ADDENDUM #2

DATE: September 23, 2019

TO: All Prospective Bidders

FROM: Dennis Sienna, Purchasing Agent II

RE: **RFP# DS072219**

All respondents are hereby advised of the following amendment to the Request for Proposal documents which are hereby made an integral part of the bid documents for the subject contract, prepared by the University of Connecticut Procurement Services Department.

Proposals submitted shall be deemed to include the following document information as shown in Addendum No. 2. Respondents shall be required to acknowledge receipt of this addendum in their proposal response. Failure to acknowledge receipt of this addendum by the respondent may result in the rejection of their proposal response.

BIDDER NOTE: This addendum must be completed, signed and submitted with your proposal response to be considered for award. If you have already submitted a proposal, please complete the addendum and submit same in a sealed envelope, clearly marked with the bid number, response date, and return address. This will be accepted as part of your proposal response, PROVIDING IT IS RECEIVED BY THE PURCHASING DEPARTMENT BY THE TIME AND DATE SPECIFIED IN ITEM NUMBER ONE (1) OF THIS DOCUMENT.

Refer to the following clarifications:

1) **The RFP due date has been extended to 10/03/2019; 2:00 pm.**
2) **RFI Log is enclosed**
3) **Below is the updated link to Appendix H that was provided in the RFP document.**
   (Ctrl + Click on the Link) Supplemental Information Appendix H
4) **Enclosed is a copy of the PowerPoint presentation that was given during the pre-proposal meeting.**

_____ _____

Name of Bidder Date

_____

Address

_____

Signature and Title

RFI LOG - RFP #DS072219 Water Systems Management and Operations Services Contract		
RFI No.	**Question**	**Response**
1	Could you clarify is the Contractor able to bill for minor repair/replacement of equipment listed in items 3.6.1 thru 3.6.5 and 3.6.7 under the agreed upon mark-up or is this equipment to be included in base price requirements as stated in 3.6?	The Contractor will need to include this equipment in the base price as stated in 3.6.
2	Are the metering devices referenced in item 3.6.1 including on campus meters in the buildings or only the well production meters? If on campus how many are projected to be upgraded?	The Contractor will be responsilbe for inspections, testing, recalibrating, repair and/or replacing metering devices on the well production and interconnection meters. The Contractor will also be responsible for inspections, testing and/or recalibrating meternig devices in buildings on campus. If the meter needs to be repaired or replaced, the Contractor will provide a cost to correct.
3	Item 3.6.5 would a conflict of interest be considered to have Contractor repair or replace backflow devices since Contractor is testing devices?	Yes, the Contractor would be reponsible for the testing the backflow devices and then work with Uconn Plumbing shop or a sub-contractor to repair any failed devices.
4	Item 3.6.8 How frequently is the University looking for system wide leak detection?	At a minimum every 5 years.
5	In the pricing workbook, the mark-up is listed as 5% for material, capital and subcontractors. Is that the University's maximum that will be paid for these services?	5% mark-up requested for these items is consistant with CPFP contracts. If a Contractor takes exeption to this mark-up they can provide an alternative mark-up with their proposal
6	Item 3.3.2.4 & 3.15.2 please provide clarafication on if opening the inter-connect would apply as bulk water or are you looking for tanker trucks to supply the Univesity indivdual locations that are considered billable or included in base requirements?	The Contractor shall be able and prepared to provide additional water 24/365 in the event of a water system failure or drought emergency. Opening the inter-connect could apply in certain circumstances but bottled water or a tanker truck may be required depending on the location of the need.
7	Item 3.5 please clarify if Uconn owned facilties, pipes, fencing and other equipment is in need of repair is that considered billable or included in base requirements?	As stated, the Contractor is responsible for maintaining the equipment and facilities which house water system equipment, components and grounds. General best management practices and good housekeeping should be included in the base price and if major repairs or work is needed this would be considred a billable item. Pre contract video and photos may be taken to indicate condition at time of system turnover to the contractor operator for the next contract.
8	Item 3.7.5 is the Contractor responsible for associated costs if Uconn owned tanks fail?	The Contractor is responsible for any spills, leaks or incidents related to the work being done by the contractor or sub-contractors, any chemical deliveries and/or storage.

