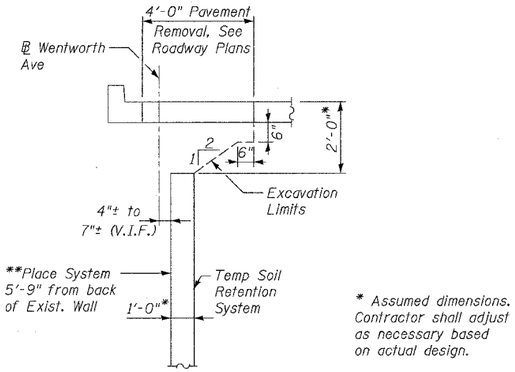
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	•	COOK	588	423
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

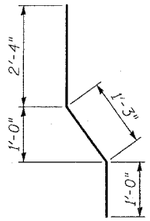
62303 •(2021-922 PT2 ETC 2324.6-1P) R-11



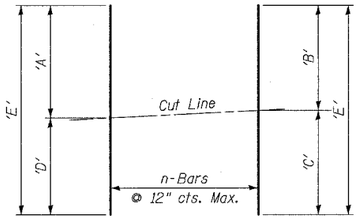
* Assumed dimensions. Contractor shall adjust as necessary based on actual design.

SECTION X-X

** Contractor should be aware of existing footing. See removal cross sections.



BAR d1(E)



* BAR CUTTING DIAGRAM

* Order bars d2(E) thru d5(E) and v3(E) thru v50(E) full length, cut as shown and use remainder where indicated.

