



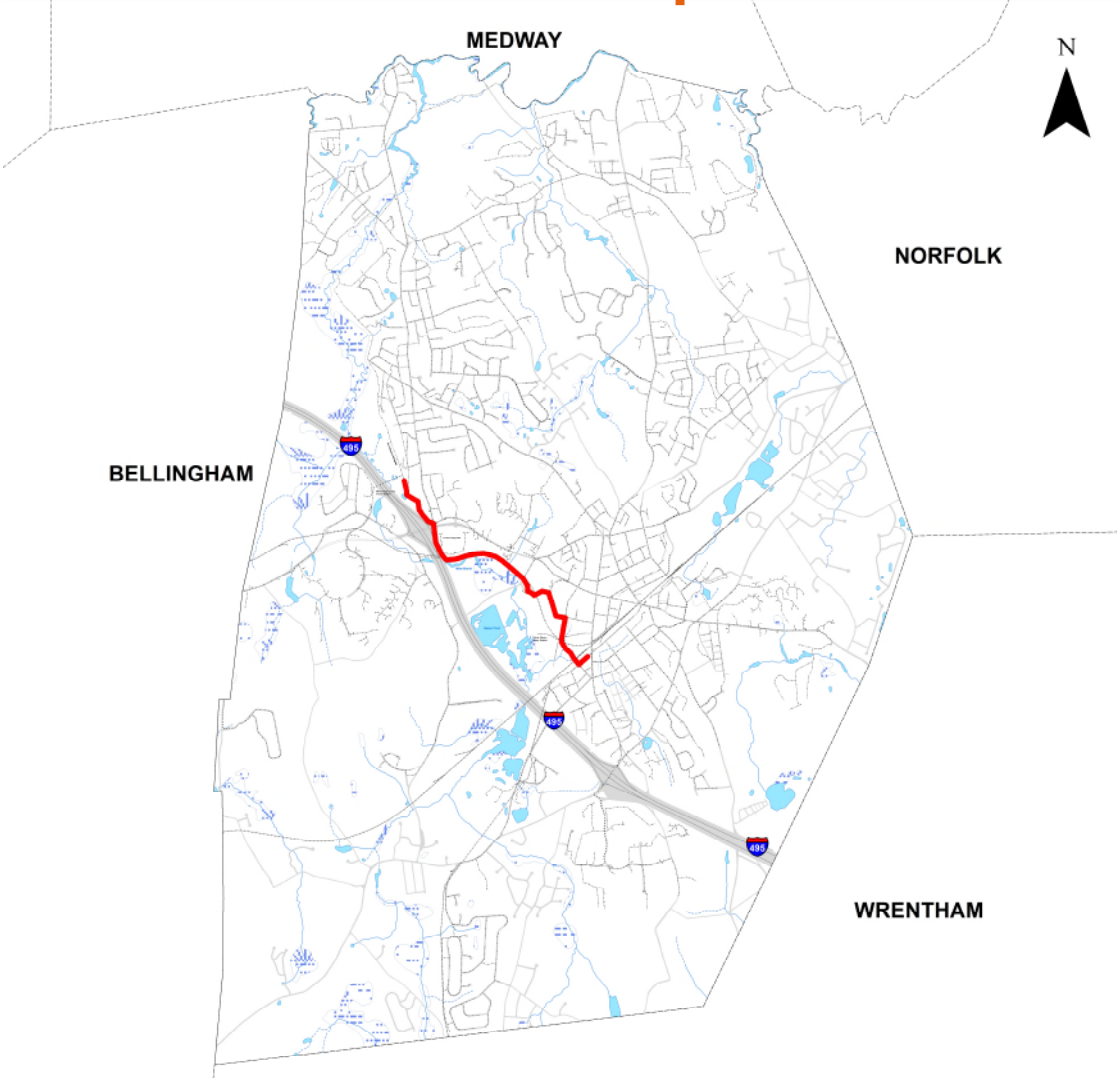
BEAVER STREET INTERCEPTOR REPLACEMENT

Alternatives Analysis

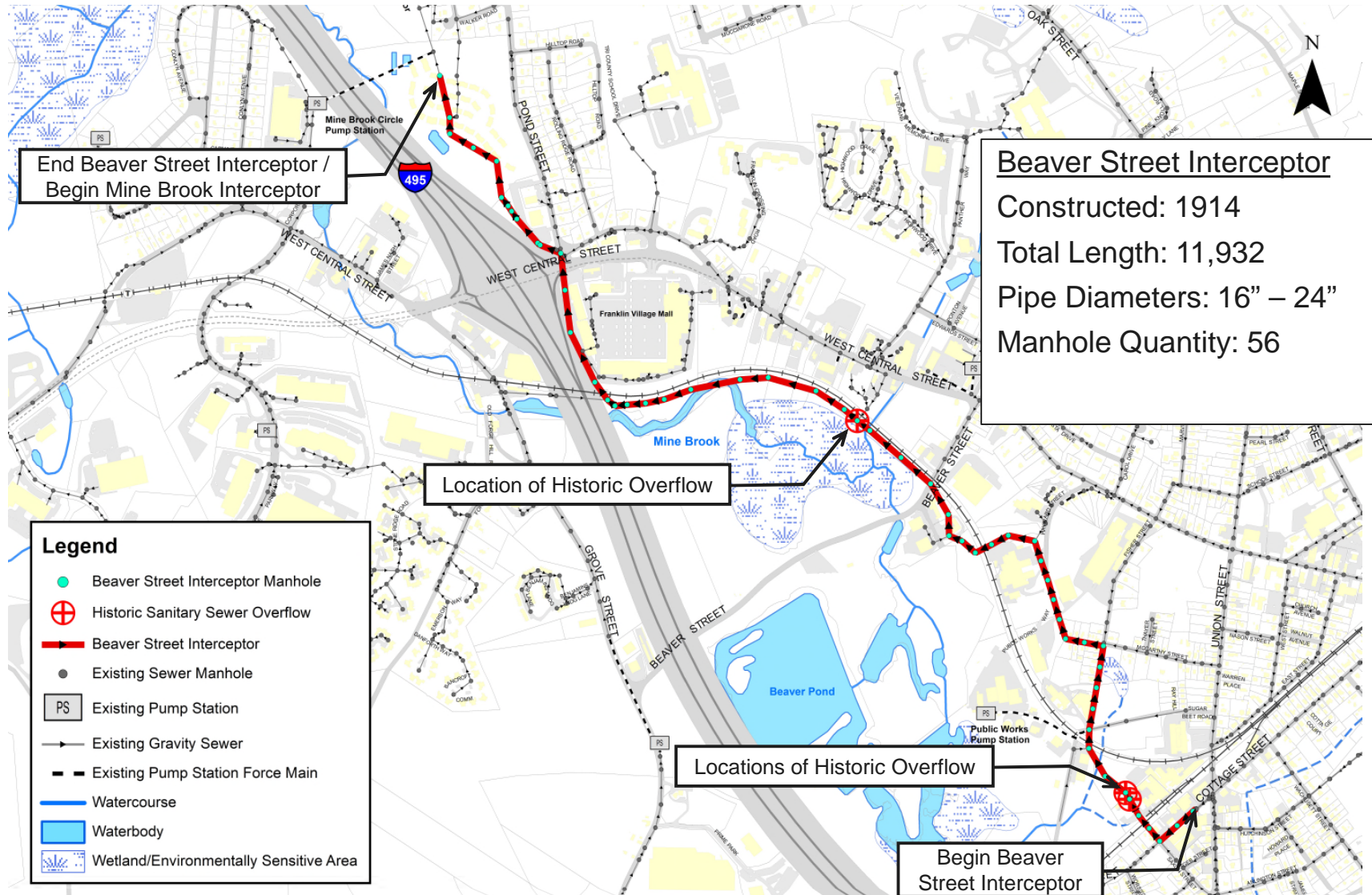
Franklin Town Council Meeting – October 21, 2020

Brutus Cantoreggi, DPW Director
Doug Martin, PE, Water & Sewer Superintendent
Scott Haynes, PE, Arcadis

Beaver Street Interceptor Location



Beaver Street Interceptor (BSI) Existing Conditions



End Beaver Street Interceptor /
Begin Mine Brook Interceptor

Beaver Street Interceptor
 Constructed: 1914
 Total Length: 11,932
 Pipe Diameters: 16" – 24"
 Manhole Quantity: 56

