM

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MONTANA	STPS 269-1(11)5	B11	B24

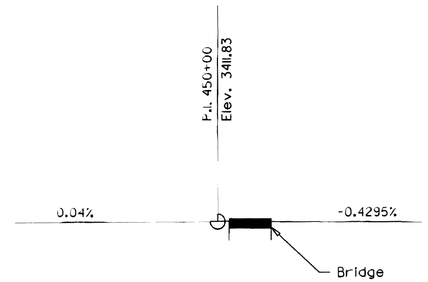
CORVALLIS NO. & SO.



PLAN



ELEVATION



PROFILE GRADE

No Scale

NOTES

FINISHED GRADE: Finished grade of bridge at centerline roadway is the same as the Profile Grade shown on Road Plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Transportation and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1995 Edition, and any amendments, thereto, and Special Provisions govern unless otherwise noted. Design prepared in accordance with 1992 AASHTO Specifications, and any amendments thereto.

REINFORCING STEEL: Use deformed reinforcing steel of the type and meeting the requirements of ASTM Specification A615, Grade 60 (AASHTO M-31).

CAST IN PLACE CONCRETE: Use Class "AD" for all substructure concrete and Class "BD Modified" for all superstructure concrete unless otherwise approved.

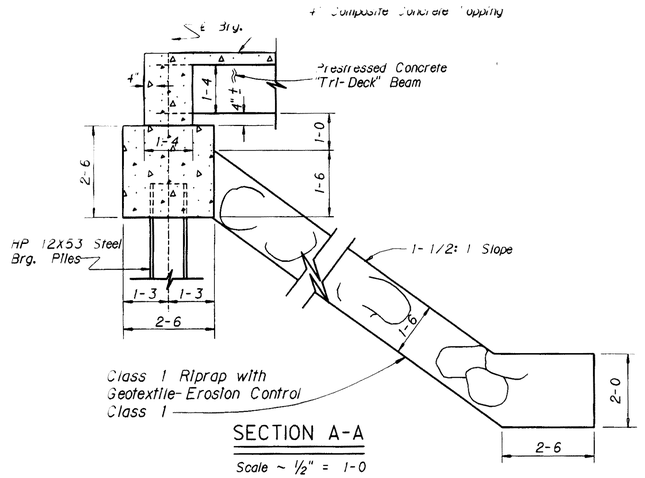
STRUCTURE EXCAVATION: The measurement and payment of Structure Excavation is included in other items. Calculate structure excavation from berm elevation. Estimated quantity is 15 CY.

TRAFFIC CONTROL PLAN AND SEQUENCE OF OPERATIONS: See Traffic Control Sheet in Road Plans and "Special Provisions".

UTILITIES: For location of utilities, see the appropriate Road Plan sheet.

STRUCTURAL STEEL: All Structural Steel is measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated weight = 553 lbs. A 36.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 Pay Factor (p.s.i.)	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000
"BD Modified"	3900	3500



SECTION A-A

Scale ~ ½" = 1-0

STREAM DATA

Drift:	Light
Scour:	None
Ice:	Light
Drainage Area:	14.6 Sq. Mi.
Base Flood Flow (100 yr.):	272 cfs
Base Flood Stage:	3407.9
Base Flood Velocity:	4.3 fps

Also see Hydraulic Data Summary sheet.

Low Beam Elev. 3409.54

DESIGNED	1/31/92	W. R. D.
DRAWN	5/11/95	M. S. L.
CHECKED	5/11/95	W. R. D.
APPROVED		
REVISED		
REVISED		

PREPARED BY

FORSGREN ASSOCIATES / P. A.