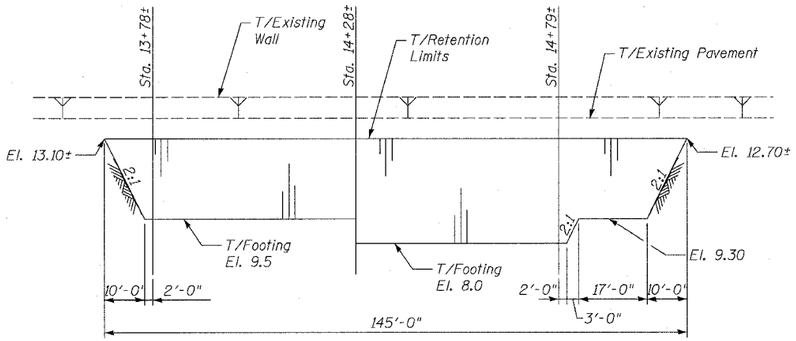
TABLE OF DIMENSIONS

Bar	'A'	'B'	'C'	'D'	'E'	n
d2(E)	9'-1"	8'-7"	8'-7"	8'-1"	17'-2"	13
d3(E)	8'-1"	7'-8"	7'-7"	7'-2"	15'-3"	13
d4(E)	7'-2"	6'-9"	6'-9"	6'-4"	13'-6"	13
d5(E)	6'-2"	5'-8"	5'-8"	5'-2"	11'-4"	13
v3(E)	3'-8"	4'-1"	4'-1"	4'-6"	8'-2"	15
v4(E)	6'-6"	6'-11"	6'-11"	7'-4"	13'-10"	15
v5(E)	4'-6"	5'-2"	5'-2"	5'-10"	10'-4"	15
v6(E)	7'-4"	8'-0"	8'-0"	8'-8"	16'-0"	15
v7(E)	5'-10"	6'-6"	6'-7"	7'-3"	13'-1"	15
v8(E)	8'-8"	9'-4"	9'-5"	10'-1"	18'-9"	15
v9(E)	7'-3"	7'-11"	8'-0"	8'-8"	15'-11"	15
v10(E)	10'-1"	10'-9"	10'-10"	11'-6"	21'-7"	15
v11(E)	8'-8"	9'-4"	9'-5"	10'-1"	18'-9"	15
v12(E)	11'-6"	12'-2"	12'-3"	12'-11"	24'-5"	15
v13(E)	10'-1"	10'-9"	10'-10"	11'-6"	21'-7"	15
v14(E)	12'-11"	13'-7"	13'-8"	14'-4"	27'-3"	15
v15(E)	11'-6"	12'-0"	12'-1"	12'-7"	24'-1"	15
v16(E)	14'-4"	14'-10"	14'-11"	15'-5"	29'-9"	15
v17(E)	12'-7"	13'-0"	13'-1"	13'-6"	26'-1"	15
v18(E)	15'-5"	15'-10"	15'-11"	16'-4"	31-9"	15
v19(E)	13'-6"	13'-8"	13'-9"	13'-11"	27'-5"	15
v20(E)	16'-4"	16'-6"	16'-7"	16'-9"	33'-1"	15
v21(E)	13'-11"	14'-1"	14'-2"	14'-4"	28'-3"	15
v22(E)	16'-9"	16'-11"	17'-0"	17'-2"	33'-11"	15
v23(E)	14'-4"	14'-5"	14'-5"	14'-6"	28'-10"	15
v24(E)	17'-2"	17'-3"	17'-3"	17'-4"	34'-6"	15
v25(E)	14'-6"	14'-4"	14'-4"	14'-2"	28'-8"	15
v26(E)	17'-4"	17'-2"	17'-2"	17'-0"	34'-4"	15
v27(E)	14'-2"	14'-0"	14'-0"	13'-10"	28'-0"	15
v28(E)	17'-0"	16'-10"	16'-10"	16'-8"	33'-8"	15
v29(E)	13'-10"	13'-7"	13'-7"	13'-4"	27'-2"	15
v30(E)	16'-8"	16'-5"	16'-5"	16'-2"	32'-10"	15
v31(E)	13'-5"	13'-0"	13'-0"	12'-7"	26'-0"	15
v32(E)	16'-3"	15'-10"	15'-10"	15'-5"	31'-8"	15
v33(E)	12'-6"	12'-2"	12'-2"	11'-10"	24'-4"	13
v34(E)	15'-4"	15'-0"	15'-0"	14'-8"	30'-0"	13
v35(E)	11'-10"	11'-5"	11'-5"	11'-0"	22'-10"	15
v36(E)	14'-8"	14'-3"	14'-3"	13'-10"	28'-6"	15
v37(E)	11'-0"	10'-7"	10'-6"	10'-1"	21'-1"	15
v38(E)	13'-10"	13'-5"	13'-4"	12'-11"	26'-9"	15
v39(E)	10'-1"	9'-8"	9'-7"	9'-2"	19'-3"	14
v40(E)	12'-11"	12'-6"	12'-5"	12'-0"	24'-11"	14
v41(E)	9'-2"	8'-10"	8'-9"	8'-5"	17'-7"	12
v42(E)	12'-0"	11'-8"	11'-7"	11'-3"	23'-3"	12
v43(E)	8'-5"	7'-11"	7'-10"	7'-4"	15'-9"	12
v44(E)	11'-3"	10'-9"	10'-8"	10'-2"	21'-5"	12
v45(E)	7'-4"	6'-4"	6'-3"	5'-3"	12'-7"	13
v46(E)	10'-2"	9'-2"	9'-1"	8'-1"	18'-3"	13
v47(E)	5'-3"	4'-10"	4'-9"	4'-4"	9'-7"	13
v48(E)	4'-4"	3'-11"	3'-10"	3'-5"	7'-9"	13
v49(E)	3'-5"	3'-0"	3'-0"	2'-7"	6'-0"	13
v50(E)	2'-7"	2'-2"	2'-1"	1'-8"	4'-3"	13

BILL OF MATERIAL

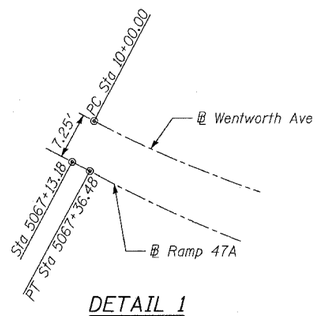
	Bar	No.	Size	Length	Shape
	d1(E)	1060	#6	4'-7"	
*	d2(E)	13	#6	17'-2"	
*	d3(E)	13	#6	15'-3"	
*	d4(E)	13	#6	13'-6"	
*	d5(E)	13	#6	11'-4"	
	d6(E)	224	#6	5'-5"	
	e1(E)	16	#5	23'-3"	
	e2(E)	56	#5	29'-8"	
	e3(E)	88	#5	32'-2"	
	e4(E)	48	#5	27'-2"	
	e5(E)	8	#5	27'-0"	
	e6(E)	16	#5	26'-2"	
	e7(E)	48	#5	24'-8"	
	e8(E)	8	#5	35'-5"	
	e9(E)	8	#5	32'-11"	
	h1(E)	20	#5	23'-3"	
	h2(E)	160	#5	29'-8"	
	h3(E)	260	#5	32'-2"	
	h4(E)	64	#5	27'-2"	
	h5(E)	22	#5	27'-0"	
	h6(E)	38	#5	26'-2"	
	h7(E)	48	#5	24'-8"	
	h8(E)	6	#5	35'-5"	
	h9(E)	6	#5	32'-11"	
	v1(E)	75	#5	3'-8"	
	v2(E)	75	#6	6'-6"	
*	v3(E)	15	#5	8'-2"	
*	v4(E)	15	#6	13'-10"	
*	v5(E)	15	#5	10'-4"	
*	v6(E)	15	#6	16'-0"	
*	v7(E)	15	#5	13'-1"	
*	v8(E)	15	#6	18'-9"	
*	v9(E)	15	#5	15'-11"	
*	v10(E)	15	#6	21'-7"	
*	v11(E)	15	#5	18'-9"	
*	v12(E)	15	#6	24'-5"	
*	v13(E)	15	#5	21'-7"	
*	v14(E)	15	#6	27'-3"	
*	v15(E)	15	#5	24'-1"	
*	v16(E)	15	#6	29'-9"	
*	v17(E)	15	#5	26'-1"	
*	v18(E)	15	#6	31-9"	
*	v19(E)	15	#5	27'-5"	
*	v20(E)	15	#6	33'-1"	
*	v21(E)	15	#5	28'-3"	
*	v22(E)	15	#6	33'-11"	
*	v23(E)	15	#5	28'-10"	
*	v24(E)	15	#6	34'-6"	
*	v25(E)	15	#5	28'-8"	
*	v26(E)	15	#6	34'-4"	
*	v27(E)	15	#5	28'-0"	
*	v28(E)	15	#6	33'-8"	
*	v29(E)	15	#5	27'-2"	

