



Massachusetts Water Resources Authority

Spot Pond tank and pump station

January, 2015

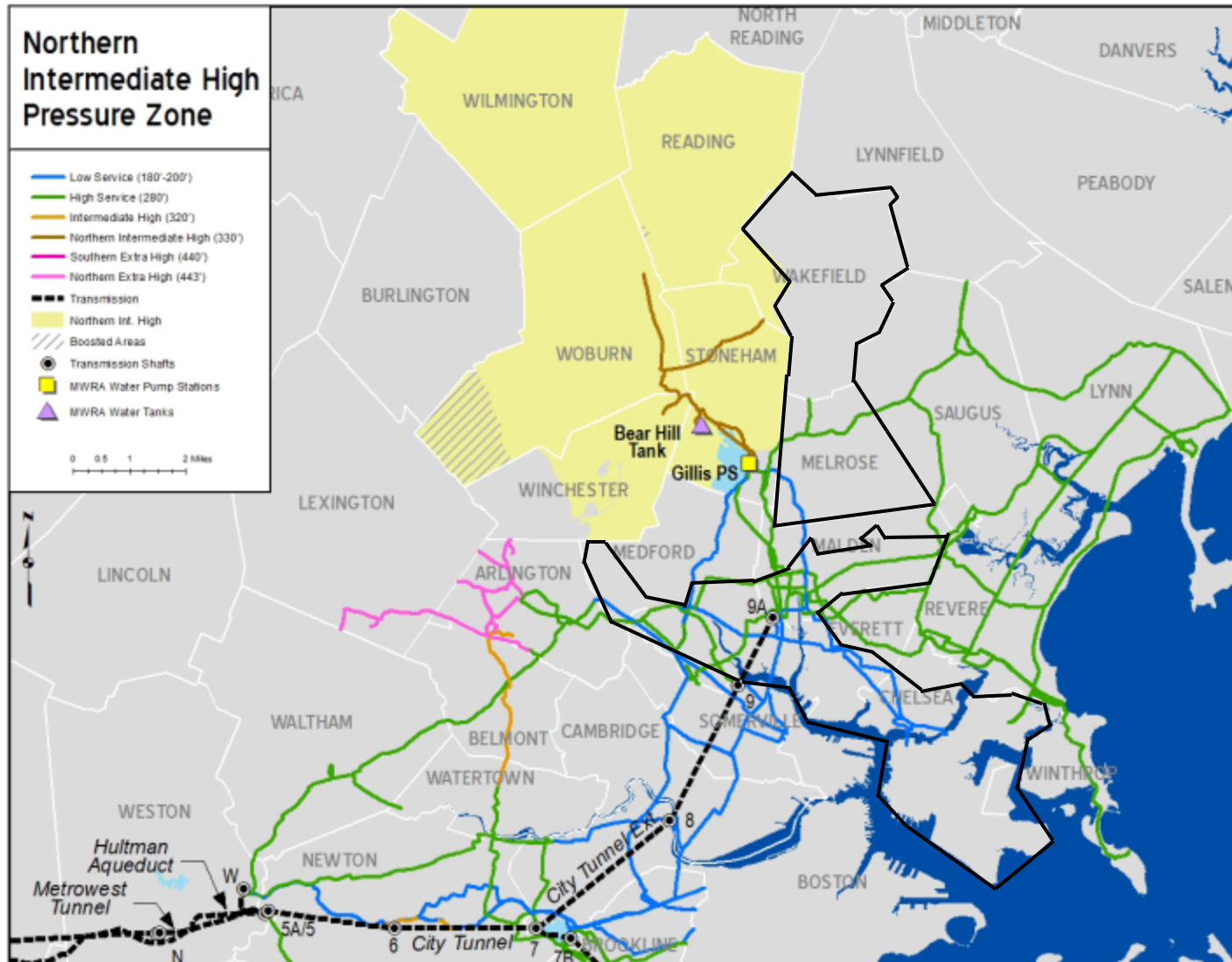


Outline

- Area Served by Project
- Need for Project
- Project approach: Design / build.
- Project features
- Construction photos
- Operational Challenges



