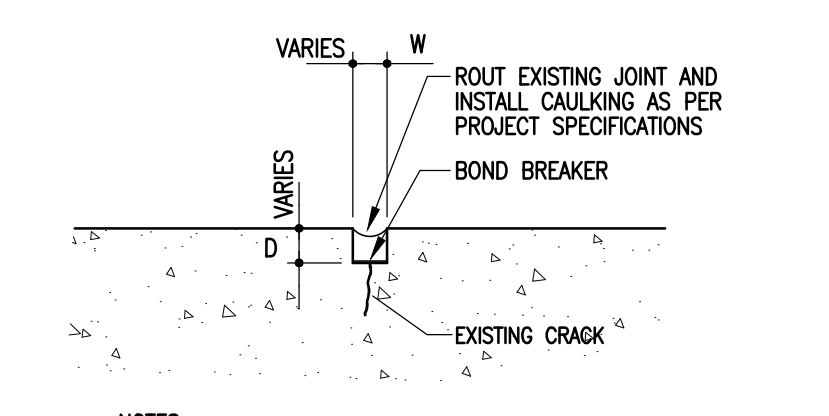
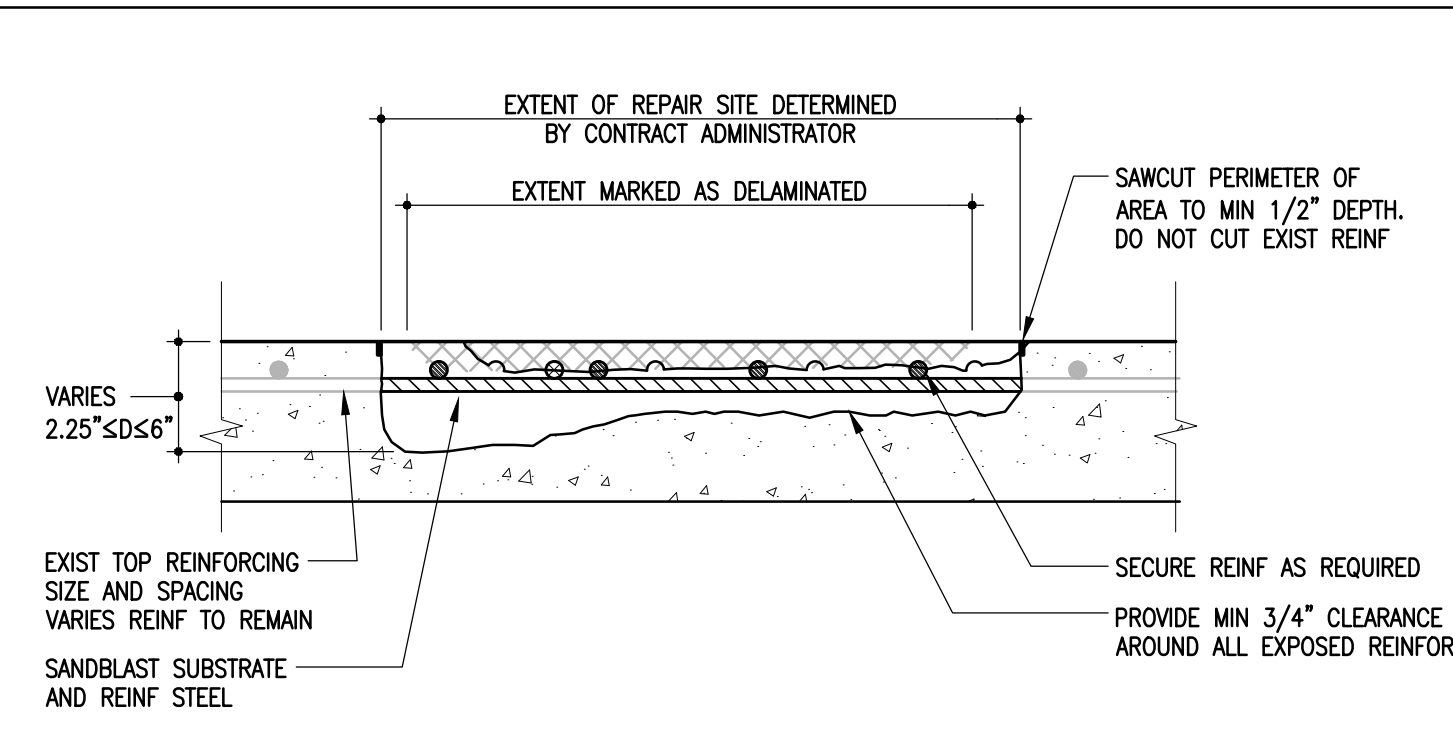


