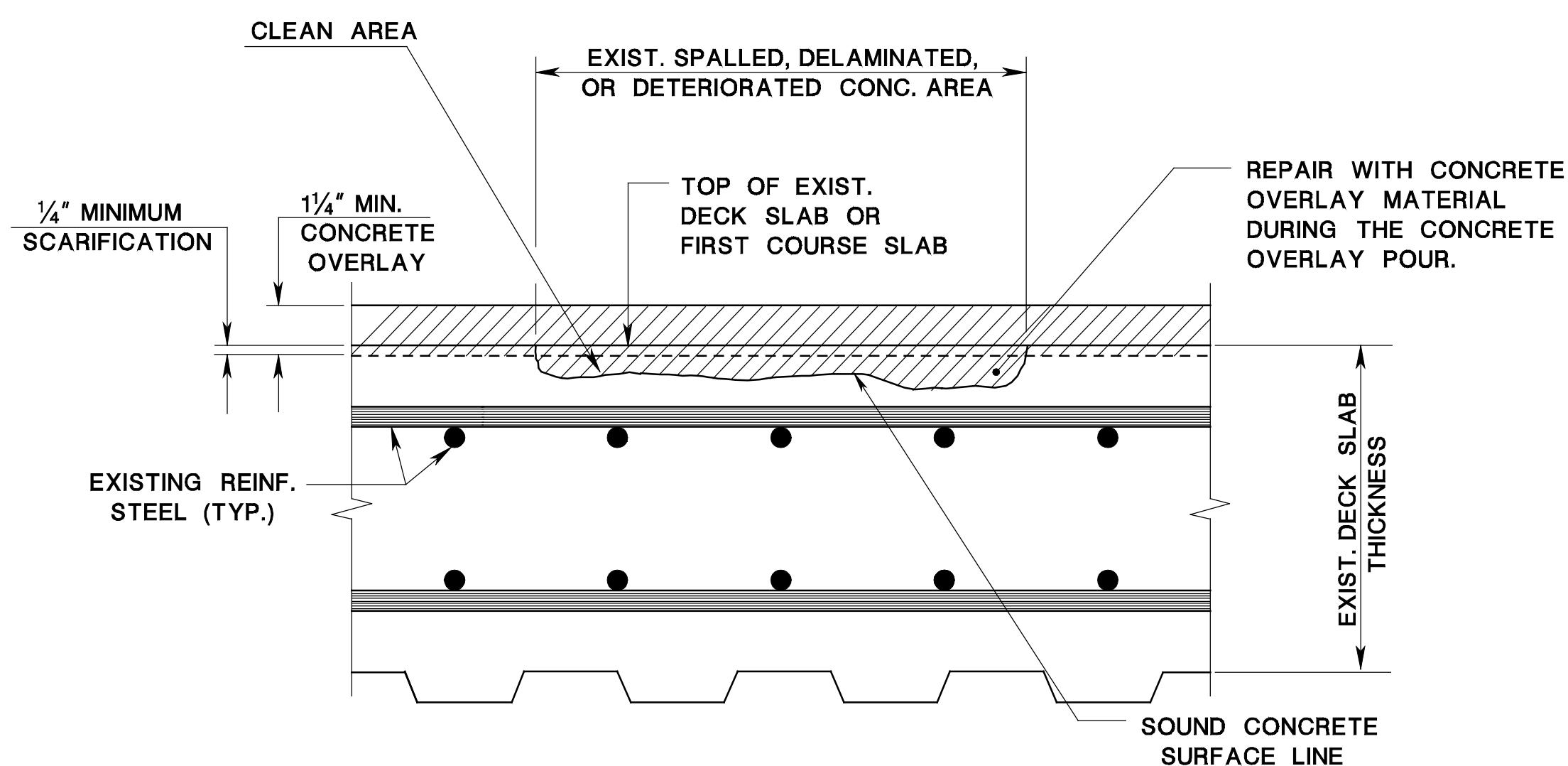
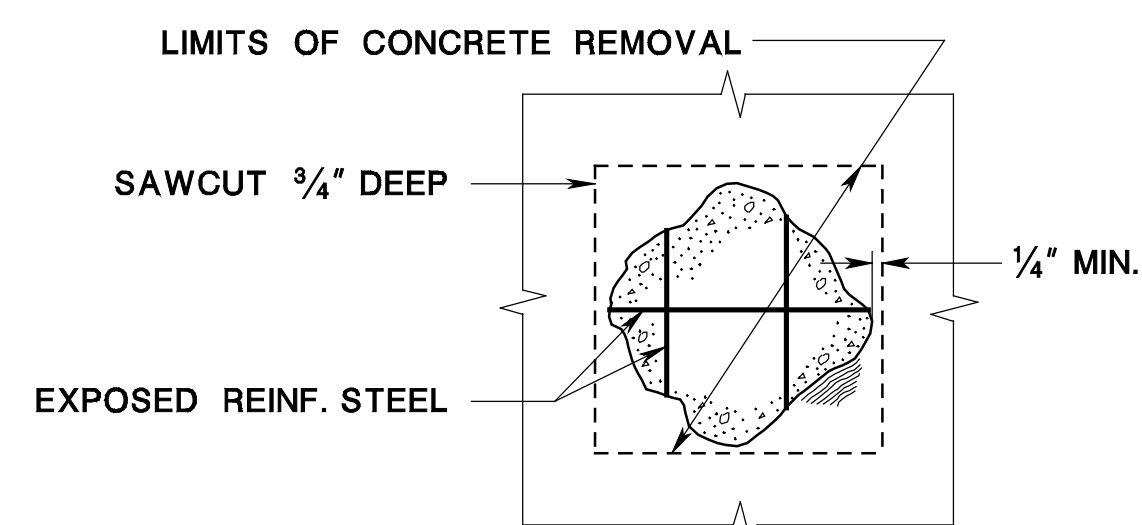


