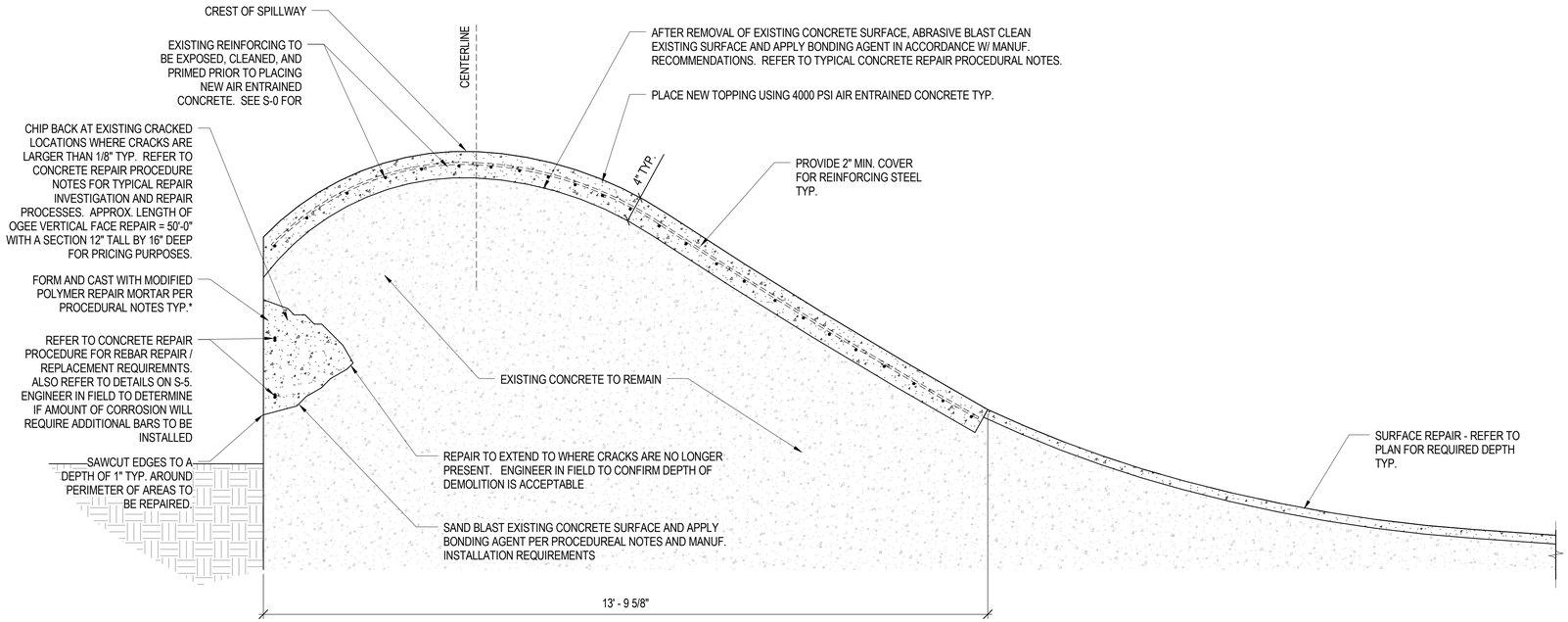
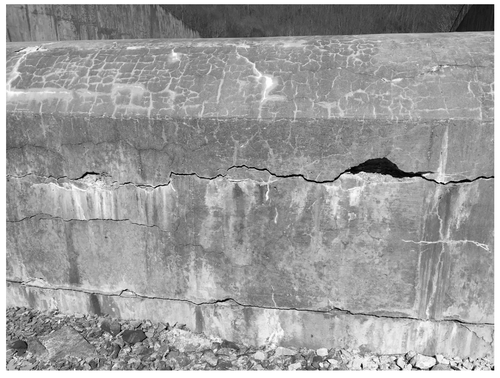
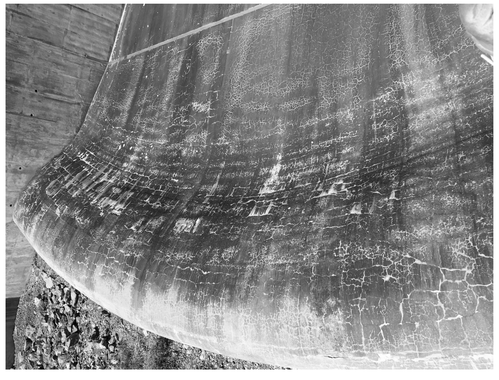


1 TYPICAL OGEE REPAIR DETAIL
3/4" = 1'-0"





*APPROX. LENGTH OF OGEE VERTICAL FACE REPAIR = 50'-0" WITH A SECTION 12" TALL BY 16" DEEP FOR PRICING PURPOSES.

