

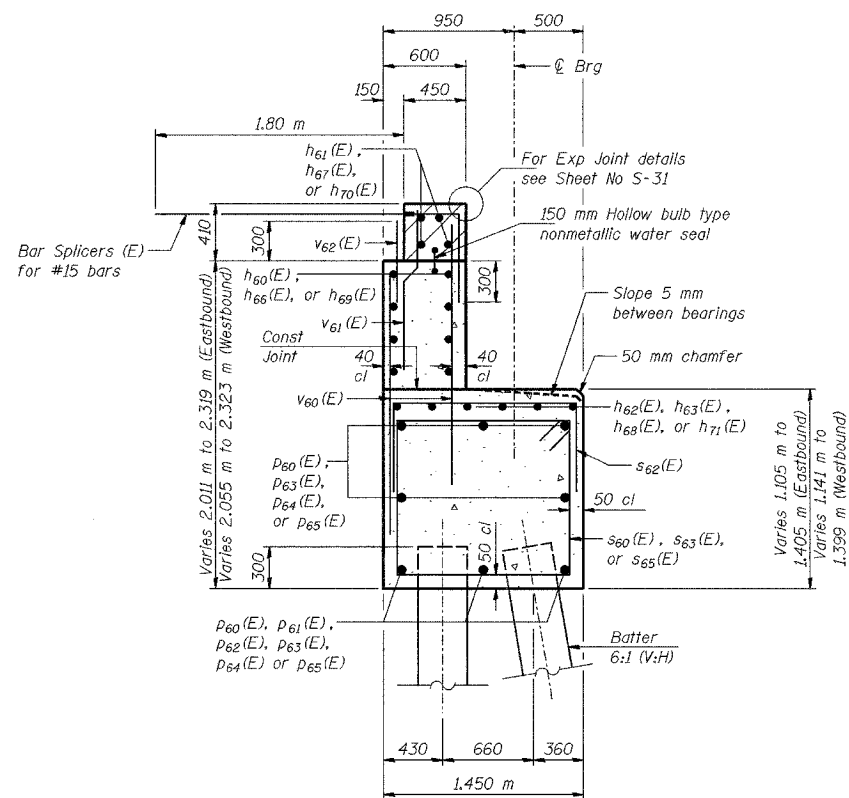
EAST ABUTMENT BILL OF MATERIAL

PHASE 2

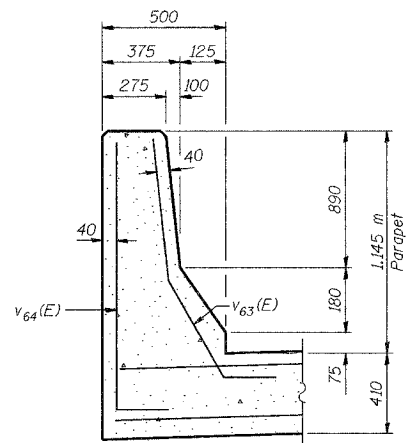
PHASE 3

Bar	No.	Size	Length (m)	Shape
h60(E)	16	#15	6.97	—
h61(E)	8	#20	7.05	—
h62(E)	6	#15	6.68	—
h63(E)	6	#15	1.54	—
h64(E)	6	#15	0.64	—
h65(E)	4	#15	1.00	—
p60(E)	16	#25	7.42	—
p61(E)	3	#25	1.79	—
p62(E)	3	#20	2.00	—
s60(E)	35	#15	4.98	□
s61(E)	14	#15	3.40	□
s62(E)	27	#15	2.63	□
v60(E)	92	#15	1.91	—
v61(E)	46	#15	1.14	—
v62(E)	46	#15	0.60	—
Test Pile, 356 mm	Each		1	
Structure Backfill	m ³		56	
Excavation, Foundation, Unclassified	m ³		43	
Concrete, A, Substructure	m ³		32.1	
Reinforcing Bars, Epoxy Coated	kg		1,760	
Pile, Concrete, Steel Shell Encased, 6.35mm, 356 mm	m		260.0	
Surface Seal (Estimated)	m ²		13	
Threaded Tie Bar Assembly, Epoxy Coated	Each		61	

Bar	No.	Size	Length (m)	Shape
h62(E)	18	#15	6.68	—
h66(E)	16	#15	7.24	—
h67(E)	8	#20	7.31	—
h68(E)	6	#15	2.25	—
h69(E)	16	#15	13.94	—
h70(E)	8	#20	14.01	—
h71(E)	6	#15	4.12	—
p62(E)	3	#20	2.00	—
p63(E)	16	#25	7.58	—
p64(E)	16	#25	7.44	—
p65(E)	16	#25	8.76	—
s62(E)	83	#15	2.63	□
s63(E)	36	#15	5.00	□
s64(E)	18	#15	3.11	□
s65(E)	78	#15	5.06	□
s66(E)	4	#15	2.54	□
s67(E)	8	#15	3.14	□
v60(E)	278	#15	1.91	—
v61(E)	139	#15	1.14	—
v62(E)	139	#15	0.60	—
v63(E)	6	#15	1.50	—
v64(E)	6	#15	1.60	—
Structure Backfill	m ³		178	
Excavation, Foundation, Unclassified	m ³		128	
Concrete, A, Substructure	m ³		98.4	
Reinforcing Bars, Epoxy Coated	kg		5,320	
Pile, Concrete, Steel Shell Encased, 6.35mm, 356 mm	m		840.0	
Surface Seal (Estimated)	m ²		39	
Threaded Tie Bar Assembly, Epoxy Coated	Each		139	



SECTION THRU ABUTMENT

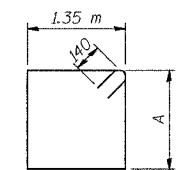


PARAPET DETAIL

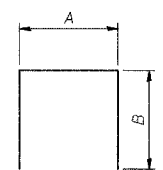
PILE DATA

Type - 356 φ Metal Shell
 Capacity - 500 kN
 Est Length - 20.0 m
 No Req'd - 55 Total*
 Test Piles - 1

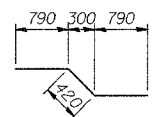
* Phase 2, Stage 2: 13 req'd
 Phase 3, Stage 2: 14 req'd
 Phase 3, Stage 3: 28 req'd



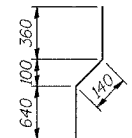
BARS s60(E), s63(E), and s65(E)



BARS s61(E), s62(E), s64(E), s66(E), and s67(E)



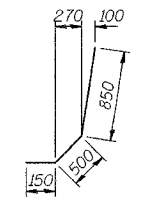
BAR p62(E)



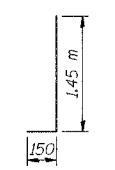
BAR v61(E)

BAR DIMENSIONS

Bar	A	B
s60(E)	1.00m	—
s61(E)	1.30m	1.05m
s62(E)	1.35m	640
s63(E)	1.01m	—
s64(E)	1.01m	1.05m
s65(E)	1.04m	—
s66(E)	1.04m	750
s67(E)	1.04m	1.05m



BAR v63(E)



BAR v64(E)

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790
 #25 bars = 1320

PHASE 2 FOR INFORMATION ONLY

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

NOTES:

Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete, C, Superstructure.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 All edges shall have standard 20 mm chamfers except as noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 (BORMAN EXPRESSWAY)
 OVER LITTLE CALUMET RIVER & N.I.C.T.D. R.O.W.

EAST ABUTMENT DETAILS
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+470.000
 STRUCTURE NO. I-80-1-8460 (EB & WB)
 DATE 07/05 (016-1003 & 016-1004)

AMERICAN
 CONSULTING ENGINEERS