STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

2002 A.A.S.H.T.O. Specifications & Supplements

DESIGN STRESSES

<u>Precast Units</u> fy = 60,000 psi f'c = 5,000 psi (Precast)

<u>Field Units</u> fy = 60,000 psi (ReInforcement) fy = 50,000 psi (AASHTO M270 Gr. 50)

HIGHWAY CLASSIFICATION

F.A.P. Rte. 742 - IL. Rte. 2 Functional Class: Other Principal Arterial ADT: 8,950 (2005); 10,350 (2025) DHV: 1035 (2025) Design Speed: 55 m.p.h. (Sta. 643+30 to 1053+97.44) Posted Speed: 55 m.p.h. (Sta. 643+30 to 1053+97.44)

TOTAL BILL OF MATERIALS

DESCRIPTION	UNIT	QTY.	
Structure Excavation	Cu. Yd.	327.2	
Pipe Underdrains for Structures 4"	Foot	205	
Concrete Gutter, Type A (Modified)	Foot	173.2	
Furnishing Soldier Piles (W Section)	Foot	1377	
Geocomposite Wall Drain	Sq. Yd.	185	
Drilling & Setting Soldier Piles (In Soil)	Cu. Ft.	7000	
Retaining Wall (Special)	Sq. Ft.	2040	
Staining Concrete Structures	Sq. Yd.	181	

DESIGNED CTH

CHECKED DSG

DRAWN EBS

CHECKED DFM

Howard R. Green Company

GENERAL NOTES

All exposed corners 90° or sharper shall be filleted with a $^3\!_4$ " dressed and beveled strip.

Reinforcement Bars shall conform to the requirements of ASTM A706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Drilling and setting of piles will require drilling into dense sand and weakly cemented sandstone. (See boring logs). Temporary drill casings or drilling slurry may be required to keep holes open prior to placement of concrete. See drilled soldier pile retaining wall special provision. All drilling will be paid as "Drilling & Setting Soldier Piles (In Soil)".

Concrete shall be painted in accordance with special provisions. The color shall be selected by the engineer.

Exposed steel wide flange/pile shall be painted with an inorganic zinc rich primer/acrylic/acrylic paint system for shop and field painting except for portions located more than 4 feet below the finished grade at the front face of the wall. The finished coat shall be only applied to the exposed surfaces of the steel piles after the concrete panels have been installed. The color of the final finish coat shall be approved by the Resident Engineer and Project Engineer. See special provisions for Cleaning and Painting New Metal Structures.

After placement of bottom precast panel, fill must be placed equally on both sides in order to continue construction of wall and place additional panels. Backfill at front face of wall must be at finished grade.

GENERAL NOTES & TOTAL BILL OF MATERIALS IL. RTE. 2 RETAINING WALL C STA. 673+17.00 TO STA. 675+22.00

SHEET NO. 2	F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
	742	37 R-3			OGLE	345	174
9 SHEETS		SN 071-7	001		CONTRACT	NO. 84	788
	FED. RO	DAD DIST. NO. 7	ILLINOIS	FED. A	AID PROJECT		