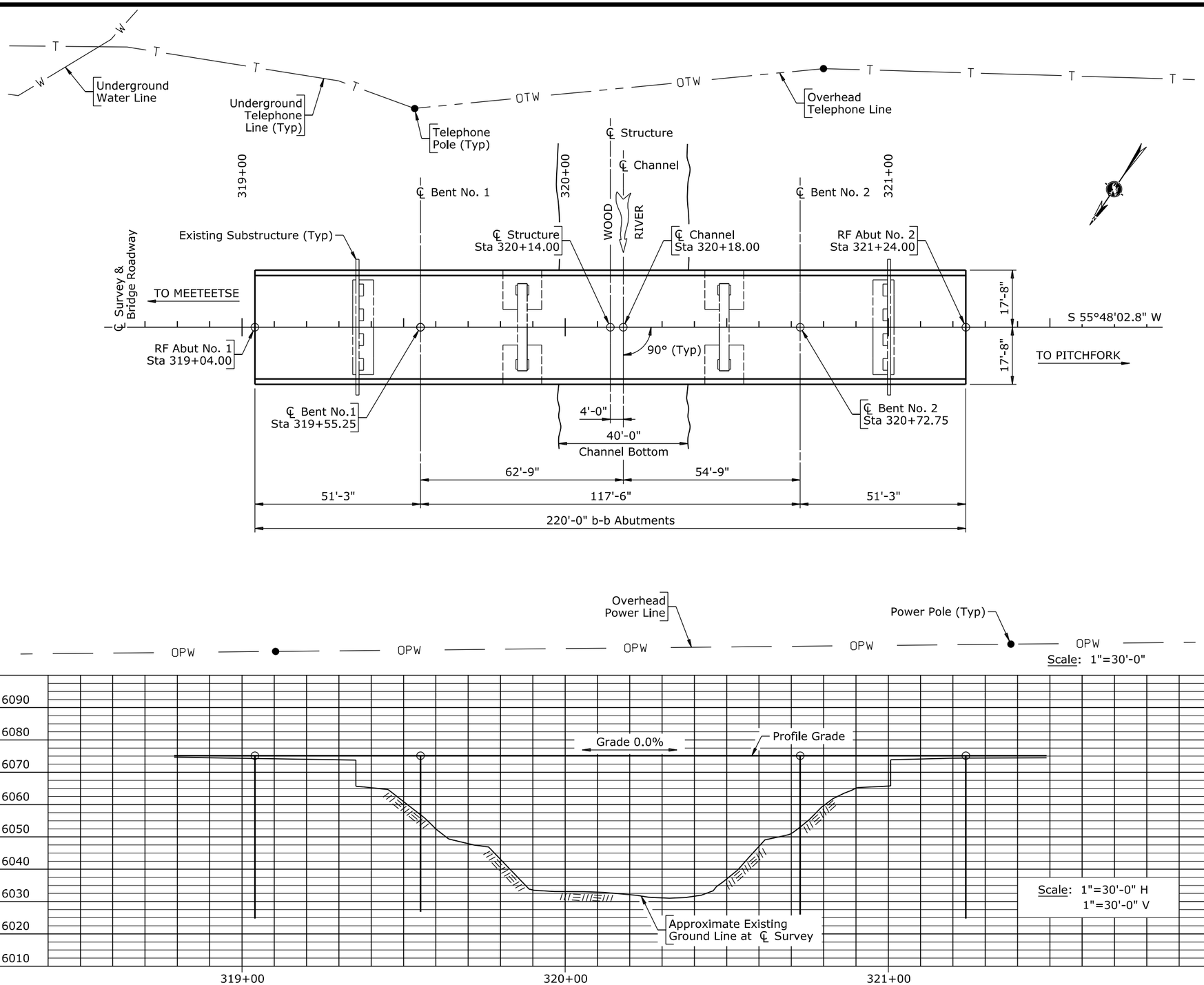

GEOLOGY

Geologist: _____

Rig: _____

Project Geologist: _____

Date Drilled: _____

Driller: _____

Circulation Medium	
Air	
Water	
Auger	

Remarks: Obtain alkali sample.

Obtain necessary foundation information to complete LRFD design.

LAYOUT APPROVAL

State Bridge Engineer — Date

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

PRELIMINARY GEOLOGY LAYOUT

BRIDGE OVER WOOD RIVER

STA 320+18

Meeteetse - Pitchfork Road

(WYO 290)

1500006 Pa

DESIGN	___ ✓ ___	Design Section	L M Nop
DETAIL	BBB ✓ AAA	Drwg No. ___	Sheet 1 of 1
QTY'S	___ ✓ ___		

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Wyo. Proj.	1500006	
Sheet	of	Sheets

BRIDGE OVER WOOD RIVER

STA 320+18

MEETEETSE - PITCHFORK ROAD

(WYO 290)

1500006

PRELIMINARY

PARK COUNTY

DESIGN DATA

SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, 8th Edition. AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2nd Edition.

ADT: 260 (Year 2020)

LOADING: HL93. Future wearing surface 25 psf. Stay-in-place forms 15 psf.

REINFORCED CONCRETE: Load and Resistance Factor Design -
Class A Concrete f'_c = 4000 psi
Reinforcing Steel f_y = 60,000 psi (Grade 60)

STRUCTURAL STEEL: Load and Resistance Factor Design -
F_y = 50,000 psi (Grade 50W)

APPROACH ROADWAY WIDTH: 32'-0"

DRILLED SHAFTS: Load and Resistance Factor Design -
Bents (Per drilled shaft): Total Load = X T
Bearing = X T
Friction = X T

PILE LOADS: Load and Resistance Factor Design -
Abutments, X T per pile

ELASTOMERIC BEARING LOADS: Load and Resistance Factor Design -
Bents: Service Dead Load = x kips
Service Live Load = x kips

SEISMIC CRITERIA: Seismic Design Category X
Effective Peak Ground Acceleration Coefficient, A_s =X.XXX
Design Earthquake Response Spectral Acceleration Coefficient for 1.0 Second Period, S_{D1} = X.XXX
Design Earthquake Response Spectral Acceleration Coefficient for 0.2 Second Period, S_{DS} = X.XXX
Site Class X
5% Damping

ESTIMATED QUANTITIES - CODE 11-CSW

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	ESTIMATE
202.03210	REMOVAL OF STEEL BRIDGES	EA		
209.01000	WATER	MG		
212.02100	DRY EXCAVATION	CY		
217.01010	GEOTEXTILE, EROSION CONTROL	SY		
217.01043	GEOTEXTILE, SUBGRADE REINFORCEMENT	SY		
301.01080	CRUSHED BASE	CY		
501.01000	STRUCTURAL STEEL	LS	LUMP SUM	LB
503.01000	BRIDGE RAILING	FT		
504.04000	PREDRILLED HOLES	FT		
504.04010	PILE SPLICES	EA		
504.11473	STEEL PILING HP 14 X 73	FT		
506.01048	DRILLED SHAFT FOUNDATIONS 48 in	FT		
507.01000	REINFORCED CONC APPROACH SLABS	SY		
511.06000	MACHINE-PLACED RIPRAP	CY		
512.01050	ELASTOMERIC COMP JOINT SEAL	FT		
513.00005	CLASS A CONCRETE	LS	LUMP SUM	CY
514.00015	REINFORCING STEEL	LS	LUMP SUM	LB
514.00025	REINFORCING STEEL (COATED)	LS	LUMP SUM	LB
605.10006	UNDERDRAIN PIPE (PERF) 6 in	FT		
605.20006	UNDERDRAIN PIPE (NON-PERF) 6 in	FT		
900.60000	CONTRACTOR QUALITY CONTROL (CONCRETE)	LS	LUMP SUM	

INDEX OF DRAWINGS

STRUCTURE NO. LIN
ML1500B, RM 6.04
SEC 22, T48N, R101W

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM
REVISIONS

REVIEW	DESIGN ___ ✓ ___	Design Section	L M Nop
APPROVAL	DETAIL CCC ✓ FFF	Drwg No. P-0001	Sheet 1 of 3
	QTY'S ___ ✓ ___		

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Wyo. Proj. 1500006

Sheet of Sheets

GENERAL NOTES

SPECIFICATIONS: WYDOT Standard Specifications for Road and Bridge Construction, 2010 Edition.

DIMENSIONS: Longitudinal dimensions for the substructure are horizontal and include no correction for grade. Longitudinal dimensions for the superstructure are along grade unless noted. Slopes are vertical : horizontal.

CONCRETE: Use class S concrete made with type II Wyoming modified cement in the drilled shaft foundations. Use class A concrete made with type II Wyoming modified cement at all other locations.

REINFORCING STEEL: Ensure reinforcing steel conforms to ASTM A 615 (Grade 60) for all bars, including ties and stirrups. Concrete cover to face of reinforcing steel is 2" unless noted. Dimensions for bent bars are out to out. Ensure bars marked with an asterisk (*) are coated.

BAR MARKS

Straight Bars — Size, Length — 508-3

Bent Bars — Size, Designation — 4A2

STRUCTURAL STEEL: Ensure structural steel conforms to ASTM A 709 (Grade 50W) unless noted. Ensure steel fabricators supplying structural components are certified under the AISC Quality Certification Program for Steel Bridge Fabricators - 2011, Category Intermediate Bridges (IBR).

Ensure steel components of the deck drain system conform to ASTM A 709 (Grade 50W) minimum and ASTM A 53 (Grade A or B). After fabrication operations are complete, ensure components are prepared in accordance with Steel Structures Painting Council Surface Preparation Specification No. 6 Commercial Blast Cleaning (SSPC-SP 6).

BRIDGE BEARING ANCHOR BOLTS: Anchor bolts may be swedge bolts or threaded rods. Ensure swedge bolts conform to ASTM A 709 (Grade 36) and swedges are produced by deforming the steel through application of pressure and not by any method that removes material, such as grinding or cutting. Ensure threaded rods conform to ASTM F 1554 (Grade 36) minimum. Ensure anchor bolts, or threaded rods, and nuts are galvanized in accordance with Subsection 815.14, Galvanized Coating. Use anchor bolts compatible with the adhesive anchorage system.

Use one of the following adhesive anchorage systems to set anchor bolts in drilled holes:
CIA-GEL 6000-GP as manufactured by MiTek USA, Inc.
Red Head C6+ as manufactured by ITW Commercial Construction
Sure Anchor I J-51 as manufactured by Dayton Superior
HIT-RE 500 V3 as manufactured by Hilti, Inc.
Drill and prepare holes and install the anchor bolts in accordance with the adhesive system manufacturer's recommendations. Work necessary for the adhesive anchorage system is incidental to the contract pay item Structural Steel.

STEEL PILING: Use steel piles conforming to ASTM A 709 (Grade 50).

ELASTOMERIC COMP JOINT SEAL: Provide one of the following products:
WJ-400 as manufactured by Watson Bowman Acme Corp.
CV-4000 as manufactured by D.S. Brown.

EYEBOLTS: Use galvanized bar conforming to ASTM A 709 (Grade 36). Work necessary for the eyebolts is incidental to the contract pay item Class A Concrete.

REMOVAL OF STEEL BRIDGES: Remove the existing three span 156'-6" x 27'-0" steel girder bridge, Structure No. CSW.

HAZARDOUS MATERIALS: The paint system on the steel components of the existing structure may contain materials including lead and chromium which are hazardous if ingested, inhaled, or otherwise absorbed.

MISCELLANEOUS REMOVAL: Work necessary to remove and dispose of the car bodies along the river bank adjacent to the existing bents is incidental to the contract pay item Machine-Placed Riprap.

DRY EXCAVATION: The estimated quantity of dry excavation is calculated below finished grade to the limits shown at approach slabs and below existing ground line at abutments.

FOUNDATIONS: Abutments are on steel piles driven to refusal in bedrock.

Bents are on drilled shafts founded in bedrock. Casing will be necessary to prevent caving of the granular materials and to control ground water. An adequate seal between the casing and bedrock may not be possible and pouring concrete under water should be anticipated. The presence of very dense gravel and cobble lenses may result in difficult drilling.

MACHINE-PLACED RIPRAP: Use stones conforming to class X gradation requirements from a contractor furnished source.

PREDRILLED HOLES: If any pile fails to achieve the bottom of pile elevations shown, predrill the remaining piles to bedrock contact and drive to refusal. The estimated quantity of predrilled holes is calculated from the bottom of abutment cap to bedrock contact at each pile.

STAY-IN-PLACE FORMS: Stay-in-place slab forms may be used for construction of the deck. Do not exceed 15 psf for the weight of the forms and additional concrete, including form deflection. Do not extend the vertical legs of support angles past the bottom of the bottom reinforcing steel mat or use these legs to support the reinforcing steel.

CRUSHED BASE: Use crushed base conforming to grading L from a contractor furnished source. Compact the crushed base in accordance with Subsection 301.4.2.3, Placing.

WATER: The estimated quantity of water for compaction of crushed base is 0.040 MG per cubic yard.

BRIDGE OFFICE NOTIFICATION: The engineer will notify the State Bridge Engineer in writing within 14 calendar days after the existing structure has been removed and again within 14 calendar days after the new structure has been opened to traffic.

REFERENCES

WYDOT Plans:	Sheet No.
Bridge Drwg No. 2727	X of X
Bridge Drwg No. 5286	X of X

Supplementary Specifications:

SS-100K	Adjustment for Structural Steel
SS-500B	Welder Qualification
SS-500E	Bridge Bearing Correction
SS-500F	Automatically End-Welded Studs
SS-500G	Structural Concrete with Quality Control and Quality Acceptance

STREAM DATA

Drainage Area	198.0 Sq Mi
Channel Slope	1.41%
Description of Channel Material	Sand, gravel, and cobbles
Drift Potential	Trees and logs
Ordinary High Water Elevation	6037.0 ft
Headwater Elevation Q_{25}	6041.4 ft
Q_{100}	6043.6 ft
High Water Elevation Q_{25}	6039.4 ft
Q_{100}	6042.2 ft
Design Scour Elevation	XXXX.X ft
Constricted Velocity Q_{25}	12.2 fps
Q_{100}	13.4 fps
Design Frequency	25 Year
Design Discharge Q_{25}	3056 cfs
Review Discharge Q_{100}	4290 cfs
Source of Discharge	Log Pearson Type III
Method of Analysis	HEC-RAS and WSP
Flood of Record	5080 cfs (Year 1963)

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

PRELIMINARY GENERAL NOTES

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)

1500006 Pa

REVIEW _____
APPROVAL _____

DESIGN ____ ✓ ____
DETAIL CCC ✓ FFF
QTY'S ____ ✓ ____

Design Section L M Nop
Drwg No. P-0001 Sheet 2 of 3

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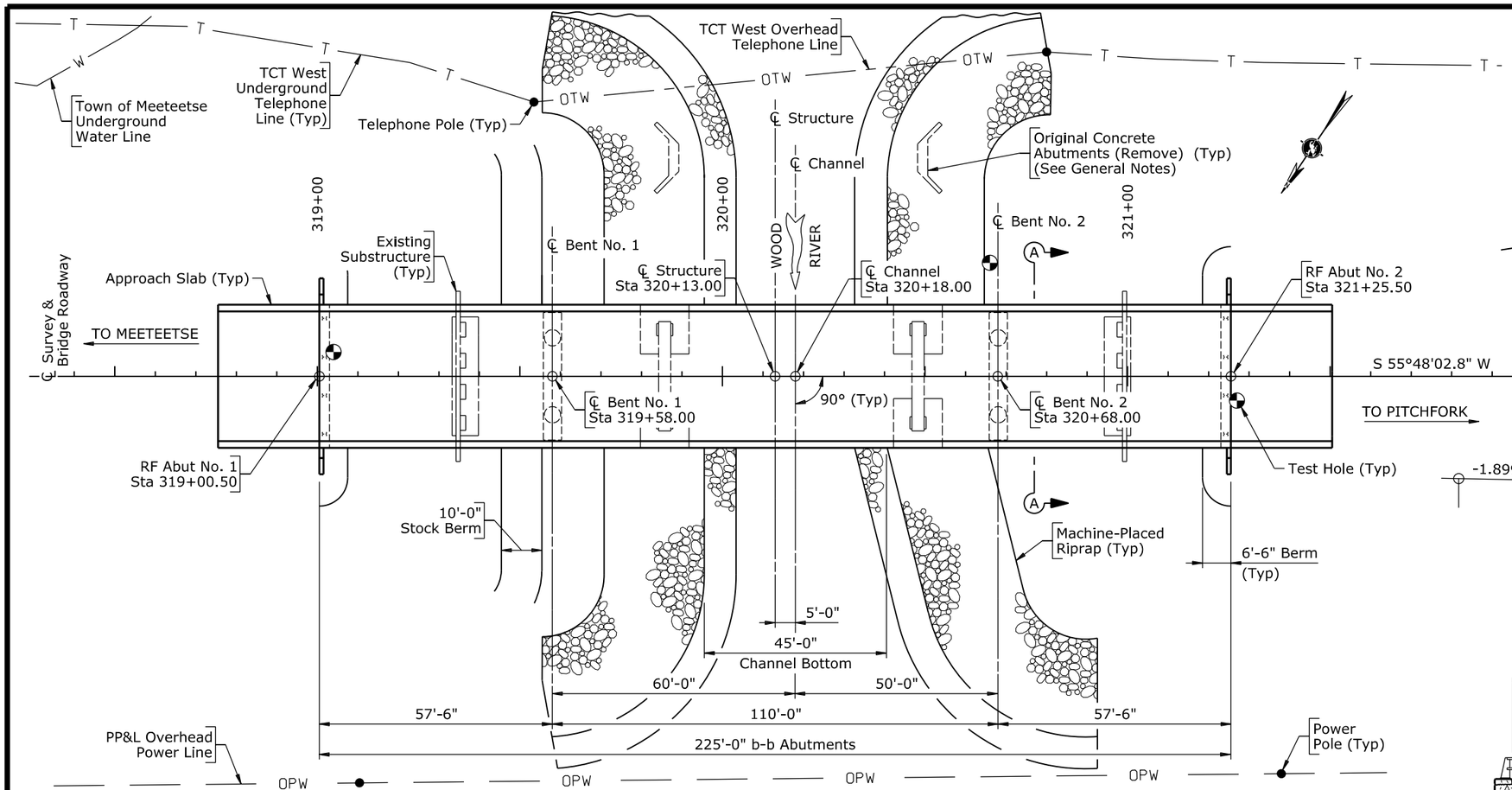
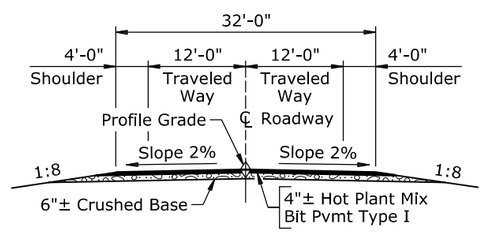
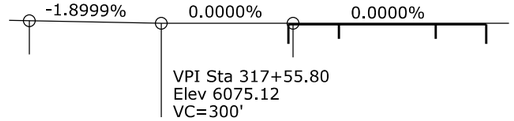
Wyo. Proj.	1500006
Sheet	of Sheets