Area Served by Project



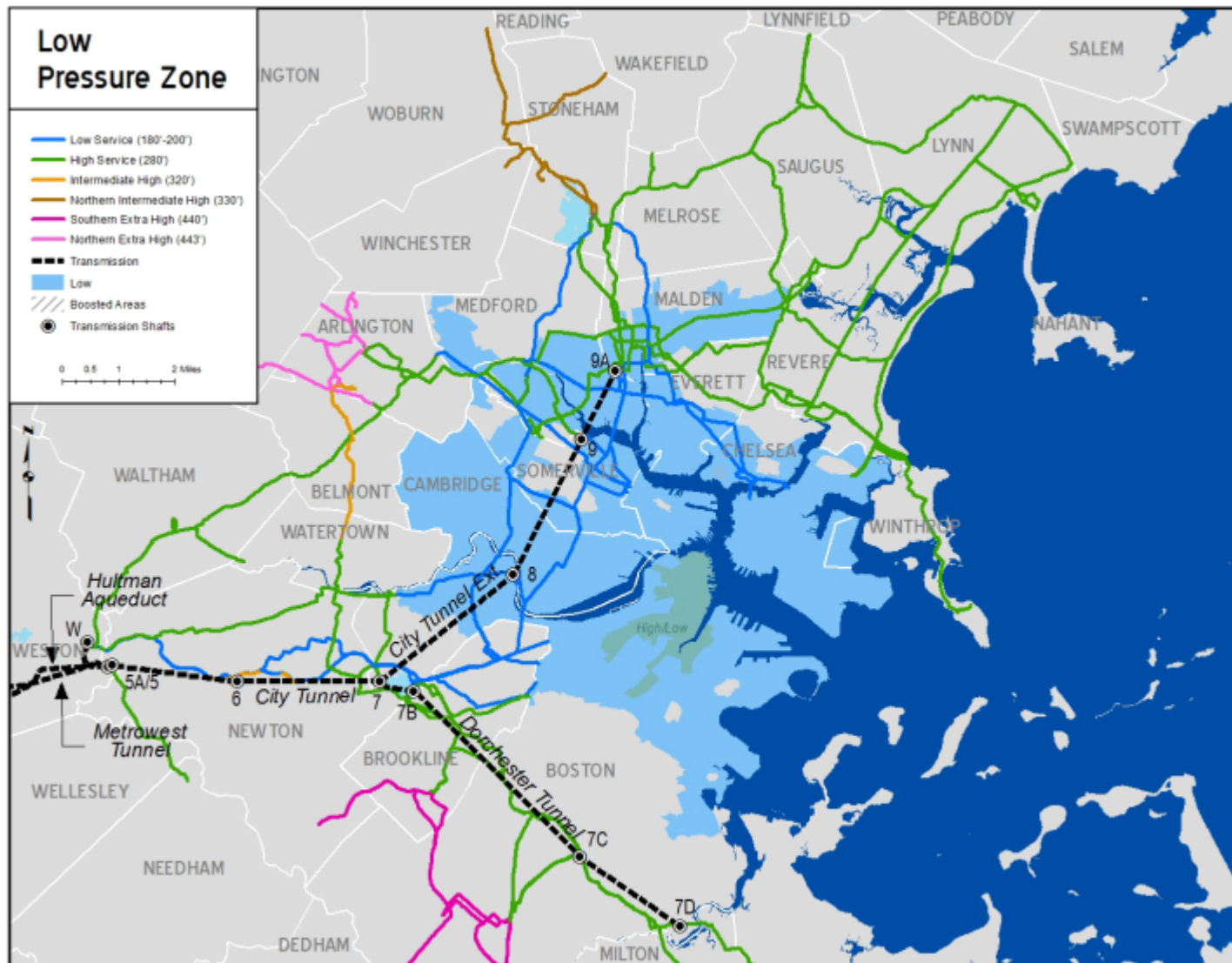


Need for Project: Gillis Pump station redundancy



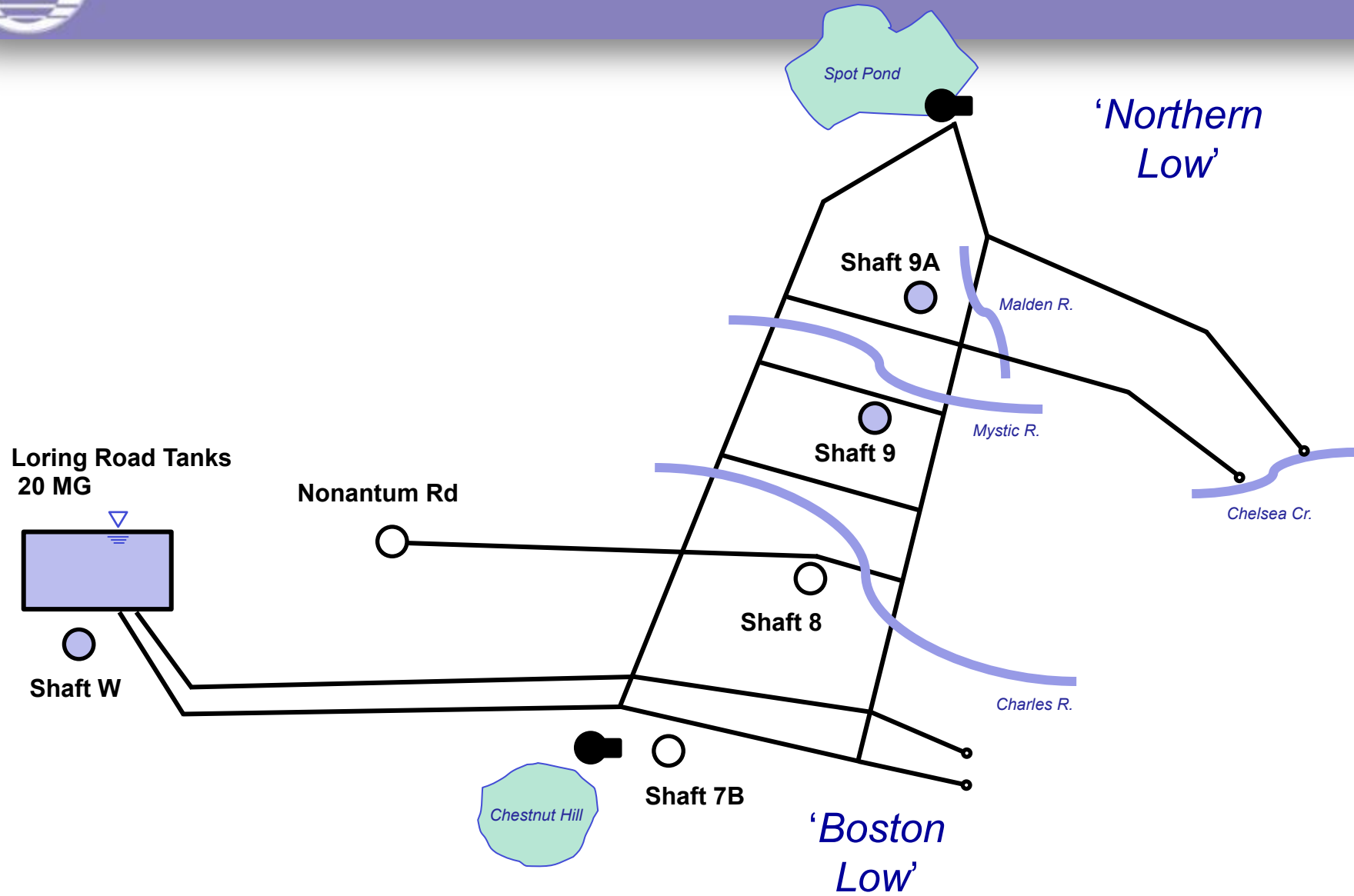


Need for Project: Low Service System





Need for Project: No Storage in "Northern Low"





Two Problems. One project.

