City of Auburn, Maine
Planning & Permitting Department
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

PLANNING BOARD AGENDA
May 12, 2026 – 6:00 p.m.
City Council Chambers, 60 Court Street

1. **ROLL CALL**

2. **MINUTES:** Acceptance of the April 14, 2026 meeting minutes.

3. **OLD BUSINESS**

   A. CONTINUED PUBLIC HEARING FINAL SITE PLAN/SUBDIVISION REVIEW: Hampshire Commons Apartments, 143 Hampshire Street (PID 250-311, 250-310, 250-309) - Application by Gorrill Palmer on behalf of Auburn Residential Development Corp to construct a 32-unit housing first residential development. The property is located in the Traditional Downtown Neighborhood (T-4.2) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision. This item is continued from the April 14, 2026 meeting.

   B. CONTINUED PUBLIC HEARING FINAL SITE PLAN/SUBDIVISION REVIEW: Wahan Oaks Subdivision, 146 Manley Road (PID 198-037 & 198-038). Application by Trillium Engineering Group on behalf of Homes for All, LLC for a proposed 14 lot single-family subdivision. The property is located in the Traditional Neighborhood Development district (T-4.2B) and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 4- Subdivision Review. This item is continued from the December 9, 2025 meeting.

4. **NEW BUSINESS**

   A. PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW: Bear Self Storage & Auto Facility, 864, 868, 878 and 900 Center Street and 1193 Turner Street (PIDs 301-017-002, 301-018, 301-019, 301-017 and 300-009) – Application by Wright Pierce on behalf of Bear Holdings, LLC and Bear, LLC to construct a 9,000 square foot auto sales/service building with paved vehicle display areas and gravel areas for rental of storage containers. The property is located in the General Business (GB) district and Suburban Residence (SR) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

   B. PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW: Town Farm Recovery Options – 249 Merrow Road (PID 186-012) - Application by Zack Cameron to change the use of

the residential property at 249 Merrow Road to an outpatient recovery facility. The property is located in the Industrial (I) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

5. **OTHER BUSINESS:** Introduction to LD-1829 "An Act to Build Housing for Maine Families and Attract Workers to Maine Businesses by Amending the Laws Governing Housing Density". Staff will introduce the new state law and discuss potential changes to Chapter 60 zoning.

6. **PUBLIC COMMENT**

7. **MISCELLANEOUS**

8. **PLANNING BOARD ITEMS FOR DISCUSSION**

9. **ADJOURNMENT**

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PLANNING BOARD MINUTES
April 14, 2026

1. **ROLL CALL:** Ed Bearor (Chair), Riley Bergeron, Tim DeRoche, Chelsea Eaton, Bob Hayes, Maureen Hopkins, Bilal Hussein, Kathy Shaw, and Andrea Westbye

   Staff members present: Eric Cousens (Public Services Executive Director) and Sam Peikes (Planning Coordinator)

2. **MINUTES:** Acceptance of the March 10, 2026 meeting minutes.

   Motion made by Bob Hayes and seconded by Maureen Hopkins to approve the March 10, 2026 minutes. Vote 7-0 Motion Carries

3. **OLD/CONTINUED BUSINESS**

   A. CONTINUED PUBLIC HEARING FINAL SITE PLAN/SUBDIVISION REVIEW:
   Danville Corner Housing Development, Danville Corner Road (PID 122-004 and 122-005) – Application by Terradyn Consultants, LLC on behalf of Timothy Millett for a housing development with 68 single family homes and 3 multi-family buildings with 8 apartments each. The property is located in the General Business (GB) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 4 – Subdivision. This item is continued from the March 10, 2026 meeting.

   Sam Peikes gave a staff report stating this item is continued from the March 10, 2026 meeting. Since that meeting, the applicant has responded to the comments regarding the traffic analysis, revised the open space calculation to not include the stormwater pond, provided an updated plan showing fire truck and emergency vehicle turning lane locations, provided snow storage locations on the site plan, and provided a revised condominium declaration. They also shifted Delish Drive 25 feet north to allow extra space for grading and eliminate the need for retaining walls, the 5,000 sf warehouse building on Lot 3 has been removed and the lot will be used for snow storage, and an additional 5 parking spaces have been added at the end of Lot 3 for access to the trail system.

   Craig Sweets of Terradyn Consultants reviewed the updated plan. He pointed out that dumpsters were added on each of the parking lots to replace the previously proposed trash storage and that they sent the plan to the Recreation Department and they sent a letter saying it meets their open space goals for the City.

   The applicant's attorney was present and answered questions on the condo documents, maintenance and repairs, when the association takes over, and personal gardens.

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Concern was expressed about not receiving documents confirming the condition is safe with the slope and vehicles queuing at the proposed stoplight at the Danville Junction Road and Washington Street intersection.

The public hearing was opened.

Stephen Beale - 575 Johnson Road pointed out that the Danville Corner Road traffic light is not part of the development, and that intersection safety isn't affected by added traffic. He said he had raised concerns about MDOT's design and that his suggestion for a turn lane was not adopted. He also warned that keeping water and sewer lines privately owned could create risks if the developer or condo association faces financial issues and a lien is imposed.

Steve Warren - 241 Danville Corner Road expressed concern about the lack of open space and feels that funds should go to the City to enhance the recreation in the neighborhood. He also expressed concern about accessibility for school buses, lack of street lights on the main artery, and suggested having some protection to prevent the developer from controlling the association and maintenance.

Spencer Dunn - 530 Court St – expressed concern about the project being stalled for a year and encouraged the board to approve the development tonight.

Craig responded to concerns stating the applicant provided financial capacity and there are performance guarantees that will address the utility concerns and protect the homeowners, that they are doing what the Recreation Department wants them to do for open space, and that there will be street lights on the main road.

The public hearing was closed.

Riley Bergeron moved to approve the application proposal from Terradyn Consultants, LLC on behalf of Timothy Millett for the proposed housing development consisting of 69 single-family homes, three multi-family buildings with eight units each an accessory 5,000 square foot warehouse on Danville Corner Road (PID- 122-004 and 122-005) pursuant to Chapter 60 Article XVI, Division 2 – Site Plan and Division 4 – Subdivision with the following conditions (1) The Final Subdivision Plan must be recorded at the Androscoggin County Registry of Deeds prior to the issuance of building permits, (2) Water and Sewer easements must be granted to the Auburn Water and Sewer District prior to activation of the mains, (3) A revised subdivision plan be provided to staff showing the street lights.

The motion was amended by Riley Bergeron and seconded by Bilal Hussein to approve the application proposal from Terradyn Consultants, LLC on behalf of Timothy Millett for the proposed housing development consisting of 68 single-family homes, three multi-family buildings with eight units each on Danville Corner Road (PID- 122-004 and 122-005) pursuant to Chapter 60 Article XVI, Division 2 – Site Plan and Division 4 – Subdivision with the following conditions (1) The Final Subdivision Plan must be recorded at the Androscoggin County Registry of Deeds prior to issuance of building permits, (2) Water and Sewer easements must be granted to the Auburn Water and Sewer District prior to activation of the

mains, (3) A revised subdivision plan be provided to staff showing the street lights. Vote 6-1 (Ed opposed). Motion Carries

4. NEW BUSINESS

A. PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW: Auburn Public Safety Facility, 550 Minot Ave (PID 209-035) – Application by Woodard & Curran on behalf of the City of Auburn to construct a new 44,000 square foot public safety facility for the Auburn Police and Fire Department. The property is located in the General Business II (GB II) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

Bilal said he is going to step down due to his personal bias of the project.

The board voted to honor Bilal's request to step down for the Public Safety Building project. Vote 6-0-1 (Bilal abstained) Motion carries.

Ed Bearor elevated Chelsea Drake to be a full voting member on this item.

Sam Peikes gave a staff report stating that the project is for a new public safety facility that will house the police and fire departments. She said the applicant is requesting a variance on the building height and a waiver on the driveway spacing.

Megan McDevitt of Woodard and Curran gave an overview of the project, the conditions of the current police and fire stations that warrant the need for a new facility, and reviewed the plans. She explained the waiver for the driveway spacing is due to the need to have two entrances but the total width of the site does not allow enough space between them to meet the requirement. She explained the need for the building height variance is due to the fire training tower exceeding the 45-foot maximum building height and that the building height is dictated by the Fire Department's operation requirements to properly drain full length fire hoses. She noted the current tower is 5 to 6 feet taller than what is being proposed.

The public hearing was opened.

Stephen Beale of 575 Johnson Rd – asked to see the plan showing the front elevation to see the sloped roofs and asked about drainage.

Bilal Hussein of 40 Weaver St – suggested the board make it a condition of approval that the applicant consult the LA Complete Streets Committee per the ordinance since the peak trips anticipated triggers a Traffic Movement Permit, requested the lights be less intrusive for abutting neighbors, and said the 500 and 100 year floodplain needs to be evaluated for potential impacts and how they will be addressed.

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Megan reviewed the plan showing where the FEMA 100-year flood elevation is, stating that retaining walls are being added, the grade is being significantly elevated, and that they will be 12 feet above flood elevation in the floodway. She said the lighting plan uses full cut-off fixtures and will be adjusted, with possible vegetative screening, to minimize light trespass on adjacent properties.

Dan Goyette said that the project was presented to the Complete Streets Committee 6 months ago, that they received comments as part of the traffic movement plan, and those have been incorporated in MDOT's traffic moving permit.

The public hearing was closed.

Motion made by Riley Bergeron and seconded by Tim DeRoche to approve the applicant's waiver request from Sec. 60-526 Building Height. Vote 7-0 Motion Carries

Motion made by Riley Bergeron and seconded by Tim DeRoche to approve the applicant's waiver request from Sec 60-800 Driveway Spacing. Vote 7-0 Motion Carries.

Motion made by Riley Bergeron and seconded by Bob Hayes to approve the application for the Auburn Public Safety Facility located at 550 Minot Ave (PID 209-035) in the General Business (GB II) district pursuant to Chapter 60, Article SVI, Division 2 – Site Plan Review and Division 3 – Special Exception with the condition that an updated site plan including screening be submitted to staff.

Riley withdrew his motion.

Motion made by Maureen Hopkins and seconded by Riley Bergeron to approve the application for the Auburn Public Safety Facility located at 550 Minot Ave (PID 209-035) in the General Business (GB II) district pursuant to Chapter 60, Article SVI, Division 2 – Site Plan Review and Division 3 – Special Exception with the following conditions: the applicant provide an updated site plan showing additional screening to mitigate light pollution on the adjacent parcel and final sewer and water easements are in place prior to activation. Vote 7-0 Motion Carries

B. PUBLIC HEARING PRELIMINARY SITE PLAN/SUBDIVISION REVIEW: Hampshire Commons Apartments, 143 Hampshire Street (PID 250-311, 250-310, 250-309) – Application by Gorrill Palmer on behalf of Auburn Residential Development Corp to construct a 32-unit housing first residential development. The property is located in the Traditional Downtown Neighborhood (T-4.2) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision.

Sam Peikes gave a staff report stating that an updated plan was submitted showing the driveway location moved closer to Western Prom to meet ordinance requirements, that the applicant is requesting waivers for lot width, building width, and front yard fence, and that Staff is requesting the applicant present a waiver from Sec 60-554 parking spaces due to the requirement being 2 parking spaces for every three dwelling units and the applicant is proposing only 14.

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Marty Sidlowski of Auburn Housing Authority gave background of Auburn Housing Authority and introduced the team working on the project.

Amanda Bartlett of Developer's Collaborative gave a brief overview of the project.

Stephen Bushey of Gorrill Palmer presented the site plans, landscape plan, and explained the need for the waivers. He said that the ordinance requires a maximum of 2 spaces for every 3 units and that they are providing 14, the requirement for lot width is 120 ft, the lot they are building on is 137 ft and combined with the lots on Gamage St it is 193 ft., the maximum building width allowed is 110 ft and the proposed building is 112 ft, and a minimum of 2 feet in height and a maximum of 4 feet in height is encouraged for the front yard fences and that they are proposing landscaping instead for the front and 6 ft tall fences on the sides.

Virginie Stanley of Invivid Architecture reviewed the building and elevation plans.

The public hearing was opened.

Joe Maley of 82 Webster St – expressed concerns regarding traffic, lighting, and encouraged the board, police, and code to make sure the project is happening the way it's supposed to be. He also wanted to know if the project was going to be for transient people coming and going or a live in situation.

Marty assured Joe that the project is permanent supportive housing and that the residences will have leases.

The public hearing was closed.

Motion made by Ed Bearor and seconded by Tim DeRoche that the parking as proposed meets the standard of our ordinance and a waiver is not necessary. Vote 7-0 Motion Carries.

Motion made by Tim DeRoche and seconded by Bob Hayes that the waiver request for the fence is unnecessary as it refers to a front yard fence and this fencing would be on the side and the rear and therefore does not apply.

Amended Motion by Tim DeRoche and seconded by Andrea Westbye that the waiver request for the fencing is not necessary due to the fence height and that the fence proposed is for the side and rear of the building when our section of the ordinance is referring to the front which does not apply. Vote 7-0 Motion Carries

Motion by Maureen Hopkins and seconded by Bob Hayes to approve the applicant's waiver request from Sec 60-549 building width. Vote 7-0 Motion Carries

Motion by Maureen Hopkins and seconded by Bob Hayes to approve the applicant's waiver request from Section 60-549 lot width. Vote 7-0 Motion Carries

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Motion by Maureen Hopkins and seconded by Tim DeRoche to approve the preliminary plan for Hampshire Commons Apartments located at 143 Hampshire Street (PID 250-311, 250-310, 250-309) in the Traditional Downtown Neighborhood (T-4.2) district pursuant to Chapter 60, Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision with the condition that final sewer and water easements are in place prior to activation . Vote 7-0 Motion Carries

Ed requested an ongoing condition that landscaping be maintained for final plan approval.

It was suggested that the Board take the Myrtle Street application out of order and that they consider that there is no evidence of right title and interest in the property and the application is not complete.

C. PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW: 26 Myrtle Street Mixed-Use Convenience Store, 26 Myrtle Street (PID 230-139-002). Application submitted by Victor Ali to change the use of the existing residential building to a mixed-use building with a convenience store on the first floor and a residential apartment on the second floor. The property is located in the Traditional Downtown Neighborhood (T-4.2) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

Motion made by Tim DeRoche and seconded to postpone the Myrtle Street application to a date uncertain. Vote 6-0-1 (Maureen was out of the room). Motion Carries

D. PUBLIC HEARING MINOR SUBDIVISION REVIEW: Poland Road Subdivision, 506 Poland Road (PID 188-016). Application submitted by Frank Perry to subdivide the property located at 506 Poland Road to create a third lot division. The property is located in the Traditional Neighborhood (T-4.2B) district and will be reviewed under Chapter 60, Article XVI, Division 4 – Subdivision.

Sam Peikes gave a staff report stating that 502 Poland Road was split last year to create a .2-acre lot, that the applicant is creating a third lot that will be accessed via shared common driveway, and that he will need to provide language for a driveway easement.

Frank Perry said he intends to have a house on the lot, that the driveway will be shared, and there will be an easement for utilities as well as the driveway included in the deed

The public hearing was opened.

There were no comments

The public hearing was closed.

Motion made by Tim DeRoche and seconded by Bob Hayes to approve the application for the Poland Road Subdivision located at 506 Poland Road, PID 188-016 pursuant Chapter 60, Article XVI, Division 4 - Subdivision with the condition that prior to recording the subdivision plan, the deed is updated to include language for the common driveway easement. Vote 7-0 Motion Carries

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The Board unanimously agreed to hear 276 River Rd.

E. PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW: Limitless Towing, 276 Riverside Drive (PID 202-006). Application submitted by Erica Flagg to operate a towing and recovery business. The property is located in the General Business (GB) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

Sam Peikes gave a staff report stating that the applicant for the tow yard and recovery business has been operating without permits and they are before the board to ensure they can continue operating while being in compliance with our ordinance. She recommended the board votes as a condition of approval the applicant discontinue all operation until all permits are in place and a sewer connection to the building is established.

Erica Flagg reviewed pictures that show the distance from the river to address concerns of fluids and debris from salvage vehicles, the vehicle plan stating they are proactive to try to move the vehicles as quickly as they can and she said they want to improve how the building looks, that the impounded and towed cars will be inside a fenced area behind the building, and she reviewed the snow removal plan.

The public hearing was opened.

There were no comments.

The public hearing was closed.

The Board requested a revised survey and site plan that accurately shows the location of the screening.

Motion made by Tim DeRoche and seconded by Riley Bergeron to postpone the Site Plan/Special Exception public hearing for 276 Riverside Drive Limitless Towing to a date certain of May 12, 2026. Vote 7-0 Motion Carries

5. PUBLIC COMMENT: None

6. MISCELLANEOUS

Motion by Bilal Hussein and seconded by Maureen Hopkins to open the Miscellaneous item to focus on CIP Feedback from last month and a potential workshop for the board. Vote 6-0 (Tim opposed) and was not unanimous. Motion Did Not Carry.

7. ADJOURNMENT

The board unanimously agreed to adjourn at 9:27 p.m.

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DRAFT

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To: Auburn Planning Board
From: Sam Peikes, Planning Coordinator
Re: PUBLIC HEARING FINAL SITE PLAN/SUBDIVISION REVIEW STAFF MEMO: Hampshire Commons Apartments, 143 Hampshire Street (PID 250-311, 250-310, 250-309) – Application by Gorrill Palmer on behalf of Auburn Residential Development Corp to construct at 32-unit housing first residential development. The property is located in the Traditional Downtown Neighborhood (T-4.2) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision. This item is continued from the April 14, 2026 meeting.

Date: May 5, 2026

PROPOSAL OVERVIEW
Gorrill Palmer, on behalf of Auburn Residential Development Corp, has submitted an application for a 32-unit housing first residential development on city owned property in the Traditional Neighborhood (T-4.2) district. The development area consists of three parcels along Hampshire Street and Gamage Ave, directly west of Chestnut Street Park, totaling approximately 0.77 acres. The proposed development will be served by public utilities and includes a 14 space parking area with two ADA spaces and associated landscaping. Primary vehicle access to the site will be from Gamage Street using the existing curb opening. All three lots are owned by the city and will be combined into one lot.



The application was last brought before the Planning Board for the April 14, 2026 meeting. At that meeting the Board voted to approve the preliminary plan with the following conditions:

- Final sewer and water easements are in place prior to activation.
- The landscaping be maintained for final approval.

Additionally, the Board voted to approve the applicant's waiver requests from Sec. 60-549.1 from building width and lot width.

The applicant has provided the following updates since the April 14 meeting:

- Location of the permanent utility easement on the plan to the city of Auburn. The applicant states in the cover memo that the upcoming land transfer documents will establish the easements on the property.
- Updated landscaping plan and visual architectural rendering of the building to be better coordinated regarding proposed landscaping of the site. Landscape maintenance will be the responsibility of the Housing Authority.

Pursuant to Sec. 60-1361, a major subdivision application requires a minimum of two meetings with the Planning Board. The first meeting is to review the preliminary subdivision plan. If the Board votes to approve the preliminary plan, the applicant has six months to resubmit for final plan review. The applicant received preliminary approval April 14, 2026 and is resubmitting as a final plan.

SUBDIVISION/SITE PLAN REVIEW STANDARDS

The following findings of fact relevant to the project are summarized below:

- Access: Access to the development will come from proposed curb cut off Gamage Street. The driveway is located approximately 152 feet from Hampshire Street to comply with the standard in Chapter 60 Article V Sec. 60-607(14) that states *"no portion of any entrance or exit driveway serving a residential use or building shall be closer than 50 feet from the nearest public street intersection".* Staff corresponded prior to the last meeting with the city engineer regarding the driveway location and the city engineer has no issues with the proposed location.
- Parking: The applicant is proposing a total of 14 off-street parking spaces including 2 ADA compliant spaces. In accordance with Sec. 60-554 note 6., parking requirements for affordable housing developments may not exceed 2 spaces for every 3 dwelling units. This means the maximum number of spaces that the City can require for the development would be 21 spaces. The applicant states that the proposed housing development will consist of a majority of non-drivers who will get around by bicycle or public transportation. At the April 14, 2026 meeting, the Board determined that the parking provided is adequate to serve the development and meets the standard of Sec. 60-554 note 6. The landscape plan sheet C-5.0 shows Northern Red Oak trees planted along the parking area facing Gamage Ave to provide some screening. Staff recommend some additional plantings, such as arborvitae trees where appropriate along the parking lot frontage for additional screening and to create a more inviting neighborhood character.
- Utilities: The development will be served by public water and sewer. Locations of utilities are shown on the site plan sheet C-3.0. The proposed sewer and water utility easement location is shown on the updated site plan in the March 27 submission materials. The applicant states that the land transfer documents will include the utility easements.

- Traffic: The proposed development is anticipated to generate 10 total passenger car equivalent trips in the peak hour. The applicant anticipates some residents of the housing development will be non-drivers and will rely on bicycling, walking or public transportation, which will reduce vehicle driving trips on Hampshire Street and Gamage Ave. A 10 by 10 foot covered bicycle storage and repair area is shown on the site plan sheet C-3.0. The city link bus stop location is also labeled on the corner of Hampshire Street and Gamage Ave.
- Stormwater Management: The proposed development will contribute less than 1 acre of impervious area and will not trigger DEP Chapter 500 review or city delegated review pursuant to Sec. 46-209. The applicant has provided an erosion and sediment control narrative in compliance with Best Management Practices shown in sheet C-6.4 of the application. Stormwater runoff from the parking area will flow east towards the tree box filter and subsurface storm drain shown on sheet C-4.0. The applicant has demonstrated in the stormwater plan that runoff leaving the site will not increase from predevelopment levels.
- Exterior Lighting: Exterior lighting will consist of pole mounted lights for the parking area and wall mounted cutoff lights for the building entrances. Lighting details are provided in Attachment E of the application and locations of lighting fixtures are shown on the site plan. The photometric plan and lighting details demonstrate that exterior lighting will not reflect onto adjacent properties or create hazardous conditions for motorists.
- Solid Waste Disposal: The dumpster location is shown on the site plan sheet C-3.0. The dumpster will be fully enclosed and screened. The applicant states in the cover memo that trash and recycling will be handled by a private trash collection vendor and that solid waste will be disposed of adequately.
- Protection of Environmental Features and Natural Resources: The proposed development is not anticipated to adversely impact natural resources, scenic areas or historic sites.
- Noise, Vibration, Odors and Air Pollution: The proposed development is not anticipated to exceed noise standards or generate vibration, odors or air pollution.
- Form-Based Code Building Design Elements: The proposed development is located in the Traditional Downtown Neighborhood (T-4.2) district within the form-based code. This district is characterized by small to medium sized buildings with diverse architectural styles and pedestrian friendly streets and sidewalks. The applicant has provided a rendering and elevation drawings of the proposed building design. In compliance with Sec. 60-549.2, the ground story building frontage façade is comprised of approximately 32% windows and doors and the upper story building frontage façade is comprised of approximately 32% windows and doors on the second floor and 22% windows and doors on the third floor. The building will also include foundation plantings and landscaping. The applicant has provided landscape planting details and notes in the updated submission. Landscaping for the development will be maintained by the Housing Authority. At the April 14, 2026 Planning Board meeting, the Board granted the applicant's waiver requests from Sec. 60-549.1 from building width and lot width. The proposed building design meets the intent of the Traditional Downtown Neighborhood (T-4.2) district.

FINDINGS

The proposed project requires review and findings for approval under Sections 60-1277, 60-1359, and 60-1336:

Site Plan Review – Section 60-1277

In considering a site plan, the planning board shall make findings that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;

(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

(3)Adequacy of the methods of disposal for wastes; and

(4)Protection of environment features on the site and in adjacent areas.

Subdivision – Section 60-1359

When reviewing any subdivision for approval, the planning board shall consider the following criteria, and before granting either approval or denial, shall determine that the proposed subdivision:

(1) Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:

a. The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;

b. The slope of the land and its effect on effluents;

c. The availability of streams for disposal of effluents; and

d. The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14);

(2) Has sufficient water available for the reasonably foreseeable needs of the subdivision;

(3) Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;

(4) Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;

(5) Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;

(6) Will provide for adequate sewage waste disposal;

(7) Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized;

(8) Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;

(9) Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any;

(10) Is funded by a subdivider has adequate financial and technical capacity to meet the standards of this section;

(11) Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application;
(12) Has provisions for on-site landscaping that are adequate to screen neighboring properties from unsightly features of the development;
(13) Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;
(14) Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;
(15) Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision.

Special Exception – Sec 60-1336
As conditions prerequisite to the granting of any special exceptions, the board shall require evidence of the following:

(1) That the special exception sought fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.
(2) That the special exception sought will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.
(3) That the special exception sought will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.
(4) That the exception sought will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.
(5) That reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.
(6) That the standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.
(7) That essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

STAFF RECOMMENDATION:
Staff have reviewed the application and corresponded with the applicant and have no additional needs and believe the application is complete and standards have been met. Staff suggest the Board review the application materials and applicable findings and determine if the application is ready for a final vote.

SUGGESTED MOTION FINAL PLAN:
I make a motion to **[approve/deny]** the final plan for Hampshire Commons Apartments located at 143 Hampshire Street (PID 250-311, 250-310, 250-309) in the Traditional Downtown Neighborhood (T-4.2) district pursuant to Chapter 60, Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision.

GORRILL PALMER
An LJB Engineering Company

300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | GorrillPalmer.com

April 30, 2026

Ms. Samantha Peikes, Planning Coordinator
City of Auburn
60 Court Street
Auburn, ME 04210

Subject: Hampshire Commons Apartments
143 Hampshire Street
Applicant: Auburn Residential Development Corp.
Final Submission

Dear Sam:

On behalf of **the Auburn Residential Development Corp**[1], Gorrill Palmer is pleased to make this Final Site plan and Subdivision application submission for the proposed **Hampshire Commons Apartments**, a 32-unit, supportive housing residential development located at 143 Hampshire Street in Auburn, ME. The Planning Board granted Preliminary approval at their April 14, 2026, meeting and we now make this submission as the Final application for the Board's consideration at their next available public hearing meeting. Within the original preliminary application package and subsequent Letter of response dated March 27, 2026, we have provided the background and development plans for the supportive housing proposal. We have now updated the plans for Final consideration. The city has engaged with the applicant's development team to pursue the construction of a three-story building within the combined parcels 250-311, 250-310, and 250-309, that total 0.77 acres at the intersection of Hampshire Street and Gamage Avenue. The building will contain 32 studio style apartment units and 24/7/365 residential staffing support from Spurwink Services in cooperation with the Auburn Housing Authority. The site work includes a parking lot with 14 parking spaces including two dedicated for public use accessing the adjacent Chestnut Street Park. The development site benefits from proximity to the City Link fixed transit service stop at the corner of Hampshire and Gamage in front of the site. Other transportation assistance including outside bike storage, potential for EV bike charging and storage, and other supportive transportation assistance for residents make the side ideally located for the intended use and for the residents. Surrounding infrastructure including the City's sidewalk system and proximity to the Chestnut Street park are also highly valued site amenities that residents can benefit from.

Per the Preliminary approval letter, the following items are to be addressed prior to Final approval:

1. *Final Sewer and water easements are in place prior to activation.*

2. *The Landscaping be maintained for Final approval.*

[1] See original application letter dated March 13, 2026, for additional entities under which permitting entitlement is sought.

We offer the following evidence to address each item:

1. The latest plans include the identification of a permanent utility easement over the existing sanitary sewer and storm drain trunk lines that extend thru the middle of the site, from Hampshire Street northeasterly to the City's Chestnut Street Park. To the best of our understanding these existing utilities were installed most likely many years ago without benefit of an easement(s) being established. As the City currently owns the property, we expect that the upcoming land transfer documents will simply establish the easement on the property and be made part of the property transfer/closing. As the applicant is not legally in control of the property at this time, we can't establish the easements within any recorded instrument, however, we have committed to showing the easement on the development plans thereby memorializing the intent and basic agreement on behalf of the applicant related to understanding where the easement will be located as part of the upcoming land transfer.

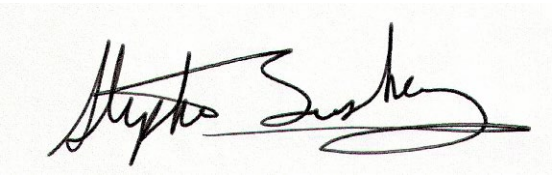
2. As discussed at the last planning board meeting, we have updated the landscaping plan and the visual architectural rendering of the building to be better coordinated regarding the proposed landscaping appearance for the site. The landscape approach is defined by the applicant's goal for high-impact aesthetics/low-costs/low maintenance landscaping. We believe the proposed landscaping balances these needs to provide an acceptable aesthetic to the site development while adhering to the budgeted costs that the project can support. The accompanying Drawing C-5.0 Landscape Plan also now includes Landscape Planting and maintenance notes. The site maintenance will fall under the responsibility of the Housing Authority, who will be responsible for the routine exterior maintenance including, but not limited to, lawn mowing, plant maintenance including trimming, pruning and removal/replacement of sick or dead plantings commensurate with typical property management. The Housing Authority is committed to providing and maintaining an exceptional facility for the residents whereby comfort, programming, visual appearance, and safety are prioritized.

CLOSURE

Twelve (12) updated plan packages and this response letter are provided for your consideration which include one (1) full size plan set and twelve (12) 11"x17" plan sets. We look forward to reviewing this project with you and the Planning Board at the next available Public hearing. If you have any questions about the information being submitted, please contact our office.

Sincerely,

GORRILL-PALMER



Stephen Bushey, P.E.
Senior Associate
Phone: 207-772-2515 x296
sbushey@gorrillpalmer.com

Attachments:
A - Updated Plan set

cc: Martin Szydlowski and Mary Young – Auburn Housing Authority
Amanda Bartlett – Developers Collaborative LLC

U:\Auburn Housing Development Corp\0129761A.00 - Auburn Maine Housing First project\P Applications\Local\Final Submissoin Letter 2026.04.30.docx

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An LJB Engineering Company

ATTACHMENT A
FINANCIAL CAPACITY EVIDENCE

GORRILL PALMER
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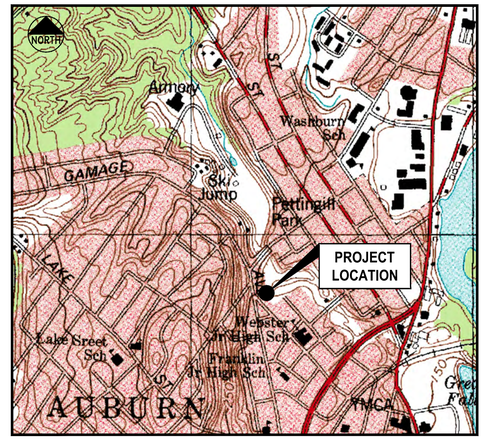
ATTACHMENT B
LEGAL DESCRIPTION

PROJECT PARCEL SITE		
ZONING: T-4.2 Traditional Downtown Neighborhood District		
AUBURN TAX ASSESSOR'S MAP AND LOT NUMBERS		
MAP	LOT	REGISTRY (A.C.R.D.) INFO
250	311	BOOK 8758, PAGE 243
250	310	BOOK 7896, PAGE 11
250	309	BOOK 5926, PAGE 329

APPLICANT:
Auburn Housing Authority
dba Auburn Residential Development Corp.
P.O. Box 3037
Auburn ME, 04212-3037
ATTN: Martin F. Szydlowski - Executive Director
207.319.4672
mszydlowski@auburnhousing.org

OWNER OF RECORD:
City of Auburn
SEE SURVEY FOR INFORMATION

SITE DEVELOPMENT PLANS
FOR
HAMPSHIRE COMMONS APARTMENTS
143 HAMPSHIRE STREET
AUBURN, MAINE
PERMIT PLAN SUBMISSION
MAY 2026



LOCATION MAP
N.T.S.

INDEX

C-1.0 COVER SHEET
C-1.1 GENERAL NOTES & LEGEND
C-1.2 SURVEY PLAN (BY OWEN HASKELL)
C-2.0 EXISTING CONDITIONS & REMOVALS PLAN
C-3.0 SITE LAYOUT & UTILITY PLAN
C-3.1 HAMPSHIRE COMMONS RECORDING PLAT
C-4.0 GRADING, DRAINAGE & EROSION CONTROL PLAN
C-4.1 STORMWATER MANAGEMENT PLAN
C-4.2 STORMWATER MANAGEMENT DETAILS
C-5.0 LANDSCAPE PLAN
C-6.0 SITE & MISCELLANEOUS DETAILS
C-6.1 SITE & MISCELLANEOUS DETAILS
C-6.2 STORM DRAIN & UTILITY DETAILS
C-6.3 EROSION & SEDIMENT CONTROL DETAILS
C-6.4 EROSION & SEDIMENT CONTROL NARRATIVE
C-6.5 FERGUSON FOCALPOINT / R-TANK DETAILS
C-9.0 PHOTOMETRICS PLAN (BY EXPOSURE LIGHTING)

UTILITIES

WATER & SEWER:
AUBURN WATER & SEWERAGE DISTRICT
268 COURT STREET
AUBURN, MAINE 04210
207.784.6469
CONTACT: MICHAEL BROADBENT
mbroadbent@awsd.org

ELECTRIC:
CENTRAL MAINE POWER
740 MAIN STREET
LEWISTON, MAINE 04240
800.750.4000
CONTACT: DYAN DUBORD
Dyan.Dubord@CMPCO.com
cell 207.500.6707
notification # 10301268392

TELEPHONE:
FIDIUM COMMUNICATIONS
600 SABLE OAKS DRIVE
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376 RIVERSIDE INDUSTRIAL PARKWAY
PORTLAND, MAINE 04103
207.541.2543
CONTACT: SCOTT CARPENTER
carpenters@unitil.com

CABLE TV:
SPECTRUM
37 ALFRED PLOURDE PARKWAY
LEWISTON, MAINE 04240
207.253.2210
CONTACT: SCOTT REED

DIG SAFE:
CALL BEFORE YOU DIG
DIAL 811 (AT LEAST 72 HRS IN ADVANCE)

PERMITS / APPROVALS

LOCAL	GOVERNING BODY	STATUS
MAJOR DEVELOPMENT REVIEW	CITY OF AUBURN - PLANNING BOARD 60 COURT STREET AUBURN, MAINE 04210 207.333.6600 ATTN: Samantha Peikes - Planner	SITE PLAN SUBMISSION 03.13.2026 PRELIMINARY APPROVAL GRANTED 04.14.2026 WAIVER GRANTED OF SEC. 60-549.1 FOR LOT AND BUILDING WIDTH FINAL PLAN SUBMISSION 05.01.2026
BUILDING PERMIT	AUBURN CODE ENFORCEMENT DEPT. 60 COURT STREET AUBURN, MAINE 04210 207.333.6600	TO BE FILED PRIOR TO CONSTRUCTION BY CONTRACTOR
STREET OPENING PERMIT	AUBURN PUBLIC WORKS DEPT. 296 GRACELAWN ROAD AUBURN, MAINE 04210 207.333.6670	TO BE FILED PRIOR TO CONSTRUCTION BY CONTRACTOR

ALL PERMITS ARE ANTICIPATED TO HAVE CONDITIONS ATTENDANT WITH THEIR APPROVAL. THE CONTRACTOR SHALL REVIEW ALL PERMITS AND THE CONDITIONS ATTENDANT WITH APPROVALS PRIOR TO THE START OF THE WORK. UNLESS OTHERWISE STIPULATED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR IS REQUIRED TO COMPLY AND FULFILL ALL CONDITIONS OF APPROVAL.

CONSULTANT LIST

CIVIL ENGINEER/TRAFFIC ENGINEER:
Gorrill Palmer Consulting Engineers, Inc.
300 SOUTHBOROUGH DRIVE, SUITE 200
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sbushey@gorrillpalmer.com

SURVEYOR:
OWEN HASKELL, Inc.
309 U.S. ROUTE ONE, UNIT 10
FALMOUTH, MAINE 04105
207.774.0424
CONTACT: REX CROTEAU

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INVIVID ARCHITECTURE
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pandika@invividarchitecture.com

GEOTECHNICAL ENGINEER:
SUMMIT GEOENGINEERING SERVICES
210 MAINE AVENUE
FARMINGDALE, MAINE, 04344
207.446.3360

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
STEPHEN R. BUSHEY
05.01.26
LICENSED PROFESSIONAL ENGINEER
STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–COVER.dwg		

This plan shall not be modified without written permission from Gorrill Palmer. Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to Gorrill Palmer.

GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: COVER SHEET
Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine
Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-1.0

U:\Auburn Housing Development Corp\0129761A.00 – Auburn Maine Housing First project\Z – CAD\DWG\AUBURN HOUSING–COVER.dwg 4/30/2026 9:27 AM

GENERAL NOTES

1. IN ADDITION TO THESE PLANS AND NOTES, THE CONTRACTOR SHALL REFER TO THE PROJECT MANUAL OR MOST CURRENT MAINE DEPARTMENT OF TRANSPORTATION (MAINE DOT) SPECIFICATIONS FOR CONSTRUCTION SPECIFICATIONS AND BIDDING PROCEDURES.

2. THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY LOCAL UTILITY COMPANIES AND THE CITY OF AUBURN.

3. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCE, PAVING, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS. ENTRANCES IN MOST LOCATIONS REQUIRE STRUCTURAL SLABS. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR INFORMATION ON THE STRUCTURAL SLAB ENTRANCES.

4. ALL REQUIRED AND NECESSARY INSPECTIONS AND OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSIONS AND THE FINAL SERVICE CONNECTIONS.

5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS, AT ITS SOLE COST.

6. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE APPLICANT AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER, THEIR REPRESENTATIVES, OR THE CITY, AT NO ADDITIONAL COST TO THE OWNER.

7. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

8. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE PROJECT SPECIFICATIONS, THE CITY OF AUBURN AND SERVICING UTILITY REQUIREMENTS, IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SHALL APPLY AT NO EXTRA COST TO THE OWNER.

9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS THROUGHOUT THE PROJECT AND PROVIDING THE OWNER WITH A SET OF ELECTRONIC FINAL RECORD DRAWINGS WHEN THE PROJECT IS COMPLETE.

10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO THE SITE AND ALL ADJACENT PROPERTIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS, SIGNAGE AND INCIDENTALS TO MAINTAIN SAFE VEHICLE AND PEDESTRIAN ACCESS THROUGH OUT THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE CITY OF AUBURN ROUTINELY REGARDING TEMPORARY IMPACT OR CHANGES TO SITE ACCESS CONDITIONS, SIDEWALK AND / OR STREET CLOSINGS.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF THE SITE PLAN PERMIT FROM THE CITY OF AUBURN, AND MEDEP STORMWATER PBR / MCGP, WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS. THE CONSTRUCTION WILL BE GOVERNED BY THE ZONING ORDINANCES WHICH ARE AVAILABLE FOR VIEWING AT THE OFFICE OF THE ENGINEER, THE MUNICIPAL OFFICE, OR THE MUNICIPAL WEBSITE.

2. THE CONTRACTOR SHALL REVIEW THE ABOVE-REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

SITE LAYOUT NOTES

1. BITUMINOUS CONCRETE CURB, SLIPFORM CONCRETE CURB AND GRANITE CURB SHALL MEET THE REQUIREMENTS OF MDOT 702.001, 703.07 AND 609.04.

2. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR THE FACE OF THE BUILDING.

3. EXCEPT WHERE INDICATED OTHERWISE, THE PAVEMENT IS TO BE STANDARD DUTY PAVEMENT.

4. ALL TRAFFIC CONTROL SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITIONS AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF N = 0.012 OR LESS.

2. AN "AS-BUILT" CERTIFICATION AND PLANS OF THE STORMWATER DRAINAGE SYSTEM IS REQUIRED PRIOR TO THE OWNER ACCEPTING ANY BUILDINGS AND PROPERTY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ANY DEVIATION FROM THE PLANS MAY DELAY THE ACCEPTANCE OF THE PROJECT, WITH CONTRACTOR RESPONSIBLE FOR ANY ASSOCIATED COSTS.

3. A DETAILED O&M MANUAL FOR STORMWATER MANAGEMENT SYSTEMS IS (WILL BE) FILED WITH THE CITY OF AUBURN DURING THE PERMIT REVIEW PROCESS. A SPECIFIC MANUAL HAS BEEN PREPARED FOR O&M OF THE DRAINAGE SYSTEM.

4. SEE EXISTING CONDITIONS FOR BENCHMARK INFORMATION.

5. SEE GRADING, DRAINAGE AND EROSION/SEDIMENT CONTROL FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.

6. ALL DISTURBED AREAS NOT TO BE PAVED, GRAVELED, SODDED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.

7. COMPACTION REQUIREMENTS:

LOCATION	MINIMUM COMPACTION*
SUBBASE AND BASE GRAVEL BELOW PAVED OR CONCRETE AREAS	95%
SUBGRADE FILL BELOW PAVED AREAS	90%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%
STRUCTURAL FILL WITHIN PROPOSED BUILDING AREA	95%
SELECT FILL ADJACENT BUILDING FOUNDATIONS, EXTERIOR FOUNDATIONS AND WITHIN 8 INCHES OF THE SLAB-ON-GRADE	95%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM-D-1557.

8. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.

9. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND EXIT RAMPS ADJACENT TO THE BUILDING AND ALONG NEW CURBED AREAS.

10. PROVIDE STABILIZATION OR SEPARATION GEOTEXTILE FABRIC OVER UNSTABLE SOILS AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH THE FINAL GEOTECHNICAL RECOMMENDATIONS.

11. STORMWATER MANAGEMENT CHAMBER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND APPLICABLE INSTALLATION GUIDES PROVIDED BY THE CHAMBER SYSTEM MANUFACTURER. SHOULD THESE PLANS CONFLICT WITH THE INSTALLATION GUIDE, THESE PLANS SHALL TAKE PRECEDENCE.

LOCAL APPROVALS, WAIVERS AND VARIANCES

THE CONSTRUCTION PLANS ARE TO BE SUBMITTED TO THE CITY OF AUBURN FOR THEIR REVIEW, APPROVAL AND RECORDS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

UTILITY NOTES

1. ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED AND CONSTRUCTED BY THE SITE CONTRACTOR TO WITHIN 5 FEET OF THE BUILDINGS, AT A LOCATION COORDINATED WITH THE MEP CONTRACTOR(S) AND THE BUILDING PLANS. SITE WORK WITHIN 5 FEET OF UNDERSLAB UTILITIES SHALL CONSIST OF TRENCHING AND BACKFILLING. ACTUAL UTILITY INSTALLATION SHALL BE BY THE MEP CONTRACTOR. ALL REQUIRED CONNECTION FEES SHALL BE PAID BY THE GENERAL CONTRACTOR.

2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH THE SERVICING UTILITY COMPANY. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.

3. ALL SANITARY SEWER WORK SHALL MEET THE STANDARDS OF THE MAINE STATE PLUMBING CODE AND AUBURN WATER & SEWERAGE DISTRICT. CONNECTIONS TO EXISTING SEWER SHALL BE PERFORMED IN ACCORDANCE WITH AUBURN WATER & SEWERAGE DISTRICT RECOMMENDATIONS AND REGULATIONS.

4. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, CONDUIT AND BACKFILLING ASSOCIATED WITH UNDERGROUND POWER, COMMUNICATIONS AND CABLE.

5. COORDINATE ALL OTHER UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY. ALL UTILITY WORK SHALL CONFORM TO THE STANDARDS OF THE UTILITY COMPANY AND PROJECT SPECIFICATIONS, WHICHEVER IS MORE STRINGENT, AT NO EXTRA EXPENSE TO THE OWNER.

6. THE LOCATIONS OF THE NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE SERVING UTILITY COMPANY, PROJECT ARCHITECTS AND MEP DESIGNERS.

7. UNDERGROUND ELECTRICAL, CONDUIT MATERIAL AND INSTALLATION SHALL CONFORM TO CENTRAL MAINE POWER STANDARDS AND PROJECT SPECIFICATIONS, WHICH EVER IS MORE STRINGENT.

8. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OR WORK TO FINISH GRADE.

9. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.

10. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.

11. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.

12. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.

EROSION CONTROL NOTES:

1. PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, GRADING LIMITS SHALL BE STAKED BY THE CONTRACTOR BASED ON THE LIMITS OF GRADING SHOWN ON THE DRAWINGS AND ACCEPTED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. AFTER THE GRADING LIMITS HAVE BEEN ACCEPTED, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCE, SEDIMENT BARRIERS AND THE CONSTRUCTION ENTRANCE ASSOCIATED WITH THE PROJECT.

2. ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE. TEMPORARY/PERMANENT SEED MIXTURES SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL PROJECT PREPARED FOR THIS PROJECT.

3. PRIOR TO PAVING OR GRAVEL PLACEMENT, THE CONTRACTOR SHALL REMOVE SILT FROM ALL STORM LINES AND APPURTANCES.

4. SILT BARRIERS SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.

5. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS IT BECOMES SATURATED WITH MUD TO ENSURE THAT IT FUNCTIONS TO CAPTURE MUD FROM THE TIRES OF CONSTRUCTION VEHICLES DURING CONSTRUCTION. THE PURPOSE OF THE CONSTRUCTION ENTRANCE IS TO KEEP ADJACENT STREETS CLEAR OF DIRT AND MUD. SWEEPING OF THE ROADWAYS SHALL BE PERFORMED BY THE CONTRACTOR ON AN AS NEEDED BASIS, BUT AT A MINIMUM ONCE A WEEK.

6. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO TOPSOIL FOR USE IN LANDSCAPING OPERATIONS.

7. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE WHICH CAUSE THE LEAST PRACTICAL UNPROTECTED DENUDED AREAS ON THE SITE DURING CONSTRUCTION.

8. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS MAY RESULT IN MONETARY PENALTIES AS ENFORCED BY THE MEDEP OR LOCAL AGENCIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.

9. A FULL EROSION/SEDIMENTATION CONTROL PLAN ACCOMPANIES THIS DRAWING SET AND IS ALSO CONTAINED IN THE SPECIFICATIONS OR FROM THE OWNER.

10. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS AS SHOWN AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED.

11. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAIN STORM OF 0.25 INCHES OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 OF THE STRUCTURE HEIGHT.

12. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2014".

GEOTECHNICAL REPORT RECOMMENDATIONS:

5.0 BEARING CAPACITY & SETTLEMENT

SGS ANTICIPATES FOOTINGS FOR THE NEW APARTMENT BUILDING WILL BE CONSTRUCTED ON EXISTING FILL. SGS RECOMMENDS THAT FOUNDATIONS BE DESIGNED USING AN ALLOWABLE BEARING PRESSURE OF 3,000 PSF.

SETTLEMENT ASSOCIATED WITH THIS BEARING PRESSURE IS ESTIMATED TO BE 1-INCH OR LESS. WITH PROPER SUBGRADE PREPARATION, DIFFERENTIAL SETTLEMENT WILL BE 1/300 OR LESS FOR THE PROPOSED BUILDING. THE BEARING PRESSURE AND ASSOCIATED SETTLEMENT ARE BASED ON THE FOLLOWING CONDITIONS:

- ALL PAVEMENT, TOPSOIL, OR SURFACE VEGETATION IS STRIPPED FROM WITHIN THE PROPOSED BUILDING FOOTPRINT PRIOR TO EXCAVATION OF THE FOOTINGS AND PLACEMENT OF FILL.
- EXPOSED DRY GRANULAR SOIL WITHIN THE BUILDING FOOTPRINT IS PROOF ROLLED BY MAKING A MINIMUM OF 5 PASSES IN EACH OF TWO PERPENDICULAR DIRECTIONS USING A VIBRATORY COMPACTOR WITH A MINIMUM OPERATING WEIGHT OF 8 TONS.
- FOOTING EXCAVATIONS SHOULD EXTEND TO 6 INCHES BELOW THE BASE OF THE FOOTINGS. TO MINIMIZE DISTURBANCE TO THE FOOTING SUBGRADE SOIL, EXCAVATIONS SHOULD BE COMPLETED USING A SMOOTH- EDGED BUCKET. EXPOSED DRY, GRANULAR FOOTING SUBGRADE SHOULD BE PROOF ROLLED PRIOR TO PLACEMENT OF CRUSHED STONE. ANY WET, SOFT, AND UNSTABLE AREAS ALONG WITH MISCELLANEOUS DEBRIS IF ENCOUNTERED, SHOULD BE REMOVED AND REPLACED WITH ¾-INCH CRUSHED STONE.
- ALL FOOTINGS SHOULD BE PLACED ON A WOVEN GEOTEXTILE, SUCH AS MIRAFI 600X, OR SIMILAR, PLACED BENEATH A MINIMUM OF 6 INCHES OF CRUSHED STONE TO CREATE A UNIFORM BASE FOR SUPPORT OF THE FOUNDATION. THE GEOTEXTILE SHOULD EXTEND A MINIMUM OF 1 FOOT OUTSIDE THE EDGES OF THE FOOTINGS AND SHOULD BE PULLED TAUGHT TO REMOVE WRINKLES.
- ALL FILL PLACED WITHIN THE BUILDING FOOTPRINT SHOULD CONSIST OF STRUCTURAL FILL. IF COMPACTED CRUSHED STONE IS PLACED UNDERNEATH THE SLAB, STRUCTURAL FILL SHALL BE PLACED UP TO 8 INCHES BELOW SUB SLAB ELEVATION. STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D1557. GENERAL FILL REQUIRED TO MEET GRADES ACROSS THE SITE SHOULD CONSIST OF COMPACTED GRANULAR BORROW OR COMMON BORROW.
- THE BUILDING SLABS SHALL BE CONSTRUCTED DIRECTLY ON THE STRUCTURAL FILL OR CRUSHED STONE AS NOTED IN *SECTION 5.3*.
- SGS SHOULD BE RETAINED TO INSPECT THE SUBGRADE CONDITIONS PRIOR TO PLACEMENT OF FILL AND PRIOR TO THE PLACEMENT OF GEOTEXTILE FABRIC AND CRUSHED STONE TO VERIFY THAT RECOMMENDATIONS ARE APPROPRIATE FOR THE ENCOUNTERED SOIL CONDITIONS.

5.1 FROST PROTECTION

EXTERIOR FOOTINGS SHOULD BE CONSTRUCTED AT A MINIMUM DEPTH OF 4.5 FEET BELOW FINISHED GRADE FOR FROST PROTECTION. THIS FROST PROTECTION DEPTH IS BASED ON A DESIGN AIR-FREEZING INDEX OF 1,400-DEGREE DAYS FOR THE AUBURN AREA. SGS RECOMMENDS EXTERIOR AND INTERIOR PORTIONS OF FOUNDATION ELEMENTS ARE BACKFILLED WITH GRAVEL BORROW. GRAVEL BORROW SHOULD BE PLACED IN 6 TO 12 INCH LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D1557. REFER TO *SECTION 7.2* FOR MATERIAL SPECIFICATIONS.

5.2 BUILDING SLAB

SGS RECOMMENDS THE BUILDING SLAB BE CONSTRUCTED ON A MINIMUM 12-INCH THICK LAYER OF STRUCTURAL FILL. ALTERNATIVELY, THE BUILDING SLAB CAN BE CONSTRUCTED UPON 8 INCHES OF COMPACTED CRUSHED STONE. STRUCTURAL FILL SHOULD BE PLACED IN 6- TO 12-INCH LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D1557. CRUSHED STONE SHOULD BE TAMPED TO LOCK THE STONE STRUCTURE TOGETHER. REFER TO *SECTION 7.2* FOR MATERIAL SPECIFICATIONS.

EXISTING

- IRON PIPE OR ROD FND
- MONUMENT FOUND
- GAS VALVE
- WATER VALVE
- UTILITY POLE
- LIGHT POLE
- DRAINAGE MANHOLE
- ELECTRIC MANHOLE
- SEWER MANHOLE
- CATCH BASIN
- SIGN
- EDGE OF PAVEMENT
- CURB
- ohw — OVERHEAD WIRES
- uge — UNDERGROUND ELECTRIC
- T — TELEPHONE
- 12"w — WATER LINE
- g — GAS LINE
- 12"san — SANITARY SEWER
- 12"sd — STORM DRAIN
- 1' CONTOUR
- × 15.23 SPOT ELEVATION
- TREE
- TREE LINE OR LIMIT OF CLEARING
- BUILDING
- RETAINING WALL/WOOD TILES
- PROPERTY LINE
- EASEMENT LINE
- B-101 TEST BORING
- HYDRANT

PROPOSED

- BARRIER FREE SYMBOL
- SIGN
- SIGN LABEL
- BUILDING / BUILDING ACCESS
- VERTICAL GRANITE CURB
- CB-1 CATCH BASIN
- 22 CONTOUR LABEL
- DMH-1 DRAIN MANHOLE
- 2 / 1 2:1 SLOPE DESIGNATION
- 18.73 SPOT GRADE
- 28.58 TW / 16.20 BW SPOT GRADE AT RETAINING WALL (TW = TOP WALL / BW = BOTTOM WALL)
- 6"UD — UNDERDRAIN
- SD-1 STORM DRAIN
- CURB STOP
- HYDRANT
- LIGHT POLE WITH FIXTURE(S)
- SMH SANITARY SEWER MANHOLE
- TEST PIT
- UTILITY POLE
- VALVE
- 6" SAN SANITARY SEWER
- W — DOMESTIC/ FIRE WATER MAIN
- 2"G — GAS MAIN
- UGE/T/C — UNDERGROUND ELECTRIC

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE — STEPHEN R. BUSHEY — 12704 — 05.01.26 — LICENSED PROFESSIONAL ENGINEER

STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–GEN NOTES.dwg		

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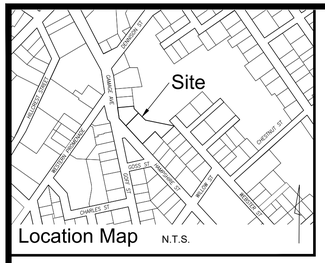
Drawing Name: GENERAL NOTES & LEGEND

Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine

Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-1.1

U:\Auburn Housing Development Corp\0123761A.00 – Auburn Maine Housing First project\Z – CAD\DWG\AUBURN HOUSING–GEN NOTES.dwg 4/28/2026 2:18 PM



Schedule B Section II Exceptions

TO BE PROVIDED

Drainage & Sanitary Sewer Structures

Drainage Structures

DMH#13, RIM=195.50
(A)12"PVC INV.=189.00
(B)24"PVC INV.=184.30
(C)24"PVC INV.=188.80
(D)18"PVC INV.=184.20
(E)24"PVC INV.=184.20

DMH #15, RIM=202.51

DMH#24, RIM=189.72
(A)24"PVC INV.=180.82
(B)24"PVC INV.=180.72

DMH#25, RIM=166.05
(A)24"PVC INV.=156.85
(B)24"PVC INV.=156.55

CB#11, RIM=192.89
(A)12"PVC INV.=187.89
(B)24"PVC INV.=184.59
(C)24"PVC INV.=184.39

CB#12, RIM=193.78
(A) 6"RPP INV.=188.68
(B)12"PVC INV.=188.58

CB#13A, RIM=193.92
(A)12"RPP INV.=189.42
(B) 4"RPP INV.=189.02
(C)12"RPP INV.=188.52

CB#13B RIM=194.29
18"RCP INV.=186.79

CB#13C RIM=195.22
12"RPP INV.=190.52

CB#14, RIM=196.36
(A)18"RPP INV.=190.26
(B)18"PVC INV.=186.26

Sanitary Sewer Structures

SMH#1 RIM=195.29
(A)24"PVC INV.=188.29 *APPEARS PLUGGED*
(B)18"RCP INV.=187.99 *APPEARS PLUGGED*
(C)18"RCP INV.=187.29 *APPEARS CLOGGED*
(D)15"RCP INV.=184.29 *APPEARS UNUSED*
(E)18"RCP INV.=187.37 *APPEARS CLOGGED*
(F)24"CI INV.=187.09
(G)24"CI INV.=183.09

SMH#2, RIM=193.74
(A)8"PVC INV.=186.93 *POSSIBLE OVERFLOW FROM SMH#1*
(B)8"PVC INV.=186.90

SMH#3, RIM=195.05
(A)10"PVC INV.=189.15
(B)8"PVC INV.=186.35
(C)8"PVC INV.=186.35
(D)10"PVC INV.=186.25

SMH#4, RIM=194.59
(A)15"RCP INV.=184.99 *APPEARS UNUSED*
(B)15"RCP INV.=184.89 *APPEARS UNUSED*

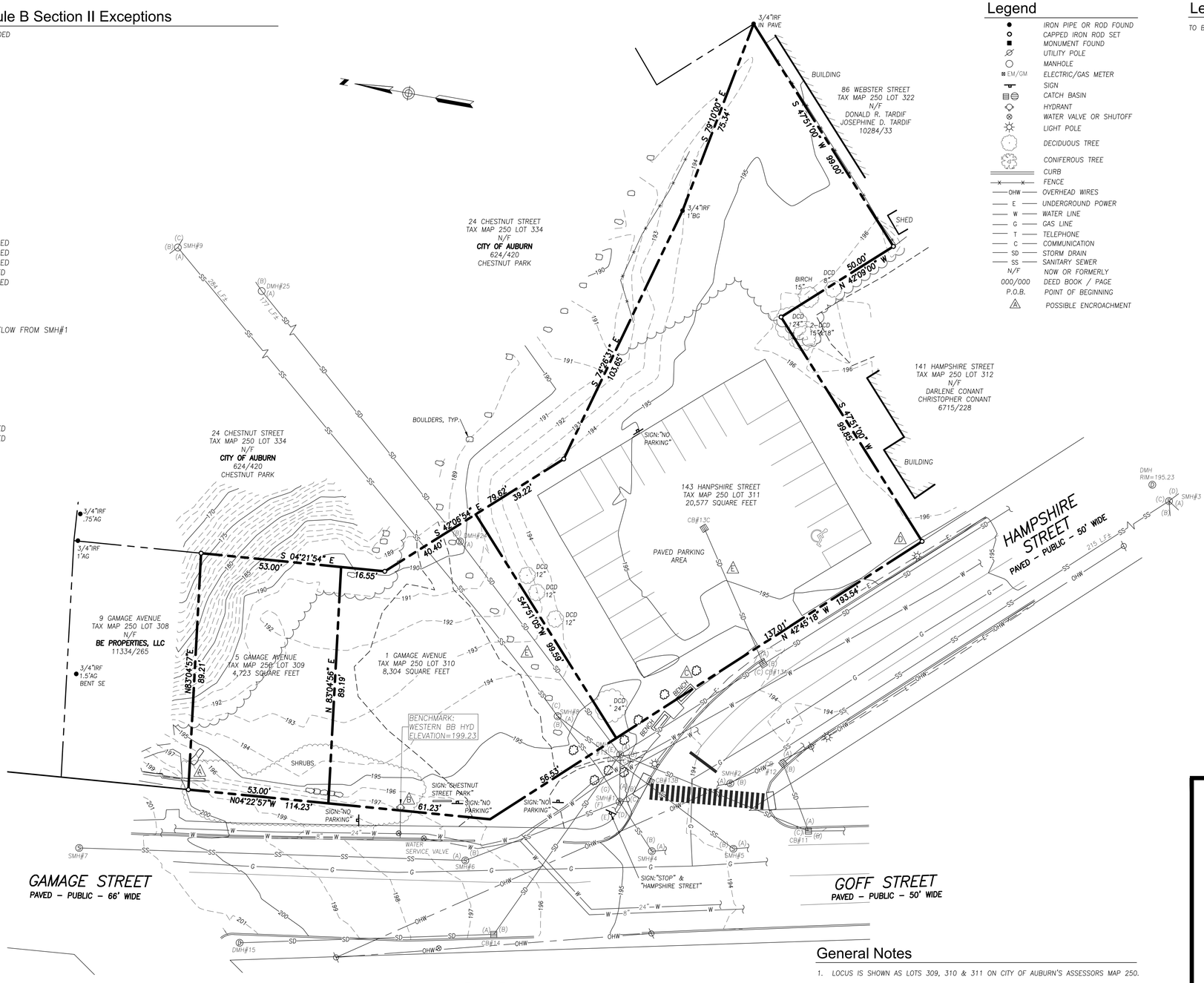
SMH#5, RIM=193.91
(A)8"PVC INV.=181.61
(B)8"PVC INV.=181.51

SMH#6, RIM=196.45
(A)18"CI INV.=187.45
(B)18"CI INV.=187.40

SMH#7, RIM=201.70

SMH#8, RIM=194.72
(A)8"PVC INV.=179.22
(B)24"CI INV.=179.12
(C)24"CI INV.=171.72

SMH#9, RIM=162.94
(A)18"CMP INV.=156.34
(B)18"CMP INV.=150.34
(C)18"CMP INV.=154.24



Legend

- IRON PIPE OR ROD FOUND
- CAPPED IRON ROD SET
- MONUMENT FOUND
- UTILITY POLE
- MANHOLE
- EM/GM ELECTRIC/GAS METER
- SIGN
- CATCH BASIN
- HYDRANT
- WATER VALVE OR SHUTOFF
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- CURB
- FENCE
- OHW OVERHEAD WIRES
- E UNDERGROUND POWER
- W WATER LINE
- G GAS LINE
- T TELEPHONE
- C COMMUNICATION
- SD STORM DRAIN
- SS SANITARY SEWER
- N/F NOW OR FORMERLY
- 000/000 DEED BOOK / PAGE
- P.O.B. POINT OF BEGINNING
- A POSSIBLE ENCROACHMENT

Legal Description

TO BE PROVIDED

Owners of Record

CITY OF AUBURN TAX MAP 250 LOT 309
AUBURN, MAINE
ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 7896 PAGE 11
CITY OF AUBURN TAX MAP 250 LOT 310
AUBURN, MAINE
ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 7896 PAGE 11
CITY OF AUBURN TAX MAP 250 LOT 311
AUBURN, MAINE
ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 8758 PAGE 243

Zoning Information

NONE PROVIDED

Flood Zone Note

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 23001C0326E, WHICH BEARS AN EFFECTIVE DATE OF JULY 8, 2013 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

Possible Encroachments

- A CONCRETE WALL ONTO LOCUS 6'±
- B HYDRANT ONTO LOCUS 1'±
- C BENCH ONTO LOCUS 2'±
- D SIDEWALK ONTO LOCUS 1.5'±
- E SEWER AND STORM DRAIN LINES CROSS LOCUS

SCALE : 1" = 20'

0' 10' 20' 40'

Utility Note

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 811 OR 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

Plan References

1. *"PROPERTY PLAN OF LAND OWNED BY CITY OF AUBURN" MADE BY ALIBERTY, LAROCHELLE & HODSON DATED SEPTEMBER 27, 1978 AND REVISED OCTOBER 11, 1978.*
2. *"PLAN OF LAND IN AUBURN BELONGING TO FERDINAND PENLEY" DATED 1893.*
3. *"PLAN SHOWING A STANDARD BOUNDARY SURVEY CHESTNUT PARK CITY OF AUBURN" MADE FOR THE CITY OF AUBURN BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. DATED MARCH 3, 2023.*
4. *PLAN OF "PROPERTY OF AUBURN SEWERAGE DISTRICT DENNISON STREET GULLEY" MADE BY GEORGE H. BARRON, ENGINEER DATED MARCH 10, 1949 AS RECORDED IN PLAN BOOK 8, PAGE 445.*
5. *"UPPER GOFF STREET AREA STORM WATER SEPARATION CITY OF AUBURN PUBLIC WORKS DEPARTMENT AUBURN, MAINE" BY AE HODSDON CONSULTING ENGINEERS, WATERVILLE, MAINE. SHEET 2 OF 11 "GOFF STREET PLAN & PROFILE STA. 21+00 TO STA. 28+70" AND SHEET 3 OF 11 "GOFF STREET CROSS COUNTRY RUN PROFILE STA. 0+00 TO STA. 4+07". PLANS DATED 6/21/1999, REVISED THROUGH 7/6/99.*

General Notes

1. *LOCUS IS SHOWN AS LOTS 309, 310 & 311 ON CITY OF AUBURN'S ASSESSORS MAP 250.*
2. *BEARINGS ARE BASED ON MAINE STATE COORDINATE SYSTEM, WEST ZONE, NAD83 PER GNSS OBSERVATIONS. ELEVATIONS ARE BASED ON NAVD 88 DATUM, PER GNSS OBSERVATIONS.*
3. *THERE ARE 19 DELINEATED REGULAR SPACES AND 1 HANDICAP SPACES, FOR A TOTAL OF 20 PARKING SPACES.*
4. *NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, BUILDING ADDITIONS, OR RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED.*
5. *NO PROPOSED CHANGES IN STREET LINES IS KNOWN BY THIS SURVEYOR.*
6. *NO WETLAND MARKERS WERE OBSERVED.*
7. *NO BUILDING WERE OBSERVED ON THE SURVEYED PROPERTY.*
8. *SURVEYED PROPERTY CONTAINS 19 STANDARD PARKING SPACES AND 1 HANDICAP PARKING SPACE.*
9. *NO EVIDENCE OF RECENT EARTH MOVING WORK OR BUILDING CONSTRUCTION WAS OBSERVED.*
10. *NO PROPOSED CHANGES IN STREET RIGHT OF WAYS OR EVIDENCE OF RECENT SIDEWALK CONSTRUCTION OR REPAIRS WERE OBSERVED.*
11. *THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT.*

ALTA / NSPS Land Title Survey

1 Gamage Street & 143 Hampshire Street
Auburn, Androscoggin County, Maine
Made For
City of Auburn Maine
60 Court Street, Auburn, Maine

Surveyor's Certification

TO: CITY OF AUBURN, MAINE STATE HOUSING AUTHORITY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 6(B) 7(A), 7(B)(1), 7(C), 8, 9, 11(A), 11(B), 13, 16, AND 17 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON FEBRUARY 4, 2026

REX J. CROTEAU
PROFESSIONAL LAND SURVEYOR NO. 2273

DATE OF PLAT OR MAP: MARCH 11, 2026
DATE OF LAST REVISION:

STATE OF MAINE REX J. CROTEAU 2273 PROFESSIONAL LAND SURVEYOR

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE 1, UNIT 10, FALMOUTH, ME 04105 TEL. 207-774-0424

DRAWN BY: RJC / JDC	FIELD BOOK: FILE	JOB NO.	2025-201 AUB
CHECKED BY: RRL	SCALE: 1" = 20'	DRWG. NO.	1

NORTH

86 WEBSTER STREET
TAX MAP 250 LOT 322
N/F
DONALD R. TARDIF
JOSEPHINE D. TARDIF
10284/33

3/4"IRF
IN PAVE

S 47°51'05" W
99.90'

S 75°10'00" E
75.34'

3/4"IRF
1"BG

24 CHESTNUT STREET
TAX MAP 250 LOT 334
N/F
CITY OF AUBURN
624/420
CHESTNUT PARK

50.00'
N 47°09'00" W

BIRCH
15"

DCD
24"

DCD
15"

SUMMIT BORING, TYP. - SEE GEOTECHNICAL REPORT DATED 04.08.26 FOR MORE INFORMATION.

B-2

141 HAMPSHIRE STREET
TAX MAP 250 LOT 312
N/F
DARLENE CONANT
CHRISTOPHER CONANT
6715/228

EXISTING BUILDING
#141 HAMPSHIRE ST.

S 47°51'05" W
99.85'

(C)
(B) SMH#9
(A)

284 LF±

(B)
DMH#25
(A)

177 LF±

DHF 3"? UPROOTED TREE NEAR

IPF T
1"
.5AG

3/4"IRF
.75"AG

3/4"IRF
1"AG

3/4"IRF
1.5"AG
BENT SE

24 CHESTNUT STREET
TAX MAP 250 LOT 334
N/F
CITY OF AUBURN
624/420
CHESTNUT PARK

BOULDERS, TYP.

SIGN:"NO PARKING"

REMOVE SIGN

143 HAMPSHIRE STREET
TAX MAP 250 LOT 311
20,577 SQUARE FEET

REMOVE CB & PIPE

TREE TO BE REMOVED, TYP.

CB#13C

REMOVE PAVEMENT

PAVED PARKING AREA

B-5

B-3

REUSE OPENING FOR PROPOSED FD CONNECTION

HAMPSHIRE STREET

DMH
RIM=195.23
(D)
(C) SMH#3
(A)
(B)

215 LF±

S 42°08'54" E
79.65'

39.22'

(B) SMH#16
(A)

S 47°51'05" W
99.59'

DCD
12"

DCD
12"

DCD
12"

ADJUST COVERS TO NEW GRADE, TYP.

N 42°45'16" W
193.54'

N 47°14'01" E
40.40'

SAWCUT, TYP.

GOSS STREET

9 GAMAGE AVENUE
TAX MAP 250 LOT 308
N/F
BE PROPERTIES, LLC
11334/265

5 GAMAGE AVENUE
TAX MAP 250 LOT 309
4,723 SQUARE FEET

1 GAMAGE AVENUE
TAX MAP 250 LOT 310
8,304 SQUARE FEET

S 04°21'54" E
53.00'

N 83°04'56" E
89.19'

LIMIT OF CLEARING, TYP.

SIGNS TO BE REMOVED BY CITY

B-4

BENCH

SMH#8
(A)
(B)

PROTECT BENCHES OR TEMPORARILY REMOVE AND RESET PRIOR TO COMPLETION

SHRUBS

SIGN:"CHESTNUT STREET PARK"

SIGN:"NO PARKING"

SIGN:"NO PARKING"

N 04°22'51" W
114.23'

61.23'

SMH#2
(A)
(B)

OHW #12

CB#13B

SMH#1
(F)
(C)
(D)

CB#11

SMH#7

WATER SERVICE VALVE

SMH#6

SMH#4

SMH#5

SIGN:"STOP" & "HAMPSHIRE STREET"

GOFF STREET

GAMAGE AVE.

VERIFY ANY ABANDONED UTILITY SERVICES INTO SITE AND REMOVE PER ASWD REQUIREMENTS, TYP.

DMH#15

CB#14

20 0 10 20 40
1 inch = 20 ft.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
STEPHEN R. BUSHEY
2026.05.01.26
LICENSED PROFESSIONAL ENGINEER

STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING-EX & REMOVALS.dwg		

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GORRILL PALMER
An LJB Engineering Company

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(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

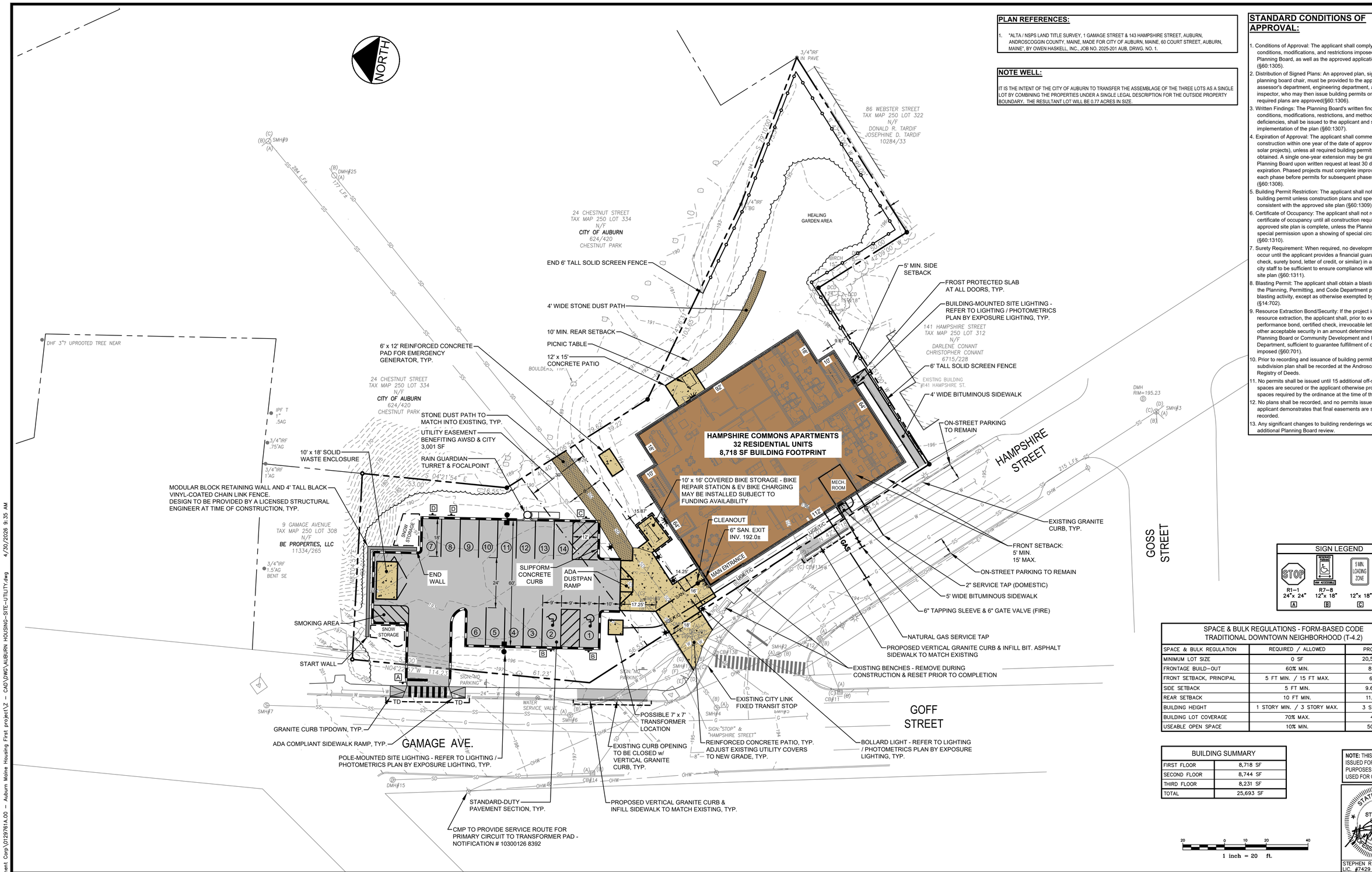
Drawing Name: EXISTING CONDITIONS & REMOVALS PLAN

Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine

Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-2.0

U:\Auburn Housing Development Corp\012976\A.00 - Auburn Maine Housing First project\Z - CAD\DWG\AUBURN HOUSING-EX & REMOVALS.dwg 4/30/2026 10:56 AM



PLAN REFERENCES:

1. "ALTA / NSPS LAND TITLE SURVEY, 1 GAMAGE STREET & 143 HAMPSHIRE STREET, AUBURN, ANDROSCOGGIN COUNTY, MAINE, MADE FOR CITY OF AUBURN, MAINE, 60 COURT STREET, AUBURN, MAINE", BY OWEN HASKELL, INC., JOB NO. 2025-201 AUB, DRWG. NO. 1.

NOTE WELL:

IT IS THE INTENT OF THE CITY OF AUBURN TO TRANSFER THE ASSEMBLAGE OF THE THREE LOTS AS A SINGLE LOT BY COMBINING THE PROPERTIES UNDER A SINGLE LEGAL DESCRIPTION FOR THE OUTSIDE PROPERTY BOUNDARY. THE RESULTANT LOT WILL BE 0.77 ACRES IN SIZE.

STANDARD CONDITIONS OF APPROVAL:

1. Conditions of Approval: The applicant shall comply with all conditions, modifications, and restrictions imposed by the Planning Board, as well as the approved application and site plan (§60:1305).
2. Distribution of Signed Plans: An approved plan, signed by the planning board chair, must be provided to the applicant, assessor's department, engineering department, and building inspector, who may then issue building permits once all other required plans are approved(§60:1306).
3. Written Findings: The Planning Board's written findings, including conditions, modifications, restrictions, and methods to address deficiencies, shall be issued to the applicant and shall govern implementation of the plan (§60:1307).
4. Expiration of Approval: The applicant shall commence construction within one year of the date of approval (two years for solar projects), unless all required building permits have been obtained. A single one-year extension may be granted by the Planning Board upon written request at least 30 days prior to expiration. Phased projects must complete improvements for each phase before permits for subsequent phases are issued (§60:1308).
5. Building Permit Restriction: The applicant shall not receive a building permit unless construction plans and specifications are consistent with the approved site plan (§60:1309).
6. Certificate of Occupancy: The applicant shall not receive a certificate of occupancy until all construction required by the approved site plan is complete, unless the Planning Board grants special permission upon a showing of special circumstances (§60:1310).
7. Surety Requirement: When required, no development activity may occur until the applicant provides a financial guarantee (certified check, surety bond, letter of credit, or similar) in an amount set by city staff to be sufficient to ensure compliance with the approved site plan (§60:1311).
8. Blasting Permit: The applicant shall obtain a blasting permit from the Planning, Permitting, and Code Department prior to any blasting activity, except as otherwise exempted by ordinance (§14:702).
9. Resource Extraction Bond/Security: If the project involves resource extraction, the applicant shall, prior to excavation, post a performance bond, certified check, irrevocable letter of credit, or other acceptable security in an amount determined by the Planning Board or Community Development and Planning Department, sufficient to guarantee fulfillment of conditions imposed (§60:701).
10. Prior to recording and issuance of building permits, the final subdivision plan shall be recorded at the Androscoggin County Registry of Deeds.
11. No permits shall be issued until 15 additional off-street parking spaces are secured or the applicant otherwise provides the spaces required by the ordinance at the time of the permit issued.
12. No plans shall be recorded, and no permits issued, until the applicant demonstrates that final easements are signed and recorded.
13. Any significant changes to building renderings would need additional Planning Board review.

SIGN LEGEND

R1–1	R7–8		
STOP	RESERVED PARKING VAN ACCESSIBLE	5 MIN. LOADING ZONE	RESERVED PUBLIC PARKING FOR OVERNIGHT PARK
24"x 24"	12"x 18"	12"x 18"	
A	B	C	D

SPACE & BULK REGULATIONS - FORM-BASED CODE
TRADITIONAL DOWNTOWN NEIGHBORHOOD (T-4.2)

SPACE & BULK REGULATION	REQUIRED / ALLOWED	PROVIDED
MINIMUM LOT SIZE	0 SF	20,577 SF
FRONTAGE BUILD–OUT	60% MIN.	81.3%
FRONT SETBACK, PRINCIPAL	5 FT MIN. / 15 FT MAX.	6 FT
SIDE SETBACK	5 FT MIN.	9.67 FT
REAR SETBACK	10 FT MIN.	11.0 FT
BUILDING HEIGHT	1 STORY MIN. / 3 STORY MAX.	3 STORIES
BUILDING LOT COVERAGE	70% MAX.	43%
USEABLE OPEN SPACE	10% MIN.	50% ±

BUILDING SUMMARY

FIRST FLOOR	8,718 SF
SECOND FLOOR	8,744 SF
THIRD FLOOR	8,231 SF
TOTAL	25,693 SF

20 0 10 20 40
1 inch = 20 ft.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
STEPHEN R. BUSHEY
05.01.26
LICENSED
PROFESSIONAL ENGINEER
STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–SITE–UTILITY.dwg		

This plan shall not be modified without written permission from Gorrill Palmer. Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to Gorrill Palmer.

GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

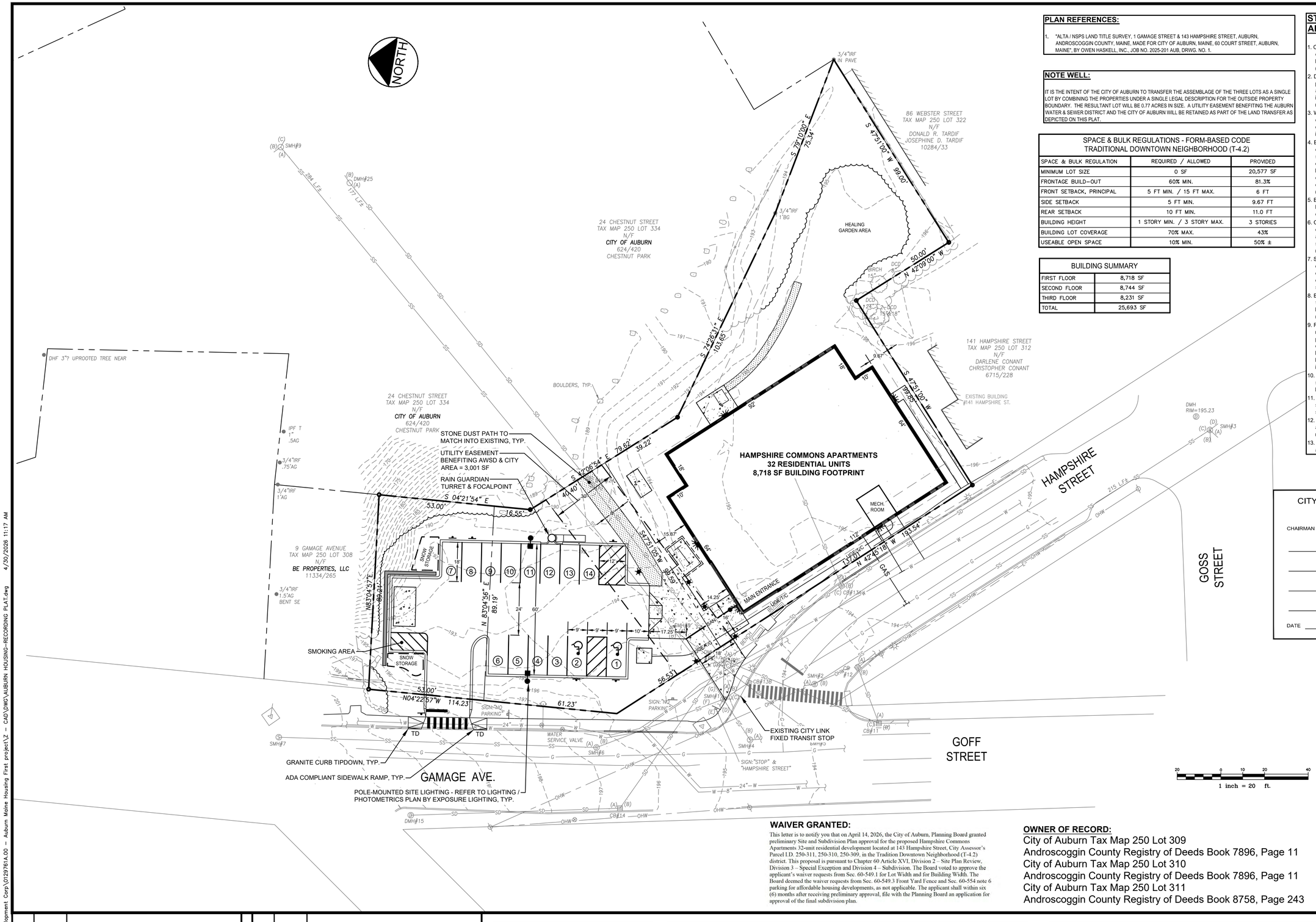
Drawing Name: SITE LAYOUT & UTILITY PLAN

Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine

Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-3.0

U:\Auburn Housing Development Corp\01297761A.00 – Auburn Maine Housing First project\Z – CAD\DWG\AUBURN HOUSING–SITE–UTILITY.dwg 4/30/2026 9:35 AM



PLAN REFERENCES:

1. "ALTA / NSPS LAND TITLE SURVEY, 1 GAMAGE STREET & 143 HAMPSHIRE STREET, AUBURN, ANDROSCOGGIN COUNTY, MAINE, MADE FOR CITY OF AUBURN, MAINE, 60 COURT STREET, AUBURN, MAINE", BY OWEN HASKELL, INC., JOB NO. 2025-201 AUB, DRWG. NO. 1.

NOTE WELL:

IT IS THE INTENT OF THE CITY OF AUBURN TO TRANSFER THE ASSEMBLAGE OF THE THREE LOTS AS A SINGLE LOT BY COMBINING THE PROPERTIES UNDER A SINGLE LEGAL DESCRIPTION FOR THE OUTSIDE PROPERTY BOUNDARY. THE RESULTANT LOT WILL BE 0.77 ACRES IN SIZE. A UTILITY EASEMENT BENEFITING THE AUBURN WATER & SEWER DISTRICT AND THE CITY OF AUBURN WILL BE RETAINED AS PART OF THE LAND TRANSFER AS DEPICTED ON THIS PLAT.

SPACE & BULK REGULATIONS - FORM-BASED CODE
TRADITIONAL DOWNTOWN NEIGHBORHOOD (T-4.2)

SPACE & BULK REGULATION	REQUIRED / ALLOWED	PROVIDED
MINIMUM LOT SIZE	0 SF	20,577 SF
FRONTAGE BUILD-OUT	60% MIN.	81.3%
FRONT SETBACK, PRINCIPAL	5 FT MIN. / 15 FT MAX.	6 FT
SIDE SETBACK	5 FT MIN.	9.67 FT
REAR SETBACK	10 FT MIN.	11.0 FT
BUILDING HEIGHT	1 STORY MIN. / 3 STORY MAX.	3 STORIES
BUILDING LOT COVERAGE	70% MAX.	43%
USEABLE OPEN SPACE	10% MIN.	50% ±

BUILDING SUMMARY	
FIRST FLOOR	8,718 SF
SECOND FLOOR	8,744 SF
THIRD FLOOR	8,231 SF
TOTAL	25,693 SF

STANDARD CONDITIONS OF APPROVAL:

1. Conditions of Approval: The applicant shall comply with all conditions, modifications, and restrictions imposed by the Planning Board, as well as the approved application and site plan (§60:1305).
2. Distribution of Signed Plans: An approved plan, signed by the planning board chair, must be provided to the applicant, assessor's department, engineering department, and building inspector, who may then issue building permits once all other required plans are approved(§60:1306).
3. Written Findings: The Planning Board's written findings, including conditions, modifications, restrictions, and methods to address deficiencies, shall be issued to the applicant and shall govern implementation of the plan (§60:1307).
4. Expiration of Approval: The applicant shall commence construction within one year of the date of approval (two years for solar projects), unless all required building permits have been obtained. A single one-year extension may be granted by the Planning Board upon written request at least 30 days prior to expiration. Phased projects must complete improvements for each phase before permits for subsequent phases are issued (§60:1308).
5. Building Permit Restriction: The applicant shall not receive a building permit unless construction plans and specifications are consistent with the approved site plan (§60:1309).
6. Certificate of Occupancy: The applicant shall not receive a certificate of occupancy until all construction required by the approved site plan is complete, unless the Planning Board grants special permission upon a showing of special circumstances (§60:1310).
7. Surety Requirement: When required, no development activity may occur until the applicant provides a financial guarantee (certified check, surety bond, letter of credit, or similar) in an amount set by city staff to be sufficient to ensure compliance with the approved site plan (§60:1311).
8. Blasting Permit: The applicant shall obtain a blasting permit from the Planning, Permitting, and Code Department prior to any blasting activity, except as otherwise exempted by ordinance (§14:702).
9. Resource Extraction Bond/Security: If the project involves resource extraction, the applicant shall, prior to excavation, post a performance bond, certified check, irrevocable letter of credit, or other acceptable security in an amount determined by the Planning Board or Community Development and Planning Department, sufficient to guarantee fulfillment of conditions imposed (§60:701).
10. Prior to recording and issuance of building permits, the final subdivision plan shall be recorded at the Androscoggin County Registry of Deeds.
11. No permits shall be issued until 15 additional off-street parking spaces are secured or the applicant otherwise provides the spaces required by the ordinance at the time of the permit issued.
12. No plans shall be recorded, and no permits issued, until the applicant demonstrates that final easements are signed and recorded.
13. Any significant changes to building renderings would need additional Planning Board review.

CITY OF AUBURN PLANNING BOARD
SITE PLAN APPROVAL

CHAIRMAN _____

_____ _____

_____ _____

_____ _____

_____ _____

DATE _____

REGISTRY BLOCK

STATE OF MAINE

ANDROSCOGGIN COUNTY REGISTRY OF DEEDS

RECEIVED _____,

20_____, AT _____h _____m _____M.

AND RECORDED IN PLAN BOOK _____

PAGE _____

ATTEST _____

REGISTRAR

20 0 10 20 40
1 inch = 20 ft.

WAIVER GRANTED:

This letter is to notify you that on April 14, 2026, the City of Auburn, Planning Board granted preliminary Site and Subdivision Plan approval for the proposed Hampshire Commons Apartments 32-unit residential development located at 143 Hampshire Street, City Assessor's Parcel I.D. 250-311, 250-310, 250-309, in the Tradition Downtown Neighborhood (T-4.2) district. This proposal is pursuant to Chapter 60 Article XVI, Division 2 – Site Plan Review, Division 3 – Special Exception and Division 4 – Subdivision. The Board voted to approve the applicant's waiver requests from Sec. 60-549.1 for Lot Width and for Building Width. The Board deemed the waiver requests from Sec. 60-549.3 Front Yard Fence and Sec. 60-554 note 6 parking for affordable housing developments, as not applicable. The applicant shall within six (6) months after receiving preliminary approval, file with the Planning Board an application for approval of the final subdivision plan.

OWNER OF RECORD:

City of Auburn Tax Map 250 Lot 309
Androscoggin County Registry of Deeds Book 7896, Page 11
City of Auburn Tax Map 250 Lot 310
Androscoggin County Registry of Deeds Book 7896, Page 11
City of Auburn Tax Map 250 Lot 311
Androscoggin County Registry of Deeds Book 8758, Page 243

STATE OF MAINE
STEPHEN R. BUSHEY
05.01.26
LICENSED PROFESSIONAL ENGINEER
STEPHEN R. BUSHEY, P.E.
LIC. #7429

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Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–RECORDING PLAT.dwg		

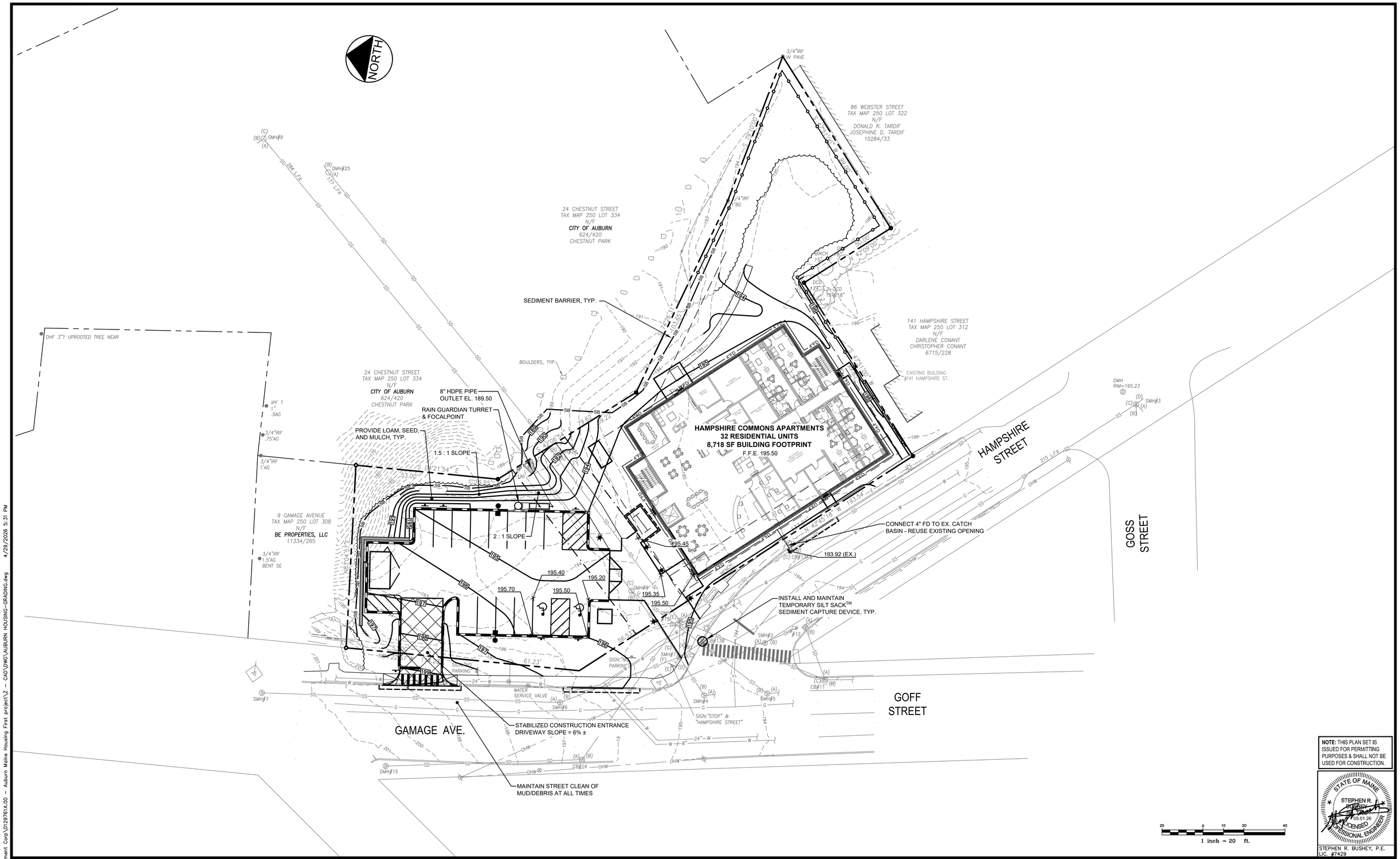
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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: HAMPSHIRE COMMONS RECORDING PLAT
Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine
Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-3.1

U:\Auburn Housing Development Corp\0123761A.00 – Auburn Maine Housing First project\Z – CAD\DWG\AUBURN HOUSING–RECORDING PLAT.dwg 4/30/2026 11:17 AM



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STATE OF MAINE
STEPHEN R. BUSHEY
2026.05.01.26
LICENSED PROFESSIONAL ENGINEER

STEPHEN R. BUSHEY, P.E.
LIC. #7429

20 0 10 20 40
1 inch = 20 ft.

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Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING-GRADING.dwg		

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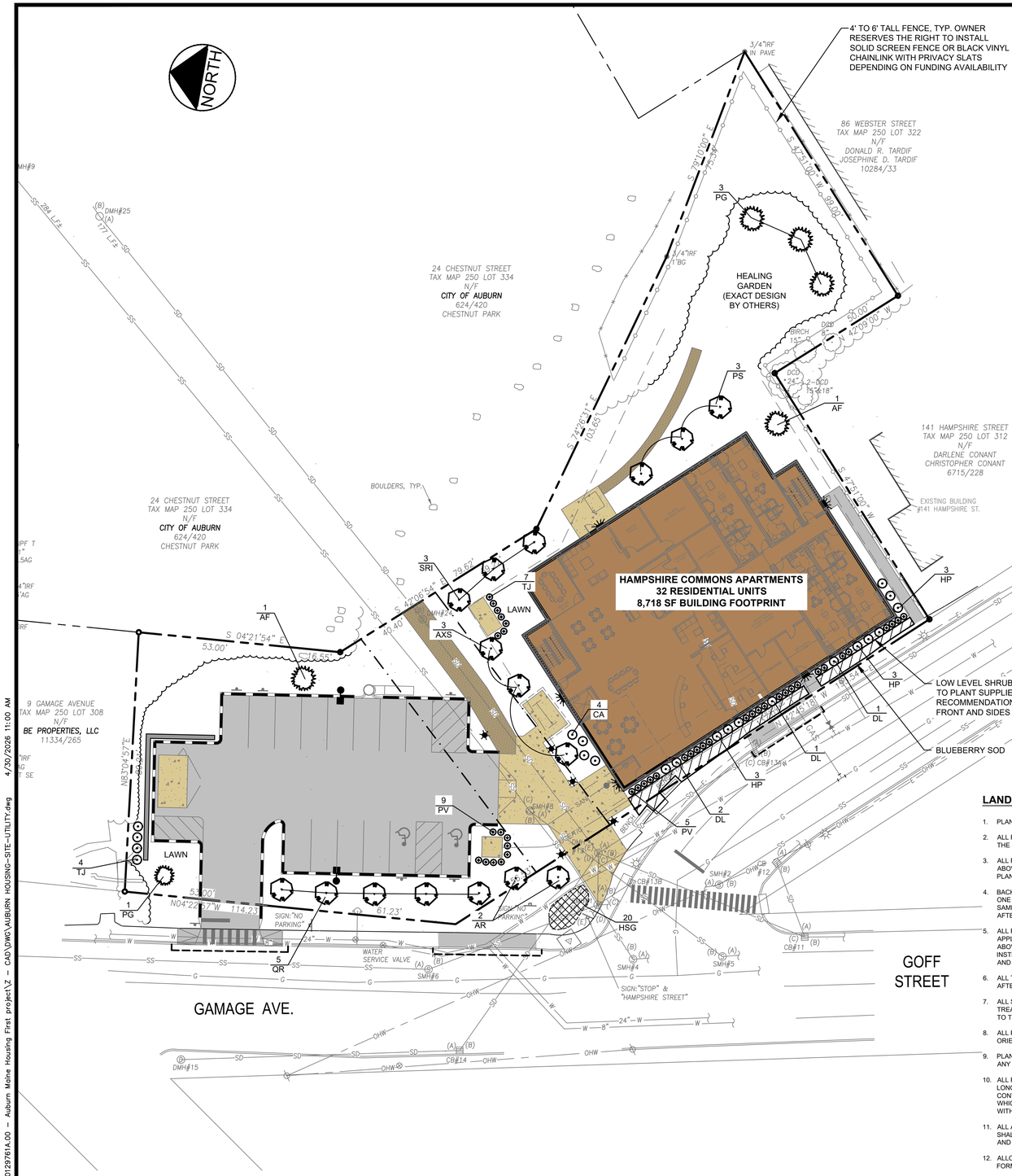
Drawing Name: GRADING, DRAINAGE & EROSION CONTROL PLAN

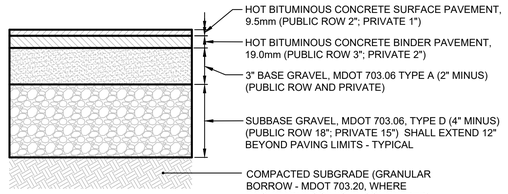
Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine

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Drawing No. C-4.0

U:\Auburn Housing Development Corp\D12976\1A.00 - Auburn Maine Housing First project\Z - CAD\DWG\AUBURN HOUSING-GRADING.dwg 4/29/2026 5:31 PM


NORTH
4' TO 6' TALL FENCE, TYP. OWNER RESERVES THE RIGHT TO INSTALL SOLID SCREEN FENCE OR BLACK VINYL CHAINLINK WITH PRIVACY SLATS DEPENDING ON FUNDING AVAILABILITY
86 WEBSTER STREET
TAX MAP 250 LOT 322
N/F
DONALD R. TARDIF
JOSEPHINE D. TARDIF
10284/33
24 CHESTNUT STREET
TAX MAP 250 LOT 334
N/F
CITY OF AUBURN
624/420
CHESTNUT PARK
HEALING GARDEN
(EXACT DESIGN BY OTHERS)
141 HAMPSHIRE STREET
TAX MAP 250 LOT 312
N/F
DARLENE CONANT
CHRISTOPHER CONANT
6715/228
EXISTING BUILDING #141 HAMPSHIRE ST.
BOULDERS, TYP.
HAMPSHIRE COMMONS APARTMENTS
32 RESIDENTIAL UNITS
8,718 SF BUILDING FOOTPRINT
LAWN
LOW LEVEL SHRUBS - SUBJECT TO PLANT SUPPLIER RECOMMENDATIONS, TYP. FRONT AND SIDES (22 TOTAL)
BLUEBERRY SOD
HAMPSHIRE STREET
GOSS STREET
GOFF STREET
GAMAGE AVE.
9 GAMAGE AVENUE
TAX MAP 250 LOT 308
N/F
BE PROPERTIES, LLC
11334/265
SIGN:"NO PARKING"
SIGN:"STOP" & "HAMPSHIRE STREET"
WATER SERVICE VALVE
DMH#9
DMH#25
DMH#24
DMH#15
DMH RIM=195.23
CB#13
CB#14
CB#11
CB#12
SMH#2
SMH#3
SMH#4
SMH#5
SMH#6
S 79°10'00" E 15.34'
S 42°11'00" W 39.60'
S 37°26'21" E 103.65'
S 47°49'00" W 50.00'
S 42°09'00" W 50.00'
S 47°06'54" E 79.67'
S 04°21'54" E 53.00'
S 16°55'
N83°04'57"E 40.40'
N04°22'07"W 114.25'
61.23'
S 47°49'00" W 215 L.F.
53.00'
3/4"IRF IN PAVE
3/4"IRF 1.1'BG
3/4"IRF
"AG
"IRF
"AG
"IRF
"AG



NOTES:

1. APPLY TACK COAT BETWEEN BINDER AND SURFACE COURSES.
2. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION AND/OR CITY OF PORTLAND TECHNICAL STANDARD, WHICHEVER IS MORE STRINGENT. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH THE MDOT STANDARD SPECIFICATIONS.
3. CONTRACTOR TO VERIFY TRENCH RESTORATION SECTION IN CASCO STREET WITH THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY EXCAVATION.

(A) BITUMINOUS CONCRETE PAVEMENT SECTION
N.T.S.

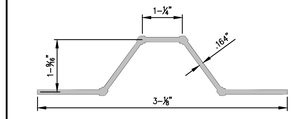
LENGTH: AS REQUIRED

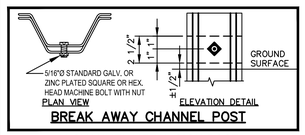
WEIGHT PER LINEAR FOOT: 2.50 LBS. MIN.

HOLES: ⅜" DIAMETER, 1" C-C FULL LENGTH

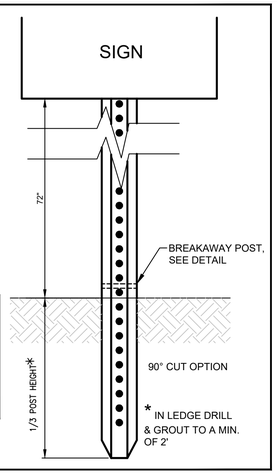
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASSTM A-576 (GRADE 1070 - 1080)

FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

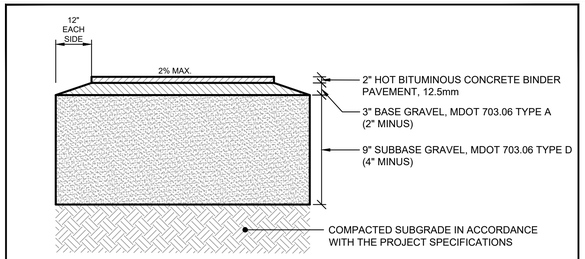




BREAK AWAY CHANNEL POST



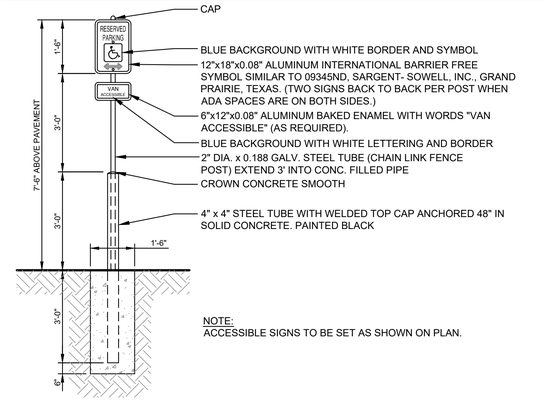
(D) U-CHANNEL METAL SIGN POST
N.T.S.



NOTES:

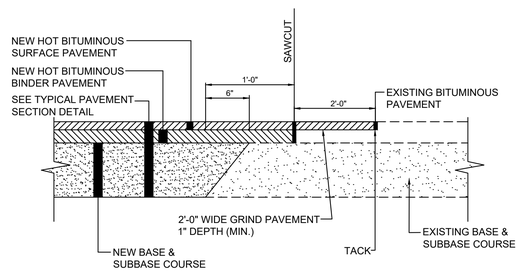
1. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION.
2. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
3. 2% MAXIMUM CROSS SLOPE ON ALL SIDEWALKS AND ADA PARKING SPACES.

(G) BITUMINOUS CONCRETE SIDEWALK SECTION FOR SITE INSTALLATION
N.T.S.



NOTE:
ACCESSIBLE SIGNS TO BE SET AS SHOWN ON PLAN.

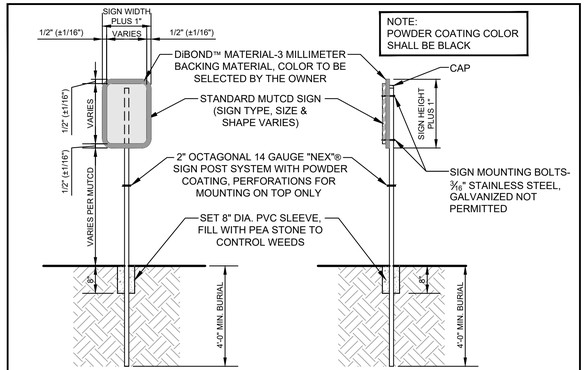
(J) BARRIER FREE PARKING SIGN
N.T.S.



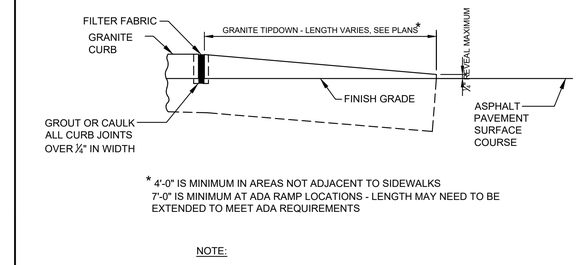
NOTES:

1. USE THIS DETAIL FOR THE RADIUS FILLET AT THE DRIVEWAY ENTRANCE TO THE PUBLIC STREETS OR TO MATCH PARKING LOT/DRIVE PAVEMENTS WHERE WIDENING OF EXISTING PAVEMENT AREA IS REQUIRED.
2. WHERE SURFACE PAVEMENT HAS NOT BEEN INSTALLED, THE 2'-0" WIDE GRIND IS NOT REQUIRED.

(B) PAVEMENT SAWCUT DETAIL
N.T.S.



(E) TRAFFIC SIGN (WITH BACKING)
N.T.S.



* 4'-0" IS MINIMUM IN AREAS NOT ADJACENT TO SIDEWALKS
7'-0" IS MINIMUM AT ADA RAMP LOCATIONS - LENGTH MAY NEED TO BE EXTENDED TO MEET ADA REQUIREMENTS

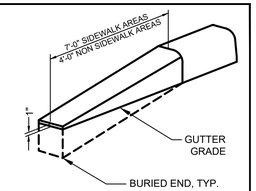
NOTE:

REFER TO PLANS FOR LOCATIONS & LENGTHS OF TIPDOWNS.

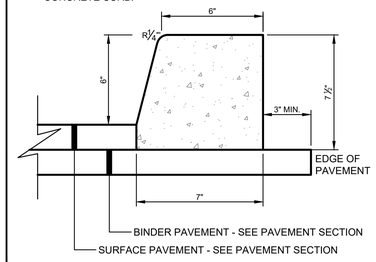
(H) GRANITE CURB TIPDOWN INSTALLATION DETAIL
N.T.S.

NOTES:

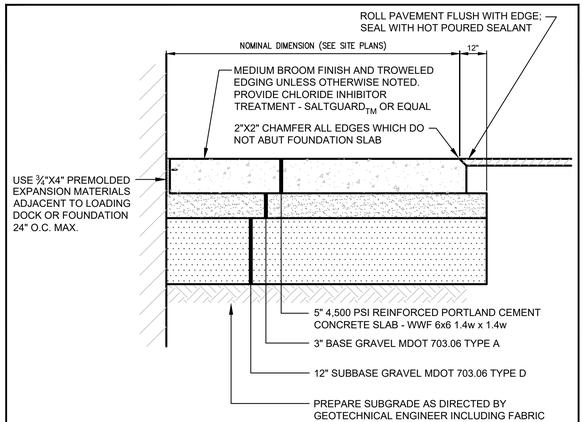
1. 4,000 PSI CONCRETE WITH FIBER REINFORCEMENT.
2. 4% TO 6% AIR ENTRAINMENT.
3. 1" TO 2" SLUMP.
4. APPLY EPOXY TO BINDER PAVEMENT PRIOR TO CURB PLACEMENT.
5. APPLY SALTGUARD ™ TREATMENT TO ALL CONCRETE CURB.



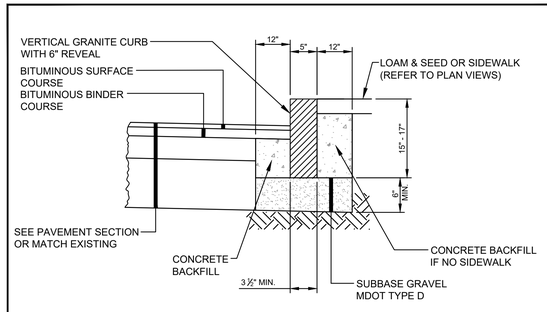
END TRANSITION CURB



(K) EXTRUDED SLIPFORM VERTICAL CONCRETE CURB DETAIL
N.T.S.

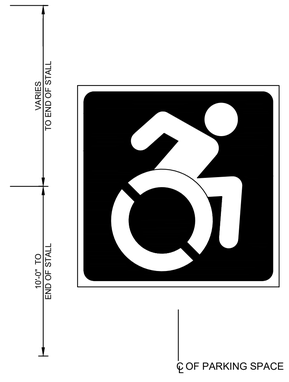


(C) CONCRETE SLAB DETAIL
N.T.S.



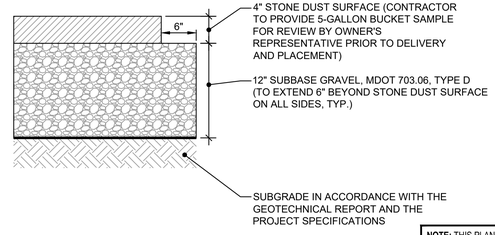
NOTES:
1. VERTICAL GRANITE CURB TO MEET MDOT STANDARD SPECIFICATIONS.
2. REFER TO PLANS FOR LOCATIONS OF GRANITE CURBS.
3. JOINTS SHALL BE MORTARED.
4. JOINT SEPARATION SHALL BE ¼" AND ⅝".
5. MAX. LENGTH OF STRAIGHT CURB STONES = 8', MIN. LENGTH = 3'.
6. CIRCULAR CURB REQUIRED FOR RADIUS LESS THAN 50'.

(F) TYPE 1 VERTICAL GRANITE CURB DETAIL
N.T.S.



NOTE:
1. BARRIER FREE STALLS SHALL BE DELINEATED WITH THIS SYMBOL IN WHITE MARKING ON NON-SKID BLUE BACKGROUND.
2. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR CURRENT INTERNATIONAL SYMBOL OF ACCESS PAINTING STENCIL.

(I) INTERNATIONAL BARRIER FREE SYMBOL DETAIL
N.T.S.



NOTES:

1. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION.
2. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH SPECIFICATIONS AND GEOTECHNICAL REPORTS.

(L) STONE DUST WALKING PATH DETAIL
N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE — STEPHEN R. BUSHEY — 05.01.26 — LICENSED PROFESSIONAL ENGINEER

STEPHEN R. BUSHEY, P.E.
LIC. #7429

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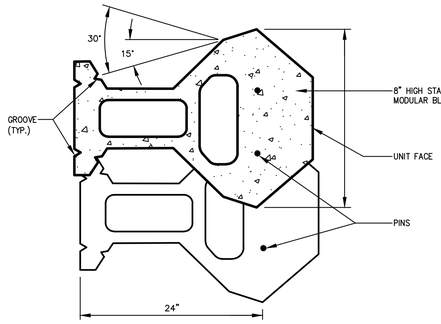
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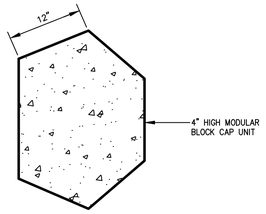
GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:	SITE & MISCELLANEOUS DETAILS
Project:	HAMPSHIRE COMMONS APARTMENTS 143 Hampshire Street, Auburn, Maine
Client:	AUBURN HOUSING AUTHORITY P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No.
C-6.0

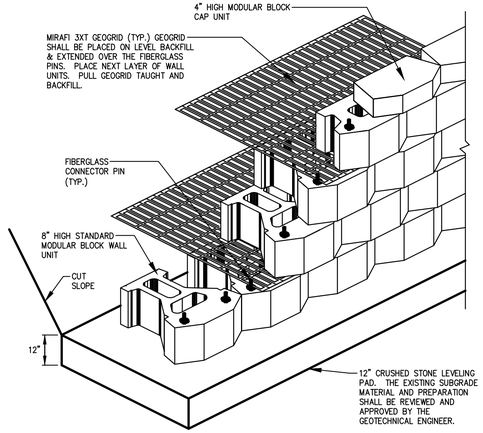
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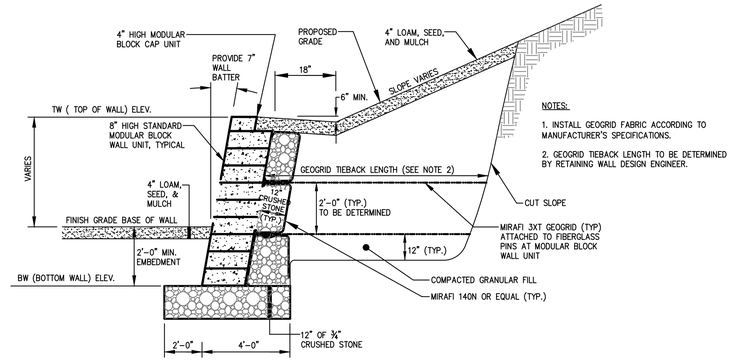




NOTES:

1. REMOVE THE EXTENDED TAIL PIECES AT THE GROOVES TO RETURN THE BLOCK SHAPE TO ITS 30° SIDES WHEN BUILDING TIGHT CONVEX CURVES.
2. THE ELONGATED TAIL SECTION PROVIDES ADDITIONAL STABILITY FOR STRAIGHT WALLS AS THE TAIL PIECE RESTS ON THE UNIT BELOW IT.
3. AREA WITHIN, BETWEEN AND 12" BEHIND THE UNITS IS TO BE FILLED WITH 1/2" TO 3/4" CRUSHED STONE WITH LESS THAN 5% PASSING A #200 SEIVE.
4. PROVIDE 4' TALL BLACK VINYL-COATED CHAIN LINK FENCE ON TOP OF WALL, TYP.

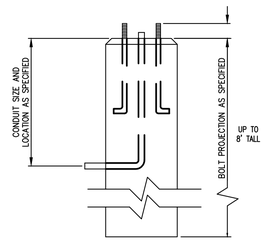




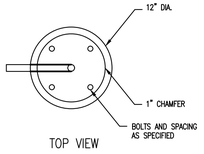
NOTES:

1. INSTALL GEOGRID FABRIC ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. GEOGRID TIEBACK LENGTH TO BE DETERMINED BY RETAINING WALL DESIGN ENGINEER.

Ⓐ MODULAR BLOCK DETAILS
N.T.S.



FRONT VIEW



TOP VIEW

ITEM #B-401
WEIGHT – SEE CHART BELOW

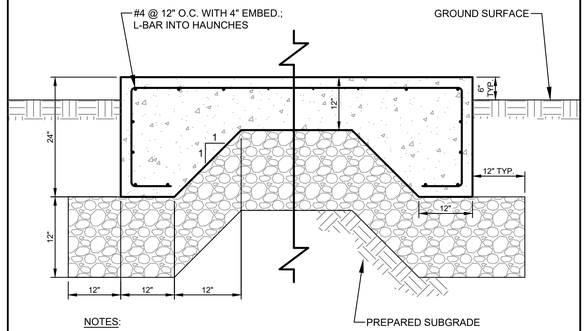
HEIGHT	WEIGHT	ITEM #
4' TALL	472 LBS	B-4014
5' TALL	590 LBS	B-4015
6' TALL	708 LBS	B-4016
7' TALL	826 LBS	B-4017
8' TALL	944 LBS	B-4018

DESIGN NOTES:

1 – CONCRETE 4000 PSI AT 28 DAYS.
2 – REINFORCING IS AS SPECIFIED. (TYP. 4 – #4 VERTICALLY AND #3 STIRRUPS 12" O.C. HORIZONTALLY)
3 – ANCHOR BOLTS AND GROUNDING AS SPECIFIED.
4 – BALLAST POURED AROUND BASE IF REQUIRED.

PRECAST CONCRETE PRODUCTS OF MAINE, INC. PHONE (207) 729-1628 FAX (207) 729-8710

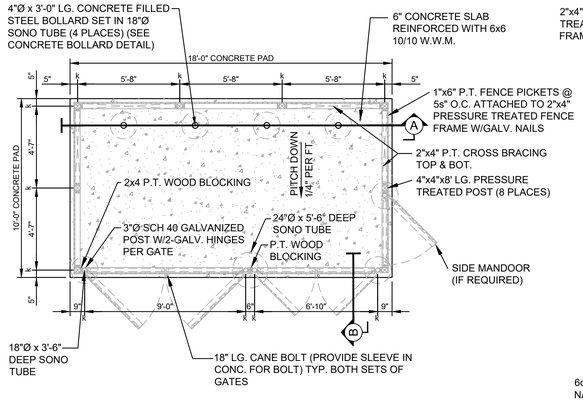
Ⓑ 12" DIA. LIGHT POLE BASE
N.T.S.



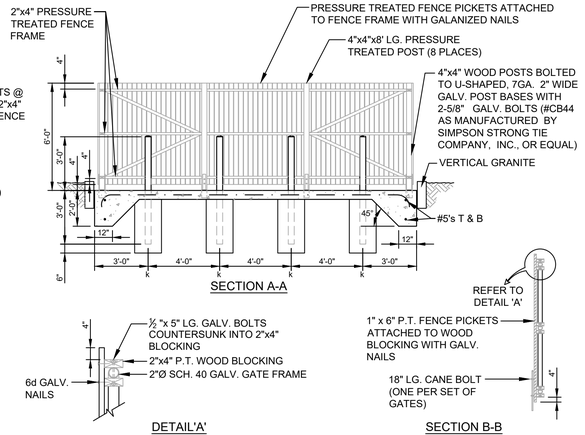
NOTES:

1. FOR PAD DIMENSIONS SHALL BE 10' LONG x 5' WIDE.
2. 12" BASE GRAVEL SHALL BE MDOT 703.06 STANDARDS FOR TYPE D GRAVEL.
3. CONCRETE PAD SHALL HAVE COMPRESSIVE STRENGTH OF 4,500 PSI.
4. PROVIDE BROOM FINISH AND SALTGUARD™ CHLORIDE INHIBITOR.

Ⓓ CONCRETE GENERATOR PAD DETAIL
N.T.S.



Ⓒ SOLID WASTE ENCLOSURE PLAN AND DETAILS
N.T.S.



NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
STEPHEN R. BUSHEY
7429
05.01.26
LICENSED PROFESSIONAL ENGINEER
STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–DETAILS.dwg		

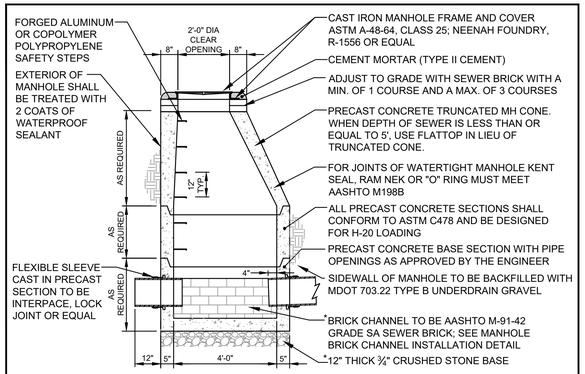
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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: SITE & MISCELLANEOUS DETAILS
Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine
Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-6.1

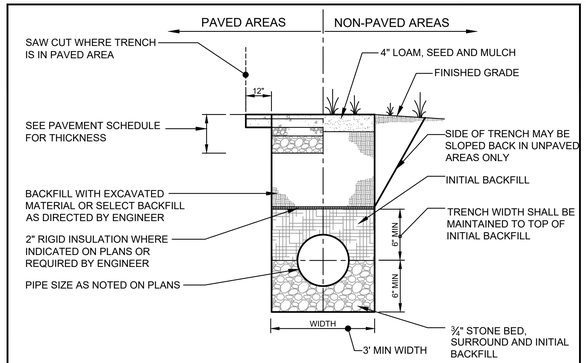
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4'-0" DIA. PRECAST SEWER & STORM DRAIN MANHOLE DETAIL

(A) N.T.S.

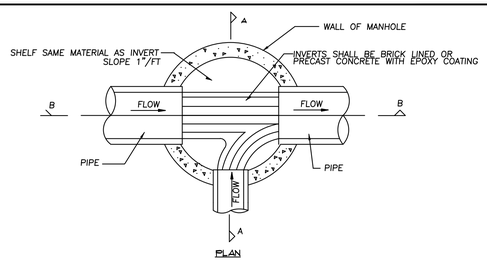
* NOTE:
CHANNEL MAY ALSO BE A PREFABRICATED FIBERLINER 2000 CHANNEL AS FABRICATED BY GDT, INC. OF ESSEX, CT OR EQUAL

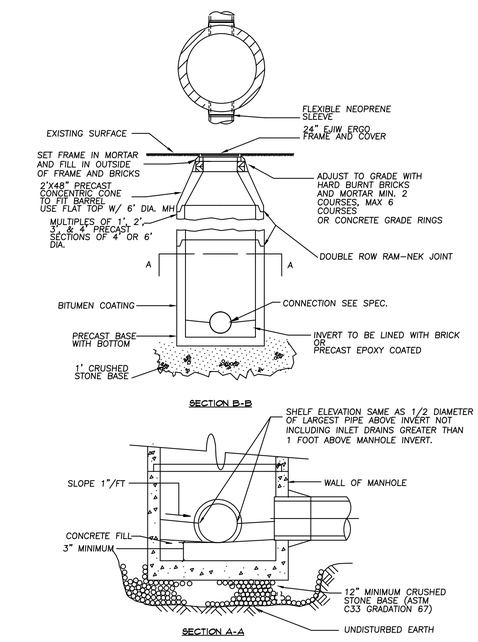


NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

TYPICAL SEWER AND STORM DRAIN TRENCH SECTION

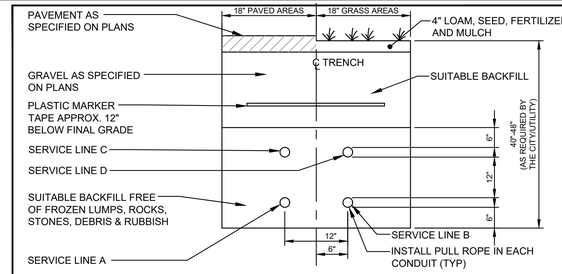
(D) N.T.S.





PRECAST CONCRETE SEWER MANHOLE DETAIL

(G) N.T.S.



CONDUIT TYPE

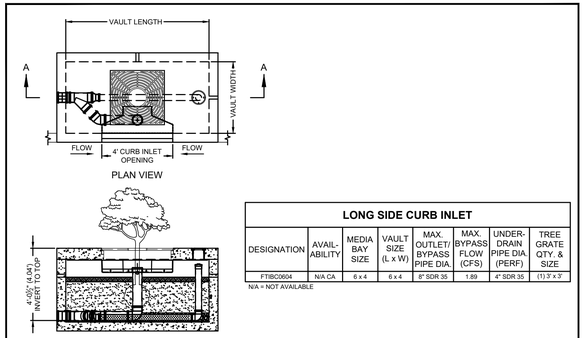
SERVICE	CONDUIT SIZE	GRASS AREAS	PAVED AREAS	UTILITY	REMARKS
A	2-6"	SCHEDULE 40 PVC ELECTRICAL GRADE	RIGID GALVANIZED STEEL, ASTM A120*	POWER	SEE NOTE
B	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120*	TELEPHONE	SEE NOTE
C	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120*	COMMUNICATION	SEE NOTE
D	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120*	SPARES	SEE NOTE

*AS REQUIRED BY CITY /UTILITY

NOTES:
1. ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10' ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS. COORDINATE WITH ELECTRICAL SITE PLANS BY E.S. BOULOS.
2. IN CITY RIGHT OF WAY, CONDUITS TO HAVE 36" MIN. COVER AND BE ENCASED WITH MIN. 3" CONCRETE ON ALL SIDES.

UTILITY TRENCH - PRIMARY ELEC., TEL. & COMM.

(I) N.T.S.



LONG SIDE INLET CONFIGURATION

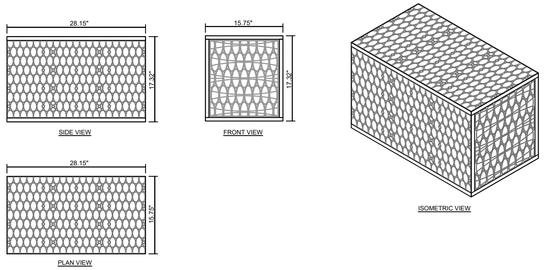
LONG SIDE CURB INLET							
DESIGNATION	AVAIL-ABILITY	MEDIA BAY SIZE	VAULT SIZE (L x W)	MAX. OUTLET/ BYPASS PIPE DIA.	MAX. BYPASS FLOW (CFS)	UNDER-DRAIN PIPE DIA. (PERF)	TREE GRATE QTY. & SIZE
FTIBC0604	N/A CA	6 x 4	6 x 4	8" SDR 35	1.89	4" SDR 35	(1) 3' x 3'

N/A = NOT AVAILABLE

FILTERRA INTERNAL BYPASS CURB

(B) N.T.S.

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX



MODULE DATA

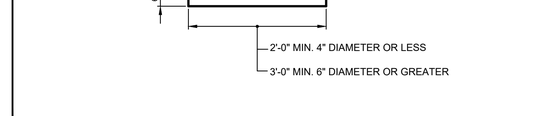
GEOMETRY: LENGTH = 28.15 IN. (715 MM)
WIDTH = 15.75 IN. (400 MM)
HEIGHT = 17.32 IN. (440 MM)
TANK VOLUME = 4.44 CF
STORAGE VOLUME = 4.22 CF
VOID INTERNAL VOLUME: 95%
VOID SURFACE AREA: 90%

LOAD RATING: 33.4 PSI, (MODULE ONLY) HS25, (WITH ACF COVER SYSTEM)
MATERIAL: 100% RECYCLED POLYPROPYLENE
SMALL PLATES PER SEGMENT/TOTAL: 5/5

ACF ENVIRONMENTAL LET'S GET IT DONE

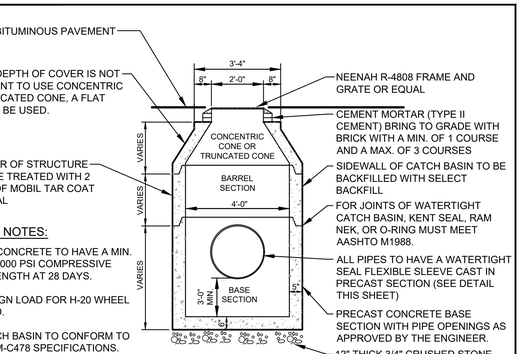
R-TANK^{HD} - SINGLE MODULE

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com 5/16



WATER SERVICE TRENCH SECTION

(J) N.T.S.

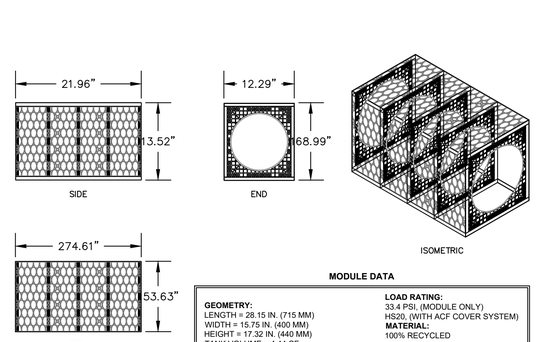


DESIGN NOTES:

1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..

4'-0" PRECAST CATCH BASIN DETAIL

(C) N.T.S.



MODULE DATA

GEOMETRY:
LENGTH = 28.15 IN. (715 MM)
WIDTH = 15.75 IN. (400 MM)
HEIGHT = 17.32 IN. (440 MM)
TANK VOLUME = 4.44 CF
STORAGE VOLUME = 4.22 CF
VOID INTERNAL VOLUME: 95%
VOID SURFACE AREA: 90%

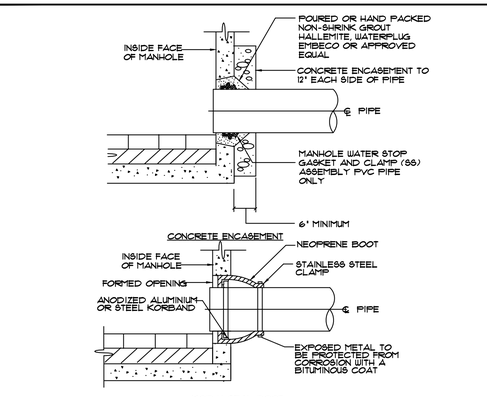
LOAD RATING:
33.4 PSI, (MODULE ONLY)
HS20, (WITH ACF COVER SYSTEM)
MATERIAL:
100% RECYCLED POLYPROPYLENE
SMALL PLATES PER SEGMENT/TOTAL:
5/5

09/25/2017

ACF ENVIRONMENTAL LET'S GET IT DONE

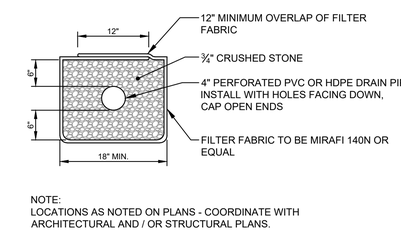
R-TANK^{HD} - SINGLE MAINTENANCE MODULE

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



MANHOLE PIPE CONNECTIONS FOR SEWER DETAIL

(H) N.T.S.



NOTE:
LOCATIONS AS NOTED ON PLANS - COORDINATE WITH ARCHITECTURAL AND / OR STRUCTURAL PLANS.

TYPICAL FOUNDATION DRAIN DETAIL

(K) N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
STEPHEN R. BUSHEY
2026.01.26
LICENSED PROFESSIONAL ENGINEER

STEPHEN R. BUSHEY, P.E.
LIC. #7429

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING-DETAILS.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: STORM DRAIN & UTILITY DETAILS

Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine

Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212-3037

Drawing No. C-6.2

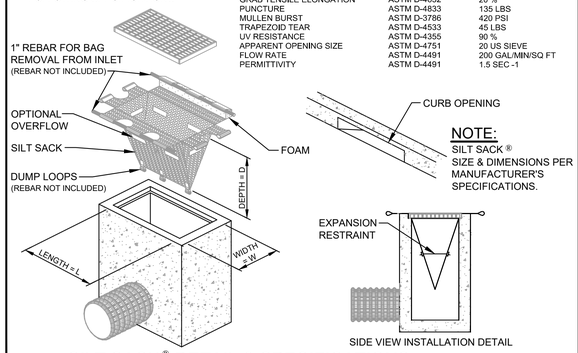
U:\Auburn Housing Development Corp\0129761A.00 - Auburn Maine Housing First project\2 - CAD\DWG\AUBURN HOUSING-DETAILS.dwg 4/28/2026 4:02 PM

NOTE: THE SILT SACK ® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

HIGH-FLOW SILT SACK ® (FOR USE IN LOW POINTS/SAGS)

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

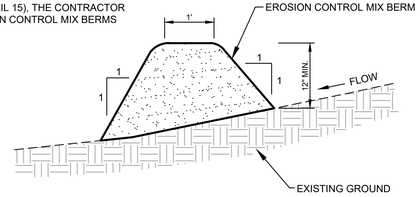
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



NOTE:
SILT SACK ® SIZE & DIMENSIONS PER MANUFACTURER'S SPECIFICATIONS.

(A) SILT SACK® DETAIL & SPECIFICATIONS
N.T.S.

NOTE:
DURING PERIODS OF WINTER CONSTRUCTION (NOV. 15 THROUGH APRIL 15), THE CONTRACTOR SHALL INSTALL EROSION CONTROL MIX BERMS IN LIEU OF SILT FENCE.

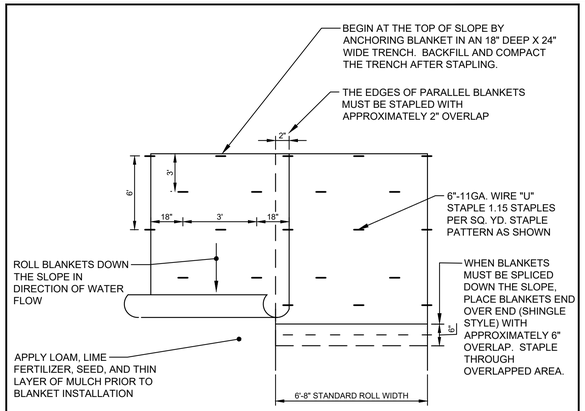


EROSION CONTROL MIX:

EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES & MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

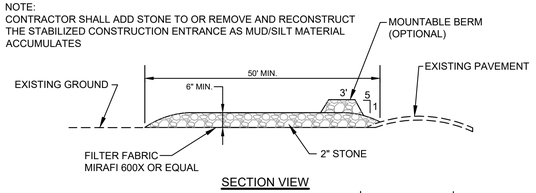
- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm.
- PH SHALL FALL BETWEEN 5.0 AND 8.0.

(D) EROSION CONTROL MIX BERM DETAIL
N.T.S.

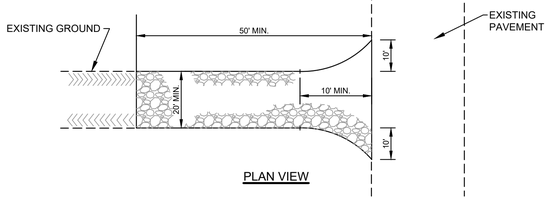


PLAN VIEW

NOTE:
CONTRACTOR SHALL ADD STONE TO OR REMOVE AND RECONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES

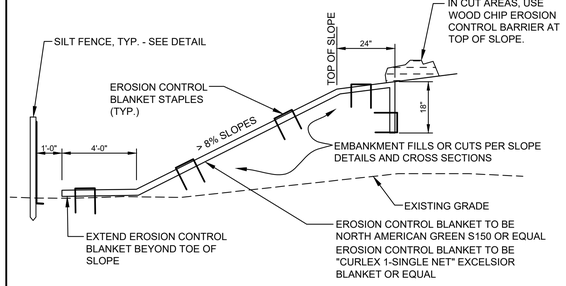


SECTION VIEW



PLAN VIEW

(B) STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.

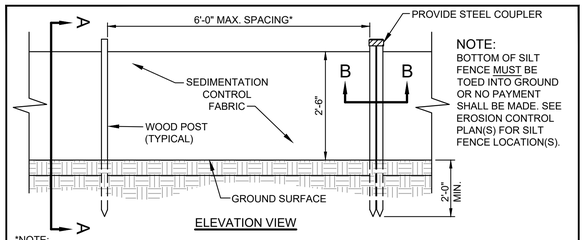


SECTION VIEW

NOTE:
EROSION CONTROL BLANKET STAPLE SIZE AND DISTRIBUTION PER MANUFACTURER'S SPECIFICATIONS.

NOTES:
1. IF GRASS CATCH IS NOT 75% BY SEPTEMBER 1, ADD #4 REBARS @ 3'-0" ROWS @ 3' CENTERS. REMOVE OR DRIVE REBARS 3" BELOW GRADE IN SPRING FOLLOWING TURF ESTABLISHMENT.
2. MULCH RATE TO BE 1/2 THE RATE OTHERWISE SPECIFIED.

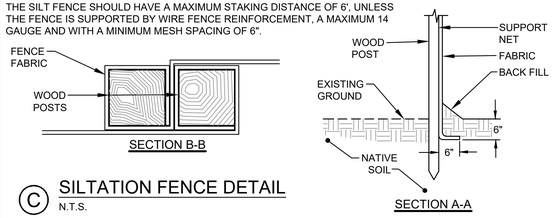
(F) EROSION CONTROL BLANKET SLOPE STABILIZATION DETAIL
N.T.S.



ELEVATION VIEW

NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE. SEE EROSION CONTROL PLAN(S) FOR SILT FENCE LOCATION(S).

*NOTE:
THE SILT FENCE SHOULD HAVE A MAXIMUM STAKING DISTANCE OF 6', UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT, A MAXIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".



(C) SILTATION FENCE DETAIL
N.T.S.

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT WILL REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LADEN RUNOFF, FROM THE REMEDIAL CONSTRUCTION OF THE EXISTING STORMWATER BASIN, TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG, WITHIN A DEWATERING SUMP. THIS DESCRIPTION ALSO CONTAINS APPENDED MATERIALS DESCRIBING THE DIRTBAGS REFERRED TO IN THIS NARRATIVE.

DEWATERING OF THE REMEDIAL CONSTRUCTION OF THE EXISTING BASIN SHALL BE ACCOMPLISHED USING THE FOLLOWING MEASURES:

- THE PUMPING OF WATER WITHIN THE POND TO A DIRTBAG (PATENTED PRODUCT BY ACF ENVIRONMENTAL PRODUCTS) WITH RELEASE THROUGH A VEGETATED BUFFER AT LEAST 100 FEET UPGRADIENT OF A WETLAND DURING THE REMEDIAL CONSTRUCTION OF THE EXISTING BASIN.

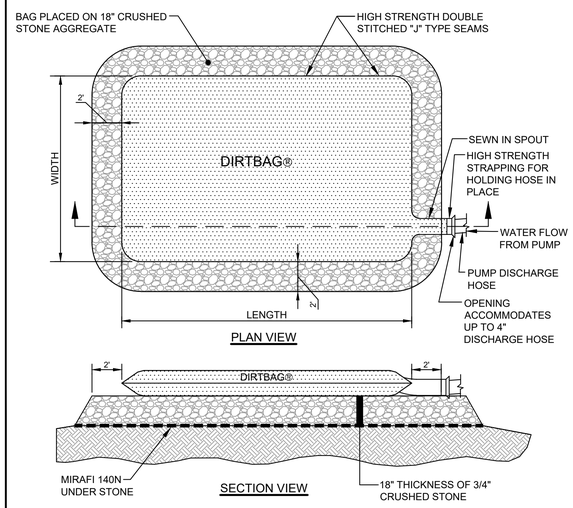
REQUIREMENTS FOR DIRTBAGS:

AT ALL TIMES THERE MUST BE AN UNUSED DIRTBAG AVAILABLE FOR EMERGENCY USE.

AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE DIRTBAG ACTIVE OR READY FOR USE. THE DIRTBAGS SHALL BE FIELD LOCATED BY THE CONTRACTOR BUT ARE NOT TO BE INSTALLED WITHIN 100 FEET OF THE WETLANDS. THE DIRTBAG SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 140N, AND 18 INCHES OF 3/4 INCH CRUSHED STONE. THE PLAN DIMENSION OF THE CRUSHED STONE PAD SHALL EXCEED THE PLAN AREA OF THE DIRTBAG BY AT LEAST TWO FEET IN ALL DIRECTIONS. THE DIRTBAG SHALL NOT BE INSTALLED ON AN UNDERLYING SLOPE OF GREATER THAN 15 PERCENT.

CONSTRUCTION DEWATERING OPERATIONS:

ALL CONSTRUCTION-DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE DIRTBAG, THE SELECTION OF THE USE OF THE DIRTBAG OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT THE SITE CONTRACTOR TO ALTER THE SELECTED OPERATION IF TURBID DISCHARGE TO A WETLAND IS OBSERVED.



(E) DIRTBAG® DETAIL AND SPECIFICATIONS
N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
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05.01.26
LICENSED PROFESSIONAL ENGINEER

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Rev.	Date	Revision
3	2026.05.01	FINAL PLAN SUBMISSION
2	2026.03.25	REVISED PER REVIEW COMMENTS
1	2026.03.13	SITE PLAN APPLICATION

Design: SRB	Draft: CDD	Date: AUG 2025
Checked: SRB	Scale: AS NOTED	Job No.: 4229
File Name: AUBURN HOUSING–DETAILS.dwg		

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Drawing Name: EROSION & SEDIMENT CONTROL DETAILS
Project: HAMPSHIRE COMMONS APARTMENTS
143 Hampshire Street, Auburn, Maine
Client: AUBURN HOUSING AUTHORITY
P.O. Box 3037, Auburn, Maine 04212–3037

Drawing No. C-6.3

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14.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

THE PRIMARY EMPHASIS OF THE EROSION/SEDIMENTATION CONTROL PLAN, WHICH WILL BE IMPLEMENTED FOR THIS PROJECT, IS AS FOLLOWS:

- DEVELOPMENT OF A CAREFUL CONSTRUCTION SEQUENCE.
- RAPID REVEGETATION OF DENUDED AREAS TO MINIMIZE THE PERIOD OF SOIL EXPOSURE.
- RAPID STABILIZATION OF DRAINAGE PATHS TO AVOID RILL AND GULLY EROSION.
- THE USE OF ON-SITE MEASURES TO CAPTURE SEDIMENT (SEDIMENTATION BASINS, HAY BALES/STONE CHECK DAMS/SILT FENCE, ETC.)

THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVICES WILL BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT. THESE DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS DESCRIBED WITHIN THIS REPORT. FOR FURTHER REFERENCE, SEE THE LATEST EDITION OF THE MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS.

A. DEWATERING

WATER FROM CONSTRUCTION TRENCH DEWATERING SHALL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 50 FEET OF A PROTECTED NATURAL RESOURCE.

B. INSPECTION AND CONSTRUCTION MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. BEFORE AND WITHIN 24 HOURS AFTER EACH WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH OF RAINFALL IN A CONSECUTIVE 24-HOUR PERIOD, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE QUALIFIED CONTRACTOR KNOWLEDGEABLE OF DEP STANDARDS SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. ADDITIONALLY, INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE A WEEK. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

1. INSPECTION AND CORRECTIVE ACTION. AN ENGINEER OR SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER STANDARDS AS DESCRIBED IN THE CONDITIONS OF THE PERMIT SHALL INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES (INCLUDING CATCH BASIN INLET PROTECTION MEASURES, SEDIMENT FILTER MEASURES, AND STABILIZATION OF SLOPES), MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. UPON FINAL SUBDIVISION PLANS, THE INSPECTION LOG WILL BE UPDATED TO REFLECT ALL STRUCTURES.

2. MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE ASSOCIATED WITH THESE INSPECTIONS. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

3. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

C. TEMPORARY EROSION CONTROL MEASURES

EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO ONE ACRE AT A TIME OR NO LARGER AREA THAT CAN BE MULCHED IN ONE DAY.

TYPICAL SLOPE RESTORATION:

- EROSION CONTROL BLANKETS REQUIRED BETWEEN 2:1 AND 3:1 SLOPES
- SLOPES STEEPER THAN 8% REQUIRE EROSION CONTROL MULCH
- SLOPES STEEPER THAN 2:1 SHALL NOT USE SOLELY VEGETATED STABILIZATION METHODS
- 1.5:1 SLOPES ARE PROHIBITED.

THE FOLLOWING MEASURES ARE PLANNED AS TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION:

1. A CRUSHED STONE-STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE APPROVED ACCESS DRIVE ON ACADEMY STREET AND MAIN STREET.

2. SILTATION FENCE OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF-- BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE AND/OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THIS PACKAGE AND INSPECTED AT LEAST ONCE A WEEK AND BEFORE AND IMMEDIATELY AFTER A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE OR BERM LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE ENDS, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM. WOOD WASTE COMPOST BERMS ARE NOT TO BE USED ADJACENT TO WETLAND AREAS THAT ARE NOT TO BE DISTURBED, BUT IT CAN BE PLACED INSIDE THE SILT FENCE AS A SECONDARY ROW.

3. STRAW OR HAY MULCH INCLUDING HYDROSEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND OCTOBER 15TH ON SLOPES OF LESS THAN 15 PERCENT SHALL BE ANCHORED BY APPLYING WATER; MULCH PLACED ON SLOPES OF EQUAL TO OR STEEPER THAN 15 PERCENT SHALL BE COVERED BY A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. FABRIC NETTING AND STAPLES SHALL BE USED ON DISTURBED AREAS WITHIN 50' OF LAKES, STREAMS, AND WETLANDS REGARDLESS OF THE UPSTREAM SLOPE. MULCH PLACED BETWEEN OCTOBER 15TH AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT SHALL BE COVERED WITH A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SLOPES STEEPER THAN 3:1 AND EQUAL TO OR FLATTER THAN 2:1, WHICH ARE TO BE REVEGETATED, SHALL RECEIVE CURLEX BLANKETS BY AMERICAN EXCELSIOR OR EQUAL. SLOPES STEEPER THAN 2:1 SHALL RECEIVE RIPRAP AS NOTED ON THE PLANS. THE MULCH APPLICATION RATE FOR BOTH TEMPORARY AND PERMANENT SEEDING IS 75 LBS PER 1000 SF AS IDENTIFIED IN ATTACHMENT A OF THIS SECTION. MULCH SHALL NOT BE PLACED OVER SNOW.

4. TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION WILL BE PROTECTED AS FOLLOWS:

   a) TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN 50 FEET OF ANY WETLANDS WHICH WILL NOT BE DISTURBED AND SHALL BE LOCATED AWAY FROM DRAINAGE SWALES.

   b) STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS BY EITHER TEMPORARILY SEEDING THE STOCKPILE BY A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH, SUCH AS HAY, STRAW, OR EROSION CONTROL MIX.

   c) STOCKPILES SHALL BE SURROUNDED BY SEDIMENTATION BARRIER AT THE TIME OF FORMATION. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF STOCKPILES. ADDITIONALLY, STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO STOCKPILES.

6. ALL DENUDED AREAS THAT ARE WITHIN 50 FEET OF AN UNDISTURBED WETLAND, WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN A BUILDING PAD, PARKING AREA, OR ACCESS DRIVE SUBBASE AREA, SHALL RECEIVE MULCH OR EROSION CONTROL MESH FABRIC WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL. ALL AREAS WITHIN 75 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW. IN OTHER AREAS, THE TIME PERIOD MAY BE EXTENDED TO 7 DAYS.

7. ACADEMY AND MAIN STREETS (UNDISTURBED PORTIONS ENTERING THE PROJECT SITE) SHALL BE SWEPT TO CONTROL MUD AND DUST AS NECESSARY. ADDITIONAL STONE SHALL BE ADDED TO THE STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.

8. DURING GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS AND AS DIRECTED ON THE EROSION CONTROL PLANS.

9. SILT FENCING WITH A MAXIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE ANCHORED.

10. WOOD WASTE COMPOST/BARK BERMS MAY BE USED IN LIEU OF SILTATION FENCING IN AREAS NOT ADJACENT TO WETLANDS, BUT CAN BE USED INSIDE OF SILT FENCE AS A SECONDARY ROW. BERMS SHALL BE REMOVED AND SPREAD IN A LAYER NOT TO EXCEED 3" THICK ONCE UPSTREAM AREAS ARE COMPLETED AND A 90% CATCH OF VEGETATION IS ATTAINED.

11. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MDOT SPECIFICATIONS – SECTION 637 – DUST CONTROL.

12. LOAM AND SEED IS INTENDED TO SERVE AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DENUDED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP. APPLICATION RATES ARE PROVIDED IN ATTACHMENT A OF THIS SECTION. SEEDING SHALL NOT OCCUR OVER SNOW.

13. ALL CATCH BASINS SHALL BE PROTECTED DURING CONSTRUCTION WITH A CATCH BASIN INLET FILTER AND, IN CASES OF HEAVY FLOWS, A STONE SEDIMENT BARRIER AS SHOWN ON SHEET C406.

D. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES HAVE BEEN DESIGNED AS PART OF THE EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, GRAVEL SUBBASE, ETC.) WILL BE LOAMED, LIMED, FERTILIZED, MULCHED, AND SEEDED. FABRIC NETTING, ANCHORED WITH STAPLES, SHALL BE PLACED OVER THE MULCH IN AREAS AS NOTED IN TEMPORARY EROSION CONTROL MEASURES PARAGRAPH 4 OF THIS REPORT. ALL AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48-HOUR WINDOW. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

2. ALL STORM DRAIN PIPE OUTLETS SHALL HAVE RIPRAP APRONS AT THEIR OUTLET TO PROTECT THE OUTLET AND RECEIVING CHANNEL FROM SCOUR AND DETERIORATION. INSTALLATION DETAILS ARE PROVIDED IN THE PLAN SET. THE APRONS SHALL BE INSTALLED AND STABILIZED TO THE EXTENT PRACTICABLE PRIOR TO DIRECTING RUNOFF TO THE TRIBUTARY PIPE OR CULVERT.

3. CATCH BASINS SHALL BE PROVIDED WITH SEDIMENT SUMPS AND INLET HOODS (THE SNOUT) FOR ALL OUTLET PIPES THAT ARE 18" IN DIAMETER OR LESS.

14.1 IMPLEMENTATION SCHEDULE

THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE REQUIRED TO ENSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPTIMIZED:

NOTE: FOR ALL GRADING ACTIVITIES, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION NOT TO OVEREXPOSE THE SITE, THIS SHALL BE ACCOMPLISHED BY LIMITING THE DISTURBED AREA. AREA SHALL BE LIMITED TO NO MORE THAN THE CONTRACTOR CAN MULCH IN ONE DAY.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES AT THE APPROVED LOCATIONS.
2. INSTALL PERIMETER SILT FENCE AND/OR WOOD WASTE BERMS.
3. INSTALL SEDIMENT BASINS, DIVERSION DIKES, OR CHECK DAMS (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BMP'S)
4. CLEAR AND GRUB SITE. INSTALL STONE CHECK DAMS AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS.
5. COMMENCE INSTALLATION OF DRAINAGE APPURTENANCES.
6. COMMENCE EARTHWORK FOR STORMWATER FACILITIES.
7. COMMENCE EARTHWORK AND GRADING TO SUBGRADE.
8. COMMENCE INSTALLATION OF RETAINING WALLS (IF NECESSARY).
9. COMMENCE INSTALLATION OF WATER AND SEWER LINES.
10. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.
11. COMPLETE INSTALLATION OF UNDERGROUND UTILITIES TO WITHIN 5' OF FUTURE BUILDINGS.
12. INSTALL LIGHT POLE FOUNDATIONS AND LIGHT POLES.
13. COMPLETE REMAINING EARTHWORK OPERATIONS.
14. COMPLETE INSTALLATION OF DRAINAGE APPURTENANCES.
15. INSTALL SUB-BASE AND BASE GRAVEL WITHIN PARKING AREAS, WALKWAYS, AND ALL DRIVEWAYS.
16. INSTALL CURBING IN PARKING AREAS AS NEEDED.
17. INSTALL BASE COURSE PAVING FOR DRIVES AND PARKING AREA AS WELL AS CONCRETE SURFACES.
18. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
19. INSTALL SURFACE COURSE PAVING FOR DRIVES AND PARKING AREAS. STRIPE PER PLAN.
20. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
21. TOUCH UP LOAM AND SEED.

PRIOR TO CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE FOR THE COMPLETION OF THE WORK, WHICH WILL SATISFY THE FOLLOWING CRITERIA:

1. THE ABOVE CONSTRUCTION SEQUENCE SHOULD GENERALLY BE COMPLETED IN THE SPECIFIED ORDER; HOWEVER, SEVERAL SEPARATE ITEMS MAY BE CONSTRUCTED SIMULTANEOUSLY. WORK MUST ALSO BE SCHEDULED OR PHASED TO REDUCE THE EXTENT OF THE EXPOSED AREAS AS SPECIFIED BELOW. THE INTENT OF THIS SEQUENCE IS TO PROVIDE FOR EROSION CONTROL AND TO HAVE STRUCTURAL MEASURES SUCH AS SILT FENCE AND CONSTRUCTION ENTRANCES IN PLACE BEFORE LARGE AREAS OF LAND ARE DENUDED.

2. THE WORK SHALL BE CONDUCTED IN SECTIONS WHICH SHALL:

   (a) LIMIT THE AMOUNT OF EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 30 DAYS.

   (b) REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT, OR TEMPORARILY STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL FOR AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND AND 7 DAYS FOR ALL OTHER AREAS. AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW.

   (c) INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEM AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE. THE DITCHES SHALL BE IMMEDIATELY LINED OR REVEGETATED AS SOON AS THEIR INSTALLATION IS COMPLETE.

14.2 EROSION, SEDIMENTATION AND STABILIZATION CONTROL PLAN

THE EROSION CONTROL INFORMATION IS INCLUDED IN THE PLAN SET.

14.3 DETAILS AND SPECIFICATIONS

THE EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

14.4 WINTER STABILIZATION PLAN

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT; VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO ONE ACRE OR AN AREA THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN PARKING AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

FOR WORK, WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENUDED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 2 DAYS FOR ALL AREAS.

THE CONTRACTOR SHALL INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES
STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOODWASTE EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE SHALL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 50 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCE PROTECTION
ANY AREAS WITHIN 25 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 90% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 75 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS
DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING
AN AREA SHALL BE CONSIDERED DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE EITHER BEEN MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER, WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

5. MULCHING ON SLOPES AND DITCHES
SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAT 8%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING
BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 90% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

7. WINTER CONSTRUCTION INSPECTION
AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE QUALIFIED CONTRACTOR KNOWLEDGEABLE OF DEP STANDARDS SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO ENSURE THEIR CONTINUOUS FUNCTION. INSPECTIONS SHALL BE PERFORMED A MINIMUM OF ONCE PER WEEK AND SHALL BE CONDUCTED IN ACCORDANCE WITH THE EROSION CONTROL MEASURES AND SITE STABILIZATION WITHIN THE EROSION CONTROL REPORT.

14.5 STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS – THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 1. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

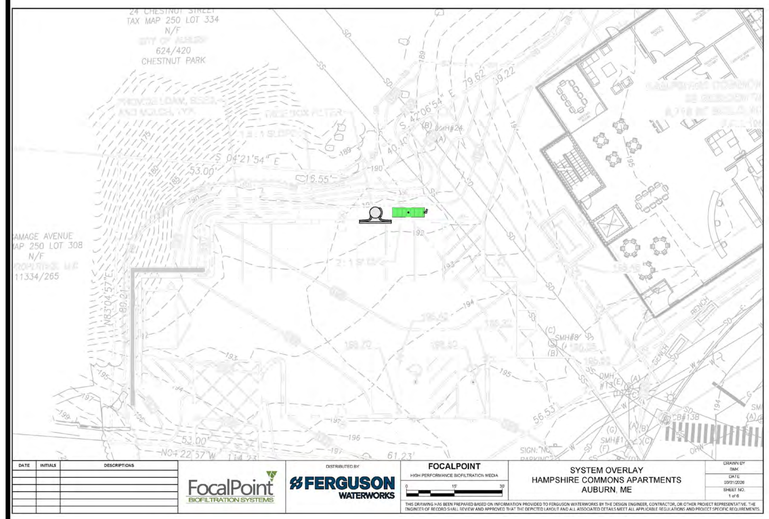
INSTALL A SOD LINING IN THE DITCH -- THE APPLICANT SHALL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

INSTALL A STONE LINING IN THE DITCH --THE APPLICANT SHALL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE CONTRACTOR SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR SHALL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES --- THE CONTRACTOR SHALL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE APPLICANT SHALL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. THE DEPARTMENT SHALL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 1, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY SEPTEMBER 1 THE CONTRACTOR SHALL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT SHALL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT SHALL COVER THE SLOPE WITH A LAYER OF WOODWASTE COMPOST AS DESCRIBED IN ITEM III OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM IV OF THIS STANDARD.

STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR SHALL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY SEPTEMBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING



DATE	INITIALS	DESCRIPTIONS

FocalPoint BIOFILTRATION SYSTEMS

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FOCALPOINT
HIGH PERFORMANCE BIOFILTRATION MEDIA

SYSTEM OVERLAY
HAMPSHIRE COMMONS APARTMENTS
AUBURN, ME

DRAWN BY: BMH | DATE: 05/01/2026 | SHEET NO.: 1 of 6

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SYSTEM VOLUMES	
FOCALPOINT FOOTPRINT	30 SF
FOCALPOINT MEDIA QUANTITY	2 CY
SUBSURFACE STORAGE VOLUME	26 CF
EXCAVATION FOOTPRINT	80 SF
DRAINAGE STONE QUANTITY	1 CY

R-TANK QUANTITIES	
# OF SD SINGLE R-TANKS	7

ELEVATIONS	
DESCRIPTION	ELEVATION
TOP OF MULCH ELEVATION	193.00
TOP OF MEDIA ELEVATION	192.75
DEPTH OF MEDIA	18"
TOP OF BIRDSONG STONE ELEVATION	191.25
TOP OF R-TANK UNDERDRAIN ELEV	190.75
R-TANK UNDERDRAIN INVERT	189.90
INVERT OF STONE BASE (2)	189.77

LEGEND

R-TANK SD SINGLE UNITS

8" FOCALPOINT INSPECTION INLET

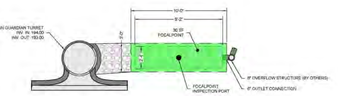
PIPE CONNECTION

EXCAVATION PERIMETER

PERIMETER BACKFILL

NOTES & DISCLAIMERS

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
2. BACKFILL, GEOTEXTILE, AND/OR LINER QUANTITIES ARE APPROXIMATIONS BASED ON DIMENSIONS SHOWN.
3. FERGUSON WATERWORKS PROVIDES THESE VALUES AS BEING ACCURATE IN DEPICTING SITE CONFIDENCE, THAT THEY SATISFY ANY LOCAL BUILDING CODE REQUIREMENTS, AND SHOULD BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO BIDDING.
4. FERGUSON SUPPLIES THE PRODUCTS ONLY AND TAKES NO RESPONSIBILITY FOR INSTALLATION AND HAS NO ROLE IN THE DESIGN OF THE SYSTEM AS BUILT.
5. FERGUSON DOES NOT SUPPLY THE PLANTINGS OR DRAINAGE STONE.
6. R-TANK SYSTEMS ARE NOT DESIGNED TO SUPPORT LOADS FROM BUILDING, RETAINING WALLS, ETC. THEREFORE, THE ENGINEER OF RECORD MUST COORDINATE[2] WITH THE R-TANK MANUFACTURER TO ENSURE THAT ALL LOADS ARE REPORTED UPON THE SYSTEM AND ANY INFILTRATION FROM THE SYSTEM HAS BEEN ACCOUNTED FOR IN FOUNDATION DESIGN.



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FOCALPOINT
HIGH PERFORMANCE BIOFILTRATION MEDIA

SYSTEM LAYOUT
HAMPSHIRE COMMONS APARTMENTS
AUBURN, ME

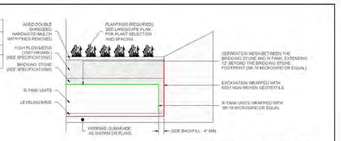
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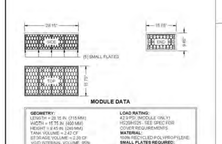
R-TANK UNIT LOAD RATING

UNIT TYPE	COMPRESSION STRENGTH	NON-VEHICULAR MIN. COVER*	HS-20 MIN. COVER*	HS-25 MIN. COVER*	MAX. COVER*
HD	24.4 PSI	12"	28"	36"	8'-9"

* MINIMUM AND MAXIMUM COVER ARE MEASURED FROM THE TOP OF THE R-TANK UNIT TO THE TOP OF THE FINISHED SURFACE.



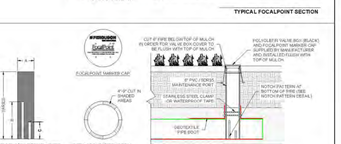
TYPICAL FOCALPOINT SECTION



R-TANK INSPECTION PORT DIMENSIONS

UNIT TYPE	PORT DIAMETER ("A")	TALL SLOT HEIGHT ("B")	SHORT SLOT HEIGHT ("B")
HD	12"	9"	4"
SD	12"	7"	4"
LD	12"	9"	4"
XD	12"	HARVEY	HARVEY

* VERTICAL HEIGHTS VARY BASED ON THE STACKED HEIGHT OF THE HD SYSTEM. THE TOP OF THE OPENING SHOULD NOT EXCEED THE TOP OF THE STACK HEIGHT.





R-TANK TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL

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FocalPoint BIOFILTRATION SYSTEMS

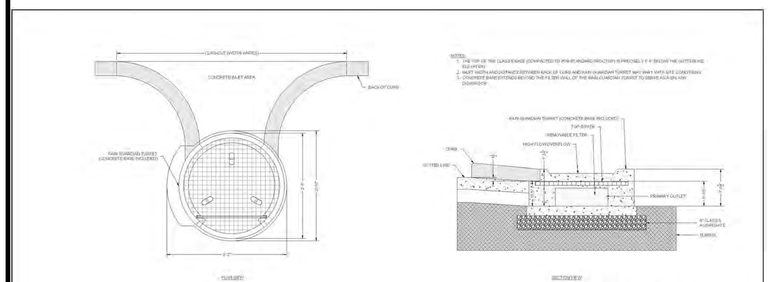
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FOCALPOINT
HIGH PERFORMANCE BIOFILTRATION MEDIA

SYSTEM DETAILS
HAMPSHIRE COMMONS APARTMENTS
AUBURN, ME

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FocalPoint BIOFILTRATION SYSTEMS

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FOCALPOINT
HIGH PERFORMANCE BIOFILTRATION MEDIA

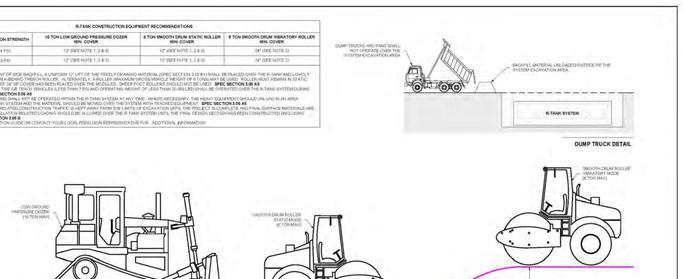
SYSTEM DETAILS
HAMPSHIRE COMMONS APARTMENTS
AUBURN, ME

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R-TANK CONSTRUCTION EQUIPMENT RECOMMENDATIONS				
UNIT TYPE	COMPRESSION STRENGTH	10 TON LOW GROUND PRESSURE DOZER MIN. COVER	8 TON SMOOTH DRUM STATIC ROLLER MIN. COVER	8 TON SMOOTH DRUM VIBRATORY ROLLER MIN. COVER
HD	24.4 PSI	12" (SEE NOTE 1, 2 & 3)	12" (SEE NOTE 1, 2 & 3)	24" (SEE NOTE 2)
SD	43.2 PSI	12" (SEE NOTE 1, 2 & 3)	12" (SEE NOTE 1, 2 & 3)	24" (SEE NOTE 2)

NOTES:
1. FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12" LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.05 B1) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A VIBRATORY TRENCH ROLLER. ALTERNATELY, A ROLLER (MINIMUM DRIVEN VEHICLE WEIGHT OF 8 TONS) MAY BE USED. ROLLERS MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 12" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. **SPEC SECTION 3.06 A5**
2. ONLY LOW GROUND PRESSURE DOZERS AND ROLLERS LESS THAN 5 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS SHALL BE OPERATED OVER THE R-TANKS SYSTEMS DURING CONSTRUCTION. **SPEC SECTION 3.05 A6**
3. DUMP TRUCKS AND VEHICLES SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHERE NECESSARY, THE HEAVY EQUIPMENT SHOULD PLACED IN AN AREA OUTSIDE OF THE R-TANK SYSTEM AND MATERIAL SHALL BE MOVED BY LIGHT EQUIPMENT. **SPEC SECTION 3.05 A5**
4. EQUIPE THAT ALL LIMITED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. SO DOING AVOIDS ALL OTHER REQUIRED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). **SPEC SECTION 3.05 A5**
5. SEE R-TANK INSTALLATION GUIDE OR CONTACT TIGUE LOCAL FERGUSON REPRESENTATIVE FOR ADDITIONAL INFORMATION.



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FocalPoint BIOFILTRATION SYSTEMS

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FOCALPOINT
HIGH PERFORMANCE BIOFILTRATION MEDIA

CONSTRUCTION EQUIPMENT COVER DETAIL
HAMPSHIRE COMMONS APARTMENTS
AUBURN, ME

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FOCALPOINT SPECIFICATION

SUMMARY
A. SCOPE OF WORK
THE FOLLOWING GENERAL SPECIFICATIONS DESCRIBE THE COMPONENTS AND INSTALLATION REQUIREMENTS FOR A VOLUME BASED HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (MPWED) THAT UTILIZES PHYSICAL, CHEMICAL AND BIOLOGICAL PROCESSES TO REMOVE POLLUTANTS FROM STORMWATER RUNOFF. THE SYSTEM IS DESIGNED TO TREAT STORMWATER RUNOFF FROM IMPERVIOUS SURFACES. THE BIOFILTRATION SYSTEM SHALL BE INSTALLED AS SHOWN ON THE APPROVED DRAWINGS AND SHALL BE A COMPLETE, INTEGRATED SYSTEM DESIGNED TO BE PLACED ON SOIL AND/OR ON LINER FOOT SUBGRADES PER THE APPROVED DRAWINGS TO TREAT CONTAMINATED RUNOFF FROM IMPERVIOUS SURFACES.

THE HIGH FLOW DRAINAGE MODULAR BIOFILTRATION SYSTEM (MPWED) IS COMPRISED OF THE FOLLOWING COMPONENTS:

a. PLANT COMPONENT
i. MANUFACTURER SHALL PROVIDE A RECOMMENDED LIST OF ACCEPTABLE PLANTS.
ii. PLANTS SHALL BE SELECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE, SHALL BE NATIVE/LOCALLY SOURCED, AND SHALL BE APPROPRIATE FOR USE.
b. MULCH COMPONENT
i. SHREDDED HARDWOOD MULCH (NO DYED MULCH PERMITTED)
c. BIOFILTER COMPONENT
i. THE BIOFILTRATION MEDIA (BFM) IS A HIGH PERFORMANCE DRAINAGE MEDIUM TO WHICH EACH ELEMENT(S) IN HIGH-I PERFORMANCE BIOFILTRATION SYSTEM IS ADDED TO ENHANCE SPECIFIC POLLUTANT REMOVAL MECHANISMS. THE BFM IS DESIGNED TO PROVIDE FOLLOW-THROUGH SYSTEM WATER RUNOFF.
ii. A SEPARATION LAYER WHICH ISOLATES THE CONCEPT OF "BRIDGING" TO SEPARATE THE BIOFILTRATION MEDIA FROM THE UNDERDRAIN STONE BEDDING AND PIPE SYSTEM.
iii. A PRE-FILTER MEDIA LAYER (PFL) WHICH PREVENTS FINES FROM ENTERING THE UNDERDRAIN STONE BEDDING AND PIPE SYSTEM.
iv. AN ADVANCED HYDRO-INFILTRATION MEDIA "LAYER" WHICH ACTS AS THE PRIMARY TREATMENT MEDIA FOR REMOVAL OF POLLUTANTS OF CONCERN. THIS LAYER CONSISTS OF A ROCK-MINERAL-ROCK FILTER MEDIA OR DESIGN ISOLATION ELEMENT, SUCH AS MANTHEY SANDBED, EITHER SURROUNDING THE BIOFILTRATION COMPONENT OR LOCATED IMMEDIATELY UPSTREAM OF IT.
v. A SATURATED ZONE (SZ) WHICH PROVIDES FOR ANAEROBIC TREATMENT.
vi. THE PRE-FINISH LAYER (PFL) IS TYPICALLY ACCOMPLISHED BY LOCATING THE BIOFILTRATION COMPONENT DOWNSTREAM OF A SMALL FLOW TO ROCK MEDIA, SEDIMENT FOREBAY, OR OTHER SMALL DETENTION EMBANKMENT.
vii. THE FINAL LAYER IS THE FREEBOARD (FB) WHICH PROVIDES FOR TEMPORARY STORAGE OF STORMWATER.
d. OBSERVATION AND MAINTENANCE COMPONENT
i. AN OBSERVATION AND MAINTENANCE PORT SHALL BE INSTALLED OVER THE APPROVED DRAWINGS TO ASSIST FOR EASY INSPECTION OF THE UNDERDRAIN/STORAGE ELEMENT, AND ELEMENT ACCESS IF NEEDED.
e. AN EXFILTRATION COMPONENT
i. AN EXFILTRATION SYSTEM (UNDERLINED) IS LISTED EXTERNAL TO, BUT HAVE THE BIOFILTRATION IS PLANNED TO PROVIDE STORAGE WHEN NEEDED. THIS MAY BE AN INFILTRATING FLOW BYPASS STRUCTURE, SEDIMENT OVERFLOW STRUCTURE, OR OTHER STRUCTURE AS SHOWN ON THE APPROVED DRAWINGS. THE EXFILTRATION SYSTEM SHALL BE UTILIZED IF SHALLOW INSTALLED WORK PERFORMED WITH SATISFACTORY RECORDS OF PERFORMANCE ON EARTHWORKS, PIPE, CHAMBER, OR FOUNDATIONS) CONSTRUCTION PROJECTS OF COMPARABLE SIZE AND QUALITY.

QUALITY ASSURANCE AND EXPERIENCE REQUIREMENTS
THE QUALITY AND COMPETENCY OF ALL SYSTEM COMPONENTS AND ALL OTHER APPURTENANCES AND THEIR ASSEMBLY AND INSTALLATION IS CRITICAL TO THE PERFORMANCE OF THE BIOFILTRATION SYSTEM. THE SYSTEM SHALL BE PROVIDED, INSTALLED OR TO BE PERFORMED ONLY BY SKILLED WORK PERFORM WITH SATISFACTORY RECORDS OF PERFORMANCE ON EARTHWORKS, PIPE, CHAMBER, OR FOUNDATIONS) CONSTRUCTION PROJECTS OF COMPARABLE SIZE AND QUALITY.

a. PLANTS
i. PLANTS MUST BE COMPATIBLE WITH THE MPWED MEDIA AND THE SUSTAINED INTENT MANNER ENTIRELY DESIGNED FOR THE SYSTEM. PLANTS SHALL BE SELECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE AND SHALL BE NATIVE/LOCALLY SOURCED.
ii. ALL PLANT MATERIAL SHALL COMPLY WITH THE TYPE AND SIZE REQUIRED BY THE APPROVED DRAWINGS AND SHALL BE FREE OF DISEASE AND OF DISEASE.
b. MULCH
i. MULCH - TYPICALLY 1-3 DOUBLE SHREDDED HARDWOOD (NON-DYED MULCH) FINAL COMPLY WITH THE TYPE AND SIZE REQUIRED BY THE APPROVED DRAWINGS AND SHALL BE FREE OF DISEASE AND OF DISEASE. NO DYED MULCH IS PERMITTED. ALTERNATIVE TO HYDROGRADED MULCH AND TYPICALLY CONSISTS OF CLEAN, ENGINEERED GEOTEXTILE OF 20MM TO 40MM.
c. BIOFILTRATION MEDIUM
i. BIOLOGICALLY ACTIVE (BIOFILTRATION MEDIA SHALL BE VISUALLY INSPECTED TO ENSURE APPROPRIATE VOLUMES, TEXTURE AND CONSISTENCY WITH THE APPROVED DRAWINGS, AND MUST BEAR A BATCH NUMBER MARKING FROM THE MANUFACTURER. THE MANUFACTURER SHALL PROVIDE A MEDIUM SAMPLE AND A COPY OF THE MANUFACTURER'S RECOMMENDED INSTALLATION RATE FOR EACH, IN THE QUANTITY LABORATORY TEST MUST BE PROVIDED TO IDENTIFY THE EQUIVALENT RATE.
ii. THE CHEMICAL, PHYSICAL PERFORMANCE, COMPOSITION AND CHARACTERISTICS OF THE BIOFILTRATION MEDIA MUST MEET OR EXCEED THE FOLLOWING WHEN IN STANDARDS AS DEMONSTRATED TO BY TESTING ACCEPTABLE TO THE PROJECT ENGINEER:

Pollutant	Removal Efficiency
TSS	80%
Phosphorus	50%
Nitrogen	40%
Bacteria	90%

Gradation and Characteristics	
Sand - Fine	10% - 15%
Sand - Medium	10% - 15%
Sand - Coarse	15% - 25%
Sand - Very Coarse	40% - 45%
Gravel	10% - 15%
Infiltration Rate	>220 inches per hour
Void Ratio*	30% - 35%

* Peat Moss Specification
Listed by Organic Materials Review Institute
100% natural peat (no composted, shoddy, and/or turf mixes)
Total Carbon >50%
Carbon to Nitrogen Ratio 25:1 to 35:1
Lignin Content >50% to 53%
Humic Acid >13%
pH 5.0 to 7.0
Moisture Content 25% to 35%
90% to 100% passing a 2.0mm sieve
<10% passing 1.0mm sieve

d. UNDERDRAIN STONE
i. THE UNDERDRAIN STONE SHALL BE WASHED, CLEAN, ANGULAR, CRUSHED STONE MEETING AASHTO M-43 #57 GRADATION AS FOLLOWS:

Sieve Size	% Passing
1.5"	100%
1"	95% to 100%
0.5"	25% to 60%
0.375"	0% to 20%
#4	0% to 10%
#8	0% to 5%

e. SEPARATION MESH
i. SEPARATION MESH SHALL BE COMPOSED OF HIGH-TENSILITY WOVEN GEOTEXTILE (TYPICALLY 4 OZ/SY) THAT DOES NOT ALLOW THE PASSAGE OF SOIL PARTICLES LARGER THAN 0.212 MM (#70 SIEVE) AND HAS THE FOLLOWING MINIMUM PROPERTIES:

Properties	Test Method	Unit	Min Avg Roll Value (MD / CD)
Tensile Strength	ASTM D4595	kN/m (lbs/ft)	22 (1,540) / 22 (1,540)
Creep Reduced Strength	ASTM D5262	kN/m (lbs/ft)	8.8 (603) / 8.8 (603)
Long Term Allowable Design Load	GRI GG4	kN/m (lbs/ft)	5.9 (407) / 7.2 (496)
UV Resistance (at 500 hours)	-	% strength retained	80/50
Apertures Size (machine direction)	-	mm (in)	0.22 (#6)
Apertures Size (cross-machine direction)	-	mm (in)	0.22 (#6)
Mass/Unit Area	ASTM D5261	g/m2 (oz/sy)	137 (4.0)

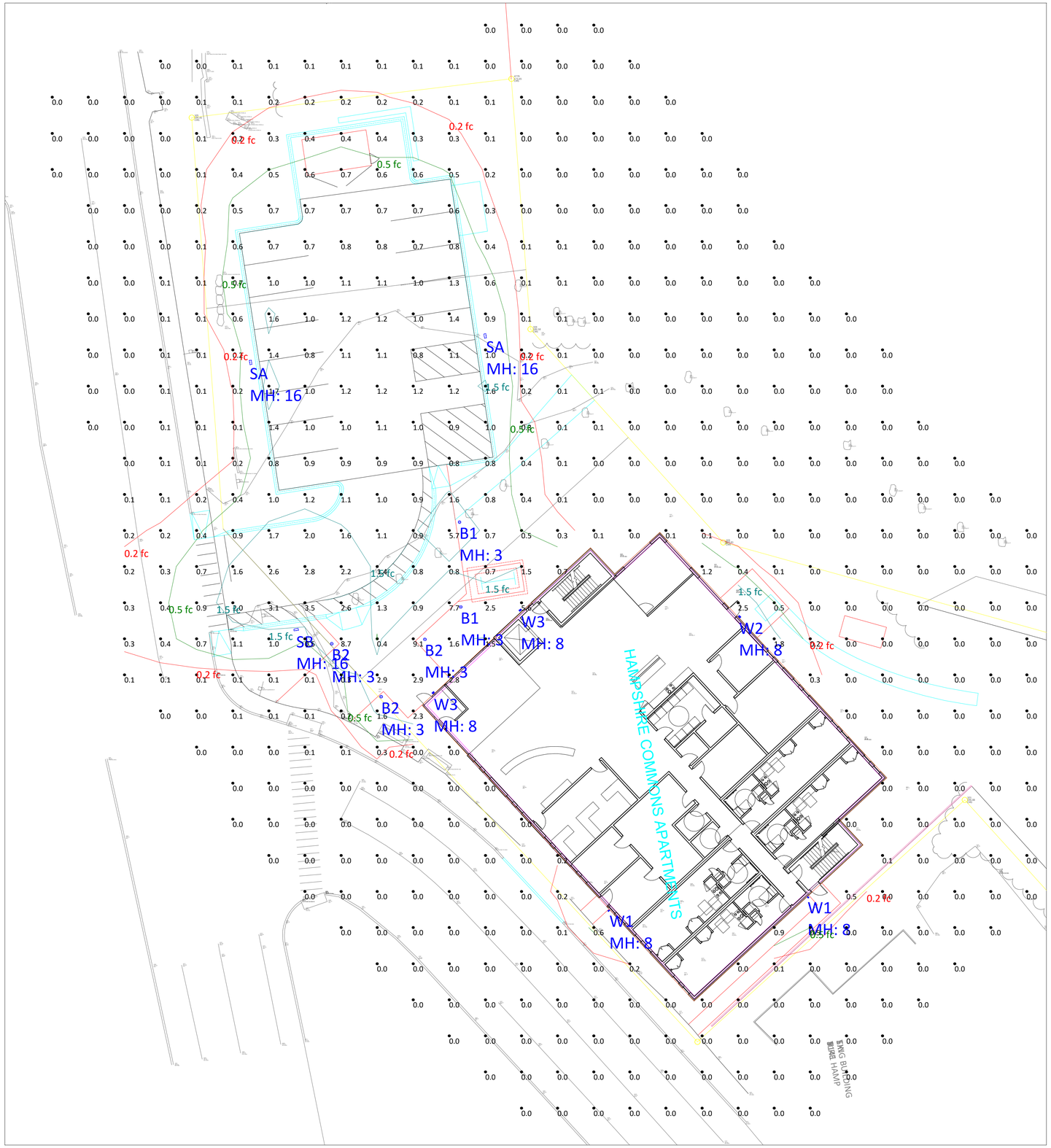
f. BRIDGING STONE
i. BRIDGING STONE SHALL BE 3/8" PEA GRAVEL, OR OTHER DIAMETER SIZED TO PREVENT MIGRATION OF SOI TO MEDIA.
ii. AS SPECIFIED BY MANUFACTURER, STONE MUST BE WASHED AND FREE FROM SEDIMENT, SOIL AND CONTAMINANTS.

g. DELIVERY, STORAGE AND HANDLING
i. PROTECTION OF MATERIALS DURING DELIVERY, HANDLING AND STORAGE
a. MATERIALS SHALL BE STORED AND HANDLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO PREVENT DAMAGE, DEGRADATION, CONTAMINATION, OR LOSS OF PROPERTIES.
b. MATERIALS SHALL BE PROTECTED FROM EXCESSIVE HEAT, MOISTURE, DIRT, AND DEBRIS.
c. PACKAGING SHALL REMAIN INTACT UNTIL READY FOR USE.
ii. HANDLING PROCEDURES
a. MATERIALS SHALL BE HANDLED USING METHODS THAT PREVENT DAMAGE TO PACKAGING AND CONTENTS.
b. SHARP OBJECTS THAT COULD PUNCTURE PACKAGING SHALL BE KEPT AWAY FROM MATERIALS.
iii. STORAGE REQUIREMENTS
a. MATERIALS SHALL BE STORED ON A FLAT, STABLE SURFACE.
b. STACKING HEIGHTS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS.
c. MATERIALS SHALL BE PROTECTED FROM WEATHER BY COVERING WITH WATERPROOF TARPAULINS OR SIMILAR MATERIALS.

h. INSPECTION
i. PRODUCTION
a. SUBMIT MANUFACTURER'S PRODUCT DATA AND APPROVED INSTALLATION MANUAL AS WELL AS WARRANTY/EXPIRY DATE/CLAIM AND MAINTENANCE/REPAIR MANUAL FOR THE SYSTEM. IT WILL BE THE RESPONSIBILITY OF THE SYSTEM MANUFACTURER TO PROVIDE ALL INSTRUCTION TO ENSURE THE SYSTEM IS INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS MANUAL.
ii. INSTALLATION
a. WHEN AFTER SMALL SUBMIT A LETTER OF CERTIFICATION THAT THE COMPLETE SYSTEM WHERE GIVEN DESIGN ALL REQUIREMENTS AND RECOMMENDATIONS AND THAT THE SYSTEM IS FUNCTIONING AS INTENDED. SUBMIT ALL WARRANTY DOCUMENTATION AND MAINTENANCE REQUIREMENTS TO THE OWNER'S REPRESENTATIVE.
b. PERFORM CLEANING DURING THE INSTALLATION AND UPON COMPLETION OF THE WORK.
c. PROTECT INSTALLED WORK AND CLEAN AND REPAIR DAMAGE RESULTING FROM NON-COMPLIANCE TO ALIGNMENT, MATERIALS AND WORKMANSHIP RESULTING FROM INSTALLATION.
d. REMOVE AND REPLACE DAMAGED OR NON-CONFORMING MATERIALS. PROTECT REMAINING BIOFILTRATION SYSTEM THAT SHOULD BE VISUALLY INSPECTED THROUGHOUT THE BIOFILTRATION MEDIA. SHOULD THE SYSTEM NOT BE FUNCTIONING AS INTENDED, REMOVE AND REPLACE AS DIRECTED BY THE ENGINEER. REMOVED MATERIALS SHALL BE DISPOSED OF AT LEGALLY REPUTABLE FACILITIES IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
e. MANUFACTURER'S WARRANTY
i. MANUFACTURER SHALL PROVIDE A WARRANTY FOR ALL COMPONENTS OF THE MPWED FOR A PERIOD OF ONE YEAR FROM THE DATE OF INSTALLATION. UPON REQUIREMENTS AND ACCEPTANCE WITH THE MANUAL, IMPROPER OPERATION, MAINTENANCE OR NEGLIGENCE, OR ILLEGAL ACTIVITIES IS EXEMPTED OF POLLUTANTS, VANDALISM, ACCIDENTS, ACTS OF GOD, ETC.
j. REVIEW COMPLIANCE/TESTING
i. THE OWNER MUST RECORDED SIGNED A VOLUMES-BASED SIZING CRITERIA AND DEMONSTRATING. UNDER NO CIRCUMSTANCES SHALL THE BIOFILTRATION SYSTEM BE PLACED INTO OPERATION UNTIL THE CONTRIBUTING DRAINAGE AREA IS FULLY STABILIZED. THE ENGINEER OF RECORD SHALL PERFORM A FINAL INSPECTION TO ENSURE THAT APPROPRIATE EROSION AND SEDIMENT CONTROLS ARE IN PLACE AND THAT THE SYSTEM IS FUNCTIONING AS INTENDED. THE ENGINEER OF RECORD SHALL PROVIDE CERTIFICATION THAT THE SYSTEM WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
ii. THE PLANTS HOLDS THE DEPTH OF THE ROOT BALL AND TOO TIMES TIMES AS HOE AS THE ROOT BALL (YOU SHOULD BE PLACED AT THE SAME DEPTH AS THEY WERE GROWING IN THE NURSERY POT).
iii. PLANTS YOU MUST GROUND TOO AND NOT PLANTED TOO DEEP. DON'T DO HOLES DEEPER THAN WOULD HOLD THE WHOLE SHOULD BE PLACED AT THE ROOT COLLAR. EXPANDING THE TRUNK WILL CAUSE THE TREE TO DIE.
iv. PLANTS SHOULD BE PLACED AT THE SAME DEPTH AS THEY WERE GROWING IN THE NURSERY POT.
v. CONSULT FOLLOW MANUFACTURER'S PLANTING GUIDANCE.
vi. FOLLOW THE BIOFILTRATION MEDIA, TOP WITH MULCH. MULCH SHOULD NOT EXTEND TOUCH THE PLANT BASE OR STEMS. MULCH SHOULD BE PLACED AT THE SAME DEPTH AS THEY WERE GROWING IN THE NURSERY POT. MULCH SHOULD BE EXPRESSED AWAY FROM THE BASE OF THE PLANTS.
vii. MULCH SHALL BE PROVIDED BY AN INSTALLATION CONTRACTOR AND NOT BY GEOTEXTILE QUALITY MANUFACTURER.

i. SEQUENCING AND SCHEDULING
i. PRIOR TO COMMENCEMENT OF WORK, A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER'S REPRESENTATIVE, CONTRACTOR, AND ENGINEER OF RECORD TO REVIEW THE APPROVED PLANS AND SPECIFICATIONS, CONSTRUCTION SEQUENCE, AND ROLES AND RESPONSIBILITIES.
ii. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE AND ENGINEER OF RECORD.
iii. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED TO PREVENT UNNECESSARY DISTURBANCE OF THE BIOFILTRATION SYSTEM AREA.
iv. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE OF KEY CONSTRUCTION MILESTONES.

j. SEQUENCING AND SCHEDULING
i. PRIOR TO COMMENCEMENT OF WORK, A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER'S REPRESENTATIVE, CONTRACTOR, AND ENGINEER OF RECORD TO REVIEW THE APPROVED PLANS AND SPECIFICATIONS, CONSTRUCTION SEQUENCE, AND ROLES AND RES



PLAN VIEW

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
2) CALCULATIONS MAY or MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED.
4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO EXPOSURE/ESS AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APPEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

Calculation Summary

Label	Avg	Max	Min	Avg/Min	Max/Min
site	0.3	9.1	0.0	N.A.	N.A.
parking	1.0	1.7	0.6	1.7	2.8

Luminaire Schedule (note fixture cataloge numbers are not complete)

Type	Qty	Lum. Lumens	LLF	Lum. Watts	Description	Mounting Height	MANUFAC
B1	2	700	0.900	7	BEE-B-7W-U-3K-T3-XX-D-SKY	3	Zuma Lighting
B2	3	665	0.900	7	BEE-B-7W-U-3K-T4-XX-D-SKY	3	Zuma Lighting
SA	2	4859	0.900	36	VALS-06L-3W-UNV-30K7-XXX-SA	16	LSI INDUSTRIES, INC.
SB	1	5127	0.900	36	VALS-06L-3M-UNV-30K7-XXX-SA	16	LSI INDUSTRIES, INC.
W1	2	534	0.900	7.3	LEW-30001-5W-T1-W30-XX-120/277	8	LIGMAN
W2	1	1229	0.900	13.4	LEW-30011-14W-T1-W30-XX-120-277	8	LIGMAN
W3	2	1376	0.900	13.4	LEW-30001-5W-T3-W30-XX-120/277	8	LIGMAN

site ltg 3-12-26.AGI

GENERATED BY EXPOSURE/ESS, PORTSMOUTH, NH - 603-601-8080 - exposure2lighting.com

TITLE: HAMPSHIRE COMMONS
143 HAMPSHIRE ST, AUBURN, ME
SITE LIGHTING LAYOUT

GENERATED FOR: GORRILL PALMER

SCALE NOT TO SCALE

Page 1 of 1

Date:3/12/2026

EXPOSURE — LIGHTING — CONTROLS — ELECTRICAL —

NOTICE: THIS DRAWING IS THE EXCLUSIVE PROPERTY OF EXPOSURE/ESS.
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THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION OF LIGHTING FIXTURES INCLUDED IN THIS DRAWING. IT IS PROVIDED USING FIXTURE PHOTOMETRICS FURNISHED BY THE MANUFACTURER. EXPOSURE/ESS MAKES NO WARRANTY AS TO THE ACCURACY OF PERFORMANCE SHOWN IN IES FILE IS NOT THE RESPONSIBILITY OF THE MANUFACTURER, IT'S USE FOR ANY OTHER PURPOSE IS NOT AUTHROZED BY EXPOSURE/ESS.

AREA CALCULATIONS

FIRST FLOOR:	8,630 GSF
SECOND FLOOR:	8,642 GSF
THIRD FLOOR:	8,106 GSF
TOTAL:	25,378 GSF

MEETING ROOM 123 210 SF — 2 ppl
KITCHEN / DINING LOBBY 107 992 SF — 66 ppl
MEDICAL OFFICE 120 142 SF — 2 ppl
LIBRARY / WELLNESS ROOM 121 311 SF — 6 ppl
DONATION CLOSET 119 77 SF — 1 ppl
LAUNDRY 118 312 SF — 2 ppl
STORAGE 122 50 SF — 1 ppl
JANITOR 117 62 SF — 1 ppl
UNIT 101 437 SF
UNIT 103 437 SF
STAIR #1
STAIR #2
CORRIDOR 108
TOILET #1 115 53 SF
TOILET #2 116 53 SF
SECONDARY KITCHEN / PANTRY / STAFF LAUNDRY 113 360 SF — 2 ppl
STORAGE ROOM 114 106 SF — 1 ppl
MECH. / ELEC. ROOM 112 144 SF — 1 ppl
DIRECTOR 111 144 SF — 2 ppl
OFFICE #1 109 91 SF — 1 ppl
OFFICE #2 110 169 SF — 2 ppl
UNIT 102 437 SF
UNIT 104 437 SF
RECEPTION LOBBY 106 1188 SF — 79 ppl
RECEPTION AREA
ENTRY LOBBY 105 430 SF
MAIL BOXES
VESTIBULE 100 73 SF
INT
ELEVATOR 9'-0"

1ST FLOOR 1
3/16" = 1'-0"

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631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

HAMPSHIRE COMMONS

143 HAMPSHIRE STREET, AUBURN, MAINE

Owner/Client:

AUBURN HOUSING AUTHORITY

20 GREAT FALLS PLAZA, AUBURN, ME 04212

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

CONCEPT DESIGN

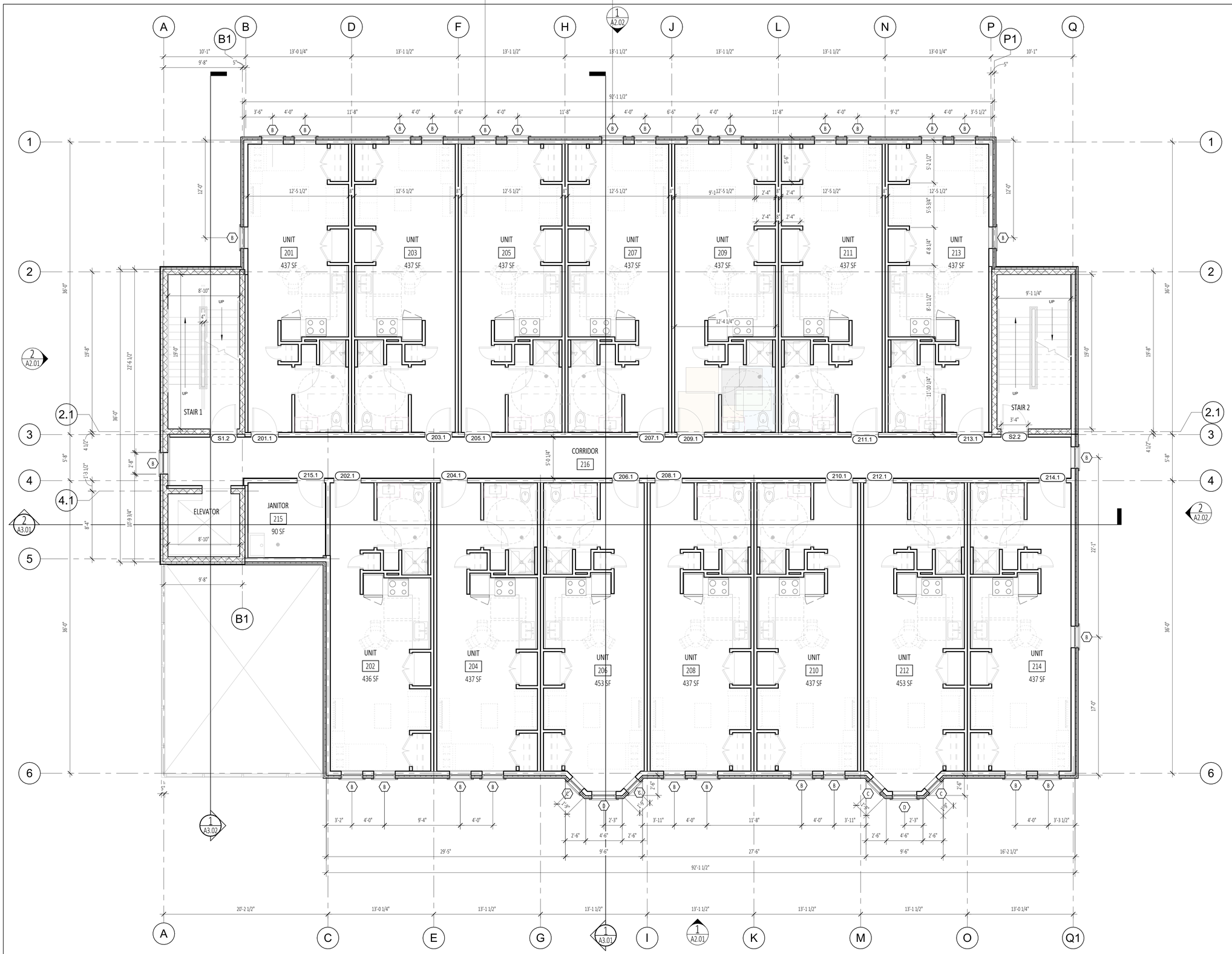
Revisions:

FIRST FLOOR PLAN

Scale: As indicated

04/29/2026

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2ND FLOOR | 1

3/16" = 1'-0"

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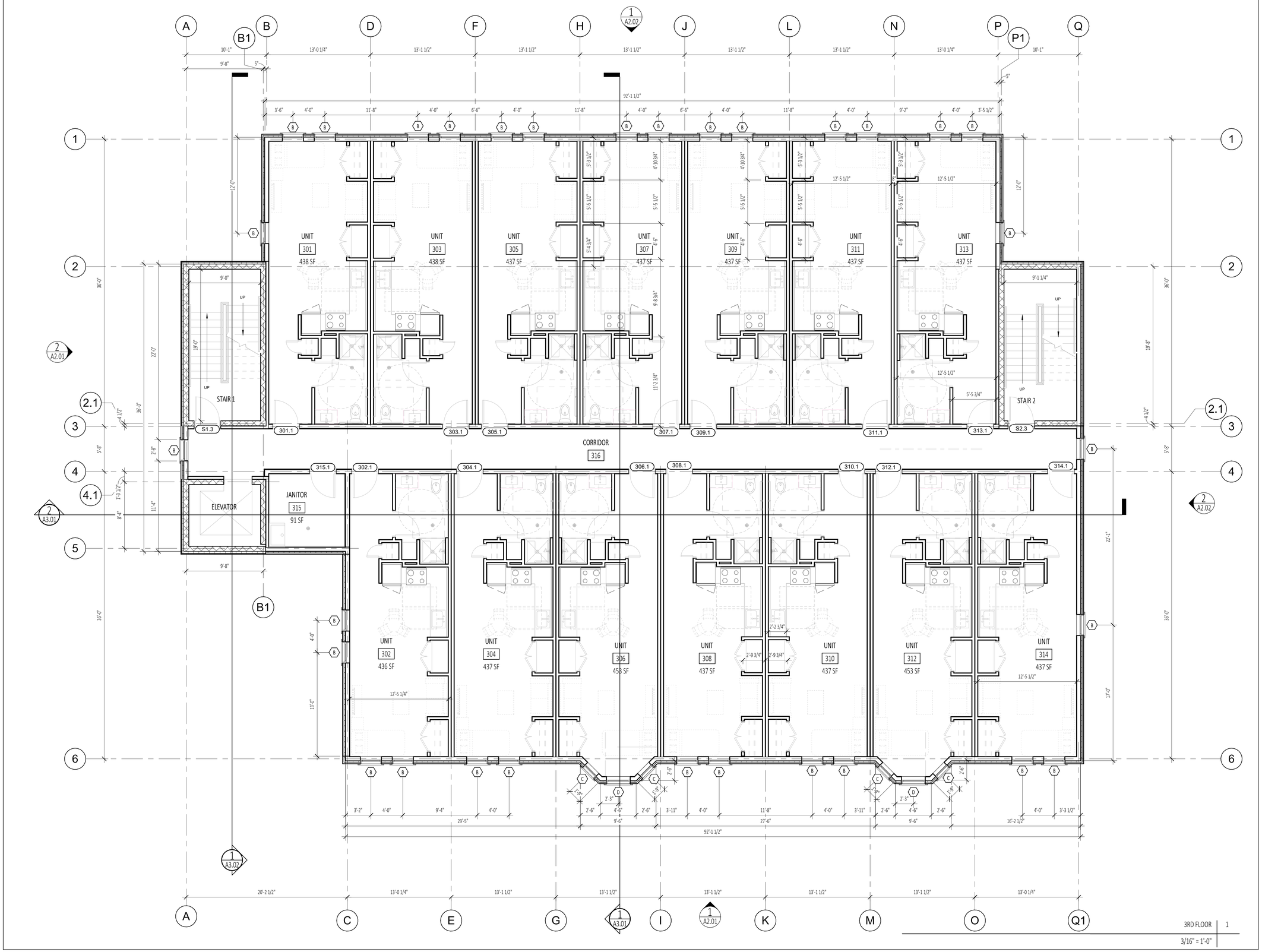
SECOND FLOOR PLAN

Scale: 3/16" = 1'-0"

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A1.02

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Stamp:

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Issuance:

CONCEPT DESIGN

Revisions:

THIRD FLOOR PLAN

Scale: 3/16" = 1'-0"

04/29/2026

A1.03

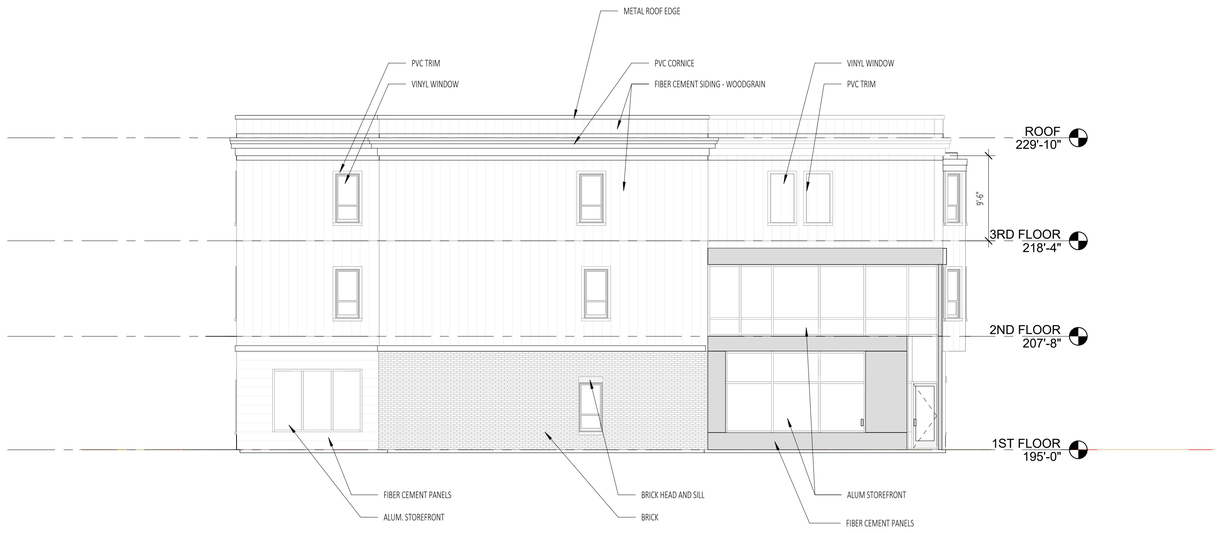
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MATERIAL SCHEDULE					
Key Name	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR	REMARKS
1	COMPOSITE HORIZONTAL	LP SMARTSIDE	NICKEL GAP SIDING	CAVERN STEEL	



HAMPSHIRE STREET ELEVATION | 1

1/8" = 1'-0"



WEST ELEVATION | 2

1/8" = 1'-0"

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Consultant:

Issuance:

CONCEPT DESIGN

Revisions:

EXTERIOR ELEVATIONS

Scale: 1/8" = 1'-0"

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A2.01

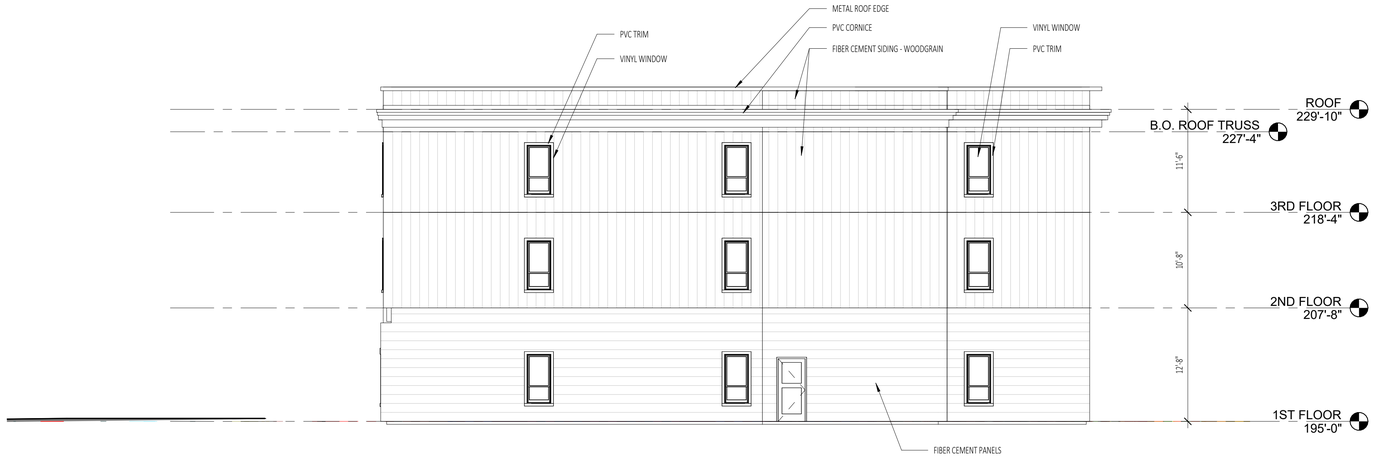
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MATERIAL SCHEDULE					
Key Name	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR	REMARKS
1	COMPOSITE HORIZONTAL	LP SMARTSIDE	NICKEL GAP SIDING	CAVERN STEEL	



NORTH ELEVATION | 1

1/8" = 1'-0"



EAST ELEVATION | 2

1/8" = 1'-0"

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Owner/Client:

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20 GREAT FALLS PLAZA, AUBURN, ME 04212

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Consultant:

Issuance:

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Revisions:

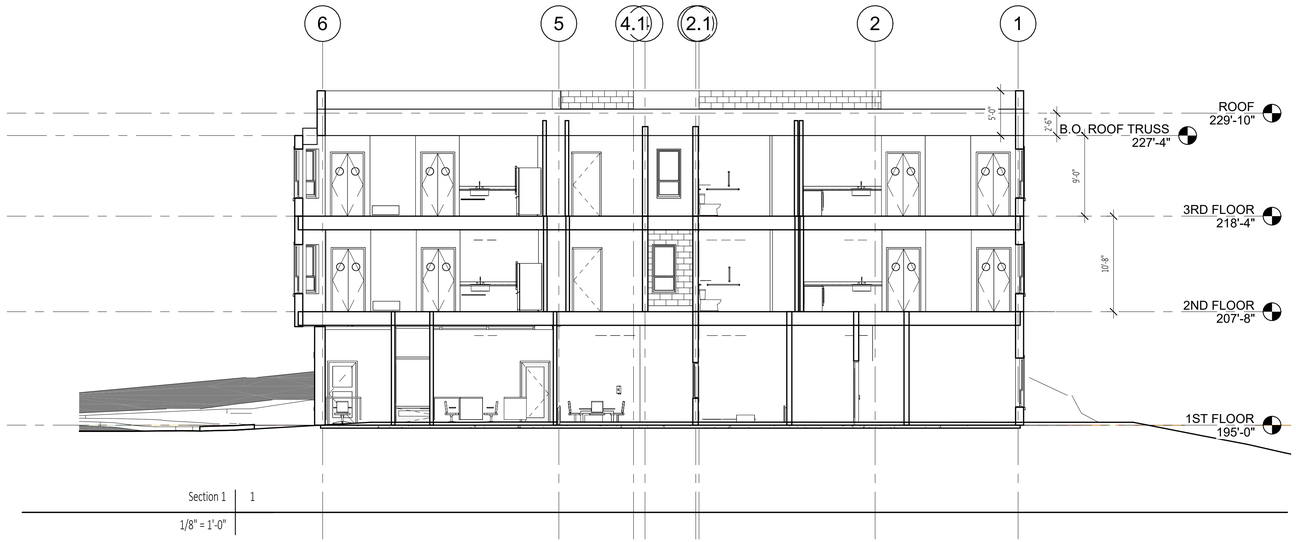
EXTERIOR ELEVATIONS

Scale: 1/8" = 1'-0"

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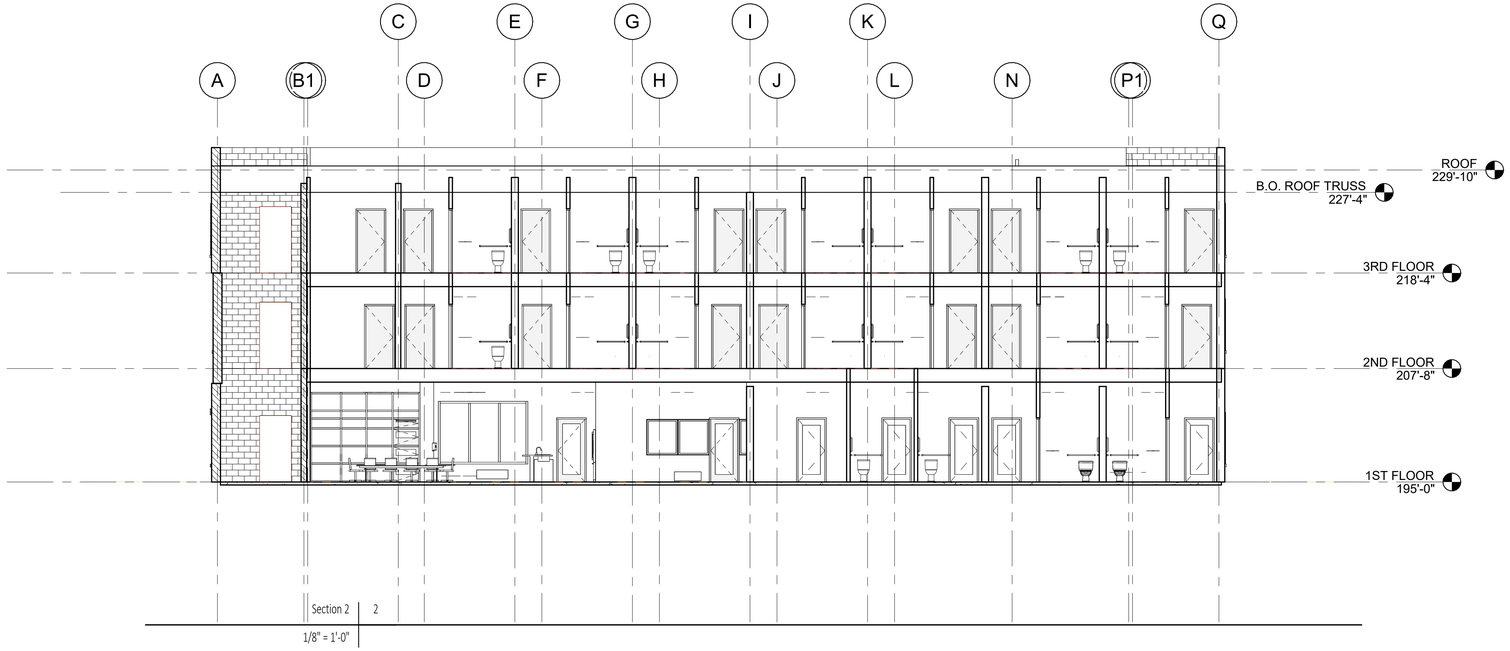
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Section 1 | 1

1/8" = 1'-0"



Section 2 | 2

1/8" = 1'-0"

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Project:

HAMPSHIRE COMMONS

143 HAMPSHIRE STREET, AUBURN, MAINE

Owner/Client:

AUBURN HOUSING AUTHORITY

20 GREAT FALLS PLAZA, AUBURN, ME 04212

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Issuance:

CONCEPT DESIGN

Revisions:

BUILDING SECTIONS

Scale: As indicated

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Section 3 | 1

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143 HAMPSHIRE STREET, AUBURN, MAINE

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Issuance:

CONCEPT DESIGN

Revisions:

BUILDING SECTIONS

Scale: As indicated

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LJ Engineering
Building Partnerships

300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | LJBinc.com

May 1, 2026

Ms. Sam Peikes,
Planning Coordinator
City of Auburn
60 Court Street
Auburn, ME 04210

Subject: Hampshire Commons Apartments
143 Hampshire Street
Site/Subdivision/Special Exception Review Application
Letter of Response to Comments #2

Dear Sam,

On behalf of **Auburn Residential Development Corp, LLC (Applicant)** our office is providing this letter of response in support of the ongoing Site Plan, Subdivision, & Special Exception Application for the Hampshire Commons supportive housing residential development at 143 Hampshire Street. We understand the project is subject to a Special Exception Review as identified in Chapter Sec. 60-556(b)(3) and Sec. 60-556(b)(5). Special Exceptions are reviewed under Sec. 60-1335 – Sec. 60-1337. The following information is being provided in support of those standards.

SPECIAL EXCEPTION Standards

Chapter 60, Article XVI, Division 3 of the City of Auburn Code of Ordinances (City Code) defines the procedures and approval criteria for a special exception review. The applicable standard sections are provided below in *italics* followed by our evidence demonstrating compliance in **bold**.

Sec. 60-1336: Conditions.

(a) *As conditions prerequisite to the granting of any special exceptions, the board shall require evidence of the following:*

1. *That the special exception sought fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.*

Supporting Evidence: Per Sec.60-556(b), the project requires a Special Exception review due to the following standards:

- **The project proposes a total of 12,000 SF of new construction including all floors.**
- **The project seeks a waiver from the Form-Based Code**

The building, although proposing to create more than 12,000 sf of total floor area,

remains in compliance with the Form-Based Code building lot coverage and other space and bulk standards. Additionally, the Applicant requested waivers for the building width and the lot width along the Hampshire Street frontage based on evidence provided that the Site is an existing site with lot width exceeding the Form Based code maximum and the building width, while only slightly over the form based code maximum building width, is needed to accommodate the proposed programming. The Board held a discussion and voted to approve these waivers at the April 14th meeting. We understand the project meets all other standards of the Zoning Ordinance and Form-Based Code.

2. *That the special exception sought will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.*

As part of the Site Plan and Subdivision Review with City Staff and the Planning Board to date, the Applicant has provided Traffic information in accordance the Sec. 46-235. This information supports the finding that no adverse impacts to the current traffic patterns or adjacent roadway and intersection capacity are anticipated as part of this project. No high crash locations were identified within the project area that would otherwise warrant further review for vehicular or pedestrian safety hazards. The project has been reviewed and accepted by the Fire Department for general access into and around the site for emergency services. The proposed building will meet, and must meet, any and all NFPA and Building Codes and Maine State Housing standards to ensure proper safety standards are met for the structure. Based on this information, we conclude the project will not result in or create an unsafe condition related to traffic, fire, or other safety elements.

3. *That the special exception sought will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.*

The proposed development is an infill project within the T-4.2 Traditional Downtown Neighborhood meeting those Form Based Code standards and does not propose altering traffic movement patterns in the immediate downtown area. The project will not hamper or adversely impact the current and existing facilities. The site will provide a new curb cut on Gamage Street that complies with City standards. The applicant will reconstruct portions of the sidewalk as necessary along the project frontage. The property is not part of any long-term public or semi-public acquisitions planned by the City. As you know, the project parcels were offered for sale by the City for development opportunities.

4. *That the exception sought will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.*

The building height, materials, and massing reinforce the existing urban character along Hampshire Street and Gamage Avenue, while landscaping and buffering will mitigate potential impacts to adjacent residential properties. The proposed development is a substantial investment in the downtown area and will redevelop three vacant properties. This project will be a substantial improvement to the neighborhood and is anticipated to

assist in increasing property values. The development will provide much-needed new housing unit stock in the downtown area to support local supportive housing needs.

5. *That reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.*

The site's 0.77-acre area allows the proposed 32-unit building, parking, circulation, and amenity space to be accommodated without overcrowding. Stormwater runoff will be managed through a proprietary system designed in accordance with Section 60-1301(14) and MaineDEP standards, with long-term operation and maintenance procedures provided by the applicant. The site is served by existing public water and sewer, with confirmed capacity, emergency vehicle access has been reviewed by the Fire Department, and shared parking, access, and landscaped common areas will be maintained through recorded easements and ownership responsibilities.

6. *That the standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.*

The proposed development has been designed to comply with all applicable requirements of the City's Zoning Ordinance and Form-Based Code and will be constructed in accordance with the City of Auburn Building Code and other applicable codes.

7. *That essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.*

This project has been reviewed by the local utility companies and applicable City Departments who have all approved of the project as proposed to the best of our understanding. We understand the public safety/emergency services can support the building. The project will not adversely affect the local school systems. Public utilities have capacity to serve the project's need for water, sewer, and power.

LJB Engineering
Building Partnerships

Closure

We appreciate the opportunity to provide this additional information related to the special exception review under the T-4.2 Form Based Code and look forward to Staff and the Board's continued review of this application and consideration for approval at their next public hearing meeting. If you require any additional information, please do not hesitate to contact me directly.

In addition to this information, we have attached the latest architectural rendering from the architect depicting a view of the building from Gamage Street. We look forward to sharing this image with the Board at the upcoming meeting.

Sincerely,

LJB Inc.

Stephen Bushey, P.E.
Senior Associate
Phone: 207-772-2515 x296
Sbushey@ljbinc.com

cc: Martin Szydlowski, Auburn Housing Authority
Amanda Bartlett, Developers Collaborative
Eric Cousens – City of Auburn

U:\Auburn Housing Development Corp\0129761A.00 - Auburn Maine Housing First project\P Applications\Local\LOR #2 2026.05.01 Special Exception


architecture
invivid

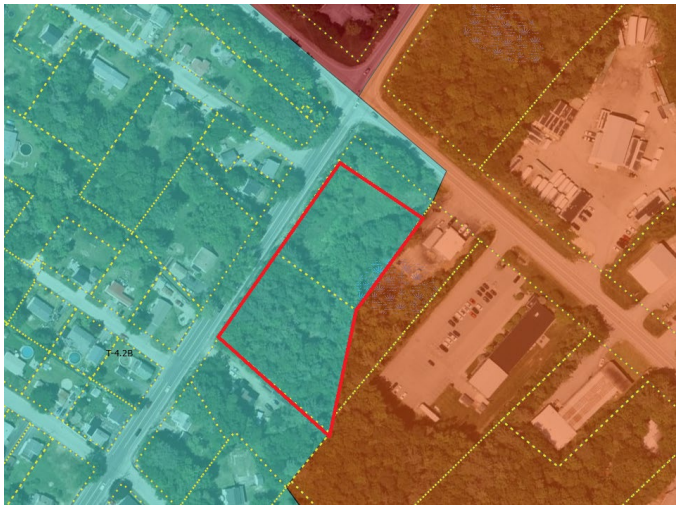
City of Auburn, Maine
Office of Planning & Permitting
www.auburnmaine.gov | 60 Court Street
Auburn, Maine 04210 207.333.6601

To: Auburn Planning Board
From: Sam Peikes, Planning Coordinator
Re: FINAL SITE PLAN/SUBDIVISION REVIEW: Wahan Oaks Subdivision, 146 Manley Road (PID 198-037 & 198-038): Application by Trillium Engineering Group on behalf of Homes For All, LLC for a proposed 14 lot single-family subdivision. This property is located in the Traditional Neighborhood Development district (T-4.2B) and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 4 - Subdivision Review. This item is continued from the December 9, 2025 meeting.

Date: May 5, 2026

PROPOSAL OVERVIEW
Trillium Engineering Group on behalf of Homes For All, LLC has submitted an application for a proposed 14-lot single-family subdivision at 146 Manley Road (PID 198-037 & 198-038). The property is located in the Traditional Neighborhood (T-4.2B). Access to the proposed structures will be provided by a new city street.

The development is located in the T-4.2B Traditional Neighborhood District, which allows single-family dwellings by right. The intent and purpose of this district are characterized by small- to medium-sized buildings with smaller front yards and stoops, creating a compact urban environment. The smaller minimum and maximum building setbacks form a moderately dense street-wall pattern, promote diverse architectural styles, and support pedestrian-friendly streets.



The application was last brought to the Planning Board for the December 9, 2025 meeting. At that meeting the Board granted preliminary approval for the application with the following conditions:

- Applicant shall obtain all required MDEP wetland permits. All wetland boundaries, disturbances, and setbacks must be shown on the final site plan.
- Applicant must meet the 63,560 SF open space requirement or obtain approval for a fee-in-lieu. Fee-in-lieu amount to be determined by the City Tax Assessor at final approval.
- Applicant shall coordinate all water/sewer design with the City and Auburn Sewer and Water District, including main size, hydrants, and service details. Connection to Manley Road is preferred; if connecting to Rodman Road, a City utility easement (PID# 198-036) is required and gravity flow must be verified.
- Full stormwater design and maintenance plan (City vs. HOA) must be provided before final approval. Applicant shall address sidewalk connection to Manley Road, required roadway geometry, and provide updated fire apparatus turning movements.

The applicant has provided the following updates since the December 9 meeting:

- Stormwater management report and design to meet city requirements.
- In lieu request from providing required amount of open space.
- Sewer and water service capacity approval letter from Auburn Sewer and Water District.
- A proposed sidewalk connection to Manley Road.
- Location of disturbance of wetlands.

Pursuant to Sec. 60-1361, a major subdivision application requires a minimum of two meetings with the Planning Board. The first meeting is to review the preliminary subdivision plan. If the Board votes to approve the preliminary plan, the applicant has six months to resubmit for final plan review. The applicant received preliminary approval December 9, 2025 and is resubmitting for final plan review.

SITE PLAN REVIEW AND SUBDIVISION STANDARDS

The following findings of fact relevant to the project are summarized below:

- Access: Access to the subdivision will come from the proposed Wahan Oaks Drive off Manley Road. The proposed road is a private road that will be designed to meet city standards. The proposed road contains two points of access. The applicant should confirm if both sides of the road will be used for entering and exiting the subdivision.
- Parking: The proposed subdivision does not include any formal parking areas. Each dwelling unit will contain its own driveway for vehicles to park.
- Utilities: The proposed homes in the subdivision will be serviced by public water and sewer. The locations of water and sewer are shown on the site plan sheet C-103. The applicant corresponded with the Auburn Water and Sewer District April 20, 2026. As noted in the email, the District states that there is adequate capacity to serve the project. Prior to proceeding with service, the District is requesting easements for both the water and sewer main, separate water services with service box shown on utility plans for each

building, location of all sewer connections on utility plans and connect Lots 14 and 13 to the first manhole. The applicant should confirm that these requests have been shown on the updated utility plan.

- Traffic: The proposed subdivision is anticipated to generate approximately 17 passenger equivalent trips in the peak hour. The number of vehicle trips will be negligible and will be limited to occupants of the subdivision. The proposed subdivision will not create traffic congestion or cause unsafe traffic conditions.
- Stormwater Management: The proposed development is anticipated to create approximately 34,000 square feet of impervious area for the new private road and sidewalk. The proposed development will impact roughly 4,393 square feet of wetlands. As a result of disturbance within the wetlands, the applicant has applied for a DEP PBR, which includes requirements for meeting erosion control Best Management Practices. Stormwater will be managed by catch basins and grading and curbing, which will be tied into the existing system on Manley Road. Erosion and stormwater control details are provided in sheets C-200, C-201 and C-300.
- Open Space: Single-family residential subdivisions are required to meet the standards for open space under Section 60-1367. According to the ordinance, a developer is required to provide 1 acre of open space for the first ten lots or units and 5,000 square feet for each additional unit. The subdivision contains a total of 14 dwelling units, which means the amount of open space required for the development would be approximately 1.5 acres of open space. Due to the wetland and site constraints, the applicant is unable to provide the open space in the required amount and instead has opted to pay the fee in lieu. The applicant met with the Parks and Recreation Advisory Board on January 30, 2026 who recommended the money go towards bicycle repair stations at Mount Apatite to support the park's growing mountain biking community with remaining funds going towards trail maintenance and updated wayfinding signage. There does not appear to be any public recreation space within the vicinity of the development, and the proposed development does not appear to contain any open space or green space. A requirement of Sec. 60-548B.1. is to show 10% minimum of useable open space. The applicant will need to address this standard.
- Exterior Lighting: The applicant should show locations of lighting on the plan and provide lighting details. In accordance with Sec. 60-1304 it needs to be demonstrated that exterior lighting will not create safety hazards for motorists or trespass onto abutting property.
- Solid Waste Disposal: The proposed subdivision does not include a shared on-site dumpster. The applicant states in the cover memo from December that solid waste from the development will be serviced by the local city pick-up and disposal system. Each homeowner will be responsible for disposing of their solid waste.
- Protection of Environmental Features and Natural Resources: The proposed subdivision is not anticipated to adversely impact natural resources, scenic areas or historic sites.
- Noise, Vibration, Odors and Air Pollution: The proposed subdivision is not anticipated to exceed noise standards or create a nuisance to surrounding properties. The proposed development is not anticipated to generate vibration, odors or air pollution.
- Form-Based Code Building Design Elements: The proposed development is located in the Traditional Neighborhood (T-4.2B) district which is characterized by small to

medium sized buildings with smaller front yards with diverse architectural styles and pedestrian friendly streets and sidewalks. At the last meeting, it was requested that the applicant provide a sidewalk connection from the proposed private road to the existing sidewalk on Manley Road. The applicant has provided updated plans showing a proposed sidewalk on one side of Wahan Oaks Drive. Staff suggest the applicant provide details and dimensions of the propose sidewalk and esplanade is provided as well pursuant to Sec. 46-182(1). Maintenance of the sidewalk should be the responsibility of either the developer or individual homeowners. Street tree landscaping is proposed in front of the homes off Manley Road. The applicant should provide details of proposed landscaping and tree species. The applicant should demonstrate how the proposed subdivision meets the design standards and intent of the T-4.2B district.

PLANNING BOARD ACTION

The proposed project requires review and findings for approval under Sections 60-1277 and 60-1359:

Site Plan Review – Section 60-1277

In considering a site plan, the planning board shall make findings that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;

(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

(3)Adequacy of the methods of disposal for wastes; and

(4)Protection of environment features on the site and in adjacent areas.

Subdivision – Section 60-1359

When reviewing any subdivision for approval, the planning board shall consider the following criteria, and before granting either approval or denial, shall determine that the proposed subdivision:

(1) Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:

a. The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;

b. The slope of the land and its effect on effluents;

c. The availability of streams for disposal of effluents; and

d. The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14);

(2) Has sufficient water available for the reasonably foreseeable needs of the subdivision;

(3) Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;

(4) Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;
(5) Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;
(6) Will provide for adequate sewage waste disposal;
(7) Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized;
(8) Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;
(9) Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any;
(10) Is funded by a subdivider has adequate financial and technical capacity to meet the standards of this section;
(11) Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application;
(12) Has provisions for on-site landscaping that are adequate to screen neighboring properties from unsightly features of the development;
(13) Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;
(14) Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;
(15) Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision.

STAFF RECOMMENDATION:
Staff recommend that more information is needed from the applicant before a final decision is made. The applicant will need to provide information on lighting types and details, sidewalk dimensions and details and landscaping details. The development is located in the form-based code T-4.2B district which requires design standards around building types, landscaping and pedestrian friendly streets. The applicant should be prepared to demonstrate or speak to how the proposed subdivision meets the intent of the T-4.2B district. As required under Sec. 60-1362, the Planning Board has 30 days to vote to approve or deny a final plan subdivision application. Unless items are addressed, staff recommend the application be tabled for the next meeting.

SUGGESTED MOTION:
I make a motion to [approve/deny] the application for Wahan Oaks Subdivision located at 146 Manley Road (PID 198-037 & 198-038) pursuant to Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 4 - Subdivision Review.

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

Wahan Oaks

Final Application Review Package

Date Issued: April 30th, 2026



Project Title: Wahan Oaks

Owner: Homes for All LLC

Site Location: 146 Manley Rd. Auburn, ME

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

Attachments

A. Response to Preliminary Approval Comments 12/18/25
B. Updated Response to Staff Review Comments 11/21/25
C. Updated Project Narrative
D. Application
E. Deed
F. LLC Docs
G. Agent Authorization
H. Abutters List
I. Technical Capability
J. Financial Capacity
K. Utility Capacity Correspondence
L. DEP Permitting & Agency Review Requests
M. Stormwater Report & Maintenance Plan
N. Misc. Maps & Exhibits
O. Site Plans

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251 US Route-1, Suite O-2
Falmouth, ME 04105

A. Response to Preliminary Approval Comments 12/18/25

City of Auburn, Maine
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

December 18, 2025

Applicant/Property Owner:
Homes for All, LLC
34 Harvest Hill Lane
Auburn, ME 04210
Email: john@homesforallme.com

Agent:
Trillium Engineering Group
Eric Dube, P.E.
251 US Route 1
Falmouth, Maine 04105
Email: ericd@triliumeg.com

Re: Preliminary Approval Letter for Wahan Oaks Subdivision

Dear Mr. Dube,

This letter is to notify you that on December 9th City of Auburn Planning Board has granted preliminary Site and Subdivision Plan approval for the proposed Wahan Oaks 14 long single-family subdivision located at 146 Manley Road, City Assessor's Parcel I.D. 198-037 & 198-038, in the Traditional Neighborhood Development (T-4.2B) district. This proposal is pursuant to Chapter 60, Article IV Subdivision, Article XVI Division 2 – Site Plan Review and Article XVI, Division 4 – Subdivision. The subdivider shall within six (6) months after the preliminary approval of the preliminary plan, file with the Planning Board an application for approval of the final subdivision plan. The applicant will need to address the following items as noted below before receiving final approval:

1. Applicant shall obtain all required MDEP wetland permits. All wetland boundaries, disturbances, and setbacks must be shown on the final site plan.
2. Applicant must meet the 63,560 SF open space requirement or obtain approval for a fee-in-lieu. Fee-in-lieu amount to be determined by the City Tax Assessor at final approval.
3. Applicant shall coordinate all water/sewer design with the City and AWSD, including main size, hydrants, and service details. Connection to Manley Road is preferred; if connecting to Rodman Road, a City utility easement (PID# 198-036) is required and gravity flow must be verified.
4. Full stormwater design and maintenance plan (City vs. HOA) must be provided before final approval. Applicant shall address sidewalk connection to Manley Road, required roadway geometry, and provide updated fire apparatus turning movements.
5. Prior to recording and issuance of building permits, the final subdivision plan shall be recorded at the Androscoggin County Registry of Deeds.

Sincerely,

Sam Peikes, Planning Coordinator

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 30, 2026

City of Auburn
60 Court St.
Auburn, ME 04210

RE: Wahan Oaks– Subdivision
Development Review Application – Response to Preliminary Approval Comments

Dear City of Auburn:

Trillium Engineering Group is providing this response to preliminary approval comments received on 12/18/25 from Planning Coordinator Samantha Peikes via email. The preliminary approval comments were in response to the applicant's previous planning submission for the Wahan Oaks subdivision project – located at 146 Manley Rd.. Please see below for the comments received and our (Trillium's) responses.

Comments Received 12/18/25 – Preliminary Approval

1. Comment Received: *Applicant shall obtain all required MDEP wetland permits. All wetland boundaries, disturbances, and setbacks must be shown on the final site plan.*
   Response:
   - The applicant is currently pursuing all necessary DEP permitting and agency review requests for the proposed project. See site plans for setbacks, disturbances, boundaries, etc.

2. Section & Requirement: *Applicant must meet the 63,560 SF open space requirement or obtain approval for a fee-in-lieu. Fee-in-lieu amount to be determined by the City Tax Assessor at final approval.*
   Response:
   - The applicant is continuing to coordinate with the city regarding the fee-in-leu to satisfy the open space requirement.

3. Section & Requirement: *Applicant shall coordinate all water/sewer design with the City and AWSD, including main size, hydrants, and service details. Connection to Manley Road is preferred; if connecting to Rodman Road, a City utility easement (PID#198-036) is required and gravity flow must be verified.*
   Response:
   - The applicant has received capacity approval from AWSD for water/sewer, see utility capacity correspondence section of the package. The applicant is proposing to connect all utilities to Manley Rd. Applicant will continue to work with the City engineer and AWSD regarding connection specifications, etc.

4. Section & Requirement: *Full stormwater design and maintenance plan (City vs. HOA) must be provided before final approval. Applicant shall address sidewalk connection to Manley Road, required roadway geometry, and provide updated fire apparatus turning movements.*
   Response:
   - The applicant is to provide the City with a stormwater report and design and is coordinating with AWSD and the City engineer regarding all tie-ins to municipal

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251 US Route-1, Suite O-2
Falmouth, ME 04105

systems. Regarding stormwater, the proposed design introduces an overall impervious surface area (including estimated building footprints and paved surfaces) of 34,248 SF. See site plans for impervious area table breakdown. Applicant is proposing a sidewalk connection to Manley Rd. see updated site plans and updated turning movement exhibit for fire truck turning.

5. Section & Requirement: *Prior to recording and issuance of building permits, the final subdivision plan shall be recorded at the Androscoggin County Registry of Deeds.*
   Response:
   - No response necessary, noted.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.
Sincerely,



Kyle Berwick
Trillium Engineering Group

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

B. Updated Response to Staff Review Comments 11/21/25

From: David Hediger <dhediger@auburnmaine.gov>
Sent: Friday, November 21, 2025 8:40 AM
To: Kyle Berwick
Cc: Tammy Thatcher; Elizabeth Bullen; Eric Dube; Brad Van Damm; Kristopher Bennett; Mike Broadbent; Eddie Williams
Subject: RE: [External]RE: [External]RE: 146 Manley Road

Kyle:
Staff has completed a preliminary review of the application and offer the following at this time:

1. Ownership Clarification
   The applicant is listed as *Homes For All, LLC*, but the property deeds indicate a different owner. Please demonstrate legal right, title, or interest in the property.
2. Environmental Permitting
   Will the project require permitting from the Maine Department of Environmental Protection (DEP) for wetland alterations? Additionally, are there any required setbacks from natural resources that must be observed?
3. Road Classification
   Please clarify whether the proposed road is intended to be a city-accepted public street or a privately maintained road.
4. Code References
   The application must reference and address the applicable criteria outlined in the following sections of the Auburn Code of Ordinances:
   - Section 60-1277 – Site Plan Review Objectives
   - Section 60-1301 – Site Plan Submission Requirements
   - Section 60-1359 – Subdivision Review Standards
5. Traffic Impact Analysis
   Address the applicable criteria of Division 4 – Traffic Impact Analysis Standards. Note that the City Engineer may waive or modify any requirements of this division if the developer's certified traffic engineer demonstrates that such requirements are unnecessary due to the size, type, or location of the development, or if alternative analytical methods are equally effective. A full waiver may be granted if a certified civil engineer demonstrates that traffic impacts (e.g., volume, type, and pattern changes) are negligible.
6. Form-Based Code Compliance
   The property is located within the Form-Based Code District. The application must address the Discretionary Criteria of Section 60-558, specifically those related to the T4-2B Transect.
7. Recreation and Open Space Standards
   The application must address the requirements of Section 60-1367 – Recreation Area/Open Space Standards, including the minimum land area required
8. Water

We would like to see them connect the new water main to Manley Rd, NOT Rodman Rd as showing in the plans.
Ideally, they would connect both sides of this new main to form a loop. This will enhance water quality and fire flows.
What size are they proposing for the new main?
Are they going to need fire hydrants per the FD? If so, the main size will need to reflect this.
The plans should also show the individual services to each building.
We would need utility easements to take over this as a public main. It must also be constructed to our specifications.
If they wish for the main to be private, then they must install a meter pit, and will have one bill for the entire development.

9. Sewer
   Need to check elevations if they expect to get gravity as it's shown on the plans. This main is very shallow, and the District has concerns about whether or not the slope for gravity is possible.
10. Enginnering
    The future stormwater responsibilities will need to be included later on for approvals. Either the City will need to maintain the stormwater infrastructure that will be included in the MS4 permit or a homeowners association needs to be set up to take on those responsibilities.
    There is a sidewalk on Manley Road so a connecting sidewalk would make sense for this proposed roadway.
    Horizontal curves shall be no closer than 135 feet to the center of an intersection unless otherwise approved by the City Engineer.
    75' radius for the horizontal curve of the road is tight. I would want to see autoturn with AFD's apparatus and other turning movements.

Please provide initial responses and any revised materials by December 1. If there are concerns aboutmeeting this deadline, please let me know ASAP. Our mailing goes out 11/25 and if for any reason you think you need more time, I rather not ask the Board to continue the hearing with notices sent.

As previously noted, this is a major subdivision requiring two meetings. The Planning Board reviews preliminary plans at a public hearing, sets any conditions for the final plan, and grants preliminary approval as a guide; however, final plan approval is separate and may require additional changes or another hearing. The Board, by majority vote, may determine whether a public hearing is necessary for final plan review.

The subdivider must submit the final subdivision plan within six months of preliminary approval. One six-month extension may be granted for good cause if requested in writing at least 30 days before the original deadline. The Board may require resubmission of the preliminary plan instead of acting on the final plan.

Within 30 days of the public hearing on the final plan, the Planning Board will approve, conditionally approve, approve with conditions, or disapprove the plan, providing written reasons for its decision. Typically, the Board will make a motion to approve at the meeting of the final hearing.

The preliminary hearing is scheduled for December 9 at 6:00 p.m. Notices to abutters are mailed on 11/25.

Please contact me with any questions.

Thank you

David Hediger, Director of Planning
City of Auburn
60 Court Street, Auburn, ME 04210
207.333.6601 X1154



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From: Kyle Berwick <kyleb@trilliumeg.com>
Sent: Tuesday, November 11, 2025 9:14 AM
To: David Hediger <dhediger@auburnmaine.gov>
Cc: Tammy Thatcher <tthatcher@auburnmaine.gov>; Elizabeth Bullen <ebullen@auburnmaine.gov>; Eric Dube <ericd@trilliumeg.com>; Brad Van Damm <bradv@trilliumeg.com>
Subject: [External]RE: [External]RE: 146 Manley Road

Hi David,

Please see attached for the application package we submitted to the portal. If you need any other information and/or have any initial comments/questions, please reach out.

Thank you,

Kyle Berwick
Project Engineer
Trillium Engineering Group
251 US Route 1, Suite O-2
Falmouth, ME 04105
Mobile: 603.915.6325

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 30, 2026

City of Auburn
60 Court St.
Auburn, ME 04210

RE: Wahan Oaks– Subdivision
Development Review Application – *Updated* Response to Staff Review Comments

Dear City of Auburn:

Trillium Engineering Group is providing this *updated* response to staff review comments received on 11/21/25 from Planner Director David Hediger via email. The comments were in response to a preliminary review performed by city staff for the proposed Wahan Oaks Subdivision project located at 146 Manley Rd. Please see below for the comments received and our (Trillium's) responses.

Comments Received 11/22/25 – Staff Preliminary Review

1. Comment Received: *Ownership Clarification*
   The applicant is listed as Homes For All, LLC, but the property deeds indicate a different owner. Please demonstrate legal right, title, or interest in the property.
   Response:
   - The owner is Homes for All, LLC, an updated deed has been attached to the response package.

2. Section & Requirement: *Environmental Permitting*
   Will the project require permitting from the Maine Department of Environmental Protection (DEP) for wetland alterations? Additionally, are there any required setbacks from natural resources that must be observed?
   Response:
   - The applicant is currently in the process of pursuing permitting with DEP. All permits to be submitted to the DEP and applicable agency review requests.

3. Section & Requirement: *Road Classification*
   Please clarify whether the proposed road is intended to be a city-accepted public street or a privately maintained road.
   Response:
   - The proposed road is intended to be a city-accepted public street.

4. Section & Requirement: *Code References*
   The application must reference and address the applicable criteria outlined in the following sections of the Auburn Code of Ordinances:
   Section 60-1277 – Site Plan Review Objectives
   Section 60-1301 – Site Plan Submission Requirements
   Section 60-1359 – Subdivision Review Standards
   Response:
   - See the updated site plan narrative addressing the applicable criteria in the outlined sections.

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Falmouth, ME 04105

5. Section & Requirement: *Traffic Impact Analysis*
Address the applicable criteria of Division 4 – Traffic Impact Analysis Standards. Note that the City Engineer may waive or modify any requirements of this division if the developer's certified traffic engineer demonstrates that such requirements are unnecessary due to the size, type, or location of the development, or if alternative analytical methods are equally effective. A full waiver may be granted if a certified civil engineer demonstrates that traffic impacts (e.g., volume, type, and pattern changes) are negligible.
Response:
   - The proposed traffic to be generated by the subdivision is approximately 17 peak-hour am and pm trips generated daily. This increase is not to cause undue negative impacts to the surrounding traffic patterns/circulation. The overall increase in volume is negligible.

6. Section & Requirement: *Form-Based Code Compliance*
The property is located within the Form-Based Code District. The application must address the Discretionary Criteria of Section 60-558, specifically those related to the T4-2B Transect.
Response:
   - See the updated site plan narrative addressing the applicable criteria in the outlined sections.

7. Section & Requirement: *Recreation and Open Space Standards*
The application must address the requirements of Section 60-1367 – Recreation Area/Open Space Standards, including the minimum land area required
Response:
   - The applicant is currently working with the City of Auburn regarding this requirement and paying a fee-in-leu instead of providing the required open space.

8. Section & Requirement: *Water*
We would like to see them connect the new water main to Manley Rd, NOT Rodman Rd as showing in the plans. Ideally, they would connect both sides of this new main to form a loop. This will enhance water quality and fire flows.. What size are they proposing for the new main? Are they going to need fire hydrants per the FD? If so, the main size will need to reflect this. The plans should also show the individual services to each building. We would need utility easements to take over this as a public main. It must also be constructed to our specifications. If they wish for the main to be private, then they must install a meter pit, and will have one bill for the entire development.
Response:
   - The applicant has corresponded with AWSD for ability to serve. See utility correspondence section within the package.

9. Section & Requirement: *Sewer*
Need to check elevations if they expect to get gravity as it's shown on the plans. This main is very shallow, and the District has concerns about whether or not the slope for gravity is possible.

Response:
   - The applicant has corresponded with AWSD for ability to serve. See utility

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251 US Route-1, Suite O-2
Falmouth, ME 04105

correspondence section within the package.

10. Section & Requirement: *Engineering*
The future stormwater responsibilities will need to be included later on for approvals. Either the City will need to maintain the stormwater infrastructure that will be included in the MS4 permit or a homeowners association needs to be set up to take on those responsibilities. There is a sidewalk on Manley Road so a connecting sidewalk would make sense for this proposed roadway. Horizontal curves shall be no closer than 135 feet to the center of an intersection unless otherwise approved by the City Engineer. 75' radius for the horizontal curve of the road is tight. I would want to see autoturn with AFD's apparatus and other turning movements.

Response:

- The applicant is to provide the City with a stormwater report and design and is coordinating with AWSD and the City engineer regarding all tie-ins to municipal systems. Regarding stormwater, the proposed design introduces an overall impervious surface area (including estimated building footprints and paved surfaces) of 34,248 SF. See site plans for impervious area table breakdown.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.
Sincerely,



Kyle Berwick
Trillium Engineering Group

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

C. Updated Project Narrative

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 30, 2026

City of Auburn
60 Court St,
Auburn, ME 04210

RE: Wahan Oaks
Project Narrative - Updated for Final Application Review

Dear City of Auburn:

Trillium Engineering Group is providing this updated project narrative for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, approximate utility locations, and zoning requirement table. All solid waste is, presumably, to be serviced by the local City pick-up/disposal system. The applicant will provided the City with a comprehensive stormwater report for the proposed stormwater BMPs on site. The on-site stormwater facilities are projected to tie into the municipal stormwater drainage system and introduce an overall impervious surface area (including estimated building footprints and paved surfaces) of 34,248 SF. See site plans for impervious area table breakdown. Regarding permitting, the applicant is coordinating with DEP regarding all applicable permitting for overall disturbance area, wetland disturbance, etc. The applicant has compiled all documentation requested up to this point by the City for final application review, with the exception of the stormwater report/calculations which are to be submitted. The applicant will continue coordinating with the City regarding the fee-in-leu to satisfy the open space requirement. Please see all attached documentation and updated site plans for final planning review, including all comment responses,

Section 60-1277 – Site Plan Review Objectives: *In considering a site plan, the planning board shall make findings that the development has made provisions for the following:*

Section Requirement (1): *Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;*
Response:

- The proposed project will not cause undue detrimental nor offensive uses on the site and will provide adequate drainage design, provide buffers in accordance with City standards, etc. The nature of the subdivision, being single-family residential lots, allows for the site to have limited and reasonable levels of artificial/reflected light, sound generation, dust and vibration generation, etc.

Section Requirement (2): *Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas*
Response:

- The proposed project provides a 24' roadway which safely allows vehicles to maneuver throughout the subdivision. The proposed design allows for safe pedestrian circulation via a 5' wide pedestrian sidewalk connecting the Manley Rd. sidewalk to the subdivision roadway along with an esplanade. See the attached turning analysis

exhibit with a fire truck as the vehicle, showing adequate movement for a large vehicle.

Section Requirement (3): *Adequacy of the methods of disposal for wastes*
Response:

- Since the proposed subdivision is 14 individual single-family residential lots, it is presumed that all solid waste will be serviced by the local City pick-up/disposal system.

Section Requirement (4): *Protection of environmental features on the site and in adjacent areas.*
Response:

- The project proposes limiting all disturbance around and within the on-site wetland areas, however, not all wetland areas can be avoided and permitting with the MDEP is currently being pursued by the applicant.

Section 60-1301 – Scale; Required Information: *The original plan shall be drawn on reproducible Mylar at a scale of no more than 100 feet to the inch. Each site plan shall contain the following information…*

Section Requirement (1): *The requirements in this section all pertain to the site plan drawing and the information to be present on the drawings*
Response:

- The information required within this section can be seen on the existing and proposed site plans, see the updated site plans for more information/detail.

Section 60-1359 – Subdivision Guidelines: *When reviewing any subdivision for approval, the planning board shall consider the following criteria, and before granting either approval or denial, shall determine that the proposed subdivision…*

Section Requirement (1): *Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:*
a. The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;
b. The slope of the land and its effect on effluents;
c. The availability of streams for disposal of effluents; and
d. The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14); The information required within this section can be seen on the existing and proposed site plans, see the updated site plans for more information/detail.
Response:

- The proposed project will not cause undue water, air or noise pollution. The project proposes the use of stormwater drainage structures on site to be tied into the municipal system, lessening untreated surface runoff. In addition, the site is elevated well above sea level, and the only environmentally sensitive areas on-site are the wetland areas, which is being permitted by the applicant. Air and noise pollution will not be an issue as single-family residences tend to not typically generate much air/noise pollution in general.

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Falmouth, ME 04105

Section Requirement (2): *Has sufficient water available for the reasonably foreseeable needs of the subdivision*
Response:

- The subdivision proposes the use of City water, the applicant has corresponded with AWSD for ability to serve. See utility correspondence section within the package.

Section Requirement (3): *Will not cause an unreasonable burden on an existing water supply, if one is to be utilized*
Response:

- As previously stated, the subdivision proposes the use of City water, the applicant has corresponded with AWSD for ability to serve. See utility correspondence section within the package.

Section Requirement (4): *Will not cause unreasonable soil erosion or reduction in the Capacity of the land to hold water so that a dangerous or unhealthy condition may result*
Response:

- The project will be cognizant, especially during the construction phase, of erosion and sedimentation and the contractor will institute all appropriate erosion and sedimentation BMPs to ensure minimization of runoff. Soils are to be stabilized in accordance to DEP regulations. Regarding post-construction, the site will be graded adequately, and stormwater will be addressed to ensure that runoff is not adversely affecting the site and causing erosion or reduction in the permeability of the site. All areas to be properly stabilized upon the completion of construction.

Section Requirement (5): *Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;*
Response:

- The proposed traffic to be generated by the subdivision is approximately 17 peak-hour am and pm trips generated daily. This increase is not to cause undue negative impacts to the surrounding traffic patterns/circulation. The overall increase in volume is negligible.

Section Requirement (6): *Will provide for adequate sewage waste disposal*
Response:

- The subdivision proposes the use of City sewer; the applicant has corresponded with AWSD for ability to serve. See utility correspondence section within the package.

Section Requirement (7): *Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized*
Response:

- As previously stated, the subdivision proposes the use of City water, the applicant has corresponded with AWSD for ability to serve. See utility correspondence section within the package. As for solid waste, the subdivision should not cause undue burden on the City services.

Section Requirement (8): *Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;*
Response:

- The subdivision doesn't intend to cause any undue adverse effects on the scenic nor natural beauty of the area, aesthetics, historic sites, etc. The proposed lot is within an

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Falmouth, ME 04105

already developed area within the City, and the subdivision would not be an outlier in terms of development and impervious area when considering its surroundings. Wetland disturbance is being permitted by the applicant.

Section Requirement (9): *Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any*
Response:

- The subdivision will be in conformance with any applicable City regulations/ordinances.

Section Requirement (10): *Is funded by a subdivider has adequate financial and technical capacity to meet the standards of this section;*
Response:

- The applicant/developer has previously provided a letter of financial capacity to the City, see attached for a letter of technical capacity.

Section Requirement (11): *Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application*
Response:

- The proposed subdivision will not adversely affect the character of the surrounding neighborhood, the surrounding area abutting the project site is developed and a mix of residential and commercial land/buildings. With the proposed subdivision consisting of single-family residential lots, it will fit the existing character of the area.

Section Requirement (12): *Has provisions for on site landscaping that are adequate to screen neighboring properties from unsightly features of the development;*
Response:

- The applicant is to provide landscaping to meet standards and will work with the City regarding requirements. The project, as proposed, meets all setback requirements.

Section Requirement (13): *Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;*
Response:

- The project will not create a fire hazard and the subdivision accessway provides ample room for emergency vehicles to access all lots/buildings of the subdivision, see the attached turning template exhibit showing a fire truck safely navigating the accessway.

Section Requirement (14): *Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;*
Response:

- The project will not adversely affect the quality and/or quantity of groundwater as the subdivision will follow all applicable stormwater regulations/requirements along with impervious surface requirements to allow for rainwater permeability into the ground. There will be no wells on site, and the lots will be serviced by City utilities.

Section Requirement (15): *Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision*

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Falmouth, ME 04105

Response:

- The project will not have long-term cumulative effects nor a significantly increased amount of phosphorus concentration, the project will follow all applicable stormwater and phosphorous control regulations/requirements and measures.

Section 60-558 – Form Based Code Development Application Procedure.:

Section Requirement (b-1): *Applicant identifies subject property's zoning/transect and determines what plan type the project is.*

Response:

- The project is a proposed subdivision, see site plans for zoning requirement table.

Section Requirement (b-2): *Applicant reviews the project's compliance for the applicable form based code development standards sections 60-548 through 60-552; including all sections on purpose, building placement and configuration, building frontages, external elements, lot layout, the Parking and Use Matrix Chart and administration; along with any other applicable zoning ordinance regulations.*

Response:

- The applicant will continue to work with the City to confirm satisfaction of all City zoning and land use requirements, see site plans for zoning requirement table and proposed conditions, specifically for the T4.2.B Traditional Neighborhood.

Section Requirement (b-3): *Pre-development consultation. All potential development and project applicants are encouraged to contact the Auburn Planning Office for a pre-development consultation to confirm the form based code or zoning regulations and discuss the form based code requirements and related zoning and/or other regulatory items. Failure to consult with the planning office may result in the delay of acceptance, review and approval of the application.*

Response:

- The applicant has submitted a sketch plan application and had a meeting with City staff; staff review has supplied the applicant with initial comments that have been addressed previously. The applicant has received preliminary approval and is now submitting for final approval with this updated package submission.

Section Requirement (b-4): *Discretionary plan applicants will submit; a development review application, a form based code development checklist the appropriate application fee and number of applications to the planning office for review and consideration by the planning board according to their normal submission deadline and meeting schedule.*

Response:

- The applicant has submitted a sketch plan package, response to comments package and will submit any and all final applications, documents, etc. for planning approval.

Section Requirement (b-5): *Applications not meeting all the requirements of the form based code may include waiver as per section 60-1312 or variance requests as part of their application*

Response:

- No response needed, noted.

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Falmouth, ME 04105

Waiver Requests:

No waiver requests at this time. As previously mentioned, the applicant is working with the City regarding a fee-in-leu for the required open space area to meet requirements. Any additional waivers deemed necessary by staff or planning board will be addressed accordingly.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



Kyle Berwick
Trillium Engineering Group

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

D. Application

City of Auburn, Maine
Office of Planning & Permitting
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: Wahan Oaks

PROPOSED DEVELOPMENT ADDRESS: 146 Manley Rd. Auburn, ME

PARCEL ID #: Tax Map 198 / Lots 37, 38

REVIEW TYPE:
Site Plan □ Site Plan Amendment □
Subdivision ☒ Subdivision Amendment □

PROJECT DESCRIPTION: The project proposes a 14-unit single-family residential subdivision with a proposed public road.

CONTACT INFORMATION:

Applicant	Property Owner (See Applicant)
Name: Homes for All, LLC	Name:
Address: 34 Harvest Hill Lane	Address:
City / State Auburn, ME	City / State
Zip Code 04210	Zip Code
Work #:	Work #:
Cell #:	Cell #:
Fax #:	Fax #:
Home #:	Home #:
Email: John@homesforallme.com	Email:

Project Representative	Other professional representatives for the project (surveyors, engineers, etc.),
Name: Trillium Engineering Group	Name: (See Project Rep)
Address: 251 US Route-1	Address:
City / State Falmouth, ME	City / State
Zip Code 04105	Zip Code
Work #: 207-307-0872	Work #:
Cell #:	Cell #:
Fax #:	Fax #:
Home #:	Home #:
Email: ericd@trilliumeg.com	Email:

PROJECT DATA

The following information is required where applicable, in order complete the application

IMPERVIOUS SURFACE AREA/RATIO

*Pavement within ROW

Existing Total Impervious Area	0 sq. ft.
Proposed Total Paved Area	15,556 sq. ft.
Proposed Total Impervious Area	15,556 sq. ft.
Proposed Impervious Net Change	+ 15,556 sq. ft.
Impervious surface ratio existing	0 % of lot area
Impervious surface ratio proposed	15.6 % of lot area

BUILDING AREA/LOT COVERAGE

*All building footprints are estimates based on probable/typical residential building size. Total building floor area Includes driveway area past ROW.

Existing Building Footprint	0 sq. ft.
Proposed Building Footprint	960 sq. ft.
Proposed Building Footprint Net change	+960 sq. ft.
Existing Total Building Floor Area	0 sq. ft.
Proposed Total Building Floor Area	18,692 sq. ft.
Proposed Building Floor Area Net Change	+18,692 sq. ft
New Building	yes (1 per lot) (yes or no)
Building Area/Lot coverage existing	0 % of lot area
Building Area/Lot coverage proposed	18.8 % of lot area

ZONING

T-4.2B (Traditional Neighborhood Development District)

Existing	
Proposed, if applicable	N/A

LAND USE

Existing	Vacant Lot
Proposed	Moderate Density Neighborhood Conservation (Future Land Use)

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	0
Proposed Number of Residential Units	14 (1 Unit per Lot)
Subdivision, Proposed Number of Lots	14

PARKING SPACES

Existing Number of Parking Spaces	N/A
Proposed Number of Parking Spaces	
Number of Handicapped Parking Spaces	
Proposed Total Parking Spaces	

ESTIMATED COST OF PROJECT: $195,000

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	0 sq. ft.
Proposed Disturbed Area	73,167 sq. ft.
Proposed Impervious Area	34,248 sq. ft.

1. ***If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.***
2. ***If the proposed impervious area is greater than one acre including any impervious area crated since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.***
3. ***If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.***
4. ***If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.***

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) 0 passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) 17 am/pm passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary *See Site Plans for Table

1. Property is located in the _____zoning district.
2. Parcel Area: _____acres / _____ square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	_____ /	_____
Street Frontage	_____ /	_____
Min Front Yard	_____ /	_____
Min Rear Yard	_____ /	_____
Min Side Yard	_____ /	_____
Max. Building Height	_____ /	_____
Use Designation	_____ /	_____
Parking Requirement	1 space/ per_____ square feet of floor area	
Total Parking:	_____ /	_____
Overlay zoning districts (if any):	_____ /	_____ / _____
Urban impaired stream watershed?	YES/NO If yes, watershed name_____	

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

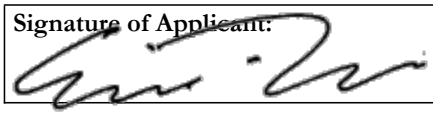
1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative. (NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

To view the City of Auburn Zoning Ordinance, go to:
www.auburnmaine.gov under City Departments / Planning, Permitting & Code / Subdivisions / Land Use /Zoning Ordinance

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	**Date:**
	04/30/2026

City of Auburn, Maine
Economic & Community Development
Eric Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME: Wahan Oaks
PROPOSED DEVELOPMENT ADDRESS: 146 Manley Rd. Auburn, ME
PARCEL #: Tax Map 198 / Lots 37, 38

Required Information		*Check when Submitted*		*Applicable Ordinance*
Site Plan		*Applicant*	*Staff*	
	Owner's Names/Address	X		
	Names of Development	X		
	Professionally Prepared Plan	X		
	Tax Map or Street/Parcel Number	X		
	Zoning of Property	X		
	Distance to Property Lines	X		
	Boundaries of Abutting land	X		
	Show Setbacks, Yards and Buffers	X		
	Airport Area of Influence	X		
	Parking Space Calcs			
	Drive Openings/Locations	X		
	Subdivision Restrictions	X		
	Proposed Use	X		
	PB/BOA/Other Restrictions	TBD		
	Fire Department Review	TBD		
	Open Space/Lot Coverage	X		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Landscape Plan	*TBD will work w/ city regarding landscaping requirments	*Applicant*	*Staff*	
	Greenspace Requirements			
	Setbacks to Parking			
	Buffer Requirements			
	Street Tree Requirements			
	Screened Dumpsters			
	Additional Design Guidelines			
	Planting Schedule			
Stormwater & Erosion Control Plan	*Stormwater Report to be supplemented	*Applicant*	*Staff*	
	Compliance w/ chapter 500	X		
	Show Existing Surface Drainage	TBS		
	Direction of Flow	TBS		
	Location of Catch Basins, etc.	X		
	Drainage Calculations	TBS		
	Erosion Control Measures	X		
	Maine Construction General Permit	X		
	Bonding and Inspection Fees			
	Post-Construction Stormwater Plan	TBS		
	Inspection/monitoring requirements	X		
Lighting Plan	*Residential subdivision, lighting will be low-level residential	*Applicant*	*Staff*	
	Full cut-off fixtures			
	Meets Parking Lot Requirements			
Traffic Information		*Applicant*	*Staff*	
	Access Management			
	Signage			
	PCE - Trips in Peak Hour	17 am/pm		

Required Information		*Check when Submitted*		*Applicable Ordinance*
	Vehicular Movements	X		
	Safety Concerns	X		
	Pedestrian Circulation	X		
	Police Traffic			
	Engineering Traffic			
Utility Plan	*TBD will work w/ city public works regarding ability to serve for water/sewer	***Applicant***	***Staff***	
	Water	X		
	Adequacy of Water Supply	X		
	Water main extension agreement			
	Sewer	X		
	Available city capacity	X		
	Electric	X		
	Natural Gas			
	Cable/Phone	X		
Natural Resources		***Applicant***	***Staff***	
	Shoreland Zone			
	Flood Plain			
	Wetlands or Streams	X		
	Urban Impaired Stream			
	Phosphorus Check			
	Aquifer/Groundwater Protection			
	Applicable State Permits	X		
	Lake Auburn Watershed			
	Taylor Pond Watershed			
Right, Title or Interest		***Applicant***	***Staff***	
	Verify	X		
	Document Existing Easements, Covenants, etc.	X		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Technical & Financial Capacity		***Applicant***	***Staff***	
	Cost Est./Financial Capacity	X		
	Performance Guarantee	X		
State Subdivision Law		***Applicant***	***Staff***	
	Verify/Check	X		
	Covenants/Deed Restrictions	TBD		
	Offers of Conveyance to City	TBD		
	Association Documents	TBD		
	Location of Proposed Streets & Sidewalks	X		
	Proposed Lot Lines, etc.	X		
	Data to Determine Lots, etc.	X		
	Subdivision Lots/Blocks	X		
	Specified Dedication of Land	TBD (OPEN SPACE)		
Additional Subdivision Standards		***Applicant***	***Staff***	
	Mobile Home Parks			
	PUD			
A JPEG or PDF of the proposed site plan		***Applicant***	***Staff***	
		X		
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving				

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251 US Route-1, Suite O-2
Falmouth, ME 04105

E. Deed

Bk 11536 Ps197 #3241
03-06-2024 @ 01:36p

NOT AN OFFICIAL COPY

Deed in Lieu of Foreclosure - Land Only

RegKel LLC and WOB LLC, each being a Maine limited liability company in good standing, and each with a mailing address of 1543 Hotel Road in Auburn, Androscoggin County, Maine 04210 (collectively hereafter the "Grantors"), hereby grant to **Ralph J. Sawyer** of Leesburg, Lake County Florida and with a mailing address of P.O. Box 3486, Auburn, Maine 04212-3486, and **Stanley J. Sawyer**, with an address of 54 Abenaki Way, Turner, Maine 04282 (collectively hereafter the "Grantees"), in full satisfaction of all amounts owed by the above named Grantors to the above named Grantees under the terms of two (2) separate promissory notes, one to each of the above named Grantees each in the original principal amount of Sixty-Five Thousand and 00/100 Dollars ($65,000.00), and in lieu of foreclosure of a certain mortgage deed, which secured said two (2) separate promissory notes, executed by the above named Grantors in favor of the above named Grantees dated June 23, 2021 and recorded in the Androscoggin County Registry of Deeds in Book 10790, Page 27, all of their right, title and interest in and to two (2) certain lots or parcels of land, with any buildings and improvements thereon, situated in Auburn, Androscoggin County, Maine, bounded and described as follows, to wit:

MAINE REAL ESTATE TRANSFER TAX PAID

Parcel 1: Beginning at an iron pin on the southerly side of Manley Road, which pin is two hundred seventy-two (272) feet, more or less, southwesterly from the northeasterly corner of land conveyed by Ernest Boisclair et al to C. Walter Guilmette Realty Development Corp. by deed dated September 9, 1965 recorded in the Androscoggin County Registry of Deeds in Book 946, Page 420; thence running south forty-one degrees (41°) east, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin and corner in Guilmette's line; thence running south forty-nine degrees (49°) west two hundred twenty-five (225) feet, more or less, on Guilmette's line to an iron pin and corner in Guilmette's line; thence running north forty-one degrees (41°) west, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin in the line of said road; thence running northeasterly on the line of said road two hundred twenty-five (225) feet, more or less, to the point of beginning.

Parcel 2: Beginning on the southeasterly side of the Manley Road at the southwesterly corner of land now or formerly of Rose Boisclair; thence in a southeasterly direction by line of land of said Boisclair a distance of two hundred (200) feet, more or less, to its southeasterly or southerly corner; thence by a straight line in a southerly direction a distance of two hundred sixty (260) feet, more or less, to the easterly corner of land now or formerly of Marie Hurd; thence in a northwesterly direction by line of land of said Hurd a distance of two hundred eighty-five (285) feet, more or less, to the Manley Road; thence in a northeasterly direction a distance of two hundred seven (207) feet, more or less, to the point of beginning.

NOT AN OFFICIAL COPY

Parcel 1 hereinabove described was conveyed by Ralph J. Sawyer and Stanley J. Sawyer to RegKel LLC by quitclaim deed with covenant dated June 23, 2021 and recorded in said Registry in Book 10790, Page 23. Parcel 2 hereinabove described was conveyed by Ralph J. Sawyer and Stanley J. Sawyer to WCB LLC by quitclaim deed with covenant dated June 23, 2021 and recorded in said Registry in Book 10790, Page 25.

In Witness Whereof, the above named Grantors have hereunto set their respective hands and seals on this 3rd day of October, 2023.

K. A. Vieira
Witness

RegKel LLC

Kelsey John
By: Kelsey John
Its: Member, Duly Authorized

AS TO BOTH
Witness

WCB LLC

Kyle B
By: Kyle Bouffard
Its: Member, Duly Authorized

State of Maine
Androscoggin, SS.

October 3, 2023

Then personally appeared the above-named **Kelsey John**, duly authorized Member of **RegKel LLC**, and acknowledged the foregoing instrument to be her free act and deed in said capacity and the free act and deed of **RegKel LLC**.

Before me,

K. Alexander Vieira
~~Notary Public~~/Attorney-At-Law
Print Name: K. ALEXANDER VIEIRA
Commission Expires: N/A

NOT AN OFFICIAL COPY

State of Maine
Androscoggin, SS.

October 3, 2023

Then personally appeared the above-named **Kyle Bouffard**, duly authorized Member of **WCB LLC** and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of **WCB LLC**.

Before me,

K. Alexander Visbaras

~~Notary Public~~/Attorney-At-Law
Print Name: K. Alexander Visbaras
Commission Expires: N/A

K:\Oneica\Clients\B&M Builders\Sawyer Purchase - Manley Road Two Parcels\Deed to Ralph Sawyer and Stanley Sawyer from RegKel and WCB in lieu of foreclosure

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

F. LLC Docs

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Fri Oct 10 2025 10:26:10. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
HOMES FOR ALL LLC	20251432DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
10/12/2023	N/A	MAINE

Other Names	(A=Assumed ; F=Former)
NONE	

Principal Home Office Address

Physical	Mailing
34 HARVEST HILL LANE AUBURN, ME 04210	34 HARVEST HILL LANE AUBURN, ME 04210

Clerk/Registered Agent

Physical	Mailing
MAURICE A. SELINGER, III ONE CANAL PLAZA, SUITE 1000 PORTLAND, ME 04101	MAURICE A. SELINGER, III P.O. BOX 7320 PORTLAND, ME 04112-7320

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

G. Agent Authorization

189 Main Street, Suite 200
Yarmouth, ME 04096

November 26, 2025

To Whom It May Concern:

We hereby authorize

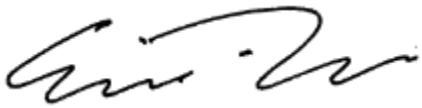
Trillium Engineering Group
189 Main Street
Yarmouth, ME 04096

As our agent to act on our behalf in all matters relating to all processes required in the proposed Wahan Oaks project located at 146 Manley Rd in Auburn, ME.

This certification commences on the date of signing and is valid for two years from November 26, 2025, to November 26, 2027.

This certificate will become null and void unless it is agreed between both parties to make an extension.

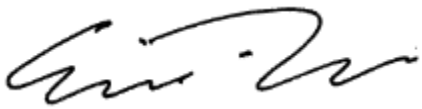
Sincerely,



Eric Dube, P.E.
Trillium Engineering Group



_____
Signature of Owner(s)/Representative(s)
Homes for All, LLC



_____
Signature of Agent
Eric Dube, P.E.

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

H. Abutters List

500' Abutter List - Wahan Oaks

Name, First-Last	Property Address	Mailing Address	Parcel ID
DULAC LUCIEN	83 POLIQUIN AVE	83 POLIQUIN AV AUBURN, ME 04210	198-018
ANDROSCOGGIN VALLEY COUNCIL	125 MANLEY RD	125 MANLEY RD AUBURN, ME 04210	198-041
CLEMENTS JOHN A II	167 MANLEY RD	167 MANLEY ROAD AUBURN, ME 04210	197-086
BLOODGOOD SCOTT M	181 MANLEY RD	181 MANLEY ROAD AUBURN, ME 04210	197-085
AAA FIRE EXTINGUISHER CO INC	328 RODMAN RD	328 RODMAN RD AUBURN, ME 04210	198-035
KENDALL SUSAN B	87 POLIQUIN AVE	PO BOX 1832 AUBURN, ME 04211	197-089
CHAFFEE JUSTIN F	196 MANLEY RD	196 MANLEY RD AUBURN, ME 04210	197-088
SCOTSMAN GROUP INC THE	325 RODMAN RD	901 SOUTH BOND STREET SUITE 600 BALTIMORE, MD 21231	198-043
BELLMAN DALE C	1594 HOTEL RD	1594 HOTEL RD AUBURN, ME 04210	197-058
WARD MEREDITH K	36 SNOW AVE	36 SNOW AV AUBURN, ME 04210	197-053
GONDEK TRACY	14 LUFKIN ST	PO BOX 82 AUBURN, ME 04212	197-063
WHITE RAYMOND L	191 MANLEY RD	191 MANLEY RD AUBURN, ME 04210	197-084
WALKER SAMUEL A	19 LUFKIN ST	19 LUFKIN STREET AUBURN, ME 04210	197-061
GUIMOND ALLAN R	182 MANLEY RD	182 MANLEY ROAD AUBURN, ME 04210	197-087
KALLEN CASSANDRA	35 SNOW AVE	35 SNOW AVENUE AUBURN, ME 04210	197-054
HODSDON FAMILY TRUST	300 RODMAN RD	163 BRADBURY HILL RD MINOT, ME 04258	198-033
EMERALD HOLDINGS, LLC	306 RODMAN RD	PO BOX 1150 AUBURN, ME 04211	198-034
ENGLISH WILLIAM D	199 MANLEY RD	199 MANLEY ROAD AUBURN, ME 04210	197-083
AUBURN CITY OF	RODMAN RD	60 COURT ST AUBURN, ME 04210	198-036
LEONARD PAUL N	22 LUFKIN ST	PO BOX 1482 AUBURN, ME 04211	197-063-001
SAWYER RALPH J	146 MANLEY RD	54 ABENAKI WAY TURNER, ME 04282	198-037
CYR MARC L	121 POLIQUIN AVE	121 POLIQUIN AVENUE AUBURN, ME 04210	197-068
PERSONAL ONSITE DEVELOPMENT	100 MANLEY RD	100 MANLEY RD AUBURN, ME 04210	198-042
SAVAGE EVELYN L	15 LUFKIN ST	15 LUFKIN ROAD AUBURN, ME 04210	197-062
PROVENCHER, DAVID A.	151 MANLEY RD	41 FOREST DRIVE POLAND, ME 04274	198-040
MANLEY ASSOCIATES	362 RODMAN RD	155 CENTER STREET BLDG G BOX 6 AUBURN, ME 04210	197-048
LACHANCE ANTHONY A	155 MANLEY RD	155 MANLEY ROAD AUBURN, ME 04210	198-039
SAWYER RALPH J	MANLEY RD	54 ABENAKI WAY TURNER, ME 04282	198-038
BAKER NORMAN O	25 SNOW AVE	25 SNOW AV AUBURN, ME 04210	197-055
VERIZON NEW ENGLAND INC	362 RODMAN RD	2116 SOUTH 17TH ST MATTOON, IL 61938	197-048-000-001
CORRAO ANTHONY	280 RODMAN RD	280 RODMAN ROAD AUBURN, ME 04210	198-032

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

I. Technical Capability

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 29, 2026

City of Auburn
60 Court St,
Auburn, ME 04210

Re: **City Of Auburn**
Letter of Technical Capability

Dear City of Auburn:

The Applicant has assembled a team of qualified professionals for the design and permitting of the project. Each team member has extensive experience in the design and permitting of projects throughout the state of Maine. The consultant team consists of the following members:

Civil Engineering:

Eric Dube, P.E.
Trillium Engineering Group
251 US Route-1, Suite O-2
Falmouth, Maine 04105
(207) 307-0872
ericd@trilliumeg.com

Kyle Berwick
Trillium Engineering Group
251 US Route-1, Suite O-2
Falmouth, Maine 04105
(207) 307-0872
kyleb@trilliumeg.com

Brad Van Damm
Trillium Engineering Group
251 US Route-1, Suite O-2
Falmouth, Maine 04105
(207) 307-0872
bradv@trilliumeg.com

Jonathan DeWick, P.E.
Trillium Engineering Group
251 US Route-1, Suite O-2
Falmouth, Maine 04105
(207) 307-0872
jond@trilliumeg.com

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

J. Financial Capacity

*Previously submitted by applicant to the City by owner

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

K. Utility Capacity Correspondence

Kyle Berwick

From: Eddie Williams <ewilliams@awsd.org>
Sent: Monday, April 20, 2026 2:16 PM
To: Mike Broadbent; Kyle Berwick; "wreynolds@auburnmaine.gov"
Cc: Eric Dube; Brad Van Damm; Michael Abbott
Subject: RE: 146 Manley Rd - Proposed 14 lot Subdivision - Utility and Drainage Connection Coordination

Good afternoon,

There is a 12" sewer main and a 20" water main on Manely Road with plenty of capacity to serve. In order to proceed, we'll need the following:

- Easements for both the water and sewer main to be taken over by the District.
- Separate water services with service box shown on the utility plans for each building.
- Please show all sewer connections on utility plans.
- Please be sure to connect Lot 14 and 13 into the first manhole.

Please let me know if you have any questions!

Thank you so much,

Eddie Williams
Director of Technical and Employee Services
Auburn Water and Sewerage Districts
268 Court St, Auburn, ME 04210
Tel: (207) 784-6469 ext. 232
ewilliams@awsd.org

From: Mike Broadbent <mbroadbent@awsd.org>
Sent: Monday, April 20, 2026 8:02 AM
To: Kyle Berwick <kyleb@trilliumeg.com>; "wreynolds@auburnmaine.gov" <wreynolds@auburnmaine.gov>; Eddie Williams <ewilliams@awsd.org>
Cc: Eric Dube <ericd@trilliumeg.com>; Brad Van Damm <bradv@trilliumeg.com>; Info <info@awsd.org>
Subject: RE: 146 Manley Rd - Proposed 14 lot Subdivision - Utility and Drainage Connection Coordination

Thanks Kyle,

Our Technical Services Director was on Vacation last week, he'll get back to you today and can help you with questions.

Mike

From: Kyle Berwick <kyleb@trilliumeg.com>
Sent: Thursday, April 16, 2026 7:09 PM
To: "wreynolds@auburnmaine.gov" <wreynolds@auburnmaine.gov>; Mike Broadbent <mbroadbent@awsd.org>
Cc: Eric Dube <ericd@trilliumeg.com>; Brad Van Damm <bradv@trilliumeg.com>; Info <info@awsd.org>
Subject: 146 Manley Rd - Proposed 14 lot Subdivision - Utility and Drainage Connection Coordination

Some people who received this message don't often get email from kyleb@trilliumeg.com. Learn why this is important

Good Afternoon,

I'm reaching out regarding the proposed subdivision project located at 146 Manley Rd. The project proposes the subdivision of the lot into 14 single-family residential lots and the utilization of public utilities (water, sewer, stormwater, etc.). Typically, we go through a capacity request/ability-to-serve application process, however I couldn't seem to find any information on the Auburn water & sewer district website or any application forms. If you folks could please advise on our next steps for capacity approval that would be greatly appreciated. Additionally, any information on existing nearby infrastructure would be very helpful (storm drainage, sewer and water mains, inverts, etc.).

I've attached our preliminary planset for your reference. We are currently going through the planning process with the city,

Thank you for your help,

Kyle Berwick
Project Engineer
Trillium Engineering Group
251 US Route 1, Suite O-2
Falmouth, ME 04105
Mobile: 603.915.6325



This email has been scanned for spam and viruses by Proofpoint Essentials. Click here to report this email as spam.

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

L. DEP Permitting & Agency Review Requests

Start NRPA Wetland Tier-1 Permit Submission

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

MEDEP Wetlands Tier-1 Permit Application

Date Issued: April 30th, 2026



Project Title: Wahan Oaks

Owner: Homes For All, LLC

Site Location: 146 Manley Rd. Auburn, ME

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

Attachments

A. Cover Letter(s)
B. Permit Application Form
C. Payment Confirmation
D. Deed
E. LLC Docs
F. Agent Authorization Letter
G. Site Photos
H. Abutters List
I. Avoidance and Minimization
J. Erosion Control and Construction Narrative
K. Site Plans

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251 US Route-1, Suite O-2
Falmouth, ME 04105

A. Cover Letter(s)

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 29, 2026

DEP Central Maine Regional Office
17 State House Station
Augusta, Maine 04333-0017

RE: Wahan Oaks
DEP NRPA Permit – Project Narrative

Dear DEP Reviewer:

Trillium Engineering Group is providing this project narrative for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, etc. along with an overall proposed wetland disturbance area.

The project proposes an overall wetland disturbance area of approximately 4,393 SF. This disturbance area accounts for a 27' setback from the proposed residential buildings abutting the wetland area for the future development of the lots. All wetland impacts are to be minimized to this proposed setback. See the erosion control and construction narrative along with the avoidance and minimization narrative for more project information/detail. Please see the proposed site plans for layout and disturbance areas along with any and all additional supporting documentation uploaded to the MELS portal and/or found within the submission package.

The construction process will be cognizant of any environmentally sensitive areas and provide all appropriate erosion and sedimentation control methods to minimize disturbances outside the project and wetland setback boundaries.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,

Kyle Berwick
Trillium Engineering Group

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 29, 2026

Maine Historic Preservation Commission
10 Water St.
65 State House Station
Hallowell, Maine 04347

RE: Wahan Oaks
MHPC Review – Project Narrative

Dear MHPC Reviewer:

Trillium Engineering Group is providing this project narrative for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, etc.

The area surrounding the project site does not seem to consist of any historical properties nor archaeological sites nor significant features. There are wetlands present on site and disturbance is being permitted through DEP.

The construction process will be cognizant of any environmentally sensitive areas and provide all appropriate erosion and sedimentation control methods to minimize disturbances outside the project and wetland setback boundaries.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,

Kyle Berwick
Trillium Engineering Group

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

B. Permit Application Form

Department of Environmental Protection
Bureau of Land Resources
17 State House Station
Augusta, Maine 04333
Telephone: 207-287-7688

FOR DEP USE
ATS #_____
L- _____
Total Fees: _____
Date Received: _____

APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT PERMIT

[1] **Name of Applicant:** Homes For All, LLC	[5] **Name of Agent:** Trillium Engineering Group - Eric Dube
[2] **Applicant's Mailing Address:** 34 Harvest Hill Lane Auburn,ME 04210	[6] **Agent's Mailing Address:** 251 US Route-1 Suite O-2 Falmouth, ME 04105
[3] **Applicant's Daytime Phone:** (207) 542-5676	[7] **Agent's Daytime Phone:** (207) 307-0872
[4] **Applicant's Email Address:** john@homesforallme.com	[8] **Agent's Email Address:** ericd@trilliumeg.com

[9] **Location of Activity (nearest Road, Street, Rt.#):** 146 Manley Rd	[10] **Town:** Auburn	[11] **County:** Androscoggin

[12] Type of Resource: (Check all that apply)

- ❒ River, stream or brook
- ❒ Great Pond
- ❒ Coastal Wetland
- ☑ Freshwater Wetland
- ❒ Wetland Special Significance
- ❒ Significant Wildlife Habitat
- ❒ Fragile Mountain

[13] Name of Resource: Freshwater wetland

[14] Amount of Impact (sq. ft.):

Fill: 4,393

Dredging/Veg Removal/Other:

[15] Type of Wetland: (Check all that apply)

- ☑ Forested
- ❒ Scrub Shrub
- ❒ Emergent
- ☑ Wet Meadow
- ❒ Peatland
- ❒ Open Water
- ❒ Other_____

FOR FRESHWATER WETLANDS

Tier 1	*Tier 2*	*Tier 3*
☑ 0 – 4,999 sq. ft. ❒ 5,000 – 9,999 sq. ft. ❒ 10,000 – 14,999 sq. ft.	❒ 15,000 – 43,560 sq. ft.	❑ > 43,560 sq. ft. or ❑ Smaller than 43,560 sq. ft., not eligible for Tier 1

[16] Proposed Start Date and Brief Activity Description:
End of Summer/Fall 2026, the project proposes a 14-lot single family residential subdivision

[17] Size of Lot or Parcel & UTM Locations: ❒ _____ square feet, or 2.29 acres UTM Northing: 4881254.7 UTM Easting: 399105.24

[18] Title, Right or Interest:
☑ Own ❑ Lease ❑ Purchase Option ❑ Written Agreement

[19] **Deed Reference Numbers:** Book: 11881 Page: 25	[20] **Map and Lot Numbers:** Map: 198 Lot: 37, 38
[21] **DEP Staff Previously Contacted:**	[22] **Part of a larger project:** ❑ Yes ❑ No **After-the-Fact:** ❑ Yes ☑ No

[23] **Resubmission of Application?** ❑ Yes ❑ No	**If yes, previous application #:**	**Previous project manager:**
[24] **Written Notice of Violation?** ❑ Yes ❑ No	**If yes, name of DEP enforcement staff involved:**	[25] **Previous Wetland Alteration:** ❑ Yes ❑ No

[26] Detailed Directions to the Project Site:
The site is currently a vacant undeveloped lot, following Route 202 head onto Rodman Rd, once on Rodman Rd. follow until Manley Rd intersects and the lot will be on the left hand side

[27]

TIER 1	TIER 2/3 AND INDIVIDUAL PERMITS	
☑ Title, right or interest documentation ☑ Topographic Map ☑ Narrative Project Description ☑ Plan or Drawing (8 1/2" x 11") ☑ Photos of Area ☑ Statement of Avoidance & Minimization ☑ Statement/Copy of cover letter to MHPC	❒ Title, right or interest documentation ❒ Topographic Map ❒ Copy of Public Notice/Public Information Meeting Documentation ❒ Wetlands Delineation Report (Attachment 1) that contains the Information listed under Site Conditions ❒ Alternatives Analysis (Attachment 2) including description of how wetland impacts were Avoided/Minimized	❒ Erosion Control/Construction Plan ❒ Functional Assessment (Attachment 3), if required ❒ Compensation Plan (Attachment 4), if required ❒ Appendix A and others, if required ❒ Statement/Copy of cover letter to MHPC ❒ Description of Previously Mined Peatland, if required

FEES, CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2

[28] FEES

FEE: I will pay the Natural Resources Protection Act Permit fee (https://www.maine.gov/dep/feeschedule.pdf) by:

☐ **Credit Card –** Pay online through the **Payment Portal. (Attach payment confirmation when filing this application form.)**

☐ **Check** – Fill in all the information below and mail a copy of this form (without attachments) and a check made payable to "Treasurer, State of Maine," to: Maine DEP, 17 State House Station, Augusta, ME 04333-0017.

Name: **Phone:** **Ext.** **Check #:** **Email Filing Date:**

IMPORTANT
IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE,
ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent),
certifies that he or she has read and understood the following:

DEP SIGNATORY REQUIREMENT

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

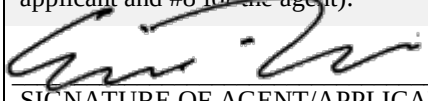
CORPS SIGNATORY REQUIREMENT

USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fines not more than $10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

DEP SIGNATORY REQUIREMENT

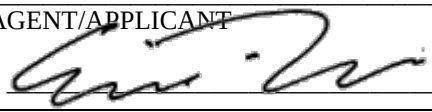
"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #8 for the agent)."



_____ Date: 04/29/2026

SIGNATURE OF AGENT/APPLICANT

Signature of Agent:  Date: 04/29/2026

NOTE: Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

C. Payment Confirmation

*Payment submitted to MELS portal

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

D. Deed

Bk 11881 Pg25 #11073
07-25-2025 @ 01:08p

QUITCLAIM DEED
Statutory Short Form

DLN:

KNOW ALL BY THESE PRESENTS, That **Ralph J. Sawyer**, of Leesburg, Florida, whose mailing address is P.O. Box 3486, Auburn, Maine 04212, **and Stanley J. Sawyer**, whose mailing address is 1715 Enrique Drive, Lady Lake, The Villages, Florida 32159 for consideration paid, grant to **Homes For All LLC**, a Maine Limited Liability Company, whose principal place of business is 34 Harvest Hill Lane, Auburn, Maine 04210, with Quitclaim Covenant, the real property in the City of **Auburn**, County of **Androscoggin** and State of **Maine**, more particularly described as follows:

Two (2) certain lots or parcels of land, with any buildings and improvements thereon, situated in Auburn, Androscoggin County, Maine, bounded and described as follows:

Parcel 1: Beginning at an iron pin on the southerly side of Manley Road, which pin is two hundred seventy-two (272) feet, more or less, southwesterly from the northeasterly corner of land conveyed by Ernest Boisclair et al to C. Walter Guilmette Realty Development Corp., by deed dated September 9, 1965, recorded in the Androscoggin County Registry of Deeds in Book 946, Page 420; thence running South forty-one degrees (41°) East, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin and corner in Guilmette's line; thence running South forty-nine degrees (49°) West two hundred twenty-five (225) feet, more or less, on Guilmette's line to an iron pin and corner in Guilmette's line; thence running North forty-one degrees (41°) West, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin in the line of said road; thence running northeasterly on the line of said road two hundred twenty-five (225) feet, more or less, to the point of beginning.

