



Diagram illustrating the construction of a W.W.F. (Wire-Wrapped Form) jacket for a column repair. The diagram shows a cross-section of the repair assembly. Key components and labels include:

- 4" CONCRETE COVER, (MIN) ALL SIDES
- ADD SPACERS ON SIDES WHERE NO CHANNELS FOR W.W.F. SUPPORT
- 6 X 6-W2.9 X W2.9 W.W.F. WRAPPED AROUND COLUMNS FOR REINFORCING
- MC10X25, TYP., SEE PLAN FOR LOCATIONS. THRU BOLT WITH 1/2" Ø THRU BOLTS, RE: SECTION C FOR SPACING
- EXISTING CONCRETE COLUMN

NOTE: AT LOCATIONS WHERE 3 NEW STEEL BEAMS ARE FRAMING INTO EXISTING COLUMN, PROVIDE CHANNEL FRAMING ON ALL 4 SIDES OF EXISTING COLUMN. THRU-BOLTING SHALL BE STAGGERED AS SUCH TO AVOID THRU-BOLTING FROM OTHER DIRECTION AND SP. @24" O.C. RATHER THAN 12" O.C.

9' F.V.

9' F.V.

EXISTING CONC. TOPPING TO REMAIN

EXISTING CONC. SLAB TO REMAIN

SHORE EXISTING FLOOR UNTIL NEW BEAM IS IN PLACE AND SUPPORTED BY NEW STEEL STRUCTURE

SAWCUT EXISTING CONCRETE BEAM

PROVIDE A SOLID CONTACT SURFACE BETWEEN THE NEW 6" BEAM AND THE EXISTING SAWCUT BEAM BY PLACING HIGH STRENGTH GROUT ON TOP OF BEAMS

REPLACE EXISTING W12x31 W/ (n) W12 SEE PLAN FOR SIZE

4' F.V.

4' F.V.

LIMITS OF REMOVAL FOR ENTIRE LENGTH OF BEAM

EXISTING CONC. TOPPING TO REMAIN

EXISTING CONC. SLAB TO REMAIN

T.O. BEAM AND TOP OF COLUMN TO BEAM FUSION

EXISTING CONC. COLUMN TO REMAIN

W8 OR W12 - SEE PLAN FOR LOCATIONS AND SIZE

MC10, SEE PLAN FOR LOCATIONS

1/2" THRU BOLT,
SPACED @ 12" O.C. STAGGERED

NOTE: STEEL COLUMN SHALL BE INSTALLED BEFORE STEEL BEAMS CAN BE INSTALLED

CMU PARAPET TO BE REMOVED AND REPLACED

DRILL & EPOXY #6 X 3'-0" (6" EMBED) INTO EXIST. BEAMS, - Ø SLAB (3" EMBED)

CONTRACTOR TO SHORE BEAM AND SLAB AS NECESSARY TO REMOVE AND REPLACE WALL

#5, VERT. Ø 12" O.C. AT EXTERIOR FACE

(1) #6, VERT. Ø 12" O.C. @ INTERIOR FACE

2" CLR.

3" CLR.

(1) #5 E/F, HORIZ. SP. Ø 12" O.C. VERTICALLY

INSIDE

OUTSIDE

(2) #6, CONT. TOP & BOTTOM

DRILL & EPOXY W/HILTI HY150 #5 X 2'-6" (6" EMBED) INTO EXIST. FNDN. WALL

EXISTING SLAB TO REMAIN

EXISTING FOUNDATION WALL FOOTING TO REMAIN

Diagram illustrating the cross-section of a beam repair. The diagram shows an existing concrete slab and beam structure. A new high-strength grout is applied between the existing beam and a new steel beam. A bolted connection is shown, with a note indicating the bolt size and location: (n) W8 OR W12 - SEE PLAN FOR LOCATIONS AND SIZE.

Labels in the diagram include:

- EXISTING CONC. TOPPING TO REMAIN
- EXISTING CONC. SLAB AND BEAM TO REMAIN
- HIGH STRENGTH GROUT BETWEEN EXIST. BEAM AND NEW STEEL BEAM
- BOLTED CONNECTION SEE XX/XX
- (n) W8 OR W12 - SEE PLAN FOR LOCATIONS AND SIZE

EXIST. TOPPING TO REMAIN

4 1/4" EXIST. SLAB TO REMAIN

HIGH STRENGTH GROUT ON TOP OF BEAM

CHIP OUT EXIST. CONC. BEAM TO FACE OF EXIST CONC. WALL

EXIST. CONCRETE BEAM, SAWCUT AS REQ'D TO INSTALL STEEL BEAM. SEE SECTION A-A

SAWCUT POCKET IN EXISTING WALL FOR BEAM BEARING. PROVIDE 1" MIN. GROUT UNDER BEAM TO ENSURE POSITIVE BEARING. PROVIDE 5" BEAM BEARING (DO NOT OVERCUT)

12" F.V.

(n) WB BEAM, SEE PLAN FOR SIZE AND LOCATION

EXISTING 17" PRECAST BEAM
W/4"-1/4" SLAB AND TOPPING

CONTRACTOR TO SHORE BEAM AND
SLAB AS NECESSARY TO REMOVE
AND REPLACE WALL

LOUVER OPENING

BUILDING GENERATOR ROOM

CONTRACTOR TO FIELD VERIFY
LOUVER OPENING PRIOR TO
CONSTRUCTION

NOTE: REFER TO ARCHITECTURAL
FOR OPENING LOCATIONS IN WALL

CMU PARAPET TO BE REMOVED
AND REPLACED

CONTRACTOR TO SAWCUT EXISTING
BEAMS BACK 4" (MAX)

REFER TO ARCHITECTURAL FOR
FINISH

6" DEEP X 12" WIDE BEAM
REINFORCED W(4) #5, HORIZ. AND
#3 TIES SP @ 8" O.C. - LAP
HORIZ. REINF. WITH WALL, BEYOND
A MIN OF 2'-0"

AT EACH SIDE OF LOUVER,
PROVIDE (2) #6 E/F VERT.

EXISTING FOUNDATION WALL AND
FOOTING TO REMAIN

AT FOUNDATION WALL, DRILL &
EPOXY W/HILTI HY150 #6X3'-0"
(6" EMBED), LAP W/VERT. BARS
AT EACH SIDE OF LOUVER

1'-2" (A)

1'-8" (A)

6"

WARNING
LOCATION OF ALL UNDERGROUND
UTILITIES SHALL BE VERIFIED BY
THE CONTRACTOR.
CALL BEFORE DIGGING
MINNESOTA
ONE-CALL SYSTEM
1-800-252-1166
REQUIRED BY
MN STATUTE 216D