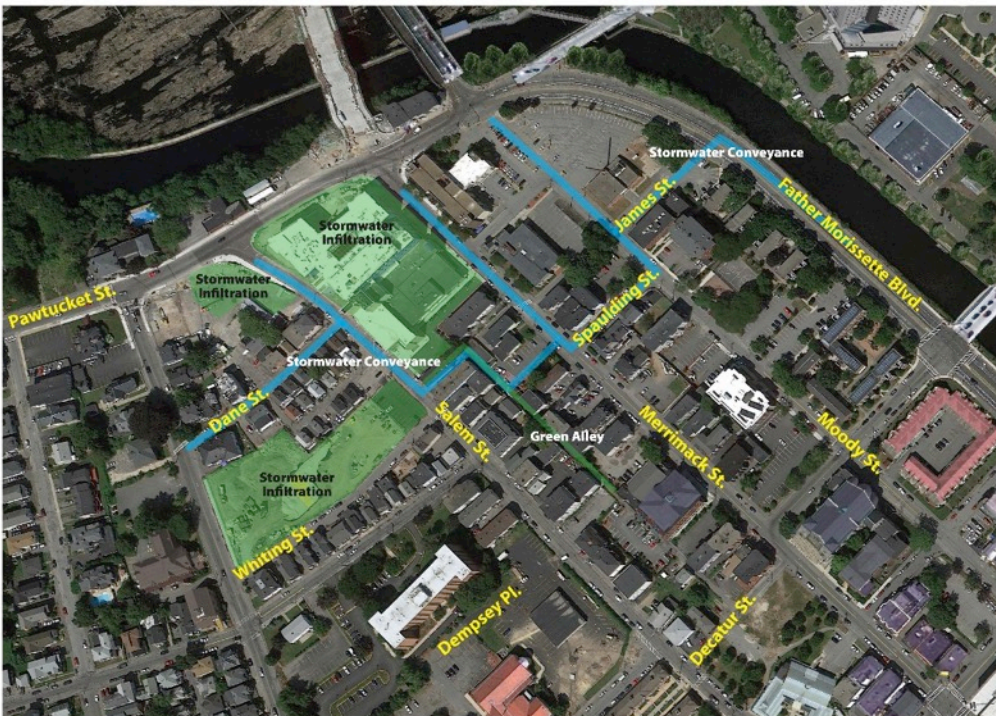




DECATUR WAY: GREEN ALLEY

WATER, ART, & YOU



LEGEND
Pipes

OVERVIEW MAP

NEWEA
CSO/Wet Weather
Issues Specialty
Conference

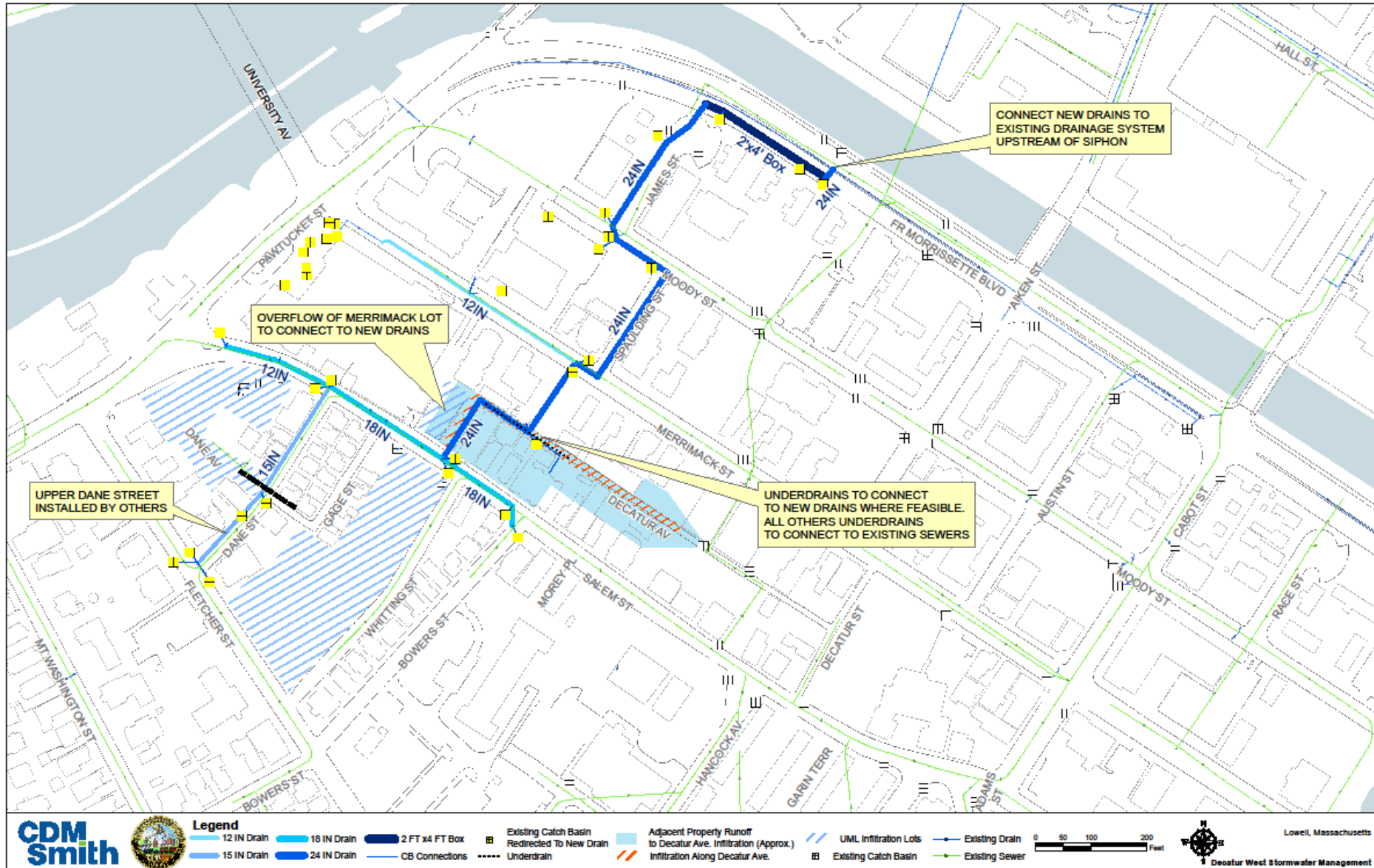
UMASS Lowell Inn &
Conference Center
Lowell, MA
October 27, 2015