Parcel 2: Beginning on the southeasterly side of the Manley Road at the southwesterly corner of land now or formerly of Rose Boisclair; thence in a southeasterly direction by line of land of said Boisclair a distance of two hundred (200) feet, more or less, to its southeasterly or southerly corner; thence by a straight line in a southerly direction a distance of two hundred sixty (260) feet, more or less, to the easterly corner of land now or formerly of Marie Hurd; thence in a northwesterly direction by line of land of said Hurd a distance of two hundred eighty-five (285) feet, more or less, to the Manley Road; thence in a northeasterly direction a distance of two hundred seven (207) feet, more or less, to the point of beginning.

Meaning and intending to convey and conveying the premises described in a deed to Ralph J. Sawyer and Stanley J. Sawyer, dated October 3, 2023, and recorded in the Androscoggin County Registry of Deeds in Book 11536, Page 197. *Title not searched by preparer, Scrivener only.

Witness our hands and seals this 24th day of July, 2025.

Witness

to both

Ralph J. Sawyer

Stanley J. Sawyer

STATE OF MAINE

COUNTY OF CUMBERLAND, ss July 24, 2025

Personally appeared on the above date, the above-named Ralph J. Sawyer and Stanley J. Sawyer and acknowledged the foregoing instrument to be their free act and deed.

Before me,

~~Notary~~ Public/Attorney at Law
Print name: James Mundy
Exp: #5154

Maine Real Estate Transfer Tax Paid
TINA M. CHOUINARD, REGISTER
ANDROSCOGGIN COUNTY MAINE E-RECORDED

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

E. LLC Docs

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Fri Oct 10 2025 10:26:10. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
HOMES FOR ALL LLC	20251432DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
10/12/2023	N/A	MAINE

Other Names	(A=Assumed ; F=Former)
NONE	

Principal Home Office Address

Physical	Mailing
34 HARVEST HILL LANE AUBURN, ME 04210	34 HARVEST HILL LANE AUBURN, ME 04210

Clerk/Registered Agent

Physical	Mailing
MAURICE A. SELINGER, III ONE CANAL PLAZA, SUITE 1000 PORTLAND, ME 04101	MAURICE A. SELINGER, III P.O. BOX 7320 PORTLAND, ME 04112-7320

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

F. Agent Authorization Letter

189 Main Street, Suite 200
Yarmouth, ME 04096

November 26, 2025

To Whom It May Concern:

We hereby authorize

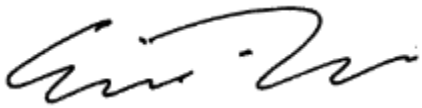
Trillium Engineering Group
189 Main Street
Yarmouth, ME 04096

As our agent to act on our behalf in all matters relating to all processes required in the proposed Wahan Oaks project located at 146 Manley Rd in Auburn, ME.

This certification commences on the date of signing and is valid for two years from November 26, 2025, to November 26, 2027.

This certificate will become null and void unless it is agreed between both parties to make an extension.

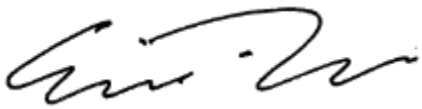
Sincerely,



Eric Dube, P.E.
Trillium Engineering Group



_____
Signature of Owner(s)/Representative(s)
Homes for All, LLC



_____
Signature of Agent
Eric Dube, P.E.

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G. Site Photos

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Photo 1: Aerial view of site showing the surrounding area



Photo 2: View of ground area

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Photo 3: View of ground area

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H. Abutters List

1,000' Abutter List - Wahan Oaks

Parcel ID	Property Address - Owner	Mailing Address	City,State,Zip
197-044	1635 HOTEL RD - TIBBETTS CLYDE JR	1635 HOTEL RD	AUBURN , ME , 04210
197-045	1611 HOTEL RD - MORNEAULT RONALDO R	1611 HOTEL ROAD	AUBURN , ME , 04210
197-046	1591 HOTEL RD - 1591 HOTEL ROAD LLC	2980 HOTEL RD	AUBURN , ME , 04210
197-047	1571 HOTEL RD - TRAN KIEU	1571 HOTEL ROAD	AUBURN , ME , 04210
197-048	362 RODMAN RD - MANLEY ASSOCIATES	155 CENTER STREET BLDG G BOX 6	AUBURN , ME , 04210
197-048-000-001	362 RODMAN RD - VERIZON NEW ENGLAND INC	2116 SOUTH 17TH ST	MATTOON , IL , 61938
197-049	4 SNOW AVE - BERNIER DORIS R	4 SNOW AVENUE	AUBURN , ME , 04210
197-050	10 SNOW AVE - THORNTON ANDREW PAUL	10 SNOW AVE	AUBURN , ME , 04210
197-052	28 SNOW AVE - SCUTT FRANK C	28 SNOW AVENUE	AUBURN , ME , 04210
197-053	36 SNOW AVE - WARD MEREDITH K	36 SNOW AV	AUBURN , ME , 04210
197-054	35 SNOW AVE - KALLEN CASSANDRA	35 SNOW AVENUE	AUBURN , ME , 04210
197-055	25 SNOW AVE BAKER NORMAN O	25 SNOW AV	AUBURN , ME , 04210
197-056	13 SNOW AVE 21 LEIGHTON, LLC	21 LEIGHTON AVE	PORTLAND , ME , 04210
197-057	1588 HOTEL RD GUY HART ENTERPRISES INC	334 MAIN ST	OXFORD , ME , 04270
197-058	1594 HOTEL RD BELLMAN DALE C	1594 HOTEL RD	AUBURN , ME , 04210-3616
197-059	1608 HOTEL RD OUELLETTE PAUL D	1608 HOTEL RD	AUBURN , ME , 04210
197-061	19 LUFKIN ST WALKER SAMUEL A	19 LUFKIN ST	AUBURN , ME , 04210
197-062	15 LUFKIN ST SAVAGE EVELYN L	15 LUFKIN ROAD	AUBURN , ME , 04210
197-063	14 LUFKIN ST GONDEK TRACY	PO BOX 82	AUBURN , ME , 04212
197-063-001	22 LUFKIN ST LEONARD PAUL N	PO BOX 1482	AUBURN , ME , 04211
197-064	1618 HOTEL RD CADMAN DAVID	220 SAWYER RD	GREENE , ME , 04236
197-065	149 POLIQUIN AVE ST. PIERRE NICHOLAS A	149 POLIQUIN AVE	AUBURN , ME , 04210
197-066	141 POLIQUIN AVE ST PIERRE WILLIAM	141 POLIQUIN AV	AUBURN , ME , 04210
197-067	135 POLIQUIN AVE BELANGER ERIC L	135 POLIQUIN AV	AUBURN , ME , 04210
197-068	121 POLIQUIN AVE CYR MARC L	121 POLIQUIN AVENUE	AUBURN , ME , 04210
197-069	124 POLIQUIN AVE BLAIS DOROTHY E	124 POLIQUIN AV	AUBURN , ME , 04210
197-070	128 POLIQUIN AVE BERUBE NORMAND D	128 POLIQUIN AVENUE	AUBURN , ME , 04210
197-071	134 POLIQUIN AVE HALL KYLE	134 POLIQUIN AV	AUBURN , ME , 04210
197-071-001	144 POLIQUIN AVE PENNY TRAVIS	144 POLIQUIN AVENUE	AUBURN , ME , 04210
197-072	1652 HOTEL RD MUKESHIMANA REBECCA	1652 HOTEL ROAD	AUBURN , ME , 04210
197-074	97 MAPLE PT HEFFERNAN BRIAN P	97 MAPLE POINT	AUBURN , ME , 04210
197-081	239 MANLEY RD EVRARD TIMOTHY C	513 BOOTHBY RD	LIVERMORE , ME , 04253
197-082	211 MANLEY RD NEUSCHWANGER JOHN D	211 MANLEY ROAD	AUBURN , ME , 04210
197-083	199 MANLEY RD ENGLISH WILLIAM D	199 MANLEY ROAD	AUBURN , ME , 04210
197-084	191 MANLEY RD WHITE RAYMOND L	191 MANLEY RD	AUBURN , ME , 04210
197-085	181 MANLEY RD BLOODGOOD SCOTT M	181 MANLEY ROAD	AUBURN , ME , 04210
197-086	167 MANLEY RD CLEMENTS JOHN A II	167 MANLEY ROAD	AUBURN , ME , 04210
197-087	182 MANLEY RD GUIMOND ALLAN R	182 MANLEY ROAD	AUBURN , ME , 04210
197-088	196 MANLEY RD CHAFFEE JUSTIN F	196 MANLEY RD	AUBURN , ME , 04210
197-089	87 POLIQUIN AVE KENDALL SUSAN B	PO BOX 1832	AUBURN , ME , 04211
197-090	86 POLIQUIN AVE RANDAZZO KERRY V	86 POLIQUIN AVE	AUBURN , ME , 04210

197-091	96 POLIQUIN AVE PELLETIER MICHAEL N	96 POLIQUIN AVENUE	AUBURN , ME , 04210
197-092	208 MANLEY RD HOLMES MARION A	208 MANLEY ROAD	AUBURN , ME , 04210
197-093	214 MANLEY RD MARTIN MITCHELL	214 MANLEY RD	AUBURN , ME , 04210
197-094	85 HUARD AVE BERUBE ROLAND B	85 HUARD AVENUE	AUBURN , ME , 04210
197-095	77 HUARD AVE MARKEY VICTOR M	PO BOX 643	CANTON , ME , 04221
197-096	69 HUARD AVE MARKEY VICTOR MICHAEL	P.O. BOX 643	CANTON , ME , 04221
197-097	90 HUARD AVE TURGEON ROBERT L	67 MAPLE POINT	AUBURN , ME , 04210
197-099	67 MAPLE PT TURGEON ROBERT L	67 MAPLE PT	AUBURN , ME , 04210
198-006	63 HUARD AVE THOMPSON NEAL E	63 HUARD AVENUE	AUBURN , ME , 04210
198-006-001	53 HUARD AVE THOMPSON WILMA J.	53 HUARD AVE	AUBURN , ME , 04210
198-014	56 POLIQUIN AVE SOUCY DARCY	56 POLIQUIN AV	AUBURN , ME , 04210
198-015	60 POLIQUIN AVE SULLIVAN THOMAS F	62 POLIQUIN AVENUE	AUBURN , ME , 04210
198-016	62 POLIQUIN AVE SULLIVAN THOMAS F	62 POLIQUIN AVENUE	AUBURN , ME , 04210
198-017	74 POLIQUIN AVE SWETT ASHLEY L	2 FRANKLIN STREET	LEWISTON , ME , 04240
198-018	83 POLIQUIN AVE DULAC LUCIEN	83 POLIQUIN AV	AUBURN , ME , 04210
198-019	75 POLIQUIN AVE HELMS NEVIN II	75 POLIQUIN AVE	AUBURN , ME , 04210
198-020	63 POLIQUIN AVE HILL CY C	63 POLIQUIN AVE	AUBURN , ME , 04210
198-021	53 POLIQUIN AVE CURRY PHILIP A	4 BAY ST	SCARBOROUGH , ME , 04074
198-022	41 POLIQUIN AVE GARDNER MICHELLE J	41 POLIQUIN AVE	AUBURN , ME , 04210
198-031	258 RODMAN RD UNITED STATES POSTAL SERVICE	8TH AV AND 33RD ST	NEW YORK , NY , 10012
198-032	280 RODMAN RD CORRAO ANTHONY	280 RODMAN ROAD	AUBURN , ME , 04210
198-033	300 RODMAN RD HODSDON FAMILY TRUST	163 BRADBURY HILL RD	MINOT , ME , 04258
198-034	306 RODMAN RD EMERALD HOLDINGS, LLC	PO BOX 1150	AUBURN , ME , 04211
198-035	328 RODMAN RD THE BURNS PROPERTYZ MAINE DIVISION LLC	15 CRANBERRY LANE	BERKLEY , MA , 02779
198-036	RODMAN RD AUBURN CITY OF	60 COURT ST	AUBURN , ME , 04210
198-037	146 MANLEY RD SAWYER RALPH J	54 ABENAKI WAY	TURNER , ME , 04282
198-038	MANLEY RD SAWYER RALPH J	54 ABENAKI WAY	TURNER , ME , 04282
198-039	155 MANLEY RD LACHANCE ANTHONY A	155 MANLEY ROAD	AUBURN , ME , 04210
198-040	151 MANLEY RD PROVENCHER, DAVID A.	41 FOREST DRIVE	POLAND , ME , 04274
198-041	125 MANLEY RD ANDROSCOGGIN VALLEY COUNCIL	125 MANLEY RD	AUBURN , ME , 04210
198-042	100 MANLEY RD PERSONAL ONSITE DEVELOPMENT	100 MANLEY RD	AUBURN , ME , 04210
198-043	325 RODMAN RD SCOTSMAN GROUP INC THE	901 SOUTH BOND STREET SUITE 600	BALTIMORE , MD , 21231
198-044	295 RODMAN RD BC & L REALTY	356 East Hebron Road	Turner , ME , 04210
198-045	265 RODMAN RD MANAGEMENT CONTROLS LLC	PO BOX 2058	AUBURN , ME , 04210
198-046	245 RODMAN RD R.A. CUMMINGS INC	PO BOX 1747	AUBURN , ME , 04210
207-066	415 RODMAN RD MURPHY JOHN F HOMES INC	800 CENTER ST	AUBURN , ME , 04210
207-068	1569 HOTEL RD HUMPHREY WILLIAM H	1569 HOTEL RD	AUBURN , ME , 04210
208-001	385 RODMAN RD NORTHEASTER GRAPHIC SUPPLY INC	PO BOX 1418	PORTLAND , ME , 04104-1418
208-002	87 MANLEY RD OLDE MILL ASSOCIATES LLC	PO BOX 1830	LEWISTON , ME , 04243-1830
208-003	83 MANLEY RD SAMSON MARIE A	83 MANLEY ROAD	AUBURN , ME , 04210
208-004	81 MANLEY RD BARTLETT STEPHEN B	48 WEATHERLY PL	AUBURN , ME , 04210
208-146	80 MANLEY RD ROGERS DAVID S	80 MANLEY ROAD	AUBURN , ME , 04210

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I. Avoidance and Minimization

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Avoidance and Minimization

It is not possible to avoid all wetland impacts involving this proposed project, however it is our intent to minimize and avoid impacts to the greatest extent possible, especially areas outside of the proposed direct disturbance/permanent impact areas of the wetlands.

In order to minimize the project's impact to previously undisturbed areas and areas outside of the permanent impact areas, the contractor is to use the least invasive methods of disturbing the wetland areas. These methods would include the use of appropriate site-specific equipment, which is to be determined by the contractor, matting if deemed necessary, etc. Additionally, with the use of a double row of silt fencing along the extents of the proposed disturbance area to ensure sedimentation is minimized and disturbance stays within the proposed extents.

It is our intent to advise the contractors to use these best practices while working within and disturbing the wetland area. If followed properly the wetland impact will be minimized and all areas that are to remain undisturbed will be avoided.

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J. Erosion Control and Construction Narrative

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Erosion Control and Construction Narrative

The construction of the proposed project will disturb an overall area of approximately 4,393 SF of wetland area. The construction within the wetland areas will mainly utilize machinery such as an excavator and tree cutting/stump removal equipment, if necessary. All areas outside of the direct permanent wetland impact area is to be avoided with no disturbance and a double layer of silt fencing provided to protect the remaining undisturbed wetland area from sedimentation.

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K. Site Plans

End NRPA Wetland Tier-1 Permit Submission

Start DEP Stormwater PBR Permit Submission

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Falmouth, ME 04105

Stormwater PBR Application

Date Issued: April 29th, 2026



Project Title: Wahan Oaks

Owner: Homes for All LLC

Site Location: 146 Manley Rd. Auburn, ME

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Falmouth, ME 04105

Attachments

A. Cover Letter
B. Application Form
C. Payment Confirmation
D. Deed
E. LLC Docs
F. Agent Authorization
G. Public Notice
H. Location Map
I. Site Photos
J. Misc. Mapping
K. Erosion Control & Construction Narrative
L. Site Plans

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A. Cover Letter

TRILLIUM ENGINEERING GROUP

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April 29, 2026

DEP Central Maine Regional Office
17 State House Station
Augusta, Maine 04333-0017

RE: Wahan Oaks
DEP Stormwater PBR – Project Narrative

Dear DEP Reviewer:

Trillium Engineering Group is providing this project narrative for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, etc. along with an overall proposed disturbance area.

The project proposes an overall disturbance area of approximately 73,167 SF. This disturbance area accounts for approximately 34,248 SF of impervious area (see impervious area table on C101 for breakdown), and 38,919 SF of landscaped/grassed area. The direct watershed of the existing site is Taylor Brook and an unnamed freshwater wetland area. All environmental disturbances are to be minimized and permitting is being filed with the DEP for wetland impacts. See the erosion control and construction narrative for more project information/detail regarding erosion control. Please see the proposed site plans for layout and disturbance area along with any and all additional supporting documentation uploaded to the MELS portal and/or found within the submission package.

The construction process will be cognizant of any environmentally sensitive areas and provide all appropriate erosion and sedimentation control methods to minimize all disturbance outside the defined project disturbance area boundaries.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



Kyle Berwick
Trillium Engineering Group

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Falmouth, ME 04105

B. Application Form

[1] **Name of Applicant:** Homes For All, LLC	[5] **Name of Agent:** Trillium Engineering Group - Eric Dube
[2] **Applicant's Mailing Address:** 34 Harvest Hill Lane Auburn,ME 04210	[6] **Agent's Mailing Address:** 251 US Route-1 Suite O-2 Falmouth, ME 04105
[3] **Applicant's Daytime Phone:** 207-542-5676	[7] **Agent's Daytime Phone:** (207) 307 0872
[4] **Applicant's Email Address:** john@homesforallme.com	[8] **Agent's Email Address:** ericd@trilliumeg.com

[9] **Location of Project: (Road, Street, Rt.)** 146 Manley Rd	[10] **Location Town:** Auburn	[11] **Location County:** Androscoggin

[12] **Is this PBR for renewal of an individual Stormwater permit or Stormwater Permit-by-Rule?** ☐ Yes ☐ No

Is this PBR for transfer of a Stormwater Permit-by-Rule? ☐ Yes ☐ No

If Yes, DEP Permit Number: _____ **Prior Project Manager (if known):** _____

NOTE: If either box is checked Yes, skip to Box 30B below.

[13] **Type of Direct Watershed: (Check all that apply.)**

- ☐ Lake not most at risk
- ☐ Lake most at risk
- ☐ Lake most at risk, severely blooming
- ☑ River, stream or brook
- ☐ Urban impaired stream
- ☑ Freshwater wetland
- ☐ Coastal wetland
- ☐ Wellhead of public water supply

[14] **Amount of Developed Area:**
Total _____ acres **OR** Total 73,167 SF

[15] **Amount of Impervious Area:**
Total _____ acres **OR** Total 34,248 SF

[16] **Amount of Occupied Area (Solar Projects Only):**
Total _____ acres

[16A] **Amount of Disturbed Area:**
Total 73,167 acres

[17] **Part of a Subdivision?** ☐ Yes ☐ No

[18] **Is this Activity Part of a Larger Project?** ☐ Yes ☐ No

[19] **Name of Waterbody(ies) Drained to:** Taylor Brook (per ME online mapping)

[20] **Name of Impaired Waterbody (if applicable)** N/A

[21] **Brief Project Description:** The project proposes a 14 lot subdivision development.

[22] **Size of Lot or Parcel:**
Total 2.29 acres **OR** Total _____ SF

UTM Northing, if known: 4881254.72

UTM Easting, if known: 399105.24

[23] **Deed Reference Numbers:** Book: 11881 Page: 25

[24] **Map and Lot Numbers:** Map: 198 Lot: 37, 38

[25] **DEP Staff Previously Contacted:**

[26] **Project started prior to Application?** ☐ Yes ☐ No

If yes, Completed? ☐ Yes ☐ No

[27] **Resubmission of PBR Application?** ☑ No ☐ Yes➔

If Yes, Prior Application Number:

Prior Project Manager:

[28] **Written Notice of Violation?** ☑ No ☐ Yes➔

If Yes, Name of DEP Enforcement Staff Involved:

[29] **Detailed Directions to the Project Site:**
The site is currently a vacant undeveloped lot, following Route 202 head onto Rodman Rd, once on Rodman Rd. follow until Manley Rd intersects and the lot will be on the left hand side.

SUBMISSIONS

[30A] **For a new Stormwater PBR:**

- ☑ This Form (signed and dated)
- ☑ Fee
- ☑ Dept. of Inland Fisheries & Wildlife Approval (if in Essential Habitat)
- ☑ Photos of Area
- ☑ ESC Plan
- ☑ Location Map
- ☑ Site Plan
- ☐ List of persons to whom notice was provided and a signed copy of the Public Notice Filing and Certification form.

[30B] **For renewal of an individual Stormwater permit or Stormwater PBR and/or transfer of a Stormwater PBR:**

- ☐ This Form (signed and dated)
- ☐ Copy of original Stormwater permit or PBR
- ☐ Fee
- ☐ For a transfer: A copy of the deed, lease, purchase option or other evidence of applicant's title, right or interest in project site, and proof of legal name if the applicant is a corporation or other legal entity.
- ☐ List of persons to whom notice was provided and a signed copy of the Public Notice Filing and Certification form.

FEE: Pay by credit card at the Payment Portal. The SW Permit-by-Rule fee may be found here: https://www.maine.gov/dep/feeschedule.pdf.

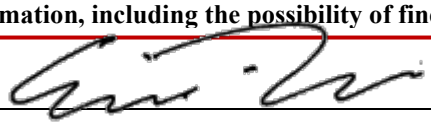
☐ **Attach payment confirmation from the Payment Portal when filing this notification form.**

CERTIFICATION / SIGNATURE for NEW STORMWATER PBR or RENEWAL

Applicant Statement:

I am applying for a Stormwater PBR or permit renewal and have attached the required submissions. I have read the requirements and I affirm that my project satisfies the applicable stormwater management standards. I authorize staff of State and Federal agencies having jurisdiction over this activity to access the project site for the purpose of determining compliance with the rules.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature (may be typed):  Title: Authorized Agent Date: 4/29/26

Print or Type Name: Trillium Engineering Group - Eric Dube

CERTIFICATION / SIGNATURES for TRANSFER of a STORMWATER PBR

Current Permittee Statement: By signing below, the current permittee certifies that they agree to the transfer of the Stormwater PBR identified on this application form to the applicant named on this form.

Signature (may be typed): _____ Title: _____ Date: _____

Print or Type Name: _____

Applicant Statement: By signing below the applicant certifies that they have received, read, and understand and will comply with the Stormwater PBR being transferred.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature (may be typed): _____ Title: _____ Date: _____

Print or Type Name: _____

Note: This project also requires the submission of a Maine Construction General Permit (MCGP) Notice of Intent to Comply (NOI). The Stormwater PBR application may be submitted at the same time as the MCGP NOI, using the MCGP NOI form, with one application fee. Please visit the Department's MCGP webpage for more information: https://www.maine.gov/dep/land/stormwater/construction.html.

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C. Payment Confirmation

*Payment submitted to MELS portal

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D. Deed

Bk 11881 Pg25 #11073
07-25-2025 @ 01:08p

QUITCLAIM DEED
Statutory Short Form

DLN:

KNOW ALL BY THESE PRESENTS, That **Ralph J. Sawyer**, of Leesburg, Florida, whose mailing address is P.O. Box 3486, Auburn, Maine 04212, **and Stanley J. Sawyer**, whose mailing address is 1715 Enrique Drive, Lady Lake, The Villages, Florida 32159 for consideration paid, grant to **Homes For All LLC**, a Maine Limited Liability Company, whose principal place of business is 34 Harvest Hill Lane, Auburn, Maine 04210, with Quitclaim Covenant, the real property in the City of **Auburn**, County of **Androscoggin** and State of **Maine**, more particularly described as follows:

Two (2) certain lots or parcels of land, with any buildings and improvements thereon, situated in Auburn, Androscoggin County, Maine, bounded and described as follows:

Parcel 1: Beginning at an iron pin on the southerly side of Manley Road, which pin is two hundred seventy-two (272) feet, more or less, southwesterly from the northeasterly corner of land conveyed by Ernest Boisclair et al to C. Walter Guilmette Realty Development Corp., by deed dated September 9, 1965, recorded in the Androscoggin County Registry of Deeds in Book 946, Page 420; thence running South forty-one degrees (41°) East, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin and corner in Guilmette's line; thence running South forty-nine degrees (49°) West two hundred twenty-five (225) feet, more or less, on Guilmette's line to an iron pin and corner in Guilmette's line; thence running North forty-one degrees (41°) West, two hundred (200) feet, more or less, on said Guilmette's line to an iron pin in the line of said road; thence running northeasterly on the line of said road two hundred twenty-five (225) feet, more or less, to the point of beginning.

Parcel 2: Beginning on the southeasterly side of the Manley Road at the southwesterly corner of land now or formerly of Rose Boisclair; thence in a southeasterly direction by line of land of said Boisclair a distance of two hundred (200) feet, more or less, to its southeasterly or southerly corner; thence by a straight line in a southerly direction a distance of two hundred sixty (260) feet, more or less, to the easterly corner of land now or formerly of Marie Hurd; thence in a northwesterly direction by line of land of said Hurd a distance of two hundred eighty-five (285) feet, more or less, to the Manley Road; thence in a northeasterly direction a distance of two hundred seven (207) feet, more or less, to the point of beginning.

Meaning and intending to convey and conveying the premises described in a deed to Ralph J. Sawyer and Stanley J. Sawyer, dated October 3, 2023, and recorded in the Androscoggin County Registry of Deeds in Book 11536, Page 197. *Title not searched by preparer, Scrivener only.

Witness our hands and seals this 24th day of July, 2025.

Witness

to both

Ralph J. Sawyer

Stanley J. Sawyer

STATE OF MAINE

COUNTY OF CUMBERLAND, ss July 24, 2025

Personally appeared on the above date, the above-named Ralph J. Sawyer and Stanley J. Sawyer and acknowledged the foregoing instrument to be their free act and deed.

Before me,

~~Notary~~ Public/Attorney at Law
Print name: James Mundy
Exp: #5154

Maine Real Estate Transfer Tax Paid
TINA M. CHOUINARD, REGISTER
ANDROSCOGGIN COUNTY MAINE E-RECORDED

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251 US Route-1, Suite O-2
Falmouth, ME 04105

E. LLC Docs

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Fri Oct 10 2025 10:26:10. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
HOMES FOR ALL LLC	20251432DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
10/12/2023	N/A	MAINE

Other Names	(A=Assumed ; F=Former)
NONE	

Principal Home Office Address

Physical	Mailing
34 HARVEST HILL LANE AUBURN, ME 04210	34 HARVEST HILL LANE AUBURN, ME 04210

Clerk/Registered Agent

Physical	Mailing
MAURICE A. SELINGER, III ONE CANAL PLAZA, SUITE 1000 PORTLAND, ME 04101	MAURICE A. SELINGER, III P.O. BOX 7320 PORTLAND, ME 04112-7320

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251 US Route-1, Suite O-2
Falmouth, ME 04105

F. Agent Authorization

189 Main Street, Suite 200
Yarmouth, ME 04096

November 26, 2025

To Whom It May Concern:

We hereby authorize

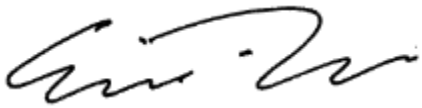
Trillium Engineering Group
189 Main Street
Yarmouth, ME 04096

As our agent to act on our behalf in all matters relating to all processes required in the proposed Wahan Oaks project located at 146 Manley Rd in Auburn, ME.

This certification commences on the date of signing and is valid for two years from November 26, 2025, to November 26, 2027.

This certificate will become null and void unless it is agreed between both parties to make an extension.

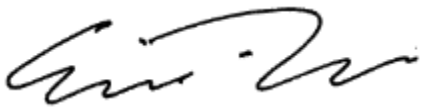
Sincerely,



Eric Dube, P.E.
Trillium Engineering Group



_____
Signature of Owner(s)/Representative(s)
Homes for All, LLC



_____
Signature of Agent
Eric Dube, P.E.

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

G. Public Notice

1,000' Abutter List - Wahan Oaks

Parcel ID	Property Address - Owner	Mailing Address	City,State,Zip
197-044	1635 HOTEL RD - TIBBETTS CLYDE JR	1635 HOTEL RD	AUBURN , ME , 04210
197-045	1611 HOTEL RD - MORNEAULT RONALDO R	1611 HOTEL ROAD	AUBURN , ME , 04210
197-046	1591 HOTEL RD - 1591 HOTEL ROAD LLC	2980 HOTEL RD	AUBURN , ME , 04210
197-047	1571 HOTEL RD - TRAN KIEU	1571 HOTEL ROAD	AUBURN , ME , 04210
197-048	362 RODMAN RD - MANLEY ASSOCIATES	155 CENTER STREET BLDG G BOX 6	AUBURN , ME , 04210
197-048-000-001	362 RODMAN RD - VERIZON NEW ENGLAND INC	2116 SOUTH 17TH ST	MATTOON , IL , 61938
197-049	4 SNOW AVE - BERNIER DORIS R	4 SNOW AVENUE	AUBURN , ME , 04210
197-050	10 SNOW AVE - THORNTON ANDREW PAUL	10 SNOW AVE	AUBURN , ME , 04210
197-052	28 SNOW AVE - SCUTT FRANK C	28 SNOW AVENUE	AUBURN , ME , 04210
197-053	36 SNOW AVE - WARD MEREDITH K	36 SNOW AV	AUBURN , ME , 04210
197-054	35 SNOW AVE - KALLEN CASSANDRA	35 SNOW AVENUE	AUBURN , ME , 04210
197-055	25 SNOW AVE BAKER NORMAN O	25 SNOW AV	AUBURN , ME , 04210
197-056	13 SNOW AVE 21 LEIGHTON, LLC	21 LEIGHTON AVE	PORTLAND , ME , 04210
197-057	1588 HOTEL RD GUY HART ENTERPRISES INC	334 MAIN ST	OXFORD , ME , 04270
197-058	1594 HOTEL RD BELLMAN DALE C	1594 HOTEL RD	AUBURN , ME , 04210-3616
197-059	1608 HOTEL RD OUELLETTE PAUL D	1608 HOTEL RD	AUBURN , ME , 04210
197-061	19 LUFKIN ST WALKER SAMUEL A	19 LUFKIN ST	AUBURN , ME , 04210
197-062	15 LUFKIN ST SAVAGE EVELYN L	15 LUFKIN ROAD	AUBURN , ME , 04210
197-063	14 LUFKIN ST GONDEK TRACY	PO BOX 82	AUBURN , ME , 04212
197-063-001	22 LUFKIN ST LEONARD PAUL N	PO BOX 1482	AUBURN , ME , 04211
197-064	1618 HOTEL RD CADMAN DAVID	220 SAWYER RD	GREENE , ME , 04236
197-065	149 POLIQUIN AVE ST. PIERRE NICHOLAS A	149 POLIQUIN AVE	AUBURN , ME , 04210
197-066	141 POLIQUIN AVE ST PIERRE WILLIAM	141 POLIQUIN AV	AUBURN , ME , 04210
197-067	135 POLIQUIN AVE BELANGER ERIC L	135 POLIQUIN AV	AUBURN , ME , 04210
197-068	121 POLIQUIN AVE CYR MARC L	121 POLIQUIN AVENUE	AUBURN , ME , 04210
197-069	124 POLIQUIN AVE BLAIS DOROTHY E	124 POLIQUIN AV	AUBURN , ME , 04210
197-070	128 POLIQUIN AVE BERUBE NORMAND D	128 POLIQUIN AVENUE	AUBURN , ME , 04210
197-071	134 POLIQUIN AVE HALL KYLE	134 POLIQUIN AV	AUBURN , ME , 04210
197-071-001	144 POLIQUIN AVE PENNY TRAVIS	144 POLIQUIN AVENUE	AUBURN , ME , 04210
197-072	1652 HOTEL RD MUKESHIMANA REBECCA	1652 HOTEL ROAD	AUBURN , ME , 04210
197-074	97 MAPLE PT HEFFERNAN BRIAN P	97 MAPLE POINT	AUBURN , ME , 04210
197-081	239 MANLEY RD EVRARD TIMOTHY C	513 BOOTHBY RD	LIVERMORE , ME , 04253
197-082	211 MANLEY RD NEUSCHWANGER JOHN D	211 MANLEY ROAD	AUBURN , ME , 04210
197-083	199 MANLEY RD ENGLISH WILLIAM D	199 MANLEY ROAD	AUBURN , ME , 04210
197-084	191 MANLEY RD WHITE RAYMOND L	191 MANLEY RD	AUBURN , ME , 04210
197-085	181 MANLEY RD BLOODGOOD SCOTT M	181 MANLEY ROAD	AUBURN , ME , 04210
197-086	167 MANLEY RD CLEMENTS JOHN A II	167 MANLEY ROAD	AUBURN , ME , 04210
197-087	182 MANLEY RD GUIMOND ALLAN R	182 MANLEY ROAD	AUBURN , ME , 04210
197-088	196 MANLEY RD CHAFFEE JUSTIN F	196 MANLEY RD	AUBURN , ME , 04210
197-089	87 POLIQUIN AVE KENDALL SUSAN B	PO BOX 1832	AUBURN , ME , 04211
197-090	86 POLIQUIN AVE RANDAZZO KERRY V	86 POLIQUIN AVE	AUBURN , ME , 04210

197-091	96 POLIQUIN AVE PELLETIER MICHAEL N	96 POLIQUIN AVENUE	AUBURN , ME , 04210
197-092	208 MANLEY RD HOLMES MARION A	208 MANLEY ROAD	AUBURN , ME , 04210
197-093	214 MANLEY RD MARTIN MITCHELL	214 MANLEY RD	AUBURN , ME , 04210
197-094	85 HUARD AVE BERUBE ROLAND B	85 HUARD AVENUE	AUBURN , ME , 04210
197-095	77 HUARD AVE MARKEY VICTOR M	PO BOX 643	CANTON , ME , 04221
197-096	69 HUARD AVE MARKEY VICTOR MICHAEL	P.O. BOX 643	CANTON , ME , 04221
197-097	90 HUARD AVE TURGEON ROBERT L	67 MAPLE POINT	AUBURN , ME , 04210
197-099	67 MAPLE PT TURGEON ROBERT L	67 MAPLE PT	AUBURN , ME , 04210
198-006	63 HUARD AVE THOMPSON NEAL E	63 HUARD AVENUE	AUBURN , ME , 04210
198-006-001	53 HUARD AVE THOMPSON WILMA J.	53 HUARD AVE	AUBURN , ME , 04210
198-014	56 POLIQUIN AVE SOUCY DARCY	56 POLIQUIN AV	AUBURN , ME , 04210
198-015	60 POLIQUIN AVE SULLIVAN THOMAS F	62 POLIQUIN AVENUE	AUBURN , ME , 04210
198-016	62 POLIQUIN AVE SULLIVAN THOMAS F	62 POLIQUIN AVENUE	AUBURN , ME , 04210
198-017	74 POLIQUIN AVE SWETT ASHLEY L	2 FRANKLIN STREET	LEWISTON , ME , 04240
198-018	83 POLIQUIN AVE DULAC LUCIEN	83 POLIQUIN AV	AUBURN , ME , 04210
198-019	75 POLIQUIN AVE HELMS NEVIN II	75 POLIQUIN AVE	AUBURN , ME , 04210
198-020	63 POLIQUIN AVE HILL CY C	63 POLIQUIN AVE	AUBURN , ME , 04210
198-021	53 POLIQUIN AVE CURRY PHILIP A	4 BAY ST	SCARBOROUGH , ME , 04074
198-022	41 POLIQUIN AVE GARDNER MICHELLE J	41 POLIQUIN AVE	AUBURN , ME , 04210
198-031	258 RODMAN RD UNITED STATES POSTAL SERVICE	8TH AV AND 33RD ST	NEW YORK , NY , 10012
198-032	280 RODMAN RD CORRAO ANTHONY	280 RODMAN ROAD	AUBURN , ME , 04210
198-033	300 RODMAN RD HODSDON FAMILY TRUST	163 BRADBURY HILL RD	MINOT , ME , 04258
198-034	306 RODMAN RD EMERALD HOLDINGS, LLC	PO BOX 1150	AUBURN , ME , 04211
198-035	328 RODMAN RD THE BURNS PROPERTYZ MAINE DIVISION LLC	15 CRANBERRY LANE	BERKLEY , MA , 02779
198-036	RODMAN RD AUBURN CITY OF	60 COURT ST	AUBURN , ME , 04210
198-037	146 MANLEY RD SAWYER RALPH J	54 ABENAKI WAY	TURNER , ME , 04282
198-038	MANLEY RD SAWYER RALPH J	54 ABENAKI WAY	TURNER , ME , 04282
198-039	155 MANLEY RD LACHANCE ANTHONY A	155 MANLEY ROAD	AUBURN , ME , 04210
198-040	151 MANLEY RD PROVENCHER, DAVID A.	41 FOREST DRIVE	POLAND , ME , 04274
198-041	125 MANLEY RD ANDROSCOGGIN VALLEY COUNCIL	125 MANLEY RD	AUBURN , ME , 04210
198-042	100 MANLEY RD PERSONAL ONSITE DEVELOPMENT	100 MANLEY RD	AUBURN , ME , 04210
198-043	325 RODMAN RD SCOTSMAN GROUP INC THE	901 SOUTH BOND STREET SUITE 600	BALTIMORE , MD , 21231
198-044	295 RODMAN RD BC & L REALTY	356 East Hebron Road	Turner , ME , 04210
198-045	265 RODMAN RD MANAGEMENT CONTROLS LLC	PO BOX 2058	AUBURN , ME , 04210
198-046	245 RODMAN RD R.A. CUMMINGS INC	PO BOX 1747	AUBURN , ME , 04210
207-066	415 RODMAN RD MURPHY JOHN F HOMES INC	800 CENTER ST	AUBURN , ME , 04210
207-068	1569 HOTEL RD HUMPHREY WILLIAM H	1569 HOTEL RD	AUBURN , ME , 04210
208-001	385 RODMAN RD NORTHEASTER GRAPHIC SUPPLY INC	PO BOX 1418	PORTLAND , ME , 04104-1418
208-002	87 MANLEY RD OLDE MILL ASSOCIATES LLC	PO BOX 1830	LEWISTON , ME , 04243-1830
208-003	83 MANLEY RD SAMSON MARIE A	83 MANLEY ROAD	AUBURN , ME , 04210
208-004	81 MANLEY RD BARTLETT STEPHEN B	48 WEATHERLY PL	AUBURN , ME , 04210
208-146	80 MANLEY RD ROGERS DAVID S	80 MANLEY ROAD	AUBURN , ME , 04210

PUBLIC NOTICE:
NOTICE OF INTENT TO FILE

Please take notice that:

Trillium Engineering Group - on behalf of Homes for All LLC
(Name and Mailing Address of Applicant)

(207) 307-0872 , info@trilliumeg.com
(Phone Number and Email Address of Applicant)

is intending to file a Stormwater Management Law Permit by Rule (Stormwater PBR) application with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S. § 420-D and 38 M.R.S. § 344(7) on or about:

May 2026
(Anticipated Filing Date)

The application is for:

The overall disturbance area of a proposed 14-lot subdivision.
(Description of the Project)

at the following location:

146 Manley Rd. Auburn, ME 04210
(Project Location)

The application will be filed for public inspection on the DEP's website at: https://www.maine.gov/dep/mels/hub.html.

A copy of the application may also be seen at the municipal office in Auburn, Maine.
(City/Town)

The DEP review period for a Stormwater PBR application is 14 calendar days. A decision made by the Commissioner to approve a PBR is appealable to the Board of Environmental Protection. An aggrieved person must file the appeal within 30 days of the date of a final license decision of the Commissioner. An appeal must be filed in accordance with Section 23 of the Department's Chapter 2 rules, *Processing of Applications and Other Administrative Matters*. For more information, please visit: https://www.maine.gov/dep/publications/is-appeal.html.

PUBLIC NOTICE INSTRUCTIONS AND CERTIFICATION
Stormwater Permit by Rule

The Department's Chapter 2 rules, *Processing of Applications and Other Administrative Matters*, require an applicant for a Stormwater Management Law Permit by Rule (Stormwater PBR) to provide public notice within 30 days prior to submitting the Stormwater PBR to the Department (see Chapter 2, §13). In the notice, the applicant must provide the information included in the Department's Notice of Intent to File form.

Notice must be mailed to abutters and all persons owning land within 1,000 feet of the proposed project. ("Abutter" for the purposes of public notice means any person who owns property that is contiguous with the property on which the project requiring a license from the Department is proposed.) The applicant also must provide a copy of the Notice of Intent to File and a duplicate of the PBR application to the municipal office.

1. **Abutters and Others Owning Land Within 1,000 Feet:** You must mail a copy of the Notice of Intent to File to abutters and all persons owning land within 1,000 feet of the proposed project. Their names and addresses can be obtained from the town tax maps or local officials. They must receive notice within 30 days prior to the filing of the application with the Department.

2. **Municipal Office:** You must mail a copy of the Notice of Intent to File and a duplicate of the entire application to the municipal office. The municipal office must receive notice within 30 days prior to the filing of the application with the Department.

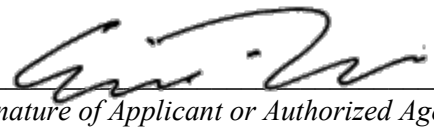
ATTACH a copy of the list of persons to whom notice was provided.

CERTIFICATION

By signing below, the applicant or authorized agent certifies that:

1. A mailing of the Notice of Intent to File was sent to all abutters and all other persons owning land within 1,000 feet of the proposed project within 30 days prior to filing of the application; and

2. A mailing of the Notice of Intent to File and a duplicate copy of the application was sent to the town office of the municipality in which the project is located.



Signature of Applicant or Authorized Agent

04/29/26

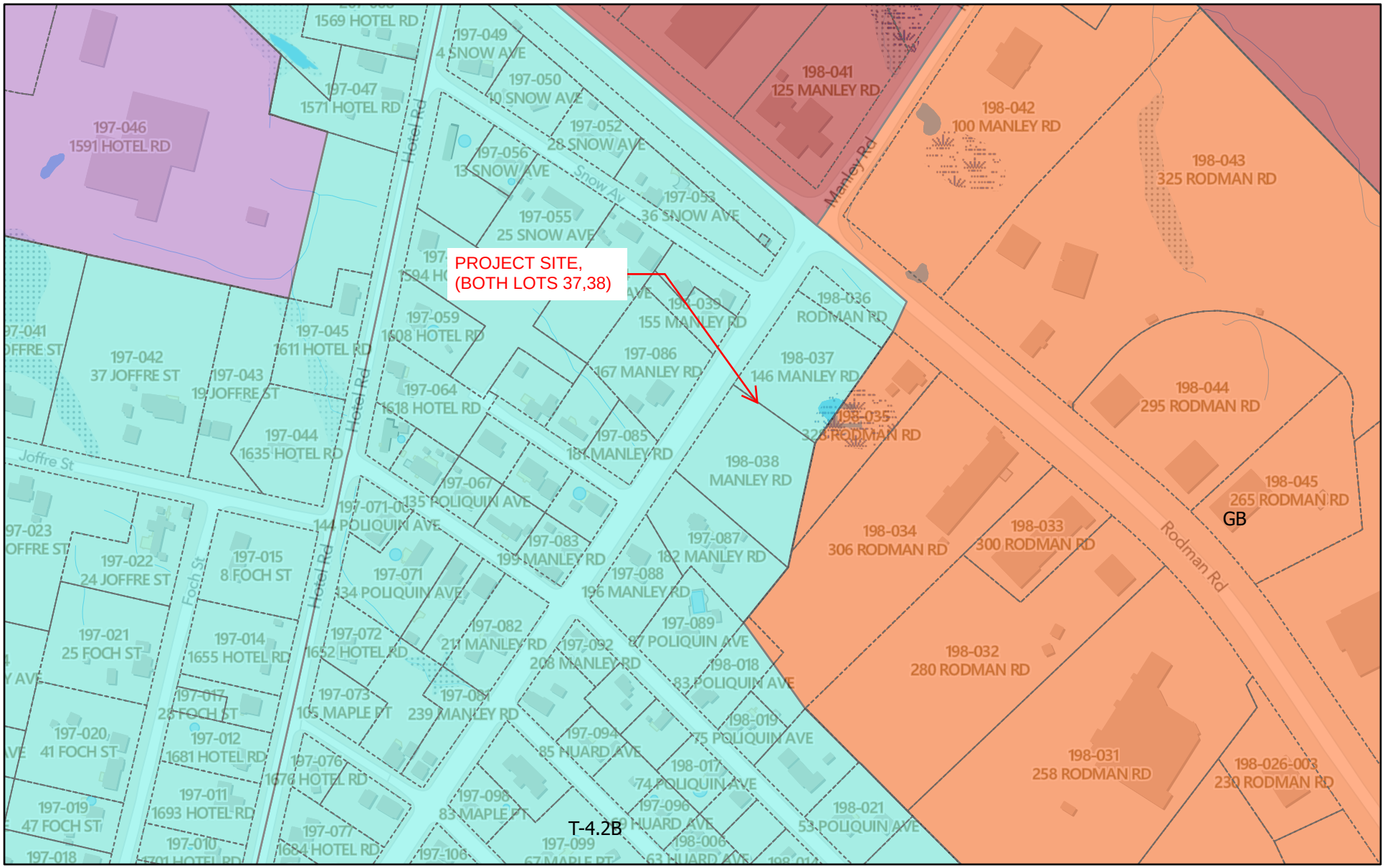
Date

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ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

H. Location Map

Auburn ArcGIS Map - Wahan Oaks



10/9/2025, 9:42:43 PM

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

Mailing Labels - All Fields
Mailing Labels
Current Parcels _ Public
Auburn Zoning
GB - General Business
GB II - General Business II
ID - Industrial
T-4.2B - Traditional Neighborhood Development District
Wetlands

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Web AppBuilder for ArcGIS

Credit should always be given to the data source and/or originator when the data is transferred or printed. | COA | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

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Falmouth, ME 04105

I. Site Photos

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Photo 1: Aerial view of site showing the surrounding area



Photo 2: View of ground area

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Falmouth, ME 04105



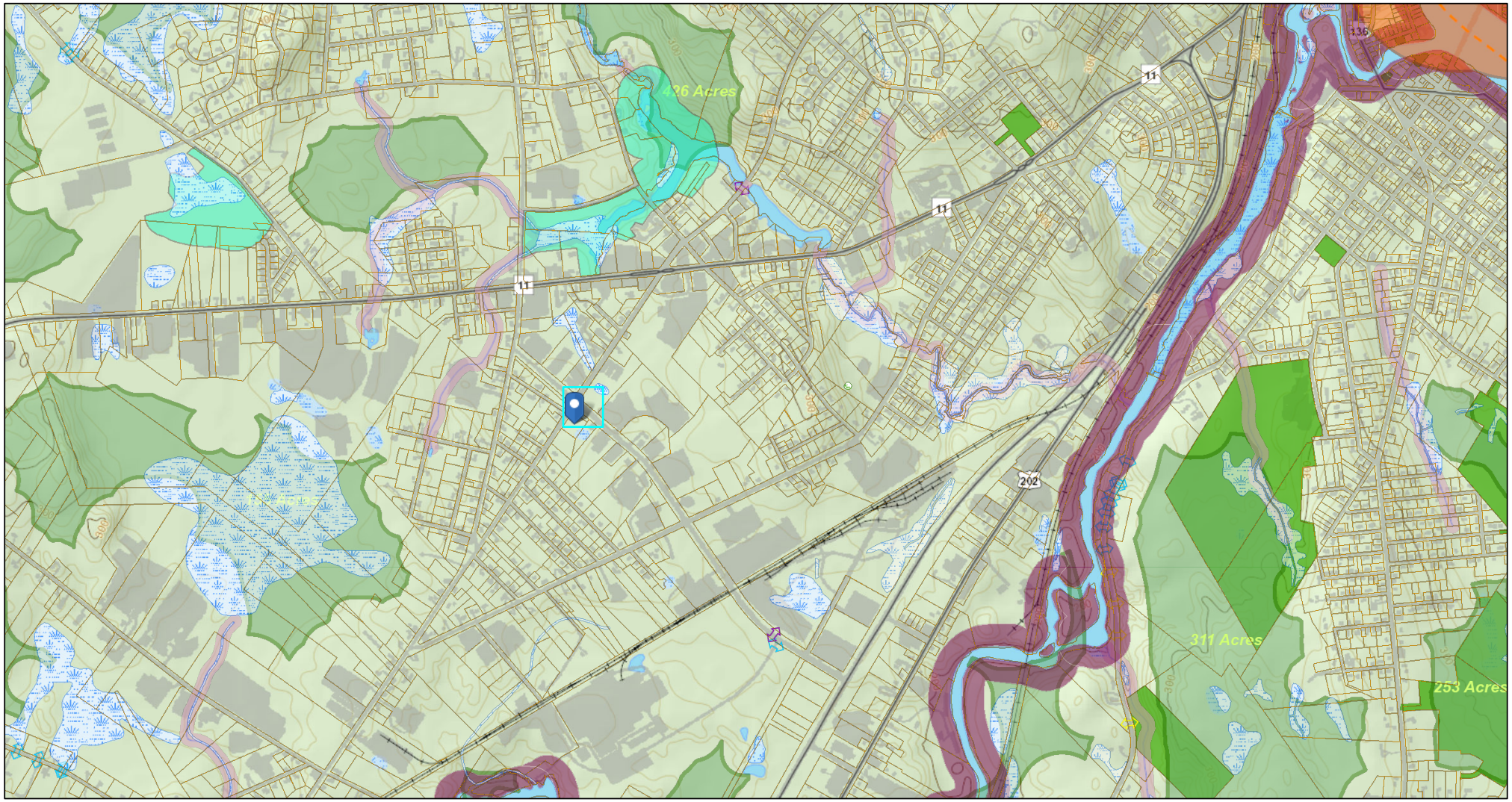
Photo 3: View of ground area

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251 US Route-1, Suite O-2
Falmouth, ME 04105

J. Misc. Mapping

Beginning With Habitat - 146 Manley Rd



April 28, 2026

1:18,056

- Parcels- Unorganized Townships
- Parcels- Organized Towns\Cities
- Aquifers
- National Wetlands Inventory Wetlands
- Shellfish Beds
- Stream Buffer (75 feet)
- Great Ponds, Rivers and Coastal Buffer (250 feet)
- Atlantic Salmon Habitat
- Shorebird Habitat
- Seabird Nesting Island
- Tidal Waterfowl / Wading Bird Habitat
- Inland Waterfowl / Wading Bird Habitat
- Significant Vernal Pools
- Deer Wintering Areas
- Essential Wildlife Habitats
- Endangered, Threatened, and Special Concern Species
- Natural Communities
- Rare Plants and Natural Communities
- Focus Areas- Overlapping Organized Towns
- Conserved Lands
- Highway Bridge Connectors

Riparian Connectors
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day

Undeveloped Block Connectors
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day
- Undeveloped Habitat Blocks

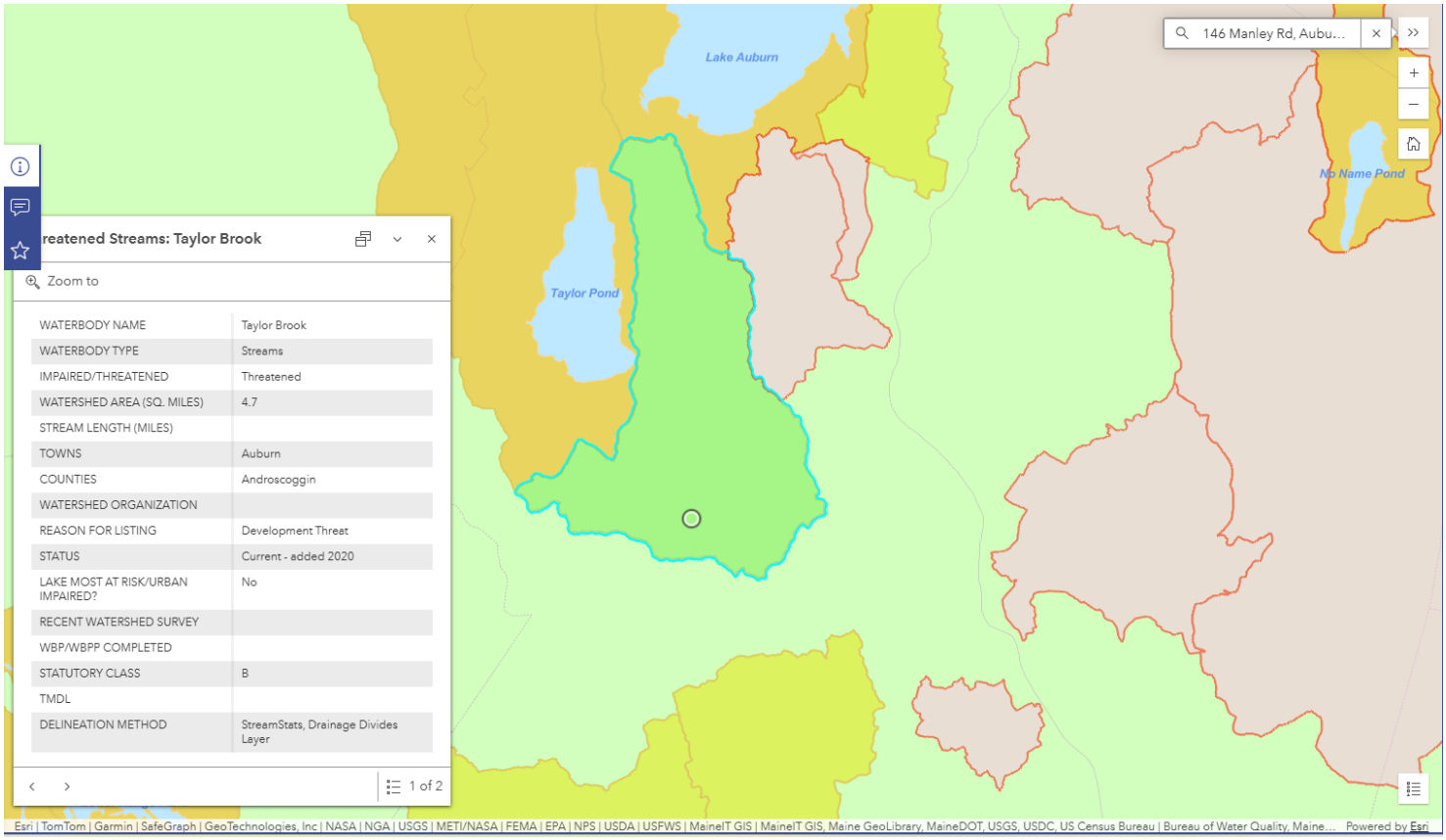
0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

Beginning with Habitat Program for Planning Purposes Only
Map Created With BWH Map Viewer

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105



*Above map produced from ME online mapping tool "Maine NPS Priority Watersheds". The project site location (146 Manley Rd.) is represented by the circle.

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Falmouth, ME 04105

K. Erosion Control & Construction Narrative

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ENGINEERING GROUP

251 US Route 1, Suite O-2
Falmouth, ME 04105

Erosion Control and Construction Narrative

The construction of the proposed project is estimated to have an overall disturbance area of approximately 73,167 SF. 34,248 SF of that disturbance is estimated to be impervious area and is a combination of preliminary building footprints and paved areas. The construction process will be cognizant of all environmentally sensitive areas on site, allowing for no disturbance outside the permitted wetland disturbance areas. All construction materials on site are to be adequately and properly stabilized and upon completion of work all areas are to be stabilized. The use of silt fencing, including double rows of silt fencing around the extents of the wetland boundaries, will be required throughout the construction process. See detail sheet C300 for details/information regarding erosion and sedimentation control methods, etc.

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Falmouth, ME 04105

L. Site Plans

End DEP Stormwater PBR Permit Submission

Start DEP MCGP NOI Submission

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

MDEP MCGP NOI Application

Date Issued: April 30, 2026



Project Title: Wahan Oaks

Owner: Homes For All, LLC

Site Location: 146 Manley Rd. Auburn, ME

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

Attachments

A. Application Form
B. Narrative
C. Agent Authorization
D. LLC Docs
E. IF&W Map
F. USGS
G. Site Photos
H. SWPPP
I. Site Plans

TRILLIUM
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251 US Route-1, Suite O-2
Falmouth, ME 04105

A. Application Form

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO COMPLY
MAINE CONSTRUCTION GENERAL PERMIT

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	Homes For All, LLC	Name:	Trillium Engineering Group
Mailing Address:	34 Harvest Hill Lane	Mailing Address:	251 US Route-1, Suite O-2
Mailing Address:		Mailing Address:	
Town/State/Zip:	Auburn, ME 04210	Town/State/Zip:	Falmouth, ME 04105
Daytime Phone #:	(207) 542-5676 Ext:	Daytime Phone #:	(207) 307-0872 Ext:
Email Address:	john@homesforallme.com	Email Address:	ericd@trilliumeg.com

PROJECT INFORMATION

Project Town:	Auburn	UTM Northing & Easting (if known):	4881254.72 N , 399105	Tax Map and Lot Number:	Map 198 , Lot 37,38		
Size of disturbed area proposed:	73,167 SF	Part of a larger project?	☐ Yes ☑ No	Creating a common plan of development or sale?	☑ Yes ☐ No	After the Fact?	☐ Yes ☑ No
Name of waterbody(ies) to which disturbed area would drain (or municipality if area drains to MS4):	Taylor Brook watershed / Freshwater Wetland / Municipal drainage system	Does the site drain to an Impaired Waterbody? If so, provide name:	N/A				
Brief Project Description:	The project proposes a 14-lot single-family residence subdivision with paved roadway.						
Project Location & Brief Directions to Site:	The site is currently a vacant undeveloped lot, following Route 202 head onto Rodman Rd, once on Rodman Rd. follow until Manley Rd intersects and the lot will be on the left hand side.						

NOTICE OF INTENT (NOI) FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS AND FEE

I am filing notice of my intent to carry out work that meets the requirements of the Construction General Permit (effective July 21, 2006). I have a copy of the Construction General Permit and have read and will comply with all of the standards. I have attached all the required submittals.

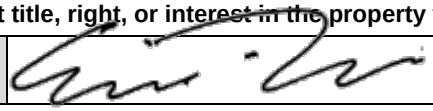
- ☑ ***Attach*** a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- ☑ ***Attach*** a drawing or site plan of the proposed activity.
- ☑ ***Attach*** an erosion and sedimentation control (ESC) plan.
- ☑ ***Attach*** photos of the project site that show existing character and topography of the area proposed for development.
- ☑ ***Attach*** if this form is not being signed by the property owner or lessee, documentation showing authorization to sign.
- ☐ ***Attach*** if any construction activity will occur in essential habitat, written approval from the Dept. of Inland Fisheries & Wildlife.
- ☑ ***Attach*** if the applicant is a corporation, LLC, or other legal entity, proof of legal name. Provide a copy of Secretary of State's *registration information* (available at http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x). Individuals and municipalities are not required to provide any proof of identity.

FEE: Pay by credit card at the **Payment Portal**. The MCGP fee may be found here https://www.maine.gov/dep/feeschedule.pdf.
☑ ***Attach*** payment confirmation from the Payment Portal when filing this notification form.

Signature & Certification:

- I authorize staff of the Departments of Environmental Protection to access the project site for the purpose of determining compliance with the Construction General Permit**.**
- I understand coverage under the Construction General Permit becomes effective 14 calendar days after receipt by the Department of this completed form, the required submissions, and fee, *unless the Department approves or denies the NOI prior to that date.*

By signing this Notice of Intent, I represent that the project meets all the requirements for coverage under the Construction General Permit and that the project will be completed in compliance with the Construction General Permit. I also represent that the applicant has sufficient title, right, or interest in the property where the construction activity will place.

Signature of Applicant or Agent (may be typed):		**Date:**	04/29/2026

***Keep a copy as a record of permit*.** Email this completed form with attachments to DEP at: DEP.PBRNotification@maine.gov. This email account is used to receive PBRs and NOIs. No further authorization will be issued by DEP after receipt of this notice.
Work carried out in violation of the Construction General Permit is subject to enforcement.

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251 US Route-1, Suite O-2
Falmouth, ME 04105

B. Narrative

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-1
Falmouth, ME 04105

April 30, 2026

Maine Department of Environmental Protection
Central Maine Regional Office
17 State House Station
Augusta, ME 04333

Re: **Wahan Oaks**
MCGP NOI Application – Project Narrative

To Whom It May Concern:

On behalf of Trillium Engineering Group, I am pleased to submit the following MCGP NOI package for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, etc. along with an overall proposed wetland disturbance area and overall project disturbance area. The project proposes stormwater management BMPs to manage the increase of impervious surfaces on site. The BMPs include the use of a drainage system utilizing catch basins and grading/curbing to manage runoff. The on-site drainage is proposed to tie into the municipal drainage system on Manley Rd.

The overall disturbance area is approximately 73,167 SF (1.68 acres). All erosion and sedimentation controls are to be followed during the entire construction process, see Site Plan C300 for E&S details along with the SWPPP section of this section.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



Kyle Berwick
Trillium Engineering Group

TRILLIUM ENGINEERING GROUP

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

C. Agent Authorization

189 Main Street, Suite 200
Yarmouth, ME 04096

November 26, 2025

To Whom It May Concern:

We hereby authorize

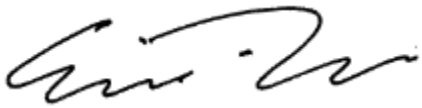
Trillium Engineering Group
189 Main Street
Yarmouth, ME 04096

As our agent to act on our behalf in all matters relating to all processes required in the proposed Wahan Oaks project located at 146 Manley Rd in Auburn, ME.

This certification commences on the date of signing and is valid for two years from November 26, 2025, to November 26, 2027.

This certificate will become null and void unless it is agreed between both parties to make an extension.

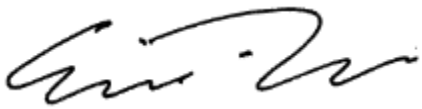
Sincerely,



Eric Dube, P.E.
Trillium Engineering Group



_____
Signature of Owner(s)/Representative(s)
Homes for All, LLC



_____
Signature of Agent
Eric Dube, P.E.

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

D. LLC Docs

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Fri Oct 10 2025 10:26:10. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
HOMES FOR ALL LLC	20251432DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
10/12/2023	N/A	MAINE

Other Names	(A=Assumed ; F=Former)
NONE	

Principal Home Office Address

Physical	Mailing
34 HARVEST HILL LANE AUBURN, ME 04210	34 HARVEST HILL LANE AUBURN, ME 04210

Clerk/Registered Agent

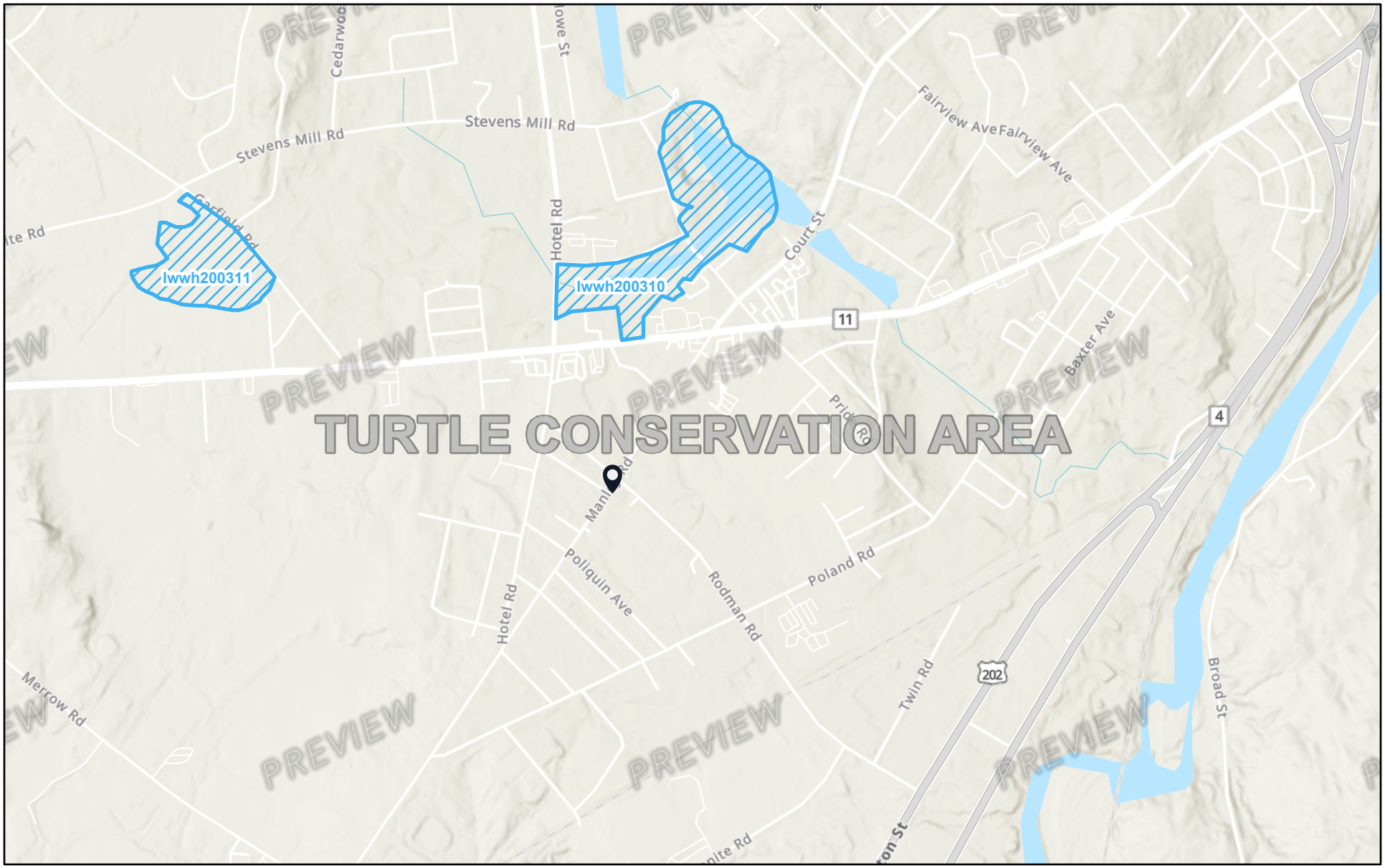
Physical	Mailing
MAURICE A. SELINGER, III ONE CANAL PLAZA, SUITE 1000 PORTLAND, ME 04101	MAURICE A. SELINGER, III P.O. BOX 7320 PORTLAND, ME 04112-7320

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Falmouth, ME 04105

E. IF&W Map

Maine Department of Inland Fisheries and Wildlife Habitat Data Web Map - Wahan Oaks



4/30/2026

Inland Waterfowl and Wading Bird Habitat - SWH

World_Hillshade

1:23,157

0 0.13 0.25 0.5 mi

0 0.23 0.45 0.9 km

Maine Department of Inland Fisheries and Wildlife, Maine Inland Fisheries and Wildlife, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©

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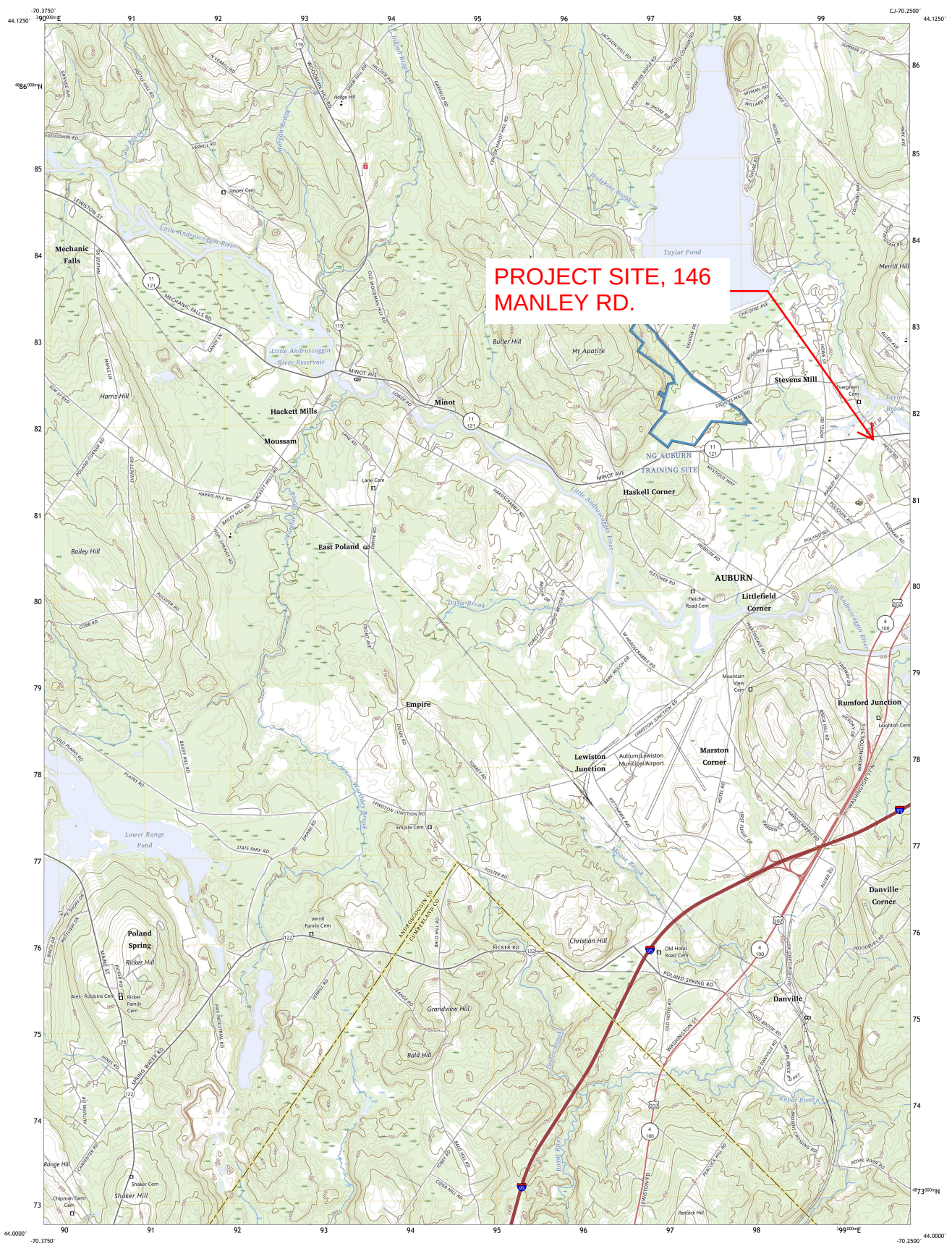
251 US Route-1, Suite O-2
Falmouth, ME 04105

F. USGS

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

MINOT QUADRANGLE
MAINE
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 19T
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2018 - September 2018
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2024
Hydrography.....National Hydrography Dataset, 2003 - 2022
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2020 - 2022
Wetlands.....FWS National Wetlands Inventory 1984 - 2004

UTM GRID AND 2023 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

ADJOINING QUADRANGLES
1 Oxford
2 Lake Auburn West
3 Lake Auburn East
4 Mechanic Falls
5 Lewiston
6 Raymond
7 Gray
8 North Pownal

MINOT, ME
2024

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Falmouth, ME 04105

G. Site Photos

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Photo 1: Aerial view of site showing the surrounding area



Photo 2: View of ground area

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251 US Route-1, Suite O-2
Falmouth, ME 04105



Photo 3: View of ground area

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Falmouth, ME 04105

H. SWPPP

Appendix A. Erosion & Sedimentation Control

1. **Pollution prevention.** Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable. Control stormwater volume and velocity within the site to minimize soil erosion. Minimize the disturbance of any steep slopes. Control stormwater discharges, including both peak flow rates and volume, to minimize erosion at outlets. The discharge may not result in erosion of any open drainage channels, swales, stream channels or stream banks, upland, or coastal or freshwater wetlands off the project site.

   ***Stormwater discharges will be controlled by the utilization of stormwater BMPs (tying into existing municipal drainage system). See site plans.**

   a. **Buffers.** Whenever practicable, no disturbance activities should take place within 50 feet of any protected natural resource. If disturbance activities take within 50 feet of any protected natural resource, and stormwater discharges through the disturbed areas toward the protected natural resource, perimeter sediment controls must be doubled.

      ***See site plans for silt fencing and catch basin protection. Disturbance within the wetland area is to be permitted through an NRPA Wetland Tier-1 permit.**

2. **Preserve native topsoil, unless infeasible.** Topsoil which is stripped or removed must be stockpiled for use in reclaiming disturbed land areas. Soil stockpiles shall be seeded, mulched, or otherwise stabilized. Preserving native topsoil is not required where the intended function of a specific area of the site dictates that the topsoil is disturbed or removed.

   ***Topsoil that is to be preserved shall be stabilized throughout construction. All areas of disturbance to be stabilized upon the completion of the project. See C300 for erosion and sedimentation control details.**

3. **Minimize soil compaction.** In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, restrict vehicle and equipment use. In these locations, avoid soil compaction and use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

   ***Throughout construction the contractors shall be cognizant of minimizing all disturbance and impacts outside of the permitted proposed disturbance area. See C300 for erosion and sedimentation control details.**

4. **High Infiltration Capacity Soils.** To the extent practicable:
   a. Hydrologic Soil Group (HSG) A and B soils must not be disturbed,
   b. Stormwater must be directed to low-lying areas and depressions with HSG A and B soils,
   c. Temporary sediment traps and basins must be installed over HSG A and B soils

***Disturbance to the HSG B soil on site (NgB) is to be minimized to the greatest extent practicable, minimizing disturbance outside of the proposed disturbance area.**

5. **Sediment barriers.** Prior to soil disturbance, properly install sediment barriers at the downgradient edge of any area to be disturbed and adjacent to any drainage channels within the disturbed area. Sediment barriers should be installed downgradient of soil or sediment stockpiles and stormwater prevented from running onto the stockpile. Maintain the sediment barriers by removing accumulated sediment, or removing and replacing the barrier, until the disturbed area is permanently stabilized. Where a discharge to a storm drain inlet occurs, if the storm drain carries water directly to a surface water and you have authority to access the storm drain inlet, you must install and maintain protection measures that remove sediment from the discharge.

   ***See site plans for silt fencing and catch basin protection. See C300 for erosion and sedimentation control details.**

6. **Stabilized construction entrance.** Prior to construction, properly install a stabilized construction entrance (SCE) at all points of egress from the site. The SCE is a stabilized pad of aggregate underlain by a geotextile filter fabric or an equivalent measure used to prevent traffic from tracking material away from the site onto public right-of-way. Maintain the SCE until all disturbed areas are stabilized.

   ***See site plans for stabilized construction entrance(s).**

7. **Temporary sediment basins.** Temporary sediment basins must be designed to provide storage for either the calculated runoff from a 2-year, 24-hour storm or provide for 3,600 cubic feet of capacity per acre draining to the basin. Erosion controls and velocity dissipation devices must be used if the discharging waters are likely to create erosion. Accumulated sediment must be removed as needed from the basin to maintain at least ½ of the design capacity of the basin.
   a. Utilize surface outlets. To the maximum extent practicable, outlet structures must be utilized to withdraw water from the surface of temporary sedimentation basins, in order to minimize the discharge of pollutants. Exceptions may include periods of extended cold weather, where alternate outlets are required during frozen periods. If such a device is infeasible for portions of or the entire construction period, justification must be made.

   ***The site will be maintained during construction to prevent unreasonable erosion and sedimentation. Runoff produced from this development is not likely to be produced in a quantity that will affect surrounding areas.**

8. **Cationic treatment chemicals.** If you plan to use cationic treatment chemicals, such as polymers, flocculants, or other chemicals that contain an overall positive charge designed to reduce turbidity in stormwater, you are ineligible for coverage under this general permit unless you notify the Department in advance and the Department authorizes the

use. When requesting approval to use cationic treatment chemicals, you must describe appropriate controls and implementation procedures to ensure the use will not lead to a violation of water quality standards. In addition, you must specify the type(s) of soil likely to be treated on the site, chemicals to be used and how they are to be applied and in what quantity, any manufacturer's recommendations, and any training had by personnel who will handle and apply the chemicals.

***Cationic treatment chemicals will not be used, this section is not applicable.**

9. **Temporary stabilization.** Stabilize any exposed soil with mulch, or other non-erodible cover within 7 days of the temporary cessation of construction activities. Stabilize areas within 75 feet of a downgradient protected natural resource within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.

   ***Temporary stabilization is to be administered to meet requirements throughout the construction process. See C300 for erosion and sedimentation control details during construction phase.**

10. **Removal of temporary measures.** Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

    ***Temporary measures to be removed to meet requirements.**

11. **Permanent stabilization.** If the area will not be worked for more than one year or has been brought to final grade, then permanently stabilize the area within 7 days by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, moisture, and soil conditions; amend areas of disturbed subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding so to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be reworked and restabilized if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. One or more of the following may apply to a particular site.
    a. **Seeded areas.** For seeded areas, permanent stabilization means a 90% cover of the disturbed area with mature, healthy plants with no evidence of washing or riling of the topsoil.

       ***Any areas requiring seeding are to be seeded to meet requirements.**

    b. **Sodded areas.** For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.

***Any areas requiring sod are to be sodded to meet requirements.**

c. **Permanent Mulch.** For mulched areas, permanent mulching means total coverage of the exposed area with approved mulch material. Erosion Control Mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.

***Any areas requiring mulch are to be mulched to meet requirements.**

d. **Riprap.** For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.

***No riprap is proposed, this section is not applicable.**

e. **Agricultural use.** For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.

***No agricultural use is proposed, this section is not applicable.**

f. **Paved areas.** For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.

***All paved areas are to be permanently stabilized to meet requirements. See C300 for erosion and sedimentation control details during construction phase.**

g. **Ditches, channels, and swales.** For open channels, permanent stabilization means the channel is stabilized with mature vegetation at least three inches in height, with well-graded riprap lining, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. There must be no evidence of slumping of the lining, undercutting of the banks, or downcutting of the channel.

***This section is not applicable to the proposed project.**

12. **Winter Construction.** "Winter construction" is construction activity performed during the period from November 1 through April 15, or outside of the said period if the ground is frozen or snow covered. If areas within the construction activity are not stabilized with temporary or permanent measures outlined above by November 15, then the site must be protected with additional stabilization measures that are specific to winter conditions.

a. **Site Stabilization.** For winter stabilization, hay mulch is applied at twice the standard temporary stabilization rate. At the end of each construction day, areas that

have been brought to final grade must be stabilized. Mulch may not be spread on top of snow.

***Site is to be stabilized to meet requirements, See C300 for erosion and sedimentation control details during winter construction.**

b **Sediment Barriers.** All areas within 75 feet of a protected natural resource must be protected with a double row of sediment barriers.

***Sediment barriers to be provided to meet requirements, see site plans. See C300 for erosion and sedimentation control details during winter construction.**

c **Ditch.** All vegetated ditch lines that have not been stabilized by November 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.

***No vegetated ditches are proposed, this section is not applicable.**

d **Slopes.** Mulch netting must be used to anchor mulch on all slopes greater than 8% unless erosion control blankets or erosion control mix is being used on these slopes.

***See C300 for erosion and sedimentation control details during winter construction.**

13. **Laydown & Staging Areas.** This section applies to the projects which will use areas within a project's limit of disturbance for material laydown and staging.

a. Upland areas must be selected for laydown and staging to the extent practicable,

***The site's upland area is limited, is upland area is to be utilized for laydown/staging it is to be complicit with all DEP requirements.**

b. Use of wet areas (e.g., minor depressions along drainageways) hydraulically connected to downgradient protected natural resources and/or parcel must be justified using specific site or operational limitations. Temporary structures (e.g., swales, dikes) must be provided to intercept upgradient stormwater and divert it away from these laydown and staging areas,

***The site's wet areas are to be largely avoided to the most practicable extent possible, if required to be use as a laydown area the proper temporary structures shall be put into place by the contractor to meet DEP requirements.**

c. Provide stormwater quality treatment in compliance with the applicable Chapter 500 standard for the areas which will be used for more than 12 months.

***Construction is not intended to go over a 12 month period, in the case it does all laydown and staging areas are to be complicit with all DEP requirements.**

14. **Parking areas.** Parking areas must be constructed to ensure runoff is delivered to adjacent swales, catch basins, curb gutters, or buffer areas without eroding areas downslope. The parking area's subbase compaction and grading must be done to ensure runoff is evenly distributed to adjacent buffers or side slopes. Catch basins must be located and set to provide enough storage depth at the inlet so to allow inflow of peak runoff rates without by-pass of runoff to other areas.

    ***All paved areas will flow to the appropriate catch basins for collection, see site plans.**

15. **Roads.** Gravel and paved roads must be designed and constructed with crowns or other measures, such as water bars, to ensure that stormwater is delivered immediately to adjacent stable ditches, vegetated buffer areas, catch basin inlets, or street gutters.

    ***All paved areas will flow to the appropriate catch basins for collection, see site plans.**

16. **Culverts.** Culverts must be sized to avoid unintended flooding of upstream areas or frequent overtopping of roadways. Culvert inlets must be protected with appropriate materials for the expected entrance velocity, and protection must extend at least as high as the expected maximum elevation of storage behind the culvert. Culvert outlet design must incorporate measures, such as aprons or plunge pools, to prevent scouring of the stream channel. Culvert inlet and outlet protection measures must be installed within 48 hours of culvert installation, or prior to a storm event, whichever is sooner. Outlet protection measures must be designed to stay within the channel limits. The design must take account of tailwater depth.

    ***The project's stormwater is proposed to tie into the municipal stormwater system, all culverts involved in the system are maintained by the City and will be verified for capacity of the proposed project.**

17. **Stormwater channels.** All disturbed ditches, swales, and other open stormwater channels must be stabilized by the end of each workday. Stabilization shall be maintained on a daily basis.
    New ditches, swales, and other open stormwater channels must be designed, constructed, and stabilized using measures that achieve long-term erosion control. Ditches, swales and other open stormwater channels must be sized to handle, at a minimum, the expected volume runoff. Each channel should be constructed in sections so that the section's grading, shaping, and installation of the permanent lining can be completed the same day. If the channel's final grading or permanent lining installation must be delayed, then diversion berms must be used to divert stormwater away from the channel, properly spaced check dams must be installed in the channel to slow the water velocity, and a

temporary lining installed along the channel to prevent scouring. Permanent stabilization for channels is addressed under Appendix A(11)(g) above.

***The project does not propose any stormwater channels. This section is not applicable.**

a. The channel should receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.

*** The project does not propose any stormwater channels. This section is not applicable.**

b. When the subcatchment draining to a ditch or swale is less than 1 acre of total drainage and less than ¼ acre of impervious area, diversion of runoff to adjacent wooded or otherwise vegetated buffer areas is encouraged where the opportunity exists.

***The proposed project does not fit within the above criteria.**

18. **Utility Trench.** Trenches shall be backfilled and temporarily stabilized (including spoil and/or backfill piles) at the end of each working day.

***See trenching notes and details on the site plans and C300 for erosion control and construction notes.**

18. **Additional requirements.** Additional requirements may be applied on a site-specific basis.

*** No response required.**

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

General Housekeeping and BMP Inspection & Maintenance Plan
Appendix B & C

Housekeeping/Operations & Maintenance:

1.

a) Spill prevention: All materials stored on site that may become pollutants shall be stored in such a manner as to minimize exposure of said materials to stormwater. All appropriate spill prevention, containment, and response planning and implementation shall be in place prior to the materials arrival on site.

b) Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to any infiltration areas. Utilize dikes, berms, sumps, and other forms of secondary containment to prevent discharge to groundwater.

c) Fugitive sediment and dust: Stabilized construction entrances will be installed prior to construction to help prevent the tracking of mud off the site onto public roads. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

d) Debris and other material: All materials that may become a source for pollutants shall comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

e) Excavation de-watering: Any water collected within: trenches, foundations or ponds and/or any other areas within the construction area that retain water after excavation shall be spread through natural wooded buffers if possible. Avoid allowing the water to flow over disturbed areas of the site.

f) Authorized non-stormwater discharges: Identify any potential non-stormwater discharges and bring to the attention of the engineer immediately. Authorized non-stormwater discharges are:

- Discharges from firefighting activity
- Fire hydrant flushing
- Vehicle wash water if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited).
- Dust control runoff in accordance with permit conditions and Appendix (C)(3).
- Routine external building washdown, not including surface paint removal, that does not involve detergents.
- Pavement wash water (where spills/leaks of toxic or hazardous materials have not occurred unless all spilled material has been removed) if detergents are not used.
- Uncontaminated air conditioning or compressor condensate.
- Uncontaminated groundwater or spring water.
- Foundation or footer drain-water where flows are not contaminated.
- Uncontaminated excavation dewatering (see requirements in Appendix C(5).
- Potable water sources including waterline flushing
- Landscape irrigation

g) Additional requirements: N/A

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

146 Manley Rd – Wahan Oaks

STORMWATER MANAGEMENT INSPECTION LOG

***Maintenance and Inspection to be conducted in compliance with DEP Maine Stormwater Management Design Manual – Technical Design Manual Volume III**

How to Complete:

1. Enter Date
2. Initial All areas that are satisfactory
3. Note any deficiencies or required maintenance items
4. Sign as inspector, submit to Owner

Section	Areas of Concern	Inspection Frequency	Date/ Initial	Date/ Initial	Date/ Initial	Date/ Initial
Drainage Ways	Erosion Loss of Ground Cover Sediment	Annually spring and late fall and after heavy rains				
Paved Surfaces	Excess Solids/Sand Settlement	Annually spring or as needed				
Vegetated Areas	Loss of Ground Cover Erosion Overgrowth	Annually early spring and after heavy rains				
Catch Basins	Remove Accumulated Sediments & Debris Remove Floating Debris & Oils	Annually in the spring				
Other	Erosion Soil Migration	As specified for devices				

Notes:

_____

_____

Work Items Undertaken:

_____

_____

_____

_____

_____

REVIEWED AND ACKNOWLEDGED BY OWNER:

BY: _____

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

1. Re-certification: The owner shall submit a certification of the following to the department within three months of the expiration of each five-year interval from the date of issuance of the permit:
   a) Identification and repair of erosion problems: All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

   b) Inspection and repair of stormwater control system: All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

   c) Maintenance: The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

2. Duration of maintenance: Perform maintenance as described and required in the permit unless and until the system is formally accepted by the municipality or quasi-municipal district or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system.

3. Duration of Inspection Log: The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

4. Responsible parties:
   The owner of the project is Homes For All, LLC
   34 Harvest Hill Lane
   Auburn, ME 04210

   The engineer for the project is Trillium Engineering Group
   251 US Route-1, Suite O-2
   Falmouth, ME 04105

   A maintenance log (attached) shall be maintained and made available at any time when requested by Maine DEP, Town, or the Engineer. The log shall record when specific maintenance tasks were completed. Include the names of key people or companies that completed the work. The owner shall be responsible for the stormwater system inspection and for verifying the maintenance tasks have been completed properly.

   By signing below, you agree to complete the above maintenance tasks as recommended. If problems should arise, please contact the engineer immediately, Trillium Engineering Group (207) 307-0872.

   I agree to complete the required maintenance items as outlined above.

   Print Name Homes For All, LLC - Owner

   Signature _____

TRILLIUM
ENGINEERING GROUP

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Falmouth, ME 04105

I. Site Plans

End DEP MCGP NOI Submission

Start MHPC Review Request Submission

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

MHPC Application Package

Date Issued: April 29, 2026



Project Title: Wahan Oaks

Owner: Homes For All, LLC

Site Location: 146 Manley Rd. Auburn, ME

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

Attachments

A. Narrative
B. Location Map
C. Site Photos
D. Site Plans

TRILLIUM
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251 US Route-1, Suite O-2
Falmouth, ME 04105

A. Narrative

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

April 29, 2026

Maine Historic Preservation Commission
10 Water St.
65 State House Station
Hallowell, Maine 04347

RE: Wahan Oaks
MHPC Review – Project Narrative

Dear MHPC Reviewer:

Trillium Engineering Group is providing this project narrative for the proposed project located at 146 Manley Rd in Auburn, ME (Tax Map 19B, Lots 37,38) in the T-4.2B – Traditional Neighborhood Development District. The project proposes the subdivision of two existing lots which are currently vacant wooded lots, into one overall plot of land with 14 individual single family residential lots. In addition to the 14 individual lots the project proposes a paved roadway with each lot being serviced by City utilities (sewer, water, etc.). See the proposed site plans for an overall layout with potential housing locations with driveways, etc.

The area surrounding the project site does not seem to consist of any historical properties nor archaeological sites nor significant features. There are wetlands present on site and disturbance is being permitted through DEP.

The construction process will be cognizant of any environmentally sensitive areas and provide all appropriate erosion and sedimentation control methods to minimize disturbances outside the project and wetland setback boundaries.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,

Kyle Berwick
Trillium Engineering Group

TRILLIUM
ENGINEERING GROUP

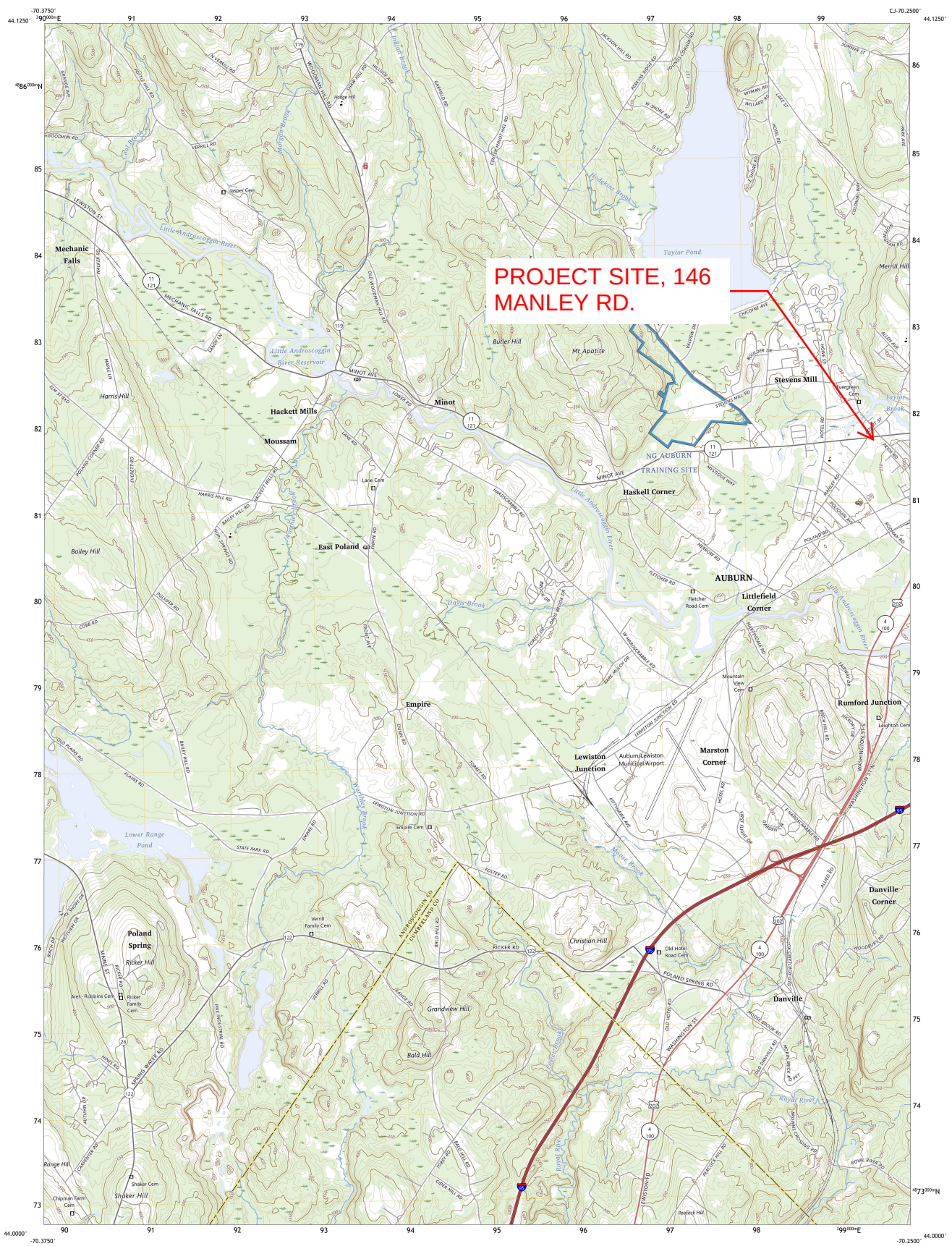
251 US Route-1, Suite O-2
Falmouth, ME 04105

B. Location Map

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

MINOT QUADRANGLE
MAINE
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
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CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

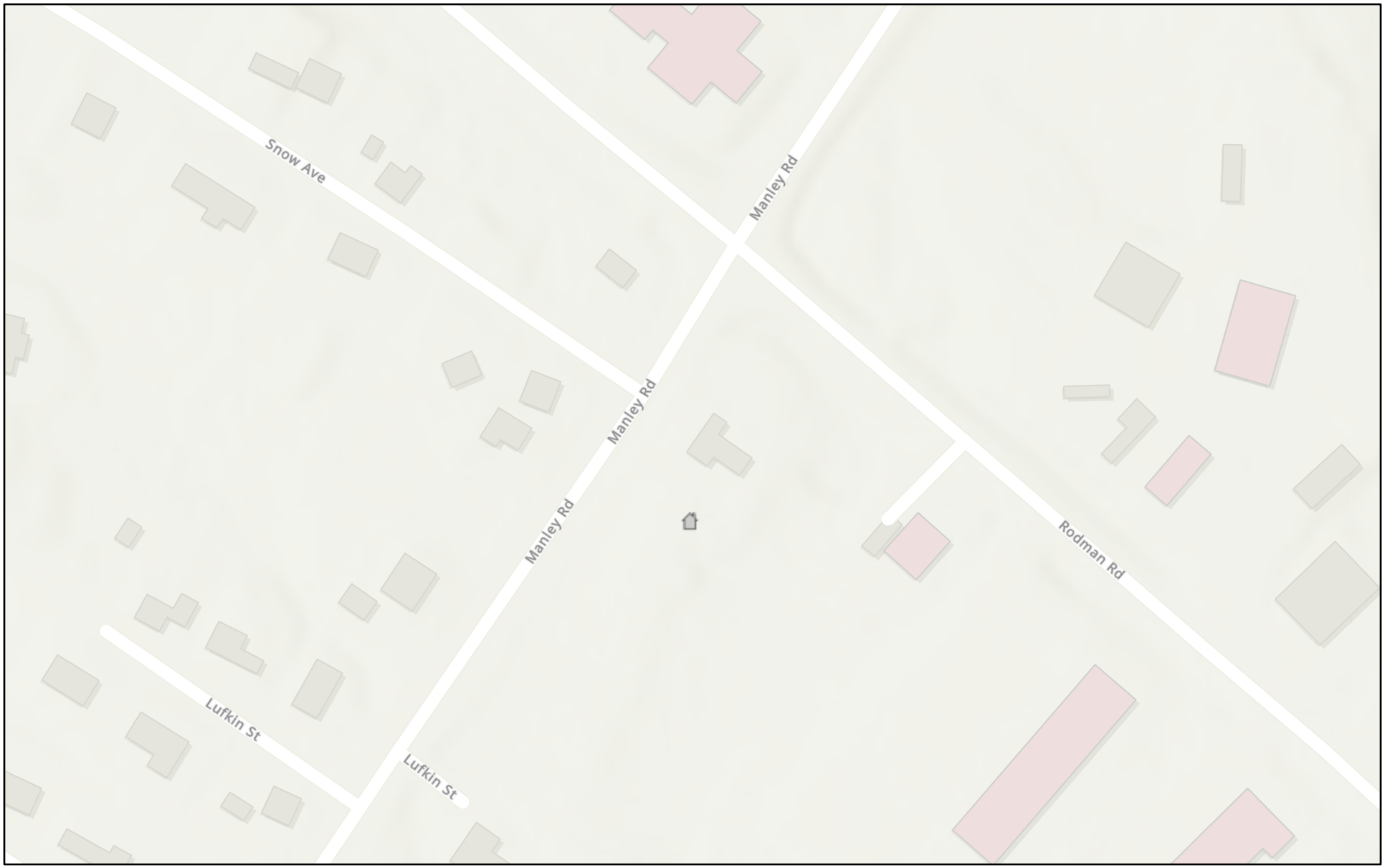
This map was produced to conform with the National Geospatial Program US Topo Product Standard.

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

ADJOINING QUADRANGLES
1 Oxford
2 Lake Auburn West
3 Lake Auburn East
4 Mechanic Falls
5 Lewiston
6 Raymond
7 Gray
8 North Pownal

MINOT, ME
2024

146 Manley Rd. - Historic Mapping



4/29/2026

Maine Historic Properties - Historic Properties

Not Eligible

World_Hillshade

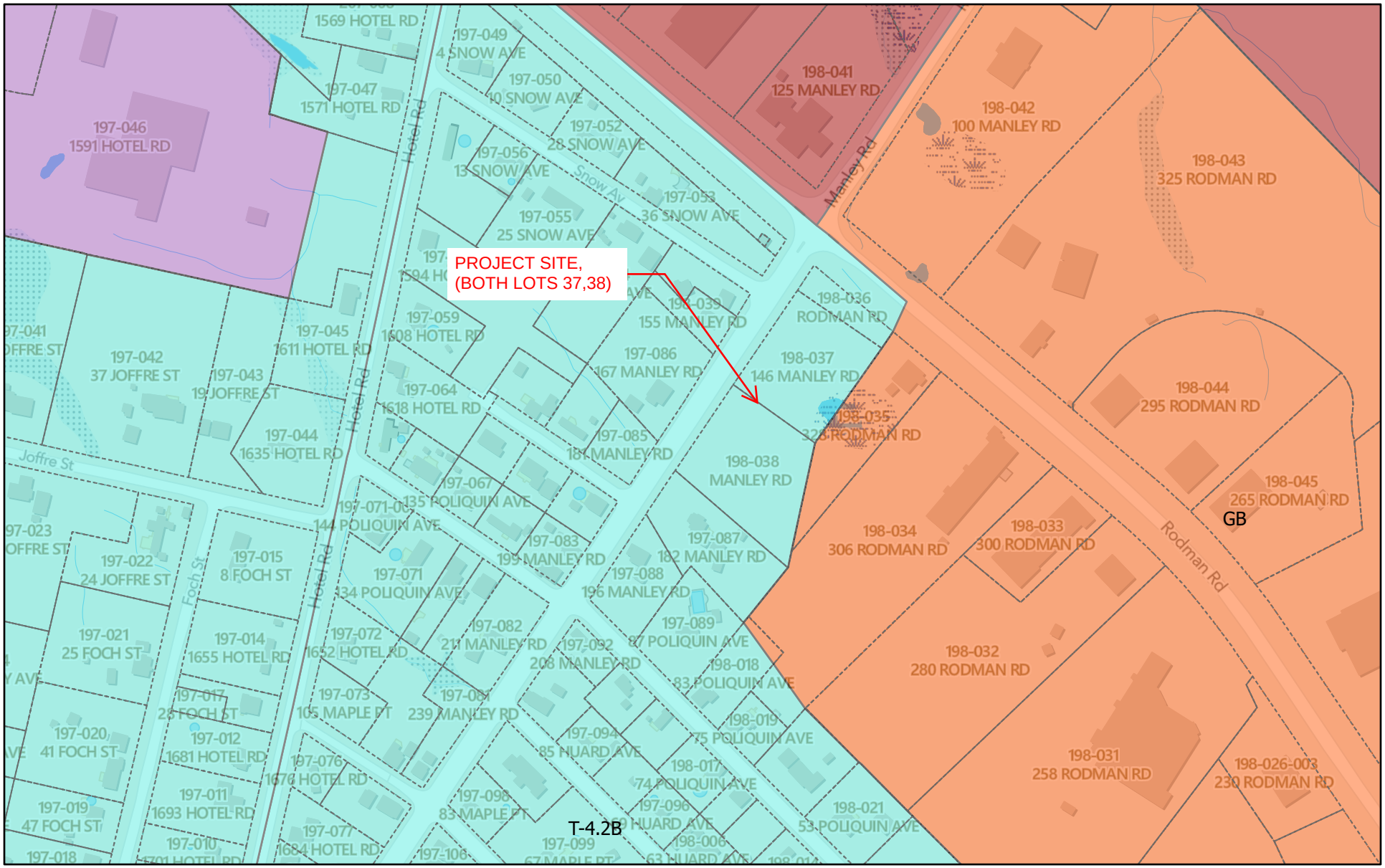
1:2,230

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.08 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Vantor, Airbus DS,

Auburn ArcGIS Map - Wahan Oaks



10/9/2025, 9:42:43 PM

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

Mailing Labels - All Fields
Mailing Labels
Current Parcels _ Public
Auburn Zoning
GB - General Business
GB II - General Business II
ID - Industrial
T-4.2B - Traditional Neighborhood Development District
Wetlands

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Web AppBuilder for ArcGIS

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TRILLIUM
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251 US Route-1, Suite O-2
Falmouth, ME 04105

C. Site Photos

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Falmouth, ME 04105



Photo 1: Aerial view of site showing the surrounding area



Photo 2: View of ground area

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251 US Route-1, Suite O-2
Falmouth, ME 04105



Photo 3: View of ground area

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Falmouth, ME 04105

D. Site Plans

End MHPC Review Request Submission

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Falmouth, ME 04105

M. Stormwater Report & Maintenance Plan

*Stormwater Report to be submitted

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

General Housekeeping and BMP Inspection & Maintenance Plan
Appendix B & C

Housekeeping/Operations & Maintenance:

1.

a) Spill prevention: All materials stored on site that may become pollutants shall be stored in such a manner as to minimize exposure of said materials to stormwater. All appropriate spill prevention, containment, and response planning and implementation shall be in place prior to the materials arrival on site.

b) Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to any infiltration areas. Utilize dikes, berms, sumps, and other forms of secondary containment to prevent discharge to groundwater.

c) Fugitive sediment and dust: Stabilized construction entrances will be installed prior to construction to help prevent the tracking of mud off the site onto public roads. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

d) Debris and other material: All materials that may become a source for pollutants shall comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

e) Excavation de-watering: Any water collected within: trenches, foundations or ponds and/or any other areas within the construction area that retain water after excavation shall be spread through natural wooded buffers if possible. Avoid allowing the water to flow over disturbed areas of the site.

f) Authorized non-stormwater discharges: Identify any potential non-stormwater discharges and bring to the attention of the engineer immediately. Authorized non-stormwater discharges are:

- Discharges from firefighting activity
- Fire hydrant flushing
- Vehicle wash water if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited).
- Dust control runoff in accordance with permit conditions and Appendix (C)(3).
- Routine external building washdown, not including surface paint removal, that does not involve detergents.
- Pavement wash water (where spills/leaks of toxic or hazardous materials have not occurred unless all spilled material has been removed) if detergents are not used.
- Uncontaminated air conditioning or compressor condensate.
- Uncontaminated groundwater or spring water.
- Foundation or footer drain-water where flows are not contaminated.
- Uncontaminated excavation dewatering (see requirements in Appendix C(5).
- Potable water sources including waterline flushing
- Landscape irrigation

g) Additional requirements: N/A

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Falmouth, ME 04105

146 Manley Rd – Wahan Oaks

STORMWATER MANAGEMENT INSPECTION LOG

***Maintenance and Inspection to be conducted in compliance with DEP Maine Stormwater Management Design Manual – Technical Design Manual Volume III**

How to Complete:

1. Enter Date
2. Initial All areas that are satisfactory
3. Note any deficiencies or required maintenance items
4. Sign as inspector, submit to Owner

Section	Areas of Concern	Inspection Frequency	Date/ Initial	Date/ Initial	Date/ Initial	Date/ Initial
Drainage Ways	Erosion Loss of Ground Cover Sediment	Annually spring and late fall and after heavy rains				
Paved Surfaces	Excess Solids/Sand Settlement	Annually spring or as needed				
Vegetated Areas	Loss of Ground Cover Erosion Overgrowth	Annually early spring and after heavy rains				
Catch Basins	Remove Accumulated Sediments & Debris Remove Floating Debris & Oils	Annually in the spring				
Other	Erosion Soil Migration	As specified for devices				

Notes:

_____

_____

Work Items Undertaken:

_____

_____

_____

_____

_____

REVIEWED AND ACKNOWLEDGED BY OWNER:

BY: _____

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

1. Re-certification: The owner shall submit a certification of the following to the department within three months of the expiration of each five-year interval from the date of issuance of the permit:
   a) Identification and repair of erosion problems: All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

   b) Inspection and repair of stormwater control system: All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

   c) Maintenance: The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

2. Duration of maintenance: Perform maintenance as described and required in the permit unless and until the system is formally accepted by the municipality or quasi-municipal district or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system.

3. Duration of Inspection Log: The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

4. Responsible parties:
   The owner of the project is Homes For All, LLC
   34 Harvest Hill Lane
   Auburn, ME 04210

   The engineer for the project is Trillium Engineering Group
   251 US Route-1, Suite O-2
   Falmouth, ME 04105

   A maintenance log (attached) shall be maintained and made available at any time when requested by Maine DEP, Town, or the Engineer. The log shall record when specific maintenance tasks were completed. Include the names of key people or companies that completed the work. The owner shall be responsible for the stormwater system inspection and for verifying the maintenance tasks have been completed properly.

   By signing below, you agree to complete the above maintenance tasks as recommended. If problems should arise, please contact the engineer immediately, Trillium Engineering Group (207) 307-0872.

   I agree to complete the required maintenance items as outlined above.

   Print Name Homes For All, LLC - Owner

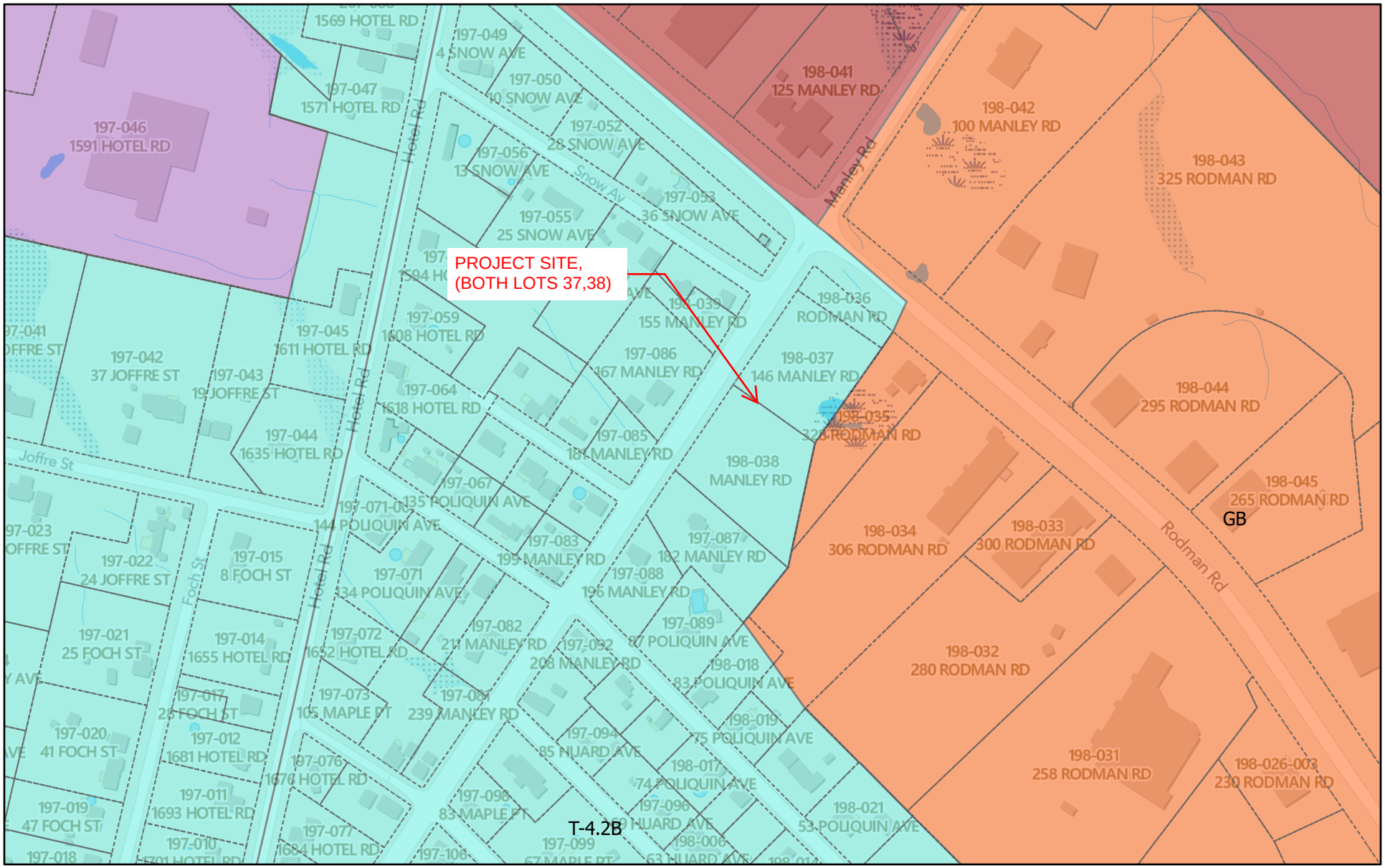
   Signature _____

TRILLIUM
ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

N. Misc. Maps & Exhibits

Auburn ArcGIS Map - Wahan Oaks



10/9/2025, 9:42:43 PM

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

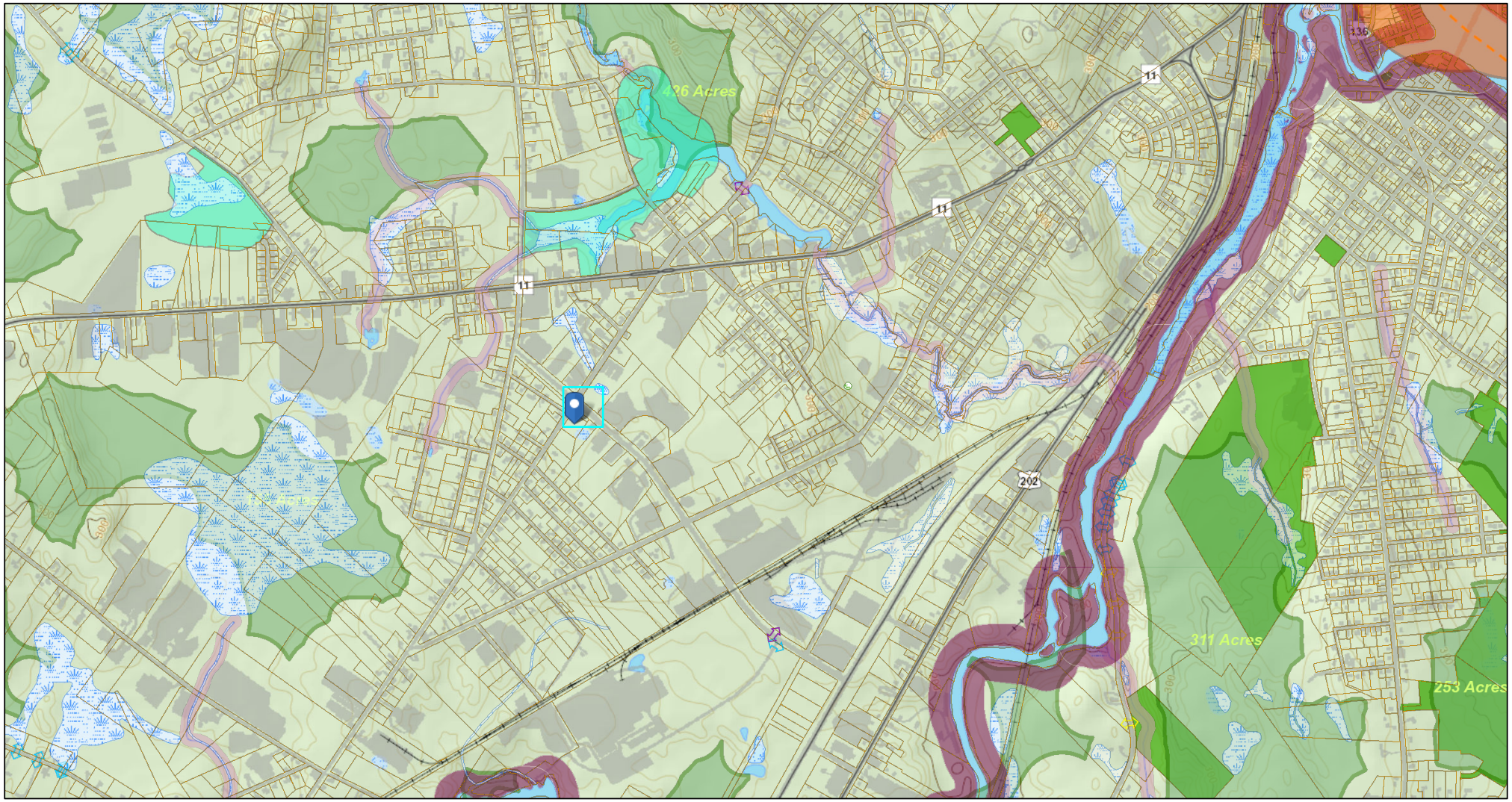
Mailing Labels - All Fields
Mailing Labels
Current Parcels _ Public
Auburn Zoning
GB - General Business
GB II - General Business II
ID - Industrial
T-4.2B - Traditional Neighborhood Development District
Wetlands

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Web AppBuilder for ArcGIS

Credit should always be given to the data source and/or originator when the data is transferred or printed. | COA | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Beginning With Habitat - 146 Manley Rd



April 28, 2026

1:18,056

- Parcels- Unorganized Townships
- Parcels- Organized Towns\Cities
- Aquifers
- National Wetlands Inventory Wetlands
- Shellfish Beds
- Stream Buffer (75 feet)
- Great Ponds, Rivers and Coastal Buffer (250 feet)
- Atlantic Salmon Habitat
- Shorebird Habitat
- Seabird Nesting Island
- Tidal Waterfowl / Wading Bird Habitat
- Inland Waterfowl / Wading Bird Habitat
- Significant Vernal Pools
- Deer Wintering Areas
- Essential Wildlife Habitats
- Endangered, Threatened, and Special Concern Species
- Natural Communities
- Rare Plants and Natural Communities
- Focus Areas- Overlapping Organized Towns
- Conserved Lands
- Highway Bridge Connectors

Riparian Connectors
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day

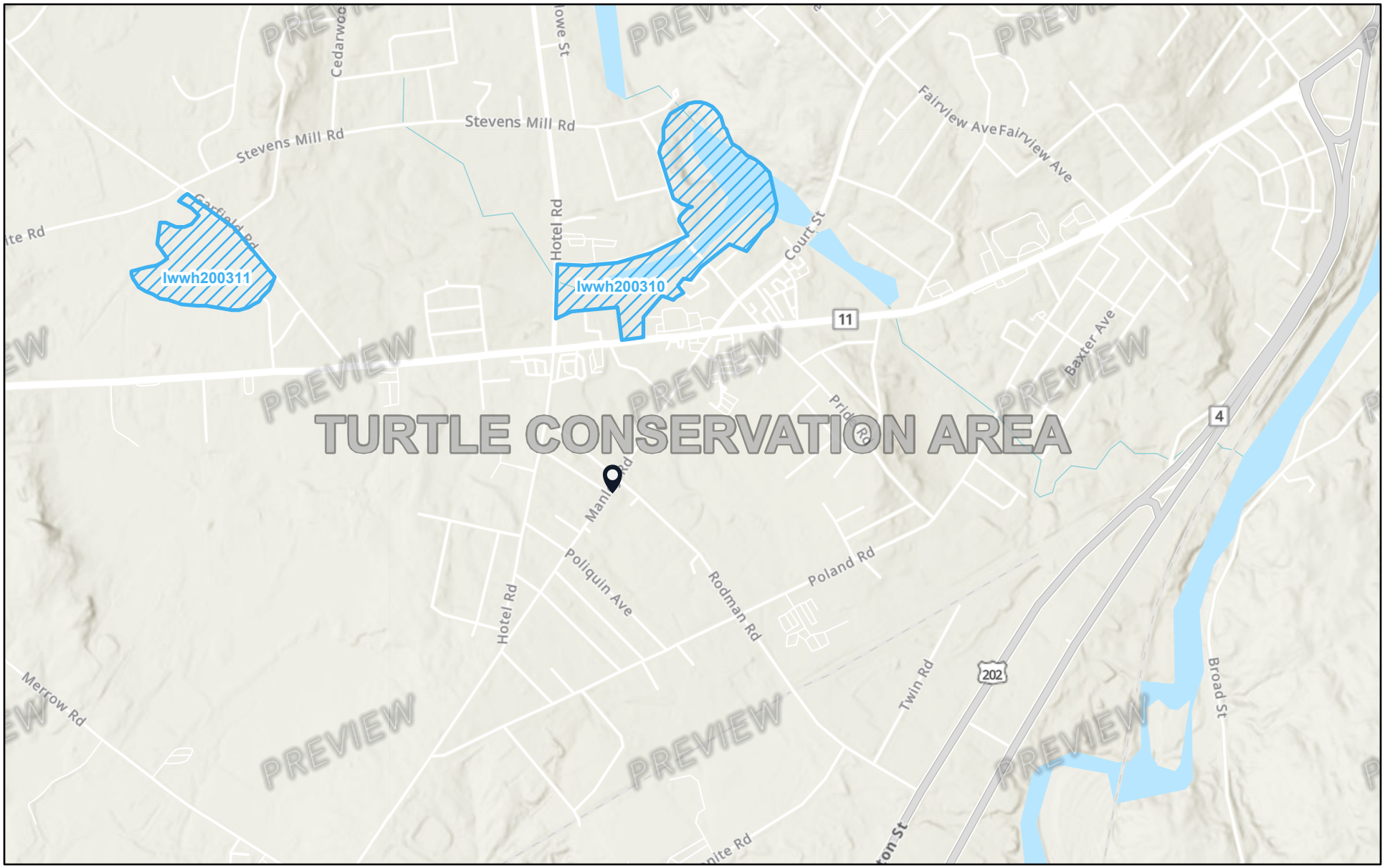
Undeveloped Block Connectors
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day
- Undeveloped Habitat Blocks

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

Beginning with Habitat Program for Planning Purposes Only
Map Created With BWH Map Viewer

Maine Department of Inland Fisheries and Wildlife Habitat Data Web Map - Wahan Oaks



4/30/2026

Inland Waterfowl and Wading Bird Habitat - SWH

World_Hillshade

1:23,157

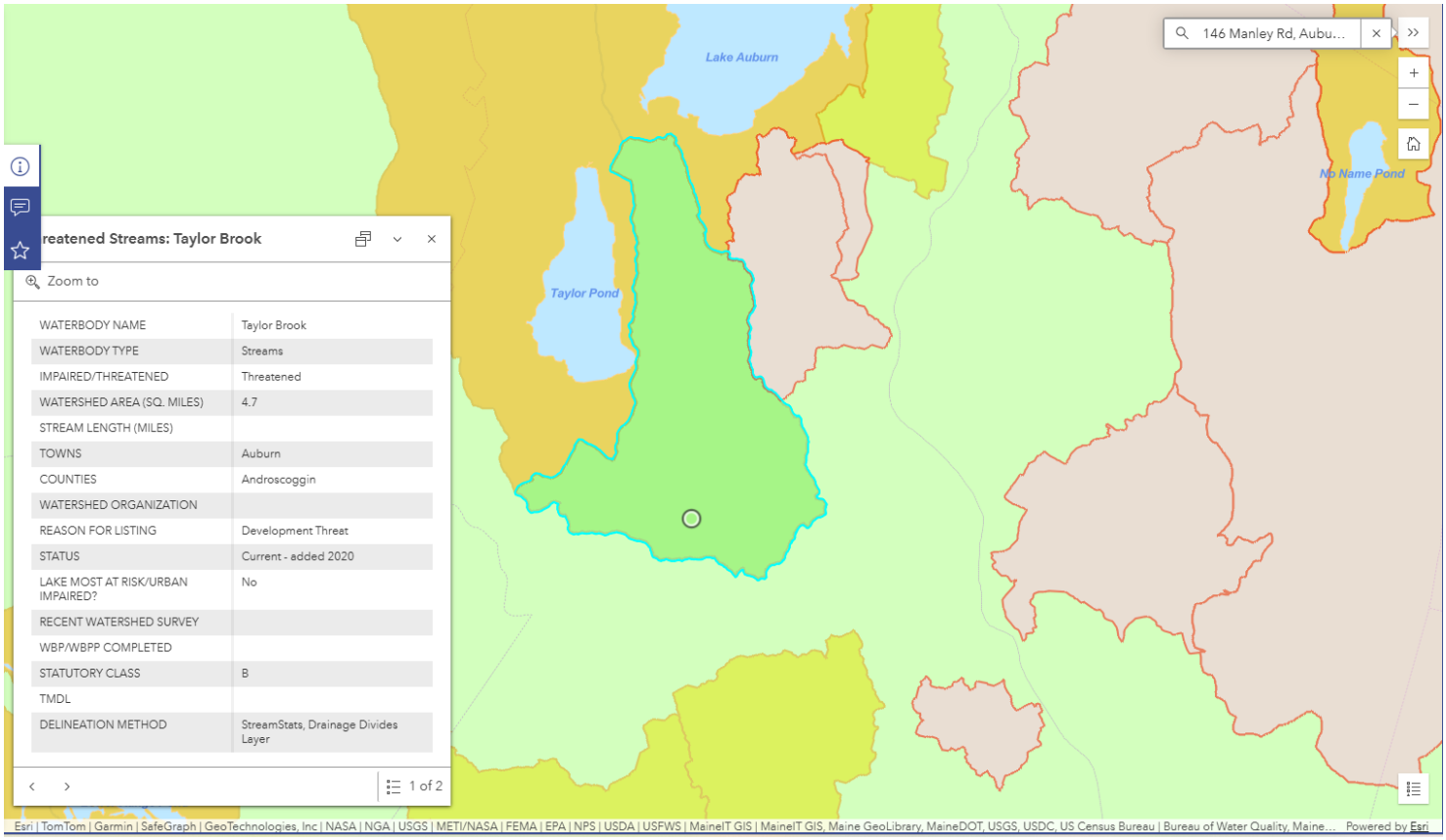
0 0.13 0.25 0.5 mi

0 0.23 0.45 0.9 km

Maine Department of Inland Fisheries and Wildlife, Maine Inland Fisheries and Wildlife, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©

TRILLIUM ENGINEERING GROUP

251 US Route-1, Suite O-2
Falmouth, ME 04105

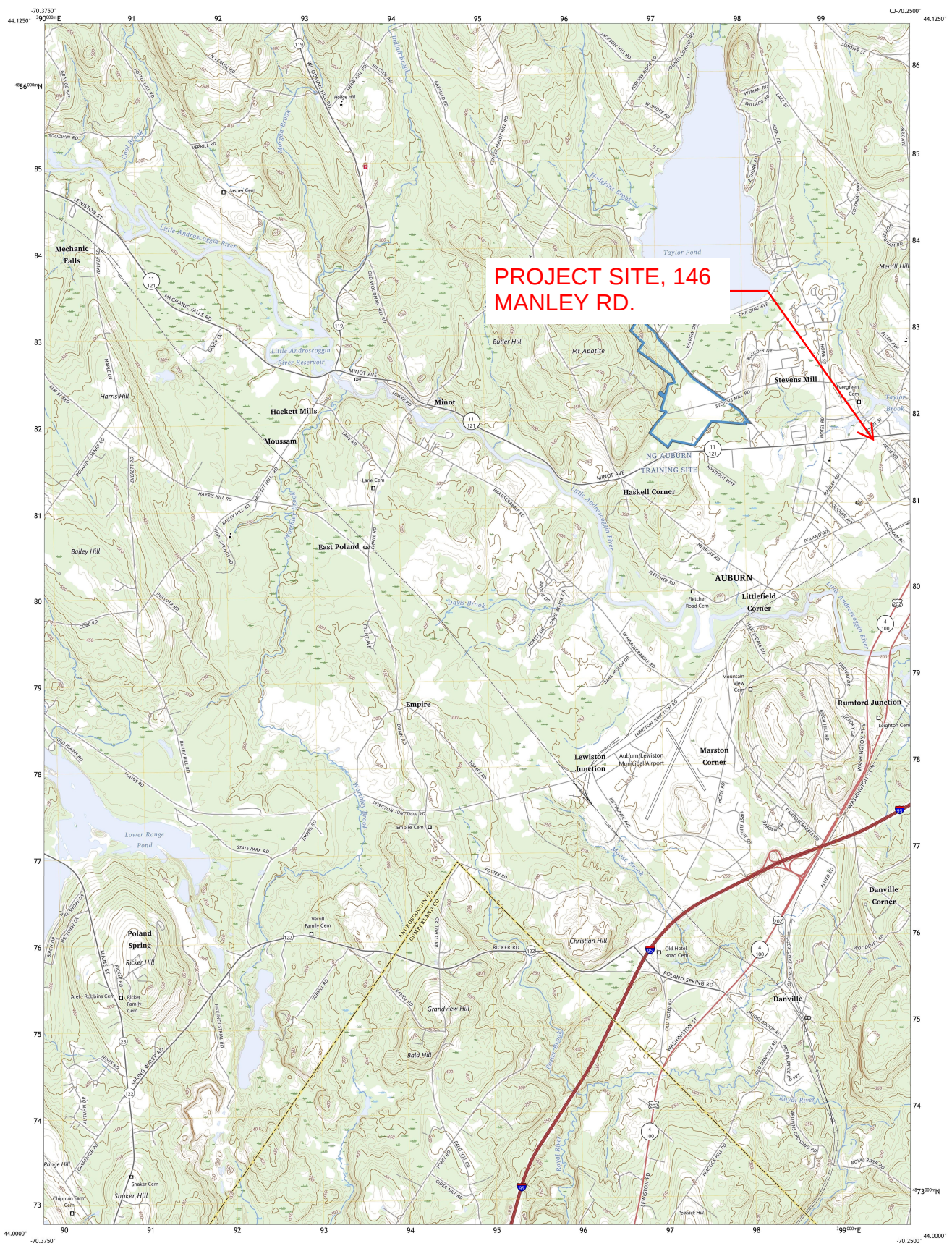


*Above map produced from ME online mapping tool "Maine NPS Priority Watersheds". The project site location (146 Manley Rd.) is represented by the circle.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

MINOT QUADRANGLE
MAINE
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 19T
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2018 - September 2018
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2024
Hydrography.....National Hydrography Dataset, 2003 - 2022
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2020 - 2022
Wetlands.....FWS National Wetlands Inventory 1984 - 2004

UTM GRID AND 2023 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

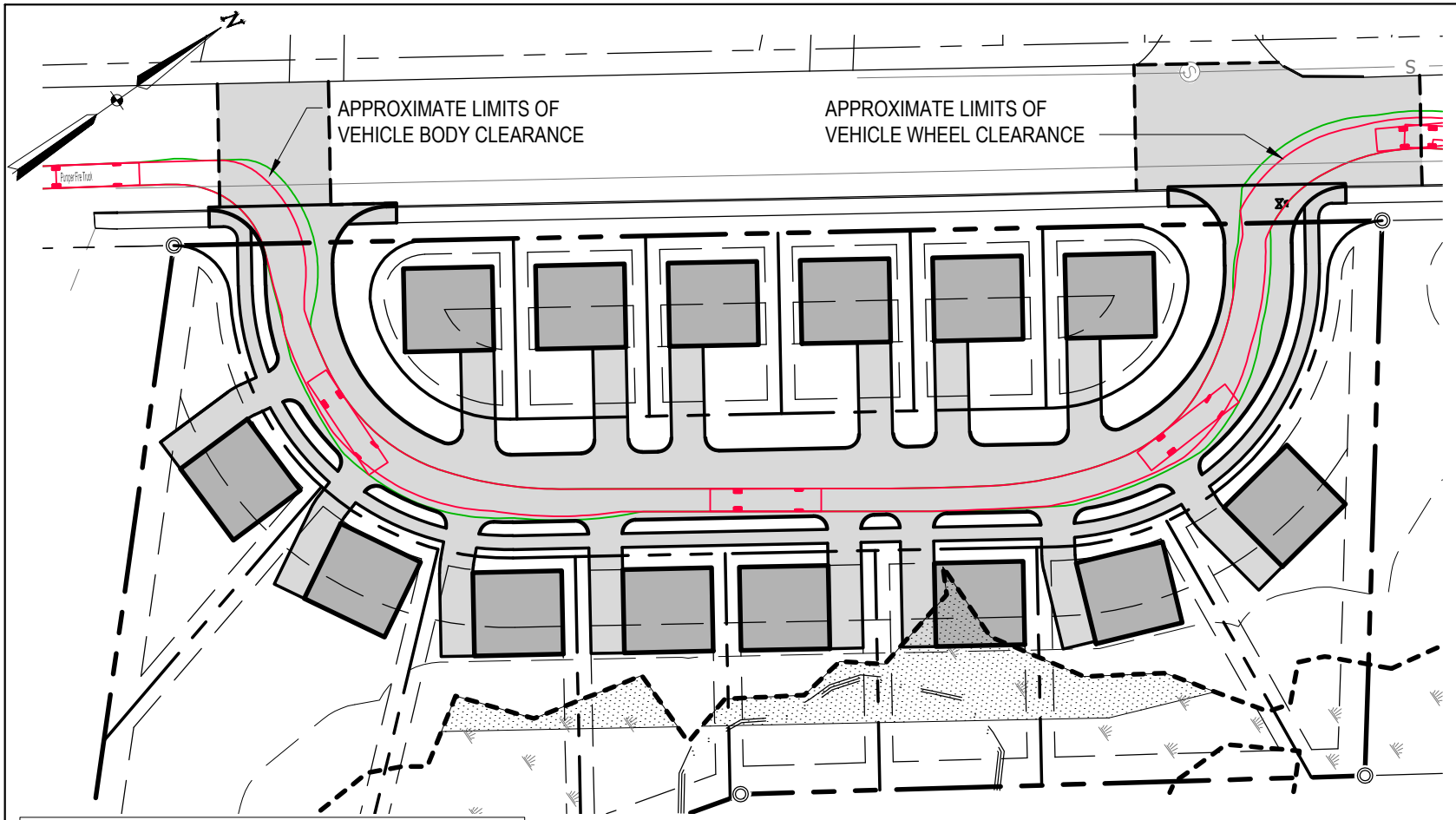
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

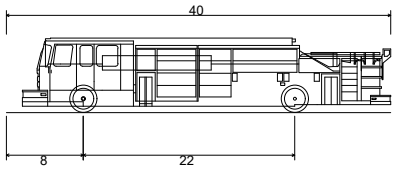
This map was produced to conform with the National Geospatial Program US Topo Product Standard.

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

ADJOINING QUADRANGLES
1 Oxford
2 Lake Auburn West
3 Lake Auburn East
4 Mechanic Falls
5 Lewiston
6 Raymond
7 Gray
8 North Pownal

MINOT, ME
2024





Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
1 INCH = 60 FT.

TRILLIUM
ENGINEERING GROUP
251 US ROUTE 1, SUITE C-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR
ALL LLC

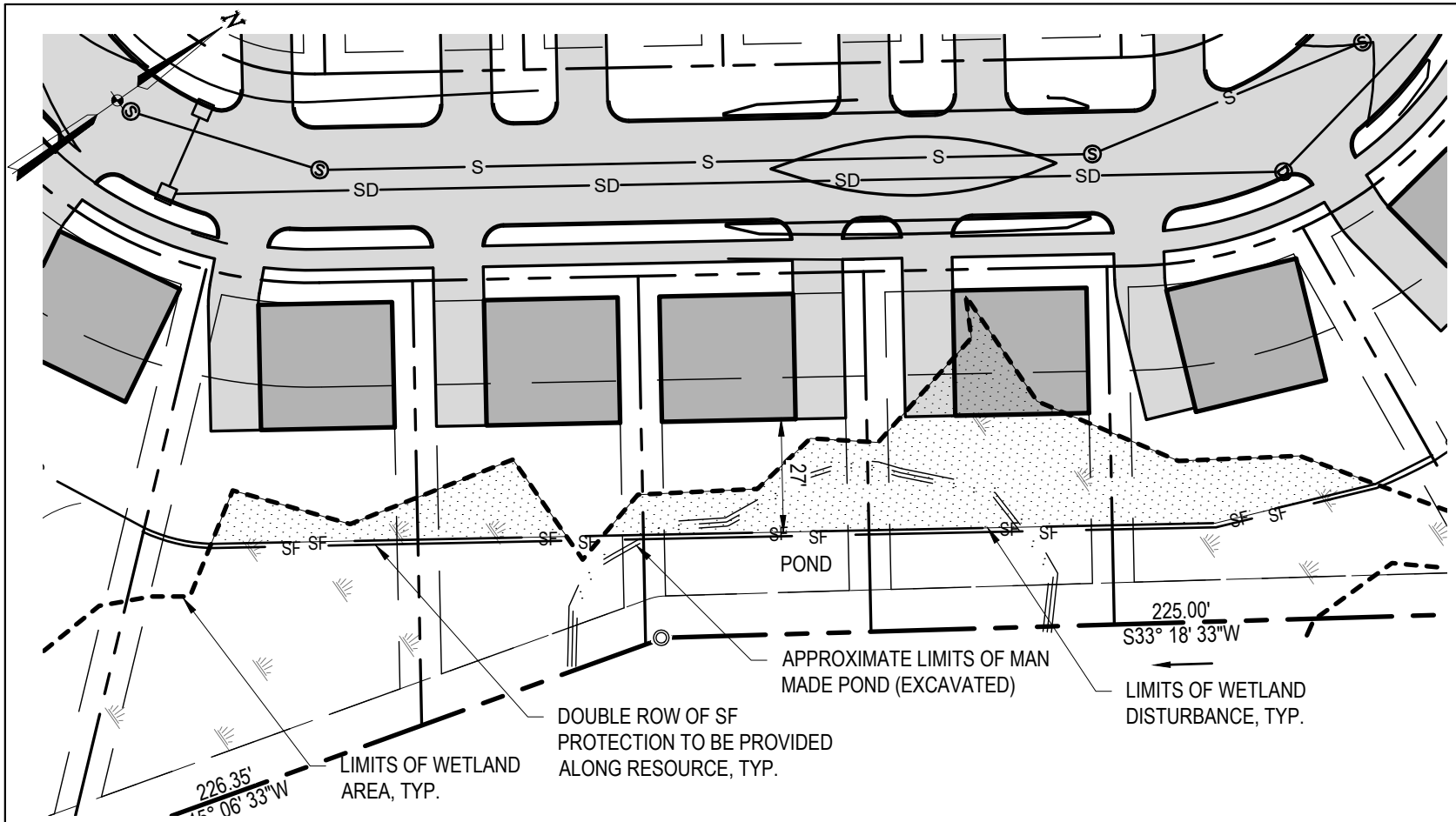
34 HARVEST HILL LANE
AUBURN, ME 04210

WAHAN OAKS
146 MANLEY ROAD
AUBURN, MAINE

FIRE TRUCK TURNING MOVEMENT DIAGRAM

SCALE:	1" = 60'
DESIGNED:	BVD
DRAWN:	BVD
DATE:	4/30/2026
PROJECT NUMBER:	25-009

SK1



WETLAND IMPACTS TABLE	
LOT AREA (S.F.)	99,626 S.F.
OVERALL PROJECT DISTURBANCE AREA	73,167 S.F.
TEMPORARY WETLAND IMPACTS	0
PERMANENT WETLAND IMPACTS	4,393 S.F.
TOTAL WETLAND IMPACT	4,393 S.F.

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 INCH = 40 FT.

TRILLIUM ENGINEERING GROUP
253 US ROUTE 1, SUITE 101-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

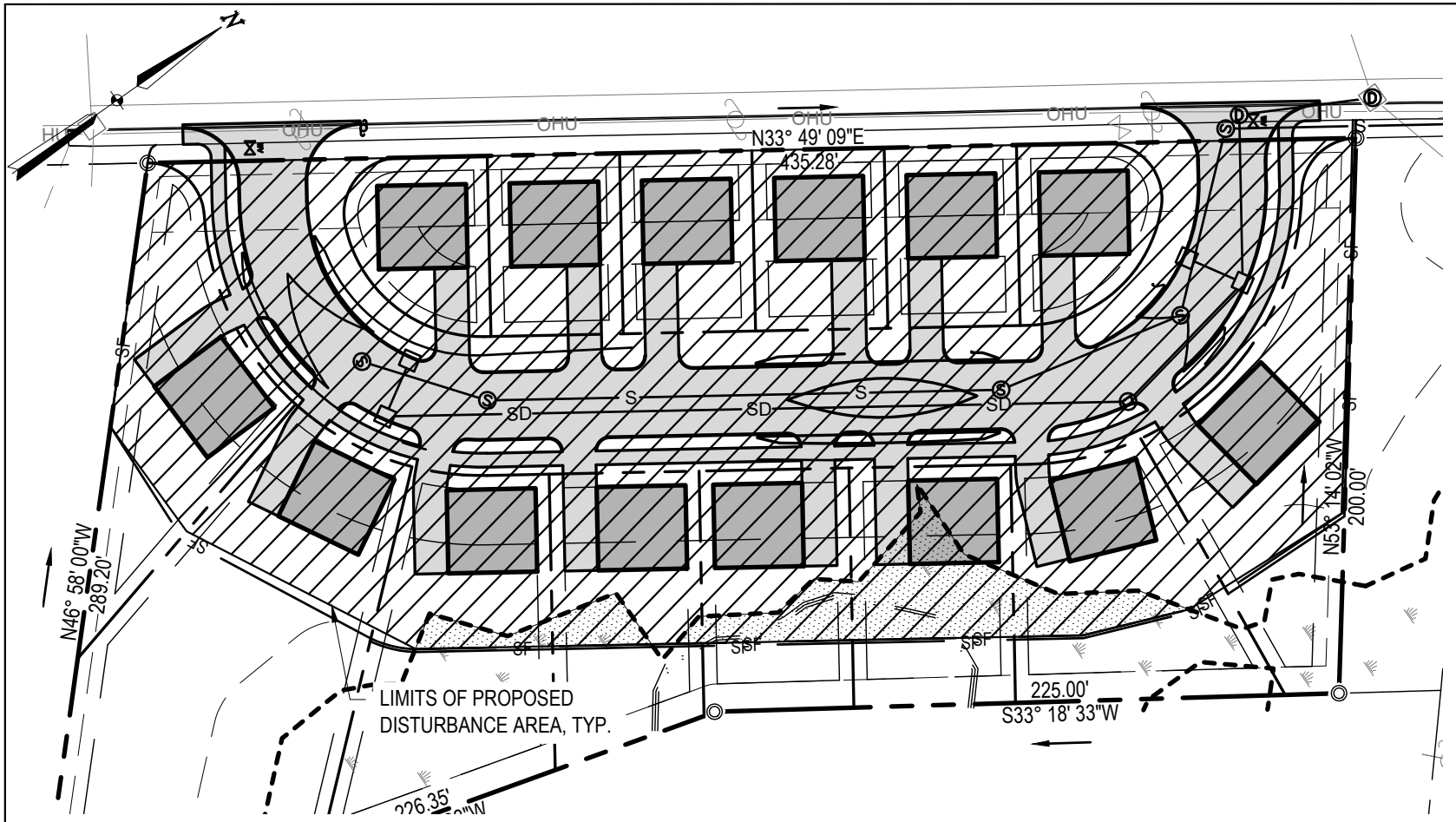
34 HARVEST HILL LANE
AUBURN, ME 04210

WAHAN OAKS
146 MANLEY ROAD
AUBURN, MAINE

WETLAND NRPA PERMITTING EXHIBIT

SCALE:	1" = 60'
DESIGNED:	BVD
DRAWN:	BVD
DATE:	11/26/2025
PROJECT NUMBER:	25-009

SK2



DISTURBANCE TABLE	
LOT AREA (S.F.)	99,626 S.F.
IMPERVIOUS AREA*	34,248 S.F.
LANDSCAPED AREA	38,919 S.F.
OVERALL PROJECT DISTURBANCE AREA	73,167 .S.F.

*SEE IMPERVIOUS AREA BREAKDOWN TABLE ON C101

GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
1 INCH = 60 FT.

