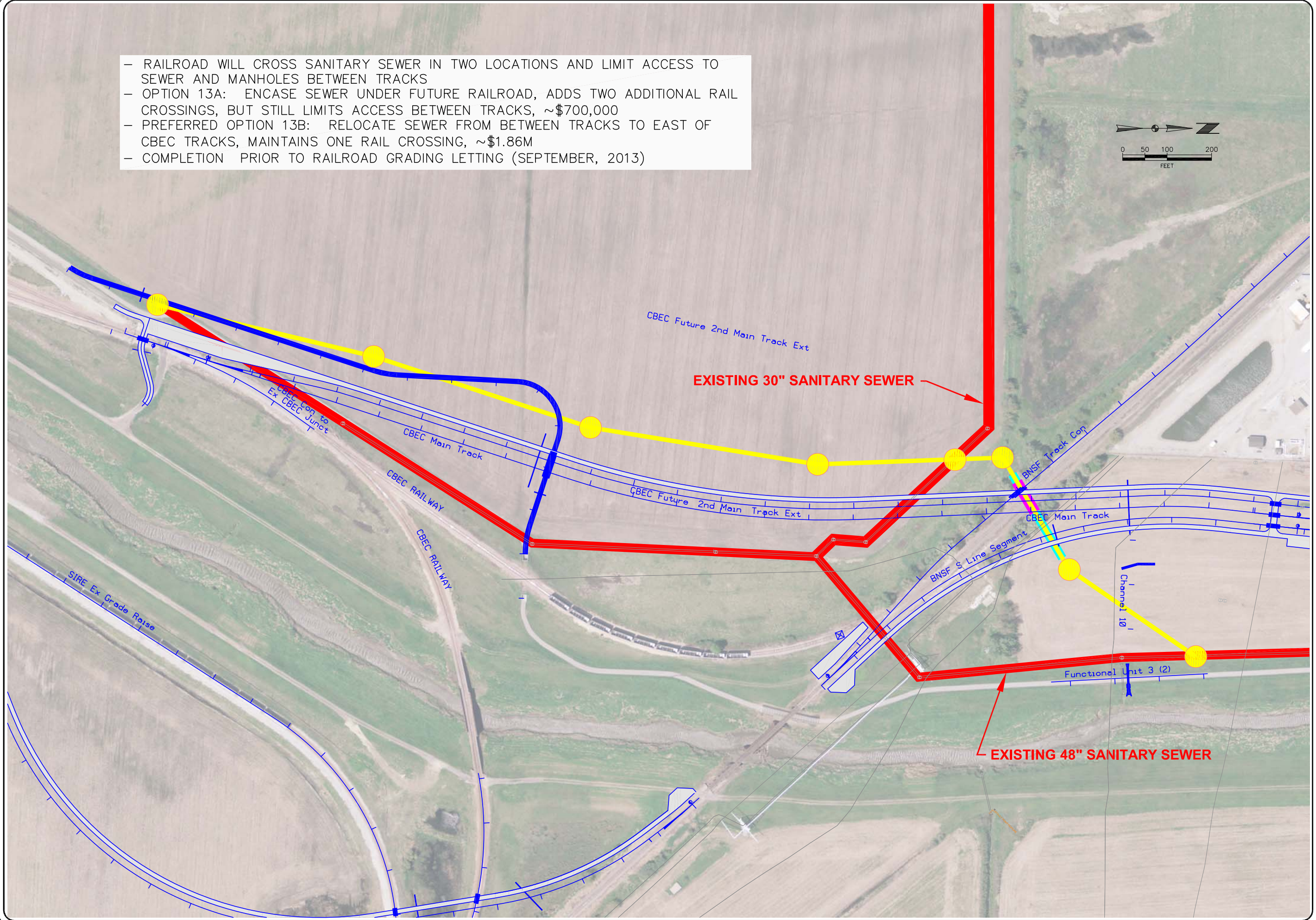
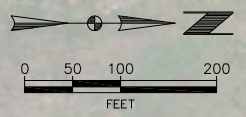


- RAILROAD WILL CROSS SANITARY SEWER IN TWO LOCATIONS AND LIMIT ACCESS TO SEWER AND MANHOLES BETWEEN TRACKS
- OPTION 13A: ENCASE SEWER UNDER FUTURE RAILROAD, ADDS TWO ADDITIONAL RAIL CROSSINGS, BUT STILL LIMITS ACCESS BETWEEN TRACKS, ~\$700,000
- PREFERRED OPTION 13B: RELOCATE SEWER FROM BETWEEN TRACKS TO EAST OF CBEC TRACKS, MAINTAINS ONE RAIL CROSSING, ~\$1.86M
- COMPLETION PRIOR TO RAILROAD GRADING LETTING (SEPTEMBER, 2013)