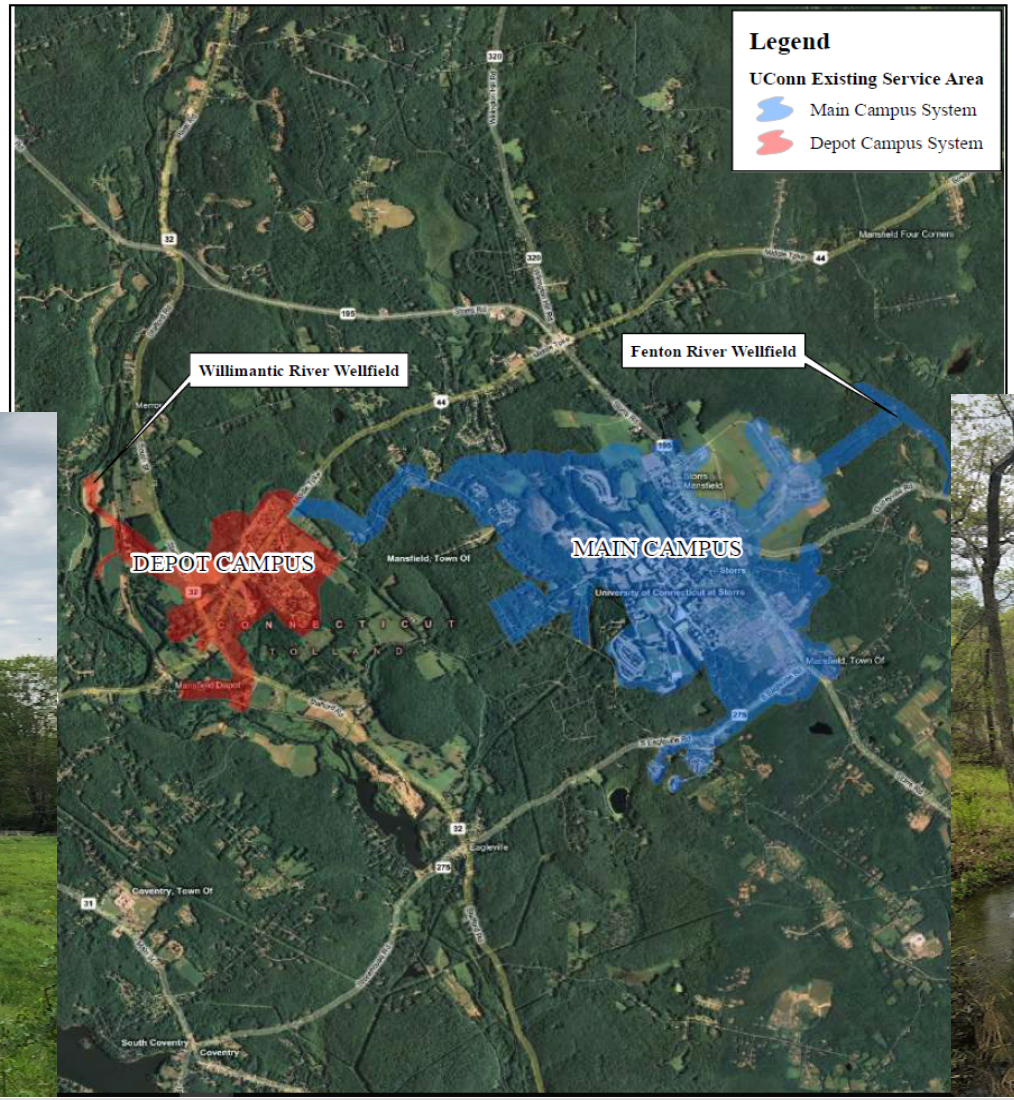
UCONN

UNIVERSITY OF CONNECTICUT

REQUEST FOR PROPOSAL

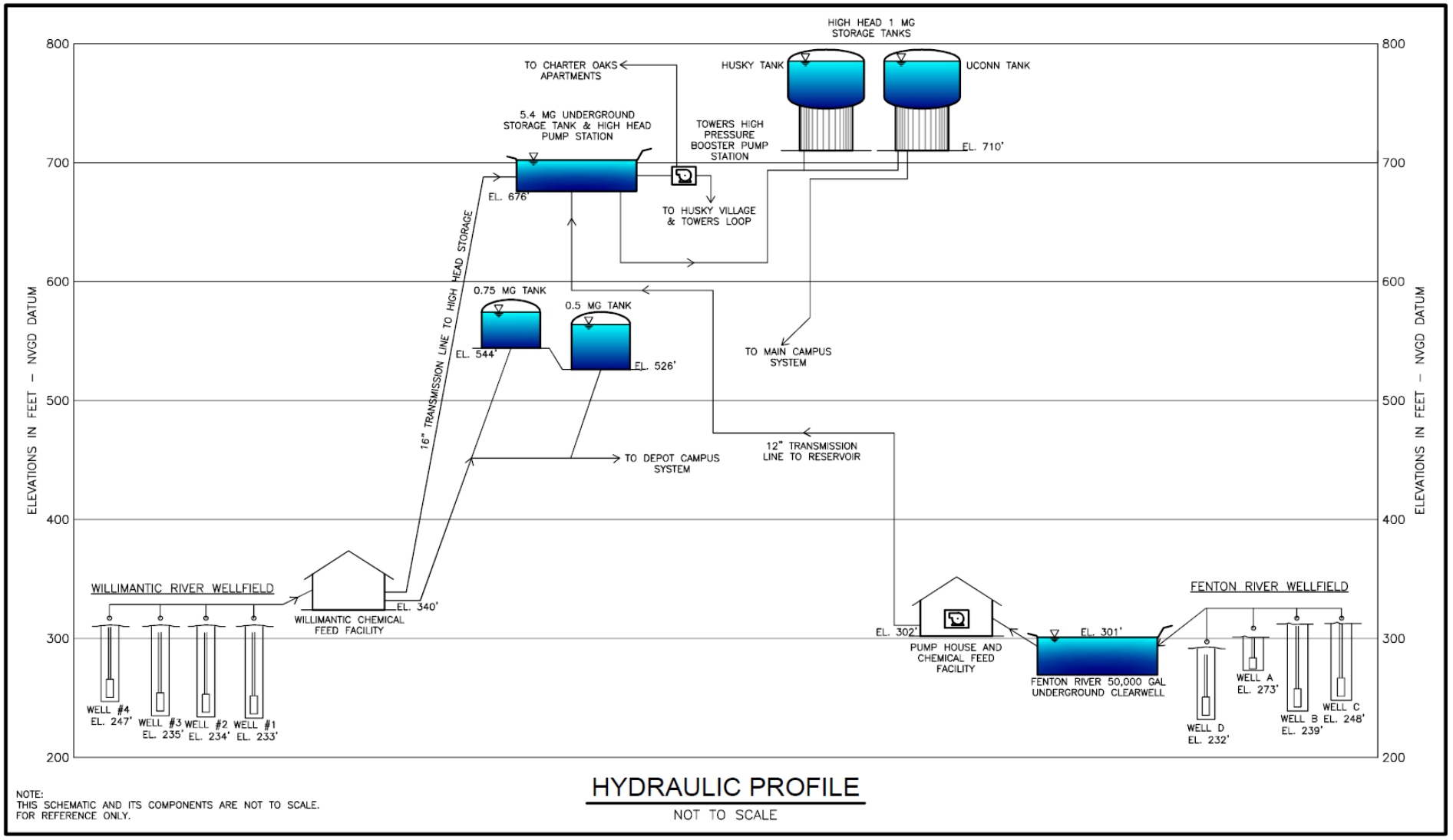
RFP#DS072219

WATER SYSTEMS MANAGEMENT AND OPERATIONS SERVICES CONTACT


Legend
UConn Existing Service Area
Main Campus System
Depot Campus System
Willimantic River Wellfield
Fenton River Wellfield
DEPOT CAMPUS
MAIN CAMPUS
Mansfield, Town Of
Storrs
University of Connecticut at Storrs
Mansfield Four Corners
Mansfield Depot
Eagleville
Coventry, Town Of
South Coventry
Coventry
CONNECTICUT

Willimantic River

Fenton River



NOTE:
THIS SCHEMATIC AND ITS COMPONENTS ARE NOT TO SCALE.
FOR REFERENCE ONLY.

HYDRAULIC PROFILE

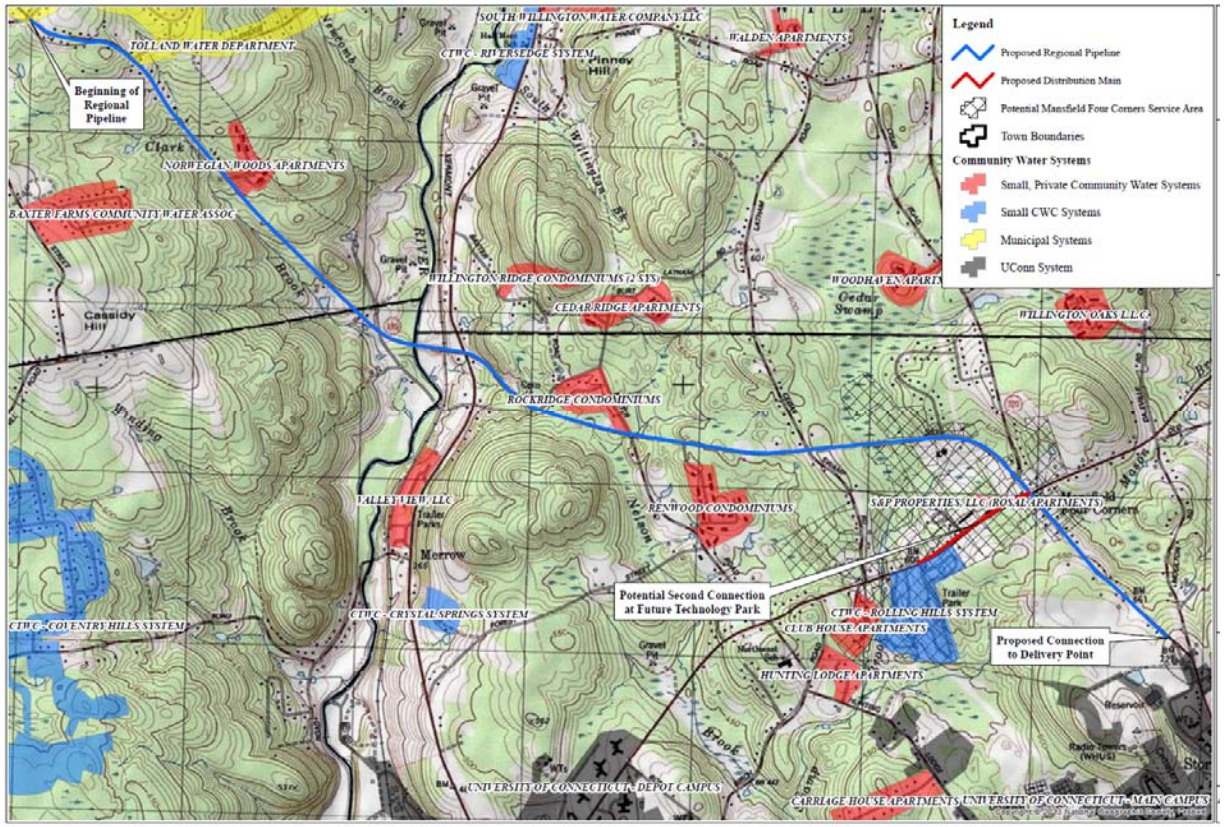
NOT TO SCALE

UCONN Diversion Registration

Facility	Rate (mgd)	Equivalent Rate
Fenton River Well A	0.576 mgd	400 gpm
Fenton River Well B	1.008 mgd	700 gpm
Fenton River Well C	0.720 mgd	500 gpm
Fenton River Well D	0.720 mgd	500 gpm
Fenton River Wellfield Total	***0.8443 mgd***	--
Willimantic River Well #1	0.648 mgd	450 gpm
Willimantic River Well #2	0.432 mgd	300 gpm
Willimantic River Well #3	0.648 mgd	450 gpm
Willimantic River Well #4	0.720 mgd	500 gpm
Willimantic River Wellfield Total	***2.3077 mgd***	--

Connecticut Water Company/UCONN Diversion Permit

- Tolland-Mansfield Regional Pipeline and Interconnection
- Shenipsit Reservoir to UConn
- 25 year permit / expires May 29, 2040
- 1.85 mgd (max)



