



Harvard-Devens Water System Interconnection Level 2 Unified Permit

Town of Harvard
Department of Public Works

December 2023

Tighe&Bond

H-1776-016
12/11/2023

Neil Angus, Director/Land Use Administrator
Devens Enterprise Commission
33 Andrews Parkway
Devens, MA 01432

Re: **Harvard-Devens Water System Interconnection Project - Harvard, MA
Level 2 Unified Permit**

Dear Mr. Angus,

We are writing on behalf of the Town of Harvard to provide the Devens Enterprise Commission with a Level 2 Unified Permit Application.

The proposed project consists of a new Booster Pump Station on Sheridan Road to serve as an interconnection between the Town of Harvard and Devens. The Booster Pump Station Design includes a master meter, chemical feed systems, electrical gear, and pump skid. The chemical feed system will consist of NaOCl for disinfection. The project also includes the construction of an 8,900 linear foot 12-inch ductile iron water main in Depot Road in Harvard, MA.

Enclosed please find:

- Devens Regional Enterprise Zone Level 2 Permit Application
- Unified Permit Application Responses
- Appendices to Unified Permit Application Responses
- Harvard-Devens Water System Interconnection Project – Contract No. 1 Plans
- Harvard-Devens Water System Interconnection Project – Contract No. 2 Plans
- A \$240 check for the Unified Permit Processing Fee

The estimated construction cost for this project is \$2,000,000. We are requesting a waiver of the \$24,000 Unified Permit Fee, since this is a municipal project for the Town of Harvard.

We would be happy to meet with you as well to further discuss the project. Please call me if you have any questions regarding the project.

Very truly yours,

TIGHE & BOND, INC.



Mary Danielson, PE
Project Engineer
(207) 702-1993
mdanielson@tighebond.com

Copy: Timothy Kilhart, Harvard DPW Director
Thomas Mahanna, Tighe & Bond
April Locke, Tighe & Bond

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DEVENS ENTERPRISE COMMISSION

**DEVENS REGIONAL ENTERPRISE ZONE
PERMIT APPLICATION LEVEL 2**

DEC NO. _____
DATE: _____
FEE: _____

ESTIMATED COST OF CONSTRUCTION / IMPROVEMENTS \$2,000,000.00

OWNER MassDevelopment

Town of Harvard
APPLICANT Department of Public Works

ADDRESS 33 Andrews Parkway

ADDRESS 47 Depot Road, Harvard MA

TOWN/STATE Devens, MA

TOWN/STATE Harvard, MA

PHONE 978-784-2900

PHONE 978-456-4130

FAX _____

FAX 978-456-4125

SIGNATURE _____

T. B. Kilford
SIGNATURE

Type or print name and title

Timothy B. Kilford
Type or print name and title

If appropriate, attach a separate sheet with the name(s), address(es), and telephone/fax numbers for the project engineer, attorney, or other "development team" personnel.

SITE / LOCATION / STREET 39 Sheridan Road, Devens, MA

LOT SIZE / TOTAL PARCEL / ZONING DISTRICT: Lot Size: 25.7 acres, Zoning District: Open Space

STATEMENT OF PROPOSED WORK OR ACTIVITY: Construction of a booster pump station to serve as a drinking water interconnection between the Town of Harvard and Devens.

SCOPE OF WORK (pick the actions that best fit your project or application)

- Site Plan Reconsideration
- Wetlands NOI Zoning Variance
- Minor amendment or modification of an approved plan
- Historic District renovations/addition/alternations
- Other (Specify) _____

Explain work to be performed: The work includes construction of a booster pump station off of Sheridan Road in Devens, MA and installation of approximately 705 linear feet of 12-inch ductile iron water main in Devens to convey water from Devens to the booster pump station. Please refer to the design plans provided in the permit submittal for locations of the booster pump station and water main.

