

* Note: Existing weepholes in Units #1, #3 and #4 shall be cleaned to provide drainage. This work shall be subsidiary to other bid items of the Contract.

GENERAL NOTES

UNIT STRESSES: $f_s = 20,000$ p.s.i.; $f_c = 1,200$ p.s.i.; $f'_c = 4,000$ p.s.i.

MACHINE PREPARATION (1/4"): This item shall consist of preparing the deck for an overlay by removing all bituminous material and all concrete from the roadway surface of the entire bridge to a depth of 1/4". See Special Provisions.

AREA PREPARED FOR PATCHING: This item shall consist of removing unsound concrete and bituminous patches from the bridge deck, cleaning reinf. bars, fill the full depth patch areas with concrete and preparing the entire area of deck for overlay. Quantity shown is an estimate of the areas involved. The exact areas shall be determined by tapping, before, during and after chipping operation to assure that all unsound concrete has been removed. Chipping shall be done with a 30# jack hammer (max.) and/or a 15# chipping hammer (max.) See Special Provisions.

FULL DEPTH REMOVAL: Forms shall be provided to enable placement of concrete in areas of full depth removal of bridge deck. The forms may be suspended from existing reinforcing bars by wire ties or a method approved by the Engineer may be used. See Special Provisions for method of measurement and basis of payment.

REINFORCING IN BRIDGE DECK: Care shall be exercised to prevent cutting, stretching or damaging exposed reinforcing steel. Extreme care shall be exercised to avoid breaking the bond between the reinforcing steel and concrete where bars are partially exposed yet remain anchored in sound concrete. Reinforcing steel damaged, cut or deteriorated shall be replaced as directed by the Engineer. See table on this sheet for min. splice length required.

EXISTING GRADE: The top of the patching concrete shall be finished to the same profile grade and cross slope of the existing wearing surface after machine preparation. Graded screed rails will be required on large patch areas as directed by the Engineer. The screed for the Thin Bonded Overlay shall be adjusted to provide the same relative profile and cross slope as the original deck while maintaining a 2" min. thickness.

THIN BONDED CONCRETE OVERLAY: This item shall consist of cleaning concrete surfaces and reinforcing steel, application of grout and finishing and placing the patching material and the 2" concrete overlay. See Special Provisions.

CONCRETE: See Special Provisions for composition and consistency of concrete.

LINSEED OIL SURFACE TREATMENT (Br): All concrete exposed on the roadway surface, curbs and median shall receive Linseed Oil Surface Treatment after placement of Thin Bonded Concrete Overlay (2"). Pay quantity is based on roadway surface area E.W.S. to E.W.S. All other areas are subsidiary.

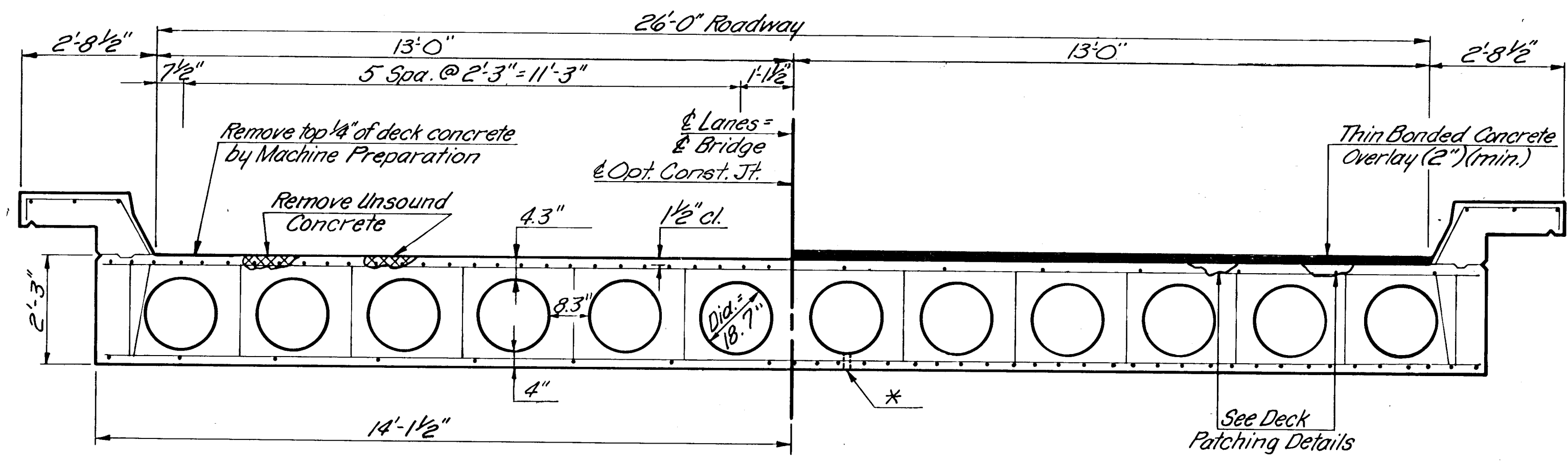
TRAFFIC: Traffic shall be carried thru construction. See Traffic Control Sheets.

