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# Town of Andover

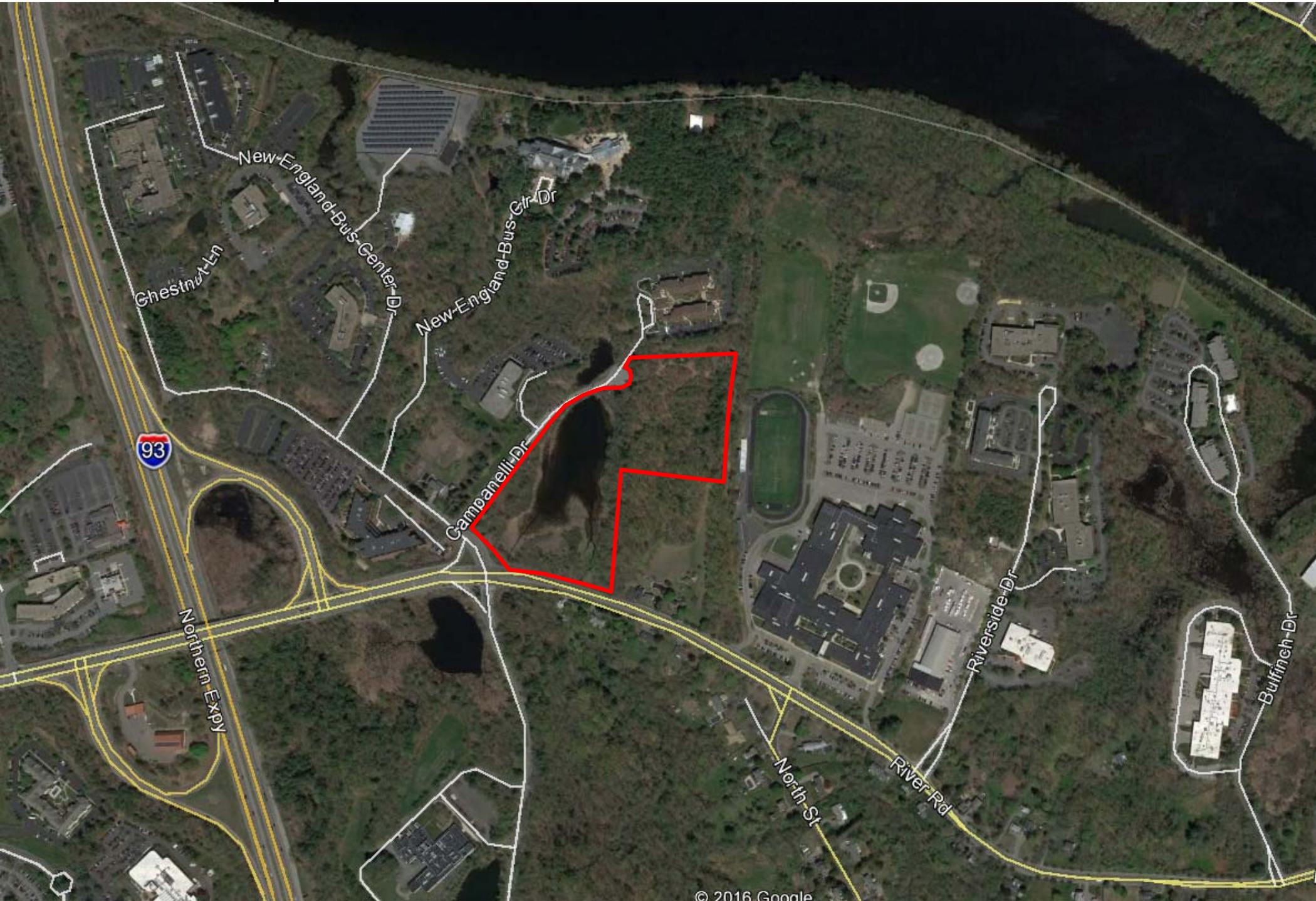
## Department of Municipal Services Facility

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October 24, 2016

# Site Location Map



# ANDOVER MUNICIPAL SERVICES FACILITY

## Existing Conditions Plan

**NOTES:**

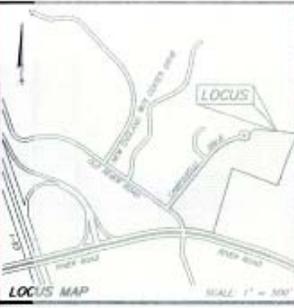
- 1) THE HORIZONTAL DATUM FOR THIS SURVEY IS THE MASSACHUSETTS COORDINATE SYSTEM, NAD 83, MAINLAND ZONE. THE VERTICAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM (NAVD83). SAID DATUMS WERE ESTABLISHED VIA GPS OBSERVATIONS UTILIZING REALIZATION NAD83 (2011) AND GEOID 12A.
- 2) UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS OF SURFACE VISIBLE STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE AT THE TOWN OF ANDOVER ENGINEERING DEPARTMENT, ANNEVILLE DEPARTMENT OF PUBLIC WORKS, AND PRIVATE UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "ONE-CALL" AT 811 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- 3) THE LIMIT OF BORDERING VEGETATED WETLANDS SHOWN HEREON WAS Delineated BY NORSSE ENVIRONMENTAL SERVICES, INC. AND LOCATED BY FIELD SURVEY.

