



Lake Erie Outfall Project

**Presenter: Jason Hockran
Owner/Vice President**



H & H ENTERPRISES



Who: Northeast Borough Sewer Authority & GPI Inc.

Why: Carry treated wastewater from Sewer plant into Lake Erie EPA approved outflow location

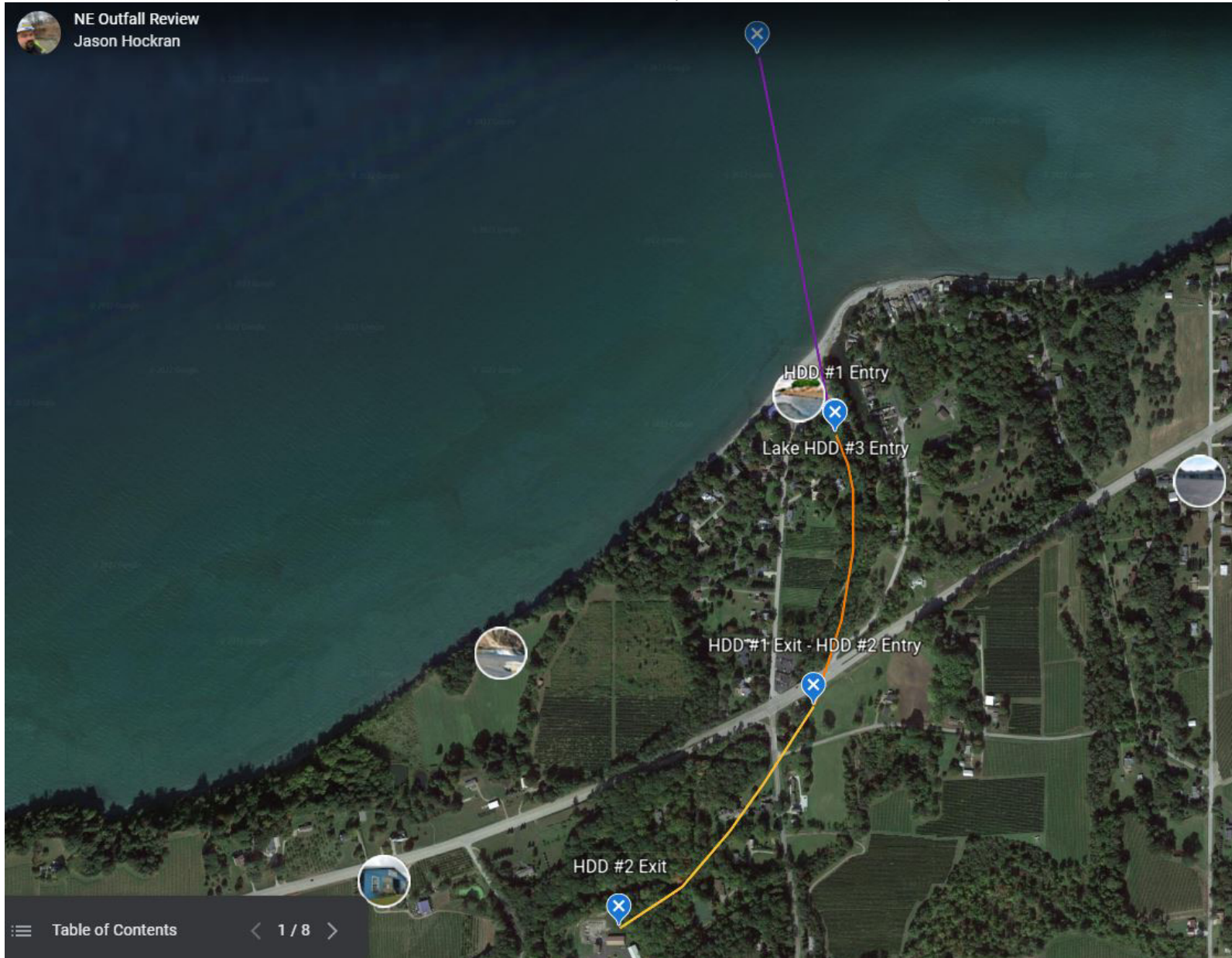
**When: Planning begins 2015, H&H & GPI Inc.
Construction begins Nov. 2019
Completed & Operating July 2020**