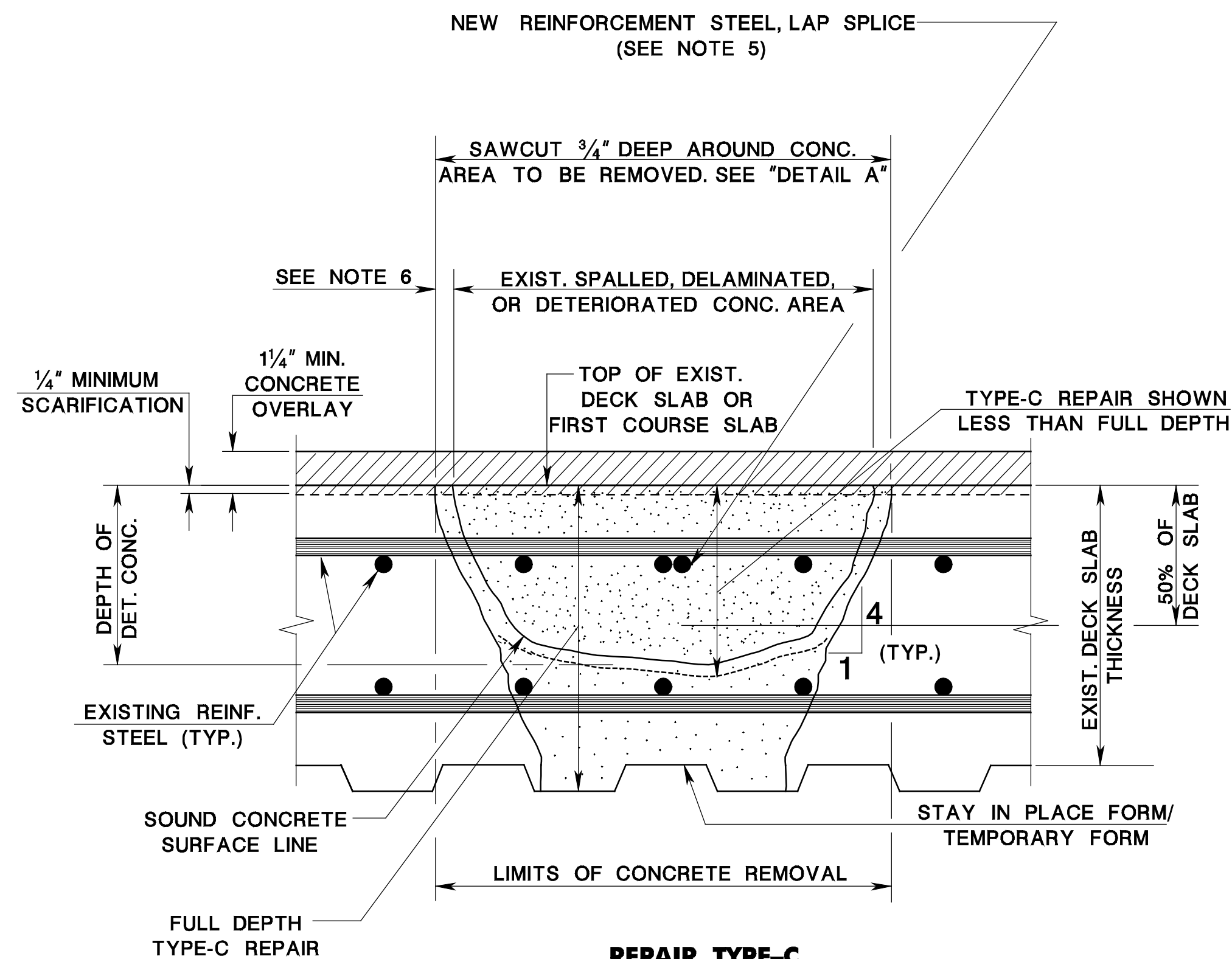
REPAIR TYPE-B
(SEE NOTE 2)