- I GENERAL
- DRAWINGS ARE PREPARED BASED ON THE BEST AVAILABLE INFORMATION. REVIEW ALL SITE CONDITIONS PRIOR TO PROCEEDING WITH WORK. ADVISE CONTRACT ADMINISTRATOR OF ANY DISCREPANCIES IN EXISTING CONSTRUCTION'S CONFIGURATION, SIZES, LOCATIONS, ETC. WHERE DISCREPANCIES ARE FOUND, DO NOT PROCEED WITHOUT DIRECTION.
 - DO NOT SCALE DRAWINGS. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION. DIMENSIONS SHOWN TRANSCRIBED FROM ORIGINAL DRAWINGS. ONUS REMAINS ON CONTRACTOR TO SITE VERIFY ALL DIMENSION.
 - PROVIDE SUITABLE AND SAFE MEANS OF GAINING ACCESS TO ALL WORK AREAS TO ENABLE THE WORKS DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS TO BE CARRIED OUT AND THE CONTRACT ADMINISTRATOR TO CARRY OUT THE NECESSARY INSPECTIONS.
 - COORDINATE WITH CITY OF WINNIPEG OPERATIONS. DO NOT BLOCK CORRIDORS RESULTING IN NO ACCESS FOR CITY OF WINNIPEG OPERATIONS.
 - ALL NECESSARY MEASURES SHALL BE TAKEN TO PROVIDE PROTECTION TO OTHER TRADES AND CITY OF WINNIPEG OCCUPYING AND WORKING WITHIN THE BUILDING.
 - CONTRACTOR SHALL MAKE GOOD OR RECTIFY ANY DAMAGE CAUSED TO THE STRUCTURE OR ITEMS DESIGNATED TO REMAIN.

