Information Item: Declaration of Emergency for Repair of Rosemount Interceptor 7112 and 9208

Adam Gordon, Manager, Interceptor Engineering, Technical Services

Environment Committee: July 23, 2019



Location Map



Facts

- Interceptor 9208 constructed in 2008
- Provides service for Rosemount
- Emergency declared March 11, 2019
- Excavation began April 1, 2019
- Pipe installed and backfilled April 8, 2019



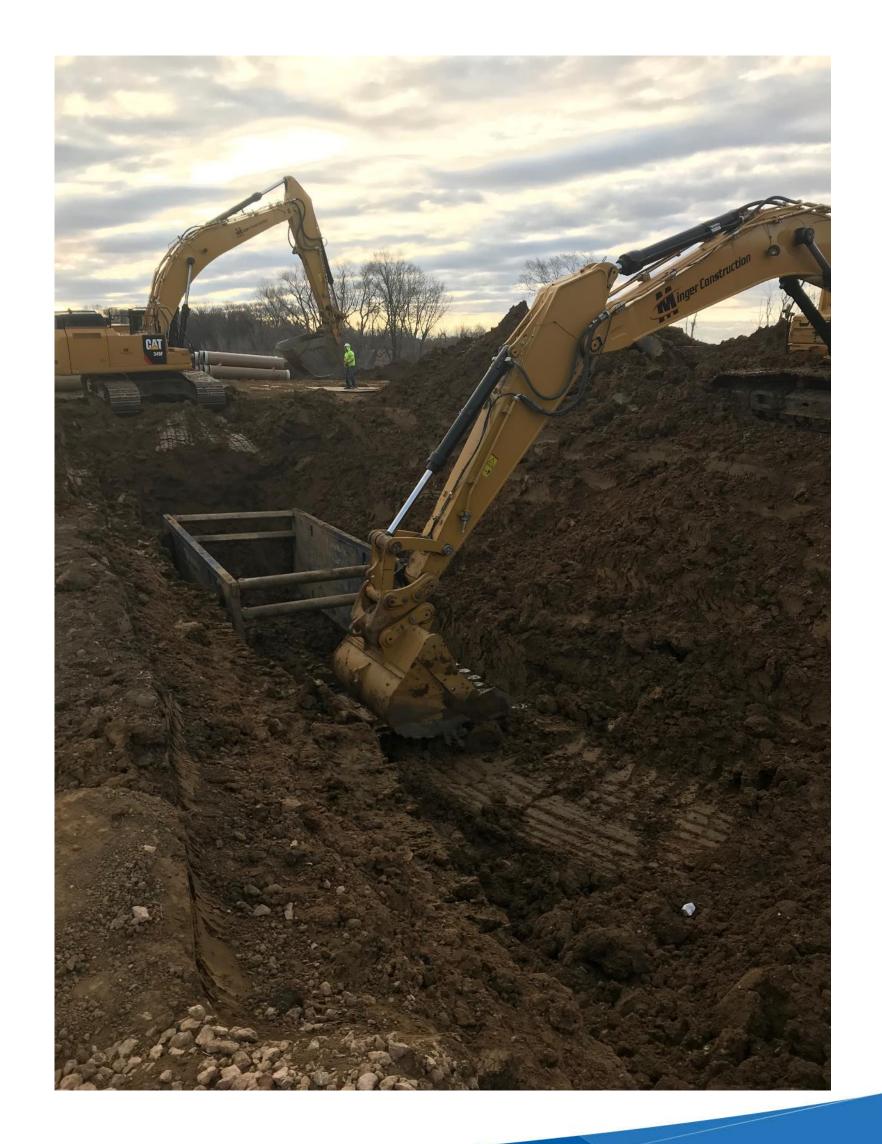
 Replacement of 500 LF of 36-inch diameter pipe between structures 221 and 222