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AUG. 11		

CBIS UTILITY RELOCATIONS
 BNSF & CBEC RAILROAD
 CITY OF COUNCIL BLUFFS
 COUNCIL BLUFFS, IOWA

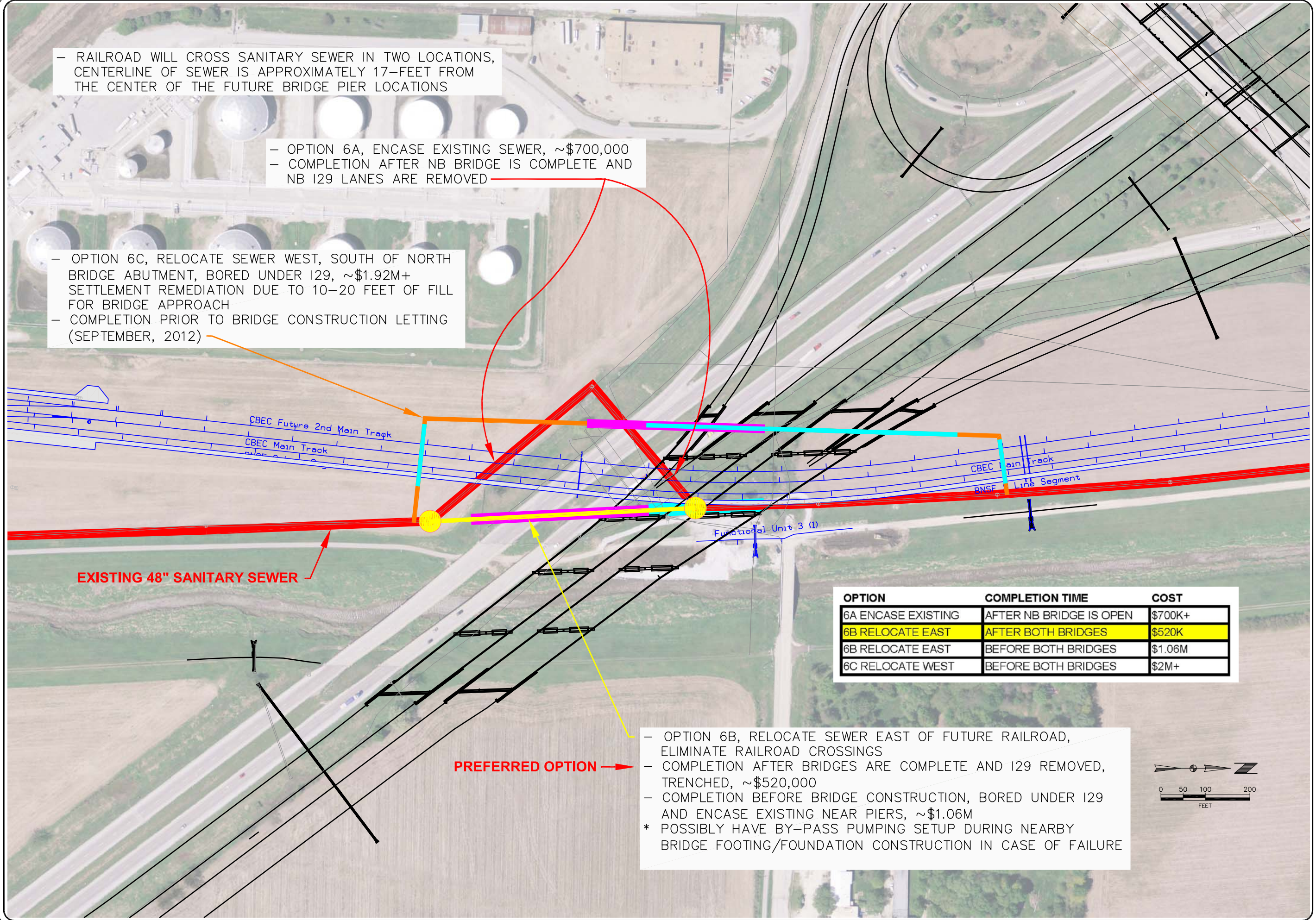
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– RAILROAD WILL CROSS SANITARY SEWER IN TWO LOCATIONS, CENTERLINE OF SEWER IS APPROXIMATELY 17- FEET FROM THE CENTER OF THE FUTURE BRIDGE PIER LOCATIONS

– OPTION 6A, ENCASE EXISTING SEWER, ~\$700,000
 – COMPLETION AFTER NB BRIDGE IS COMPLETE AND NB 129 LANES ARE REMOVED

– OPTION 6C, RELOCATE SEWER WEST, SOUTH OF NORTH BRIDGE ABUTMENT, BORED UNDER 129, ~\$1.92M+ SETTLEMENT REMEDIATION DUE TO 10-20 FEET OF FILL FOR BRIDGE APPROACH
 – COMPLETION PRIOR TO BRIDGE CONSTRUCTION LETTING (SEPTEMBER, 2012)



EXISTING 48" SANITARY SEWER

PREFERRED OPTION →

OPTION	COMPLETION TIME	COST
6A ENCASE EXISTING	AFTER NB BRIDGE IS OPEN	\$700K+
6B RELOCATE EAST	AFTER BOTH BRIDGES	\$520K
6B RELOCATE EAST	BEFORE BOTH BRIDGES	\$1.06M
6C RELOCATE WEST	BEFORE BOTH BRIDGES	\$2M+

