F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	BRIDGE DECK REPAIRS 2007-1	WHITESIDE	64	39
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Contract No. 64D24   Sheet 7 of 8

Provide temporary girder support if concrete deterioration extends under bearing plate

Exist. Curtain Wall

New Stone Riprap, Class A4 along each Exist. Curtain Wall

Existing Groundline

8' 5' 3' 3' 3' 7' 2' 2' 1' 6'

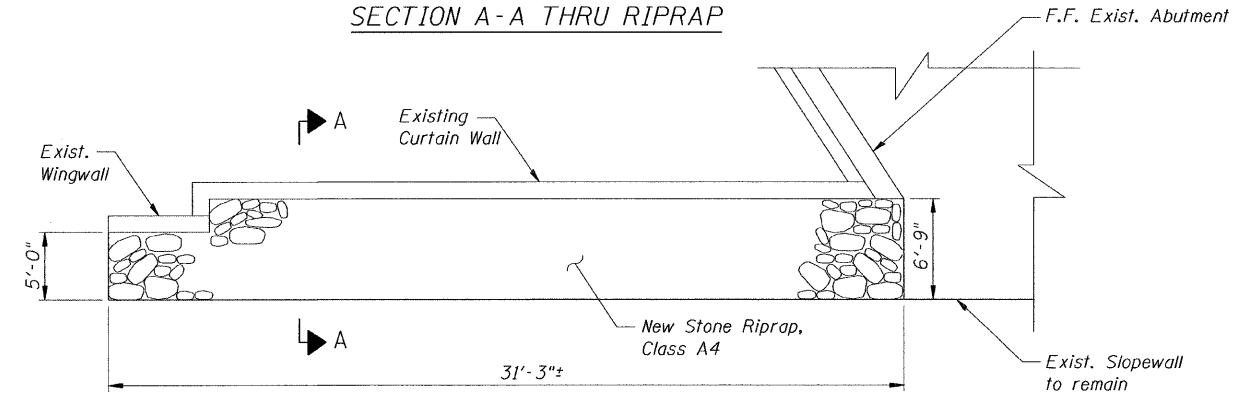## EXIST. SOUTH ABUTMENT & UNFOLDED EXIST. CURTAIN WALLS ELEVATION
(Looking South)

Exist. Curtain Wall

Provide temporary girder support if concrete deterioration extends under bearing plate

8' 5' 2' 4' 2' 3' 2' 5' 2' 1' 6' 2'

New Stone Riprap, Class A4 along each Exist. Curtain Wall

Existing Groundline
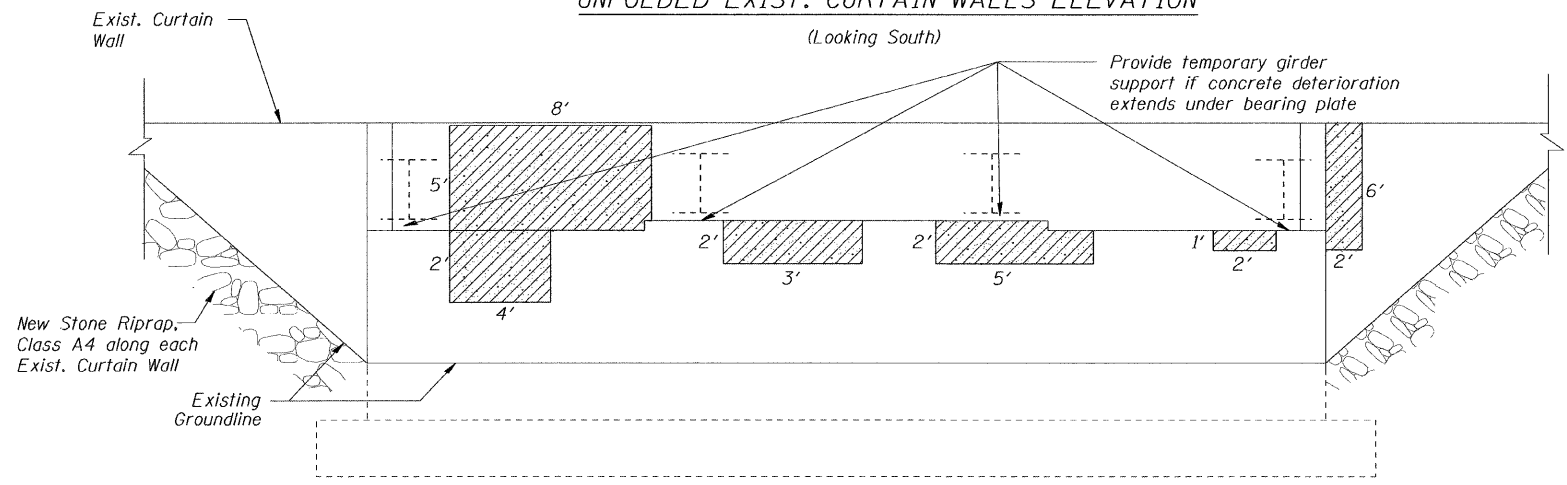
EXIST. NORTH ABUTMENT & UNFOLDED EXIST. CURTAIN WALLS ELEVATION
(Looking North)