Comments from Notifying Agencies: _____



**LEVEL TWO UNIFIED PERMIT –
CHECKLIST FOR DETERMINATION OF COMPLETENESS
[Devens Enterprise Commission Rules and Regulations 2023]**

Town of Harvard - Department of Public Works
Name of applicant and project: Harvard-Devens Water System Interconnection

Date of Issuance of this DOC: _____

List Regulatory Components of this Unified Permit: _____

Signature of LUA or Authorized Agent: _____

1. Submission Requirements

- (a) A completed Permit application form.
- (b) The required Administrative, Processing, and Peer Review Fee.
- (c) One (1) original and three (3) copies of the application, supporting plans and materials and one (1) digital (PDF) copy of the full submission.
- (d) A List of Abutters, certified if abutters are not located in Devens and a sketch plan showing the proximity of the abutters to the site.
- (e) Drainage calculations prepared by an Engineer complying with 974 CMR 3.04(4).
- (f) Request for Determination of Applicability (RFD) or a Notice of Intent (NOI) shall be submitted in accordance with Article XII of the By-Laws and 974 CMR 4.06.
- (g) Copies of all existing easements, covenants, restrictions and Institutional Controls applying to the lot.
- (h) Soil suitability tests and analysis.
- (i) A list of Waivers requested by the applicant, identified as Waivers of Submission and Plan Form and Contents requirements or Design Standards, with the applicable section of the Regulations clearly identified or a statement that no waivers are being requested.
- (j) Copy of any variance applying to the land, granted or filed concurrently with the Site Plan.
- (k) A narrative demonstrating compliance with the Reuse Plan and By-Laws meeting the specifications of 974 CMR 1.02.

- (l) If proposed by the applicant, a plan for the phasing of the construction of the required improvements, including a description, schedule, and plan showing the location of each phase.
- (m) A written statement of compliance with the Devens Open Space and Recreation Plan (DOSRP) and the Devens Main Post Trails report dated July 2001, to determine the effects, if any, of proposed development on resource areas, proposed trail rights-of-way, active and passive recreation areas, and other amenities included in the DOSRP.
- (n) If an applicant proposes parking lot construction phasing, a written statement demonstrating that the portion to be constructed is sufficient for the needs of the users of the proposed structure, comparing the number of spaces required by the By-Laws to the number the applicant believes are adequate, written certification that no building or permanent accessory structure will be placed on the area reserved for additional parking spaces, and a draft covenant that the parking will be built when the DEC determines it is required.
- (o) An estimate of the number of vehicle trips daily and for the morning and evening peak periods (trip generation rates shall be based on the ITE "Trip Generation Manual" most recent edition, and if applicable, data about similar developments in Massachusetts) and a description of traffic mitigation measures proposed including traffic management plans, trip reduction methods, and car/vanpooling preferential parking, etc. Refer to the Devens Transportation Management Initiative Overview for full details and parking/trip reduction guidance.
- (p) An erosion and sedimentation plan.
- (q) A landscaping maintenance and water management plan.
- (r) A narrative demonstrating compliance with the Industrial Performance Standards.
- (s) A copy of the LEED Green Building Rating System Project Checklist with the Location and Transportation, Sustainable Sites, and Water Efficiency Categories completed: <https://www.usgbc.org/resources/leed-v4-building-design-and-construction-checklist> .
- (t) Building elevations or perspectives of those portions of the building visible from public ways and residential and open space zoning districts showing the general appearance, massing, building materials, proposed colors, and relationship to abutting premises and, prior to the public hearing, the design review letter from Mass Development.
- (u) Building design review materials and if located within the Viewshed District, viewshed impact analysis.
- (v) All Slope Resource Areas as identified in 974 CMR 3.06 Appendix B Figures (13) Figure M within the proposed plan area shall be shown on the site plan.
- (w) Climate change mitigation, adaptation and greenhouse gas emissions mitigation measures in accordance with the requirements of 974 CMR 4.11.

- ✓ (x) A completed copy of the Devens Project Checklist for Reducing Embodied Carbon (highlighted rows only) – see Appendix 2. A final copy of this completed checklist (all rows) will be required prior to issuance of a Certificate of Occupancy.
- ✓ (y) All project submittals subject to DEC review shall require the stamp and signature of a registered Professional Engineer in the Commonwealth of Massachusetts certifying that the project complies with the requirements of 974 CMR 3.04(4), Stormwater Management Design Standards, and 974 CMR 4.08, General: Stormwater Management