– OPTION 6B, RELOCATE SEWER EAST OF FUTURE RAILROAD, ELIMINATE RAILROAD CROSSINGS
 – COMPLETION AFTER BRIDGES ARE COMPLETE AND 129 REMOVED, TRENCHED, ~\$520,000
 – COMPLETION BEFORE BRIDGE CONSTRUCTION, BORED UNDER 129 AND ENCASE EXISTING NEAR PIERS, ~\$1.06M
 * POSSIBLY HAVE BY-PASS PUMPING SETUP DURING NEARBY BRIDGE FOOTING/FOUNDATION CONSTRUCTION IN CASE OF FAILURE

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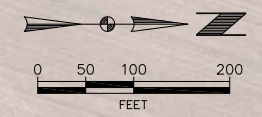
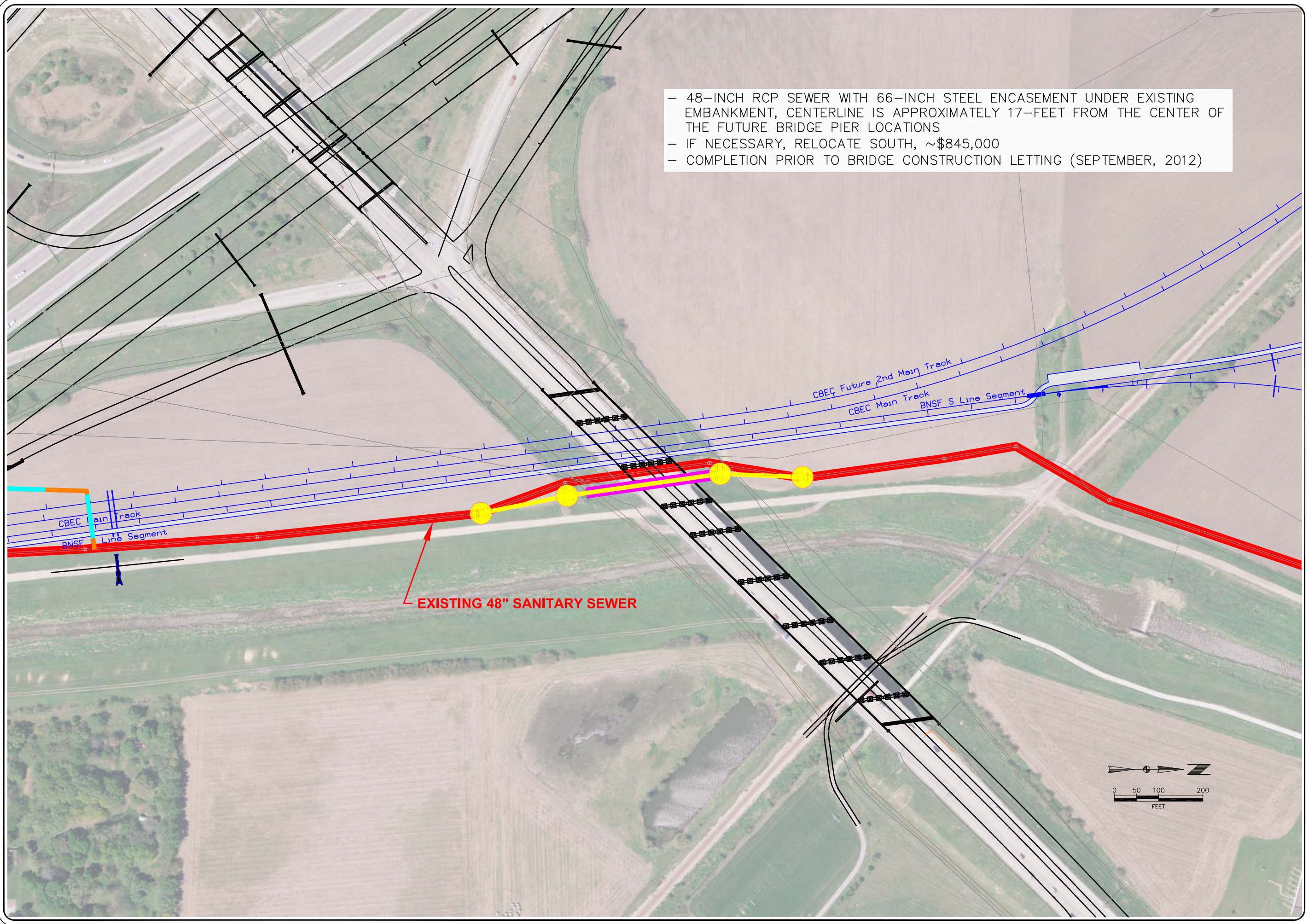
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 129
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- 48-INCH RCP SEWER WITH 66-INCH STEEL ENCASEMENT UNDER EXISTING EMBANKMENT, CENTERLINE IS APPROXIMATELY 17- FEET FROM THE CENTER OF THE FUTURE BRIDGE PIER LOCATIONS
- IF NECESSARY, RELOCATE SOUTH, ~\$845,000
- COMPLETION PRIOR TO BRIDGE CONSTRUCTION LETTING (SEPTEMBER, 2012)



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