REPAIR SEQUENCE: See Repair Sequence Detail Sheet.

Note: Broken concrete and other material shall be removed from the voids in areas where full depth removal provide access to the voids. This work shall be considered subsidiary to Area Prepared for Patching.

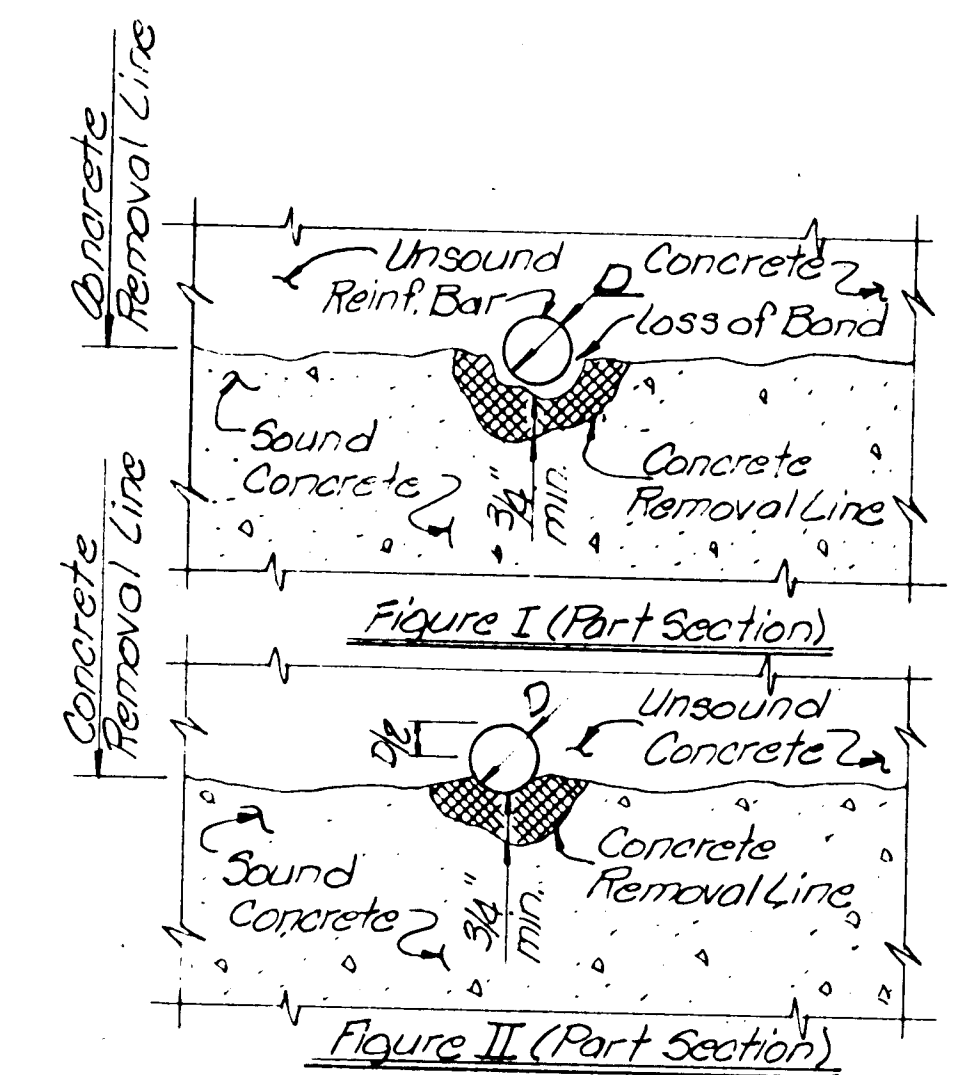
Bar Size	Min. Spl. Len.
#4	12"
#5	13"
#6	16"
#7	20"
#8	26"
#9	33"
#10	42"
#11	52"