New Stone Riprap, Class A4

Wrap New Filter Fabric up Exist. Curtain Wall

Exist. Curtain Wall

3'-0" 2'-8" 6" 4'-9" 2'-0"

New Bedding

New Filter Fabric. Pay limits shall equal limits for Stone Riprap, Class A4
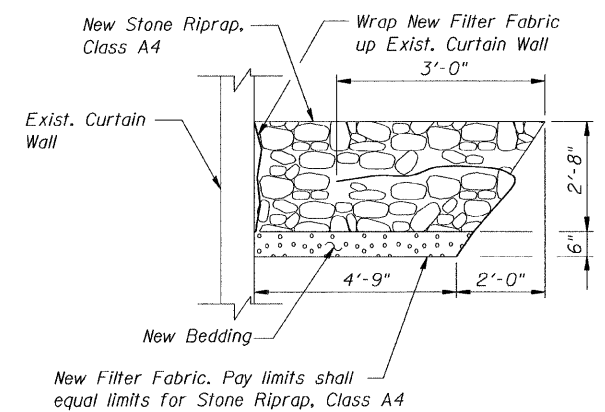
SECTION A-A THRU RIPRAP

LEGEND

Structural Repair of Concrete (Depth Equal to or Less than 5")

Concrete Removal

F.F. Exist. Abutment

Exist. Wingwall

Existing Curtain Wall

5'-0" 6'-9"

New Stone Riprap, Class A4

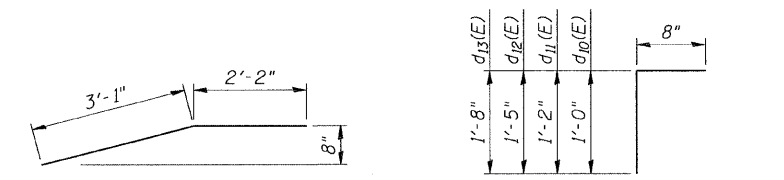Exist. Slopewall to remain

31'-3"±

RIPRAP PLAN AT EXIST. ABUTMENTS
(Exist. North Abutment, west side shown. Other locations similar)

Z ← N ←

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$d_{10}(E)$	12	#5	1'-8"	⌐
$d_{11}(E)$	4	#5	1'-10"	⌐
$d_{12}(E)$	4	#5	2'-1"	⌐
$d_{13}(E)$	4	#5	2'-4"	⌐
$e_{12}(E)$	8	#5	5'-3"	—
$e_{13}(E)$	8	#5	5'-3"	∕
Stone Riprap, Class A4		Sq. Yd.		98
Filter Fabric		Sq. Yd.		98
Concrete Removal		Cu. Yd.		0.1
Concrete Superstructure		Cu. Yd.		0.6
Protective Coat		Sq. Yd.		4
Reinforcement Bars, Epoxy Coated		Pound		140
Structural Repair of Concrete (Depth Equal to or Less than 5")		Sq. Ft.		198

3'-1" 2'-2" 8"

$d_{13}(E)$ $d_{12}(E)$ $d_{11}(E)$ $d_{10}(E)$ 8"

1'-8" 1'-5" 1'-2" 1'-0"

BAR $e_{13}(E)$

BARS $d_{10}(E)$, $d_{11}(E)$, $d_{12}(E)$, $d_{13}(E)$

8'-0" 5'-7" 2'-5" 2'-4¾"

Top of Exist. Wingwall

2'-4¾" 6" 1'-2"

Sawcut perimeter ¾" prior to removal of concrete.
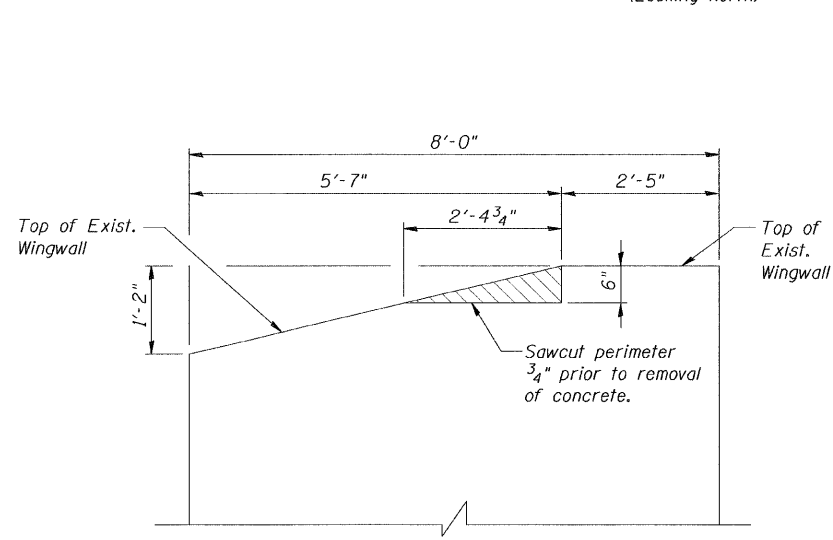
CONCRETE REMOVAL @ EXIST. WINGWALL ELEVATION
(O.F. of Northwest Exist. Wingwall shown, looking east. Other locations similar)