2. Surveying and Drafting Plan Requirements

- ✓ (a) Site plans shall be 24"x36" and at a scale of 1" = 40' unless alternate size is approved by the Director. All Site Plans must also conform to the Registry of Deeds requirements for recording.
- ✓ (b) The names and addresses of the record owner of the land and the applicant and the name, seal, and address of the designer, Engineer, Surveyor, and Registered Landscape Architect who made the plan, all of which shall appear in the lower right-hand corner.
- ✓ (c) The name of the development, scale, date of plan, and legend.
- ✓ (d) A locus plan indicating the general location of the site in relation to all adjacent and nearby roads, railroads, and waterways.
- ✓ (e) Ties from the development site to the nearest town and county bounds if within 1000 feet of the site. Bearings and curve data/distances of all lot lines, names of all adjoining property owners as they appear in the most recent tax list, and the location of easements, rights-of-way, and public and private ways.
- ✓ (f) Devens Lot number of the site, if available.
- ✓ (g) Topography for the entire site in two-foot intervals with contours and principal elevations of significant existing and proposed features related to the National Geodetic Vertical Datum (NGVD) of 1929. Existing contours shall be shown as dashed lines and, along with all other existing features, shall be screened. Proposed contours are to be shown as solid lines.
- ✓ (h) A space for the DEC's endorsement of the Site Plan by a majority of the members of the DEC on the front sheet and space for the chairperson or designee to sign all other sheets.
- ✓ (i) Lines of existing abutting Streets and Roads showing drainage and driveway locations and curb cuts.
- ✓ (j) Surveyed property lines showing distances and monument locations, all existing and proposed Easements, Rights-of-Way, utilities and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed.

3. Administrative Plan Requirements

- (a) Zoning district(s) and any boundary of zoning districts within the site, along any existing or proposed lot line, or within 50 feet.
- (b) The location, dimensions (including height), and general use of all existing and proposed buildings and structures to remain, including ground coverage, gross floor area, open area uses, and other facilities and improvements. Location of buildings existing on the site to be developed and on adjacent land under the same ownership within 500 feet of the lot line, indicating whether existing buildings are to be retained, modified or removed. See Appendix 1 for table template.
- (c) A statement noting the area of the site, the percentage of the site to be covered by impervious surfaces (such as buildings and parking areas), the area to be devoted to open space, the area to be paved for parking, driveways, loading spaces, and sidewalks, the number of proposed parking spaces and the number required by the By-Laws, the number of employees expected per shift, and the gross floor area of each proposed (commercial, industrial, office, or other) use. This data shall be tabulated to show the relationship of the required versus the proposed quantities. See Appendix 1 table template.
- (d) Existing and proposed front, side, and rear setback dimensions.
- (e) Parking lots and loading docks, showing driveway entrances and exits designed for safe ingress and egress, curb cuts, layout of parking spaces, aisles, off-street loading facilities, pedestrian walks, bicycle racks or storage facilities, handicap ramps, and representative cross-sections of service and parking areas and driveways.
- (f) Existing and proposed landscape features such as fences, walls, planting areas, wooded areas, and walks. Scattered trees to be preserved shall also be shown as well as all "specimen trees" (trees exceeding a minimum caliper of twelve inches) within 100 feet of existing or proposed lot lines have been identified and indicated on the plan. All existing landscape features, especially existing trees and woodland to remain are shown on ALL site plan sheets. Planting details setback, screens, and other landscaped areas including quantities, species, and spacing of plantings, shown at sufficient scale to illustrate clearly the landscaping design. Plans for walks, walls, and fences including dimensions, materials, and finishes. Landscaping Plans, Irrigation Design plans, Planting Plans, Planting Detail sheets, and Planting Specifications shall be prepared by a Landscape Architect registered in the Commonwealth of Massachusetts and shall bear the seal and signature of the Registered Landscape Architect who prepared them.
- (g) Planting Plans shall indicate the locations of proposed Street, Road and site lighting, even if site lighting is shown elsewhere on a separate plan and designed by separate consultant. Planting plans shall also include details and locations for walks, walls, and fences including dimensions, materials, and finishes.
- (h) Quantities, species, and spacing of plantings in lot setback areas, screens, parking and loading areas, and other landscaped areas shall be shown at a minimum scale of 1"=40'. Detail plans for areas such as landscape treatments adjacent to buildings, tree clusters or shrub beds, landscaped islands in parking areas, or other densely landscaped areas shall be shown at a scale of 1"=20'.

