



City of Lake City Water Main Route Study

July 21, 2021

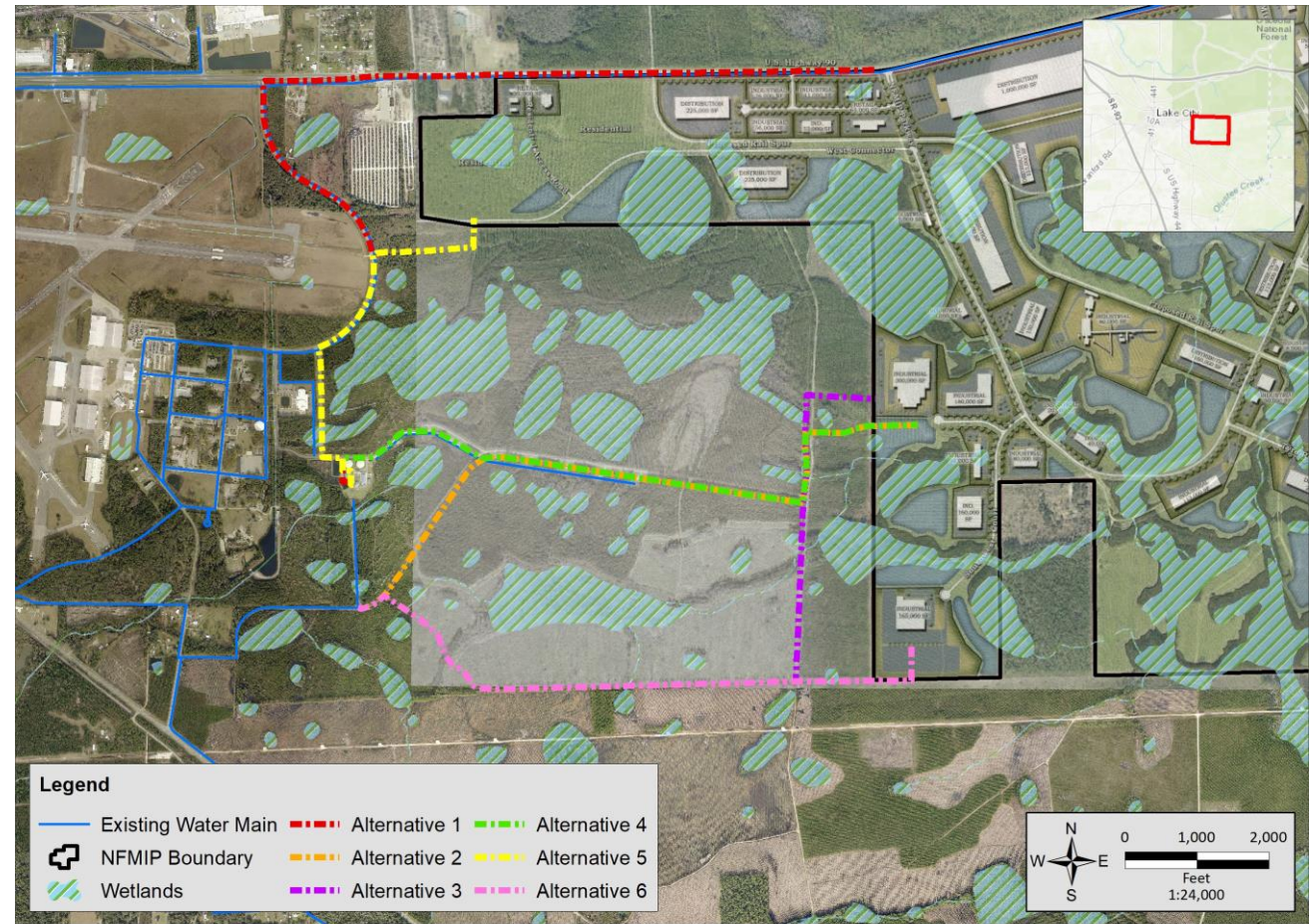
Utility Advisory Committee Meeting

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- Provide water (4 MGD average) to North Florida Mega Industrial Park (NFMIP) from Lake City's Price Creek Water Treatment Plant (PCWTP).
- Evaluate route alternatives for water piping (approximately 24-inch diameter).
- Prepare a hydraulic model to analyze two selected alternatives.
- Develop cost estimate(s) for recommended route(s).