**RECORD OWNER:**

INHABITANTS OF THE TOWN OF ANDOVER

**ASSESSORS:**

MAP 142, BLOCK 6, LOT 6



**REFERENCES:**

- NORTHERN EASEL REGISTRY OF DEEDS**
- DEED BOOK 14682, PAGE 310
  - DEED BOOK 2288, PAGE 11 (SEWER EASEMENT)
  - DEED BOOK 2288, PAGE 28 (ACCESS EASEMENT)
  - DEED BOOK 2176, PAGE 10 (RESTRICTIONS)
  - DEED BOOK 2288, PAGE 5 (RELEASE)
  - DEED BOOK 1361, PAGE 753 (SEWER EASEMENT)
  - PLAN 10256



**Campanelli Drive**

**LEGEND**

- STONE WALL
- EDGE OF PAVEMENT
- BARBED WIRE FENCE
- CURB WITH BOTTOM CURB ELEVATION
- EDGE OF ACCESS WALK
- SEWERAGE WITH FLOW DIRECTION DOUBLE GRADE CHAINWAGON & MANHOLE
- WATER MANHOLE, WATER MAIN WITH SIZE, DE, DATE, NAME & FIRE HYDRANT
- SEWER
- HIGH PRESSURE GAS MAIN WITH SIZE AND MATERIAL
- ELECTRIC MANHOLE & UNDERGROUND ELECTRIC LINES
- LIMIT OF BORDERING VEGETATED WETLAND WITH FLAG NUMBER AND ELEVATION
- LIMIT OF 100-FOOT WETLAND BUFFER ZONE
- EDGE OF DIRT ROAD
- SURFACE CONTOUR
- PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES
- PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES

ELEVATION BENCH MARKS		
DATUM: NAVD83 (SEE NOTE 1)		
NO.	DESCRIPTION	ELEV.
1.	HYDRANT - CHISEL MARK SET ON R.O.M.D.	70.12
2.	20" PINE - NAB SET 1.0' A.G.	82.30
3.	20" DMC - NAB SET 1.0' A.G.	85.41

SCALE: 1" = 30'

PROJECT NO. 20101

DATE: 7/12/16

DWG. 20101ws\_2-12 - E.dwg

LAYOUT: EC

SHEET: 1 OF 1

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# Status of Design

## Summary of Work Completed

- **Review & Confirmation**

- Re-interviewed staff from all Divisions
- Updated the vehicle/equipment inventory list
- Developed an initial updated programming document
- Worked with Municipal Services to develop a modified / accepted programming document

- **Survey**

- Prepared a detailed survey of existing conditions

- **Subsurface Investigation**

- Advanced test pits
- Advanced geotechnical borings
- Identified anticipated foundation type

- **Concepts**

- Developed multiple concepts
- Identified a preferred concept

- **Cost Estimate**

- Developed an updated Conceptual Cost Estimate

# **Programming Analysis Update**

# DEPARTMENT OF MUNICIPAL SERVICES (TOWN YARD) SPACE NEEDS ASSESSMENT

- Administration
- Engineering
- Highway
- Water & Sewer
- Vehicle Maintenance
- Forestry
- Parks