Michael Dodson, RLA

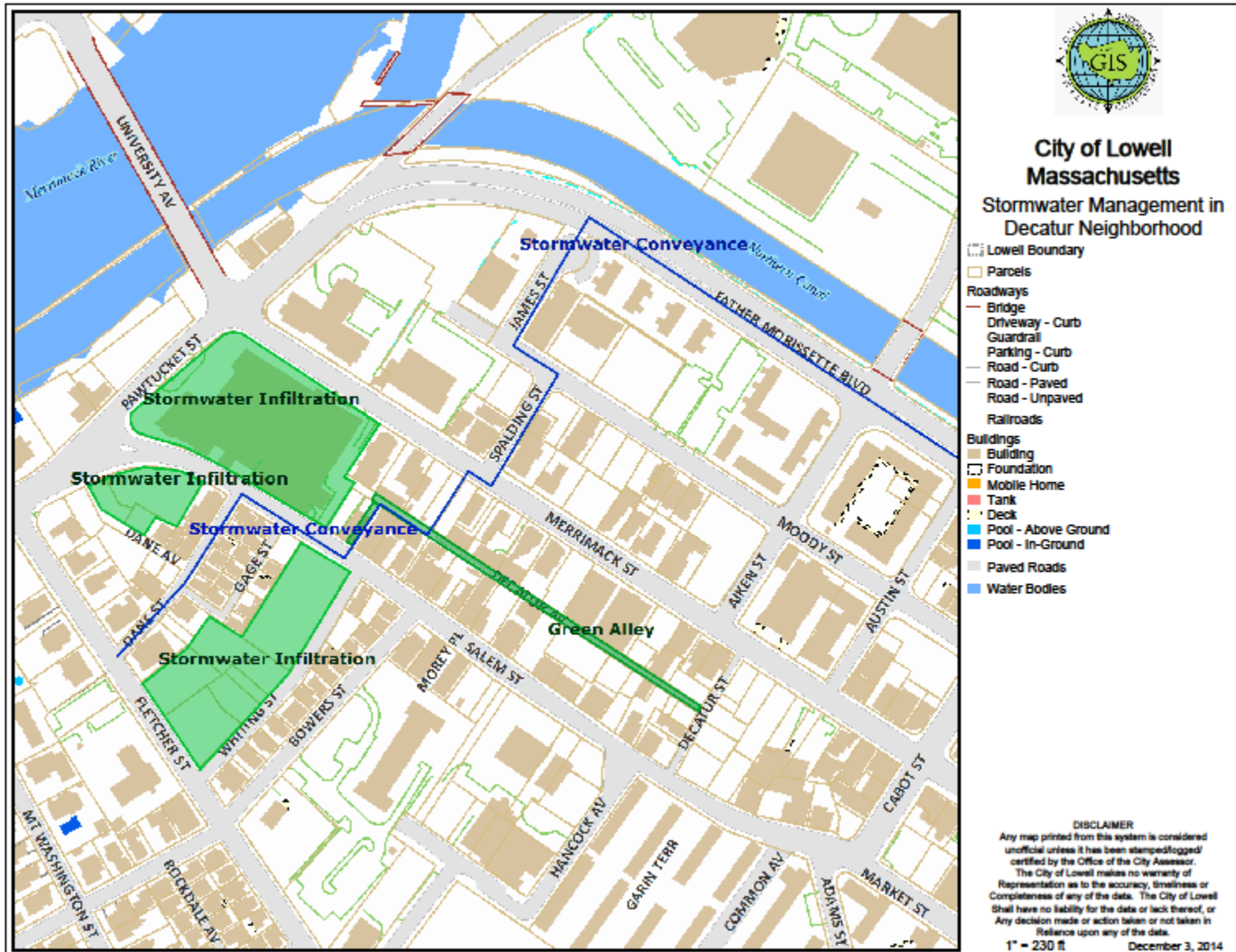
OVERVIEW

- Who?
- What?
- When?
- Where?
- Why?

Stormwater Conveyance in Decatur Neighborhood



Stormwater Conveyance in Decatur Neighborhood



Existing Photos



Existing Photos



Existing Photos



Porous Pavements

- Porous Asphalt
- Precast Interlocking Permeable Pavers
- Cast-in-Place Pervious Concrete
- Precast Pervious Concrete

Precast Pervious Concrete

Stormcrete™

**Modular Precast
Porous Concrete Stormwater System**



Precast Pervious Concrete: Pros and Cons

PROS

- Light color = high albedo
- Formed in a controlled environment
- Cleaning/replacing panels easier than cast-in-place pervious concrete
- Different standard size panels are available