- ☑ (i) If an irrigation system is proposed, the Submission shall include an irrigation plan complying with 974 CMR 8.09(11) showing the complete layout and of all components, complete schematic diagrams of all systems, a functional and sequential description of all systems, and irrigation details for installation of all components, including but not limited to piping, valves, valve boxes, sprinkler heads, backflow preventers, automatic control systems, pumps, meters, associated cabinets, and all appurtenances as needed.
- ☑ (j) Proposed means of fire equipment access.
- ☑ (k) Proposed traffic circulation systems, including the volume and proposed direction of traffic flows into, out of, and within the site for both vehicles and pedestrians for an average day and for peak hours.
- ☑ (l) Location and dimensions (including height) of all storage facilities for equipment, material, and other like items. Location of all underground and aboveground fuel, combustible, and flammable liquid storage tanks greater than 250 gallons.
- ☑ (m) Location and dimensions (including height) of facilities for garbage, rubbish, recycling, and other waste collection and disposal. Location and dimensions (including height) of facilities for garbage, rubbish, recycling, composting and other waste collection and disposal. **Note: Applicants should be aware of MA waste ban materials and plan for storage/reuse accordingly.** Info. on waste ban items can be found at <http://goo.gl/Qrea5>
- ☑ (n) Garage and pedestrian entrances and exits.
- ☑ (o) Maximum size vehicle, including trailers, expected to use the site after construction, by length, width, height, and American Association of State Highway and Transportation Officials (AASHTO) designation.
- ☑ (p) Location and dimensions (including height) of existing and/or proposed free-standing signs and the manner of illumination. All proposed signs shall conform with Article XIII of the By-Laws and 974 CMR 6.00: Sign Control as most recently amended.
- ☑ (q) Existing and proposed public and private utilities, above and below grade, along with their type, size, and class
- ☑ (r) If the project is to be phased, a plan for the phasing of the construction of the required improvements, including a description, schedule, and plan of affected areas
- ☑ (s) Any additional details that may be pertinent or required by the Director during the scoping or Pre-Permitting sessions

4. Industrial Performance Standards Plan Requirements.

- ☑ (a) The site lighting information shall be provided on the Site Plan, including types of fixtures, heights, wattage, foot candle output directly under the light source, foot

candle output at the lot line, and a photometric layout/diagram showing direction and intensity of outdoor lighting.

- (b) Notes shall be provided on the Site Plan stating:
 - (1) Existing or proposed use will not generate electromagnetic interference to any sensitive receptor. Interference with the Harvard-Smithsonian radio telescope (1400-1720 MHz) is specifically prohibited.
 - (2) Proposed or existing use will not cause pronounced, multiple patterns of noise or vibration nuisance to, or interfere with, any sensitive receptor.
 - (3) Either "A Massachusetts Department of Environmental Protection (DEP) air quality permit application has been made" or "A DEP air quality permit is not required."
- (c) Locations or uses deemed by the Director to be sensitive receptors in any given area of impact may be subject to field identification of the receptor and/or special documentation or field data that helps to clarify the existence or absence of subject impacts. This documentation and data includes existing secondary data and studies, limited field testing by the applicant, or in the worst case scenario, retention of additional professional consultants to conduct further testing. Specifications for any additional information will be identified by the Director during the pre-permitting conference and shall be incorporated in the Site Plan.
- (d) A Copy of the completed Industrial Performance Standards Checklist shall be included: http://www.devseec.com/forms/Industrial_Performance_Standards_Checklist.pdf.

5. Wetlands/Water Resources/Flood Plain Plan Requirements.

- (a) All Resource Areas as defined by 974 CMR 4.06, including existing natural features (ponds, brooks, wetlands, etc.), Federal Emergency Management Agency (FEMA) flood plain elevations on and/or adjacent to the lot, Flood Insurance Rate Map (FIRM) panel number, zone designation, and base flood elevation.
- (b) Erosion, siltation, and dust control measures before and during construction, in accordance with 974 CMR 3.02(3)(e).
- (c) Location of all private wells on or within 200 feet of the boundaries of the property, if any
- (d) Location of all public and community water supply wells on or within 1,000 feet of the boundaries of the property, if any.
- (e) Proposed conservation restrictions and easements.
- (f) For any site plan that stores fuel, combustible and flammable liquids, as defined by 42 U.S.C. section 6901-6922i, G.L. c. 148, and 527 CMR 9.00, compliance with 974 CMR 4.09 and an addendum to the DSPCC and the location of on-site materials and equipment for spill response in accordance with its specific DSPCC are required.

