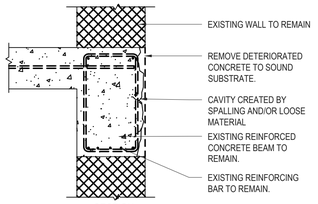
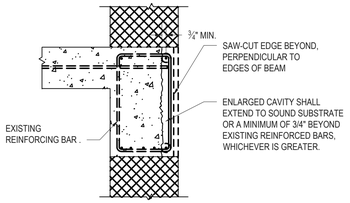


SECTION
(STEP 1)



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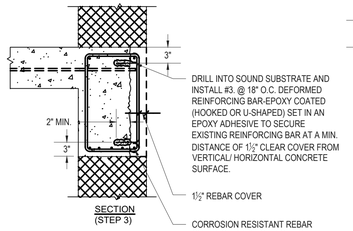

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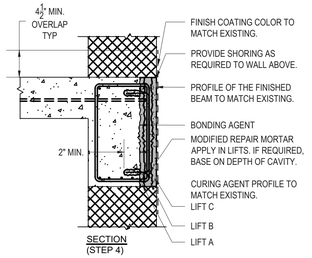
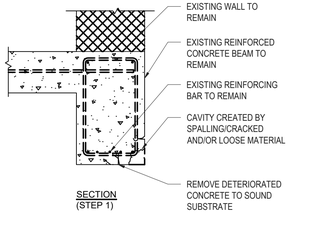
(STEP 3)



SECTION
(STEP 4)

CONCRETE SPALL REPAIR AT BEAM (SIDE - VERTICAL SURFACE)



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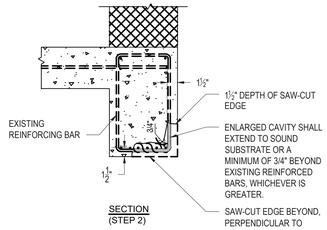

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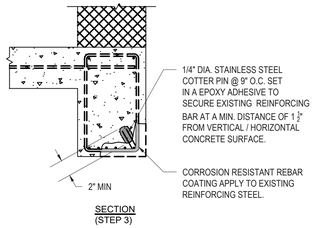
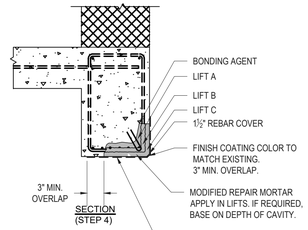
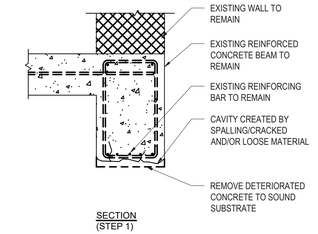


SECTION
(STEP 3)

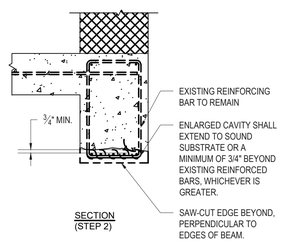


SECTION
(STEP 4)

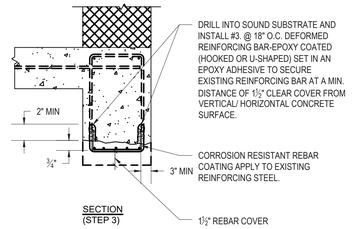
CONCRETE SPALL REPAIR AT BEAM (BOTTOM EDGE)



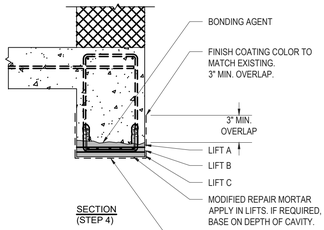
SECTION
(STEP 1)



SECTION
(STEP 2)



SECTION
(STEP 3)



SECTION
(STEP 4)

CONCRETE SPALL REPAIR AT BEAM (BOTTOM)

1 CONCRETE SPALL REPAIR DETAILS AT BEAM

SCALE: N.T.S.

REPAIR PROCEDURE:

STEP 1: IDENTIFICATION OF DETERIORATED CONCRETE

A. VISUALLY SURVEY ALL CONCRETE SURFACES.

B. SOUND SURFACES WITH 3 LB. DEAD BLOW HAMMER AT LOCATIONS APPROXIMATELY 2"-3" O.C. TO IDENTIFY EXTENT OF DETERIORATED/ DELAMINATED CONCRETE TO BE REMOVED.

C. MARK AREA OF DETERIORATED/ DELAMINATED CONCRETE

D. DETERMINE QUANTITY OF CONCRETE REPAIR BY SOUNDING OUT CONCRETE.

STEP 2: CUTTING AND REMOVAL OF CONCRETE

A. CREATE AN ENLARGED CAVITY BY PROVIDING A SAW CUT EDGE ¾" IN DEPTH, EXTEND MINIMUM OF 1½" BEYOND THE PERIMETER OF THE CAVITY INTO SOUND CONCRETE. DO NOT CUT OR DAMAGE UNCOVERED REINFORCING BAR.

