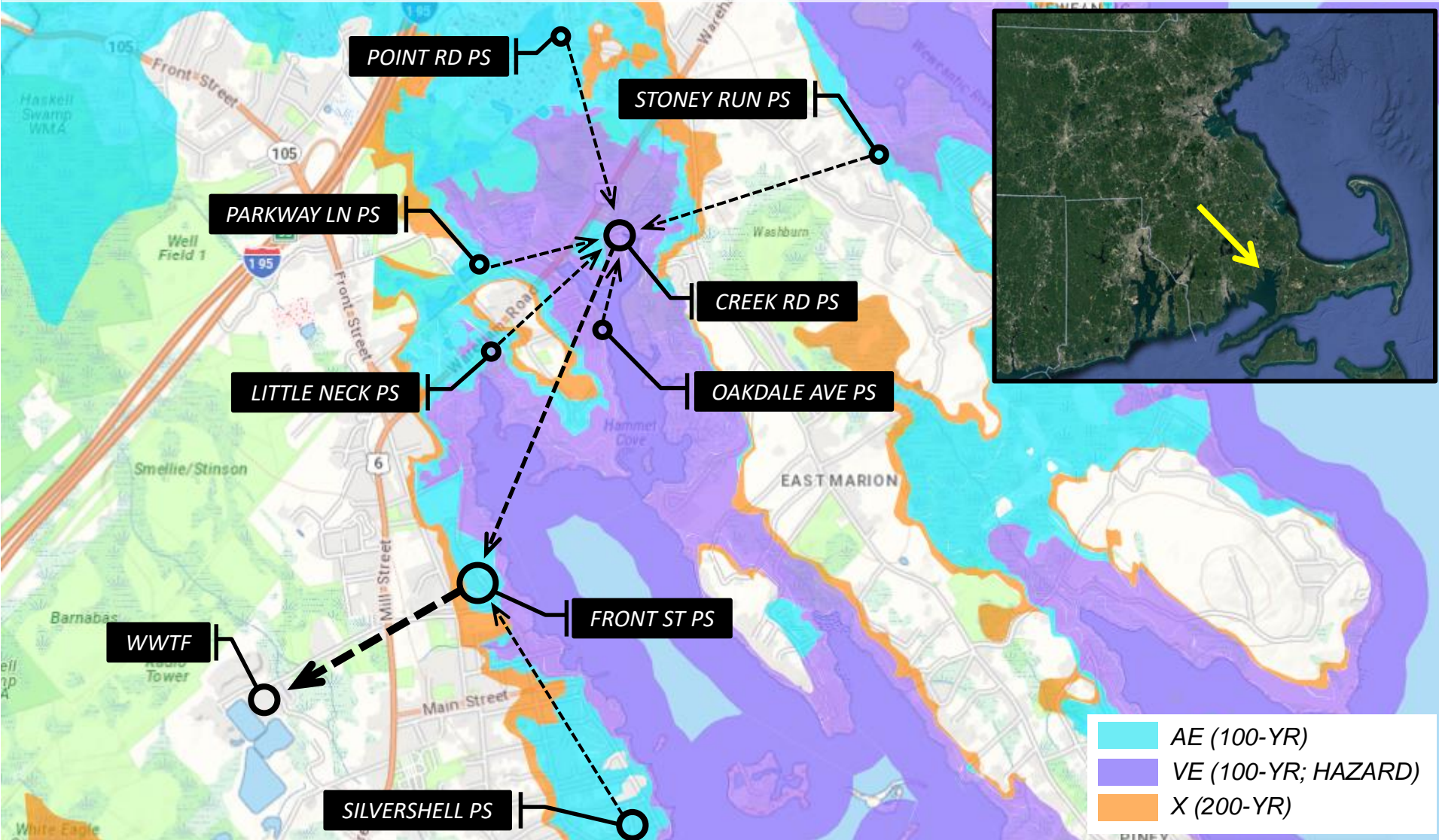


Accelerating the fortification of coastal pump stations with grant funding in Marion, MA