UNDERGROUND CONSTRUCTION TECHNOLOGY

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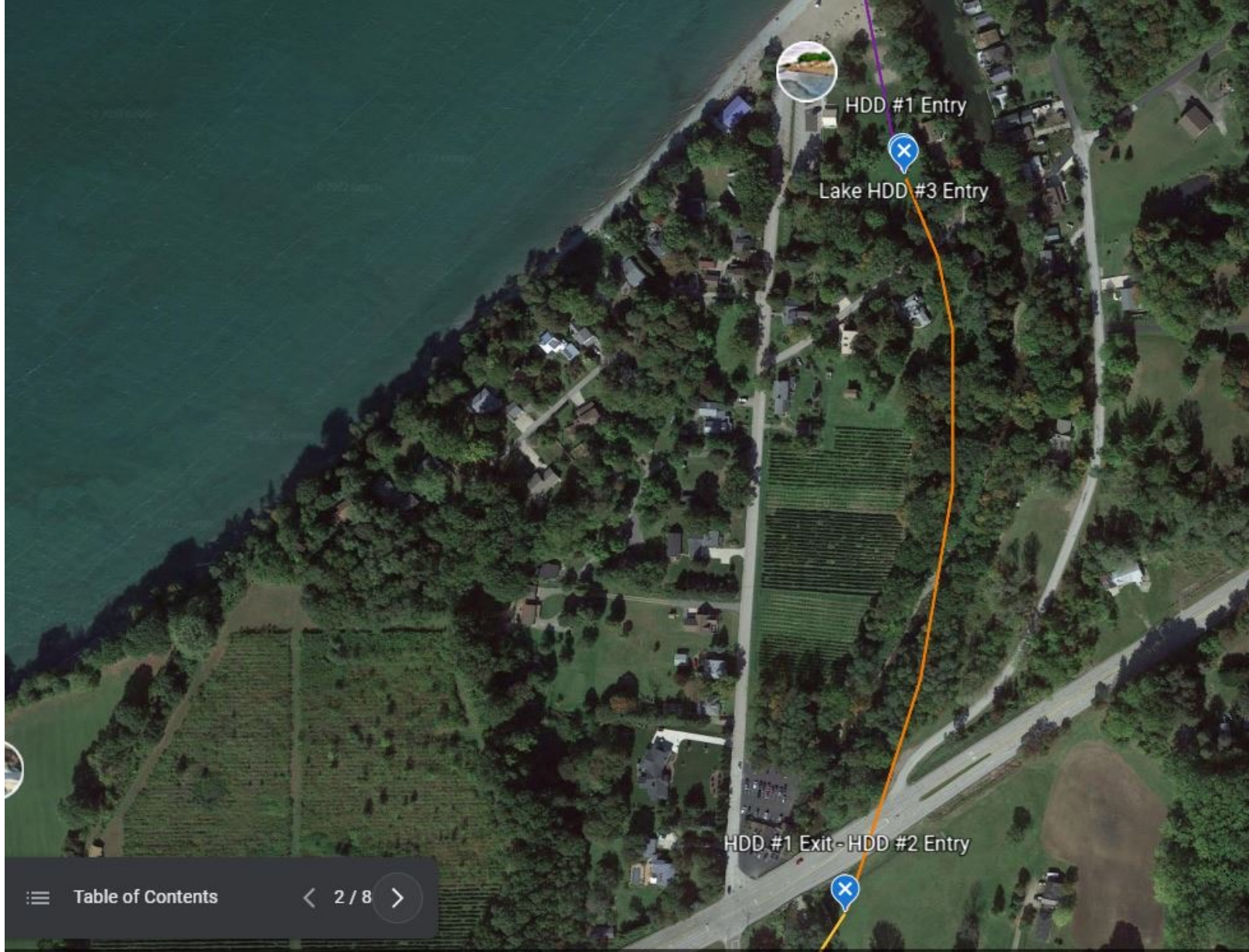
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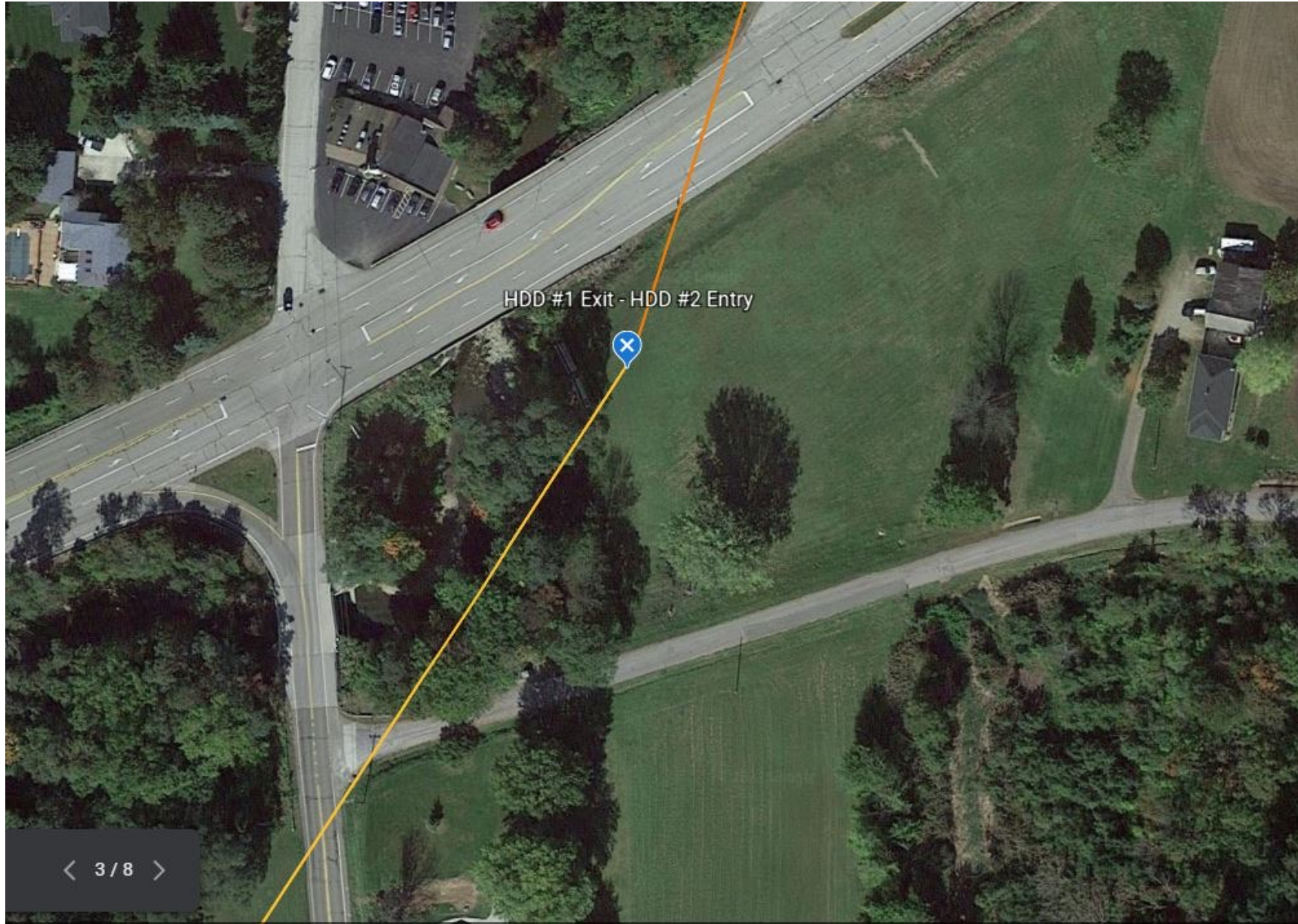
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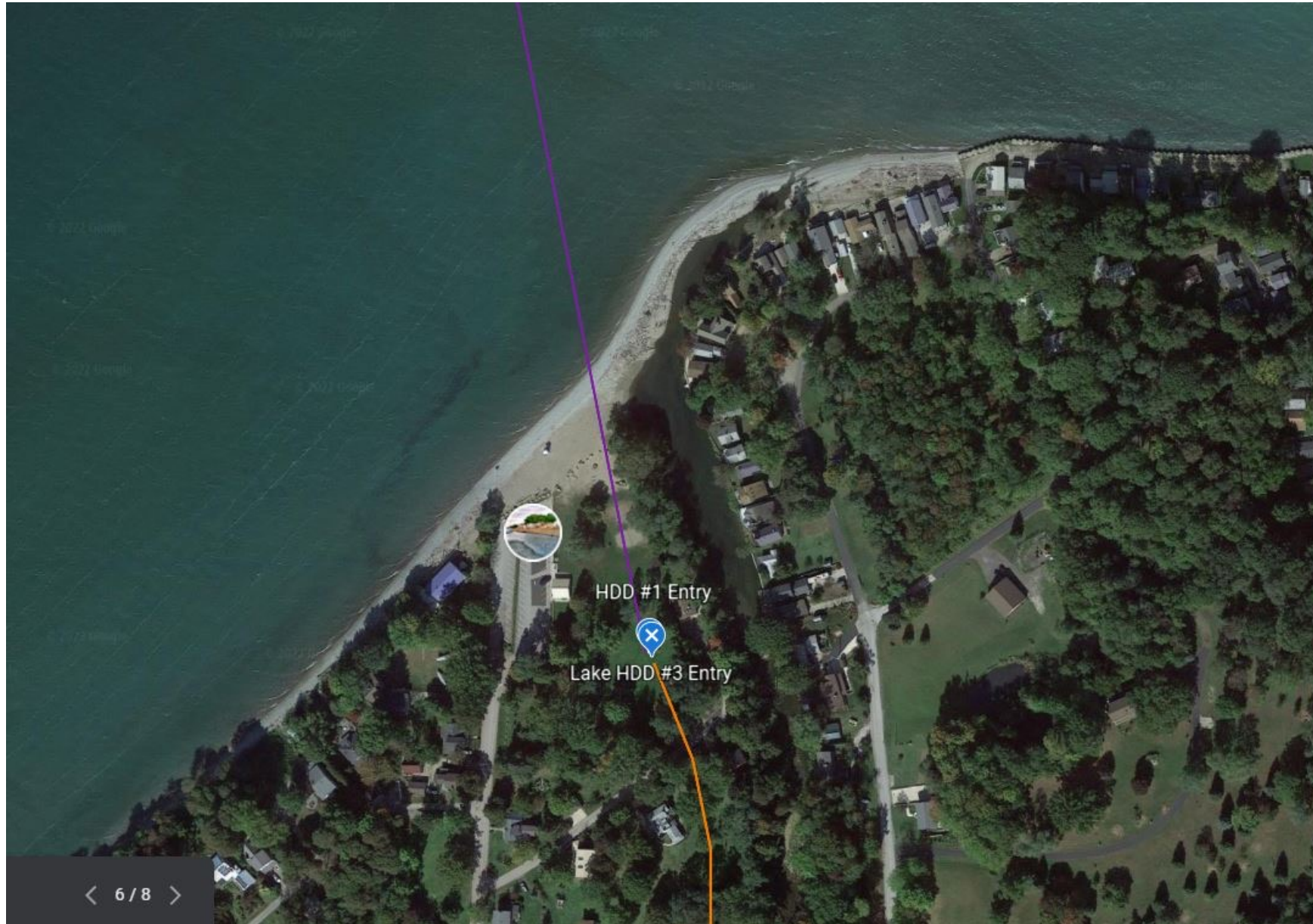
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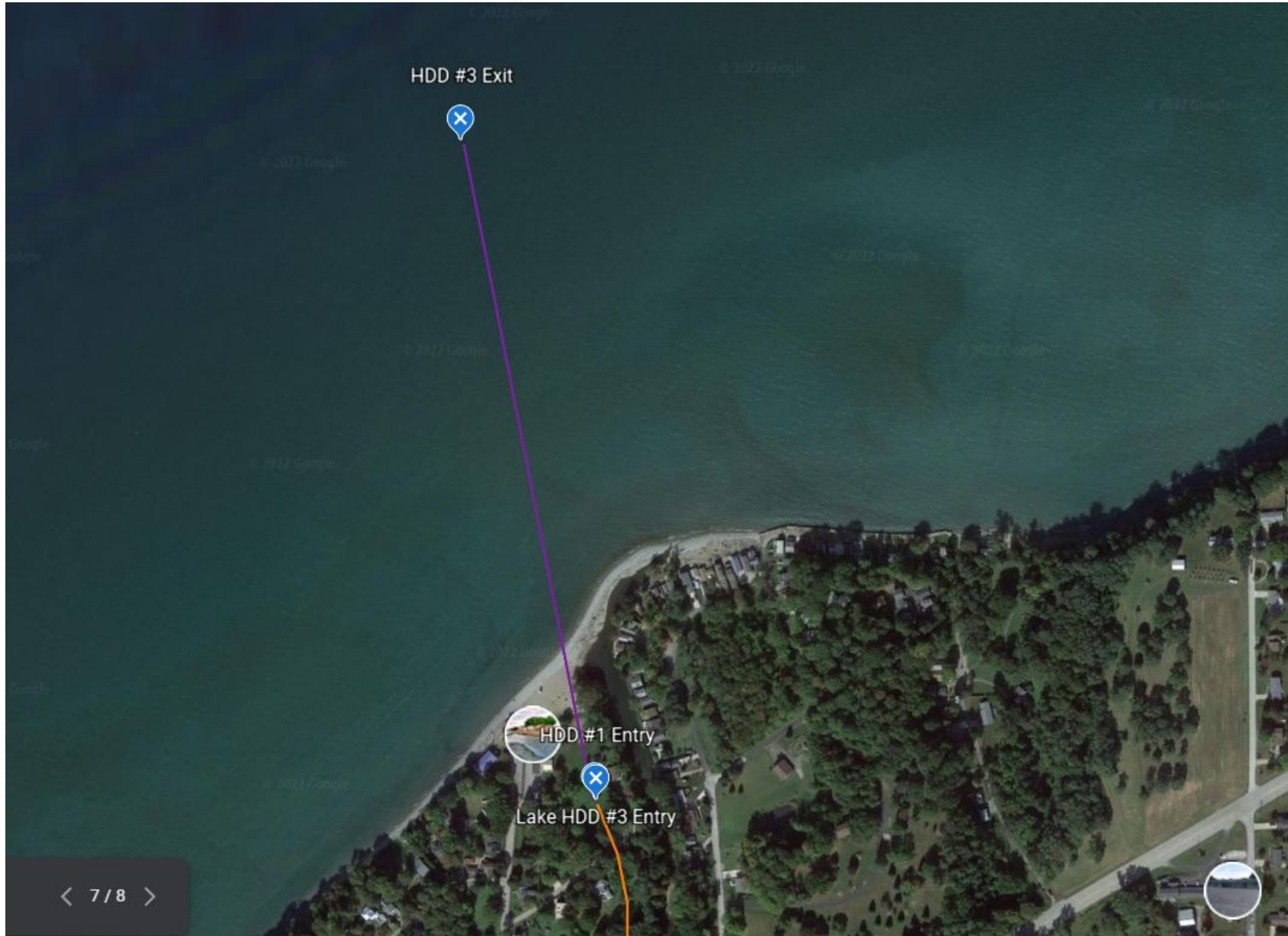
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DESIGN & PLANNING FACTORS

- Environmental Impact Reduction
- ROW Property, Terrain & Geology issues
- Critical Design – Timeframe planning
- Multiple HDD Segments
- Coordination – HDD, Public Access & Marine
- TEAM – shared RISK, Communication





HDD OPERATIONS KEY ELEMENTS

- March 2020, Pandemic – Mobilization HDD #3**
- Unknown formation @ Lake bottom – rock/dirt**
- Minimize Mud into Lake, Sedimentation & Efficiency**





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HDD OPERATIONS KEY ELEMENTS

- Hole Tripping – Pipe management on Barge
Hole Openers – with Pup joint
- Fractured Formation – last 20 ft. of drilled hole
- Gyro & Paratrack combo
- Mud Weight





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PIPE HANDLING on WATER

- 2,200 ft. fused on beach
- Utilize barge and supply boats to maneuver
- Alignment of HDPE with drill pipe on barge
- Pipe remove air, fill with water
- Length of pipe calculations





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QUESTIONS?

Jason Hockran

Owner/Vice President

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