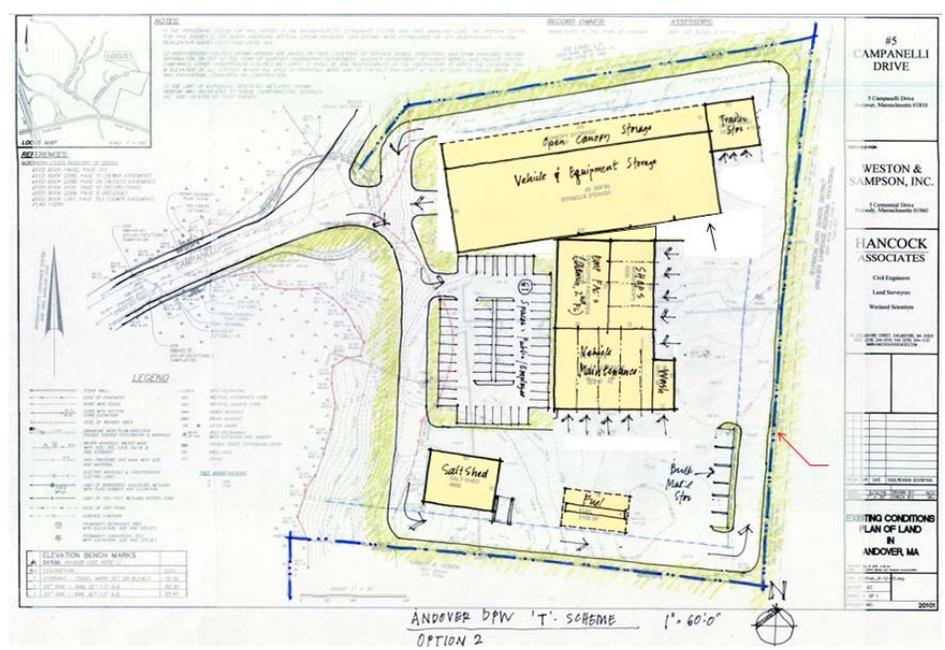
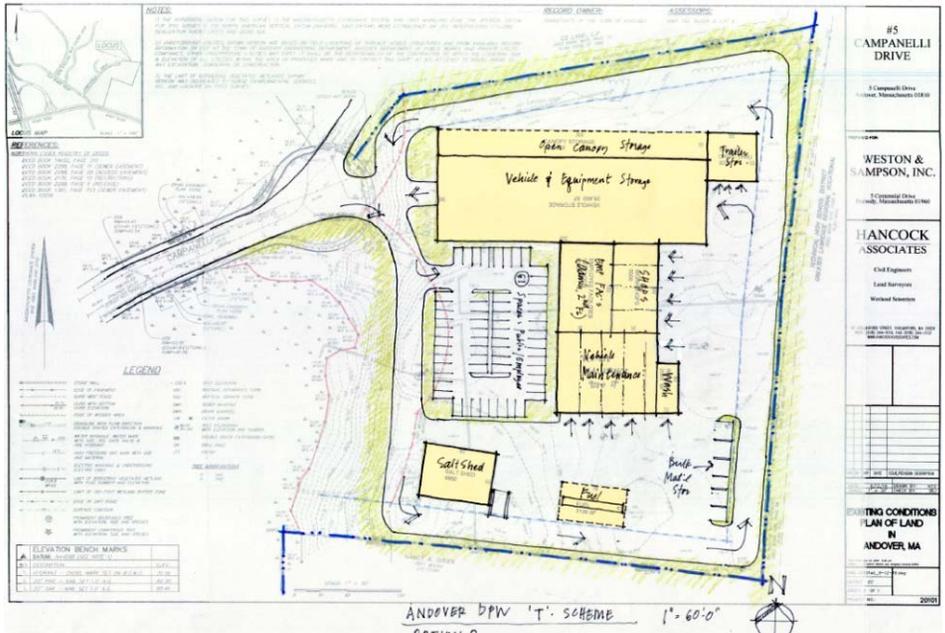
TOTAL: 52,853 SF  
Canopy: 7,800 SF

**Meets Municipal Services needs & is within the allocated debt service**

*(Red Spring Road Plant & Facilities Operations, Cemetery, and Water Treatment remain at their existing sites)*

# Conceptual Alternatives

Concept Development



# ANDOVER MUNICIPAL SERVICES FACILITY

## Preferred Concept



**NOTES:**

- 1) THE HORIZONTAL DATUM FOR THIS SURVEY IS THE MASSACHUSETTS COORDINATE SYSTEM, NAD 1983, NAD 83 ZONE. THE VERTICAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM (NAVD83). SAID DATUMS WERE ESTABLISHED BY THE OBSERVATIONS INCLUDING REVISIONS DATES 12/15/11 AND 02/03/12.
- 2) UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS OF SURFACE WORK STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE. ALL THE TOWN OF ANDOVER ENGINEERING DEPARTMENT OF PUBLIC WORKS AND PRIVATE UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST OF WHICH THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, DEPTH & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT THE SHOWN AT 801-411-2247 AT LEAST 20 WORKING DAYS BEFORE ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- 3) THE LIMIT OF SURVEYING WETLANDS BEYOND SHOWN HEREON WAS DELINEATED BY NORTON ENVIRONMENTAL SERVICES, INC. AND LOCATED BY FIELD SURVEY.