WEST YELLOWSTONE, MT

FOR

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

BRIDGE OVER SUPPLY DITCH

AT STA. 450+55.43

FEDERAL AID PROJECT NO. STPS 269-1(11)5

RAVALLI COUNTY

GENERAL LAYOUT

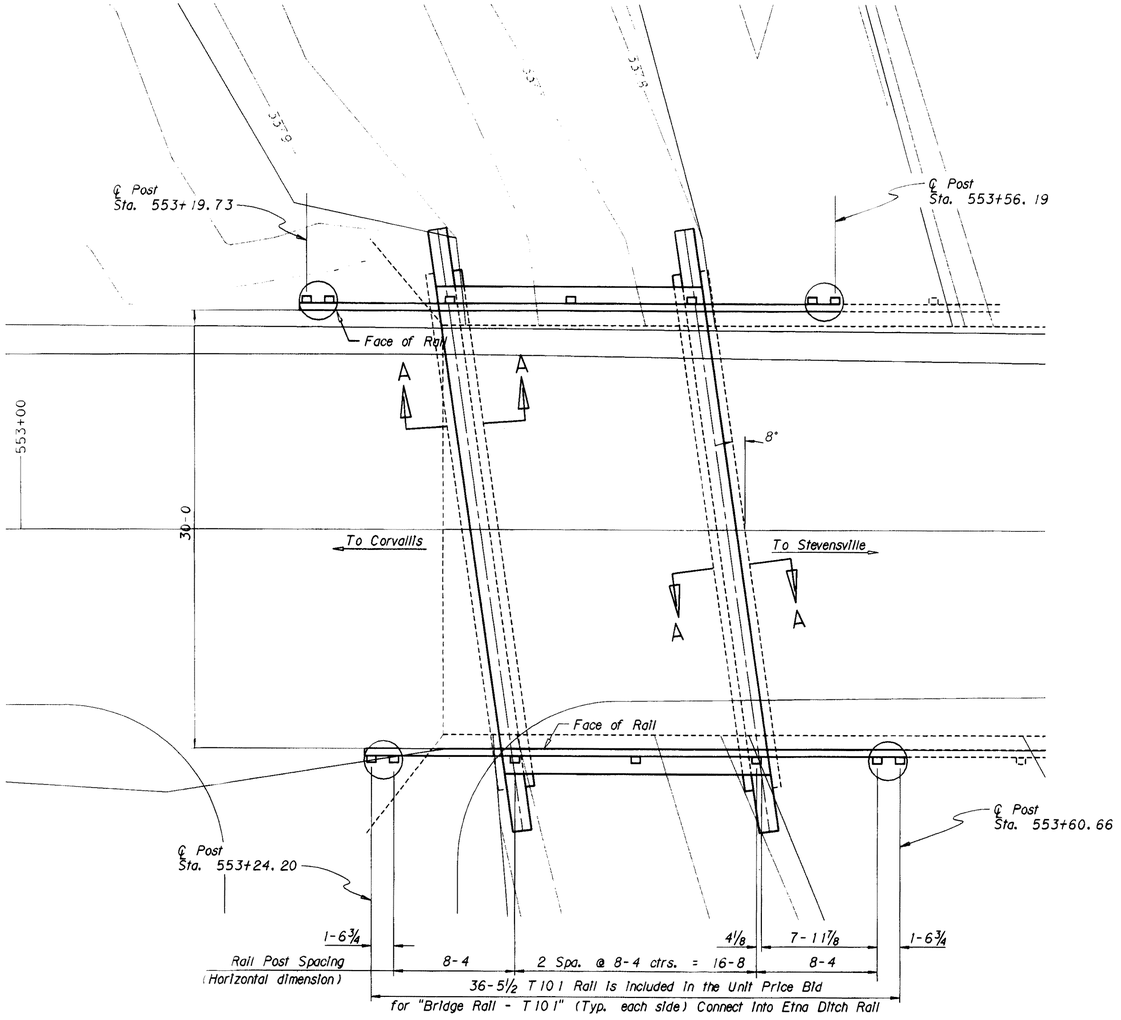
Scale ~ 1" = 5'-0" (except as noted)

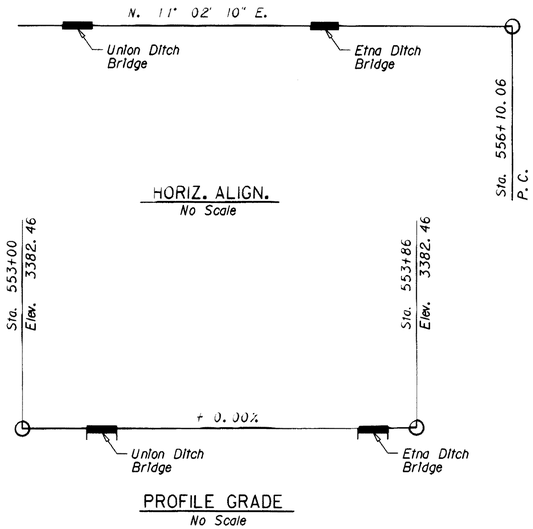
DRAWING NO. 16129

MONTANA
CADD
DATE: 18-JUL-96 15:17
PLOT SCALE: 1.5
USER: C.LIR
\9504\SUPPLY\CORLYD2.BRG

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MONTANA	STPS 269-1(11)5	B15	B24