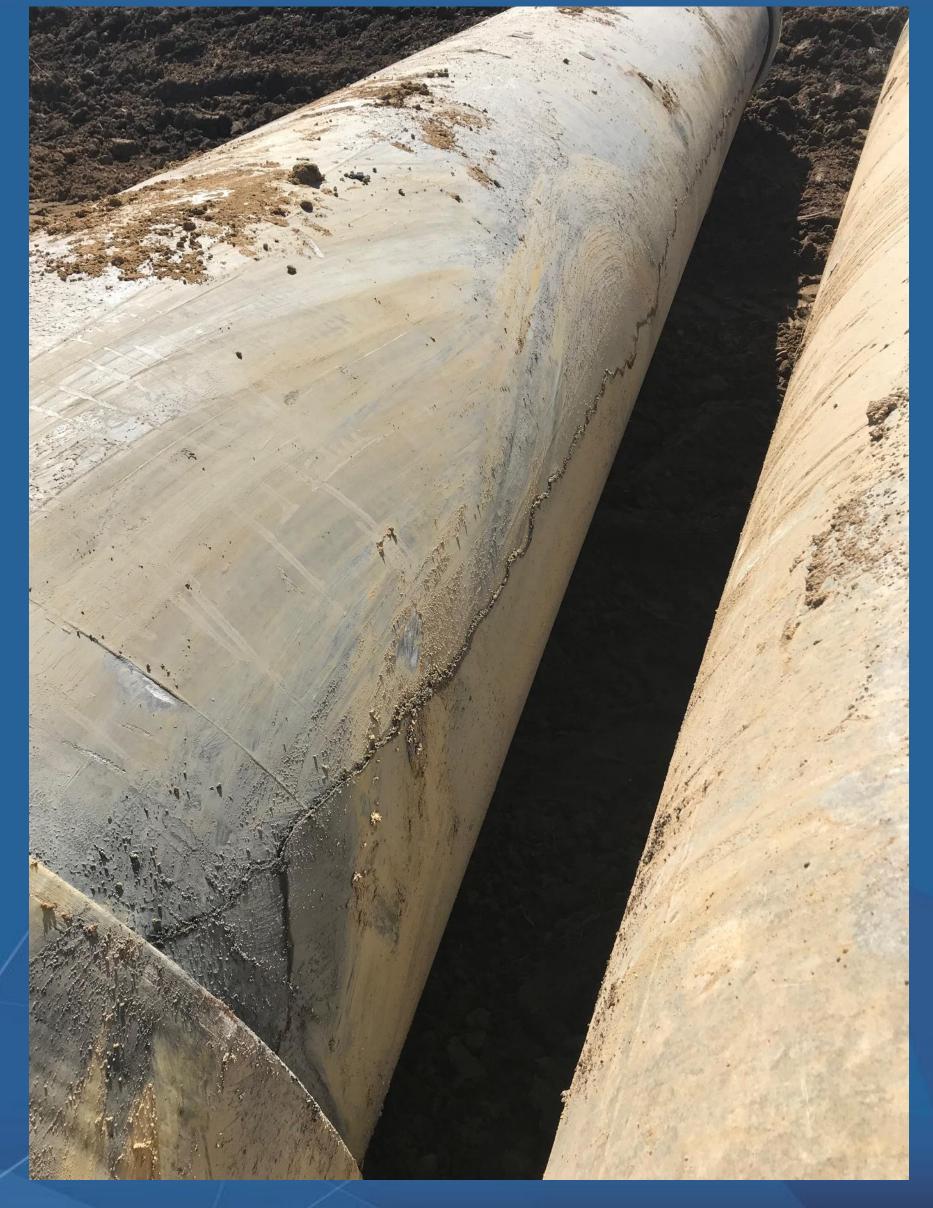
Findings/Observations

- During the removal, sand was found in the rock backfill surrounding the sewer pipe
- Trench materials and backfill around the pipe were saturated with water
- 5 of the 20-foot HOBAS pipe sections were cracked longitudinally the entire length of the pipe