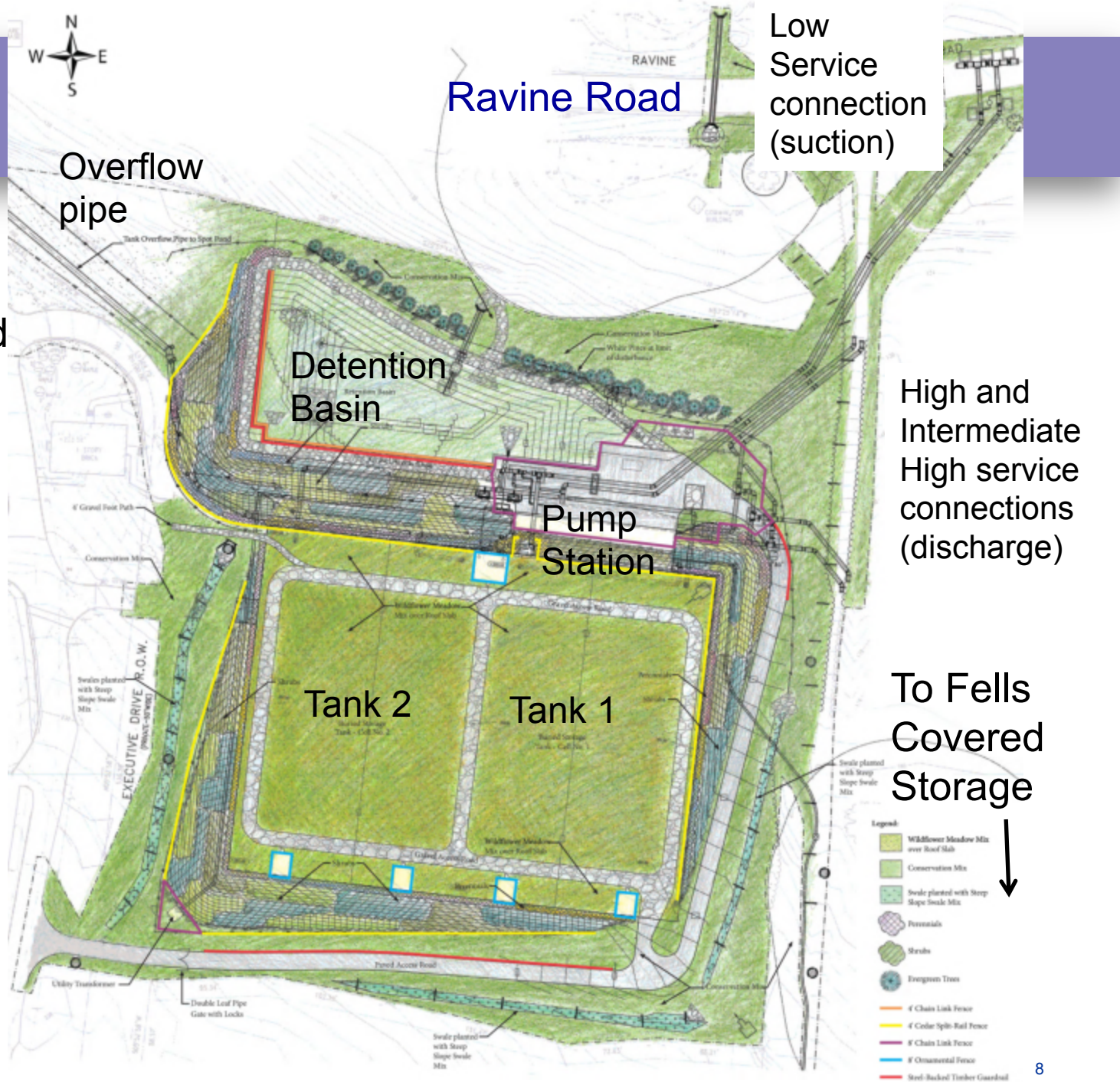
- Spot Pond Water Storage Facility
- Design/build project awarded to Walsh Construction Company in November 2011
- Project consists of
 - 20 MG storage tank in two separate cells
 - Pump station for NIH and NH service area
- Construction underway



Plan:

To Gillis P.S. and Spot Pond

New England Regional Hospital





Rendering:





Rendering:





Site Prior to Construction, October, 2010





Site Prior to Construction, October, 2010





Blasting Operation, Oct, 2012





Pump Station Suction Piping, June, 2013





Pump Station Slab, July, 2013





Miles of Steel Rebar, July, 2013





Rock Crushing and Material Sorting, Sept, 2013





Steel and Concrete for Roof Slab, Sept, 2013





Clearing Pipeline Road for New Pipe Installation, Sept, 2013





Concrete Slab Placement, Oct, 2013





Starting to Take Shape, Oct, 2013





Tons of Steel to Tie





Interior Baffle Walls, Oct, 2103





Staging to Support Roof Slab Installation, Oct, 2013





Staging to Support Roof Slab, Oct, 2013





Tank Overflow pipe Installation, March 2014





Jacking Pit with Soil Being Removed, March, 2014





Last Section of jacked pipe, March, 2014





Mobile Pumps Behind Gillis Pump Station, March, 2014





Standby Pump If Needed, March, 2014





Discharge Connection to Section 89, March, 2104





Overflow Pipe completion, May, 2014





Tank 2 Interior, May, 2014





Pump Station Piping, July, 2014





Switch gear, July 2014





Low Service Tie-in, Ravine Road, September, 2014





Duct bank installation in pipeline road, September, 2014





Pump Station, September, 2014





Landscaping underway, September, 2014



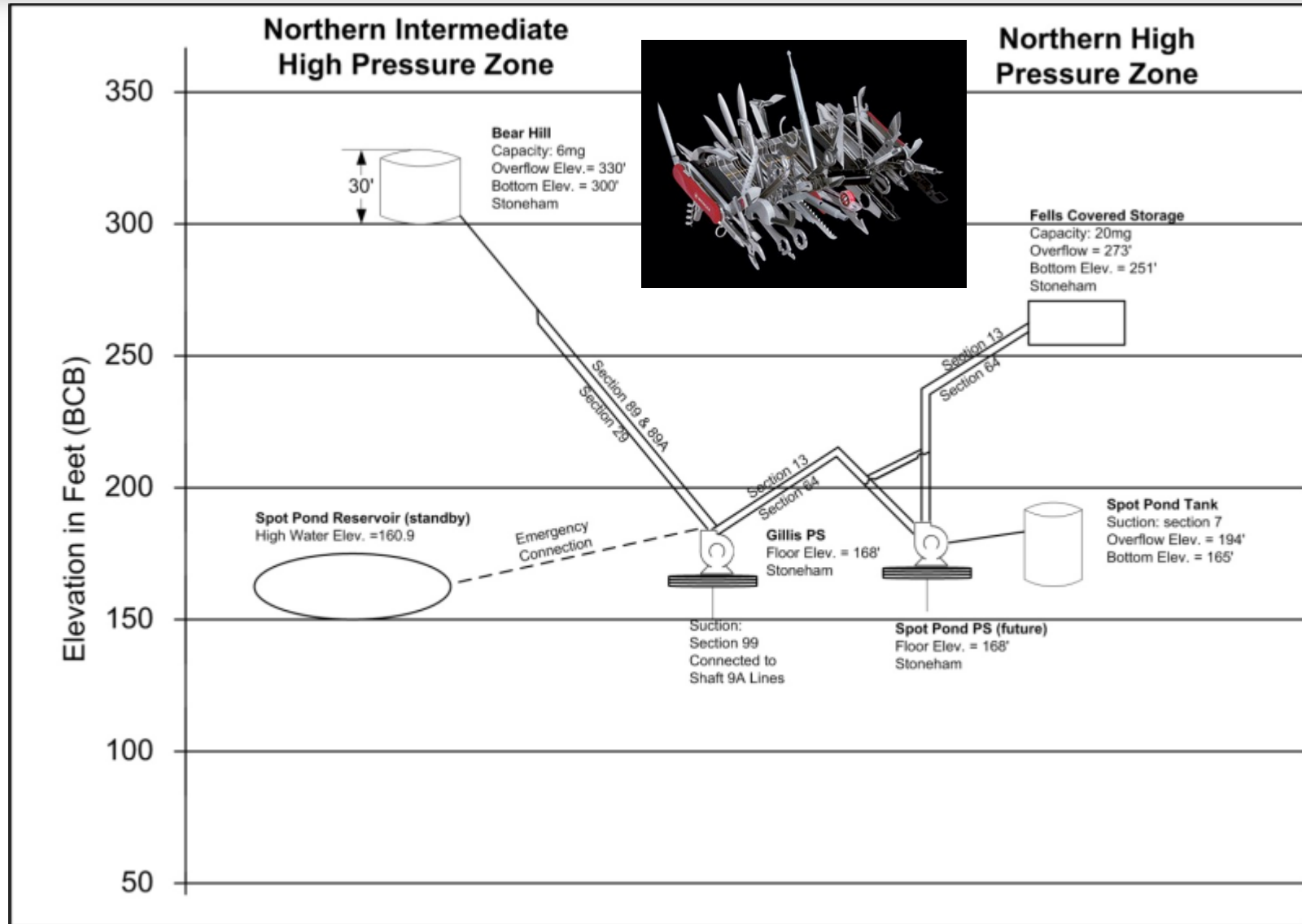


Slope Protection, Oct, 2014



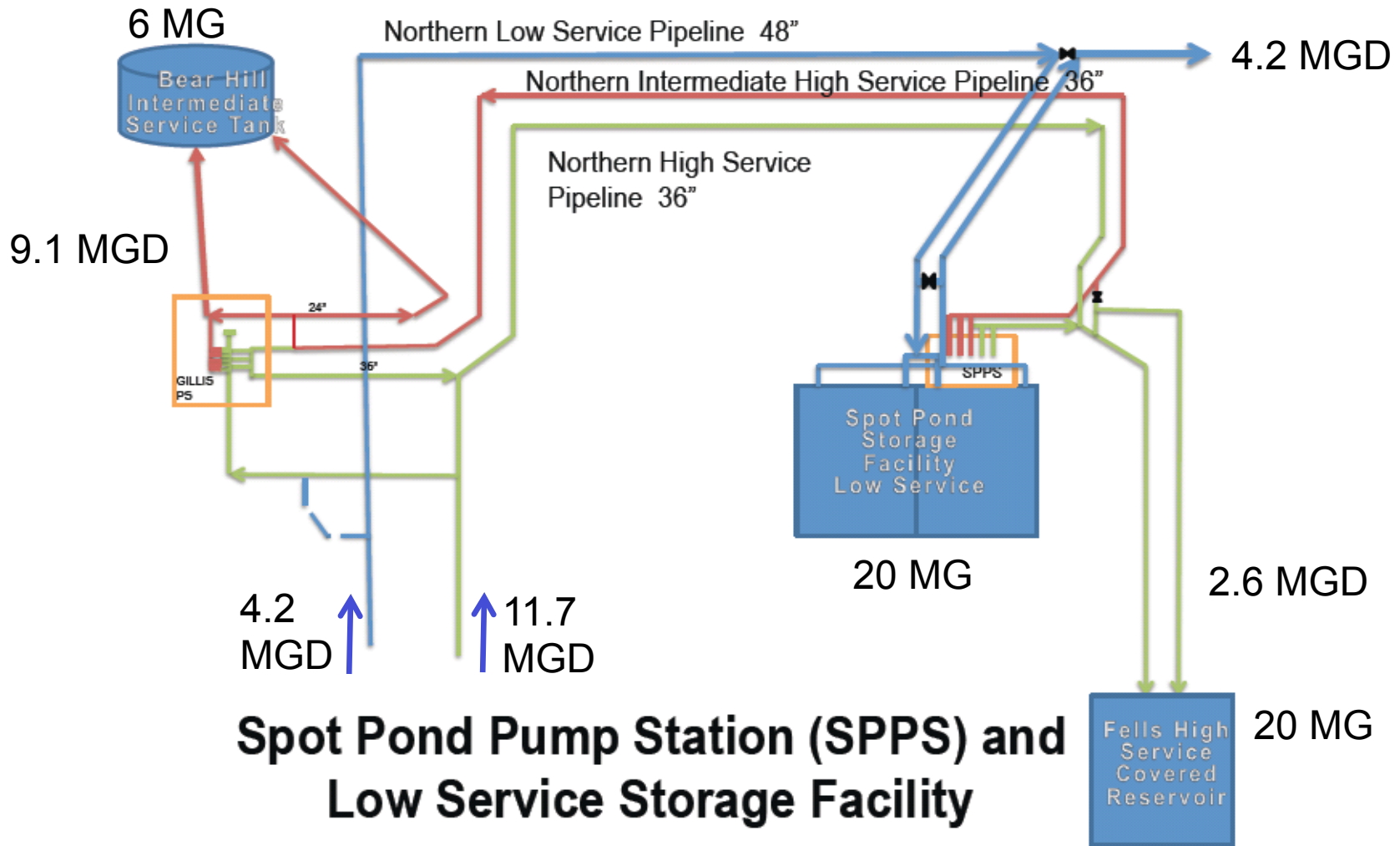


Northern High/Northern Intermediate High Pumping





Operational Challenges





Low Service System