CONCRETE REPAIR PROCEDURE

THIS REPAIR PROCEDURE IS INTENDED TO BE USED FOR CONCRETE WHERE THE EXISTING MEMBER SHOWS SIGNS OF SURFACE DISTRESS WHICH DOES NOT EXTEND THROUGH THE ENTIRE CROSS SECTION OF THE MEMBER. SUCH MEMBERS INCLUDE BUT ARE NOT LIMITED TO: SLABS, FOOTINGS, WALLS AND MASS CONCRETE WITH MINOR REINFORCEMENT OR SUCH ELEMENTS WHERE EXPOSED REINFORCEMENT IS NOT SHOWING SIGNS OF CORROSION.

1. LOCATIONS WHERE THIS PROCEDURE SHALL BE REQUIRED ARE LOCATED ON PLAN AND WILL BE VERIFIED IN THE FIELD BY BY THE FIELD ENGINEER. LOCATIONS WILL BE IDENTIFIED BY VISUAL INSPECTION AND BY SOUNDING METHODS. IDENTIFIED LOCATIONS (ON PLANS AND DETAILS) ARE LIMITED ONLY TO LOCATIONS WHERE DISTRESS IS VISIBLE.
2. SAW CUT ALONG THE PERIMETER OF THE CONCRETE WHERE LOCATIONS OF DISTRESS HAVE BEEN IDENTIFIED. THE DEPTH OF CUT SHALL BE A MINUMUM OF ¼" AND A MAXIMUM OF ½" LESS THAN THE SPECIFIED CLEAR COVER OF THE MEMBER. IF THE CLEAR COVER IS UNKNOWN, THE MAXIMUM DEPTH OF CUT SHALL BE ½". ALL CUTS SHALL BE MADE NORMAL TO THE CONCRETE SURFACE.
3. USING A PNEUMATIC HAMMER WITH POINTED BIT (OR OTHER APPLICATION TO BE APPROVED BY THE ENGINEER), LOOSE OR UNSOUND MATERIAL SHALL BE REMOVED WITHIN THE PERIMETER OF THE SAWCUT. HOWEVER, THE CONTRACTOR SHALL NOT INITIATE DRILLING PAST THE DEPTH OF SAW CUT WITHOUT THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING REINFORCEMENT. SOUND MATERIAL WITHIN THE PERIMETER OF THE REPAIR SHALL ALSO BE REMOVED TO A DEPTH OF ½", WITH THE REMAINING SURFACE ROUGHENED TO ¼" AMPLITUDE.
4. THE SAW CUT PERIMETER SHALL MAINTAIN A CLEAN EDGE. IF THE PERIMETER BECOMES DAMAGED DURING REMOVAL OF CONCRETE, THE PERIMETER SIDE DAMAGED SHALL BE RECUT AT AN OFFSET OF ½" PAST THE EXTENT OF DAMAGE TO THE ORIGINAL CUT. THE CONCRETE SHALL BE REMOVED BETWEEN THE NEW AND ORIGINAL CUT, ADHERING TO STEP 3.
5. ONCE STEP 3 AND 4 ARE COMPLETE, THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH ANY FURTHER REPAIRS. ONCE THE ENGINEER HAS BEEN NOTIFIED AND AN APPROVAL GIVEN TO THE CONTRACTOR, THE REMAINING SURFACE SHALL BE OIL FREE ABRASIVE DRY BLASTED TO REMOVE ALL DEBRIS, DIRT, CONCRETE SLURRY, LOOSELY BONDED AGGREGATES, CORROSION AND CORROSION PRODUCTS FROM THE REPAIR AREA AND EXISTING REINFORCEMENT. ONCE THE ABOVE HAS BEEN REMOVED, THE SURFACE SHALL BE BLOWN WITH OIL FREE COMPRESSED AIR.