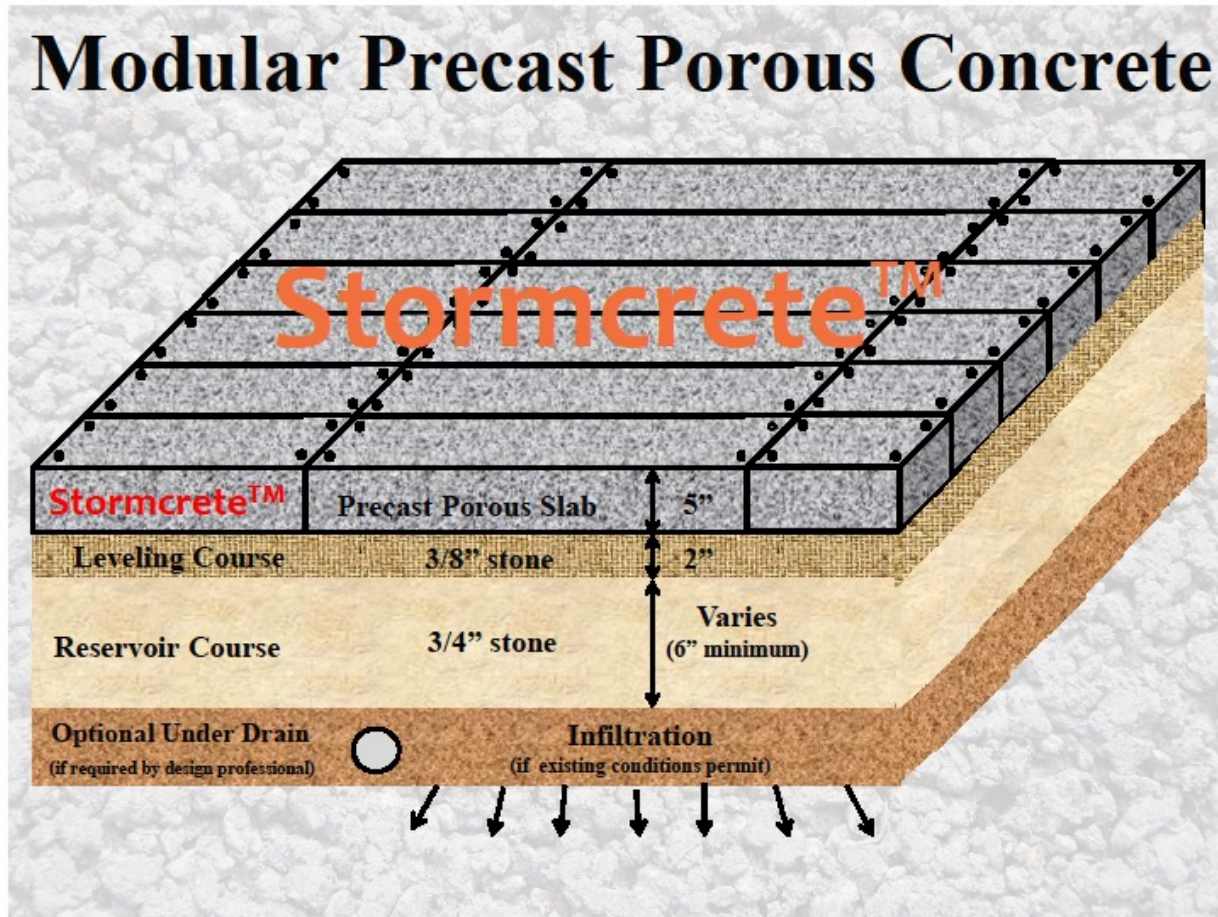
CONS

- Potentially more expensive

Precast Pervious Concrete



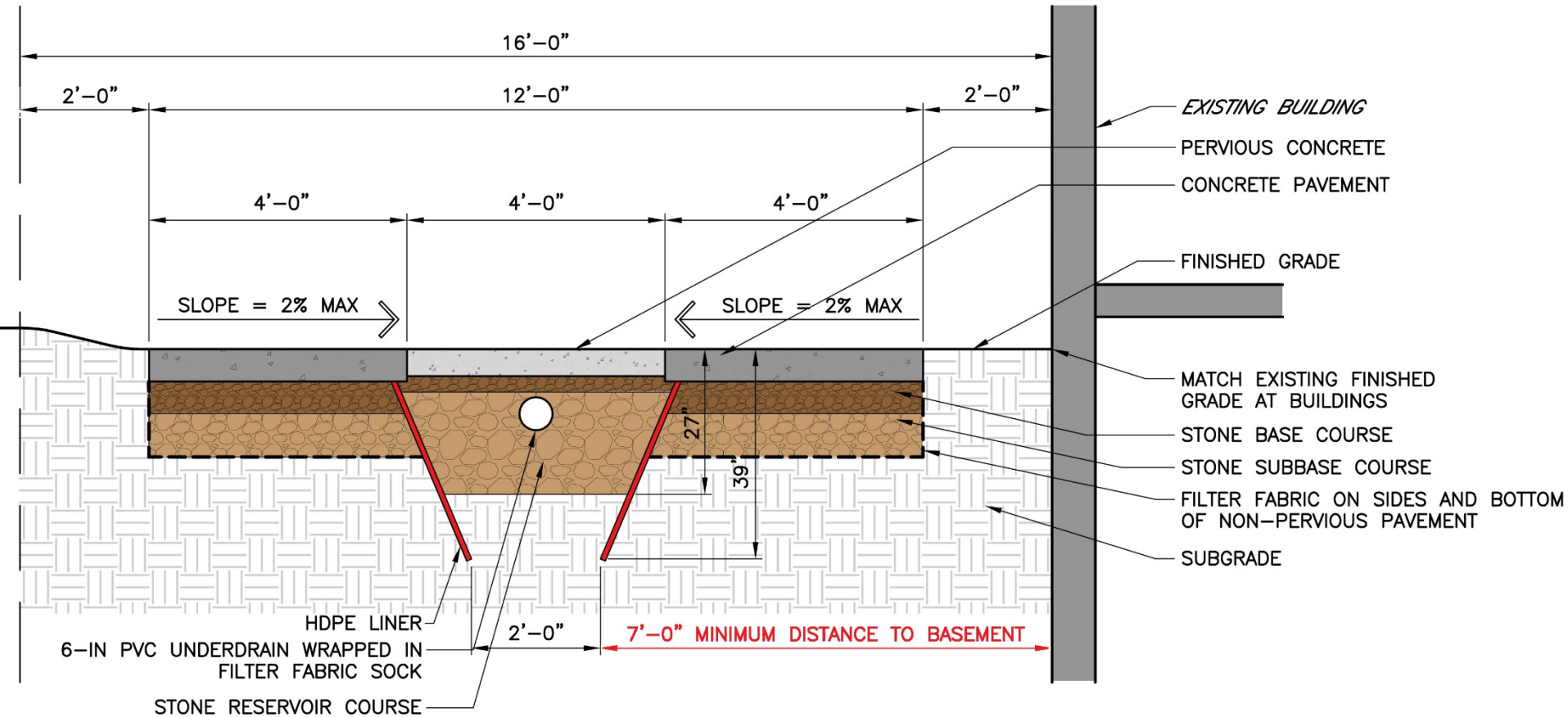
Precast Pervious Concrete: Cross Section Example



Maintenance

- Inspect at least once per year to examine surface infiltration rates.
- Vacuum as much as 2 to 4 times per year to remove solids and debris and keep voids open.
- Power wash can be used to dislodge trapped particles.
- Light salting during winter months is acceptable.

