

min.

DETAIL

SECTION B-B

Sheet Pile Deadman Anchor System

Tie Rod

Tie Rod

4" min.

typ.

DETAIL 2

Notes:

Tie rods shall be tensioned to remove any sag in the tie rod. All labor and materials required to fabricate and install tie rods and deadman wales shall be included in Furnishing and Erecting Structural Steel.

All labor and materials required to install stiffeners in soldier piles shall be included in Furnishing Soldier Piles (HP Section).

> excavation Top of rock ∏ĦI Elev. D

Finished

ground

line

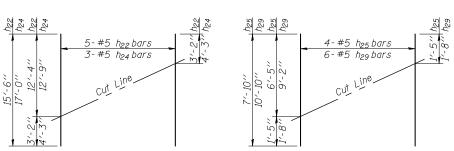
Bottom of

₽1½" x 13" x 13'

SECTION THRU SOLDIER PILE WING WALL

TABLE OF VARIABLE DIMENSIONS

ITEM	N.E. Wing	N.W. Wing	S.E. Wing	S.W. Wing
Soldier Pile	HP12x53	HP12x53	HP14x102	HP12x53
Wale	HP12x53	HP12x53	HP12x53	HP12x53
Elev. A	487.83	486.17	488.00	488.50
Elev. B	481.50	481.50	481.00	483.00
Elev. C	478.33	479.17	475.00	480.25
Elev. D	452.00	464.00	451.00	454.00
Dim. E	6.80	5.09	19.12	5.95
Dim. F	1/2"	1/2"	2"	1/2"
Dim. G	34''	34''	1''	3,11
Dim. H	1/2"	1/2"	2"	1/2"
Dim. I	1'-0''	1'-0''	1'-2''	1'-0''
Dim. J	1'-4''	1'-4''	1′-5′′	1'-4''
Dim. K	4′′	4''	4/2"	4′′



FIELD CUTTING DIAGRAM

and use remainder of bars in opposite face.

FIELD CUTTING DIAGRAM

Order h_{22} & h_{24} bars full length. Cut as shown Order h_{25} & h_{29} bars full length. Cut as shown Order h_{27} bars full length. Cut as shown and use remainder of bars in opposite face.

FIELD CUTTING DIAGRAM and use remainder of bars in opposite face.

Sheet Pile Deadman Anchor System

SECTION C-C

Soldier Pile

Bar	No.	Size	Length	Shape
h22	5	#5	15′-6′′	
h23	4	#5	12'-9''	
h24	3	#5	17'-0''	
V6	13	#5	14'-2''	
Concrete	Structui	res	Cu. Yd.	3.6
Furnishing and Erecting Structural Steel		Pound	1,940	
Stud Shear Connectors		Each	18	
Reinforcement Bars		Pound	380	
Furnishing Soldier Pile (HP Section)		r Piles	Foot	99
Driving So	oldier Pi	iles	Foot	99
Permanen: Sheet Pili			Sq. Ft.	129

S.E. WING BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h27	16	#5	22'-2"	
h ₂₈ (E)	12	#5	19'-0''	
v 8(E)	17	#5	25'-3''	
v9(E)	6	#5	20'-3''	
Concrete	Structui	es	Cu. Yd.	10.2
Furnishing Structura		recting	Pound	4,210
Stud Shed	ir Conne	Each	51	
Reinforcement Bars		Pound	370	
Reinforcement Bars, Epoxy Coated		Pound	810	
Furnishing Soldier Piles (HP Section)		Foot	190	
Driving So	oldier Pi	Foot	190	
Permanen Sheet Pili			Sq. Ft.	251

Bar	No.	Size	Length	Shape
h25	4	#5	7′-10′′	
h26	8	#5	6'-9''	
V 7	7	#5	11'-3''	
Concrete	Structui	es	Cu. Yd.	1.6
Furnishing Structural		Pound 1,210		
Stud Shec	ir Conne	Each	9	
Reinforce	ment Ba	Pound	170	
Furnishing (HP Section		Foot	41	
Driving So	oldier Pi	Foot	41	
Permanen: Sheet Pili		Sq. Ft.	56	

S.W. WING BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h29	6	#5	10'-10''	
h30	6	#5	9'-6''	
V 10	10	#5	12'-7''	
Concrete	Structui	es .	Cu. Yd.	2.4
Furnishing Structura		Pound	1,270	
Stud Shed	ır Conne	Each	10	
Reinforce	ment Bo	Pound	260	
Furnishing Soldier Piles (HP Section)		Foot	66	
Driving So	oldier Pi	Foot	66	
Permanen Sheet Pili			Sq. Ft.	83

Notes:

It shall be noted that the Sheet Pile Anchor System for the S.E. Wing may coincide with the Stage II Temporary Soil Retention System. At the Contractor's option, the Sheet Pile Anchor System for the S.E. Wing may be incorporated into the Stage II Temporary Soil Retention System. The elevations and minimum section modulus shown may be adjusted to suit the design of the Temporary Soil Retention System, but shall meet the design requirements of the Sheet Pile Anchor System as a minimum. Additional materials required shall be included with Temporary Soil Retention System. Holes shall be field drilled in Soldier Pile flange and Sheet Pile Anchor

System, $\frac{1}{8}$ " ϕ larger than threaded rods and tie rods. All nuts and washers shall be ASTM A325 Type 1, mechanically

galvanized. For Elevation of soldier pile wingwalls, see sheet 12 of 20.

For Soldier Pile and Deadman Layout, see sheet 13 of 20. For waterstop details, see sheet 13 of 20. For Steel H-Pile details, see sheet 16 of 20.

FILE NAME = 1:\0906600\0906603\Cad\S_F	lans\0822045-76D06.dgn	DESIGNED	-	K.A. Klues	REVISED -
HORNER & SHIFRIN, INC.	USER NAME = kaklues	CHECKED	-	E.M. Lagemann	REVISED -
SHIFRIN, INC.	PLOT SCALE =	DRAWN	-	I. Krinitskiy	REVISED -
ENGINEERS	PLOT DATE = 5/10/2012	CHECKED	-	K.A. Klues	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

4" min.,

					AILS III 82–2045			
SHEET	NO.	14	OF	20	SHEETS			_

.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
809	135-N	ST. CLAIR	206	157
		CONTRACT	NO. 7	6D06
	ILLINOIS FED. A	ID PROJECT		