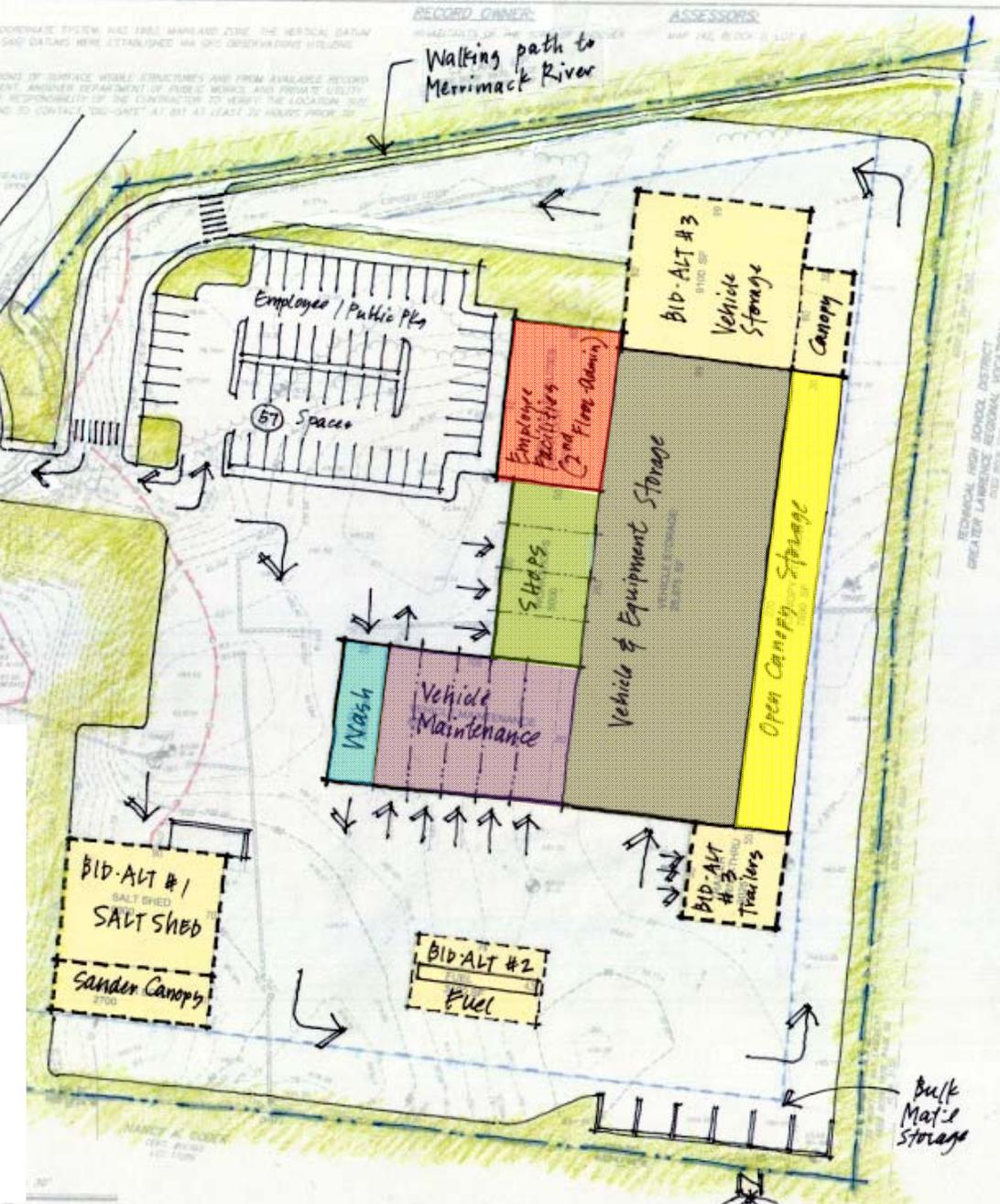
**REFERENCES:**

NORTHERN ENGINEERING RECORDS OF DEEDS

- DEED BOOK 14992, PAGE 210
- DEED BOOK 2200, PAGE 11 (SEWER EASEMENT)
- DEED BOOK 2298, PAGE 29 (ACCESS EASEMENT)
- DEED BOOK 2176, PAGE 10 (RESTRICTIONS)
- DEED BOOK 2286, PAGE 3 (RELEASE)
- DEED BOOK (LAST PAGE), PAGE 703 (SEWER EASEMENT)
- PLAN 10226



- Office / Employee Facilities
- Trade Shops
- Vehicle Maintenance
- Wash Bay
- Vehicle / Equipment Storage
- Canopy



#5 CAMPANELLI DRIVE  
5 Campanelli Drive  
Andover, Massachusetts 01810

WESTON & SAMPSON, INC.  
5 Centennial Drive  
Framingham, Massachusetts 01960

HANCOCK ASSOCIATES  
Civil Engineers  
Land Surveyors  
Wetland Scientists

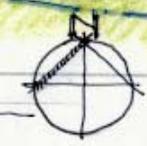
24 100 HIGHWAY STREET, CHELSEA, MA 02158  
PH: (617) 244-0111, FAX: (617) 244-1132  
WWW.HANCOCKASSOCIATES.COM