6. Schedule:

Transmitted to Nitsch and other consultants
Pre-Permitting conference
Date of Determination of Completeness
Mail to Towns (30-day comment period begins)
Advertisements
Notification of abutters
Public hearing
End of 30-day comment period
Tentative vote

7. Notes/Comments

Section 1 Submission Requirements

1.1 Complete Permit Application Form

A complete permit application form is included in this submission.

1.2 Administrative, Processing, and Peer Review Fee

The Town of Harvard will mail the Devens Enterprise Commission a \$240.00 check to cover the Unified Permit processing fee. The Town understands that additional fees related to the peer review may be required.

We are requesting a waiver of the \$24,000 Unified Permit Fee since this is a municipal project for the Town of Harvard.

1.3 Application Forms

One (1) original and three (3) copies of the application, supporting plans and materials and one (1) digital PDF copy of the full permit submission are included herein.

Please follow this link to download a PDF copy of the permit submittal.

1.4 List of Abutters

A list of certified abutters from the Town of Harvard is included in Appendix A of this permit submittal. The Harvard abutters are shown in the plan sets titled "Harvard-Devens Water System Interconnection Project Contract No. 1/DWSRF-7285" and "Harvard-Devens Water System Interconnection Project Contract No. 2/DWSRF-7285", which are included as Appendices B and C to this permit.

It is Tighe & Bond's understanding that MassDevelopment will provide an abutter list for Devens.

1.5 Drainage Calculations

Drainage calculations were completed in accordance with 974 CMR 3.04(4) and are included in Appendix D of the Stormwater Report. The entire Stormwater Report is included in Appendix D of this permit submittal.

1.6 Notice of Intent

A Notice of Intent was prepared in accordance with Article XII of the Devens By-Laws and 974 CMR 4.06. The Notice of Intent is included in Appendix E of this permit submittal.

1.7 Easements, Covenants, Restrictions and Institutional Controls

The Town of Harvard seeks an easement from MassDevelopment, the final extents of which will be based on the design approved under this permit package.

1.8 Soil Suitability Test Results

Soil borings were conducted on October 23 and 24. Soil boring logs are included in Appendix F.

Two test pits were made onsite on October 23, 2023. Soil Suitability Assessment for On-Site Sewage Disposal is included in Appendix G.

Percolation tests were conducted on October 23, 2023. Percolation Test Form 12 is included in Appendix H.

1.9 Waivers

There are no waivers requested for the proposed booster pump station location.

1.10 Variances

The proposed project is seeking a variance to the side yard setback of 10 feet. In order to keep the project away from the steep slope area, it is necessary to maintain a side yard setback of less than 10 feet.

1.11 Reuse Plan and By-Law Compliance

This project is a regional collaboration between Devens and the Town of Harvard. The proposed booster pump station will be used as a drinking water interconnection between Devens and the Town of Harvard. It will be located in the Open Space Zone of Devens. The booster pump station will be approximately 30-feet by 24-feet and will contain two 50 gpm booster pumps and one 500 gpm high demand pump. The existing access road off of Sheridan Road will be maintained for operators to access the booster pump station.

The booster pump station design includes minimal disturbance to the existing site. Site restoration will include native plants and wildflowers to enhance Devens' ecological resources. The proposed design includes stormwater runoff mitigation. Stormwater runoff from the project area will flow into one of two proposed trench drains. From the trench drains, water will be conveyed to a proposed drainage manhole, which will direct runoff to a water quality unit for pretreatment. After pretreatment, runoff will be directed to a subsurface infiltration system for treatment and infiltration to groundwater.

1.12 Phasing of Construction

Tighe & Bond is not proposing phasing of construction for the proposed booster pump station. The pump station will be bid and constructed as a single project. Water main improvements will be bid as a separate project but constructed concurrently.