6. IMMEDIATELY AFTER STEP 5, COAT ALL EXPOSED REINFORCEMENT WITH SIKA ARMATEC 110 EPOCEM BONDING AGENT. THE BONDING AGENT SHALL BE MIXED AND APPLIED PER THE MANUFACTURES WRITTEN RECOMMENDATIONS. A MINIMUM OF 2 COATS AT 20MILS EACH SHALL BE APPLIED TO ALL EXPOSED REINFORCEMENT. COATINGS SHALL BE ALLOWED TO DRY 2-3 HOURS AT APPROX. 73°F BETWEEN COATS AND BEFORE PROCEEDING TO STEP 8.
7. COAT ENTIRE EXPOSED CONCRETE SURFACE WITH SIKA ARMATEC 110 EPOCEM BONDING AGENT PER MANUFACTURERS WRITTEN RECOMMENDATIONS. ALLOW BONDING AGENT TO CURE BEFORE PROCEEDING TO THE FOLLOWING STEP.
8. THE ENTIRE PREPPED SURFACE SHALL BE COVERED USING SOAKED BURLAP. THE BURLAP SHALL BE CONTINUOUSLY SOAKED DURING THIS TIME WITH CLEAN WATER FOR A MINIMUM OF 24 HOURS BEFORE PROCEEDING WITH THE APPLICATION OF THE BONDED CONCRETE. AFTER THE 24 HOUR BURLAP SOAK, REMOVE THE BURLAP AND CLEAN THE SURFACE USING A HIGH POWERED PRESSURE WASHER. ONCE THE SURFACE HAS BEEN PRESSURE WASHED, BLOW THE SURFACE CLEAN USING OIL FREE COMPRESSED AIR. THE SURFACE SHALL BE CLEAN AND SATURATED-SURFACE DRY BEFORE PROCEEDING WITH THE NEXT STEP.
9. IMMEDIATELY FOLLOWIONG THE CLEANING OF THE SATURATED-SURFACE DRY SURFACE, APPLY SIKATOP 111 PLUS POLYMER-MODIFIED REPAIR MORTAR. AT THE DISCRETION OF THE CONTRACTOR, SIKATOP 123 PLUS POLYMER-MODIFIED REPAIR MORTAR IS ALLOWED TO BE USED FOR VERTICAL APPLICATIONS, AS THIS MORTAR IS NON-SAGGING. ALL REPAIR MORTAR SHALL BE MIXED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
10. THE EXTERIOR SURFACE OF THE REPAIR MORTAR SHALL BE FINISHED SMOOTHED (IF NOT FORMED) AND LEVEL WITH THE ORIGINAL SURFACE PLANE U.N.O. ON PLANS OR DETAILS.
11. IMMEDIATELY AFTER FINISHING THE SURFACE (OR REMOVAL OF THE FORMS), THE REPAIRED SURFACE SHALL BE COVERED WITH WET BURLAP COVERED WITH POLYETHYLENE. THE BURLAP SHALL BE CONTINUOUSLY WET FOR A MINIMUM OF 48 HOURS BEFORE REMOVAL.
12. SHOULD THE REPAIR NOT INVOLVE REINFORCEMENT THAT IS EXPOSED, FOLLOW STEPS 1 THROUGH 10 AND OMIT THE CLEANING, PREPPING, AND CORROSIVE PROTECTIVE EPOXY APPLICATION OF THE REINFORCEMENT.
13. WHERE THERE IS A CONTROL JOINT THROUGH AN AREA TO BE REPAIRED, INSERT A PLASTIC STRIP FOLLOWING THE ORIGINAL LINE OF THE CONTROL JOINT BEFORE PLACING THE REPAIR MORTAR IN STEP 8. ONCE THE REPAIR MORTAR HAS CURED, REMOVE THE PLASTIC STRIP AND SEAL THE CONTROL JOINT PER THE "APPLYING AND REPLACING SEALANTS FOR JOINTS AND CRACKS" PROCEDURE.

