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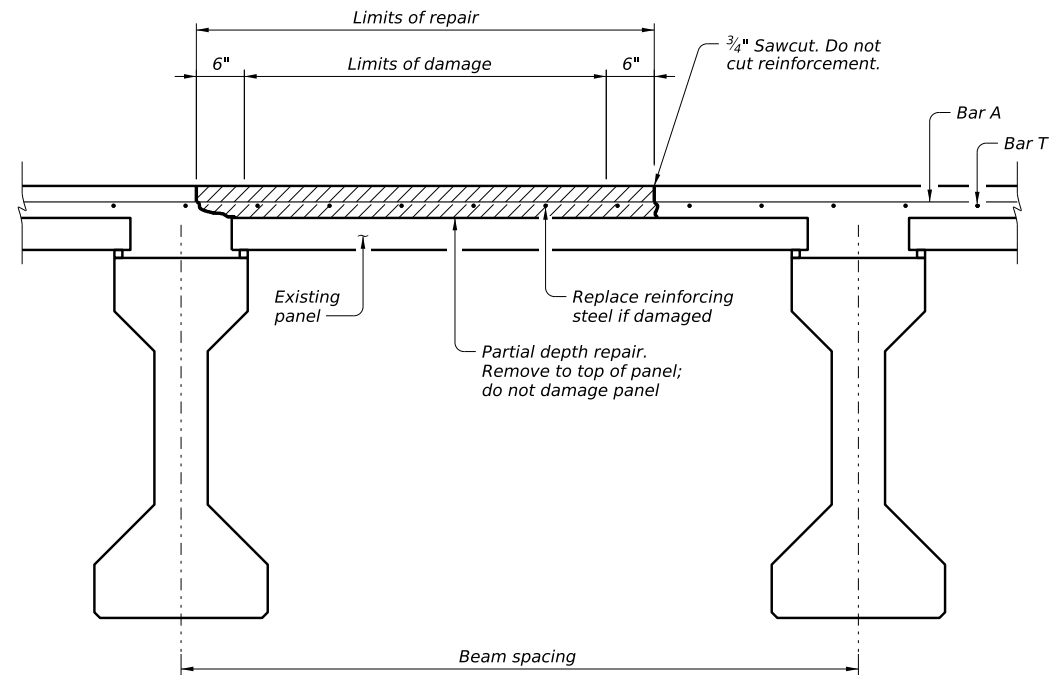
TABLE OF ESTIMATED QUANTITIES

Item	Description	Units	Quantity
429-6003	CONC STR REPAIR (DECK REP (PART DEPTH))	SF	

REINFORCING BAR TABLE

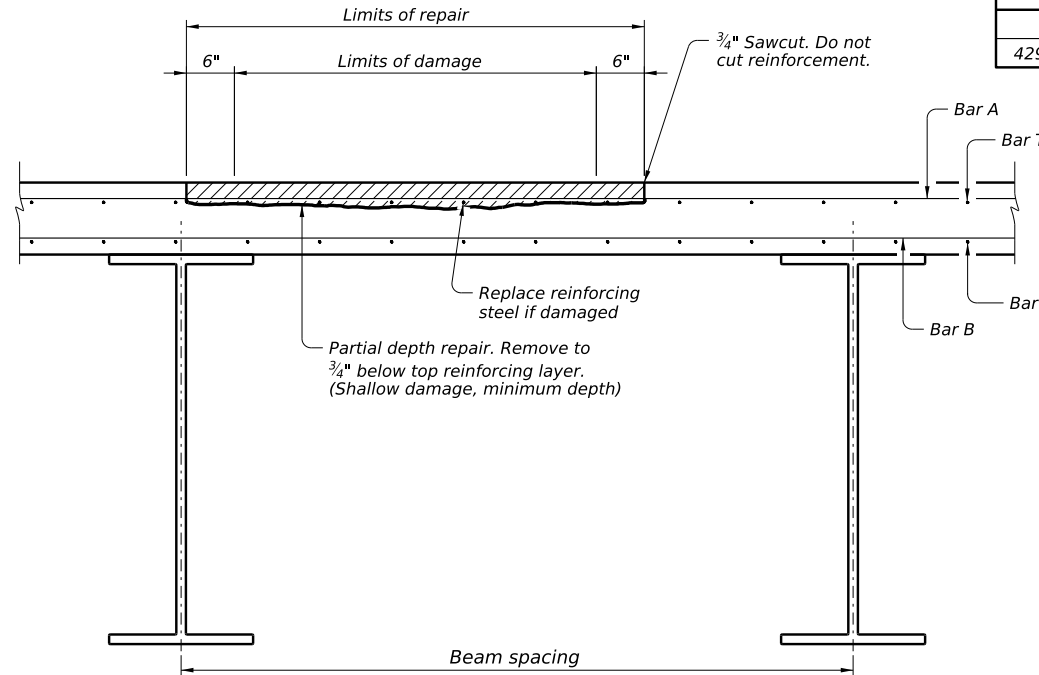
Bar	Size	Max Spa	Bar Laps	
			Uncoated	Coated
A	#5	6"	2'-0"	3'-0"
T	#4	9"	1'-7"	2'-5"

