



**Albertson Engineering Inc.**

STAGE TRUSS ASSESSMENT & REPAIR REPORT

PROJECT: Outlaw Square  
DATE: February 25, 2022  
AE Project # 2018-405

BACKGROUND

Albertson Engineering was recently contacted by City of Deadwood personnel that the stage truss appeared to have a sag. After additional investigation, the sag was found to be approximately 2".

We believe the sag is related to the shrinkage in the top chord of the truss. The mechanics of the top chord rely on direct contact at splice locations. As the top chord has shrunk, the truss has slightly deflected until direct contact is again made at the splice locations.

We do not believe the truss is currently structurally unsafe but understand that aesthetically it is desirable to remove some of the sag.

REPAIR RECOMMENDATION

We recommend jacking the truss up to a level position, routing a specific gap at the splice location, and inserting prefabricated "T" plates at the splice locations. Attached are details for this recommendation.

Please let us know if you have any questions or need anything further.

Report by,

Albertson Engineering, Inc.

Jared Schippers, PE  
Principal Engineer

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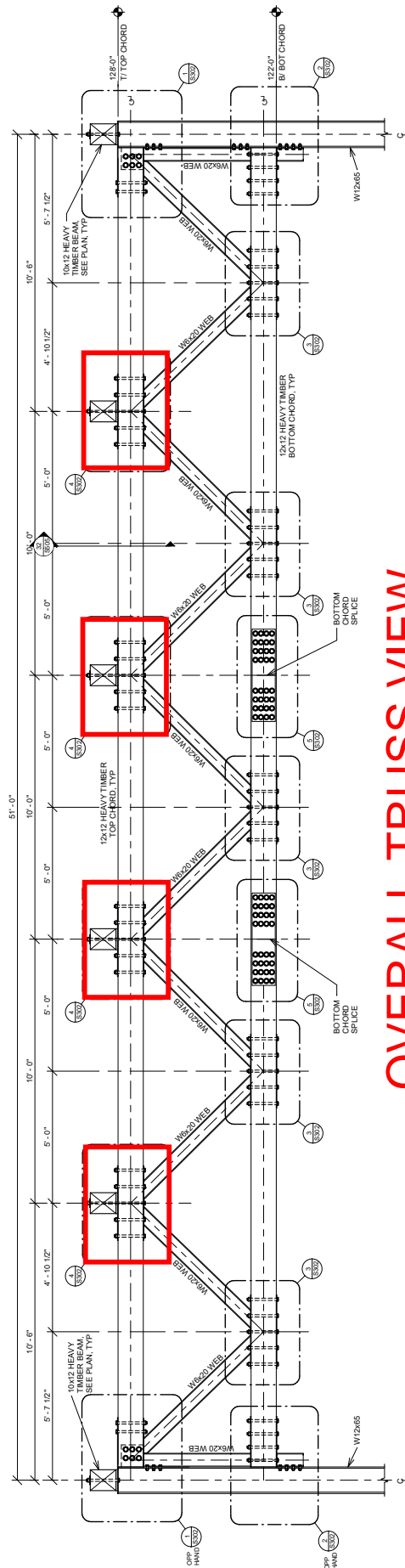
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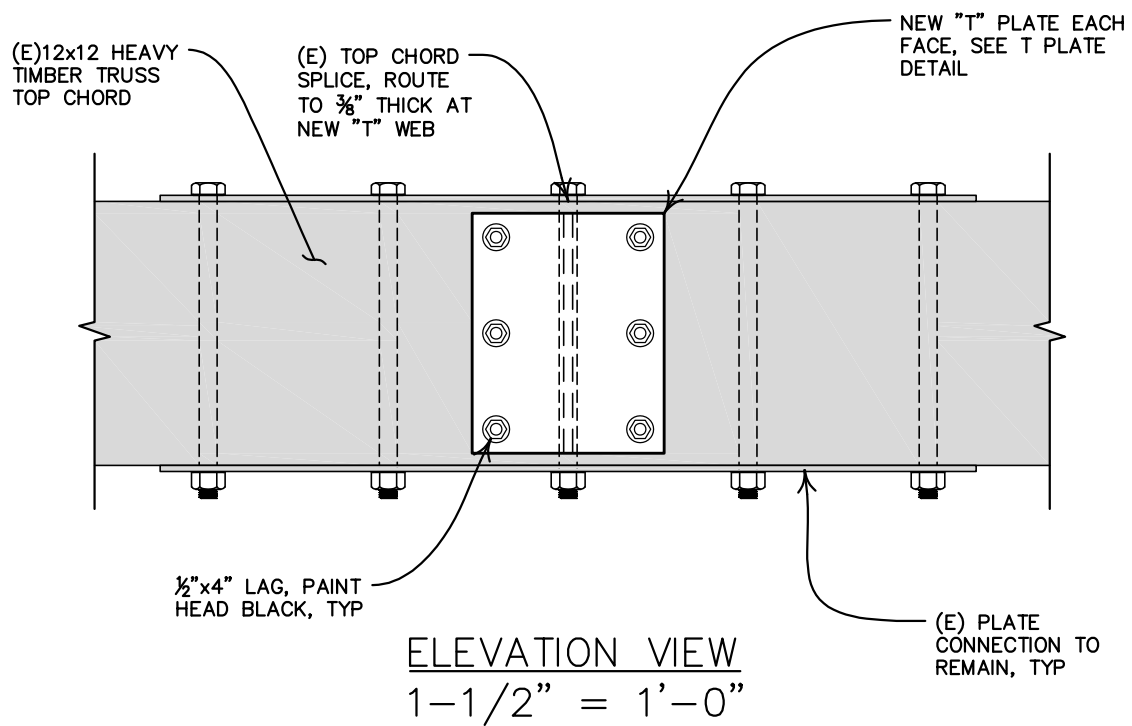
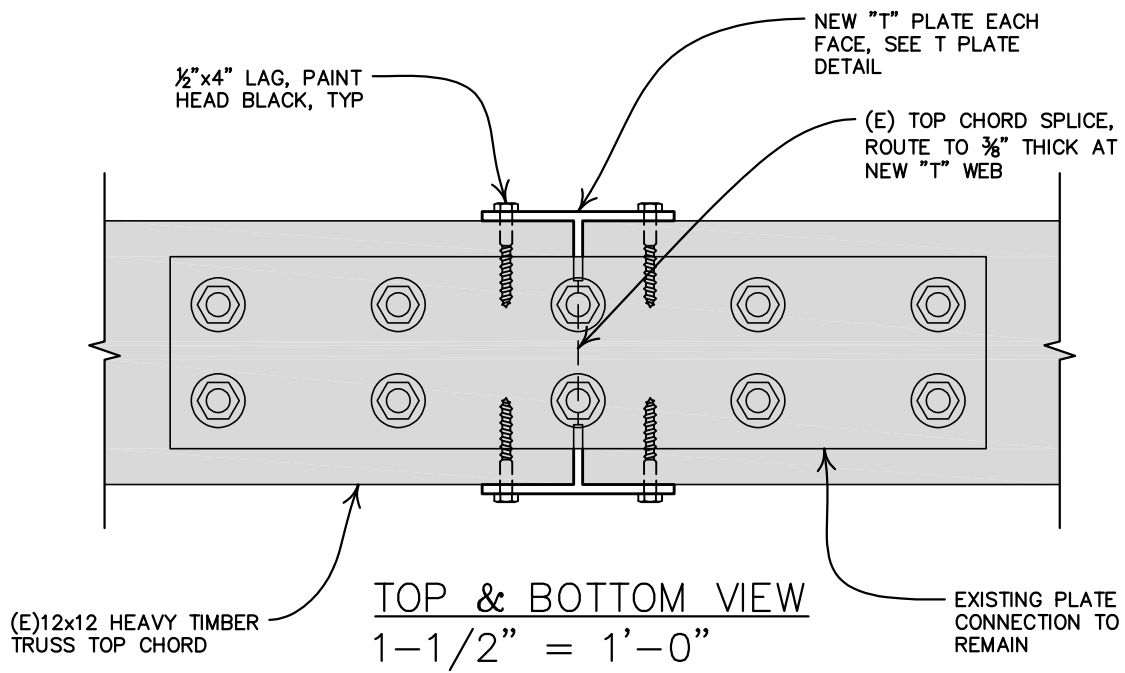