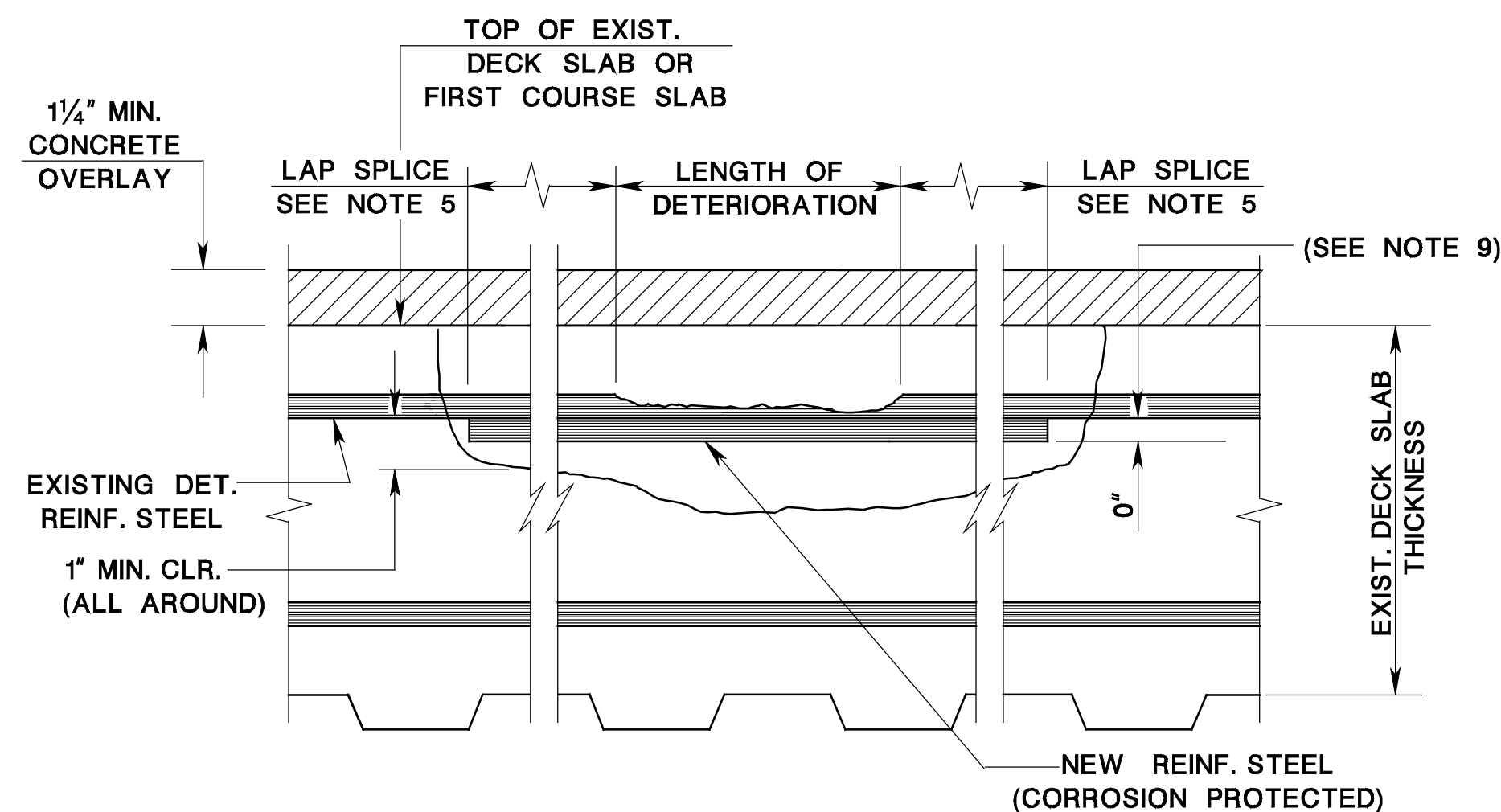
TYPICAL REPAIR DETAIL FOR MINOR SPALLED AREAS
(SEE NOTE 1)