TRILLIUM
ENGINEERING GROUP
253 US ROUTE 1, SUITE 101-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR
ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

WAHAN OAKS

146 MANLEY ROAD
AUBURN, MAINE

DEP EXHIBIT

SCALE:	1" = 60'
DESIGNED:	BVD
DRAWN:	BVD
DATE:	11/26/2025
PROJECT NUMBER:	25-009

SK3

TRILLIUM
ENGINEERING GROUP

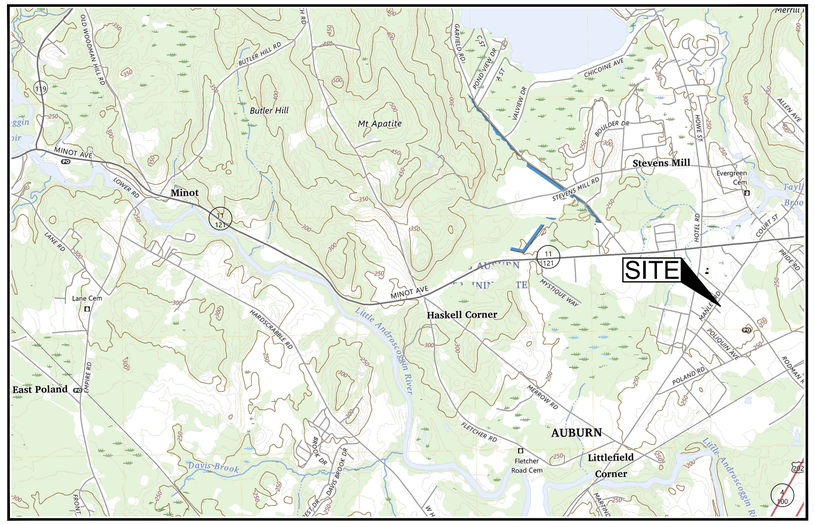
251 US Route-1, Suite O-2
Falmouth, ME 04105

O. Site Plans

WAHAN OAKS - PROPOSED SUBDIVISION

146 MANLEY ROAD, AUBURN MAINE

APRIL 2026



LOCUS MAP

NOT TO SCALE

DRAWING LIST

C001	COVER SHEET
C100	EXISTING CONDITIONS AND DEMOLITION PLAN
C101	PROPOSED SUBDIVISION PLAN
C102	PROPOSED SITE LAYOUT PLAN
C103	PROPOSED UTILITY PLAN
C104	PROPOSED GRADING AND DRAINAGE PLAN AND PROFILE
C200	SITE DETAILS
C201	SITE DETAILS
C300	EROSION CONTROL DETAILS

OWNER:

HOMES FOR ALL, LLC
34 HARVEST HILL LANE
AUBURN, ME 04210

CONSULTANTS:

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 2
FALMOUTH, ME 04105

TRILLIUM
ENGINEERING GROUP
251 US ROUTE 1, SUITE 0-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION

146 MANLEY ROAD
AUBURN, MAINE

ISSUED

NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
B	RESPONSE TO COMMENTS	ED	12/1/2025
C	FINAL APPLICATION REVIEW	ED	4/30/2026

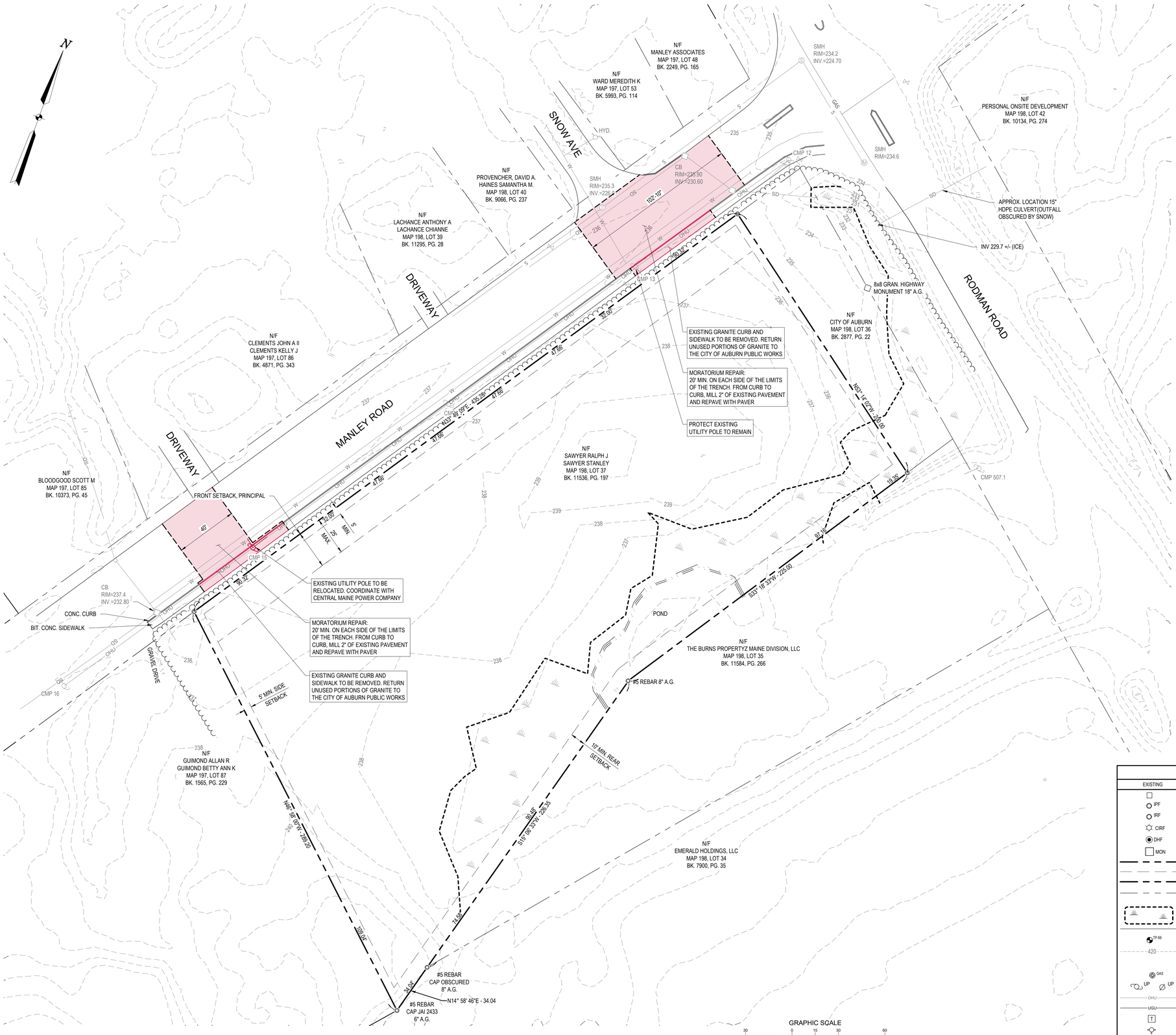
SHEET TITLE:

COVER SHEET

DESIGNED BY:	BVD
DRAWN BY:	BVD
DATE:	10/9/2025
PROJECT NUMBER:	25-009

C001

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM



1 EXISTING CONDITIONS AND DEMOLITION PLAN
1" = 30'

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

GENERAL NOTES

1) BOUNDARY AND TOPOGRAPHY SURVEY PERFORMED BY TRILLIUM ENGINEERING GROUP.
2) THE CONTRACT WORK TO BE PERFORMED ON THIS PROJECT CONSISTS OF FURNISHING ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, IMPLEMENTS, PARTS AND SUPPLIES NECESSARY FOR OR APPURTENANT TO, THE INSTALLATION OF CONSTRUCTION IMPROVEMENTS IN ACCORDANCE WITH THESE DRAWINGS AND AS FURTHER ELABORATED IN ANY ACCOMPANYING SPECIFICATIONS.
3) THE WORK SHALL BE PERFORMED IN A THOROUGH WORKMANLIKE MANNER. ALL CONTRACTORS TO CONFORM TO ALL APPLICABLE OSHA STANDARDS. ANY REFERENCE TO A SPECIFICATION OR DESIGNATION OF THE AMERICAN SOCIETY FOR TESTING MATERIALS, FEDERAL SPECIFICATIONS, OR OTHER STANDARDS, CODES OR ORDERS, REFERS TO THE MOST RECENT OR LATEST SPECIFICATION OR DESIGNATION.
4) ALL CONSTRUCTION WITHIN THE CITY RIGHT OF WAY SHALL COMPLY WITH CITY PUBLIC WORKS STANDARDS. ALL CONSTRUCTION WITHIN A STATE RIGHT OF WAY SHALL COMPLY WITH MAINE D.O.T. STANDARDS. ALL UTILITY CONSTRUCTION SHALL CONFORM TO RESPECTIVE UTILITY STANDARDS.
5) THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED BY THE CITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY REQUIRED TO PERFORM ALL THE WORK (STREET OPENINGS, BUILDING PERMIT, ETC.). THE CONTRACTOR SHALL POST ALL BONDS AS REQUIRED, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
6) PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR IS TO INFORM ALL AREA UTILITY COMPANIES AND GOVERMENTAL AGENCIES OF PLANNED CONSTRUCTION. THE SITE CONTRACTOR IS REQUIRED TO CONTACT DIG-SAFE (1-800-225-4977) AT LEAST 3 BUSINESS DAYS PRIOR TO ANY EXCAVATION TO VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.
7) THE PROJECT DRAWINGS ARE GENERALLY SCHEMATIC AND INDICATE THE POSSIBLE LOCATION OF EXISTING UNDERGROUND UTILITIES. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY MAPS, MUNICIPAL RECORD MAPS, AND FIELD SURVEY. IT IS NOT GUARANTEED TO BE CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SERVICES, WHEN THOSE SERVICES ARE TO BE LEFT IN PLACE. THE CONTRACTOR IS TO PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING THE EXCAVATING AND BACKFILLING OPERATIONS. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE FOUND, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
8) OSHA REGULATIONS MAKE IT UNLAWFUL TO OPERATE CRANES, BOOMS, HOISTS, ETC. WITHIN TEN FEET (10') OF ANY ELECTRIC LINE. IF THE CONTRACTOR MUST OPERATE CLOSER THAN 10', THE CONTRACTOR MUST CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS BEFORE ENCROACHING ON THIS REQUIREMENT.
9) IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLANS, APPROVALS, AND DETAILS FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL THE SITE CONDITIONS IN THE FIELD AND CONTACT THE DESIGN ENGINEER IF THERE ARE ANY DISCREPANCIES REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT AN APPROPRIATE REVISION CAN BE MADE PRIOR TO BIDDING.
10) THE CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND CONSTRUCTION DETAILS OF THE BUILDING AREA. BUILDING AND DRIVEWAYS SHOWN ARE CONCEPTUAL. ALL SITE DIMENSIONS ARE REFERENCED TO PROPERTY LINES, THE FACE OF CURBS, OUTSIDE FACE OF WALLS, OR EDGE OF PAVING UNLESS OTHERWISE NOTED.
11) ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED IN WRITING BY THE OWNER, DESIGN ENGINEER, AND APPROPRIATE GOVERNMENTAL AGENCY PRIOR TO INSTALLATION.
12) THE CONTRACTOR SHALL RESTORE ALL UTILITY STRUCTURES, PIPE, UTILITIES, PAVEMENT, CURBS, SIDEWALKS, AND LANDSCAPED AREAS DISTURBED BY CONSTRUCTION TO AS GOOD AS BEFORE BEING DISTURBED AS DETERMINED BY CITY CODE ENFORCEMENT OFFICIALS. ANY DAMAGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
13) ALL EXCAVATION SHALL BE BACKFILLED TO EXISTING GRADE BEFORE THE END OF THE DAY OR ADEQUATELY PROTECTED FROM DANGER TO HUMANS AND ANIMALS.
14) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE OWNER WILL PROVIDE A BENCH MARK AT THE CONSTRUCTION SITE FROM WHICH TO BEGIN LAYOUT.
15) THE CONTRACTOR SHALL GUARANTEE THE FAITHFUL REMEDY OF ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND GUARANTEES PAYMENT FOR ANY RESULTING DAMAGE WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT.
16) THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF CONSTRUCTION.
17) A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER, DESIGNERS, CITY OFFICIALS AND CONTRACTOR SHALL BE REQUIRED BEFORE ANY CONSTRUCTION OCCURS ON THE PROJECT. DURING CONSTRUCTION THERE SHALL BE WEEKLY PROGRESS MEETINGS WITH THE OWNER ON SITE OR TELECONFERENCE) UNTIL PROJECT COMPLETION.
18) PROPER IMPLEMENTATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE OF PARAMOUNT IMPORTANCE FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER, THEIR REPRESENTATIVES, OR STATE/LOCAL/ FEDERAL INSPECTORS AT NO ADDITIONAL COST TO THE OWNER.

CITY OF AUBURN ZONING SUMMARY
TAX MAP 198 / LOTS 37, 38
ZONE: T-4.2B - TRADITIONAL NEIGHBORHOOD DEVELOPMENT DISTRICT
OVERLAY ZONES: MANUFACTURED HOUSING OVERLAY DISTRICT, FIREARMS RESTRICTED ZONE, AIRPORT AOI, GAS ZONE (LOT 37)
FUTURE LAND USE: MODERATE DENSITY NEIGHBORHOOD CONSERVATION

	REQUIRED
FRONT SETBACK, PRINCIPAL	5' MIN./25' MAX*
(CORNER LOT) FRONT SETBACK, SECONDARY	5' MIN./15' MAX.
SIDE SETBACK	5' MIN.
REAR SETBACK	10' MIN.
BUILDING LOT COVERAGE	70% MAX.
USEABLE OPEN SPACE	10% MIN.
FRONTAGE BUILDOUT	60% MIN. **
BUILDING WIDTH	14' MIN./110' MAX.
BUILDING HEIGHT MINIMUM	1 STORY MIN.
BUILDING HEIGHT MAXIMUM	3 STORY MAX. ***

* WHERE ADJACENT BUILDINGS EXCEED THE MAXIMUM SETBACK, THE MAXIMUM SETBACK MAY BE CALCULATED BY THE AVERAGE SETBACK OF PRINCIPAL STRUCTURES ON ADJACENT LOTS. FOR UNDEVELOPED ADJACENT LOTS, A SETBACK OF 25' SHALL BE USED FOR THE CALCULATION. FRONT SETBACK, PRINCIPAL - WHERE A PRIVATE SHARED ACCESS DRIVE IS PROVIDED SERVING MORE THAN ONE STRUCTURE (MINIMIZING ACCESS POINTS ON ANY PUBLIC ROAD), THE FRONT SETBACK MAY BE MEASURED FROM THE PRIVATE ACCESS DRIVE, PEDESTRIAN ACCESS WAY, OR PARKING AREA.

** FOR COMMERCIAL AND MULTI-FAMILY USES AND 30% MINIMUM FOR SINGLE FAMILY AND TWO-FAMILY HOMES. THIS PROVISION DOES NOT APPLY TO DEVELOPMENTS WITH PRIVATE SHARED ACCESS WAYS TO MORE THAN ONE STRUCTURE

*** EXCLUDING ATTIC STORY

LEGEND

EXISTING	DESCRIPTION	EXISTING	DESCRIPTION
	GRANITE MONUMENT - 3' OFFSET	S	SEWER LINE
IPF	IRON PIN FOUND/SET	SMH	SEWER MANHOLE
IRF	IRON ROD FOUND	DMH	DRAINAGE MANHOLE
CIRF	CAPPED IRON ROD FOUND	CB	CATCH BASIN
DHF	DRILL HOLE FOUND	SD	STORMDRAIN
MON	GRANITE MONUMENT FOUND	UD	UNDERDRAIN
	STREET LINE		SILT FENCE
	LOT SETBACKS		TEMP. STONE CHECK DAM
	PROPERTY LINE		GRADING AND FLOW DIRECTION
	ABUTTER LINE		HAY BALES
	"NO CUT" BUFFER		EROSION CONTROL BLANKET
	WETLANDS		STORMWATER BOUNDARY
	EDGE OF ROAD/TRAVELED WAY		STORMWATER FLOW (Tc)
TP #9	SOIL TEST PIT		FACE OF LEDGE OUTCROP
420	CONTOUR		DECIDUOUS TREE
	SPOT GRADE		CONIFEROUS TREE
GAS	GAS SHUT-OFF		TREE LINE
UP UP	UTILITY POLE		SITE LIGHTING
OHU	OVERHEAD UTILITIES		STONE WALL
UGU	UNDERGROUND ELECTRICAL		
T	ELECTRICAL TRANSFORMER		
	FIRE HYDRANT		
W	WATER LINE		
WG	WATER GATE		

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 0-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
B	RESPONSE TO COMMENTS	ED	12/1/2025
C	FINAL APPLICATION REVIEW	ED	4/30/2026

ISSUED

SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

DESIGNED BY: BVD
DRAWN BY: BVD
DATE: 10/9/2025
PROJECT NUMBER: 25-009

C100

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM



1 PROPOSED SUBDIVSION PLAN
1" = 30'

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.



LOCATION MAP
NOT TO SCALE

IMPERVIOUS AREA TABLE	
LOT AREA (S.F.)	99,627 S.F.
TYPE OF COVER	PROPOSED IMP. AREA (S.F.)
LOT BUILDINGS AND DRIVEWAYS (ESTIMATE, TO BE DETERMINED)	18,692 S.F.
PAVEMENT (WITHIN PROPOSED RIGHT-OF-WAY)	15,556 S.F.
TOTAL	34,248 S.F.
PERCENT IMPERVIOUS	34.4%

AUBURN MAINE ZONING SUMMARY
TAX MAP 198 / LOTS 37,38
T-4.2B - TRADITIONAL NEIGHBORHOOD DEVELOPMENT DISTRICT

	REQUIRED	PROPOSED
MIN. LOT AREA	N/A	99,627
LOT WIDTH	24' MIN/120' MAX.	47'±
FRONT SETBACK	5' MIN./25' MAX.	5'
REAR SETBACK	10' MIN.	10'
SIDE SETBACK	5' MIN.	5'
BUILDING LOT COVERAGE	70%	34.4%
BUILDING WIDTH	14' MIN./110' MAX.	32'
BUILDING HEIGHT	1 STORY MIN./3 STORY MAX.*	2 STORY
* MAX. BUILDING HEIGHT EXCLUDES ATTIC STORY		

OVERLAY ZONES:
MANUFACTURED HOUSING OVERLAY DISTRICT
FIREARMS RESTRICTED ZONE
AIRPORT AOI
GAS ZONE, RODMAN ROAD: ENCOMPASSES 2/3 OF LOT 198-037. 198-038 CLEAR
FUTURE LAND USE: MODERATE DENSITY NEIGHBORHOOD CONSERVATION

CITY OF AUBURN
PLANNING BOARD APPROVAL:

CHAIR: DATE:

GENERAL NOTES

1. LOCATIONS OF UTILITIES ARE APPROXIMATE
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE THEIR INDIVIDUAL SERVICES PRIOR TO THE START OF CONSTRUCTION.
3. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM CITY OF AUBURN PUBLIC WORKS DEPARTMENT, NO FEE WILL BE CHARGED FOR THIS PERMIT.
4. ALL THE UTILITY WORK SHALL BE DONE BY OTHERS.
5. PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AND SHALL NOT BE DISTURBED. IF DISTURBED, THEY SHALL BE REPLACED BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
6. ALL EXISTING CATCH BASINS, MANHOLES, CONNECTIONS, AND OUTLET PIPING SHALL BE CLEANED AND LEFT IN SATISFACTORY OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
7. ALL LAWN AREAS, WALKWAYS, AND DRIVEWAYS OUTSIDE THE WORK AREA, DAMAGED BY THE CONTRACTOR, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT REMOVED.
9. EXISTING PAVEMENT SHALL BE SAW CUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED.
10. EXISTING DRAINAGE STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED.
11. ALL EXISTING DRAINAGE PIPES TO BE ABANDONED SHALL BE PLUGGED WITH CONCRETE OR AS DIRECTED BY THE PROJECT ENGINEER.
12. BEFORE CONNECTION NEW PIPES TO AN EXISTING SEWER LINE, THE CONTRACTOR SHALL NOTIFY THE SEWER MAINTENANCE DIVISION OF THE CITY PUBLIC WORKS DEPARTMENT. NO WORK SHALL BE DONE WITHOUT THEIR APPROVAL.
13. NO ADDITIONAL PAYMENT WILL BE MADE FOR GRADING SIDE SLOPES OF DRIVEWAYS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS, REPAIRS MAY INCLUDE OVERLAY, REMOVAL OF UNACCEPTABLE MATERIALS, COMPLETE REPLACEMENT, JOINT SEALING, OR REBUTTING PAVEMENT AS REQUIRED. THIS WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE ONE YEAR GUARANTEE. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
15. ALL MANHOLE FRAMES SHALL BE SUPPLIED WITH SOLID MANHOLE COVERS; SEE STANDARD DETAIL.
16. NEW CATCH BASINS SHALL BE INSTALLED WITH A TYPE A-4 CATCH BASIN INLET STONE.
17. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE REMOVAL OF EXISTING PIPES.
18. ALL GRANITE CATCH BASIN STONES, MANHOLE FRAMES AND COVERS TO BE REMOVED SHALL BE DELIVERED TO THE CITY LOCATION AS DIRECTED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK. THESE EXISTING MATERIALS MAY BE REUSED AS DIRECTED BY THE PROJECT ENGINEER.
19. ALL TERMINAL MANHOLES SHALL HAVE CHANNELS CONSTRUCTED STRAIGHT THROUGH THE MANHOLE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND RECONNECTING EXISTING SEWER LATERALS TO NEW SEWER. PAYMENT WILL BE UNDER THE RESPECTIVE UNIT BID ITEM AS SPECIFIED IN THE CONTRACT DOCUMENT.

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
■	MONUMENT	□
●	IRON REBAR/ROD/PIPE, LOCATED BY TEG	○
◒	IRON REBAR/ROD/PIPE, LOCATED BY OTHERS	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTER LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELED WAY	
TP #9	SOIL TEST PIT	
420	CONTOUR	420
	SPOT GRADE	
GAS	GAS SHUT-OFF	
UP UP	UTILITY POLE	
OHU	OVERHEAD UTILITIES	OHU
UGU	UNDERGROUND ELECTRICAL	UGE
T	ELECTRICAL TRANSFORMER	T
	FIRE HYDRANT	
W	WATER LINE	W
WG	WATER GATE	
S	SEWER LINE	S
SMH	SEWER MANHOLE	SMH-1
DMH	DRAINAGE MANHOLE	DMH-1
CB	CATCH BASIN	CB-1
SD	STORMDRAIN	SD
UD	UNDERDRAIN	UD
	SILT FENCE	SF
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (Tc)	
	FACE OF LEDGE OUTCROP	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	TREE LINE	
	SITE LIGHTING	
	STONE WALL	

TRILLIUM
ENGINEERING GROUP
251 US ROUTE 1, SUITE O-2
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CLIENT:
HOMES FOR ALL LLC

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AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

ISSUED

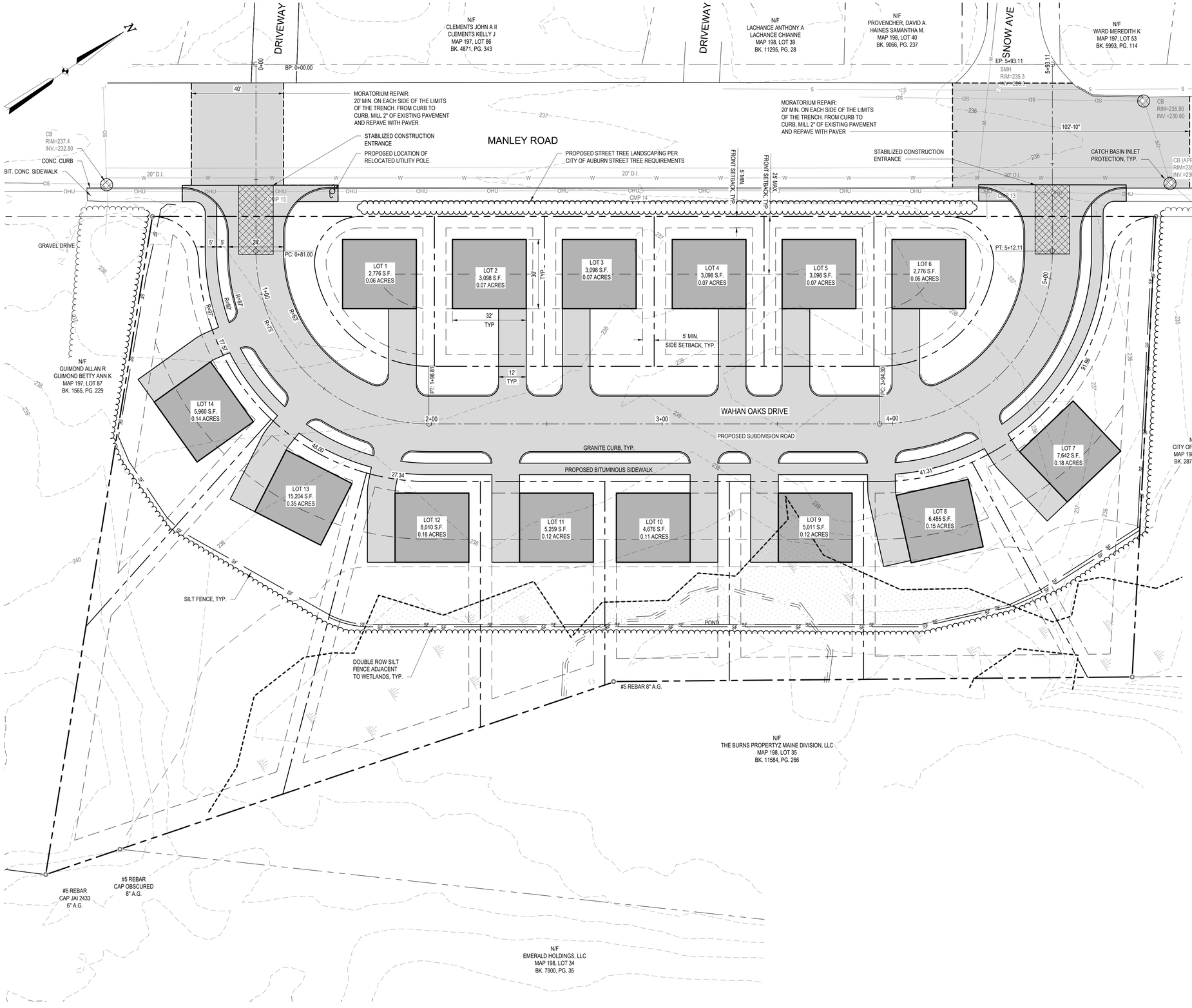
NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
B	RESPONSE TO COMMENTS	ED	12/1/2025
C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:
PROPOSED SUBDIVISION PLAN

DESIGNED BY: BVD
DRAWN BY: BVD
DATE: 10/9/2025
PROJECT NUMBER: 25-009

C101

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM



1 PROPOSED SITE LAYOUT PLAN
1" = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
■	MONUMENT	□
●	IRON REBAR/ROD/PIPE, LOCATED BY TEG	○
◒	IRON REBAR/ROD/PIPE, LOCATED BY OTHERS	
	STREET LINE	
101	LOT SETBACKS	101
327.60	PROPERTY LINE	327.60
	ABUTTER LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELED WAY	
TP 69	SOIL TEST PIT	
420	CONTOUR	420
	SPOT GRADE	
GAS	GAS SHUT-OFF	
UP UP	UTILITY POLE	
OHU	OVERHEAD UTILITIES	OHU
UGU	UNDERGROUND ELECTRICAL	UGE
T	ELECTRICAL TRANSFORMER	T
	FIRE HYDRANT	
W	WATER LINE	W
WG	WATER GATE	
S	SEWER LINE	S
SMH	SEWER MANHOLE	SMH-1
DMH	DRAINAGE MANHOLE	DMH-1
CB	CATCH BASIN	CB-1
SD	STORMDRAIN	SD
UD	UNDERDRAIN	UD
	SILT FENCE	SF
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (Tc)	
	FACE OF LEDGE OUTCROP	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	TREE LINE	
	SITE LIGHTING	
	STONE WALL	

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 0-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

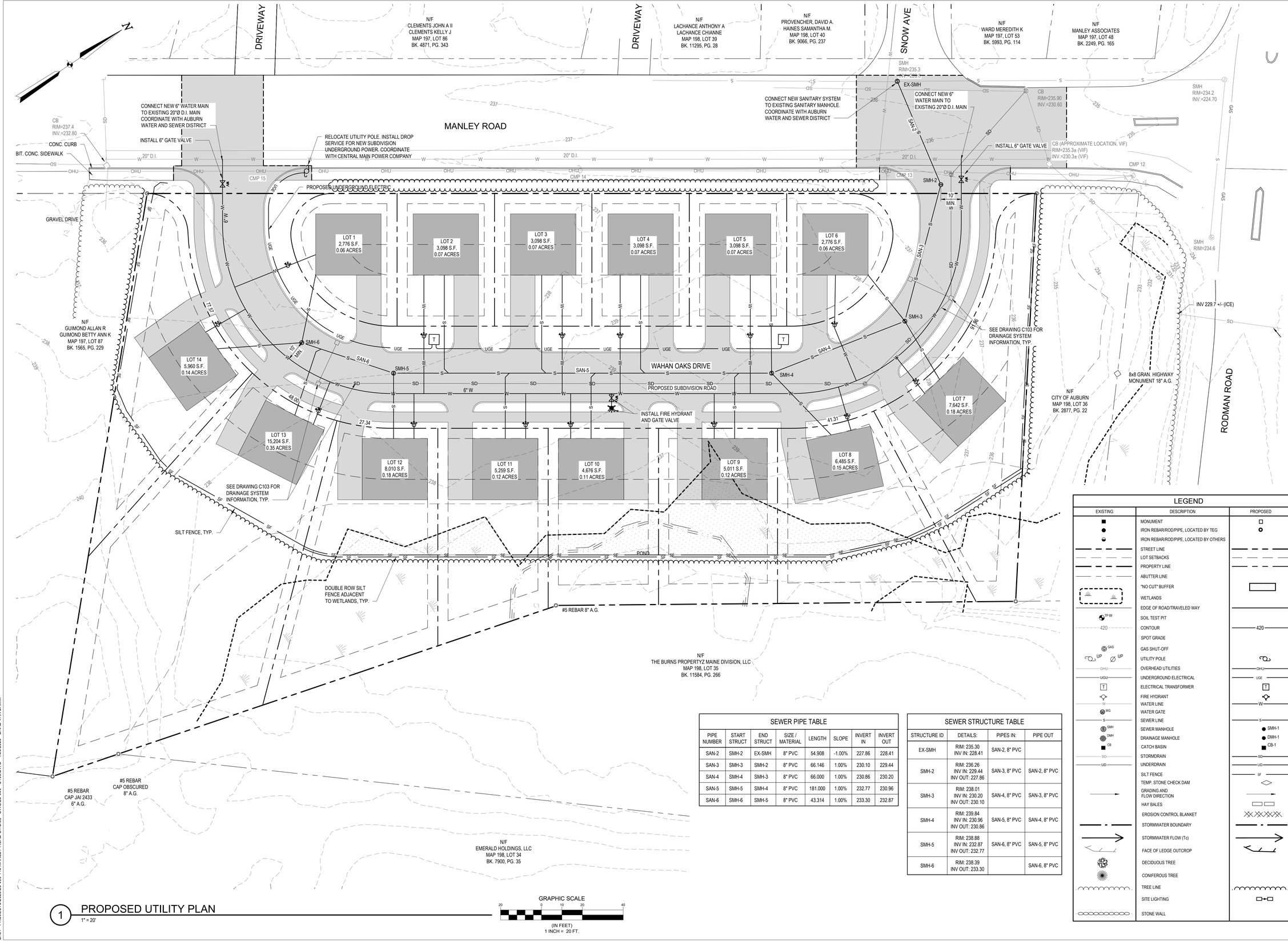
ISSUED	NUMBER	DESCRIPTION	BY	DATE
	A	PRE-APPLICATION REVIEW	ED	10/10/2025
	B	RESPONSE TO COMMENTS	ED	12/1/2025
	C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:
PROPOSED SITE LAYOUT PLAN

DESIGNED BY:	BVD
DRAWN BY:	BVD
DATE:	10/9/2025
PROJECT NUMBER:	25-009

C102

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM



SEWER PIPE TABLE

PIPE NUMBER	START STRUCT	END STRUCT	SIZE / MATERIAL	LENGTH	SLOPE	INVERT IN	INVERT OUT
SAN-2	SMH-2	EX-SMH	8" PVC	54.908	-1.00%	227.86	228.41
SAN-3	SMH-3	SMH-2	8" PVC	66.146	1.00%	230.10	229.44
SAN-4	SMH-4	SMH-3	8" PVC	66.000	1.00%	230.86	230.20
SAN-5	SMH-5	SMH-4	8" PVC	181.000	1.00%	232.77	230.96
SAN-6	SMH-6	SMH-5	8" PVC	43.314	1.00%	233.30	232.87

SEWER STRUCTURE TABLE

STRUCTURE ID	DETAILS:	PIPES IN:	PIPE OUT
EX-SMH	RIM: 235.30 INV IN: 228.41	SAN-2, 8" PVC	
SMH-2	RIM: 236.26 INV IN: 229.44 INV OUT: 227.86	SAN-3, 8" PVC	SAN-2, 8" PVC
SMH-3	RIM: 238.01 INV IN: 230.20 INV OUT: 230.10	SAN-4, 8" PVC	SAN-3, 8" PVC
SMH-4	RIM: 239.84 INV IN: 230.96 INV OUT: 230.86	SAN-5, 8" PVC	SAN-4, 8" PVC
SMH-5	RIM: 238.88 INV IN: 232.87 INV OUT: 232.77	SAN-6, 8" PVC	SAN-5, 8" PVC
SMH-6	RIM: 238.39 INV OUT: 233.30		SAN-6, 8" PVC

LEGEND

EXISTING	DESCRIPTION	PROPOSED
■	MONUMENT	□
●	IRON REBAR/ROD/PIPE, LOCATED BY TEG	○
◒	IRON REBAR/ROD/PIPE, LOCATED BY OTHERS	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTER LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELED WAY	
TP 69	SOIL TEST PIT	
420	CONTOUR	420
	SPOT GRADE	
GAS	GAS SHUT-OFF	
UP UP	UTILITY POLE	
OHU	OVERHEAD UTILITIES	OHU
UGU	UNDERGROUND ELECTRICAL	UGE
T	ELECTRICAL TRANSFORMER	T
	FIRE HYDRANT	
W	WATER LINE	W
WG	WATER GATE	
S	SEWER LINE	S
SMH	SEWER MANHOLE	SMH-1
DMH	DRAINAGE MANHOLE	DMH-1
CB	CATCH BASIN	CB-1
SD	STORMDRAIN	SD
UD	UNDERDRAIN	UD
	SILT FENCE	SF
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (Tc)	
	FACE OF LEDGE OUTCROP	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	TREE LINE	
	SITE LIGHTING	
	STONE WALL	

1 PROPOSED UTILITY PLAN
1" = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 0-2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION

146 MANLEY ROAD
AUBURN, MAINE

ISSUED

NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
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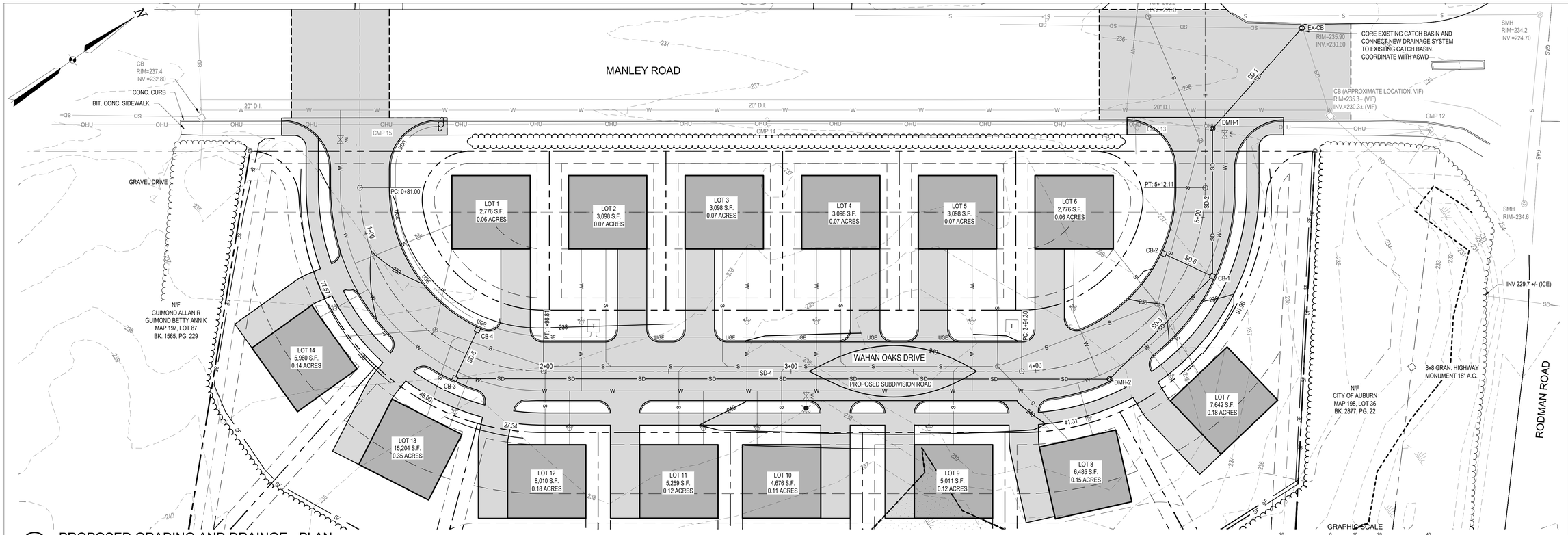
SHEET TITLE:

PROPOSED UTILITY PLAN

DESIGNED BY: BVD
DRAWN BY: BVD
DATE: 10/9/2025
PROJECT NUMBER: 25-009

C103

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM



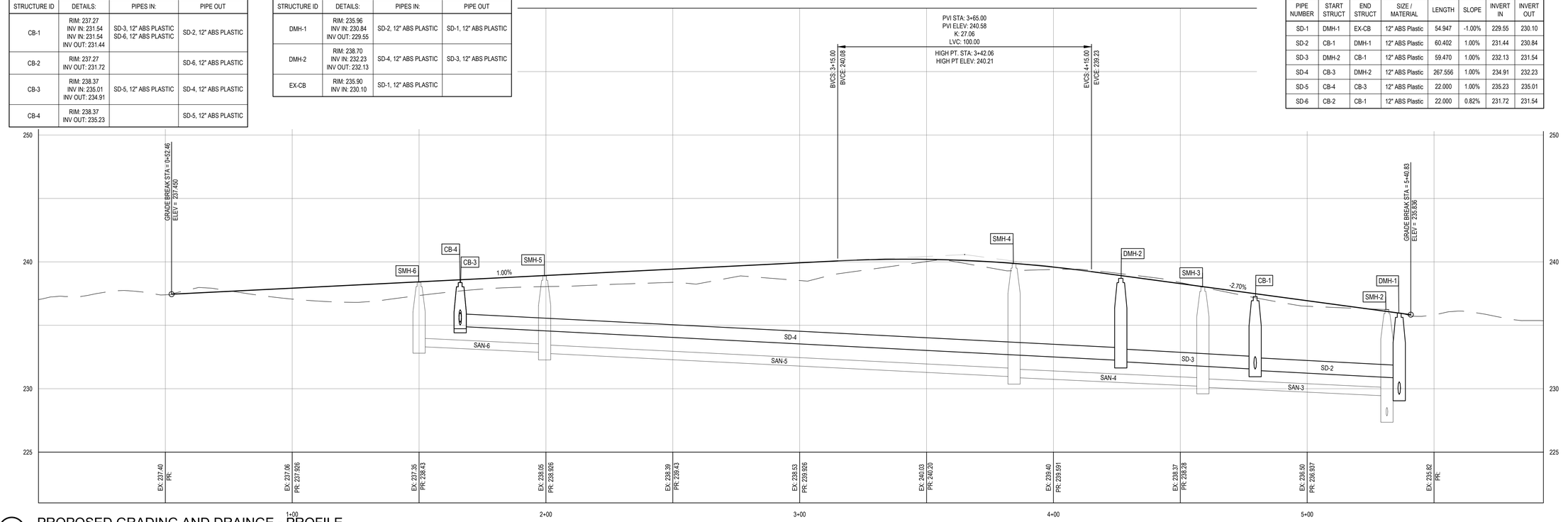
1 PROPOSED GRADING AND DRAINGE - PLAN

1" = 20'

DRAIN STRUCTURE TABLE			
STRUCTURE ID	DETAILS:	PIPES IN:	PIPE OUT
CB-1	RIM: 237.27 INV IN: 231.54 INV IN: 231.54 INV OUT: 231.44	SD-3, 12" ABS PLASTIC SD-6, 12" ABS PLASTIC	SD-2, 12" ABS PLASTIC
CB-2	RIM: 237.27 INV OUT: 231.72		SD-6, 12" ABS PLASTIC
CB-3	RIM: 238.37 INV IN: 235.01 INV OUT: 234.91	SD-5, 12" ABS PLASTIC	SD-4, 12" ABS PLASTIC
CB-4	RIM: 238.37 INV OUT: 235.23		SD-5, 12" ABS PLASTIC

DRAIN STRUCTURE TABLE			
STRUCTURE ID	DETAILS:	PIPES IN:	PIPE OUT
DMH-1	RIM: 235.96 INV IN: 230.84 INV OUT: 229.55	SD-2, 12" ABS PLASTIC	SD-1, 12" ABS PLASTIC
DMH-2	RIM: 238.70 INV IN: 232.23 INV OUT: 232.13	SD-4, 12" ABS PLASTIC	SD-3, 12" ABS PLASTIC
EX-CB	RIM: 235.90 INV IN: 230.10	SD-1, 12" ABS PLASTIC	

DRAIN PIPE TABLE							
PIPE NUMBER	START STRUCT	END STRUCT	SIZE / MATERIAL	LENGTH	SLOPE	INVERT IN	INVERT OUT
SD-1	DMH-1	EX-CB	12" ABS Plastic	54.947	-1.00%	229.55	230.10
SD-2	CB-1	DMH-1	12" ABS Plastic	60.402	1.00%	231.44	230.84
SD-3	DMH-2	CB-1	12" ABS Plastic	59.470	1.00%	232.13	231.54
SD-4	CB-3	DMH-2	12" ABS Plastic	267.556	1.00%	234.91	232.23
SD-5	CB-4	CB-3	12" ABS Plastic	22.000	1.00%	235.23	235.01
SD-6	CB-2	CB-1	12" ABS Plastic	22.000	0.82%	231.72	231.54



2 PROPOSED GRADING AND DRAINGE - PROFILE

H: 1" = 20' / V: 1" = 5'

Z:\01 - PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03 - DWG\25-009 - C100.DWG - 4/30/2026 - BRAD VAN DAMM

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 0-2
FALMOUTH, ME 04105

CLIENT:
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WAHAN OAKS
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146 MANLEY ROAD
AUBURN, MAINE

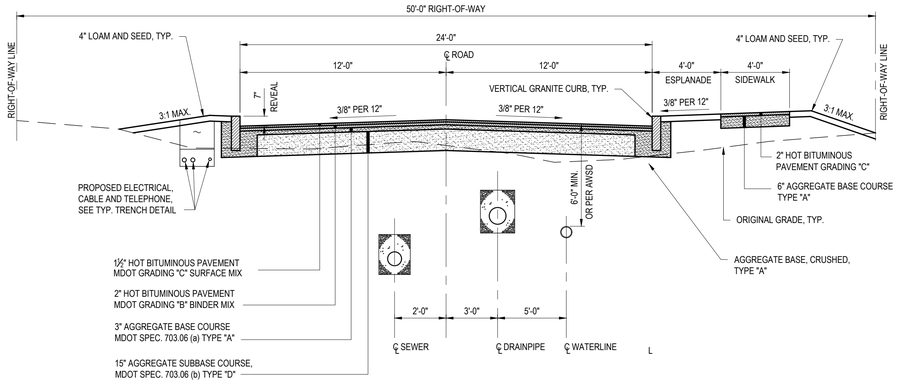
ISSUED

NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
B	RESPONSE TO COMMENTS	ED	12/1/2025
C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:
PROPOSED GRADING AND DRAINAGE PLAN AND PROFILE

DESIGNED BY: BVD
DRAWN BY: BVD
DATE: 10/9/2025
PROJECT NUMBER: 25-009

C104



NOTES:

1. POWER, TELEPHONE, AND CABLE TV SHALL NOT BE PLACED LESS THAN 30 INCHES DEEP.
2. DEPTH OF OTHER UTILITIES AS PER THE RECOMMENDATION OF THE APPLICABLE UTILITY COMPANY.
3. WARNING TAPE SHALL BE PLACED OVER EACH LINE. PVC CONDUIT IS REQUIRED FOR STREET CROSSINGS AND UNDER PAVEMENT MORE THAN 12 FEET IN LENGTH.
4. LOAM AND SEED SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS 615 AND 618, METHOD ONE.
5. ENTIRE WIDTH OF ROADWAY AND SHOULDERS SHALL BE STRIPPED AND GRUBBED OF TOP SOIL, ORGANICS AND OTHER DELETERIOUS MATERIAL. ALL STUMPS AND UNSUITABLE MATERIAL (IF ANY) SHALL BE REMOVED IF WITHIN 5 FEET OF FINISHED GRADE UNDER ALL PAVED AREAS.
6. SUITABLE GRANULAR FILL MATERIAL SHALL CONSIST OF HARD DURABLE MINERALS LESS VERY FINE SANDS, SILT, CLAY, OR ORGANIC MATERIALS. MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES. COMPACTION SHALL BE ACHIEVED BY MECHANICAL MEANS OF A "DYNAPAC", TANDEM VIBRATORY WALK BEHIND ROLLER, OR TRACKING WITH HEAVY EQUIPMENT.

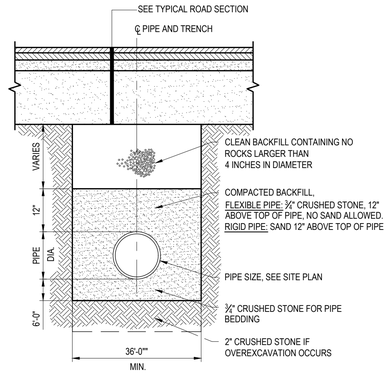
RECOMMENDED MINIMUM PLACEMENT TEMPERATURES FOR PAVEMENT

BASE[1] TEMPERATURE °F	MAT THICKNESS, IN INCHES					
	1/2	3/4	1	1 1/2	2	3
+40 - 50	-	-	310	300	285	275
+50 - 60	-	310	300	295	280	270
+60 - 70	310	300	290	285	275	265
+70 - 80	300	290	285	280	270	265
+80 - 90	290	280	275	270	265	260
+90	280	275	270	265	260	255
ROLLING TIME MIN.	4	6	8	12	15	15

1. BASE ON WHICH MIX IS PLACED.
2. AND GREATER

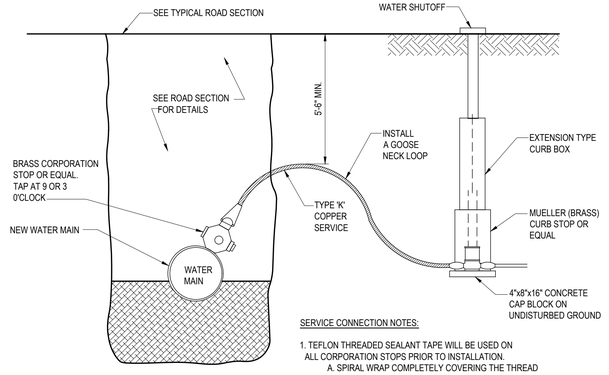
1 TYPICAL ROAD SECTION
NTS

NOTE:
MANLEY ROAD IS UNDER MORATORIUM UNTIL 2029. CITY OF AUBURN REQUIRES PAVEMENT REPAIR 20' ON EACH SIDE OF THE LIMITS OF TRENCH, FROM CURB TO CURB. MILL 2" OF EXISTING PAVEMENT AND REPAVE WITH PAVER.



NOTE:
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED BY THE CITY.

2 TYPICAL UNDERGROUND PIPE TRENCH SECTION
NTS

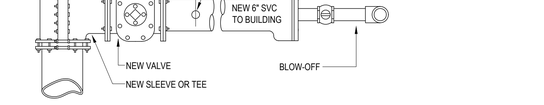


SERVICE CONNECTION NOTES:

1. TEFLON THREADED SEALANT TAPE WILL BE USED ON ALL CORPORATION STOPS PRIOR TO INSTALLATION.
   A. SPIRAL WRAP COMPLETELY COVERING THE THREAD AREA WITH TWO WRAPS.
   B. PIPE DOPE OR OTHER LIQUID THREAD SEALANTS ARE NOT ACCEPTABLE.
2. LEAVE UP TO THREE THREADS SHOWING OUTSIDE OF PIPE. A TORQUE OF 35 POUNDS IS RECOMMENDED.

GENERAL NOTES
1. CONTRACTOR SHALL CONFIRM ALL PIPE SIZES WITH THE CITY WATER DISTRICT.
2. WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY WATER DISTRICT STANDARDS.
3. CONTRACTOR SHALL STUB NEW SERVICES AT THE EDGE OF THE R.O.W. IN THE MIDDLE OF EACH LOT, UNLESS OTHERWISE NOTED ON THE PLAN/PROFILES.
4. FINAL LOCATION OF ALL BLOW OFF VALVES, STREET BOXES AND HYDRANT VALVES SHALL BE IN ACCORDANCE WITH THE CITY WATER DISTRICT.

3 TYPICAL WATER SERVICE CONNECTION DETAIL
NTS

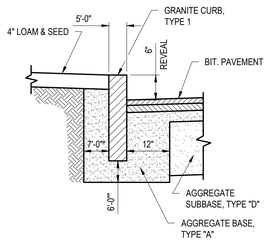


PLAN VIEW

PROCEDURES:

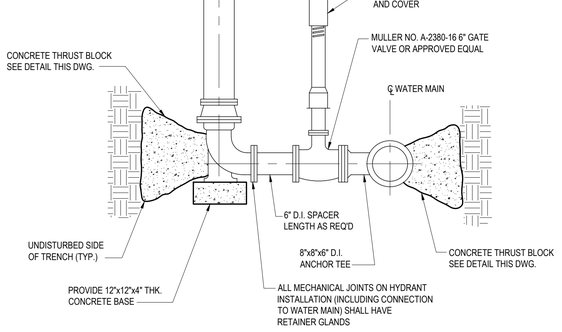
1. NEW VALVE TO REMAIN SHUT AND ONLY OPERATED BY DISTRICT FOR FLUSHING, TESTING, DISINFECTING, ETC.
2. THE TESTING CORPORATION LOCATION MUST BE ACCESSIBLE BY:
   A. LEAVING THE EXCAVATION OPEN DURING TESTING - DISINFECTION PERIOD, OR BY:
   B. INSTALLING A "JUMPER LINE" TO THE GROUND SURFACE WITH THE CORPORATION BEING AN ANGLE VALVE IN A VALVE BOX, OR BY USING A SERVICE BOX AND ROD. AFTER COMPLETION OF THE HYDROSTATIC TEST AND THE DISINFECTION PROCEDURE:
      (1) THE ANGLE VALVE IS SHUT,
      (2) THE "JUMPER LINE" IS CUT OFF BELOW THE GROUND, AND
      (3) THE BOX IS PULLED.

4 NEW WATER SERVICE CONNECTION TO EXISTING MAIN
NTS



SECTION

5 TYPICAL GRANITE CURB DETAIL
NTS



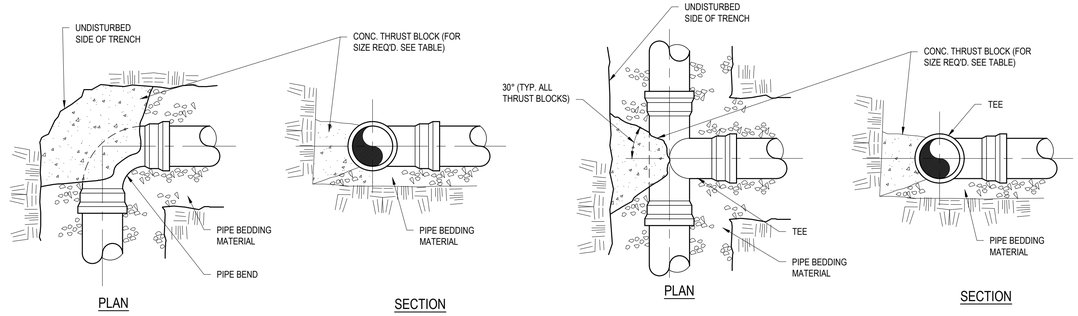
6 TYPICAL HYDRANT DETAIL
NTS

CONCRETE THRUST BLOCK SIZE REQUIREMENTS

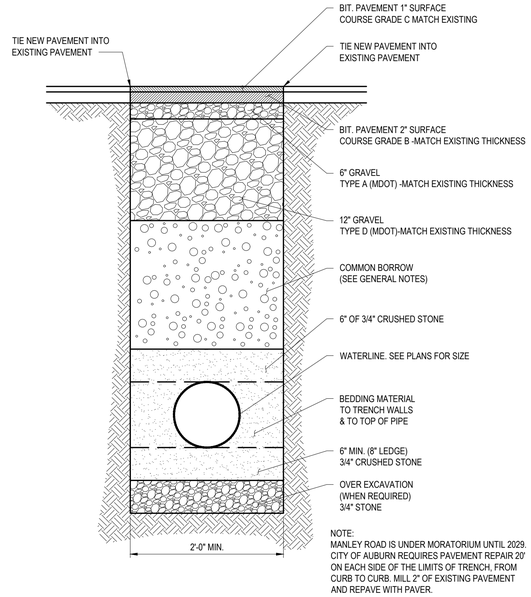
FITTINGS		SQUARE FEET OF BEARING ON UNDISTURBED SOIL			
		90° BENDS	45° BENDS	TEES & PLUGS	HYDRANTS
PIPE SIZE (IN)	4	2.0	1.0	1.0	N/A
	6	3.0	2.0	2.0	6.0
	8	5.0	3.0	4.0	N/A
	10	7.0	4.0	5.0	N/A
	12	10.0	6.0	7.0	N/A
	14	13.0	7.0	10.0	N/A
	16	17.0	9.0	12.0	N/A

NOTES:
1. FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE PIPE CROWN, CONC. SHALL BE PLACED BETWEEN THE PIPE AND THE ROCK FACE.
2. FOR BENDS HAVING A DEFLECTION OF LESS THAN 45°, THE THRUST BLOCK AREAS STATED FOR A 45° BEND SHALL BE USED.
3. THE THRUST BLOCK BEARING AREAS ARE BASED ON A RESULTANT THRUST AT FITTINGS OFF 100 PSI WATER PRESSURE AND A SOIL WITH A BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT. DIFFERENT SOIL CONDITIONS MAY REQUIRE DIFFERENT BEARING AREAS AT THE DIRECTION OF THE ENGINEER.
4. THE MAXIMUM HEIGHT OF EACH THRUST BLOCK SHALL BE EQUAL TO 1/2 THE DISTANCE BETWEEN THE GROUND SURFACE AND THE BOTTOM OF THAT THRUST BLOCK.
5. JOINTS SHALL NOT BE ENCASED IN CONCRETE.

SIZE REQUIREMENT TABLE



7 TYPICAL THRUST BLOCK DETAILS
NTS



NOTE:
MANLEY ROAD IS UNDER MORATORIUM UNTIL 2029. CITY OF AUBURN REQUIRES PAVEMENT REPAIR 20' ON EACH SIDE OF THE LIMITS OF TRENCH, FROM CURB TO CURB. MILL 2" OF EXISTING PAVEMENT AND REPAVE WITH PAVER.

8 WATER MAIN TRENCH SECTION
NTS

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

ISSUED

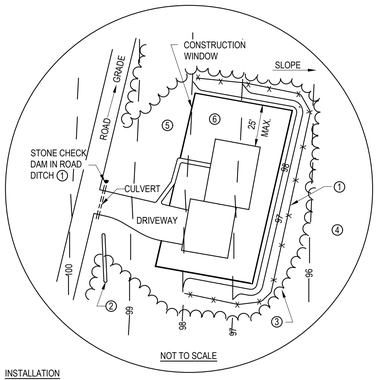
NUMBER	DESCRIPTION	BY	DATE
A	PRE-APPLICATION REVIEW	ED	10/10/2025
B	RESPONSE TO COMMENTS	ED	12/1/2025
C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:
SITE DETAILS

DESIGNED BY:	BVD
DRAWN BY:	BVD
DATE:	10/9/2025
PROJECT NUMBER:	25-009

C200

Z:\01. PROJECTS\2025\25-009 146 MANLEY ROAD SITE\03. DWG\25-009 - C200.DWG 4/30/2026 BRAD VAN DAMM



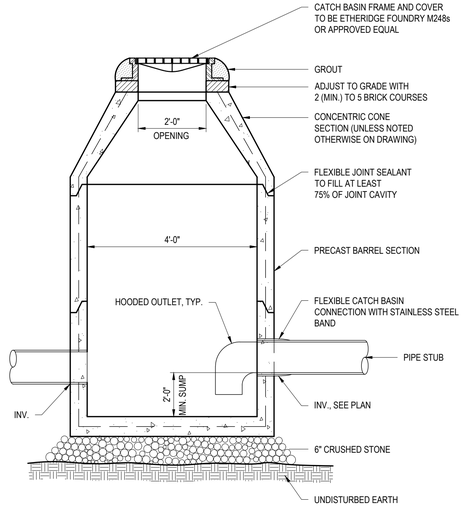
INSTALLATION

1. INSTALL SEDIMENT BARRIERS ON YOUR SITE BEFORE DISTURBING SOILS. SEE THE "SEDIMENT BARRIERS" MEASURE FOR DETAILS ON INSTALLATION AND MAINTENANCE.
2. CONSTRUCT A DIVERSION DITCH TO KEEP UPSLOPE RUNOFF OUT OF WORK AREA.
3. MARK CLEARING LIMITS ON THE SITE TO KEEP EQUIPMENT OUT OF AREAS WITH STEEP SLOPES, CHANNELIZED FLOW, OR ADJACENT SURFACE WATERS AND WETLANDS.
4. PRESERVE BUFFERS BETWEEN THE WORK AREA AND ANY DOWNSTREAM SURFACE WATERS AND WETLANDS. SEE THE "BUFFERS" MEASURE FOR BUFFER PRESERVATION.
5. USE TEMPORARY MULCH AND RYE-SEED TO PROTECT DISTURBED SOILS OUTSIDE THE ACTIVE CONSTRUCTION AREA. SEE THE "MULCHING" MEASURE AND "VEGETATION" MEASURE FOR DETAILS AND SPECIFICATIONS FOR THESE CONTROLS.
6. PERMANENTLY SEED AREAS NOT TO BE PAVED WITHIN SEVEN DAYS OF COMPLETING FINAL GRADING. SEE "VEGETATION" MEASURE FOR INFORMATION ON PROPER SEEDING.

MAINTENANCE

EVERY MONTH THE FIRST YEAR AFTER CONSTRUCTION AND YEARLY THEREAFTER, INSPECT FOR AREAS SHOWING EROSION OR POOR VEGETATION GROWTH. THESE PROBLEMS SHALL BE FIXED AS SOON AS POSSIBLE. EACH SPRING REMOVE ANY ACCUMULATION OF DEBRIS OR WINTER SAND THAT WOULD IMPEDE RUNOFF FROM ENTERING A BUFFER OF DITCH.

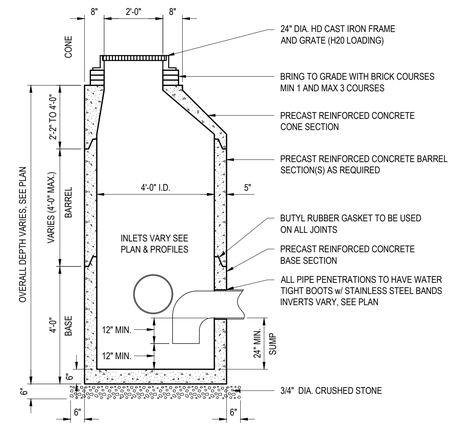
1 HOUSE LOT EROSION CONTROL
NTS



DRAINAGE MANHOLE DETAIL
NTS

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

1. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 PSI AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-67
3. ALL NEW AND EXISTING STRUCTURES THAT ARE WORKED ON MUST BE VACUUM TESTED AFTER COMPLETION.
4. ALL MANHOLES SHALL HAVE BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE.
5. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
6. MANHOLES SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
7. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
8. STORM AND SEWER MANHOLES SHALL HAVE SOLID COVERS WITH ONE DRILLED PICK HOLE.
9. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR AND REMAIN THE PROPERTY OF THE CITY.



NOTES:

1. CONCRETE 4000 PSI AFTER 28 DAYS.
2. REINFORCING H-20 LOADING 4x4 / 4x4 WWM. SLAB TOP - NO. 5 BARS.
3. EACH CASTING TO HAVE LIFTING HOLES TO BE FILLED WITH NON-SHRINK MORTAR.

OFFSET CONE STREET BASIN, W/ CASCO TRAP

CATCH BASIN DETAIL
NTS

2 TYPICAL DRAINAGE MANHOLE AND CATCH BASIN DETAILS
NTS

NOTES:
1. STONE SIZE: 2½" TO 1½" USE CRUSHED STONE.
2. THICKNESS MINIMUM OF 8".
3. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC TRAVELED WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE.

3 STABILIZED CONSTRUCTION ENTRANCE
NTS

4 TYPICAL UNDERGROUND WIRE TRENCH SECTION
NTS

NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
2. REINFORCING: PAD #4'S @ 12" O.C. E.W. E.F. BASE 1-MAT OF #4'S @ 12" O.C.
3. AS PER CENTRAL MAINE POWER COMPANY SPECIFICATIONS.
4. 1-8" X 12" KNOCKOUT PROVIDED EACH WALL. LARGER KNOCKOUTS ARE AVAILABLE.
5. MINIMUM CLEARANCES TO BUILDINGS AND OTHER OBSTRUCTIONS SHALL BE 3' TO THE REAR, 5' TO THE SIDES, AND 10' TO THE FRONT OF THE TRANSFORMER PAD.
6. REFER TO HANDBOOK OF STANDARD REQUIREMENTS BY CENTRAL MAINE POWER FOR ADDITIONAL REQUIREMENTS.

5 TRANSFORMER PAD DETAIL
NTS

6 TYPICAL GRAVITY SANITARY TRENCH SECTION
NTS

7 TYPICAL SEWER MANHOLE
NTS

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

ISSUED	NUMBER	DESCRIPTION	BY	DATE
	A	PRE-APPLICATION REVIEW	ED	10/10/2025
	B	RESPONSE TO COMMENTS	ED	12/1/2025
	C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:
SITE DETAILS

DESIGNED BY:	BVD
DRAWN BY:	BVD
DATE:	10/9/2025
PROJECT NUMBER:	25-009

C201

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EROSION AND SEDIMENTATION NOTES

1. THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR DEALING WITH SOIL EROSION AND SEDIMENTATION DURING AND AFTER PROJECT CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARD AND SPECIFICATIONS FOR EROSION PREVENTION AS CONTAINED IN THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: "MAINE EROSION AND SEDIMENT CONTROL BMPs" PUBLISHED BY THE MAINE DEP, LATEST EDITION.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES

1. EROSION/SEDIMENT CONTROL DEVICES

   THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1.1. SILT FENCE: SILT FENCE WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SILT FENCE WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SILT FENCE AND TO PROVIDE ADDITIONAL TREATMENT.

1.2. HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.

1.3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.

1.4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.

1.5. STRAW AND HAY MULCH; USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. ALL OTHER SLOPES MUST BE COVERED WITH JUTE MESH OVER MULCH, OR CURLEX II OR EXCELSIOR MAY BE USED IN PLACE OF JUTE MESH AND MULCH OVER LOAM AND SEED.

1.6. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELSIOR OR CURLEX.

2. TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES

   PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:

2.1. SILTATION FENCE ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SILTATION FENCE WILL REMAIN IN PLACE UNTIL THE SITE IS 85% REVEGETATED.

2.2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SILT FENCE.

2.3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:

   A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.

   B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.

   C. STABILIZE STOCKPILES WITHIN 15 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.

   D. SURROUND STOCKPILE SOIL WITH SILTATION FENCE AT BASE OF PILE.

2.1. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL OR WITHIN 15 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.

2.2. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 15 DAY MAXIMUM.

2.3. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

3. PERMANENT EROSION CONTROL MEASURES

   THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

3.1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

3.2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP.

CONSTRUCTION PHASE

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 15 DAYS, SEE ITEM NO. 4.
2. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION. IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP APRONS SHALL BE INSTALLED, AS SHOWN ON THE PLANS.
3. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. NO STOCKPILE SHALL BE CLOSER THEN 100' OF A RESOURCE INCLUDING, BUT NOT LIMITED TO, WETLANDS, STREAMS, AND OPEN WATER BODIES. ALL STOCKPILES SHALL HAVE A SILTATION FENCE BELOW THEM REGARDLESS OF TIME OF PRESENCE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:
   A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
   B. SEEDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
   C. INSTALL SILT FENCE AROUND STOCKPILE AT BASE OF PILE.

   STOCKPILES TO HAVE SILT FENCE INSTALLED AT TIME OF ESTABLISHMENT AT BASE OF PILE.
4. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 30 DAYS SHALL BE EITHER:
   A. TREATED WITH ANCHORED MULCH IMMEDIATELY, OR
   B. SEEDED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1000 SQ. FT) AND MULCHED IMMEDIATELY.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STONE, WITHIN 5 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)
6. ALL CULVERTS WILL BE PROTECTED WITH STONE RIPRAP (D50 = 6" UNLESS OTHERWISE SPECIFIED) AT INLETS AND OUTLETS.

POST-CONSTRUCTION REVEGETATION

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

1. A MINIMUM OF 4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS	SWALES
KENTUCKY BLUEGRASS 0.46 LBS/1000 SF.	RED TOP 0.05 LBS/1000 SF.
CREEPING RED FESCUE 0.46 LBS/1000 SF.	TALL FESCUE 0.46 LBS/1000 SF.
PERENNIAL RYE GRASS 0.11 LB/1000 SF.	

3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
   A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
   I. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
   II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
   III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.
   B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.
   A. ONLY UNFROZEN LOAM SHALL BE USED.
   B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
   C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.
   D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
   E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
   F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.
5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. HAY BALE BARRIERS, SILT FENCE, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SILT FENCE BEHIND THE HAY BALES.
2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. EXPOSED AREAS WILL BE RESEEDED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

EROSION CONTROL DURING WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SILT FENCE OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.
7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELSIOR OR CURLEX.
8. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1 THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
9. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.
10. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

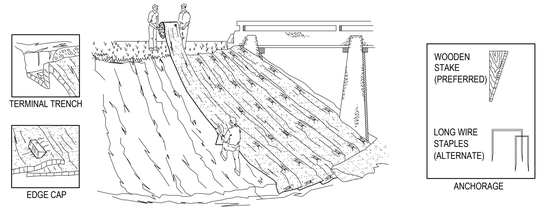
SITE INSPECTION AND MAINTENANCE

1. WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING RAIN FALLS, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (85% GRASS CATCH). NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

   IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.
2. SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER TO THE CITY.

MAINTENANCE AFTER CONSTRUCTION

1. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER OR THEIR DESIGNEE. SUCH RESPONSIBILITIES INCLUDE BUT ARE NOT LIMITED TO THOSE DETAILED AS FOLLOWS:
   A. PARKING LOT SHALL BE MECHANICALLY SWEPT TWICE PER YEAR. THE FIRST SHALL TAKE PLACE IN THE MID WINTER (JANUARY THAW) TO REMOVE ACCUMULATED SANDS FROM WINTER SANDING TO THIS POINT. THE SECOND SWEEPING SHALL TAKE PLACE AFTER WINTER SANDING OPERATIONS TERMINATE BUT PRIOR TO MAY 1.
   B. INSPECTION OF STORMWATER OUTLET STRUCTURE SHOULD BE CONDUCTED TWICE PER YEAR. ACCESS TO THE STRUCTURE IS THROUGH THE TOP. THE OIL/WATER SEPARATOR UNIT SHALL BE PUMPED DOWN AND THE SEDIMENT AND TRASH SHALL BE REMOVED AT THE TIME OF THE INSPECTION. THE REMOVAL OF ALL SEDIMENT AND TRASH WILL HELP MINIMIZE VOLUME LOSS.
2. THE OWNER SHALL FILE A YEARLY MAINTENANCE REPORT TO THE CITY DOCUMENTING THE REQUIRED MAINTENANCE FOR THE STORMWATER SYSTEM.



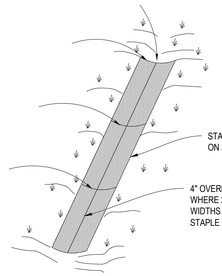
- UNROLL MAT ONTO GROUND IN DIRECTION OF WATER FLOW.
- MAT SHOULD LIE FLAT. DO NOT STRETCH MAT OVER GROUND. STRETCHING MAY CAUSE MAT TO BRIDGE DEPRESSIONS IN THE SURFACE AND ALLOW EROSION UNDERNEATH.
- BURY TRANSVERSE TERMINAL ENDS OF MAT TO SECURE AND PREVENT EROSIVE FLOW UNDERNEATH.
- SECURE MAT SNUGLY INTO ALL TRANSVERSE CHECK SLOTS.
- BACKFILL AND COMPACT TRENCHES AND CHECK SLOTS AFTER STAKING THE MAT IN BOTTOM OF TRENCH.
- OVERLAP ROLL ENDS BY THREE (3) FEET (MIN.) WITH UPSLOPE MAT ON TOP TO PREVENT UPLIFT OF MAT END BY WATER FLOW. IF INSTALLING IN THE DIRECTION OF A CONCENTRATED WATER FLOW, START NEW ROLLS IN A TRANSVERSE DITCH.
- OVERLAP ADJACENT EDGES OF MAT BY THREE (3) INCHES (MIN.) AND STAKE.
- WOOD STAKES ARE RECOMMENDED FOR PINNING MAT TO THE GROUND SURFACE. STAKES SHOULD BE 1" X 3" NOMINAL STOCK CUT IN A TRIANGULAR SHAPE. STAKES SHOULD BE 12" TO 18" LONG, DEPENDING ON SOIL DENSITY.
- DRIVE WOODEN STAKES TO WITHIN THREE (3) INCHES OF GROUND SURFACE. DO NOT DRIVE FLUSH TO SURFACE.
- IN ALL TRANSVERSE TERMINAL TRENCHES AND CHECK SLOTS, STAKE EACH MAT AT ITS CENTER AND OVERLAP EDGES BEFORE BACKFILLING AND COMPACTING.
- STAKE OVERLAPS LONGITUDINALLY AT THREE (3) TO FIVE (5) FOOT INTERVALS.
- FOLLOW COLORED DOT PATTERNS BY MANUFACTURER

  REQUIRED ON ALL SLOPES > 8% (WINTER CONSTRUCTION)

  REQUIRED ON ALL SLOPES > 15% (SUMMER CONSTRUCTION)

EROSION CONTROL BLANKET
GENERAL INSTALLATION GUIDELINES ON SLOPES

NTS



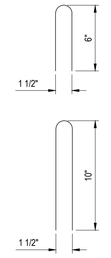
CONSTRUCTION NOTES:

A. BURY THE TOP OF THE NETTING IN A TRENCH 6" OR MORE DEEP

B. TAM TRENCH FULL OF SOIL. SECURE WITH ROW OF STAPLES, 12" SPACING, 4" DOWN FROM THE TRENCH

C. OVERLAP- BURY UPPER END OF LOWER STRIP AS IN "A" & "B". OVERLAP END OF TOP STRIP 4" AND STAPLE

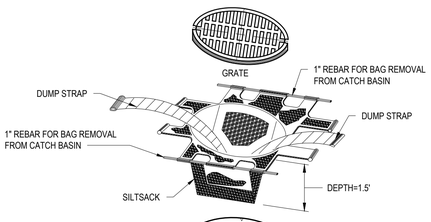
D. CHECK SLOT- FOLD OF NETTING BURIED IN SLIT TRENCH AND TAMPED; DOUBLE ROW OF STAPLES AT 12" SPACING. USE CHECK SLOTS AT 15' SPACING IN DITCHES OR STEEP SLOPES.

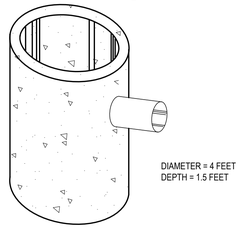


TYPICAL STAPLES NO. 11 GAUGE WIRE

EROSION CONTROL BLANKET REQUIRED IN ALL DITCHES > 3%

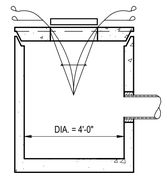
NOTE: GRADING PLAN GOVERNS IN ALL LOCATIONS



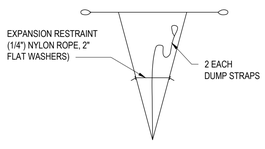


"SILTSACK" INSTALLATION INSTRUCTION

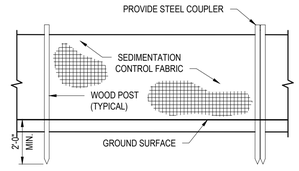
1. REMOVE THE CATCH BASIN GRATE AND PLACE THE SACK INTO THE OPENING. HOLD OUT APPROXIMATELY SIX (6) INCHES OF THE SACK BEYOND THE BASIN FRAME TO ALLOW ACCESS TO THE "SILTSACK" LIFTING STRAPS. REPLACING THE GRATE BACK INSIDE OF ITS FRAME WILL HOLD THE SACK IN PLACE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND MAINTAINING THIS SEDIMENT CONTROL DEVICE. THE SACK IS CONSIDERED FULL AND READY TO EMPTY WHEN THE THE "RESTRAINT CORD" IS NO LONGER VISIBLE.
3. THE "SILTSACK" IS REMOVED BY PLACING TWO (2) PIECES IF 1 INCH DIAMETER REBAR THROUGH THE LIFTING LOOPS LOCATED ON EACH SIDE OF THE SACK AND LIFTING WITH AN APPROPRIATE PIECE OF CONSTRUCTION EQUIPMENT. THE LIFTING STRAPS ARE CONNECTED TO THE BOTTOM OF THE SACK AND THE LIFTING ACTION WILL CAUSE THE SACK TO TURN INSIDE OUT, AND EMPTYING THE CONTENTS. THE SACK SHOULD THEN BE CLEANED, RINSED AND RETURNED TO ITS ORIGINAL SHAPE AND PLACED BACK IN THE BASIN.
4. THE "SILTSACK" IS REUSABLE, THEREFORE, ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE THE SACK FROM THE BASIN, CLEAN AND STORE OUT OF DIRECT SUNLIGHT UNTIL ITS NEXT USE.
5. THE "SILTSACK" SEDIMENT CONTROL DEVICE IS MANUFACTURED BY: ACF ENVIRONMENTAL

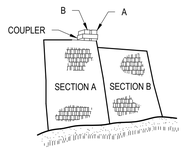


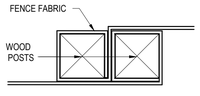
INSTALLATION DETAIL



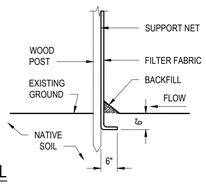
BAG DETAIL





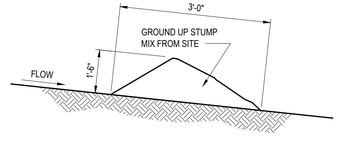


NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND



SILTATION FENCE DETAIL

NTS



MAY BE USED IN LIEU OF SILT FENCE

EROSION CONTROL MIX DETAIL

N.T.S.

SILTATION FENCE INSTALLATION

1. EXCAVATE A 6"x6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM. JOIN SECTION AS SHOWN ABOVE.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPLISHED BY AN INTERCEPTION DITCH.
5. BARRIER SHALL BE MIRAFI SILT FENCE OR APPROVED EQUAL.

TRILLIUM ENGINEERING GROUP
251 US ROUTE 1, SUITE 2
FALMOUTH, ME 04105

CLIENT:
HOMES FOR ALL LLC

34 HARVEST HILL LANE
AUBURN, ME 04210

PRELIMINARY
NOT FOR CONSTRUCTION

WAHAN OAKS
PROPOSED SUBDIVISION
146 MANLEY ROAD
AUBURN, MAINE

ISSUED	NUMBER	DESCRIPTION	BY	DATE
	A	PRE-APPLICATION REVIEW	ED	10/10/2025
	B	RESPONSE TO COMMENTS	ED	12/1/2025
	C	FINAL APPLICATION REVIEW	ED	4/30/2026

SHEET TITLE:

EROSION CONTROL DETAILS

DESIGNED BY:	BVD
DRAWN BY:	BVD
DATE:	10/9/2025
PROJECT NUMBER:	25-009

C300

Z:\01. PROJECTS\2025\25-009 146 MANLEY ROAD SITE\ED\ DWG\25-009 - C200.DWG 4/30/2026, BRAD VAN DAMM

Auburn Parks and Recreation Advisory Board

146 Manley Road Fee In-Lieu of Land Dedication Recommendation

January 30, 2026

To the Members of the Auburn Planning Board,

The Auburn Parks and Recreation Advisory Board is writing to offer recommendations for how a $6,300 fee in-lieu of onsite open-space dedication for the proposed subdivision at 146 Manley Road could be utilized at parks within the same designated recreational zone. After reviewing current needs at Mt. Apatite and Cleveland Field Park, the Advisory Board respectfully submits the following recommendations.

The Board recommends prioritizing investment at Mt. Apatite through the installation of a bicycle repair station,[1] or potentially two stations at the primary entrances and parking areas. These stations, which typically range from $1,300–$2,000, would support the park's strong and growing mountain-biking community and enhance user safety. Remaining funds could support trail maintenance or updated wayfinding signage—ongoing needs that improve user experience and accessibility as well as complement ongoing trail work aimed at better designating biking and walking routes.

As an alternative option, the Board recommends improvements at Cleveland Field Park through the purchase and installation of four to five ADA-accessible picnic tables, approximately $1,500 per table. [2] This would provide inclusive seating for families, youth sports participants, and neighborhood residents who use the field for outings and practices, strengthening its role as a community gathering space.

Both proposed uses of the in-lieu fee would provide visible, meaningful improvements within the designated recreation zone and would serve residents of the new subdivision as well as the broader community. The Advisory Board believes either option represents a responsible and impactful application of the funds.

Thank you for your consideration of these recommendations.

Sincerely,
Julia Bergeron-Smith
Chair, Auburn Parks and Recreation Advisory Board

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[1] An example of a bike repair station: https://outdoorworkoutsupply.com/collections/bike-repair-stations/products/dero-fixit

[2] An example of an ADA Accessible picnic table: https://proplaygrounds.com/product/ada-accessible-round-picnic-table-commercial-grade-metal/?srsltid=AfmBOopeeoB14VMh7Rwda45BWsGV_CkMjyJgkPyIVeGjr13ElOVOs7PW

City of Auburn, Maine
Office of Planning & Permitting
www.auburnmaine.gov | 60 Court Street
Auburn, Maine 04210 207.333.6601

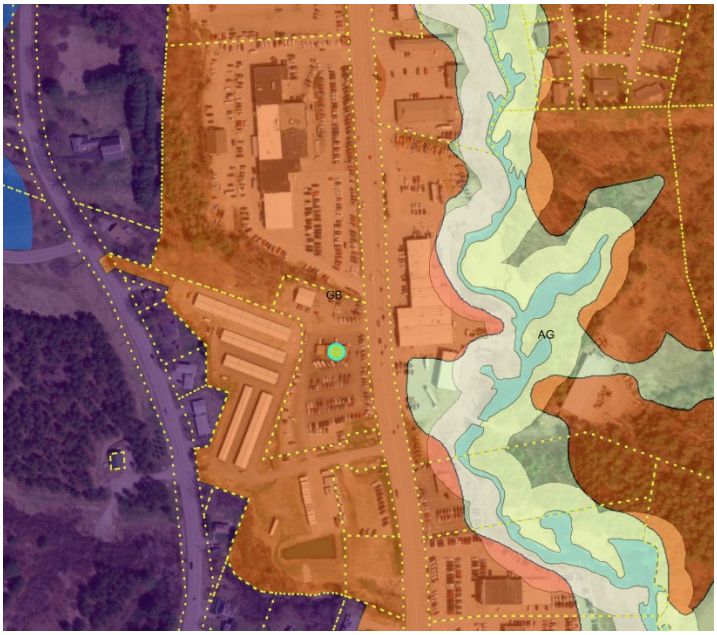
To: Auburn Planning Board
From: Sam Peikes, Planning Coordinator
Re: PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION REVIEW STAFF MEMO: Bear Self-Storage and Auto Sales Facility, 864, 868, 878 and 900 Center Street (PIDs: 301-017-002, 301-018, 301-019, 301-017, and 300-009) - Application by Wright Pierce on behalf of Bear Holdings, LLC and Bear, LLC to construct a 9,000 square foot auto sales/service building with paved vehicle display areas and gravel areas for rental of storage containers. The development is located in the General Business (GB) district and Suburban Residence (SR) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception

Date: May 5, 2026

PROPOSAL/OVERVIEW
Wright Pierce on behalf of Bear Holdings, LLC and Bear, LLC is submitting an application to construct a 9,000 square foot auto sales/service building with paved vehicle display areas and gravel areas for rental of storage containers located at 864, 868, 878 and 900 Center Street (PIDs: 301-017-002, 301-018, 301-019, 301-017, and 300-009) in the General Business (GB) district with one parcel located in the Suburban Residence (SR) district. The development is comprised of 4 parcels owned by Bear Holdings, LLC and one owned by Bear, LLC totaling approximately 7.36 acres with frontage on both Center Street and Turner Street. The development will contribute over three acres of impervious area and received Delegated Review Authority for the Site Location of Development Act permit.

The development received Planning Board approval August 13, 2024, but construction was never started, therefore the applicant is resubmitting as a new application. The approval included the following conditions:

- No development activity until any bonding or inspection fees is determined by the Auburn Engineering Department.
- All necessary stormwater improvements shall be shown on the plan to the satisfaction of the City Engineer prior to the issuance of building permits.
- The applicant shall provide confirmation from CMP that use of the easement area as shown on the plans is acceptable prior to the issuance of building permits.



WAVIER REQUEST

The applicant is requesting a waiver from Sec. 46-235 Traffic Impact Analysis Standards. The applicant states in the cover memo that the proposed site changes will only have a marginal increase in traffic. The development is anticipated to generate roughly 22 passenger vehicle trips within the peak hour and will not require a Traffic Movement Permit. The existing entrances on Center Street will be utilized as well. The waiver request was granted when the development was previously approved.

SITE PLAN REVIEW AND SUBDIVISION STANDARDS

The following findings of fact relevant to the project are summarized below:

- Access: Access to the proposed auto display and building will come from the two existing driveways located off Center Street. The driveways will be repaved. In accordance with Sec. 60-800, driveways on roads with 35 mph speed limits need to be placed a minimum distance of 150 feet. The driveway spacing locations comply with Sec. 60-800. No change to the existing access is proposed. The gravel area for container storage portion of the site is located in the Suburban Residence (SR) district, while the rest of the development is located in the General Business (GB) district. Automobile sales is not permitted in the Suburban Residence (SR) district; however accessory uses, buildings and structures is an allowed use. Accessory uses, buildings and structures must be located on the same lot as the principal building or use. As noted from the last review, it was recommended by staff that the applicant work with the Assessing Department to ensure the lots are combined and recorded as one lot. The applicant should confirm if this has been done.

- Parking: The paved areas on site will be utilized for vehicle parking. In accordance with Sec. 60-607 (10), the applicant is required to provide screening for a parking area serving a business or industrial use that abuts a residential district. The applicant is proposing to screen the west side of the gravel parking area located off Turner Street in the Suburban Residence district with evergreen trees and a privacy screen on the existing chain link fence. Parking and loading areas are arranged to not back onto a public street.
- Utilities: The development will be serviced by public sewer and water. Sewer and water service will be extended to the proposed building. Locations of utilities are shown on the site grading and drainage plan sheet C-4. The applicant corresponded with the Auburn Sewer and Water District on June 6, 2024 regarding capacity to serve the project. The District states there is adequate capacity to serve the new building.
- Traffic: The applicant is requesting a waiver from Sec. 46-235 from providing a traffic impact analysis. The applicant states that the traffic increase as a result of the proposed development will be minimal. The proposed development is anticipated to generate 22 total passenger equivalent trips in the peak hour. The proposed development is not anticipated to cause unsafe vehicular travel conditions or contribute to traffic congestion.
- Stormwater Management: Stormwater from the development will be managed on site by catch basins and storm drains. Runoff will be treated by the existing wet pond along the southern portion of the site, two grassed underdrain soil filters near Center Street, and a subsurface sand filter near Center Street. The applicant has submitted a stormwater plan in compliance with DEP and city requirements. The stormwater calculations demonstrate that runoff leaving the site will not increase from predevelopment levels. The stormwater plan was peer reviewed by Woodard and Curran on behalf of the city on August 8, 2024. The applicant has provided responses to the peer review comments in the attached letter dated February 24, 2026 to satisfy the prior condition of approval that stated all necessary stormwater improvements shall be shown on the plan to the satisfaction of the City Engineer prior to the issuance of building permits.
- Exterior Lighting: The applicant is proposing to use fully shielded cutoff LED fixtures mounted to the building and light poles for the proposed display area. Lighting details are provided in Attachment 5 of the application and the locations of lighting fixtures are shown on the site plan sheet C-3. Lighting is not anticipated to recess onto abutting properties or create hazardous conditions for motorists.
- Solid Waste Disposal: Solid waste will be disposed of on site via the 12 by 12 foot concrete dumpster pad. The dumpster pad will be fully enclosed and screened behind the proposed building. Solid waste will be serviced by a waste hauler and will be disposed of properly at a licensed facility.
- Protection of Environmental Features and Natural Resources: The proposed development is not anticipated to adversely impact natural resources, scenic areas or historic sites. The development is located outside of the Shoreland Overlay district.
- Noise, Vibration, Odors and Air Pollution: The proposed development is not anticipated to exceed noise standards or create a nuisance to surrounding properties. The proposed development is not anticipated to generate vibration, odors or air pollution.

PLANNING BOARD ACTION

The proposed project requires review and findings for approval under Sections 60-1277 and 60-1359:

Site Plan Review – Section 60-1277

In considering a site plan, the planning board shall make findings that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;

(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

(3)Adequacy of the methods of disposal for wastes; and

(4)Protection of environment features on the site and in adjacent areas.

Special Exception – Sec 60-1336

As conditions prerequisite to the granting of any special exceptions, the board shall require evidence of the following:

(1) That the special exception sought fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.

(2) That the special exception sought will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.

(3) That the special exception sought will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.

(4) That the exception sought will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.

(5) That reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.

(6) That the standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.

(7) That essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

STAFF RECOMMENDATION:
Staff have reviewed the application and corresponded with the applicant. Staff suggest the Board review the application materials and applicable findings and determine if the application is ready for a vote.

If the Board votes to approve the application, staff suggest the following conditions of approval:

- No development activity until any bonding or inspection fees is determined by the Auburn Engineering Department.
- The applicant shall provide confirmation from CMP that use of the easement area as shown on the plans is acceptable prior to the issuance of building permits.

Staff recommend the Board vote on the applicant's waiver request as well.

SUGGESTED MOTION WAIVER REQUEST:
I make a motion to **[approve/deny]** the applicant's waiver request from Sec. 46-235 Traffic Impact Analysis.

SUGGESTED MOTION:
I make a motion to **[approve/deny]** the application for Bear Self-Storage and Auto Sales Facility located at 864, 868, 878 and 900 Center Street (PIDs: 301-017-002, 301-018, 301-019, 301-017, and 300-009) in the General Business (GB) district and Suburban Residence (SR) district pursuant to Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception

BEAR HOLDINGS, LLC/BEAR, LLC

City of Auburn Development Review Application

MARCH 2026

Bear Self-Storage Facility
Center Street, Auburn, Maine

WRIGHT-PIERCE
Engineering a Better Environment

WRIGHT-PIERCE
Engineering a Better Environment

11 Bowdoin Mill Island, Suite 140
Topsham, ME 04086
207.725.8721 | wright-pierce.com

March 20, 2026

Samantha Peikes, Planning Coordinator
City of Auburn
60 Court Street, Suite 104
Auburn, ME 04210

SUBJECT: Site Plan Amendment
Bear Self-Storage Facility
828 Center Street, Auburn, Maine

Dear Samantha,

Wright-Pierce is pleased to submit the attached Site Plan Amendment Application for the proposed Self-Storage and Auto Sales facility on Center Street on behalf of Bear Holdings, LLC and Bear, LLC. This application is a resubmittal of the application that was previously approved with conditions in August 2024. Since it has been over a year without starting construction, we are resubmitting. The applicant would like to start the project at this time and requires the application to be re-approved. The approval was also a Site Location Approval under Auburn's Delegated Review Authority which is still in effect as the SLODA permit allows for a project to start within 4 years of approval.

The project proposes to construct a 9,000 SF auto sales/service building on the southern side of the site with paved vehicle display areas and gravel areas for rental of storage containers. The storage-facility and auto sales are in the General Business zoning district, except for one recently acquired lot on Turner Street in the suburban residential zoning district. A house on the lot was recently demolished, and a gravel area will be constructed on a portion of the lot. The project will require a special exception approval from the planning board.

The site has been assembled by a series of land exchanges to total approximately 7.36 acres with frontage on both Center Street and Turner Street. The site is comprised of 4 parcels owned by Bears Holdings, LLC and one by Bear, LLC.

The existing site is served by a water service from Turner Street and sewer service from a sewer line that crosses the site, which were constructed after the previous site plan approval for the self-storage facility. These existing services will be extended to the proposed building.

Stormwater from the site will be managed by on-site catch basins and stormdrains and runoff treated in an existing wet pond along the southern portion of the site, two grassed underdrained soil filters near Center Street, and a subsurface sand filter near Center Street. The soil filters and wet pond treat runoff from the building, new pavement, and gravel on the southern side of the site. The subsurface sand filter is proposed to replace an underdrained soil filter and will provide treatment of stormwater from additional paved areas of the dealership. The subsurface system is oversized to also provide detention beyond the required treatment

volume, to reduce the peak runoff rate from that area of the site. The storm water system and treatment have been designed to meet the Maine DEP Chapter 500 and 502 requirements for sites with greater than one acre of new impervious area, as described in the attached Stormwater Management Plan. The stormwater will be treated for quality prior to discharge into the un-named stream that abuts the southern boundary of the parcel. The site is in the watershed of Bobbin Mill Brook and the Androscoggin River.

A landscaped buffer of evergreen trees and privacy fencing will be planted along a portion of the southerly project limits to screen the storage containers in the gravel area from the residential abutters and Center Street.

The site has been designed to address the City's Site Plan Review objectives as listed in Sec 60-1277 of the ordinance. An explanation of how the project meets these standards is included with the application.

The project is seeking a waiver of the traffic analysis requirement of the zoning ordinance (Section 46-235), since the proposed site changes only marginally expand the existing low traffic volume uses on the site and only a marginal increase in traffic is anticipated as a result of the proposed project. The existing entrances on Center Street will continue to be utilized. The project will not require a traffic use permit since the anticipated traffic is only 22 passenger car equivalents in the peak hour (Saturday).

Sincerely,
WRIGHT-PIERCE

Jan Wiegman, PE
Senior Project Manager
jan.wiegman@wright-pierce.com

Nate Edwards, PE
Lead Project Engineer
nathan.edwards@wright-pierce.com

Attachments

cc: Richard Raubeson, Bear Holdings, LLC/Bear, LLC

City of Auburn, Maine
Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: Bear Self Storage Facility and K&R Auto

PROPOSED DEVELOPMENT ADDRESS: 864, 868, 878, 900 Center St., 1193 Turner St., Auburn, ME

PARCEL ID #: 301-017- 2, 301-018, 301-019, 301-017, 300-009

REVIEW TYPE:
Site Plan □ Site Plan Amendment X
Subdivision □ Subdivision Amendment □

PROJECT DESCRIPTION: This application is for construction of a building for car display and service, comprised of office areas and vehicle preparation/maintenance areas. New pavement and gravel areas for storage container storage area also proposed. Stormwater treatment of the new developed portions of the site are also proposed.

CONTACT INFORMATION:

Applicant

Name: Bear Holdings, LLC and Bear, LLC
Address: 878 Center Street
City / State Auburn, ME
Zip Code 04210
Work #:
Cell #: 207-838-6210
Fax #:
Home #:
Email: rraubeson50@aol.com

Property Owner

Name: Bear Holdings, LLC and Bear, LLC
Address: 878 Center Street
City / State Auburn, ME
Zip Code 04210
Work #:
Cell #: 207-838-6210
Fax #:
Home #:
Email: rraubeson50@aol.com

Project Representative

Name: Wright-Pierce, Jan B. Wiegman, PE
Address: 11 Bowdoin Mill Island, Suite 140
City / State Topsham, ME
Zip Code 04086
Work #: (207) 725-8721
Cell #:
Fax #:
Home #:
Email: jan.wiegman@wright-pierce.com

Other professional representatives for the project (surveyors, engineers, etc.),

Name:
Address:
City / State
Zip Code
Work #:
Cell #:
Fax #:
Home #:
Email:

PROJECT DATA

The following information is required where applicable, in order complete the application

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	166,835	sq. ft.
Proposed Total Paved Area	200,242	sq. ft.
Proposed Total Impervious Area	262,754	sq. ft.
Proposed Impervious Net Change	95,919	sq. ft.
Impervious surface ratio existing	38	% of lot area
Impervious surface ratio proposed	61	% of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	34,955	sq. ft.
Proposed Building Footprint	43,955	sq. ft.
Proposed Building Footprint Net change	9,000	sq. ft.
Existing Total Building Floor Area	34,955	sq. ft.
Proposed Total Building Floor Area	43,955	sq. ft.
Proposed Building Floor Area Net Change	9,000	sq. ft
New Building	Yes	(yes or no)
Building Area/Lot coverage existing	8	% of lot area
Building Area/Lot coverage proposed	10	% of lot area

ZONING

Existing	General Business (GB) Suburban Residential (SR)
Proposed, if applicable	N/A

LAND USE

Existing	Storage Facility/Auto Sales
Proposed	Storage Facility/Auto Sales

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	N/A
Proposed Number of Residential Units	N/A
Subdivision, Proposed Number of Lots	N/A

PARKING SPACES

Existing Number of Parking Spaces	N/A
Proposed Number of Parking Spaces	N/A
Number of Handicapped Parking Spaces	N/A
Proposed Total Parking Spaces	N/A

ESTIMATED COST OF PROJECT: $1.544 M

**Total disturbed area. To clarify, this is all in existing developed area.

***Total impervious area in proposed condition. This is not how much new impervious area there is. Project proposes 110,000 SF of new impervious area. Excludes repaving areas that are already paved and where grade is minimally altered since this is considered maintenance by the Maine DEP. All new developed area is new impervious.

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	166,835	sq. ft.
Proposed Disturbed Area	152,000**	sq. ft.
Proposed Impervious Area	262,754***	sq. ft.

1. ***If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.*** Contractor will obtain MCGP.
2. ***If the proposed impervious area is greater than one acre including any impervious area crated since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.*** Applicant is seeking a Stormwater Management Permit through the City.
3. ***If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.*** N/A
4. ***If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.*** N/A

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) Sat: 11 trips passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) Sat: 22 trips passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary

1. Property is located in the General Business/Suburban Residential zoning district.
2. Parcel Area: 9.2 acres / 400,710 square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	10,000 s.f.	400,710
Street Frontage	100 ft.	511 ft.+ - center street
Min Front Yard	25 ft.	120 ft.
Min Rear Yard	35 ft.	330 ft.
Min Side Yard	25 ft.	200 ft.
Max. Building Height	45 ft.	35 ft.
Use Designation		self storage/Auto sales
Parking Requirement	1 space/ per N/A square feet of floor area	
Total Parking:	N/A	N/A
Overlay zoning districts (if any):	N/A	N/A
Urban impaired stream watershed?	YES/NO If yes, watershed name	No

Distances refer to the currently proposed building, not existing

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative. (NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

To view the City of Auburn Zoning Ordinance, go to:
www.auburnmaine.gov under City Departments / Planning, Permitting & Code / Subdivisions / Land Use /Zoning Ordinance

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	Date:
Richard Henderson	6-7-2024

City of Auburn, Maine
Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME: Bear Self Storage
PROPOSED DEVELOPMENT ADDRESS: 878 Center Street, Auburn, ME 04210
PARCEL #: See Section 1 for list of parcels and tax map.

Required Information		*Check when Submitted*		*Applicable Ordinance*
Site Plan		*Applicant*	*Staff*	
	Owner's Names/Address	✓		
	Names of Development	✓		
	Professionally Prepared Plan	✓		
	Tax Map or Street/Parcel Number	✓		
	Zoning of Property	✓		
	Distance to Property Lines	✓		
	Boundaries of Abutting land	✓		
	Show Setbacks, Yards and Buffers	✓		
	Airport Area of Influence	N/A		
	Parking Space Calcs	N/A		
	Drive Openings/Locations	✓		
	Subdivision Restrictions	N/A		
	Proposed Use	✓		
	PB/BOA/Other Restrictions	N/A		
Fire Dept has not reviewed.	Fire Department Review			
	Open Space/Lot Coverage	✓		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Landscape Plan		*Applicant*	*Staff*	
	Greenspace Requirements	N/A		
	Setbacks to Parking	N/A		
Evergreen tree line proposed for screening. Spaced 10 ft on center.	Buffer Requirements	✓		
	Street Tree Requirements	N/A		
	Screened Dumpsters	N/A		
	Additional Design Guidelines	N/A		
All proposed plantings are white pine and are labeled on the plan.	Planting Schedule	✓		

Stormwater & Erosion Control Plan		*Applicant*	*Staff*	
	Compliance w/ chapter 500	✓		
	Show Existing Surface Drainage	✓		
	Direction of Flow	✓		
	Location of Catch Basins, etc.	✓		
	Drainage Calculations	✓		
	Erosion Control Measures	✓		
Contractor to file permit	Maine Construction General Permit			
To be provided later	Bonding and Inspection Fees			
	Post-Construction Stormwater Plan	✓		
	Inspection/monitoring requirements	✓		
Lighting Plan		*Applicant*	*Staff*	
	Full cut-off fixtures	✓		
	Meets Parking Lot Requirements	N/A		
Traffic Information		*Applicant*	*Staff*	
Waiver for traffic analysis requested. See cover letter.	Access Management			
	Signage			
	PCE - Trips in Peak Hour			

Required Information		*Check when Submitted*		*Applicable Ordinance*
	Vehicular Movements			
	Safety Concerns			
	Pedestrian Circulation			
	Police Traffic			
	Engineering Traffic			
Utility Plan		*Applicant*	*Staff*	
	Water	✓		
	Adequacy of Water Supply	✓		
	Water main extension agreement	N/A		
	Sewer	✓		
	Available city capacity	✓		
	Electric	✓		
	Natural Gas	N/A		
	Cable/Phone	✓		
Natural Resources		*Applicant*	*Staff*	
Not in shoreland	Shoreland Zone	✓		
Not in floodplain	Flood Plain	✓		
	Wetlands or Streams	✓		
No UIS	Urban Impaired Stream	✓		
Not in lake watershed	Phosphorus Check	N/A		
Not near aquifer	Aquifer/Groundwater Protection	✓		
Within 75-ft setback of stream. Will file a NRPA PBR.	Applicable State Permits			
Not in lake watershed	Lake Auburn Watershed	✓		
Not in lake watershed	Taylor Pond Watershed	✓		
Right, Title or Interest		*Applicant*	*Staff*	
	Verify	✓		
	Document Existing Easements, Covenants, etc.	✓		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Technical & Financial Capacity		*Applicant*	*Staff*	
	Cost Est./Financial Capacity	✓		
To be provided when project approved	Performance Guarantee			
State Subdivision Law		*Applicant*	*Staff*	
N/A - Project is not a subdivision.	Verify/Check			
	Covenants/Deed Restrictions			
	Offers of Conveyance to City			
	Association Documents			
	Location of Proposed Streets & Sidewalks			
	Proposed Lot Lines, etc.			
	Data to Determine Lots, etc.			
	Subdivision Lots/Blocks			
	Specified Dedication of Land			
Additional Subdivision Standards		*Applicant*	*Staff*	
N/A - Project is not a subdivision.	Mobile Home Parks			
	PUD			
A JPEG or PDF of the proposed site plan		*Applicant*	*Staff*	
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving				

Auburn Site Plan Review and Special Exception Review Criteria

Bear Self Storage and K&R Auto

We have prepared the following responses to the Site Plan review criteria for approval:

1. Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air:

   Response: The project treats the runoff from the site with several Maine DEP approved best practices and the overall site meets the DEP stormwater law and site location runoff standards. The lighting for the project will be full cutoff and will not spillover onto adjacent properties. The developed portions of the site will be at least 50' from the nearest commercial property line and 70' or more from the nearest residential property line. Supplemental vegetative screening is planned between the storage use and the adjacent residential uses. The project uses will not generate excessive sounds, dust or vibration and will preserve light and air to neighboring properties.

2. Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas:

   Response: The site will be accessed by existing driveway entrances and will provide for internal circulation. Pedestrian movement will be accommodated at the front of the building with a sidewalk. There are no connecting sidewalks along the western side of Center Street, so no sidewalks are proposed to adjacent uses.

3. Adequacy of the methods of disposal for wastes:

   Response: Solid waste from the operation of the auto dealership will be accommodated by an on-site dumpster that will be services by a waste hauler and the waste will be disposed of at licensed facilities. The project will connect to the public sewer servicing the site.

4. Protection of environment features on the site and in adjacent areas:

   Response: The site development will be largely on existing developed portions of the site.

We have prepared the following responses to the Special Exception provisions for approval:

1. That the special exception sought fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.

   Response: The ordinance does not set out specific requirements for the Auto Sales and service or the storage uses.

2. That the special exception sought will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.

   Response: The proposed uses will not create or aggravate traffic, fire or safety hazards at the site. The project will use existing site entrances that have been used for storage uses and auto

sales and service uses at the site. At the driveway there is in excess of 750' of site distance in both directions and the speed limit on Center Street in front of the site is 35 mph which is adequate to meet the site distance requirements. Fire access through the site has been provided.

3. That the special exception sought will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.

   Response: To our knowledge there are no master development plan pattern of highway circulation or public land acquisitions in the vicinity of the site.

4. That the exception sought will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.

   Response: The project is similar to uses already on the site and will not alter the character of the property or properties in the vicinity of the site.

5. That reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.

   Response: The project has been designed to meet the provisions of the Maine DEP Chapter 500 stormwater law requirements. The requirements of Chapter 501 and 502 do not apply to this site. The site does meet the City's general space and bulk standards for the zoning districts. A buffer to the stream along the southern boundary of the site will remain.

6. That the standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.

   Response: The project does not seek to change any standards and meets the current standards for development.

7. That essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

   Response: The project is an expansion of the existing uses at the site and is currently served by the City's essential services. We do not anticipate additional essential city services for the project.

Attachment 1
Title, Right & Interest

ATTACHMENT 1

TITLE, RIGHT OR INTEREST

The project site is currently made up of five parcels owned by Bears Holdings, LLC and Bear, LLC. The following Table 1 lists the parcels comprising the project site arranged by City of Auburn tax map and lot number and book and page references to the deeds recorded at the Androscoggin County Registry of Deeds. Central Maine Power (CMP) has an easement through the site, which is attached.

TABLE 1

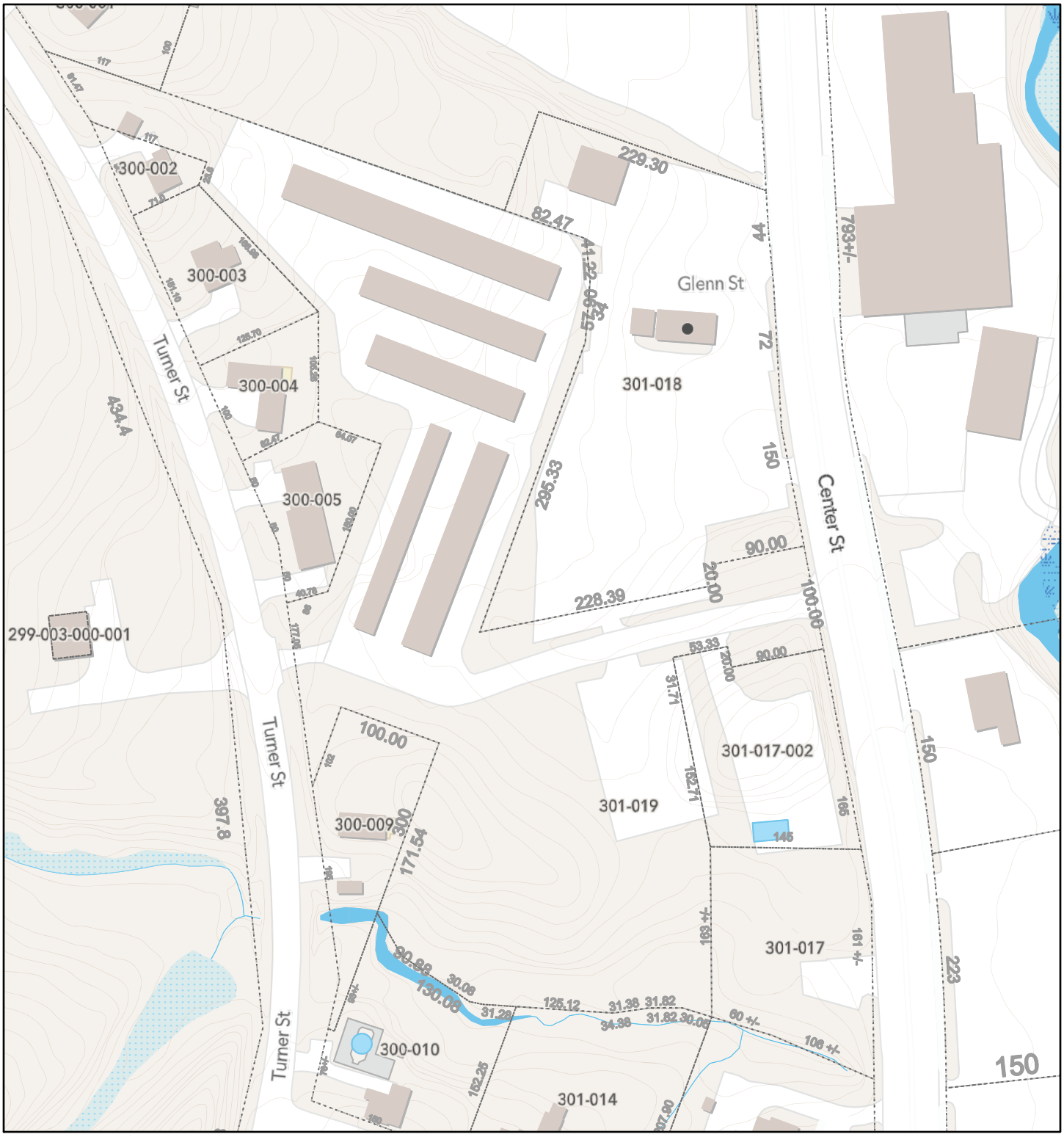
Parcel Listing

Tax Map/Lot Number	Current Ownership	Deed References - Book/Page
300/9	Bear, LLC	11304/245
301/17	Bears Holdings, LLC	9291/232
301/17-2	Bears Holdings, LLC	9291/234
301/18	Bears Holdings, LLC	9291/232
301/19	Bears Holdings, LLC	9291/232

Attached hereto are copies of the deeds, easements, and agreements referenced above.

Richard Raubeson is the principal member of both LLCs. We have attached a tax map with the parcels outlined.

Bear's Self Storage



8/22/2023, 3:23:35 PM

Current Parcels

Wetlands

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.08 km

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City of Auburn
The City of Auburn makes no warranty, representation, or guaranty as to the sequence, accuracy, timeliness, or completeness of any of the information provided. The reader should not rely on the

Bk 9291 Pg232 #585
01-13-2016 @ 11:02a

NOT AN OFFICIAL COPY

QUITCLAIM DEED
Without Covenant

NOT AN OFFICIAL COPY

THAT, I, RICHARD K. RAUBESON whose mailing address is 8 Salt Spray Lane, Cape Elizabeth, Maine 04107, in consideration of one dollar and other valuable consideration paid by BEAR'S HOLDINGS ELC, a Maine limited liability company with a mailing address of 8 Salt Spray Lane, Cape Elizabeth, Maine 04107, the receipt whereof I do hereby acknowledge, do hereby remise, release, bargain, sell and convey and forever quitclaim unto the said BEAR'S HOLDINGS LLC, its successors and assigns forever, the following described real estate:

(a) Land and buildings located at 864 Center Street, Auburn, County of Androscoggin, State of Maine, more particularly described in the deed from Carleton B. Ring and Barbara P. Ring to Richard K. Raubeson and Kathleen I. Raubeson dated September 2010 and recorded in the Androscoggin County Registry of Deeds in Book 8017, Page 216.

NO MAINE R.E. TRANSFER TAX PAID

(b) Land and buildings located at 900 Center Street, Auburn, County of Androscoggin, State of Maine, more particularly described in two deeds to Richard K. Raubeson and Kathleen I. Raubeson, one from Frances M. Isaacson dated September 5, 1984 and recorded in the Androscoggin County Registry of Deeds in Book 1755, Page 187, and the other from Harold B. Hallock dated April 14, 1987 and recorded in said registry in Book 2076, Page 76.

(c) Land and buildings located on Center Street, Auburn, County of Androscoggin, State of Maine, more particularly described in the deed from Carleton B. Ring and Barbara P. Ring to Richard K. Raubeson and Kathleen I. Raubeson dated December 22, 2003 and recorded in the Androscoggin County Registry of Deeds in Book 5754, Page 322.

Being the same premises described in the deed from Kathleen I. Raubeson to Richard K. Raubeson dated September 22, 2014, and recorded in said registry in Book 9005, Page 175.

EXCEPTING so much of the foregoing as was conveyed by deed from Lake Superior Corporation and Richard K. Raubeson to Bear LLC dated December 1, 2015, and recorded in said registry in Book 9269, Page 320, and in the deed from Richard K. Raubeson to Lake Superior Corporation by deed dated of near or even date herewith to be recorded herewith.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging to the said Bear's Holdings LLC, its successors and assigns forever.

IN WITNESS WHEREOF, I, the said Richard K. Raubeson, have hereunto set my hand and seal this 11th day of January, 2016.

Witness

Richard K. Raubeson

State of Maine
Androscoggin, ss. January 11, 2016

Personally appeared the above-named Richard K. Raubeson and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Ronald L. Bissonnette, Attorney at Law

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NOT AN OFFICIAL COPY

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

Bk 9291 Pg234 #586
01-13-2016 @ 11:02a

NOT AN OFFICIAL COPY

QUITCLAIM DEED
Without Covenant

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THAT, I, RICHARD K. RAUBESON whose mailing address is 8 Salt Spray Lane, Cape Elizabeth, Maine 04107, in consideration of one dollar and other valuable consideration paid by BEAR'S HOLDINGS LLC, a Maine limited liability company with a mailing address of 8 Salt Spray Lane, Cape Elizabeth, Maine 04107, the receipt whereof I do hereby acknowledge, do hereby remise, release, bargain, sell and convey and forever quitclaim unto the said BEAR'S HOLDINGS LLC, its successors and assigns forever, the following real estate located in Auburn, County of Androscoggin, and State of Maine, bounded and described as follows:

(a) Land with any improvements thereon located between Turner Street and Center Street and being more particularly described in the deed from Frances M. Isaacson to K & R Associates dated November 27, 1990 and recorded in Book 2632, Page 147;

(b) Land with any improvements thereon located between Turner Street and Center Street and being more particularly described in the deed from Richard K. Raubeson and Kathleen I. Raubeson to K & R Associates dated November 28, 1990 and recorded in Book 2632, Page 149;

(c) Land with any improvements thereon located on the westerly side of Center Street and being more particularly described in the deed from Carleton B. Ring and Barbara P. Ring to K & R Associates dated October 30, 1989 and recorded in Book 2500, Page 29; and

(d) Land with any improvements thereon located on the westerly side of Center Street, said land being formerly referred to as Glenn Street, and being more particularly described in the deed from Auburn Water District to K & R Associates dated July 19, 1993 and recorded in Book 3084, Page 295.

Being the same premises described in the deed from K & R Associates to Richard K. Raubeson dated September 22, 2014, and recorded in said registry in Book 9005, Page 177.

EXCEPTING so much of the foregoing as was conveyed by deed from Lake Superior Corporation and Richard K. Raubeson to Bear LLC dated December 1, 2015, and recorded in said registry in Book 9269, Page 320, and in the deed from Richard K. Raubeson to Lake Superior Corporation by deed dated of near or even date herewith to be recorded herewith.

All book and page references refer to the records of the Androscoggin County Registry of Deeds.

NO MAINE R.E. TRANSFER TAX PAID

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging to the said Bear's Holdings LLC, its successors and assigns forever.

IN WITNESS WHEREOF, I, the said Richard K. Raubeson, have hereunto set my hand and seal this 11th day of January, 2016.

Witness

Richard K. Raubeson

State of Maine
Androscoggin, ss.

January 11, 2016

Personally appeared the above-named Richard K. Raubeson and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Ronald L. Bissonnette, Attorney at Law

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NOT AN OFFICIAL COPY

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

NOT AN OFFICIAL COPY

DLN: 10023402261955

QUITCLAIM DEED WITH COVENANT

JOHN M. VALLIERES, of Auburn, County of Androscoggin, State of Maine, for consideration paid, grants to **BEAR LLC**, a Maine limited liability company, with an address of 8 Salt Spray Lane, Cape Elizabeth, Maine 04107, with QUITCLAIM COVENANT, a certain lot or parcel of land, with any buildings thereon, situated in Auburn, County of Androscoggin, and State of Maine, being more particularly bounded and described as follows:

> Being Lots 40, 41, 42 and 43 on a Plan of Lakeside recorded in the Androscoggin County Registry of Deeds in Book of Plans, Volume 2, Page 197.
>
> Subject to an easement for electric poles granted to Central Maine Power Company by H.L. Wills on August 18, 1920, by instrument recorded in said Registry in Book 299, Page 202.
>
> Also subject to an easement for sewer pipe or drain granted by Albert and Mildred Shaw to Auburn Sewerage District by instrument dated March 31, 1927 and recorded in said Registry in Book 1141, Page 323.
>
> Being the same premises conveyed to John M. Vallieres by deed from Federal National Mortgage Association dated March 25, 2022 and recorded in the Androscoggin County Registry of Deeds Book 11107, Page 149.

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IN WITNESS WHEREOF, the Grantor has executed this instrument as of the 9th day of February, 2023.

Witness

John M. Vallieres

STATE OF MAINE
COUNTY OF ANDROSCOGGIN February 9, 2023

Then personally appeared the above-named John Vallieres and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Tina M. Titus, Notary Public
State of Maine

H:\DOCS\TITUS\CLIENTS\Bear LLC\1193 Turner St. Auburn (fr. Vallieres)\Deed Quitclaim with Covenant.docx

TINA M. TITUS
Notary Public, State of Maine
My Commission Expires 3/31/2023

Maine Real Estate Transfer Tax Paid
TINA M. CHOUINARD, REGISTER
ANDROSCOGGIN COUNTY MAINE E-RECORDED

Bk 9291 Pg230 #584
01-13-2016 @ 11:02a

QUITCLAIM DEED

Richard K. Raubeson of Cape Elizabeth, County of Cumberland, State of Maine, for consideration paid, grants to **Lake Superior Corporation**, a Maine corporation with an office in Auburn, Maine County of Androscoggin, State of Maine, with **QUITCLAIM COVENANT**, a certain lot or parcel of land situated in **Auburn**, County of **Androscoggin**, and State of **Maine,** bounded and described as follows:

NO MAINE R.E. TRANSFER TAX PAID

Beginning at the intersection of the southerly line of land of Bear LLC, as described in the deed recorded in Book 9269, Page 320, and the westerly line of Center Street;

Thence southerly by said line of Center Street a distance of 26 feet, more or less to land of Lake Superior Corporation (see Book 7032, Page 300);

Thence westerly by said land of Lake Superior Corporation a distance of 143 feet, more or less to said land of Bear LLC;

Thence N 10° 42' 38" W by said land of Bear LLC a distance of 31.71 feet to a corner;

Thence N 79° 17' 22" E by said land of Bear LLC a distance of 53.33 feet to a corner;

Thence S 10° 42' 38" E by said land of Bear LLC a distance of 20.00 feet to a corner;

Thence N 79° 17' 22" E by said land of Bear LLC a distance of 90.00 feet to the point of beginning.

For grantor's source of title, see the deed recorded in Book 9005, Page 117.

This is a conveyance to the owner of abutting land that does not create a lot under the subdivision laws.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be executed on this 11th day of January, 2016.

Witness

Richard K. Raubeson

STATE OF MAINE
ANDROSCOGGIN COUNTY

January 11, 2016

Then personally appeared the above-named Richard K. Raubeson and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Ronald L. Bissonnette, Attorney at Law

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ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

Bk 7032 Pg300 #1168
01-18-2007 @ 10:46a

WARRANTY DEED

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CARLETON B. RING and **BARBARA P. RING**, husband and wife, both of Auburn, Maine, for consideration paid, grant to **LAKE SUPERIOR CORPORATION,** a Maine corporation with an address c/o Richard Raubeson, 900 Center Street, Auburn, Maine, 04210, with **WARRANTY COVENANTS**, a certain lot or parcel of land, with any buildings thereon, situated in **AUBURN**, County of **ANDROSCOGGIN,** and State of **MAINE**, bounded and described as follows:

1. PARCEL.

A certain lot or parcel of land situated in the City of Auburn, County of Androscoggin, State of Maine, being bounded and described as follows:

Beginning on the apparent westerly sideline of Center Street at the southeasterly corner of land of Richard & Kathleen Raubeson (deed reference Book 5754, Page 322);

Thence South seven degrees twenty-four minutes West (S 7° 24' W), along the apparent westerly sideline of Center Street, about one hundred sixty-five (165) feet to a point that is twenty-five (25) feet northerly of an easterly projection of the northerly exterior face of the house retained by Carleton B. Ring and Barbara A. Ring;

Thence westerly, along land retained by said Rings on a line that is parallel with and twenty-five (25) feet northerly of, as measured perpendicular to, the northerly exterior face of said Rings' house, one hundred forty-five (145) feet;

Thence southerly, continuing along land retained by said Rings, about one hundred sixty-three (163) feet to the northeasterly corner of land now or formerly of Thomas Murphy (deed reference Book 5274, Page 90);

Thence westerly, along the northerly line of land of said Murphy and land now or formerly of David Lane (deed reference Book 2131, Page 95), about three hundred fifty (350) feet to the southeasterly line of land now or formerly of Laurent Demers (deed reference Book 5361, Page 94);

Thence northeasterly, along the southeasterly line of land of said Demers, about two hundred thirty-four (234) feet to the southwesterly corner of said land of Richard and Kathleen Raubeson (deed reference Book 5754, Page 322);

MAINE REAL ESTATE TRANSFER TAX PAID

Thence South seventy-eight degrees eight minutes East (S 78° 08' E), along said southerly line of land of said Raubeson, three hundred fifty-nine and one tenth (359.1) feet to the point of beginning.

Said parcel contains about 2.4 acres.

All bearings refer to Magnetic North as observed on October 5, 1989 and as shown on a plan entitled "Plan of Land in Auburn for Dr. Carleton Ring", dated October 10, 1989, prepared by David Buker, PLS (unrecorded).

See attached Exhibit 1.

2. ACCESS EASEMENT.

Conveyed herewith is a fifty (50) foot wide access easement over said land retained by said Rings, running from Center Street to the above described Parcel. The southerly sideline of said easement runs along the southerly line of land retained by said Rings and along the northerly line of land now or formerly of William Wilding (deed reference 4042, Page 134) and land now or formerly of Nancy Leeman (deed reference Book 2140, Page 145).

This easement shall be for all purposes of a right of way to benefit the real estate of the Grantee described above and shall include, without limitation, the following:

(1) the right of ingress and egress by foot and by vehicle of any sort whatever;

(2) the right to construct, maintain, repair, grade, excavate, fill, pave and improve the full width of the right of way;

(3) the right to install, construct, maintain, repair and replace within the right of way, both above and below ground, utility services to include, without limitation, facilities necessary or convenient for the transmission of electricity, gas, telephone communications, cable television, computer communications, sewerage, water and such similar services which are currently available or in the future may become available.

The easement is not limited to any current use of the property served by the easement but shall serve any lawful purpose to which said property may be put in the future.

3. GRADING RIGHTS.

There is also included herewith an easement for the reasonable rights to grade said land retained by the Rings, as may be needed from time to time as improvements are made to the parcel conveyed herein. Said easement is located

southerly of, adjacent to and within twenty-five (25) feet of the second course of the Parcel described above and easterly of, adjacent to and within thirty-five (35) feet of the third course of the above described Parcel.

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4. EXCEPTIONS.

This conveyance is made subject to the following:

(1) an easement granted to the Central Maine Power Co. by Herbert L. Wills, dated August 18, 1920 and recorded in the Androscoggin County Registry of Deeds in Book 299, Page 202;

(2) a Notice of Layout and Taking dated August 24, 1962 and recorded November 8, 1962 by the State of Maine against Carleton B. Ring and Barbara P. Ring including slopes, drainage and other rights recorded in the Androscoggin County Registry of Deeds in Book 883, Page 64;

(3) an easement dated April 7, 1972 and recorded in Book 1142, Page 63 from Barbara Ring and Carleton Ring to the Auburn Sewerage District; and

(4) grading rights conveyed in the deed dated December 22, 2003 and recorded in Book 5754, Page 322 from Carleton B. Ring and Barbara P. Ring to Richard Raubeson and Kathleen Raubeson.

5. EXEMPTION FROM SUBDIVISION LAW.

Said land retained by said Rings has been retained by the Rings for their own use as a single-family residence which has been their principal residence for at least five (5) years immediately preceding the date hereof.

6. SOURCE OF TITLE.

Being a part of the premises described in the deed from Eugenia Cierpich Tufts to Barbara P. Ring and Carleton B. Ring dated March 27, 1959, and recorded in the Androscoggin County Registry of Deeds in Book 800, Page 387. All book and page references are to said registry of deeds.

IN WITNESS WHEREOF, the Grantors have executed this instrument on this 16th day of January, 2007.

Witness

Witness

Carleton B. Ring

Barbara P. Ring

NOT AN OFFICIAL COPY

STATE OF MAINE
ANDROSCOGGIN, SS.

January 16, 2007

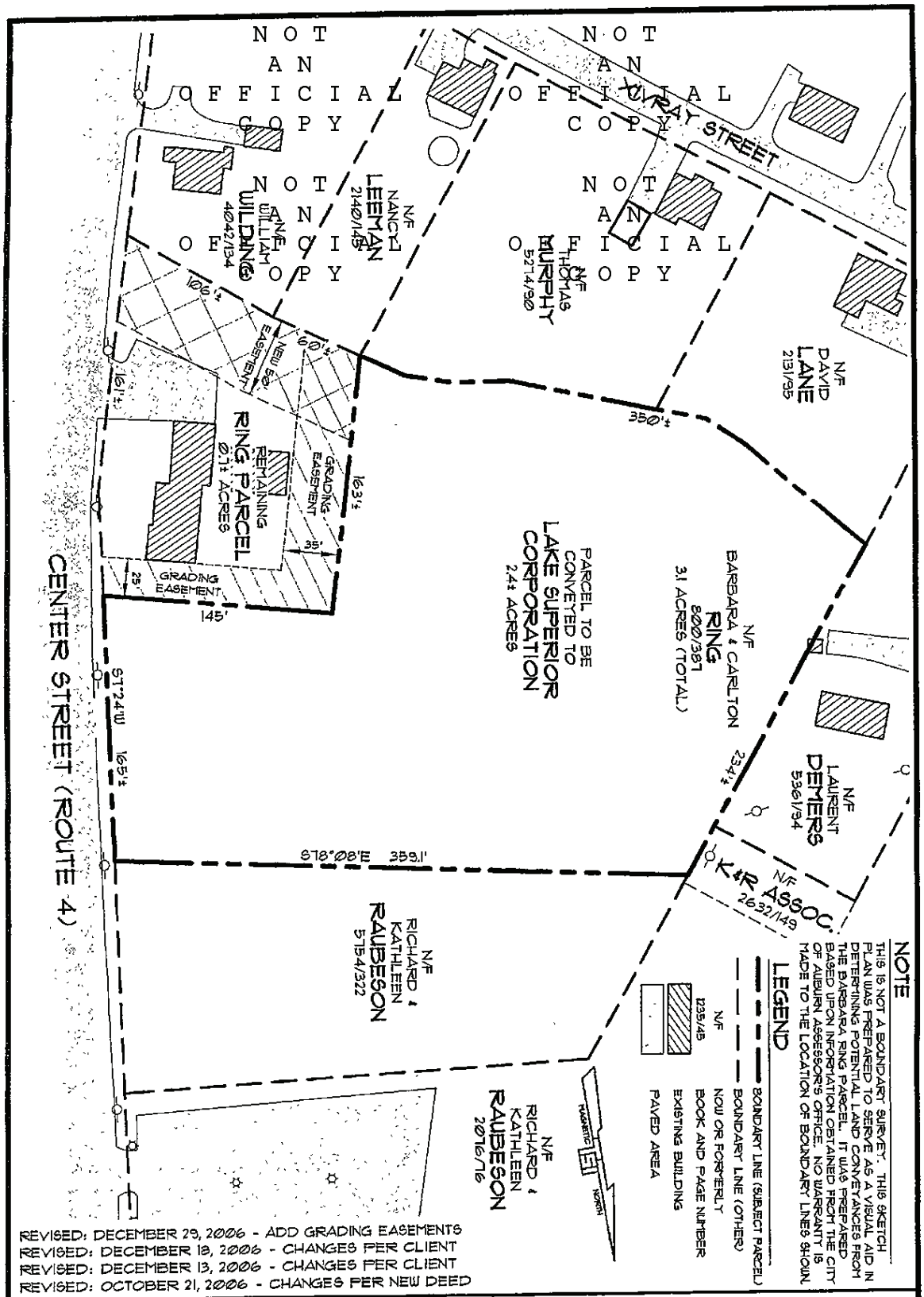
Then personally appeared the above-named Carleton B. Ring and Barbara P. Ring and acknowledged the foregoing instrument to be their free act and deed.

Before me,

Ronald L. Bissonnette, Attorney at Law

dft/H:\CLIENTS\Lake Superior Corporation\Purchase of part of 864 Center St\WARRANTY DEED to Lake Superior.doc

EXHIBIT 1



ANDROSCOGGIN COUNTY
Tina R. Charrond
REGISTER OF DEEDS

Bk 9269 Pg320 #21514
12-04-2015 @ 10:43a

DEED

NO MAINE R.E. TRANSFER TAX PAID

LAKE SUPERIOR CORPORATION, a Maine corporation, and **RICHARD K. RAUBESON**, of Cape Elizabeth, County of Cumberland, State of Maine, (collectively, the "Grantors") for valuable consideration, give, grant and convey to **BEAR LLC**, a Maine limited liability company, with an office in Cape Elizabeth, County of Cumberland, State of Maine, a certain lot or parcel of land situated in **Auburn**, County of **Androscoggin**, State of **Maine**, bounded and described as follows:

1. PARCEL

Beginning at an existing capped ¾ inch rebar, numbered 2177, set in the northeasterly side of Turner Street, so called, at the southwesterly corner of land conveyed to Norman E. Rose and Mary W. Rose from David F. Robinson and Nancy D. Robinson by deed dated June 3, 2004, and recorded in the Registry of Deeds for Androscoggin County in Book 5940, Page 295, thence;

1. **North 75°12'54" East** along the southerly line of said Rose's land a distance of **40.78 feet** to an existing capped ¾ inch rebar, numbered 2177, set at the southeasterly corner of said Rose's land, thence;

2. **North 20°35'20" East** along the easterly line of said Rose's land a distance of **150.00 feet** to and existing 5/8 inch rebar found at the westerly corner of said Rose's land, thence;

3. **North 69°53'29" West** along the northerly line of said Rose's land a distance of **64.07 feet** to an existing 5/8 inch rebar found at the northerly corner of said Rose's land and at the southeasterly corner of land conveyed to Paula Whitehouse and Ronald K. Kekoa from Paula J. Keller and Kathy Whitehouse by deed dated September 9, 2005 and recorded in said Registry in Book 6498, Page 176, thence;

4. **North 00°31'06" East** along the easterly line of said Whitehouse and Kekoa's land a distance of **105.06 feet** to an existing 5/8 inch rebar found at the northeasterly corner of said Whitehouse and Kekoa's land, and at the southeasterly corner of land conveyed to Victoria D. Sanzone from Cartus Financial Corporation by deed dated September 11, 2009 and recorded in said Registry in Book 7789, Page 89, thence;

5. **North 42°55'14" West** along the easterly line of said Sanzone's land a distance of **166.98 feet** to an existing 5/8 inch rebar found at the northeasterly corner of said Sanzone's land and at the southeasterly corner of land conveyed to Brenda Jipson from Bruce A. Ritchie by deed dated August 23, 1994 and recorded in said Registry in Book 3316, Page 305, thence;

6. **North 19°40'00" East** along the southerly line of said Jipson's land a distance of **23.20 feet** to an existing 5/8 inch rebar found at the easterly corner of said Jipson's land, thence;

7. **North 70°22'10" West** along the northerly line of said Jipson's land a distance of **117.00 feet** to an existing capped ¾ inch rebar, numbered 2177, set in the northeasterly line of said Turner Street, thence;

8. **North 32°39'20" West** along the northeasterly line of said Turner Street a distance of **81.47 feet** to an existing capped ¾ inch rebar, numbered 2177, set at the southwesterly corner of land conveyed to David E. Webb and Joan N. Webb from Bertha M. Reny by deed dated July 17, 1972 and recorded in said Registry in Book 1058, Page 73, thence;

9. **South 70°22'10" East** along the southerly line of said Webb's land a distance of **117.00 feet** to an existing 1 inch axel found, at Webb's southeasterly corner and at the southwesterly corner of land conveyed to John Emerson, LLC, from The Emerson Family Partnership, thence;

10. **South 70°22'10" East** along the southerly line of said Emerson's land a distance of **350.00 feet** to the southerly corner of said Emerson's land, thence;

11. **South 70°22'10" East** a distance of **82.47 feet** to a point, thence;

12. **South 05°00'17" East** a distance of **41.22 feet** to a point, thence;

13. **South 05°06'38" West** a distance of **57.90 feet** to a point, thence;

14. **South 20°37'50" West** a distance of **295.33 feet** to a point, thence;

15. **North 79°17'22" East** a distance of **228.39 feet** to a point, thence;

16. **North 10°42'38" West** a distance of **20.00 feet** to a point, thence;

17. **North 79°17'22" East** a distance of **90.00 feet** to a point in the westerly line of Center Street so called, thence;

18. **South 10°14'25" East** along the westerly line of said Center Street a distance of **100.00 feet** to a point, thence;
19. **South 79°17'22" West** a distance of **90.00 feet** to a point, thence;

20. **North 10°42'38" West** a distance of **20.00 feet** to a point, thence;

21. **South 79°17'22" West** a distance of **53.33 feet** to a point, thence;

22. **South 10°42'38" East** a distance of **31.71 feet** to a point in the northerly line of land conveyed to Lake Superior Corporation from Carleton B. Ring and Barbara P. Ring by deed dated September 15, 2014 and recorded in said Registry in Book 7032, Page 300, thence;

23. **South 10°42'38" East** a distance of **152.71 feet** to at point at the northwesterly corner of land conveyed to Richard K. Raubeson from Kathleen I. Raubeson by deed dated September 22, 2014 and recorded in said Registry in Book 9005, Page 175, thence;

24. **South 00°03'02" West** along the westerly line of said Raubeson's land a distance of **163 feet more or less** to a point in the centerline of a small brook at the northwesterly corner of land conveyed to Central Maine Credit Union from Timothy R. Wilding personal representative of the Estate of William R. Wilding by deed dated January 31, 2012 and recorded in said Registry in Book 8330, Page 100, and at the northeasterly corner of land conveyed to Andrea M. Higson and David J. Higson from Thomas C. Murphy and Melissa A. Chamberland by deed dated April 22, 2005 and recorded in said Registry in Book 6313, Page 58, thence;

25. **Westerly, southwesterly, and northwesterly** direction along the centerline of said small brook, and along the northerly line of said Higson's land and along the northerly line of land conveyed to David W. Lane and Ginamarie Lane from Ele J. Cormier, Jr. and Dolores J. Cormier by deed dated July 31, 1987 and recorded in said Registry in Book 2131, Page 95, a distance of **350 feet more or less** to a point in the easterly line of land conveyed to Laurent P. Demers from Wayne Tardie and Joyce Tardie by deed dated April 3, 2003 and recorded in said Registry in Book 5361, Page 94, said point being **North 71°56'24" West** a distance of **332.97 feet** along a tie line from the northwesterly corner of said Central Maine Credit Union's land and the northeasterly corner of said Higson's land, thence;

26. **North 20°35'20" East** along the easterly line of said Demers land a distance of **171.54 feet** to an existing 5/8 inch rebar found at the northeasterly corner of said Demers land, thence;

27. **North 69°24'40" West** along the northerly line of said Demers land a distance of **100.00 feet** to an existing 5/8 inch rebar found at the northwesterly corner of said Demers land, thence;

28. **South 20°35'20" West** along the westerly line of said Demers land a distance of **80.50 feet** to an existing 5/8 inch rebar found at the southwesterly corner of said Demers land and in the northeasterly line of said Turner Street, thence;

29. **North 07°27'53" West** along the northeasterly line of said Turner Street a distance of **177.05 feet** to the point of beginning.

Containing 5.4 acres, more or less, and being sometimes referred to herein as the "Bear LLC Parcel."

2. SURVEY AND BEARINGS

Bearings are Grid North based on the City of Auburn GIS Map. Description is based on a survey by ARCC Land Surveyors, Inc. and lines established by others.

3. SOURCE OF TITLE

Being a portion of land conveyed to Richard K. Raubeson from Kathleen I. Raubeson by deed dated September 22, 2014 and recorded in the Registry of Deeds for Androscoggin County Registry of Deeds in Book 9005, Page 175, a portion of land conveyed to Richard K. Raubeson from K&R Associates by deed dated September 15, 2014 and recorded in said Registry in Book 9005, Page 177, and a portion of land conveyed to Lake Superior Corporation from Carleton B. Ring and Barbara P. Ring by deed dated January 16, 2007 and recorded in said Registry in Book 7032, Page 300.

4. EASEMENT APPURTENANT

Also conveyed herewith is an easement appurtenant to the Bear LLC Parcel in common with the owner of the servient estate to repair, maintain and replace existing riprap spillways and related drainage structures located within 90.00 feet of the westerly line of Center Street adjacent to or near the northerly and southerly lines of the Bear LLC Parcel, said lines being 90.00 feet in length and being the calls numbered 17 and 19, respectively, in the description of the Bear LLC Parcel above.

5. RESERVATION OF EASEMENT

There is reserved for the benefit of land retained by Lake Superior Corporation on the westerly side of Center Street (as described in the deed recorded in Book 7032, Page 300) and for the benefit of land retained by Richard K. Raubeson on the westerly side of Center Street (as

described in the deeds recorded in Book 9005, Page 175 and Book 9005, Page 177) an easement in common with Bear LLC and its successors in interest of the servient estate over the following described parcel (the "Easement Parcel"):

Beginning at the intersection of the westerly line of Center Street with the northerly line of the Bear LLC Parcel that intersects said line of Center Street;

Thence South 10° 14' 25" East along the westerly line of Center Street a distance of 100.00 feet to land retained by Richard K. Raubeson;

Thence South 79° 17' 22" West along said retained land of Raubeson a distance of 90.00 feet;

Thence North 10° 42' 38" West along said retained land of Raubeson a distance of 20.00 feet;

Thence South 79° 17' 22" West along said retained land of Raubeson a distance of 53.33 feet;

Thence continuing South 79° 17' 22" West through the Bear LLC Parcel a distance of 210 feet, more or less, to a point in the southeasterly line of Lot 39 on the Plan of Lakeside (the "Lakeside Plan") recorded in the Androscoggin County Registry of Deeds, Book of Plans, Book 5, Page 197;

Thence North 20° 37' 50" East along the southeasterly lines of Lot 39, Lot 38 and Lot 37 on the Lakeside Plan a distance of 70 feet, more or less, to the northerly line of the Bear LLC Parcel and land retained by Richard Raubeson (see Book 9005, Page 175);

Thence North 79° 17' 22" East along said land retained by Raubeson and the northerly line of the Bear LLC Parcel a distance of 228.39 feet;

Thence North 10° 42' 38" West a distance of 20.00 feet, to a corner in said land retained by Richard K. Raubeson;

Thence North 79° 17' 22" East along said land retained by Richard K. Raubeson a distance of 90.00 feet to the point of beginning.

The easement in common with the owner of the servient estate shall be for all purposes of a right of way to benefit the dominant estate, and shall include, without limitation intended, the following:

(1) the right of ingress and egress by foot and by vehicle of any sort whatever;

(2) the right to construct, maintain, repair, grade, excavate, fill, pave and improve the full width of the right of way;

(3) the right to install, construct, maintain, repair and replace within the right of way, both above and below ground, utility services to include, without limitation, facilities necessary or convenient for the transmission of electricity, gas, telephone communications, cable television, computer communications, sewerage, water and such similar services which are currently available or in the future may become available, and the right to connect to any existing utilities within the Easement Parcel.

To the extent the foregoing grant of easement does not satisfy the requirements of a public utility for the installation, construction, maintenance and repair of such utility services, the owner of the servient estate will execute and deliver the standard form of easement required by the public utility for such purpose relating to and encumbering the Easement Parcel.

The easement is not limited to any current use of the property served by the easement but shall serve any lawful purpose to which said property may be put in the future.

The owners of the dominant estate and of the servient estate shall repair any damage to the Easement Parcel caused by the owners' respective use (or use by the respective owners' invitees) of same and shall restore the Easement Parcel as near as practicable to the condition existing prior to the exercise of the owner's rights in the Easement Parcel.

6. EXISTING EASEMENTS AND STRUCTURES

This conveyance is made subject to all existing easements, conditions and structures located within the Bear LLC Parcel including, without limitation intended, the following:

(1) Easement from Herbert L. Wills to Central Maine Power Company dated August 18, 1920 and recorded in Book 299, Page 202; and

(2) Easement from Barbara Ring and Carleton Ring to the Auburn Sewerage District dated April 7, 1972 and recorded in Book 1142, Page 63.

IN WITNESS WHEREOF, this instrument has been executed and delivered as of the 1ST day of December, 2015.

LAKE SUPERIOR CORPORATION

Witness

By: Richard K. Raubeson, President
Thereunto duly authorized

Witness

RICHARD K. RAUBESON, Individually

STATE OF MAINE
ANDROSCOGGIN COUNTY

December 1, 2015

Then personally appeared the above-named Richard K. Raubeson and acknowledged the foregoing instrument to be his free act and deed, both individually and in said capacity, and the free act and deed of Lake Superior Corporation.

Before me,

Ronald L. Bissonnette
Attorney at Law

dft/F:\Darlene\CLIENTS\RAUBESON\Self Storage Project - Glenn Street\Deed to Bear LLC 2015-11-05.doc

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

Attachment 2
Demonstration of Technical and Financial Capability

ATTACHMENT 2

FINANCIAL AND TECHNICAL CAPACITY

2.0 Financial Capacity

The cost estimate for the project cost is attached to this section with the total project cost to be approximately $ 1,544,000. The applicant is in discussions with a bank to provide financing for the project.

2.1 Technical Capacity

Bear Holdings LLC has engaged a group of professionals to design the project including Wright-Pierce for the site planning and Davis Land Survey, LLC for the boundary survey. The building and the building systems will be designed by professionals and the Owner will be the general contractor for the project. He has experience with general contracting other projects such as a commercial building expansion in Saco.