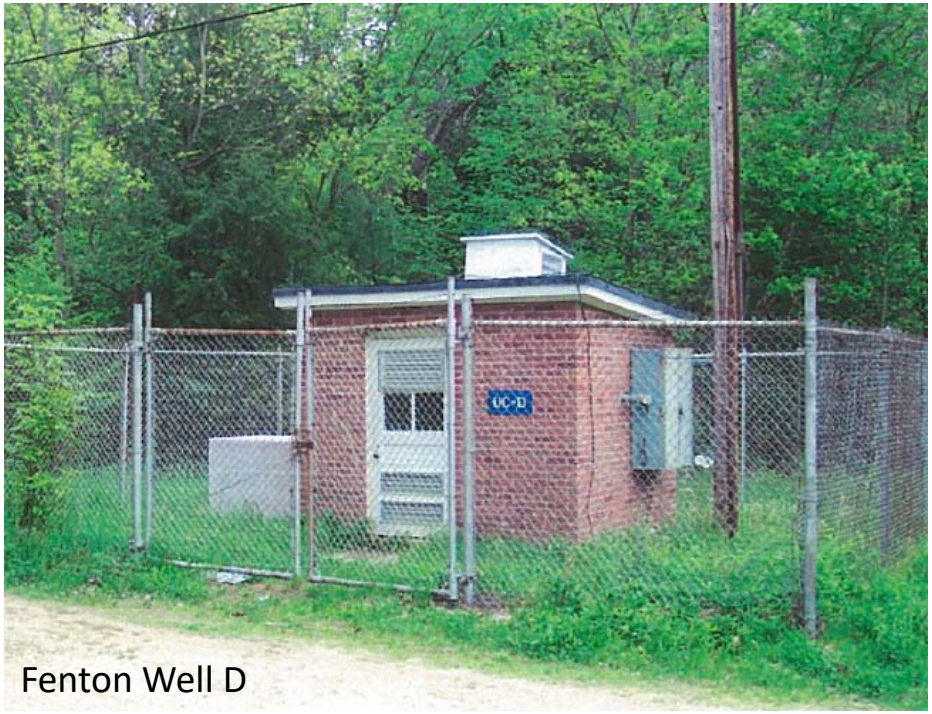
Fenton River Wellfield

- Wells A, B, C, and D
- Pump house/lift station
- Fenton Wellfield Chemical Facility
- Underground clearwell basin

Fenton River Wellfield Specifications

	Well A	Well B	Well C	Well D
Year Drilled	1926	1949	1949	1958
Type	Caisson	Gravel Packed	Gravel Packed	Gravel Packed
Depth	28 feet	70 feet	63 feet	59 feet
Diameter	24 feet	18" x 12"	18" x 12"	18" x 12"
Well Yield	400 gpm[1]	675 gpm[2]	520 gpm[2]	400 gpm[3]
Design Pump Capacity	400 gpm @ 38' TDH	700 gpm @ 45' TDH	500 gpm @ 40' TDH	500 gpm @ 159' TDH
Average Pumping Rate with Other Wells Pumping	327 gpm	532 gpm	271 gpm	360 gpm
Maximum Known Pumping Rate	352 gpm	560 gpm	406 gpm	448 gpm
Status	Active	Active	Active	Active

Fenton Wellfield



Fenton Well D

50,000 gallon Clearwell Tank

Fenton Treatment Building

Fenton Wellfield Recent Projects

- Inspected and repaired Fenton Well B, C and D
- Inspected and repaired the Fenton Clearwell tank
- Fenton electric upgrade and removal of obsolete transformers

Willimantic Wellfield

- Wells 1, 2, 3, and 4
- Willimantic Wellfield Chemical Facility

Willimantic River Wellfield Specifications

	Well #1	Well #2	Well #3	Well #4	MTS Well #2
Year Drilled	1970	1974	1958	1998	1948
Type	Gravel Packed	Gravel Packed	Gravel Packed	Gravel Packed	Gravel Packed
Depth	69 feet	68 feet	68 feet	53 feet[5]	60 feet
Diameter	30" x 16"	24" x 14"	24" x 18"	20" x 12"	12 inches
Well Yield	750 gpm[1]	361 gpm[2]	725 gpm[3]	560 gpm[6]	525 gpm[4]
Design Pump Capacity	400 gpm @ 555' TDH	200 gpm @ 460' TDH	210 gpm @ 520' TDH	540 gpm @ 484' TDH	N/A
Maximum Known Pumping Rate	750 gpm	361 gpm	725 gpm	414 gpm	N/A
Status	Active	Active	Active	Active	Inactive

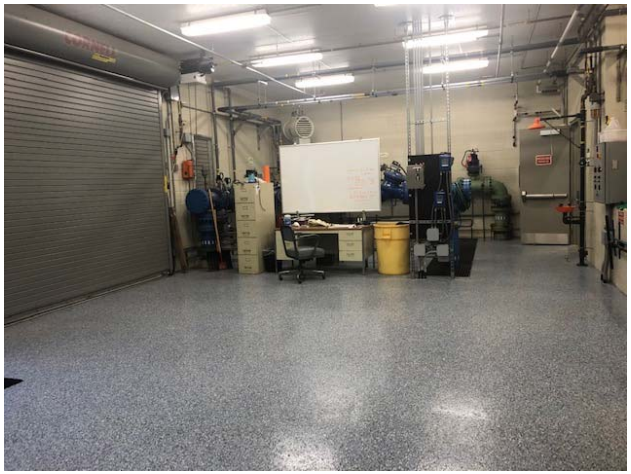
Willimantic Wellfield

Willimantic Well 4

Willimantic Well 3

Willimantic Treatment Building

Willimantic Wellfield Recent Projects



- Inspected and repaired Willimantic Wells 1, 2, 3, and 4 – includes pumps and motors
- Well and treatment building upgrades including new epoxy floors and paint

