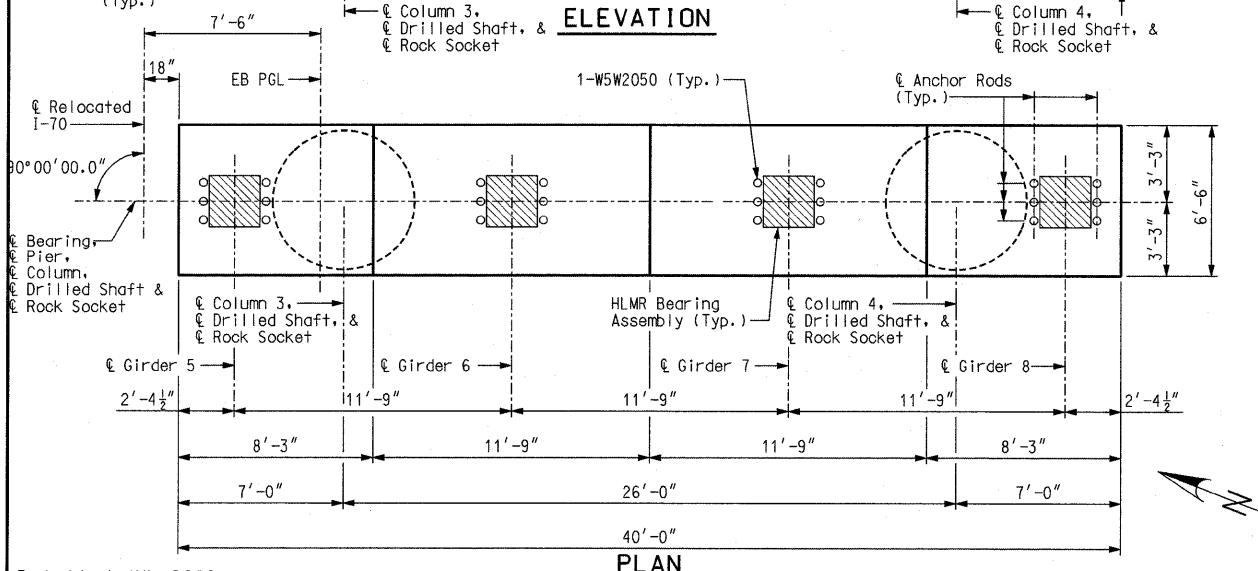
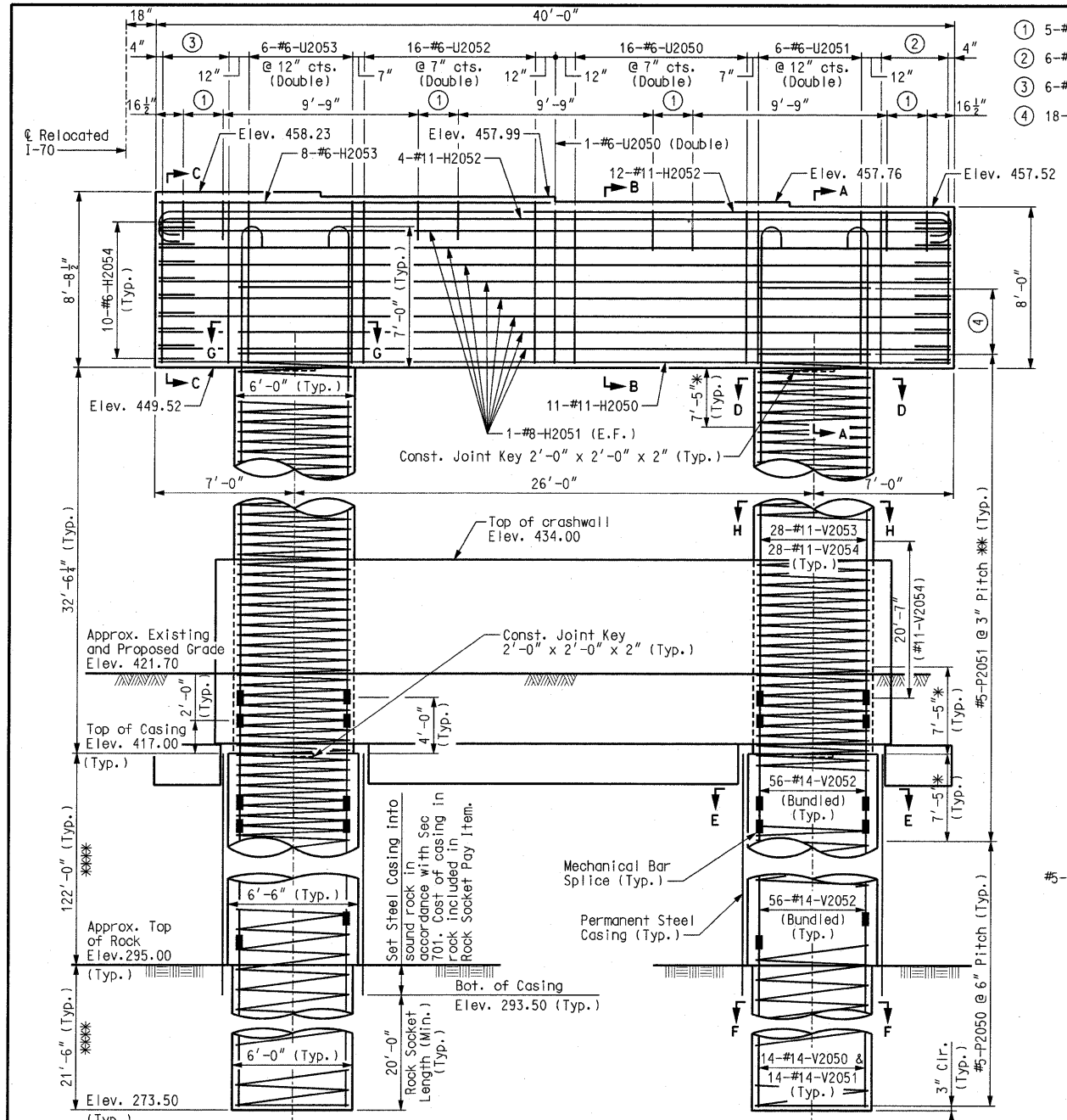
