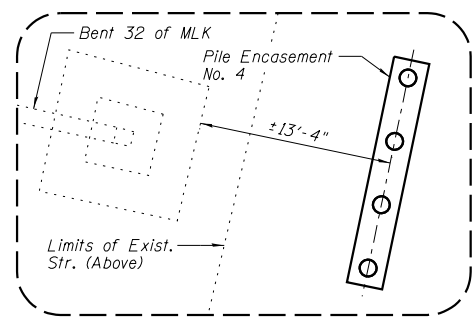


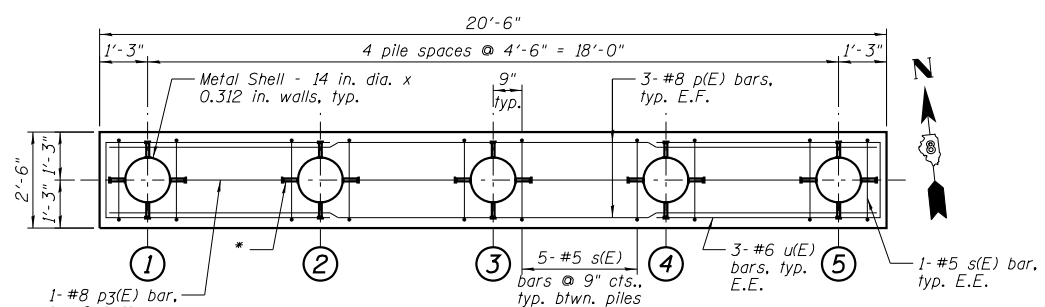
ENLARGED PLAN "A"

ENLARGED PLAN "B"

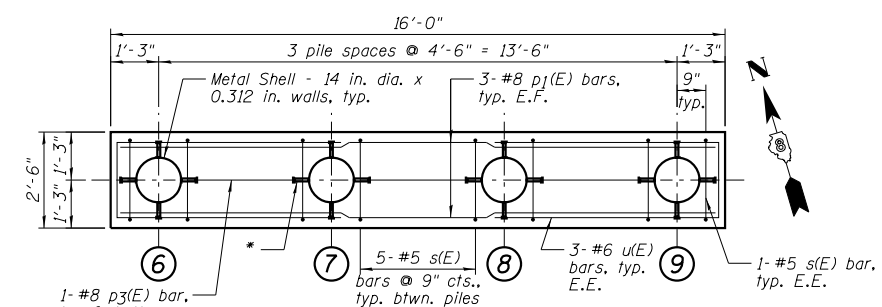
**Included in the cost for "Impact Attenuators (Fully Redirective, Narrow), Test Level 3".



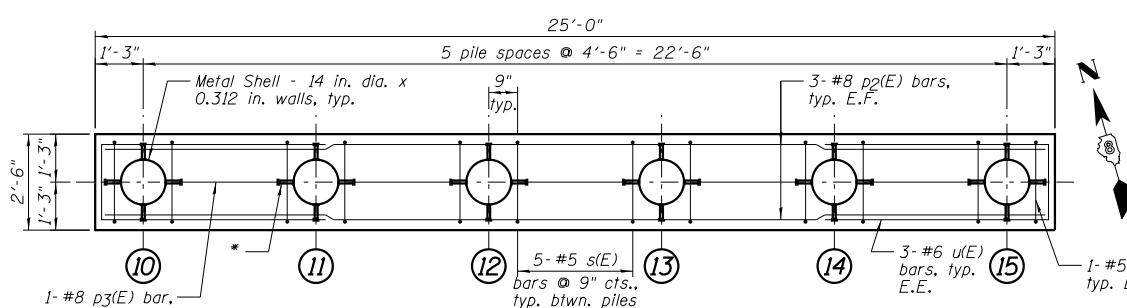
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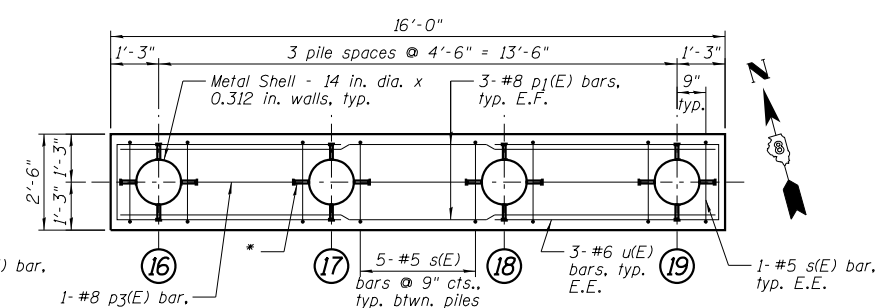
PILE ENCASEMENT NO. 1