Location of Historic Overflow

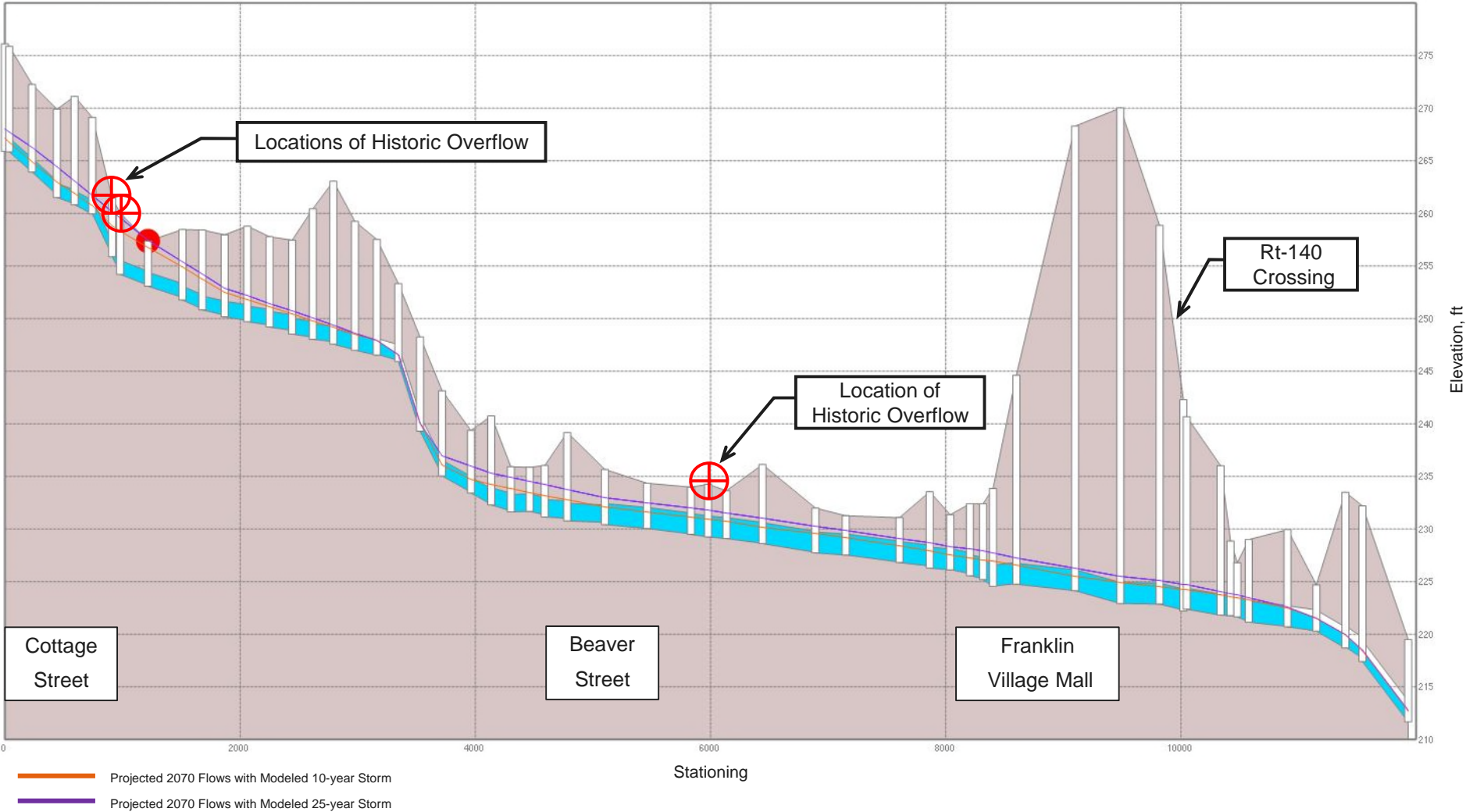
Legend

- Beaver Street Interceptor Manhole
- ⊕ Historic Sanitary Sewer Overflow
- Beaver Street Interceptor
- Existing Sewer Manhole
- PS Existing Pump Station
- Existing Gravity Sewer
- - - Existing Pump Station Force Main
- Watercourse
- Waterbody
- Wetland/Environmentally Sensitive Area