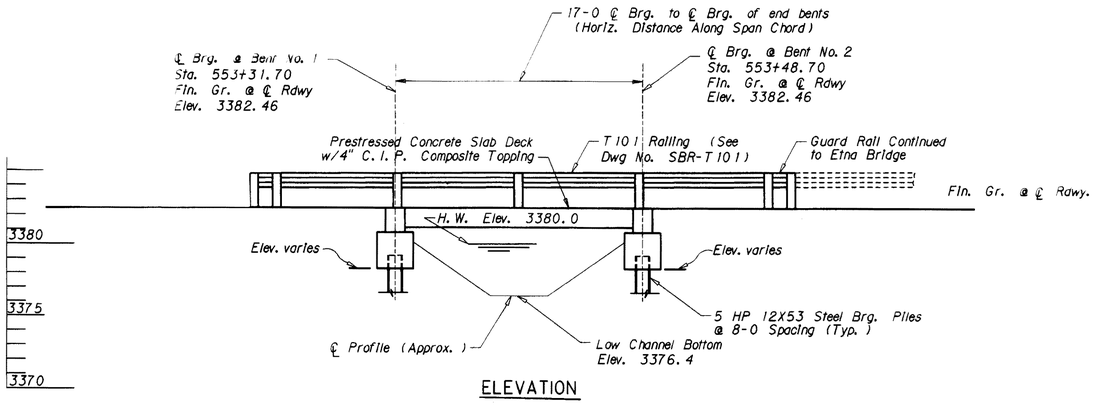
CORVALLIS NO. & SO.



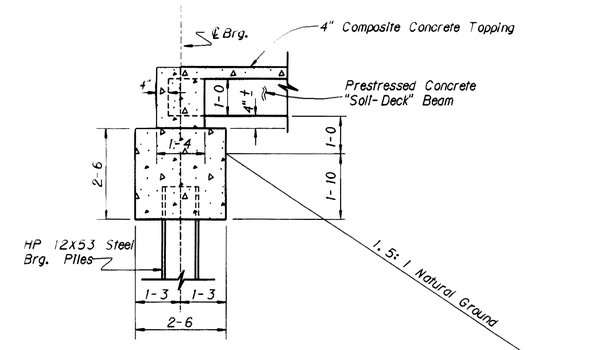


HORIZ. ALIGN.
No Scale

PROFILE GRADE
No Scale



ELEVATION



SECTION A-A
Scale ~ ½" = 1-0

NOTES

FINISHED GRADE: Finished grade of bridge at centerline roadway is the same as the Profile Grade shown on Road Plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Transportation and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1995 Edition, and any amendments, thereto, and Special Provisions govern unless otherwise noted. Design prepared in accordance with 1992 AASHTO Specifications, and any amendments thereto.

REINFORCING STEEL: Use deformed reinforcing steel of the deformed type and meeting the requirements of ASTM Specification A615, Grade 60 (AASHTO M-31).

CAST IN PLACE CONCRETE: Use Class "AD" for all substructure concrete and Class "BD Modified" for all superstructure concrete unless otherwise approved.

STRUCTURE EXCAVATION: The measurement and payment of Structure Excavation is included in other items. Calculate structure excavation from berm elevation. Estimated quantity is 15 CY.

TRAFFIC CONTROL PLAN AND SEQUENCE OF OPERATIONS: See Traffic Control Sheet in Road Plans and "Special Provisions".

UTILITIES: For location of utilities, see the appropriate Road Plan sheet.

STRUCTURAL STEEL: All Structural Steel is measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated weight = 540 lbs. A 36.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 Pay Factor (p.s.i.)	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000
"BD Modified"	3900	3500

STREAM DATA

Drift:	Light
Scour:	None
Ice:	Light
Drainage Area:	0 Sq. Mi. (Irr. Flow Only)
Design Flow:	60 cfs
Design Flow Elev.:	3380.0
Velocity:	1.8 fps

Also see Hydraulic Data Summary sheet.