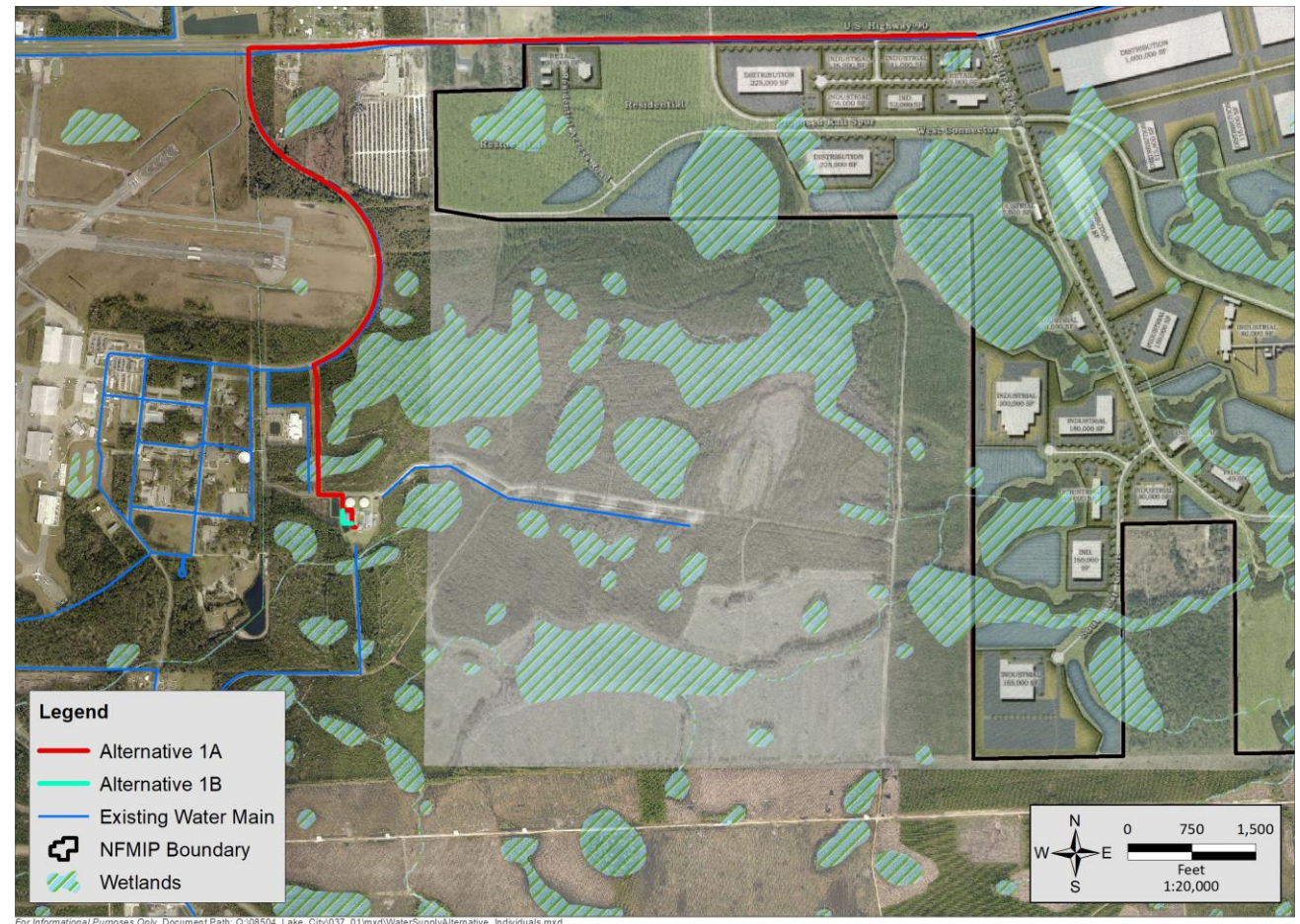


- Land Boundaries (based on Columbia County Property Appraiser) and Easement Requirements
- Wetland Locations (per US Fish and Wildlife Services – National Wetlands Inventory)
- Existing Infrastructure
- Current Access
- Proposed NFMIP Site Layout
- Topography
- Soil Type
- Construction Constraints
- Pipe Length
- Proximity to the North side of NFMIP



Highlights:

- Connects directly to HSPS.
- Challenges at the PCWTP site due to narrow spaces between structures.
- Busy infrastructure in US-90 and SE Timberwolf Ave. – possible conflicts.
- Typical Soil: Fine Sand.
- May require HDD due to potential wetland crossing(s).
- Piping Length: 15,500 feet approx. (up to Tyre Rd.)
- Piping exclusively in ROW.