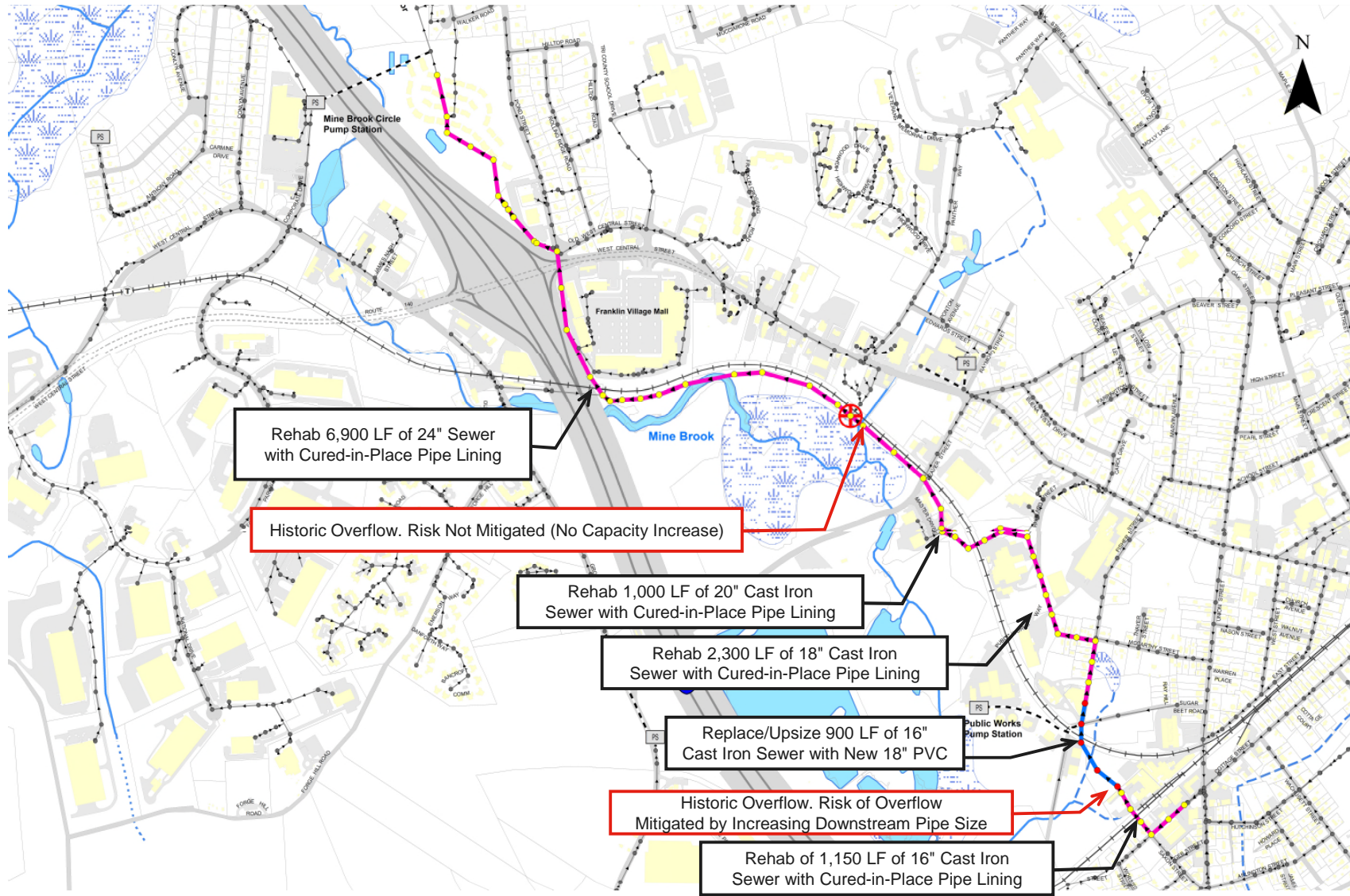
Locations of Historic Overflow

Begin Beaver
Street Interceptor