Typical Section



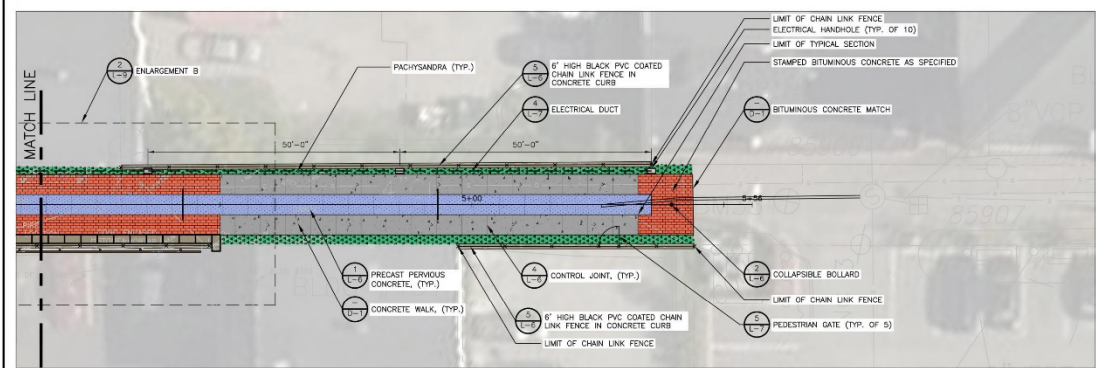
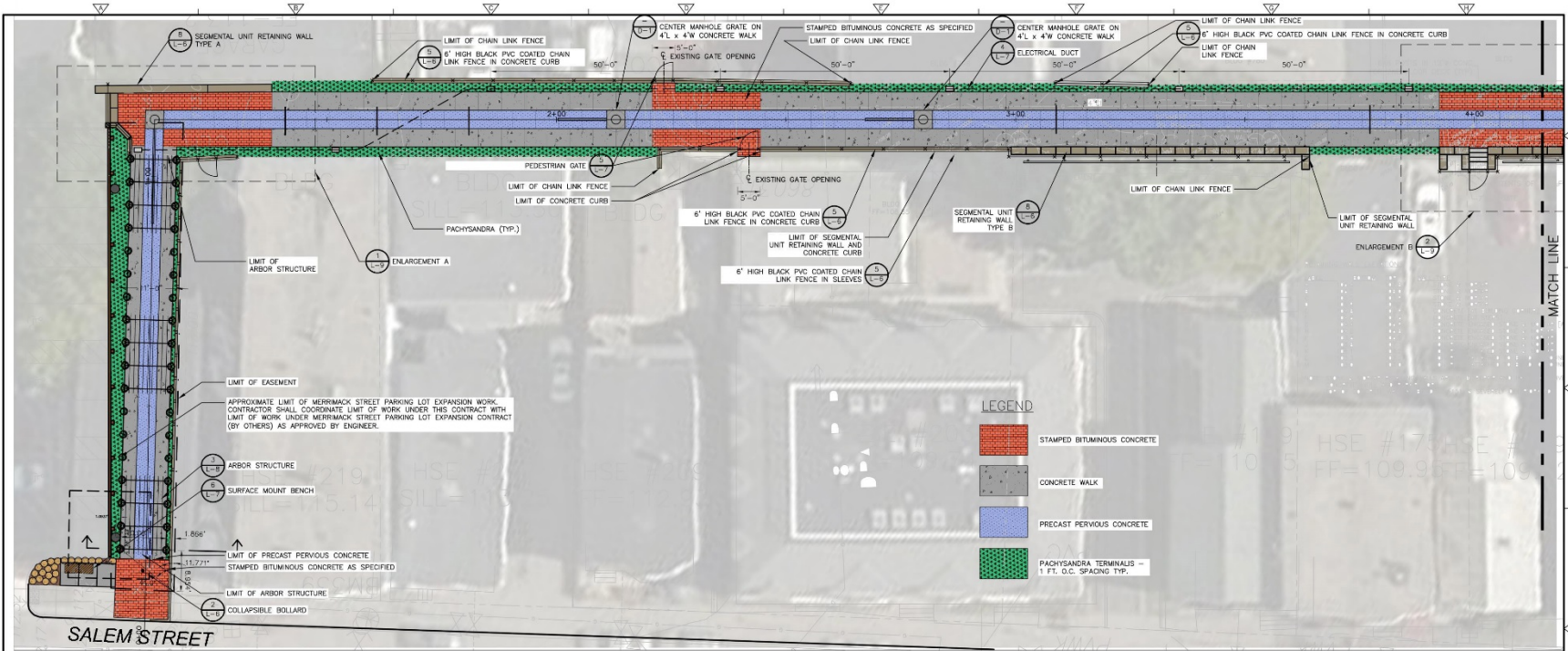