8'-0" 5'-7" 2'-5" 2'-4¾"

Top of New Build-Up @ Exist. Wingwall

3 Spa. @ 12" cts. = 3'-0" 3-#5 $d_{10}(E)$ @ 12" cts.

1-#5 e_{12} (E) E.F.

1'-2" 6"

Top of Exist. Wingwall

1-#5 e_{13} (E) E.F.
1-#5 d_{11} (E)
1-#5 d_{12} (E)
1-#5 d_{13} (E)

Top of Exist. Wingwall, Bottom of New Build-Up @ Exist. Wingwall

Note:
Epoxy grout d_{10} (E), d_{11} (E), d_{12} (E) & d_{13} (E) bars into existing concrete in accordance with Section 584 of the Standard Specifications, min. 8" embed. Cost included with Concrete Superstructure.

CONCRETE BUILD-UP @ EXIST. WINGWALL ELEVATION
(O.F. of Northwest Exist. Wingwall shown, looking east. Other locations similar)

1'-0" 1'-2"

Top of New Build-Up @ Exist. Wingwall

$e_{12}(E)$

Top of Exist. Wingwall, Bottom of New Build-Up @ Exist. Wingwall

$e_{13}(E)$

d (E) bar, See Concrete Build-Up @ Exist. Wingwall Elevation for bar designation.

VIEW B-B

Note:
Quantity for Structural Repair of Concrete has been increased to include additional repair areas not apparent at the time of the inspection. The actual repair areas will be determined by the Resident Engineer. The Contractor will be paid for the quantity furnished.
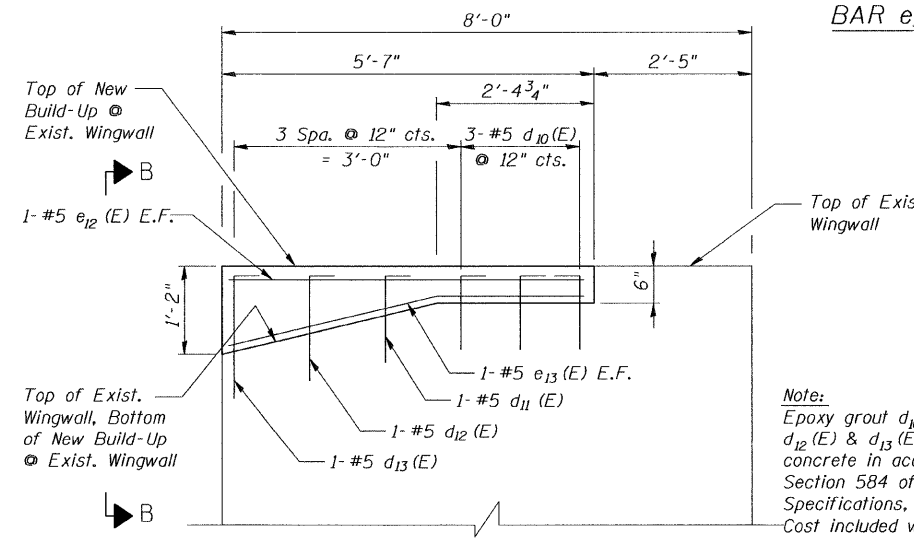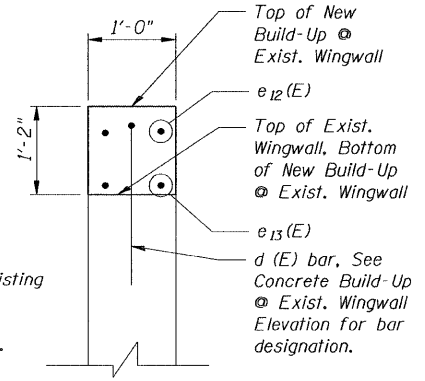
DESIGNED	S.D.H.
CHECKED	E.E.J.
DRAWN	M.S.M.
CHECKED	S.D.H.

SUBSTRUCTURE REPAIR & RIPRAP DETAILS
C.H. 17 (WILMOT ROAD) OVER I-88
F.A.I. ROUTE 88
SECTION: BRIDGE DECK REPAIRS 2007-1
WHITESIDE COUNTY
STATION 3014+40.25
S.N. 098-0058
DATE: 12-09-08

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO   ILLINOIS