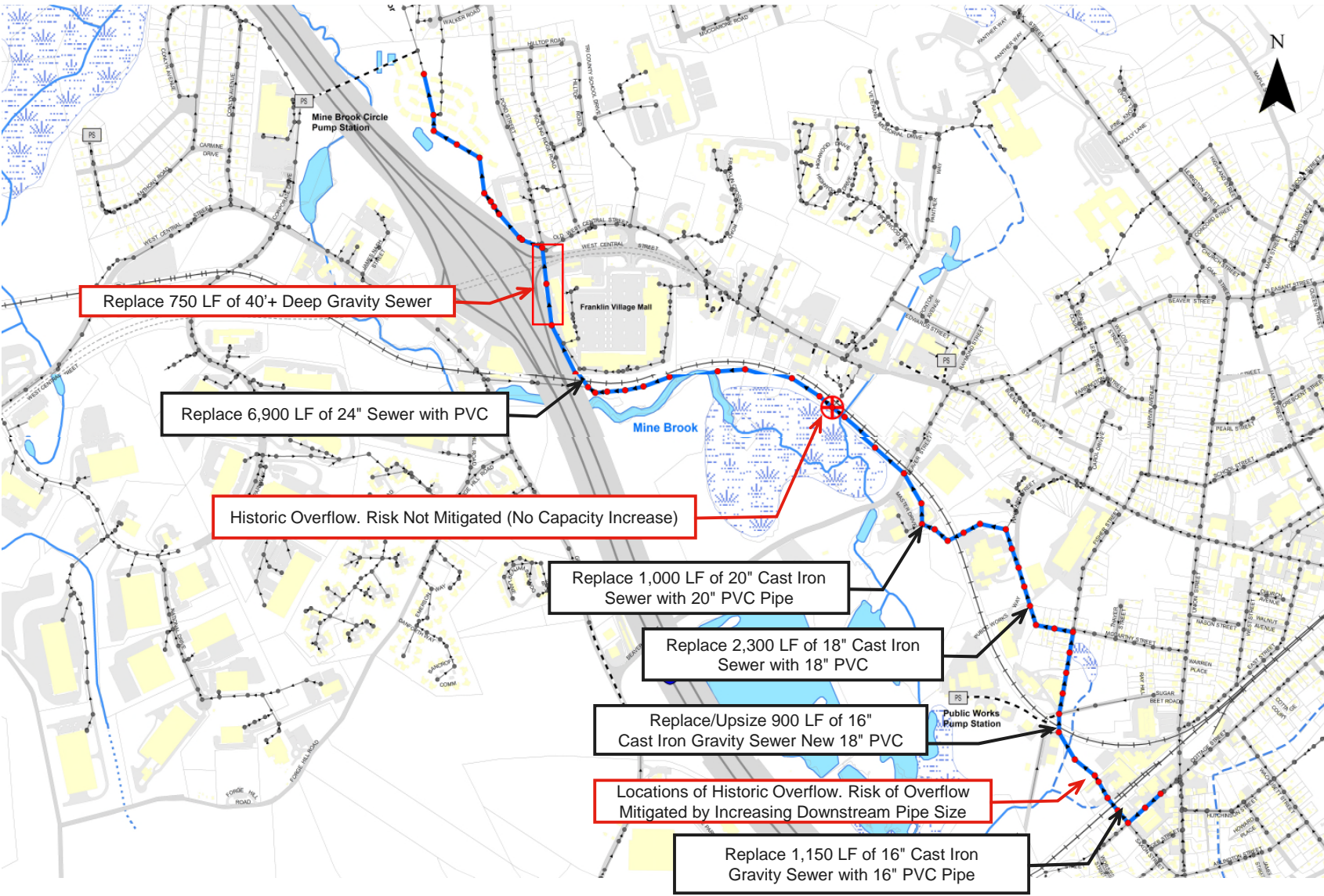
Existing Profile and Hydraulic Model at 50-year Buildout 10-year and 25-year Storm Events