Highlights:

- Represents challenges at the PCWTP's site due to narrow spaces between structures.
- Runs through dirt roads and parallel to the well battery.
- Connects to NFMIP through proposed parking lot.
- Typical Soil: Fine Sand.
- Option for open-cut (since wetlands are being avoided).
- Piping Length: 9,800 feet approx.



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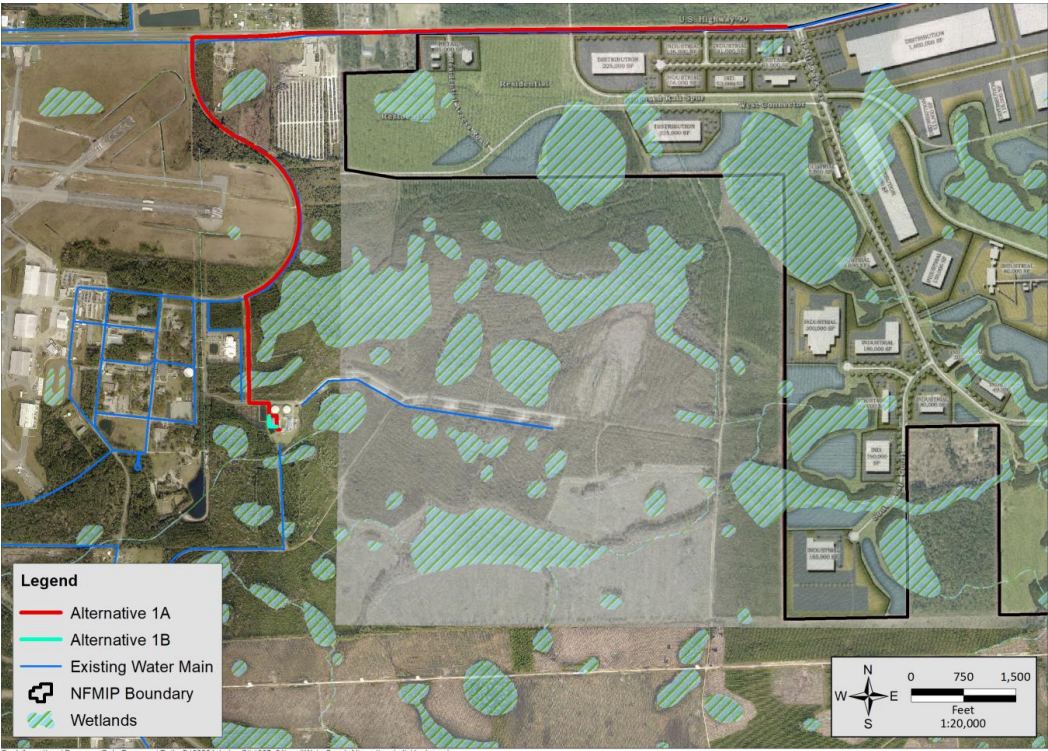
Highlights:

- Connects directly to HSPS.
- Challenges at the PCWTP site due to narrow spaces between structures.
- Busy infrastructure along SE Timberwolf Ave. – possible conflicts.
- Connects with NFMIP through the proposed residential area.
 - 5A to NFMIP boundary.
 - 5B loops with water main at US90.
- Typical Soil: Fine Sand.
- Option for open-cut (since wetlands are mostly avoided); one possible HDD.
- Piping Length:
 - 5A: 5,800 feet approx. (it is the shortest of the alternatives).
 - 5B: 13,300 LF (includes 5A).



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Alternative 1



Alternative 5A/5B



Alternative	Cost	-30% Cost	+50% Cost
1	\$6,323,000	\$4,426,100	\$9,484,500
5A	\$2,495,000	\$1,746,500	\$3,742,500
5A + 5B	\$5,498,000	\$3,848,600	\$8,247,000



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