	Bar	No.	Size	Length	Shape
*	v30(E)	15	#6	32'-10"	
*	v31(E)	15	#5	26'-0"	
*	v32(E)	15	#6	31'-8"	
*	v33(E)	13	#5	24'-4"	
*	v34(E)	13	#6	30'-0"	
*	v35(E)	15	#5	22'-10"	
*	v36(E)	15	#6	28'-6"	
*	v37(E)	15	#5	21'-1"	
*	v38(E)	15	#6	26'-9"	
*	v39(E)	14	#5	19'-3"	
*	v40(E)	14	#6	24'-11"	
*	v41(E)	12	#5	17'-7"	
*	v42(E)	12	#6	23'-3"	
*	v43(E)	12	#5	15'-9"	
*	v44(E)	12	#6	21'-5"	
*	v45(E)	13	#5	12'-7"	
*	v46(E)	13	#6	18'-3"	
*	v47(E)	13	#5	9'-7"	
*	v48(E)	13	#5	7'-9"	
*	v49(E)	13	#5	6'-0"	
*	v50(E)	13	#5	4'-3"	
	v51(E)	224	#5	1'-8"	
	Reinforcement Bars, Epoxy Coated			Pound	60,220
	Concrete Structures			Cu. Yd.	322.7
	Concrete Superstructures			Cu. Yd.	130.7
	Chain Link Fence, 42" Attached to Structure (Special)			Foot	1,000
	Chain Link Gate Assembly (Special)			Each	1
	Rustication Finish			Sq. Ft.	9,160
	Protective Coat			Sq. Yd.	1,329

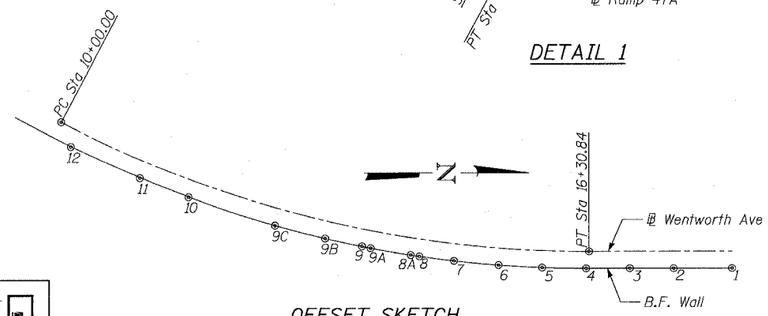


TEMPORARY SOIL RETENTION SYSTEM

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



DETAIL 1



OFFSET SKETCH

Points Shown are Wall Joints

NOTES

1. Build wall parallel to ℄ Wentworth Ave. & at constant offset beyond Pt. 12 U.N.O. (Chords)
2. Utilize Face of existing wall as W.P. for top modification.
3. Pts 8A, 9A, etc. are on existing wall to be removed.

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

SHEET 12 OF 24

REVISIONS	
NAME	DATE
REVISED	6/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (SB LOCAL LANES)
COOK COUNTY
STA. 3532+90.57 TO STA. 3543+57.42
RETAINING WALL S-45S-F
BILL OF MATERIAL
S.N. 016-W978

SCALE: NTS DRAWN BY: MTR
DATE: JUNE 9, 2006 CHECKED BY: BLU

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