APPLYING AND REPLACING SEALANTS FOR JOINTS AND CRACKS PROCEDURE

THE INTENT OF THIS REPAIR IS TO REPLACE AND/OR APPLY SEALANT TO CONSTRUCTION JOINTS, CONTROL JOINTS AND CRACKS WHERE SEALANT IS IN POOR CONDITION OR FOR NEW CRACKS WHERE SEALANT IS REQUIRED. THE FOLLOWING PROCEDURE SHALL ALSO BE USED FOR VERTICAL SURFACES EXCEPT A NON-SAG SEALANT SHALL BE USED. EXISTING JOINTS SHALL BE RECUT PER THE "TYPICAL EXISTING SEALANT JOINT REPLACEMENT DETAIL". THE ENGINEER SHALL IDENTIFY JOINTS AND CRACKS TO RECEIVE NEW SEALANT. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING PROCEDURE WHILE APPLYING AND REPLACING SEALANTS.

1. REMOVE ALL OF THE EXISTING SEALANT IN THE JOINT OR CRACK. THOROUGHLY CLEAN THE JOINT OR CRACK USING A KNIFE (OR APPROVED ALTERNATE BY THE ENGINEER) THAT WILL REMOVE ALL REMAINING SEALANT DEBRIS.
2. SHOULD A JOINT BE DAMAGED, UNEVEN, OR SATURATED WITH CONTAMINANTS, NEW JOINT EDGES SHALL BE SAWCUT OR GROUND TO THE APPROPRIATE DEPTH TO FORM CLEAN AND SMOOTH EDGES. SHOULD THE JOINT BE SHALLOW OR "V" SHAPPED, NEW JOINT EDGES SHALL BE SAWCUT ON EACH SIDE OF THE JOINT TO FORM SQUARE EDGES. A MINIMUM OF 1/16" SHOULD BE REMOVED FROM EACH SIDE OF THE SAWCUT. REMOVE ALL DEBRIS USING COMPRESSED AIR. WHENEVER A CRACK DEVIATES FROM A CONTROL JOINT OR INTERSECTS THE CONTROL JOINT AT THE SIDE WALL OF THE JOINT, WIDEN THE JOINT SUCH THAT THE CRACK REMAINS IN THE BOTTOM OF THE JOINT.
3. DAMAGED JOINT EDGES MAY ALSO BE REPAIRED BY USING SIKAQUICK 1000 RAPID STRENGTH REPAIR MORTAR. THE MORTAR SHALL BE MIXED AND INSTALLED PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
4. THE BOTTOM OF JOINTS THAT ARE ROUGH OR IRREGULAR SHALL BE GROUND SMOOTH AND FLAT.
5. AESTHETICALLY SENSITIVE AREAS SHALL BE MASKED USING MASKING TAPE EITHER SIDE OF THE JOINT OR CRACK PRIOR TO PROCEEDING WITH THE FOLLOWING STEPS. THE MASKING TAPE SHALL BE MAINTAINED AND KEPT IN PLACE UNTIL THE SEALANTS ARE INSTALLED AND SURFACES HAVE BEEN TOOLED.
6. THE VERTICAL SIDES OF EACH JOINT FOR THE FULL LENGTH OF THE JOINT SHALL BE ABRASIVE BLASTED USING AN ADEQUATE NOZZLE THAT DIRECTS THE BLAST DIRECTLY TO THE SIDES OF THE JOINT. EACH SIDE OF THE JOINT SHALL BE BLASTED UNTIL THE SIDES ARE A TEXTURE OF SANDPAPER, CLEAN AND FREE OF ANY BOND INHIBITING CONTAMINENTS OR LOOSE PARTICLES. USING A HIGH POWERED PRESSURE WASHER, CLEAN THE JOINT USING CLEAN WATER, FOLLOWED BY BLOW DRYING THE JOINT USING OIL FREE COMPRESSED AIR BEFORE PROCEEDING.
7. SHOULD A JOINT DEPTH BE GREATER THAN 7/16" A CONTINUOUS STRIP OF POLYETHYLENE FOAM SHALL BE INSTALLED IN THE BOTTOM OF THE JOINT, SET TO A DEPTH AS SHOWN IN THE TYPICAL DETAIL USING A GAGE TOOL. ONCE THE POLYETHYLENE FOAM HAS BEEN SET, THE BOND BREAKER CAN THEN BE INSTALLED OVER THE FOAM.
8. A CONTINUOUS STRIP OF LOW DENSITY POLYETHYLENE OR TEFLON BOND BREAKER SHALL BE ADHERED TO THE TOP OF THE POLYETHYLENE FOAM OR BOTTOM CONCRETE SURFACE OF THE JOINT. IN LOCATIONS WHERE THE BOND BREAKER DOES NOT ADEQUATELY ADHERE TO THE BOTTOM OF THE JOINT OR THE POLYETHYLENE FOAM AND RISES UP INTO THE SEALANT WILL REQUIRE REPLACEMENT OF THE SEALANT AND BOND BREAKER. THE SIDES OF THE JOINT SHALL REMAIN FREE OF ANY BOND BREAKER SUCH THAT THE SEALANT CAN ADHERE TO THE SIDE WALLS OF THE JOINT.
9. UPON APPROVAL BY THE ENGINEER OF JOINT CLEANING, INSTALLATION OF BACKER FOAM, AND INSTALLATION OF BOND BREAKER TAPE, THE PRIMER (AS SPECIFIED BY THE SEALANT MANUFACTURER) SHALL BE APPLIED TO THE SIDE WALLS OF THE JOINT.
10. IMMEDIATELY AFTER THE PRIMER HAS SET PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS, THE SEALANT SHALL BE INSTALLED IN THE JOINT. SIKAFLEX 1c SL SELF LEVELING SEALANT SHALL BE USED IN JOINTS THAT ARE HORIZONTAL AND SIKADUR 51 NS NON-SAG SEALANT SHALL BE USED IN ANY JOINT THAT IS INCLINED. THE SEALANT SHALL BE MIXED AND APPLIED TO THE JOINT PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
11. THE FINAL FINISH OF THE SEALANT SHALL BE A SLIGHT CONCAVE SHAPE, REFERENCE THE TYPICAL DETAIL. THE SURFACE OF THE SEALANT SHALL REMAIN 1/16" BELOW THE EXISTING CONCRETE SURFACE ON EITHER SIDE OF THE JOINT. ANY SEALANT PROTRUING OUT OF THE JOINT PAST THE CONCRETE SURFACE SHALL BE CUT DOWN TO NOT EXTEND PAST THE CONCRETE SURFACE.
12. FOR HORIZONTAL CRACKS THAT DO NOT COINCIDE WITH A JOINT, FILL ENTIRE CRACK WITH SIKADUR CRACK WELD. FOR CRACKS ALONG AN INCLINED SURFACE, SEAL THE FACE OF THE CRACK WITH SIKADUR CAPSEAL, LEAVING INJECTION PORTS ALONG THE CRACK AT A DISTANCE OF 1.5 TIMES THE DEPTH OF THE CRACK. ONCE THE SIKADUR CAPSEAL HAS SET, INJECT THE CRACK AT THE INJECTION PORTS WITH THE SIKADUR CRACK WELD. INSTALL THE SIKADUR CRACK WELD AND SIKADUR CAPSEAL PER THE MANUFACTUERERS WRITTEN RECOMMENDATIONS.
13. REMOVE ANY MASKING TAPE AFTER THE SEALANT IS INSTALLED AND CLEAN THE SURFACE.