PLAN



TYPICAL ROADWAY SECTION



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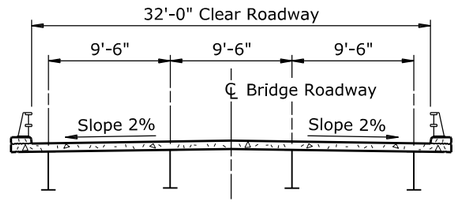

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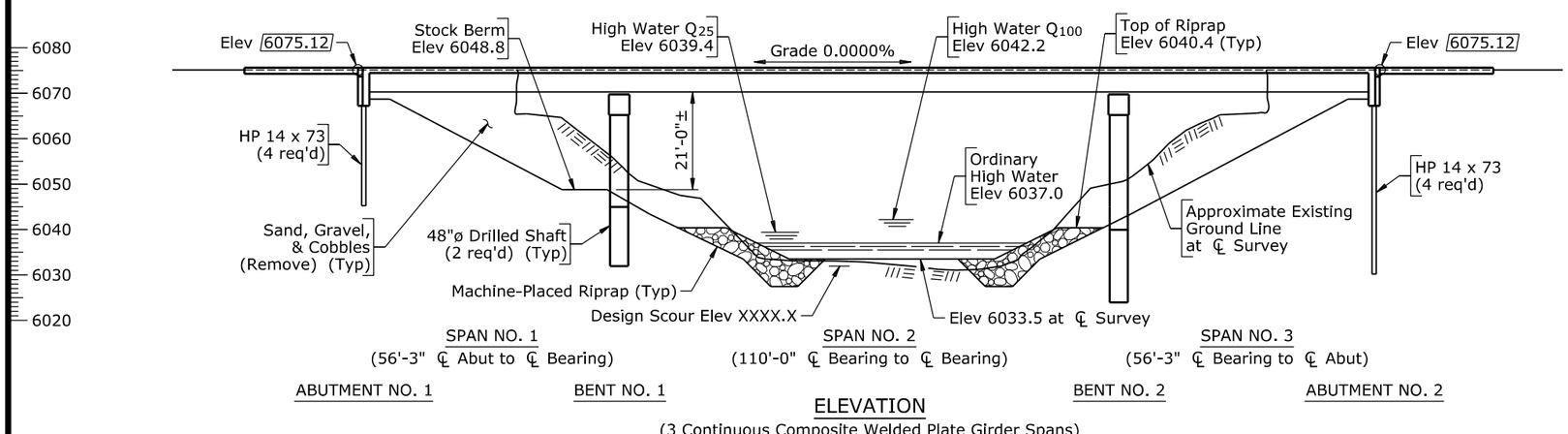

ELEVATION
(3 Continuous Composite Welded Plate Girder Spans)

Note: 1) Elevations shown as 6075.12 indicate finished grade at rear face abutment on ℄ Bridge Roadway.
2) Berm slopes are 1:2±, measured perpendicular to ℄ Channel.
3) Replace the existing bridge, Structure No. CSW, with the new bridge, Structure no. LIN.

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

PRELIMINARY LAYOUT

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)

1500006 Pa

REVIEW	DESIGN ___ ✓ ___	Design Section	L M Nop
APPROVAL	DETAIL BBB ✓ DDD	Drwg No. P-0001	Sheet 3 of 3
	QTY'S ___ ✓ ___		

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BRIDGE OVER WOOD RIVER

STA 320+18

MEETEETSE - PITCHFORK ROAD

(WYO 290)

1500006

PARK COUNTY

DESIGN DATA

SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, 8th Edition. AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2nd Edition.

ADT: 260 (Year 2020)

LOADING: HL93. Future wearing surface 25 psf. Stay-in-place forms 15 psf.

REINFORCED CONCRETE: Load and Resistance Factor Design -
Class A Concrete f'_c = 4000 psi
Reinforcing Steel f_y = 60,000 psi (Grade 60)

STRUCTURAL STEEL: Load and Resistance Factor Design -
F_y = 50,000 psi (Grade 50W)

APPROACH ROADWAY WIDTH: 32'-0"

DRILLED SHAFTS: Load and Resistance Factor Design -
Bents (Per drilled shaft): Total Load = 24.57 T
Bearing = 24 T
Friction = 0.57 T

PILE LOADS: Load and Resistance Factor Design -
Abutments, 63 T per pile

ELASTOMERIC BEARING LOADS: Load and Resistance Factor Design -
Bents: Service Dead Load = x kips
Service Live Load = x kips

SEISMIC CRITERIA: Seismic Design Category X
Effective Peak Ground Acceleration Coefficient, A_s =X.XXX
Design Earthquake Response Spectral Acceleration Coefficient for 1.0 Second Period, S_{DI} = X.XXX
Design Earthquake Response Spectral Acceleration Coefficient for 0.2 Second Period, S_{DS} = X.XXX
Site Class X
5% Damping

ESTIMATED QUANTITIES - CODE 11-CSW

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	ESTIMATE
202.03210	REMOVAL OF STEEL BRIDGES	EA	1	
209.01000	WATER	MG	18	
212.02100	DRY EXCAVATION	CY	630	
217.01010	GEOTEXTILE, EROSION CONTROL	SY	2030	
217.01043	GEOTEXTILE, SUBGRADE REINFORCEMENT	SY	1590	
301.01080	CRUSHED BASE	CY	450	
501.01000	STRUCTURAL STEEL	LS	LUMP SUM	182,200 LB
503.01000	BRIDGE RAILING	FT	550	
504.04000	PREDRILLED HOLES	FT	216	
504.04010	PILE SPLICES	EA	1	
504.11473	STEEL PILING HP 14 X 73	FT	244	
506.01048	DRILLED SHAFT FOUNDATIONS 48 in	FT	58	
507.01000	REINFORCED CONC APPROACH SLABS	SY	197	
511.06000	MACHINE-PLACED RIPRAP	CY	2330	
512.01050	ELASTOMERIC COMP JOINT SEAL	FT	73	
513.00005	CLASS A CONCRETE	LS	LUMP SUM	358.1 CY
514.00015	REINFORCING STEEL	LS	LUMP SUM	23,360 LB
514.00025	REINFORCING STEEL (COATED)	LS	LUMP SUM	59,610 LB
605.10006	UNDERDRAIN PIPE (PERF) 6 in	FT	70	
605.20006	UNDERDRAIN PIPE (NON-PERF) 6 in	FT	48	
900.60000	CONTRACTOR QUALITY CONTROL (CONCRETE)	LS	LUMP SUM	

INDEX OF DRAWINGS

STRUCTURE NO. LIN
ML1500B, RM 6.04
SEC 22, T48N, R101W

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM
REVISIONS

REVIEW _____
APPROVAL _____
DESIGN ___ ✓ ___
DETAIL BBB ✓ DDD
QTY'S ___ ✓ ___
Design Section L M Nop
Drwg No. 0001 Sheet 1 of 18

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Wyo. Proj. 1500006

Sheet B2 of B25 Sheets

GENERAL NOTES

SPECIFICATIONS: WYDOT Standard Specifications for Road and Bridge Construction, 2010 Edition.

DIMENSIONS: Longitudinal dimensions for the substructure are horizontal and include no correction for grade. Longitudinal dimensions for the superstructure are along grade unless noted. Slopes are vertical : horizontal.

CONCRETE: Use class S concrete made with type II Wyoming modified cement in the drilled shaft foundations. Use class A concrete made with type II Wyoming modified cement at all other locations.

REINFORCING STEEL: Ensure reinforcing steel conforms to ASTM A 615 (Grade 60) for all bars, including ties and stirrups. Concrete cover to face of reinforcing steel is 2" unless noted. Dimensions for bent bars are out to out. Ensure bars marked with an asterisk (*) are coated.

BAR MARKS

Straight Bars — Size, Length — 508-3

Bent Bars — Size, Designation — 4A2

STRUCTURAL STEEL: Ensure structural steel conforms to ASTM A 709 (Grade 50W) unless noted. Ensure steel fabricators supplying structural components are certified under the AISC Quality Certification Program for Steel Bridge Fabricators - 2011, Category Intermediate Bridges (IBR).

Ensure steel components of the deck drain system conform to ASTM A 709 (Grade 50W) minimum and ASTM A 53 (Grade A or B). After fabrication operations are complete, ensure components are prepared in accordance with Steel Structures Painting Council Surface Preparation Specification No. 6 Commercial Blast Cleaning (SSPC-SP 6).

BRIDGE BEARING ANCHOR BOLTS: Anchor bolts may be swedge bolts or threaded rods. Ensure swedge bolts conform to ASTM A 709 (Grade 36) and swedges are produced by deforming the steel through application of pressure and not by any method that removes material, such as grinding or cutting. Ensure threaded rods conform to ASTM F 1554 (Grade 36) minimum. Ensure anchor bolts, or threaded rods, and nuts are galvanized in accordance with Subsection 815.14, Galvanized Coating. Use anchor bolts compatible with the adhesive anchorage system.

Use one of the following adhesive anchorage systems to set anchor bolts in drilled holes:
CIA-GEL 6000-GP as manufactured by MiTek USA, Inc.
Red Head C6+ as manufactured by ITW Commercial Construction
Sure Anchor I J-51 as manufactured by Dayton Superior
HIT-RE 500 V3 as manufactured by Hilti, Inc.
Drill and prepare holes and install the anchor bolts in accordance with the adhesive system manufacturer's recommendations. Work necessary for the adhesive anchorage system is incidental to the contract pay item Structural Steel.

STEEL PILING: Use steel piles conforming to ASTM A 709 (Grade 50).

ELASTOMERIC COMP JOINT SEAL: Provide one of the following products:
WJ-400 as manufactured by Watson Bowman Acme Corp.
CV-4000 as manufactured by D.S. Brown.

EYEBOLTS: Use galvanized bar conforming to ASTM A 709 (Grade 36). Work necessary for the eyebolts is incidental to the contract pay item Class A Concrete.

REMOVAL OF STEEL BRIDGES: Remove the existing three span 156'-6" x 27'-0" steel girder bridge, Structure No. CSW.

HAZARDOUS MATERIALS: The paint system on the steel components of the existing structure may contain materials including lead and chromium which are hazardous if ingested, inhaled, or otherwise absorbed.

MISCELLANEOUS REMOVAL: Work necessary to remove and dispose of the car bodies along the river bank adjacent to the existing bents is incidental to the contract pay item Machine-Placed Riprap.

DRY EXCAVATION: The estimated quantity of dry excavation is calculated below finished grade to the limits shown at approach slabs and below existing ground line at abutments.

FOUNDATIONS: Abutments are on steel piles driven to refusal in bedrock.

Bents are on drilled shafts founded in bedrock. Casing will be necessary to prevent caving of the granular materials and to control ground water. An adequate seal between the casing and bedrock may not be possible and pouring concrete under water should be anticipated. The presence of very dense gravel and cobble lenses may result in difficult drilling.

MACHINE-PLACED RIPRAP: Use stones conforming to class X gradation requirements from a contractor furnished source.

PREDRILLED HOLES: If any pile fails to achieve the bottom of pile elevations shown, predrill the remaining piles to bedrock contact and drive to refusal. The estimated quantity of predrilled holes is calculated from the bottom of abutment cap to bedrock contact at each pile.

STAY-IN-PLACE FORMS: Stay-in-place slab forms may be used for construction of the deck. Do not exceed 15 psf for the weight of the forms and additional concrete, including form deflection. Do not extend the vertical legs of support angles past the bottom of the bottom reinforcing steel mat or use these legs to support the reinforcing steel.

CRUSHED BASE: Use crushed base conforming to grading L from a contractor furnished source. Compact the crushed base in accordance with Subsection 301.4.2.3, Placing.

WATER: The estimated quantity of water for compaction of crushed base is 0.040 MG per cubic yard.

BRIDGE OFFICE NOTIFICATION: The engineer will notify the State Bridge Engineer in writing within 14 calendar days after the existing structure has been removed and again within 14 calendar days after the new structure has been opened to traffic.

REFERENCES

WYDOT Plans:	Sheet No.
Bridge Drwg No. 2727	1-5 of 5
Bridge Drwg No. 5286	1 & 7 of 7

Supplementary Specifications:

SS-100K	Adjustment for Structural Steel
SS-500B	Welder Qualification
SS-500E	Bridge Bearing Correction
SS-500F	Automatically End-Welded Studs
SS-500G	Structural Concrete with Quality Control and Quality Acceptance

STREAM DATA

Drainage Area	198.0 Sq Mi
Channel Slope	1.41%
Description of Channel Material	Sand, gravel, and cobbles
Drift Potential	Trees and logs
Ordinary High Water Elevation	6037.0 ft
Headwater Elevation Q_{25}	6041.4 ft
Q_{100}	6043.6 ft
High Water Elevation Q_{25}	6039.4 ft
Q_{100}	6042.2 ft
Design Scour Elevation	XXXX.X ft
Constricted Velocity Q_{25}	12.2 fps
Q_{100}	13.4 fps
Design Frequency	25 Year
Design Discharge Q_{25}	3056 cfs
Review Discharge Q_{100}	4290 cfs
Source of Discharge	Log Pearson Type III
Method of Analysis	HEC-RAS and WSP
Flood of Record	5080 cfs (Year 1963)

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

GENERAL NOTES

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)

1500006 Pa

REVIEW _____ APPROVAL _____

DESIGN ____ ✓ ____
DETAIL BBB ✓ DDD
QTY'S ____ ✓ ____

Design Section L M Nop

Drwg No. 0001 Sheet 2 of 18

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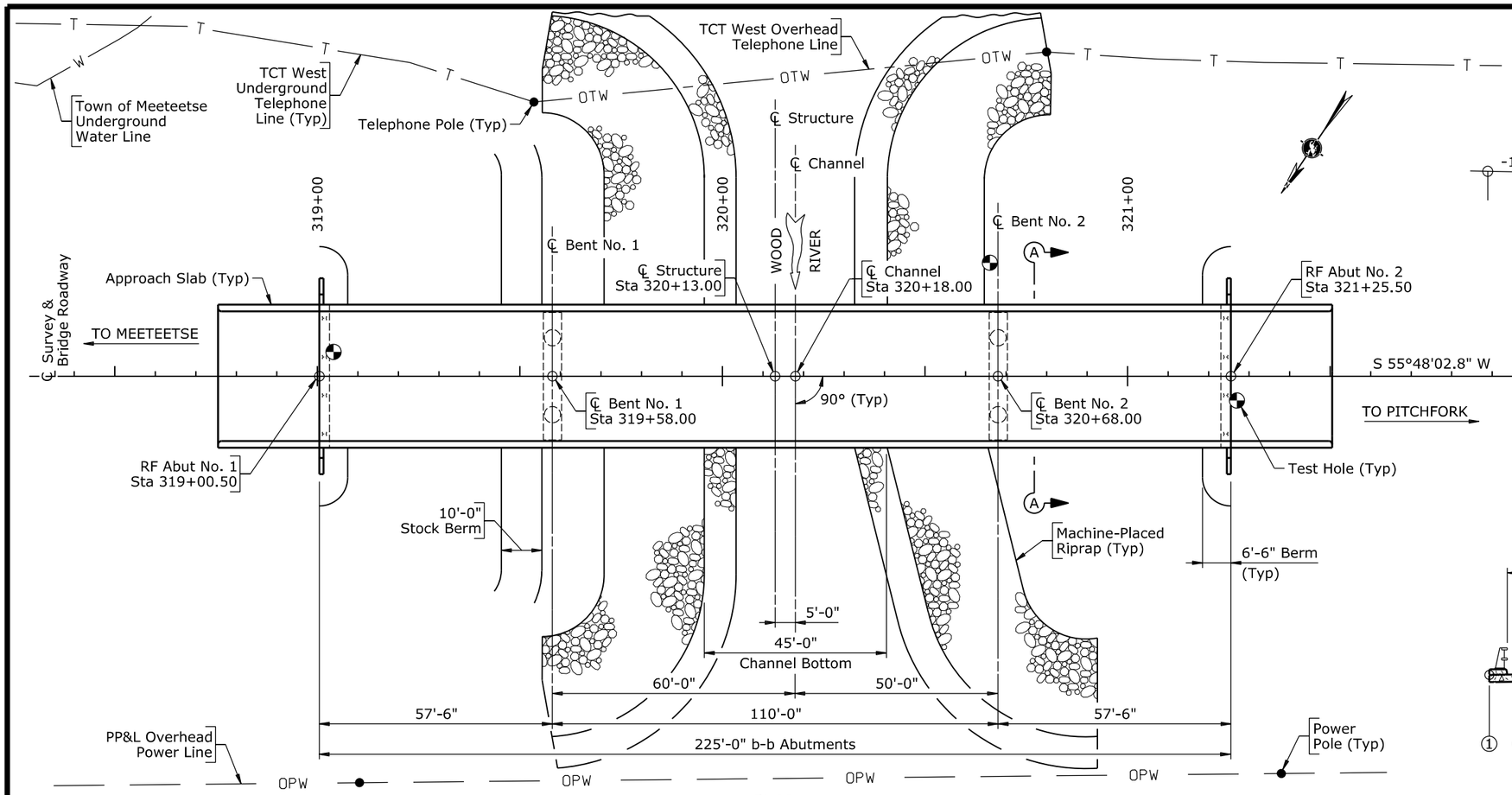
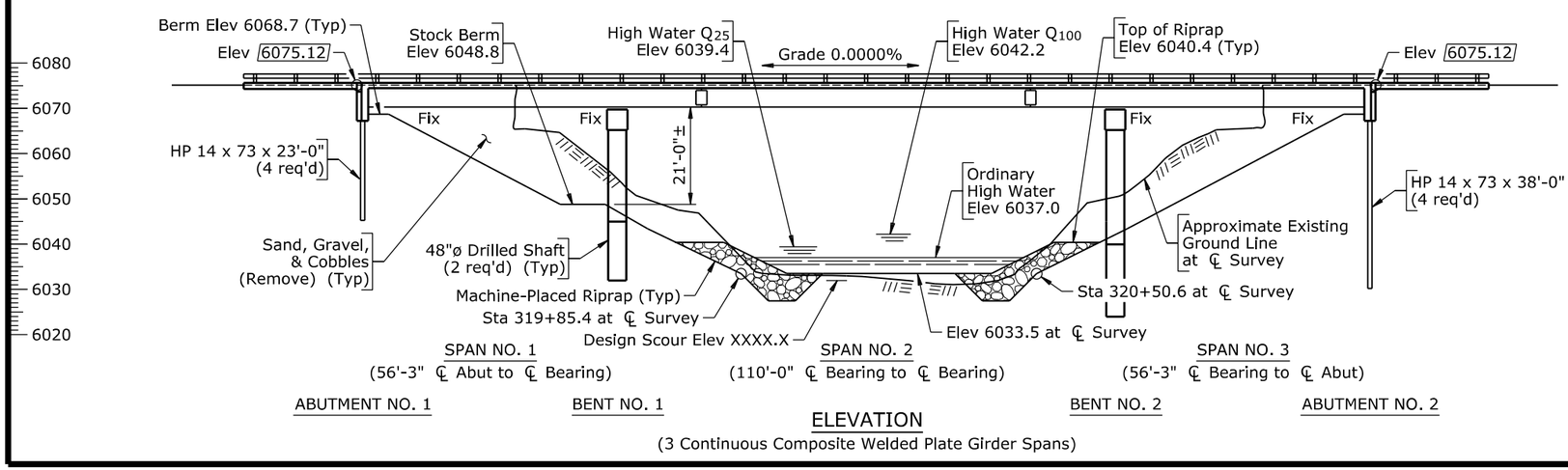




Note: 1) Elevations shown as 6075.12 indicate finished grade at rear face abutment on ℄ Bridge Roadway.
2) Berm slopes are 1:2±, measured perpendicular to ℄ Channel.