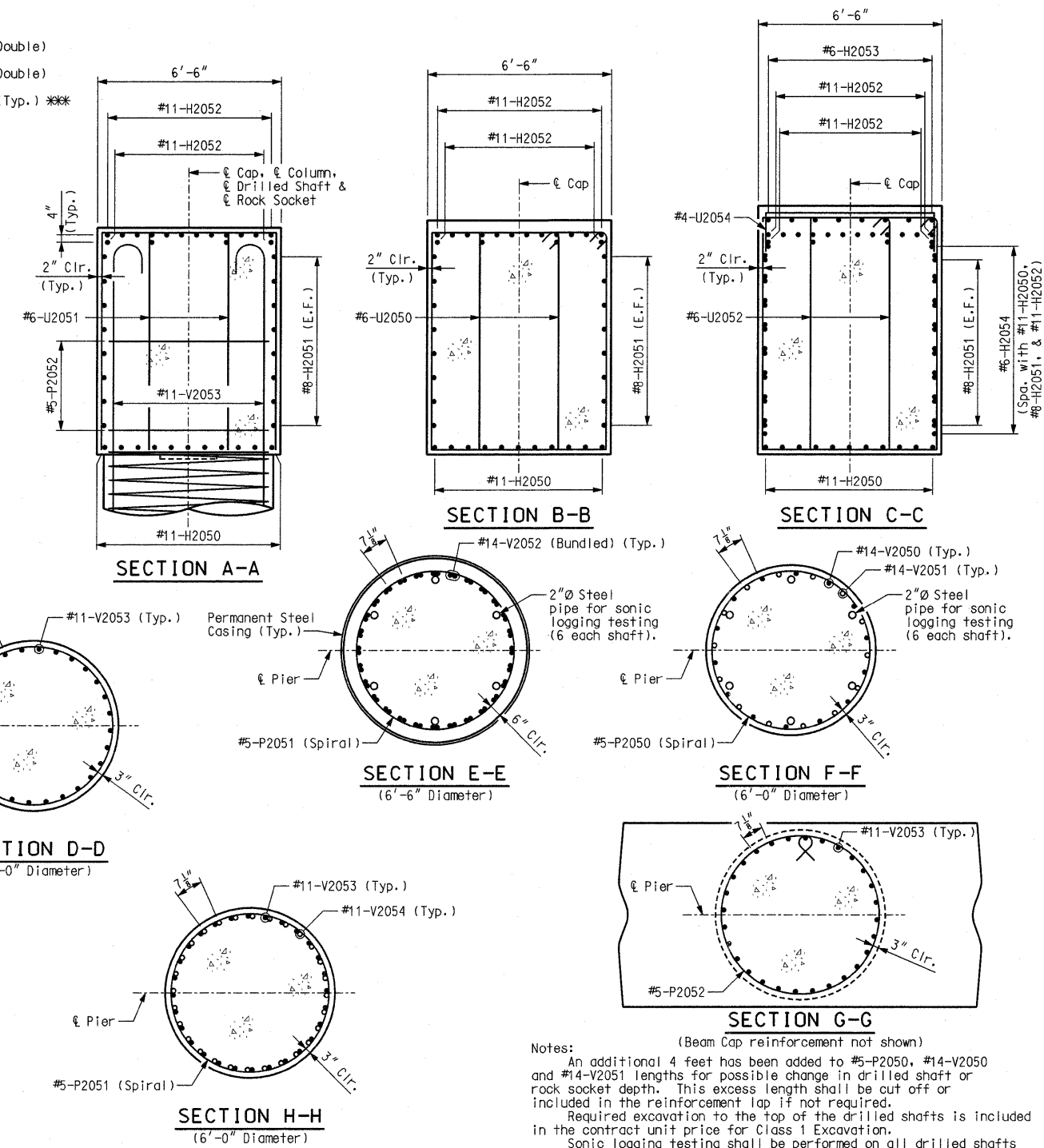