DRYE McGLAMERY ENGINEERING, PLLC
NC FIRM LICENSE #P-1305

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040795 WESTON DRYE
4/19/16

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HAYWOOD COUNY
NORTH CAROLINA

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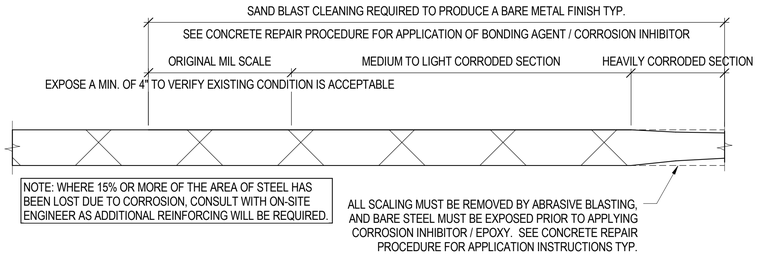
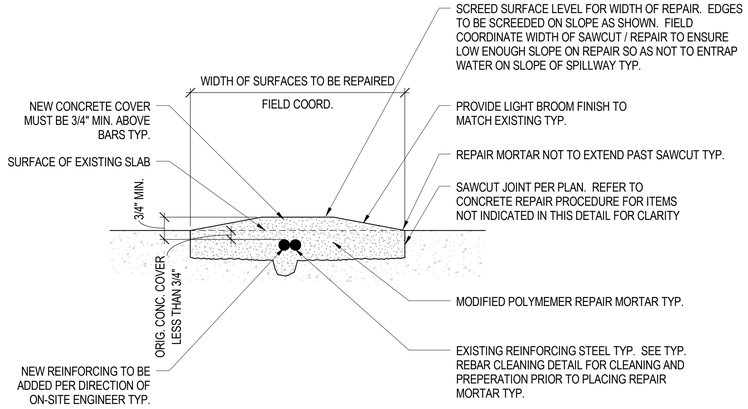
OGEE REPAIR DETAILS

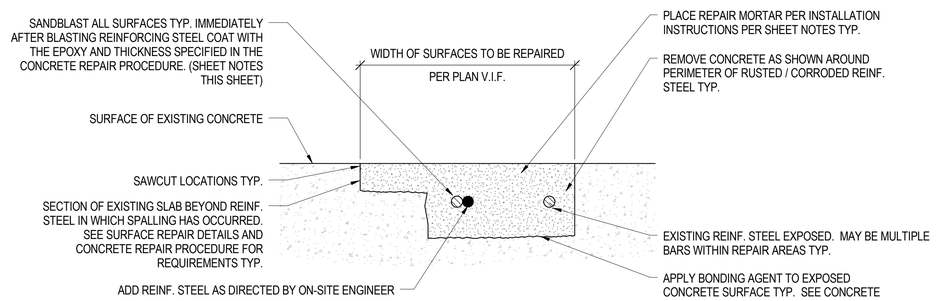
S-4



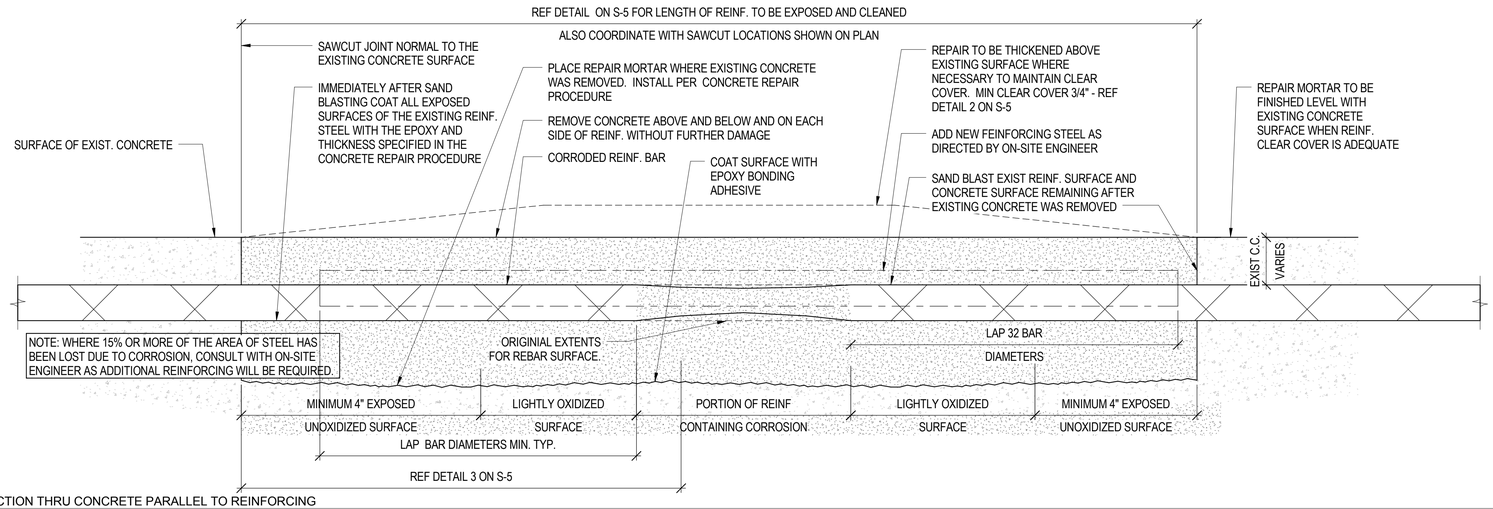
1 TYPICAL CLEANING AT CORRODED REINFORCING
6" = 1'-0"