Low Beam Elev. 3380.80

DESIGNED	5/11/95	B. H. S.
DRAWN	5/11/95	M. S. L.
CHECKED	5/11/95	W. R. D.
APPROVED		
REVISED		
REVISED		

PREPARED BY
FORSGREN ASSOCIATES / P.A.
WEST YELLOWSTONE, MT
FOR

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

BRIDGE OVER UNION DITCH

AT STA. 553+40.20

FEDERAL AID PROJECT NO. STPS 269-1(11)5

RAVALLI COUNTY

GENERAL LAYOUT

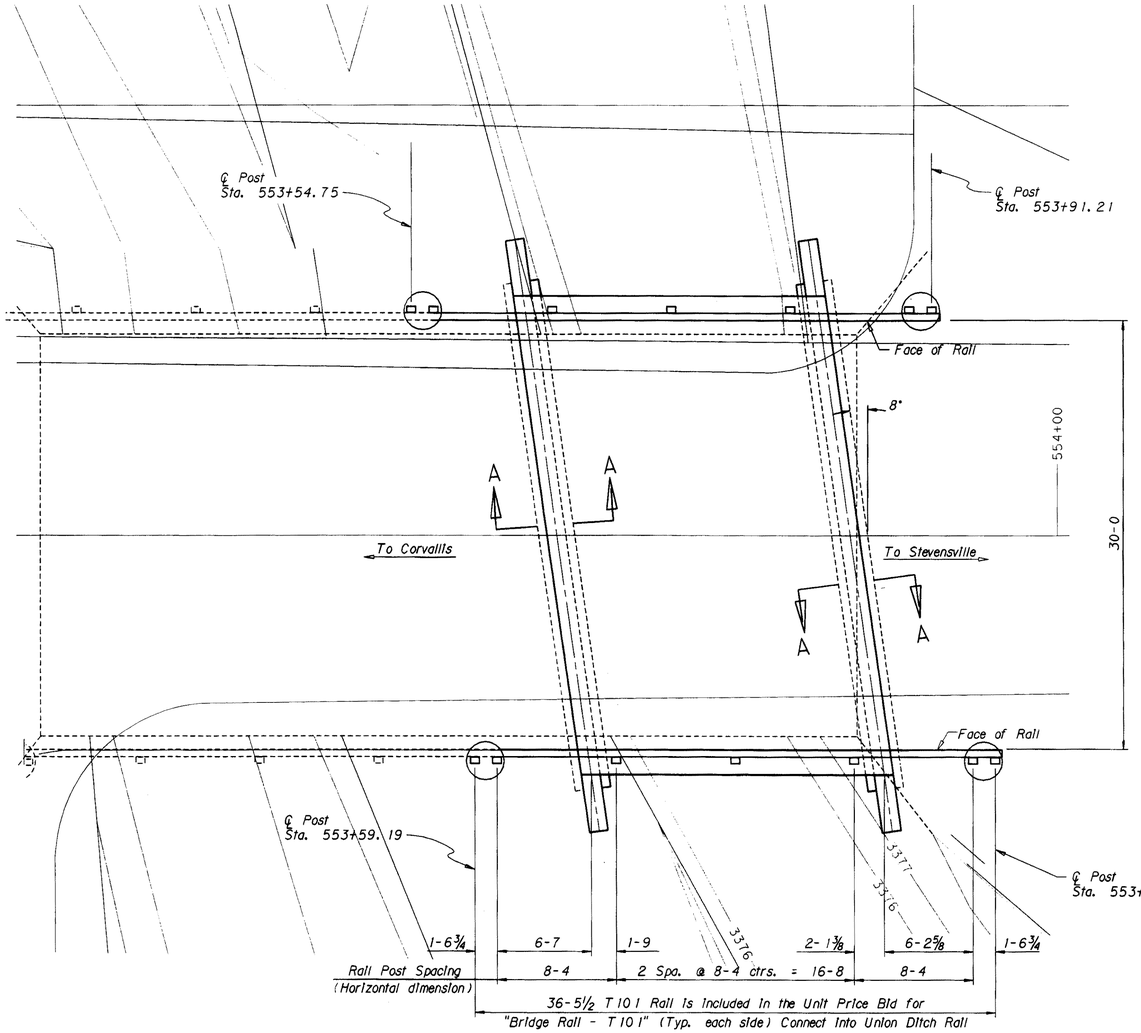
Scale ~ 1" = 5'-0" (except as noted)