Cost Estimate for Permitting

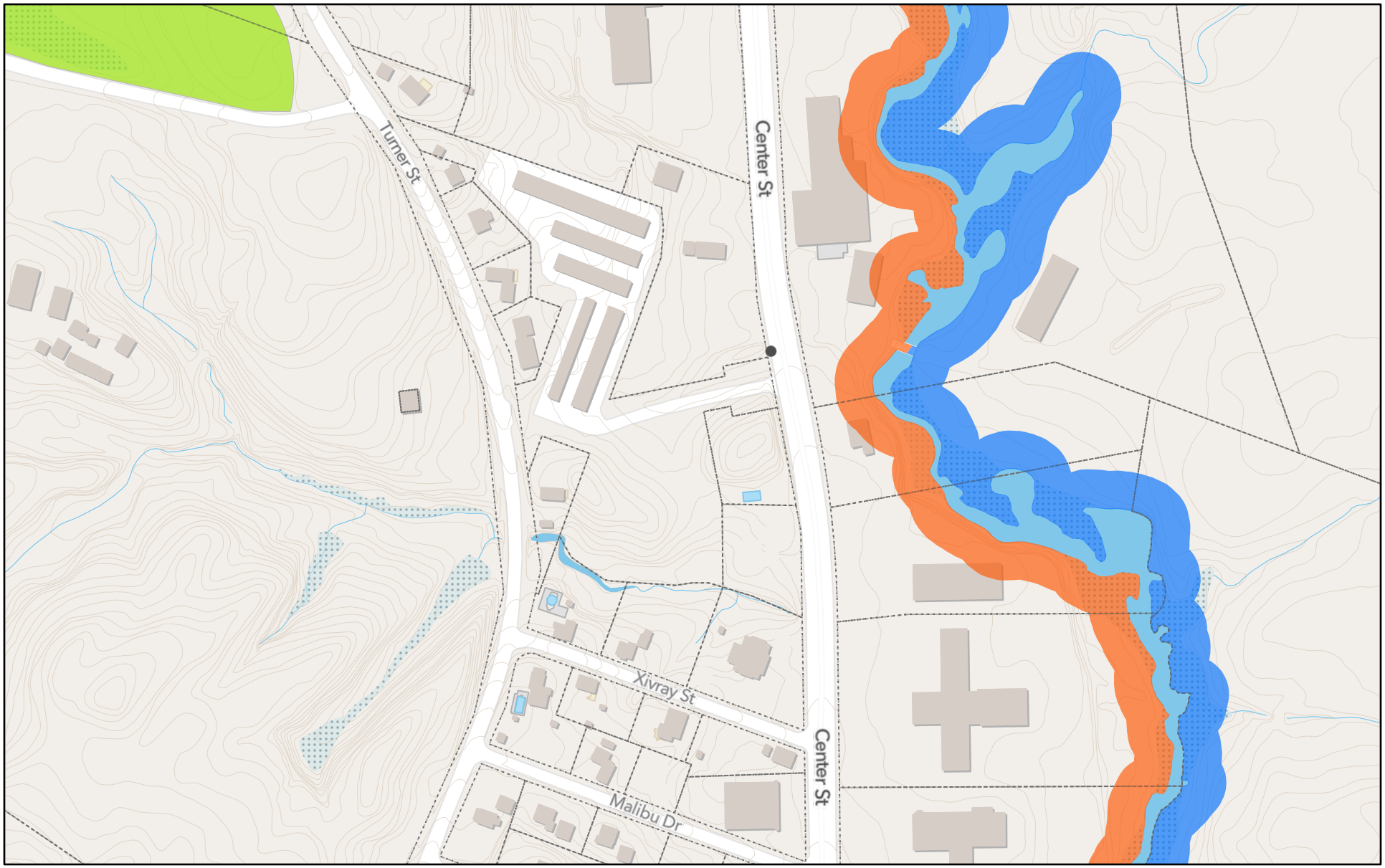
Bear Holding LLC

6/4/2024

	Items	QUANTITY	UNIT	UNIT PRICE	COST
1	Sitework	1	LS	$214,000.00	$214,000
2	Pavement	1	LS	$65,000.00	$65,000
3	Landscaping	1	LS	$20,000.00	$20,000
4	Building design	1	LS	$45,000.00	$45,000
5	Foundations	1	LS	$115,000.00	$90,000
6	Building Shell	1	LS	$755,000.00	$755,000
7	HVAC	1	LS	$55,000.00	$55,000
8	Signage	1	LS	$15,000.00	$15,000
9	Lighting	1	LS	$25,000.00	$25,000
10	Electrical	1	LS	$35,000.00	$35,000
11	Finishes	1	LS	$85,000.00	$85,000
				Sub-Total:	**$1,404,000.00**
				Contingency (10%)	**$140,400**
				Total:	**$1,544,400.00**

Attachment 3
Natural Resources Figures

Shoreland



8/18/2023, 4:35:49 PM

Current Parcels _ Public

ShorelandZoning

Resource Protection

General Development

Stream Protection

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

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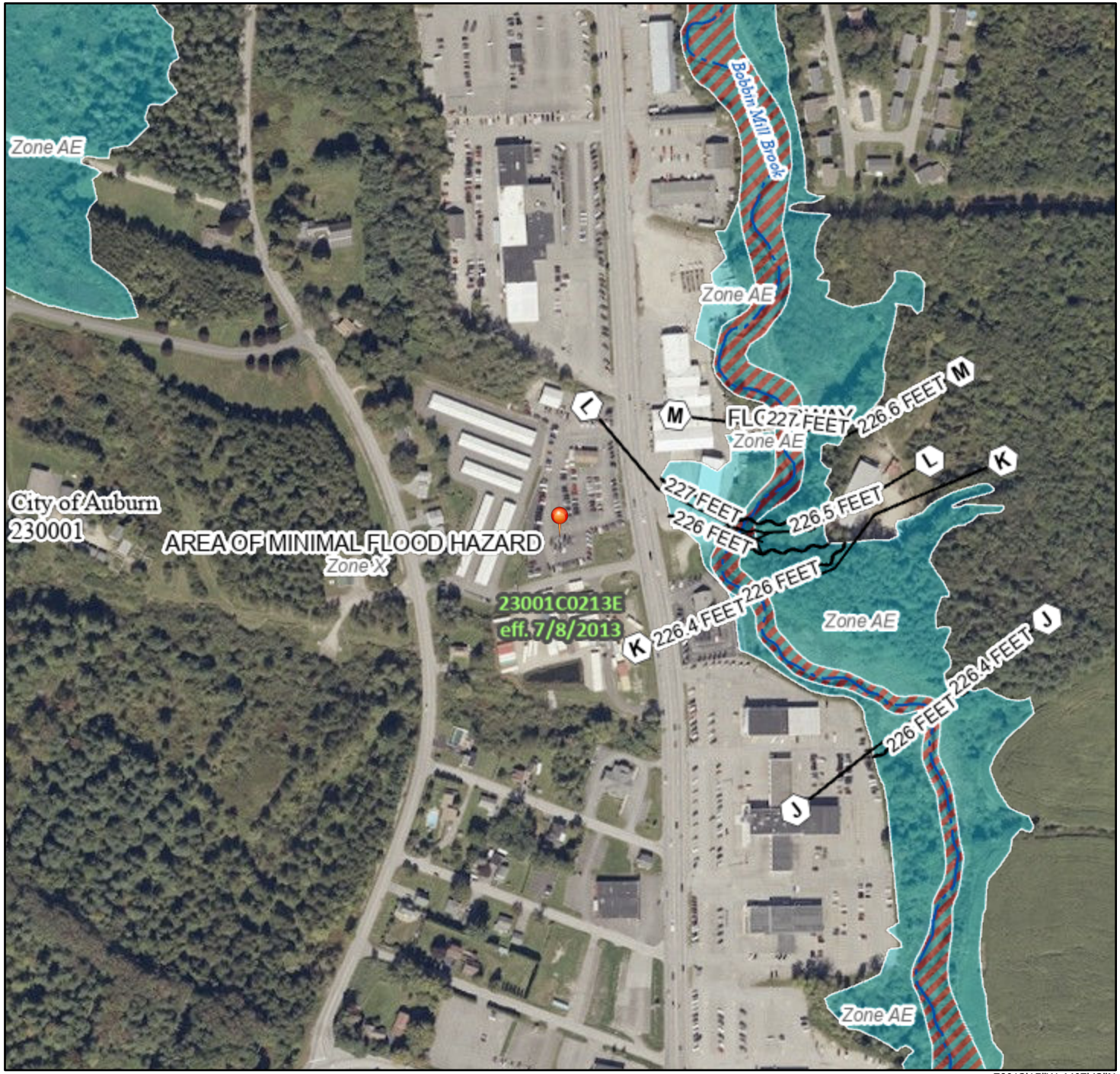
Web AppBuilder for ArcGIS

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National Flood Hazard Layer FIRMette

FEMA

70°13'52"W 44°8'8"N



70°13'15"W 44°7'42"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

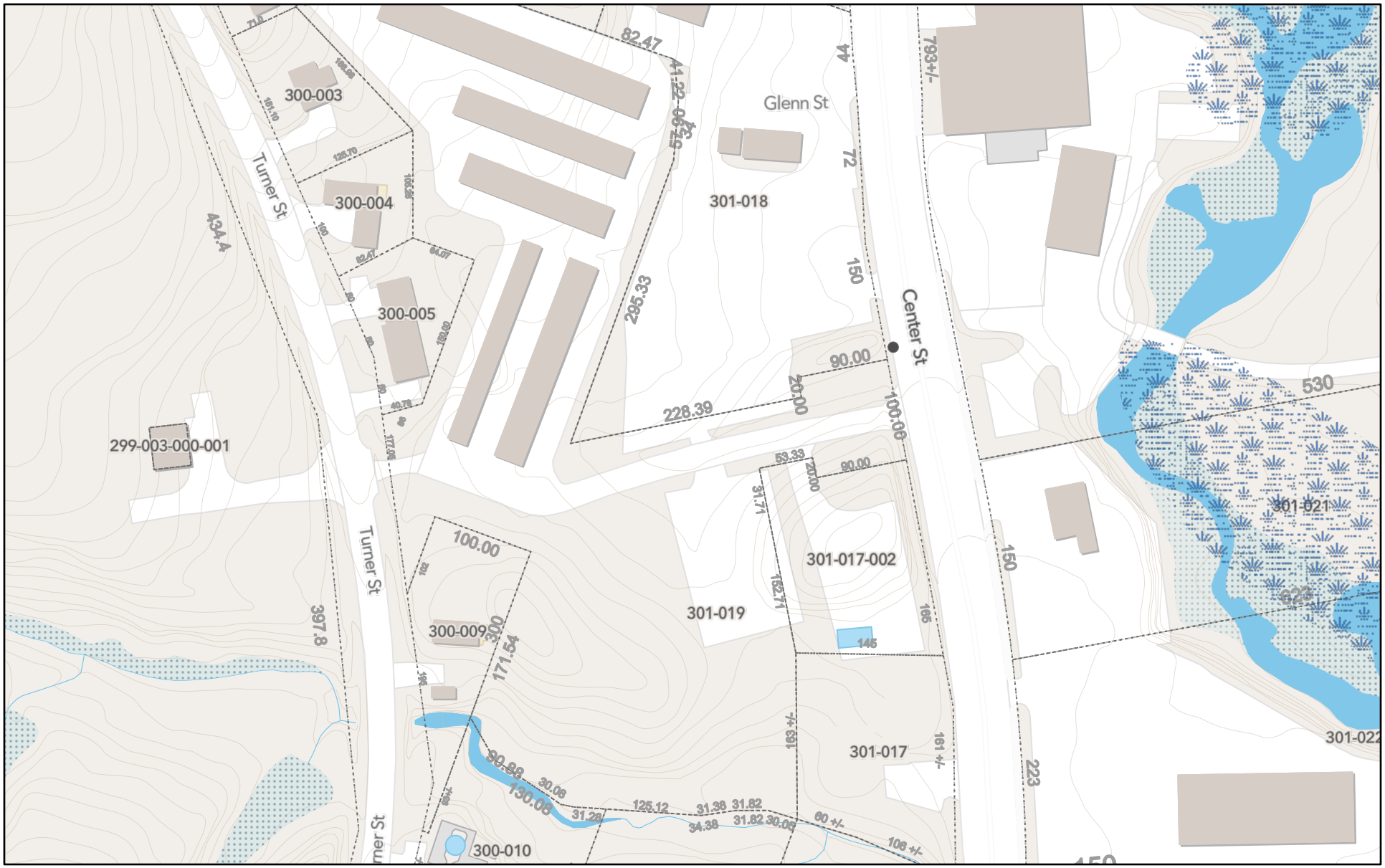
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/18/2023 at 4:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Wetland and Stream



8/18/2023, 4:37:25 PM

Current Parcels _ Public

Wetlands

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.08 km

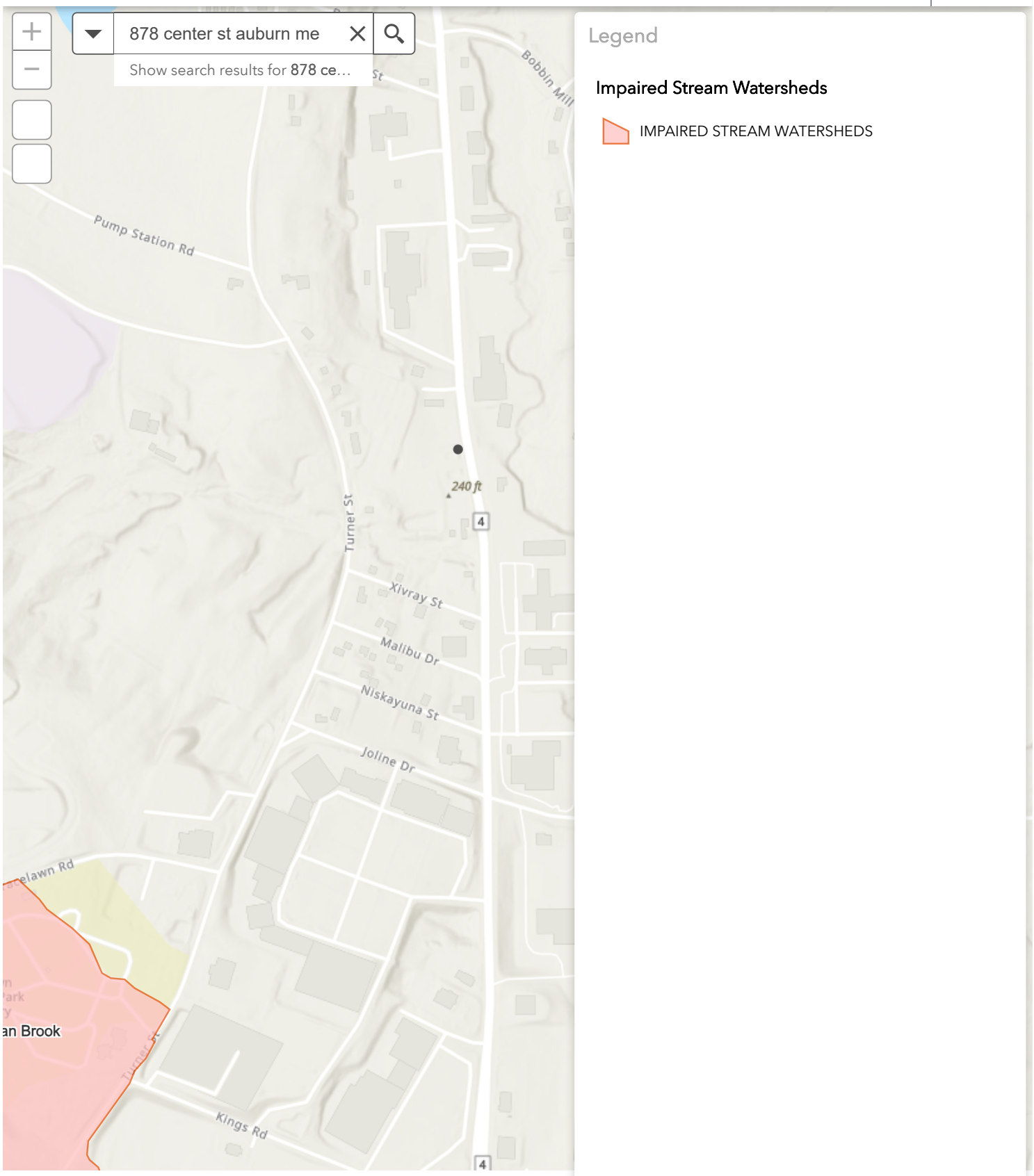
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Web AppBuilder for ArcGIS

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Maine Urban Impaired Stream Watersheds

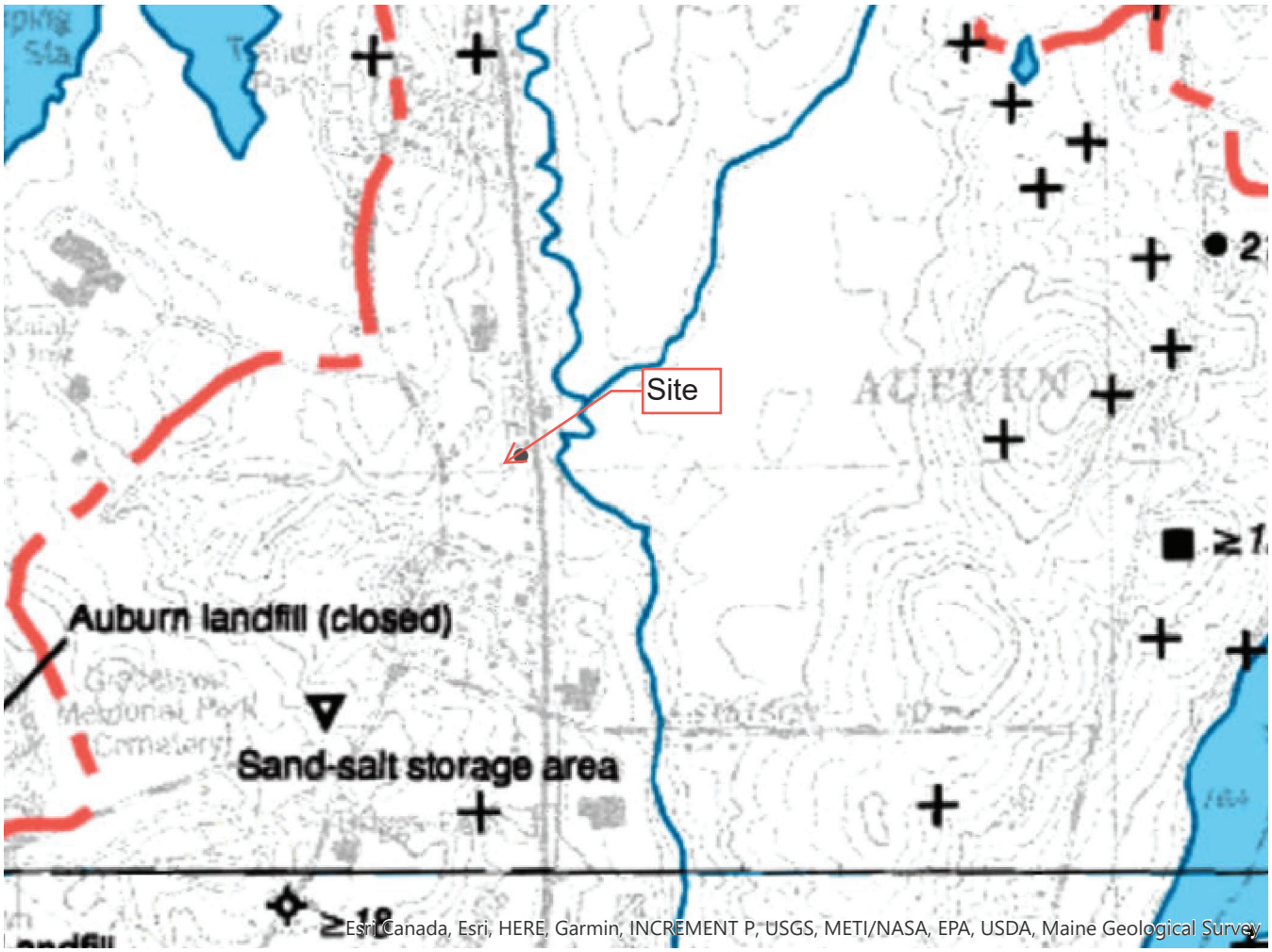
Maine Department of Environmental Prote



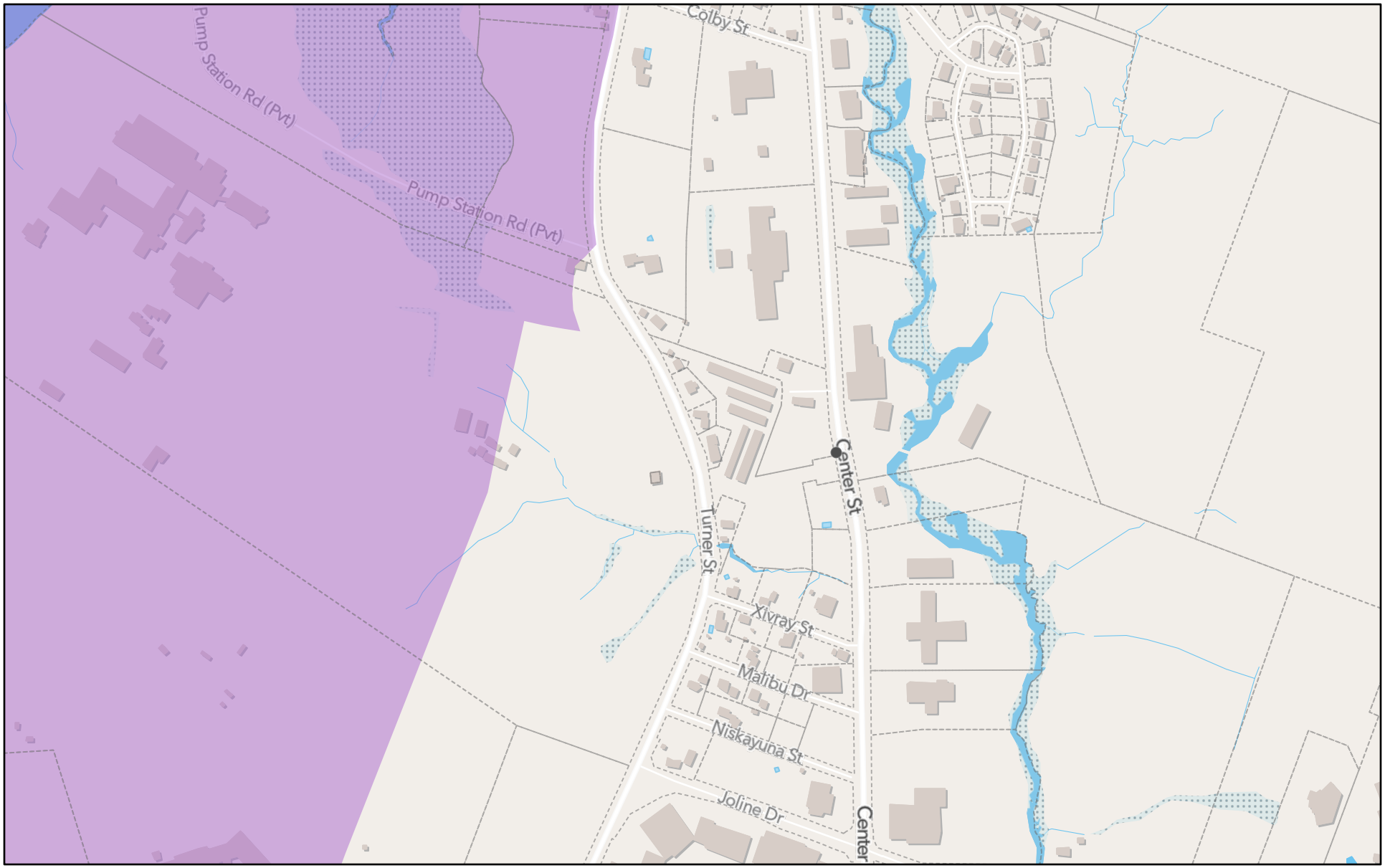
Legend

Impaired Stream Watersheds

IMPAIRED STREAM WATERSHEDS


Site
Auburn landfill (closed)
Sand-salt storage area
Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, Maine Geological Survey

Lake Auburn Watershed



8/18/2023, 4:48:13 PM

Current Parcels _ Public

Lake Auburn Watershed

1:9,028

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

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Web AppBuilder for ArcGIS

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Taylor Pond Watershed



8/18/2023, 4:49:29 PM

Taylor Pond Watershed

1:36,112

0 0.23 0.45 0.9 mi

0 0.35 0.7 1.4 km

Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Web AppBuilder for ArcGIS

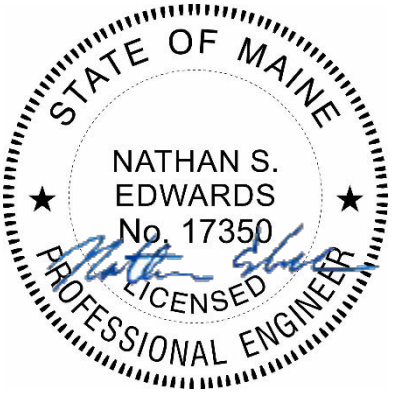
Credit should always be given to the data source and/or originator when the data is transferred or printed. | Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA | Maine GeoLibrary | GlobeXplorer, Walnut

Attachment 4
Stormwater Management Plan and Erosion Control Plan

Bear Self-Storage Facility

Stormwater Management Plan

July 2024



7/30/2024

Prepared By:

Wright-Pierce
11 Bowdoin Mill Island, Suite 140
Topsham, ME 04086
207.725.8721 | wright-pierce.com

1.1 Introduction

Bear Holding's is proposing to construct a new 9,000 SF building on the southerly side of the access driveway at the storage facility portion of the site. The project proposes expanded vehicle display areas at the car dealership and around the proposed building. Additional gravel area is proposed at the storage facility for more storage space. Several stormwater best management practices (BMPs) are proposed to treat and attenuate the peak runoff rates of stormwater of the new development proposed in this application. The site is situated between Center Street and Turner Street and consists of several contiguous parcels owned by Bear Holding's and one parcel by Bear, LLC.

1.2 Existing Conditions

The existing site is entirely developed and consists of a self-storage facility with five storage buildings, gravel area for mobile storage boxes, paved access drives, stormwater wet pond, and car dealership with a paved parking lot and three associated buildings. The existing conditions stormwater model was developed based on the impervious area and non-impervious developed area of the site as approved. See Figure 1 in Appendix A for the existing conditions drainage plan. This drainage plan is based on the previously approved site plan.

The majority of the surface runoff from the development, plus some off-site runoff from the residential properties along Turner Street, is directed to a wet pond located on the southerly portion of the site where the collected runoff is treated and conveyed to an unnamed stream that crosses Center Street and is tributary to Bobbin Mill Brook. Bobbin Mill Brook is a tributary of the Androscoggin River. Runoff from the access drive flows into two underdrained soil filters located on the easterly portion of the site where the collected runoff is treated and conveyed to the existing storm drainage system on Center Street.

Soils mapping and characteristics were obtained from the Medium Intensity Soil Survey for Androscoggin County. As indicated on the attached soils map the primary hydrological soils group covering the site is Group C with some areas covered by Group B and Group D. Current rainfall data from the Northeast Regional Climate Center (NRCC) was utilized for the model. Rainfall depths used were 3.01 in, 4.44 in, 5.56 in, and 7.81 in for the 2-, 10-, 25-, and 100-year, 24-hour storms, respectively.

1.3 Proposed Conditions

This application proposes to expand the gravel storage container area on the southern side of the site. Runoff from this area that does not already flow to the wet pond for treatment will flow to two grassed underdrained soil filters (GUSFs) for treatment and peak flow attenuation. Most of the access drive runoff will also be conveyed to these GUSFs.

The majority of the site's runoff will continue to be treated by the existing wet pond; however, the contributing drainage area boundary will change some due to the proposed grading. The wet pond was originally designed with additional capacity in anticipation of a future phase of work, which our analysis and calculations show has capacity for the proposed improvements without alteration.

Runoff from a portion of the southerly side of the site will not be treated. A residential house owned by Bear Holding's has recently been demolished on the southwesterly side of the site. This impervious area has been seeded and was therefore modeled as landscaped grass in the proposed conditions model.

A new 9,000 SF building is proposed on the southerly side of the access driveway, which is surrounded by new pavement to be used as display area for the car dealership. New gravel area is proposed west of the new building and pavement for storage containers. Since the last approval some new pavement has been installed north of the access driveway at the car dealership, which is all proposed to be treated retroactively with the proposed subsurface soil filter. This application also proposes a minor addition of pavement beyond what has already been installed, which will be treated too.

Section 1.5 of this report outlines how the stormwater treatment requirements will be met by the proposed design.

1.4 Regulatory Requirements

The City of Auburn Site Plan Review Ordinance, Section 14 requires that the stormwater runoff from the site shall be managed in accordance with Maine Department of Environmental Protection's (MDEP) regulations outlined in Chapter 500 and 502. The proposed development will disturb more than one acre of land and will create more than one acre of pavement, and as a result the development must comply with MDEP's Basic and General Standards. These standards provide specific design criteria for water quality treatment.

1.5 Water Quality Treatment Summary

The general intent of the proposed design is to treat runoff from as much of the site as practicable, treat at least 95% of the new impervious areas and 80% of the new developed areas (this includes impervious area), and manage peak runoff rates.

An existing wet pond, two proposed GUSFs, and one proposed SSF will be utilized to meet the stormwater treatment requirements described above. Calculations showing conformance with MDEP design standards are in Appendix B. Calculations performed in HydroCAD for each stormwater practice are included in Appendix C.

The only newly developed area that will not be treated is a small portion of paved access drive at the southeasterly side of the site. This area is approximately 3,000 SF and is outlined in Figure 2 in Appendix A as "Non-Treated Area". Therefore approximately 105,000 SF of 108,000 SF of the new newly developed impervious area will be treated, exceeding the 95% treatment requirement. Since the rest of the areas disturbed by the project are already developed, there are no new non-impervious developed areas to treat. The impervious area treatment calculation was performed by tabulating the areas of the site that had a change from pervious land cover in the existing condition to impervious land cover in the proposed condition. Areas that were already impervious but changed to a new type of impervious land cover were also considered new impervious, even though they are already impervious. It is important to note that this is why the increase in impervious area used to calculate the required impervious area to be treated on the site is greater than what the actual addition of impervious area is on the site. Figure 2 in Appendix A shows the areas of the site that were considered new development for this calculation. The small non-treated area is also noted in this figure.

GUSF 1 is proposed southeast of the new building at the storage facility to detain and treat stormwater from the surrounding proposed paved area. GUSF 2 is adjacent to GUSF 1 and receives runoff from the proposed building and surrounding paved area. The treatment volume and soil filter area of both GUSFs were sized based on MDEP requirements and treat all the impervious area that drains to them, which is all new impervious developed area. The non-impervious area that drains to them does not factor into the MDEP sizing because it has been previously developed. The GUSFs were designed to have significant additional storage capacity beyond what is needed for treatment to attenuate peak runoff rates from the site. Section 1.6 of this report further describes how peak runoff rates are reduced from the site.

The SSF is proposed on the westerly side of the site, north of the access driveway at the car dealership to treat runoff from the expanded vehicle display area. All the new impervious developed area here will be treated by the SSF and has been sized accordingly. Additional runoff from existing pavement and landscaped developed area will also flow to the system but was not used for the MDEP treatment volume calculations since they area is existing. The additional runoff was modeled in HydroCAD to ensure the system is properly sized to handle the flow. This stormwater practice consists of two areas. The first area provides the required stormwater treatment. The second area consists of additional stormwater storage for larger storm events for peak flow attenuation, not treatment. Runoff will be collected by catch basins and conveyed to stormwater chambers. Some of the chambers are isolator rows which will pre-treat the stormwater runoff before the stormwater moves to additional chambers. Stormwater will fill the chambers and infiltrate through a sand filter media layer with underdrains below. When this treatment portion of the system is at capacity, stormwater will bypass to the additional storage chambers. Section 1.6 of this report further describes how peak runoff rates are reduced from the site.

The existing wet pond treats stormwater runoff from the existing storage buildings, surrounding paved and landscaped areas on the northwesterly side of the site and the proposed gravel areas around the pond on the southwesterly side of the site. Some off-site drainage from the residential neighborhood to the west also drains to the pond. Calculations were performed to determine that the existing wet pond has the capacity to treat all of the stormwater runoff that drains to it based on current MDEP requirements to treat all the area draining to it (MDEP requirements for wet ponds have become more stringent since the last approval). Additionally, the grading of the pond was modified in some areas since the last site plan approval, so the storage volume was revised in the HydroCAD model to reflect this.

1.6 Peak Runoff Rate Analysis

A peak runoff rate analysis was performed in HydroCAD, which compared the existing and proposed conditions of the site. As required by the City's Ordinance, the 2-, 10-, and 25-year, 24-hour storms were modeled. As described in Sections 1.2 and 1.3 describing the existing and proposed conditions, the existing conditions were considered those as approved in the last site plan application. The proposed conditions were modeled as shown in this current site plan application. The peak runoff rates are summarized below in Table 1 and the full HydroCAD output report is in Appendix C.

TABLE 1: PEAK RUNOFF RATES

24-Hour Storm Event Recurrence Interval	Study Point 1		Study Point 2	
	Existing (cfs)	Proposed (cfs)	Existing (cfs)	Proposed (cfs)
2-Year	1.3	1.4	6.5	4.2
10-Year	3.5	3.3	12.3	10.3
25-Year	11.2	10.4	17.2	12.8

Two study points were identified where stormwater runoff leaves the site for comparison of the peak runoff rates in the existing and proposed conditions. Study Point 1 is the downstream extent of the stream on the property, immediately before it crosses Center Street via culvert. Study Point 2 is the site's stormwater discharge to the existing closed drainage system on Center Street.

As shown in Table 1, the peak runoff rate to Study Point 1 is reduced during the 2-, 10-, and 25-year, 24-hour storms. This point receives stormwater discharge from the existing wet pond and overland runoff from southerly side of the site along the stream. The wet pond provides significant storage of stormwater mitigating peak runoff rates.

Peak runoff rates at Study Point 2 are also reduced during the 2-, 10-, and 25-year, 24-hour storms. This is because a large GUSF and SSF collect, treat, and attenuate the stormwater runoff from the site.

1.7 Conclusion

By incorporating various stormwater treatment practices, runoff from the proposed development will meet the MDEP Basic and General Standards.

Appendix A
Figures



PLAN
SCALE: 1"=40'

DRAWING 1	**BEARS HOLDING, LLC** **BEAR SELF STORAGE FACILITY** **SITE IMPROVEMENTS** **AUBURN, MAINE** **PRE-DEVELOPMENT STORMWATER PLAN**	**WRIGHT-PIERCE** 207.725.8721 | www.wright-pierce.com 11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086	STATE OF MAINE JAN B.S. WIEGMAN No. 5852 REGISTERED PROFESSIONAL ENGINEER 7/31/2024	PROJECT NO: 21316 DESIGNED: J.WIEGMAN CAD COORD: R.BEISAW CAD: R.BEISAW CHECKED: N.EDWARDS DATE: 06-2024 APPROVED: J.WIEGMAN DATE: 06-2024 SUBMISSION: FOR PERMITTING

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2			
3			
4			
5			

LAST SAVED BY: RYAN.BEISAW 7/31/2024 12:23 PM

LEGEND:

WATERSHED BOUNDARY

STUDY POINT (SP1)

WATERSHED (1S)

POND (GU SF1)

NEW DEVELOPED AREA

NON-TREATED AREA

N

TURNER STREET

XIVRAY STREET

CENTER STREET

N/F
DAVID W. LANE
10186/259 ~ 9-20-2019
TM 300-10
6 XIVRAY STREET

N/F
ANDREA M. & DAVID J. HIGSDON
6313/58 ~ 4-22-2005
TM 301-14
16 XIVRAY STREET

N/F
CENTRAL MAINE
FEDERAL CREDIT UNION
8330/100 ~ 1-31-2012
TM 301-16
836 CENTER ST

N/F
BEAR LLC
11304/245
TM 300-9
1193 TURNER ST

N/F
NORMAN E & MARY W ROSE
5940/295 ~ 6-3-2004
TM 300-5
1215 TURNER ST

N/F
KATHY WHITEHOUSE
& RONALD K KEKOA
6498/176 ~ 9-16-2005
TM 300-4
1229 TURNER ST

N/F
VICTORIA D. SANZONE
7789/89 ~ 9-11-2009
TM 300-3
1233 TURNER ST

N/F
BRENDA JIPSON
3316/305 ~ 8-23-1994
TM 300-2
1245 TURNER ST

N/F
DAVID E WEBB
JOAN N WEBB
1058/73 ~ 7-17-1972
TM 300-1
1257 TURNER ST

N/F
JOHN EMERSON LLC
8126/97 ~ 3-3-2011
TM 313-12
946 CENTER STREET
PO BOX 860
AUBURN, ME 04212

N/F
BEAR'S HOLDINGS LLC
9291/232 ~ 1-31-2021
TM 301-19
878 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/230
TM 301-17
864 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-17-2
868 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-18
900 CENTER STREET

1S, 1P, 2S, 3S, 4S, 5S, 6S, 7S, 8S

PAVED AREA

PAVED DRIVE

STORAGE UNIT

PAVED PARKING AREA

GU SF1

GU SF2

SSF1

SP1

SP2

PLAN
SCALE: 1"=40'

0 40 80

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2			
3			
4			
5			

PROJECT NO: 21316
DESIGNED: J.WIEGMAN
CAD COORD: R.BEISAW
CAD:
CHECKED: N.EDWARDS
DATE: 06-2024
APPROVED: J.WIEGMAN
DATE: 06-2024
SUBMISSION: FOR PERMITTING

STATE OF MAINE
JAN B.S. WIEGMAN
No. 5852
REGISTERED PROFESSIONAL ENGINEER
7/31/2024

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

POST DEVELOPMENT STORMWATER PLAN

DRAWING
2

J:\ENGVME\AUBURN\21316-BEARSELFSTORAGE_DRAWINGS\CIVL_FIGURE\21316 FIGURE_POSTSTORMWATER.DWG | 21316 Figure_PostStormwater | 1:2.5849 | — | 7/31/2024 12:28:24 PM | RYAN.BEISAW

Appendix B
Stormwater Practice Design Calculations

Project Name:	**Bear Self Storage**
Date:	**6/5/2024**

=Inputs

GRASSED UNDERDRAIN SOIL FILTER 1

DRAINAGE AREA CHARACTERISTICS

Land Cover Type	Area	Units
Impervious	10530	SF
Non-Impervious Developed	0	SF
Total Drainage Area	10530	SF

GRASSED UNDERDRAIN SOIL FILTER VOLUME REQUIREMENTS

Land Cover Type	Area (SF)	Multiplier	Volume (CF)
Impervious Area	10530	1.0	878
Developed Area	0	0.4	-
		Volume Required	**878**

GRASSED UNDERDRAIN SOIL FILTER SURFACE AREA REQUIREMENTS

Land Cover Type	Area (SF)	Multiplier	Area (SF)
Impervious Area	10530	0.05	527
Developed Area	0	0.02	-
		Area Required	**527**

GRASSED UNDERDRAIN SOIL FILTER DESIGN

Design Parameter	Quantity	Units	Req. Met?
Bottom Surface Area (3000 max)	2000	SF	OK
Ponding Depth	1.5	FT	N/A
Porosity	1.00	-	N/A
Storage Volume	4013	CF	OK

Stage-Area-Storage for Pond GUSF1: Soil Filt

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
232.00	2,000	0
232.10	2,090	204
232.20	2,180	418
232.30	2,270	641
232.40	2,360	872
232.50	2,450	1,113
232.60	2,540	1,362
232.70	2,630	1,620
232.80	2,720	1,888
232.90	2,810	2,165
233.00	2,900	2,450
233.10	2,990	2,744
233.20	3,080	3,048
233.30	3,170	3,361
233.40	3,260	3,682
233.50	3,350	4,013
233.60	3,440	4,352
233.70	3,530	4,700
233.80	3,620	5,058
233.90	3,710	5,425
234.00	3,800	5,800
234.10	3,910	6,185
234.20	4,020	6,582
234.30	4,130	6,990
234.40	4,240	7,408
234.50	4,350	7,838

GRASSED UNDERDRAIN SOIL FILTER 2			
DRAINAGE AREA CHARACTERISTICS			
Land Cover Type	**Area**	**Units**	
Impervious	54877	SF	
Non-Impervious Developed	0	SF	
Total Drainage Area	54877	SF	
GRASSED UNDERDRAIN SOIL FILTER VOLUME REQUIREMENTS			
Land Cover Type	**Area (SF)**	**Multiplier**	**Volume (CF)**
Impervious Area	54877	1.0	4,573
Developed Area	0	0.4	-
		Volume Required	**4,573**
GRASSED UNDERDRAIN SOIL FILTER SURFACE AREA REQUIREMENTS			
Land Cover Type	**Area (SF)**	**Multiplier**	**Area (SF)**
Impervious Area	54877	0.05	2,744
Developed Area	0	0.02	-
		Area Required	**2,744**
GRASSED UNDERDRAIN SOIL FILTER DESIGN			
Design Parameter	**Quantity**	**Units**	**Req. Met?**
Bottom Surface Area (3000 max)	3000	SF	OK
Ponding Depth	1.5	FT	N/A
Porosity	1.00	-	N/A
Storage Volume	5587	CF	OK

Stage-Area-Storage for Pond GUSF2: Soil Filt

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
232.00	3,000	0
232.10	3,097	305
232.20	3,195	619
232.30	3,293	944
232.40	3,390	1,278
232.50	3,488	1,622
232.60	3,585	1,975
232.70	3,682	2,339
232.80	3,780	2,712
232.90	3,878	3,095
233.00	3,975	3,488
233.10	4,064	3,889
233.20	4,154	4,300
233.30	4,244	4,720
233.40	4,333	5,149
233.50	4,423	5,587
233.60	4,512	6,034
233.70	4,601	6,489
233.80	4,691	6,954
233.90	4,781	7,427
234.00	4,870	7,910
234.10	5,033	8,405
234.20	5,196	8,917
234.30	5,359	9,444
234.40	5,522	9,988
234.50	5,685	10,549
234.60	5,848	11,125
234.70	6,011	11,718
234.80	6,174	12,328
234.90	6,337	12,953
235.00	**6.500**	**13.595**

Project Name:	**Bear Self Storage**
Date:	**6/5/2024**

=Inputs

SUBSURFACE SAND FILTER 1

DRAINAGE AREA CHARACTERISTICS

Land Cover Type	Area	Units
Impervious	27618	SF
Non-Impervious Developed	0	SF
Total Drainage Area	27618	SF

SUBSURFACE FILTER VOLUME REQUIREMENTS

Land Cover Type	Area (SF)	Multiplier	Volume (CF)
Impervious Area	27618	1.0	2,302
Developed Area	0	0.4	-
		Volume Required	**2,302**

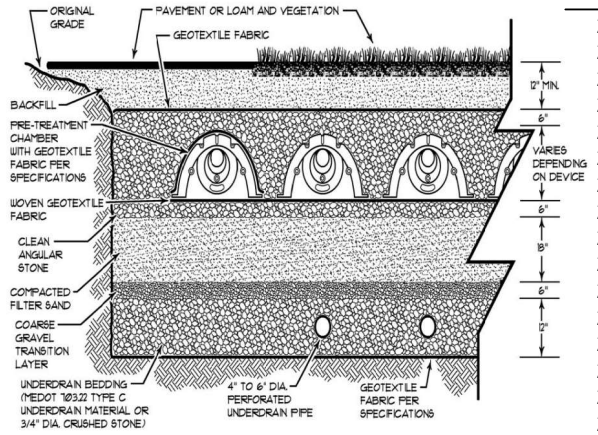
SUBSURFACE SAND FILTER SURFACE AREA REQUIREMENTS

Land Cover Type	Area (SF)	Multiplier	Area (SF)
Impervious Area	27618	0.05	1,381
Developed Area	0	0.02	-
		Area Required	**1,381**

SUBSURFACE SAND FILTER DESIGN

See storage table on right. WQV elevation is 230.5 (top of chamber) and the storage volume is 2,404 CF, which meets theminimum requirement of 2,302 CF.

Figure from Maine DEP Stormwater Manual Volume III



Stage-Area-Storage for Pond SSF1: Sand Filt

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
228.67	**2,257**	0
228.72	2,257	45
228.77	2,257	90
228.82	2,257	135
228.87	2,257	181
228.92	2,257	226
228.97	2,257	271
229.02	2,257	316
229.07	2,257	361
229.12	2,257	406
229.17	2,257	451
229.22	2,257	540
229.27	2,257	629
229.32	2,257	717
229.37	2,257	804
229.42	2,257	891
229.47	2,257	977
229.52	2,257	1,062
229.57	2,257	1,146
229.62	2,257	1,229
229.67	2,257	1,311
229.72	2,257	1,392
229.77	2,257	1,471
229.82	2,257	1,550
229.87	2,257	1,627
229.92	2,257	1,703
229.97	2,257	1,777
230.02	2,257	1,849
230.07	2,257	1,919
230.12	2,257	1,987
230.17	2,257	2,053
230.22	2,257	2,115
230.27	2,257	2,174
230.32	2,257	2,228
230.37	2,257	2,279
230.42	2,257	2,329
230.47	2,257	2,376
230.52	2,257	2,422
230.57	2,257	2,467

Project Name:	**Bear Self Storage**
Date:	**6/5/2024**

=Inputs

WET POND 1

DRAINAGE AREA CHARACTERISTICS

Land Cover Type	Area	Units
Impervious	102121	SF
Non-Impervious Developed	68786	SF
Total Drainage Area	170907	SF

WET POND TREATMENT VOLUME REQUIREMENTS

Permanent Pool Volume

Land Cover Type	Area (SF)	Multiplier	Volume (CF)
Impervious Area	102121	2.0	17,020
Developed Area	68786	0.8	4,586
		Volume Required	**21,606**

Channel Protection Volume

Land Cover Type	Area (SF)	Multiplier	Volume (CF)
Impervious Area	1000	1.0	83
Developed Area	102121	0.4	3,404
		Volume Required	**3,487**

WET POND TREATMENT SURFACE AREA REQUIREMENTS

Land Cover Type	Area (SF)	Multiplier	Area (SF)
Impervious Area	102121	0.05	5,106
Developed Area	68786	0.02	1,376
		Area Required	**6,482**

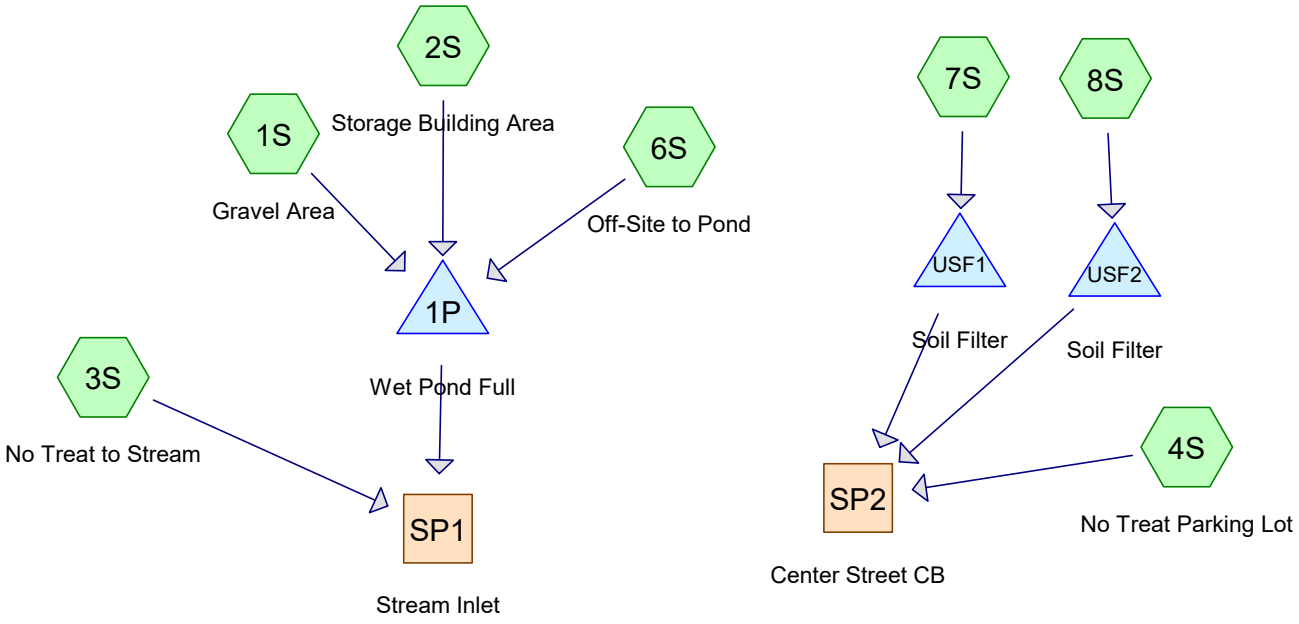
WET POND DESIGN

Design Parameter	Quantity	Units	Req. Met?
Bottom Surface Area	8500	SF	OK
Permanent Pool Volume (PPV)	28157	CF	OK
Channel Protection Volume (CPV)	36205	CF	OK

Wet Pond Storage Volume

Elevation (FT)	Area (SF)	Depth (Ft)	Volume (CF)	Notes
229	-	-	-	Bottom of pond.
234	8533	5	28157	Permanent pool elevation.
235	9585	1	37216	
236	10550	1	47284	
237	11575	1	58346	
237.5	12488	0.5	64362	Top of pond.

Appendix C
HydroCAD Output Reports



Subcat Reach Pond Link

Routing Diagram for Bear Self Storage Existing
Prepared by Wright-Pierce, Printed 6/5/2024
HydroCAD® 10.00-26 s/n 01135 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.572	61	>75% Grass cover, Good, HSG B (2S, 6S)
5.558	74	>75% Grass cover, Good, HSG C (1S, 2S, 3S, 4S, 6S, 7S, 8S)
0.073	96	Gravel (1S, 3S, 4S)
3.757	98	Impervious (1S, 2S, 3S, 4S, 6S, 7S, 8S)
9.961	**82**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Gravel Area Runoff Area=44,036 sf 9.97% Impervious Runoff Depth=1.08"
Tc=5.0 min CN=77 Runoff=1.27 cfs 0.091 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=1.99"
Tc=5.0 min CN=90 Runoff=5.90 cfs 0.405 af

Subcatchment 3S: No Treat to Stream Runoff Area=70,347 sf 5.45% Impervious Runoff Depth=1.02"
Flow Length=715' Tc=14.4 min CN=76 Runoff=1.25 cfs 0.138 af

Subcatchment 4S: No Treat Parking Lot Runoff Area=159,446 sf 38.56% Impervious Runoff Depth=1.45"
Tc=5.0 min CN=83 Runoff=6.46 cfs 0.444 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=0.91"
Tc=5.0 min CN=74 Runoff=0.78 cfs 0.058 af

Subcatchment 7S: Runoff Area=9,734 sf 65.78% Impervious Runoff Depth=1.99"
Tc=5.0 min CN=90 Runoff=0.54 cfs 0.037 af

Subcatchment 8S: Runoff Area=10,901 sf 29.97% Impervious Runoff Depth=1.32"
Tc=5.0 min CN=81 Runoff=0.40 cfs 0.028 af

Reach SP1: Stream Inlet Inflow=1.25 cfs 0.252 af
Outflow=1.25 cfs 0.252 af

Reach SP2: Center Street CB Inflow=6.46 cfs 0.481 af
Outflow=6.46 cfs 0.481 af

Pond 1P: Wet Pond Full Peak Elev=236.04' Storage=19,573 cf Inflow=7.95 cfs 0.554 af
Outflow=0.22 cfs 0.115 af

Pond USF1: Soil Filter Peak Elev=232.56' Storage=647 cf Inflow=0.54 cfs 0.037 af
Outflow=0.24 cfs 0.023 af

Pond USF2: Soil Filter Peak Elev=232.52' Storage=613 cf Inflow=0.40 cfs 0.028 af
Outflow=0.04 cfs 0.014 af

Total Runoff Area = 9.961 ac Runoff Volume = 1.200 af Average Runoff Depth = 1.45"
62.28% Pervious = 6.204 ac 37.72% Impervious = 3.757 ac

Summary for Subcatchment 1S: Gravel Area

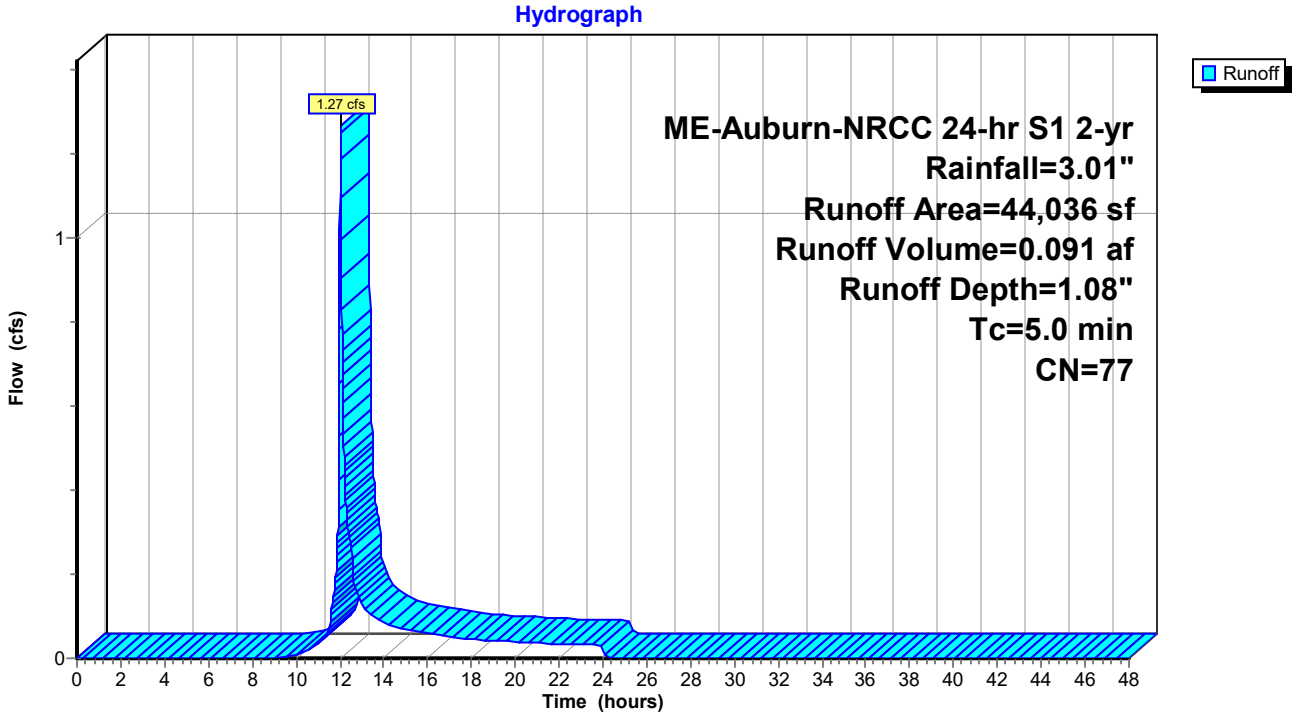
Runoff = 1.27 cfs @ 12.03 hrs, Volume= 0.091 af, Depth= 1.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	4,390	98	Impervious
	38,852	74	>75% Grass cover, Good, HSG C
*	794	96	Gravel
	44,036	77	Weighted Average
	39,646		90.03% Pervious Area
	4,390		9.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Gravel Area



Summary for Subcatchment 2S: Storage Building Area

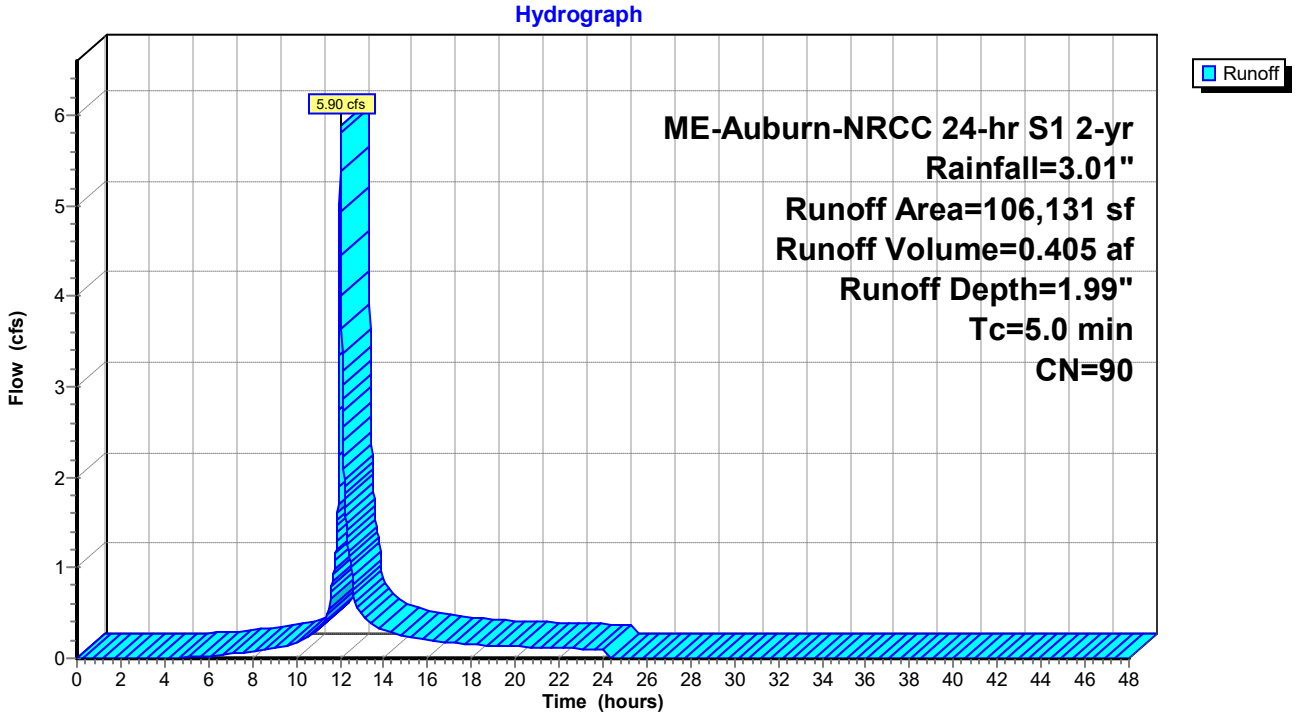
Runoff = 5.90 cfs @ 12.03 hrs, Volume= 0.405 af, Depth= 1.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: No Treat to Stream

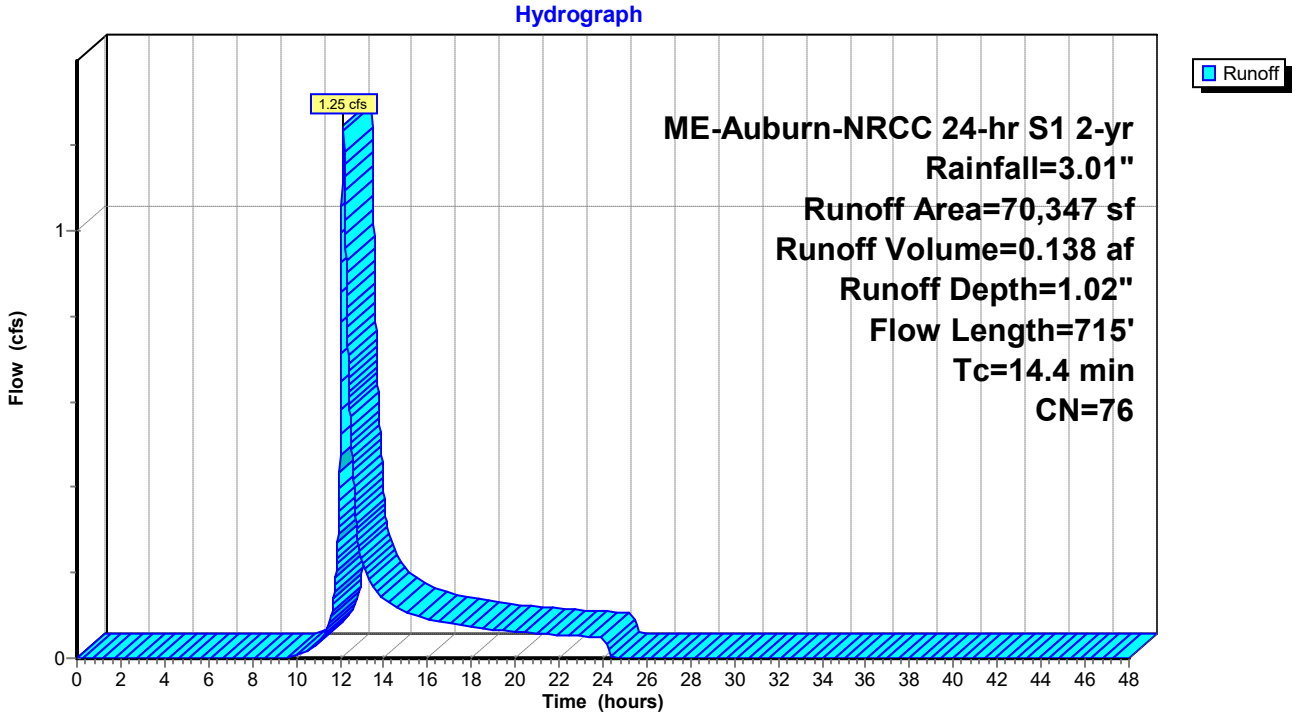
Runoff = 1.25 cfs @ 12.16 hrs, Volume= 0.138 af, Depth= 1.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	1,643	96	Gravel
*	3,832	98	Impervious
	64,872	74	>75% Grass cover, Good, HSG C
	70,347	76	Weighted Average
	66,515		94.55% Pervious Area
	3,832		5.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	70	0.0700	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	100	0.1200	0.34		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
14.4	715	Total			

Subcatchment 3S: No Treat to Stream



Summary for Subcatchment 4S: No Treat Parking Lot

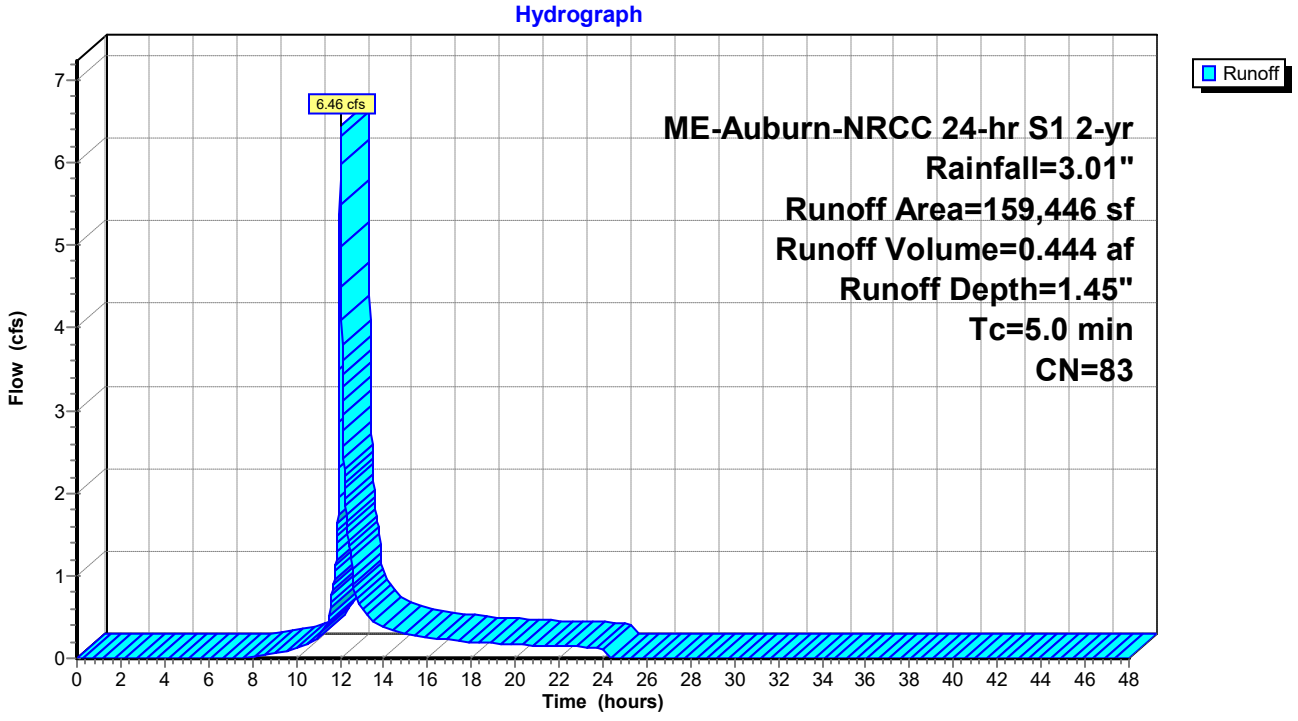
Runoff = 6.46 cfs @ 12.03 hrs, Volume= 0.444 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	61,478	98	Impervious
*	761	96	Gravel
	97,207	74	>75% Grass cover, Good, HSG C
	159,446	83	Weighted Average
	97,968		61.44% Pervious Area
	61,478		38.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: No Treat Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

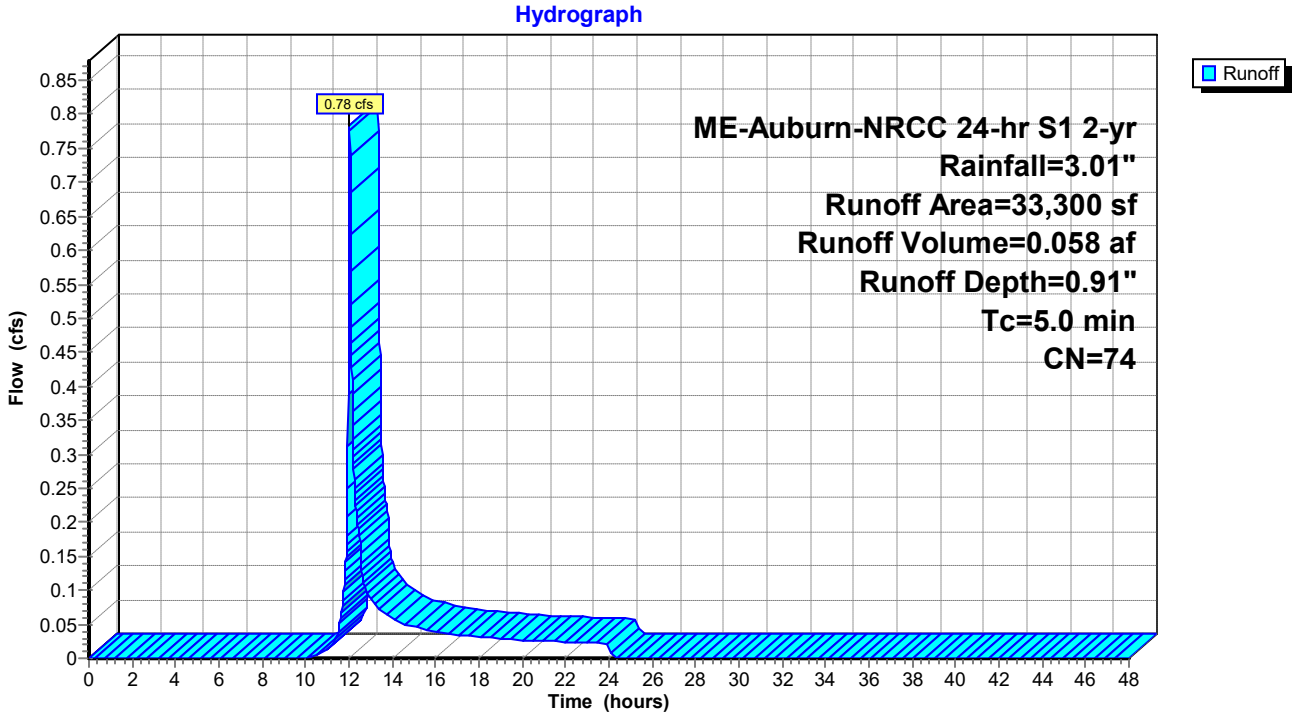
Runoff = 0.78 cfs @ 12.03 hrs, Volume= 0.058 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	16,738	74	>75% Grass cover, Good, HSG C
	11,046	61	>75% Grass cover, Good, HSG B
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S:

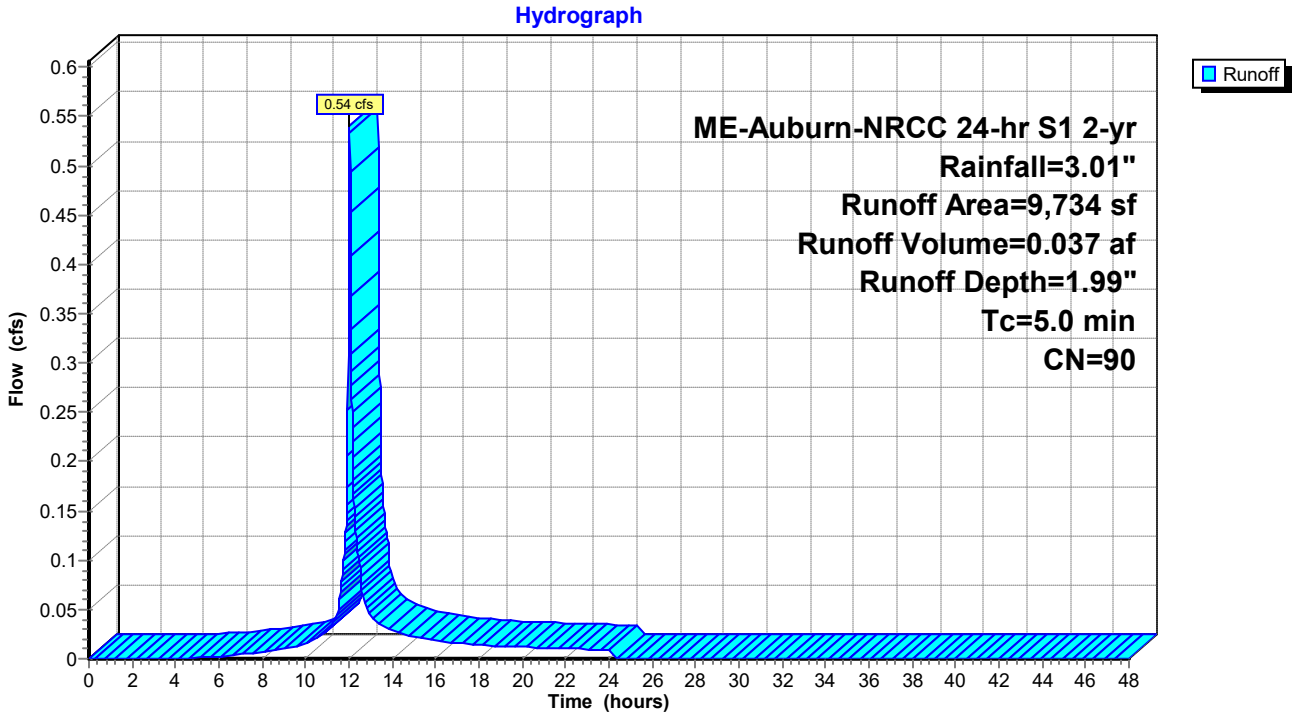
Runoff = 0.54 cfs @ 12.03 hrs, Volume= 0.037 af, Depth= 1.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	6,403	98	Impervious
	3,331	74	>75% Grass cover, Good, HSG C
	9,734	90	Weighted Average
	3,331		34.22% Pervious Area
	6,403		65.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S:



Summary for Subcatchment 8S:

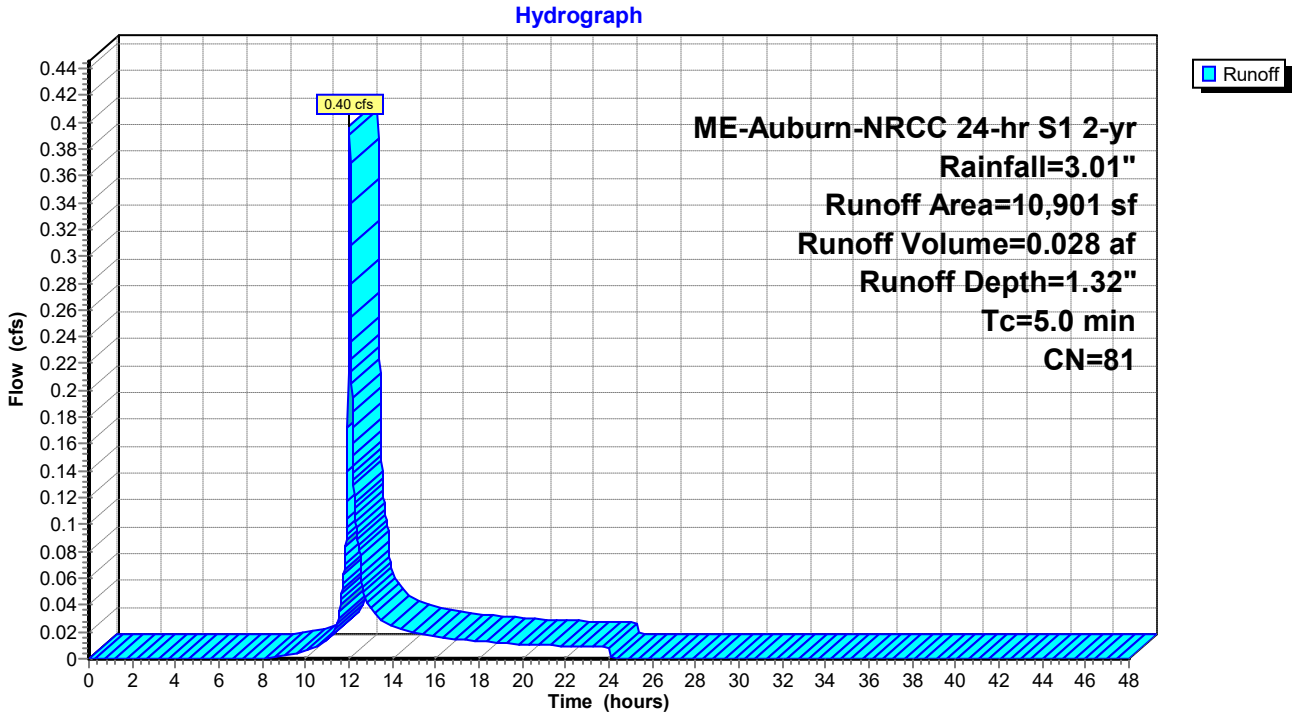
Runoff = 0.40 cfs @ 12.03 hrs, Volume= 0.028 af, Depth= 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	3,267	98	Impervious
	7,634	74	>75% Grass cover, Good, HSG C
	10,901	81	Weighted Average
	7,634		70.03% Pervious Area
	3,267		29.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S:

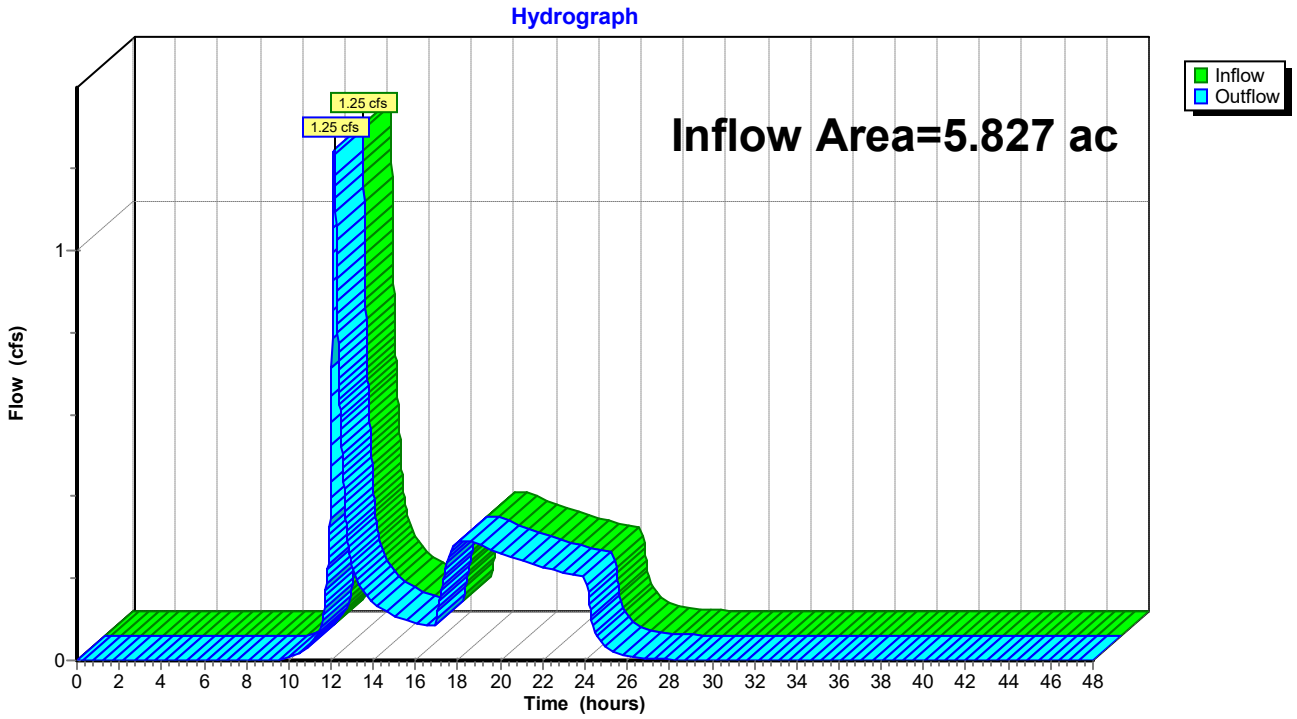


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.827 ac, 36.45% Impervious, Inflow Depth = 0.52" for 2-yr event
Inflow = 1.25 cfs @ 12.16 hrs, Volume= 0.252 af
Outflow = 1.25 cfs @ 12.16 hrs, Volume= 0.252 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

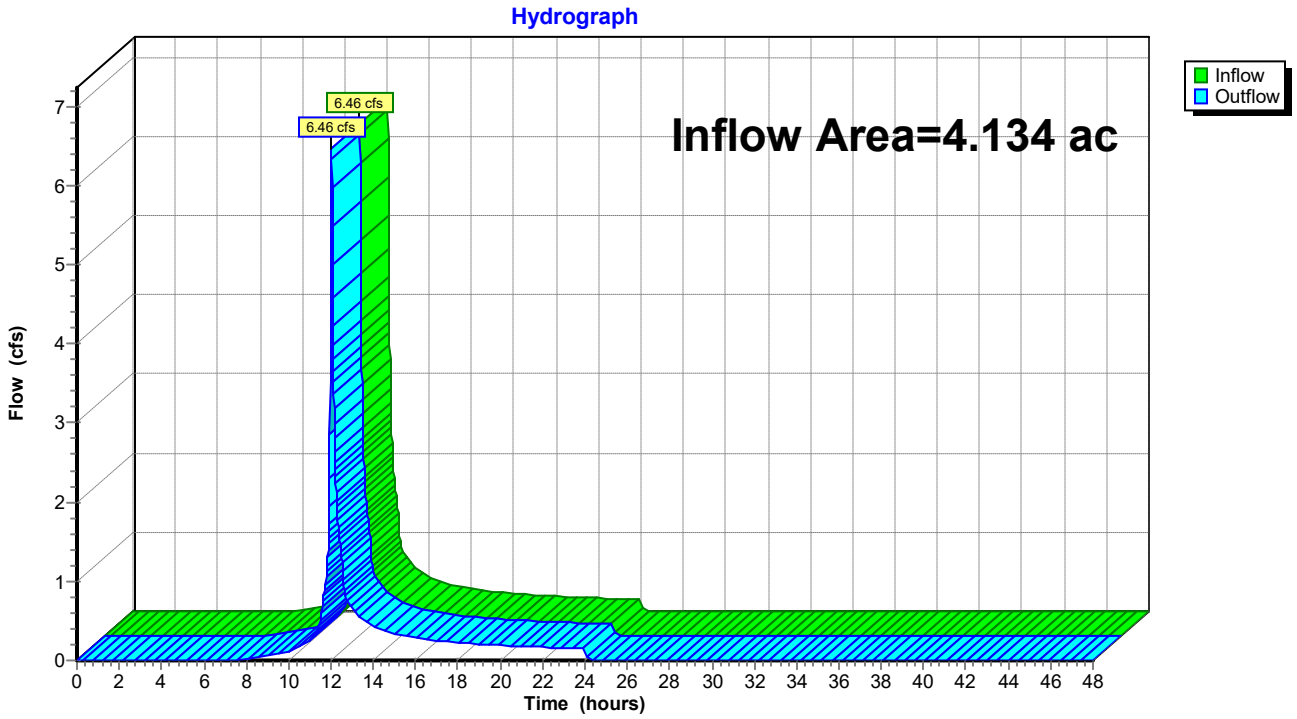


Summary for Reach SP2: Center Street CB

Inflow Area = 4.134 ac, 39.51% Impervious, Inflow Depth = 1.40" for 2-yr event
Inflow = 6.46 cfs @ 12.03 hrs, Volume= 0.481 af
Outflow = 6.46 cfs @ 12.03 hrs, Volume= 0.481 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 4.212 ac, 48.34% Impervious, Inflow Depth = 1.58" for 2-yr event
Inflow = 7.95 cfs @ 12.03 hrs, Volume= 0.554 af
Outflow = 0.22 cfs @ 18.38 hrs, Volume= 0.115 af, Atten= 97%, Lag= 380.9 min
Primary = 0.22 cfs @ 18.38 hrs, Volume= 0.115 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.04' @ 18.38 hrs Surf.Area= 10,593 sf Storage= 19,573 cf

Plug-Flow detention time= 610.5 min calculated for 0.115 af (21% of inflow)
Center-of-Mass det. time= 402.0 min (1,247.8 - 845.7)

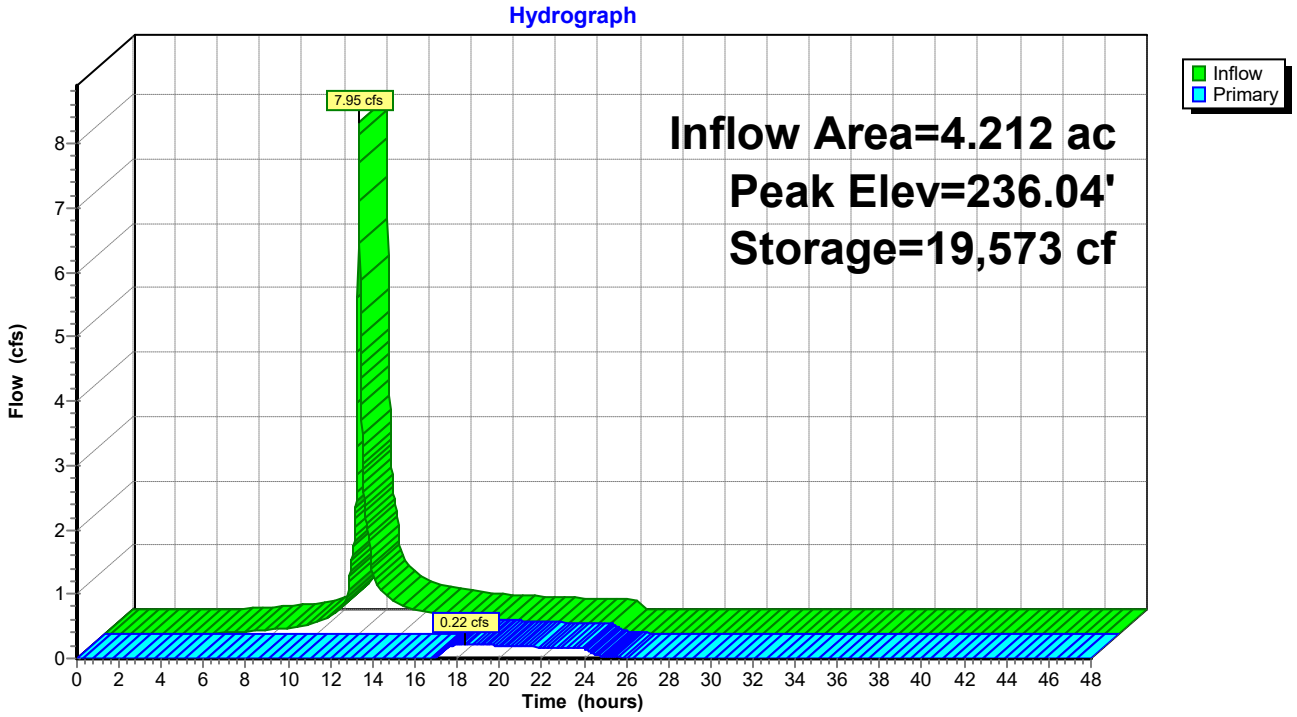
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	42,677 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
238.00	13,400	12,488	42,677

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=0.22 cfs @ 18.38 hrs HW=236.04' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.22 cfs @ 0.53 fps)

Pond 1P: Wet Pond Full



Summary for Pond USF1: Soil Filter

Inflow Area = 0.223 ac, 65.78% Impervious, Inflow Depth = 1.99" for 2-yr event
Inflow = 0.54 cfs @ 12.03 hrs, Volume= 0.037 af
Outflow = 0.24 cfs @ 12.15 hrs, Volume= 0.023 af, Atten= 56%, Lag= 7.3 min
Primary = 0.24 cfs @ 12.15 hrs, Volume= 0.023 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.56' @ 12.15 hrs Surf.Area= 767 sf Storage= 647 cf

Plug-Flow detention time= 237.6 min calculated for 0.023 af (63% of inflow)
Center-of-Mass det. time= 105.6 min (933.2 - 827.6)

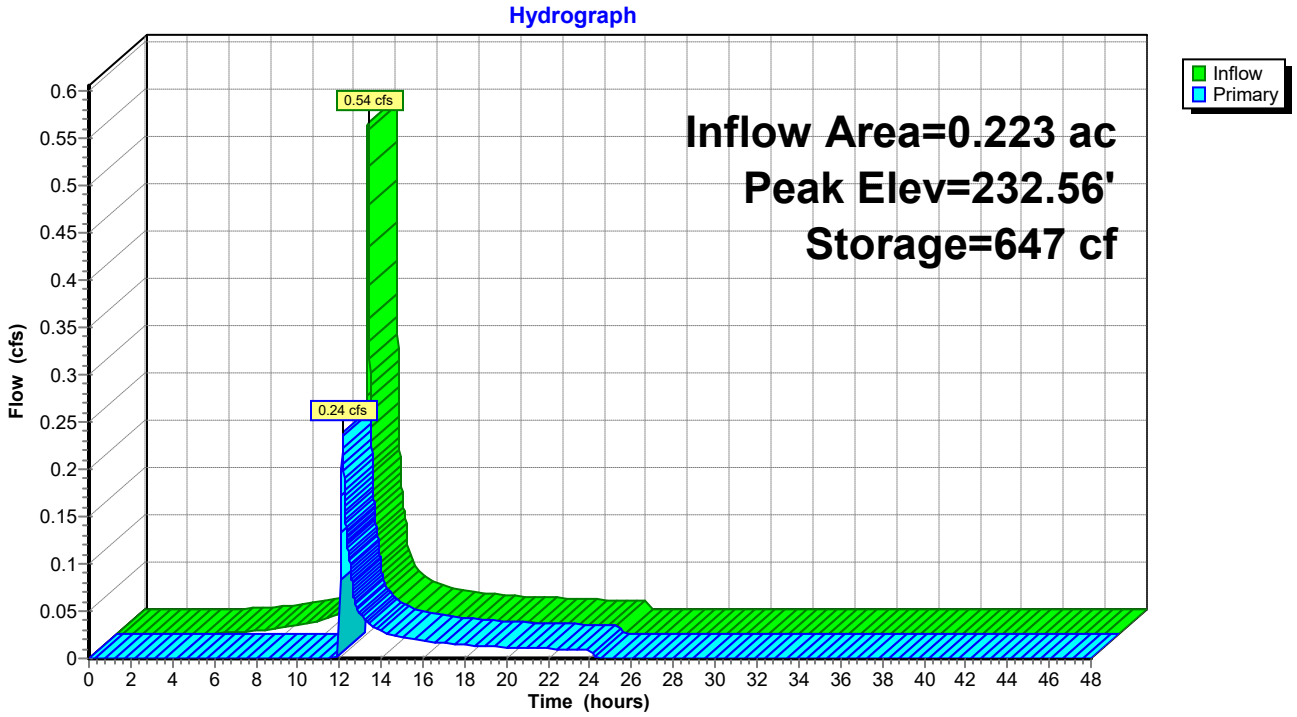
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.24 cfs @ 12.15 hrs HW=232.56' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.24 cfs @ 0.63 fps)

Pond USF1: Soil Filter



Summary for Pond USF2: Soil Filter

Inflow Area = 0.250 ac, 29.97% Impervious, Inflow Depth = 1.32" for 2-yr event
Inflow = 0.40 cfs @ 12.03 hrs, Volume= 0.028 af
Outflow = 0.04 cfs @ 13.13 hrs, Volume= 0.014 af, Atten= 91%, Lag= 65.9 min
Primary = 0.04 cfs @ 13.13 hrs, Volume= 0.014 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.52' @ 13.13 hrs Surf.Area= 751 sf Storage= 613 cf

Plug-Flow detention time= 322.1 min calculated for 0.014 af (50% of inflow)
Center-of-Mass det. time= 165.2 min (1,037.6 - 872.4)

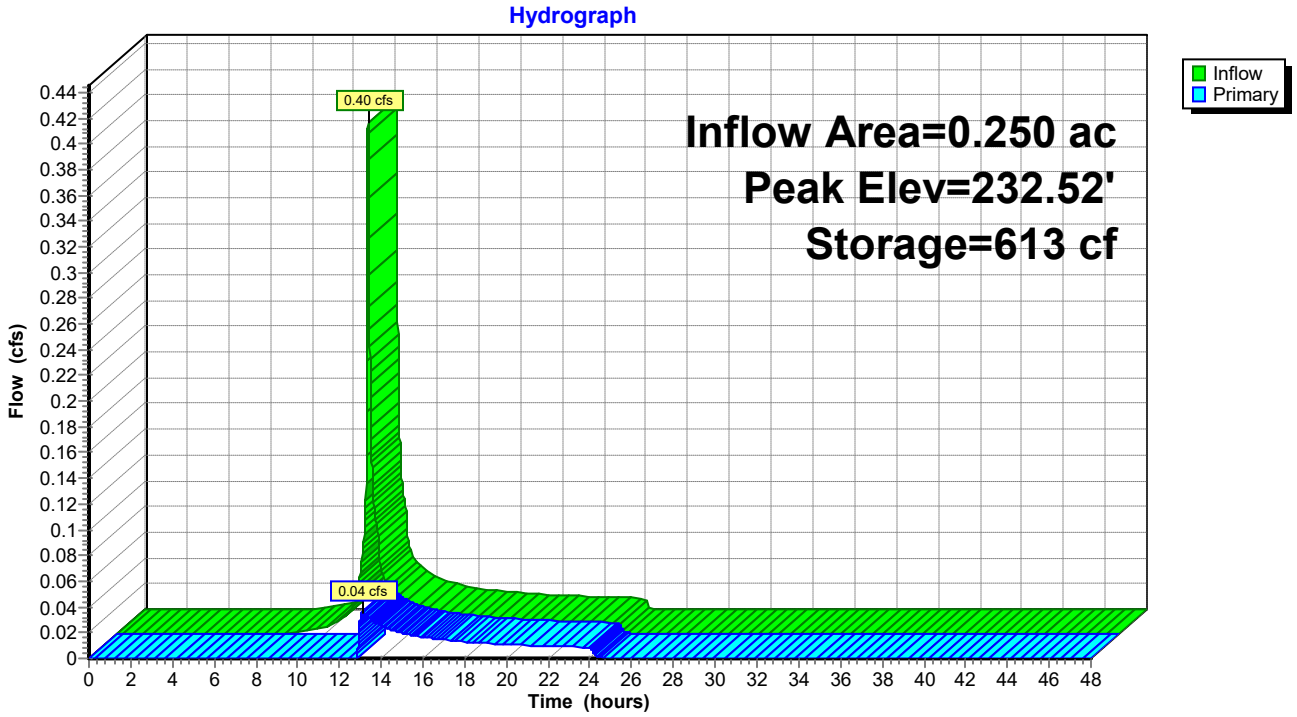
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.04 cfs @ 13.13 hrs HW=232.52' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.04 cfs @ 0.33 fps)

Pond USF2: Soil Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Gravel Area Runoff Area=44,036 sf 9.97% Impervious Runoff Depth=2.16"
Tc=5.0 min CN=77 Runoff=2.52 cfs 0.182 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=3.34"
Tc=5.0 min CN=90 Runoff=9.21 cfs 0.678 af

Subcatchment 3S: No Treat to Stream Runoff Area=70,347 sf 5.45% Impervious Runoff Depth=2.08"
Flow Length=715' Tc=14.4 min CN=76 Runoff=2.60 cfs 0.280 af

Subcatchment 4S: No Treat Parking Lot Runoff Area=159,446 sf 38.56% Impervious Runoff Depth=2.67"
Tc=5.0 min CN=83 Runoff=11.33 cfs 0.815 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=1.93"
Tc=5.0 min CN=74 Runoff=1.68 cfs 0.123 af

Subcatchment 7S: Runoff Area=9,734 sf 65.78% Impervious Runoff Depth=3.34"
Tc=5.0 min CN=90 Runoff=0.84 cfs 0.062 af

Subcatchment 8S: Runoff Area=10,901 sf 29.97% Impervious Runoff Depth=2.50"
Tc=5.0 min CN=81 Runoff=0.72 cfs 0.052 af

Reach SP1: Stream Inlet Inflow=3.51 cfs 0.824 af
Outflow=3.51 cfs 0.824 af

Reach SP2: Center Street CB Inflow=12.32 cfs 0.902 af
Outflow=12.32 cfs 0.902 af

Pond 1P: Wet Pond Full Peak Elev=236.21' Storage=21,353 cf Inflow=13.40 cfs 0.983 af
Outflow=2.46 cfs 0.544 af

Pond USF1: Soil Filter Peak Elev=232.64' Storage=707 cf Inflow=0.84 cfs 0.062 af
Outflow=0.78 cfs 0.048 af

Pond USF2: Soil Filter Peak Elev=232.61' Storage=682 cf Inflow=0.72 cfs 0.052 af
Outflow=0.53 cfs 0.038 af

Total Runoff Area = 9.961 ac Runoff Volume = 2.192 af Average Runoff Depth = 2.64"
62.28% Pervious = 6.204 ac 37.72% Impervious = 3.757 ac

Summary for Subcatchment 1S: Gravel Area

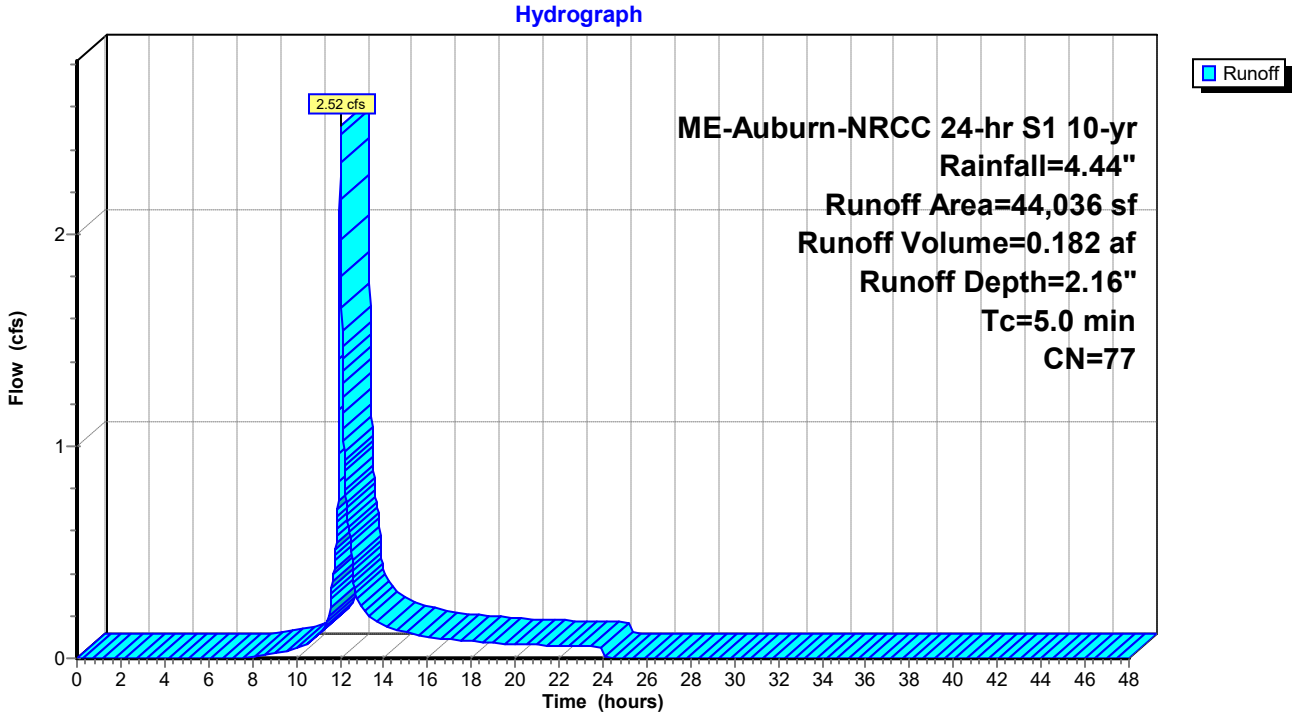
Runoff = 2.52 cfs @ 12.03 hrs, Volume= 0.182 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	4,390	98	Impervious
	38,852	74	>75% Grass cover, Good, HSG C
*	794	96	Gravel
	44,036	77	Weighted Average
	39,646		90.03% Pervious Area
	4,390		9.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Gravel Area



Summary for Subcatchment 2S: Storage Building Area

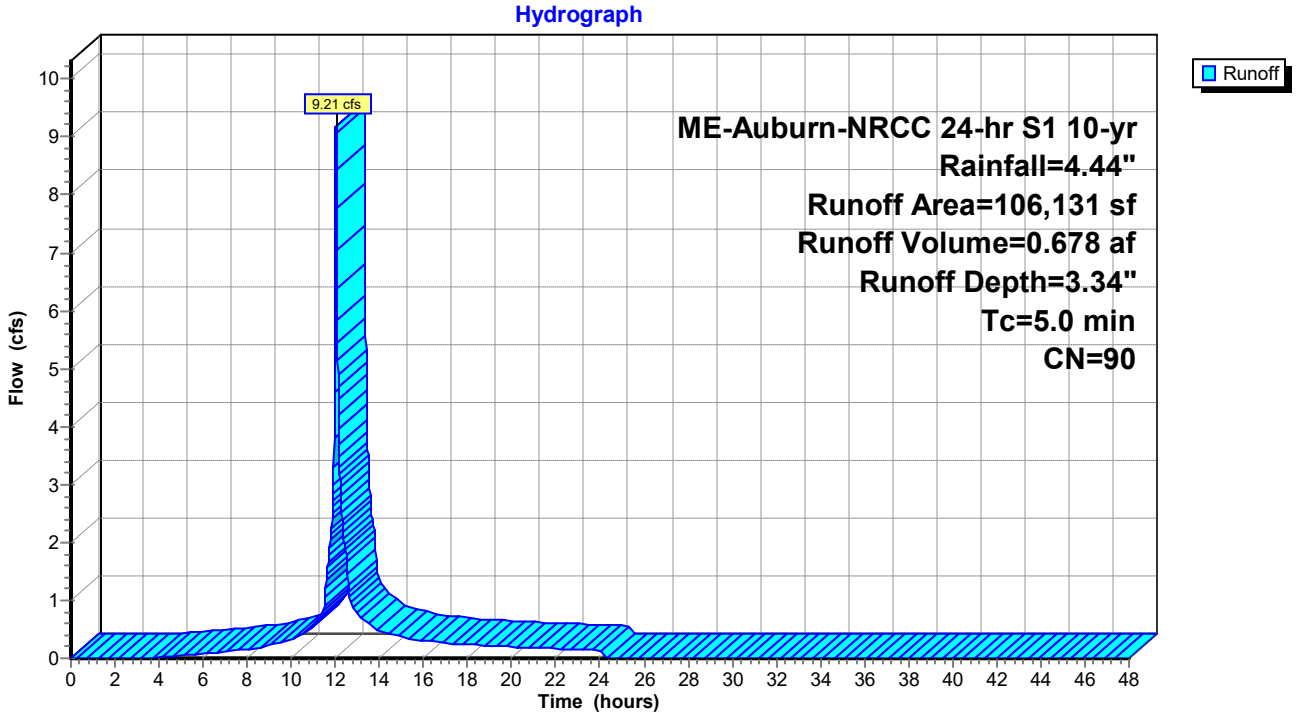
Runoff = 9.21 cfs @ 12.03 hrs, Volume= 0.678 af, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: No Treat to Stream

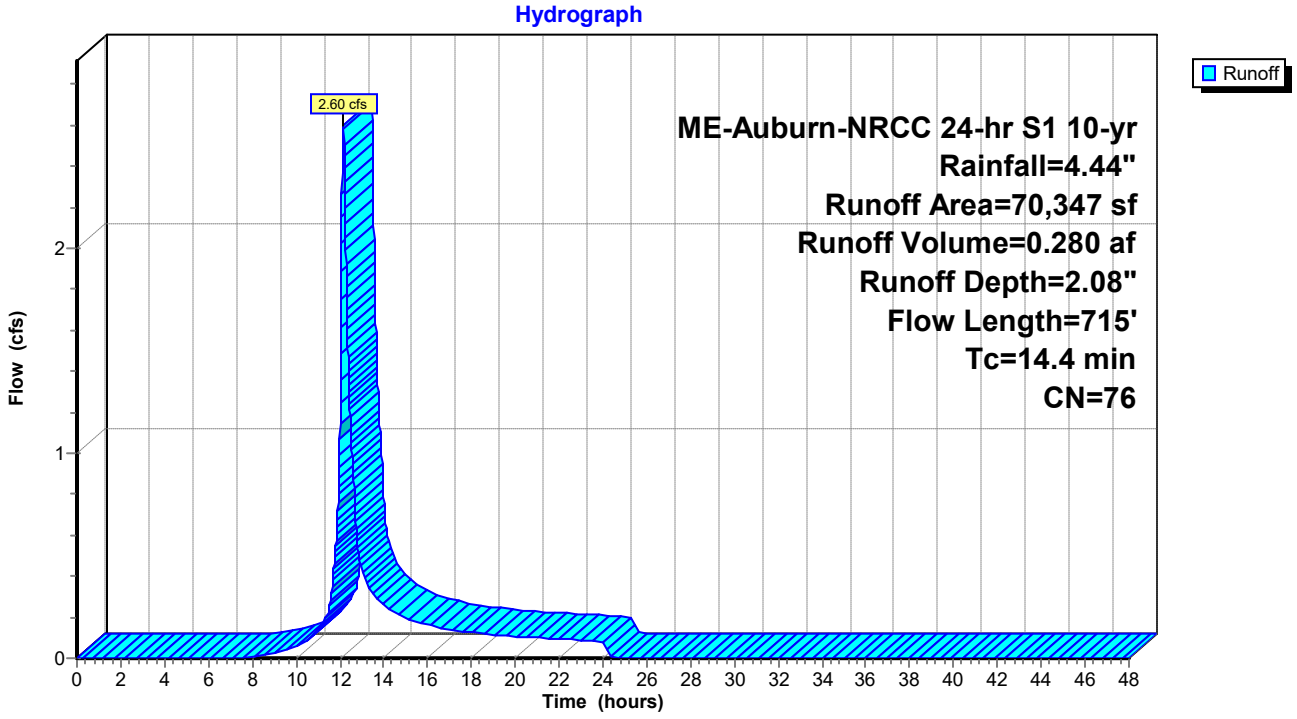
Runoff = 2.60 cfs @ 12.15 hrs, Volume= 0.280 af, Depth= 2.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	1,643	96	Gravel
*	3,832	98	Impervious
	64,872	74	>75% Grass cover, Good, HSG C
	70,347	76	Weighted Average
	66,515		94.55% Pervious Area
	3,832		5.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	70	0.0700	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	100	0.1200	0.34		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
14.4	715	Total			

Subcatchment 3S: No Treat to Stream



Summary for Subcatchment 4S: No Treat Parking Lot

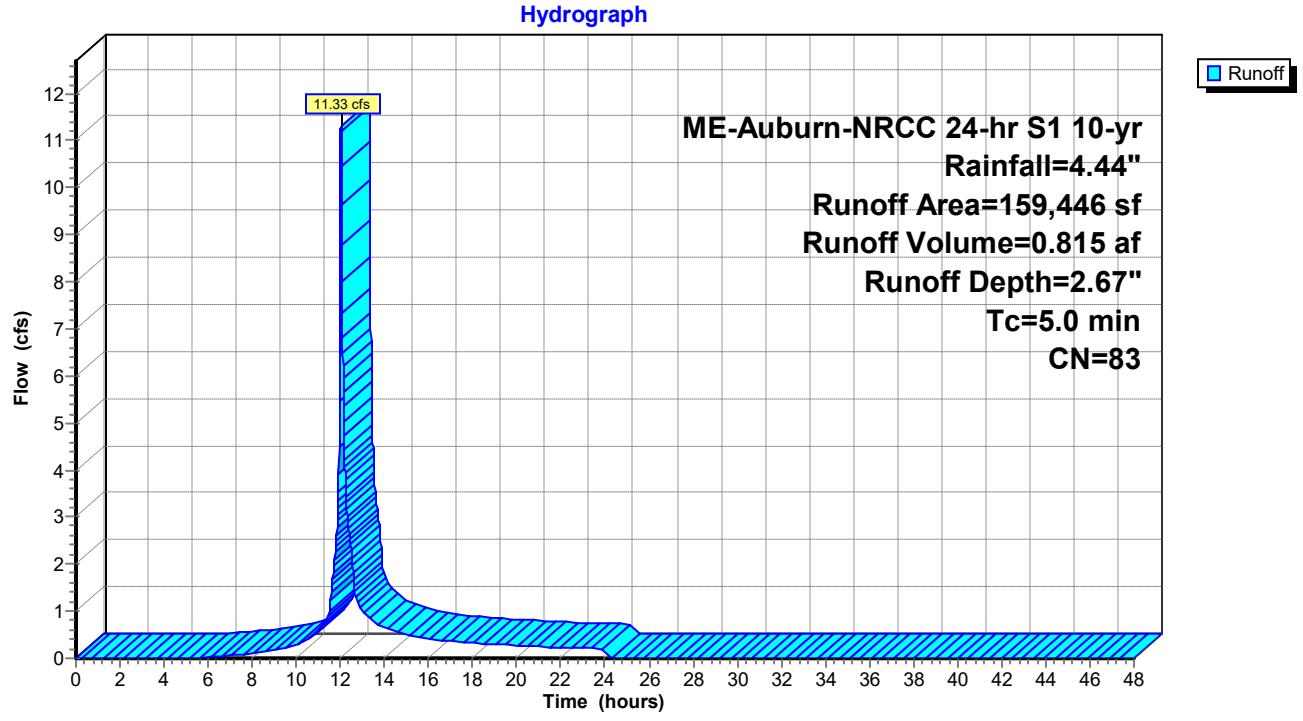
Runoff = 11.33 cfs @ 12.03 hrs, Volume= 0.815 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	61,478	98	Impervious
*	761	96	Gravel
	97,207	74	>75% Grass cover, Good, HSG C
	159,446	83	Weighted Average
	97,968		61.44% Pervious Area
	61,478		38.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: No Treat Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

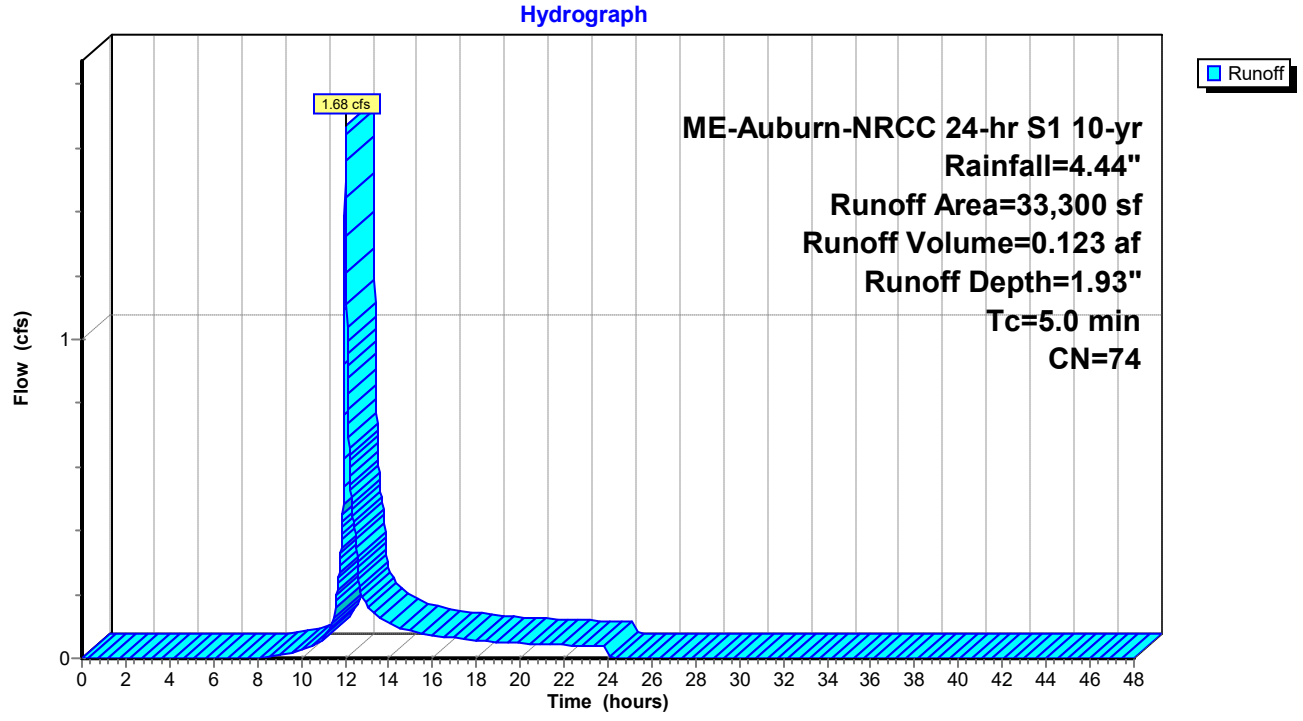
Runoff = 1.68 cfs @ 12.03 hrs, Volume= 0.123 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	16,738	74	>75% Grass cover, Good, HSG C
	11,046	61	>75% Grass cover, Good, HSG B
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S:

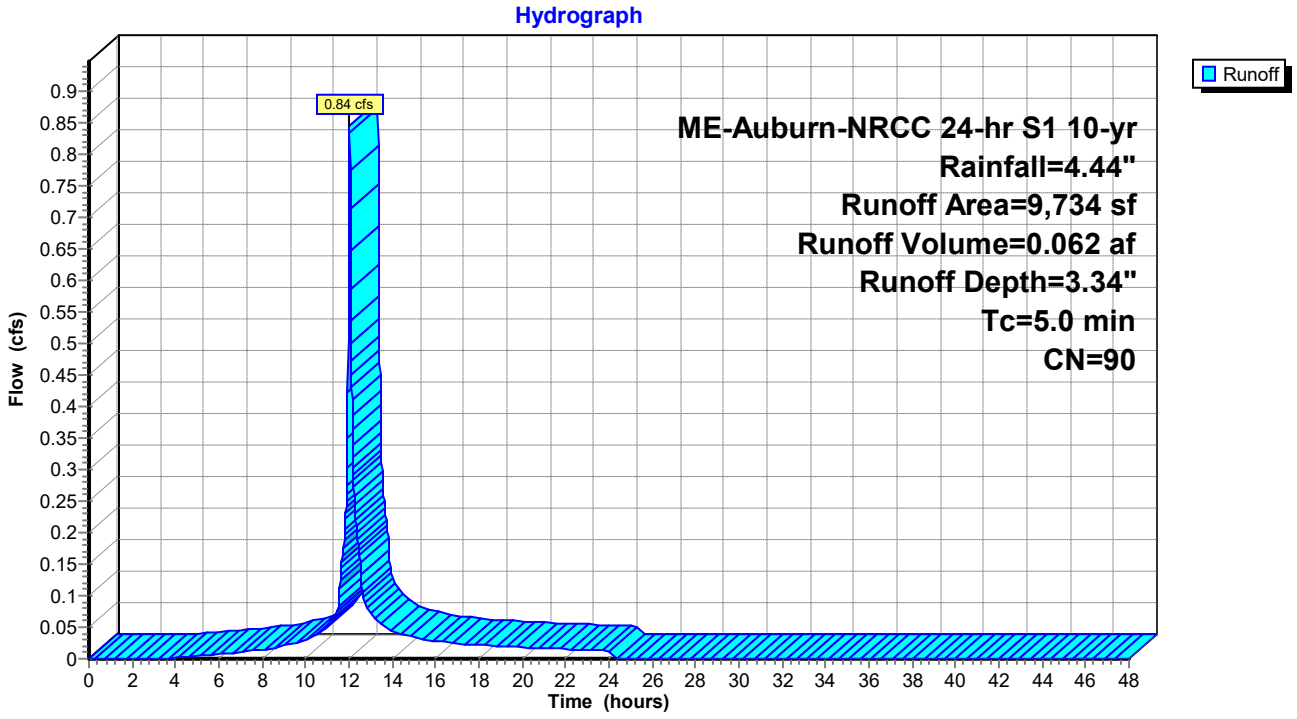
Runoff = 0.84 cfs @ 12.03 hrs, Volume= 0.062 af, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	6,403	98	Impervious
	3,331	74	>75% Grass cover, Good, HSG C
	9,734	90	Weighted Average
	3,331		34.22% Pervious Area
	6,403		65.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S:



Summary for Subcatchment 8S:

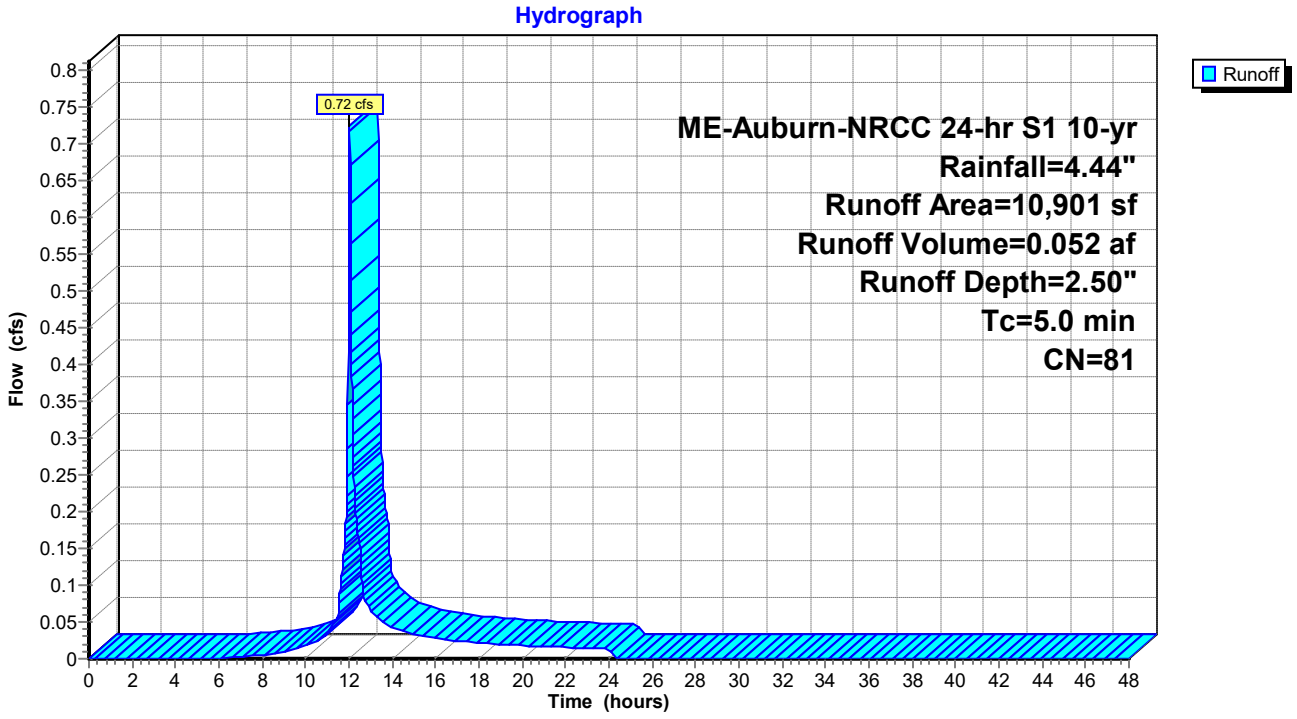
Runoff = 0.72 cfs @ 12.03 hrs, Volume= 0.052 af, Depth= 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	3,267	98	Impervious
	7,634	74	>75% Grass cover, Good, HSG C
	10,901	81	Weighted Average
	7,634		70.03% Pervious Area
	3,267		29.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S:

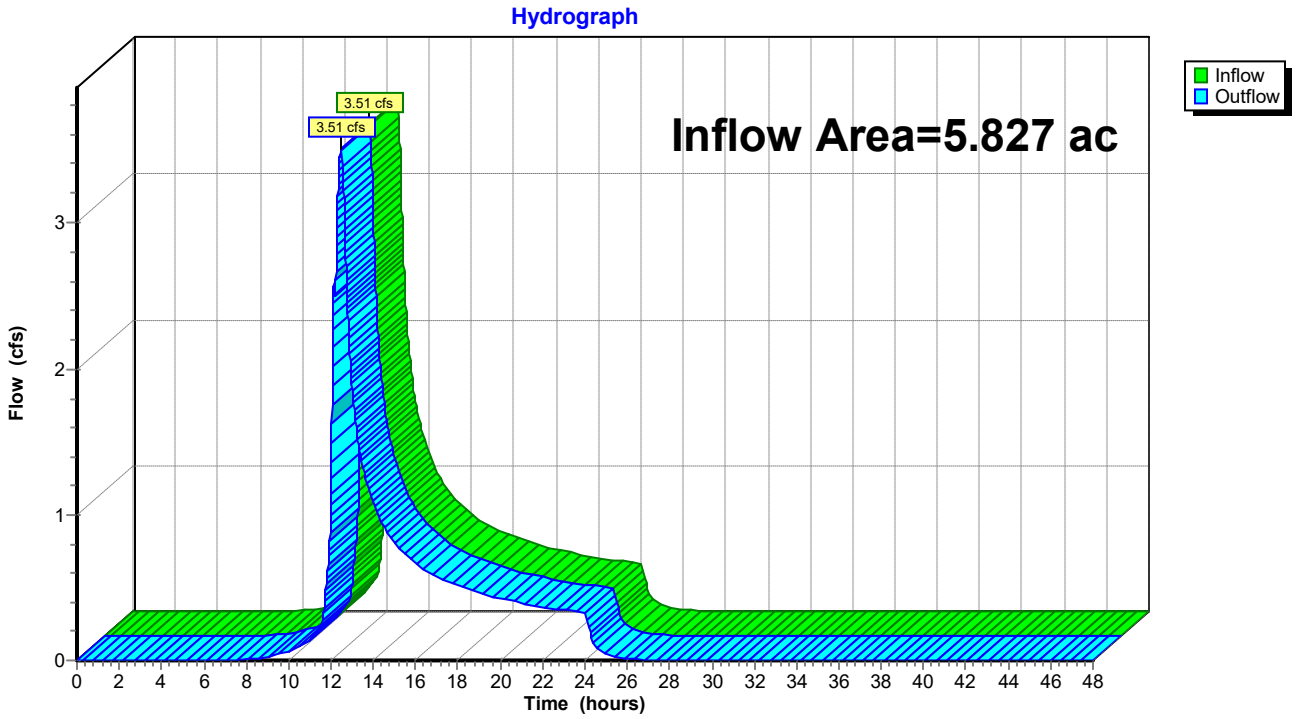


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.827 ac, 36.45% Impervious, Inflow Depth = 1.70" for 10-yr event
Inflow = 3.51 cfs @ 12.49 hrs, Volume= 0.824 af
Outflow = 3.51 cfs @ 12.49 hrs, Volume= 0.824 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

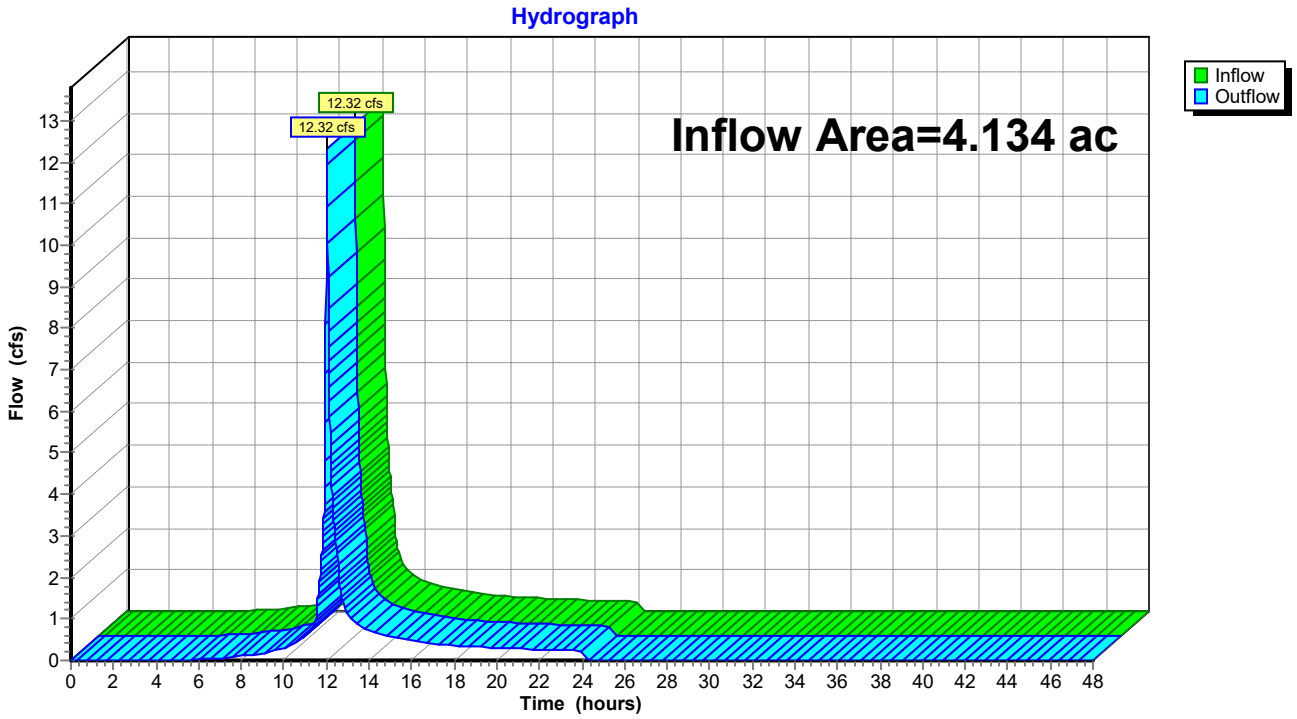


Summary for Reach SP2: Center Street CB

Inflow Area = 4.134 ac, 39.51% Impervious, Inflow Depth = 2.62" for 10-yr event
Inflow = 12.32 cfs @ 12.03 hrs, Volume= 0.902 af
Outflow = 12.32 cfs @ 12.03 hrs, Volume= 0.902 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 4.212 ac, 48.34% Impervious, Inflow Depth = 2.80" for 10-yr event
Inflow = 13.40 cfs @ 12.03 hrs, Volume= 0.983 af
Outflow = 2.46 cfs @ 12.55 hrs, Volume= 0.544 af, Atten= 82%, Lag= 31.1 min
Primary = 2.46 cfs @ 12.55 hrs, Volume= 0.544 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.21' @ 12.55 hrs Surf.Area= 10,764 sf Storage= 21,353 cf

Plug-Flow detention time= 295.6 min calculated for 0.543 af (55% of inflow)
Center-of-Mass det. time= 152.1 min (977.5 - 825.5)

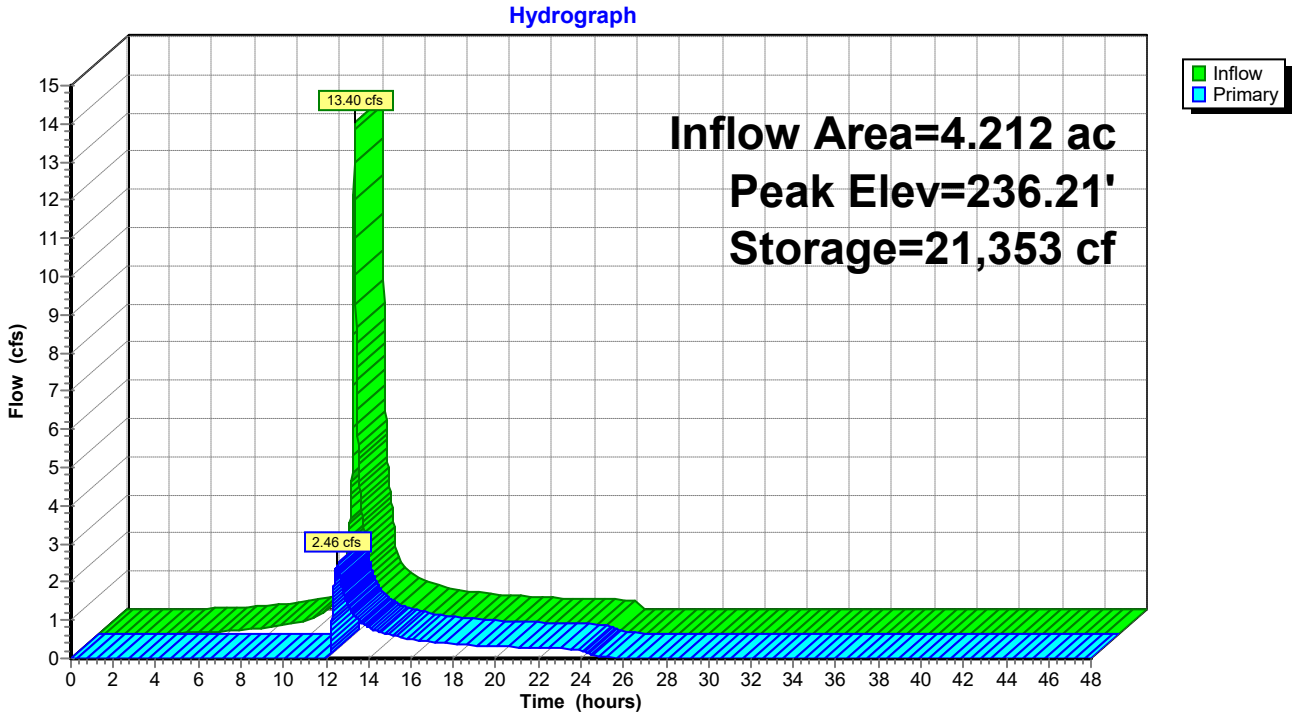
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	42,677 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
238.00	13,400	12,488	42,677

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=2.46 cfs @ 12.55 hrs HW=236.21' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 2.46 cfs @ 1.18 fps)

Pond 1P: Wet Pond Full



Summary for Pond USF1: Soil Filter

Inflow Area = 0.223 ac, 65.78% Impervious, Inflow Depth = 3.34" for 10-yr event
Inflow = 0.84 cfs @ 12.03 hrs, Volume= 0.062 af
Outflow = 0.78 cfs @ 12.05 hrs, Volume= 0.048 af, Atten= 7%, Lag= 1.3 min
Primary = 0.78 cfs @ 12.05 hrs, Volume= 0.048 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.64' @ 12.05 hrs Surf.Area= 794 sf Storage= 707 cf

Plug-Flow detention time= 167.3 min calculated for 0.048 af (78% of inflow)
Center-of-Mass det. time= 69.1 min (876.5 - 807.5)

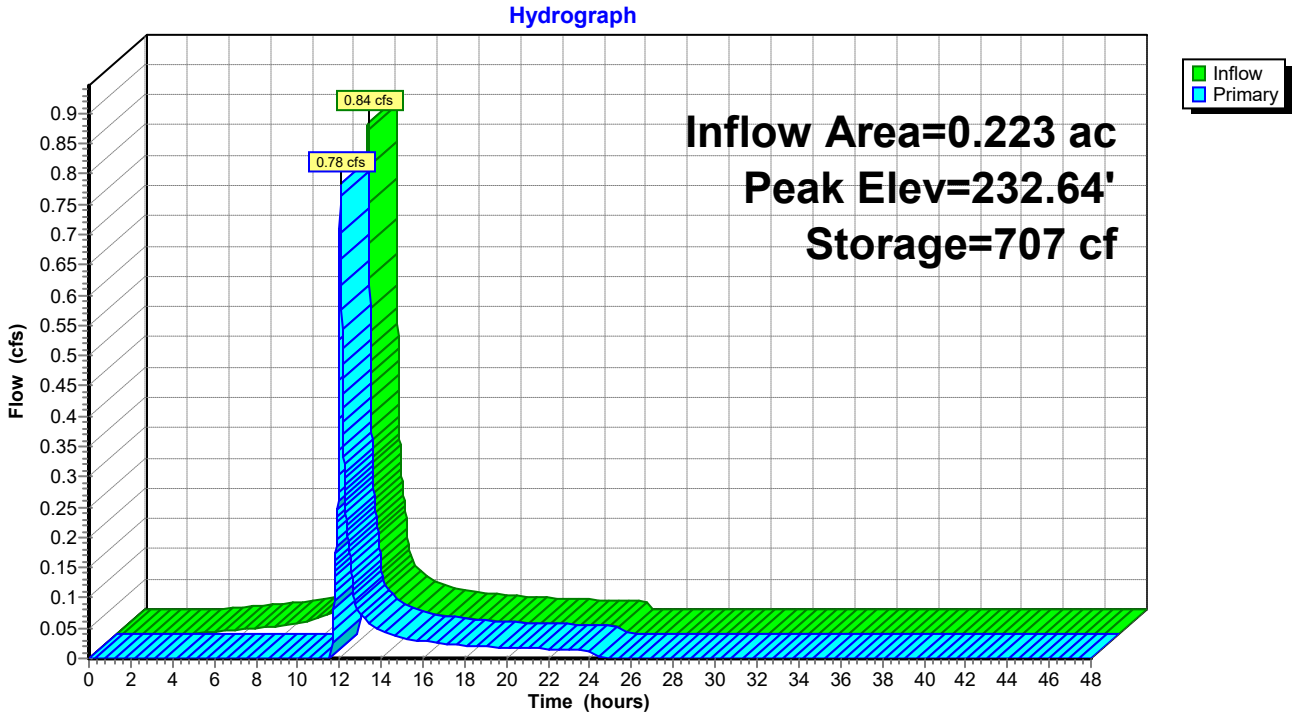
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.78 cfs @ 12.05 hrs HW=232.64' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.78 cfs @ 0.93 fps)

Pond USF1: Soil Filter



Summary for Pond USF2: Soil Filter

Inflow Area = 0.250 ac, 29.97% Impervious, Inflow Depth = 2.50" for 10-yr event
Inflow = 0.72 cfs @ 12.03 hrs, Volume= 0.052 af
Outflow = 0.53 cfs @ 12.08 hrs, Volume= 0.038 af, Atten= 27%, Lag= 3.0 min
Primary = 0.53 cfs @ 12.08 hrs, Volume= 0.038 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.61' @ 12.08 hrs Surf.Area= 782 sf Storage= 682 cf

Plug-Flow detention time= 180.0 min calculated for 0.038 af (74% of inflow)
Center-of-Mass det. time= 70.0 min (916.5 - 846.5)

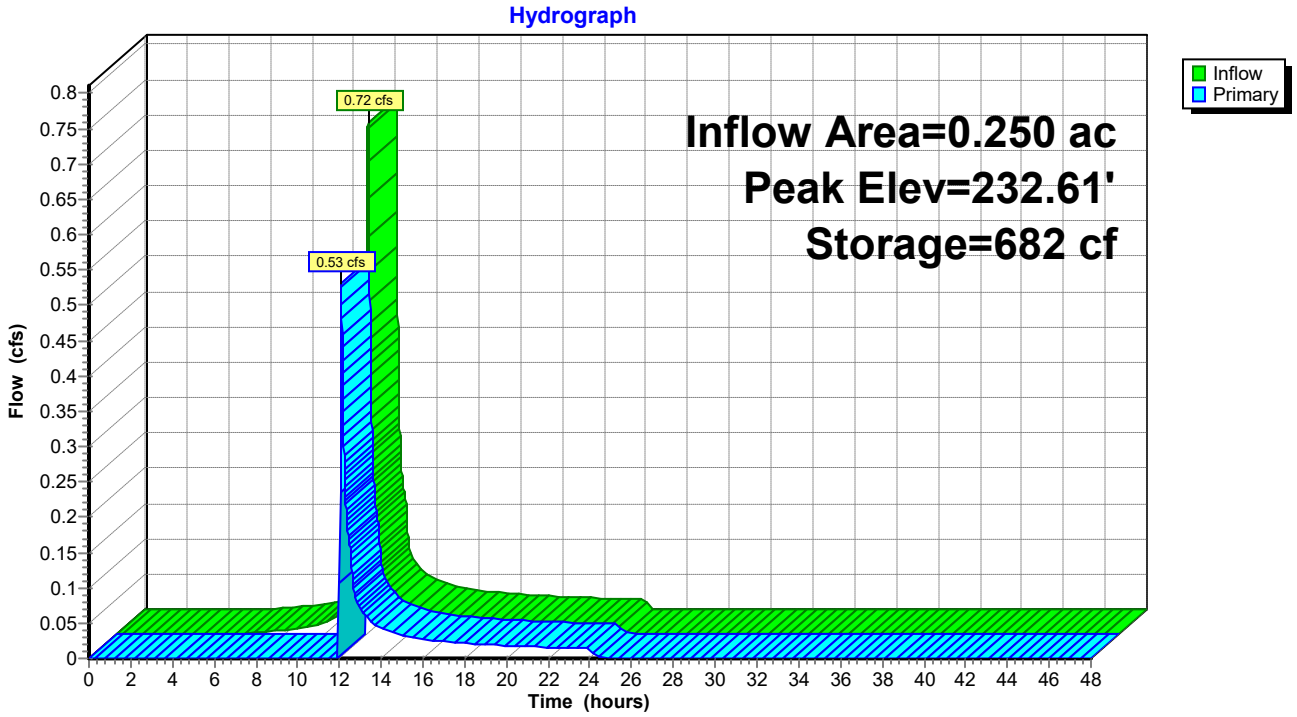
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.53 cfs @ 12.08 hrs HW=232.61' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.53 cfs @ 0.82 fps)

Pond USF2: Soil Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Gravel Area Runoff Area=44,036 sf 9.97% Impervious Runoff Depth=3.10"
Tc=5.0 min CN=77 Runoff=3.58 cfs 0.261 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=4.42"
Tc=5.0 min CN=90 Runoff=11.87 cfs 0.897 af

Subcatchment 3S: No Treat to Stream Runoff Area=70,347 sf 5.45% Impervious Runoff Depth=3.00"
Flow Length=715' Tc=14.4 min CN=76 Runoff=3.78 cfs 0.404 af

Subcatchment 4S: No Treat Parking Lot Runoff Area=159,446 sf 38.56% Impervious Runoff Depth=3.68"
Tc=5.0 min CN=83 Runoff=15.35 cfs 1.124 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=2.82"
Tc=5.0 min CN=74 Runoff=2.46 cfs 0.180 af

Subcatchment 7S: Runoff Area=9,734 sf 65.78% Impervious Runoff Depth=4.42"
Tc=5.0 min CN=90 Runoff=1.09 cfs 0.082 af

Subcatchment 8S: Runoff Area=10,901 sf 29.97% Impervious Runoff Depth=3.49"
Tc=5.0 min CN=81 Runoff=1.00 cfs 0.073 af

Reach SP1: Stream Inlet Inflow=11.20 cfs 1.303 af
Outflow=11.20 cfs 1.303 af

Reach SP2: Center Street CB Inflow=17.21 cfs 1.251 af
Outflow=17.21 cfs 1.251 af

Pond 1P: Wet Pond Full Peak Elev=236.43' Storage=23,770 cf Inflow=17.91 cfs 1.338 af
Outflow=7.45 cfs 0.898 af

Pond USF1: Soil Filter Peak Elev=232.67' Storage=729 cf Inflow=1.09 cfs 0.082 af
Outflow=1.02 cfs 0.069 af

Pond USF2: Soil Filter Peak Elev=232.66' Storage=721 cf Inflow=1.00 cfs 0.073 af
Outflow=0.93 cfs 0.059 af

Total Runoff Area = 9.961 ac Runoff Volume = 3.021 af Average Runoff Depth = 3.64"
62.28% Pervious = 6.204 ac 37.72% Impervious = 3.757 ac

Summary for Subcatchment 1S: Gravel Area

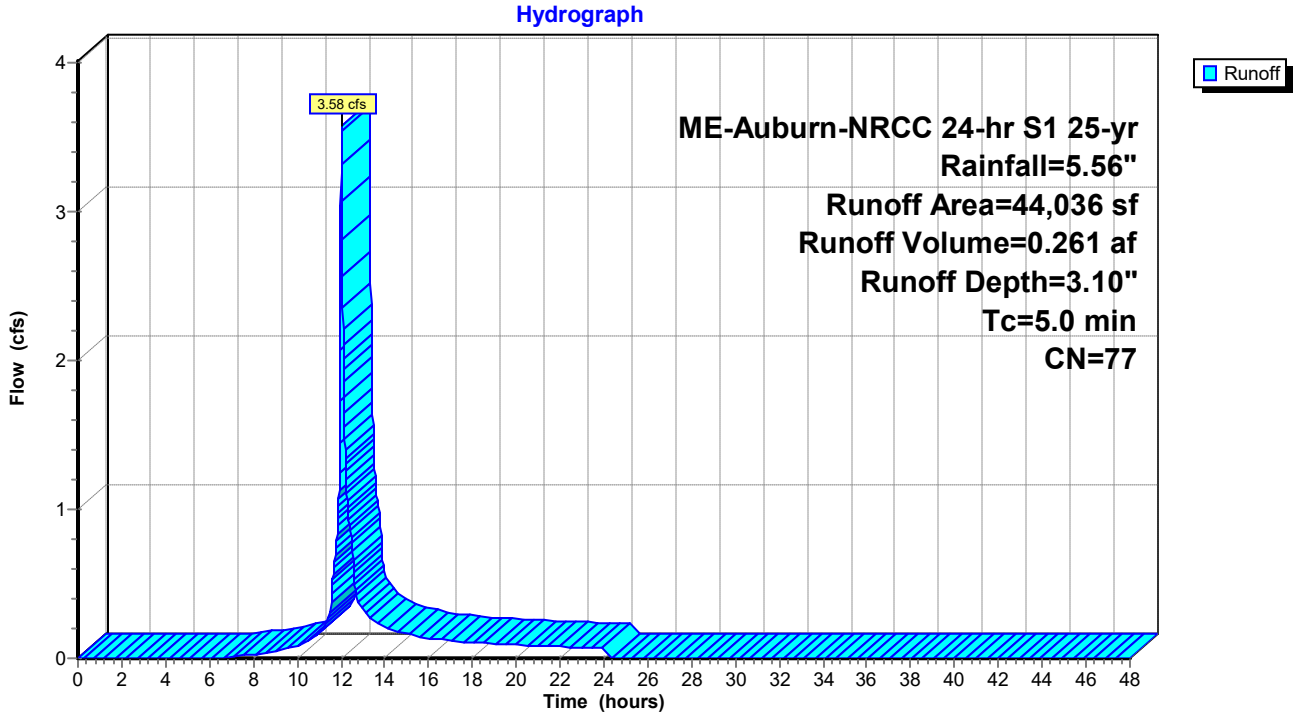
Runoff = 3.58 cfs @ 12.03 hrs, Volume= 0.261 af, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	4,390	98	Impervious
	38,852	74	>75% Grass cover, Good, HSG C
*	794	96	Gravel
	44,036	77	Weighted Average
	39,646		90.03% Pervious Area
	4,390		9.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Gravel Area