MIN. REBAR SPLICE LENGTHS

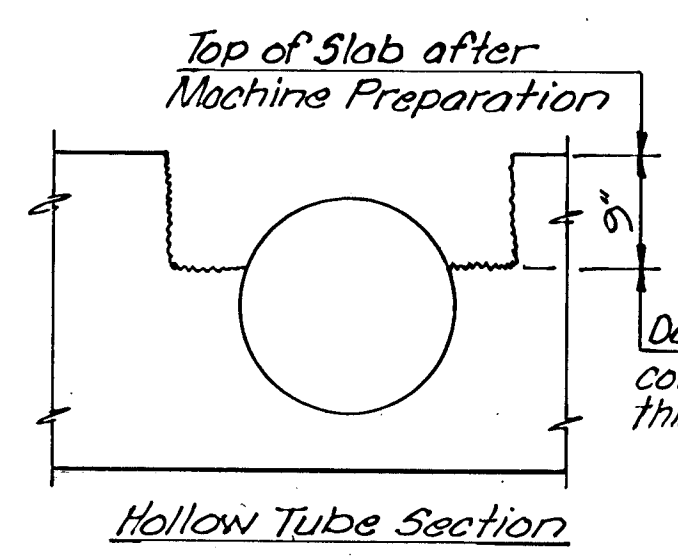
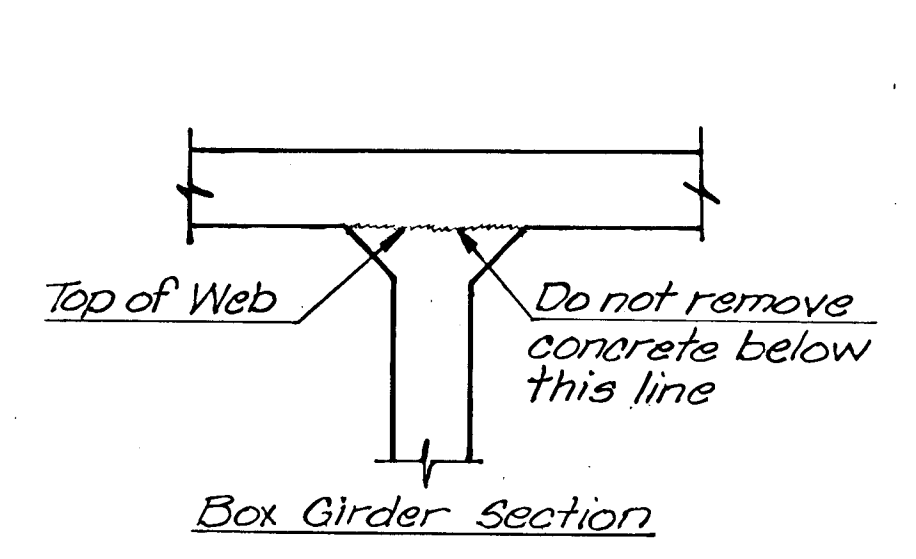