- II CONCRETE REPAIRS
- THE CONTRACTOR WILL BE REQUIRED TO FURNISH ALL MATERIALS, LABOUR, ACCESS, AND EQUIPMENT REQUIRED TO COMPLETE REPAIR WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
 - PROVIDE SUITABLE AND SAFE MEANS OF GAINING ACCESS TO ALL REPAIR AREAS TO ENABLE THE WORKS DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS TO BE CARRIED OUT, AND THE CONTRACT ADMINISTRATOR TO CARRY OUT THE NECESSARY INSPECTIONS.
 - THE LOCATION NUMBER AND EXTENT OF DEFECTS ARE TO BE DETERMINED ON-SITE BY VISUAL AND HAMMER SOUNDING SURVEY
 - ANY AREAS BROKEN OUT, CORED OR DRILLED FOR THE PURPOSES OF TESTING OR SAMPLING SHALL BE MADE GOOD.
 - THE POWER AND SIZE OF THE EQUIPMENT USED FOR CONCRETE REMOVAL SHALL BE APPROPRIATE TO THE SCALE OF THE INDIVIDUAL REPAIRS AND SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACT ADMINISTRATOR. PARTICULAR CARE SHALL BE TAKEN THAT DAMAGE IS NOT CAUSED TO CONCRETE SUBSTRATE AND REINFORCING STEEL WHICH IS TO REMAIN IN PLACE.
 - THE PERIMETER OF THE REPAIR AREA SHALL BE SQUARED OFF BY SAWCUTTING. THE SAWCUT SHALL BE A MINIMUM OF 1 INCH DEPTH. IF REINFORCING STEEL IS ENCOUNTERED THEN THE DEPTH SHOULD BE IMMEDIATELY REDUCED AS REQUIRED. UNDER NO CIRCUMSTANCES SHALL THE EXISTING REINFORCING STEEL BE CUT.
 - UNLESS OTHERWISE NOTED ON DRAWINGS ALL CONCRETE REPAIRS ARE TO BE SANDBLASTED TO REMOVE LOOSE AND DETERIORATED CONCRETE, LAITANCE, AND TO TEXTURE THE SURFACE. THE SUBSTRATE CLEANING AND PREPARATION OPERATION SHALL BE SUFFICIENT TO REMOVE ALL DIRT OR OTHER CONTAMINANTS, PREVIOUS COATINGS, LAITANCE, PAINT, ETC. AND OBTAIN THE REQUIRED PROFILE.
 - CLEAN REINFORCING STEEL DESIGNATED TO REMAIN TO NEAR-WHITE METAL VIA BLAST CLEANING. THE REINFORCING STEEL MUST BE FREE OF ALL VISIBLE OIL, GREASE, DUST, DIRT, MILL SCALE, RUST, COATING, OXIDES CORROSION PRODUCTS, AND OTHER FOREIGN MATTER.
 - PRIOR TO INSTALLATION OF FORMWORK OBTAIN CONTRACT ADMINISTRATOR'S APPROVAL OF PREPARED SURFACE AND ANY SUPPLEMENTAL REINFORCING STEEL PLACEMENT REQUIRED.
 - UNLESS OTHERWISE NOTED ON DRAWINGS REPAIR AREAS TO MATCH EXISTING PROFILES AND DIMENSION.

- III CONCRETE DELAMINATION REMOVAL
- THE PERIMETER OF THE AREAS MARKED AS DELAMINATED ARE TO BE SAWCUT TO A DEPTH OF 1/2". IF REINFORCING STEEL IS ENCOUNTERED, THE SAW DEPTH MUST BE IMMEDIATELY REDUCED AS REQUIRED. CHECK DEPTH OF THE CUT REGULARLY.
 - THE ENTIRE AREA WITHIN THE SAWCUT MUST HAVE A MINIMUM OF 2 1/4" OF CONCRETE REMOVED FROM THE TOP SURFACE USING A MAXIMUM 15 LB. ELECTRIC CHIPPING HAMMER.
 - WHERE THE BOND BETWEEN EXISTING CONCRETE AND REINFORCING STEEL OR MESH HAS BEEN DESTROYED (EITHER BY THE CONCRETE'S DETERIORATION OR CORROSION OF THE REINFORCING STEEL) OR IF THE CHIPPING OPERATION HAS CAUSED ONE-THIRD THE PERIPHERY OF A BAR TO BE EXPOSED FOR A DISTANCE OF 6" OR MORE, THE CONCRETE ADJACENT TO THE BAR SHALL BE REMOVED BY HANDCHIPPING OR WITH THE USE OF SHORT STROKE ELECTRIC CHIPPING HAMMERS TO A DEPTH THAT WILL PERMIT NEW CONCRETE TO BOND TO THE ENTIRE PERIPHERY OF THE BAR SO EXPOSED AND A MINIMUM OF 3/4" CLEARANCE ALL AROUND.
 - AFTER ALL DELAMINATED, UNSOUND, OR LOOSE MATERIAL IS REMOVED FROM THE SLAB SURFACE, THE CONTRACTOR SHALL REQUEST AN INSPECTION FROM THE CONTRACT ADMINISTRATOR. THIS INSPECTION IS TO BE DONE IN THE PRESENCE OF THE CONTRACTOR AND IF ANY FURTHER WORK IS REQUIRED, THE CONTRACTOR IS TO COMPLETE IT IMMEDIATELY.