Reinforcing steel is approximately 3 lbs/sf per mat



PARTIAL DEPTH DECK REPAIR WITH PANELS

(Showing concrete beams)



PARTIAL DEPTH DECK REPAIR WITHOUT PANELS

(Showing steel beams)

NOTE TO DESIGNER:

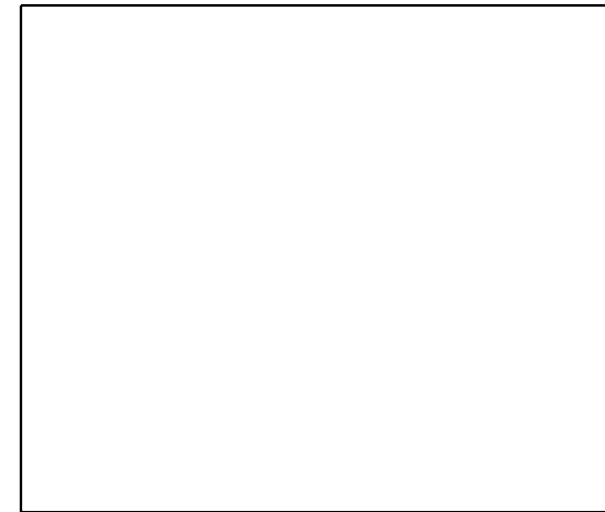
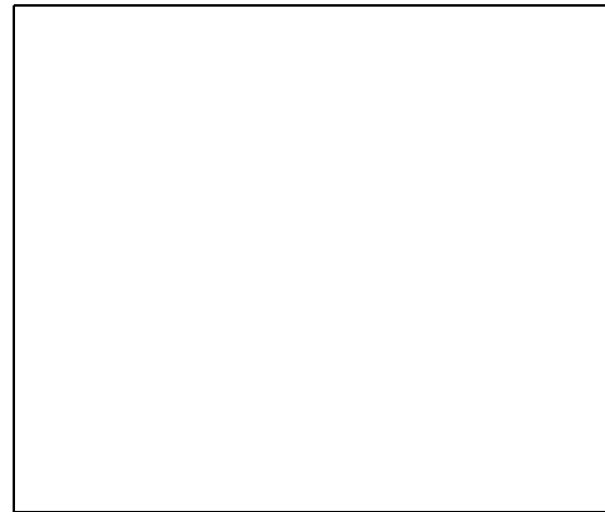
This sheet is to be used as a guide for performing partial depth deck repairs. Details depict a generic cross section and may not be representative of actual conditions. Revise the details as required to fit existing conditions. This guide assumes that no panel damage has occurred. If panel has been damaged, a full depth repair must be completed.

This sheet cannot be used without modification. The details shown may need to be amended if the exact 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.

REPAIR PROCEDURE

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

- 1) Sound repair area and mark 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. If damaged concrete rests atop PCP, ensure the panel is undamaged, and do not cut into the panel for repairs. If the panel is damaged, perform full-depth deck repairs.
- 3) Use power-driven chipping tools (up to 30lb. hammer) or hydro-demolition to remove remaining concrete to 3/4" beneath top layer of reinforcement to ensure bonding between new concrete and existing reinforcement. 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) Create a 1/4" surface profile (or conforming to ICRI CSP 9) of concrete surface to remain.
- 7) Pressure wash entire repair area until clean, and continue to pressure wash entire area until concrete within the boundaries achieves saturated surface dry (SSD) condition (at least 15 minutes of pressure washing to all repair surfaces of concrete).
- 8) Remove any standing water within repair limits.
- 9) Obtain approval of the prepared surface by the Engineer before placing concrete.
- 10) 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.

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, "Concrete Superstructures" 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.

P.E. SEAL
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P.E. XXXXX on XX/XX/XX.
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Bridge Division

PARTIAL DEPTH DECK REPAIR

(Not to be used as a standard)

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