B. PROVIDE A RECTILINEAR CAVITY, WITH EDGES PARALLEL TO EDGES OF EXISTING ADJACENT STRUCTURE.

C. REMOVE ANY/ALL DETERIORATED CONCRETE IN CAVITY IN ACCORDANCE WITH THE SPECIFICATIONS UNTIL A SOUND SURFACE IS UNCOVERED.

D. EXTEND THE DEPTH OF SOUND SUBSTRATE MIN. ¾" BEYOND CORRODED REINFORCING BAR ALL ALONG THE LENGTH OF THE BAR TO WHERE STEEL CORROSION IS NOT DETECTED.

E. CUTTING AND REMOVAL PROCESS SHOULD BE IN ACCORDANCE WITH THE SPECIFICATIONS.

STEP 3: SURFACE PREPARATION

A. CLEAN STEEL REINFORCING BAR USING A MOTOR-DRIVEN WIRE BRUSH TO REMOVE ALL RUST AND SCALE. IF CROSS SECTIONAL AREA AFTER CLEANING OF ANY STEEL REINFORCING BAR HAS BEEN REDUCED BY MORE THAN 20%, NOTIFY THE A/E AND MAKE AREA AVAILABLE FOR EXAMINATION. REINFORCE PER DETAIL '3' -SEE S-001.00

B. MECHANICALLY REMOVE THIN LAYERS OF SURFACE CONCRETE USING SUCH EQUIPMENT AS GRINDER, AND SCARIFIER. CLEAN THE CAVITY WITH POTABLE WATER. REMOVE ANY BOND INHIBITIVE MATERIALS.

C. COAT REINFORCING BARS WITH A CORROSION RESISTANT COATING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STEP 4: FORM WORK

A. PROVIDE FORM WORK WHERE EVER REQUIRED FOR POURABLE REPAIR MORTAR PROFILE TO MATCH EXISTING.

STEP:5 MODIFIED REPAIR MORTAR INSTALLATION

A. SATURATE CAVITY SURFACE USING POTABLE WATER. SUBSTRATE SHOULD BE SATURATED SURFACE DRY (SSD) WITH NO STANDING WATER.

AT 50° F, CAVITY TO BE SSD 1.5 HOURS PRIOR TO RESTORATION
AT 70° F, CAVITY TO BE SSD 1.0 HOURS PRIOR TO RESTORATION
AT 90° F, CAVITY TO BE SSD 0.5 HOURS PRIOR TO RESTORATION

B. APPLY BONDING AGENT TO CONCRETE, IF REQUIRED BY MANUFACTURER OF MODIFIED REPAIR MORTAR.

C. APPLY MODIFIED REPAIR MORTAR AS RECOMMENDED BY MANUFACTURER, COLOR AND TEXTURE TO MATCH EXISTING CONCRETE SURFACE. CONTRACTOR TO PROVIDE A MOCK-UP FOR ARCHITECT/ENGINEER AND OWNER TO APPROVE PRIOR TO COMPLETING REPAIRS.

D. MODIFIED REPAIR MORTAR TO BE APPLIED IN LIFTS, IF REQUIRED, BASED ON THE DEPTH OF THE CAVITY. MAXIMUM THICKNESS OF LIFT AS RECOMMENDED BY MANUFACTURER. IF RESTORATION IS PERFORMED USING MULTIPLE LIFTS, SCORE THE SURFACE OF EACH LIFT TO PRODUCE A ROUGHENED SURFACE TO RECEIVE THE NEXT LIFT.

E. AT COMPLETION OF INSTALLATION, SURFACE OF REPAIR MORTAR TO MATCH PROFILE OF ADJACENT CONCRETE SURFACES. FINISH THE SURFACE SMOOTH WITH WOOD OR SPONGE FLOAT. AVOID FEATHERING WITH ADJACENT CONCRETE TO REMAIN.

F. CURE AS PER MANUFACTURER'S RECOMMENDATIONS.

G. COAT ALL REPAIRED AND/OR EXPOSED CONCRETE WITH PROTECTIVE CEMENTITIOUS COATING, SUCH AS SIKATOP, OR APPROVED EQUAL.

NOTE:
PROVIDE TEMPORARY SHORING AS REQUIRED. CONTRACTOR TO PROVIDE TEMPORARY SHORING DESIGN AND SHOP DRAWINGS PREPARED BY LICENSED ENGINEER IN THE STATE OF NEW YORK

NEW YORK CITY HOUSING AUTHORITY
ASSET & CAPITAL MANAGEMENT DIVISION
ARCHITECTURE & ENGINEERING SERVICES
TEL. 212.306.3000 FAX 212.306.5160
24-02 40th Avenue
Long Island City, New York 11101

PROGRAM UNIT :

BY / DATE	Rev. No.	SUBMISSION

KEY PLAN

Development:

Building Address:

Building No: ORACLE No:

Borough of:

Zone No.: Zoning Map No.:

Block No.: Lot No.:

E.D.P. No.:

Development No.:

Contract Title:

RFQ No.: RFQ_NO

Drawing Title:

CONCRETE BEAM SPALL REPAIR

Seal & Signature:

Drawn By: DRAWN_BY

Checked By: CHECKED_BY

Date: DATE

Scale: SCALE

Drawing No.:

S-103

Sheet:

Orient and Affix DOB BSCAN Sticker Here