Summary of Pumping Specifications

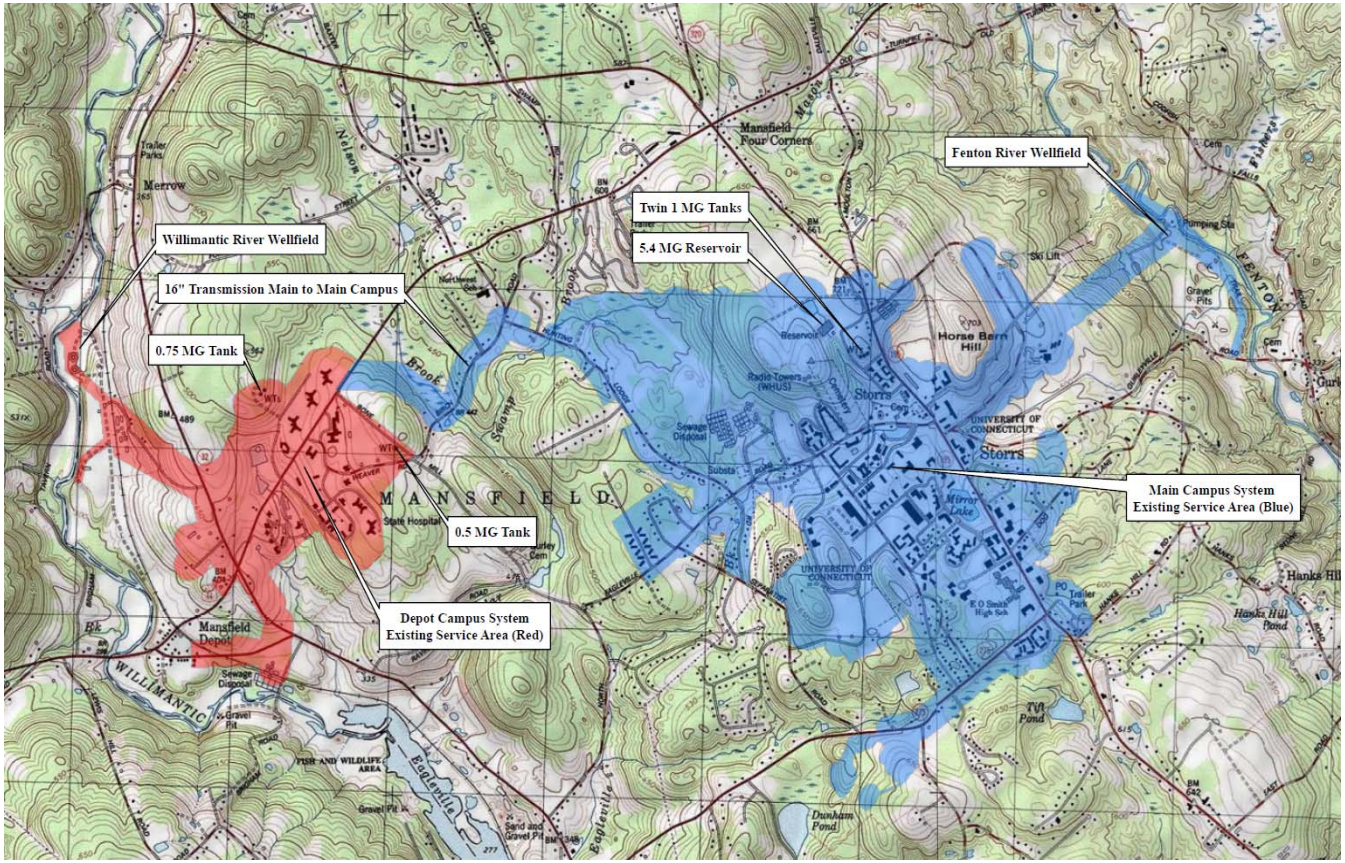
Pump Location	Horsepower (hp)	Year of Pump Installation	Condition*	Aux. Power
Fenton River Well A Pump and Motor	5	1977	Good	Yes
Fenton River Well B Pump and Motor	10	1949	Good	Yes
Fenton River Well C Pump and Motor	7.5	1949	Good	Yes
Fenton River Well D Pump and Motor	25	2008	Good	Yes
Fenton High Lift Pump – 550 gpm	125	2007	Good	Yes
Fenton High Lift Pump – 1,000 gpm	200	2002	Good	Yes
Willimantic River Well #1 Pump and Motor	100	2006	Good	Yes
Willimantic River Well #2 Pump and Motor	75	2009	Good	Yes
Willimantic River Well #3 Pump and Motor	100	2006	Good	Yes
Willimantic River Well #4 Pump and Motor	100	2006	Good	Yes
High Head #1 – 1,600 gpm	100	Late 1990s	Good	Yes
High Head #2 - 1,600 gpm	100	Late 1990s	Good	Yes
High Head #3 - 1,600 gpm	100	Late 1990s	Good	Yes
Towers Booster Pump Station #1 – 50 gpm	7.5	2003	Good	Yes
Towers Booster Pump Station #2 – 250 gpm	25	2003	Good	Yes
Towers Booster Pump Station #3 – 250 gpm	25	2003	Good	Yes
Towers Booster Pump Station #4 – 500 gpm	40	2003	Good	Yes
Towers Booster Pump Station #5 – 1,250 gpm	40	2003	Good	Yes
Towers Booster Pump Station #6 (Peaking) – 1,250 gpm	125	2003	Good	Yes
Towers Booster Pump Station #7 (Peaking) – 1,250 gpm	125	2003	Good	Yes
Towers Booster Pump Station #8 (Fire Demand) – 3,500 gpm	350	2003	Good	Yes
Hilltop Apartments (constant pressure Jockey pump)	5 hp each	2003	Good	No
Hilltop Apartments (constant pressure Jockey pump)	5 hp each	2003	Good	No
Hilltop Apartments (constant pressure Jockey pump)	5 hp each	2003	Good	No

Note: All VFD pumps have variable rates.