NO.	DATE	BY	REVISION DESCRIPTION

EXISTING CONDITIONS  
PLAN OF LAND  
IN  
ANDOVER, MA

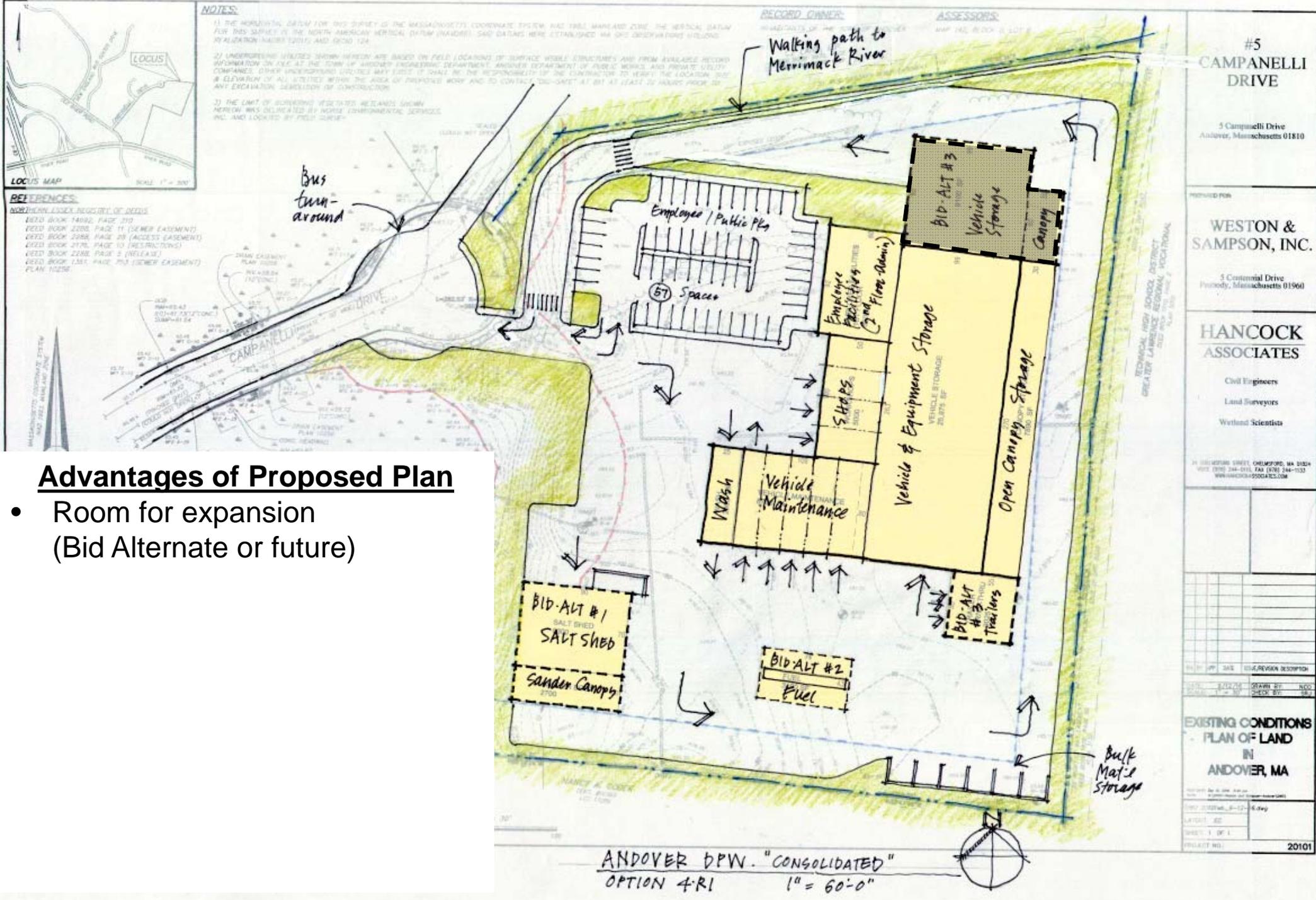
DATE: 10/20/11, 11-12-11, 1-12-11  
LAYOUT: JG  
SCALE: 1" = 60'-0"  
PROJECT NO.: 20101

ANDOVER DPW. "CONSOLIDATED"  
OPTION 4-R1 1" = 60'-0"