Summary for Subcatchment 2S: Storage Building Area

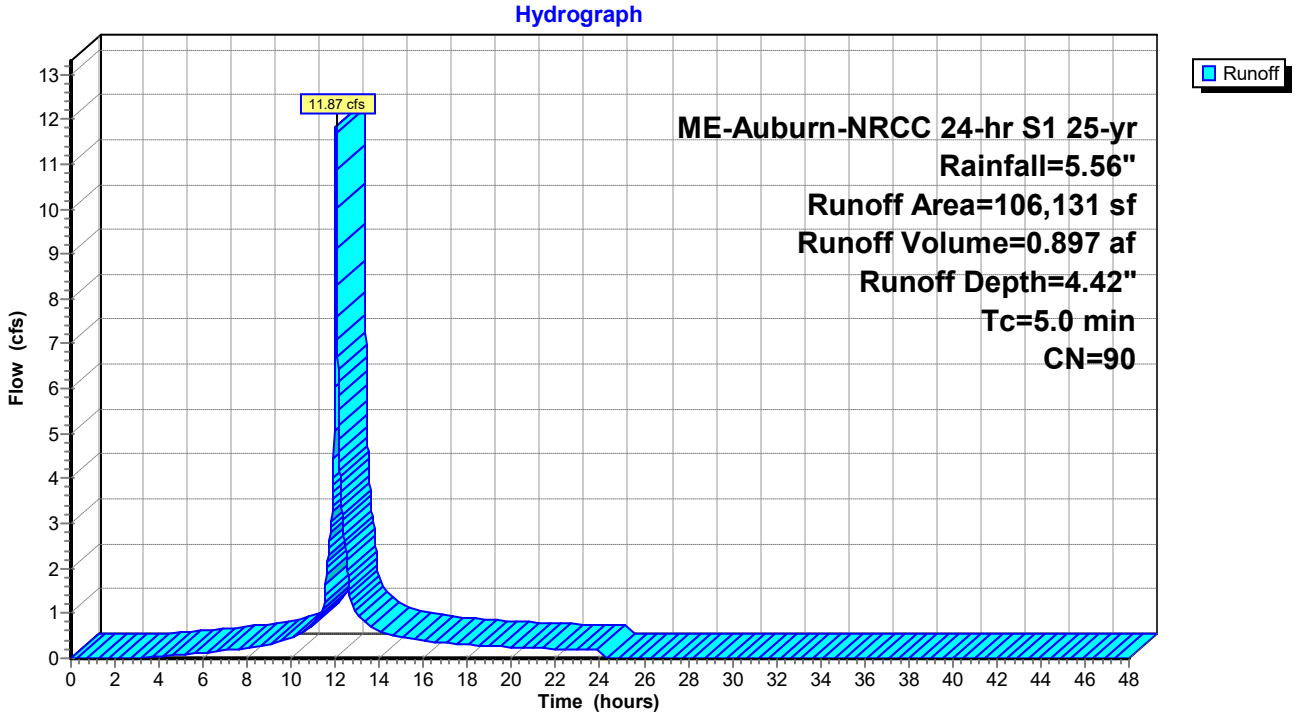
Runoff = 11.87 cfs @ 12.03 hrs, Volume= 0.897 af, Depth= 4.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: No Treat to Stream

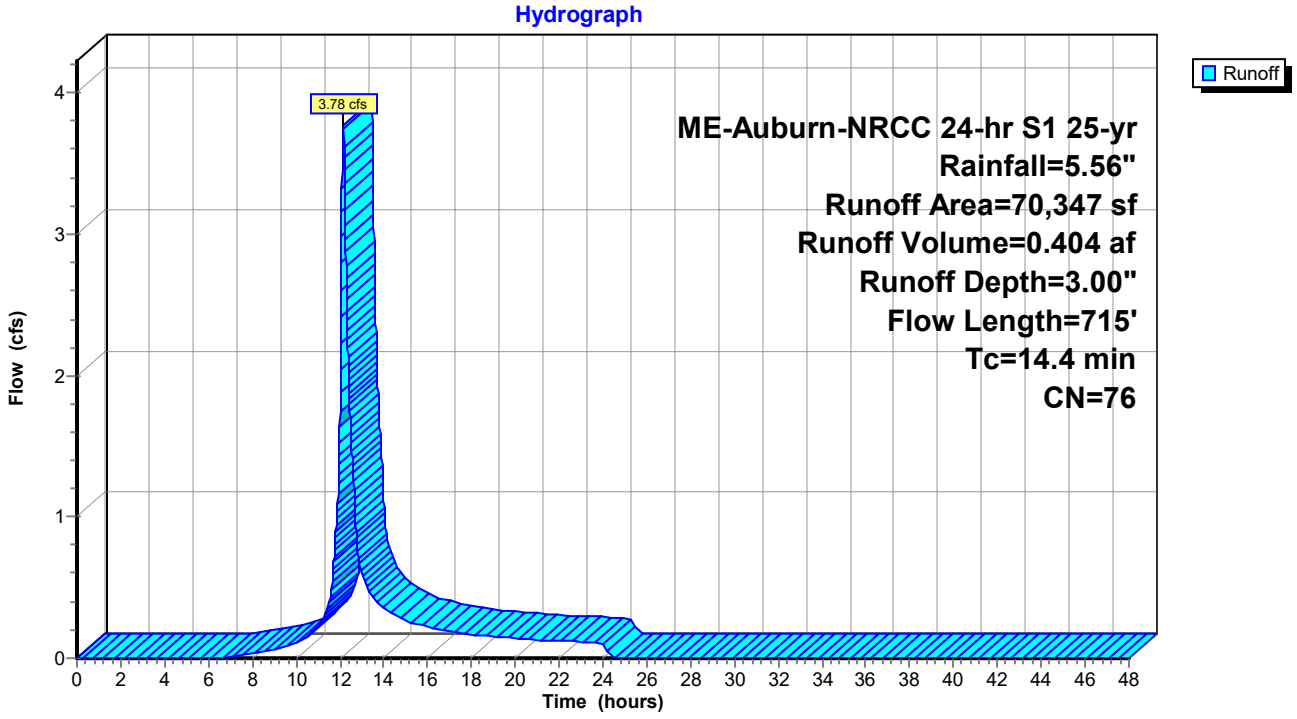
Runoff = 3.78 cfs @ 12.15 hrs, Volume= 0.404 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	1,643	96	Gravel
*	3,832	98	Impervious
	64,872	74	>75% Grass cover, Good, HSG C
	70,347	76	Weighted Average
	66,515		94.55% Pervious Area
	3,832		5.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	70	0.0700	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	100	0.1200	0.34		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
14.4	715	Total			

Subcatchment 3S: No Treat to Stream



Summary for Subcatchment 4S: No Treat Parking Lot

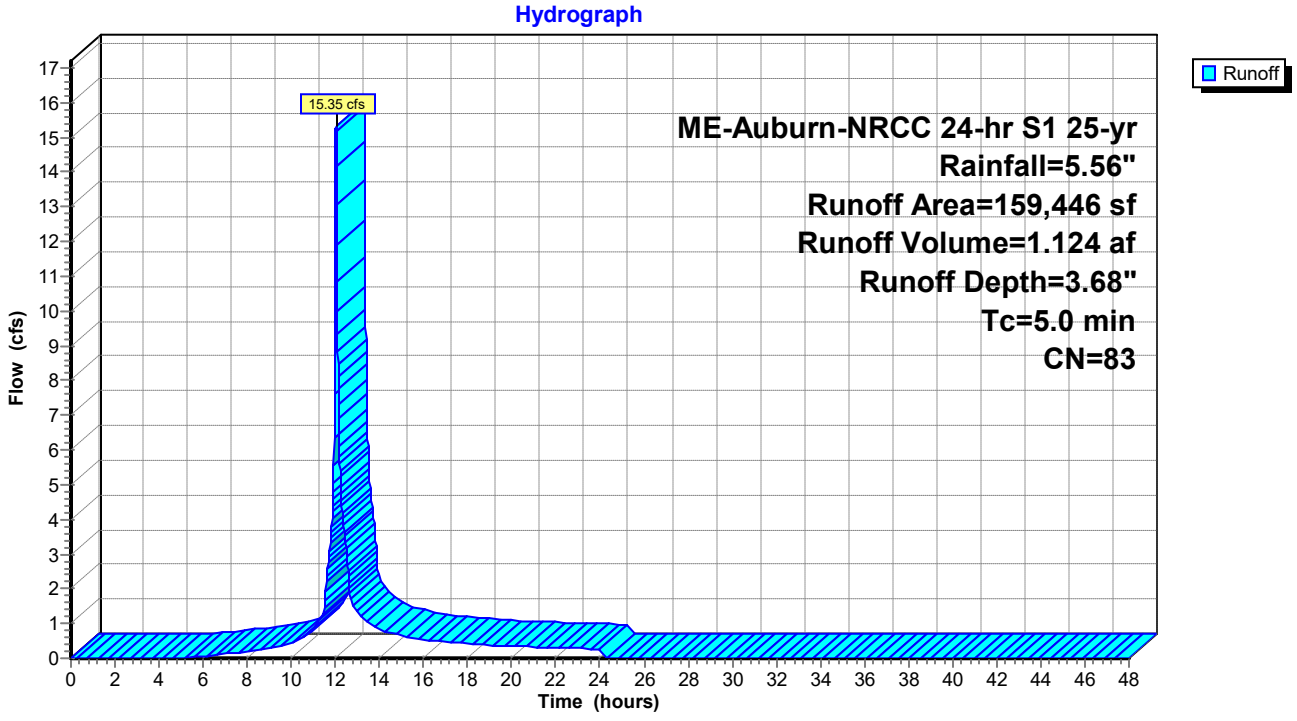
Runoff = 15.35 cfs @ 12.03 hrs, Volume= 1.124 af, Depth= 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	61,478	98	Impervious
*	761	96	Gravel
	97,207	74	>75% Grass cover, Good, HSG C
	159,446	83	Weighted Average
	97,968		61.44% Pervious Area
	61,478		38.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: No Treat Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

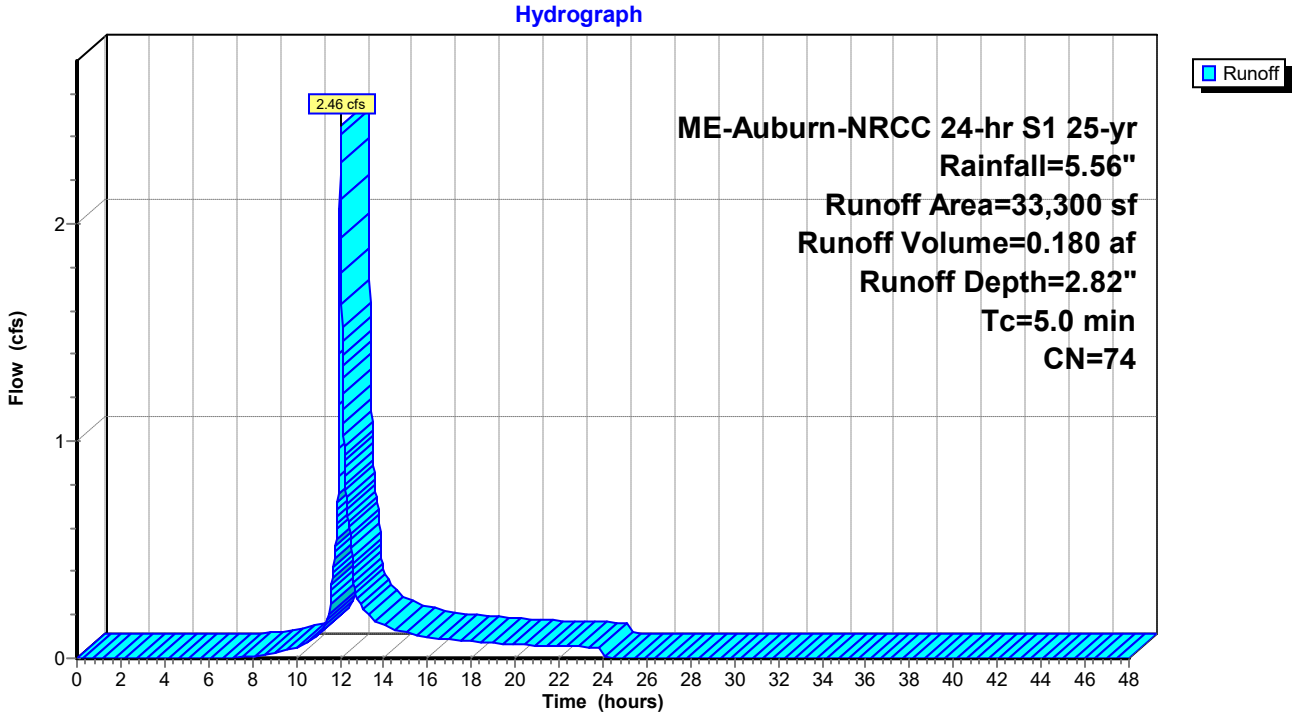
Runoff = 2.46 cfs @ 12.03 hrs, Volume= 0.180 af, Depth= 2.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	16,738	74	>75% Grass cover, Good, HSG C
	11,046	61	>75% Grass cover, Good, HSG B
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S:

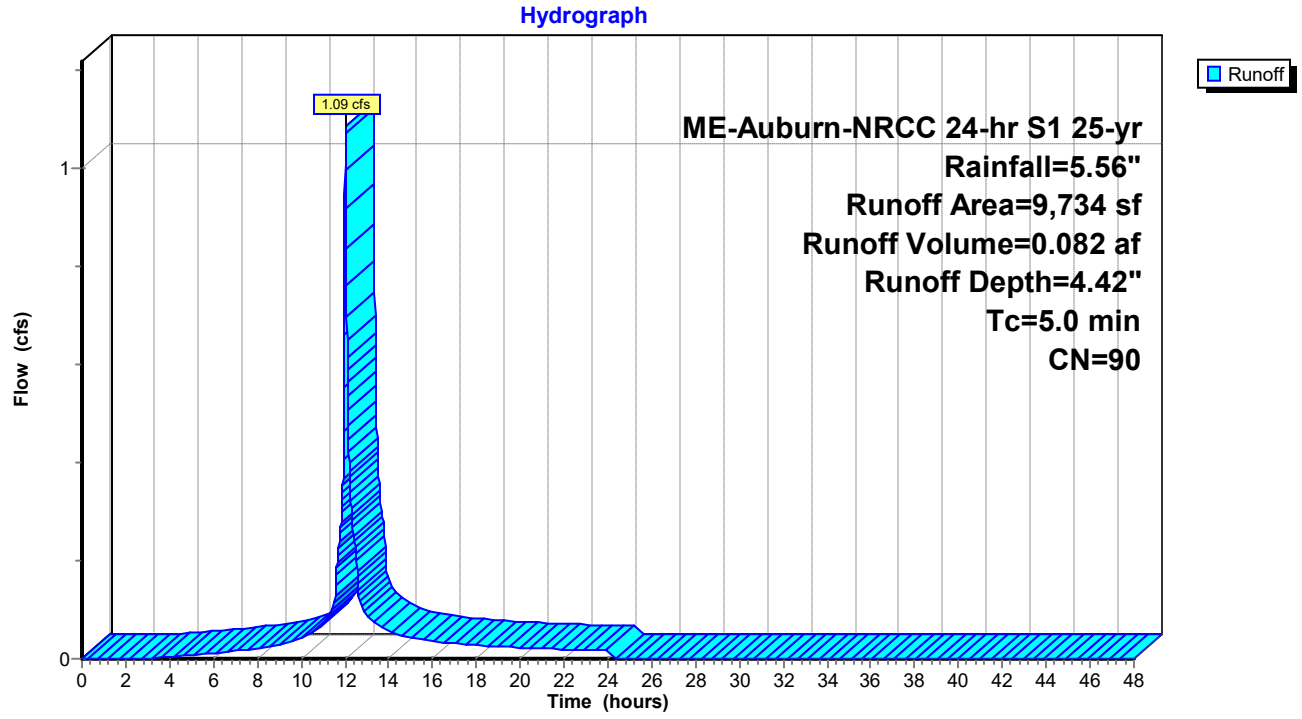
Runoff = 1.09 cfs @ 12.03 hrs, Volume= 0.082 af, Depth= 4.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	6,403	98	Impervious
	3,331	74	>75% Grass cover, Good, HSG C
	9,734	90	Weighted Average
	3,331		34.22% Pervious Area
	6,403		65.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S:



Summary for Subcatchment 8S:

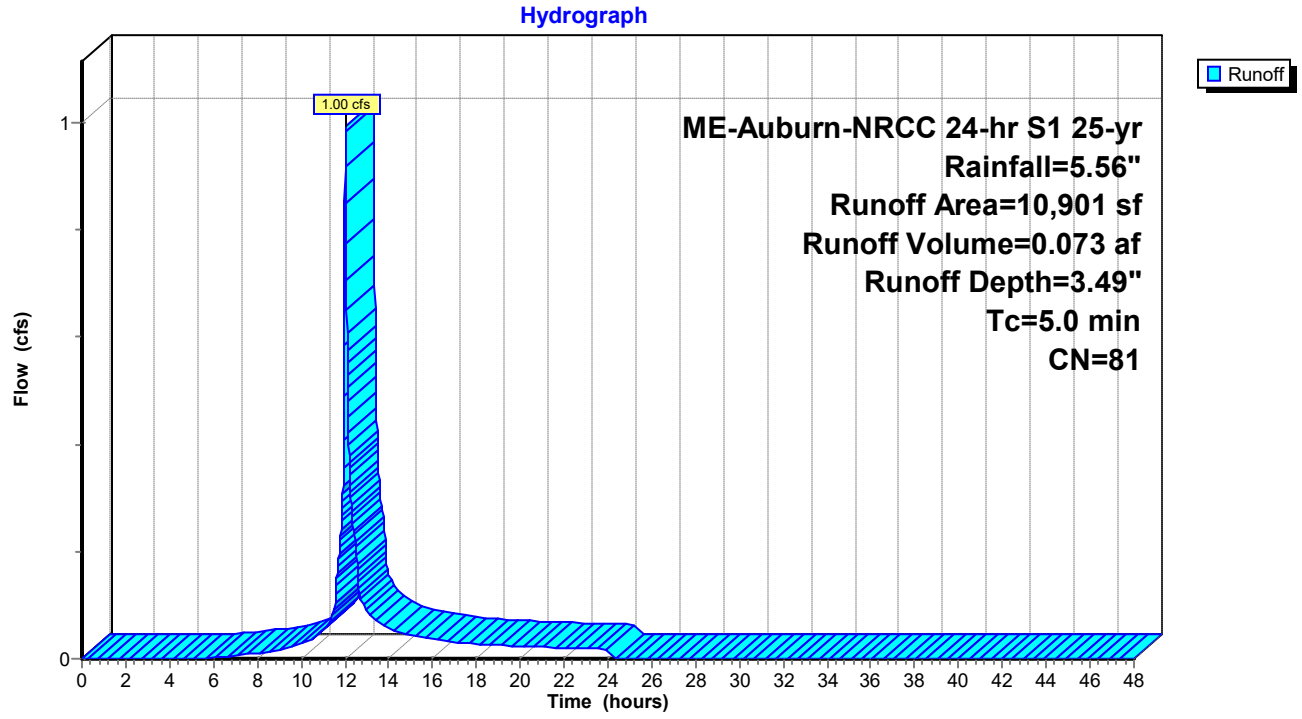
Runoff = 1.00 cfs @ 12.03 hrs, Volume= 0.073 af, Depth= 3.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	3,267	98	Impervious
	7,634	74	>75% Grass cover, Good, HSG C
	10,901	81	Weighted Average
	7,634		70.03% Pervious Area
	3,267		29.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S:

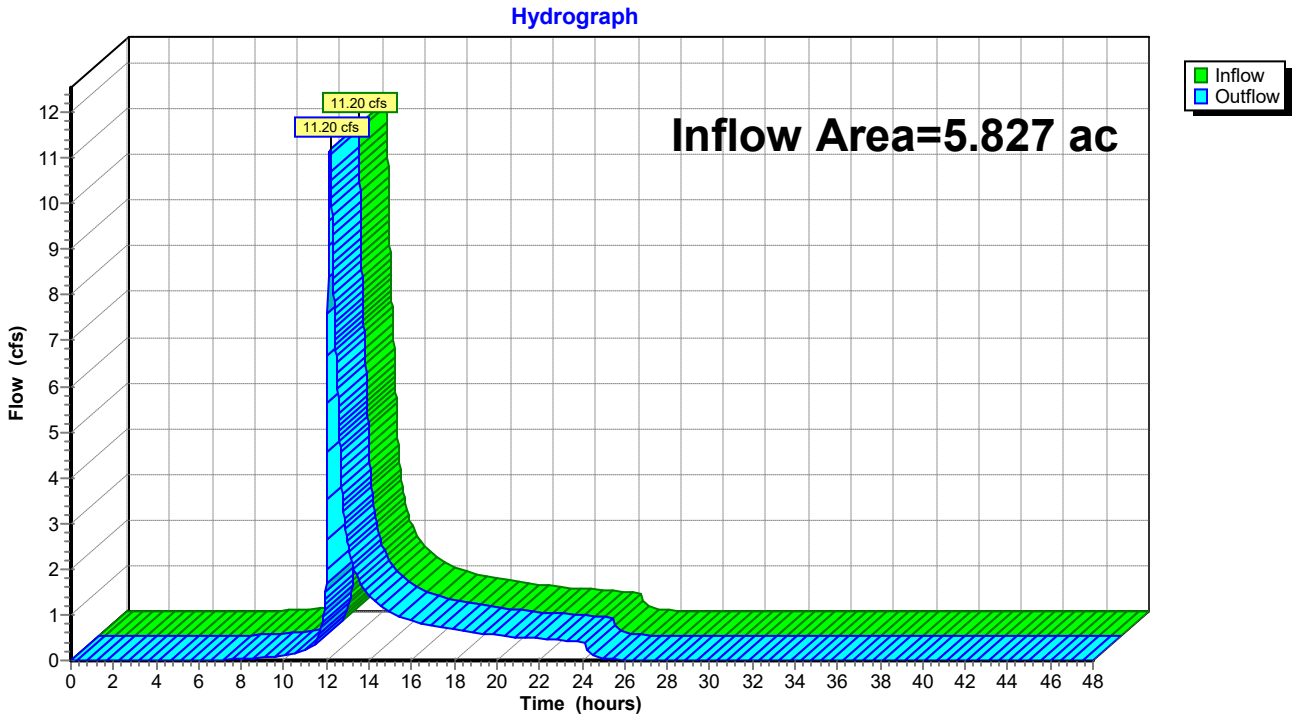


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.827 ac, 36.45% Impervious, Inflow Depth = 2.68" for 25-yr event
Inflow = 11.20 cfs @ 12.17 hrs, Volume= 1.303 af
Outflow = 11.20 cfs @ 12.17 hrs, Volume= 1.303 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

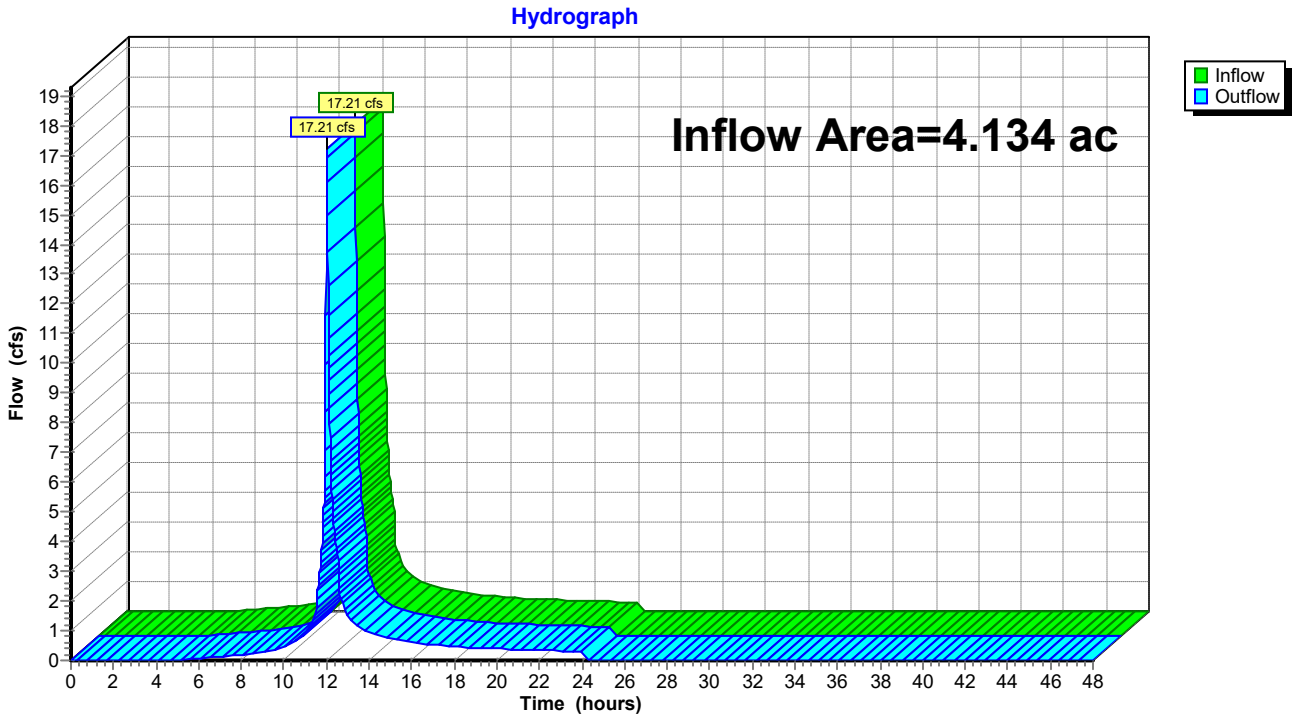


Summary for Reach SP2: Center Street CB

Inflow Area = 4.134 ac, 39.51% Impervious, Inflow Depth = 3.63" for 25-yr event
Inflow = 17.21 cfs @ 12.03 hrs, Volume= 1.251 af
Outflow = 17.21 cfs @ 12.03 hrs, Volume= 1.251 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 4.212 ac, 48.34% Impervious, Inflow Depth = 3.81" for 25-yr event
Inflow = 17.91 cfs @ 12.03 hrs, Volume= 1.338 af
Outflow = 7.45 cfs @ 12.17 hrs, Volume= 0.898 af, Atten= 58%, Lag= 8.7 min
Primary = 7.45 cfs @ 12.17 hrs, Volume= 0.898 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.43' @ 12.17 hrs Surf.Area= 10,992 sf Storage= 23,770 cf

Plug-Flow detention time= 231.4 min calculated for 0.898 af (67% of inflow)
Center-of-Mass det. time= 108.2 min (922.9 - 814.7)

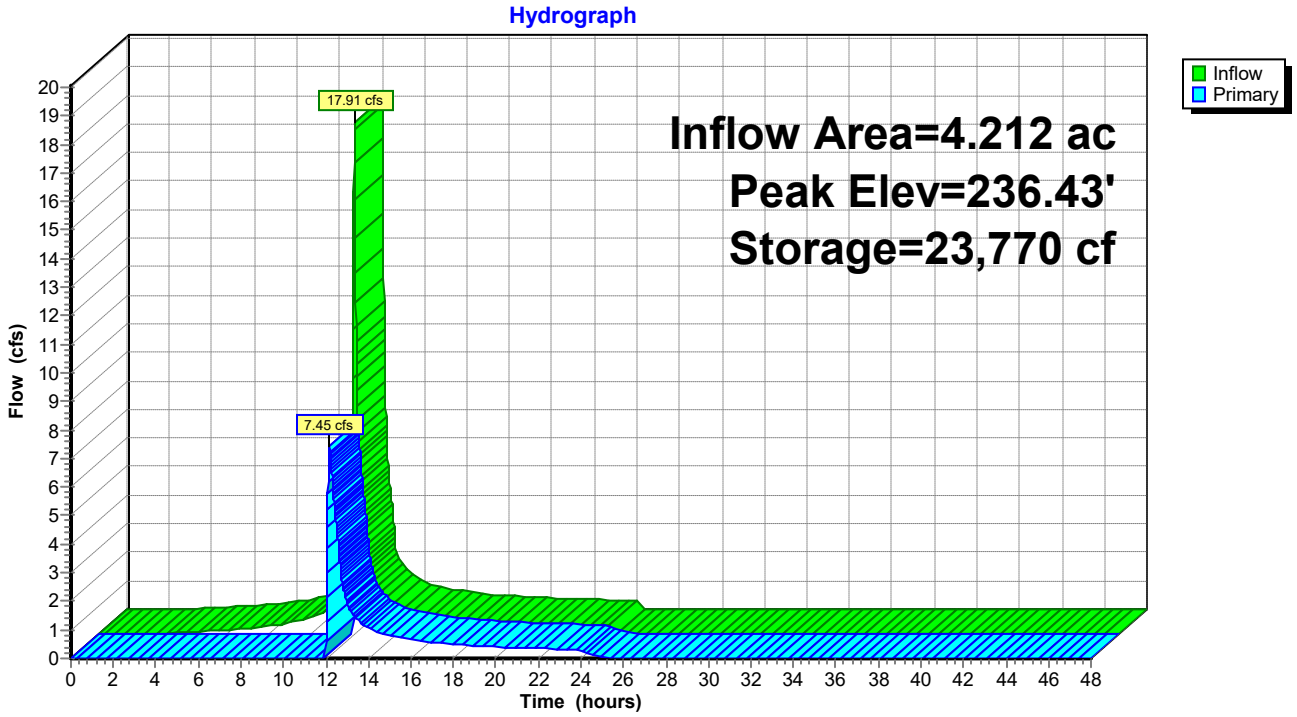
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	42,677 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
238.00	13,400	12,488	42,677

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=7.45 cfs @ 12.17 hrs HW=236.43' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 7.45 cfs @ 1.73 fps)

Pond 1P: Wet Pond Full



Summary for Pond USF1: Soil Filter

Inflow Area = 0.223 ac, 65.78% Impervious, Inflow Depth = 4.42" for 25-yr event
Inflow = 1.09 cfs @ 12.03 hrs, Volume= 0.082 af
Outflow = 1.02 cfs @ 12.05 hrs, Volume= 0.069 af, Atten= 6%, Lag= 1.2 min
Primary = 1.02 cfs @ 12.05 hrs, Volume= 0.069 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.67' @ 12.05 hrs Surf.Area= 803 sf Storage= 729 cf

Plug-Flow detention time= 140.8 min calculated for 0.068 af (83% of inflow)
Center-of-Mass det. time= 59.7 min (856.7 - 797.1)

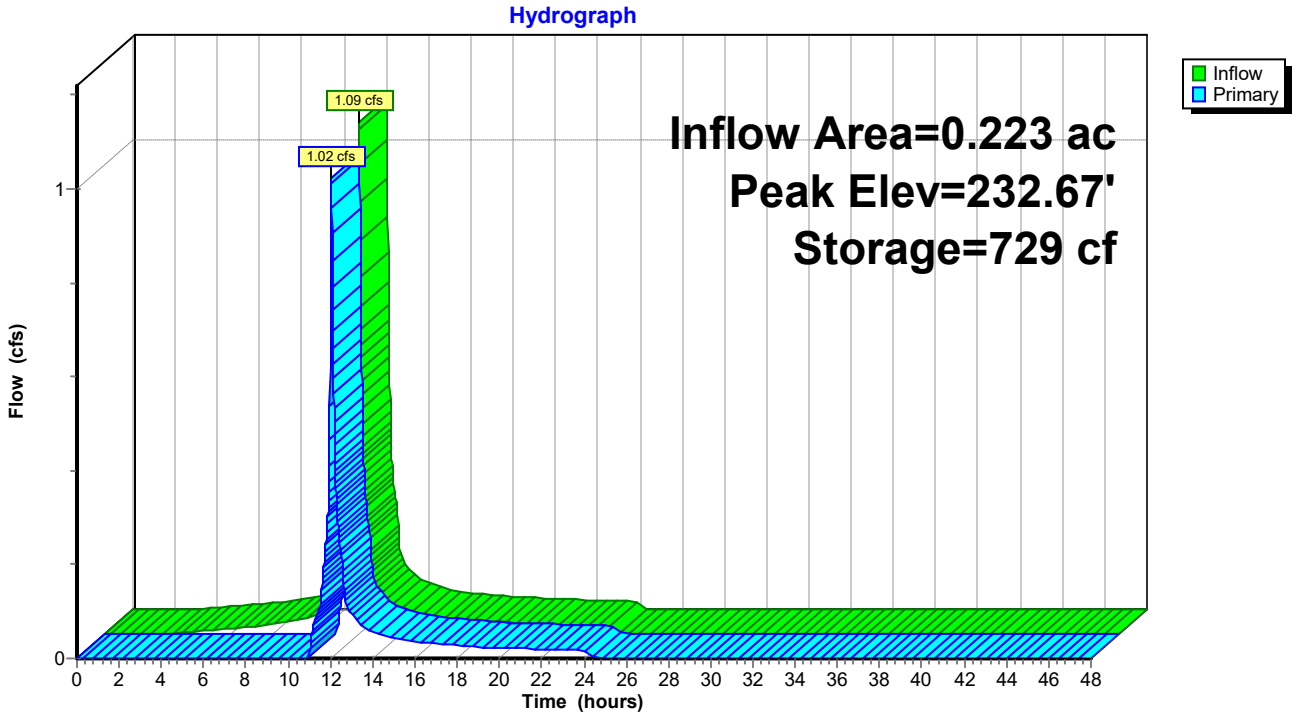
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=1.02 cfs @ 12.05 hrs HW=232.67' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 1.02 cfs @ 1.02 fps)

Pond USF1: Soil Filter



Summary for Pond USF2: Soil Filter

Inflow Area = 0.250 ac, 29.97% Impervious, Inflow Depth = 3.49" for 25-yr event
Inflow = 1.00 cfs @ 12.03 hrs, Volume= 0.073 af
Outflow = 0.93 cfs @ 12.05 hrs, Volume= 0.059 af, Atten= 7%, Lag= 1.3 min
Primary = 0.93 cfs @ 12.05 hrs, Volume= 0.059 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 232.66' @ 12.05 hrs Surf.Area= 799 sf Storage= 721 cf

Plug-Flow detention time= 141.0 min calculated for 0.059 af (81% of inflow)
Center-of-Mass det. time= 53.4 min (886.4 - 833.1)

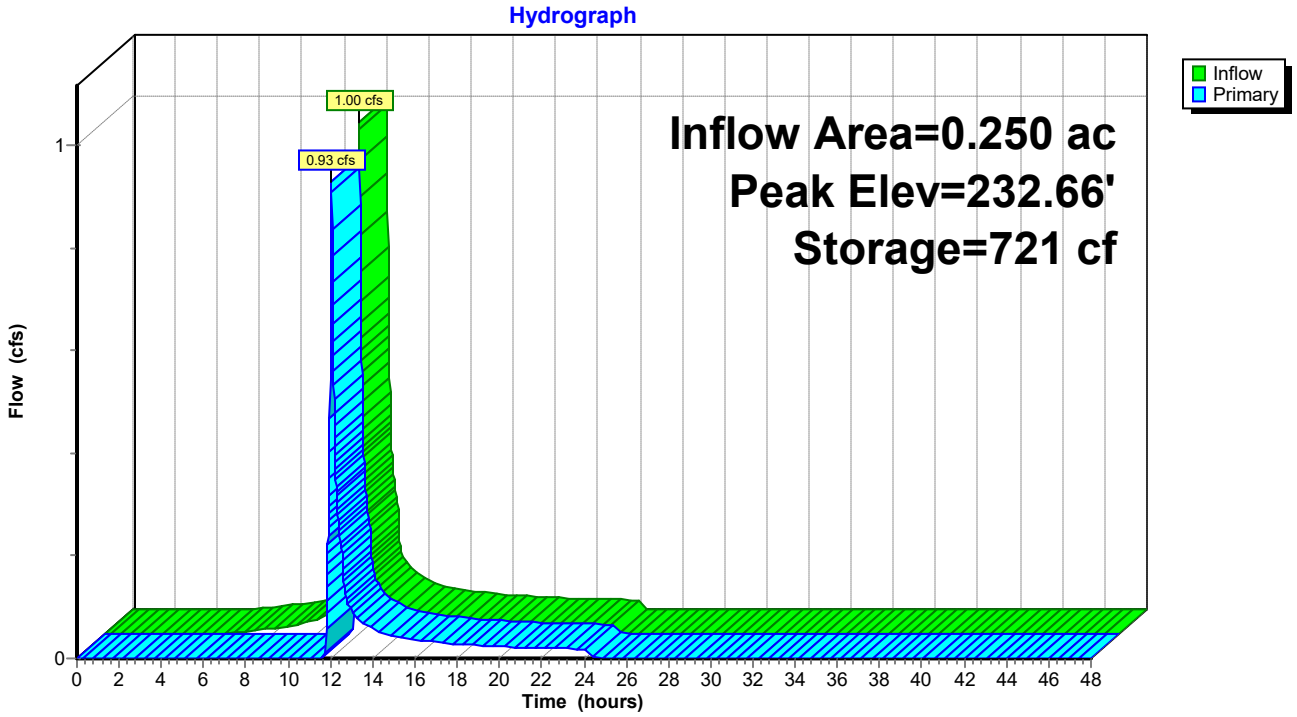
Volume	Invert	Avail.Storage	Storage Description
#1	231.50'	1,518 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

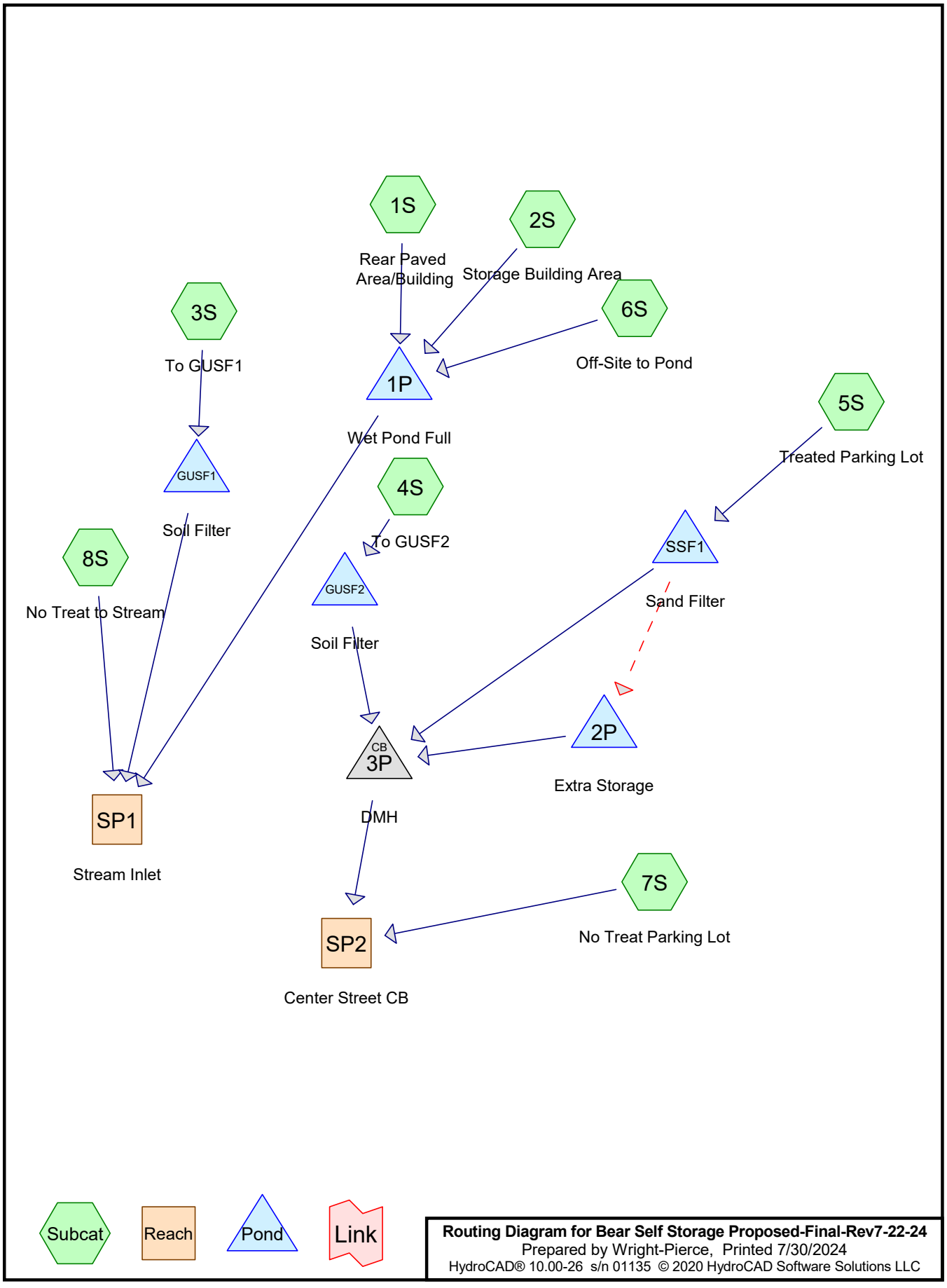
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
231.50	454	0	0
232.50	745	600	600
233.50	1,092	919	1,518

Device	Routing	Invert	Outlet Devices
#1	Primary	232.50'	**6.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.93 cfs @ 12.05 hrs HW=232.66' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.93 cfs @ 0.99 fps)

Pond USF2: Soil Filter





Routing Diagram for Bear Self Storage Proposed-Final-Rev7-22-24
Prepared by Wright-Pierce, Printed 7/30/2024
HydroCAD® 10.00-26 s/n 01135 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.572	61	>75% Grass cover, Good, HSG B (2S, 6S)
3.358	74	>75% Grass cover, Good, HSG C (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S)
0.426	96	Gravel (1S, 7S)
5.256	98	Impervious (2S, 4S, 5S, 6S, 7S)
0.350	98	Paved parking, HSG C (3S, 8S)
9.961	**88**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Rear Paved Runoff Area=31,476 sf 0.00% Impervious Runoff Depth=1.67"
Tc=5.0 min CN=86 Runoff=1.47 cfs 0.101 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=1.99"
Tc=5.0 min CN=90 Runoff=5.90 cfs 0.405 af

Subcatchment 3S: To GUSF1 Runoff Area=18,025 sf 58.42% Impervious Runoff Depth=1.83"
Tc=5.0 min CN=88 Runoff=0.92 cfs 0.063 af

Subcatchment 4S: To GUSF2 Runoff Area=69,088 sf 79.43% Impervious Runoff Depth=2.26"
Tc=5.0 min CN=93 Runoff=4.28 cfs 0.299 af

Subcatchment 5S: Treated Parking Lot Runoff Area=62,654 sf 79.82% Impervious Runoff Depth=2.26"
Tc=5.0 min CN=93 Runoff=3.88 cfs 0.271 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=0.91"
Tc=5.0 min CN=74 Runoff=0.78 cfs 0.058 af

Subcatchment 7S: No Treat Parking Lot Runoff Area=54,784 sf 72.59% Impervious Runoff Depth=2.17"
Tc=5.0 min CN=92 Runoff=3.28 cfs 0.227 af

Subcatchment 8S: No Treat to Stream Runoff Area=58,456 sf 8.05% Impervious Runoff Depth=1.02"
Flow Length=610' Tc=7.7 min CN=76 Runoff=1.36 cfs 0.114 af

Reach SP1: Stream Inlet Inflow=1.36 cfs 0.239 af
Outflow=1.36 cfs 0.239 af

Reach SP2: Center Street CB Inflow=4.20 cfs 0.665 af
Outflow=4.20 cfs 0.665 af

Pond 1P: Wet Pond Full Peak Elev=236.04' Storage=19,586 cf Inflow=8.15 cfs 0.564 af
Outflow=0.23 cfs 0.125 af

Pond 2P: Extra Storage Peak Elev=226.50' Storage=811 cf Inflow=3.14 cfs 0.077 af
Outflow=1.10 cfs 0.072 af

Pond 3P: DMH Peak Elev=225.84' Inflow=2.86 cfs 0.437 af
15.0" Round Culvert n=0.013 L=15.0' S=0.1487 '/' Outflow=2.86 cfs 0.437 af

Pond GUSF1: Soil Filter Peak Elev=233.10' Storage=2,744 cf Inflow=0.92 cfs 0.063 af
Outflow=0.00 cfs 0.000 af

Pond GUSF2: Soil Filter Peak Elev=233.57' Storage=5,883 cf Inflow=4.28 cfs 0.299 af
Outflow=1.68 cfs 0.171 af

Pond SSF1: Sand Filter Peak Elev=230.69' Storage=2,571 cf Inflow=3.88 cfs 0.271 af
Primary=0.11 cfs 0.194 af Secondary=3.14 cfs 0.077 af Outflow=3.25 cfs 0.271 af

Total Runoff Area = 9.961 ac Runoff Volume = 1.539 af Average Runoff Depth = 1.85"
43.73% Pervious = 4.356 ac 56.27% Impervious = 5.606 ac

Summary for Subcatchment 1S: Rear Paved Area/Building

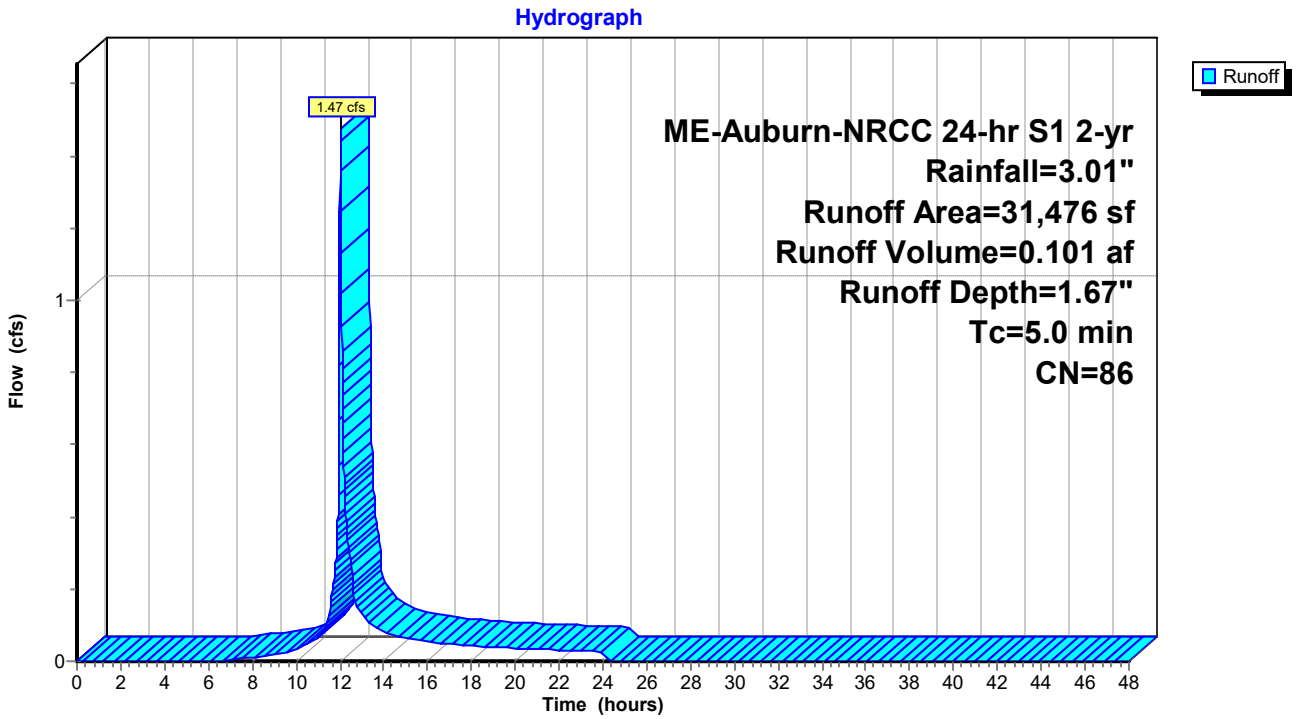
Runoff = 1.47 cfs @ 12.03 hrs, Volume= 0.101 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
	13,645	74	>75% Grass cover, Good, HSG C
*	17,831	96	Gravel
	31,476	86	Weighted Average
	31,476		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Rear Paved Area/Building



Summary for Subcatchment 2S: Storage Building Area

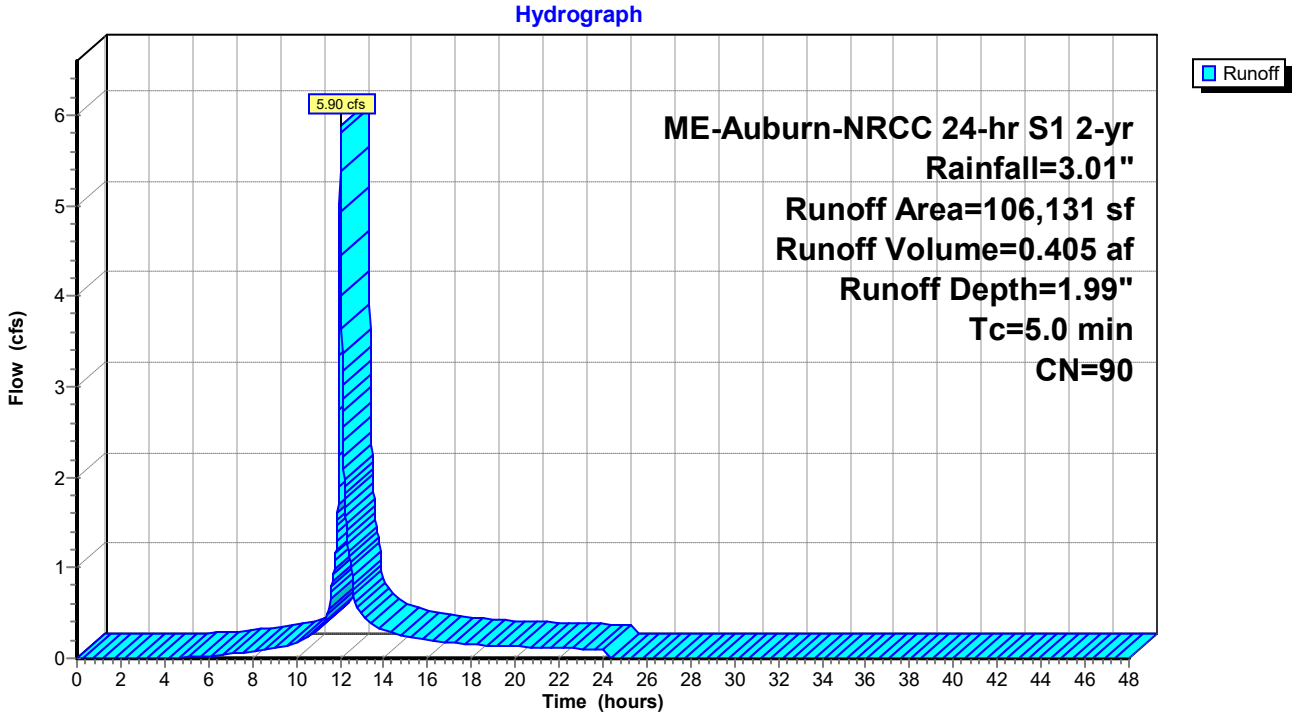
Runoff = 5.90 cfs @ 12.03 hrs, Volume= 0.405 af, Depth= 1.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: To GUSF1

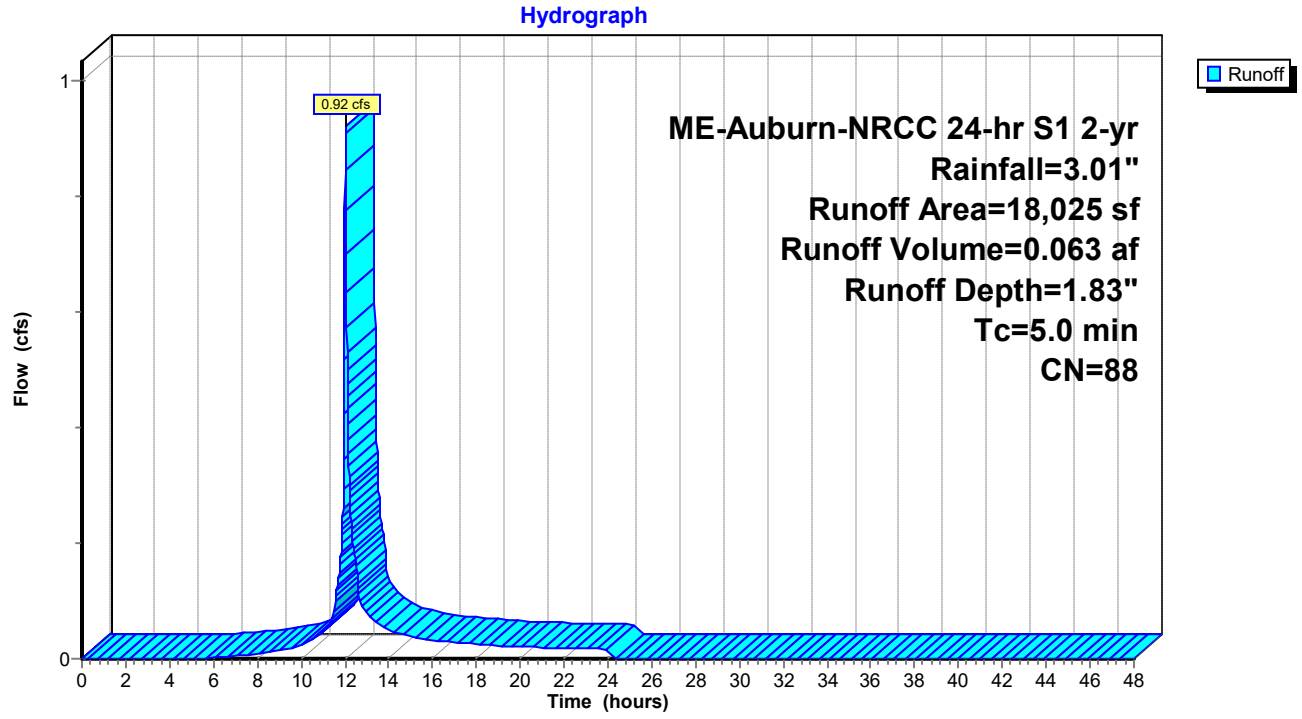
Runoff = 0.92 cfs @ 12.03 hrs, Volume= 0.063 af, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

Area (sf)	CN	Description
10,530	98	Paved parking, HSG C
7,495	74	>75% Grass cover, Good, HSG C
18,025	88	Weighted Average
7,495		41.58% Pervious Area
10,530		58.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: To GUSF1



Summary for Subcatchment 4S: To GUSF2

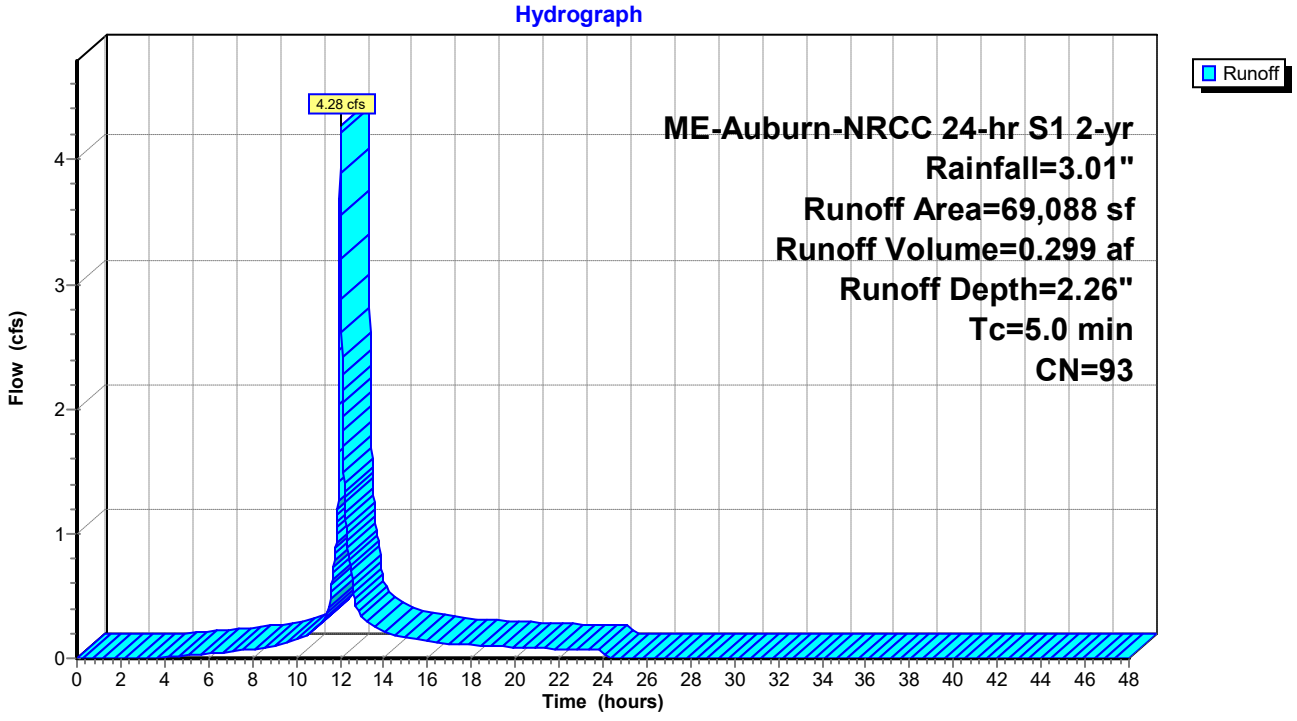
Runoff = 4.28 cfs @ 12.03 hrs, Volume= 0.299 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	53,245	98	Impervious
	14,211	74	>75% Grass cover, Good, HSG C
*	1,632	98	Impervious
	69,088	93	Weighted Average
	14,211		20.57% Pervious Area
	54,877		79.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: To GUSF2



Summary for Subcatchment 5S: Treated Parking Lot

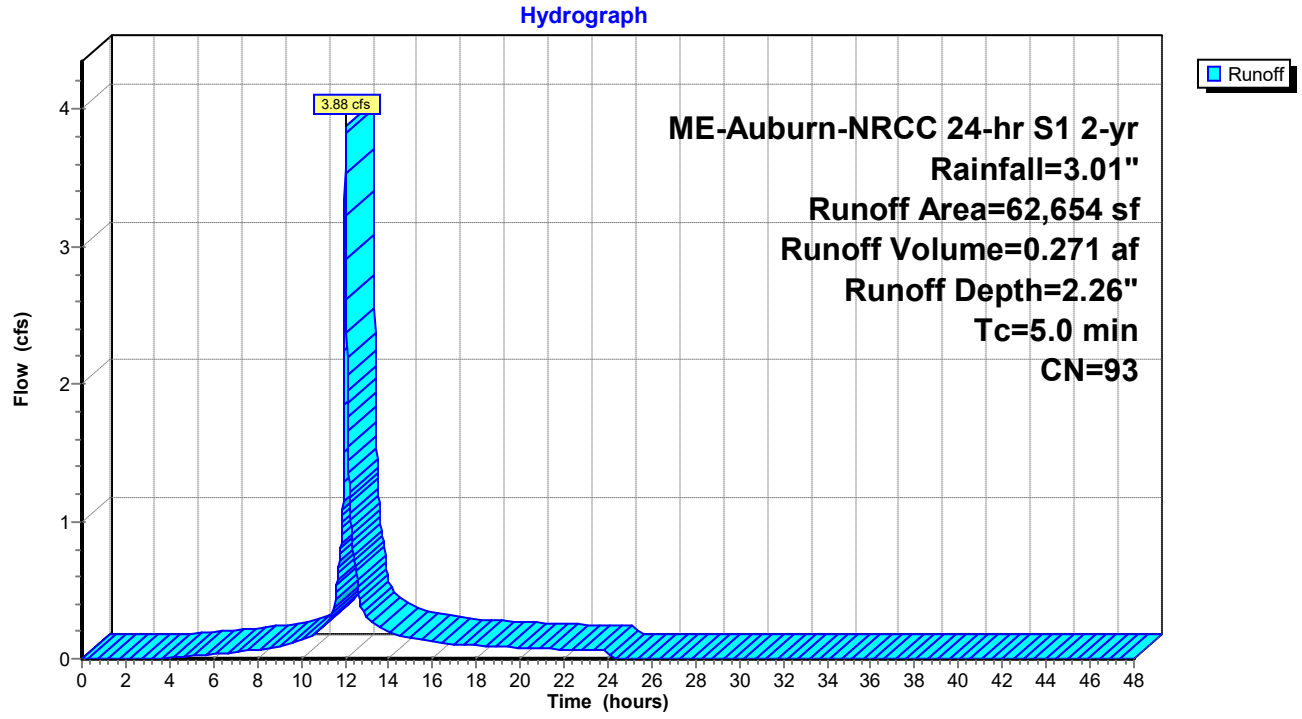
Runoff = 3.88 cfs @ 12.03 hrs, Volume= 0.271 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
	12,643	74	>75% Grass cover, Good, HSG C
*	50,011	98	Impervious
	62,654	93	Weighted Average
	12,643		20.18% Pervious Area
	50,011		79.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Treated Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

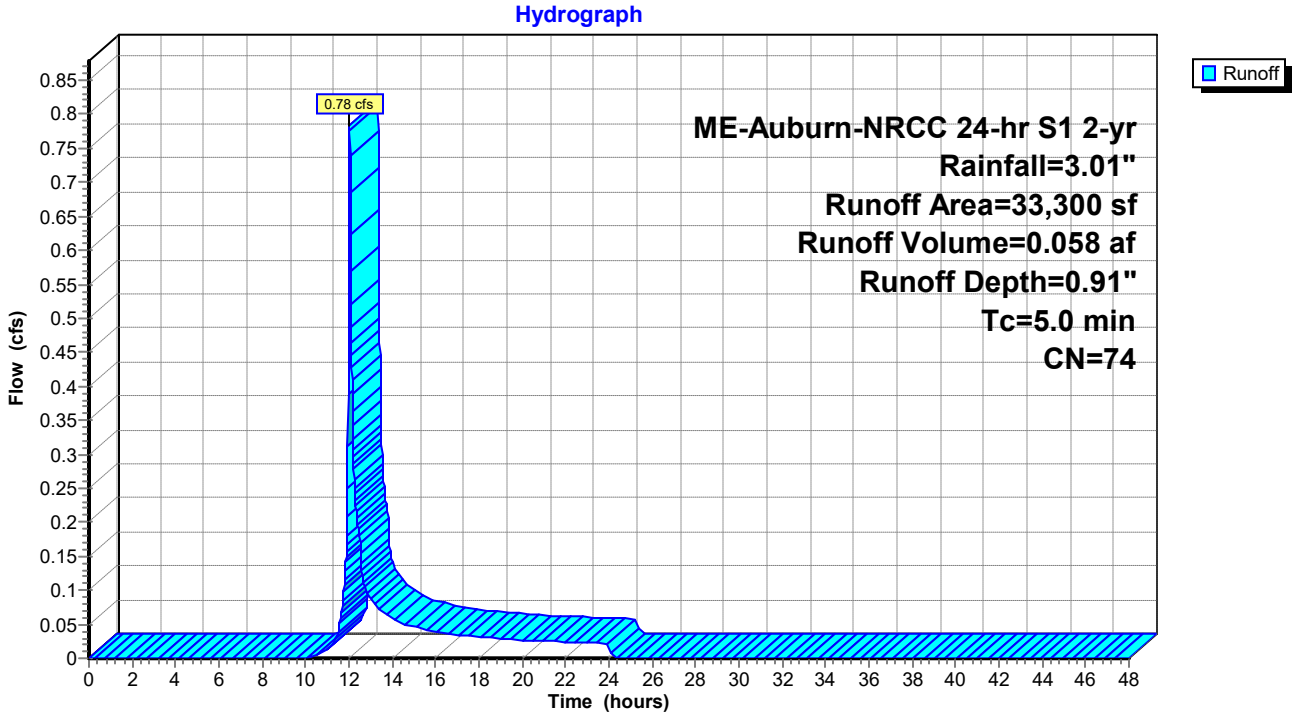
Runoff = 0.78 cfs @ 12.03 hrs, Volume= 0.058 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	11,046	61	>75% Grass cover, Good, HSG B
	16,738	74	>75% Grass cover, Good, HSG C
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S: No Treat Parking Lot

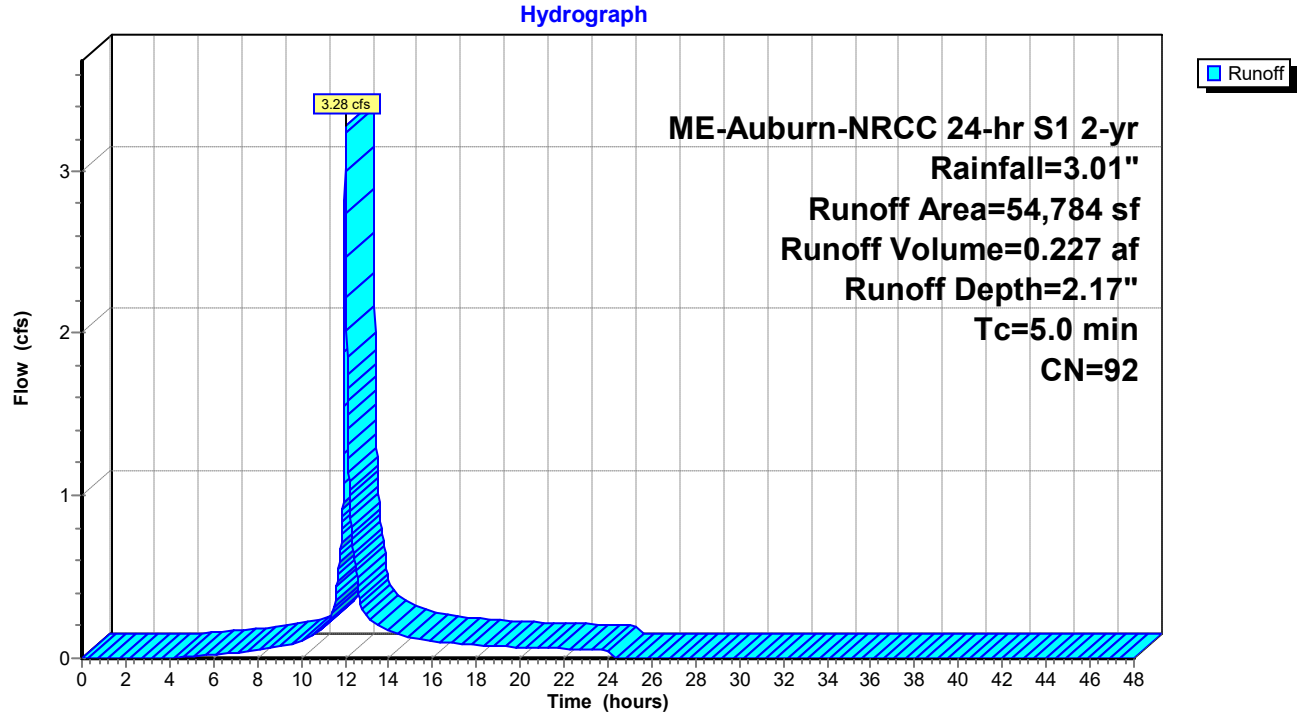
Runoff = 3.28 cfs @ 12.03 hrs, Volume= 0.227 af, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

	Area (sf)	CN	Description
*	39,768	98	Impervious
	14,306	74	>75% Grass cover, Good, HSG C
*	710	96	Gravel
	54,784	92	Weighted Average
	15,016		27.41% Pervious Area
	39,768		72.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: No Treat Parking Lot



Summary for Subcatchment 8S: No Treat to Stream

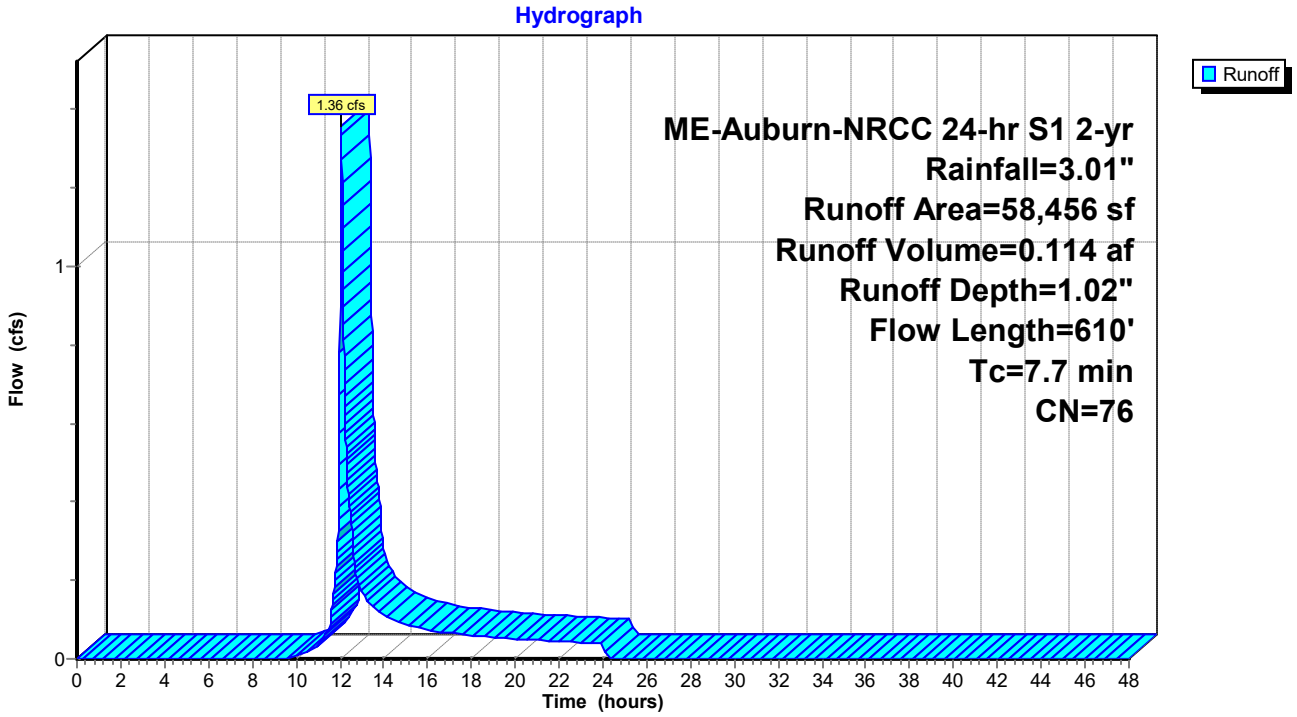
Runoff = 1.36 cfs @ 12.06 hrs, Volume= 0.114 af, Depth= 1.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 2-yr Rainfall=3.01"

Area (sf)	CN	Description
4,705	98	Paved parking, HSG C
53,751	74	>75% Grass cover, Good, HSG C
58,456	76	Weighted Average
53,751		91.95% Pervious Area
4,705		8.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	65	0.2000	0.38		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
7.7	610	Total			

Subcatchment 8S: No Treat to Stream

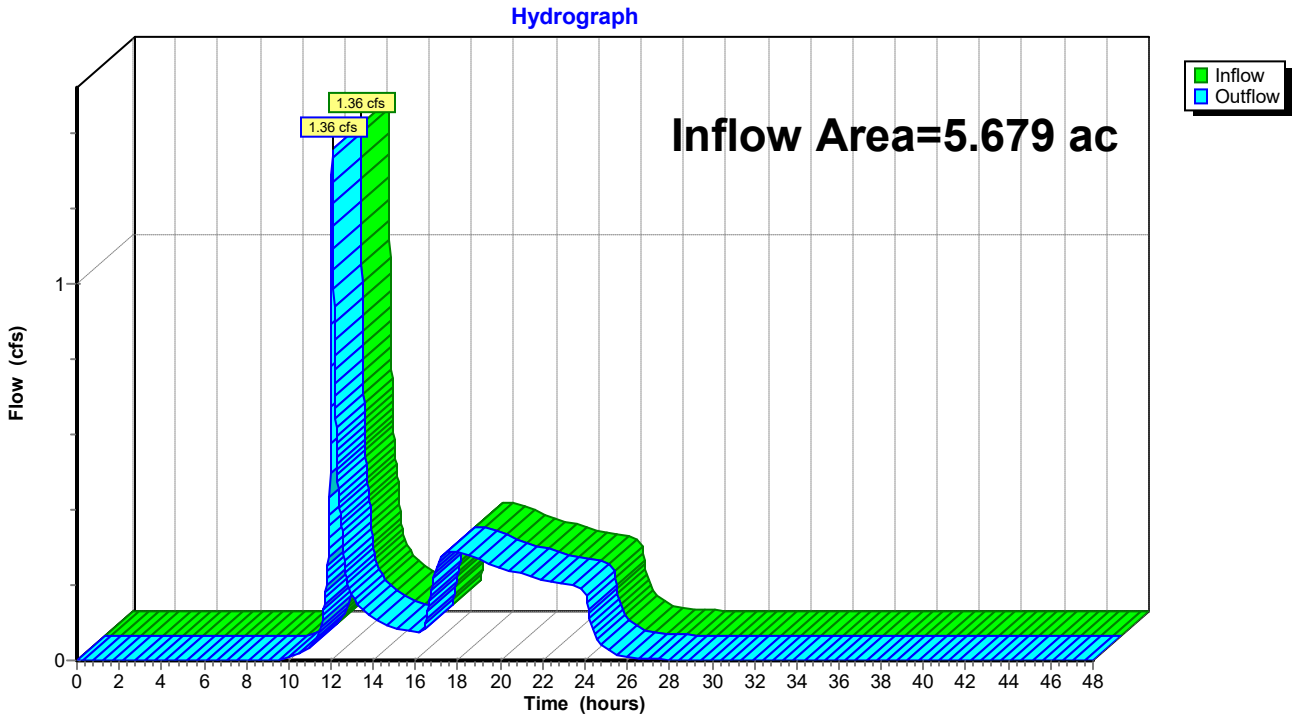


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.679 ac, 40.23% Impervious, Inflow Depth = 0.50" for 2-yr event
Inflow = 1.36 cfs @ 12.06 hrs, Volume= 0.239 af
Outflow = 1.36 cfs @ 12.06 hrs, Volume= 0.239 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

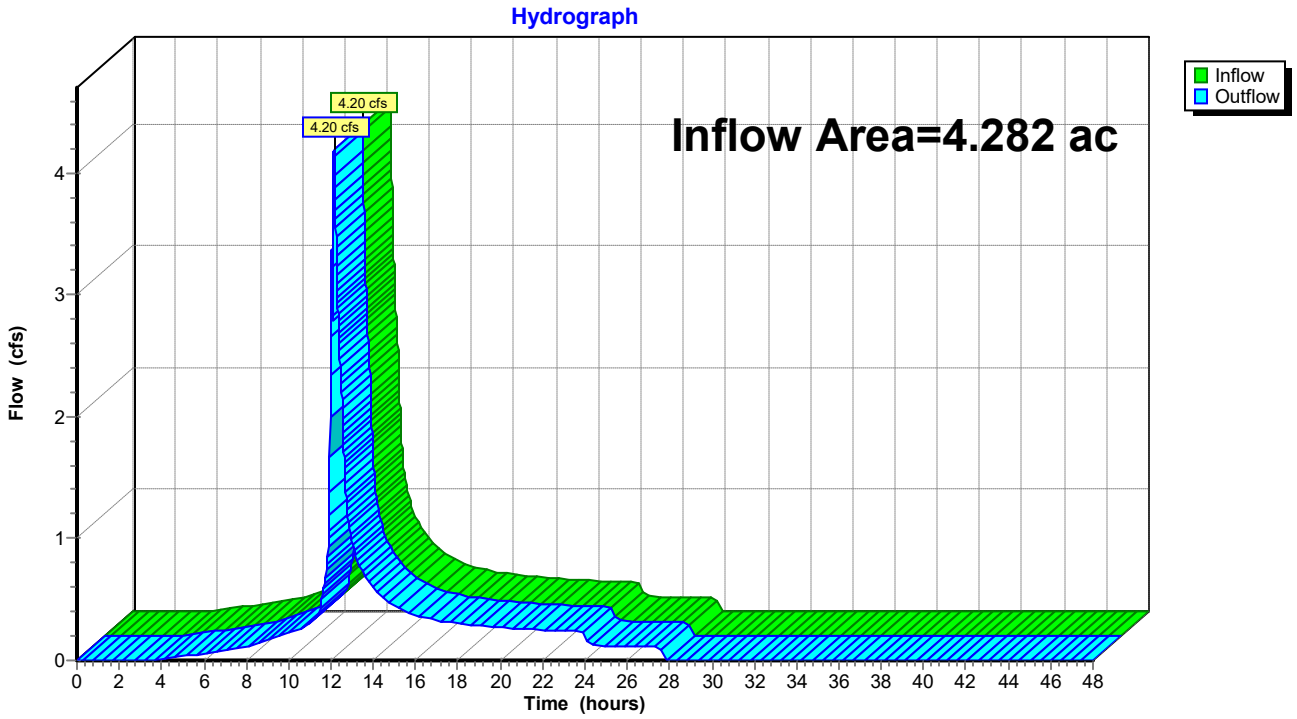


Summary for Reach SP2: Center Street CB

Inflow Area = 4.282 ac, 77.55% Impervious, Inflow Depth = 1.86" for 2-yr event
Inflow = 4.20 cfs @ 12.15 hrs, Volume= 0.665 af
Outflow = 4.20 cfs @ 12.15 hrs, Volume= 0.665 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 3.923 ac, 49.32% Impervious, Inflow Depth = 1.72" for 2-yr event
Inflow = 8.15 cfs @ 12.03 hrs, Volume= 0.564 af
Outflow = 0.23 cfs @ 17.77 hrs, Volume= 0.125 af, Atten= 97%, Lag= 344.6 min
Primary = 0.23 cfs @ 17.77 hrs, Volume= 0.125 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.04' @ 17.77 hrs Surf.Area= 10,595 sf Storage= 19,586 cf

Plug-Flow detention time= 591.1 min calculated for 0.124 af (22% of inflow)
Center-of-Mass det. time= 387.2 min (1,226.5 - 839.2)

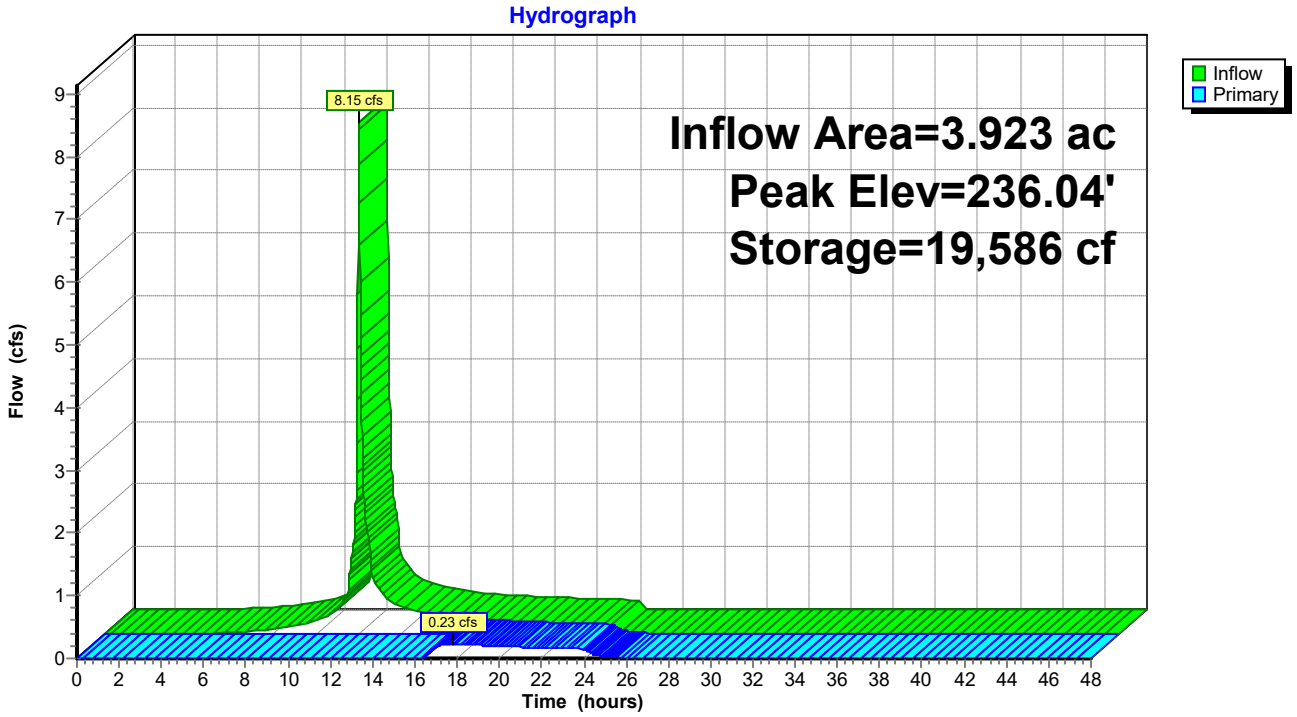
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	36,205 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
237.50	12,488	6,016	36,205

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=0.23 cfs @ 17.77 hrs HW=236.04' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.23 cfs @ 0.54 fps)

Pond 1P: Wet Pond Full



Summary for Pond 2P: Extra Storage

Inflow	=	3.14 cfs @	12.06 hrs,	Volume=	0.077 af
Outflow	=	1.10 cfs @	12.22 hrs,	Volume=	0.072 af, Atten= 65%, Lag= 9.3 min
Primary	=	1.10 cfs @	12.22 hrs,	Volume=	0.072 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 226.50' @ 12.22 hrs Surf.Area= 1,371 sf Storage= 811 cf
Flood Elev= 231.00' Surf.Area= 1,371 sf Storage= 3,954 cf

Plug-Flow detention time= 21.7 min calculated for 0.072 af (93% of inflow)
Center-of-Mass det. time= 12.1 min (772.2 - 760.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	225.50'	2,392 cf	**11.00'W x 124.66'L x 5.50'H Field A** 7,542 cf Overall - 1,562 cf Embedded = 5,980 cf x 40.0% Voids
#2A	226.00'	1,562 cf	**ADS_StormTech SC-740 +Cap** x 34 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 34 Chambers in 2 Rows
		3,954 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	225.80'	**12.0" Round Culvert X 2.00** L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 225.80' / 225.10' S= 0.0090 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.00'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Device 1	225.90'	**4.0" Vert. Orifice/Grate X 4.00** C= 0.600

Primary OutFlow Max=1.10 cfs @ 12.22 hrs HW=226.50' TW=225.81' (Dynamic Tailwater)
- **1=Culvert** (Passes 1.10 cfs of 2.83 cfs potential flow)
  - **2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
  - **3=Orifice/Grate** (Orifice Controls 1.10 cfs @ 3.16 fps)

Pond 2P: Extra Storage - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

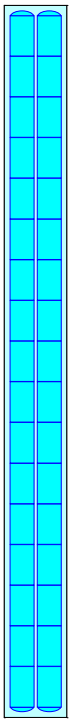
17 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 122.66' Row Length +12.0" End Stone x 2 = 124.66' Base Length
2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width
6.0" Base + 30.0" Chamber Height + 30.0" Cover = 5.50' Field Height

34 Chambers x 45.9 cf = 1,562.0 cf Chamber Storage

7,541.7 cf Field - 1,562.0 cf Chambers = 5,979.8 cf Stone x 40.0% Voids = 2,391.9 cf Stone Storage

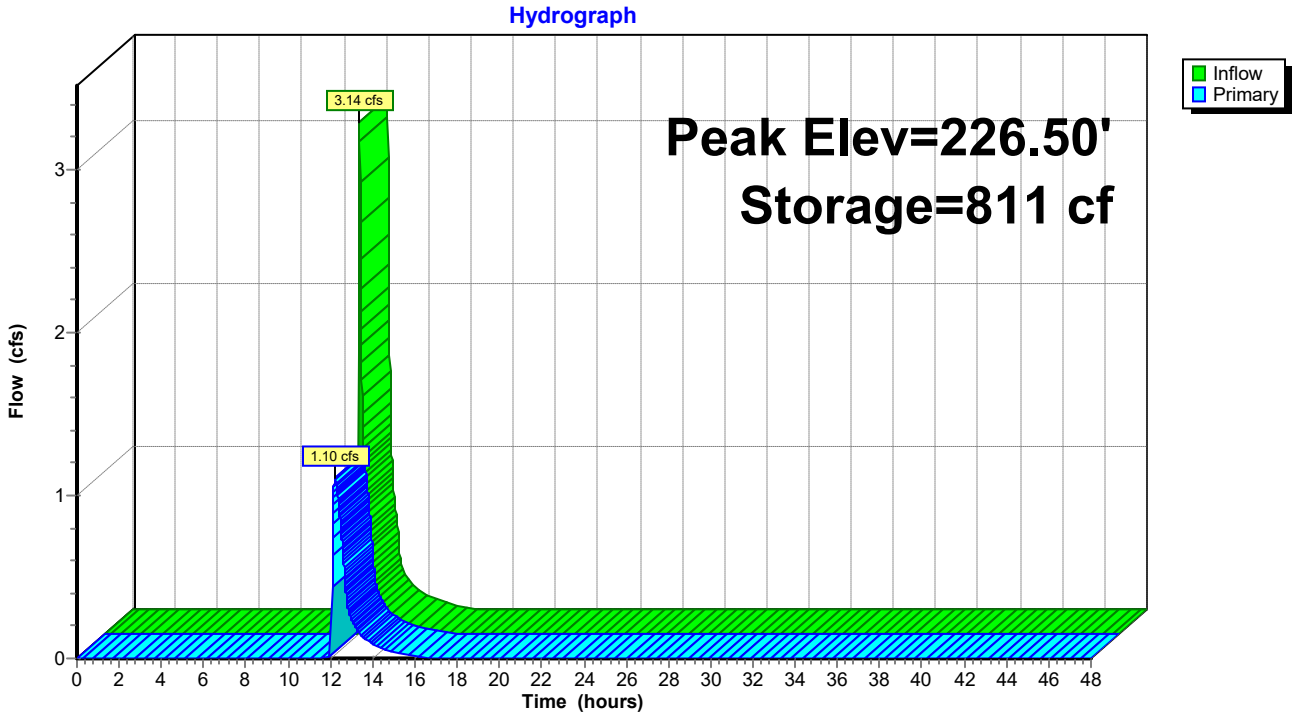
Chamber Storage + Stone Storage = 3,953.9 cf = 0.091 af
Overall Storage Efficiency = 52.4%
Overall System Size = 124.66' x 11.00' x 5.50'

34 Chambers
279.3 cy Field
221.5 cy Stone





Pond 2P: Extra Storage



Summary for Pond 3P: DMH

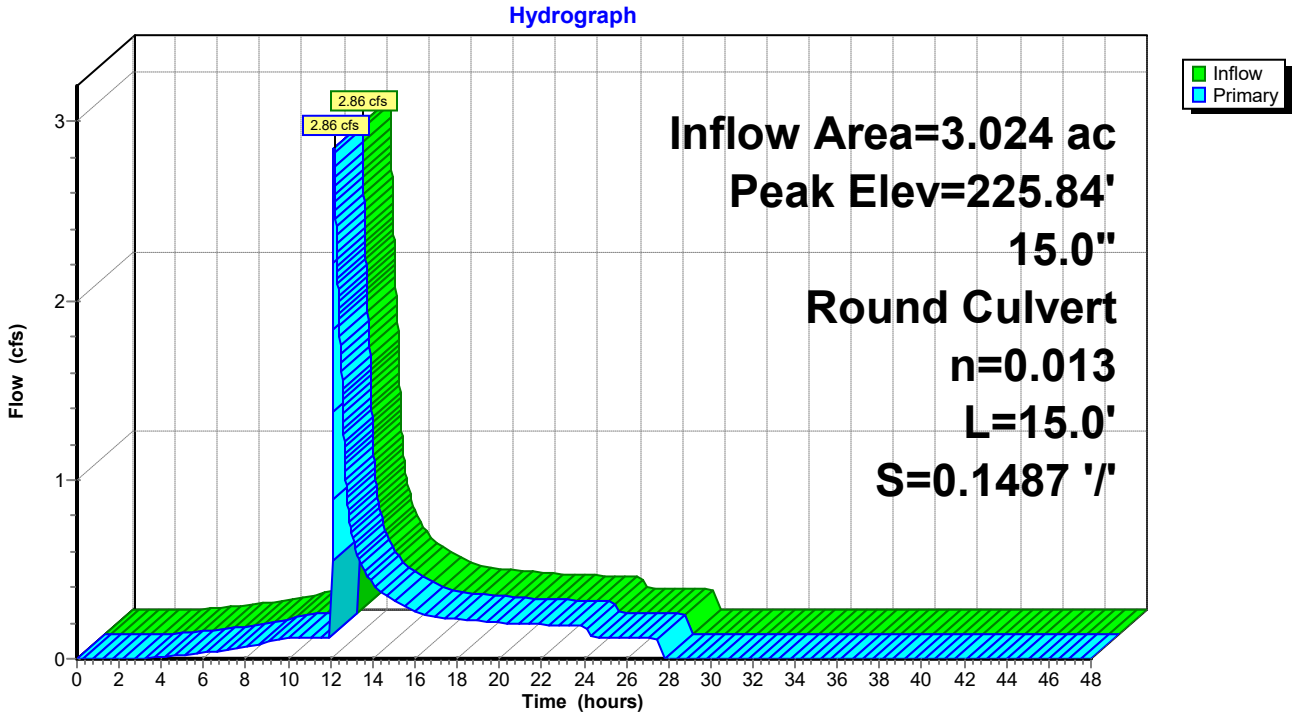
Inflow Area = 3.024 ac, 79.62% Impervious, Inflow Depth = 1.73" for 2-yr event
Inflow = 2.86 cfs @ 12.17 hrs, Volume= 0.437 af
Outflow = 2.86 cfs @ 12.17 hrs, Volume= 0.437 af, Atten= 0%, Lag= 0.0 min
Primary = 2.86 cfs @ 12.17 hrs, Volume= 0.437 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 225.84' @ 12.17 hrs
Flood Elev= 231.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.98'	**15.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 224.98' / 222.75' S= 0.1487 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.86 cfs @ 12.17 hrs HW=225.84' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.86 cfs @ 3.16 fps)

Pond 3P: DMH



Summary for Pond GUSF1: Soil Filter

Inflow Area = 0.414 ac, 58.42% Impervious, Inflow Depth = 1.83" for 2-yr event
Inflow = 0.92 cfs @ 12.03 hrs, Volume= 0.063 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.10' @ 24.29 hrs Surf.Area= 2,990 sf Storage= 2,744 cf
Flood Elev= 234.00' Surf.Area= 3,800 sf Storage= 5,800 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

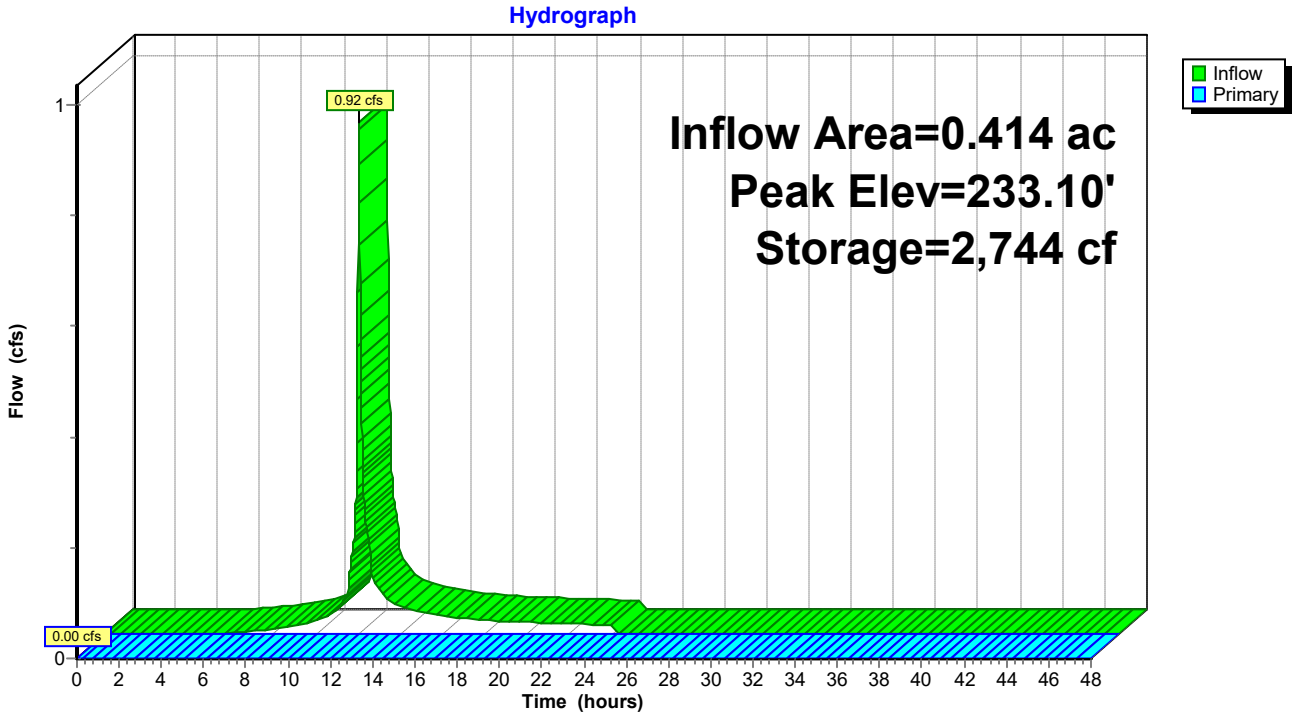
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	10,200 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	2,000	0	0
233.00	2,900	2,450	2,450
234.00	3,800	3,350	5,800
235.00	5,000	4,400	10,200

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 86.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 229.00' S= 0.0020 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=232.00' TW=0.00' (Dynamic Tailwater)
↑**2=Culvert** (Passes 0.00 cfs of 4.35 cfs potential flow)
↑**1=Orifice/Grate** (Controls 0.00 cfs)

Pond GUSF1: Soil Filter



Summary for Pond GUSF2: Soil Filter

Inflow Area = 1.586 ac, 79.43% Impervious, Inflow Depth = 2.26" for 2-yr event
Inflow = 4.28 cfs @ 12.03 hrs, Volume= 0.299 af
Outflow = 1.68 cfs @ 12.16 hrs, Volume= 0.171 af, Atten= 61%, Lag= 8.2 min
Primary = 1.68 cfs @ 12.16 hrs, Volume= 0.171 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.57' @ 12.16 hrs Surf.Area= 4,482 sf Storage= 5,883 cf
Flood Elev= 234.00' Surf.Area= 4,870 sf Storage= 7,910 cf

Plug-Flow detention time= 267.9 min calculated for 0.171 af (57% of inflow)
Center-of-Mass det. time= 127.8 min (935.9 - 808.1)

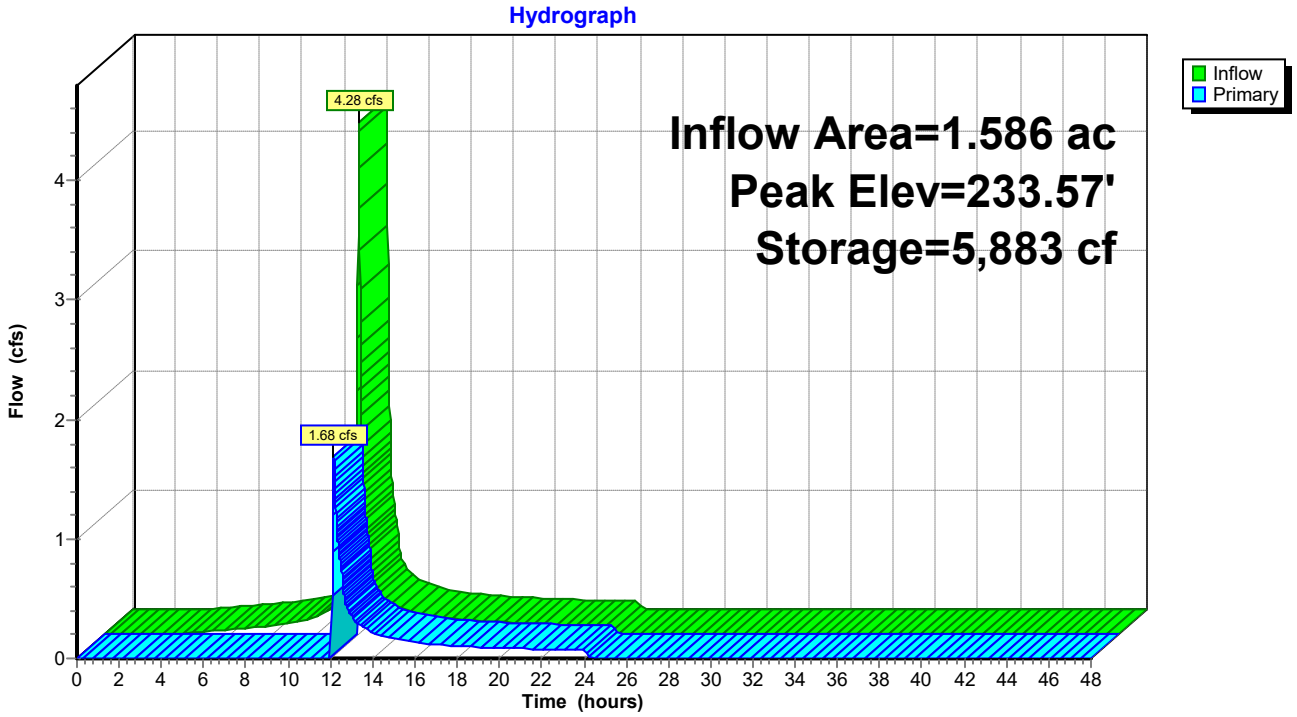
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	13,595 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	3,000	0	0
233.00	3,975	3,488	3,488
234.00	4,870	4,423	7,910
235.00	6,500	5,685	13,595

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 140.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 227.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.68 cfs @ 12.16 hrs HW=233.57' TW=225.84' (Dynamic Tailwater)
↑**2=Culvert** (Passes 1.68 cfs of 6.12 cfs potential flow)
↑**1=Orifice/Grate** (Weir Controls 1.68 cfs @ 0.84 fps)

Pond GUSF2: Soil Filter



Summary for Pond SSF1: Sand Filter

Inflow Area = 1.438 ac, 79.82% Impervious, Inflow Depth = 2.26" for 2-yr event
Inflow = 3.88 cfs @ 12.03 hrs, Volume= 0.271 af
Outflow = 3.25 cfs @ 12.06 hrs, Volume= 0.271 af, Atten= 16%, Lag= 2.1 min
Primary = 0.11 cfs @ 10.13 hrs, Volume= 0.194 af
Secondary = 3.14 cfs @ 12.06 hrs, Volume= 0.077 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 230.69' @ 12.06 hrs Surf.Area= 2,257 sf Storage= 2,571 cf
Flood Elev= 231.00' Surf.Area= 2,257 sf Storage= 2,855 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 151.4 min (959.5 - 808.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	228.67'	1,605 cf	**18.17'W x 124.24'L x 2.33'H Field A** 5,266 cf Overall - 1,253 cf Embedded = 4,013 cf x 40.0% Voids
#2A	229.17'	1,253 cf	**ADS_StormTech SC-310 +Cap** x 85 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 85 Chambers in 5 Rows
		2,858 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Secondary	229.17'	**12.0" Round Culvert X 2.00** L= 9.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 228.90' S= 0.0300 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.50'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Primary	228.67'	**2.200 in/hr Exfiltration over Surface area**

Primary OutFlow Max=0.11 cfs @ 10.13 hrs HW=228.69' TW=225.13' (Dynamic Tailwater)
└─**3=Exfiltration** (Exfiltration Controls 0.11 cfs)

Secondary OutFlow Max=3.10 cfs @ 12.06 hrs HW=230.68' TW=225.94' (Dynamic Tailwater)
└─**1=Culvert** (Passes 3.10 cfs of 7.62 cfs potential flow)
└─**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 3.10 cfs @ 1.41 fps)

Pond SSF1: Sand Filter - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

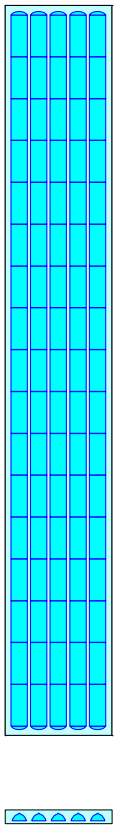
17 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 122.24' Row Length +12.0" End Stone x 2 = 124.24' Base Length
5 Rows x 34.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 18.17' Base Width
6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

85 Chambers x 14.7 cf = 1,253.1 cf Chamber Storage

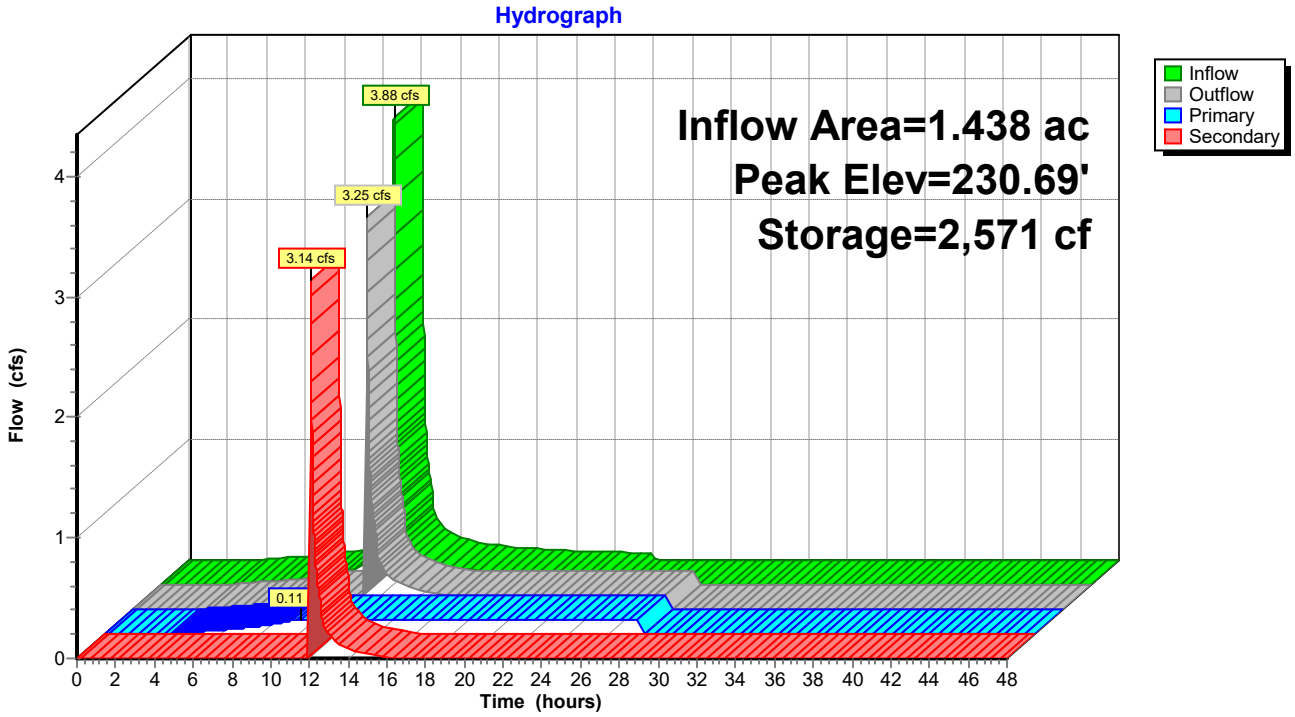
5,266.4 cf Field - 1,253.1 cf Chambers = 4,013.3 cf Stone x 40.0% Voids = 1,605.3 cf Stone Storage

Chamber Storage + Stone Storage = 2,858.4 cf = 0.066 af
Overall Storage Efficiency = 54.3%
Overall System Size = 124.24' x 18.17' x 2.33'

85 Chambers
195.1 cy Field
148.6 cy Stone



Pond SSF1: Sand Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Rear Paved Runoff Area=31,476 sf 0.00% Impervious Runoff Depth=2.95"
Tc=5.0 min CN=86 Runoff=2.45 cfs 0.178 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=3.34"
Tc=5.0 min CN=90 Runoff=9.21 cfs 0.678 af

Subcatchment 3S: To GUSF1 Runoff Area=18,025 sf 58.42% Impervious Runoff Depth=3.14"
Tc=5.0 min CN=88 Runoff=1.49 cfs 0.108 af

Subcatchment 4S: To GUSF2 Runoff Area=69,088 sf 79.43% Impervious Runoff Depth=3.65"
Tc=5.0 min CN=93 Runoff=6.40 cfs 0.482 af

Subcatchment 5S: Treated Parking Lot Runoff Area=62,654 sf 79.82% Impervious Runoff Depth=3.65"
Tc=5.0 min CN=93 Runoff=5.80 cfs 0.437 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=1.93"
Tc=5.0 min CN=74 Runoff=1.68 cfs 0.123 af

Subcatchment 7S: No Treat Parking Lot Runoff Area=54,784 sf 72.59% Impervious Runoff Depth=3.54"
Tc=5.0 min CN=92 Runoff=4.97 cfs 0.371 af

Subcatchment 8S: No Treat to Stream Runoff Area=58,456 sf 8.05% Impervious Runoff Depth=2.08"
Flow Length=610' Tc=7.7 min CN=76 Runoff=2.79 cfs 0.233 af

Reach SP1: Stream Inlet Inflow=3.28 cfs 0.788 af
Outflow=3.28 cfs 0.788 af

Reach SP2: Center Street CB Inflow=10.33 cfs 1.158 af
Outflow=10.33 cfs 1.158 af

Pond 1P: Wet Pond Full Peak Elev=236.21' Storage=21,406 cf Inflow=13.34 cfs 0.978 af
Outflow=2.54 cfs 0.539 af

Pond 2P: Extra Storage Peak Elev=228.40' Storage=2,527 cf Inflow=5.63 cfs 0.207 af
Outflow=2.24 cfs 0.202 af

Pond 3P: DMH Peak Elev=226.69' Inflow=6.17 cfs 0.786 af
15.0" Round Culvert n=0.013 L=15.0' S=0.1487 '/' Outflow=6.17 cfs 0.786 af

Pond GUSF1: Soil Filter Peak Elev=233.51' Storage=4,030 cf Inflow=1.49 cfs 0.108 af
Outflow=0.04 cfs 0.016 af

Pond GUSF2: Soil Filter Peak Elev=233.81' Storage=6,998 cf Inflow=6.40 cfs 0.482 af
Outflow=4.02 cfs 0.354 af

Pond SSF1: Sand Filter Peak Elev=230.77' Storage=2,651 cf Inflow=5.80 cfs 0.437 af
Primary=0.11 cfs 0.230 af Secondary=5.63 cfs 0.207 af Outflow=5.75 cfs 0.437 af

Total Runoff Area = 9.961 ac Runoff Volume = 2.610 af Average Runoff Depth = 3.14"
43.73% Pervious = 4.356 ac 56.27% Impervious = 5.606 ac

Summary for Subcatchment 1S: Rear Paved Area/Building

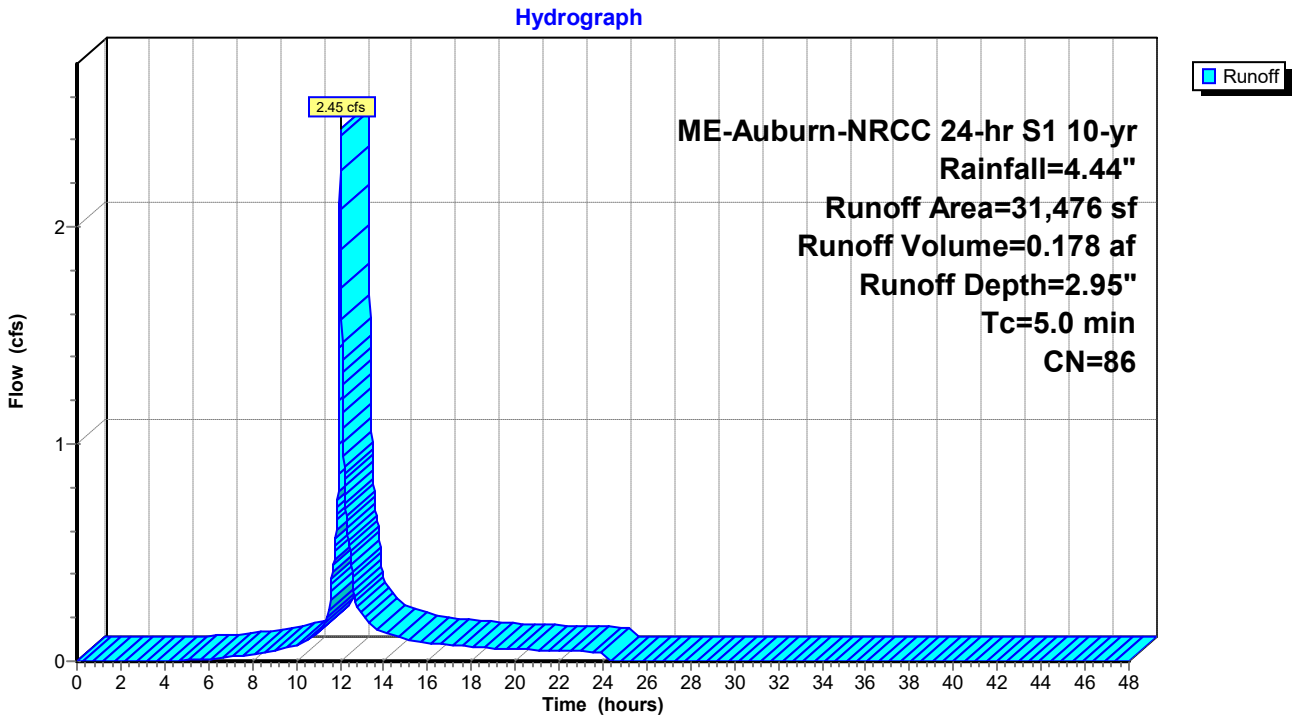
Runoff = 2.45 cfs @ 12.03 hrs, Volume= 0.178 af, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
	13,645	74	>75% Grass cover, Good, HSG C
*	17,831	96	Gravel
	31,476	86	Weighted Average
	31,476		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Rear Paved Area/Building



Summary for Subcatchment 2S: Storage Building Area

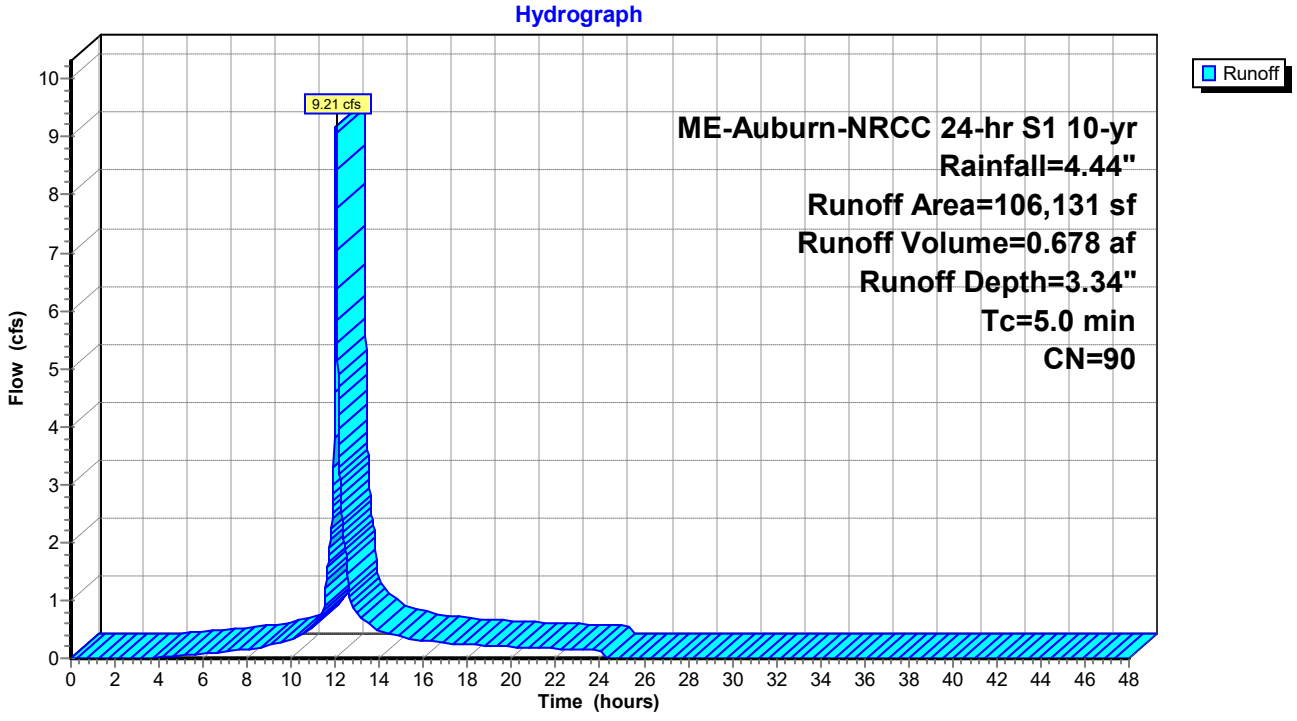
Runoff = 9.21 cfs @ 12.03 hrs, Volume= 0.678 af, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: To GUSF1

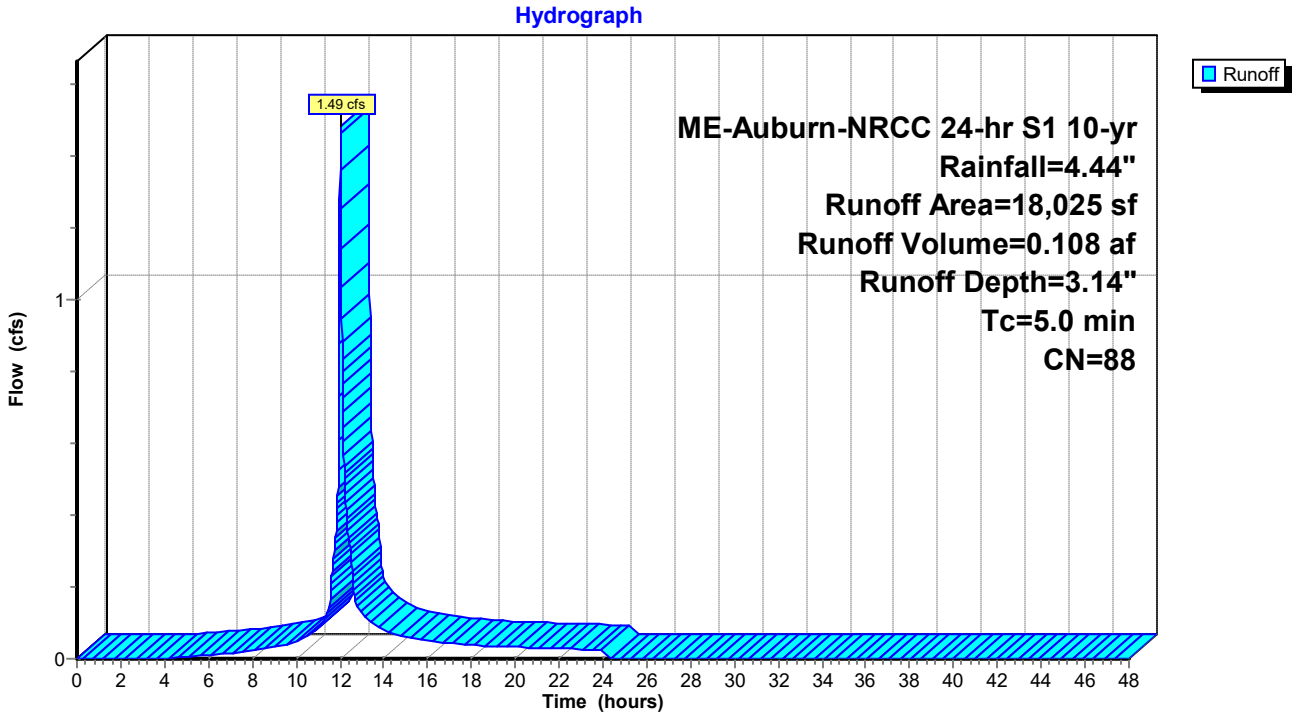
Runoff = 1.49 cfs @ 12.03 hrs, Volume= 0.108 af, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

Area (sf)	CN	Description
10,530	98	Paved parking, HSG C
7,495	74	>75% Grass cover, Good, HSG C
18,025	88	Weighted Average
7,495		41.58% Pervious Area
10,530		58.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: To GUSF1



Summary for Subcatchment 4S: To GUSF2

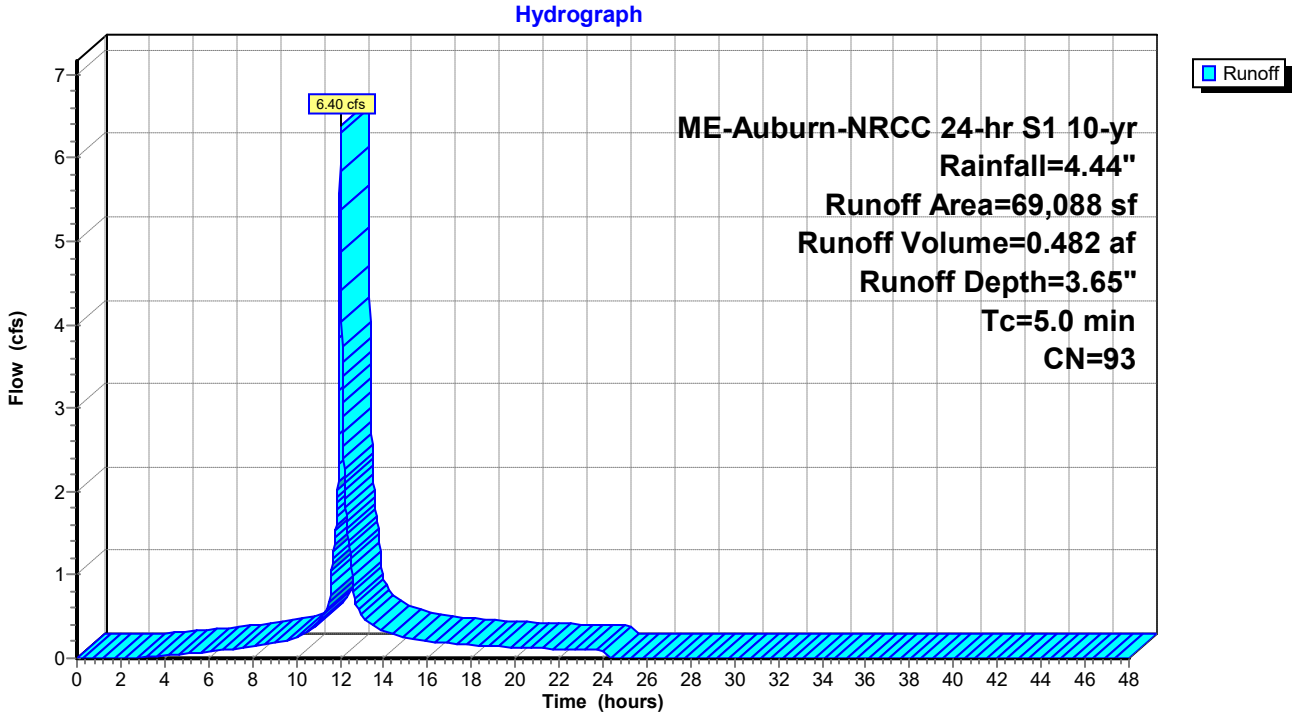
Runoff = 6.40 cfs @ 12.03 hrs, Volume= 0.482 af, Depth= 3.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	53,245	98	Impervious
	14,211	74	>75% Grass cover, Good, HSG C
*	1,632	98	Impervious
	69,088	93	Weighted Average
	14,211		20.57% Pervious Area
	54,877		79.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: To GUSF2



Summary for Subcatchment 5S: Treated Parking Lot

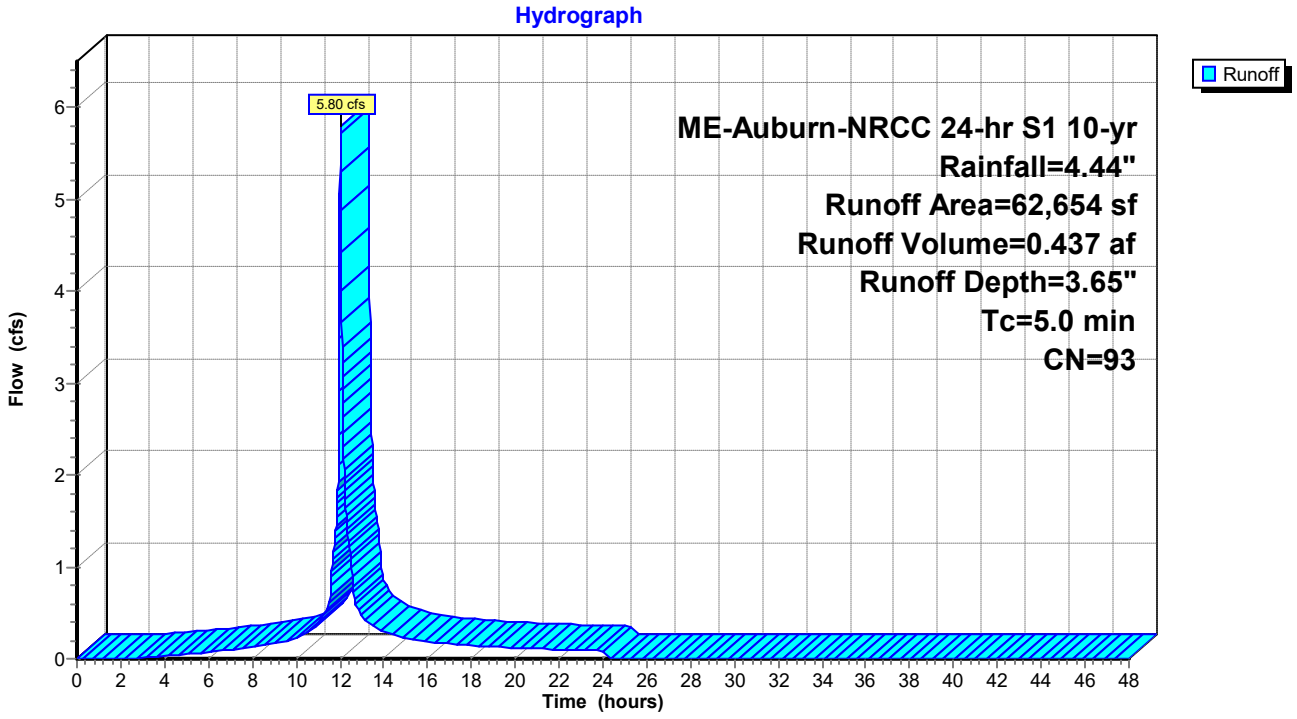
Runoff = 5.80 cfs @ 12.03 hrs, Volume= 0.437 af, Depth= 3.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
	12,643	74	>75% Grass cover, Good, HSG C
*	50,011	98	Impervious
	62,654	93	Weighted Average
	12,643		20.18% Pervious Area
	50,011		79.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Treated Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

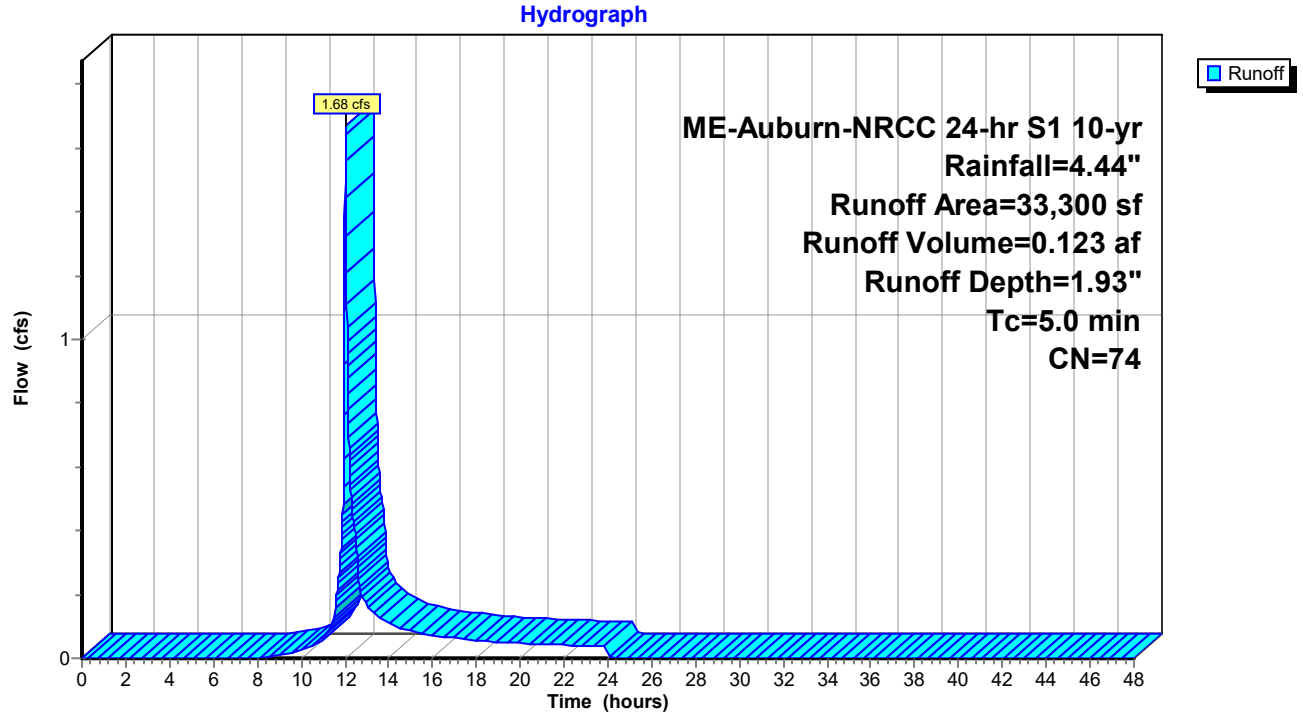
Runoff = 1.68 cfs @ 12.03 hrs, Volume= 0.123 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	11,046	61	>75% Grass cover, Good, HSG B
	16,738	74	>75% Grass cover, Good, HSG C
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S: No Treat Parking Lot

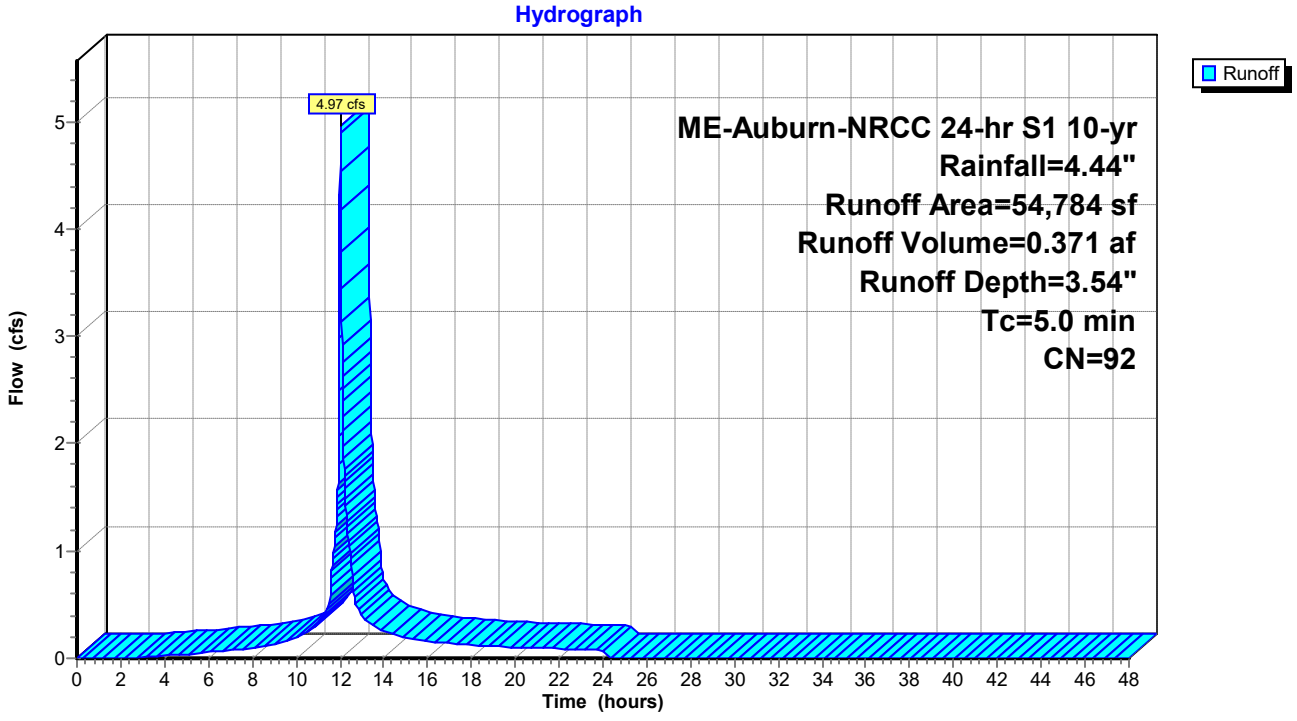
Runoff = 4.97 cfs @ 12.03 hrs, Volume= 0.371 af, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
*	39,768	98	Impervious
	14,306	74	>75% Grass cover, Good, HSG C
*	710	96	Gravel
	54,784	92	Weighted Average
	15,016		27.41% Pervious Area
	39,768		72.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: No Treat Parking Lot



Summary for Subcatchment 8S: No Treat to Stream

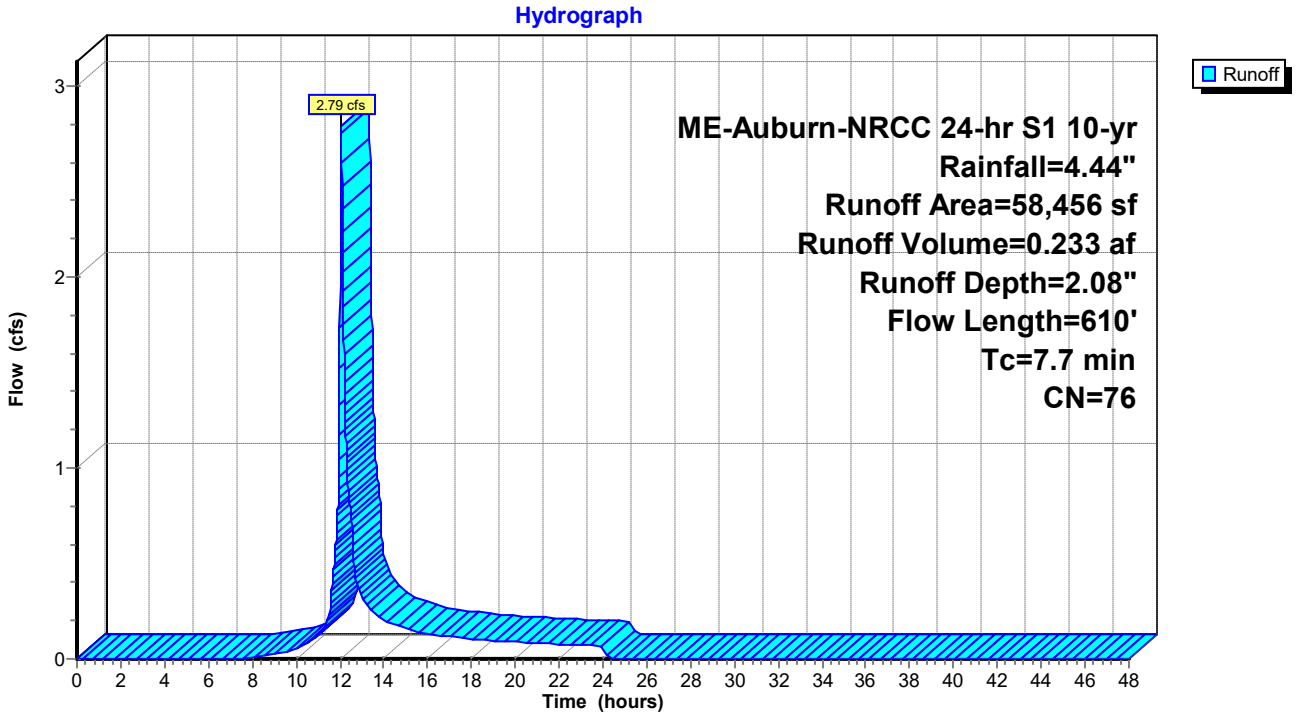
Runoff = 2.79 cfs @ 12.06 hrs, Volume= 0.233 af, Depth= 2.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 10-yr Rainfall=4.44"

Area (sf)	CN	Description
4,705	98	Paved parking, HSG C
53,751	74	>75% Grass cover, Good, HSG C
58,456	76	Weighted Average
53,751		91.95% Pervious Area
4,705		8.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	65	0.2000	0.38		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
7.7	610	Total			

Subcatchment 8S: No Treat to Stream

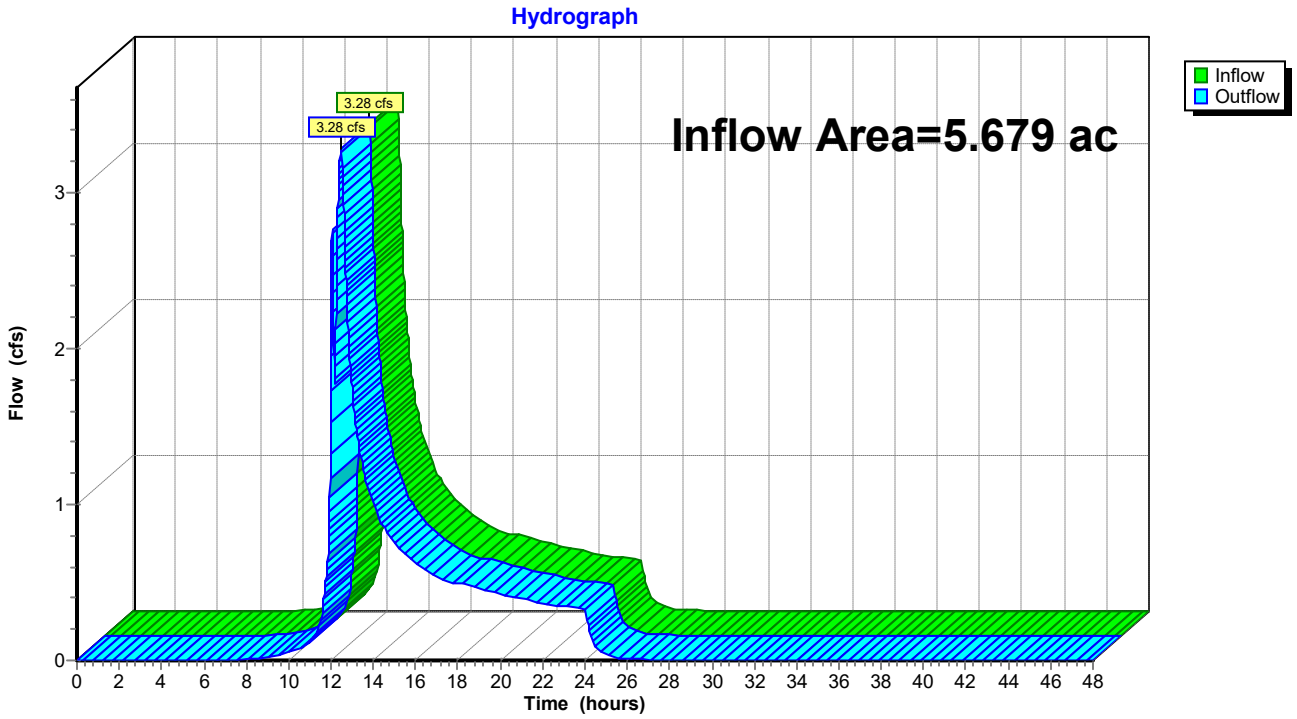


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.679 ac, 40.23% Impervious, Inflow Depth = 1.66" for 10-yr event
Inflow = 3.28 cfs @ 12.48 hrs, Volume= 0.788 af
Outflow = 3.28 cfs @ 12.48 hrs, Volume= 0.788 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

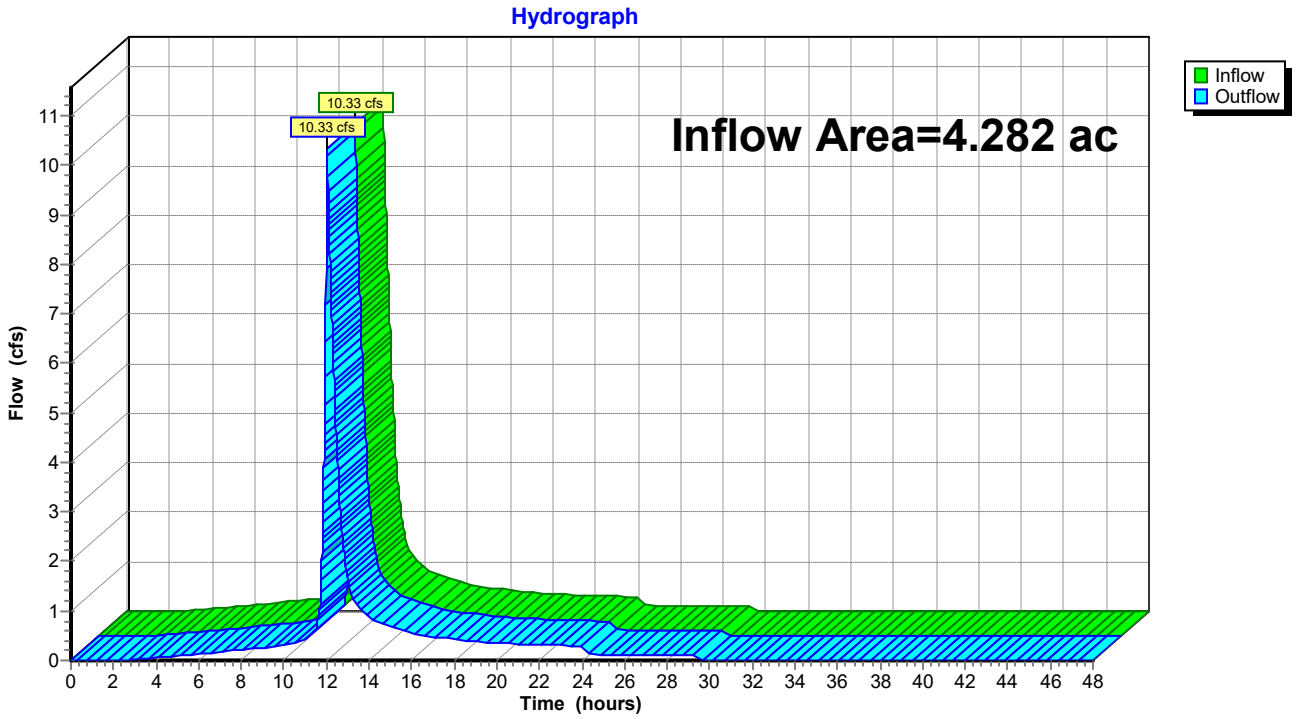


Summary for Reach SP2: Center Street CB

Inflow Area = 4.282 ac, 77.55% Impervious, Inflow Depth = 3.24" for 10-yr event
Inflow = 10.33 cfs @ 12.04 hrs, Volume= 1.158 af
Outflow = 10.33 cfs @ 12.04 hrs, Volume= 1.158 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 3.923 ac, 49.32% Impervious, Inflow Depth = 2.99" for 10-yr event
Inflow = 13.34 cfs @ 12.03 hrs, Volume= 0.978 af
Outflow = 2.54 cfs @ 12.53 hrs, Volume= 0.539 af, Atten= 81%, Lag= 30.1 min
Primary = 2.54 cfs @ 12.53 hrs, Volume= 0.539 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.21' @ 12.53 hrs Surf.Area= 10,769 sf Storage= 21,406 cf

Plug-Flow detention time= 294.9 min calculated for 0.539 af (55% of inflow)
Center-of-Mass det. time= 152.2 min (971.2 - 819.0)