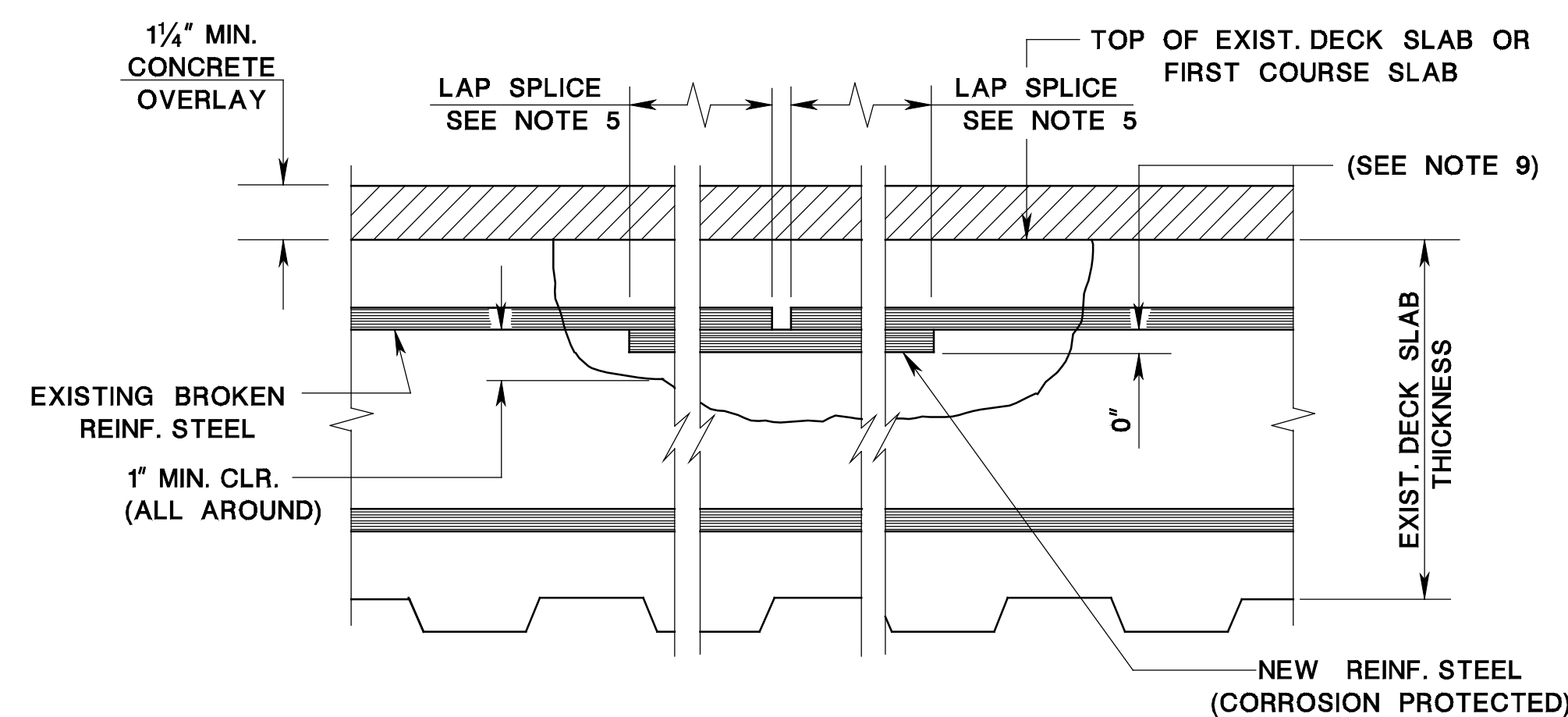
LIMITS OF REPAIR AREA (PLAN VIEW)
(SEE NOTE 7)