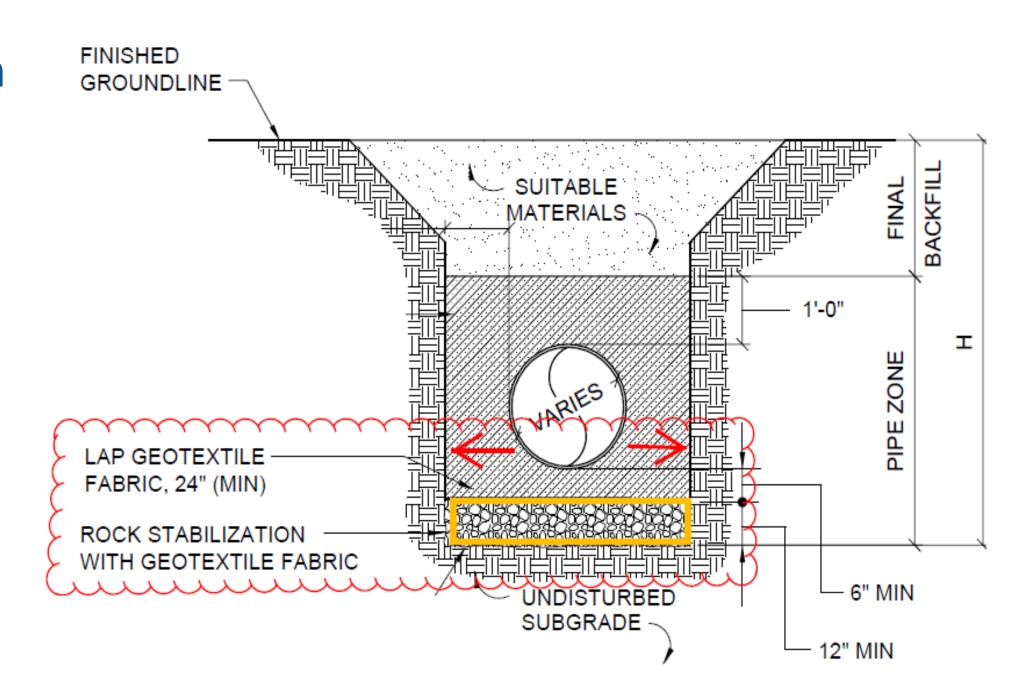
9208 Cracked Pipe





Likely Causes for Collapse

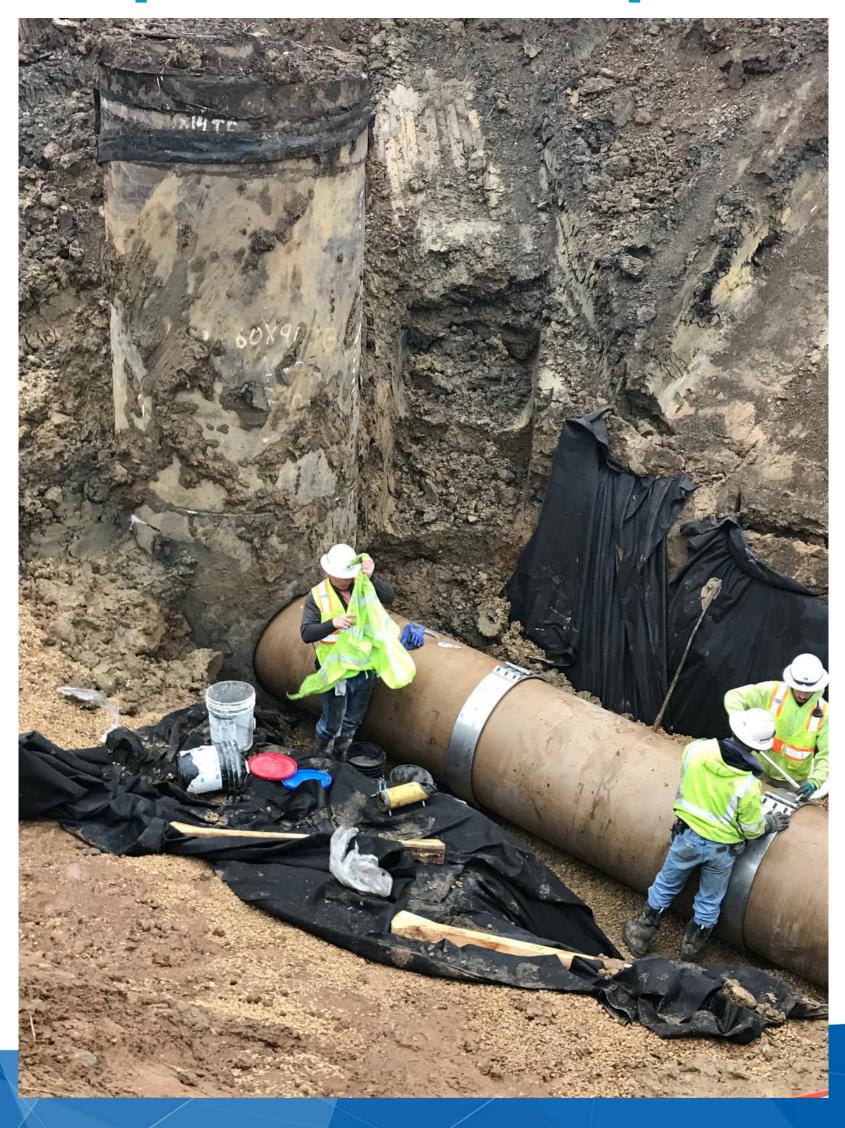
- Sand migration into the backfill can cause the trench walls to collapse away from the pipe
- The wet trench conditions during the initial installation may have further compromised the trench structure
- Inadequate pipe bedding material surrounding the pipe can lead to pipe failure



PIPE BEDDING/TRENCH BACKFILL DETAIL
WITH ROCK STABILIZATION/TRENCH DEWATERING



Replacement Pipe



- Constructed trench dewatering system
- Excavation 12-inches below pipe
- Placed crushed limestone and geotextile fabric continuously around the entire pipe



Questions

Adam Gordon
Manager, Interceptor Engineering
651-602-4503

Adam.Gordon@metc.state.mn.us