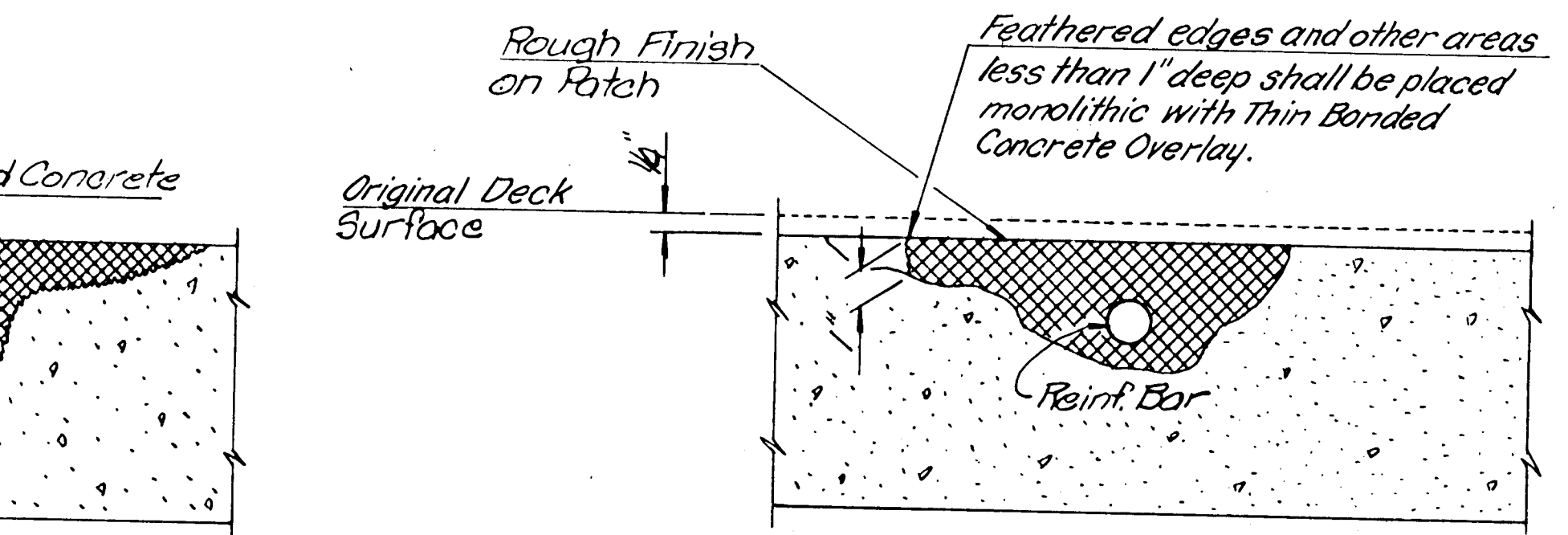
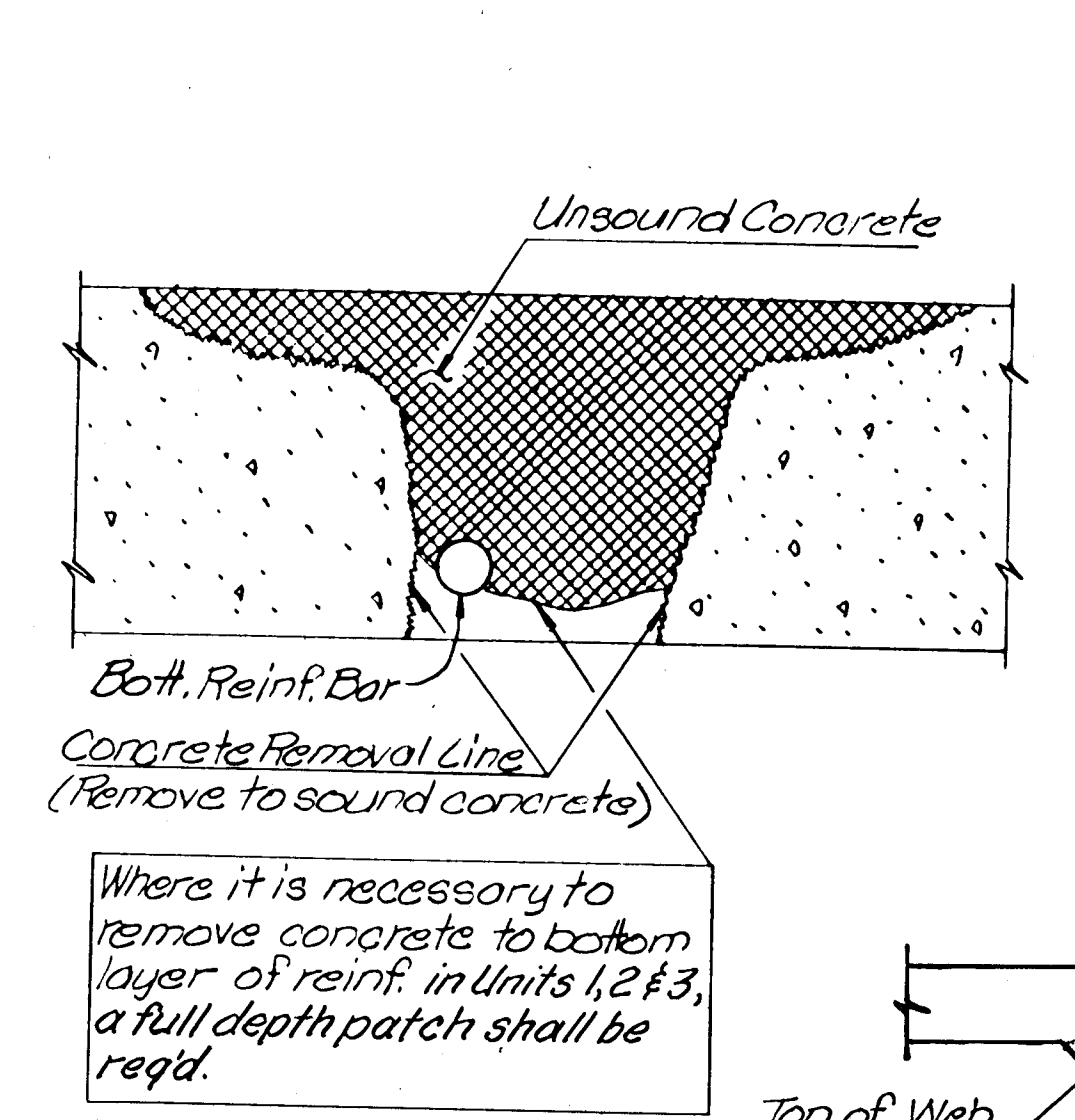