REPAIR TYPE-C
(SEE NOTE 3)



DETERIORATED REINFORCEMENT STEEL REPAIR



BROKEN REINFORCEMENT STEEL REPAIR

GENERAL NOTES:

- 1 SPALLED, DELAMINATED, AND DETERIORATED CONCRETE AREAS SHALL BE CLEANED AND REPAIRED WITH THE CONCRETE OVERLAY TYPE THAT IS TO BE USED FOR THE OVERLAY PLACEMENT, OR CLASS A CONCRETE MAY BE USED.
- 2 REPAIR TYPE-B:
ALL DETERIORATED AND DELAMINATED CONCRETE SHALL BE REMOVED TO A MINIMUM DEPTH OF 1" BELOW THE BOTTOM OF THE TOP LAYER OF EXISTING REINFORCEMENT STEEL TO A MAXIMUM OF 50% OF THE THICKNESS OF THE EXISTING CONCRETE DECK.
- 3 REPAIR TYPE-C:
ALL DETERIORATED AND DELAMINATED CONCRETE SHALL BE REMOVED, AND IF THE SOUND CONCRETE SURFACE IS LOCATED AT A DEPTH GREATER THAN 50% OF THE DECK THICKNESS WHEN MEASURED FROM THE TOP OF THE DECK, PERFORM TYPE-C REPAIR UPON APPROVAL OF THE RE, AS SHOWN IN THE DETAIL "REPAIR TYPE-C". IF THE BOTTOM MAT OF THE DECK REINFORCEMENT STEEL IS EXPOSED, THE DECK SLAB SHALL BE REPLACED TO FULL DEPTH IN THIS AREA OF EXPOSURE.
- 4 THE TOP SURFACE OF THE CONCRETE FOR TYPE-B AND TYPE-C REPAIRS SHALL BE EVEN WITH THE ADJACENT TOP OF EXISTING DECK SLAB AND SHALL MAINTAIN THE EXISTING GRADES AND CROSS SLOPES.
- 5 NEW CORROSION PROTECTED REINFORCEMENT STEEL SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT STEEL WHEN AN EXISTING ONE HAS A SECTION LOSS OF 25% OR MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE RE, OR THE EXISTING REINFORCEMENT STEEL IS BROKEN. THE NEW ONE SHALL EXTEND 30 BAR DIAMETERS IN EACH DIRECTION FROM WHERE THE SECTION LOSS OR BREAK ENDS. MODIFY THE LIMITS OF THE REPAIR AREA TO MEET THE REINFORCEMENT STEEL SPLICE LAP REQUIREMENTS.
- 6 FOR REPAIR TYPE-B AND TYPE-C SOUND CONCRETE SHALL BE REMOVED TO A DEPTH OF 1/4" MINIMUM TO 1" MAXIMUM IN ALL DIRECTIONS, EXCEPT THAT THE MAXIMUM LIMIT MAY BE MODIFIED UPON APPROVAL OF THE RE.
- 7 UPON APPROVAL OF THE RE, MODIFY THE LIMITS OF CONCRETE REMOVAL AS SHOWN IN THE "LIMITS OF REPAIR AREA (PLAN VIEW)" WHEN SUPPLEMENTARY REINFORCEMENT STEEL IS REQUIRED.
- 8 DECK REINFORCEMENT STEEL DETAILS SHOWN ARE GENERAL. ACTUAL REINFORCEMENT STEEL SPACINGS AND LOCATIONS WILL VARY FROM BRIDGE TO BRIDGE.
- 9 NEW REINFORCEMENT STEEL SHALL BE PLACED AT THE SAME LEVEL ALONGSIDE THE EXISTING DETERIORATED OR BROKEN REINFORCEMENT STEEL.
- 10 BEFORE PLACEMENT OF THE OVERLAY, ALL PREVIOUSLY PATCHED AREAS SHALL BE COMPLETELY REMOVED.

BRIDGE DECK REHABILITATION WITH CONCRETE OVERLAY

N.T.S.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

BRIDGE CONSTRUCTION DETAILS

BCD-551-1

BCD-551-1