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

GENERAL PLAN AND ELEVATION

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)

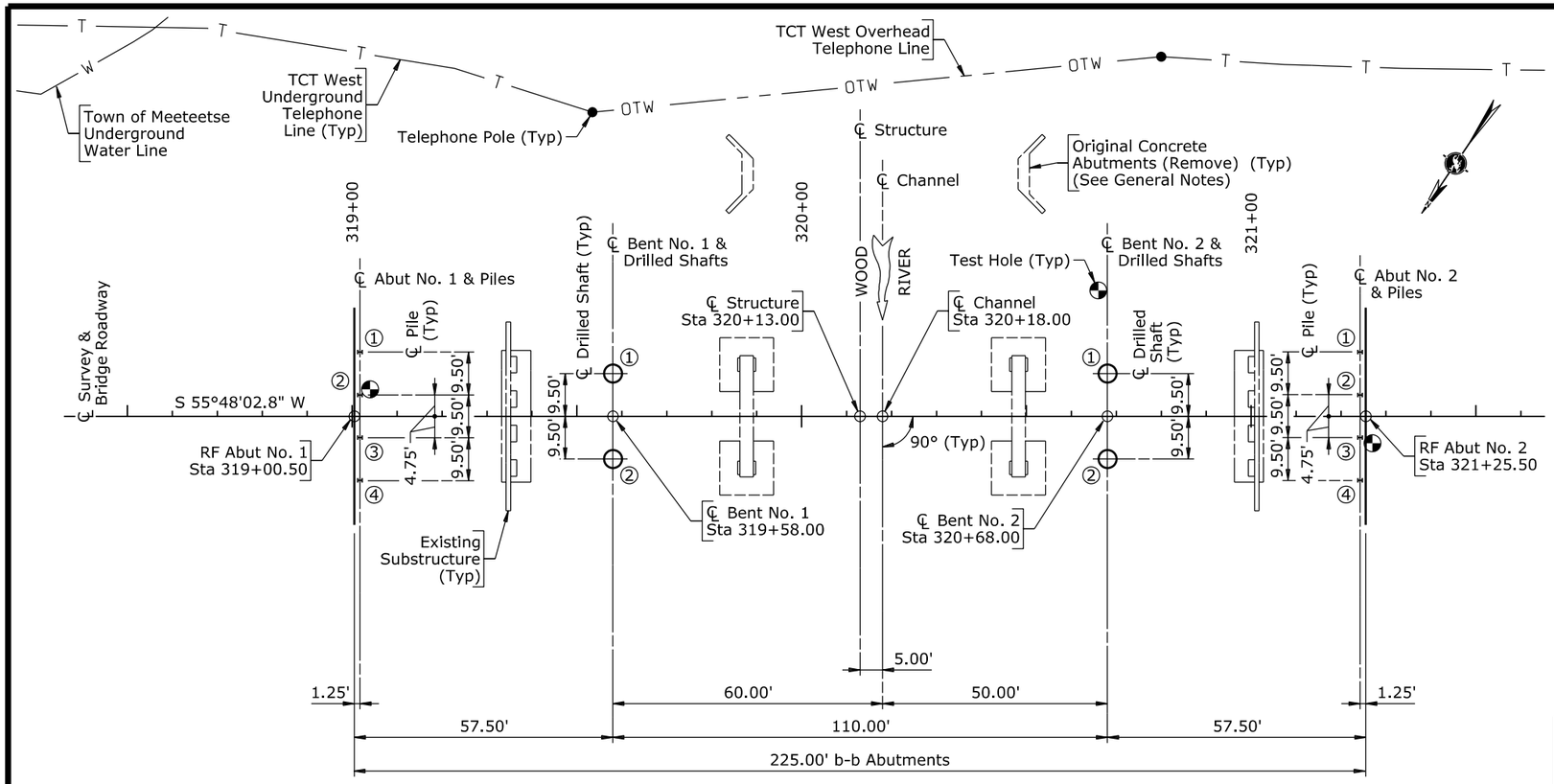
1500006 Pa

REVIEW
APPROVAL
DESIGN ✓
DETAIL BBB ✓ DDD
QTY'S ✓

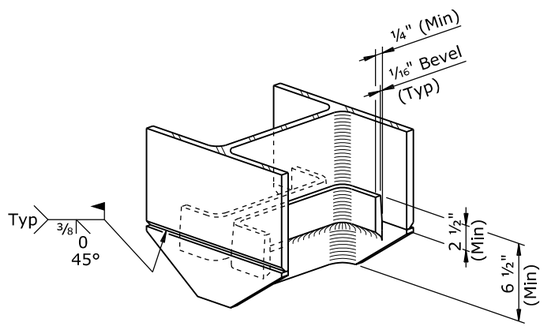
Design Section L M Nop
Drwg No. 0001 Sheet 3 of 18

1500006_1gp.dgn

Wyo. Proj.	1500006			
Sheet	B4	of	B25	Sheets

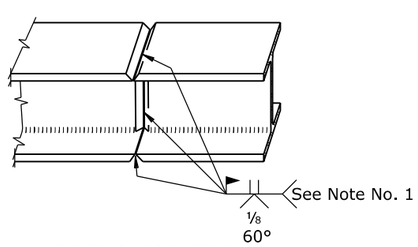


SUBSTRUCTURE LAYOUT

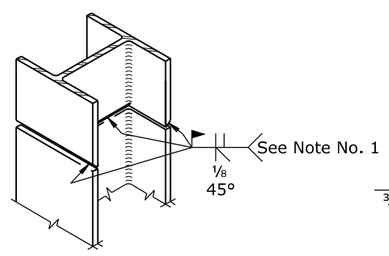


PILE POINT DETAIL
(8 required for HP 14 x 73)

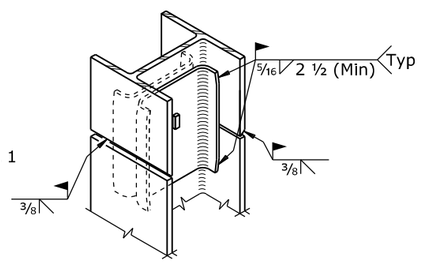
SUBSTRUCTURE DATA				
Location	Pile Elevations		Drilled Shaft Elevations	
	Piles No. ① - ④		Drilled Shafts No. ① & ②	
	Top	Bottom	Top	Bottom
Abut No. 1	6068.21	6045.21	———	———
Bent No. 1	———	———	6044.94	6031.94
Bent No. 2	———	———	6039.94	6023.94
Abut No. 2	6068.21	6030.21	———	———



WELDED SPLICE DETAIL
(Piles welded horizontal)



WELDED SPLICE DETAIL
(Piles welded vertical)



PILE SPLICER DETAIL
(Piles vertical or horizontal)

PILE SPLICE DETAILS

Note: 1) Gouge root to sound metal before welding second side.
2) Piles are HP 14 x 73.
3) Drilled shafts are 48" diameter.

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

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SUBSTRUCTURE LAYOUT

BRIDGE OVER WOOD RIVER

STA 320+18

Meeteetse - Pitchfork Road

(WYO 290)

1500006 Pa

REVIEW	DESIGN	Design Section	L M Nop
APPROVAL	DETAIL BBB ✓ DDD	Drwg No. 0001	Sheet 4 of 18
	QTY'S		

1500006_1sb.dgn

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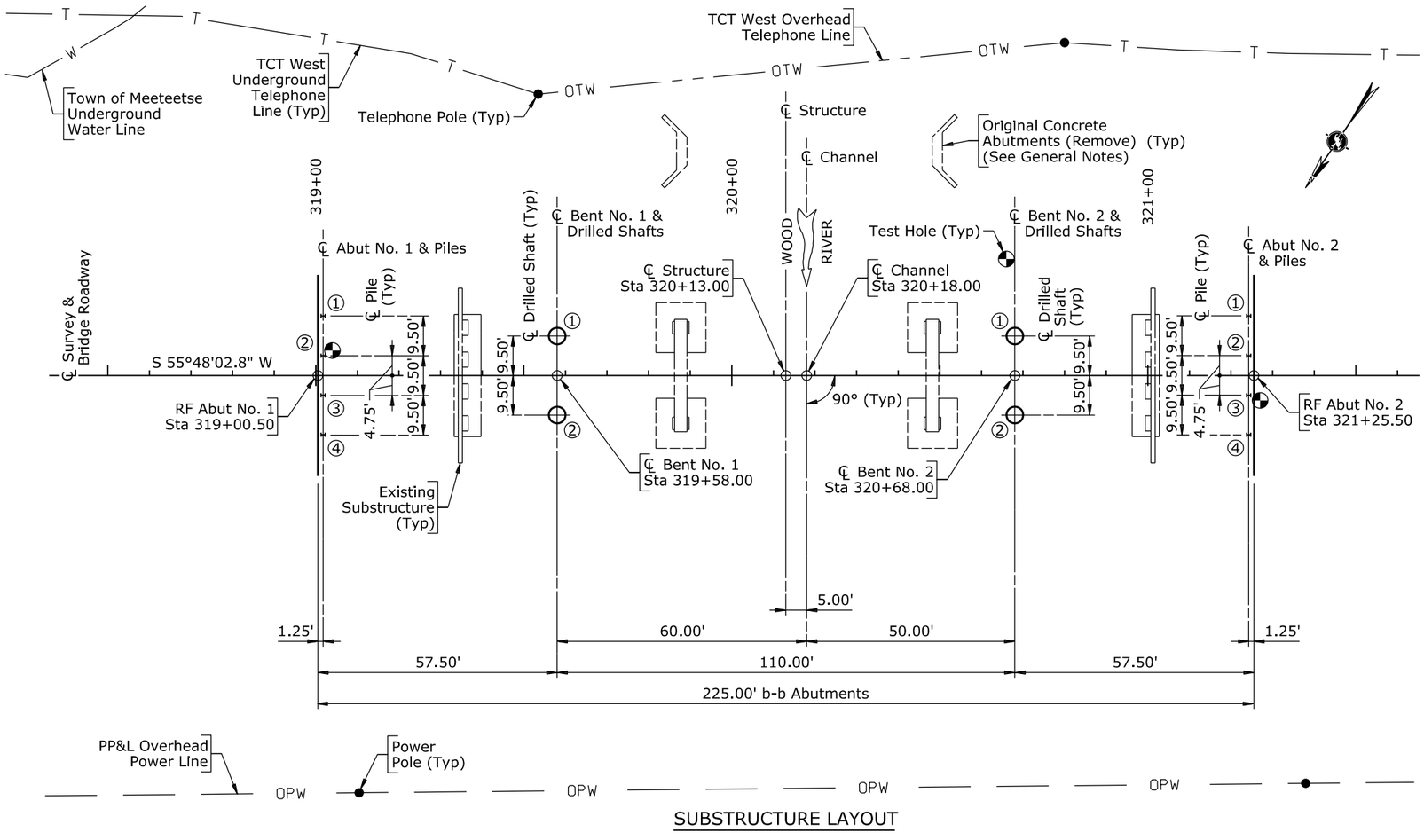
Sheet of Sheets



SUBSTRUCTURE LAYOUT

SUBSTRUCTURE DATA				
Location	Pile Elevations		Drilled Shaft Elevations	
	Piles No. ① - ④		Drilled Shafts No. ① & ②	
	Top	Bottom	Top	Bottom
Abut No. 1	6068.21	6045.21	———	———
Bent No. 1	———	———	6044.94	6031.94
Bent No. 2	———	———	6039.94	6023.94
Abut No. 2	6068.21	6030.21	———	———

Note: 1) Piles are HP 14 x 73 (Grade 50).
2) Drilled shafts are 48" diameter.

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BRIDGE PROGRAM

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FINAL GEOLOGY LAYOUT

BRIDGE OVER WOOD RIVER

STA 320+18

Meeteetse - Pitchfork Road

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REVIEW ———

APPROVAL ———

DESIGN ——— ✓ ———

DETAIL CCC ✓ AAA

QTY'S ——— ✓ ———

Design Section L M Nop

Drwg No. 0001 Sheet 1 of 1

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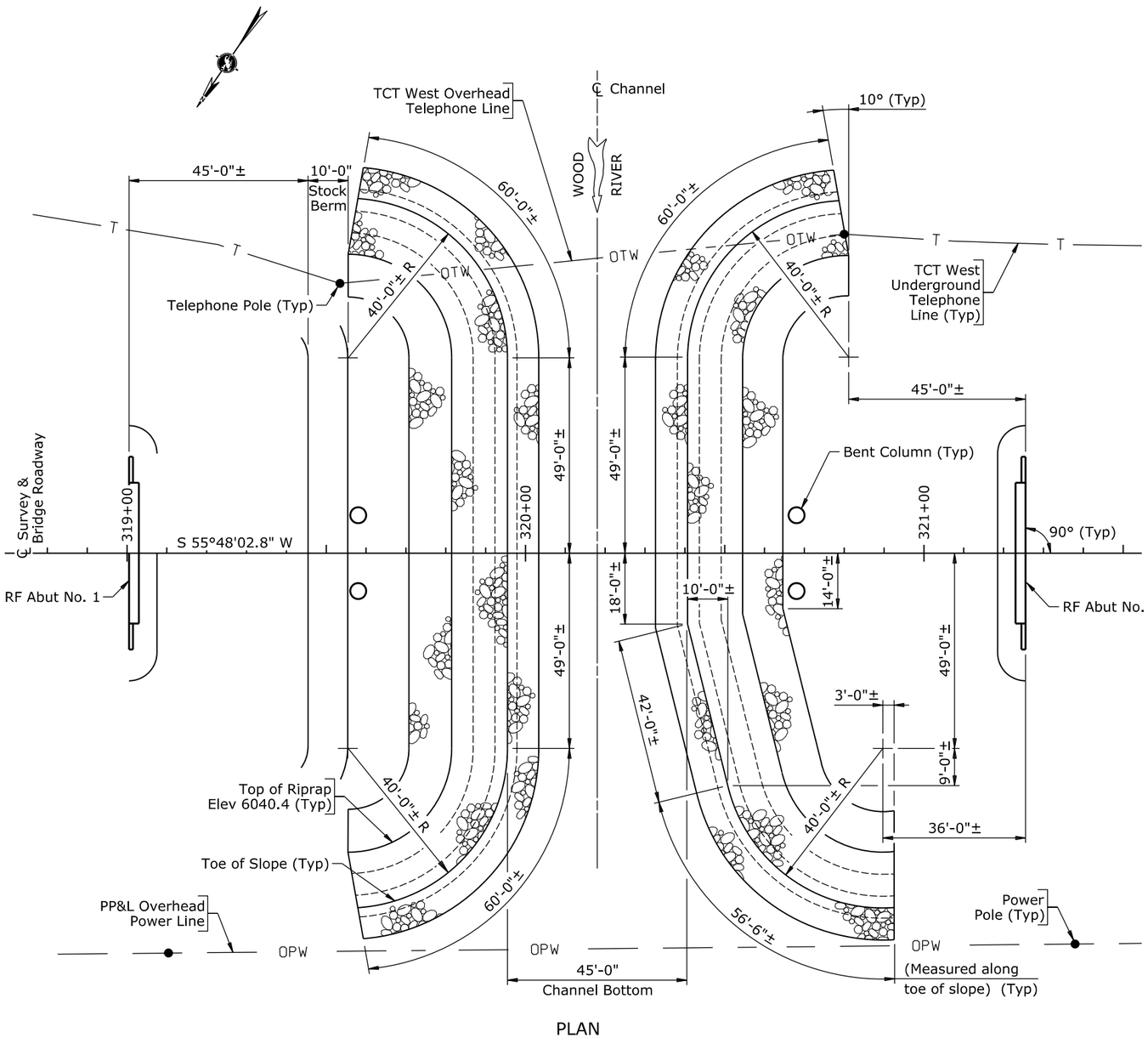
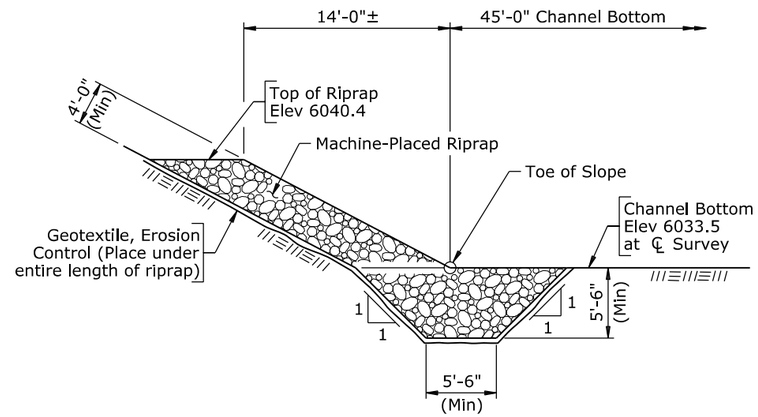
Wyo. Proj.	1500006		
Sheet	B5	of	B25 Sheets



