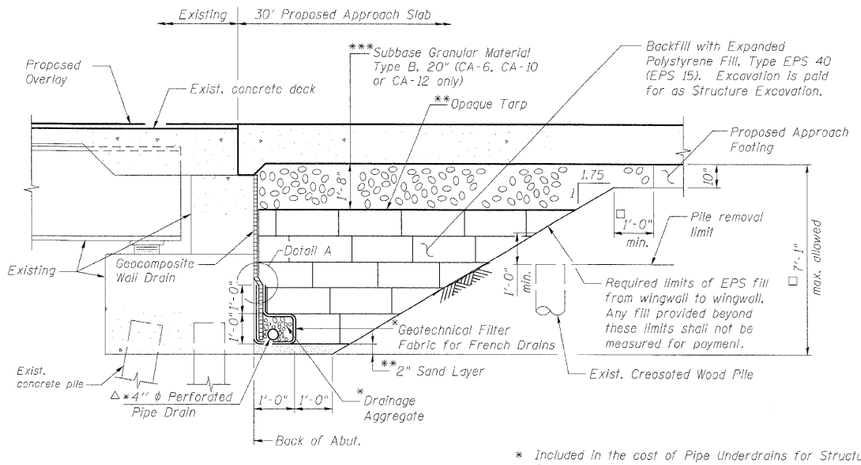
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ABUTMENT STABILIZATION DETAIL
(Horiz. dim. @ Rt. L's)

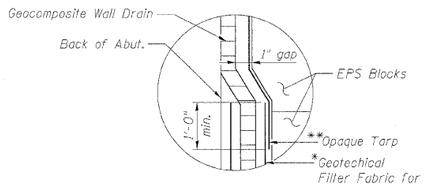
* Included in the cost of Pipe Underdrains for Structures.
** Included in the cost of Expanded Polystyrene Fill.
*** Included in the cost of Concrete Superstructure. See Approach Slab Details.

△ Tie new Pipe Underdrain into existing drainage elements at interface where abutment section changes.

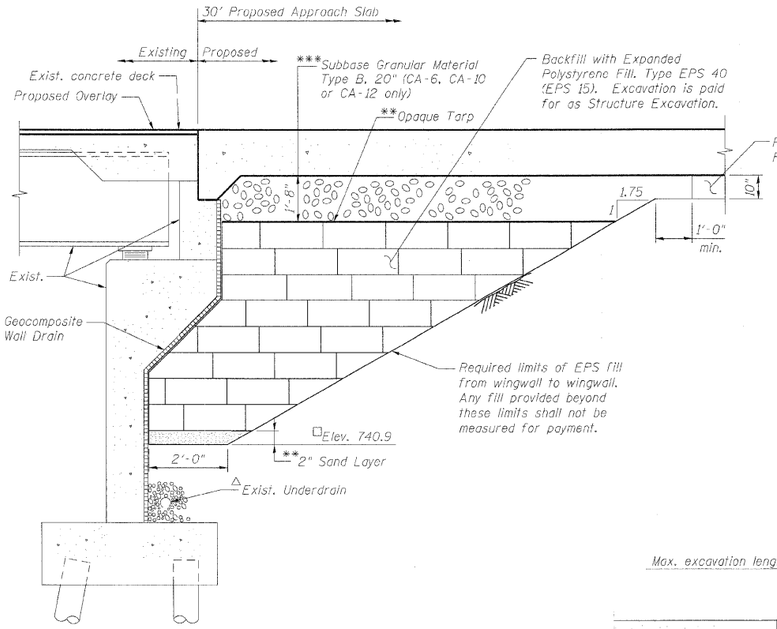
□ Max. allowed EPS fill depth to maintain 1'-0" min. berm from Proposed Approach Footing to EPS fill cut. If abutment exceeds this height, only install fill down to the max. allowed depth.

All drainage system components shall extend parallel to the abutment backwall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

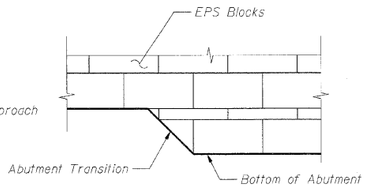
Existing approach slabs are supported on creosoted wood piles. The piles shall be removed down a minimum of 1'-0" below the limits of structure excavation. Cost included in Structure Excavation.



DETAIL A

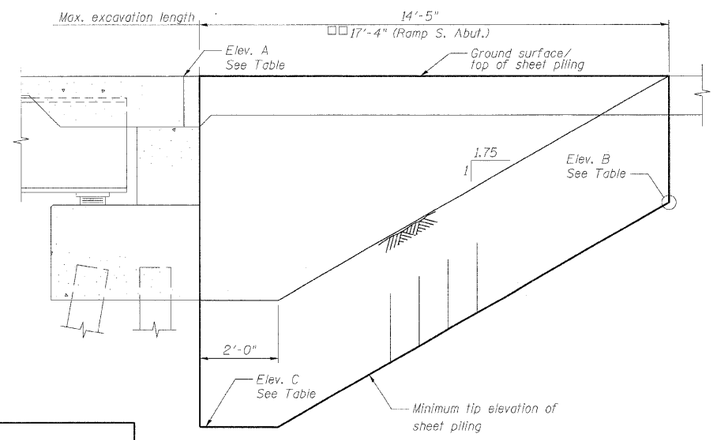


ABUTMENT STABILIZATION DETAIL
(Horiz. dim. @ Rt. L's)
(West Portion of Ramp H South Abutment Only)



EPS BLOCK ORIENTATION AT ABUTMENT TRANSITION DETAIL
(Located at Steps in Abutment footing)

□□ Due to the shape of the ramp south abutment, the sheeting will not be able to be installed against the back of abutment for the full height of the cut. Soil at the inset portion of the ramp south abutment shall be retained and care shall be taken not to damage the footing. Cost included with Temporary Sheet Piling.



TEMPORARY SHEET PILING
(Horiz. dim. @ Rt. 1's)

SHEET PILING ELEVATION TABLE

Abutment	Location	Elev. A	Elev. B	Elev. C	Min. Section Modulus Req'd. (in.³/ft.)	Min. Embedment (ft.)
North	Mainline	745.88	739.68	732.59	3.3	6.3
North	Ramp	744.12	737.92	730.83	3.3	6.3
South	Mainline	751.43	745.23	738.14	3.3	6.3
South	Ramp	749.69	741.39	732.64	5.5	8.3

BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	697
Temporary Sheet Piling	Sq. Ft.	673
Geocomposite Wall Drain	Sq. Yd.	246
Pipe Underdrains for Structures 4"	Foot	320
Expanded Polystyrene Fill	Cu. Yd.	450

DESIGNED -	MFB
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS/AAY

ABUTMENT STABILIZATION DETAILS
STRUCTURE NO. 022-0138

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10050

SHEET NO. 16	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
38 SHEETS	290/355	22(1, 1-1, 2&3)RS-7	DUPAGE	546	391
			CONTRACT NO. 60G51		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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