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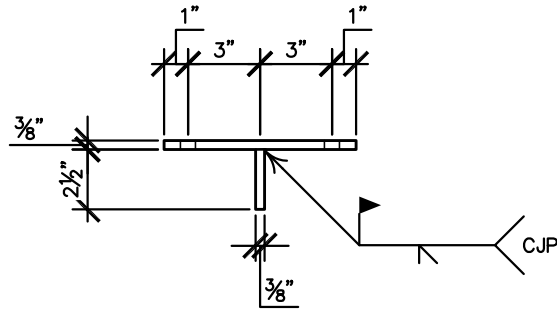
- REPAIR STEPS.**
1. JACK UP TRUSS TO LEVEL POSITION. SHORE IN PLACE.
  2. ROUTE 3/8" THICK X 2-1/2" DEEP GAP ENTIRE TOP CHORD HEIGHT.
  3. INSTALL "T" PLATES EA SIDE OF TOP CHORD (8 TOTAL "T" PLATES).  
SEE ATTACHED DETAILS.
  4. REMOVE SHORING.



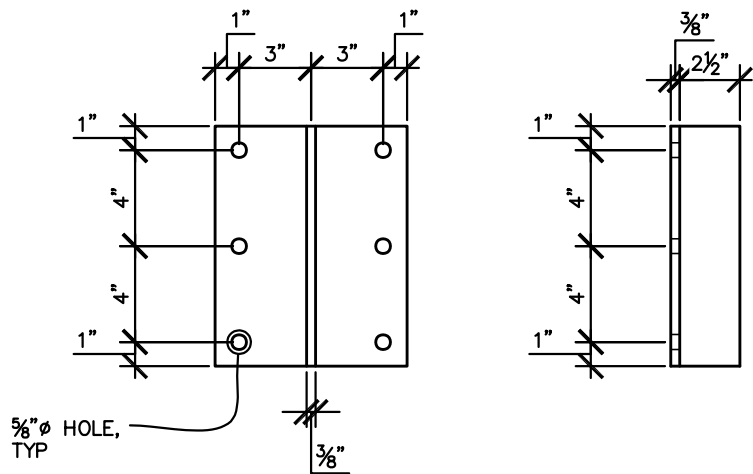
**OVERALL TRUSS VIEW**



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TOP VIEW



ELEVATION VIEW

SIDE VIEW

NOTE: POWDER  
COAT BLACK

"T" PLATE DETAIL  
1-1/2" = 1'-0"



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