PLAN



TYPICAL SECTION

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

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RIPRAP DETAILS

BRIDGE OVER WOOD RIVER

STA 320+18

Meeteetse - Pitchfork Road

(WYO 290)

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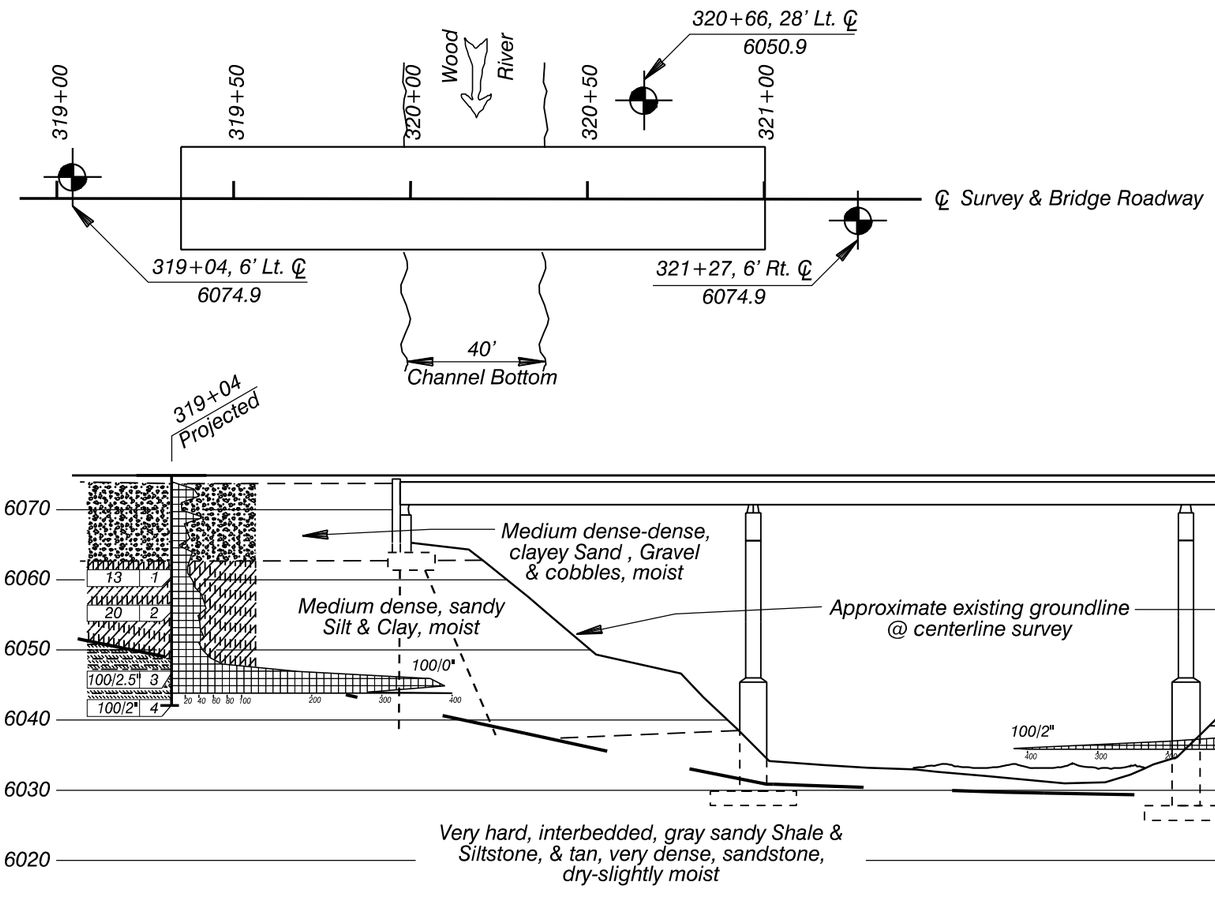
REVIEW	DESIGN BBB ✓ DDD	Design Section	L M Nop
APPROVAL	DETAIL BBB ✓ DDD	Drwg No. 0001	Sheet 5 of 18
	QTY'S BBB ✓ AAA		

1500006_1rr.dgn

SUMMARY OF LABORATORY TEST DATA

TEST NO.	LOCATION (station)	ELEVATION	BLOWS Per Ft.	SIEVE ANALYSIS - % PASSING #10	#40	#200	LIQUID LIMIT	PLASTIC INDEX	DENSITY WET PCF	MOIST. % DRY WT.	SPECIFIC GRAVITY	SHEAR STRENGTH — PEAK — lb./ft.²	UNIFIED & AASHTO CLASSIFICATION	UNIT COHESION lb./ft.²	Ø MAXIMUM	% SATURATION	REMARKS
1	319+04, 6' Lt. ℄	6061.4 - 6060.4	13	92	90	51.9	20	4		11.6			ML,A-4(0)				
2	319+04, 6' Lt. ℄	6056.4 - 6055.4	20	98	97	67.0			133.4	11.9			CL-ML.A-4(1)				
3	319+04, 6' Lt. ℄	6046.9 - 6046.7	100/2.5"														No Recovery
4	319+04, 6' Lt. ℄	6042.9 - 6042.1	100/2"						137.2	7.4							Shale
5	321+27, 6' Rt. ℄	6061.4 - 6060.4	12	75	71	38.1	NV	NP		11.6			SM,A-4(0)				
6	321+27, 6' Rt. ℄	6051.4 - 6050.4	20	83	82	56.3	22	7		11.5			CL,A-4(1)				
7	321+27, 6' Rt. ℄	6041.4 - 6040.4	15	97	94	57.8	22	5		8.3			CL-ML.A-4(0)				
8	321+27, 6' Rt. ℄	6031.4 - 6030.6	100/3.5"							10.3							Sandstone
9	321+27, 6' Rt. ℄	6027.9 - 6027.8	100/1"														No Recovery
10	320+66, 28' Lt. ℄	6023.9 - 6023.6	100/3.5"							12.1							Sandy Shale
11	320+66, 28' Lt. ℄	6015.9 - 6015.8	100/1.5"							11.6							Sandy Shale



UNIFIED SOIL CLASSIFICATION

GRAVEL	GW - Well graded gravel GP - Poorly graded gravel GM - Silty sandy gravel GC - Clayey gravel
SAND	SW - Well graded sand SP - Poorly graded sand SM - Silty sand SC - Clayey sand
SILT & CLAY	ML - Inorganic silt, slight plasticity CL - Inorganic clay, medium plasticity OL - Organic silt and silty clay, low plasticity
SILT & CLAY L.L.greater than 50%	MH - Inorganic elastic silt CH - Inorganic clay, high plasticity OH - Organic clay, medium to high plasticity
highly Organic soils	PT - Peat and other highly organic soils

STRENGTH CLASS DEFINITION - BASED ON BLOWS/FT.

— STANDARD PENETRATION —

CONSISTENCY GRANULAR	BLOWS PER FT.	CONSISTENCY COHESIVE	BLOWS PER FT.
Very Loose	0 - 4	Very Soft	0 - 1
Loose	5 - 10	Soft	2 - 4
Medium Dense	11 - 24	Medium Stiff	5 - 8
Dense	25 - 50	Stiff	9 - 15
Very Dense	>51	Very Stiff	16 - 30
		Hard	31 - 60
		Very Hard	>61

GROUND WATER SURFACE

[X] Not Encountered

[ ] As Shown, measured - Date (s) _____

Borings shown made with: Auger Rig [X] H-823; Rotary Rig [ ] ___ circulation medium

[ ] Air _____ [ ] Water _____ [ ] Mud _____

Classification of earth material on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis unless otherwise noted.

The data on this sheet is for design purposes only and is not a warranty of subsurface conditions, except at locations actually drilled. Projections between test holes are based on geologic interpretations and exact elevations cannot be guaranteed.

Data contained on this sheet is based on information from the Geology Program of the Wyoming Transportation Department and is beyond the scope of responsibility of other entities approving or sealing these plans.

NOTES: 1) CME automatic SPT hammer used for soil testing--efficiency rating 110%.
2) Test holes projected to center line, at actual elevations and same stations as drilled.

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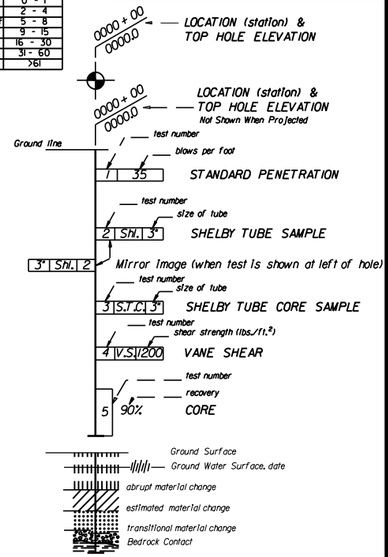
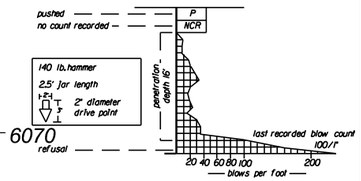
Sheet B6 of B25 Sheets



GRAPHIC REPRESENTATION - DRIVEPOINT PENETRATION



LEGEND OF EARTH MATERIALS

soils	bedrock
LOESS	LIMESTONE
CLAY	SHALE
SILT	CLAYSTONE
SAND	SILTSTONE
GRAVEL	COAL & LIGNITE
fill	SANDSTONE
	CONGLOMERATE
	all Igneous and Metamorphic rocks

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

LOG BORING SHEET

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)

1500006 Pa

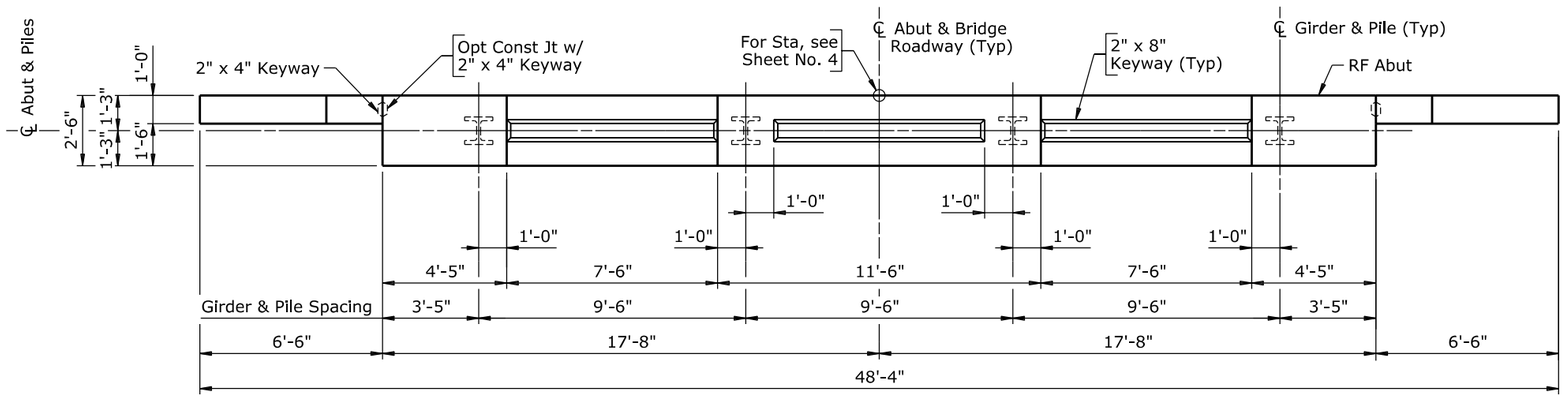
APPROVAL _____

GEOLOGIST G. MILLER Z6E5 RDK

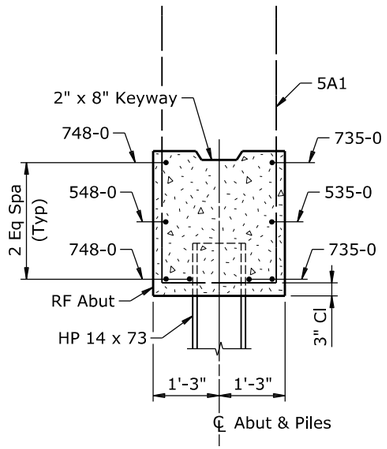
Design Section L M Nop

Drwg No. 0001 Sheet 6 of 18

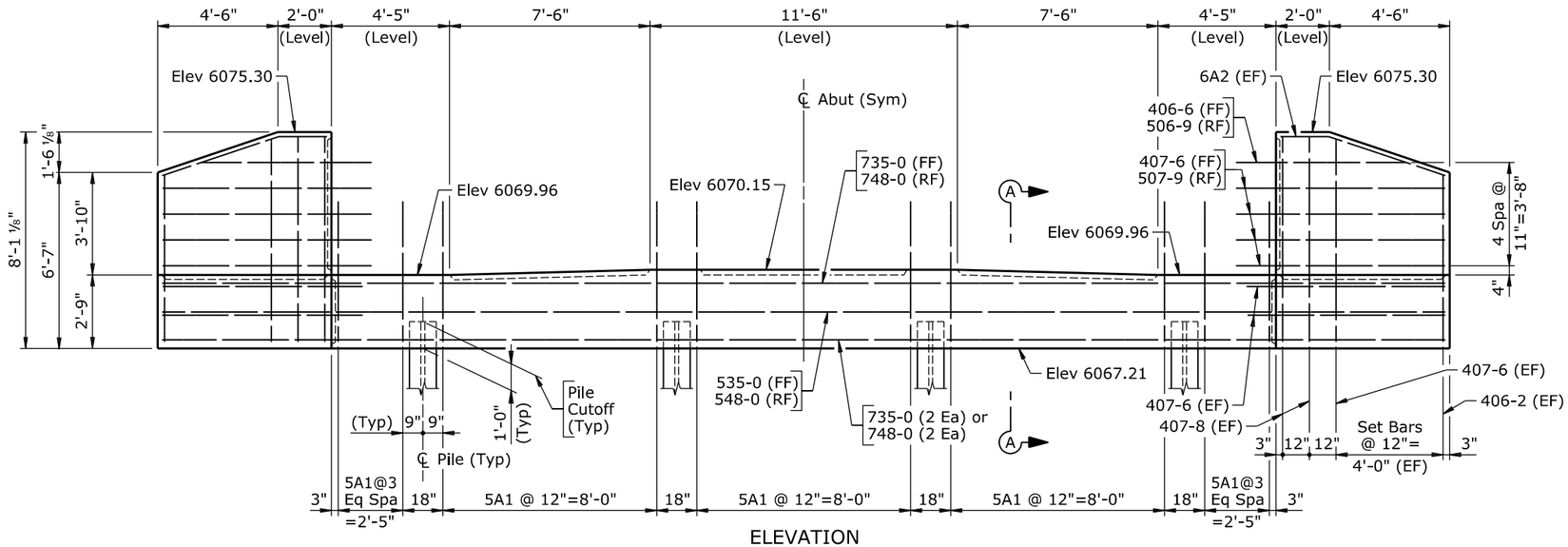
1500006_1lb.dgn



PLAN



SECTION A-A



ELEVATION

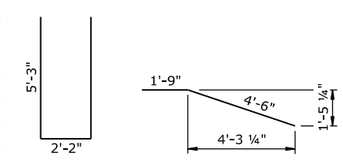
(Looking back station at Abutment No. 1, looking ahead station at Abutment No. 2)

TYPICAL WINGWALL SECTION

BILL OF REINFORCEMENT

Location	Mark	Number Required Per Abut	Location	Mark	Number Required Per Abut
Cap	407-6	4	Wingwalls	406-6	2
	5A1	35		407-6	8
	535-0	1		407-8	8
	548-0	1		Set Bars	4
	735-0	3		506-9	2
	748-0	3		507-9	8
	Weight	1078 LB		6A2	4
				Weight	298 LB

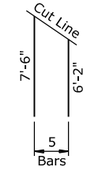
Bending Diagrams



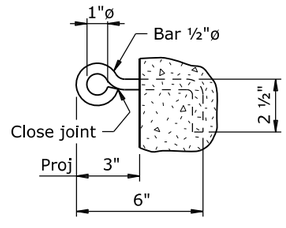
5A1 (Stirrup) (12'-8")

6A2 (6'-3")

Set Diagrams



Set Bars (No. 4 Bars) (Avg length=6'-10")



EYEBOLT DETAIL

(16 req'd for securing fence)

Note: 1) Ensure the reinforcing steel fabricator prefixes bar marks this sheet with numeral 1 at Abutment No. 1 and numeral 2 at Abutment No. 2.
2) The estimated quantity of class A concrete is 13.0 CY per abutment.
3) For pile cutoff elevations, see Sheet No. 4.