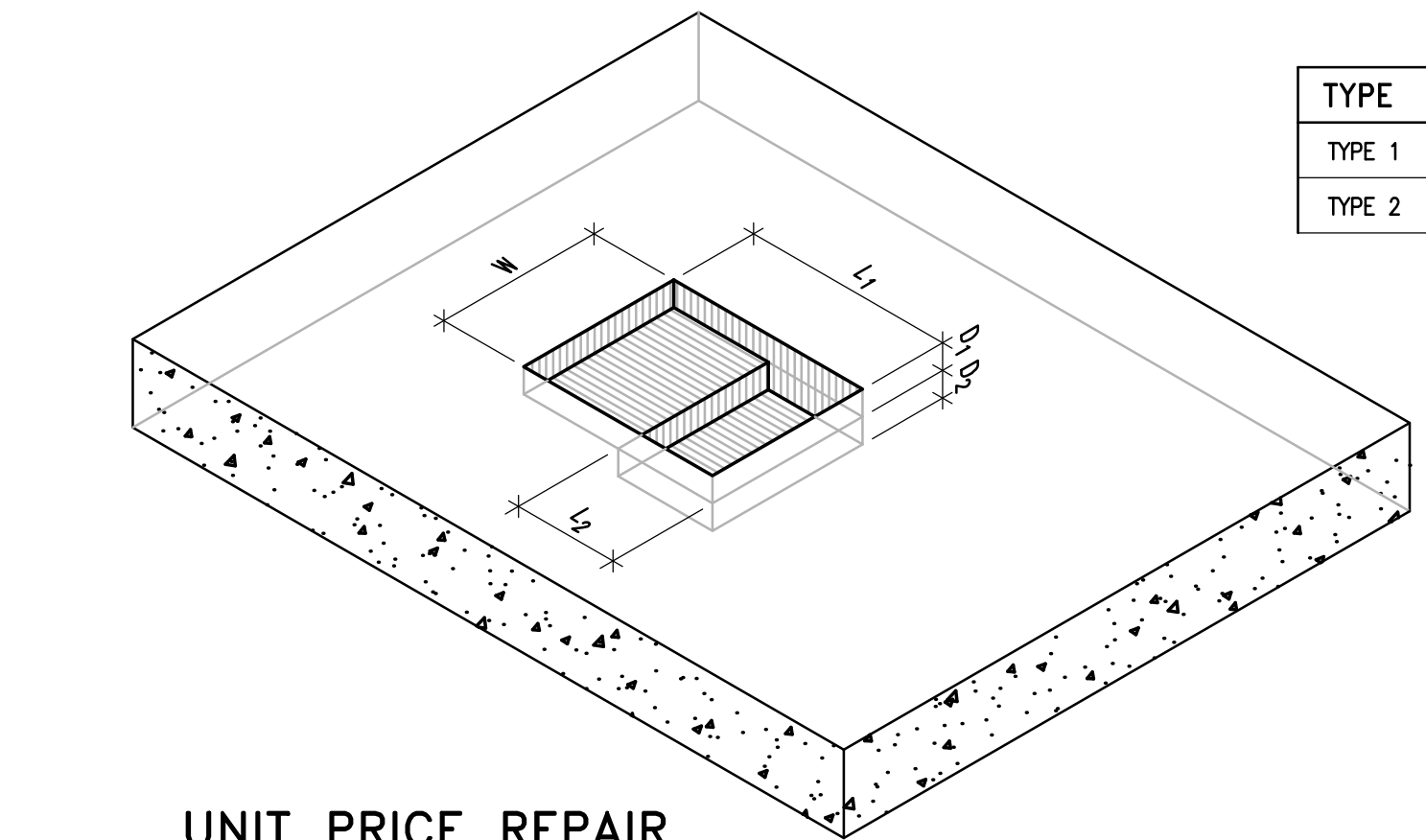
- IV CONCRETE SUBSTRATE PREPARATION
- WITHIN 24 HOURS PRIOR TO INFILLING, SANDBLAST THE SUBSTRATE TO REMOVE LOOSE AND DETERIORATED CONCRETE, LAITANCE, DUST, DIRT, OIL, AND ANY OTHER MATERIAL THAT COULD INTERFERE WITH THE BOND OF THE NEW CONCRETE. PROVIDE A UNIFORM SURFACE PROFILE OF ICR1-CSP-5 OR BETTER.
 - EXPOSED REINFORCING STEEL TO BE CLEANED TO NEAR WHITE METAL AND TOTALLY FREE OF RUST.
 - VACUUM CLEAN SURFACE AND/OR AIR BLAST WITH OIL FREE COMPRESSED AIR TO REMOVE RESIDUE AND SPENT MEDIA CREATED BY SURFACE PREPARATION.
 - WATERBLAST SUBSTRATE AT MINIMUM 3,000 PSI TO REMOVE ANY RESIDUAL DUST AND DIRT. MAINTAIN SUBSTRATE IN A SATURATED CONDITION FOR A PERIOD OF NOT LESS THAN FOUR (4) HOURS PRIOR TO CONCRETE PLACEMENT. IF THE CONCRETE SURFACE BECOMES WET AND SUBSEQUENTLY DRIES, THE SURFACE PREPARATION AND CLEANING PROCEDURE MUST BE REPEATED.