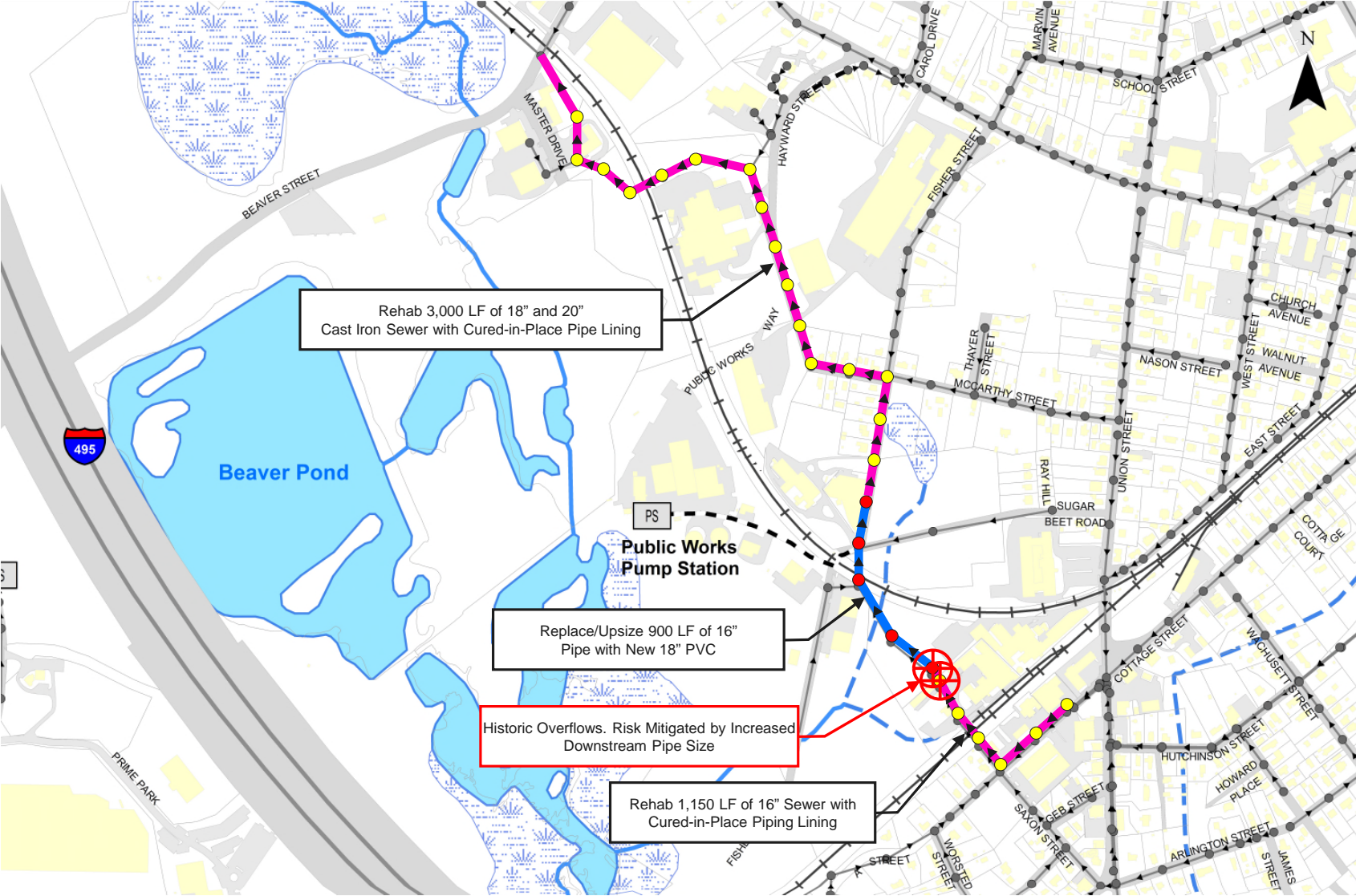
Alternative 1 – Rehabilitation of Existing BSI



Alternative 2 – BSI Replacement



Alternative 3 – Cottage St to Beaver St



Alternative 3 – Old West Central St to Mine Brook Int.



Project Cost Estimates and Comparison of Alternatives

Alternative	Cost Estimate
Alternative 1 – Rehabilitation of Existing BSI	\$9M
Alternative 2 – BSI Replacement	\$13M
Alternative 3 – Rehabilitation and Realignment of BSI	\$25M

Parameter	Relative Weight or Level of Importance	Alternative 1	Alternative 2	Alternative 3
Construction Cost	20%	5	3	2
Reliability of Design/Operation	10%	3	2	5
Risk of Overflows	20%	2	3	5
Environmental Concerns/Risk	15%	2	1	5
Maintenance	10%	3	3	2
Accessibility/Easements	15%	1	1	4
Impacts to Residents/Businesses	5%	4	4	3
Permitting Requirements	5%	2	1	3
	100%			
	Weighted Average	2.8	2.3	3.8
1 - Highly Disadvantageous , 2 – Disadvantageous, 3 – Neutral, 4 – Advantageous, 5 - Highly Advantageous				

QUESTIONS