Towers Booster Pump Station

Hilltop Apartments Booster Pump Station

High Head Pump Station



Transmission Mains

- Willimantic River Wellfield to Depot Campus
- Willimantic River Wellfield to Main Campus
- Fenton River Wellfield to Main Campus (Towers Standpipes)
- Fenton River Wellfield to Main Campus
  Distribution Mains
- Main and branch lines, valves and hydrants for the distribution of water to the building and facilities of the University

Table 2-3 Transmission System Piping Inventory

Pipe Diameter (inches)	Approximate Total Length (feet)
16	25,000
20	3,400

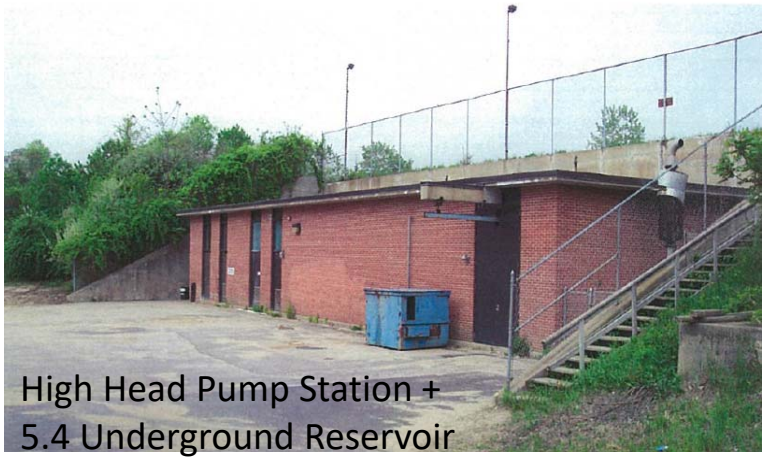
Storage

- Main Campus
  - 5.4 MG Underground Reservoir, (2)- 1 MG standpipes
- Depot Campus
  - 0.75 MG tank
  - 0.5 MG tank
- Fenton River Wellfield
  - 0.05 MG Underground Storage Tank

Summary of Storage Tank Specifications

	Fenton Clearwell	Depot Campus #1	Depot Campus #2	Towers #1	Towers #2	W-Lot Reservoir
Total Capacity (MG)	0.050	0.500	0.750	1.000	1.000	5.400
Useable Capacity (MG)	0.036	0.330	0.500	0.875	0.875	5.000
Overflow	--	33 ft	49 ft	80 ft	80 ft	--
Height	--	35 ft	51 ft	85 ft	85 ft	15 ft
Material	Concrete	Steel	Steel	Steel	Steel	Concrete
Booster Pumps	1 @ 550 gpm, 1 @ 1,000 gpm	None	None	None	None	3 @ 2,750 gpm
Year Constructed	1926	1954	1958	1954	2010	1972
Inspection	2007	2006	2006	2009	New/2010	2010

