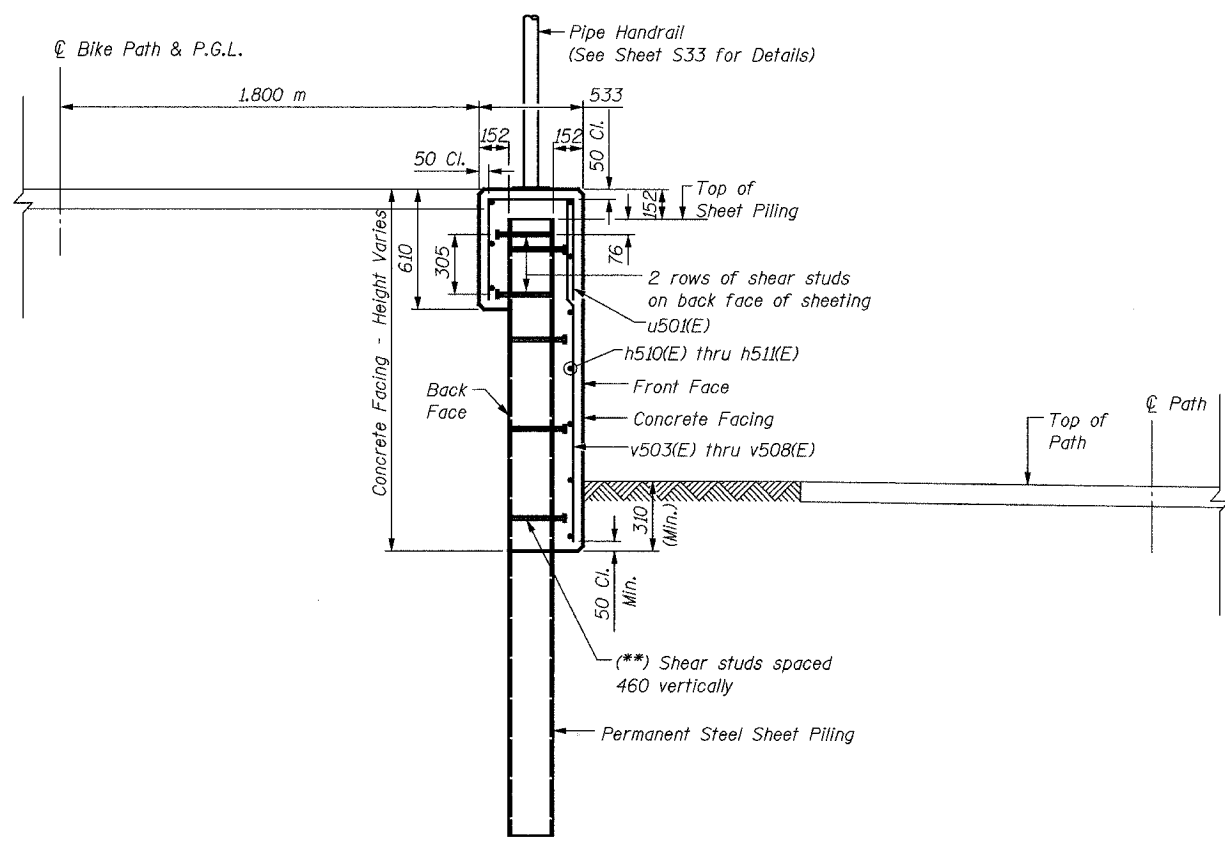
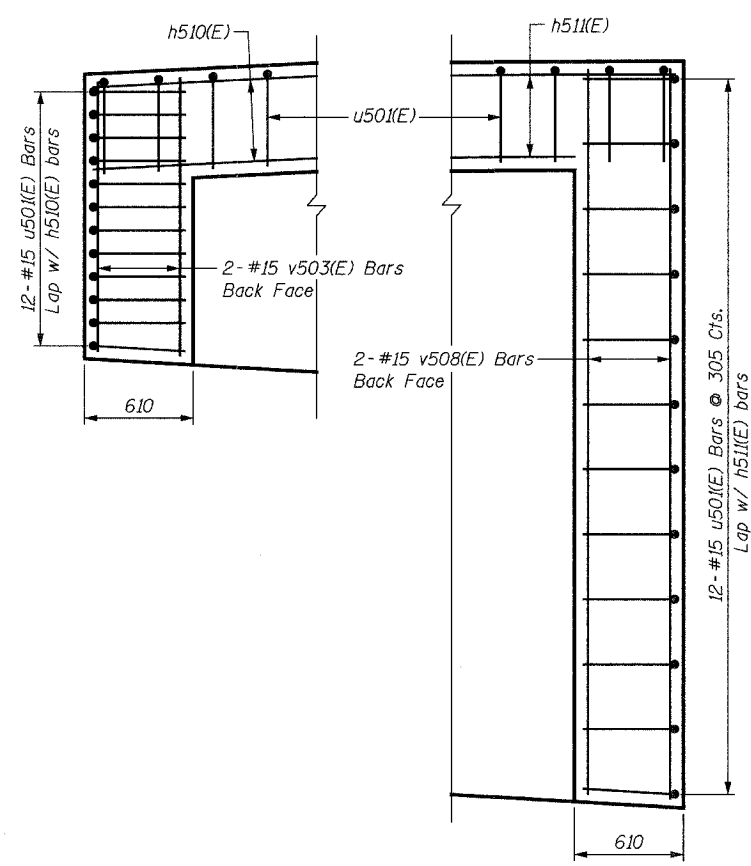