WYOMING DEPARTMENT OF TRANSPORTATION
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ABUTMENT DETAILS

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
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REVIEW
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DESIGN DDD ✓ FFF
DETAIL BBB ✓ DDD
QTY'S BBB ✓ AAA

Design Section L M Nop
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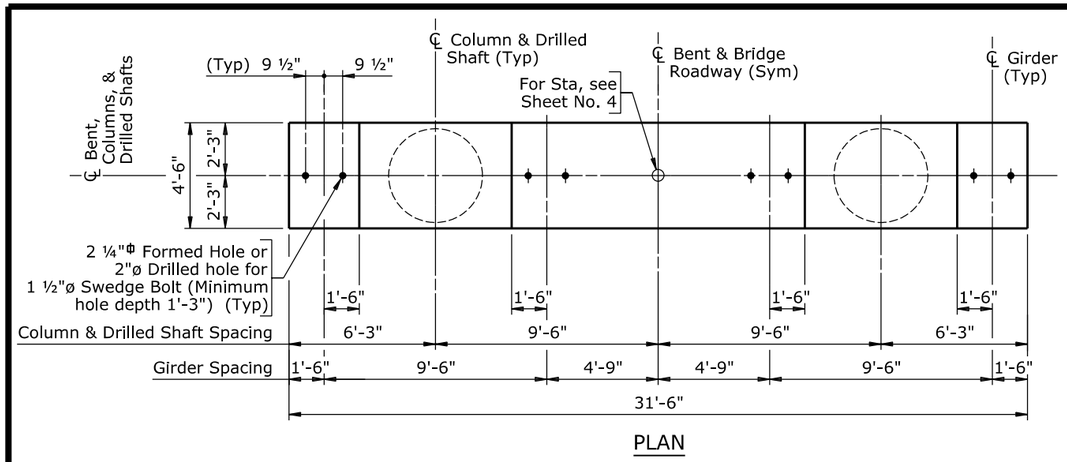
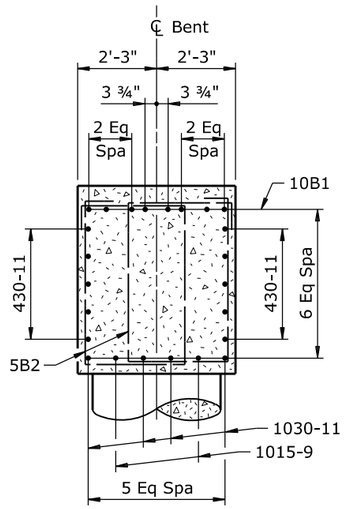
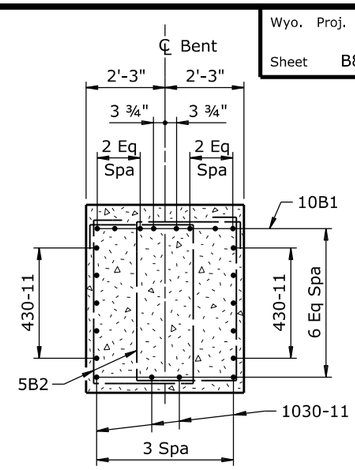
Sheet B8 of B25 Sheets



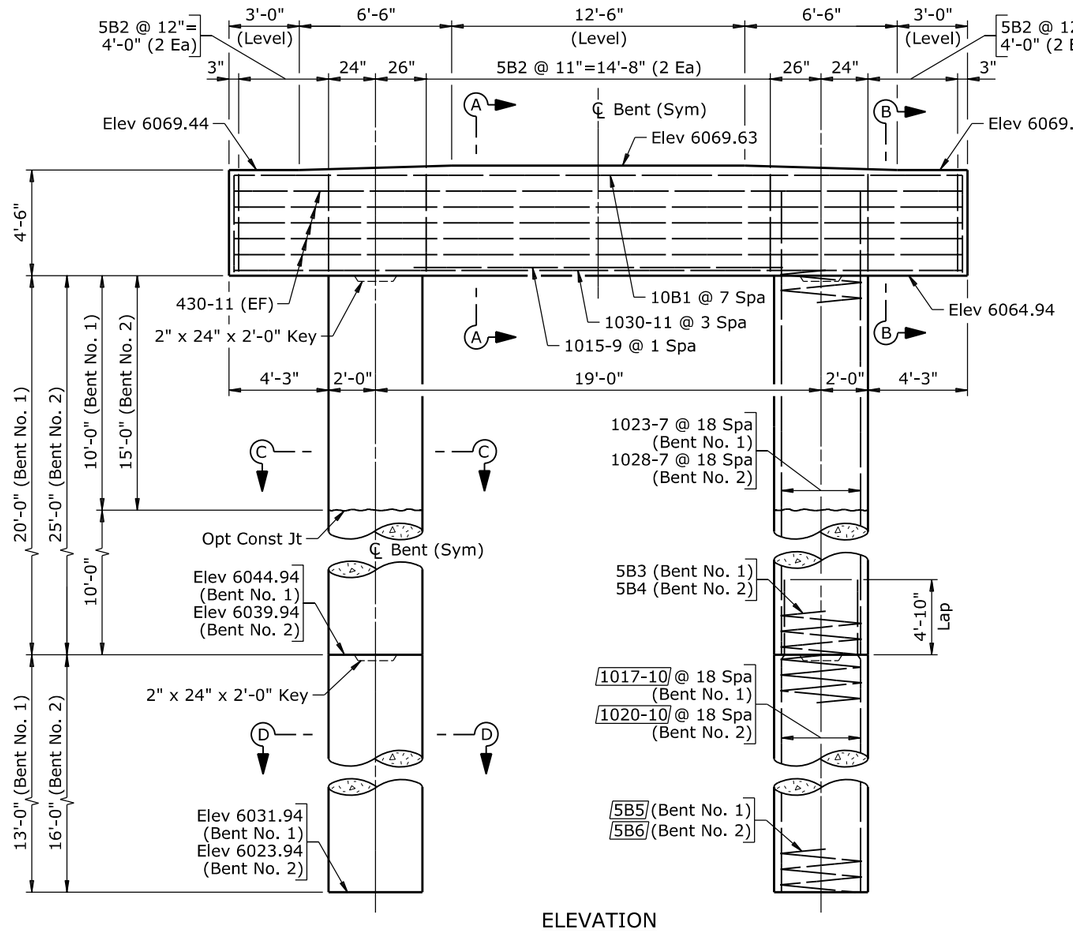
PLAN



SECTION A-A



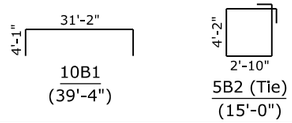
SECTION B-B



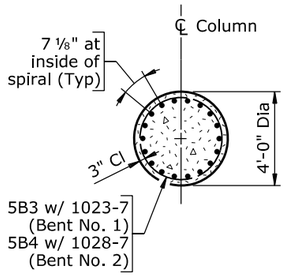
ELEVATION
(Looking ahead station)

BILL OF REINFORCEMENT			
Location	Mark	Number Required	
		Bent No. 1	Bent No. 2
Cap	430-11	10	10
	5B2	54	54
	10B1	8	8
	1015-9	2	2
	1030-11	4	4
	Weight	3074 LB	3074 LB
Columns	5B3	2	——
	5B4	——	2
	1023-7	36	——
	1028-7	——	36
	Weight	5580 LB	6814 LB
Drilled Shafts	5B5	2	——
	5B6	——	2
	1017-10	36	——
	1020-10	——	36
	Weight	4160 LB	4961 LB

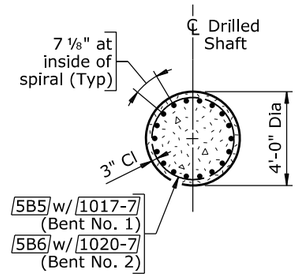
Bending Diagrams



Spirals			
Mark	Pitch	Core	Turns
5B3	3"	42"	‡84
5B4	3"	42"	‡104
5B5	3"	42"	‡54
5B6	3"	42"	‡66



SECTION C-C



SECTION D-D

Note:
1) Place 1015-9 bars symmetrical between columns.
2) Extend spiral reinforcing steel 3" into bent cap.
‡3) The number of turns for 5B5 and 5B6 bars includes 1 ½ turns at the top. The number of turns for 5B3 and 5B4 bars includes 1 ½ turns at the top and bottom.
4) Ensure the reinforcing steel fabricator prefixes bar marks this sheet with numeral 3 at Bent No. 1 and numeral 4 at Bent No. 2.
5) Reinforcing steel shown as 1020-10 is not included in the quantity of reinforcing steel.
6) The estimated quantity of class A concrete is 42.8 CY for Bent No. 1 and 47.4 CY for Bent No. 2.

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

BENT DETAILS

BRIDGE OVER WOOD RIVER
STA 320+18
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REVIEW
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Design Section L M Nop
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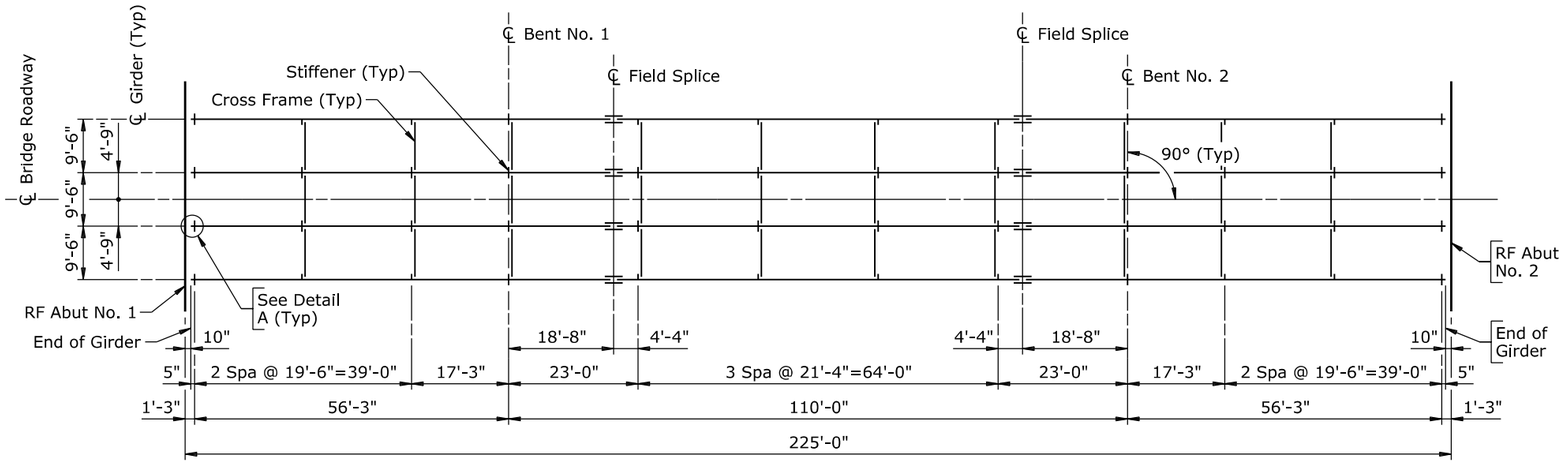
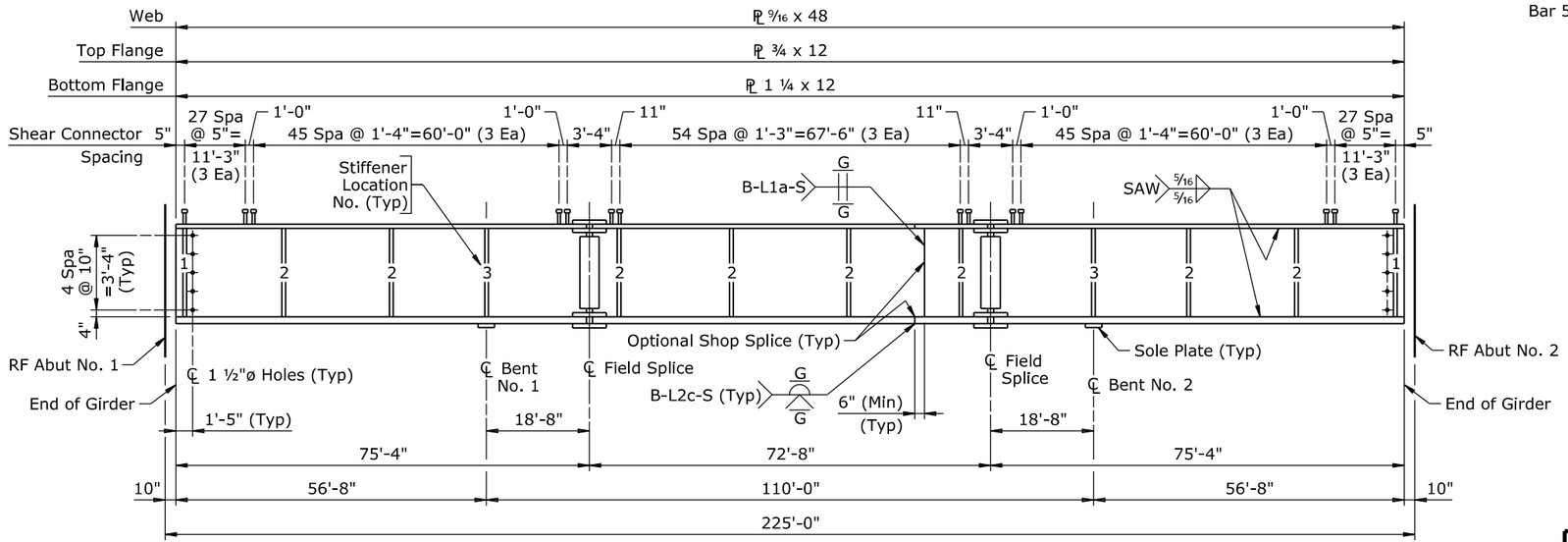


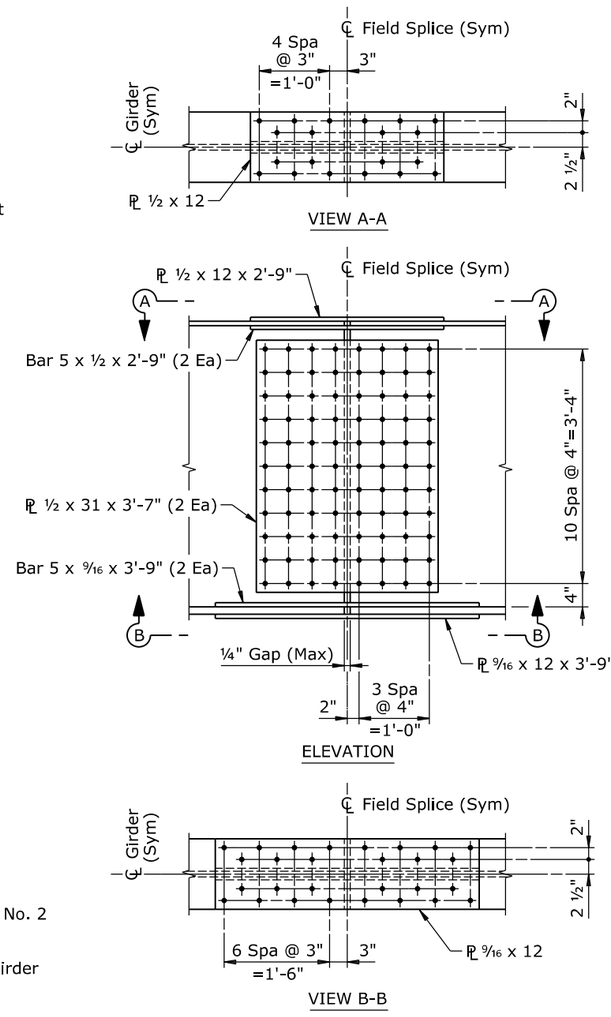
FRAMING PLAN

(Longitudinal dimensions are along bottom of bottom flange and are typical for each girder)



GIRDER ELEVATION

(Longitudinal dimensions are parallel with finished grade)



FIELD SPLICE DETAILS

(8 req'd)

Note: 1) If optional shop splice is used, ensure flange and web splice welds are inspected by ultrasonic testing after being ground flush.
2) The distance from center of bolt holes to edges is 1 ½" unless noted.
3) For Detail A, see Sheet No. 11.

WYOMING DEPARTMENT OF TRANSPORTATION
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BRIDGE OVER WOOD RIVER

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REVIEW	DESIGN DDD ✓ FFF	Design Section	L M Nop
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	QTY'S BBB ✓ AAA	Drwg No. 0001	Sheet 9 of 18

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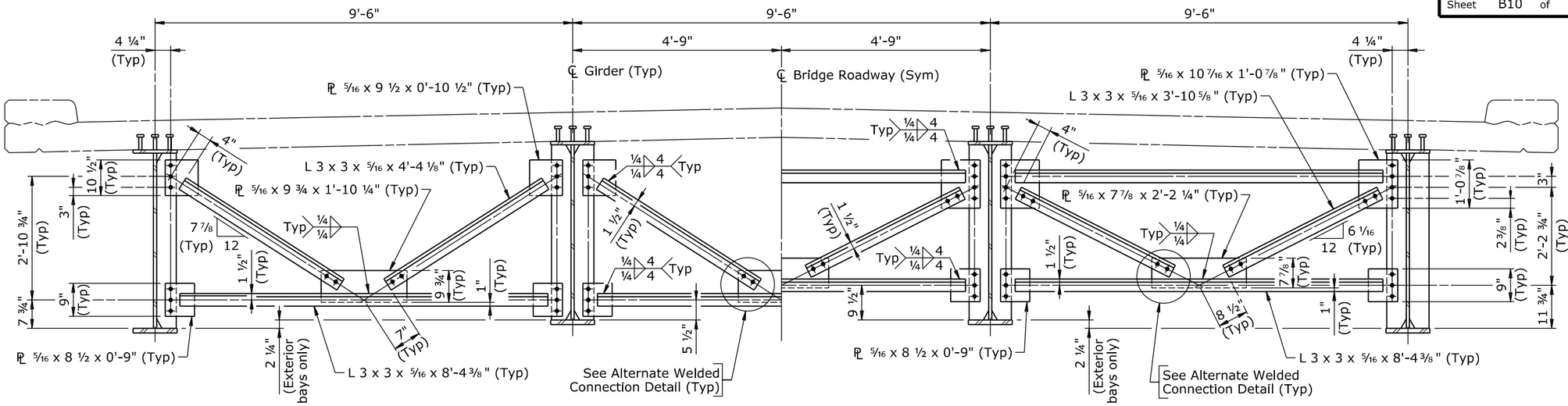
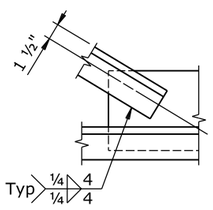
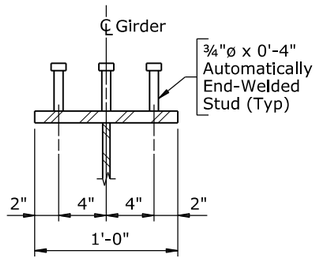


HALF SECTION
(Showing intermediate cross frames)
(24 req'd)

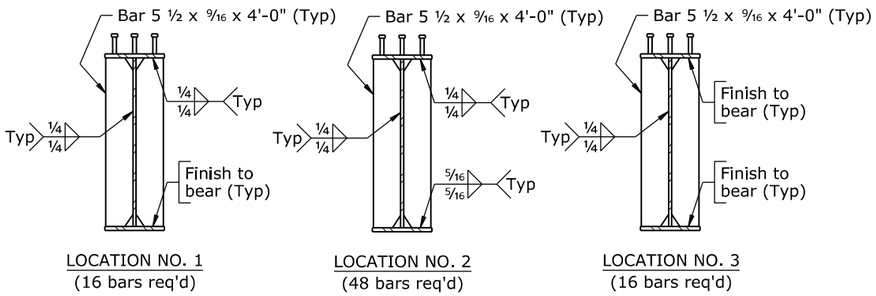
HALF SECTION
(Showing cross frames at bents)
(6 req'd)



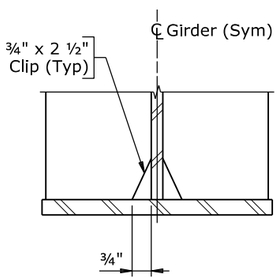
ALTERNATE WELDED CONNECTION DETAIL
(Bottom connection shown, top connection similar)



SHEAR CONNECTOR DETAIL
(2484 studs req'd)



STIFFENER DETAILS



STIFFENER CLIP DETAIL
(Typ top & bott)

Note:
1) Terminate stiffener and cross frame welds ¼" from edge of members.
2) Bolt pitch is 3" unless noted. The distance from center of bolt holes to edges is 1 ½" unless noted.
3) Alternate shop welding of bolted cross frame connections and the use of oversized holes in cross frame to stiffener connections will be permitted, at no additional cost to the department. Gusset plates have been sized to accommodate the use of both welded and bolted connections. Ensure oversized holes are in either stiffeners or gusset plates. Ensure the fabricator details the proposed connection on the shop drawings.
4) Shear connectors are intended to be field installed in accordance with Supplementary Specification SS-500F, Automatically End-Welded Studs. If shear connectors are shop applied, ensure compliance with OSHA regulations.
5) For stiffener locations, see Sheet No. 9.