- ① 5-#4-U2054 @ 6" cts.
- ② 6-#6-U2050 @ 8" cts. (Double)
- ③ 6-#6-U2052 @ 8" cts. (Double)
- ④ 18-#5-P2052 @ 3" cts. (Typ.) ***



Detailed JUL 2009
Checked JUL 2009

Note: This drawing is not to scale. Follow dimensions.



SUBSTRUCTURE QUANTITY TABLE FOR PIER 20 EB		
Item	Quantity	
Class 1 Excavation	cu. yard	20
Drilled Shafts (6 ft. 6 in. Dia.)	linear foot	244.0
Rock Sockets (6 ft. 0 in. Dia.)	linear foot	43.0
Supplementary Television Camera Inspection	each	1
Foundation Inspection Holes	linear foot	63.0
Sonic Logging Testing	each	2
Class B Concrete (Substructure)	cu. yard	306.9
Reinforcing Steel (Bridges)	pound	169,870
Mechanical Bar Splice	each	280
Non-Special Waste Disposal	cu. yard	121.9

Note: These quantities are included in the estimated quantities table on Sheet No. 7.

Notes:
 An additional 4 feet has been added to #5-P2050, #14-V2050 and #14-V2051 lengths for possible change in drilled shaft or rock socket depth. This excess length shall be cut off or included in the reinforcement lap if not required.
 Required excavation to the top of the drilled shafts is included in the contract unit price for Class 1 Excavation.
 Sonic logging testing shall be performed on all drilled shafts and rock sockets.
 All reinforcing bars in the tops of substructure beams or caps shall be spaced to clear anchor rod wells for bearings by at least 1/2". The hooks of V-Bars embedded in the beam cap shall be oriented inward. Bending the hook outward, away from the column core, is not allowed.
 The thickness of steel casing shall meet all the requirements of Sec 701 with minimum thickness being 3/8 inch. Thicker casing may be required for installation.
 For details of HLMR Bearing Assembly, see Sheet No. 43. For Anchor Rod Details and Anchor Rod Setting Plan, see Sheet No. 47.
 For details of seismic stirrup bars, see Sheet No. 7.
 * Lapping of spiral reinforcement in this region not permitted.
 ** Continue spiral bars to the bottom of the beam cap stirrup reinforcing bar.
 *** Splice locations shall be staggered.
 Anchorage of spiral reinforcement shall be provided by 1-1/2 extra turns of spiral bar at each end of spiral unit.
 **** Pay Items Rock Socket (6 ft. 0 in. Dia.).
 ***** Pay Items Drilled Shaft (6 ft. 6 in. Dia.).
 For Pier Crashwall Details see Sheet No. 35.
 If unsuitable material is encountered, excavation of unsuitable material and furnishing and placing of granular backfill shall be in accordance with Sec 206.

PIER 20 EB

CONTRACT NO. 76D61	
F.A. ROUTE	SECTION
999	82-1B-2
FED. AID PROJECT	ILLINOIS
COUNTY	ST. CLAIR
USER NAME = Jjolliff	
PLOT SCALE = *SCALE*	
PLOT DATE = 4/14/2010	
DESIGNED - HNTB	
CHECKED - CMT	
DRAWN - CMT / HNTB	
REVISED -	
REVISED -	
REVISED -	
REVISED -	

ILLINOIS APPROACH STRUCTURE FOR NEW I-70 MISSISSIPPI RIVER BRIDGE

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HNTB
 715 KIRK DRIVE
 KANSAS CITY, MO 64105
 TELEPHONE (816) 472-1201
 CERTIFICATE OF AUTHORITY NO. 001270

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 2750 WEST WASHINGTON STREET
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 ENGINEERING CORPORATION - 000631