1.13 Open Space and Recreation Plan and Devens Main Post Trails

The proposed development does not impact trail rights-of-way, recreation areas, or other amenities included in the Devens Open Space and Recreation Plan.

1.14 Parking Lot Construction Phasing

This project does not include the construction of a parking lot.

1.15 Vehicle Trips

Tighe & Bond anticipate that one vehicle trip will be made per day by operators to check on the booster pump station.

1.16 Erosion and Sedimentation Plan

The Erosion and Sedimentation Plan is included in the Stormwater Report that Tighe & Bond prepared. The Stormwater Report is included in Appendix D of this submittal.

1.17 Landscaping Maintenance and Water Management Plan

The site of the booster pump station is in a wooded area that is considered Open Space. The proposed design includes minimal clearing of existing plants and trees. The site design includes planting native plants and wildflowers that require minimal maintenance.

A water management plan does not apply to this site as the booster pump station is intended to convey water from Devens to the Town of Harvard. Water will be used onsite to prepare Sodium Hypochlorite solutions for disinfection, and as needed to supply water to the emergency shower. No other water use is anticipated.

1.18 Industrial Performance Standards

The proposed booster pumping station design includes a standby generator. The generator will be housed in a sound attenuated enclosure to decrease sound levels to 68 dB, which is lower than standard lawn equipment.

The booster pump station will not impact air quality.

Exterior photocell lights will be mounted on each side of the building for a total of four (4) lights. The lights will be designed to meet the Illuminating Engineering Society (IES) criteria for "sharp cutoff" luminaries.

1.19 Green Building Rating System Project Checklist

The Green Building Rating System Project Checklist is included in Appendix I of this submittal. Per correspondence between Tighe & Bond and Devens, only the Sustainable Sites portion of the checklist has been provided.

1.20 Building Elevations

Building elevations for the proposed booster pump station are included in the drawing plans titled "Harvard-Devens Water System Interconnection Project Contract No. 1/DWSRF 7285", which can be found in Appendix B of this permit submittal.

1.21 Viewshed Analysis

Per the Devens, Massachusetts Viewshed Districts Map dated July 22, 2003, the proposed booster pump station is not located in the Viewshed District.

1.22 Slope Resource Areas

The proposed booster pump station is not within a Slope Resource Area.

1.23 Climate Change Mitigation, Adaptation and Greenhouse Gas Emissions

The proposed booster pump station will include a tankless hot water heater to provide water to the emergency shower. The tankless hot water heater will heat water on demand, rather than rely on a tank to store heated water for use as required. The design also includes a heat pump which reduces reliance on oil and natural gas to heat the building.

1.24 Devens Project Checklist for Reducing Embodied Carbon

The Project Checklist for Reducing Embodied Carbon is included in Appendix J of this permit submittal.

1.25 Stamp and Signature Requirements

A registered Professional Engineer in the Commonwealth of Massachusetts has stamped the design plans in Appendix B and Appendix C.

Section 2 Surveying and Drafting Plan Requirements

Please refer to project plans in Appendix B titled "Harvard-Devens Water System Interconnection Project Contract No. 1/DWSRF 7285" and Appendix C titled "Harvard-Devens Water System Interconnection Project Contract No. 2/DWSRF 7285" for requirements pertaining to surveying and drafting.

Due to the size of the proposed development we request a variance of the site plan scale to be 1" = 20' instead of the required 1" = 40'. We also request a variance of the size of the printed plans to be 34"x22" instead of the required 24"x36".

A site locus plan is included in Appendix K.

Section 3 Administrative Plan Requirements

Please refer to project plans in Appendix B titled "Harvard-Devens Water System Interconnection Project Contract No. 1/DWSRF 7285" and Appendix C titled "Harvard-Devens Water System Interconnection Project Contract No. 2/DWSRF 7285" for requirements pertaining administrative plans. Clarification for other administration plan requirements is provided below.

3.1 Zoning Districts

The proposed booster pumping station is in the Open Space District.

3.2 Existing and Proposed Changes

Applicable sections of the Zoning Conformance Summary, Dimensional Requirements, Parking and Traffic Summary, and Build Area and Use Tables of the Unified Permit are included in the Tables 3-1 through 3-4 below.