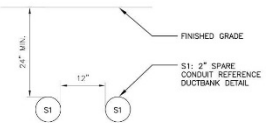
Decatur Green Alley - Proposed Condition
 Lowell, Massachusetts

February 2015

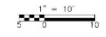
Site Plan



- LAYOUT GENERAL NOTES:**
- EXISTING SURVEY MONUMENTS OR CONTROL POINTS SHALL BE FLAGGED AND PROTECTED THROUGHOUT THE CONSTRUCTION CONTRACT UNLESS OTHERWISE APPROVED BY THE ENGINEER. DAMAGED OR MISSING MONUMENTS OR CONTROL POINTS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - PAVEMENT LIMITS, LOCATIONS OF STRUCTURES, BOLLARDS, FENCES, AND WALLS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT AFTER STAKING BY THE CONTRACTOR BASED ON ACTUAL SITE CONDITIONS.
 - AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT COVERED WITH BITUMINOUS CONCRETE, PRECAST PERVIOUS CONCRETE, CONCRETE WALK, OR RETAINING WALLS SHALL RECEIVE 6" LAYER LOAM AND 2" LAYER MULCH AS SPECIFIED.
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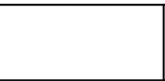


ELECTRICAL DUCTBANK DETAIL 1
NOT TO SCALE



REV. NO.	DATE	DRAWN	CHKD	REMARKS

DESIGNED BY: M. BOZDOR
 DRAWN BY: J. COUSHA
 SHEET CHECKED BY: J. BLOTT
 CROSS CHECKED BY: J. BRADY
 APPROVED BY: M. BOZDOR
 DATE: APRIL 2015



LOWELL REGIONAL WASTEWATER UTILITY
 LOWELL, MASSACHUSETTS
 DECATUR WEST STORMWATER MANAGEMENT AND
 MARGINAL SEWER RELIEF PIPE