2 TYPICAL DETAIL AT SPALLING LOCATIONS WHERE REINFORCING STEEL COVER IS LESS THAN 3/4"
3" = 1'-0"



3 TYPICAL SECTION AT CORRODED REINF. LOCATION
3" = 1'-0"



4 SECTION THRU CONCRETE PARALLEL TO REINFORCING
6" = 1'-0"

CONCRETE REPAIR PROCEDURE

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1. LOCATIONS WHERE THIS PROCEDURE SHALL BE REQUIRED ARE LOCATED ON PLAN AND WILL BE VERIFIED IN THE FIELD BY BY THE FIELD ENGINEER. LOCATIONS WILL BE IDENTIFIED BY VISUAL INSPECTION AND BY SOUNDING METHODS. IDENTIFIED LOCATIONS (ON PLANS AND DETAILS) ARE LIMITED ONLY TO LOCATIONS WHERE DISTRESS IS VISIBLE.
2. SAW CUT ALONG THE PERIMETER OF THE CONCRETE WHERE LOCATIONS OF DISTRESS HAVE BEEN IDENTIFIED. THE DEPTH OF CUT SHALL BE A MINUMUM OF ¼" AND A MAXIMUM OF ½" LESS THAN THE SPECIFIED CLEAR COVER OF THE MEMBER. IF THE CLEAR COVER IS UNKNOWN, THE MAXIMUM DEPTH OF CUT SHALL BE ½". ALL CUTS SHALL BE MADE NORMAL TO THE CONCRETE SURFACE.
3. USING A PNEUMATIC HAMMER WITH POINTED BIT (OR OTHER APPLICATION TO BE APPROVED BY THE ENGINEER), LOOSE OR UNSOUND MATERIAL SHALL BE REMOVED WITHIN THE PERIMETER OF THE SAWCUT. HOWEVER, THE CONTRACTOR SHALL NOT INITIATE DRILLING PAST THE DEPTH OF SAW CUT WITHOUT THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING REINFORCEMENT. SOUND MATERIAL WITHIN THE PERIMETER OF THE REPAIR SHALL ALSO BE REMOVED TO A DEPTH OF ½", WITH THE REMAINING SURFACE ROUGHENED TO ¼" AMPLITUDE.
4. THE SAW CUT PERIMETER SHALL MAINTAIN A CLEAN EDGE. IF THE PERIMETER BECOMES DAMAGED DURING REMOVAL OF CONCRETE, THE PERIMETER SIDE DAMAGED SHALL BE RECUT AT AN OFFSET OF ½" PAST THE EXTENT OF DAMAGE TO THE ORIGINAL CUT. THE CONCRETE SHALL BE REMOVED BETWEEN THE NEW AND ORIGINAL CUT, ADHERING TO STEP 3.
5. ONCE STEP 3 AND 4 ARE COMPLETE, THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH ANY FURTHER REPAIRS. ONCE THE ENGINEER HAS BEEN NOTIFIED AND AN APPROVAL GIVEN TO THE CONTRACTOR, THE REMAINING SURFACE SHALL BE OIL FREE ABRASIVE DRY BLASTED TO REMOVE ALL DEBRIS, DIRT, CONCRETE SLURRY, LOOSELY BONDED AGGREGATES, CORROSION AND CORROSION PRODUCTS FROM THE REPAIR AREA AND EXISTING REINFORCEMENT. ONCE THE ABOVE HAS BEEN REMOVED, THE SURFACE SHALL BE BLOWN WITH OIL FREE COMPRESSED AIR.
6. IMMEDIATELY AFTER STEP 5, COAT ALL EXPOSED REINFORCEMENT WITH SIKA ARMATEC 110 EPOCEM BONDING AGENT. THE BONDING AGENT SHALL BE MIXED AND APPLIED PER THE MANUFACTURES WRITTEN RECOMMENDATIONS. A MINIMUM OF 2 COATS AT 20MILS EACH SHALL BE APPLIED TO ALL EXPOSED REINFORCEMENT. COATINGS SHALL BE ALLOWED TO DRY 2-3 HOURS AT APPROX. 73°F BETWEEN COATS AND BEFORE PROCEEDING TO STEP 8.
7. COAT ENTIRE EXPOSED CONCRETE SURFACE WITH SIKA ARMATEC 110 EPOCEM BONDING AGENT PER MANUFACTURERS WRITTEN RECOMMENDATIONS. ALLOW BONDING AGENT TO CURE BEFORE PROCEEDING TO THE FOLLOWING STEP.
8. THE ENTIRE PREPPED SURFACE SHALL BE COVERED USING SOAKED BURLAP. THE BURLAP SHALL BE CONTINUOUSLY SOAKED DURING THIS TIME WITH CLEAN WATER FOR A MINIMUM OF 24 HOURS BEFORE PROCEEDING WITH THE APPLICATION OF THE BONDED CONCRETE. AFTER THE 24 HOUR BURLAP SOAK, REMOVE THE BURLAP AND CLEAN THE SURFACE USING A HIGH POWERED PRESSURE WASHER. ONCE THE SURFACE HAS BEEN PRESSURE WASHED, BLOW THE SURFACE CLEAN USING OIL FREE COMPRESSED AIR. THE SURFACE SHALL BE CLEAN AND SATURATED-SURFACE DRY BEFORE PROCEEDING WITH THE NEXT STEP.
9. IMMEDIATELY FOLLOWIONG THE CLEANING OF THE SATURATED-SURFACE DRY SURFACE, APPLY SIKATOP 111 PLUS POLYMER-MODIFIED REPAIR MORTAR. AT THE DISCRETION OF THE CONTRACTOR, SIKATOP 123 PLUS POLYMER-MODIFIED REPAIR MORTAR IS ALLOWED TO BE USED FOR VERTICAL APPLICATIONS, AS THIS MORTAR IS NON-SAGGING. ALL REPAIR MORTAR SHALL BE MIXED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
10. THE EXTERIOR SURFACE OF THE REPAIR MORTAR SHALL BE FINISHED SMOOTHED (IF NOT FORMED) AND LEVEL WITH THE ORIGINAL SURFACE PLANE U.N.O. ON PLANS OR DETAILS.
11. IMMEDIATELY AFTER FINISHING THE SURFACE (OR REMOVAL OF THE FORMS), THE REPAIRED SURFACE SHALL BE COVERED WITH WET BURLAP COVERED WITH POLYETHYLENE. THE BURLAP SHALL BE CONTINUOUSLY WET FOR A MINIMUM OF 48 HOURS BEFORE REMOVAL.
12. SHOULD THE REPAIR NOT INVOLVE REINFORCEMENT THAT IS EXPOSED, FOLLOW STEPS 1 THROUGH 10 AND OMIT THE CLEANING, PREPPING, AND CORROSIVE PROTECTIVE EPOXY APPLICATION OF THE REINFORCEMENT.
13. WHERE THERE IS A CONTROL JOINT THROUGH AN AREA TO BE REPAIRED, INSERT A PLASTIC STRIP FOLLOWING THE ORIGINAL LINE OF THE CONTROL JOINT BEFORE PLACING THE REPAIR MORTAR IN STEP 8. ONCE THE REPAIR MORTAR HAS CURED, REMOVE THE PLASTIC STRIP AND SEAL THE CONTROL JOINT PER THE "APPLYING AND REPLACING SEALANTS FOR JOINTS AND CRACKS" PROCEDURE.