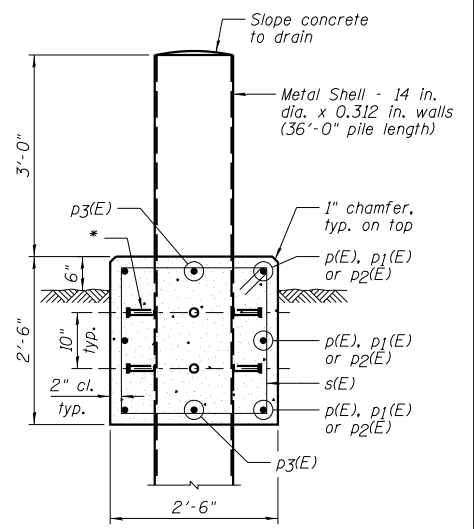
PILE ENCASEMENT NO. 2



PILE ENCASEMENT NO. 3



PILE ENCASEMENT NO. 4



TYPICAL SECTION THRU PILE ENCASEMENT

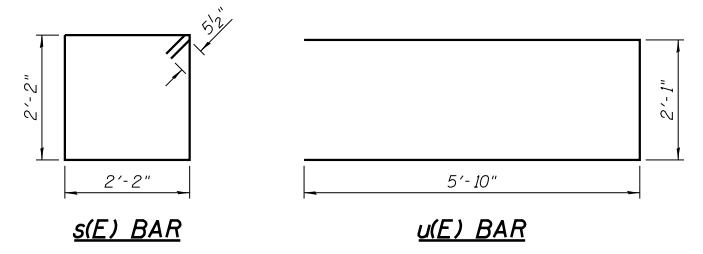
METAL SHELL PILE LOCATION

Pile No.	Northing	Easting
1	14040228.9301	2450242.7939
2	14040228.4499	2450247.2682
3	14040227.9697	2450251.7425
4	14040227.4895	2450256.2168
5	14040227.0093	2450260.6911
6	14040268.2873	2450248.1362
7	14040266.9998	2450252.4481
8	14040265.7123	2450256.7600
9	14040264.4247	2450261.0718
10	14040340.7467	2450248.7825
11	14040339.5346	2450253.1162
12	14040338.3225	2450257.4499
13	14040337.1105	2450261.7836
14	14040335.8984	2450266.1172
15	14040334.6863	2450270.4509
16	14040366.9791	2450139.2233
17	14040365.7801	2450143.5606
18	14040364.5811	2450147.8980
19	14040363.3821	2450152.2353

Note: Coordinate locations for the Metal Shell Piles are taken at the center of the piles.

ATTENUATOR BASE LOCATION

Location	Northing	Easting
A	14040191.3981	2450240.3050
B	14040207.1058	2450239.9785
C	14040224.0087	2450241.7918
D	14040221.9817	2450260.6833
E	14040205.0787	2450258.8700
F	14040189.7977	2450255.2193



NOTES:

- 1.) Piles are designed for lateral load only. Minimum pile embedment shall be 32'-0".
- 2.) 3/4" φ granular or solid flux filled headed studs automatically end welded to wall of Metal Shell Pile. Cost included with Furnishing Metal Shell Piles 14" x 0.312" (No. Req'd. = 8 per pile).
- 3.) See Sheet P1 for location of Enlarged Plans.
- 4.) E.F. denotes Each Face & E.E. denotes Each End.

PILE ENCASEMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p(E)	6	#8	20'-2"	—
p1(E)	12	#8	15'-8"	—
p2(E)	6	#8	24'-8"	—
p3(E)	30	#8	3'-0"	—
s(E)	83	#5	9'-7"	□
u(E)	24	#6	13'-9"	□
Item	Unit	Quantity		
Concrete Structures	Cu. Yd.	18.0		
Reinforcement Bars, Epoxy Coated	Pound	2,790		
Furnishing Metal Shell Piles 14" x 0.312"	Foot	684		
Driving Piles	Foot	608		



DESIGNED - JCZ	REVISION
CHECKED - JML	REVISION
DRAWN - DJM	REVISION
CHECKED - MSW	REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ENLARGED PLAN VIEWS AND PILE DETAILS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
788	520-1-2	ST. CLAIR	142	78
CONTRACT NO. 76850				
ILLINOIS FED. AID PROJECT				