

**GENERAL NOTES:**

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4 in. dia., open holes 15/16 in. dia., unless otherwise noted.
- Calculated weight of Structural Steel:  
M 270 Grade 36 = 57,340 pounds  
M 270 Grade 50 = 492,660 pounds
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Concrete sealer shall be applied to the exposed surfaces of the abutment backwall, abutment seat, abutment cap, gutter in front of the abutment and concrete facing.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
- Slipforming of parapets is not allowed.
- The existing arch tunnels shall be internally braced if any portions of the tunnels are removed or if embankment is removed from around the tunnels creating an unbalanced loading condition. Any internal bracing design shall be reviewed and approved by the Engineer.
- Existing anchored sheet pile walls are located in front of the proposed abutments. The existing anchors shall be located and removed prior to installation of temporary or permanent sheet pile and abutment piles.

**SUGGESTED SEQUENCE OF STAGE 1 WALL & ABUTMENT CONSTRUCTION:**

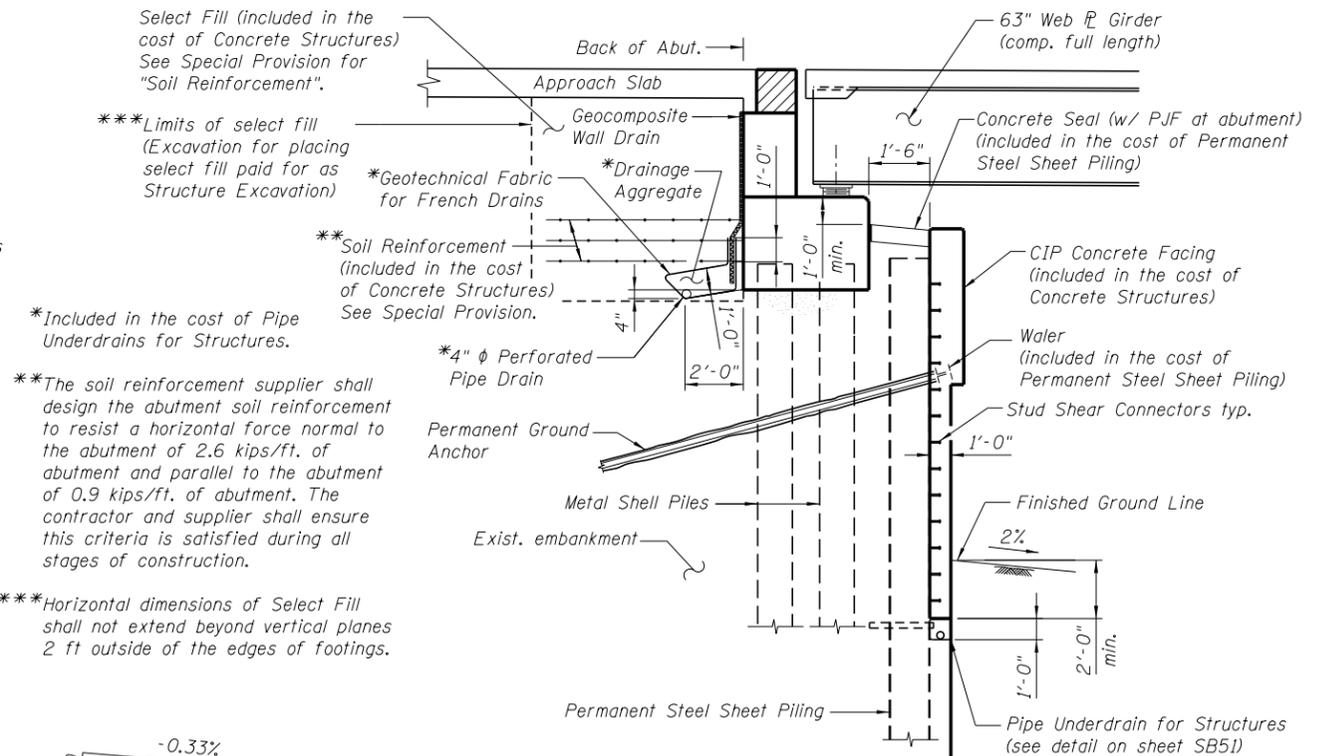
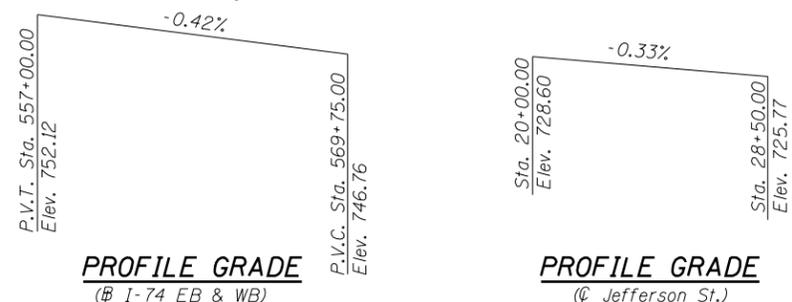
- Drive temporary sheet piling and install temporary soil retention system parallel to both the north and south stage construction lines in order to retain roadway north and south of Stage 1 while the area in between is excavated.
- Excavate existing soil within Stage 1 down to elevation of bottom of abutment.
- Drive permanent steel sheet piling between the two lines of temporary walls.
- Drive piles for the abutment.
- Cast abutments within Stage 1 limits as shown on Abutment sheets. A gap of approximately 1'-0" should be provided between the temporary shoring and the Stage 1 abutments for forms.
- Place backfill and embankment behind the Stage 1 abutment.
- Remove the temporary sheet piling located behind the abutment at the SW and NE locations to accommodate permanent ground anchor installation at the corner. Temporary soil retention system in front of the abutment at these locations shall remain in this stage. The temporary sheet piling to be removed will have to be replaced (avoiding interference with installed ground anchors) in Stages 2 or 3 in order to build the abutments in each respective stage. Cost of this additional temporary sheet piling shall be included in the cost of Temporary Sheet Piling.
- Install the waler in front of the permanent steel sheet piling.
- Install permanent ground anchors from front side of permanent sheet pile wall. Space permanent ground anchors to miss abutment piles.