APPLYING AND REPLACING SEALANTS FOR JOINTS AND CRACKS PROCEDURE

THE INTENT OF THIS REPAIR IS TO REPLACE AND/OR APPLY SEALANT TO CONSTRUCTION JOINTS, CONTROL JOINTS AND CRACKS WHERE SEALANT IS IN POOR CONDITION OR FOR NEW CRACKS WHERE SEALANT IS REQUIRED. THE FOLLOWING PROCEDURE SHALL ALSO BE USED FOR VERTICAL SURFACES EXCEPT A NON-SAG SEALANT SHALL BE USED. EXISTING JOINTS SHALL BE RECUT PER THE "TYPICAL EXISTING SEALANT JOINT REPLACEMENT DETAIL". THE ENGINEER SHALL IDENTIFY JOINTS AND CRACKS TO RECEIVE NEW SEALANT. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING PROCEDURE WHILE APPLYING AND REPLACING SEALANTS.

1. REMOVE ALL OF THE EXISTING SEALANT IN THE JOINT OR CRACK. THOROUGHLY CLEAN THE JOINT OR CRACK USING A KNIFE (OR APPROVED ALTERNATE BY THE ENGINEER) THAT WILL REMOVE ALL REMAINING SEALANT DEBRIS.
2. SHOULD A JOINT BE DAMAGED, UNEVEN, OR SATURATED WITH CONTAMINANTS, NEW JOINT EDGES SHALL BE SAWCUT OR GROUND TO THE APPROPRIATE DEPTH TO FORM CLEAN AND SMOOTH EDGES. SHOULD THE JOINT BE SHALLOW OR "V" SHAPPED, NEW JOINT EDGES SHALL BE SAWCUT ON EACH SIDE OF THE JOINT TO FORM SQUARE EDGES. A MINIMUM OF 1/16" SHOULD BE REMOVED FROM EACH SIDE OF THE SAWCUT. REMOVE ALL DEBRIS USING COMPRESSED AIR. WHENEVER A CRACK DEVIATES FROM A CONTROL JOINT OR INTERSECTS THE CONTROL JOINT AT THE SIDE WALL OF THE JOINT, WIDEN THE JOINT SUCH THAT THE CRACK REMAINS IN THE BOTTOM OF THE JOINT.
3. DAMAGED JOINT EDGES MAY ALSO BE REPAIRED BY USING SIKAQUICK 1000 RAPID STRENGTH REPAIR MORTAR. THE MORTAR SHALL BE MIXED AND INSTALLED PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
4. THE BOTTOM OF JOINTS THAT ARE ROUGH OR IRREGULAR SHALL BE GROUND SMOOTH AND FLAT.
5. AESTHETICALLY SENSITIVE AREAS SHALL BE MASKED USING MASKING TAPE EITHER SIDE OF THE JOINT OR CRACK PRIOR TO PROCEEDING WITH THE FOLLOWING STEPS. THE MASKING TAPE SHALL BE MAINTAINED AND KEPT IN PLACE UNTIL THE SEALANTS ARE INSTALLED AND SURFACES HAVE BEEN TOOLED.
6. THE VERTICAL SIDES OF EACH JOINT FOR THE FULL LENGTH OF THE JOINT SHALL BE ABRASIVE BLASTED USING AN ADEQUATE NOZZLE THAT DIRECTS THE BLAST DIRECTLY TO THE SIDES OF THE JOINT. EACH SIDE OF THE JOINT SHALL BE BLASTED UNTIL THE SIDES ARE A TEXTURE OF SANDPAPER, CLEAN AND FREE OF ANY BOND INHIBITING CONTAMINENTS OR LOOSE PARTICLES. USING A HIGH POWERED PRESSURE WASHER, CLEAN THE JOINT USING CLEAN WATER, FOLLOWED BY BLOW DRYING THE JOINT USING OIL FREE COMPRESSED AIR BEFORE PROCEEDING.