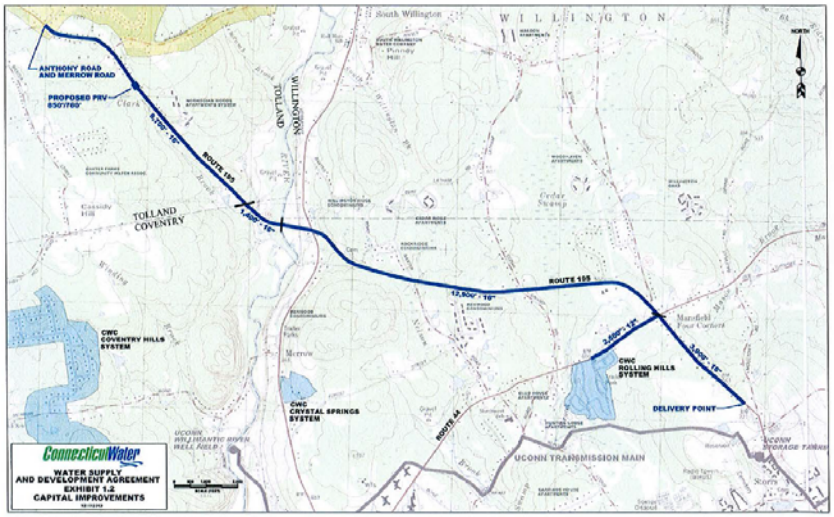
1 MG Storage Tanks

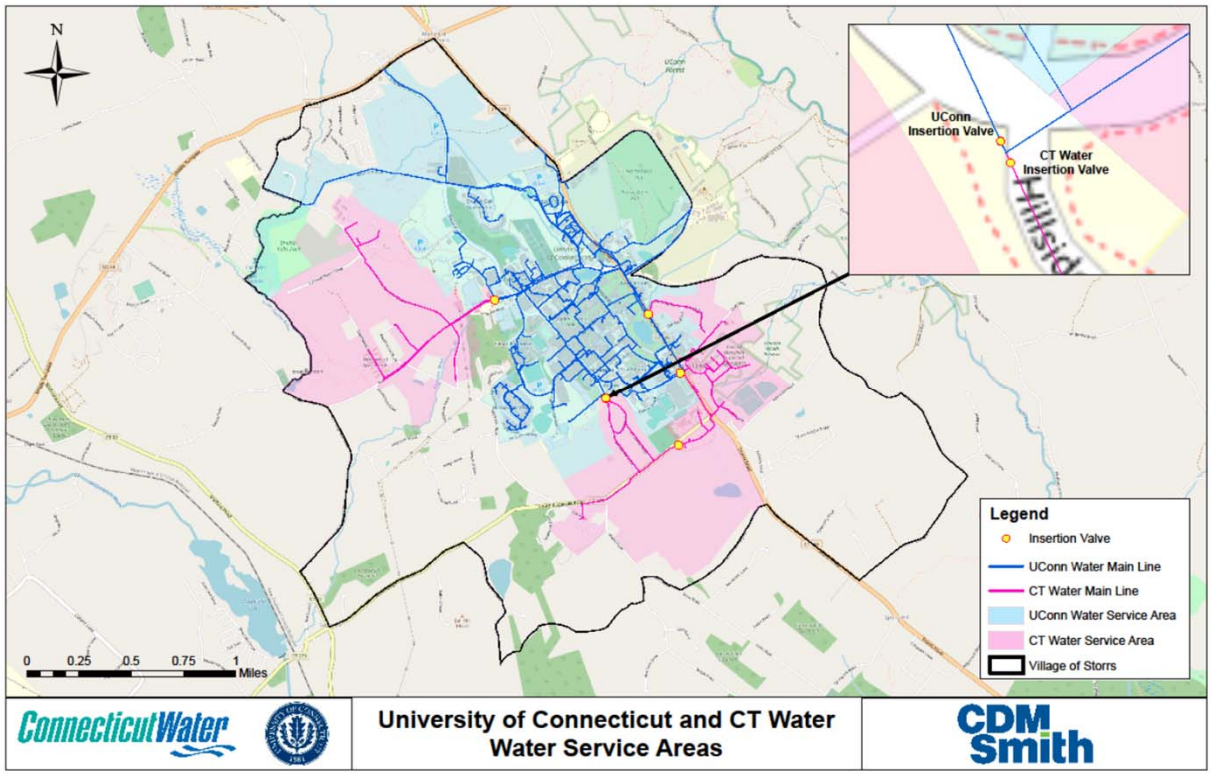

High Head Pump Station + 5.4 Underground Reservoir

Water System Recent Projects

- Water Main Phase 1 and 2 – replacement of new 16” transmission main from Willimantic Well field to campus
- North Eagleville Road – new water main
- High Head - new generator
- High Head and Towers Booster Station - upgrade including paint, new epoxy floors, and sampling area
- Insertion valves – seven were installed to assist with minimizing future shutdowns during emergency repairs
- Cla – Vals - rebuilt in the meter pit
- Additional Water Supply - CWC interconnection and meter pit

CWC Interconnection





Water System Maintenance

- Water Meter Program in place – updating domestic water meters throughout campus
- Cross Connection/Backflow inspections –annually
- System Wide Flushing - annual
- System Wide Leak detection – every 5 years
- Tank Inspections and necessary repairs
- Well/Pump maintenance and necessary repairs

UCONN Master Plan and Future Projections

Potable Water Service

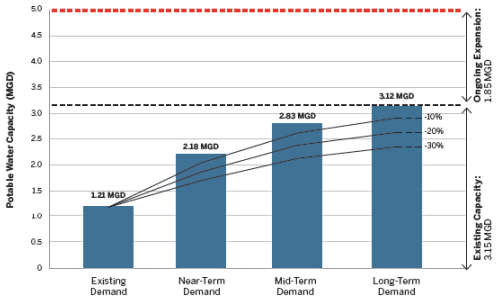
Load Projections + Assumptions

Potable Water (Gallons-Per-Day)

		Present	Near Term	Mid Term	Long Term
Business As Usual Approach	Demand	1,210,000	2,180,000	2,830,000	3,120,000
	Required Supply	(1,940,000)	(2,770,000)	(2,120,000)	(1,830,000)
10% Conservation	Demand		2,020,000	2,610,000	2,890,000
	Required Supply		(2,930,000)	(2,340,000)	(2,060,000)
20% Conservation	Demand		1,860,000	2,380,000	2,640,000
	Required Supply		(3,090,000)	(2,570,000)	(2,310,000)
30% Conservation	Demand		1,690,000	2,150,000	2,340,000
	Required Supply		(3,260,000)	(2,800,000)	(2,610,000)

Assumptions: (GPD/SF)	New Buildings	Demolition	Renovation
Academic / Teaching	0.083	0.108	-0.025
Administration	0.083	0.108	-0.025
Arts / Culture	0.054	0.070	-0.016
Athletics + Recreation	0.136	0.177	-0.041
Misc	0.000	0.000	0.000
Parking	0.000	0.000	0.000
Residence / Dining	0.110	0.143	-0.033
Science	0.137	0.178	-0.041
Student Services	0.083	0.108	-0.025
Support / Utility	0.000	0.000	0.000