WYOMING DEPARTMENT OF TRANSPORTATION
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REVIEW
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Design Section L M Nop
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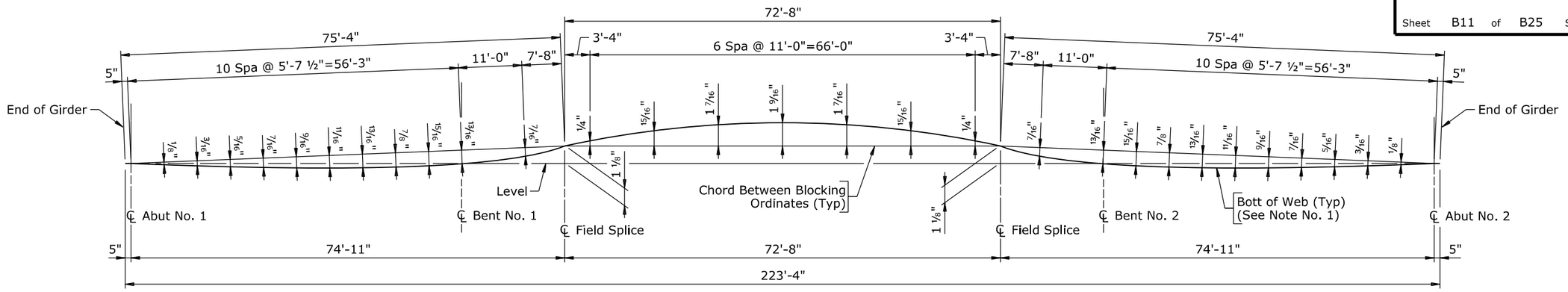
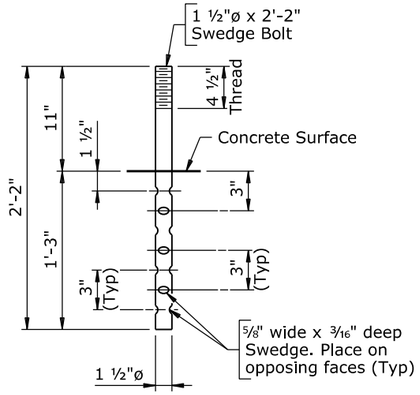
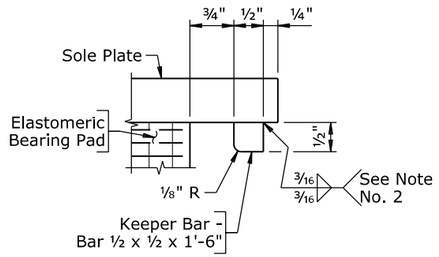


WEB CUTTING DIAGRAM

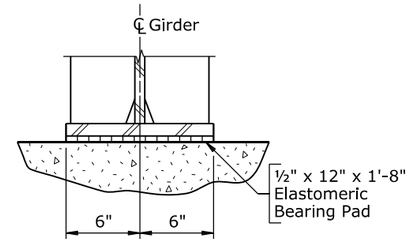
(Includes dead load deflection and grade)



SWEDGE BOLT DETAIL

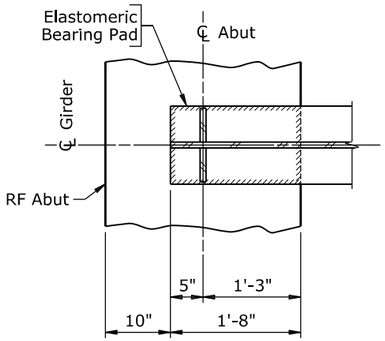


KEEPER BAR DETAIL

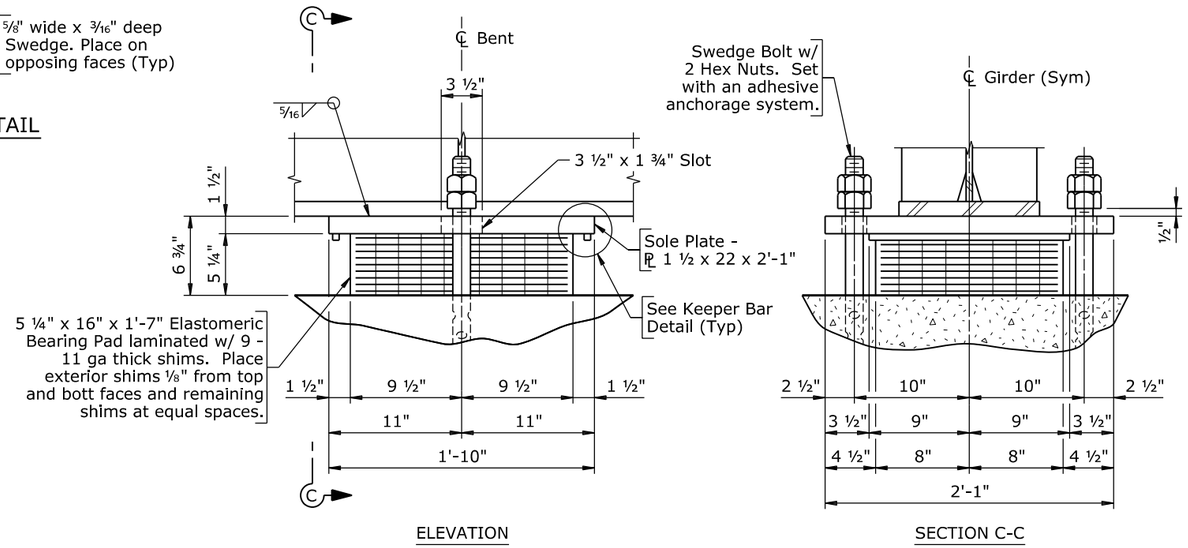


BEARING AT ABUTMENT DETAIL

(8 req'd)



DETAIL A



ELEVATION

SECTION C-C

BEARING AT BENT DETAILS

(8 req'd)

Note: 1) Top and bottom of web plates are parallel.
2) Indicated weld is not required to be completed by an AISC certified fabricator. Ensure weld inspection is performed by an AWS Certified Welding Inspector (CWI) qualified and certified in conformance with the provisions of AWS QC1, Specification for AWS Certification of Welding Inspectors. Provide inspection documentation to the engineer.
3) For location of Detail A, see Sheet No. 9.

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REVIEW

APPROVAL

DESIGN DDD ✓ FFF

DETAIL BBB ✓ DDD

QTY'S BBB ✓ AAA

Design Section L M Nop

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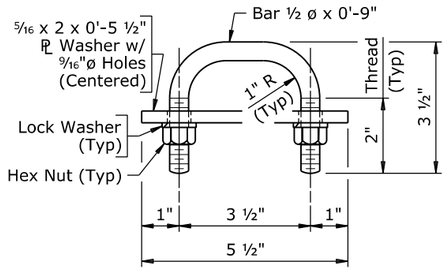
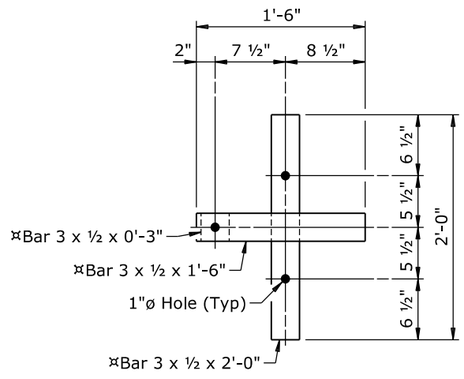
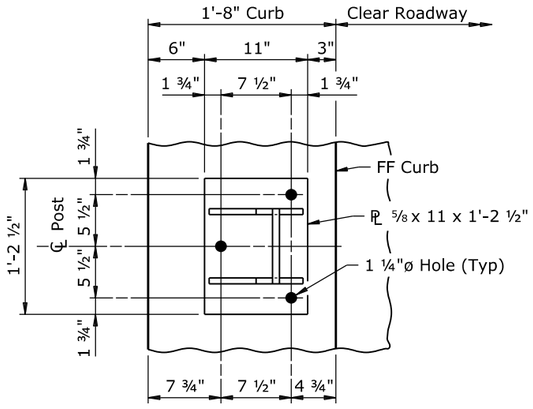


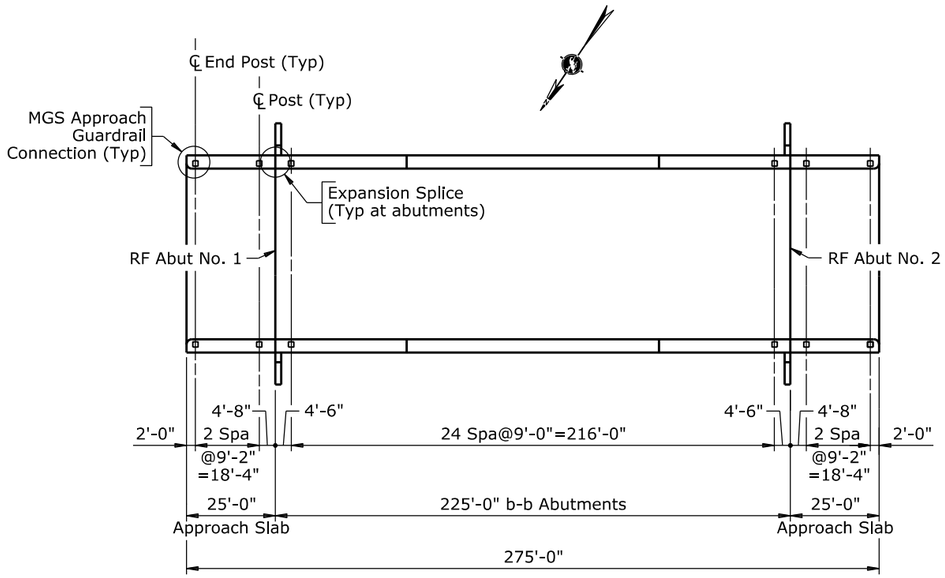
RAIL BOLT DETAIL



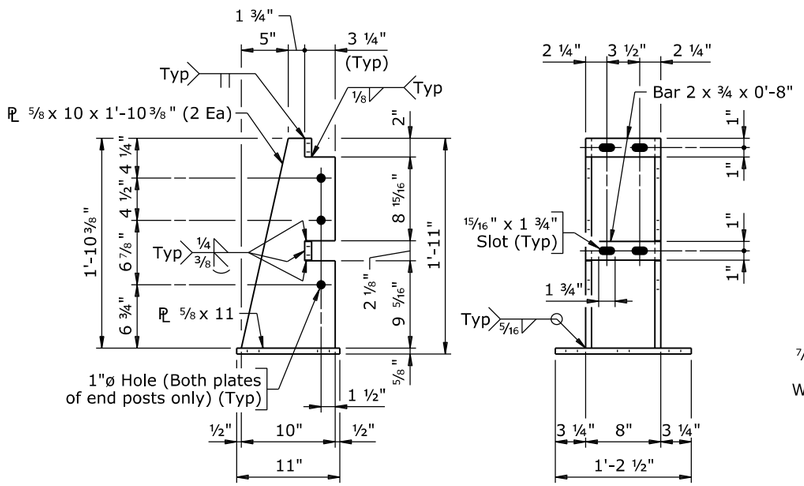
SECTION B-B
(¤Not galvanized)
(Anchor bolts and slab not shown)



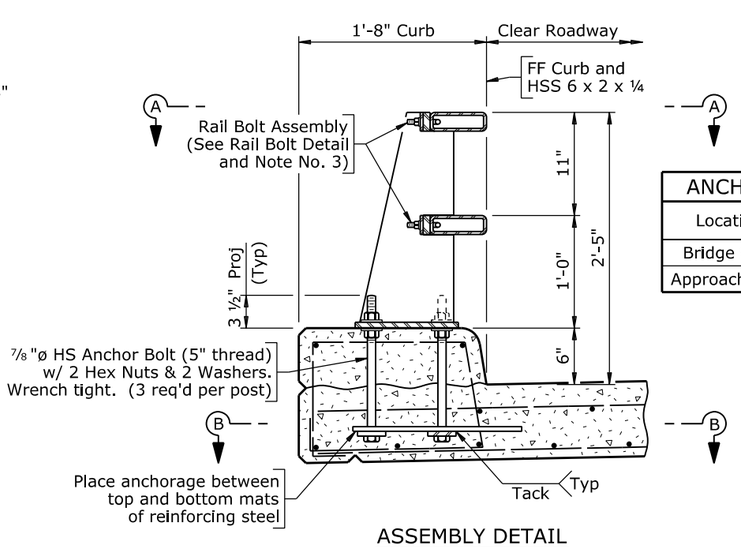
VIEW A-A
(Anchor bolts, rails, and
rail bolts not shown)



PLAN
(50 posts req'd on bridge)
(12 posts req'd on approach slabs)



POST DETAILS
(See View A-A for anchor bolt hole spacing)



ASSEMBLY DETAIL
(Shown near ℄ Post)
(Bridge slab shown, approach slab similar)

ANCHOR BOLT TABLE	
Location	Anchor Bolt
Bridge Slab	⅞"ø x 1'-3"
Approach Slab	⅞"ø x 1'-5"

Note:
1) Ensure the expansion splice is located in the railing panel which passes over the bridge expansion joint as indicated on the plan.
2) Anchor bolts may be tack welded to anchorage (Shop or field).
3) At post locations, drill two 1 1/16"ø holes in each rail to receive rail bolts (Shop or field). See Post Details for hole spacing.
4) Paint surfaces of the railing components that have been cut, drilled, or otherwise damaged with two coats of zinc-rich paint conforming to ASTM A 780.
5) After installing rails, paint exposed bolt threads with two coats of zinc-rich paint conforming to ASTM A 780.

