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TABLE OF ESTIMATED QUANTITIES

Item	Description	Units	Quantity
429-6005	CONC STR REPAIR (DECK REP (FULL DEPTH))	SF	

REINFORCING BAR TABLE

Bar	Size	Max Spa	Bar Laps	
			Uncoated	Coated
A	#5	6"	2'-0"	3'-0"
T	#4	9"	1'-7"	2'-5"
B	#5	6"	2'-0"	3'-0"
D	#4	9"	1'-7"	2'-5"

Reinforcing steel is approximately 3 lbs/sf per mat

- ① See REINFORCING BAR TABLE for bar sizes and laps to provide if bars cannot be salvaged.
- ② Chip to remove deck material and panel (if present) using maximum 15lb hammer. Do not damage beam top flange. Remove enough deck material to provide for 6" minimum ledge on beam flange.

NOTE TO DESIGNER:

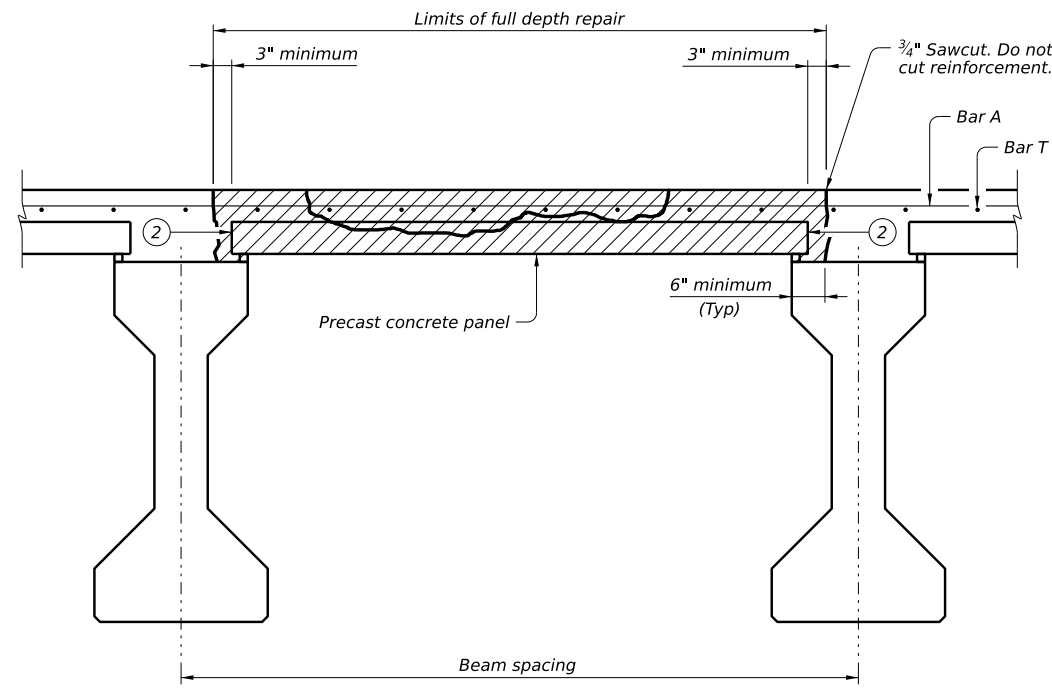
This sheet is to be used as a guide for performing full depth deck repairs. Details depict a generic cross section and may not be representative of actual conditions. This sheet cannot not be used without modification. The details shown may need to be amended if the exact existing conditions are not covered. In all cases, details and notes not required must be deleted. This note and the phrase "Not to be used as a standard" must be removed and the sheet must be signed and sealed by a Professional Engineer.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel. Provide Class S concrete ($f_c = 4,000$ psi). Alternatively, Type A or D concrete repair materials conforming to DMS-4655 may be used if approved by the Engineer. Do not open to traffic until repairs meet a minimum compressive strength of 3,600 psi.

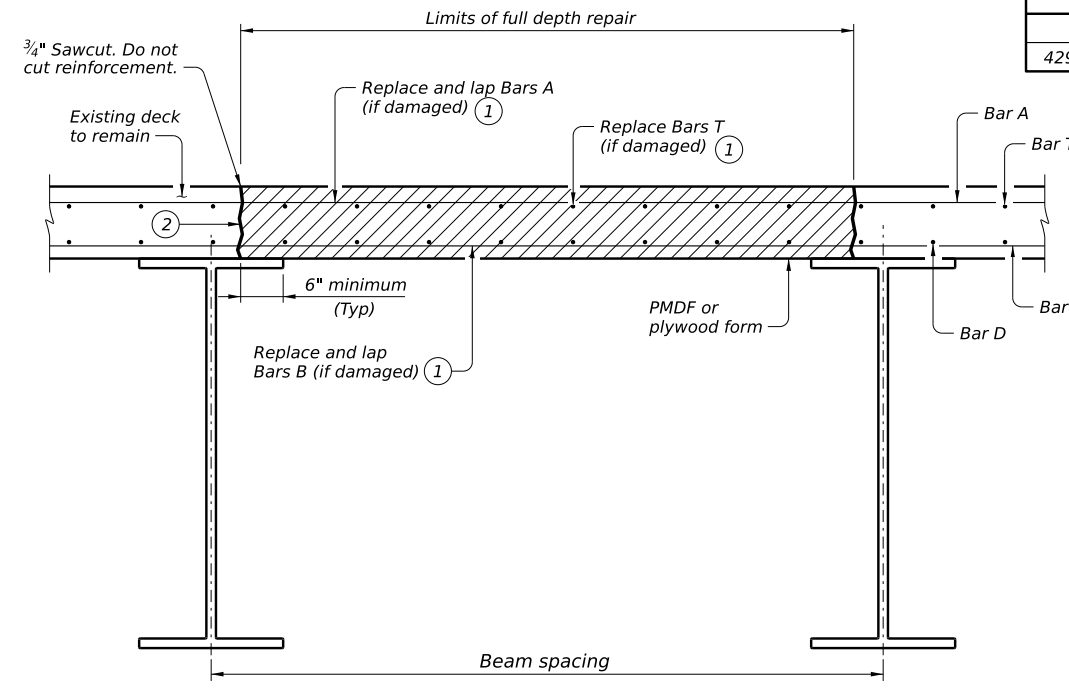
GENERAL NOTES:

Do not damage existing reinforcing. Replace reinforcing steel if more than 25% of the cross sectional area of reinforcing is damaged. Provide laps per Reinforcing Bar Table. Perform all concrete repairs in accordance with Item 422 and Chapter 3, Section 4 of TxDOT's Concrete Repair Manual. A copy of the Concrete Repair Manual must be available on site during all concrete repair operations. See elsewhere in plans for repair locations.



FULL DEPTH DECK REPAIR WITH PANELS

(Showing concrete beams)



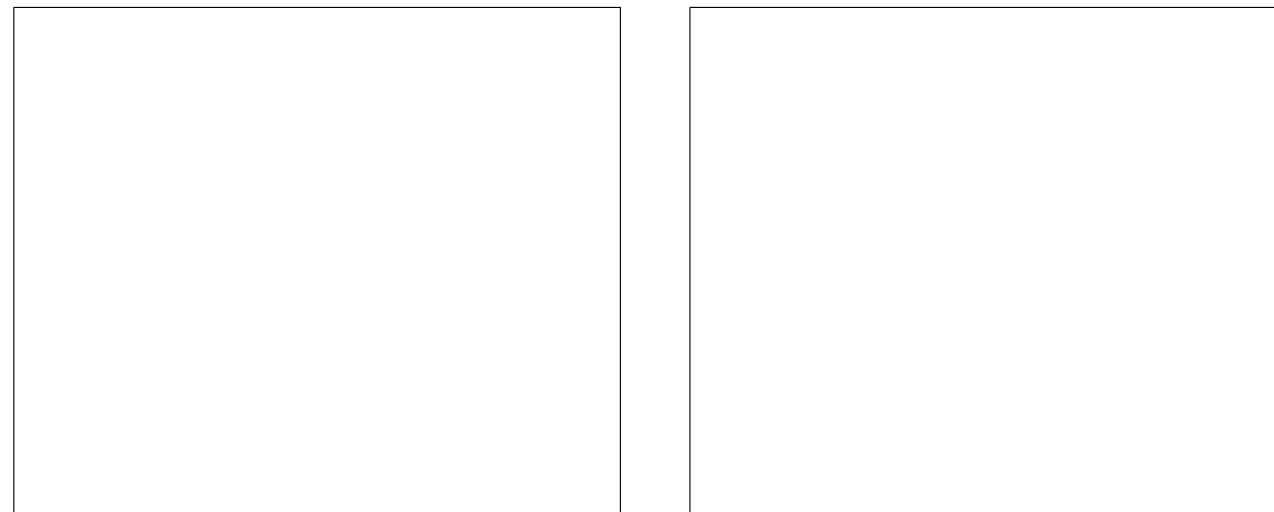
FULL DEPTH DECK REPAIR WITHOUT PANELS

(Showing steel beams)

REPAIR PROCEDURE

Refer to the TxDOT Concrete Repair Manual Chapter 3, Section 4 for detailed repair steps.

- 1) Sound repair area and mark repair limits using straight lines in the presence of the Engineer.
- 2) Saw cut the entire perimeter of the repair boundary 3/4" deep without cutting into existing reinforcement.
- 3) Use power-driven chipping tools (up to 30lb. hammer) to remove concrete. Use 15lb. hammers near the repair boundaries to prevent damage caused to sound concrete outside of the repair limits.
- 4) Remove damaged reinforcement and install new reinforcement as directed by the Engineer.
- 5) For uncoated steel reinforcing, abrasive blast steel until all rust is removed and steel is clean. Do not abrasive blast coated reinforcing. Restore damaged epoxy coating in accordance with Item 440.3.6.3.
- 6) Install formwork.
- 7) Prepare surfaces for concrete placement in accordance with Item 422.4.6.5.
- 8) Obtain approval of the prepared surface by the Engineer before placing concrete.
- 9) Place concrete according to Item 422, "Concrete Superstructures" and allow to cure.



PHOTOS SHOWING LIMITS OF REPAIR

Photos shown are for informational purposes and may not reflect exact site conditions or magnitude of repairs needed. Field verify magnitude of repairs prior to ordering materials.

P.E. SEAL
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Texas Department of Transportation Bridge Division

FULL DEPTH DECK REPAIR

(Not to be used as a standard)
NBI: XX-XXX-XXXX-XX-XXX

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