William C. Chandler, PE
Weston & Sampson



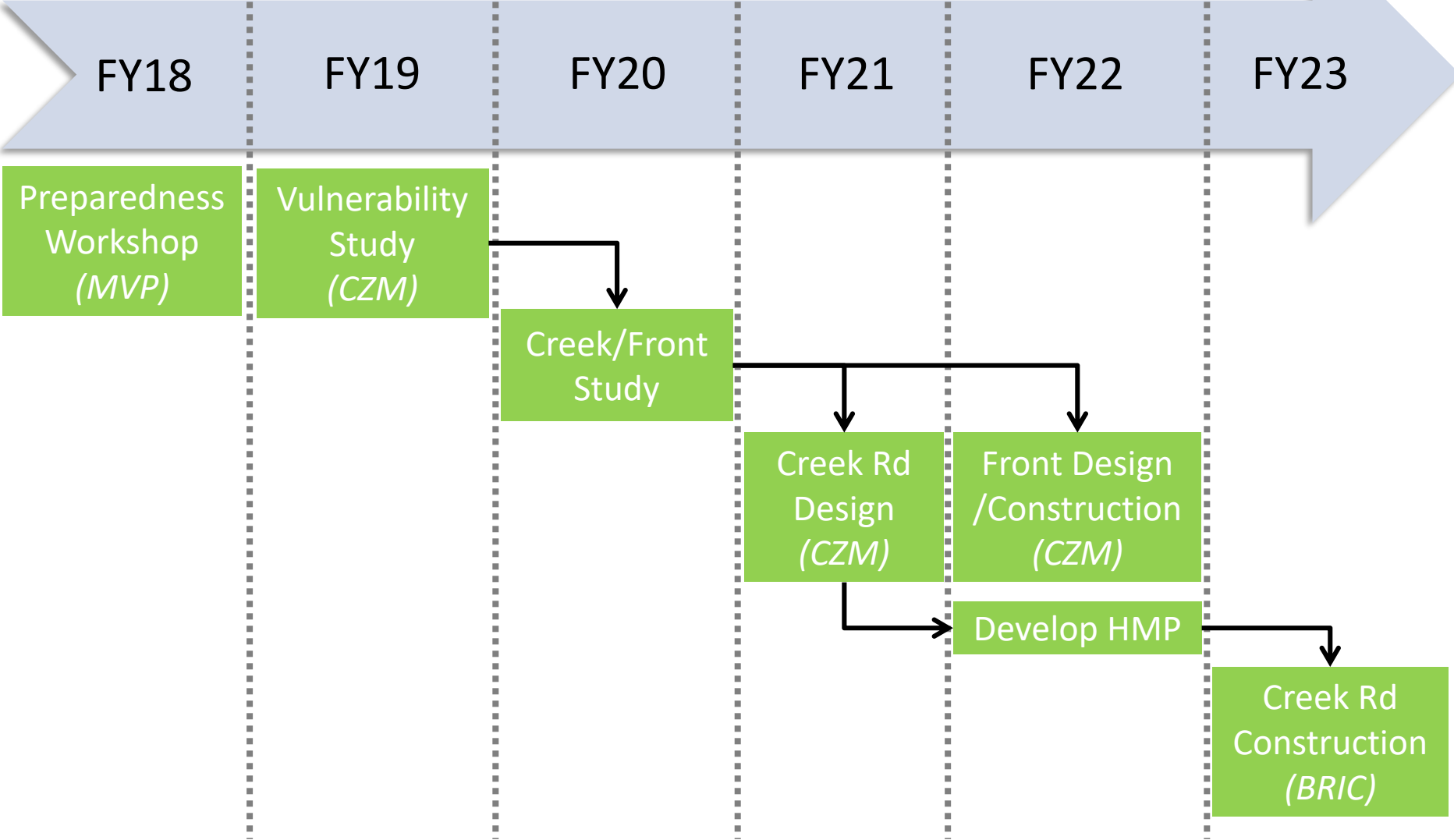
Marion Sewer System



Grant Overview

<i>PROGRAM</i>	CZM (MA)	MVP (MA)	BRIC (FEMA)
<i>MAX AWARD</i>	<ul style="list-style-type: none">• \$2M	<ul style="list-style-type: none">• \$30k/\$3M	<ul style="list-style-type: none">• \$1M/\$50M
<i>MATCH</i>	<ul style="list-style-type: none">• Up to 25%	<ul style="list-style-type: none">• 10-25%	<ul style="list-style-type: none">• 10-25%
<i>CHALLENGE</i>	<ul style="list-style-type: none">• Schedule (~Nov. – June 30)	<ul style="list-style-type: none">• Planning grant required for action grants• Nature-based solutions	<ul style="list-style-type: none">• Highly competitive

Timeline



Vulnerability Study (CZM FY19)

PUMP STATION	EX. GRADE	EX. FLOOD ZONE	2045 DFE	2080 DFE
CREEK RD	8.7	VE 17	21.0	23.1
FRONT ST	7.2	AE 13	17.7	22.1
LITTLE NECK	15.5	AE 15	20.7	23.9
OAKDALE AVE	6.0	VE 17	21.1	24.3
PARKWAY LN	11.9	AE 16	22.5	25.7
POINT RD	13.4	AE 16	21.4	24.6
SILVER SHELL	10.3	AE 16	21.1	24.2
STONE Y RUN	14.9	AE 16	20.7	23.9

Creek Road PS

- Damaged controls
- Safety hazards
- Restricted site access
- Near system capacity
- Consequences of failure