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APPROVAL _____

DESIGN ____ ✓ ____
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QTY'S BBB ✓ AAA

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Revised 4-3-17

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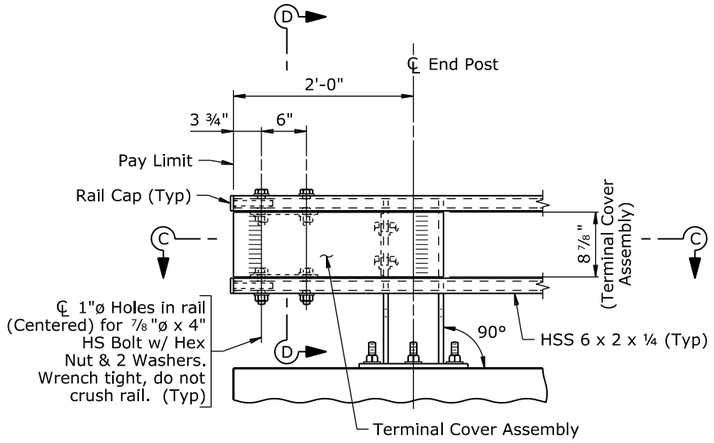
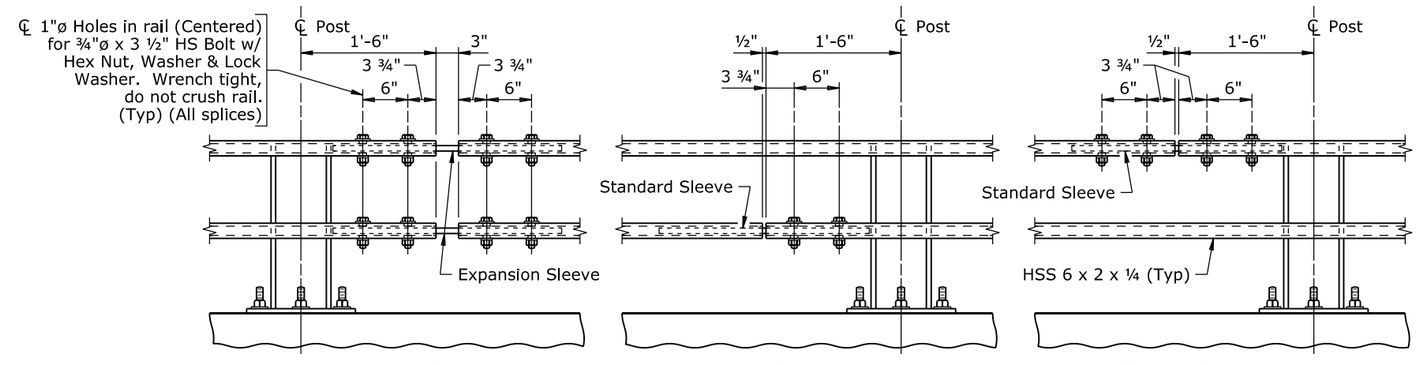
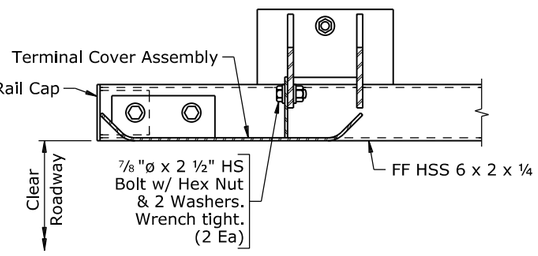


ELEVATION AT TERMINAL

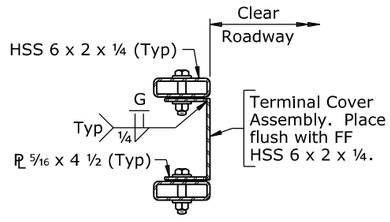
TERMINAL COMPONENT REQUIREMENTS		
Approach Guardrail Connection	Rail Caps Required	Terminal Cover Assembly Required
MGS Approach Guardrail	Yes (Without bolts)	‡No
Box Beam w/ Rubrail Approach Guardrail	No	No
No Approach Guardrail	Yes (With bolts)	Yes



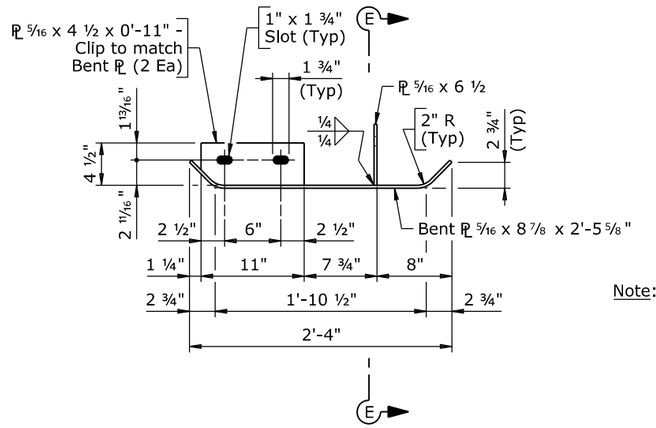
SPLICE DETAILS



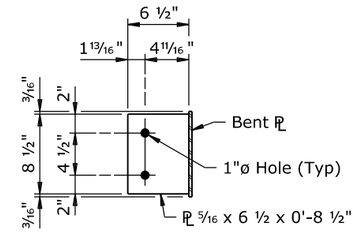
SECTION C-C



SECTION D-D

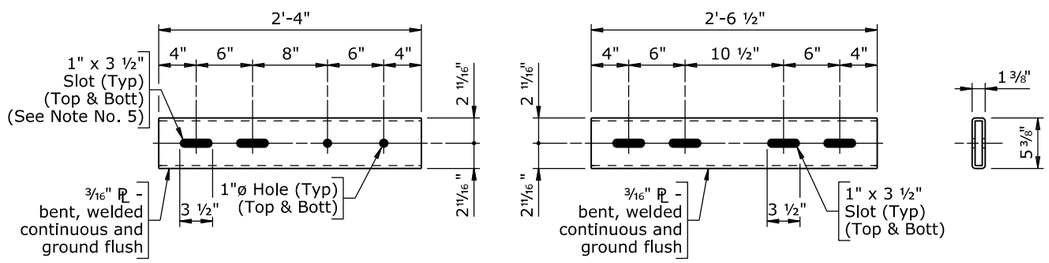


TERMINAL COVER ASSEMBLY DETAIL

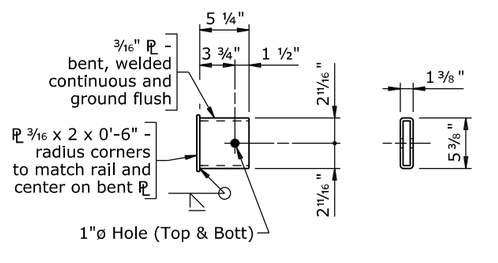


SECTION E-E

Note:
1) Ensure each rail length is continuous over a minimum of two posts.
2) In rehabilitation work, ensure railing that cannot feasibly be made continuous over a minimum of two posts has a double-bolted splice.
3) Splices may be located on either side of post.
4) Not more than one splice is permitted per side of post, except at expansion splices.
5) Slots may be omitted in standard sleeves where bolts are required on one side of splice only.
6) Do not shop splice rails.
7) Terminal components removed during rehabilitation work will remain the property of the department.
‡8) Installation of MGS approach guardrail will require other fabricated assemblies to be connected to end post. See road plans for details and pay item.



SLEEVE DETAILS



RAIL CAP DETAILS

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Revised 6-16-14

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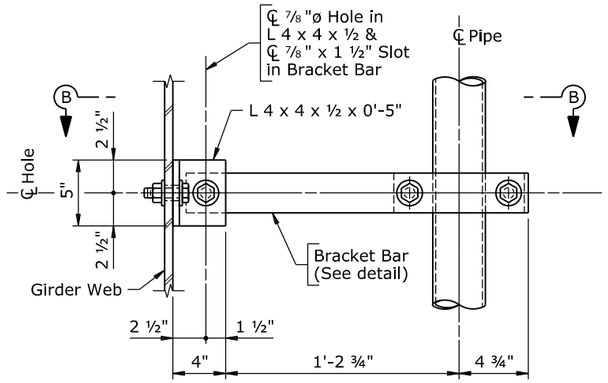
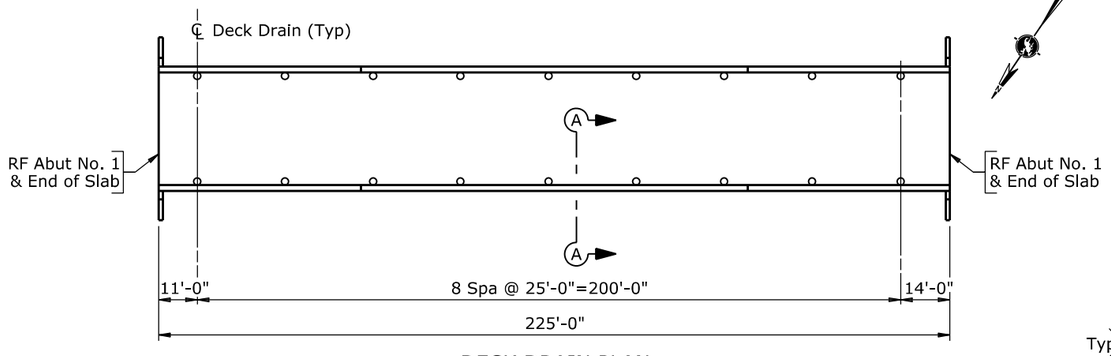
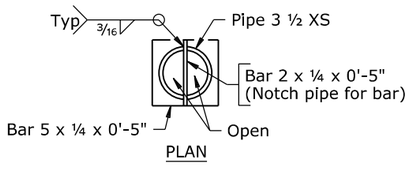


BRACKET DETAIL

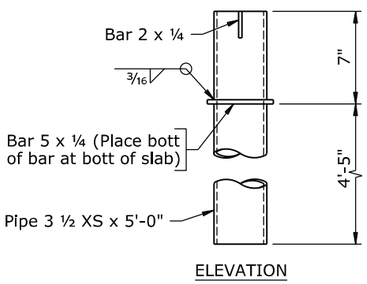


DECK DRAIN PLAN

(18 req'd)

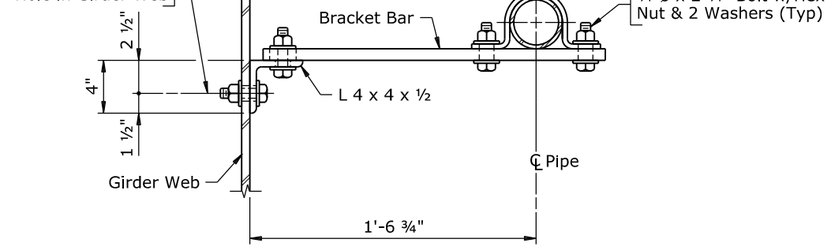


PLAN

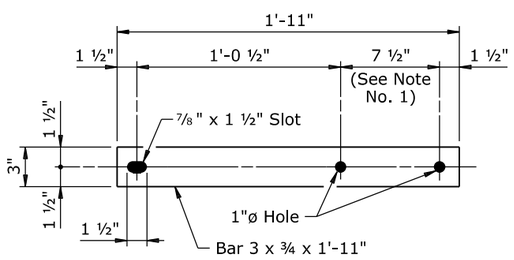


ELEVATION

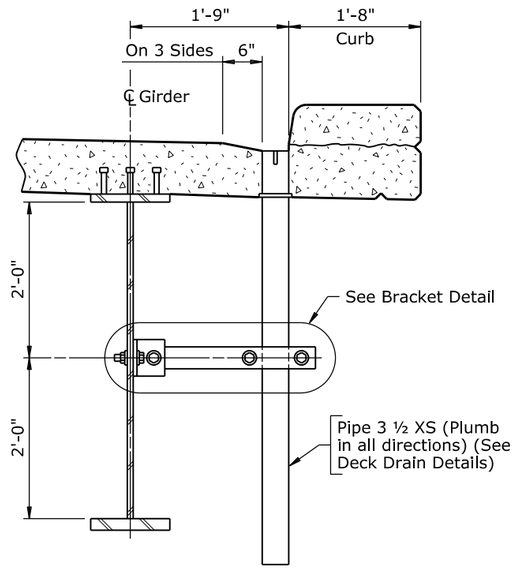
DECK DRAIN DETAILS



SECTION B-B



BRACKET BAR DETAIL



SECTION A-A

Note: 1) Spacing of 1"ø holes in bracket bar may vary to match actual standard hold-down anchor clamp hole spacing.
2) Shift locations of deck drains as necessary to avoid interference with bridge railing anchorages.
3) Before placing slab, install and properly align deck drains, including brackets.

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APPROVAL	DETAIL BBB ✓ DDD		
	QTY'S BBB ✓ AAA	Drwg No. 0001	Sheet 14 of 18

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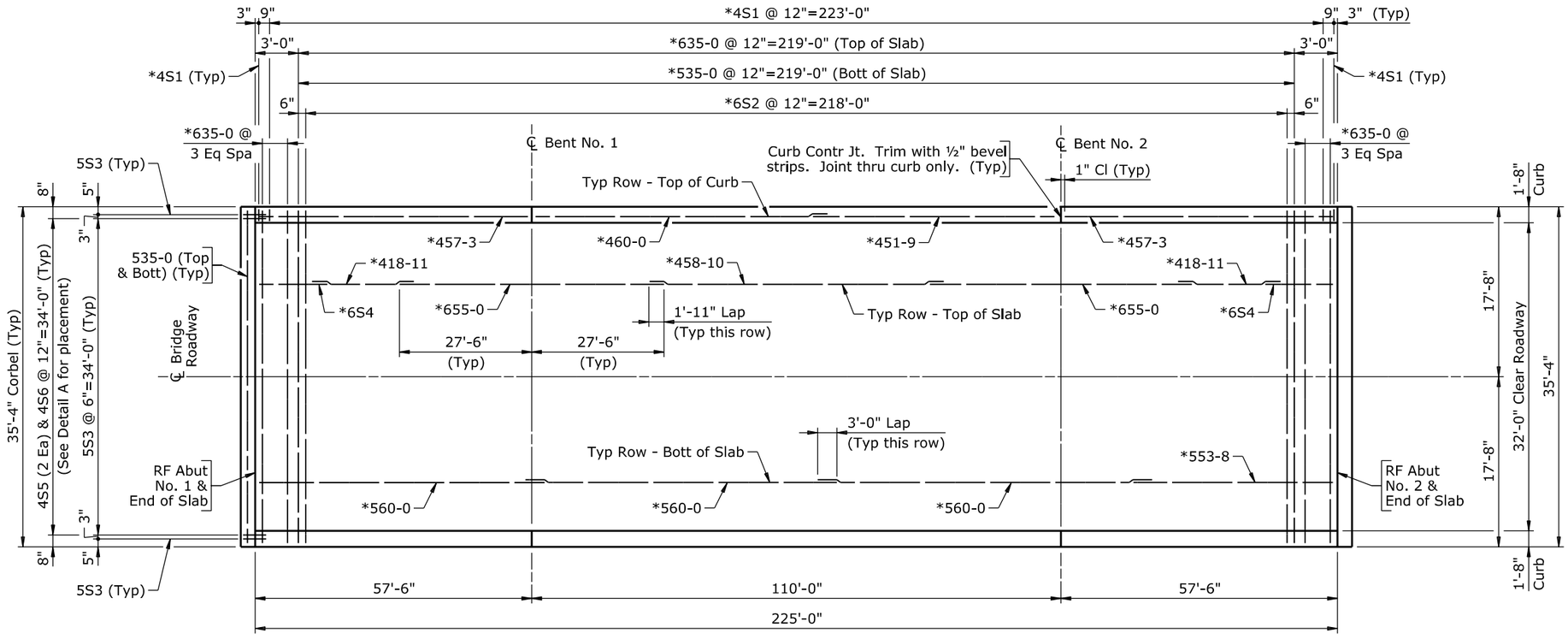
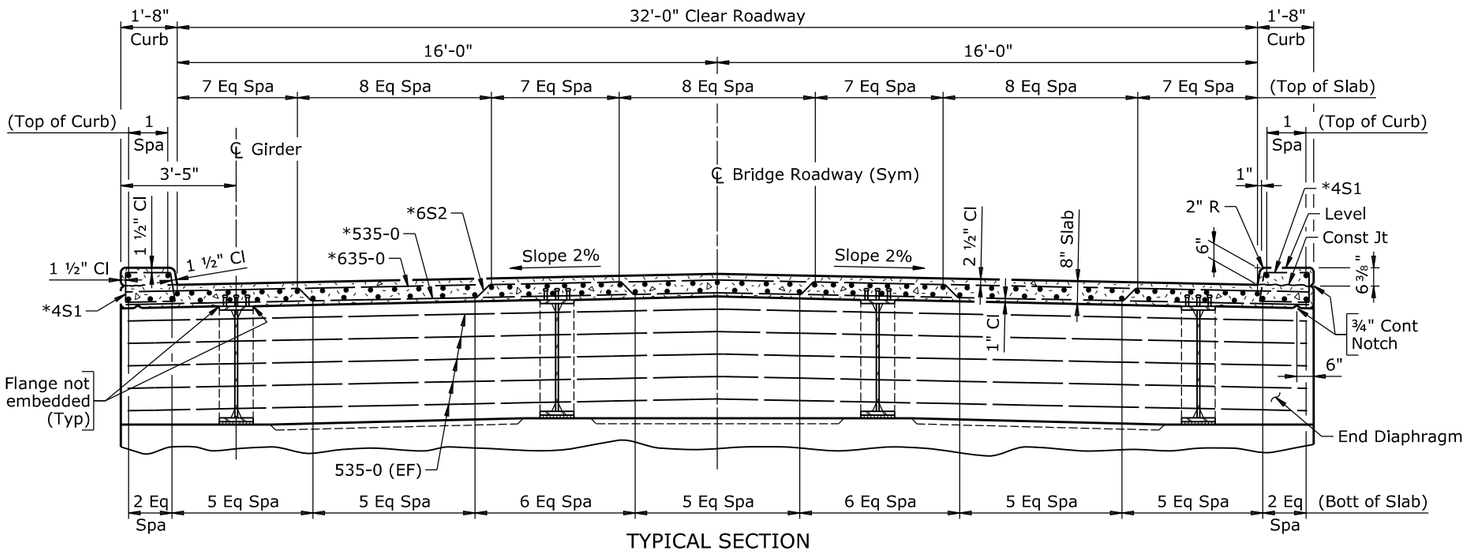
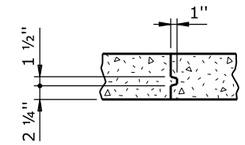


PLAN

(Longitudinal dimensions are along finished grade)



TYPICAL SECTION



SLAB CONSTRUCTION JOINT DETAIL

(Place parallel with transverse reinforcing steel)
(For emergency use only)

Note: 1) Place concrete in slab in one continuous operation at the minimum rate of 29 feet per hour.
2) For Bridge Railing Details, see Sheets No. 12 and 13.
3) For Deck Drain Details, see Sheet No. 14.
4) For Detail A, see Sheet No. 16.