TABLE 3-1

Zoning Conformance Summary	
Address	39 Sheridan Road, Devens, MA
Parcel ID	4
Primary Zoning District	Open Space
Overlay District(s)	None
Use	Harvard-Devens Water Interconnection

TABLE 3-2

Dimensional Requirements					
Criteria	Required	Existing	Proposed	Change	Zoning Compliance
Lot Area (AC)	(Min.)	25.7	25.7	0	
Total Land Area Disturbed (SF)		0	10,065	+10,065	
Total Impervious Cover (SF)		0	3,790	+3,790	No Requirement
Total Impervious Cover (% of Parcel)		0%	0.34%	+0.34%	No Requirement
Building Impervious (SF)		0	720	+720	
Building Impervious (% of Lot)		0%	0.06%	+0.06%	
Pervious/Pavement/Pavers (SF)		0	0	0	
Total Hardscape (Impervious + Pervious) (SF)		0	2,298	+2,298	
Percent of Hardscape in Pervious Pavement/Pavers (SF)		0	0	0	
Open Space (SF)		1,122,101	1,112,036	-10,065	No Requirement
Lot Frontage (FT)	75 (Min.)	627	627	0	
Front Yard Setback (FT)	25 (Min.)	N/A	40	N/A	
Side Yard Setback (FT)	10 (Min.)	N/A	6	N/A	
Rear Yard Setback (FT)	25 (Min.)	N/A	140	N/A	
Building Height (FT)		N/A	25.5	N/A	No Requirement
FAR Coverage		Not Applicable – In Open Space District			

TABLE 3-3

Parking and Traffic Summary						
Criteria	Required		Existing	Proposed	Change	Zoning Compliance
Parking Spaces	1	(Max.)	0	1	1	
Total Spaces						
Total Employee Count Visting Site			0	1	1	
Number of Employee Shifts			0	1/day	1/day	

TABLE 3-4

Building Area and Use						
Criteria	Existing	Proposed	Change	FAR Use	by	Zoning Compliance
Gross Floor Area:						
Total (SF)*	0	720	720	0.062%		
Commercial (SF)	0	0	0			
Industrial/Light Industrial/Distribution (SF)	0	0	0			
Office (SF)	0	0	0			
Other (Specify) (SF)	0	0	0			

*There are not individual rooms at the booster pump station. There is only one room.

3.3 Planting Plan

The site design includes efforts to minimize clearing and to preserve existing trees and plants. Native plants and wildflowers are included in the site design to enhance Devens' ecological resources.

3.3 Irrigation System

An irrigation system is not included in this design.

3.3 Fire Equipment Access

The site can be accessed by fire equipment using the access road off Sheridan Road.

3.4 Traffic Circulation Systems

Proposed traffic circulation systems are not included in this report as only one trip per day is anticipated to the booster pumping station.

3.5 Waste Collection and Disposal Facilities

Garbage, rubbish, recycling, and other waste collection and disposal facilities are not included at the proposed booster pump station.

3.6 Vehicle Size

Utility trucks are expected to be at the booster pumping station one time each day. Propane delivery trucks are expected to be onsite as needed to fill the two (2) 1,000-gallon propane tanks.

3.6 Proposed Free-Standing Signage

Free-standing signage is not proposed for this site.

3.6 Phasing of Construction

Phasing of construction is not proposed.

Section 4 Industrial Performance Standards Plan Requirements

Please refer to project plans in Appendix B titled "Harvard-Devens Water System Interconnection Project Contract No. 1/DWSRF 7285" for requirements pertaining to the Industrial Performance Standards.

4.1 Industrial Performance Standards Checklist

The Industrial Performance Standards Checklist is included in Appendix M of this permit submittal.

The proposed booster pumping station design includes a standby generator. The generator will be housed in a sound attenuated enclosure to decrease sound levels to 68 dB, which is lower than standard lawn equipment.

We do not anticipate that the project will result in vibrations under normal operation. Vibrations may occur as a result of equipment failure or fatigue overtime but would be addressed during repairs.

The proposed project will meet air quality standards and does not require a MassDEP Air Quality Permit.

Site lighting includes four (4) wall mounted lights on each side of the proposed booster pump station and is shown in the project plans.

The proposed project does not have the ability to create electromagnetic interference.

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