Typical Section thru Existing Slab (Showing Exist. Reinf. Steel)

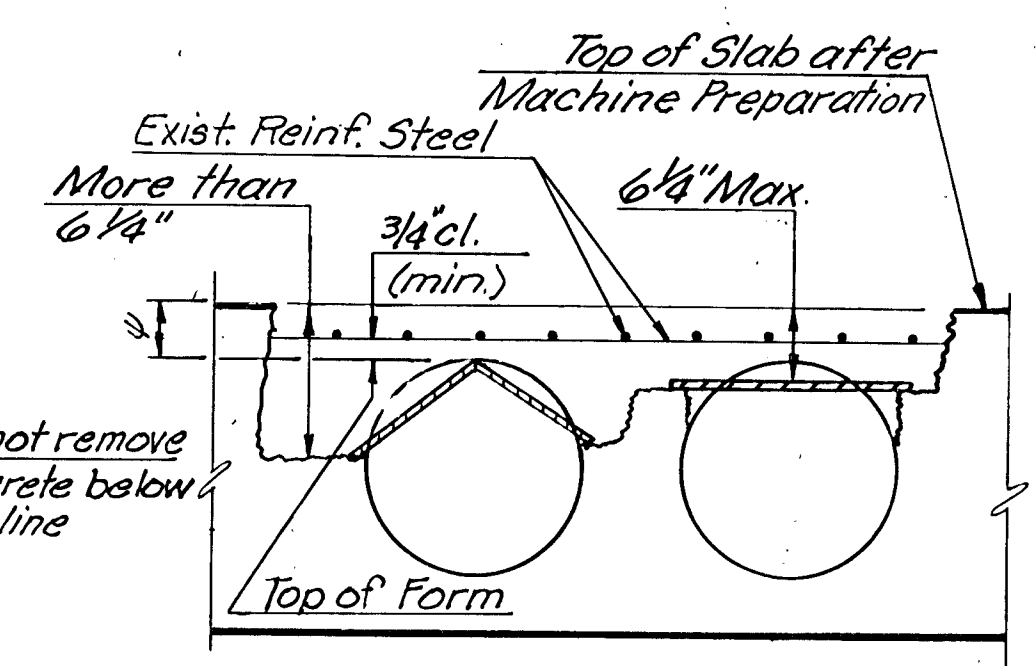
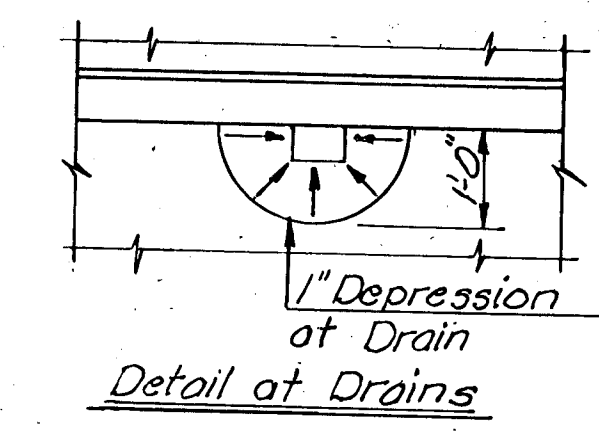
Typical Section of Overlay Material (Showing Exist. Reinf. Steel)



Note: Additional concrete shall be removed where the bond between existing concrete and reinforcing has been destroyed (Fig. I) or where more than half the diameter of the bar is exposed (Fig. II). The concrete adjacent to the bar shall be removed to a depth that will permit concrete to bond to the entire periphery of the bar.



Maximum Limits of Concrete Removal



Note: The top of form shall be a min. of 3/4" cl. from reinf. steel and a min. of 4" from top of slab. This is typical for either form.

3					
2					
1					
NO.	DATE	REVISIONS	BY	APP'D	
KANSAS DEPARTMENT OF TRANSPORTATION Bridge No. 54-87-25-80 Bridge Repair					
DETAILS OF DECK PATCHING and OVERLAY DETAILS					
Proj. No. 54-87-5942(2) Sedgwick Co.					
DESIGNED	RAM	SCALE	APP'D	QUANTITIES	3GB
DESIGN CK.	3GB	DETAIL CK.	3GB	QUAN. CK.	RAM
				TRACED	
				TRACE CK.	