7. SHOULD A JOINT DEPTH BE GREATER THAN 7/16" A CONTINUOUS STRIP OF POLYETHYLENE FOAM SHALL BE INSTALLED IN THE BOTTOM OF THE JOINT, SET TO A DEPTH AS SHOWN IN THE TYPICAL DETAIL USING A GAGE TOOL. ONCE THE POLYETHYLENE FOAM HAS BEEN SET, THE BOND BREAKER CAN THEN BE INSTALLED OVER THE FOAM.
8. A CONTINUOUS STRIP OF LOW DENSITY POLYETHYLENE OR TEFLON BOND BREAKER SHALL BE ADHERED TO THE TOP OF THE POLYETHYLENE FOAM OR BOTTOM CONCRETE SURFACE OF THE JOINT. IN LOCATIONS WHERE THE BOND BREAKER DOES NOT ADEQUATELY ADHERE TO THE BOTTOM OF THE JOINT OR THE POLYETHYLENE FOAM AND RISES UP INTO THE SEALANT WILL REQUIRE REPLACEMENT OF THE SEALANT AND BOND BREAKER. THE SIDES OF THE JOINT SHALL REMAIN FREE OF ANY BOND BREAKER SUCH THAT THE SEALANT CAN ADHERE TO THE SIDE WALLS OF THE JOINT.
9. UPON APPROVAL BY THE ENGINEER OF JOINT CLEANING, INSTALLATION OF BACKER FOAM, AND INSTALLATION OF BOND BREAKER TAPE, THE PRIMER (AS SPECIFIED BY THE SEALANT MANUFACTURER) SHALL BE APPLIED TO THE SIDE WALLS OF THE JOINT.
10. IMMEDIATELY AFTER THE PRIMER HAS SET PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS, THE SEALANT SHALL BE INSTALLED IN THE JOINT. SIKAFLEX 1c SL SELF LEVELING SEALANT SHALL BE USED IN JOINTS THAT ARE HORIZONTAL AND SIKADUR 51 NS NON-SAG SEALANT SHALL BE USED IN ANY JOINT THAT IS INCLINED. THE SEALANT SHALL BE MIXED AND APPLIED TO THE JOINT PER THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
11. THE FINAL FINISH OF THE SEALANT SHALL BE A SLIGHT CONCAVE SHAPE, REFERENCE THE TYPICAL DETAIL. THE SURFACE OF THE SEALANT SHALL REMAIN 1/16" BELOW THE EXISTING CONCRETE SURFACE ON EITHER SIDE OF THE JOINT. ANY SEALANT PROTRUING OUT OF THE JOINT PAST THE CONCRETE SURFACE SHALL BE CUT DOWN TO NOT EXTEND PAST THE CONCRETE SURFACE.
12. FOR HORIZONTAL CRACKS THAT DO NOT COINCIDE WITH A JOINT, FILL ENTIRE CRACK WITH SIKADUR CRACK WELD. FOR CRACKS ALONG AN INCLINED SURFACE, SEAL THE FACE OF THE CRACK WITH SIKADUR CAPSEAL, LEAVING INJECTION PORTS ALONG THE CRACK AT A DISTANCE OF 1.5 TIMES THE DEPTH OF THE CRACK. ONCE THE SIKADUR CAPSEAL HAS SET, INJECT THE CRACK AT THE INJECTION PORTS WITH THE SIKADUR CRACK WELD. INSTALL THE SIKADUR CRACK WELD AND SIKADUR CAPSEAL PER THE MANUFACTUERERS WRITTEN RECOMMENDATIONS.
13. REMOVE ANY MASKING TAPE AFTER THE SEALANT IS INSTALLED AND CLEAN THE SURFACE.

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NC FIRM LICENSE #P-1305

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ISSUED FOR CONSTRUCTION

DRAWN BY WGP
CHECKED BY HWD

REPAIR DETAILS AT REINFORCING STEEL LOCATIONS

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