# ANDOVER MUNICIPAL SERVICES FACILITY

## Preferred Concept

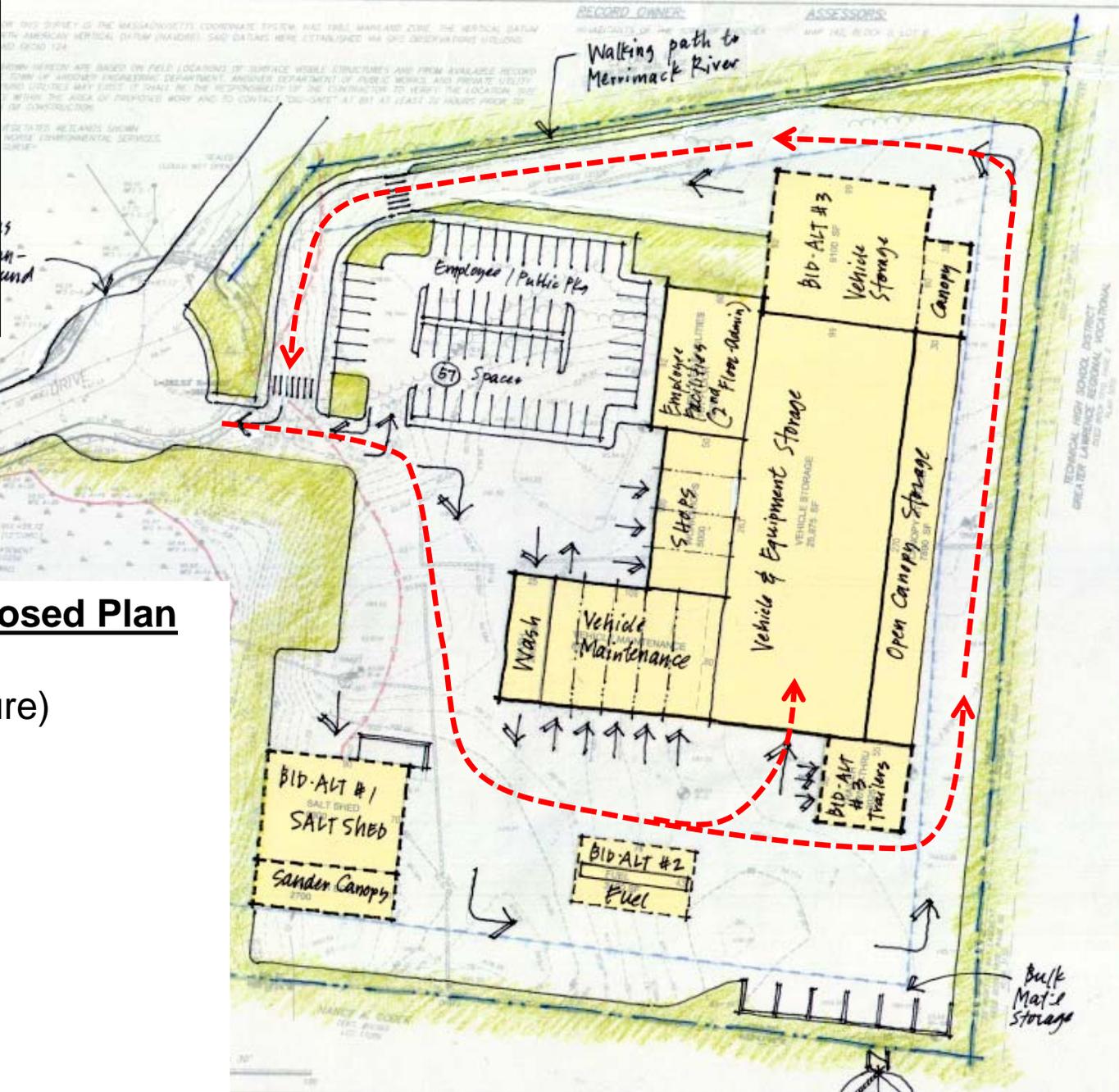
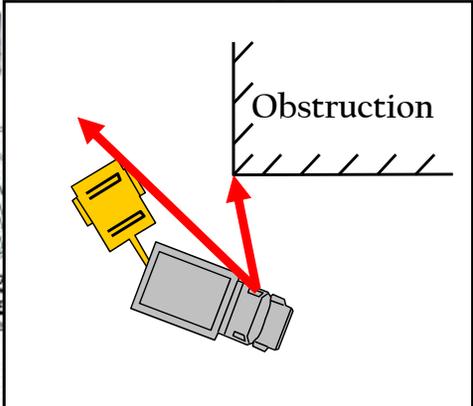


### Advantages of Proposed Plan

- Room for expansion (Bid Alternate or future)

# ANDOVER MUNICIPAL SERVICES FACILITY

## Preferred Concept



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Andover, Massachusetts 01810