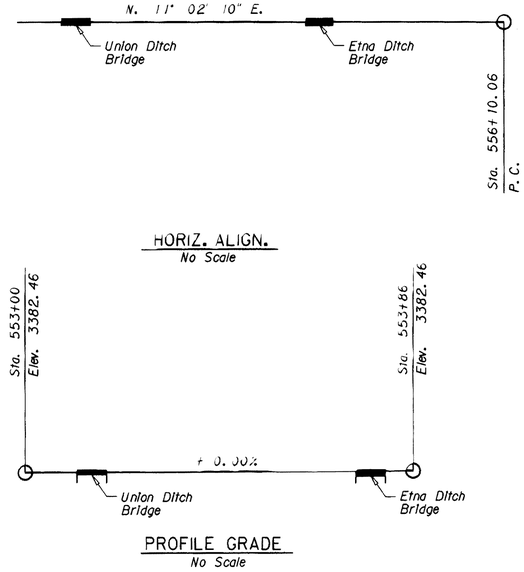
DRAWING NO. 16133

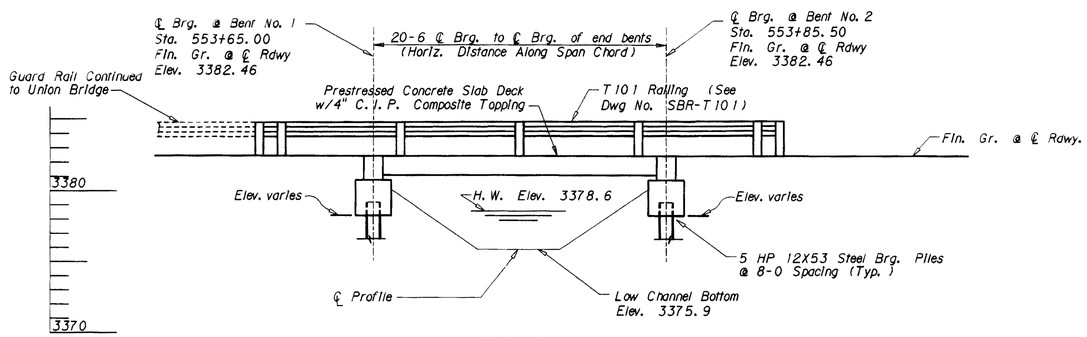
MONTANA CADD
DATE: 18-JAN-96, 14:42
PLOT SCALE 1=5.00
USER: MSL
(DWGS\9504\UNIONLN_LYOUT.DGN)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MONTANA	STPS 269-1(11)5	B19	B24

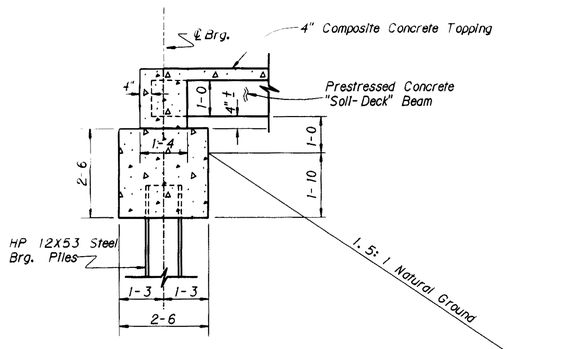
CORVALLIS NO. & SO.







ELEVATION



SECTION A-A

Scale ~ ½" = 1'-0

NOTES

FINISHED GRADE: Finished grade of bridge at centerline roadway is the same as the Profile Grade shown on Road Plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Transportation and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1995 Edition, and any amendments, thereto, and Special Provisions govern unless otherwise noted. Design prepared in accordance with 1992 AASHTO Specifications, and any amendments thereto.

REINFORCING STEEL: Use deformed reinforcing steel of the deformed type and meeting the requirements of ASTM Specification A615, Grade 60 (AASHTO M-31).

CAST IN PLACE CONCRETE: Use Class "AD" for all substructure concrete and Class "BD Modified" for all superstructure concrete unless otherwise approved.

STRUCTURE EXCAVATION: The measurement and payment of Structure Excavation is included in other items. Calculate structure excavation from berm elevation. Estimated quantity is 15 CY.

TRAFFIC CONTROL PLAN AND SEQUENCE OF OPERATIONS: See Traffic Control Sheet in Road Plans and "Special Provisions".

UTILITIES: For location of utilities, see the appropriate Road Plan sheet.

STRUCTURAL STEEL: All Structural Steel is measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated weight = 540 lbs. A 36.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 Pay Factor (p.s.i.)	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000
"BD Modified"	3900	3500

STREAM DATA

Drift:	Light
Scour:	None
Ice:	Light
Drainage Area:	0 Sq. Mi. (Irr. Flow Only)
Design Flow :	50 cfs
Design Flow Elev.:	3378.6
Velocity:	2.2 fps

Also see Hydraulic Data Summary sheet.

Low Beam Elev. 3380.47

DESIGNED	5/11/95	B.H.S.
DRAWN	5/11/95	M.S.L.
CHECKED	5/11/95	W.R.D.
APPROVED		
REVISED		
REVISED		

PREPARED BY

FORSGREN ASSOCIATES / P.A.

WEST YELLOWSTONE, MT

FOR

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

BRIDGE OVER ETNA DITCH

AT STA. 553+75.25

FEDERAL AID PROJECT NO. STPS 269-1(11)5

RAVALLI COUNTY

GENERAL LAYOUT

Scale ~ 1" = 5'-0" (except as noted)

DRAWING NO. 16137

MONTANA DATE: 16-Jul-96 15:58
CADD PLOT SCALE = 5.00
USER: MSL
\DMS\9504\ETNA\ET_LYOUT.DGN