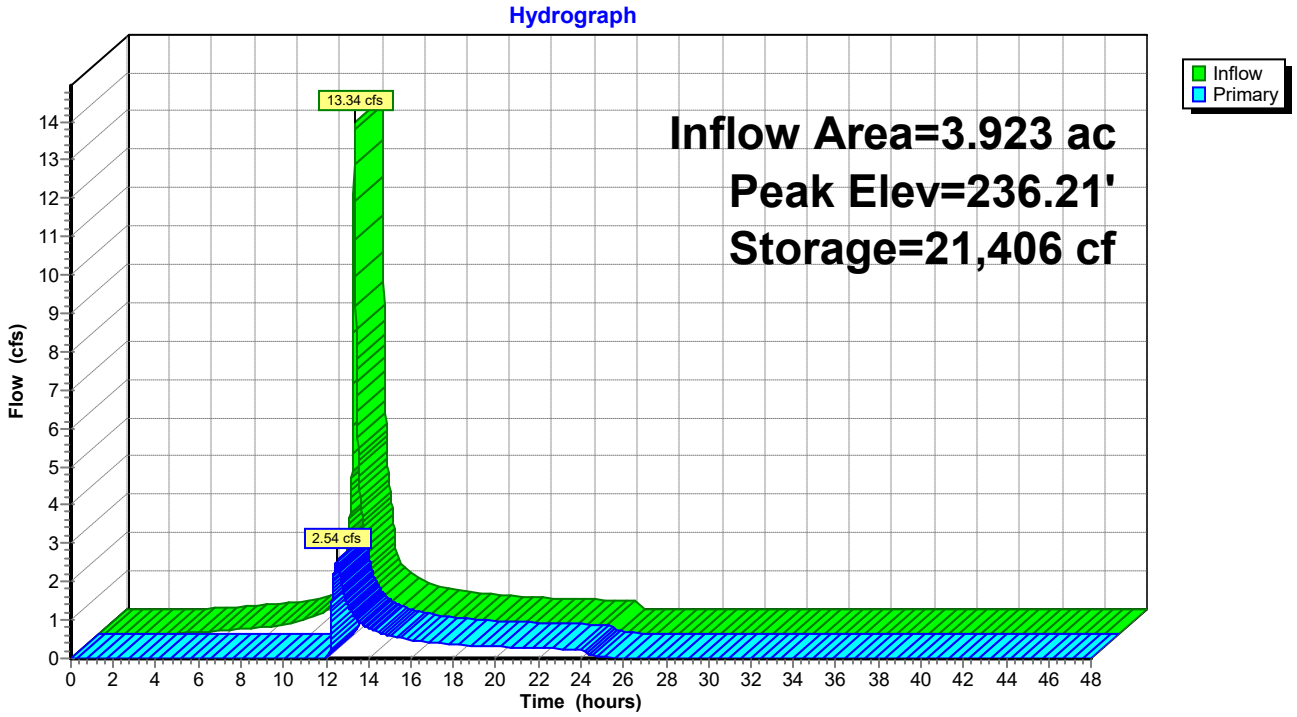
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	36,205 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
237.50	12,488	6,016	36,205

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=2.54 cfs @ 12.53 hrs HW=236.21' TW=0.00' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 2.54 cfs @ 1.19 fps)

Pond 1P: Wet Pond Full



Summary for Pond 2P: Extra Storage

Inflow	=	5.63 cfs @	12.03 hrs,	Volume=	0.207 af
Outflow	=	2.24 cfs @	12.22 hrs,	Volume=	0.202 af, Atten= 60%, Lag= 11.2 min
Primary	=	2.24 cfs @	12.22 hrs,	Volume=	0.202 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 228.40' @ 12.18 hrs Surf.Area= 1,371 sf Storage= 2,527 cf
Flood Elev= 231.00' Surf.Area= 1,371 sf Storage= 3,954 cf

Plug-Flow detention time= 22.1 min calculated for 0.202 af (98% of inflow)
Center-of-Mass det. time= 14.0 min (782.8 - 768.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	225.50'	2,392 cf	**11.00'W x 124.66'L x 5.50'H Field A** 7,542 cf Overall - 1,562 cf Embedded = 5,980 cf x 40.0% Voids
#2A	226.00'	1,562 cf	**ADS_StormTech SC-740 +Cap** x 34 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 34 Chambers in 2 Rows
		3,954 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	225.80'	**12.0" Round Culvert X 2.00** L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 225.80' / 225.10' S= 0.0090 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.00'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Device 1	225.90'	**4.0" Vert. Orifice/Grate X 4.00** C= 0.600

Primary OutFlow Max=2.26 cfs @ 12.22 hrs HW=228.34' TW=226.54' (Dynamic Tailwater)
└─**1=Culvert** (Passes 2.26 cfs of 8.51 cfs potential flow)
  ├─**2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
  └─**3=Orifice/Grate** (Orifice Controls 2.26 cfs @ 6.46 fps)

Pond 2P: Extra Storage - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

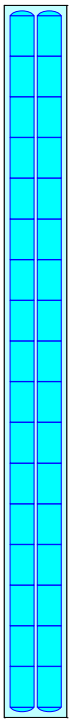
17 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 122.66' Row Length +12.0" End Stone x 2 = 124.66' Base Length
2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width
6.0" Base + 30.0" Chamber Height + 30.0" Cover = 5.50' Field Height

34 Chambers x 45.9 cf = 1,562.0 cf Chamber Storage

7,541.7 cf Field - 1,562.0 cf Chambers = 5,979.8 cf Stone x 40.0% Voids = 2,391.9 cf Stone Storage

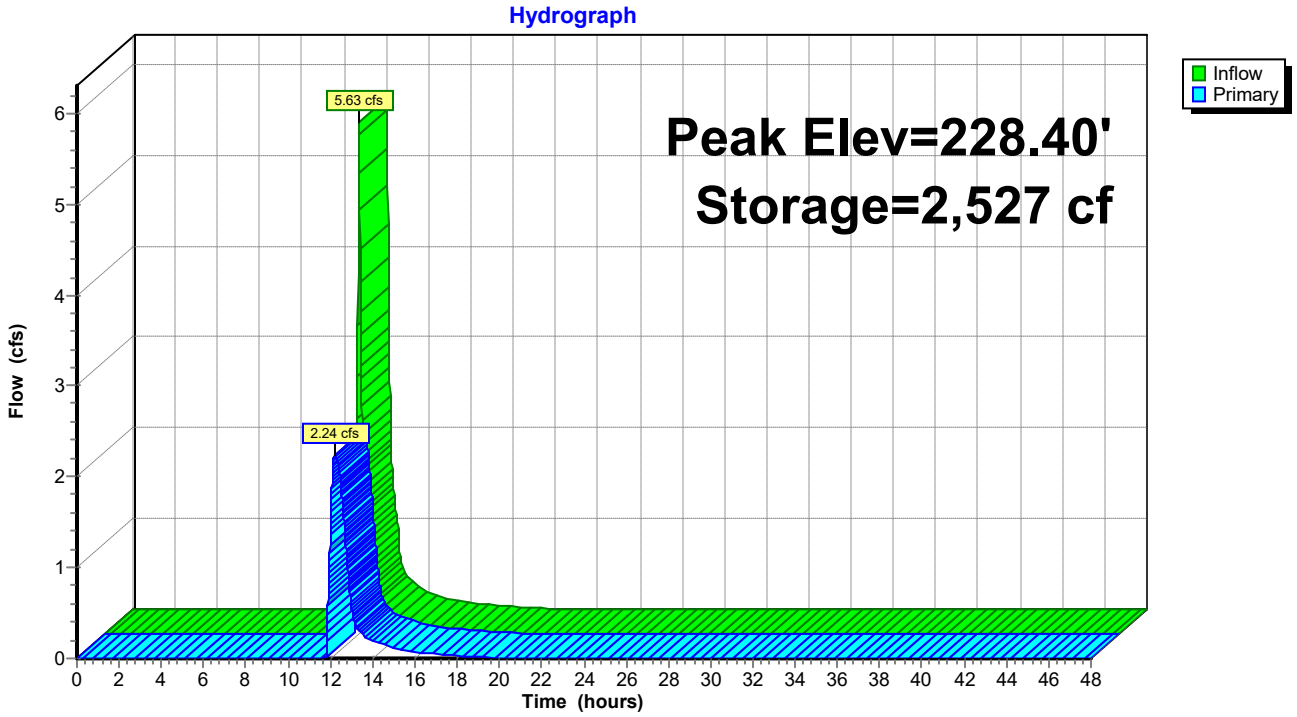
Chamber Storage + Stone Storage = 3,953.9 cf = 0.091 af
Overall Storage Efficiency = 52.4%
Overall System Size = 124.66' x 11.00' x 5.50'

34 Chambers
279.3 cy Field
221.5 cy Stone





Pond 2P: Extra Storage



Summary for Pond 3P: DMH

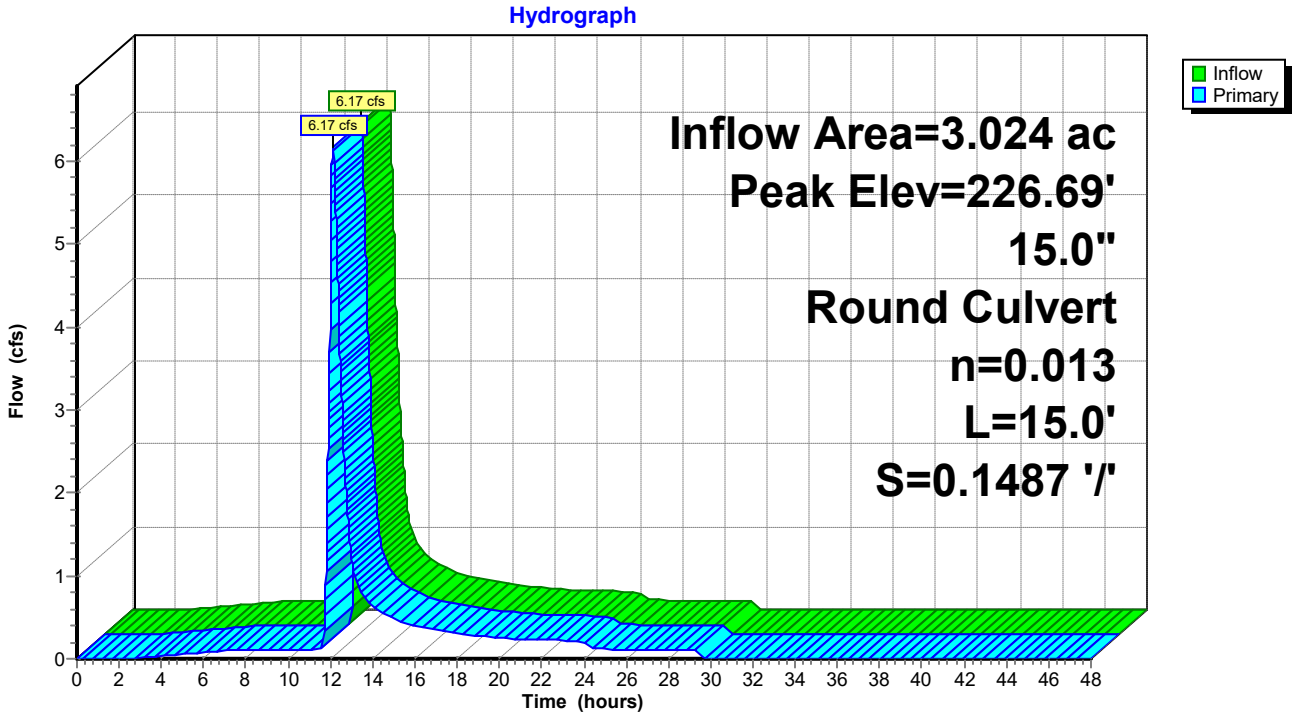
Inflow Area = 3.024 ac, 79.62% Impervious, Inflow Depth = 3.12" for 10-yr event
Inflow = 6.17 cfs @ 12.12 hrs, Volume= 0.786 af
Outflow = 6.17 cfs @ 12.12 hrs, Volume= 0.786 af, Atten= 0%, Lag= 0.0 min
Primary = 6.17 cfs @ 12.12 hrs, Volume= 0.786 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 226.69' @ 12.12 hrs
Flood Elev= 231.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.98'	**15.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 224.98' / 222.75' S= 0.1487 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=6.17 cfs @ 12.12 hrs HW=226.69' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 6.17 cfs @ 5.02 fps)

Pond 3P: DMH



Summary for Pond GUSF1: Soil Filter

Inflow Area = 0.414 ac, 58.42% Impervious, Inflow Depth = 3.14" for 10-yr event
Inflow = 1.49 cfs @ 12.03 hrs, Volume= 0.108 af
Outflow = 0.04 cfs @ 18.24 hrs, Volume= 0.016 af, Atten= 97%, Lag= 372.5 min
Primary = 0.04 cfs @ 18.24 hrs, Volume= 0.016 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.51' @ 18.24 hrs Surf.Area= 3,355 sf Storage= 4,030 cf
Flood Elev= 234.00' Surf.Area= 3,800 sf Storage= 5,800 cf

Plug-Flow detention time= 688.8 min calculated for 0.016 af (15% of inflow)
Center-of-Mass det. time= 431.4 min (1,248.7 - 817.3)

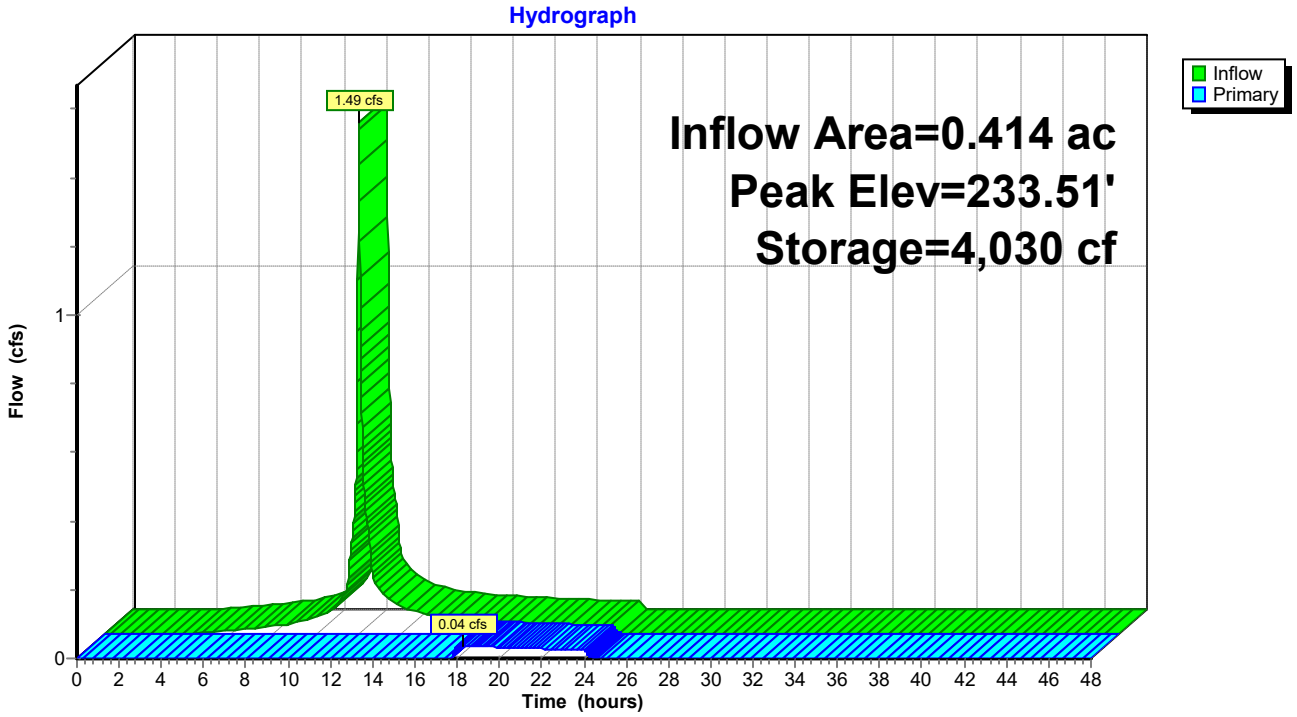
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	10,200 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	2,000	0	0
233.00	2,900	2,450	2,450
234.00	3,800	3,350	5,800
235.00	5,000	4,400	10,200

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 86.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 229.00' S= 0.0020 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.04 cfs @ 18.24 hrs HW=233.51' TW=0.00' (Dynamic Tailwater)
↑**2=Culvert** (Passes 0.04 cfs of 5.76 cfs potential flow)
↑**1=Orifice/Grate** (Weir Controls 0.04 cfs @ 0.24 fps)

Pond GUSF1: Soil Filter



Summary for Pond GUSF2: Soil Filter

Inflow Area = 1.586 ac, 79.43% Impervious, Inflow Depth = 3.65" for 10-yr event
Inflow = 6.40 cfs @ 12.03 hrs, Volume= 0.482 af
Outflow = 4.02 cfs @ 12.09 hrs, Volume= 0.354 af, Atten= 37%, Lag= 3.9 min
Primary = 4.02 cfs @ 12.09 hrs, Volume= 0.354 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.81' @ 12.09 hrs Surf.Area= 4,699 sf Storage= 6,998 cf
Flood Elev= 234.00' Surf.Area= 4,870 sf Storage= 7,910 cf

Plug-Flow detention time= 195.7 min calculated for 0.354 af (73% of inflow)
Center-of-Mass det. time= 85.8 min (876.4 - 790.6)

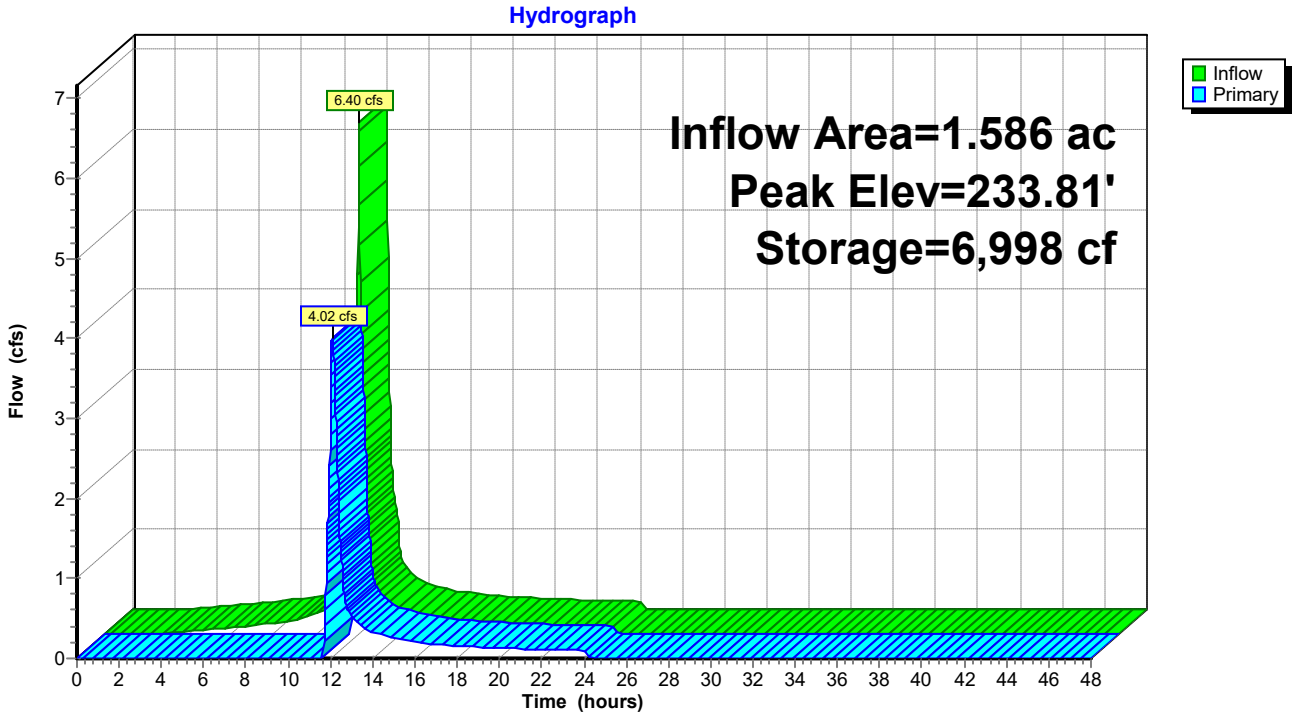
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	13,595 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	3,000	0	0
233.00	3,975	3,488	3,488
234.00	4,870	4,423	7,910
235.00	6,500	5,685	13,595

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 140.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 227.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.02 cfs @ 12.09 hrs HW=233.81' TW=226.67' (Dynamic Tailwater)
↑**2=Culvert** (Passes 4.02 cfs of 6.26 cfs potential flow)
↑**1=Orifice/Grate** (Orifice Controls 4.02 cfs @ 2.68 fps)

Pond GUSF2: Soil Filter



Summary for Pond SSF1: Sand Filter

Inflow Area = 1.438 ac, 79.82% Impervious, Inflow Depth = 3.65" for 10-yr event
Inflow = 5.80 cfs @ 12.03 hrs, Volume= 0.437 af
Outflow = 5.75 cfs @ 12.03 hrs, Volume= 0.437 af, Atten= 1%, Lag= 0.4 min
Primary = 0.11 cfs @ 8.31 hrs, Volume= 0.230 af
Secondary = 5.63 cfs @ 12.03 hrs, Volume= 0.207 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 230.77' @ 12.03 hrs Surf.Area= 2,257 sf Storage= 2,651 cf
Flood Elev= 231.00' Surf.Area= 2,257 sf Storage= 2,855 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 118.6 min (909.2 - 790.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	228.67'	1,605 cf	**18.17'W x 124.24'L x 2.33'H Field A** 5,266 cf Overall - 1,253 cf Embedded = 4,013 cf x 40.0% Voids
#2A	229.17'	1,253 cf	**ADS_StormTech SC-310 +Cap** x 85 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 85 Chambers in 5 Rows
		2,858 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Secondary	229.17'	**12.0" Round Culvert X 2.00** L= 9.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 228.90' S= 0.0300 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.50'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Primary	228.67'	**2.200 in/hr Exfiltration over Surface area**

Primary OutFlow Max=0.11 cfs @ 8.31 hrs HW=228.69' TW=225.13' (Dynamic Tailwater)
└**3=Exfiltration** (Exfiltration Controls 0.11 cfs)

Secondary OutFlow Max=5.62 cfs @ 12.03 hrs HW=230.77' TW=227.31' (Dynamic Tailwater)
└**1=Culvert** (Passes 5.62 cfs of 7.94 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 5.62 cfs @ 1.71 fps)

Pond SSF1: Sand Filter - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

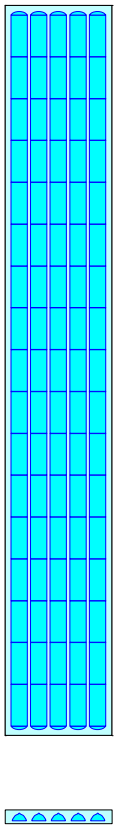
17 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 122.24' Row Length +12.0" End Stone x 2 = 124.24' Base Length
5 Rows x 34.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 18.17' Base Width
6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

85 Chambers x 14.7 cf = 1,253.1 cf Chamber Storage

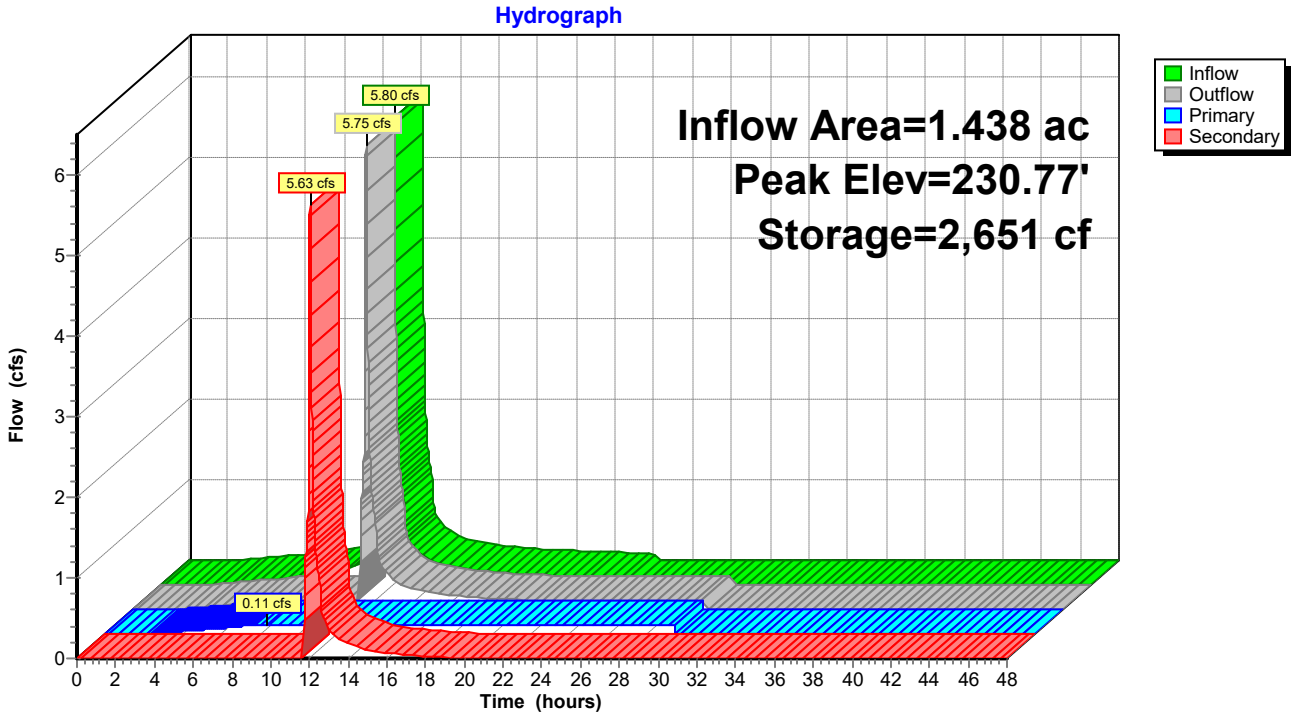
5,266.4 cf Field - 1,253.1 cf Chambers = 4,013.3 cf Stone x 40.0% Voids = 1,605.3 cf Stone Storage

Chamber Storage + Stone Storage = 2,858.4 cf = 0.066 af
Overall Storage Efficiency = 54.3%
Overall System Size = 124.24' x 18.17' x 2.33'

85 Chambers
195.1 cy Field
148.6 cy Stone



Pond SSF1: Sand Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Rear Paved Runoff Area=31,476 sf 0.00% Impervious Runoff Depth=3.99"
Tc=5.0 min CN=86 Runoff=3.25 cfs 0.240 af

Subcatchment 2S: Storage Building Area Runoff Area=106,131 sf 74.22% Impervious Runoff Depth=4.42"
Tc=5.0 min CN=90 Runoff=11.87 cfs 0.897 af

Subcatchment 3S: To GUSF1 Runoff Area=18,025 sf 58.42% Impervious Runoff Depth=4.20"
Tc=5.0 min CN=88 Runoff=1.94 cfs 0.145 af

Subcatchment 4S: To GUSF2 Runoff Area=69,088 sf 79.43% Impervious Runoff Depth=4.75"
Tc=5.0 min CN=93 Runoff=8.10 cfs 0.628 af

Subcatchment 5S: Treated Parking Lot Runoff Area=62,654 sf 79.82% Impervious Runoff Depth=4.75"
Tc=5.0 min CN=93 Runoff=7.35 cfs 0.569 af

Subcatchment 6S: Off-Site to Pond Runoff Area=33,300 sf 16.56% Impervious Runoff Depth=2.82"
Tc=5.0 min CN=74 Runoff=2.46 cfs 0.180 af

Subcatchment 7S: No Treat Parking Lot Runoff Area=54,784 sf 72.59% Impervious Runoff Depth=4.64"
Tc=5.0 min CN=92 Runoff=6.33 cfs 0.486 af

Subcatchment 8S: No Treat to Stream Runoff Area=58,456 sf 8.05% Impervious Runoff Depth=3.00"
Flow Length=610' Tc=7.7 min CN=76 Runoff=4.03 cfs 0.336 af

Reach SP1: Stream Inlet Inflow=10.44 cfs 1.267 af
Outflow=10.44 cfs 1.267 af

Reach SP2: Center Street CB Inflow=12.79 cfs 1.550 af
Outflow=12.79 cfs 1.550 af

Pond 1P: Wet Pond Full Peak Elev=236.44' Storage=23,848 cf Inflow=17.58 cfs 1.317 af
Outflow=7.64 cfs 0.878 af

Pond 2P: Extra Storage Peak Elev=230.08' Storage=3,447 cf Inflow=7.18 cfs 0.324 af
Outflow=3.49 cfs 0.319 af

Pond 3P: DMH Peak Elev=227.59' Inflow=8.32 cfs 1.064 af
15.0" Round Culvert n=0.013 L=15.0' S=0.1487 '/' Outflow=8.32 cfs 1.064 af

Pond GUSF1: Soil Filter Peak Elev=233.51' Storage=4,056 cf Inflow=1.94 cfs 0.145 af
Outflow=0.14 cfs 0.053 af

Pond GUSF2: Soil Filter Peak Elev=233.94' Storage=7,603 cf Inflow=8.10 cfs 0.628 af
Outflow=4.77 cfs 0.499 af

Pond SSF1: Sand Filter Peak Elev=230.82' Storage=2,695 cf Inflow=7.35 cfs 0.569 af
Primary=0.11 cfs 0.245 af Secondary=7.18 cfs 0.324 af Outflow=7.29 cfs 0.569 af

Total Runoff Area = 9.961 ac Runoff Volume = 3.481 af Average Runoff Depth = 4.19"
43.73% Pervious = 4.356 ac 56.27% Impervious = 5.606 ac

Summary for Subcatchment 1S: Rear Paved Area/Building

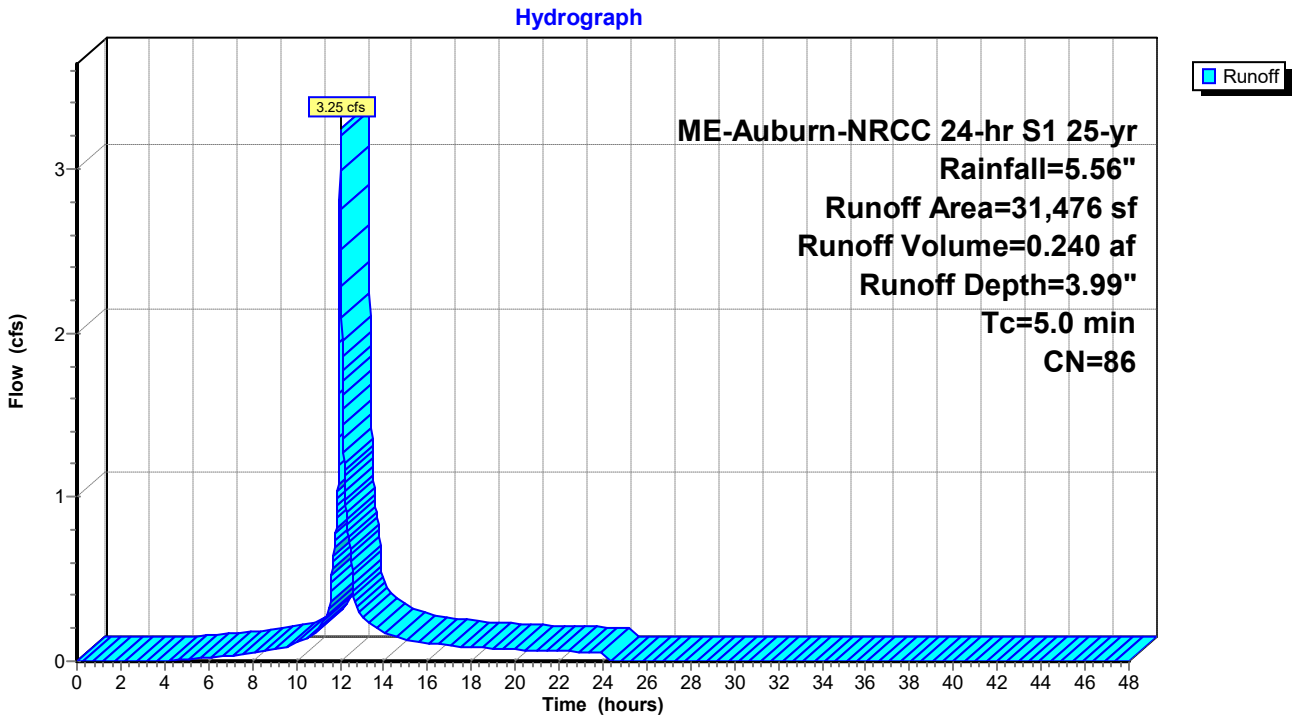
Runoff = 3.25 cfs @ 12.03 hrs, Volume= 0.240 af, Depth= 3.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
	13,645	74	>75% Grass cover, Good, HSG C
*	17,831	96	Gravel
	31,476	86	Weighted Average
	31,476		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Rear Paved Area/Building



Summary for Subcatchment 2S: Storage Building Area

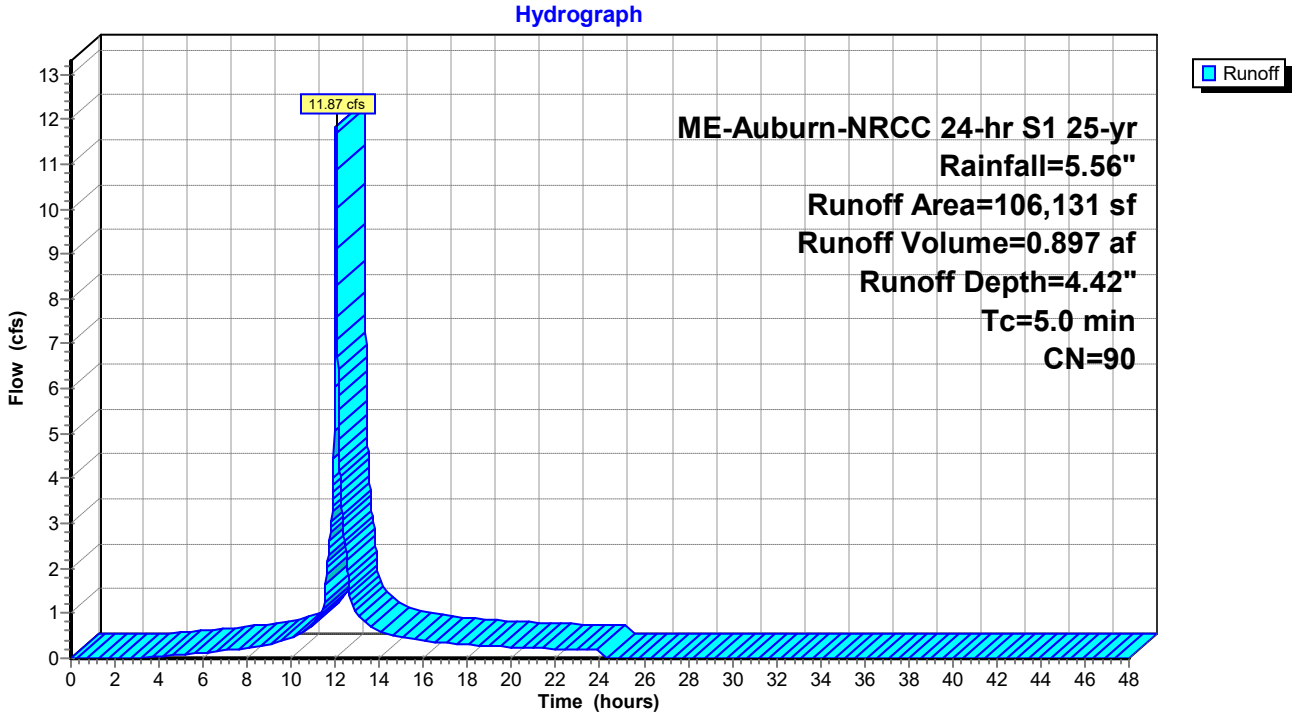
Runoff = 11.87 cfs @ 12.03 hrs, Volume= 0.897 af, Depth= 4.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	78,774	98	Impervious
	13,470	74	>75% Grass cover, Good, HSG C
	13,887	61	>75% Grass cover, Good, HSG B
	106,131	90	Weighted Average
	27,357		25.78% Pervious Area
	78,774		74.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Storage Building Area



Summary for Subcatchment 3S: To GUSF1

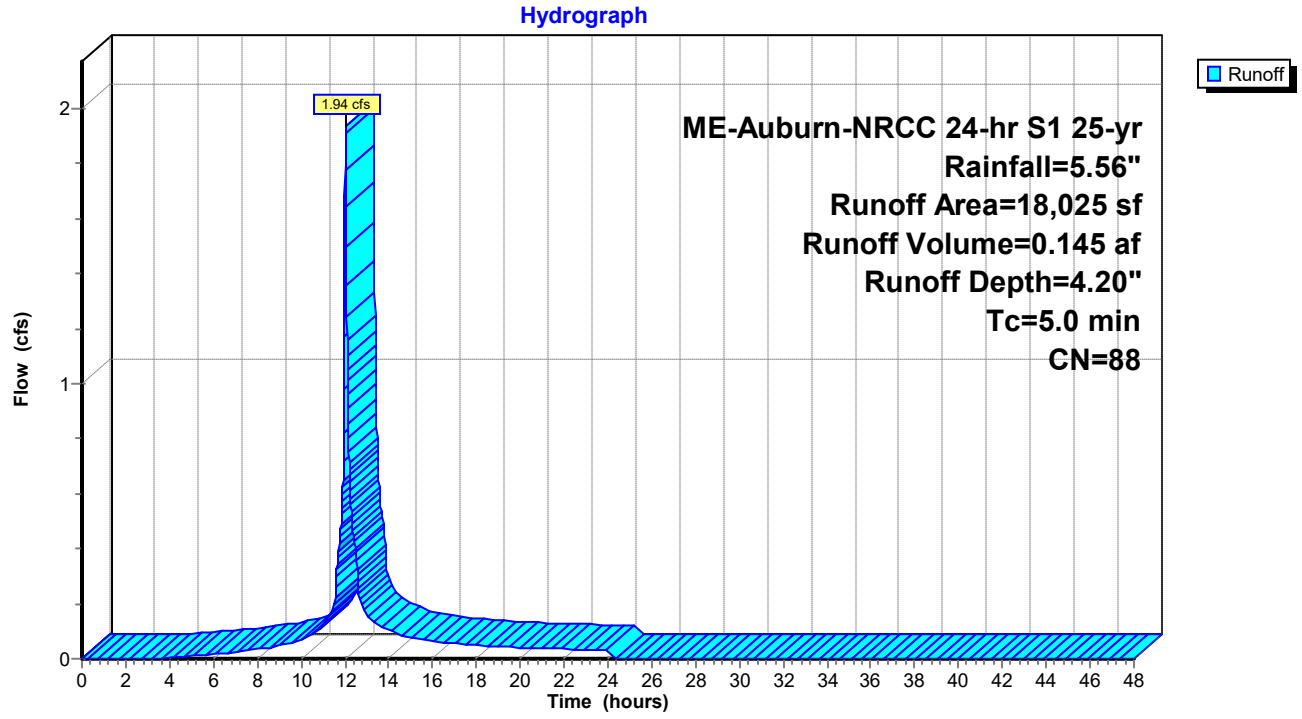
Runoff = 1.94 cfs @ 12.03 hrs, Volume= 0.145 af, Depth= 4.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

Area (sf)	CN	Description
10,530	98	Paved parking, HSG C
7,495	74	>75% Grass cover, Good, HSG C
18,025	88	Weighted Average
7,495		41.58% Pervious Area
10,530		58.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: To GUSF1



Summary for Subcatchment 4S: To GUSF2

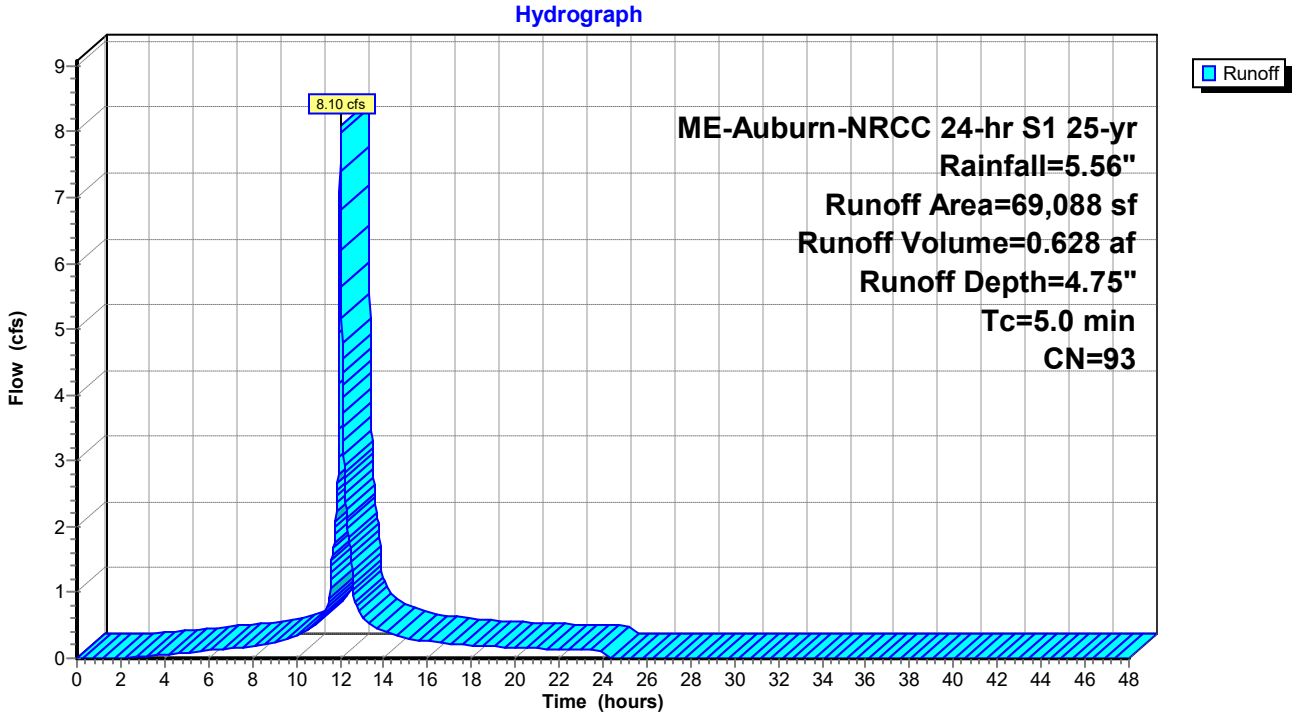
Runoff = 8.10 cfs @ 12.03 hrs, Volume= 0.628 af, Depth= 4.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	53,245	98	Impervious
	14,211	74	>75% Grass cover, Good, HSG C
*	1,632	98	Impervious
	69,088	93	Weighted Average
	14,211		20.57% Pervious Area
	54,877		79.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: To GUSF2



Summary for Subcatchment 5S: Treated Parking Lot

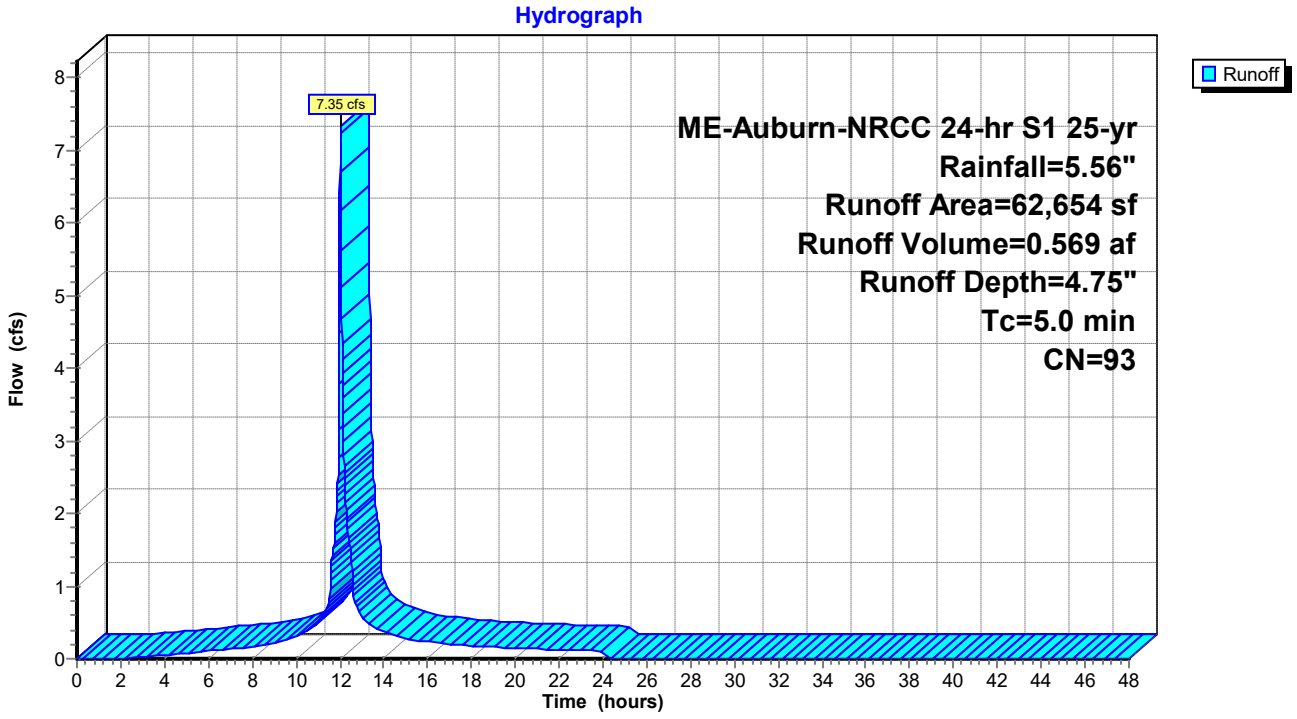
Runoff = 7.35 cfs @ 12.03 hrs, Volume= 0.569 af, Depth= 4.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
	12,643	74	>75% Grass cover, Good, HSG C
*	50,011	98	Impervious
	62,654	93	Weighted Average
	12,643		20.18% Pervious Area
	50,011		79.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Treated Parking Lot



Summary for Subcatchment 6S: Off-Site to Pond

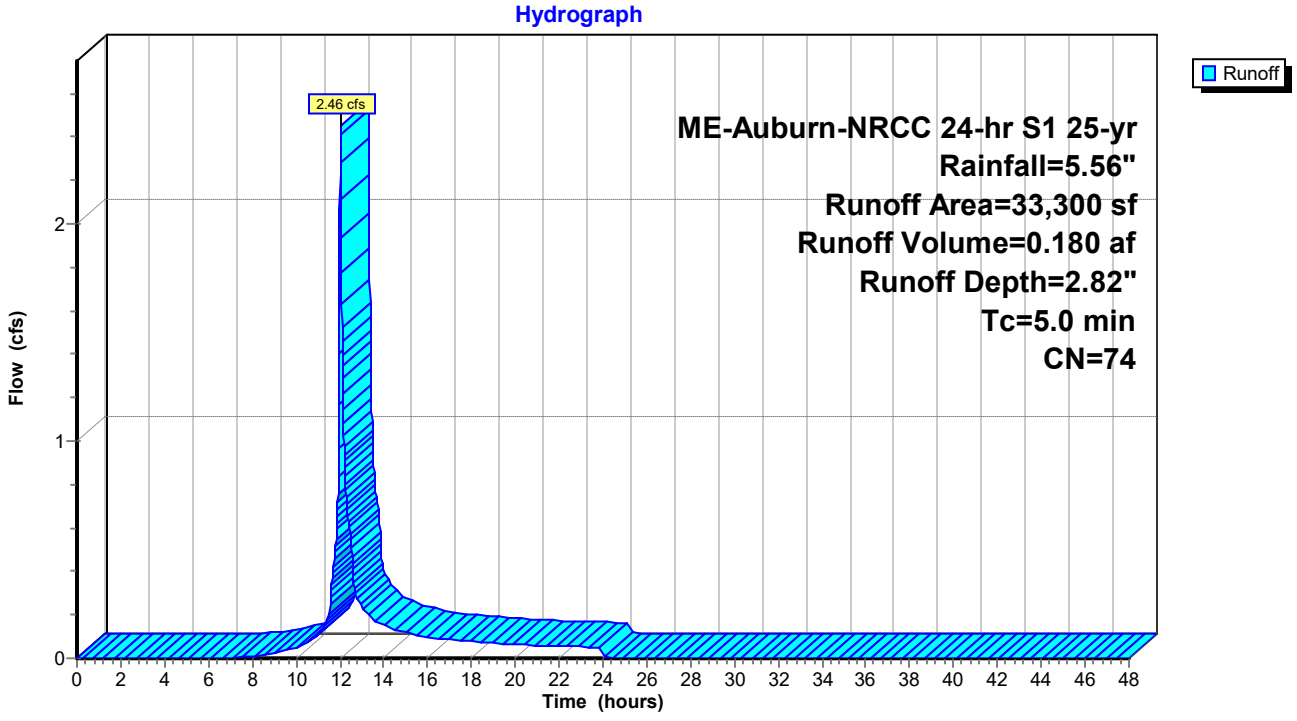
Runoff = 2.46 cfs @ 12.03 hrs, Volume= 0.180 af, Depth= 2.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	5,516	98	Impervious
	11,046	61	>75% Grass cover, Good, HSG B
	16,738	74	>75% Grass cover, Good, HSG C
	33,300	74	Weighted Average
	27,784		83.44% Pervious Area
	5,516		16.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Off-Site to Pond



Summary for Subcatchment 7S: No Treat Parking Lot

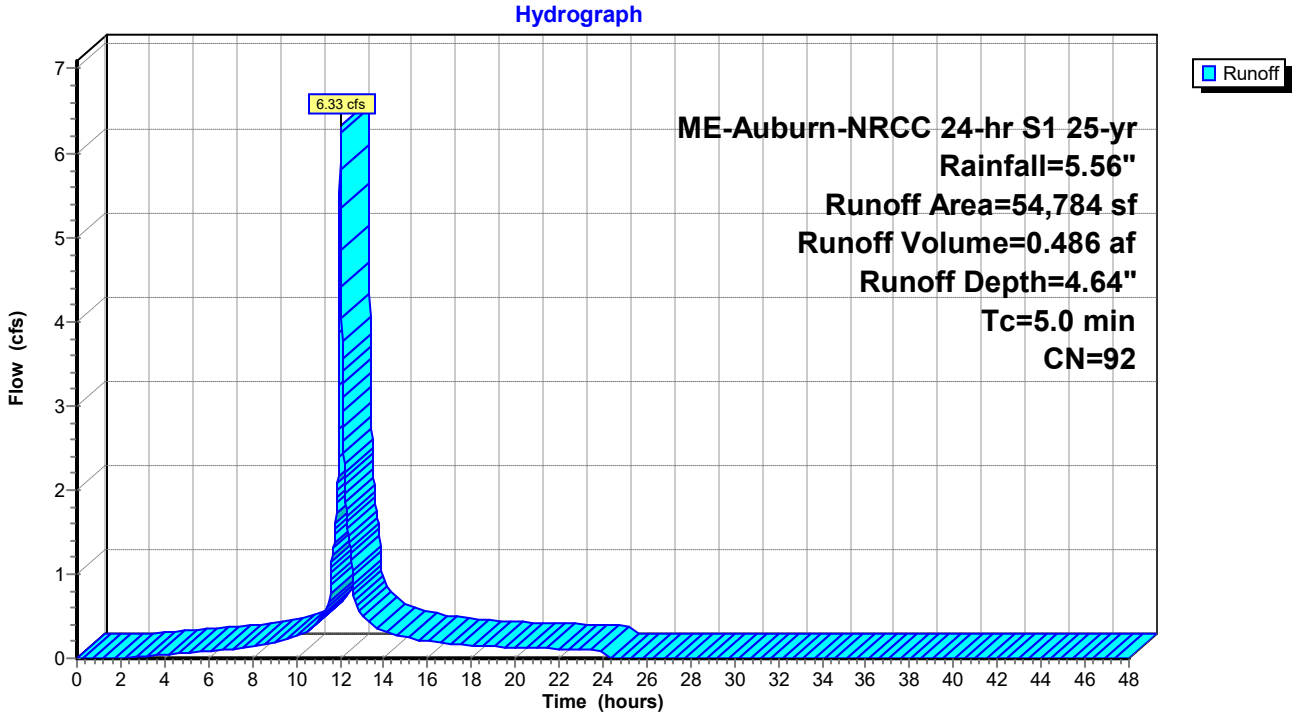
Runoff = 6.33 cfs @ 12.03 hrs, Volume= 0.486 af, Depth= 4.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

	Area (sf)	CN	Description
*	39,768	98	Impervious
	14,306	74	>75% Grass cover, Good, HSG C
*	710	96	Gravel
	54,784	92	Weighted Average
	15,016		27.41% Pervious Area
	39,768		72.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: No Treat Parking Lot



Summary for Subcatchment 8S: No Treat to Stream

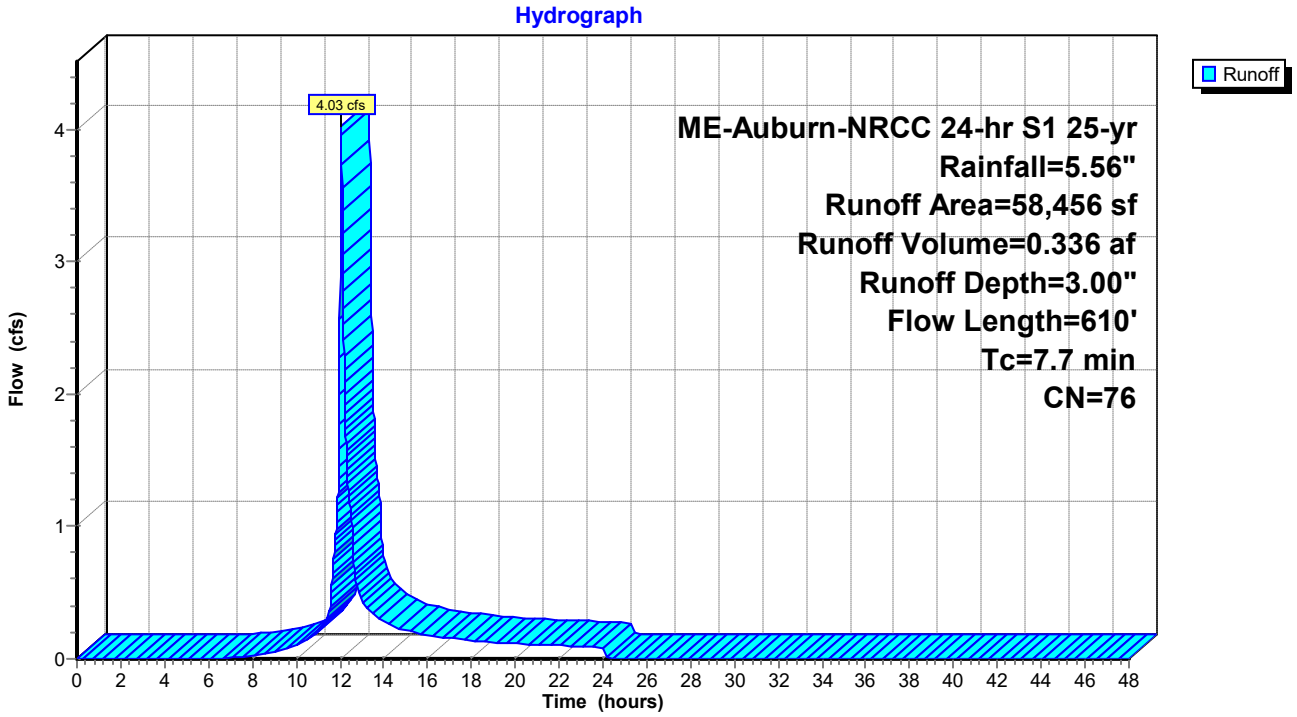
Runoff = 4.03 cfs @ 12.06 hrs, Volume= 0.336 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
ME-Auburn-NRCC 24-hr S1 25-yr Rainfall=5.56"

Area (sf)	CN	Description
4,705	98	Paved parking, HSG C
53,751	74	>75% Grass cover, Good, HSG C
58,456	76	Weighted Average
53,751		91.95% Pervious Area
4,705		8.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	65	0.2000	0.38		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.01"
4.9	545	0.0150	1.84		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
7.7	610	Total			

Subcatchment 8S: No Treat to Stream

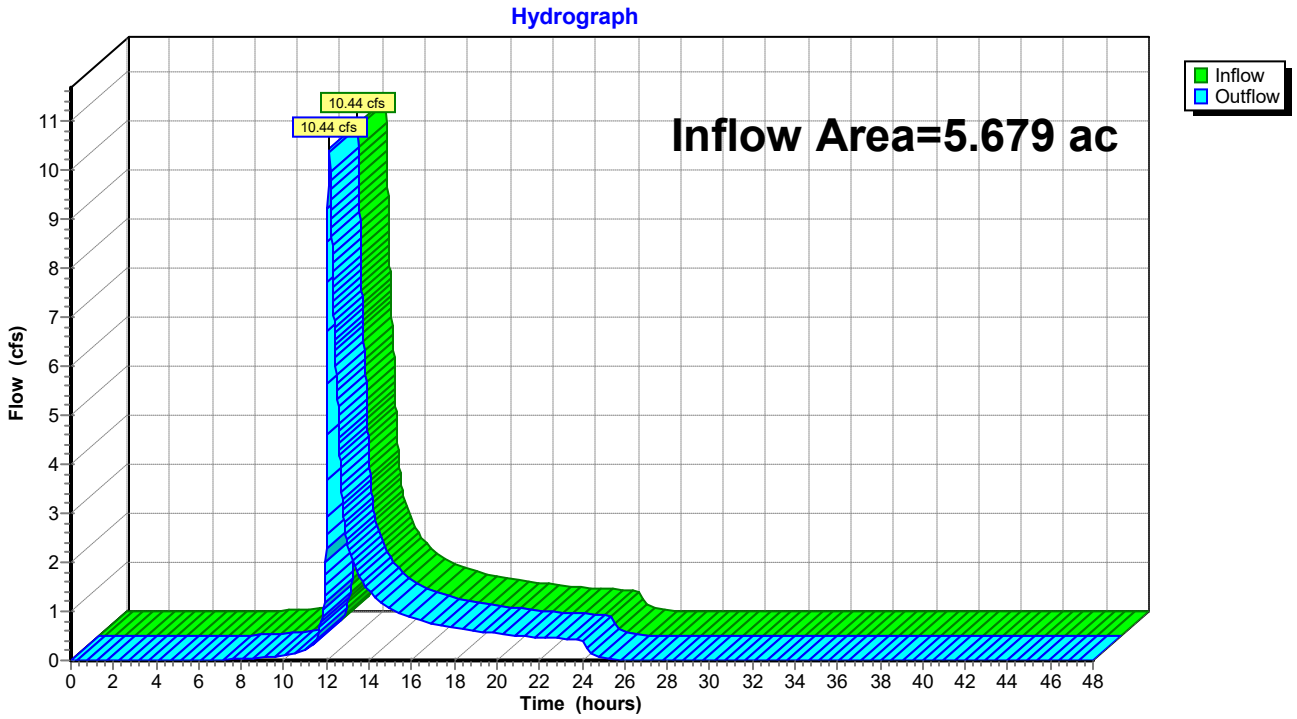


Summary for Reach SP1: Stream Inlet

Inflow Area = 5.679 ac, 40.23% Impervious, Inflow Depth = 2.68" for 25-yr event
Inflow = 10.44 cfs @ 12.13 hrs, Volume= 1.267 af
Outflow = 10.44 cfs @ 12.13 hrs, Volume= 1.267 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP1: Stream Inlet

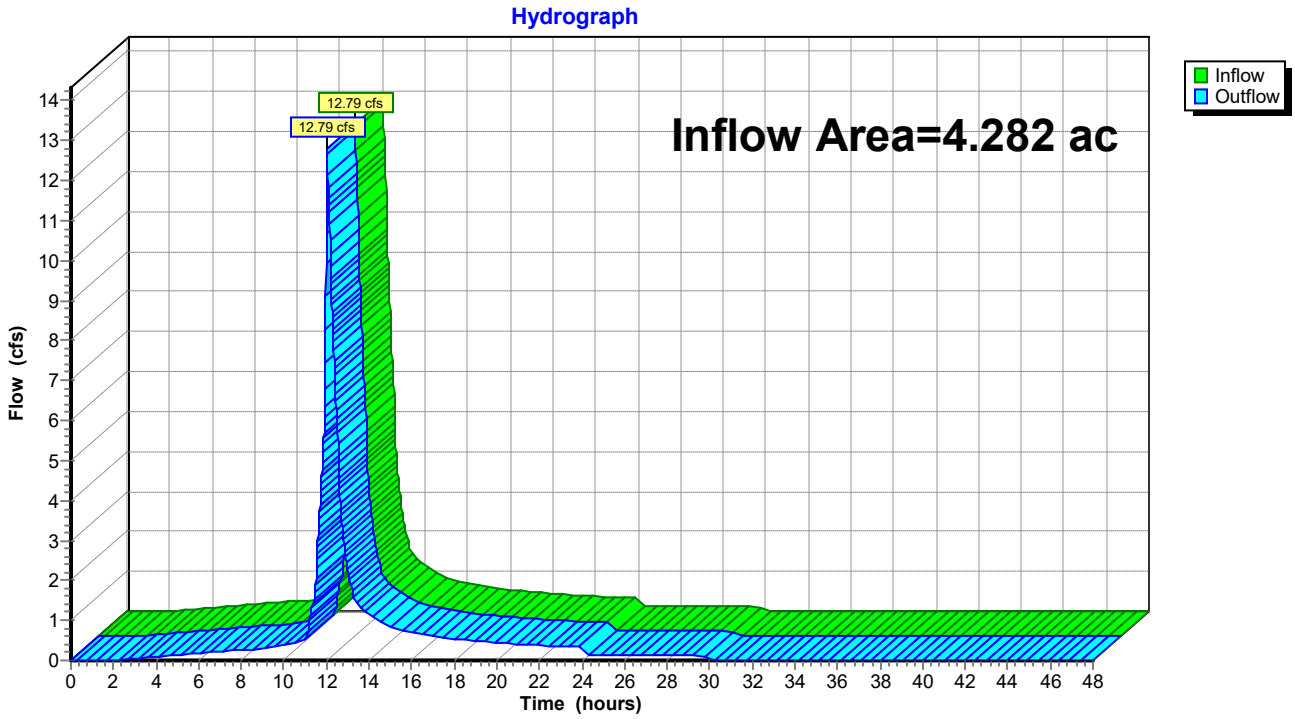


Summary for Reach SP2: Center Street CB

Inflow Area = 4.282 ac, 77.55% Impervious, Inflow Depth = 4.34" for 25-yr event
Inflow = 12.79 cfs @ 12.04 hrs, Volume= 1.550 af
Outflow = 12.79 cfs @ 12.04 hrs, Volume= 1.550 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach SP2: Center Street CB



Summary for Pond 1P: Wet Pond Full

Inflow Area = 3.923 ac, 49.32% Impervious, Inflow Depth = 4.03" for 25-yr event
Inflow = 17.58 cfs @ 12.03 hrs, Volume= 1.317 af
Outflow = 7.64 cfs @ 12.16 hrs, Volume= 0.878 af, Atten= 57%, Lag= 8.2 min
Primary = 7.64 cfs @ 12.16 hrs, Volume= 0.878 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 236.44' @ 12.16 hrs Surf.Area= 10,999 sf Storage= 23,848 cf

Plug-Flow detention time= 234.2 min calculated for 0.878 af (67% of inflow)
Center-of-Mass det. time= 110.6 min (918.9 - 808.3)

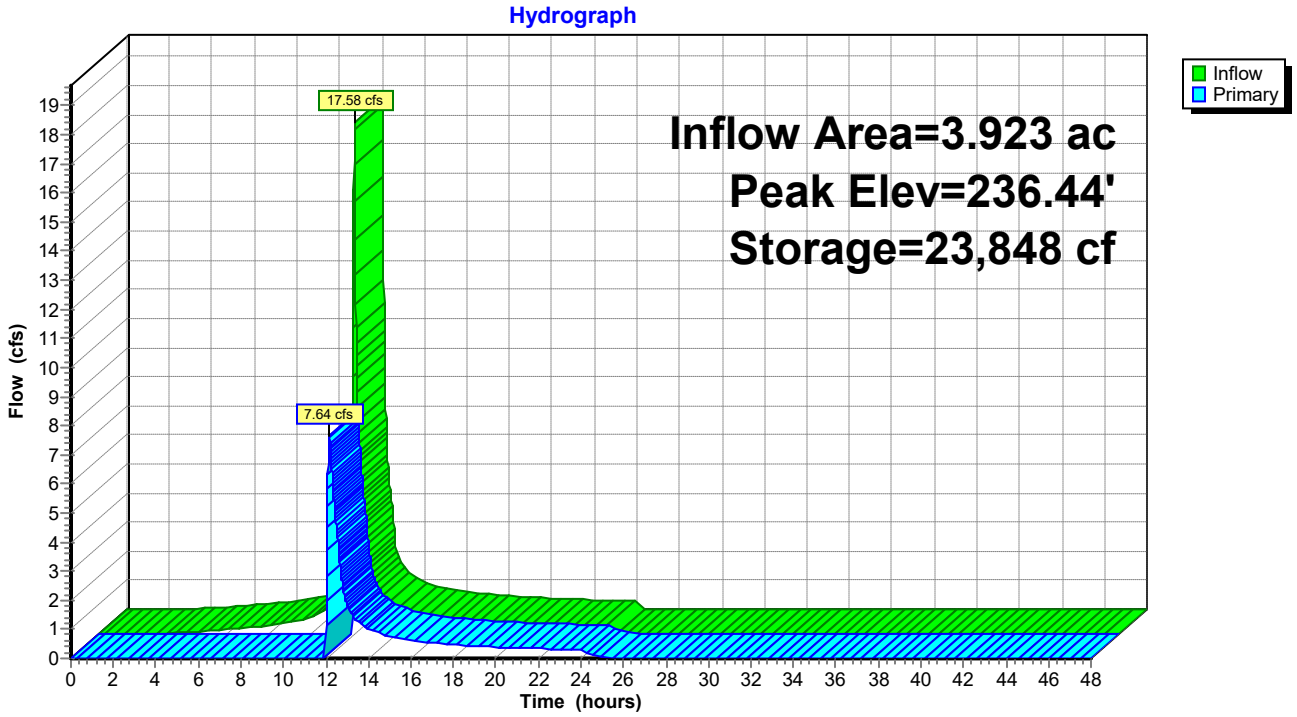
Volume	Invert	Avail.Storage	Storage Description
#1	234.00'	36,205 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
234.00	8,533	0	0
235.00	9,585	9,059	9,059
236.00	10,550	10,068	19,127
237.00	11,575	11,063	30,189
237.50	12,488	6,016	36,205

Device	Routing	Invert	Outlet Devices
#1	Primary	236.00'	**10.0' long x 12.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=7.64 cfs @ 12.16 hrs HW=236.44' TW=0.00' (Dynamic Tailwater)
↑**1=Broad-Crested Rectangular Weir** (Weir Controls 7.64 cfs @ 1.74 fps)

Pond 1P: Wet Pond Full



Summary for Pond 2P: Extra Storage

Inflow	=	7.18 cfs @	12.03 hrs,	Volume=	0.324 af
Outflow	=	3.49 cfs @	12.15 hrs,	Volume=	0.319 af, Atten= 51%, Lag= 6.8 min
Primary	=	3.49 cfs @	12.15 hrs,	Volume=	0.319 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 230.08' @ 12.15 hrs Surf.Area= 1,371 sf Storage= 3,447 cf
Flood Elev= 231.00' Surf.Area= 1,371 sf Storage= 3,954 cf

Plug-Flow detention time= 22.3 min calculated for 0.319 af (98% of inflow)
Center-of-Mass det. time= 14.5 min (793.0 - 778.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	225.50'	2,392 cf	**11.00'W x 124.66'L x 5.50'H Field A** 7,542 cf Overall - 1,562 cf Embedded = 5,980 cf x 40.0% Voids
#2A	226.00'	1,562 cf	**ADS_StormTech SC-740 +Cap** x 34 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 34 Chambers in 2 Rows
		3,954 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	225.80'	**12.0" Round Culvert X 2.00** L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 225.80' / 225.10' S= 0.0090 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.00'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Device 1	225.90'	**4.0" Vert. Orifice/Grate X 4.00** C= 0.600

Primary OutFlow Max=3.45 cfs @ 12.15 hrs HW=230.07' TW=227.57' (Dynamic Tailwater)
└─**1=Culvert** (Passes 3.45 cfs of 10.04 cfs potential flow)
  ├─**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.79 cfs @ 0.89 fps)
  └─**3=Orifice/Grate** (Orifice Controls 2.66 cfs @ 7.62 fps)

Pond 2P: Extra Storage - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

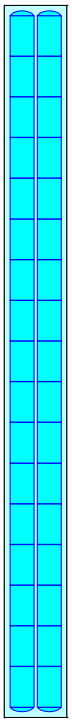
17 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 122.66' Row Length +12.0" End Stone x 2 = 124.66' Base Length
2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width
6.0" Base + 30.0" Chamber Height + 30.0" Cover = 5.50' Field Height

34 Chambers x 45.9 cf = 1,562.0 cf Chamber Storage

7,541.7 cf Field - 1,562.0 cf Chambers = 5,979.8 cf Stone x 40.0% Voids = 2,391.9 cf Stone Storage

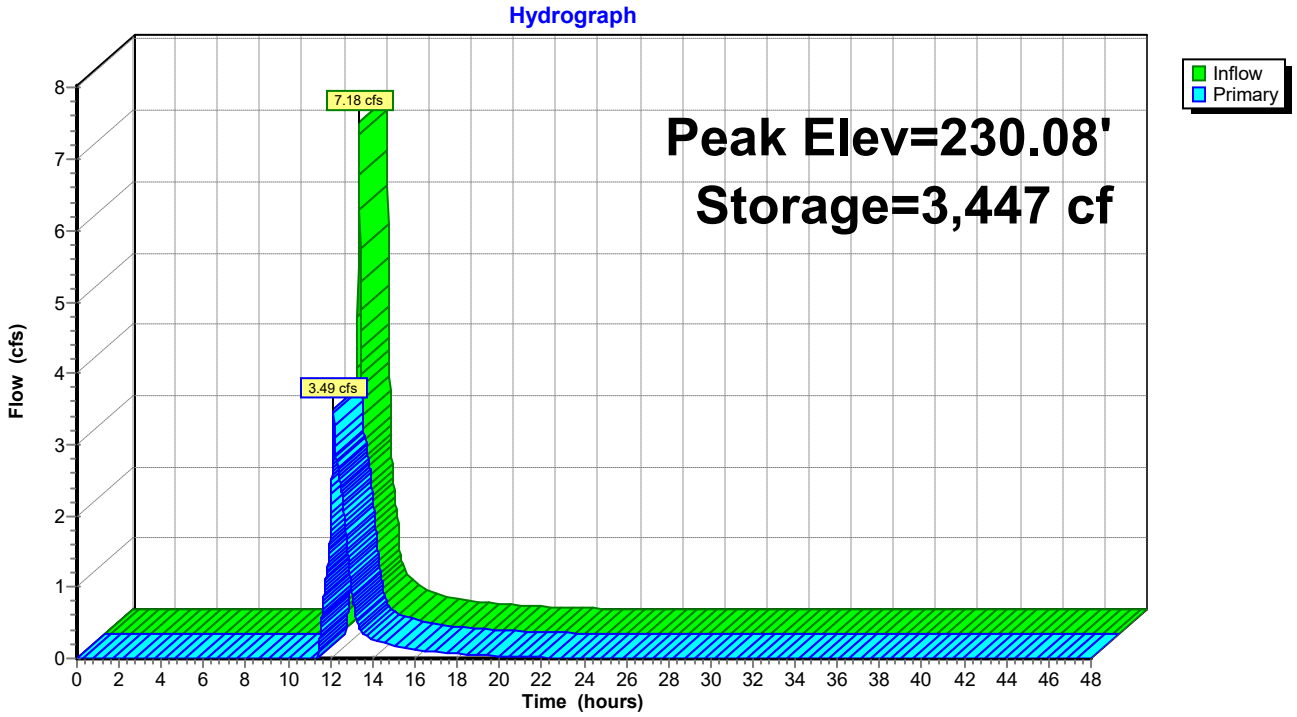
Chamber Storage + Stone Storage = 3,953.9 cf = 0.091 af
Overall Storage Efficiency = 52.4%
Overall System Size = 124.66' x 11.00' x 5.50'

34 Chambers
279.3 cy Field
221.5 cy Stone





Pond 2P: Extra Storage



Summary for Pond 3P: DMH

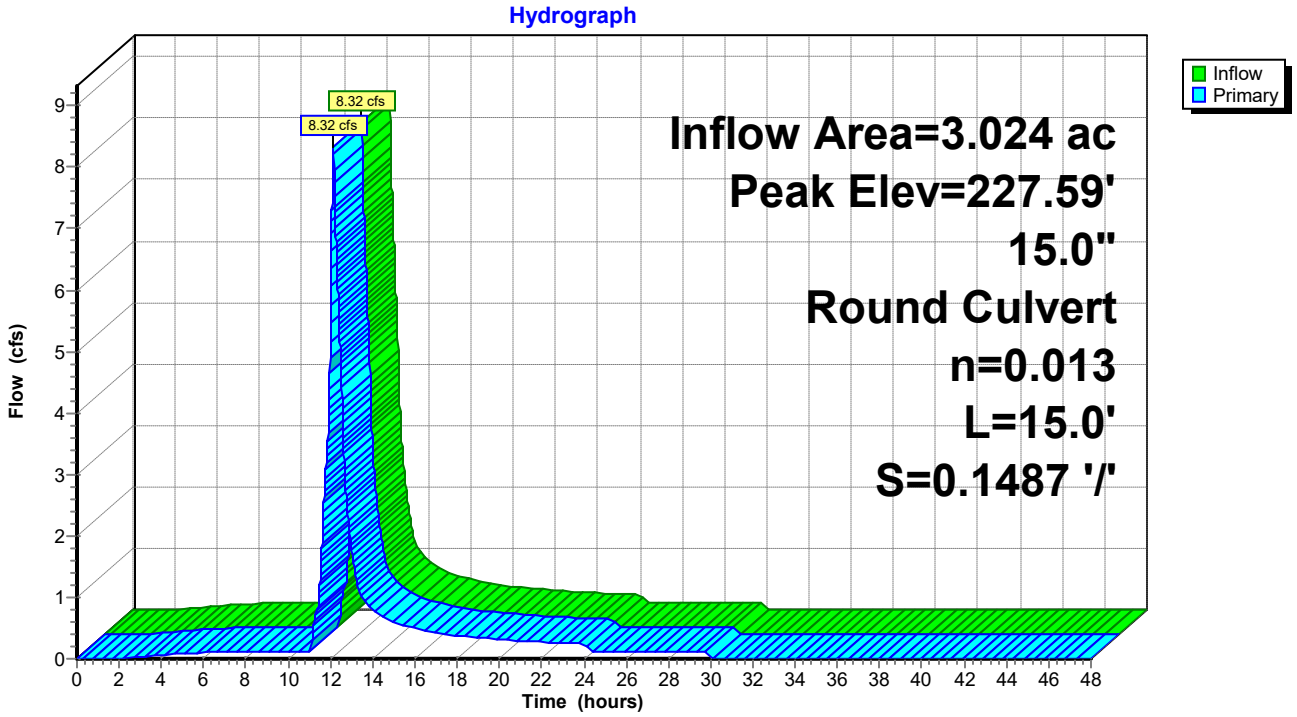
Inflow Area = 3.024 ac, 79.62% Impervious, Inflow Depth = 4.22" for 25-yr event
Inflow = 8.32 cfs @ 12.14 hrs, Volume= 1.064 af
Outflow = 8.32 cfs @ 12.14 hrs, Volume= 1.064 af, Atten= 0%, Lag= 0.0 min
Primary = 8.32 cfs @ 12.14 hrs, Volume= 1.064 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 227.59' @ 12.14 hrs
Flood Elev= 231.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.98'	**15.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 224.98' / 222.75' S= 0.1487 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=8.28 cfs @ 12.14 hrs HW=227.57' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 8.28 cfs @ 6.75 fps)

Pond 3P: DMH



Summary for Pond GUSF1: Soil Filter

Inflow Area = 0.414 ac, 58.42% Impervious, Inflow Depth = 4.20" for 25-yr event
Inflow = 1.94 cfs @ 12.03 hrs, Volume= 0.145 af
Outflow = 0.14 cfs @ 13.19 hrs, Volume= 0.053 af, Atten= 93%, Lag= 69.9 min
Primary = 0.14 cfs @ 13.19 hrs, Volume= 0.053 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.51' @ 13.19 hrs Surf.Area= 3,362 sf Storage= 4,056 cf
Flood Elev= 234.00' Surf.Area= 3,800 sf Storage= 5,800 cf

Plug-Flow detention time= 401.4 min calculated for 0.053 af (36% of inflow)
Center-of-Mass det. time= 229.3 min (1,035.3 - 806.1)

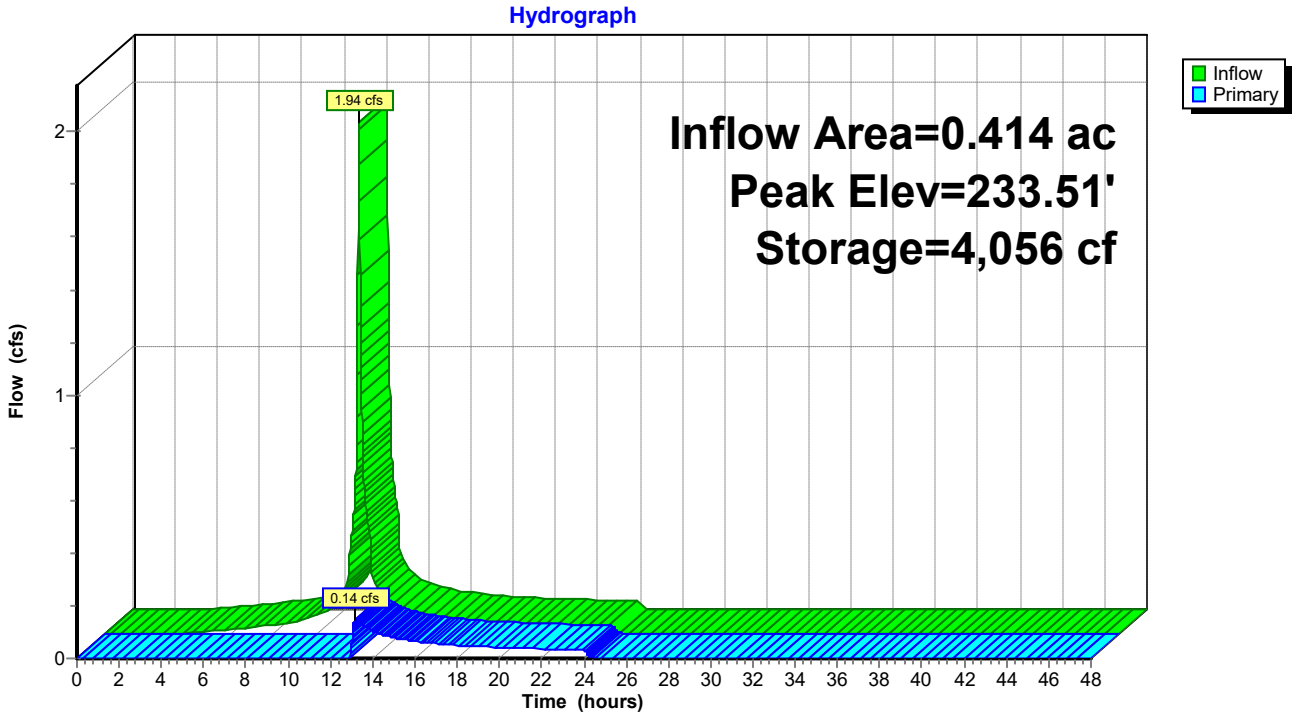
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	10,200 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	2,000	0	0
233.00	2,900	2,450	2,450
234.00	3,800	3,350	5,800
235.00	5,000	4,400	10,200

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 86.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 229.00' S= 0.0020 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.14 cfs @ 13.19 hrs HW=233.51' TW=0.00' (Dynamic Tailwater)
↑**2=Culvert** (Passes 0.14 cfs of 5.76 cfs potential flow)
↑**1=Orifice/Grate** (Weir Controls 0.14 cfs @ 0.37 fps)

Pond GUSF1: Soil Filter



Summary for Pond GUSF2: Soil Filter

Inflow Area = 1.586 ac, 79.43% Impervious, Inflow Depth = 4.75" for 25-yr event
Inflow = 8.10 cfs @ 12.03 hrs, Volume= 0.628 af
Outflow = 4.77 cfs @ 12.10 hrs, Volume= 0.499 af, Atten= 41%, Lag= 4.6 min
Primary = 4.77 cfs @ 12.10 hrs, Volume= 0.499 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.94' @ 12.10 hrs Surf.Area= 4,813 sf Storage= 7,603 cf
Flood Elev= 234.00' Surf.Area= 4,870 sf Storage= 7,910 cf

Plug-Flow detention time= 168.7 min calculated for 0.499 af (80% of inflow)
Center-of-Mass det. time= 74.9 min (856.6 - 781.7)

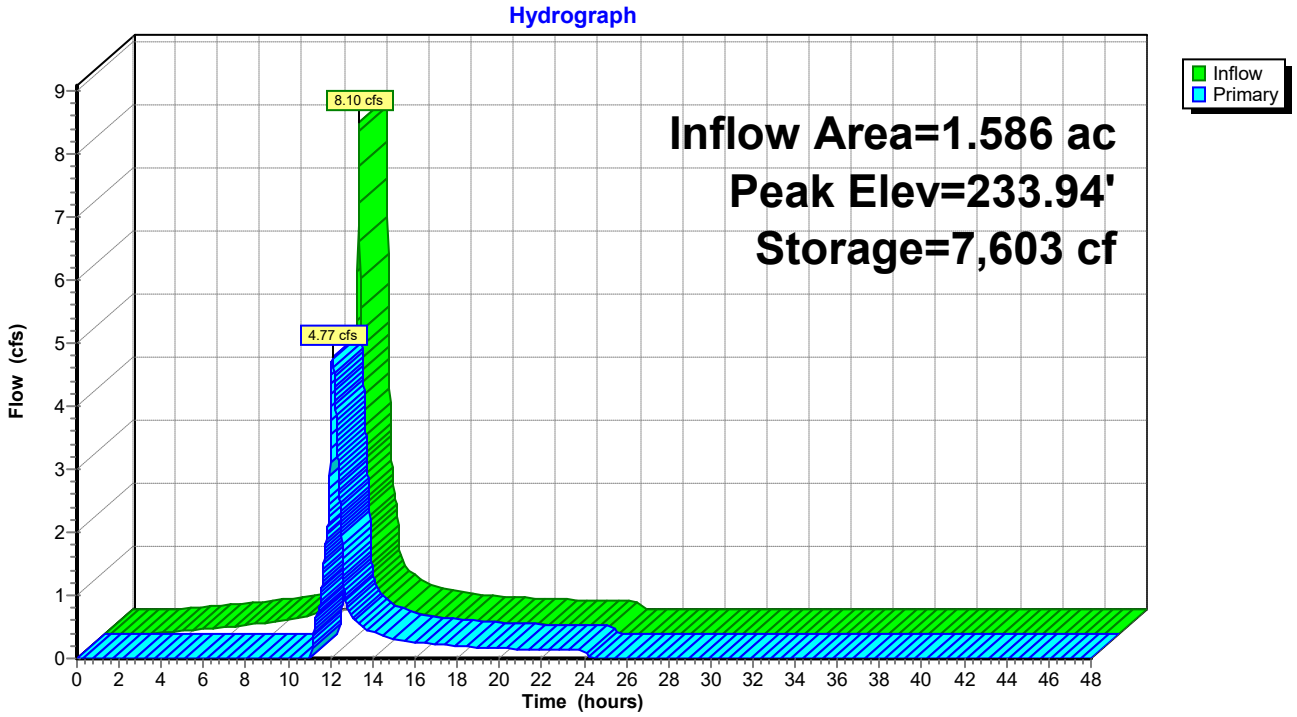
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	13,595 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	3,000	0	0
233.00	3,975	3,488	3,488
234.00	4,870	4,423	7,910
235.00	6,500	5,685	13,595

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 140.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 227.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.77 cfs @ 12.10 hrs HW=233.94' TW=227.25' (Dynamic Tailwater)
↑**2=Culvert** (Passes 4.77 cfs of 6.32 cfs potential flow)
↑**1=Orifice/Grate** (Orifice Controls 4.77 cfs @ 3.18 fps)

Pond GUSF2: Soil Filter



Summary for Pond SSF1: Sand Filter

Inflow Area = 1.438 ac, 79.82% Impervious, Inflow Depth = 4.75" for 25-yr event
Inflow = 7.35 cfs @ 12.03 hrs, Volume= 0.569 af
Outflow = 7.29 cfs @ 12.03 hrs, Volume= 0.569 af, Atten= 1%, Lag= 0.4 min
Primary = 0.11 cfs @ 6.96 hrs, Volume= 0.245 af
Secondary = 7.18 cfs @ 12.03 hrs, Volume= 0.324 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 230.82' @ 12.03 hrs Surf.Area= 2,257 sf Storage= 2,695 cf
Flood Elev= 231.00' Surf.Area= 2,257 sf Storage= 2,855 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 99.6 min (881.2 - 781.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	228.67'	1,605 cf	**18.17'W x 124.24'L x 2.33'H Field A** 5,266 cf Overall - 1,253 cf Embedded = 4,013 cf x 40.0% Voids
#2A	229.17'	1,253 cf	**ADS_StormTech SC-310 +Cap** x 85 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 85 Chambers in 5 Rows
		2,858 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Secondary	229.17'	**12.0" Round Culvert X 2.00** L= 9.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 228.90' S= 0.0300 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	230.50'	**6.0' long Sharp-Crested Vee/Trap Weir X 2.00** Cv= 2.62 (C= 3.28)
#3	Primary	228.67'	**2.200 in/hr Exfiltration over Surface area**

Primary OutFlow Max=0.11 cfs @ 6.96 hrs HW=228.69' TW=225.13' (Dynamic Tailwater)
└**3=Exfiltration** (Exfiltration Controls 0.11 cfs)

Secondary OutFlow Max=7.16 cfs @ 12.03 hrs HW=230.82' TW=228.22' (Dynamic Tailwater)
└**1=Culvert** (Passes 7.16 cfs of 8.12 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 7.16 cfs @ 1.86 fps)

Pond SSF1: Sand Filter - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

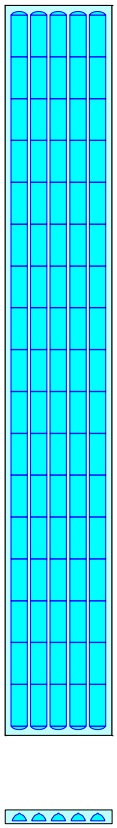
17 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 122.24' Row Length +12.0" End Stone x 2 = 124.24' Base Length
5 Rows x 34.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 18.17' Base Width
6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

85 Chambers x 14.7 cf = 1,253.1 cf Chamber Storage

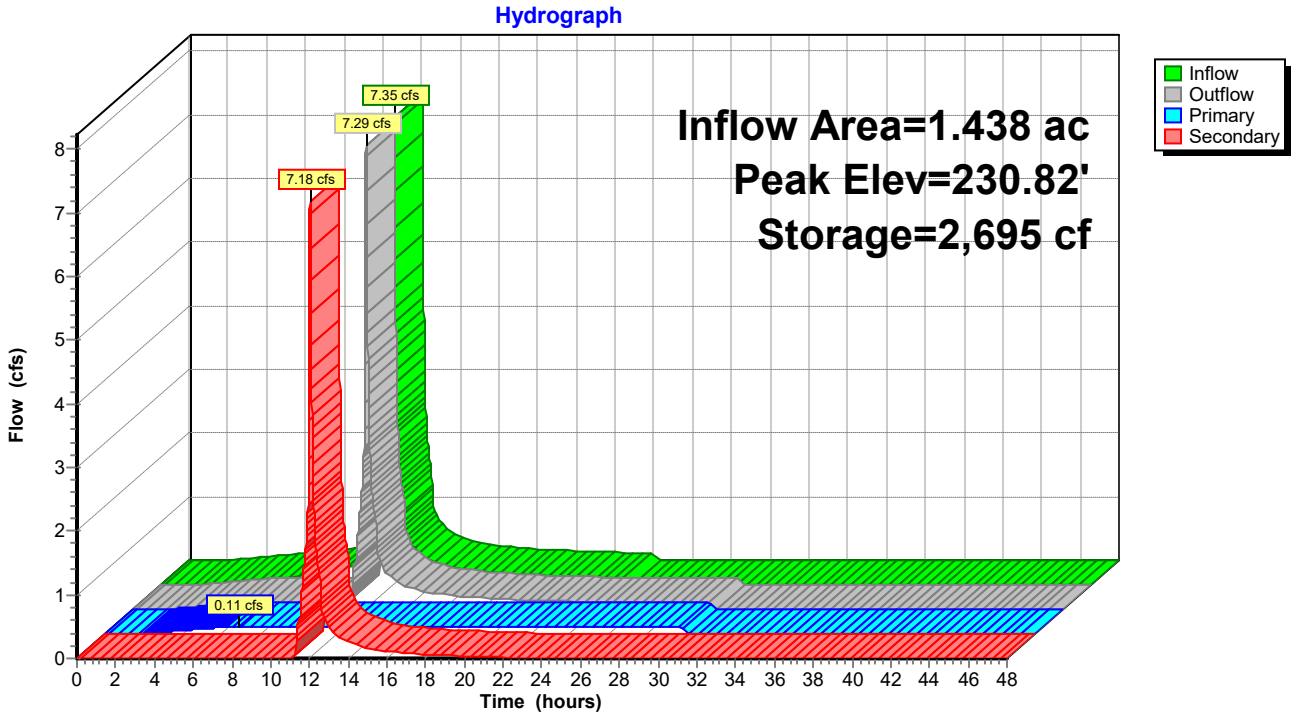
5,266.4 cf Field - 1,253.1 cf Chambers = 4,013.3 cf Stone x 40.0% Voids = 1,605.3 cf Stone Storage

Chamber Storage + Stone Storage = 2,858.4 cf = 0.066 af
Overall Storage Efficiency = 54.3%
Overall System Size = 124.24' x 18.17' x 2.33'

85 Chambers
195.1 cy Field
148.6 cy Stone



Pond SSF1: Sand Filter



Summary for Pond GUSF1: Soil Filter

Inflow Area = 0.414 ac, 58.42% Impervious, Inflow Depth = 6.38" for 100-yr event
Inflow = 2.81 cfs @ 12.03 hrs, Volume= 0.220 af
Outflow = 1.64 cfs @ 12.11 hrs, Volume= 0.128 af, Atten= 42%, Lag= 5.1 min
Primary = 1.64 cfs @ 12.11 hrs, Volume= 0.128 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 233.57' @ 12.11 hrs Surf.Area= 3,409 sf Storage= 4,234 cf
Flood Elev= 234.00' Surf.Area= 3,800 sf Storage= 5,800 cf

Plug-Flow detention time= 256.8 min calculated for 0.128 af (58% of inflow)
Center-of-Mass det. time= 122.5 min (913.4 - 790.9)

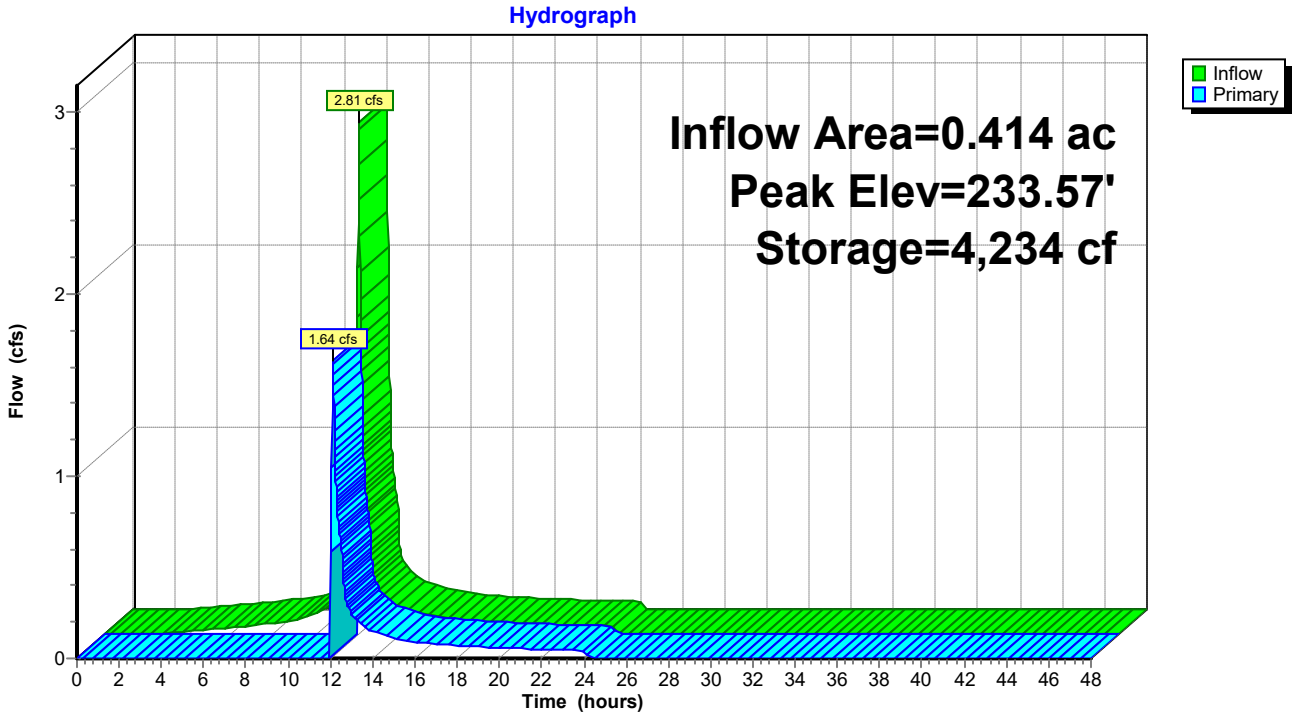
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	10,200 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	2,000	0	0
233.00	2,900	2,450	2,450
234.00	3,800	3,350	5,800
235.00	5,000	4,400	10,200

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 86.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 229.00' S= 0.0020 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.64 cfs @ 12.11 hrs HW=233.57' TW=0.00' (Dynamic Tailwater)
↑**2=Culvert** (Passes 1.64 cfs of 5.81 cfs potential flow)
↑**1=Orifice/Grate** (Weir Controls 1.64 cfs @ 0.84 fps)

Pond GUSF1: Soil Filter



Summary for Pond GUSF2: Soil Filter

Inflow Area = 1.586 ac, 79.43% Impervious, Inflow Depth = 6.97" for 100-yr event
Inflow = 11.34 cfs @ 12.03 hrs, Volume= 0.922 af
Outflow = 6.64 cfs @ 12.21 hrs, Volume= 0.794 af, Atten= 41%, Lag= 11.1 min
Primary = 6.64 cfs @ 12.21 hrs, Volume= 0.794 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 234.46' @ 12.21 hrs Surf.Area= 5,617 sf Storage= 10,312 cf
Flood Elev= 234.00' Surf.Area= 4,870 sf Storage= 7,910 cf

Plug-Flow detention time= 135.7 min calculated for 0.794 af (86% of inflow)
Center-of-Mass det. time= 63.6 min (833.4 - 769.8)

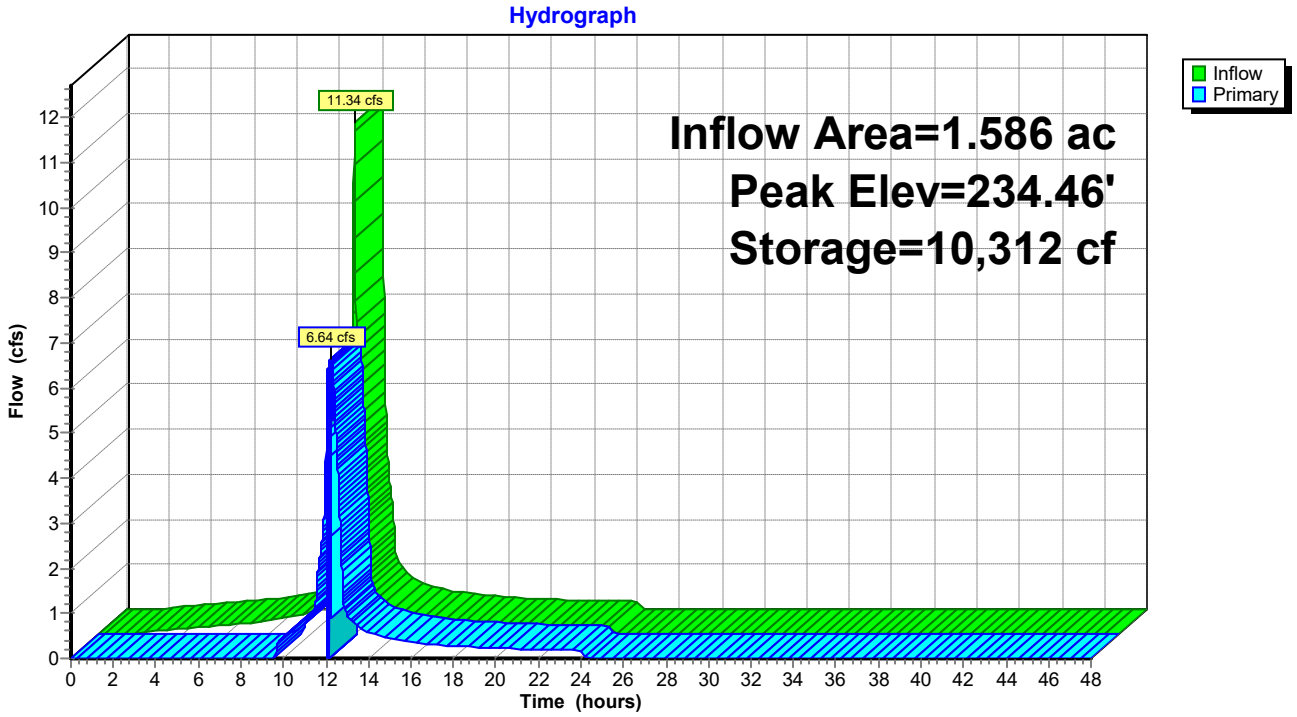
Volume	Invert	Avail.Storage	Storage Description
#1	232.00'	13,595 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
232.00	3,000	0	0
233.00	3,975	3,488	3,488
234.00	4,870	4,423	7,910
235.00	6,500	5,685	13,595

Device	Routing	Invert	Outlet Devices
#1	Device 2	233.50'	**6.0" x 1.5" Horiz. Orifice/Grate X 24.00** C= 0.600 Limited to weir flow at low heads
#2	Primary	229.17'	**12.0" Round Culvert** L= 140.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 229.17' / 227.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.51 cfs @ 12.21 hrs HW=234.46' TW=232.63' (Dynamic Tailwater)
↑**2=Culvert** (Outlet Controls 3.51 cfs @ 4.46 fps)
↑**1=Orifice/Grate** (Passes 3.51 cfs of 7.07 cfs potential flow)

Pond GUSF2: Soil Filter



Erosion and Sedimentation Control Plan

Bear's Self Storage
878 Center Street
Auburn, Maine

Introduction

This Erosion and Sedimentation Control Plan (E&S Plan) has been developed to provide a strategy to prevent unreasonable erosion of soil and sediment transport beyond the project site or into a protected natural resource. These strategies apply to the proposed development immediately prior to soil disturbing activities on the site and shall remain in place until the site is permanently stabilized.

The information presented in this E&S Plan is provided as an overview of the anticipated measures to be used on this site. In some instances, additional measures may be required due to unexpected conditions that arise during construction. Also, specific detail on the application of a recommended practice for an unexpected instance may not be covered in this E&S Plan. For additional detail on any of the erosion and sedimentation control measures discussed in this E&S Plan or for further recommendations of applicable practices, refer to the "Maine Erosion and Sediment Control BMPs" manual published by the Maine Department of Environmental Protection (MDEP) dated March 2003, as revised.

1.1 Plan Implementation Phases

Generally, the implementation of this plan occurs in three distinct phases as described below.

1.1.1 Pre-construction Phase

Prior to the beginning of any construction, perimeter sediment barriers (i.e. silt fence, erosion control mix berm, etc…) shall be installed at, or just below, the limits of clearing or grubbing, and/or just above any adjacent property line or protected natural resource. Prior to any clearing or grubbing, a construction entrance shall be constructed at the intersection of the site access with the adjacent street to avoid tracking of mud, dust and debris from the site.

1.1.2 Construction Phase

Areas undergoing actual construction shall only expose that amount of mineral soil necessary for progressive and efficient site construction. Any area that has been disturbed and is not "permanently stabilized" (as described by this E&S Plan) shall be considered "open." Open areas shall be protected and stabilized with temporary erosion and sedimentation control measures as shown on the project plans and as described within this E&S Plan.

Preparation for winter stabilization applies to some disturbed areas that are open on or after September 15th of the construction season (refer to the Winter Construction Section of this E&S Plan, Paragraph B – Overwinter Stabilization Timeframe). Any areas that remain open after November 1 or new soil disturbance that occurs after November 1, but before April 15, must be protected by additional measures as described in the Winter Construction section of this E&S Plan. The recommendations outlined in the Winter Construction section of this E&S Plan shall supersede other conflicting recommendations.

1.1.3 Post-construction Phase

Once the site has reached permanent stabilization, remove any temporary sediment control measures, such as silt fence, within 30 days. All accumulated sediment/debris in the permanent stormwater management system, ditches, swales, paved surfaces, and/or any other location that has accumulated sediment/debris during construction shall be removed and disposed of in an approved manner.

1.2 Permanent Stabilization

The strategies outlined in this E&S Plan shall be in effect until the site reaches permanent stabilization. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well established. If necessary, areas must be seeded and mulched again if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. The following list defines permanent stabilization for applicable situations.

1.2.1 Seeded Areas

For seeded areas, permanent stabilization means a 90% cover of vigorous perennial growth with no evidence of washing or rilling of the topsoil.

1.2.2 Sodded Areas

For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.

1.2.3 Permanent Mulch

For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to approved application rates and limitations.

1.2.4 Riprap

For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Larger stones should be at the toe of the slope to support stability.

1.2.5 Paved Areas

For paved areas, permanent stabilization means the placement of compacted gravel subbase is completed.

1.2.6 Ditches, Channels, and Swales

For open channels, permanent stabilization means the channel is stabilized with a 90% cover of vigorous perennial growth, a well-graded riprap lining, or with another non-erosive lining such as specified. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.

1.3 Temporary Erosion and Sedimentation Control BMPs

The placement/use of the following erosion and sedimentation control measures shall be in accordance with the "Maine Erosion and Sediment Control BMPs" manual published by the Maine Department of Environmental Protection (MDEP) dated March 2003, as revised.

1.3.1 Sedimentation Barriers

Prior to the beginning of any construction, sediment barriers (i.e. silt fence, erosion control mix berms, etc…) shall be installed across the slope(s), on the contour, at or just below the limits of clearing or grubbing, and/or just above any adjacent property line or watercourse to protect against construction related erosion. Sediment barriers shall be maintained until all tributary open areas have been permanently stabilized. The following are recommended perimeter sediment barriers:

- Silt fence: Shall be installed per the detail on the plans. The effective height of the fence shall not exceed 36 inches. It is recommended that silt fence be removed by cutting the fence materials at ground level so as to avoid additional soil disturbance.
- Staked hay bales: Shall be installed per the detail on the plans. Bales shall be wire-bound or string-tied and these bindings must remain parallel with the ground surface during installation to prevent deterioration of the bindings. Bales shall be installed within a minimum four (4) inch deep trench line with ends of adjacent bales tightly abutting another. Bales shall be held in place by at least two stakes.
- Erosion control mix berm: Shall be installed per the detail on the plans. The berm shall be a minimum height of 12-inches and a minimum width of two feet. The mix shall consist primarily of organic material and contain a well-graded mixture of particle sizes. The mix must meet the most recent composition specifications published by the MDEP. No trenching is required for installation of this barrier.
- Filter sock: Shall be installed per the detail on the plans. A filter sock is a tube made from netting that contains erosion control mix or other organic material. A filter sock shall be used in small areas and where a trench cannot be dug for a silt fence, such as where there is pavement or frozen ground. The ground where the filter sock is placed shall be smooth and level.

1.3.2 Surface Stabilization

All disturbed areas that will not be worked for more than 7 days shall be protected and stabilized with mulch or other non-erodable cover. Areas located within 75 feet of a wetland or waterbody must be protected and stabilized within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first. Areas that have been seeded (temporary or permanent) shall be stabilized immediately. The following are recommended practices for surface stabilization:

- Straw Mulch: Organic mulches including straw need to be air-dried, free of undesirable seeds and coarse materials. Application rate shall be 2 bales (70-90 lbs) per 1000 square feet or 1.5 to 2 tons (90-100 bales) per acre. This type of mulch must be anchored with a tackifier amendment and/or via physical means (i.e. vehicle tracking, jute netting, etc…) to avoid displacement by wind or water.
- Erosion control mix: Erosion Control Mix can be manufactured on or off the site. It is composed primarily of shredded bark, stump grindings, composted bark, or other acceptable products based on a similar raw source. The mix must meet the most recent composition specifications published by the MDEP. The mix shall be placed evenly and must provide 100% soil coverage. Erosion control mix shall be applied such that the thickness on slopes 3:1 or less is 2 inches plus ½ inch per 20 feet of slope up to 100 feet. The thickness on slopes between 3:1 and 2:1 is 4 inches plus ½ inch per 20 feet of slope up to 100 feet. This shall not be used on slopes greater that 2:1.
- Erosion control blankets: Erosion Control Blankets are used on steep slopes (greater than 3H:1V) and also areas that will receive concentrated stormwater flows. Erosion Control Blankets are also great for overwinter stabilization. Blankets aid in controlling erosion on disturbed soils and critical areas during the

establishment period of vegetation. Various forms of erosion control blankets are commercially available, each with different advantages for different applications. The type of blanket to be used for individual applications shall be as indicated on the development plan set or via the use of an approved equivalent blanket. In all applications, the blanket manufacturer's specifications and installation methods shall be referenced and adhered to.

1.3.3 Soil Stockpiles

All topsoil shall be stockpiled for future use on the project at a stable location on-site. Structural measures, such as sediment barriers, may be warranted for additional sediment control of the stockpile areas. Stockpiles of soil or subsoil shall be mulched with straw or with erosion control mix. This must be done within 24 hours of stocking and re-established prior to any rainfall. Any soil stockpile will not be placed (even covered with straw) within 75 feet from any protected natural resources.

1.3.4 Stabilized Construction Entrance/Exit

Prior to any clearing or grubbing, a stabilized construction entrance/exit shall be constructed wherever traffic will exit the construction site onto a paved roadway in order to minimize the tracking of sediment and debris from the construction site onto public roadways. The entrances and adjacent roadway areas shall be periodically swept or washed to further minimize the tracking of mud, dust or debris from the construction area. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. Construction entrances/exits shall be inspected on a weekly basis, and before and after each storm to ensure voids have not been filled with sediment. Stabilized construction exits shall be constructed in areas as specified and detailed on the plans.

1.3.5 Stone Check Dams

Stone check dams are generally temporary devices, which are constructed across a swale or drainage ditch and shall be used in channels that have a slope greater than 6%. Their purpose is to reduce the velocity of concentrated stormwater flows, thereby reducing erosion of the swale or ditch. These devices will also trap small amounts of sediment generated in the ditch itself, however, they are not an effective sediment trapping device and should not be used as such. Stone check dams are typically constructed of 2"-3" crushed stone and stand 24 inches in height.

1.3.6 Storm Drain Inlet Protection

Storm drains are typically operational prior to permanent stabilization of tributary areas. In these instances, hay bales, crushed stone barriers, and/or silt sacks shall be used within a catch basin or prior to a pipe entrance. This temporary protection will assist in the removal of sediment prior to entrance into a storm drainage system and the prevention of clogging and/or loss of capacity. These devices alone will not prevent all sediment from entering the stormwater system and should be used in conjunction with other devices to achieve desired sediment removal levels.

1.3.7 Dewatering

Water from construction dewatering will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing and sediment discharges to a protected natural resource. Discharge is permitted within the filter basin locations prior to the installation of the filter media.

1.3.8 Dust Control

Dust control during construction shall be achieved by the use of a watering truck to periodically sprinkle the exposed roadway areas as necessary to reduce dust during the dry months. The road surface may also be swept and vacuumed to the edge of the roadway to reduce dust. Dust shall not be swept into a waterbody or wetland. Applying other dust control products such as calcium chloride or other manufactured products are allowed if authorized by the proper local, state and/or federal regulating agencies. However, it is the contractor's ultimate responsibility to mitigate dust and soil loss from the site.

1.3.9 Temporary Stream Diversion

A temporary stream diversion allows for a dry working environment at an active construction site while ensuring the stream maintains its flow. The flow velocity of the stream diversion should remain the same as normal conditions. Only aggregate of ¾-inch to 4-inches or larger should be used and the stream diversion shall be at a height that is half that of the bankfull width plus one foot. The temporary stream diversion shall be installed per the detail on the plans.

1.3.10 Temporary Stream Crossing

Temporary stream crossings are to be used for less than one year and include bridges, fords, and culverts. The temporary stream crossing shall not affect channel flow or cause flow backups or washouts. The crossing should be monitored for debris and sediment that discharges to the stream and for ensuring fish passage is clear.

- Temporary culvert: Shall be installed per the detail on the plans. The culvert diameter shall be at a minimum of 18" and the culvert shall not require major excavation or approach fill when fitting into the existing channel. Geotextile fabric used shall extend past the end of the culvert by 12-inches to 18-inches.
- Temporary bridge: Shall be installed per the detail on the plans. A temporary bridge can be made of logs, pre-stressed concrete beams, metal beams, and other materials that are easily removable and can support the expected loads. The bridge should be installed so that it least disturbs fish habitats and fully spans the stream.
- Temporary access ford: Shall be installed per the detail on the plans. A temporary access ford shall be used when a streambed is lined with natural bedrock. Geotextile fabric used shall extend past the crossing by 12-inches to 18-inches. The temporary ford shall be installed to allow for fish passage.

1.3.11 Slope Drains

Slope drains help contain runoff on a slope to a discharge point and can be permanent or temporary. For a temporary slope drain, the slope drain may have a heavy-duty flexible pipe or a plastic-lined channel. Additionally, the pipe shall be 12-inches or greater in diameter if it is to be used for more than one day. The drainage area shall be less than 5 acres. The slope drain shall be installed per the detail on the plans and follow MaineDOT specs.

1.4 Vegetative Measures

1.4.1 Temporary Vegetation

If any disturbed area of soil will be left bare for more than 7 days, or if construction is to be completed in phases over an extended duration, temporary seeding and mulching shall commence immediately following initial fine grading of the site. In sensitive areas (within 75 feet of protected natural resources) temporary mulch must be applied within 48 hours or prior to any storm event on all disturbed surfaces. It shall be maintained and reseeded, as necessary, to ensure good vegetative cover for the entire duration of construction. Seed will be selected from

the following table (Table 1 - Temporary Seed Mixture) according to the time of year or via an approved equivalent method.

Table 1 Temporary Seed Mixture

Seed	Lbs./Acre	Lbs./1000s.f.	Recommended Seeding Date
Winter Rye	112	2.6	8/15 thru 10/1
Oats	80	1.8	4/1 thru 7/1 8/15 thru 9/15
Annual Ryegrass	40	0.9	4/1 thru 7/1
Sudangrass	40	0.9	5/15 thru 8/15
Perennial	40	0.9	8/15 thru 9/15

Note:

1. Some tree and shrub species may be desirable for sites primarily covered with sand and gravel. These methods shall be approved by the appropriate regulatory authority prior to use.

1.4.2 Permanent Vegetation

Revegetation measures shall commence immediately upon completion of final grading of areas to be loamed and seeded. Revegetation measures shall consist of the following:

1.4.2.1 Seedbed Preparation

- Four (4) inches of loam will be spread over disturbed areas and smoothed to a uniform surface. Loam shall be free of subsoil, clay lumps, stones and other objects over 2" in any dimension, and without weeds, roots or other objectionable material.
- Soil tests shall be taken at the time of soil stripping to determine fertilization requirements. Soil tests shall be taken promptly as to not interfere with the 7-day limit on soil exposure (48-hours adjacent to a protected natural resource). Based upon test results, soil amendments shall be incorporated into the soil prior to final seeding. In lieu of soil tests, soil amendments may be applied as shown below in Table 2:

Table 2 Recommended Soil Amendments

Item	Application Rate
10-20-20 Fertilizer (N-P205-K20 or equal)	18.4lbs./1,000 s.f.
Ground Limestone (50% calcium and magnesium oxide)	138-lbs./1,000 s.f.

1.4.2.2 Application of Seed

- Seeding: The seed mixture shown below in Table 3 shall be utilized for permanent seeding applications. Alternate seed mixtures may be utilized as approved. Refer to Appendix A of the MDEP Erosion and Sedimentation Control Practices Field Guide for Contractors for additional seed mixture options.

Table 3 Permanent Seed Mixture

Seed Type	Application Rate
Creeping Red Fescue	0.46 lbs/1,000 s.f. (20 lbs/acre)
Red Top	0.05 lbs/1,000 s.f. (2 lbs/acre)
Tall Fescue	0.46 lbs/1,000 s.f. (20 lbs/acre)
Total:	0.97 lbs/1,000 s.f. (42 lbs/acre)

- Hydroseeding: Shall be conducted on prepared areas as described above. Hydroseeding shall not be done on slopes steeper than 2H:1V. Lime and fertilizer may be applied simultaneously with the seed. Recommended seeding rates must be increased by 10% when hydroseeding.
- Surface Stabilization: Mulching or other approved surface stabilization methods shall commence immediately after seed is applied. Refer to the surface stabilization section of this plan for more information.

1.4.2.3 Sodding

Following seedbed preparation, sod can be applied in lieu of seeding in areas where immediate vegetation is most beneficial such as ditches, around stormwater drop inlets and areas of aesthetic value. Sod should be laid at right angles to the direction of flow starting at the lowest elevation. Sod should be rolled or tamped down to even out the joints once laid down. Where flow is prevalent the sod must be properly anchored down. Irrigate the sod immediately after installation. In most cases, sod can be best established between April 1 and November 15 of the construction year.

1.5 Winter Construction

The winter construction period is from November 1 through April 15. If the construction site is not permanently stabilized by November 1 then the site needs to be protected with over-winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is without stabilization at any one time. Limit the exposed area to those areas in which work is expected to be undertaken during the preceding 15 days and that can be mulched in one day prior to any snow event. All areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed, seeded and mulched.

Any added measures, which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions, must be installed. Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

1.5.1 Winter Construction BMP Adjustments

1) Sediments Barriers: During frozen conditions, sediment barriers shall consist of erosion control mix berms as frozen soil prevents the proper installation of hay bales and silt fences.

2) Mulching: Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, asphalt emulsion chemical, track or weed cellulose fiber. When the ground surface is not visible through the mulch then cover is sufficient. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

- Open Surfaces (flatter than 8%): Straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 square feet or 1.5 tons/acre) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to one-inch depth or less prior to application. After each day of final grading, the area will be properly stabilized with anchored straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched with straw at a rate of 150 lb. per 1,000 square feet (3 tons/acre) and adequately anchored that ground surface is not visible through the mulch.
- Open Slopes (8% or steeper) and Drainage Ways: Slopes shall not be left exposed for any extended time of work suspension unless fully mulched and anchored with netting or erosion control blankets. Mulching shall be applied at a rate of 230-lbs/1,000 square feet on all slopes steeper than 8%. Mulch netting shall be used to anchor mulch in all drainage ways with a slope steeper than 3% for slopes exposed to direct winds and for all other slopes steeper than 8%. Erosion control blankets shall be used in lieu of mulch in all drainage ways. Erosion control mix can be used to substitute erosion control blankets on slopes that do not exceed 2H:1V. In this case, the erosion control mix shall be spread out, not placed in a berm as it is installed as a sedimentation barrier.

3) Soil Stockpiles: Stockpiles of soil or subsoil shall be mulched for over winter protection with straw at twice the normal rate or at 150-lbs/1,000 square feet (3 tons per acre) or with a four-inch layer of wood waste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpile will not be placed (even covered with straw) within 100 feet from any natural resources.

4) Natural Resources Protection: Any areas within 100 feet from any protected natural resources, if not stabilized with a minimum of 90% mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats. During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

5) Seeding: Between the dates of October 15 and April 1st, loam or seed will not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until such time as the final treatment can be applied. If the date is after November 1st and if the exposed area has been loamed, final graded with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be selected to be placed prior to the placement of mulch and fabric netting anchored with staples. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5-lbs/1000 square feet. All areas seeded during the

winter will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

1.5.2 Overwinter Stabilization Timeframe

1) Ditches and Channels: All grass-lined ditches and channels must be constructed and stabilized by September 1. All stone-lined ditches and channels must be constructed and stabilized on the site by November 15. If a ditch or channel is not grass-lined by September 15, then one of the following actions must be taken to stabilize the ditch for late fall and winter.

   - Install a sod lining in the ditch: A ditch must be lined with properly installed sod by October 1. Proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.
   - Install a stone lining in the ditch: A ditch must be lined with stone riprap by November 15. A registered professional engineer must be hired to determine the stone size and lining thickness needed to withstand the anticipated flow velocities and flow depths within the ditch. If necessary, the ditch must be regraded prior to placing the stone lining to prevent the stone lining from reducing the ditch's cross-sectional area.

2) Disturbed Slopes: All stone-covered slopes must be constructed and stabilized by November 15. All slopes to be vegetated must be seeded by September 15. The MDEP will consider any area having a grade greater than 15% (10H:1V) to be a slope. If a slope to be vegetated is not stabilized by September 1, then one of the following actions must be taken to stabilize the slope for late fall and winter.

   - Stabilize the soil with temporary vegetation and erosion control blankets: By October 1 the disturbed slope must be seeded with winter rye at a seeding rate of 3 pounds per 1,000 square feet and apply erosion control blankets over the mulched slope. If the rye fails to grow at least three inches or cover at least 75% of the disturbed slope by November 1, the slope will be covered with a layer of erosion control mix or stone riprap as described in the following standards.
   - Stabilize the slope with sod: The disturbed slope must be stabilized with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Slopes steeper than 33% (3H:1V) or having groundwater seeps on the slope face, may not use late-season sod installation for stabilization.
   - Stabilize the slope with erosion control mix: A six-inch layer of erosion control mix must be spread over the slope by November 15. Prior to placing the erosion control mix, any snow accumulation on the disturbed slope must be removed. Slopes steeper than 50% (2H:1V) or having groundwater seeps on the slope face cannot use erosion control mix to stabilize slopes.

- Stabilize the slope with stone riprap: A layer of stone riprap can be placed on the slope by November 15. A registered professional engineer must be hired to determine the stone size needed for stability and to design a filter layer for underneath the riprap.

3) Other Disturbed Soils: By September 15, all disturbed soils on areas having a slope flatter than 15% (10H:1V) must receive seed and mulch. If disturbed areas are not stabilized by this date, then one of the following actions must be taken to stabilize the soil for late fall and winter.

- Stabilize the soil with temporary vegetation: By October 1, seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1,000 square feet, lightly mulch the seeded soil with straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed soil before November 1, then mulch the area for over-winter protection as described in the following "Stabilize the soil with mulch" standard.
- Stabilize the soil with sod: Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.
- Stabilize the soil with mulch: By November 15, mulch the disturbed soil by spreading straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Prior to applying the mulch, any snow accumulation on the disturbed area must be removed. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

1.6 Inspection and Maintenance

Inspection and maintenance are required of all erosion and sedimentation control measures outlined in this plan. Refer to the Inspection, Maintenance, and Housekeeping Plan for this project for an outline of the associated inspection and maintenance requirements.

Inspection, Maintenance and Housekeeping Plan

Bear's Self Storage
878 Center Street
Auburn, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures outlined in this inspection and maintenance plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "October 2016 Revision to the 2003 Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual for Designers and Engineers" manual and/or the "Volume III (Technical Design Manual) of the Maine Stormwater Management Design Manual (May 2016)" manual as published by the Maine Department of Environmental Protection (MDEP).

Section 1 During Construction

1.1 Inspection

During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

1.2 Maintenance

All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, then necessary improvements or repairs will be started no later than the end of the next workday and implementation must be completed within 7 calendar days and prior to any storm event (rainfall).

1.3 Documentation

A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional

BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. This documentation shall be maintained for at least three years after the site is permanently stabilized.

1.4 Specific Inspection and Maintenance Tasks

The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

1.4.1 Sediment Barriers

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

1.4.2 Erosion Control Blankets

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

1.4.3 Temporary Storm Drain Inlet Protection

- The inlet protection structure shall be inspected before each rain event and repaired as necessary.
- Sediment shall be removed and the storm drain sediment barrier restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- Barriers shall be removed upon permanent stabilization of the tributary area.
- Upon removal of the barrier, all accumulated sediments downstream of the structure shall be cleaned from the storm drain system.

1.4.4 Stabilized Construction Entrances/Exits

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

1.4.5 Temporary Seed and Mulch

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.

- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

1.4.6 Stabilized Temporary Drainage Swales, Ditches, Channels, and other Conveyance Practices

- Sediment accumulation in the swale, ditch, or channel shall be removed once the cross-sectional area is reduced by 25%.
- The swales, ditches, and channels shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.
- The downstream receiving area for a level spreader shall be protected during active construction and should be free of irregularities. The slope shall be less than 30%, if not a conduit and velocity dissipator must be used to bring the discharge to a stable area.
- Provide adequate culvert inlet protection and remove accumulating sediment and debris during construction.
- Other maintenance requirements for specific conveyance and distribution systems, such as vegetated swale, flow splitter, level spreader, and permeable road base, can be found in the "Volume III (Technical Design Manual) of the Maine Stormwater Management Design Manual (May 2016)" manual as published by the Maine Department of Environmental Protection (MDEP).

1.4.7 Grassed Underdrained Soil Filters, Subsurface Sand Filter, and Wet Pond

- Ensure vehicles and machinery do not drive or park on the filters or ponds during construction to prevent excessive soil compaction. Provide signage or construction fencing if necessary.
- The channel or area in which outflow discharges to must be stabilized prior to operation of the BMP.
- Ponds and grassed filters shall not be fertilized unless vegetation needs to be established.
- Remove any debris and sediment that may accumulate during construction.
- Soil compaction on the filter media shall be prevented during construction.
- Wet ponds shall be inspected following major storms.
- Infiltration systems shall be inspected after storm events for erosion and sediment accumulation.

Section 2 After Construction

2.1 Inspection

After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in all applicable permits, shall conduct the inspections.

2.2 Specific Inspection and Maintenance Tasks

2.2.1 Vegetated Areas

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

- Mow vegetation as needed.

2.2.2 Catch Basins, Outlet Control Structures, and Drain Manholes

- Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.
- If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).

2.2.3 Winter Sanding and Snow Removal

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.
- Snow plowed or otherwise removed from the site shall not be placed in stormwater BMPs, such as ponds or basins.

2.2.4 Culverts

- Inspect and, if required, clean-out culverts at least once a year, preferably in early spring and fall.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the inverts, outlets, and within the conduit, and at any riprap associated with any inverts and outlets.

2.2.5 Check for scouring at outlet locations. Provide flow dissipation as necessary. Vegetated Swales, Ditches, Channels, and other Conveyance Practices

- Inspect and, if required, clean-out swales, ditches, and channels in the spring, fall, and after heavy rains. Mow at least annually and remove any recurring woody vegetation.
- Clean out must include the removal and legal disposal of accumulated sediments and debris within the swale, ditch, or channel and at any riprap area. Give particular attention to restrictions to flow.
- Check for erosion within the ditch line. Repair erosion control matting or riprap as necessary. Maintain in order to correct erosion of the channel's bottom while maintaining flow capacity.
- Check for rill and slump erosion along slopes. Stabilize with mulch and vegetation, or with more intensive methods if rill or slump erosion is severe or a recurring item.
- Inspect for scouring at outlet locations. Provide flow dissipation as necessary. In areas with riprap, replace riprap in areas where underlying filter fabric or underdrain gravel is showing, or in areas where riprap stones have been removed or come loose.

2.2.6 Grassed Underdrained Soil Filters, Subsurface Sand Filter, and Wet Pond

- Inspect and, if required, remove sediment and debris found in the control structure, and forebay and impoundment in the fall.
- Inspect embankments for settlement, slope erosion, piping, slumping, and loss of storage volume annually in the fall and following heavy rain. Noted issues should be corrected immediately. Mow embankments at least annually and remove any woody vegetation.
- Inspect wet pond once every six months to ensure the pond is emptying through the gravel filter slowly.
- Filters shall be inspected semi-annually and after large storms.
- Inspect the outlet control structure monthly during wet weather conditions and, if required, repair broken seals, obstructed orifices, and plugged trash racks. Debris must not block the inlet or outlet of the basin.

- Check for damage to trash racks or debris guards and repair as necessary.
- Riprapped spillways shall be inspected once per year. Control woody vegetation on the pond's spillway. Remove debris and accumulated sediments. Provide flow dissipation as necessary. In areas with riprap, replace riprap in areas where underlying filter fabric or underdrain gravel is showing, or in areas where riprap stones have been removed or come loose.
- Look for sediment deposited in riprap inlets and crushed stone strips or along edges of the pond where stormwater may enter into the soil filter. If the sediments leave less than 1 foot to the top of the berm between the forebay and the impoundment, remove the sediments and reline the forebay with stones. If the sediments extend more than 1/8th of the width of the soil filter, remove the sediments and restore the vegetation.
- Monitor the time it takes for the stormwater takes to drain from the soil filter. For a 1inch or larger rainfall event, the pond should be drained in 24 to 48 hours. If the timeframe to drain the pond approaches 48 hours, the filter media should be reworked or replaced.

    i This item shall be inspected following each rain event greater than 1" in 24 hours during the first 6 months following construction of a fully stabilized basin.

    ii In months 7-12 following construction, this item shall be inspected once again, preferably following a rain event greater than 1" in 24 hours.

    iii This item shall be inspected twice per year each year after the first year. One of these inspections should be completed following a rain event greater than 1" in 24 hours.

2.3 Duration of Maintenance

Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. Maintenance repairs shall begin no more than 90 calendar days after being identified and shall be completed no more than 120 days after being identified.

Section 3 Housekeeping

Information on Housekeeping practices has been included on the Erosion and Sedimentation Control Notes and Details Plan.

Stormwater Inspection and Maintenance Form

878 Center Street
Auburn, Maine

Bear's Self Storage

Inspector: _____ Date: _____

Maintenance Personnel: _____

	Inspection		Maintenance	
SITE AREA	Date	Comments	Date	Corrective Action
Sediment Barriers				
Erosion Control Blankets				
Temporary Storm Drain Inlet Protection				
Stabilized Construction Entrances/Exits				
Temporary Seed and Mulch				
Stabilized Temporary Drainage Swales, Ditches, Channels, and other Conveyance Practies				
Catch Basins, Outlet Control Structures, and Drain				
Winter Sanding and Snow Removal				
Culverts				
Grassed Underdrain Soil Filter (GUSF) 1				
Grassed Underdrain Soil Filter (GUSF) 2				
Subsurface Sand Filter				
Wet Pond				

Sediment/Debris Disposal

Location of Sediment/Debris Accumulation	Location of Sediment/Debris Disposal	Date of Disposal

Attachment 5
Lighting Plan

ATTACHMENT 5

SITE LIGHTING

Site Lighting

The site lighting will consist of full cut off LED fixtures mounted on the building that will be motion controlled. Full cut off LED lighting fixtures are proposed along the Center Street edge of the vehicle display area. The proposed fixture information is included in this section.

KIM LIGHTING®

DATE: LOCATION:

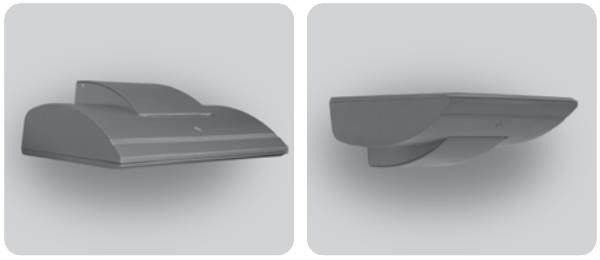
TYPE: PROJECT:

CATALOG #:

WDS

WALL MOUNTED

Wall Director



Wall Director Small

FEATURES

- -5° to +10° tilt adjustment
- High performance optics deliver up to 7,500 lumens
- up or down mountable without modification
- Programmable occupancy sensor (dimming)
- NX Lighting Controls
- 130+ lumens per watt
- UL/cUL listed for wet locations, IP66 Listed

c UL us LISTED

Downlight only, 3000K and warmer CCTs

DLC LISTED

IK07

BUY AMERICAN SOLUTIONS

See Certification Specifications

RELATED PRODUCTS

Wall Director Medium

CONTROL TECHNOLOGY

NX LIGHTING CONTROLS

SPECIFICATIONS

CONSTRUCTION

- Optical housing is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral heat sink. The housing rotates against mounting arm housing to provide -5° to 10° of adjustment with degree markers label. At 0° adjustment, lens is totally concealed from view above horizontal with fixture mounted in the downward position.
- Mounting arm housing is one-piece die-cast, low copper (<0.6%) aluminum alloy with provisions for tilt mechanism. Mounting arm fastens to the mounting plate with keyhole slots freeing both hands for securing and wiring. One stainless steel socket-head screw on the tilt mechanism frees the optical housing to rotate for aiming. Tightening the screws locks the housing and lens frame together with sealing provided by a silicone gasket. For visual aiming, adjustment may be accomplished with the fixture on.
- Lens Frame is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral cooling fins to dissipate driver thermal.
- Bracketry and hardware shall be stainless steel.
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Secondary lens is impact resistant 1/8" tempered glass with anti-reflective coating.

INSTALLATION

- Junction box (by others): Standard with steel, quick-mount junction box plate that mounts directly to 4" J-Box.
- Mounting plate is stainless steel and features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SERVICING

- Housing should hang freely in an open service position for inspection of primary wire connections. Once in service position, the housing can be removed for service by sliding the assembly to the left (for down mounting) or to the right (for up mounting) and disconnecting the wiring plugs.
- Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal.

ELECTRICAL

- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 90°C, wet rating.

(Specifications continued on page 3)

KEY DATA	
Lumen Range	2,855–8,567
Wattage Range	29–74
Efficacy Range (LPW)	89–129
Reported Life (Hours)	L70/60,000
Weight	20 lbs/9.07 kg

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

WDS

WALL MOUNTED

ORDERING GUIDE

Example: WDS-D-24L-30-3K7-1-UNV-BLS-PC-EM

CATALOG #

HOUSING

WDS

Model		Mounting		Source		Wattage		Light Engine		Distribution	
WDS	WallDirector Small	**D**	Down	**24L**	24 LEDs	**30**	30 Watts, 3000 lm	**AM** [6]	Amber-595nm Peak	**1**	Type I
		U [1]	Up			**40**	40 Watts, 4500 lm	**3K7**	3000K/70CRI	**2**	Type II
						60	60 Watts, 6000 lm	**3K8**	3000K/80CRI	**3**	Type III
						75	75 Watts, 7500 lm	**4K7**	4000K/70CRI	**4W**	Type IV Wide
								4K8	4000K/80CRI	**4F**	Type IV Forward
								5K7	5000K/70CRI	**WG** [2]	Wall Graze
										SP	Spot/Column
										FTD [2]	Forward Throw Diffuse
										WTD [2]	Wide Throw Diffuse

Voltage		Fixture Finish		Control Options		Options		Control Accessories	
UNV	120-277V	**BLS**	Black Gloss Smooth	**SCP-8F** [3, 4, 5, 9]	Programmable Occ. Sensor (<9' height)	**EM** [3]	Integral Battery Backup Unit (8W)	**SCPREMOTE**	SCP configuration tool
347 [3, 10]	347V	**BLT**	Black Matte Textured	**SCP-20F** [3, 4, 5, 9]	Programmable Occ. Sensor (9' - 20' height)	**SF**	Single Fuse & Fuse holder		
480 [3, 10]	480V	**DBS**	Dark Bronze Gloss Smooth	**NXW** [4, 5]	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	**DF**	Double Fuse & Fuse holder		
		DBT	Dark Bronze Matte Textured			**SCM1**	1/2" Surface Conduit Mount		
		GTT	Graphite Matte Textured			**SCM2**	3/4" Surface Conduit Mount		
		LGS	Light Grey Gloss Smooth			**PC** [3, 5]	Button Photocell		
		LGT	Light Grey Matte Textured						
		PSS	Platinum Silver Gloss Smooth						
		VGT	Verde Green Matte Textured						
		WHS	White Gloss Smooth						
		WHT	White Matte Textured						
		Color Option							
		CC [8]	Custom Color						

Notes:

1 Not available with EM option or with SCP sensor options.
2 WG, FTD, and WTD come with a diffused lens
3 Not available with other control options
4 Input voltage 120-347V
5 Not available in 480V
6 Turtle friendly
8 Consult factory for custom color, marine and corrosive finish options
9 SCPREMOTE SCP configuration tool needed.
10 Not available with 30 watt or 40 watts

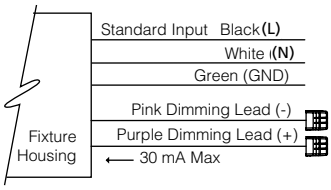
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SPECIFICATIONS (CONT')

DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver.



- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined control devices.
- Optional factory programmed dimming profile.

BUTTON PHOTOCELL

- Optional universal voltage (120-277V) button photocontrol for dusk to dawn energy savings. Photocontrol is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.

NX LIGHTING CONTROLS

NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity

OPTIONAL FUSING:

- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- Hight temperature fuse holders factory installed inside the fixture housing.
- Fuse is included.

OPTIONAL BACKUP BATTERY

- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for 0°C ambient.

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- IEC 66262 Mechanical Impact Code IK08
- IP66 certified
- RoHS compliant
- This product qualifies as a “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/16/2020. See Buy American Solutions.