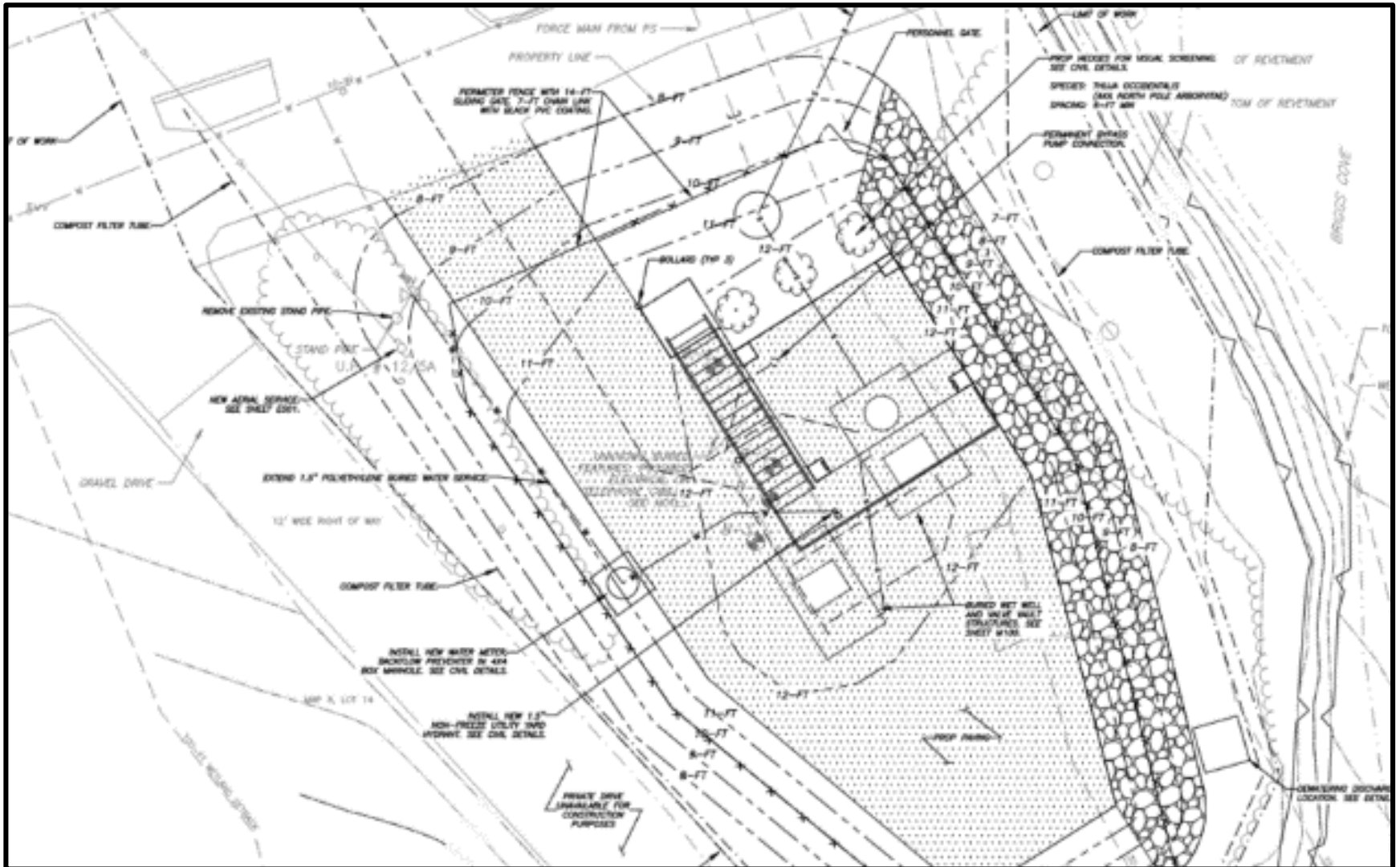


Creek Road PS

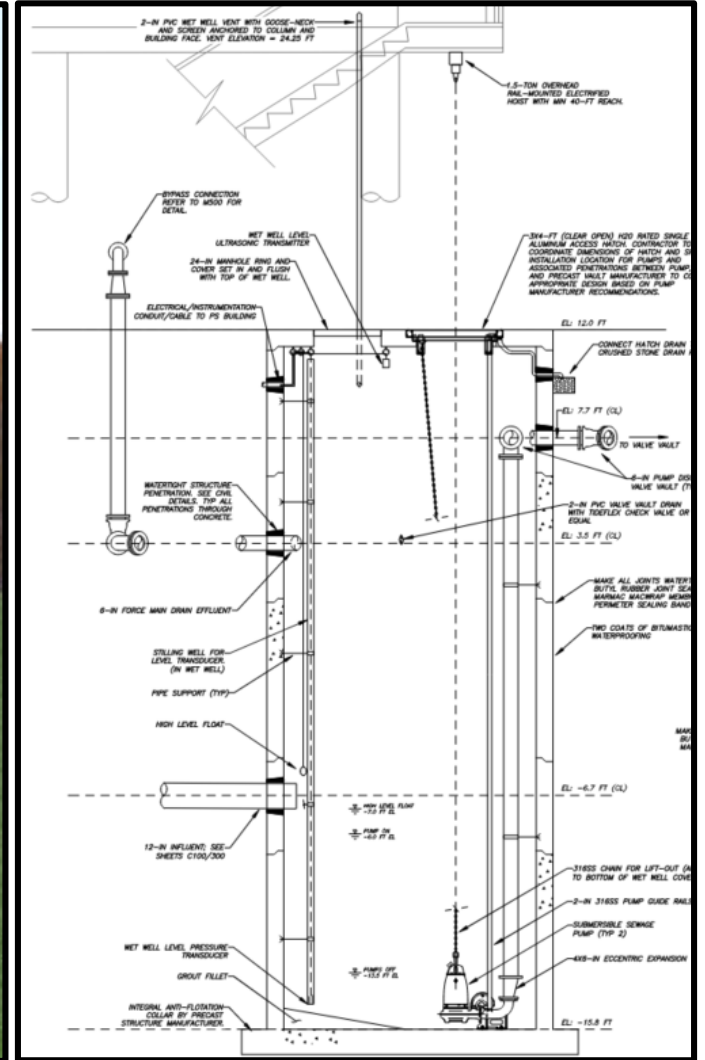
- Design (CZM FY21)
- Construction (BRIC FY23)
- Strong community support
- Developer contributions