Impact on Utility Systems



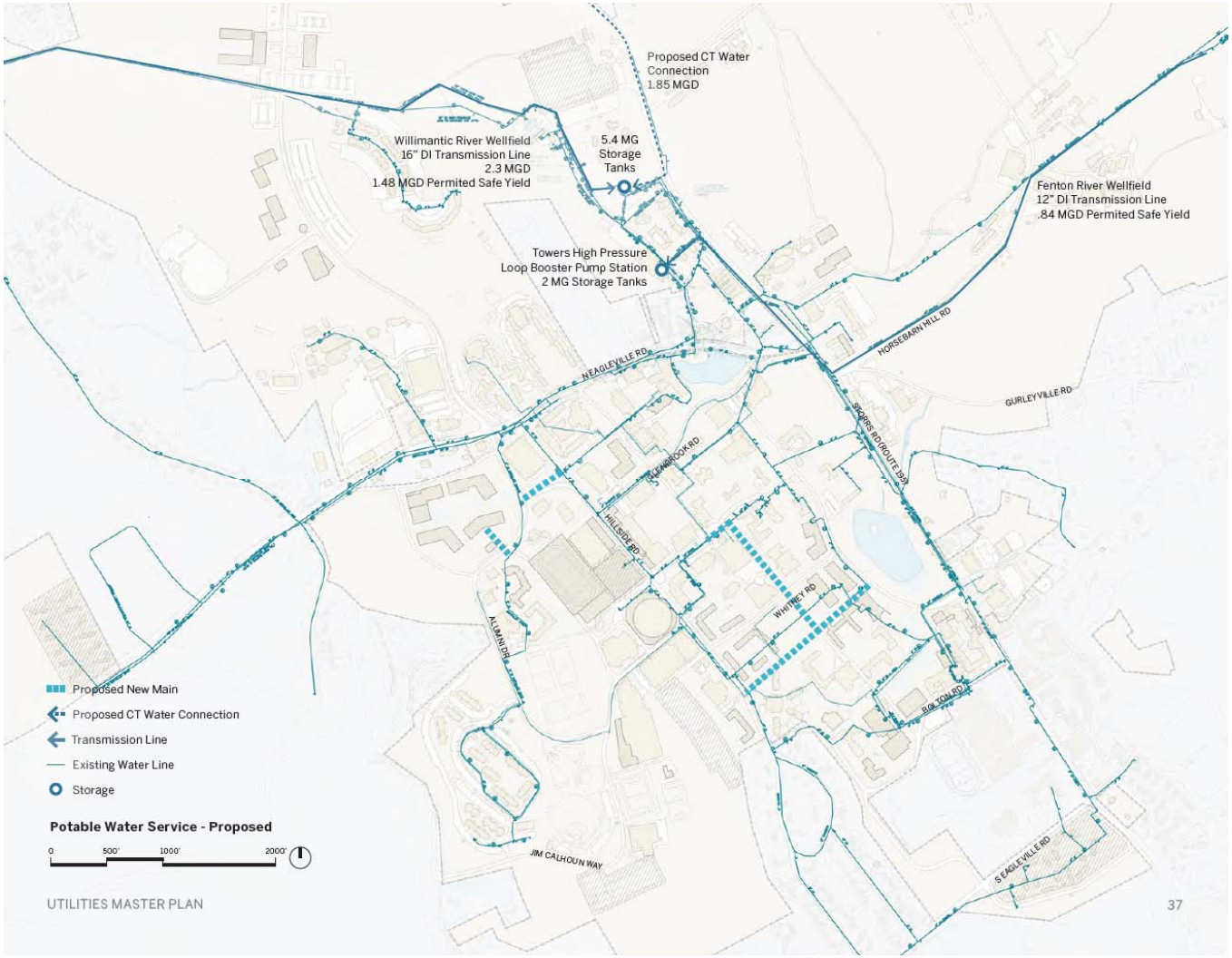
Even with considerable development in the long-term, projected demand is considerably below the proposed total supply of 4.95 MGD, which will be in place after the pipe supply connection through Connecticut Water Company is completed in 2016. This does not mean, however, that the University should not continue to pursue water conservation measures to serve its broader sustainability mission. Measures to increase water efficiency by as much as 30% are attainable in the long term; strategies to achieve these types of load reductions are outlined in the Sustainability Framework Plan.

*Renovated buildings are assumed to be approximatley 30% more efficent following the renovation. Indicated value is relative energy savings.

** Load projections based on new, removed, and renovated space by phase and use type, as outlined in the Campus Master Plan and the Load Calculations at the end of this report.

Project Water Demand Projections

	Additional Average Day Demand				
	Tech Park	Off-Campus	NextGen	Margin of Safety	TOTAL
2015	0	0	24,125	0	0
2030	126,480	242,000	138,500	369,953	876,933
2045	333,900	369,000	138,500	420,116	1,261,516
2060	333,900	453,500	138,500	459,385	1,385,285
	Additional Peak Day Demand				
2015	0	0	43,425	420,691	464,116
2030	168,219	321,860	239,700	808,965	1,538,744
2045	444,087	490,770	239,700	875,682	2,050,239
2060	444,087	603,155	239,700	914,041	2,200,983


Proposed CT Water Connection
1.85 MGD
Willimantic River Wellfield
16" DI Transmission Line
2.3 MGD
1.48 MGD Permited Safe Yield
5.4 MG Storage Tanks
Towers High Pressure Loop Booster Pump Station
2 MG Storage Tanks
Fenton River Wellfield
12" DI Transmission Line
.84 MGD Permited Safe Yield
HORSEBARN HILL RD
NEAGLEVILLE RD
GURLEYVILLE RD
STORRS RD/ROUTE 195
HILLSIDE RD
WHITNEY RD
ALUMNI DR
BOLTON RD
JIM CALHOUN WAY
S EAGLEVILLE RD
Proposed New Main
Proposed CT Water Connection
Transmission Line
Existing Water Line
Storage
Potable Water Service - Proposed
0
500'
1000'
2000'
UTILITIES MASTER PLAN
37

Thank You!