- NOTES:
- ANY EXISTING CAULKING MUST BE REMOVED PRIOR TO SAW-CUTTING JOINT OR CRACK.
 - EACH SIDE OF EXIST. JOINT OR CRACK MUST BE CUT.
 - SANDBLAST CONCRETE SURFACE TO PROVIDE CLEAN SOUND JOINT.
 - REMOVE LOOSE PARTICLES BY BLOWING OUT JOINT WITH OIL FREE COMPRESSED AIR.
 - INSTALL PRIMER, BOND BREAKER, AND CAULKING AS PER PROJECT SPECIFICATIONS. REFER TO SPECIFICATION.

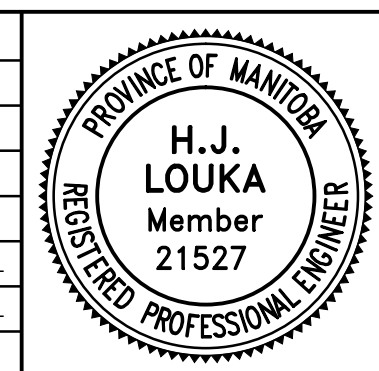
B TYPICAL TOP SURFACE REPAIR DETAIL
S-2 SCALE: NTS (UNIT PRICE PER SQ FT)

D TYPICAL CRACK REPAIR DETAIL
S-2 SCALE: NTS (UNIT PRICE PER LINEAL FOOT)



C UNIT PRICE REPAIR SCHEDULE/DIAGRAM
S-2 SCALE: NTS

| TYPE | DESCRIPTION | MEASUREMENT | INCREMENT |
|--------|---|---------------------------------|--------------------------|
| TYPE 1 | TOP SURFACE DELAMINATION (0" TO 3" DEPTH) | L ₁ x W ₁ | 0" ≤ D ₁ ≤ 3" |
| TYPE 2 | TOP SURFACE DELAMINATION (3" TO 6" DEPTH) | L ₂ x W ₂ | 3" < D ₂ ≤ 6" |



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CONSULTING STRUCTURAL CONTRACT ADMINISTRATORS

The General Contractor shall check & verify all dimensions and report any errors or omissions to the designers.

| | | | | | |
|-------------|--|---------|----------|-------------|-----------|
| Project | WINNIPEG TRANSIT: GARAGE BUILDING TRENCH REPAIRS 421 OSBORNE STREET WINNIPEG, MANITOBA | | | | |
| Sheet Title | SECTIONS, DETAILS & GENERAL NOTES | | | | |
| Design | Drawn | Checked | Scale | Date | File |
| SMG | JSR/RBC | HJL | AS NOTED | 09 JUN 2014 | 2013-1099 |

Sheet No. S-2

| No. | Date | Issue/Revision | By |
|-----|------------|-------------------------|-----|
| 1 | JULY 10/14 | ISSUED FOR ADDENDUM 1 | HJL |
| 0 | JUNE 24/14 | ISSUED FOR CONSTRUCTION | HJL |