**BILL OF MATERIAL**

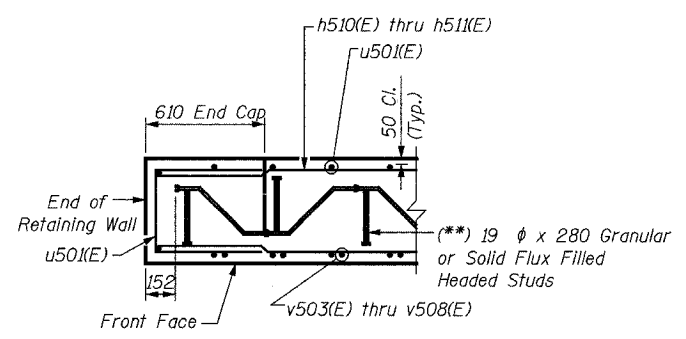
Bar	No.	Size	Length	Shape
h510(E)	15	#15	8.90 m	—
h511(E)	30	#15	9.64 m	—
u501(E)	114	#15	1.45 m	⊏
v503(E)	17	#15	1.28 m	—
v504(E)	15	#15	1.75 m	—
v505(E)	15	#15	2.26 m	—
v506(E)	15	#15	2.77 m	—
v507(E)	15	#15	3.09 m	—
v508(E)	17	#15	3.41 m	—
Concrete Structures			Cu. M	20.8
Reinforcement Bars, Epoxy Coated			kg	1,290
Structure Excavation			Cu. M	15.2
Permanent Steel				
Sheet Piling			Sq. M	175
Pipe Handrail			Meter	27



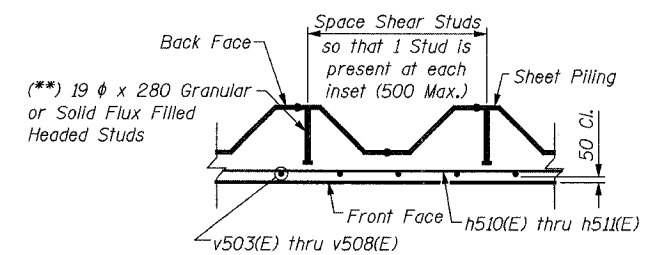
**SECTION THRU WALL "D"**  
(Section Sta. 23+458 to Sta. 23+485.08)



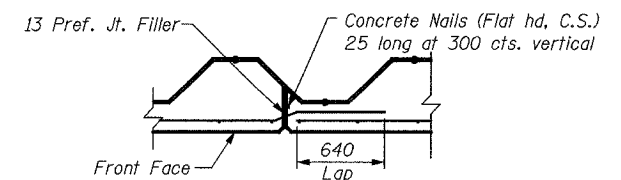
**WEST END EAST END**  
**END CAP WALL DETAILS - WALL "D"**



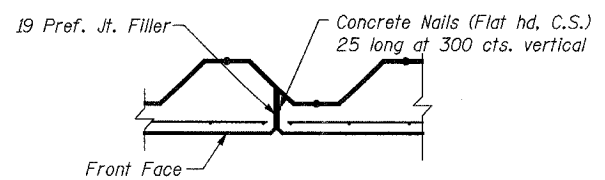
**SECTION THRU CAP**



**TYPICAL SECTION THRU WALL**



**CONSTRUCTION JOINT DETAIL**



**EXPANSION JOINT DETAIL**

**NOTES:**

- Fan h(E) bars for even distribution over face of wall.
- Cut v(E) bars as necessary in field to fit.
- Minimum lap for #15 bar = 640 mm.
- All exposed edges of concrete shall have a 20 mm chamfer unless shown otherwise.
- For minimum effective section modulus properties for sheet piling sections, refer to special provision for Permanent Steel Sheet Piling.
- Work this sheet with Sheet S28.
- Bars designated (E) shall be epoxy coated.
- All dimensions are in millimeters (mm) unless otherwise noted.
- For Plan and Elevation of Wall "D", see Sheet S28.

**(\*\*\*) NOTE:**

Shear Studs shall be 19 dia. x 208 Granular or Solid Flux Filled Headed Studs conforming to 505.08 (m) of the Standard Specifications, automatically end welded in the field to Sheet Piling. The cost of the studs is included in the cost of PERMANENT STEEL SHEET PILING.

SHEET S29 of S33

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

**URS** 1701 GOLF ROAD, SUITE 1000 TEL (847) 228-0707  
ROLLING MEADOWS, IL 60008 FAX (847) 228-1115

VILLAGE OF OAKBROOK  
SALT CREEK GREENWAY TRAIL  
RETAINING WALL "D"  
DETAILS

DATE: 06/30/05  
DESIGNED BY: MDS  
DRAWN BY: MDS  
CHECKED BY: GAT