**INDEX OF SHEETS**

SB1	General Plan and Elevation
SB2	General Data
SB3	Footing Layout
SB4	Stage Construction Details
SB5	Temporary Sheet Piling Details
SB6	Temporary Barrier Details
SB7	Top of Slab Elevation Layout
SB8	Top of Slab Elevations 1 of 4
SB9	Top of Slab Elevations 2 of 4
SB10	Top of Slab Elevations 3 of 4
SB11	Top of Slab Elevations 4 of 4
SB12	Top of Approach Slab Elevation Layout
SB13	Top of West Approach Slab Elevations
SB14	Top of East Approach Slab Elevations
SB15	Superstructure
SB16	Superstructure Details 1 of 3
SB17	Superstructure Details 2 of 3
SB18	Superstructure Details 3 of 3
SB19	Bridge Approach Slab Details 1 of 3
SB20	Bridge Approach Slab Details 2 of 3
SB21	Bridge Approach Slab Details 3 of 3
SB22	Expansion Joint Details
SB23	Framing Plan 1 of 2
SB24	Framing Plan 2 of 2
SB25	Girder Details 1 of 4
SB26	Girder Details 2 of 4
SB27	Girder Details 3 of 4
SB28	Girder Details 4 of 4
SB29	HLMR Non-Guided Expansion Bearing Details
SB30	HLMR Guided Expansion Bearing Details
SB31	West Abutment 1 of 5
SB32	West Abutment 2 of 5
SB33	West Abutment 3 of 5
SB34	West Abutment 4 of 5
SB35	West Abutment 5 of 5
SB36	West Abutment Details 1 of 2
SB37	West Abutment Details 2 of 2
SB38	East Abutment 1 of 5
SB39	East Abutment 2 of 5
SB40	East Abutment 3 of 5
SB41	East Abutment 4 of 5
SB42	East Abutment 5 of 5
SB43	East Abutment Details 1 of 2
SB44	East Abutment Details 2 of 2
SB45	Anchored Sheet Pile Wall Notes
SB46	West Abutment Sheet Pile Wall
SB47	East Abutment Sheet Pile Wall
SB48	West Abutment Facing
SB49	East Abutment Facing
SB50	Abutment Wall Details 1 of 2
SB51	Abutment Wall Details 2 of 2
SB52	Metal Shell Pile Details
SB53	Bar Splicer Assembly Details
SB54	Soil Boring Logs 1 of 10
SB55	Soil Boring Logs 2 of 10
SB56	Soil Boring Logs 3 of 10
SB57	Soil Boring Logs 4 of 10
SB58	Soil Boring Logs 5 of 10
SB59	Soil Boring Logs 6 of 10
SB60	Soil Boring Logs 7 of 10
SB61	Soil Boring Logs 8 of 10
SB62	Soil Boring Logs 9 of 10
SB63	Soil Boring Logs 10 of 10
SB64	Existing Plans
SB65	Existing Plans

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 3	Each			1
Structure Excavation	Cu. Yd.		1,748	1,748
Concrete Structures	Cu. Yd.		1,213.1	1,213.1
Concrete Superstructure	Cu. Yd.	856.0		856.0
Bridge Deck Grooving	Sq. Yd.	2,356		2,356
Form Liner Textured Surface	Sq. Ft.		8,943	8,943
Protective Coat	Sq. Yd.	2,761		2,761
Furnishing and Erecting Structural Steel	L Sum	0.20		0.20
Stud Shear Connectors	Each	5,838	2,398	8,236
Reinforcement Bars, Epoxy Coated	Pound	182,860	114,880	297,740
Bar Splicers	Each	1,272	526	1,798
Furnishing Metal Shell Piles 12" x 0.250"	Foot		5,134	5,134
Driving Piles	Foot		5,134	5,134
Test Pile Metal Shells	Each		2	2
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	378.5		378.5
Anchor Bolts, 1 1/2"	Each	112		112
Concrete Sealer	Sq. Ft.		13,811	13,811
Geocomposite Wall Drain	Sq. Yd.		434	434
Temporary Sheet Piling	Sq. Ft.		2,425	2,425
Pipe Underdrains for Structures 4"	Foot		1,007	1,007
Temporary Soil Retention System	Sq. Ft.		2,492	2,492
Permanent Ground Anchor	Each		86	86
Permanent Steel Sheet Piling	Sq. Ft.		24,711	24,711
High Load Multi-Rotational Bearings, Guided Expansion, 250K	Each	8		8
High Load Multi-Rotational Bearings, Non-Guided Expansion, 250K	Each	12		12



**SECTION THRU ABUTMENT**  
(Horiz. dim. at Rt. L's)

Note:  
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



FILE NAME =	USER NAME = mbecker	DESIGNED - MFB	REVISED -
		CHECKED - MRB/DTS	REVISED -
		DRAWN - LLR	REVISED -
		CHECKED - MRB	REVISED -

**PROFILE GRADE**  
(@ I-74 EB & WB)

**PROFILE GRADE**  
(@ Jefferson St.)

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA**  
**STRUCTURE NO. 090-0167**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90-[14R(14HB-4,14,14HB)BR]	TAZEWELL	2433	1913
			CONTRACT NO. 68620	

SHEET NO. SB2 OF SB65 SHEETS

ILLINOIS FED. AID PROJECT

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