WESTON & SAMPSON, INC.  
5 Centennial Drive  
Framingham, Massachusetts 01960

HANCOCK ASSOCIATES  
Civil Engineers  
Land Surveyors  
Wetland Scientists

EXISTING CONDITIONS  
PLAN OF LAND  
IN  
ANDOVER, MA

20101

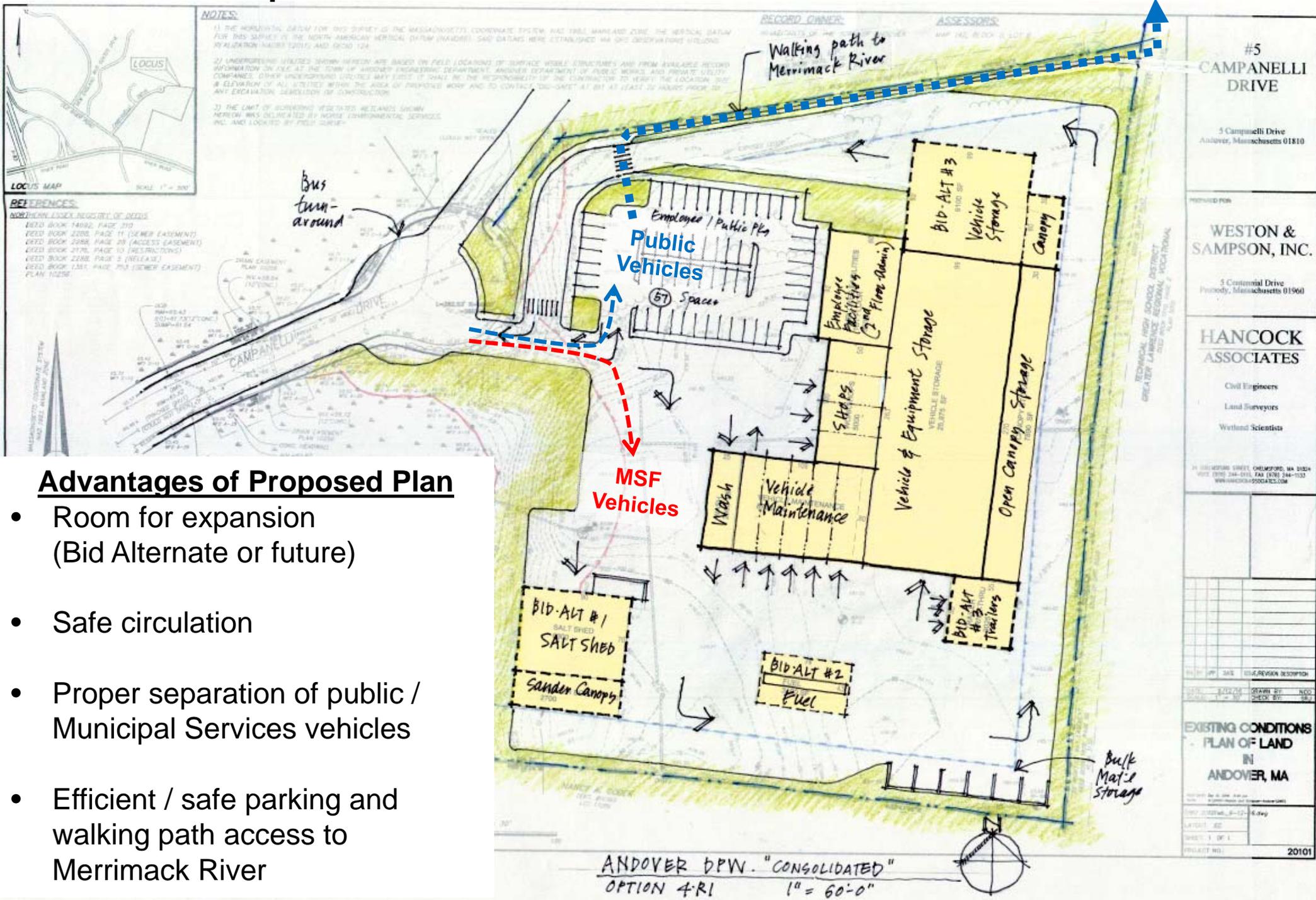
### Advantages of Proposed Plan

- Room for expansion (Bid Alternate or future)
- Safe circulation

ANDOVER DPW. "CONSOLIDATED"  
OPTION 4-R1 1" = 60'-0"

# ANDOVER MUNICIPAL SERVICES FACILITY

## Preferred Concept



### Advantages of Proposed Plan

- Room for expansion (Bid Alternate or future)
- Safe circulation
- Proper separation of public / Municipal Services vehicles
- Efficient / safe parking and walking path access to Merrimack River

# Updated Conceptual Cost Estimate

## Campanelli Drive Site

### Project Cost Summary – Base Bid

**The Town Meeting Request can be funded within the \$900,000 debt service presented to Town Meeting in May 2016**

• Construction Cost	\$15,310,000
• Contingencies / Escalation	\$1,825,000
• Owner Soft Costs	<u>\$715,000</u>