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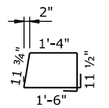
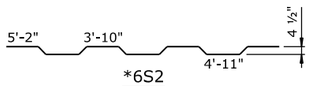
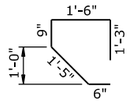
BILL OF REINFORCEMENT		
Location	Mark	Number Required
End Diaphragms	4S5	140
	4S6	70
	5S3	142
	*5S7	70
	535-0	24
	*6S4	106
	*Weight	*3458 LB
	Weight	2058 LB
Slab and Curbs	*4S1	452
	*418-11	106
	*451-9	4
	*457-3	8
	*458-10	53
	*460-0	4
	*535-0	220
	*553-8	42
	*560-0	126
	*6S2	219
	*635-0	228
	*655-0	106
	*Weight	*56,565 LB
Bending Diagrams		



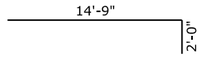
*4S1 (Tie)
(5'-7")



*6S2
(36'-0")



5S3 (Stirrup)
(Grade 60)
(5'-5")

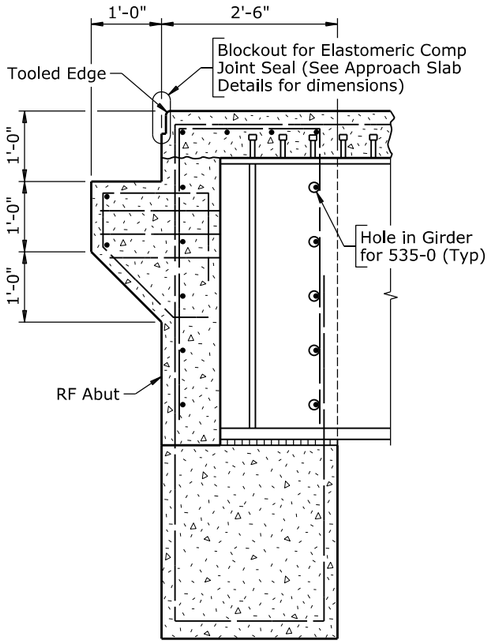


*6S4
(16'-9")

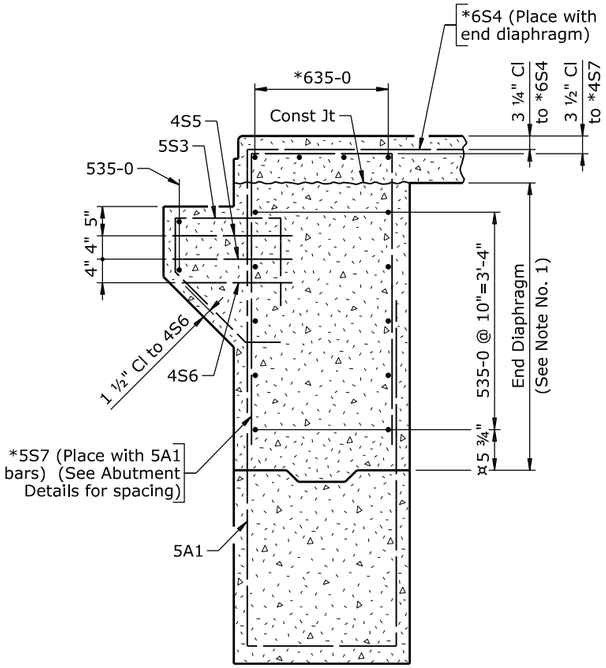
4S5 (Stirrup)
(Grade 60)
(2'-6")

4S6 (Stirrup)
(Grade 60)
(2'-4")

*5S7
(10'-10")

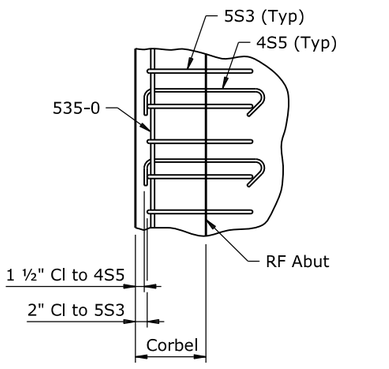


SECTION AT GIRDER
(Showing typical dimensions)



SECTION BETWEEN GIRDERS
(Showing typical reinforcing steel)

TYPICAL SECTIONS THRU END DIAPHRAGM



DETAIL A
(Showing corbel reinforcing steel placement)
(4S5 shown, 4S6 similar)

Note:
1) Ensure end diaphragms attain 80% of ultimate design strength (f'c) by cylinder tests before placing slab.
2) Ensure the reinforcing steel fabricator prefixes bar marks this sheet with numeral 5.
¤3) Dimension is at ℄ Girder.
4) The estimated quantity of class A concrete for end diaphragms is 31.6 CY, 196.3 CY for the slab, and 14.0 CY for the curbs.
5) For location of Detail A, see Sheet No. 15.
6) For Abutment Details, see Sheet No. 7.
7) For Approach Slab Details, see Sheets No. 17 and 18.

TABLE OF SCREED ELEVATIONS

Add base elevation 6070.00 to elevations listed in table. Elevations include grade, slope, and correction for dead load deflection.
For screed line locations, see Sheet No. 3.

Screed Line No.	Tenth Point of Spans																															
	1.0 ℄ Abut No. 1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0 ℄ Bent No. 1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0 ℄ Bent No. 2	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0 ℄ Abut No. 2
①	4.77	4.77	4.76	4.76	4.76	4.75	4.75	4.75	4.75	4.76	4.77	4.81	4.87	4.92	4.95	4.96	4.95	4.92	4.87	4.81	4.77	4.76	4.75	4.75	4.75	4.75	4.76	4.76	4.76	4.77	4.77
②	4.84	4.83	4.83	4.83	4.83	4.82	4.82	4.82	4.82	4.82	4.84	4.88	4.93	4.99	5.02	5.03	5.02	4.99	4.93	4.88	4.84	4.82	4.82	4.82	4.82	4.82	4.83	4.83	4.83	4.83	4.84
③	5.03	5.02	5.02	5.02	5.02	5.01	5.01	5.01	5.01	5.01	5.03	5.07	5.12	5.18	5.21	5.22	5.21	5.18	5.12	5.07	5.03	5.01	5.01	5.01	5.01	5.01	5.02	5.02	5.02	5.02	5.03
④	5.12	5.12	5.12	5.11	5.11	5.11	5.10	5.10	5.10	5.11	5.12	5.16	5.22	5.27	5.31	5.32	5.31	5.27	5.22	5.16	5.12	5.11	5.10	5.10	5.10	5.11	5.11	5.11	5.12	5.12	5.12

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APPROVAL _____

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DETAIL BBB ✓ DDD
QTY'S BBB ✓ AAA

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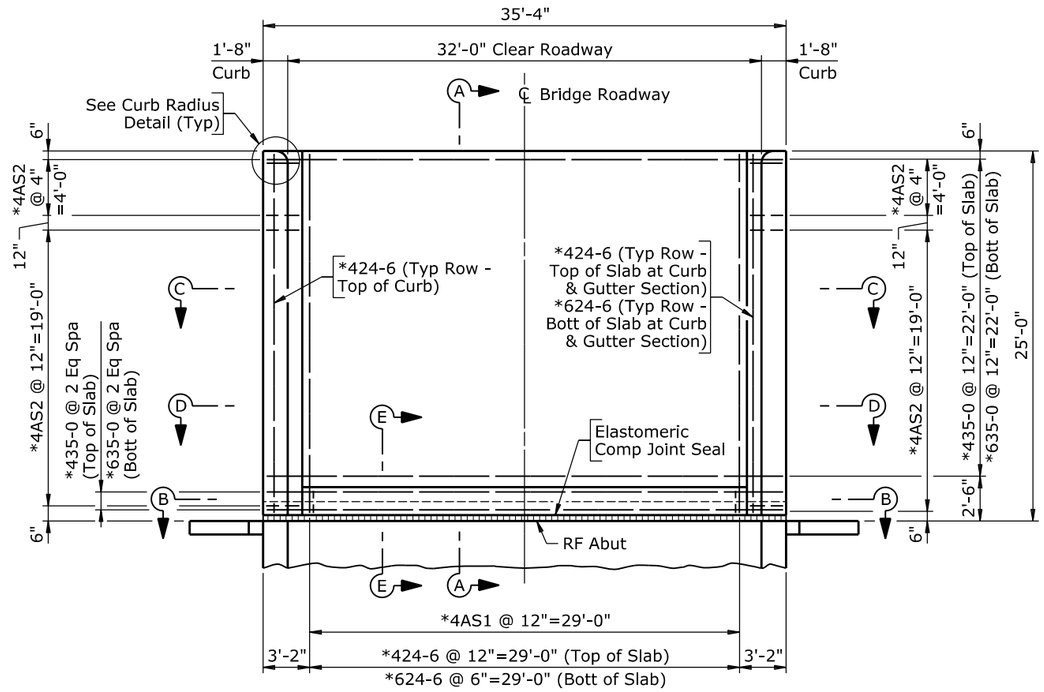
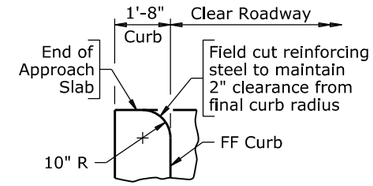
Wyo. Proj. 1500006
Sheet B17 of B25 Sheets

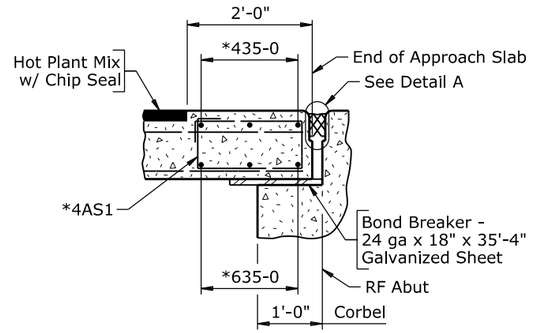


PLAN

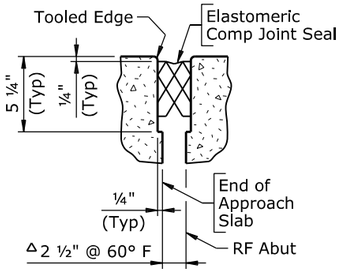
(Abutment No. 1 shown, Abutment No. 2 similar)



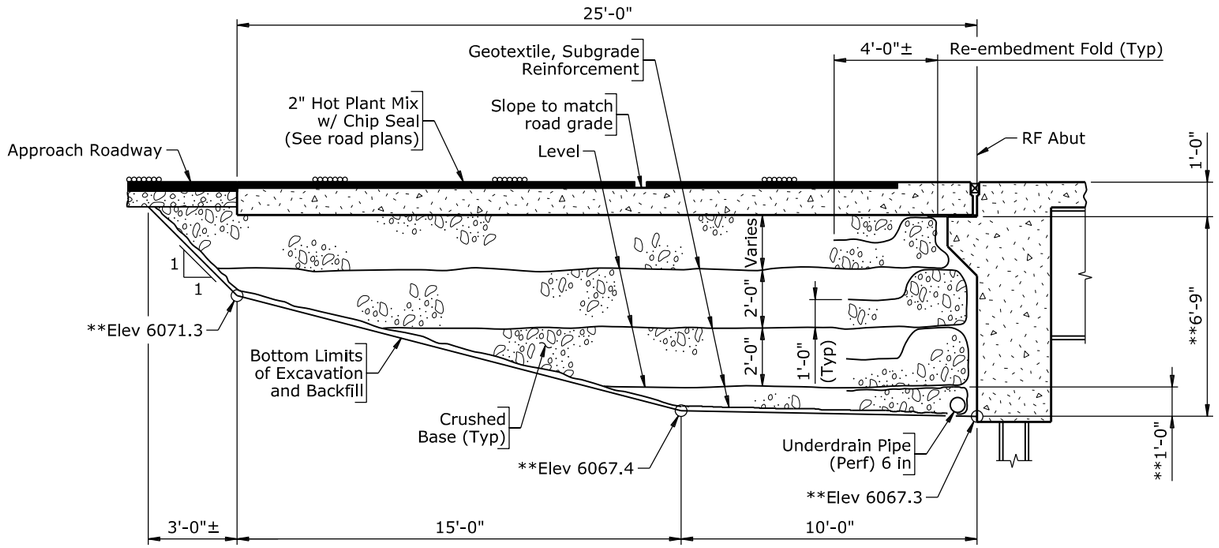
CURB RADIUS DETAIL



SECTION E-E



DETAIL A



SECTION A-A

Note: 1) Dimensions and elevations preceded by a double asterisk (**) are measured at ℄ Bridge Roadway.
△2) Increase the opening between rear face abutment and end of approach slab 1/16" for each 10° F below 60° F and decrease the opening 1/16" for each 10° F above 60° F. Account for variance in the opening in approach slab forming.
3) Extend compression joint seal up front face and across top of curbs.
4) For Bridge Railing Details, see Sheets No. 12 and 13.
5) For Sections B-B, C-C, and D-D, see Sheet No. 18.

WYOMING DEPARTMENT OF TRANSPORTATION
BRIDGE PROGRAM

REVISIONS

APPROACH SLAB DETAILS

BRIDGE OVER WOOD RIVER
STA 320+18
Meeteetse - Pitchfork Road
(WYO 290)
1500006 Pa

REVIEW
APPROVAL

DESIGN ____ ✓ ____
DETAIL BBB ✓ DDD
QTY'S BBB ✓ AAA

Design Section L M Nop
Drwg No. 0001 Sheet 17 of 18

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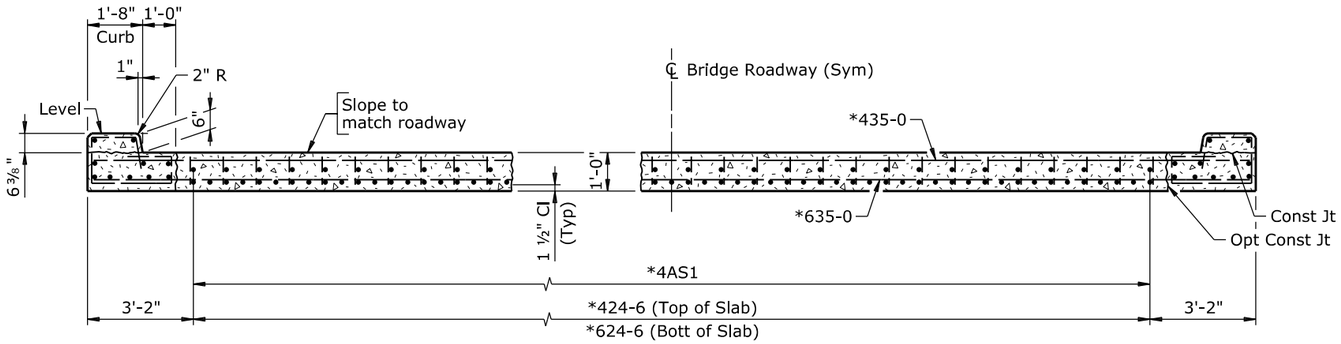
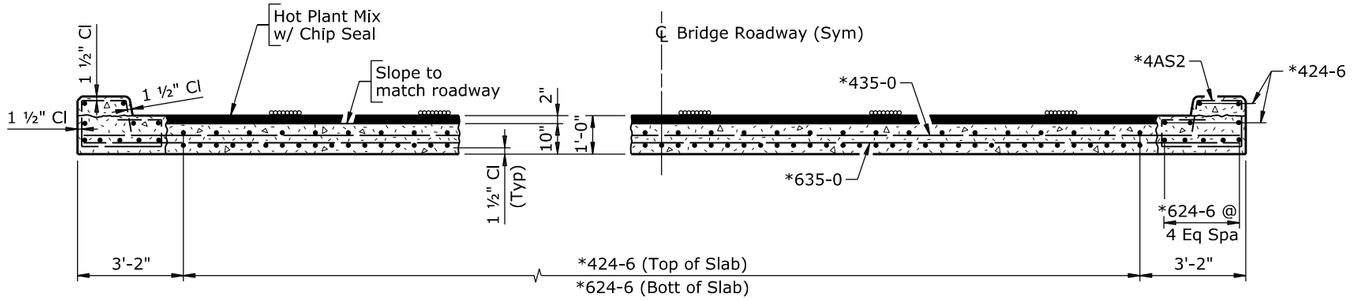
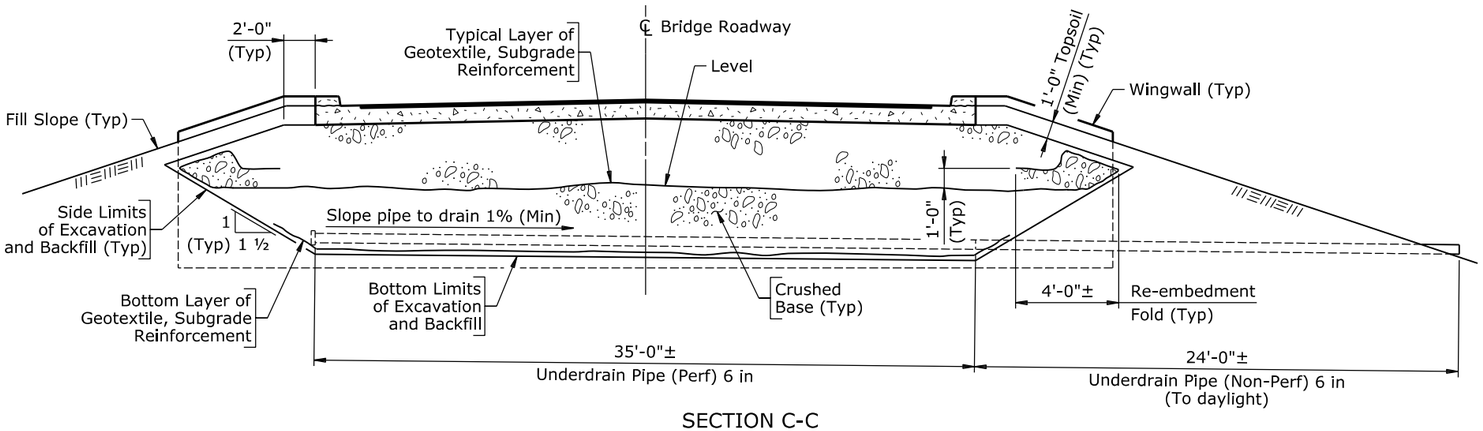


SECTION B-B
(Showing typical curb and gutter dimensions)

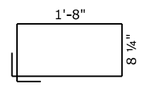


SECTION D-D
(Showing typical curb and gutter reinforcing steel)

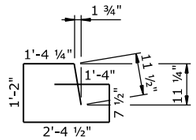


SECTION C-C

BILL OF REINFORCEMENT		
Location	Mark	Number Required Per Approach Slab
Approach Slab and Curbs	*4AS1	30
	*4AS2	66
	*424-6	40
	*435-0	26
	*624-6	69
	*635-0	26
	‡*Weight	*5645 LB
Bending Diagrams		



*4AS1 (Tie)
(5'-6")



*4AS2 (Tie)
(7'-10")

Note: 1) Ensure the reinforcing steel fabricator prefixes bar marks this sheet with numeral 6 at Abutment No. 1 and numeral 7 at Abutment No. 2.
‡2) Approach slab reinforcing steel is not included in the quantity of reinforcing steel.
3) Extend bottom layer of geotextile up side limits of excavation and backfill to bottom of first layer of geotextile.
4) For locations of Sections B-B, C-C, and D-D, see Sheet No. 17.

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1500006 Pa

REVIEW
APPROVAL

DESIGN ___ ✓ ___
DETAIL BBB ✓ DDD
QTY'S BBB ✓ AAA

Design Section L M Nop
Drwg No. 0001 Sheet 18 of 18

1500006_1ap2.dgn