Creek Road PS

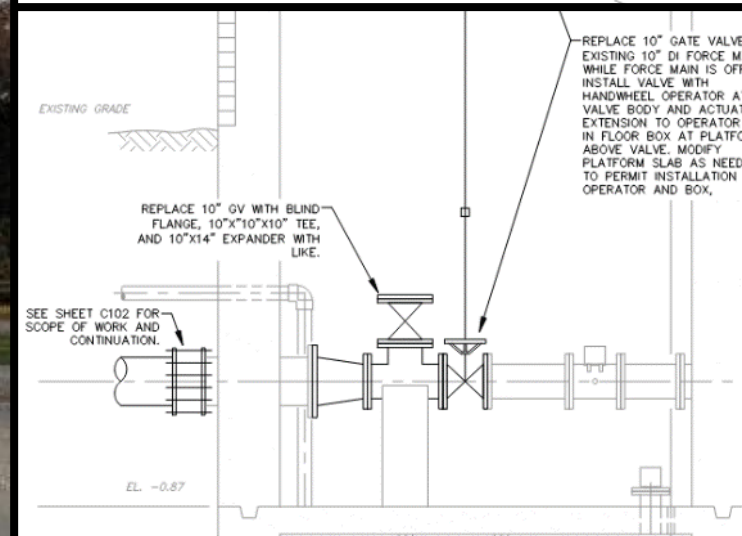
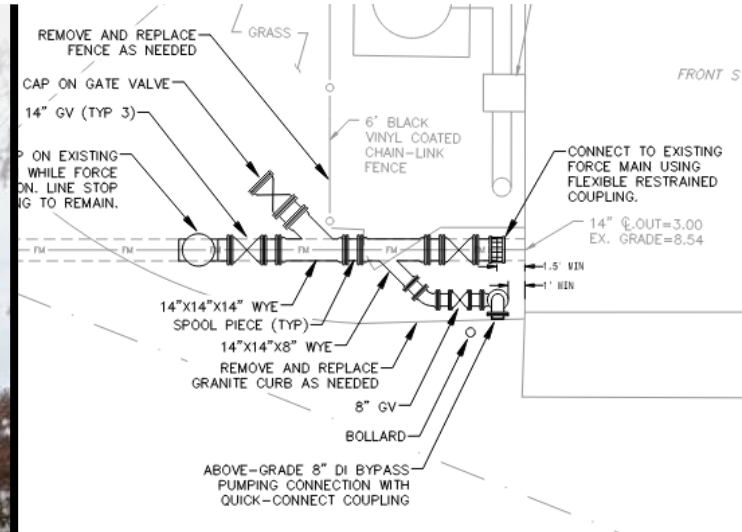


Creek Road PS



Front Street PS

- Design/Construction (CZM FY22)
 - Force main testing
 - Preliminary structural evaluation
 - Bypass connection
 - Misc. PS/FM improvement
 - Sets up future grant work



Next Steps

- Oakdale Ave PS – Major improvements
- Front St PS – Parallel force main
- Bypass connections at other five PS's
- Front St PS – Phase 2 (structural impr.)

Conclusions

- Grant funding is readily available
 - Funding agencies want to help
 - Maximizes Town funding
 - Accelerates schedule
 - Target appropriate sources
- Plan via grant
- Residents appreciate proactive approach to resilience

thank you
westonandsampson.com