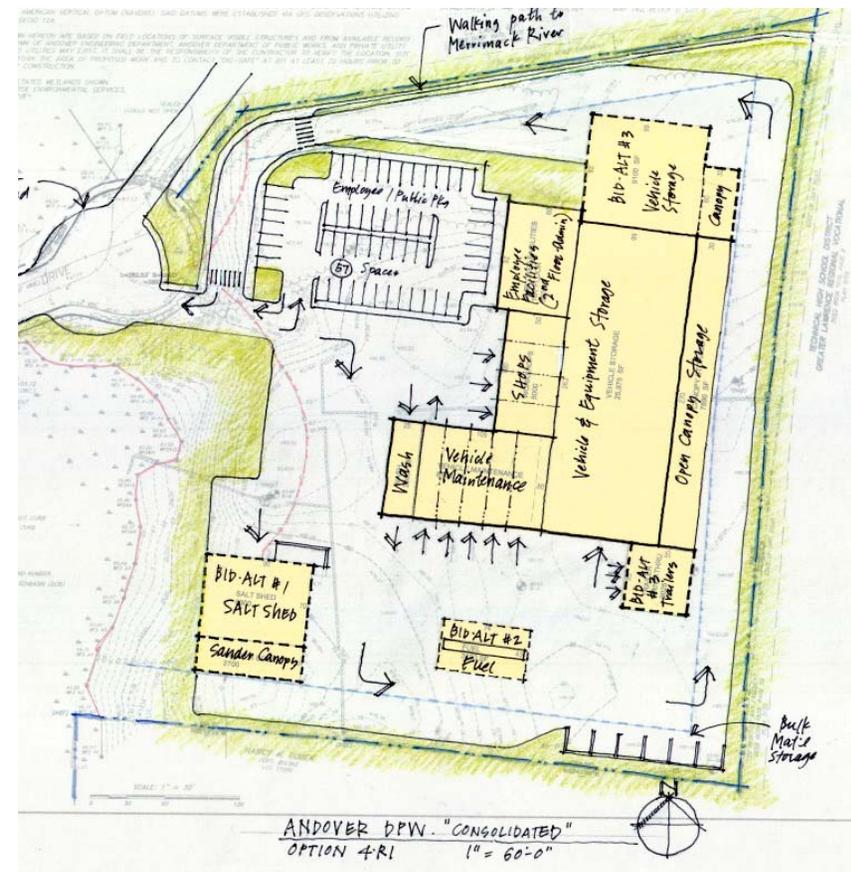
### **Anticipated Town Meeting Request: \$17,850,000**

**(Construction, Contingencies, Soft Costs)**

• Bid Alt 1 – Salt Storage Structure:	\$798,000 (Funded by State)
• Bid Alt 2 – Fuel System Relocation:	\$615,000 (Funded by Capital)
• Bid Alt 3 – Vehicle/Equipment Garage Extension:	\$1,200,000 (Funded if competitive bids received)
• Bid Alt 4 – Upgrade Industrial Equipment:	\$883,000 (Funded if competitive bids received)

## Recommendations

- The Building Committee and Municipal Services recommended the “Consolidated Option” as the preferred alternative to meet the current and future needs of the Department of Municipal Services
- Base bid to include:
  - 52,800 SF Pre-Engineered Metal Building Operations Facility
  - 7,800 SF Pre-Engineered Metal Building Canopy
- Bid Alternates to include:
  - Alternate 1 – Salt Storage Structure
  - Alternate 2 – Fuel System Relocation
  - Alternate 3 – Vehicle / Equipment Storage Garage Building Extension
  - Alternate 4 – Upgrade Industrial Support Equipment



Sample Photo of a Cost-Effective Pre-Engineered Metal Building DPW Operations Facility

## Next Steps

- Prepare **Schematic Design** Documents
  - Floor Plans
  - Elevations
  - Site Layout, Grading, and Drainage Plans
  - Prepare Schematic Design Estimate
- Prepare **Design Development** Documents
  - Advance design for all major disciplines
  - Initiate Permitting (Conservation Commission & Site Plan Review)
  - Prepare Design Development Estimate
- Initiate Contractor **Prequalification** Process per MGL
- Finalize **Construction Documents** for Public Bidding
  - Plans
  - Specifications
- Conduct Public **Bidding** of Project

**Schedule**

**Date**

- Complete Design Documents..... February 17, 2017
- Advertise for Bid..... February 22, 2017
- Filed Subbid Opening..... March 22, 2017
- General Bid Opening..... April 05, 2017
- Town Meeting Approval..... May 2017
- Construction Notice to Proceed..... June 2017
- Construction Completion..... July 2018

## Benefits of Bidding Project Prior to Town Meeting

- Project will be fully permitted
  - Conservation Commission
  - Site Plan Review
- Opportunity to take advantage of the market by having bids in hand
  - Timing will save money
- Town Meeting request based on an actual number
  - Eliminates design contingencies associated with engineering estimates