DECATUR WAY
 SITE LAYOUT AND MARGINAL SEWER RELIEF PIPE

PROJECT NO. 8553-107160
 FILE NAME: L0035PLD.WG
 SHEET NO.
L-3
 0612-1028



Stamped Bituminous Concrete



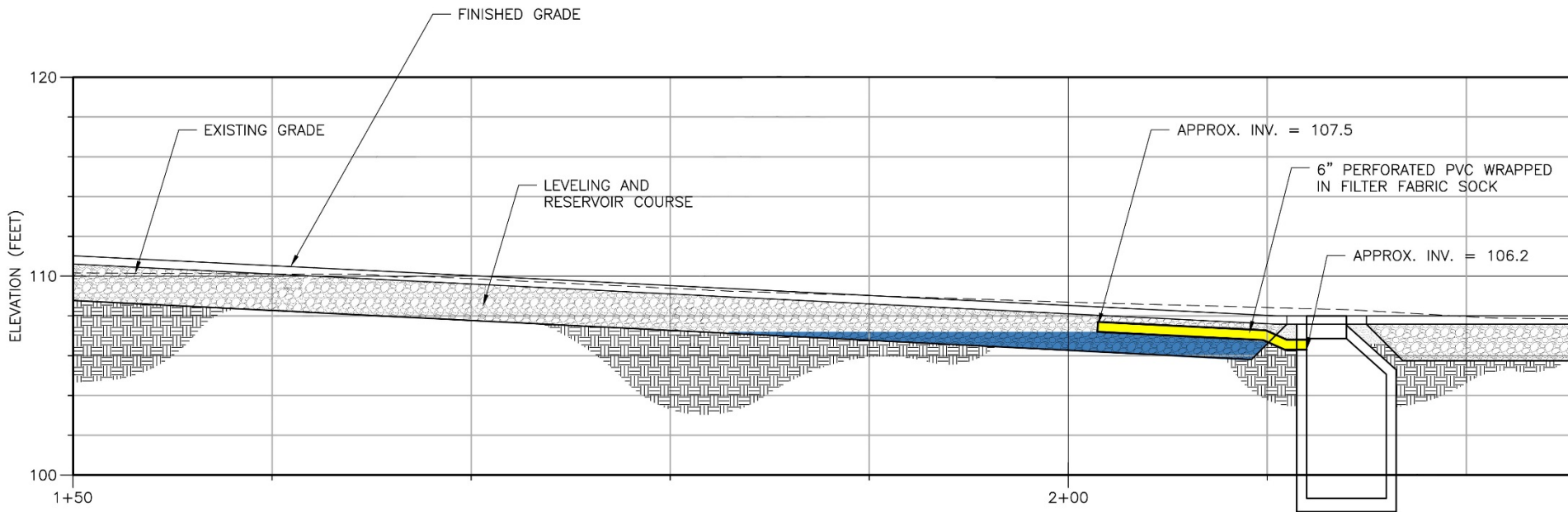
Stamped Bituminous Concrete



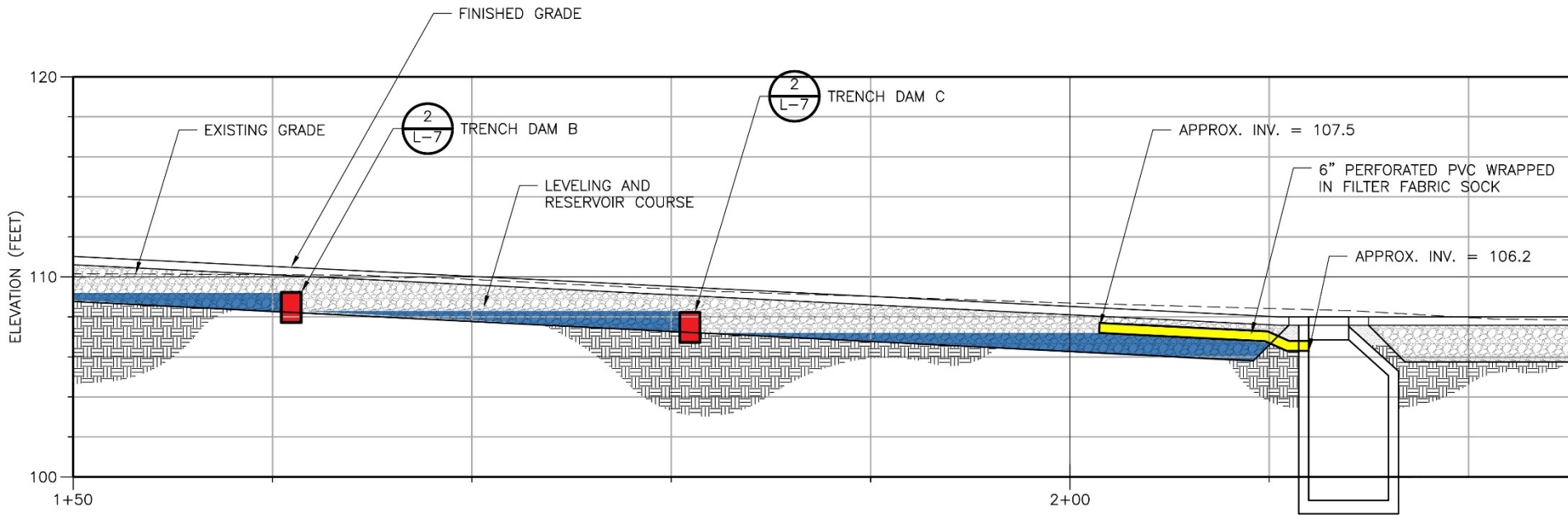
Stamped Bituminous Concrete



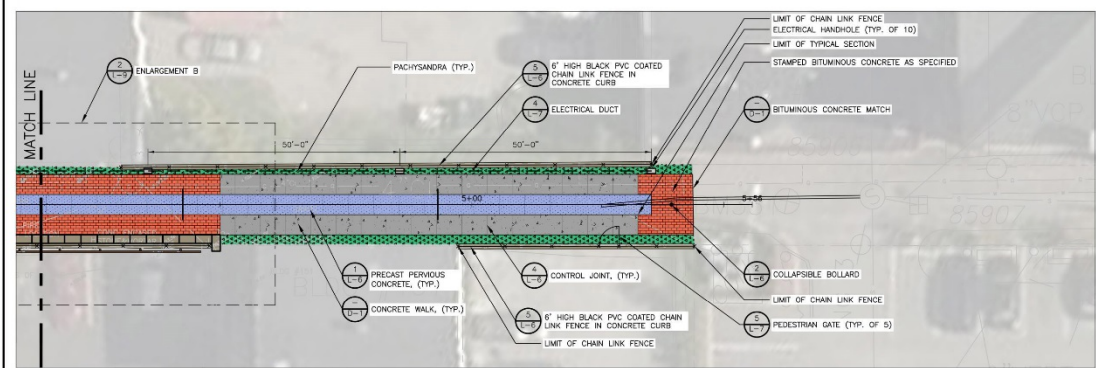
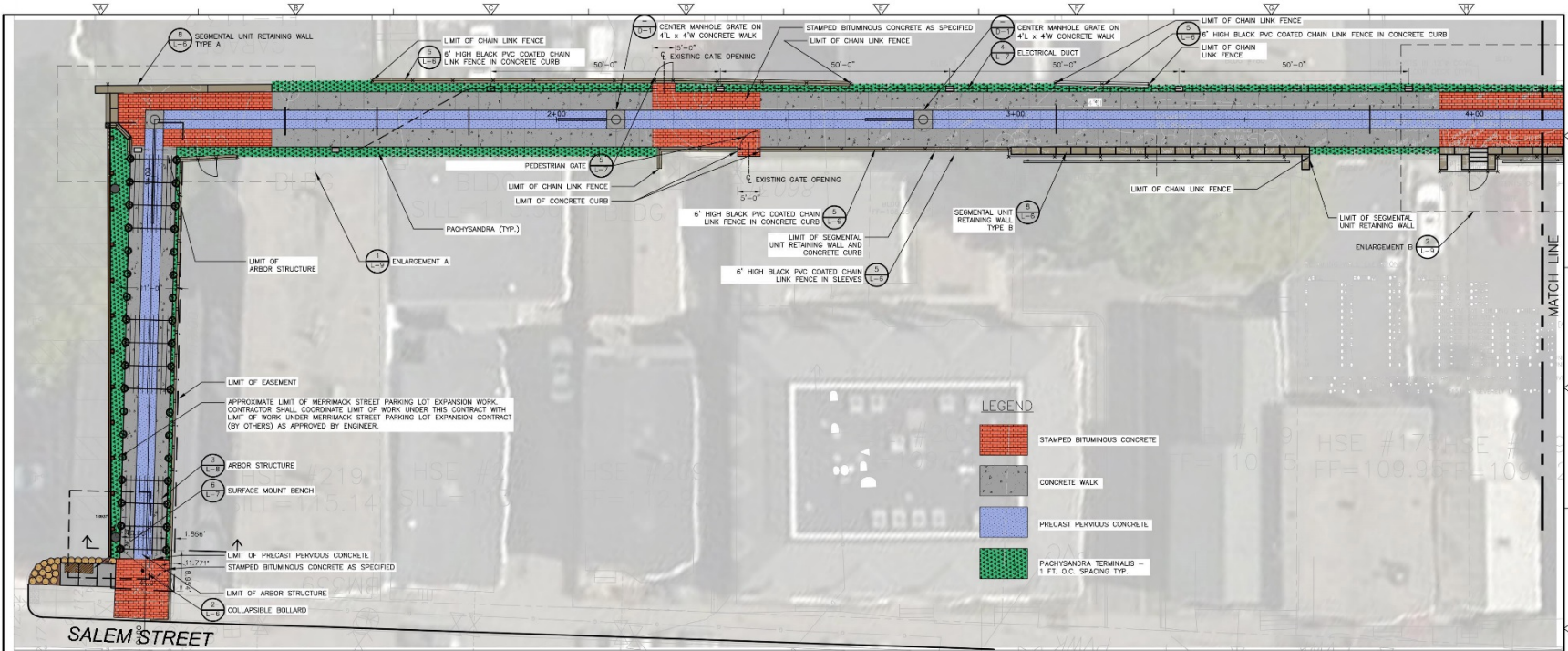
Reservoir without Impervious Dams



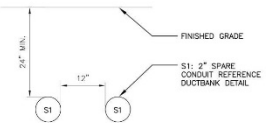
Reservoir with Impervious Dams



Site Plan



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REV. NO.	DATE	DRAWN	CHKD	REMARKS

DESIGNED BY: M. BOZDOR
 DRAWN BY: J. COOPER
 SHEET CHECKED BY: J. BLOTT
 CROSS CHECKED BY: J. BRADY
 APPROVED BY: M. BOZDOR
 DATE: APRIL 2015



LOWELL REGIONAL WASTEWATER UTILITY
 LOWELL, MASSACHUSETTS
 DECATUR WEST STORMWATER MANAGEMENT AND
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DECATUR WAY
 SITE LAYOUT AND MARGINAL SEWER RELIEF PIPE

PROJECT NO. 8553-107160
 FILE NAME: L0035PLD.WG
 SHEET NO.
L-3
 (6612-1028)



Aiken Street Bridge



Arbor Location: Before Photo



Decatur Way Arbor Structure- Existing Condition
Lowell, Massachusetts

May 2015

Arbor Location: Photosimulation



Arbor: Fabrication



Under Construction



Under Construction



Under Construction





DECATUR WAY: GREEN ALLEY



Questions?

NEWEA
CSO/Wet Weather
Issues Specialty
Conference

UMASS Lowell Inn &
Conference Center
Lowell, MA
October 27, 2015

Michael Dodson, RLA