WARRANTY

- 5 year warranty

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DATE: LOCATION:

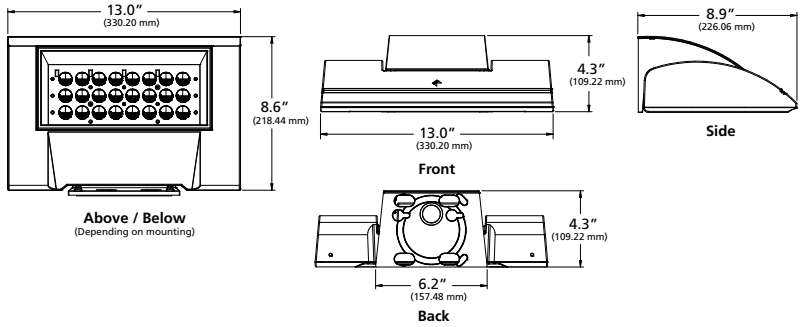
TYPE: PROJECT:

CATALOG #:

WDS

WALL MOUNTED

DIMENSIONS



Weight: 20 lbs

DELIVERED LUMENS

LEDs #	Drive Current	Lumens Package	Nominal Watts	Lens Options	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
						Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
							B	U	G			B	U	G			B	U	G	
24L	350mA	3,000	30	Clear	1	3433	1	0	0	119	3519	1	0	0	122	3560	1	0	0	123
					2	3351	1	0	1	116	3436	1	0	1	119	3475	1	0	1	120
					3	3340	1	0	1	116	3424	1	0	1	119	3463	1	0	1	120
					4F	3343	1	0	1	116	3427	1	0	1	119	3466	1	0	1	120
					4W	3267	1	0	1	113	3349	1	0	1	116	3387	1	0	1	117
					SP	3600	3	0	0	125	3691	3	0	0	128	3733	3	0	0	129
				Diffused	WG	3144	1	0	1	109	3223	2	0	1	112	3260	2	0	1	113
					FTD	2855	1	0	1	99	2927	1	0	1	101	2960	1	0	1	103
					WTD	3151	1	0	1	109	3230	1	0	1	112	3267	1	0	1	113
	500mA	4,500	40	Clear	1	4593	1	0	0	111	4708	1	0	0	113	4762	1	0	0	115
					2	4484	1	0	1	108	4596	1	0	1	111	4649	1	0	1	112
					3	4468	1	0	1	108	4581	1	0	1	110	4633	1	0	1	112
					4F	4472	1	0	1	108	4585	1	0	1	110	4637	1	0	1	112
					4W	4370	1	0	2	105	4480	1	0	2	108	4531	1	0	2	109
					SP	4817	3	0	0	116	4938	3	0	0	119	4994	3	0	0	120
				Diffused	WG	4206	2	0	1	101	4312	2	0	1	104	4361	2	0	1	105
					FTD	3819	1	0	1	92	3915	1	0	1	94	3960	1	0	1	95
					WTD	4215	1	0	1	102	4321	1	0	1	104	4371	1	0	1	105

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WDS
WALL MOUNTED

DELIVERED LUMENS (CONTINUED)

LEDs #	Drive Current	Lumens Package	Nominal Watts	Lens Options	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
						Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
							B	U	G			B	U	G			B	U	G	
24L	725mA	6,000	60	Clear	1	6333	1	0	1	108	6492	1	0	1	111	6566	1	0	1	112
					2	6182	1	0	1	106	6338	1	0	1	108	6410	1	0	1	110
					3	6161	1	0	2	105	6316	1	0	2	108	6388	1	0	2	109
					4F	6166	1	0	2	105	6321	1	0	2	108	6393	1	0	2	109
					4W	6025	1	0	2	103	6177	1	0	2	106	6248	1	0	2	107
					SP	6641	4	0	0	114	6808	4	0	0	116	6886	4	0	0	118
				Diffused	WG	5800	2	0	1	99	5945	2	0	1	102	6013	2	0	1	103
					FTD	5266	1	0	1	90	5398	2	0	1	92	5460	2	0	1	93
					WTD	5812	1	0	1	99	5958	1	0	1	102	6026	1	0	1	103
	925mA	7,500	75	Clear	1	7879	1	0	1	106	8077	1	0	1	109	8170	1	0	1	110
					2	7692	1	0	1	104	7885	1	0	1	107	7975	1	0	2	108
					3	7665	1	0	2	104	7858	1	0	2	106	7948	1	0	2	107
					4F	7672	1	0	2	104	7865	1	0	2	106	7955	1	0	2	107
					4W	7497	1	0	2	101	7685	1	0	2	104	7773	1	0	2	105
					SP	8263	4	0	0	112	8471	4	0	0	114	8567	4	0	0	116
				Diffused	WG	7216	3	0	1	98	7397	3	0	1	100	7482	3	0	1	101
					FTD	6552	2	0	1	89	6717	2	0	1	91	6793	2	0	2	92
					WTD	7231	2	0	1	98	7413	2	0	1	100	7498	2	0	1	101

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WDS
WALL MOUNTED

PHOTOMETRY

WDS-D-24L-75-4K7-1

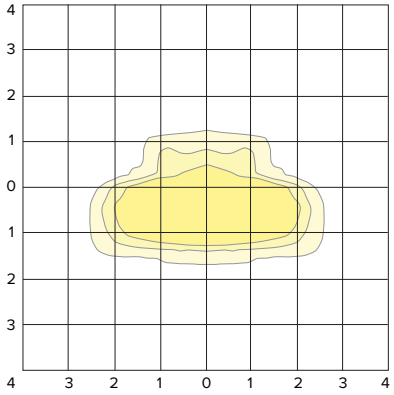
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**8077**
Watts	**74**
Efficacy	**109.1**
IES Type	**I**
BUG Rating	**B1-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7166	88.7%
Downward House Side	912	11.3%
Downward Total	8077	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8077	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-2

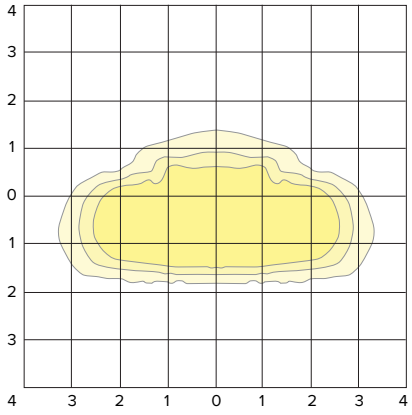
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7885**
Watts	**74**
Efficacy	**106.6**
IES Type	**II**
BUG Rating	**B1-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6393	81.1%
Downward House Side	1492	18.9%
Downward Total	7885	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7885	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-3

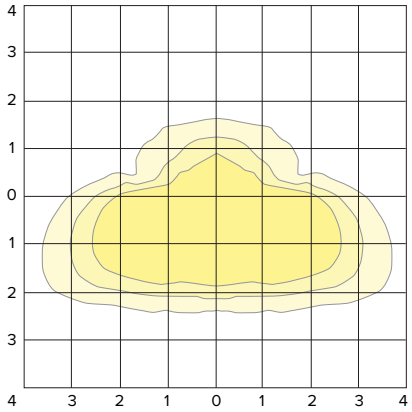
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7858**
Watts	**74**
Efficacy	**106.2**
IES Type	**III**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6551	83.4%
Downward House Side	1307	16.6%
Downward Total	7858	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7858	100%

ISOFOOT CANDLE PLOT



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WDS

WALL MOUNTED

PHOTOMETRY

WDS-D-24L-75-4K7-4F

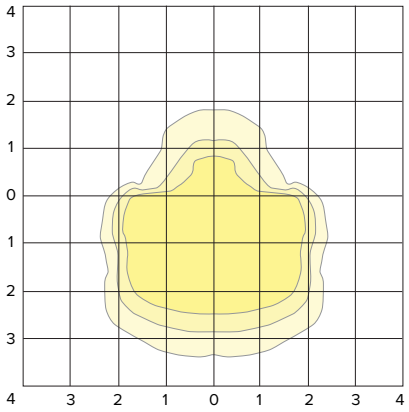
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7865**
Watts	**74**
Efficacy	**106.3**
IES Type	**III**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6782	86.2%
Downward House Side	1083	13.8%
Downward Total	7865	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7865	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-4W

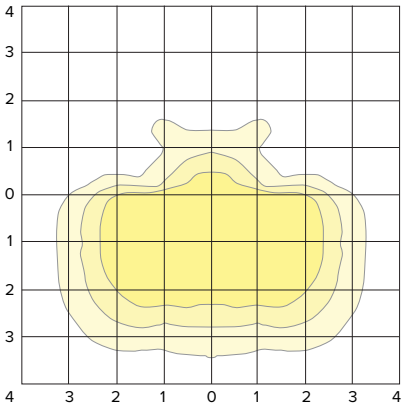
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7685**
Watts	**74**
Efficacy	**103.9**
IES Type	**III**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6794	88.4%
Downward House Side	892	11.6%
Downward Total	7685	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7685	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-FTD

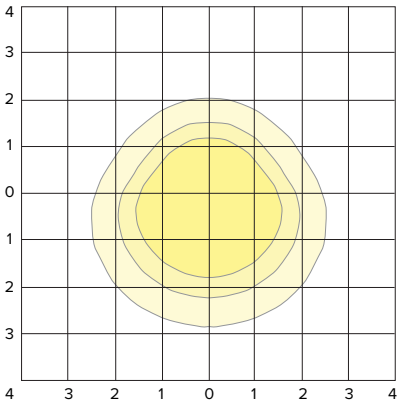
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6717**
Watts	**74**
Efficacy	**90.8**
IES Type	**III**
BUG Rating	**B2-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4462	66.4%
Downward House Side	2255	33.6%
Downward Total	6717	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	6717	100%

ISOFOOT CANDLE PLOT



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WDS
WALL MOUNTED

PHOTOMETRY

WDS-D-24L-75-4K7-SP

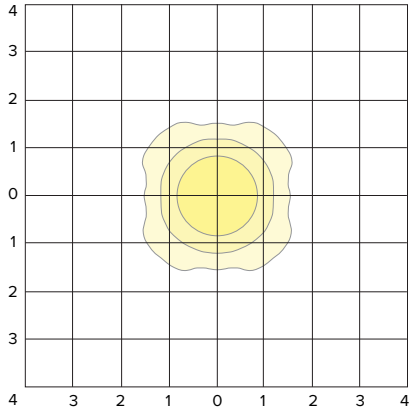
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**8471**
Watts	**74**
Efficacy	**114.5**
IES Type	**VS**
BUG Rating	**B4-U0-G0**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4236	50.0%
Downward House Side	4236	50.0%
Downward Total	8471	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8471	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-WG

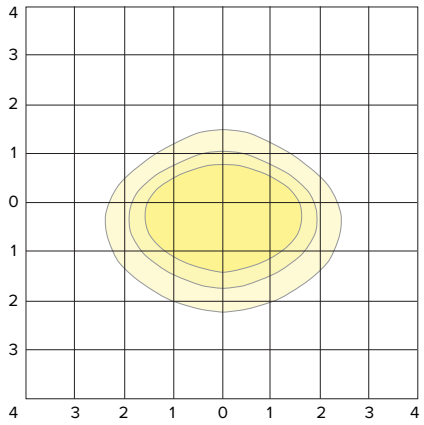
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7396**
Watts	**74**
Efficacy	**99.9**
IES Type	**I**
BUG Rating	**B3-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4931	66.7%
Downward House Side	2465	33.3%
Downward Total	7396	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7396	100%

ISOFOOT CANDLE PLOT



WDS-D-24L-75-4K7-WTD

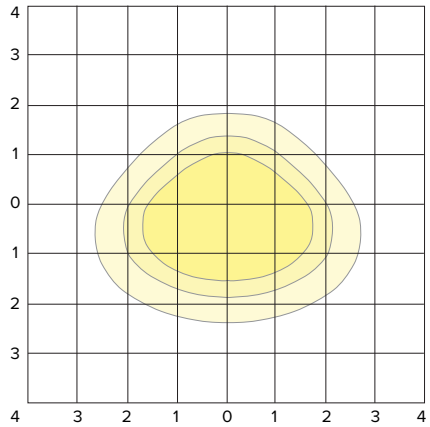
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**7413**
Watts	**74**
Efficacy	**100.2**
IES Type	**I**
BUG Rating	**B2-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5341	72.1%
Downward House Side	2072	27.9%
Downward Total	7413	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7413	100%

ISOFOOT CANDLE PLOT



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KIM LIGHTING®

DATE: LOCATION:

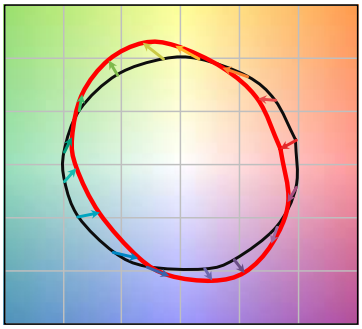
TYPE: PROJECT:

CATALOG #:

WDS
WALL MOUNTED

TM-30 DATA

COLOR VECTOR GRAPHIC

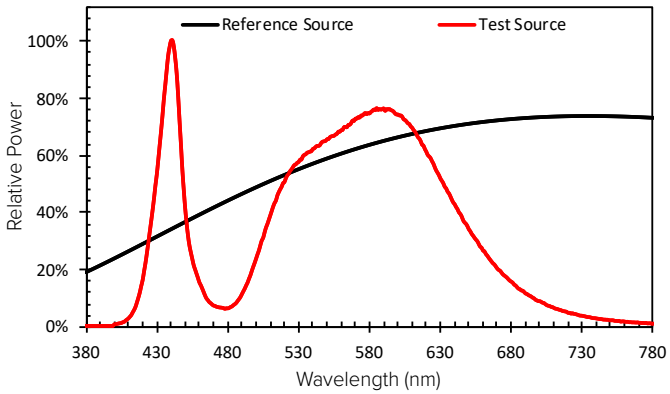


Reference Illuminant — Test Source

TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{UV}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



ELECTRICAL DATA

Drive Current	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming				
												Dimming Range	Source current out of 0-10V		Absolute voltage range on 0-10V (+)	
		VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
350mA	29	120-480	50/60	0.24	0.14	0.12	0.10	0.08	0.06	>0.9	20	10% to 100%	0mA	1mA	0V	10V
500mA	42			0.38	0.22	0.19	0.16	0.13	0.09							
725mA	59			0.48	0.27	0.24	0.21	0.16	0.12							
925mA	74			0.67	0.39	0.34	0.29	0.23	0.17							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	97%	95%	93%	86%	60khrs
40°C / 104°F	100%	92%	89%	86%	75%	

CRI Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
3000K	1	0.9119	0.7033
4000K	1	0.8941	0.734
5000K	1	0.879	0.7712

Amber Multiplier	
CCT	Multiplier
5000K	1
AM	0.1727

2700K Multiplier	
CCT	Multiplier
5000K	1
2700K	0.897

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prescolite

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LBSE-RD

EDGE-LIT ROUND FIXED CCT DIRECT J-BOX MOUNT DOWNLIGHT

LITEBOX® edge-lit



FEATURES

- 4”, 6”, and 8” aperture, delivering 750-1750 lumens
- Low surface profile of ½”
- Quick snap installation with no housing required
- Installs directly to most 3-1/2” and 4” J-Boxes
- Fixed CCT (3000K or 3500K, 80+ CRI) options
- Universal 120-277V, ideal for commercial applications
- All models standard with 0-10V/Triac/ELV dimming

WET LOCATION · C ETL LISTED US · Intertek · ENERGY STAR · IC

RELATED PRODUCTS

- 4" Edge-lit Family
- 6" Edge-lit Family
- 8" Edge-lit Family

SERVICE PROGRAMS

STOCK

SPECIFICATIONS

CONSTRUCTION

- Durable cast aluminum low profile trim with ½” surface profile
- Suitable for New Construction or remodel, IC or Non-IC applications
- Eliminates the need for a recessed housing, ideal for areas with limited plenum space
- Optional non-conductive Decorative Color Trim accessories available in White, Black, Silver, and Brushed Oil Rubbed Bronze

OPTICS

- Utilizes the latest Edge-Lit LED technology
- Integral diffuse polycarbonate lens provides uniform light distribution
- Light distribution is free of distracting bright spots
- Visually comfortable with low glare

ELECTRICAL

- Edge-Lit LED array with 3 SDCM color consistency
- Long LED life: Maintains 80% of lumen output at 54,000 hours of operation, L80 at >54,000 hours (TM-21)
- Available in Fixed CCT in 3000K or 3500K, 80+ CRI
- High efficiency integral driver with universal 120V-277V, 50/60Hz

ELECTRICAL (CONTINUED)

- All models have flicker-free dimming with 120-277V 0-10V Dim to Off or 120V Triac or ELV phase cut to 5%
- See Additional Information section for a list of recommended dimmers
- EMI: Meets Class A (<24dba) noise rating, FCC CFR 47 Part 15 Class B, ≥0.9 Power Factor, <20% THD

INSTALLATION

- Installs directly to most common 3-1/2” or 4” octagonal and round junction boxes with a minimum 1-1/2” depth including fire rated (by others)
- Metal plate mounts to the J-Box and accepts snap-in spring clips for a secure fit

CERTIFICATIONS

- cETLus listed to UL1598
- Can be used in direct contact with insulation (IC Rated)
- Suitable for wet locations, covered ceiling
- Suitable for use in clothes closets when installed in accordance to N.E.C. 410.16
- ENERGY STAR® certified

WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	783-1973
Wattage Range	10.4-20.0
Efficacy Range (LPW)	75-99
Reported Life (Hours)	L80 / >54,000
Input Current (mA)	87-167 (120V)

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HUBBELL Lighting

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LBSE-RD

EDGE-LIT ROUND FIXED CCT DIRECT J-BOX MOUNT DOWNLIGHT

STOCK

Click icon for Stock list and details

ORDERING GUIDE

Example: LBSE-4RD-35K8-WH

CATALOG #

HOUSING

LBSE –		–	–
Model/CCT Configuration	**Aperture/Shape/Function**	**CCT/CRI**	**Trim Color**
LBSE Edge-Lit Surface, Fixed CCT, 120-277V with 0-10V/Triac/ELV dimming	**4RD** 4" Round, Direct J-Box Mount, 750 Lumens **6RD** 6" Round, Direct J-Box Mount, 1100 Lumens **8RD** 8" Round, Direct J-Box Mount, 1750 Lumens	**30K8** 3000K, 80+ CRI **35K8** 3500K, 80+ CRI	**WH** White

Accessories	
☐ **LBSE-4RD-T-WH**	Trim Accessory, 4" Round, White
☐ **LBSE-4RD-T-BL**	Trim Accessory, 4" Round, Black
☐ **LBSE-4RD-T-BBZ**	Trim Accessory, 4" Round, Brushed Oil Rubbed Bronze
☐ **LBSE-4RD-T-SVR**	Trim Accessory, 4" Round, Silver
☐ **LBSE-6RD-T-WH**	Trim Accessory, 6" Round, White
☐ **LBSE-6RD-T-BL**	Trim Accessory, 6" Round, Black
☐ **LBSE-6RD-T-BBZ**	Trim Accessory, 6" Round, Brushed Oil Rubbed Bronze
☐ **LBSE-6RD-T-SVR**	Trim Accessory, 6" Round, Silver
☐ **LBSE-8RD-T-WH**	Trim Accessory, 8" Round, White
☐ **LBSE-8RD-T-BL**	Trim Accessory, 8" Round, Black
☐ **LBSE-8RD-T-BBZ**	Trim Accessory, 8" Round, Brushed Oil Rubbed Bronze
☐ **LBSE-8RD-T-SVR**	Trim Accessory, 8" Round, Silver
☐ **LBSES-C-12**	Extension Cable, LBSE/LBSES, 12"
☐ **LBSES-C-24**	Extension Cable, LBSE/LBSES, 24"

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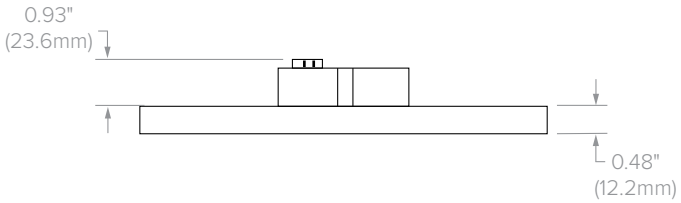
LBSE-RD

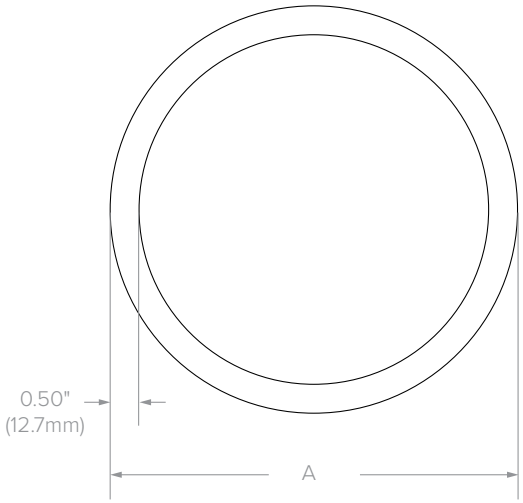
EDGE-LIT ROUND FIXED CCT DIRECT J-BOX MOUNT DOWNLIGHT

PERFORMANCE DATA TABLE

Nominal Aperture	Nominal Lumens	Cat #	CCT	CRI	Delivered Lumens	Watts	LPW
4"	750	LBSE-4RD-30K8-WH	3000K	80	783	10.4	75
		LBSE-4RD-35K8-WH	3500K		846	10.4	81
6"	1100	LBSE-6RD-30K8-WH	3000K	80	1144	12.9	89
		LBSE-6RD-35K8-WH	3500K		1237	12.9	96
8"	1750	LBSE-8RD-30K8-WH	3000K	80	1825	20.0	91
		LBSE-8RD-35K8-WH	3500K		1973	20.0	99

DIMENSIONS





Dimensional Data	
Aperture (Cat Logic)	"A"
4" (4RD)	ø4.61" (117.1mm)
6" (6RD)	ø6.00" (152.4mm)
8" (8RD)	ø8.00" (203.2mm)

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LBSE-RD

EDGE-LIT ROUND FIXED CCT DIRECT J-BOX MOUNT DOWNLIGHT

PHOTOMETRY

LBSE-4RD-30K8-WH

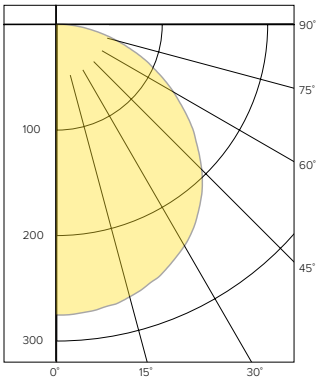
LUMINAIRE DATA

Test No.	**R20.00827-01**
Description	**4" Downlight, 3000K, 80 CRI**
Delivered Lumens	**783**
Watts	**10.4W**
Efficacy	**75.0**
Mounting	**Surface**
Spacing Criterion	**1.3**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	342	43.6
0-60	611	78.0
0-90	783	100.0
0-180	783	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	260
5	259
15	253
25	239
35	217
45	184
55	142
65	98
75	55
85	15
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	48544
55°	46342
65°	43318
75°	39448
85°	32315

*Candela/Square Meter

LBSE-6RD-30K8-WH

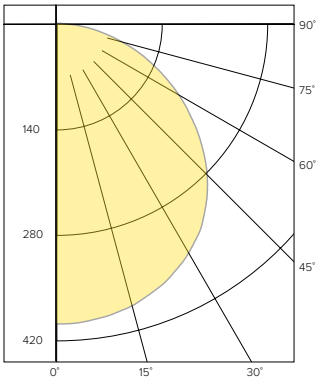
LUMINAIRE DATA

Test No.	**R20.00832-01**
Description	**6" Downlight, 3000K, 80 CRI**
Delivered Lumens	**1144**
Watts	**12.9W**
Efficacy	**89**
Mounting	**Surface**
Spacing Criterion	**1.3**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	499	43.6
0-60	891	77.9
0-90	1144	100.0
0-180	1144	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	380
5	379
15	369
25	348
35	317
45	268
55	207
65	144
75	80
85	23
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	23513
55°	22408
65°	21066
75°	19135
85°	16235

*Candela/Square Meter

LBSE-8RD-30K8-WH

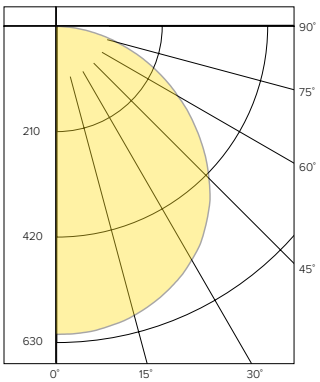
LUMINAIRE DATA

Test No.	**R20.00834-01**
Description	**8" Downlight, 3000K, 80 CRI**
Delivered Lumens	**1826**
Watts	**20W**
Efficacy	**92**
Mounting	**Surface**
Spacing Criterion	**1.3**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	798	43.7
0-60	1422	77.9
0-90	1826	100.0
0-180	1826	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	608
5	607
15	592
25	558
35	505
45	427
55	331
65	228
75	127
85	38
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	24287
55°	23187
65°	21736
75°	19752
85°	17413

*Candela/Square Meter

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LBSE-RD

EDGE-LIT ROUND FIXED CCT DIRECT J-BOX MOUNT DOWNLIGHT

ADDITIONAL INFORMATION

Dimming Compatibility

See the DIMMING link for more information on dimming compatibility and recommended dimmer list.

J-Box Compatibility

LITEBOX® Edge-Lit Direct J-Box Mount downlights are compatible with many standard 3-1/2” and 4” octagonal and round J-Boxes with a 1-1/2” minimum depth. Fire rated J-Boxes may also be used.









DIMMING

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HUBBELL Lighting

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SARA2

ARCHITECTURAL AREA/SITE

The Archetype®

FEATURES

- TIR Strike Optics
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5W, 5QM, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly

c UL us LISTED

BUY AMERICAN SOLUTIONS — See Certification Specifications

ida DARK SKY APPROVED 2014 — 3000K and warmer CCTs only



CONTROL TECHNOLOGY

NX LIGHTING CONTROLS

wiSCAPE™

RELATED PRODUCTS

Ouro Pavilion PGL8

SPECIFICATIONS

CONSTRUCTION

- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief

CONSTRUCTION (CONTINUED)

- Arm is circular cut for specified round pole
- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS

- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5W, 5QM, R, and L standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

ELECTRICAL

- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts

CONTROLS

- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- RoHS compliant
- This product qualifies as a “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	2,714–10,814
Wattage Range	58.87–84.27
Efficacy Range (LPW)	45.3–127.7
Reported Life (Hours)	L70/60,000
Weight	21 lbs 9.5 kg
EPS Side View	0.70

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SARA2

ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: 1SA-SARA2-54L-500-35K8-3-CLR-SQ-UNV-BLT-7PR-SF

CATALOG #

SARA2															
Mounting		**Model**		**LED Engine**		**CCT/CRI** [7]		**Distribution**		**Voltage**		**Lens Options**		**House Side Shield**	
1SA	Single Arm Mount	**SARA2**	The Archetype 2.0 Small Fixture	**27L-695**	27 LEDs - 6,000 Lumens	**AM** [1,8]	Monochromatic Amber	**1**	Type I	**UNV**	120-277V	**(Blank)**	No Lens	**BC** [3]	Backlight Control
1W	Wall Mount			**54L-500**	54 LEDs - 9,000 Lumens	**27K8** [2]	2700K, 80CRI	**2**	Type II	**347**	347V	**CLR**	Clear Glass Lens		
HSF	Horizontal Slipfitter					**27K9** [2]	2700K, 90CRI	**3**	Type III	**480**	480V	**CP**	Clear Polycarbonate Lens		
				Equivalent SAR-E35 = 27L-695 SAR-P35 = 27L-695 SAR-P70 = 54L-500		**3K7**	3000K, 70CRI	**4**	Type IV Forward						
						3K8 [2]	3000K, 80CRI	**4W**	Type IV Wide						
						3K9 [2]	3000K, 90CRI	**5W**	Type V Wide						
						35K8 [2]	3500K, 80CRI	**5QM**	Type V Square Medium						
						35K9 [2]	3500K, 90CRI	**R**	Corner Right						
						4K7	4000K, 70CRI	**L**	Corner Left						
						4K8 [2]	4000K, 80CRI								
						4K9 [2]	4000K, 90CRI								
						5K7	5000K, 70CRI								
						5K8 [2]	5000K, 80CRI								
						5K9 [2]	5000K, 90CRI								

Mounting Options		**Fixture Finish**		**Photocell Options**		**Fuse Options**		**Other Options**	
VSF [9]	Vertical Slipfitter Mount for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	**BLS**	Black Gloss Smooth	**7PR**	7-Pin Photocell Receptacle	**SF**	Single Fuse 120, 277, 347 Line Volts	**TPL**	Tamper Resistant Latch
SVSF [9]	Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	**BLT**	Black Matte Textured	**PC** [10]	Button Photocell	**DF**	Double Fuse 208, 240, 480 Line Volts		
2.40	Side Arm Mount 2.4" O.D. Pole	**DBS**	Dark Bronze Gloss Smooth						
3	Side Arm Mount 3" O.D. Pole	**DBT**	Dark Bronze Matte Textured						
3.25	Side Arm Mount 3.25" O.D. Pole	**GTT**	Graphite Matte Textured						
3.5	Side Arm Mount 3.5" O.D. Pole	**LGS**	Light Grey Gloss Smooth						
3.75	Side Arm Mount 3.75" O.D. Pole	**LGT**	Light Grey Matte Textured						
4.00	Side Arm Mount 4" O.D. Pole	**PSS**	Platinum Silver Smooth						
4.5	Side Arm Mount 4.5" O.D. Pole	**VGT**	Verde Green Matte Textured						
5	Side Arm Mount 5" O.D. Pole	**WHS**	White Gloss Smooth						
6	Side Arm Mount 6" O.D. Pole	**WHT**	White Matte Textured						
SQ	Side Arm Mount Square Pole	**Color Option**							
		CC	Custom Color						

Control Options		**Control Accessories** [4]	
SCH-R	Round Pole Mounted (Occupancy Sensor up to 16' to 30')	**WIR-RME-L**	wiSCAPE 7-pin Module
SCH-S	Square Pole Mounted (Occupancy Sensor up to 16' to 30')	**NXOFM-1R1D-UNV**	NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming

Notes:

1 Not available with 5QM and 5W distributions

2 See Lumen Multiplier chart on Page 12 for lumen scaling factor Consult factory for additional details.

3 Not available with Type 5 distributions or CLR option

4 Not available with other sensor or wireless control options

7 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning

8 Turtle Friendly

9 For all arm configurations, please refer to page 4. VSF/SVSF options ordered separately.

10 Not available in 480V

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SPECIFICATIONS (CONTINUED)

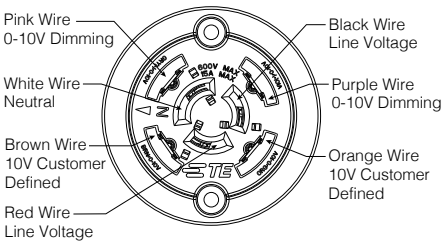
CONTROLS

BUTTON PHOTOCELL

- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
  1. Traditional on/off photoelectric control
  2. 5-pin wireless photoelectric control for added dimming feature
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use



wiSCAPE™

- wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L

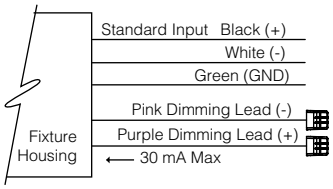
- wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS

- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-R

- Round Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4[1]/277[2]/BL[3]

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-S

- Square Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277[2]/BL[3]

ASTRODIM

- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:

- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

Notes:
1 Pole diameter
2 Voltage
3 Color

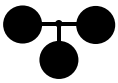
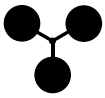
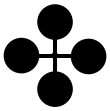
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SARA2

ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

Configuration			EPA
	1SA	1 Arm Side Mount	0.9
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

Configuration			
	1SA		3ST
	2SB		3SY
	2SL		4SC

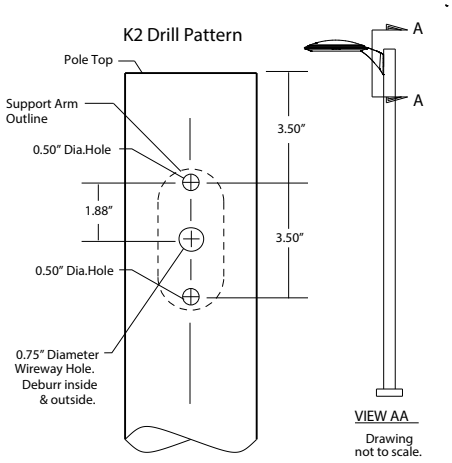
MOUNTING OPTIONS

SUPPORT ARM:

- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

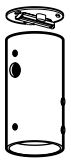
FIXTURE DRILLING INSTRUCTIONS:

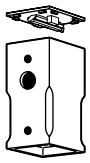
- For ARX, ALT, BNS1, SAR, SET, SRS, UR, and WP9 Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):

- Internally accessible slip-fitter attaches to a 2-3/8" x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles





- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

Ordering example for round:

- 2 - 1SA/SARA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 - VSF-2SB

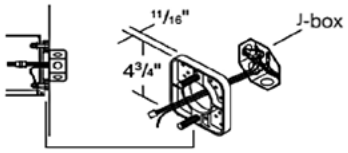
Ordering example for square:

- 2 - 1SA/SARA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 - SVSF-2SB

VSF	SVSF
VSF-1SA	SVSF-1SA
VSF-2SB	SVSF-2SB
VSF-2SL	SVSF-2SL
VSF-3ST	SVSF-3ST
VSF-3SY	SVSF-3SY
VSF-4SC	SVSF-4SC

WALL MOUNT

- Fixture mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.
- **NOTE**: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to fixture mounting.



Wall mount using adapter plate 3" or 4" J-box in wall (by others)

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SARA2

ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI				lm/w	4000K 70CRI				lm/w	5000K 70CRI				lm/w
				Lumen	BUG Rating				Lumen	BUG Rating				Lumen	BUG Rating			
					B	U	G			B	U	G			B	U	G	
27	6,000	695	1	6316	1	0	0	105.5	6782	1	0	1	113.3	6902	1	0	1	115.3
			1-BC	3602	0	0	0	60.2	3867	0	0	0	64.6	3936	0	0	0	65.7
			2	5933	1	0	1	99.1	6370	1	0	1	106.4	6483	1	0	1	108.3
			2-BC	3358	0	0	1	56.1	3606	0	0	1	60.2	3670	0	0	1	61.3
			3	5701	1	0	2	95.2	6122	1	0	2	102.3	6230	1	0	2	104.1
			3-BC	3172	0	0	1	53.0	3406	0	0	1	56.9	3466	0	0	1	57.9
			4	5956	1	0	2	99.5	6395	1	0	2	106.8	6508	1	0	2	108.7
			4-BC	3943	0	0	1	65.9	4234	0	0	2	70.7	4309	0	0	2	72.0
			4W	5564	1	0	2	59.9	5974	1	0	2	99.8	6080	1	0	2	101.6
			4W-BC	3259	0	0	1	54.4	3499	0	0	1	58.4	3561	0	0	1	59.5
			5W	5950	3	0	1	99.4	6389	3	0	1	106.7	6502	3	0	1	108.6
			5QM	6390	2	0	1	106.7	6861	2	0	1	114.6	6983	2	0	1	116.6
			R	6032	1	0	2	100.8	6476	1	0	2	108.2	6591	1	0	2	110.1
			L	6032	1	0	2	100.8	6476	1	0	2	108.2	6591	1	0	2	110.1
54	9,000	500	1	9781	1	0	1	116.1	10502	1	0	1	124.6	10688	1	0	1	127.0
			1-BC	5578	0	0	0	66.2	5989	0	0	0	71.1	6095	0	0	0	72.7
			2	9188	1	0	2	109.0	9865	2	0	2	116.8	10040	2	0	2	118.6
			2-BC	5201	0	0	1	61.7	5585	0	0	1	84.3	5684	0	0	1	67.2
			3	8829	1	0	2	104.8	9480	1	0	2	112.5	9648	1	0	2	115.6
			3-BC	4912	0	0	2	58.3	5275	0	0	2	62.6	5368	0	0	2	63.6
			4	9223	1	0	2	109.4	9903	1	0	2	117.5	10079	1	0	2	119.6
			4-BC	6107	0	0	2	72.5	6557	0	0	2	77.8	6673	0	0	2	79.2
			4W	8616	1	0	2	84.3	9251	0	0	2	109.8	9415	1	0	2	112.0
			4W-BC	5047	0	0	2	59.9	5419	0	0	2	64.3	5515	0	0	2	65.9
			5W	9215	3	0	2	109.3	9895	3	0	2	117.4	10070	3	0	2	119.1
			5QM	9896	3	0	1	117.4	10626	3	0	1	126.1	10814	3	0	1	127.7
			R	9341	1	0	2	110.8	10029	2	0	2	119.0	10207	2	0	2	120.8
			L	9341	1	0	2	110.8	10029	2	0	2	119.0	10207	2	0	2	120.8

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DELIVERED LUMENS (CONTINUED)

CLR LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
27	6,000	695	1	5491	1	0	0	91.7	5896	1	0	0	98.5	6001	1	0	0	100.2
			1-BC	3132	0	0	0	52.3	3362	0	0	0	56.2	3422	0	0	0	57.2
			2	5158	1	0	1	86.2	5538	1	0	1	92.5	5636	1	0	1	94.1
			2-BC	2919	0	0	1	48.8	3135	0	0	1	52.4	3191	0	0	1	53.3
			3	4956	1	0	1	82.8	5322	1	0	2	88.9	5416	1	0	2	90.5
			3-BC	2758	0	0	1	46.1	2961	0	0	1	49.5	3013	0	0	1	50.3
			4	5178	0	0	2	86.5	5560	1	0	2	92.9	5658	1	0	2	94.5
			4-BC	3428	0	0	1	57.3	3681	0	0	1	61.5	3746	0	0	1	62.6
			4W	4837	1	0	2	80.8	5194	1	0	2	86.8	5286	1	0	2	88.3
			4W-BC	2833	0	0	1	47.3	3042	0	0	1	50.8	3096	0	0	1	51.7
			5W	5173	3	0	1	86.4	5555	3	0	1	92.8	5653	3	0	1	94.4
			5QM	5555	2	0	1	92.8	5965	2	0	1	99.6	6071	2	0	1	101.4
			R	5244	1	0	2	87.6	5630	1	0	2	94.0	5730	1	0	2	95.7
			L	5244	1	0	2	87.6	5630	1	0	2	94.0	5730	1	0	2	95.7
54	9,000	500	1	8504	1	0	1	100.9	9130	1	0	1	108.3	9292	1	0	1	110.3
			1-BC	4850	0	0	0	57.6	5207	0	0	0	61.8	5299	0	0	0	62.9
			2	7988	1	0	2	94.8	8577	1	0	2	101.8	8729	1	0	2	103.6
			2-BC	4522	0	0	1	53.7	4856	0	0	1	57.6	4942	0	0	1	58.6
			3	7676	1	0	2	91.1	8242	1	0	2	97.8	8388	1	0	2	100.0
			3-BC	4271	0	0	1	50.7	4586	0	0	1	54.4	4667	0	0	1	55.4
			4	8019	1	0	2	95.2	8610	1	0	2	102.2	8763	1	0	2	104.0
			4-BC	5309	0	0	2	63.0	5701	0	0	2	67.7	5802	0	0	2	68.9
			4W	7491	1	0	2	88.9	8043	1	0	2	95.4	8185	1	0	2	97.1
			4W-BC	4388	0	0	2	52.1	4711	0	0	2	55.9	4795	0	0	2	56.9
			5W	8012	3	0	2	95.1	8603	3	0	1	102.1	8755	3	0	2	103.9
			5QM	8604	3	0	1	102.1	9238	3	0	1	109.6	9402	3	0	1	111.6
			R	8121	1	0	2	96.4	8719	1	0	2	103.5	8874	1	0	2	105.3
			L	8121	1	0	2	96.4	8719	1	0	2	103.5	8874	1	0	2	105.3

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SARA2

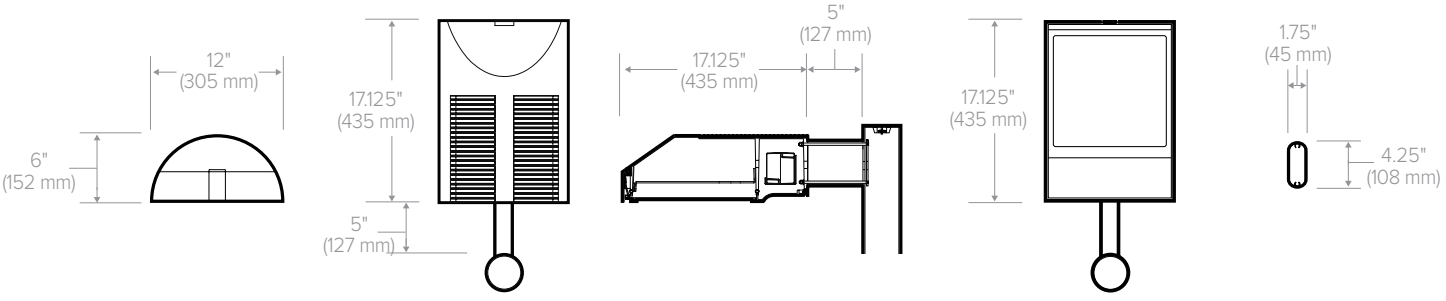
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
27	6,000	695	1	5403	1	0	0	90.2	5802	1	0	0	96.9	5905	1	0	0	98.6
			1-BC	3082	0	0	0	51.5	3308	0	0	0	55.3	3367	0	0	0	56.2
			2	5076	1	0	1	84.8	5450	1	0	1	91.0	5546	1	0	1	92.6
			2-BC	2873	0	0	1	48.0	3085	0	0	1	51.5	3140	0	0	1	52.4
			3	4877	1	0	1	81.5	5237	1	0	1	87.5	5330	1	0	2	89.0
			3-BC	2714	0	0	1	45.3	2914	0	0	1	48.7	2965	0	0	1	49.5
			4	5095	1	0	2	85.1	5471	1	0	2	91.4	5568	1	0	2	93.0
			4-BC	3373	0	0	1	56.3	3622	0	0	1	60.5	3686	0	0	1	61.6
			4W	4760	1	0	2	79.5	5111	1	0	2	85.4	5202	0	0	1	86.9
			4W-BC	2788	0	0	1	46.6	2993	0	0	1	50.0	3046	0	0	1	50.9
			5W	5090	3	0	1	85.0	5466	3	0	1	91.3	5563	3	0	1	92.9
			5QM	5467	2	0	1	91.3	5870	2	0	1	98.0	5974	2	0	1	99.8
			R	5160	1	0	2	86.2	5540	1	0	2	92.5	5639	1	0	2	94.2
			L	5160	1	0	2	86.2	5540	1	0	2	92.5	5639	1	0	2	94.2
54	9,000	500	1	8368	1	0	1	99.3	8985	1	0	1	106.6	9144	1	0	1	108.5
			1-BC	4772	0	0	0	56.6	5124	0	0	0	60.8	5214	0	0	0	61.9
			2	7860	1	0	1	93.3	8440	1	0	2	100.2	8589	1	0	2	101.9
			2-BC	4450	0	0	1	52.8	4778	0	0	1	56.7	4863	0	0	1	57.7
			3	7553	1	0	2	89.6	8110	1	0	2	96.2	8254	1	0	2	97.9
			3-BC	4202	0	0	1	49.9	4513	0	0	1	53.6	4592	0	0	1	54.5
			4	7890	1	0	2	93.6	8472	1	0	2	100.5	8623	0	0	2	102.3
			4-BC	5225	0	0	2	62.0	5610	0	0	2	66.6	5709	0	0	2	67.7
			4W	7371	1	0	2	87.5	7914	1	0	2	93.9	8055	1	0	2	95.6
			4W-BC	4318	0	0	2	51.2	4636	0	0	2	55.0	4718	0	0	2	56.0
			5W	7884	3	0	2	93.6	8465	3	0	2	100.5	8615	3	0	2	102.2
			5QM	8466	3	0	1	100.5	9091	3	0	1	107.9	9252	3	0	1	109.8
			R	7991	1	0	2	94.8	8580	1	0	2	101.8	8732	1	0	2	103.6
			L	7991	1	0	2	94.8	8580	1	0	2	101.8	8732	1	0	2	103.6

DIMENSIONS



FRONT TOP SIDE BOTTOM ARM CROSS SECTION

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-1

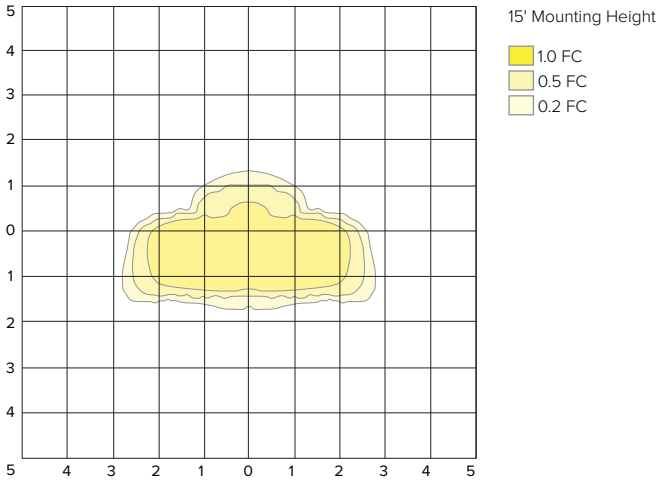
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6782**
Watts	**59.87**
Efficacy	**113.3**
IES Type	**1**
BUG Rating	**B1-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6026	88.8%
Downward House Side	757	11.2%
Downward Total	6783	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6783	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-1-BC

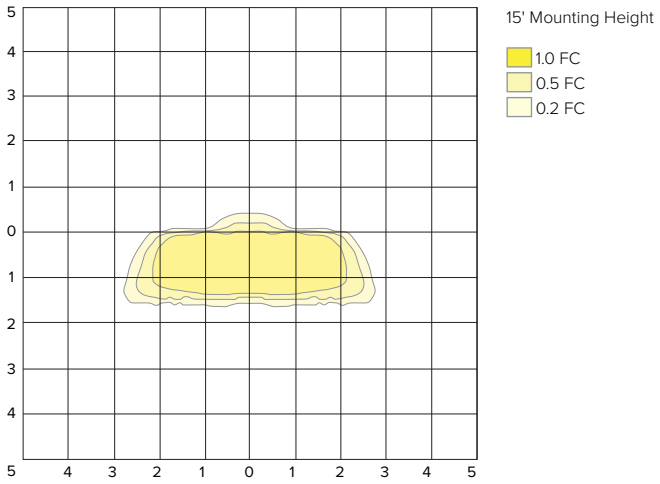
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**3871**
Watts	**59.87**
Efficacy	**64.7**
IES Type	**1-BC**
BUG Rating	**B0-U0-G0**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3796	98.0%
Downward House Side	76	2.0%
Downward Total	3871	99.9%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3871	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-2

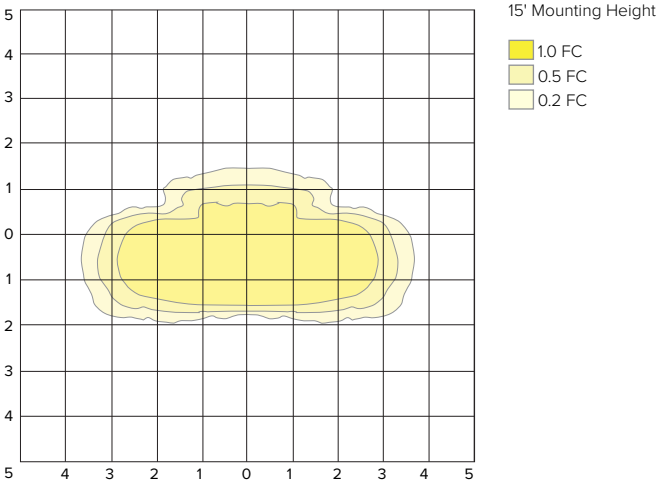
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6370**
Watts	**59.87**
Efficacy	**106.4**
IES Type	**2**
BUG Rating	**B1-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5259	82.5%
Downward House Side	1112	17.5%
Downward Total	6371	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6371	100%

ISOFOOT CANDLE PLOT



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SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-2-BC

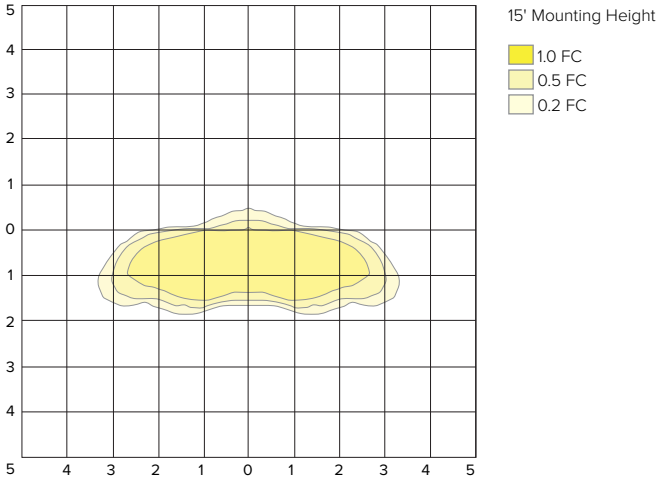
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**3609**
Watts	**59.87**
Efficacy	**60.3**
IES Type	**2-BC**
BUG Rating	**B0-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3528	97.7%
Downward House Side	81	2.2%
Downward Total	3609	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3609	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-3

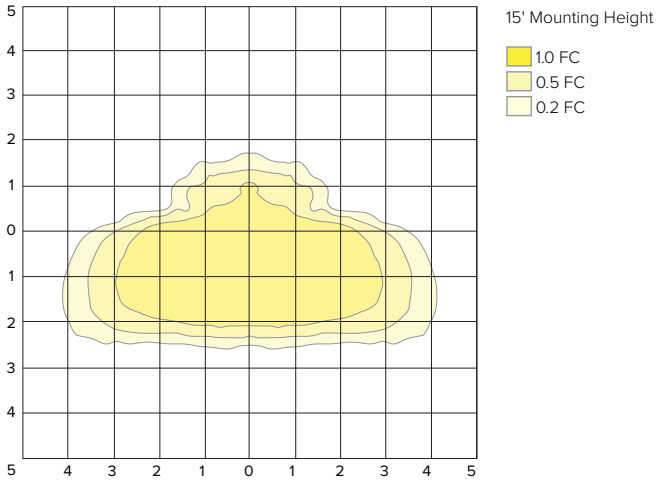
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6122**
Watts	**58.87**
Efficacy	**104.0**
IES Type	**3**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5245	85.7%
Downward House Side	877	14.3%
Downward Total	6122	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6122	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-3-BC

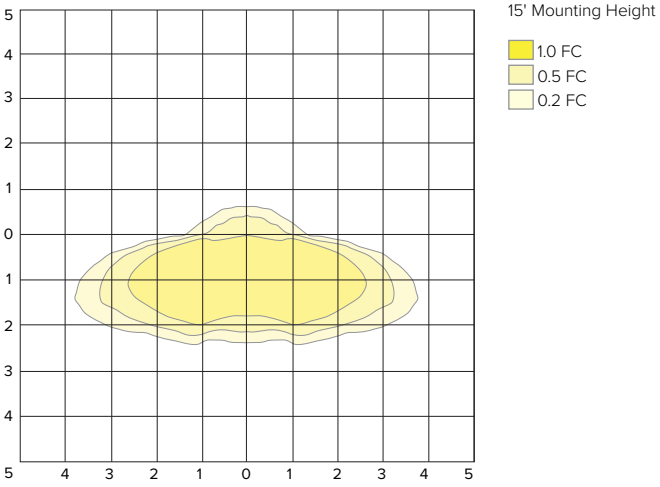
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**3407**
Watts	**59.87**
Efficacy	**56.9**
IES Type	**3-BC**
BUG Rating	**B0-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3304	96.9%
Downward House Side	103	3.0%
Downward Total	3407	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3407	100%

ISOFOOT CANDLE PLOT



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SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-4

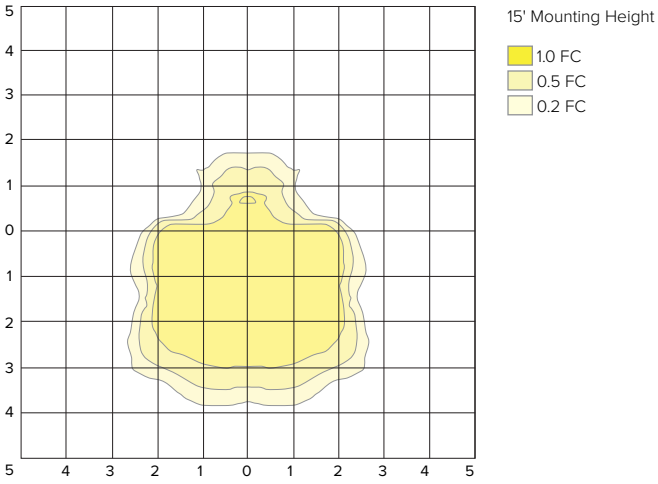
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6395**
Watts	**59.87**
Efficacy	**106.8**
IES Type	**4**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5544	86.7%
Downward House Side	852	13.3%
Downward Total	6396	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6396	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-4-BC

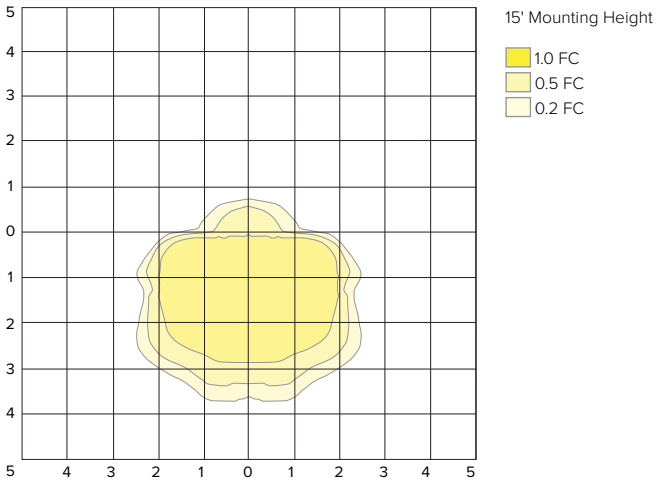
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**4236**
Watts	**59.87**
Efficacy	**70.8**
IES Type	**4-BC**
BUG Rating	**B0-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3995	94.3%
Downward House Side	241	5.7%
Downward Total	4236	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	4236	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-4W

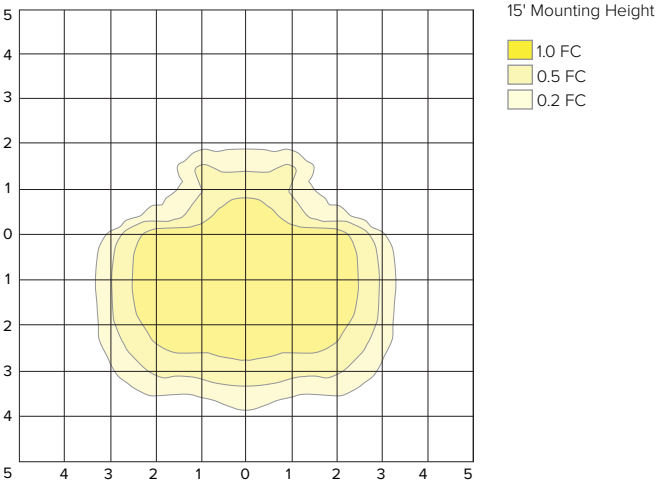
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**5975**
Watts	**59.87**
Efficacy	**99.8**
IES Type	**4W**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5179	86.7%
Downward House Side	796	13.3%
Downward Total	5975	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	5975	100%

ISOFOOT CANDLE PLOT



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DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-4W-BC

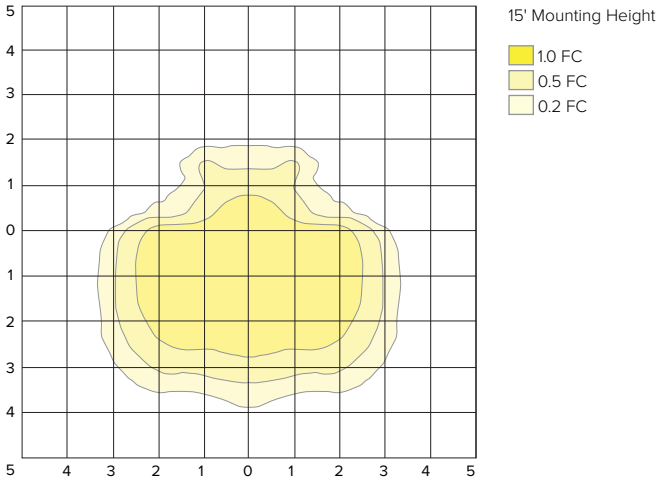
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**4236**
Watts	**59.87**
Efficacy	**70.8**
IES Type	**4W-BC**
BUG Rating	**B0-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3995	94.3%
Downward House Side	241	5.7%
Downward Total	4236	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	4236	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-5QM

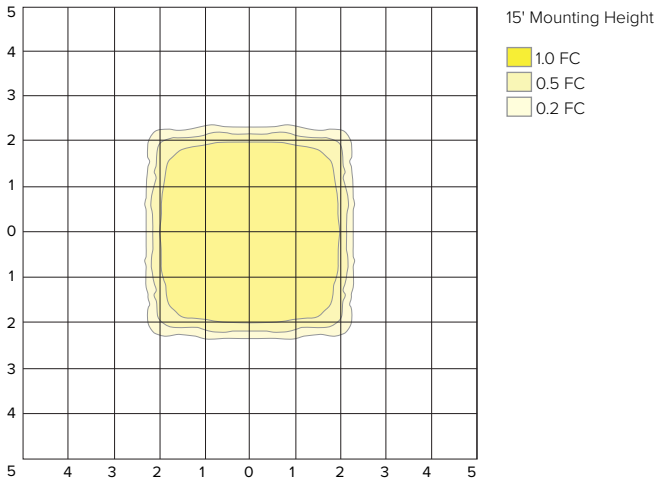
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6862**
Watts	**59.87**
Efficacy	**114.6**
IES Type	**5QM**
BUG Rating	**B2-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3431	50.0%
Downward House Side	3431	50.0%
Downward Total	6862	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6862	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-5W

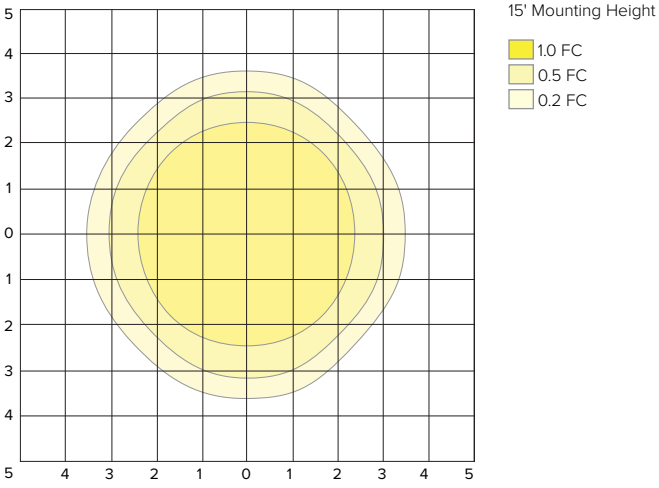
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6390**
Watts	**59.87**
Efficacy	**106.7**
IES Type	**5QM**
BUG Rating	**B3-U0-G1**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3195	50.0%
Downward House Side	3195	50.0%
Downward Total	6390	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6390	100%

ISOFOOT CANDLE PLOT



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SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-R

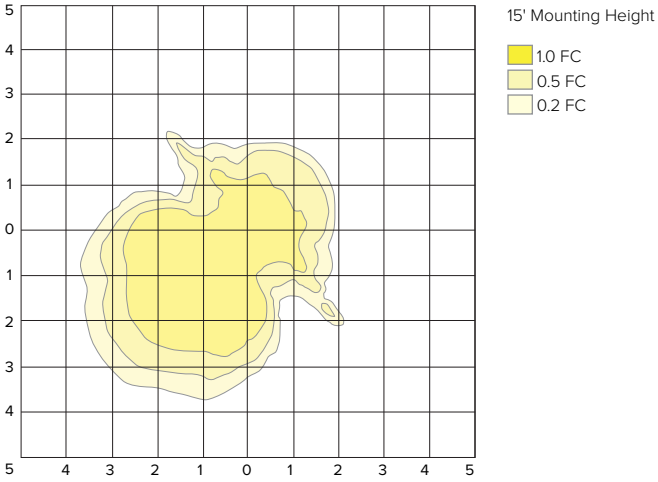
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6475**
Watts	**59.87**
Efficacy	**108.2**
IES Type	**R**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5340	82.5%
Downward House Side	1135	17.5%
Downward Total	6475	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6475	100%

ISOFOOT CANDLE PLOT



15' Mounting Height

1.0 FC
0.5 FC
0.2 FC

SAR2-27L-695-4K7-L

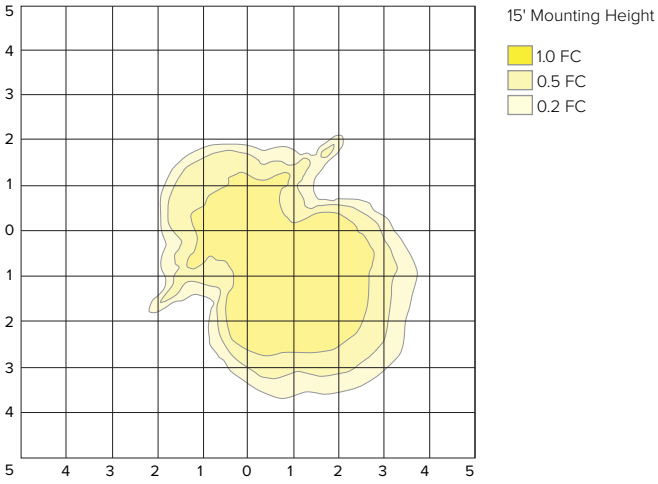
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**6476**
Watts	**59.87**
Efficacy	**108.2**
IES Type	**L**
BUG Rating	**B1-U0-G2**
Mounting Height	**15 ft**
Grid Scale	**10 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5493	84.8%
Downward House Side	983	15.2%
Downward Total	6476	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6476	100%

ISOFOOT CANDLE PLOT



15' Mounting Height

1.0 FC
0.5 FC
0.2 FC

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

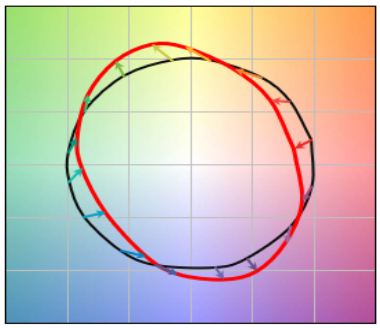
CATALOG #:

SARA2

ARCHITECTURAL AREA/SITE

TM-30 DATA

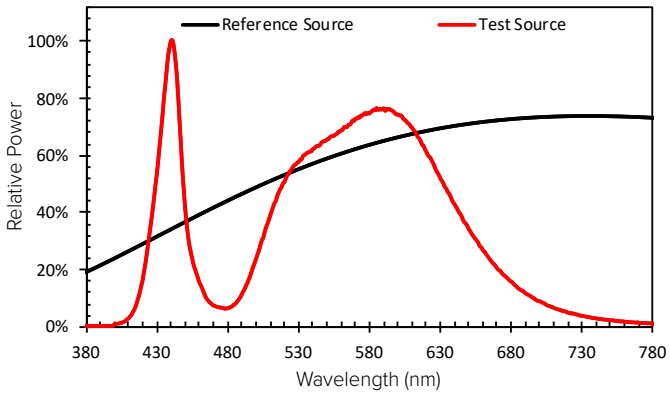
COLOR VECTOR GRAPHIC



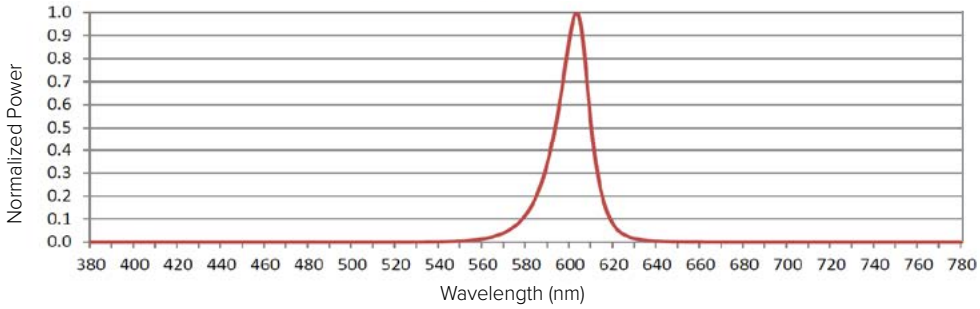
TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{UV}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage		Amps AC						Min Power Factor	Max. THD (%)	Dimming				
			VAC	Hz	120	208	240	277	347	480			Dimming Range	Source Current Out		Absolute Voltage	
														Min	Max	Min	Max
27 LEDs	58.87	695 mA	120-480	50/60	0.50	0.29	0.25	0.22	0.17	0.12	>0.9	20	10% to 100%	0mA	1mA	0V	10V
54 LEDs	84.27	500 mA			0.70	0.41	0.35	0.30	0.24	0.18							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	98.05%	96.94%	95.54%	90.73%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		

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Attachment 6
Auburn Water and Sewer District
Ability to Serve

Nathan Edwards

From: Mike Broadbent <mbroadbent@awsd.org>
Sent: Thursday, June 6, 2024 12:20 PM
To: Nathan Edwards
Cc: Jan Wiegman
Subject: RE: Bear Self Storage - Ability to Serve

Thanks Nate, the District can handle the additional 400gpd your proposing. Is this sufficient or do you need a letter?

Mike

From: Nathan Edwards <Nathan.Edwards@wright-pierce.com>
Sent: Thursday, June 6, 2024 11:45 AM
To: Mike Broadbent <mbroadbent@awsd.org>
Cc: Jan Wiegman <jan.wiegman@wright-pierce.com>
Subject: RE: Bear Self Storage - Ability to Serve

Hi Mike,

I hope you are doing well.

The plans changed at Bear's Self Storage and we are just now submitting an application for local development review at Bear's Self Storage/dealership. The existing building will remain at the dealership. The plan now is to construct a new building on the storage area side of the same site instead of the existing dealership side. The building will be 9,000 SF and used for office space, car service, and potentially car display for the dealership. Our estimation is it will use approximately 400 gpd of water per day. This is a conservative estimate assuming 200 gpd from the employees and 200 gpd from occasional car washes in the service bays. The employee usage rate is based on the ME wastewater disposal rules guidance of 12 gpd per employee. It is unlikely there will be that many employees, but we wanted to be conservative.

We are anticipating significantly less usage than what I mentioned with the previous design (400 gpd vs. 1600 gpd), but would you please confirm you have the capacity for 400 gpd?

Thank you,

Nate Edwards, PE
Wright-Pierce | Lead Project Engineer
direct 603.570.7119 | **office** 207.761.2991

WRIGHT-PIERCE
Engineering a Better Environment

From: Mike Broadbent <mbroadbent@awsd.org>
Sent: Thursday, September 7, 2023 2:26 PM
To: Nathan Edwards <Nathan.Edwards@wright-pierce.com>
Cc: Jan Wiegman <jan.wiegman@wright-pierce.com>
Subject: RE: Bear Self Storage - Ability to Serve

Nate,

Thanks for reaching out, there is sufficient capacity to serve this increase. They may need to increase the size of their water meter, in that case they will have to pay a sewer capacity fee increase. Is the current meter adequate for the fixtures in the new building?

Mike

From: Nathan Edwards <Nathan.Edwards@wright-pierce.com>
Sent: Thursday, September 7, 2023 2:07 PM
To: Mike Broadbent <mbroadbent@awsd.org>
Cc: Jan Wiegman <jan.wiegman@wright-pierce.com>
Subject: Bear Self Storage - Ability to Serve

Hi Mike,

We are designing some improvements at the Bear Self Storage Facility and K&R Auto Sales dealership at 900 Center Street in Auburn. We plan to submit a Development Review application any day now. The site is currently served by public water and sewer. The project proposes to demolish the existing building at the dealership and replace it with a larger building that we anticipate using approximately 1,600 gpd. Is there adequate supply for this?

Please let me know if you need any additional information.

Thanks,

Nate Edwards, PE
Wright-Pierce | Lead Project Engineer
direct 603.570.7119 | **office** 207.761.2991

WRIGHT-PIERCE
Engineering a Better Environment

Attachment 7
Site Plan

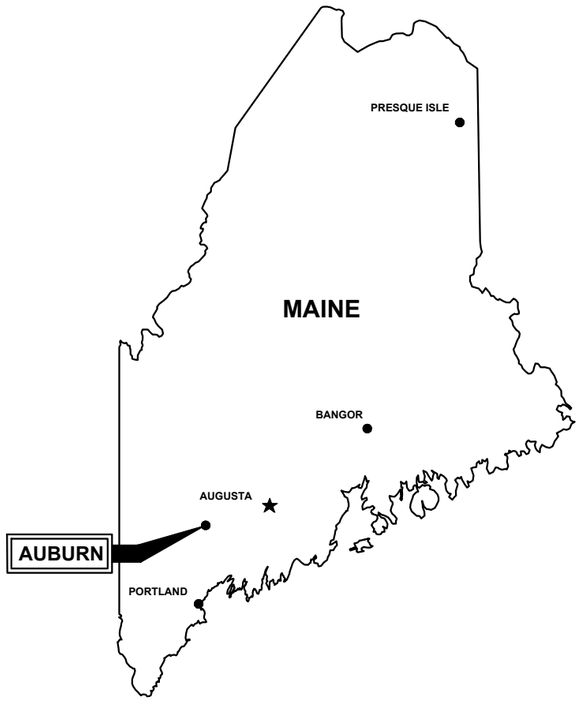
BEAR SELF STORAGE FACILITY

CONTRACT DRAWINGS

AUBURN, ME

FEBRUARY 2026

FOR PERMITTING

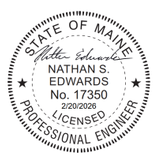


DRAWING INDEX

GENERAL	
---	COVER SHEET
CIVIL	
C-1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C-2	EXISTING CONDITIONS & DEMOLITION PLAN
C-3	SITE LAYOUT PLAN
C-4	SITE GRADING AND DRAINAGE PLAN
C-5	SITE UTILITIES PLAN
C-6	PROPOSED LANDSCAPE PLAN
C-7	DETAILS I
C-8	DETAILS II
C-9	DETAILS III
C-10	EROSION CONTROL NOTES AND DETAILS



LOCATION PLAN
SCALE: NTS



WRIGHT-PIERCE
Engineering a Better Environment

207.725.8721 | www.wright-pierce.com

WP PROJECT No. 21316

LAST SAVED BY: KYLE.BLAIS 2/10/2026 1:28 PM

GENERAL NOTES

1. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY REPRESENTATIVE PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REFER TO SECTION 01050 REGARDING COORDINATION WITH OTHERS, INCLUDING RESPONSIBILITIES AND OTHER RELATED COSTS. UTILITY CONTACTS ARE AS FOLLOWS.

ELECTRIC:

CENTRAL MAINE POWER
209 WHITTIER ROAD
FARMINGTON, MAINE 04938
TEL. (207) 779-9118

TELEPHONE/CABLE:

NEW ENGLAND TELEPHONE
5 DAVIS FARM ROAD
PORTLAND, ME 04103
TEL. (207) 797-8251

MID MAINE TELECOM
900D HAMMOND STREET
BANGOR, ME 04101
TEL. (207) 992-9945

TIME WARNER CABLE
37 ALFRED PLOURDE PARKWAY
LEWISTON, MAINE 04240
TEL. (207) 783-9902

OXFORD NETWORKS
491 LISBON STREET
LEWISTON, ME 04240
TEL. (207) 333-3471

OTT COMMUNICATIONS
56 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
TEL. (207) 688-8824

DIG SAFE:

TEL. 1-800-225-4977

WATER & SEWER:

AUBURN WATER & SEWERAGE DISTRICTS
P.O. BOX 414
AUBURN, MAINE 04210
TEL. (207) 784-6469

GAS:

UNITIL CORP.
1075 FOREST AVENUE
PORTLAND, ME 04101
TEL. (207) 541-2568

CITY OF AUBURN

60 COURT STREET
AUBURN, MAINE 04240
TEL. (207) 333-6601

2. ALL UTILITY COVERS, CATCH BASINS, MANHOLES, VALVE BOXES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH THE NEW PAVEMENT GRADE UNLESS OTHERWISE NOTED. THE RELOCATION OF UTILITY POLES WILL BE PERFORMED BY THE APPROPRIATE UTILITY OR ITS AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY IN EVERY WAY TO EXPEDITE SUCH ADJUSTMENTS. CONTRACTOR TO COORDINATE ALL UTILITY RELOCATION AND INSTALLATION WITH THE APPROPRIATE UTILITY COMPANY.
3. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AT THE APPROXIMATE LOCATIONS NOTED ON THE PLANS AND ACTUAL LOCATIONS OF SUBSURFACE UTILITIES SHALL BE REPORTED TO THE ENGINEER. WHERE APPROPRIATE, MINOR ADJUSTMENTS TO THE ALIGNMENTS OF PROPOSED LINES SHALL BE MADE TO ACCOMMODATE EXISTING UTILITIES. ALL ADJUSTMENTS (NORTHINGS, EASTINGS AND ELEVATIONS) MUST BE DEPICTED IN THE RECORD AS-BUILT DRAWING DATA SUBMITTED TO THE ENGINEER FOR INCLUSION IN THE RECORD AS-BUILT DRAWINGS.
4. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF SUBSTANTIAL COMPLETION OF THE PROJECT WILL BE CORRECTED BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. ALL EXISTING SEWER AND STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE EXCEPT AS OTHERWISE INDICATED. ANY EXISTING SEWERS, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION AND NOT TO BE REPLACED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
6. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
7. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE APPROPRIATE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
8. CONTRACTOR SHALL INSTALL AND MAINTAIN PERMANENT AND TEMPORARY TRAFFIC CONTROL DEVICES AS NECESSARY AND IN A MANNER CONSISTENT WITH MAINE DOT REQUIREMENTS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER AND ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE POLICE DEPARTMENT AND FIRE DEPARTMENT ARE TO BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. AUBURN POLICE DEPARTMENT TEL. 207-333-6650. AUBURN FIRE DEPARTMENT TEL. 207-784-5433.
10. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY RIGHTS-OF-WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
11. OPEN TRENCHES IN THE ROADWAY MUST BE BACK FILLED AT THE END OF THE WORKDAY, UNLESS PERMISSION TO LEAVE THEM OPEN IS GIVEN IN WRITING BY THE OWNER. ALL STREETS MUST BE PAVED PRIOR TO THE WINTER SHUTDOWN. TEMPORARY PAVEMENT SHALL BE CONSIDERED INCIDENTAL. OPEN TRENCHES OUTSIDE OF THE ROADWAY MAY BE LEFT OPEN IF THE CONTRACTOR PROVIDES ADEQUATELY SAFE BARRICADES AND LIGHTS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ALL EXISTING PROPERTY MONUMENTATION THAT IS DISTURBED BY HIS OPERATIONS AT NO EXPENSE TO THE OWNER. THIS WORK IS TO BE DONE BY A LAND SURVEYOR LICENSED IN THE STATE OF MAINE. PROPERTY BOUNDS FOUND ARE SHOWN ON LAYOUT PLANS, THIS MAY NOT BE INCLUSIVE OF ALL BOUNDS THAT EXIST IN THE PROJECT AREA. IF ANY ADDITIONAL BOUNDS ARE FOUND, THE CONTRACTOR SHALL DOCUMENT THE LOCATION AND NOTIFY THE ENGINEER.
13. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT. EXCESS MATERIAL MAY BE DISPOSED OF AT A LOCATION PROVIDED BY THE TOWN, IF OWNER SO DESIRES.
14. CONSTRUCT HANDICAP RAMPS AT ENDS OF ALL SIDEWALKS, FOR DRIVEWAYS OR ROADWAYS AND AS OTHERWISE SHOWN ON THE PLANS. SIDEWALKS AND HANDICAP RAMPS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
15. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED.
16. APPROXIMATE LIMIT OF WORK ON PLANS IS INTENDED TO SHOW GENERAL SCOPE OF THE WORK. ACTUAL LIMITS OF THE WORK ARE TO BE DETERMINED IN THE FIELD TO MEET PROJECT NEEDS AS DETERMINED BY THE OWNER AND THE ENGINEER.
17. PAVEMENT IS TO BE SAWCUT AT ALL SIDE ROADS, PAVED DRIVES, PAVED SIDEWALKS, AS WELL AS THE BEGINNING AND END OF THE PROJECT LIMITS. PAVEMENT GRINDING BEYOND THE SAW CUT WILL BE REQUIRED AT ALL LOCATIONS.
18. CURB CUT LOCATIONS FOR DRIVEWAYS SHALL BE FIELD VERIFIED. ADJUST CURB CUTS IF APPROPRIATE.
19. WHERE GRAVEL DRIVES NEED TO BE REGRADED BEYOND THE PROPOSED EDGE OF ROADWAY OR PROPOSED SIDEWALK USE SCREENED STONE TO ADJUST TO GRADE. EXCAVATE AS NECESSARY TO PROVIDE A MINIMUM GRAVEL DEPTH OF 12 INCHES IN ANY CUT SECTIONS.
20. THE CONTRACTOR SHALL NOTIFY RESIDENTS 48 HOURS IN ADVANCE OF WHEN CONSTRUCTION WILL DISRUPT ACCESS TO THE RESIDENTS PROPERTY, INCLUDING DRIVEWAYS, WALKWAYS, ETC. DURING NOTIFICATION, CONTRACTOR SHALL VERIFY WITH OWNER ANY KNOWN BOUNDARY MARKER LOCATIONS.
21. EXISTING SIGNS THAT ARE IMPACTED BY THIS PROJECT SHALL BE RESET PER CITY OF AUBURN STANDARDS AND IN ACCORDANCE WITH MAINE DOT AND M.U.T.C.D. ADDITIONAL SIGNS MY BE REQUIRED AS DIRECTED BY THE ENGINEER.
22. ALL MANHOLES ARE 4 FOOT DIAMETER, ECCENTRIC CONE TOP, UNLESS OTHERWISE NOTED. THE INVERTS SHOWN ARE AT THE INSIDE FACE OF THE MANHOLE.
23. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
24. REFER TO SPECIFICATION FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.
25. CONTRACTOR SHALL RE-SHAPE INVERTS AS REQUIRED WHEN CONNECTING INTO EXISTING MANHOLES.
26. ALL PERMITS, INCLUDING THE TOWN'S STREET OPENING PERMIT, ARE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH PERMIT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
27. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND MAINTAIN A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK, UNTIL PROJECT SUBSTANTIAL COMPLETION.
28. RIGID INSULATION SHALL BE PROVIDED ON ALL NEW STORM DRAIN LINES INSTALLED SUCH THAT THE CROWN IS AT A DEPTH OF 3'-0" OR LESS FROM FINISH GRADE.
29. FLOWS FROM DEWATERING EFFORTS SHALL NOT BE DISCHARGED TO SANITARY OR COMBINED SEWERS.
30. ANY EXISTING STRUCTURES, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION THAT ARE TO REMAIN IN SERVICE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, EXCEPT WHEN IN DIRECT CONFLICT WITH THE NEW SEWER OR WHERE NOT SHOWN OR INDICATED.

SITE GRADING NOTES

1. STRIPPING OF TOPSOIL (LOAM) SHALL BE IN ACCORDANCE WITH SPECIFICATION.
2. ALL ROAD AND PARKING AREA SURFACES SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED.
3. ALL AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 4 INCHES OF SOIL SHALL BE LOAM.
4. THE CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK, AND CONFINE SOIL SEDIMENT TO WITHIN THE LIMITS OF EXCAVATION AND GRADING. PRIOR TO BEGINNING EXCAVATION WORK, EROSION CONTROL FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE ACTUAL LIMITS OF GRUBBING AND/OR GRADING, AND AS SHOWN ON THE DRAWINGS. EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE A MINIMUM, CONTRACTOR SHALL TAKE ALL OTHER NECESSARY MEASURES. EROSION CONTROL FENCE SHALL ALSO BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE TOPSOIL STOCKPILES. ALL DISTURBED EARTH SURFACES SHALL BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION. ALL INSTALLED EROSION CONTROL FACILITIES SHALL BE REMOVED AT THE END OF THE PROJECT.
5. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY HAY BALE FILTERS TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL COLLECTED SEDIMENT, AND THAT WHICH COLLECTS IN THE STORM DRAIN SYSTEM.
6. CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT, AS DETERMINED BY THE ENGINEER, AND AS OUTLINED IN SPECIFICATION.
7. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS AND PLANT DRIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.
8. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINE GRADING WITH THE ENGINEER.

SITE LAYOUT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
2. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER. THE CONTRACTOR SHALL LIMIT HIS ACTIVITIES TO THESE AREAS.

EXISTING SITE NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY NOT BE COMPLETE. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE BASED ON PREVIOUS CONSTRUCTION DESIGN PLANS, WHICH ARE AVAILABLE FOR INSPECTION AT THE ENGINEER'S OFFICE. NO GUARANTEE IS MADE THAT UTILITIES OR STRUCTURES WILL BE ENCOUNTERED WHERE SHOWN OR THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. ALL LOCATIONS AND SIZES OF EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES OR PIPING THAT MAY BE AFFECTED. THE CONTRACTOR WILL REALIGN NEW PIPE LOCATIONS AS REQUIRED TO CONFORM TO EXISTING LINES AND AS APPROVED BY THE ENGINEER.
2. CONTRACTOR TO NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT.
3. UNLESS OTHERWISE NOTED, THERE IS NO KNOWN ASBESTOS WITHIN THE AREA OF WORK. IF THE PRESENCE OF ASBESTOS IS DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER IMMEDIATELY. DISPOSAL OF ASBESTOS SHALL BE IN ACCORDANCE WITH STATE OF MAINE REGULATIONS.

SURVEY NOTES:

1. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM WEST ZONE 2011 NAD83.
2. DEED REFERENCES ARE MADE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS.
3. THE PARCEL IS LOCATED IN THE GENERAL BUSINESS ZONING DISTRICT.
4. THE PARCEL IS NOT LOCATED WITHIN A 100-YEAR FLOOD HAZARD AREA AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP COMMUNITY PANEL 23001C0213E, EFFECTIVE DATE JULY 7, 2013.
5. CONTOURS WITHIN "LIMIT OF TOPO" BASED ON TOPOGRAPHIC FIELD SURVEY DONE IN MARCH AND APRIL 2022. CONTOURS BEYOND THOSE LIMITS ARE LIDAR CONTOURS FROM NV5 GEOSPATIAL, POWERED BY QUANTUM SPATIAL, USGS. THE CUSTOM DOWNLOAD CITED AS NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) DIGITAL COAST DATA ACCESS VIEWER. CUSTOM PROCESSING OF "2020 USGS LIDAR: SOUTH COASTAL MAINE (QL2)". CHARLESTON, SC: NOAA OFFICE FOR COASTAL MANAGEMENT. ACCESSED MARCH 31, 2022 AT HTTPS://COAST.NOAA.GOV/DATAVIEWER.
6. THE LOCATION, DEPTH, SIZE & EXISTENCE OF ALL UNDERGROUND UTILITY LINES, TANKS AND/OR STRUCTURES WAS NOT VERIFIED. CONTRACTOR SHALL CONTACT DIGSAFE/ON-TARGET PRIOR TO EXCAVATION TO CONFIRM THE LOCATION OF ALL PUBLIC & PRIVATE UTILITIES WITHIN THE PROJECT AREA.

CIVIL ABBREVIATIONS

&	AND
Ø, DIA	DIAMETER
#, NO	NUMBER
AC	ASBESTOS CEMENT
APP'D	APPROVED
BR	BRICK
BLDG	BUILDING
CB	CATCH BASIN
CEN	CENTER
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CIPP	CURED-IN-PLACE-PIPE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
COR	CORNER
CY	CUBIC YARD
DEMO	DEMOLITION
DMH	DRAIN MANHOLE
DI	DUCTILE IRON
DR	DRAIN
DWG	DRAWING
EL	ELEVATION
EMH	ELECTRIC MANHOLE
FM	FORCE MAIN
FT	FEET
G	GAS
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
IN	INCH
INF	INFLUENT
INV	INVERT
LBS	POUNDS
LF	LINEAR FOOT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MW	MONITORING WELL
N	NORTH
NGVD	NATIONAL GEODETIC VERTICAL DATUM
N/A	NOT AVAILABLE/APPLICABLE
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OUT	OUTFALL
PC	PERFORATED CLAY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PS	PRIMARY SLUDGE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REQ'D	REQUIRED
S	SLOPE, SEWER
SD	STORM DRAIN
SF	SQUARE FEET
SMH	SANITARY SEWER MANHOLE
SQ	SQUARE
STA	STATION
T, XFMR	TRANSFORMER
TBM	TEMPORARY BENCH MARK
THK	THICKNESS
TOS	TOP OF STRUCTURE
TYP	TYPICAL
UD	UNDERDRAIN
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
VC	VITRIFIED CLAY
VF	VERTICAL FOOT
W/	WITH
W	POTABLE WATER

LEGEND

EXISTING		PROPOSED
	PROPERTY/ROW LINE	
	SETBACK LINE	
	EASEMENT LINE	
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURBING	
	EDGE OF GRAVEL	
122	EDGE OF CONCRETE	
122	CONTOUR	123
	BUILDING	
	STONEWALL	
	TREELINE	
	CHAIN LINK FENCE	
	STOCKADE FENCE	
	BARB WIRE FENCE	
	RETAINING WALL	
	GUARDRAIL	
8"	SEWER	8"S
4"	SEWER FORCE MAIN	4"FM
4"	GAS	4"G
8"	WATER	8"W
15"	STORM DRAIN	15"SD
6"	UNDERDRAIN	6"UD
12" CMP	CULVERT	12" CMP
UGE	UNDERGROUND ELECTRIC	UGE
OHE	OVERHEAD ELECTRIC	OHE
UGT	UNDERGROUND TELEPHONE	UGT
UGTV	UNDERGROUND CABLE TV	UGTV
	IRON PIPE/REBAR	
	DRILLHOLE	
	MONUMENT	
	SURVEY CONTROL POINT	
124.6	SPOT ELEVATION	134.5
SMH	SEWER MANHOLE	SMH
DMH	DRAINAGE MANHOLE	DMH
CB CB CB	CATCH BASIN	CB CB
EMH	ELECTRIC MANHOLE	EMH
TMH	TELEPHONE MANHOLE	TMH
	SHUTOFF VALVE	
	WATER SERVICE SHUTOFF	
	YARD HYDRANT	
	HYDRANT	
	GAS SERVICE SHUTOFF	
	GAS GATE VALVE	
	UTILITY POLE	
	UTILITY POLE W/ GUY	
	UTILITY POLE W/ LIGHT	
	LIGHT POLE	
	BOLLARD	
	FLAGPOLE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	SHRUB	
	WETLAND FLAG	
	EDGE OF WATER	
	STREAM	
	EDGE OF WETLANDS	
	FLOODPLAIN	
	WETLANDS	
	DRAINAGE FLOW	
	DRAINAGE SWALE	
	PAVEMENT MARKINGS	
	SIGN	
MB	MAILBOX	
	TEMPORARY BENCH MARK	
TP	TEST PIT	
B	TEST BORING	
P	TEST PROBE	
MW	MONITORING WELL	
	LIMIT OF WORK	
	SILT FENCE	
	RIPRAP	
	RAILROAD	
	MATCHLINE	
	ROCK OUTCROP	
	PAVEMENT	
	CONCRETE	
	GRAVEL	

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO. 21316
DESIGNED: N.EDWARDS
CAD COORD: R.BESAW
CAD: R.BESAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

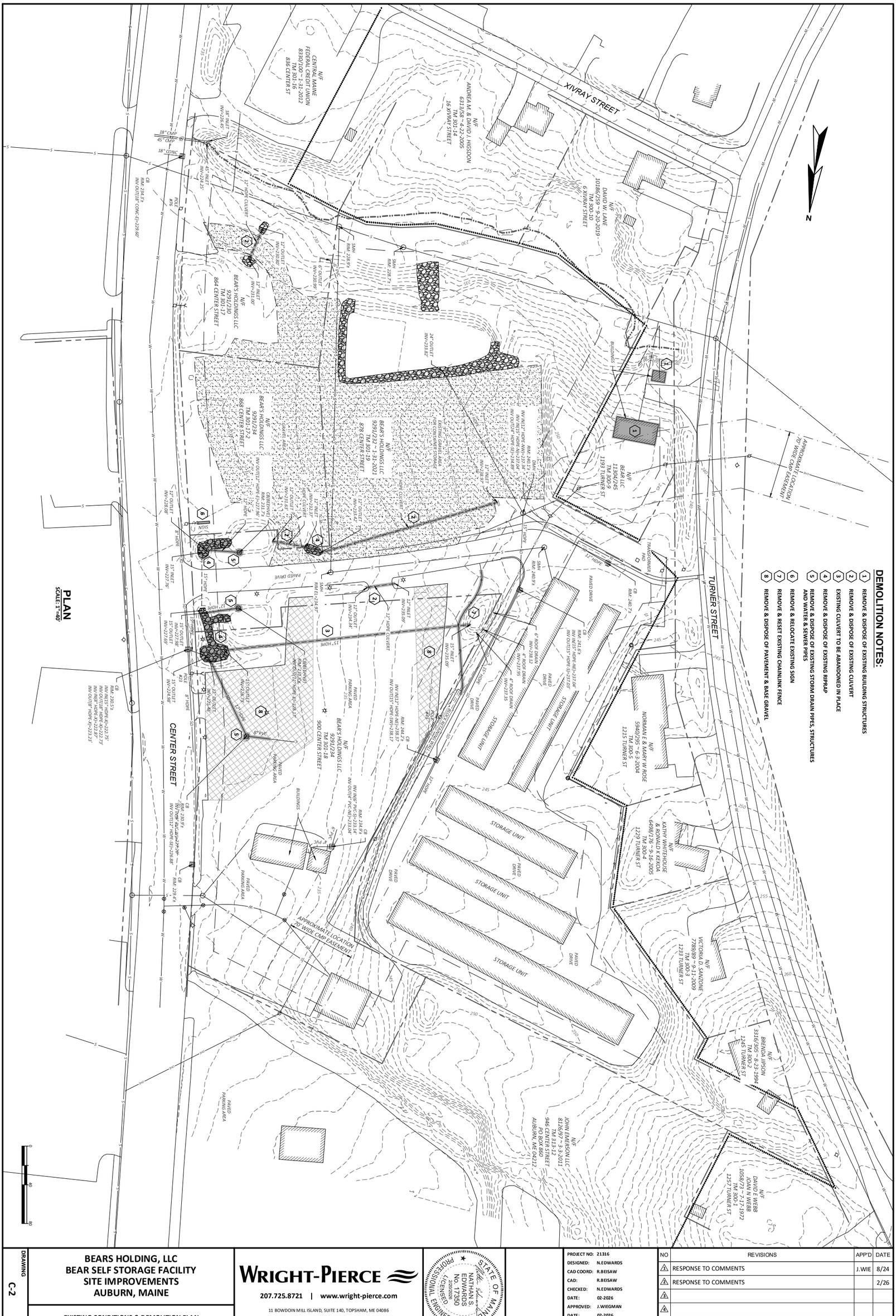
WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

GENERAL NOTES, LEGEND AND ABBREVIATIONS

DRAWING
C-1

J:\ENG\WELS\AUBURN\21316-BEARSELFSTORAGE_DRAWINGS\CIV\21316-GS-GENERALNOTES.DWG | 21316-GS-GeneralNotes | 1:2.5849 | --- | 2/10/2026 12:57:58 PM | KYLE.BLAIS



BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

EXISTING CONDITIONS & DEMOLITION PLAN

DRAWING **C-2**

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

STATE OF MAINE — NATHAN S. EDWARDS — No. 17360 — PROFESSIONAL ENGINEER — Licensed

PROJECT NO:	21316
DESIGNED:	N.EDWARDS
CAD COORD:	R.BEISAW
CAD:	R.BEISAW
CHECKED:	N.EDWARDS
DATE:	02-2026
APPROVED:	J.WIEGMAN
DATE:	02-2026
SUBMISSION:	FOR PERMITTING

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

LAST SAVED BY: KYLE.BLAIS 2/10/2026 10:06 AM

CITY OF AUBURN PLANNING BOARD

SITE PLAN, APPROVED BY THE CITY OF AUBURN PLANNING BOARD

CHAIRPERSON DATE

N

TURNER STREET

XIVRAY STREET

CENTER STREET

APPROXIMATE LOCATION 70' WIDE CMP EASEMENT

INSTALL PRIVACY SCREEN ON EXISTING CHAIN LINK FENCE

INSTALL 6' TALL SCREENED FENCE ALONG TOP OF BERM

PROPOSED GRAVEL AREA FOR CONTAINER STORAGE

GRAVEL AREA FOR CONTAINER STORAGE

INSTALL GUARDRAIL

12'x12' CONCRETE DUMPSTER PAD ENCLOSURE SEE DETAIL, DWG C-7

INSTALL SLIP FORM CURB

INSTALL CONCRETE TRANSFORMER PAD

PROPOSED BUILDING 9,000 SF.

WALL LIGHT PACK, TYP

RETAINING WALL

HAND HOLE

CONCRETE WALK

INSTALL CURB

SITE LIGHTING, TYP

PAVED AUTO DISPLAY AREA

PAVED AUTO DISPLAY AREA

PAVED DRIVE

PAVED PARKING AREA

STORAGE UNIT

TM 301-19
878 CENTER STREET

ROCKETTS ROAD WAY

RELOCATED SIGN

SUBURBAN RESIDENTIAL / GENERAL BUSINESS ZONE BOUNDARY

N/F
BEAR LLC
11304/245
TM 300-9
1193 TURNER ST

N/F
DAVID W. LANE
10186/259 ~ 9-20-2019
TM 300-10
6 XIVRAY STREET

N/F
ANDREA M. & DAVID J. HIGSDON
6313/58 ~ 4-22-2005
TM 301-14
16 XIVRAY STREET

N/F
CENTRAL MAINE
FEDERAL CREDIT UNION
8330/100 ~ 1-31-2012
TM 301-16
836 CENTER ST

N/F
BEAR'S HOLDINGS LLC
9291/232 ~ 1-31-2021
TM 301-19
878 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/230
TM 301-17
864 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-17-2
868 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-18
900 CENTER STREET

N/F
NORMAN E & MARY W ROSE
5940/295 ~ 6-3-2004
TM 300-5
1215 TURNER ST

N/F
KATHY WHITEHOUSE
& RONALD K KEKOA
6498/176 ~ 9-16-2005
TM 300-4
1229 TURNER ST

N/F
VICTORIA D. SANZONE
7789/89 ~ 9-11-2009
TM 300-3
1233 TURNER ST

N/F
BRENDA JIPSON
3316/305 ~ 8-23-1994
TM 300-2
1245 TURNER ST

N/F
DAVID E WEBB
JOAN N WEBB
1058/73 ~ 7-17-1972
TM 300-1
1257 TURNER ST

N/F
JOHN EMERSON LLC
8126/97 ~ 3-3-2011
TM 313-12
946 CENTER STREET
PO BOX 860
AUBURN, ME 04212

CB-1(TYPE F)
RIM: 239.9'±
4" INV IN(NW)=237.35'
4" INV IN(W)=237.95'
6" INV IN(SW)=238.12'
12" INV OUT(SE)=236.00'

CB-2(TYPE F)
RIM: 236.8'±
12" INV IN(S)=233.34'
12" INV OUT(N)=233.24'

CB-3(TYPE F)
RIM: 236.8'±
12" INV OUT(N)=233.80'

DMH-1
RIM: 238.5'±
12" INV IN(NW)=235.75'
12" INV OUT(E)=235.65'

NEW PAVED AREA

CB-5 (TYPE F)
RIM: 232.8'±
12" INV OUT(S)=229.62'

SUBSURFACE SAND FILTER
85 STORMTECH SC-310 CHAMBERS
(INCLUDES 30 ISOLATOR CHAMBERS)

SUBSURFACE DETENTION
34 STORMTECH SC-740 CHAMBERS

DMH-9
RIM: 232.5'±
8" INV IN(W)=227.20'
12" INV OUT(NE)=227.10'

DMH-8
RIM: 232.3'±
12" INV IN(SW)=226.01'
12" INV OUT(E)=225.91'

CB-8(6'Ø)
RIM: 232.3'±
6' WIDE WEIR EL: 230.50'
12" INV OUT(S)=229.17'
12" INV OUT(E)=229.17'
12" INV=229.17'

DMH-7
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

CB-7
RIM: 231.9'±
12" INV IN(W)=225.71'
12" INV OUT(S)=225.61'

DMH-6(6'Ø)
RIM: 231.9'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV OUT(S)=225.80'

CB-6(6'Ø)
RIM: 231.5'±
4" INV IN(W)=225.80'
12" INV IN(S)=225.10'
12" INV IN(S)=227.00'
12" INV IN(N)=225.10'
12"INV IN(N)=225.10'
15" INV OUT(E)=224.98'

CB
RIM: 230.5'±
INV IN(15" HDPE)=222.75'
INV OUT(18" HDPE)=222.73'
INV IN(8" HDPE)=222.87'
INV OUT(8" HDPE)=223.23'

DMH-5(6'Ø)
RIM: 232.5'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV OUT(N)=225.80'

CB
RIM: 244.2'±
INV IN(12" HDPE-NE)=238.37
INV OUT(15" HDPE-SW)=238.17

CB
RIM: 241.6'±
INV IN(15" HDPE-NE)=237.04'
INV OUT(15" HDPE-S)=237.03'

OCS-1
RIM: 233.5'±
4" INV IN(NE)=229.50'
12" INV OUT(SW)=229.17'

OCS-2
RIM: 233.5'±
4" INV IN(W)=229.50'
12" INV OUT(N)=229.17'

DMH-2
RIM: 235.0'±
15" INV IN(W)=232.40'
15" INV OUT(SE)=232.30'

CB-4
RIM: 232.9'±
12" INV IN(N)=229.40'
12" INV OUT(E)=229.30'

DMH-3 (6'Ø)
RIM:232.6'±
6' WIDE WEIR EL: 230.50'±
12" INV IN(W)=229.27'
12" INV OUT(E)=229.17' HDPE PIPE
12" INV OUT(N)=229.17'(ISOLATOR ROW)

DMH-4
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

GUSF-1

GUSF-2

PLAN
SCALE: 1"=40'

0 40 80

DIMENSIONAL REQUIREMENTS						
ZONE DISTRICT	YARD REQUIREMENTS			MIN. LOT WIDTH / DEPTH	LOT DENSITY	MAX. BUILDING HEIGHT
	REAR	SIDE	FRONT			
GENERAL BUSINESS	35'	5' MIN. 25' MAX.	25'	100' / 100'	30% MAX. COVERAGE BY BLDG	45'
SUBURBAN RESIDENTIAL	25'	5' MIN. 15' MAX.	25'	150' / 125'	2 BLDGS PER ACRE	35'
PROVIDED	230'	175'	117'	>150'	13%	30'

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
DESIGNED: N.EDWARDS
CAD COORD: R.BEDAW
CAD: R.BEDAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED
PROFESSIONAL ENGINEER

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

SITE LAYOUT PLAN

DRAWING
C-3

J:\ENGW\AUBURN\21316-BEARSELFSTORAGE_DRAWINGS\CIVIL\21316-CS-LAYOUT.DWG | 21316-CS-Layout | 1:2.5849 | — | 2/20/2026 12:58:58 PM | KYLE.BLAIS



BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

SITE GRADING AND DRAINAGE PLAN

DRAWING **C-4**

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

STATE OF MAINE — NATHAN S. EDWARDS — No. 17360 — LICENSED PROFESSIONAL ENGINEER

PROJECT NO:	21316
DESIGNED:	N.EDWARDS
CAD COORD:	R.BEISAW
CAD:	R.BEISAW
CHECKED:	N.EDWARDS
DATE:	02-2026
APPROVED:	J.WIEGMAN
DATE:	02-2026
SUBMISSION:	FOR PERMITTING

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

LAST SAVED BY: KYLE.BLAIS 2/10/2026 12:51 PM

N

TURNER STREET

XIVRAY STREET

SUBURBAN RESIDENTIAL
GENERAL BUSINESS
ZONE BOUNDARY

N/F
BEAR LLC
11304/245
TM 300-9
1193 TURNER ST

N/F
DAVID W. LANE
10186/259 ~ 9-20-2019
TM 300-10
6 XIVRAY STREET

N/F
ANDREA M. & DAVID J. HIGSDON
6313/58 ~ 4-22-2005
TM 301-14
16 XIVRAY STREET

N/F
CENTRAL MAINE
FEDERAL CREDIT UNION
8330/100 ~ 1-31-2012
TM 301-16
836 CENTER ST

N/F
BEAR'S HOLDINGS LLC
9291/232 ~ 1-31-2021
TM 301-19
878 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/230
TM 301-17
864 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-17-2
868 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-18
900 CENTER STREET

TM 301-19
878 CENTER STREET

N/F
NORMAN E & MARY W ROSE
5940/295 ~ 6-3-2004
TM 300-5
1215 TURNER ST

N/F
KATHY WHITEHOUSE
& RONALD K KEKOA
6498/176 ~ 9-16-2005
TM 300-4
1229 TURNER ST

N/F
VICTORIA D. SANZONE
7789/89 ~ 9-11-2009
TM 300-3
1233 TURNER ST

N/F
BRENDA JIPSON
3316/305 ~ 8-23-1994
TM 300-2
1245 TURNER ST

N/F
DAVID E WEBB
JOAN N WEBB
1058/73 ~ 7-17-1972
TM 300-1
1257 TURNER ST

N/F
JOHN EMERSON LLC
8126/97 ~ 3-3-2011
TM 313-12
946 CENTER STREET
PO BOX 860
AUBURN, ME 04212

PROPOSED GRAVEL AREA
FOR CONTAINER STORAGE

GRAVEL AREA
FOR CONTAINER STORAGE

TRANSFORMER PAD

PAVED DRIVE

STORAGE UNIT

SMH
RIM: 240.9'±

CB-1(TYPE F)
RIM: 239.9'±
4" INV IN(NW)=237.35'
4" INV IN(W)=237.95'
6" INV IN(SW)=238.12'
12" INV OUT(SE)=236.00'

CB-1

DMH-1

DMH-1
RIM: 238.5'±
12" INV IN(NW)=235.75'
12" INV OUT(E)=235.65'

BLOCK RETAINING WALL

POLE #43

CB-2(TYPE F)
RIM: 236.8'±
12" INV IN(S)=233.34'
12" INV OUT(N)=233.24'

CB-3(TYPE F)
RIM: 236.8'±
12" INV OUT(N)=233.80'

OWS
RIM: 237.5'±
6" INV IN(N)=230.50'
6" INV OUT(E)=230.40'

CB-3

CB-2

PAVED AUTO
DISPLAY AREA

WALL LIGHT
PACK, TYP

INV=229.20'
INSTALL CONCRETE
TRANSFORMER PAD

INV=231.00'
6" S

PROPOSED BUILDING

SMH
RIM: 228.7'±

SMH
RIM: 228.9'±

INSTALL
HAND HOLE

CONCRETE WALK

PAVED AUTO
DISPLAY AREA

SITE LIGHTING, TYP

DMH-2

OCS-1

GUSF-1

GUSF-2

OCS-2

OCS-1
RIM: 233.5'±
4" INV IN(NE)=229.50'
12" INV OUT(SW)=229.17'

OCS-2
RIM: 233.5'±
4" INV IN(W)=229.50'
12" INV OUT(N)=229.17'

DMH-2
RIM: 235.0'±
15" INV IN(W)=232.40'
15" INV OUT(SE)=232.30'

CB-4
RIM: 232.9'±
12" INV IN(N)=229.40'
12" INV OUT(E)=229.30'

DMH-3 (6'Ø)
RIM:232.6'±
6' WIDE WEIR EL: 230.50'±
12" INV IN(W)=229.27'
12" INV OUT(E)=229.17' HDPE PIPE
12" INV OUT(N)=229.17'(ISOLATOR ROW)

DMH-4
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

CB-5 (TYPE F)
RIM: 232.8'±
12" INV OUT(S)=229.62'

SMH
RIM EL=234.97'

SUBSURFACE SAND FILTER
85 STORMTECH SC-310 CHAMBERS
(INCLUDES 30 ISOLATOR CHAMBERS)

SUBSURFACE DETENTION
34 STORMTECH SC-740 CHAMBERS

DMH-9
RIM: 232.5'±
8" INV IN(W)=227.20'
12" INV OUT(NE)=227.10'

DMH-8
RIM: 232.3'±
12" INV IN(SW)=226.01'
12" INV OUT(E)=225.91'

CB-8(6'Ø)
RIM: 232.3'±
6' WIDE WEIR EL: 230.50'
12" INV OUT(S)=229.17'
12" INV OUT(E)=229.17'
12" INV=229.17'

CB-6

POLE #23

CENTER STREET

DMH-7
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

CB-7
RIM: 231.9'±
12" INV IN(W)=225.71'
12" INV OUT(S)=225.61'

DMH-6(6'Ø)
RIM: 231.9'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV OUT(S)=225.80'

CB-6(6'Ø)
RIM: 231.5'±
4" INV IN(W)=225.80'
12" INV IN(S)=225.10'
12" INV IN(S)=227.00'
12" INV IN(N)=225.10'
12"INV IN(N)=225.10'
15" INV OUT(E)=224.98'

CB
RIM: 230.5'±
INV IN(15" HDPE)=222.75'
INV OUT(18" HDPE)=222.73'
INV IN(8" HDPE)=222.87'
INV OUT(8" HDPE)=223.23'

DMH-5(6'Ø)
RIM: 232.5'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV OUT(N)=225.80'

PAVED PARKING AREA

PLAN
SCALE: 1"=40'

0 40 80

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
DESIGNED: N.EDWARDS
CAD COORD: R.BISSAW
CAD: R.BISSAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

SITE UTILITIES PLAN

DRAWING
C-5

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N

APPROXIMATE LOCATION 70' WIDE CMP EASEMENT

TURNER STREET

XIVRAY STREET

INSTALL PRIVACY SCREEN ON EXISTING CHAIN LINK FENCE

WHITE PINE EVERGREEN TREE SCREENING (10' OC)

INSTALL 6' TALL SCREENED FENCE ALONG TOP OF BERM

PROPOSED GRAVEL AREA

CONTAINER STORAGE AREA

PROPOSED BUILDING

PAVED AUTO DISPLAY AREA

PAVED AUTO DISPLAY AREA

GUSF-1

GUSF-2

OWS

75' SETBACK

SUBURBAN RESIDENTIAL / GENERAL BUSINESS ZONE BOUNDARY

N/F
DAVID W. LANE
10186/259 ~ 9-20-2019
TM 300-10
6 XIVRAY STREET

N/F
ANDREA M. & DAVID J. HIGSDON
6313/58 ~ 4-22-2005
TM 301-14
16 XIVRAY STREET

N/F
BEAR LLC
11304/245
TM 300-9
1193 TURNER ST

N/F
NORMAN E & MARY W ROSE
5940/295 ~ 6-3-2004
TM 300-5
1215 TURNER ST

N/F
BEAR'S HOLDINGS LLC
9291/232 ~ 1-31-2021
TM 301-19
878 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/230
TM 301-17
864 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-17-2
868 CENTER STREET

N/F
BEAR'S HOLDINGS LLC
9291/234
TM 301-18
0 CENTER STREET

N/F
CENTRAL MAINE FEDERAL CREDIT UNION
8330/100 ~ 1-31-2012
TM 301-16
836 CENTER ST

TM 301-19
878 CENTER STREET

N/F
JOHN EMERSON LLC
8126/97 ~ 3-3-2011
TM 313-12
946 CENTER STREET
PO BOX 860
AUBURN, ME 04212

CENTER STREET

PAVED PARKING AREA

APPROXIMATE LOCATION 70' WIDE CMP EASEMENT

TRANSFORMER PAD

PAVED DRIVE

STORAGE UNIT

GRAVEL AREA

BLOCK RETAINING WALL

POLE #43

POLE #23

POLE #76

SMH

DMH

CB

CB-1(TYPE F)
RIM: 239.9'±
4" INV IN(NW)=237.35'
4" INV IN(W)=237.95'
6" INV IN(SW)=238.12'
12" INV OUT(SE)=236.00'

CB-1

DMH-1

DMH-1
RIM: 238.5'±
12" INV IN(NW)=235.75'
12" INV OUT(E)=235.65'

CB-2(TYPE F)
RIM: 236.8'±
12" INV IN(S)=233.34'
12" INV OUT(N)=233.24'

CB-3(TYPE F)
RIM: 236.8'±
12" INV OUT(N)=233.80'

CB-3

CB-2

CB-5 (TYPE F)
RIM: 232.8'±
12" INV OUT(S)=229.62'

DMH-9
RIM: 232.5'±
8" INV IN(W)=227.20'
12" INV OUT(NE)=227.10'

DMH-8
RIM: 232.3'±
12" INV IN(SW)=226.01'
12" INV OUT(E)=225.91'

CB-8(6'Ø)
RIM: 232.3'±
6' WIDE WEIR EL: 230.50'
12" INV OUT(S)=229.17'
12" INV OUT(E)=229.17'
12" INV=229.17'

DMH-7
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

CB-7
RIM: 231.9'±
12" INV IN(W)=225.71'
12" INV OUT(S)=225.61'

DMH-6(6'Ø)
RIM: 231.9'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV OUT(S)=225.80'

CB-6

CB-6(6'Ø)
RIM: 231.5'±
4" INV IN(W)=225.80'
12" INV IN(S)=225.10'
12" INV IN(S)=227.00'
12" INV IN(N)=225.10'
12"INV IN(N)=225.10'
15" INV OUT(E)=224.98'

CB
RIM: 230.5'±
INV IN(15" HDPE)=222.75'
INV OUT(18" HDPE)=222.73'
INV IN(8" HDPE)=222.87'
INV OUT(8" HDPE)=223.23'

DMH-5(6'Ø)
RIM: 232.5'±
6' WIDE WEIR EL: 230.00'
(2) 4" ORIFICES IN WEIR WALL EL: 225.80'
12" INV IN(W)=225.90'
12" INV IN(N)=225.80'

OCS-1
RIM: 233.5'±
4" INV IN(NE)=229.50'
12" INV OUT(SW)=229.17'

OCS-2
RIM: 233.5'±
4" INV IN(W)=229.50'
12" INV OUT(N)=229.17'

DMH-2
RIM: 235.0'±
15" INV IN(W)=232.40'
15" INV OUT(SE)=232.30'

CB-4
RIM: 232.9'±
12" INV IN(N)=229.40'
12" INV OUT(E)=229.30'

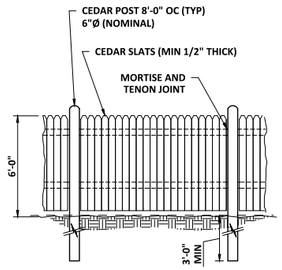
DMH-3 (6'Ø)
RIM:232.6'±
6' WIDE WEIR EL: 230.50'±
12" INV IN(W)=229.27'
12" INV OUT(E)=229.17' HDPE PIPE
12" INV OUT(N)=229.17'(ISOLATOR ROW)

DMH-4
RIM: 232.6'±
12" INV IN(W)=228.90'
12" INV OUT(E)=226.10'

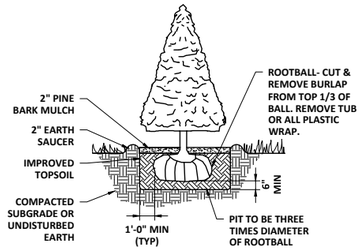
PLAN
SCALE: 1"=40'

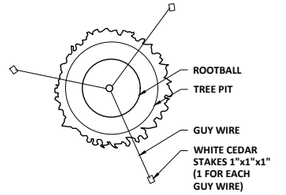
0 40 80

NOTES:
1. ALL METAL FASTENINGS TO BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
2. SUBMIT DETAILS FOR GATE FRAMING AND HARDWARE FOR ENGINEER'S APPROVAL PRIOR TO FABRICATION.
3. CONTRACTOR TO APPLY SEMI-TRANSPARENT PRESERVATIVE STAIN, COLOR TO BE COORDINATED WITH OWNER.



STOCKADE FENCE
SCALE: NTS





EVERGREEN TREE PLANTING
SCALE: NTS

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
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CAD COORD: R.BEGAW
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SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

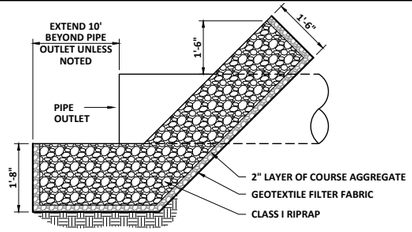
BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

PROPOSED LANDSCAPE PLAN

DRAWING
C-6

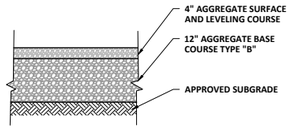
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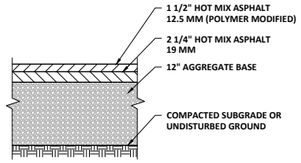


NOTE:
SEE PLANS FOR RIPRAP EXTENTS

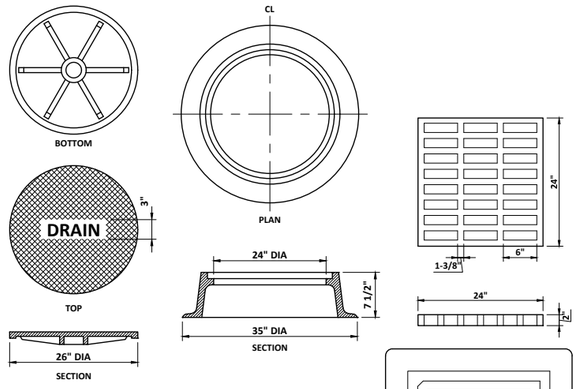
RIPRAP APRON
SCALE: NTS



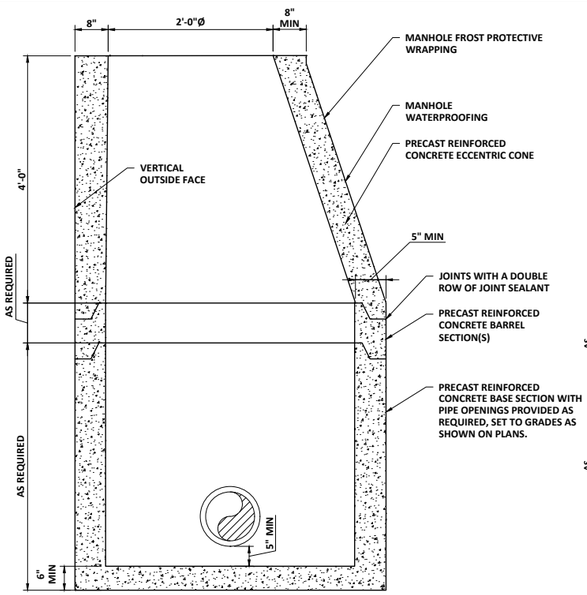
TYPICAL SECTION OF GRAVEL AREAS
SCALE: NTS



PARKING LOT PAVEMENT
SCALE: "NTS"

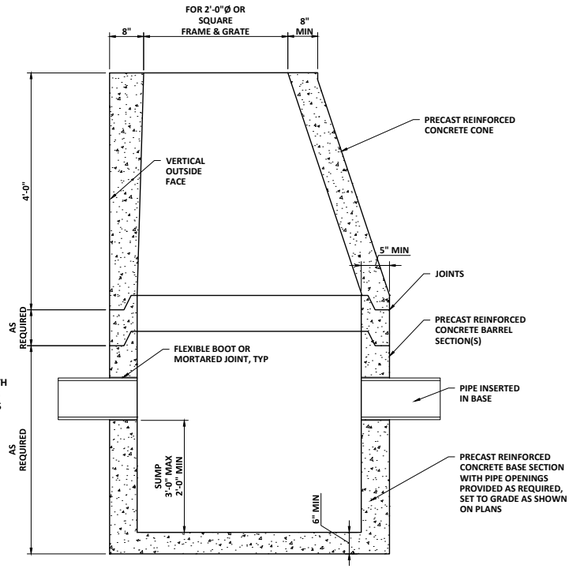


CATCH BASIN & MANHOLE STANDARD COVER AND FRAME
SCALE: NTS



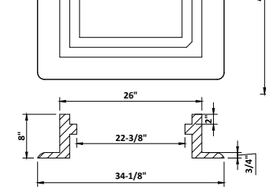
NOTES:
1. USE A FLAT SLAB TOP MANHOLE WHEN THE HEIGHT DIFFERENCE BETWEEN THE HIGHEST INVERT AND RIM IS LESS THAN 6'-0" AND WHEN MANHOLE DIAMETER IS GREATER THAN 4'-0".

TYPICAL 4-FT MANHOLE
SCALE: "NTS"

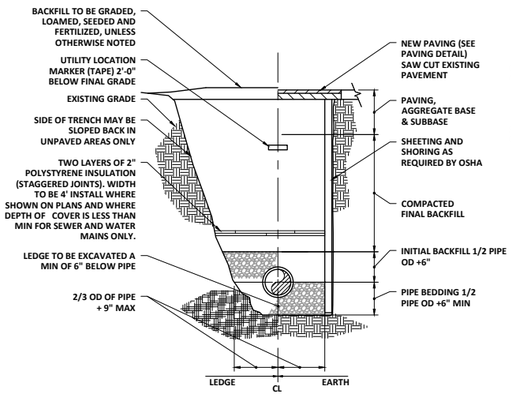


NOTE:
USE FLAT SLAB TOP CATCH BASIN WHERE REQUIRED TO MATCH GRADE

4-FT CATCH BASIN
SCALE: NTS

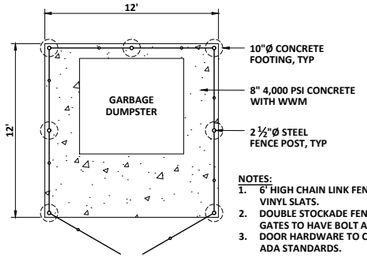


FRAME AND COVER FOR TYPE "A" CATCH BASIN
SCALE: NTS



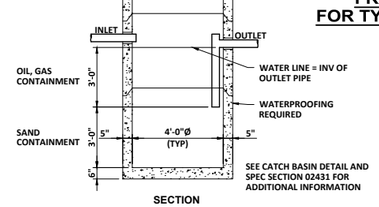
NOTES:
1. ALL EXCAVATION MUST MEET OSHA STANDARDS.
2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100' AND WHERE SHOWN ON PLANS TO PREVENT TRENCH GROUNDWATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.
3. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.

PIPE TRENCH
SCALE: "NTS"



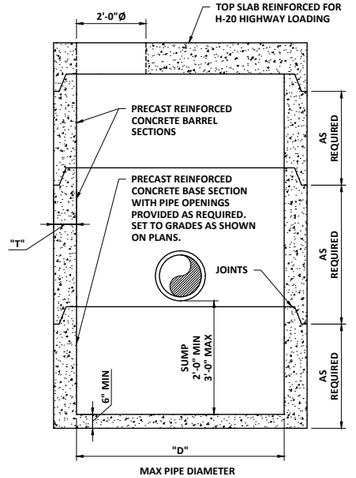
NOTES:
1. 6' HIGH CHAIN LINK FENCE WITH GREEN VINYL SLATS.
2. DOUBLE STOCKADE FENCE GATES. GATES TO HAVE BOLT ACTION LATCH.
3. DOOR HARDWARE TO CONFORM TO ADA STANDARDS.

DUMPSTER PAD ENCLOSURE
SCALE: 'NTS'



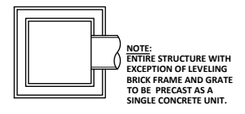
SECTION

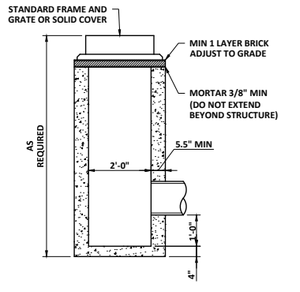
OIL/WATER SEPARATOR
SCALE: NTS



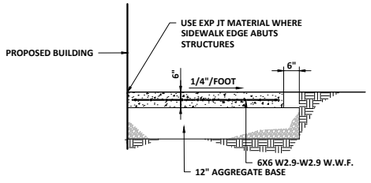
DIAMETER ("D")	MAX PIPE DIAMETER STRAIGHT THRU TO 45° DEFLECTION	MINIMUM WALL THICKNESS ("T")
48"	UP TO 30" O.D.	5"
60"	UP TO 44" O.D.	6"
72"	UP TO 51" O.D.	7"
96"	UP TO 72" O.D.	9"

FLAT SLAB TOP CATCH BASIN
SCALE: "NTS"





2'x2' CATCH BASIN & DRAIN MANHOLE (TYPE F)
SCALE: NTS



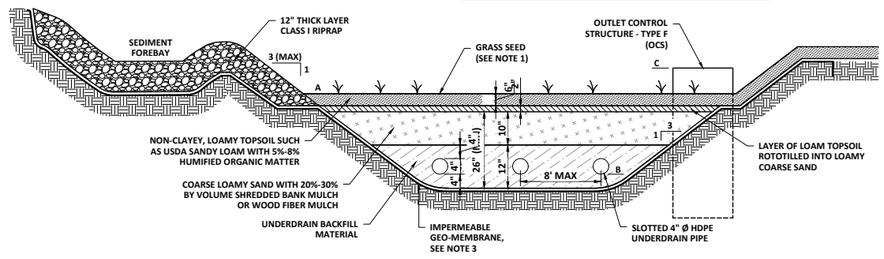
CONCRETE SIDEWALK
SCALE: NTS

TABLE I	
SPECIFICATIONS FOR LOAMY COARSE SAND	
SEIVE #	% PASSING BY WEIGHT
10	85-100
20	70-100
60	15-40
200	8-15
200 CLAY SIZE	2.0

TABLE II	
UNDERDRAIN BACKFILL	
SEIVE #	% PASSING BY WEIGHT
1"	95-100
0.5"	75-100
4	50-100
20	15-80
50	0-15
200	0-5.0

UNDERDRAIN SOIL FILTER TABLE				
SOIL FILTER REFERENCE	(A) ELEVATION OF SOIL FILTER	(B) UNDERDRAIN INVERT ELEVATION	(C) RIM ELEVATION OUTLET STRUCTURE	MIN SURFACE AREA AT SOIL FILTER ELEVATION (SF)
GUSF-1	232.00	229.80	233.50	2,000
GUSF-2	232.00	229.80	233.50	3,000

TABLE III	
USF-A SEED MIXTURE (WETLAND)	
CREEPING RED FESUCE	20 LBS/ACRE (0.5 LBS/1,000 S.F.)
TALL FESCUE	20 LBS/ACRE (0.5 LBS/1,000 S.F.)
BIRDSFOOT TREFOIL	8 LBS/ACRE (0.2 LBS/1,000 S.F.)



NOTES:
1. GRASS SEED MIXTURE SHALL BE DROUGHT TOLERANT CONSERVATION MIX.
2. PLACE FILTER MEDIA AND LOAM TOPSOIL ONLY AFTER SITE HAS BEEN STABILIZED.
3. IMPERMEABLE GEO-MEMBRANE SHALL BE 4 LDRE, PVC OR HDPE IMPERMEABLE LINER OF AT LEAST 30 MIL. THICKNESS.
4. UNDERDRAIN PIPE SHALL SLOPE AT 0.0050 MIN. (SEE DRAWING C5.0)
5. FLOW RESTRICTION IN THE FORM OF AN ORIFICE SHALL BE PROVIDED AT OUTLET TO OBTAIN 24-48 HOUR RELEASE TIME.
6. WITHIN 30 DAYS OF COMPLETION OF THE UNDERDRAINED FILTER BASIN, THE APPLICANT MUST SUBMIT A LOG OF INSPECTION REPORTS DETAILING THE ITEMS INSPECTED, PHOTOS TAKEN, AND THE DATES OF EACH INSPECTION TO THE BUREAU OF LAND RESOURCES FOR REVIEW.
7. SEDIMENT FOREBAY SHALL HAVE A MINIMUM LENGTH TO WIDTH RATIO OF 2:1.

UNDERDRAIN CONSTRUCTION, TESTING AND SUBMITTAL NOTES:

1. CONSTRUCTION OVERSIGHT: INSPECTION OF THE FILTER BASIN MUST BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. ALL MATERIAL INTENDED FOR THE FILTER BASIN MUST BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THE MATERIAL CONFORMS TO ALL DEP SPECIFICATIONS. AT A MINIMUM, INSPECTIONS WILL OCCUR:
   1.1. AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED (NOT BACKFILLED);
   1.2. AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE SOIL FILTER MEDIA;
   1.3. AFTER THE SOIL FILTER MEDIA HAS BEEN INSTALLED, SEEDED AND MULCHED; AND
   1.4. AFTER ONE YEAR, TO INSPECT VEGETATION AND MAKE CORRECTIONS.
2. TESTING AND SUBMITTALS: THE SOURCE OF EACH COMPONENT OF THE SOIL FILTER MEDIA NEEDS TO BE IDENTIFIED PRIOR TO CONSTRUCTION. ALL RESULTS OF FIELD AND LABORATORY TESTING MUST BE SUBMITTED TO THE DEP FOR APPROVAL.
   2.1. MEDIA SOURCE: SAMPLES OF EACH TYPE OF MATERIAL SHOULD BE BLENDED FOR THE MIXED FILTER MEDIA AND FROM
   2.2. UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS)
   2.3. THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIREMENTS WILL BE DETERMINED BY THE TESTING LABORATORY.
   2.4. SIEVE ANALYSIS: A SIEVE ANALYSIS CONFORMING TO ASTM C136 SHOULD BE PERFORMED ON EACH TYPE OF THE SAMPLE MATERIAL.
   2.5. PERMEABILITY TESTING: TESTING THE PERMEABILITY OF THE SOIL FILTER MEDIA MIXTURE IS RECOMMENDED WITH THE MIXTURE AT A MEASURED BULK DRY DENSITY OF 90-92% BASED ON ASTM D698.

GRASSED UNDERDRAIN SOIL FILTER CONSTRUCTION
SCALE: 'NTS'

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO. 21316
DESIGNED: N.EDWARDS
CAD COORD: R.BESAW
CAD: R.BESAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED
PROFESSIONAL ENGINEER

WRIGHT-PIERCE
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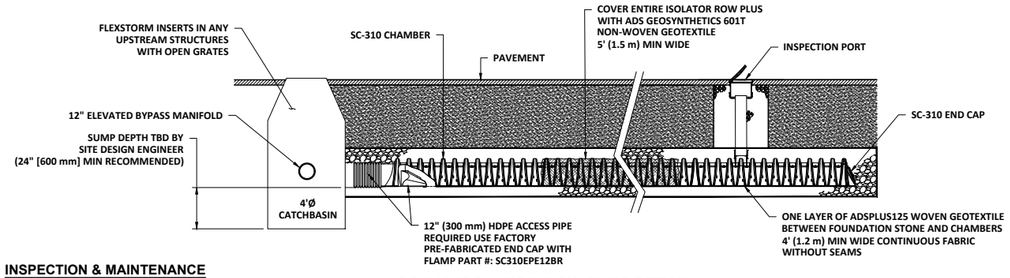
BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

DETAILS I

DRAWING
C-7

J:\ENG\ME\AUBURN\21316-BEARSELFSTORAGE_DRAWINGS\CIV\21316-CS-DETAILS1.DWG | 21316-CS-Detail1 | 12.5849 | — | 2/10/2026 1:00:58 PM | KYLE.BLAIS

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SC-310 ISOLATOR ROW PLUS DETAIL

SCALE: 'NTS'

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

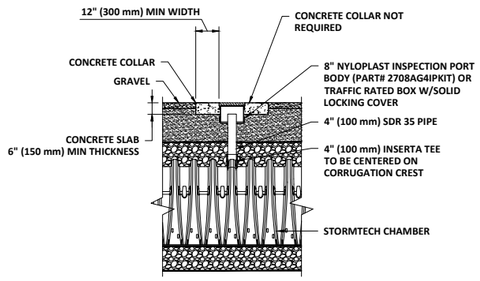
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

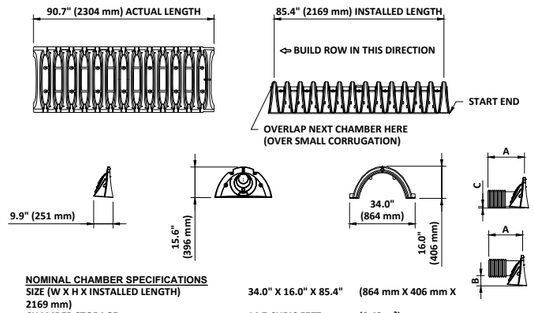
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL

SCALE: 'NTS'



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---

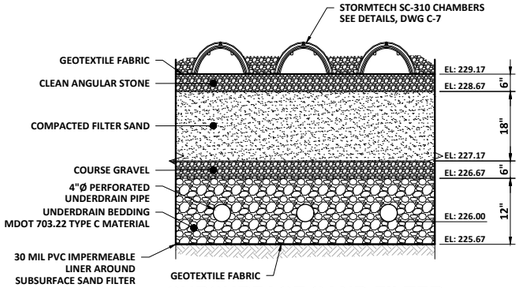
ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

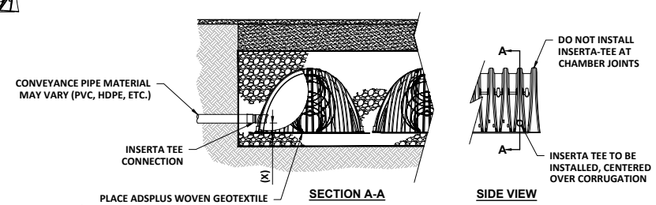
SC-310 TECHNICAL SPECIFICATIONS

SCALE: 'NTS'



SUBSURFACE SAND FILTER

SCALE: NTS



SECTION A-A SIDE VIEW

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

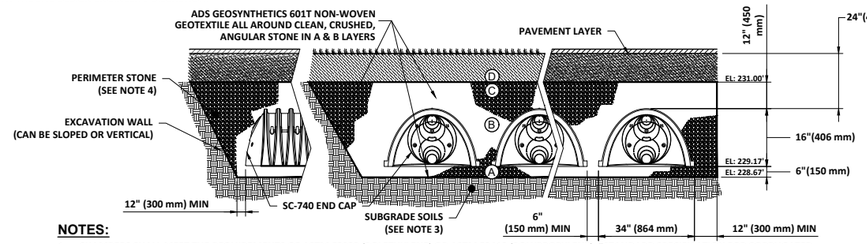
INSERTA-TEE SIDE INLET DETAIL

SCALE: 'NTS'

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

SC-310 CROSS SECTION DETAIL

SCALE: 'NTS'

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY. CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS		8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
DESIGNED: J.WIEGMAN
CAD COORD: R.BESAW
CAD: R.BESAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

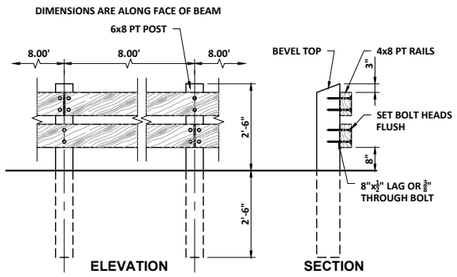
BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

DETAILS II

DRAWING
C-8

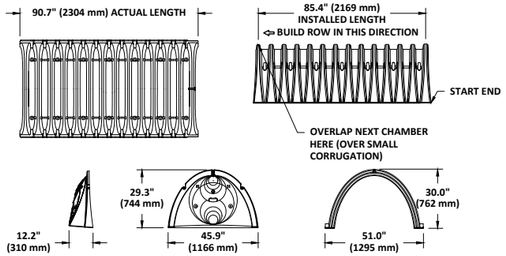
J:\ENG\WELL\AUBURN\21316-BEARSELFSTORAGE_DRAWINGS\CIV\21316-GS-DETAILS.DWG | 24x36 Plan | 1:2.5849 | ---- | 2/20/2026 1:01:16 PM | KYLE.BLAIS

LAST SAVED BY: KYLE.BLAIS 2/20/2026 12:44 PM



NOTES:
1. ALL HARDWARE TO BE GALVANIZED.
2. ALL TIMBER TO BE PRESSURE TREATED SOUTHERN YELLOW PINE.

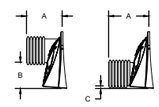
WOOD GUARDRAIL
SCALE: NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

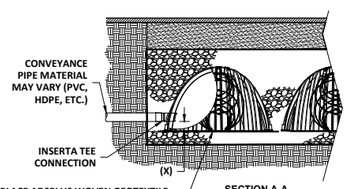
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740ECEZ*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740ECEZ THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SC-740 TECHNICAL SPECIFICATIONS
SCALE: 'NTS'



NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

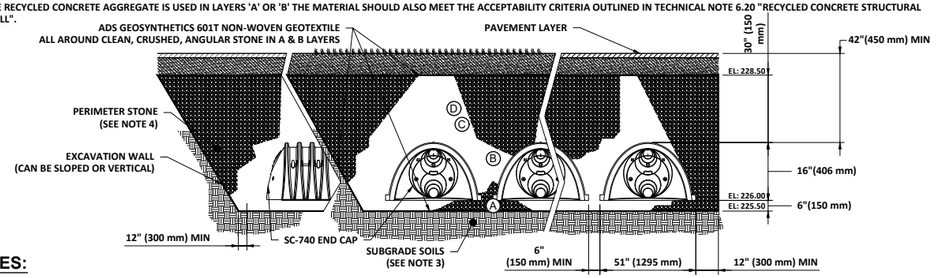
INSERTA-TEE SIDE INLET DETAIL
SCALE: 'NTS'

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
SC-800	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

SC-740 CROSS SECTION DETAIL
SCALE: 'NTS'

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS		8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
DESIGNED: J.WIEGMAN
CAD COORD: R.BESAW
CAD: R.BESAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

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BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

DETAILS III

DRAWING
C-9

J:\ENGWE\AUBURN\21316-BEARSELF STORAGE_DRAWINGS\CIV\21316-CS-DETAILSIII.DWG | 24x36 Plan | 1:2.5848 | --- | 2/20/2026 1:01:22 PM | KYLE.BLAIS

LAST SAVED BY: RYAN.BEISAW 4/9/2025 11:14 AM

EROSION AND SEDIMENTATION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS IN ACCORDANCE WITH OCTOBER 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) MANUAL FOR DESIGNERS AND ENGINEERS, OR LATEST EDITION. EROSION CONTROL MIX SHALL BE AS SPECIFIED IN THIS CITATION, PAGE 40.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS, OR LATEST EDITION. ALL TEMPORARY MEASURES SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED.
2. IN AREAS ADJACENT TO NATURAL RESOURCES, LOCATIONS TO BE VEGETATED IN THEIR FINISH CONDITION SHALL BE STABILIZED WITH MULCH WITHIN 7 DAYS OF MOST RECENT DISTURBANCE.
3. AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR UP TO ONE YEAR SHALL BE STABILIZED WITH MULCH WITHIN 7 DAYS OF MOST RECENT DISTURBANCE.
4. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE MAINTAINED IN AN UNTREATED OR UNVEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
5. SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF UPGRADIENT DRAINAGE AREAS. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILES. PLASTIC SHEETING OR OTHER MATERIAL, WOVEN OR NON-WOVEN GEOTEXTILE FABRIC, MAY BE USED TO COVER STOCKPILES.
6. INSTALL SILT FENCE AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
7. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. IF REPAIRS ARE IDENTIFIED, THEY SHALL BEGIN NO LATER THAN THE END OF THE FOLLOWING WORK DAY AND BE COMPLETE WITHIN 7 DAYS FROM INSPECTION. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
8. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 TO 1) UNLESS STABILIZED WITH RIPRAP OR OTHER STRUCTURAL MEANS. NO SLOPES IN EXCESS OF 1.5H:1V SHALL BE ALLOWED UNLESS STAMPED BY A PROFESSIONAL ENGINEER.
9. IF FINAL SEEDING AND SODDING IS NOT EXPECTED PRIOR TO THE ANTICIPATED DATE OF THE FIRST KILLING FROST, USE TEMPORARY ANNUAL RYEGRASS SEEDING AND MULCHING ON ROUGH GRADED SUBSOIL TO PROTECT THE SITE AND DELAY PERMANENT LOAMING, FINE GRADING, AND SEEDING OR SODDING UNTIL SPRING.
10. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISH GRADED SHALL BE COMPLETED 30 DAYS PRIOR TO THE FIRST KILLING FROST.
11. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
12. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND REVEGETATED.
13. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
14. EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
15. EXPOSED AREA SHOULD BE LIMITED SUCH THAT THE AREA CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
16. STABILIZATION SCHEDULE BEFORE WINTER:

SEPTEMBER 1:	ALL SLOPES GREATER THAN 15% MUST BE SEEDED AND MULCHED. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED.
SEPTEMBER 15	ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED, SEEDED AND MULCHED. SLOPES 3:1 OR GREATER TO BE STABILIZED WITH EROSION CONTROL MATTING AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND MULCHED.
OCTOBER 1	ALL DISTURBED AREAS TO BE PROTECTED WITH WINTER RYE MUST BE APPLIED AT A RATE OF 3LBS PER 1000 SQUARE FEET, AND WITH HAY APPLIED AT A RATE OF 75LBS PER 1000 SQUARE FEET OR WITH AN EROSION CONTROL BLANKET.
OCTOBER 15:	SOIL MUST BE SEEDED WITH WINTER RYE AND PROTECTED WITH EROSION CONTROL BLANKET IF NOT YET STABILIZED.
NOVEMBER 1:	AREA SHOULD BE STABILIZED IF RYE HAS NOT GROWN THREE INCHES AND DOES NOT HAVE 75% COVERAGE.
NOVEMBER 15	ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THAT DATE.
DECEMBER 1	ALL DISTURBED AREAS WHERE THE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED BY VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.

17. MULCH MAY REQUIRE ANCHORING TO ENSURE THAT MULCH REMAINS IN-PLACE. MULCH NETTING, CRIMPING, OR PUNCHING ARE ACCEPTABLE METHODS. MULCH NETTING SHALL BE TENAX RADIX EROSION CONTROL NETS OR APPROVED EQUAL, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS.
18. SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS AND EQUIPMENT ON-SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
19. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
20. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
21. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
22. AUTHORIZED NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
    - A. DISCHARGES FROM FIREFIGHTING ACTIVITY;
    - B. FIRE HYDRANT FLUSHINGS;
    - C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
    - D. DUST CONTROL RUNOFF IN ACCORDANCE WITH SPECIFICATIONS AND ANY APPLICABLE PERMIT CONDITIONS;
    - E. ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
    - F. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
    - G. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
    - H. UNCONTAMINATED GROUNDWATER OR SPRING WATER;
    - I. FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
    - J. UNCONTAMINATED EXCAVATION DEWATERING;
    - K. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
    - L. LANDSCAPE IRRIGATION.
24. UNAUTHORIZED NON-STORMWATER DISCHARGES: THE MAINEDEP'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
    - A. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
    - B. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
    - C. SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
    - D. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

EROSION CONTROL - WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH APRIL 15.
2. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
3. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. OVERWINTER HAY MULCH SHOULD BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET. MULCH SHOULD BE ANCHORED WITH NETTING OR TACKIFIER TO PREVENT MOVEMENT BEFORE FREEZING.
4. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE-FREEZING TEMPERATURES, THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MUST BE STABILIZED WITH MULCH. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT EXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
5. THE APPLICATION OF MULCH TO FINE GRADED AREAS WILL BE STABILIZED AS FOLLOWS:
    - A. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION, CHEMICAL TACK OR WOOD CELLULOSE FIBER.
    - B. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GRATER THAN 8%. THIS SHALL BE IN ADDITION TO EROSION CONTROL MATTING-DITCHES DETAIL.
    - C. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1ST, THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
6. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
7. DURING WINTER CONSTRUCTION PERIODS ALL SNOW SHALL BE REMOVED FROM AREAS OF MULCHING PRIOR TO PLACEMENT.
8. THE INSPECTION FREQUENCY FOR AREAS BEING WORKED ON DURING WINTER CONSTRUCTION SHALL BE AFTER EACH RAINFALL, SNOWSTORM, OR THAWING, AND AT LEAST ONCE A WEEK.
    - A. CONTRACTOR SHALL NOT BE REQUIRED TO INSPECT AREAS OF THE SITE THAT ARE NOT VISIBLE DUE TO SNOW IF THOSE AREAS ARE NOT BEING ACTIVELY CONSTRUCTED, HAVE BEEN INSPECTED AND PROPERLY REPAIRED PRIOR TO THE SNOW EVENT.

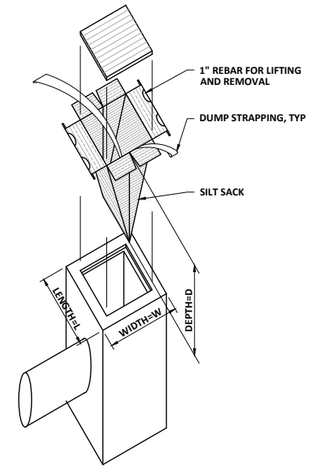
EROSION CONTROL - WETLAND NOTES

1. WETLANDS AND SURFACE WATERS (EXCEPTING THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
2. IF THE WORK INCLUDES CROSSING OF WETLANDS AND/OR STREAMS, THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS WORKING IN THESE AREAS.
3. ANY WETLAND CROSSING WORK SHALL BE COMPLETED BETWEEN THE PERIOD OF MAY 1 AND SEPTEMBER 30.
4. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION WITHIN OR ADJACENT TO WETLAND AREAS. ALL TEMPORARY MEASURES SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED.
5. WETLAND VEGETATIVE LAYERS SHALL BE REMOVED AND SALVAGED FOR RESTORATION OF THE DISTURBED AREAS.
6. STORAGE AREAS FOR WETLAND MATERIALS SHALL BE PROPERLY PROTECTED AGAINST EROSION.
7. SEEDING OF THE DISTURBED AREAS WITHIN WETLAND AREAS SHALL UTILIZE MIXTURES APPROPRIATE FOR WETLAND AREAS AS OUTLINED IN THE SPECIFICATIONS.

INSPECTIONS

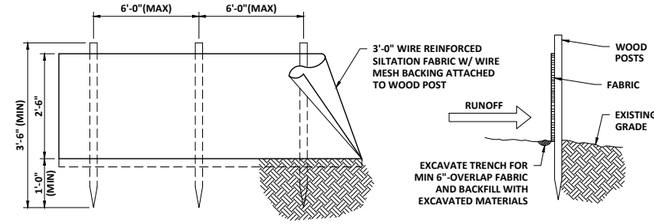
REGULAR INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE MADE AT LEAST WEEKLY AND PRIOR TO AND FOLLOWING STORM EVENTS. MINIMUM INSPECTIONS SHALL BE MADE AS LISTED IN THE TABLE BELOW. SEE INSPECTIONS, MAINTENANCE AND HOUSEKEEPING PLAN FOR ADDITIONAL INFORMATION.

INSPECTED ITEM	EXAMPLE REPAIR INDICATORS
MULCHED SURFACES	THIN MULCH OR INADEQUATE APPLICATION. WIND MOVEMENT
SEEDED SURFACES	POOR SEED GERMINATION. LOSS OF MULCH. DEVELOPMENT OF RIVULETS.
SEDIMENT BARRIER	SEDIMENT BUILD-UP TO ONE HALF THE HEIGHT OF THE BARRIER. UNDERMINING OF THE BARRIER. SUPPORTING STAKES LOOSE, TOPPLED OR UNMARKED. BREAKS IN BARRIER.
PERIMETER DIVERSION	DISCHARGE IS TO STABILIZED AREA. EROSION OR BREAKS IN BARRIER. SUPPORTING STAKES LOOSE, TOPPLED OR UNMARKED.
CATCH BASIN PROTECTION	SEDIMENT BUILD-UP AND STRUCTURE BLOCKAGES. SLOW FLOW/PONDING WATER. BREAKS IN FABRIC OR VOIDS IN BARRIER.
DEWATERING FILTER	BREAKS IN FABRIC OR SUPPORTING STRUCTURE. SLOW FLOW, INDICATING HIGH SEDIMENT BUILD-UP.
CONSTRUCTION ENTRANCE	SEDIMENTATION OF ROADWAYS. OFF-SITE DUST COMPLAINTS.
STOCKPILE	BALLOONING OR BLOWOUTS, RUNOFF AND EROSION

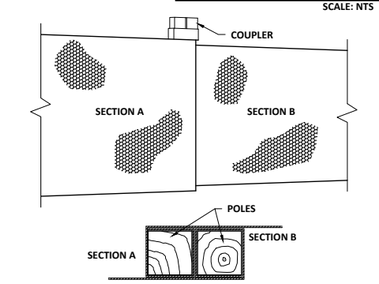


NOTE:
INSTALL SILT SACK PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. EMPTY OR REMOVE SEDIMENT FROM SILT SACK WHEN RESTRAINT CORD IS NO LONGER VISIBLE. CLEAN, RINSE, AND REPLACE AS NEEDED.

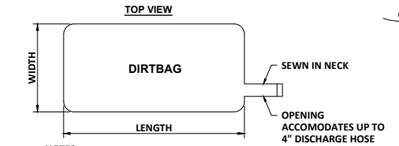
SILT SACK CATCH BASIN INLET
SCALE: NTS



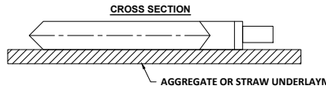
SILT FENCE INSTALLATION DETAIL
SCALE: NTS



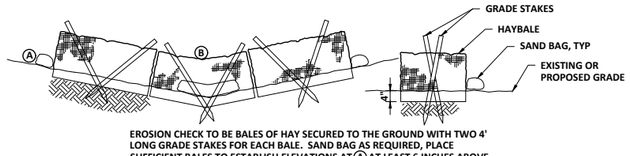
JOINING SILT FENCE SECTIONS
SCALE: "NTS"



NOTES:
1. DIRTBAG TO BE PLACED ON AGGREGATE OR STRAW.
2. SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
3. SEAM MUST BE TESTED UNDER ASTM D-4884. ACF TEST RESULTS AVAILABLE UPON REQUEST.

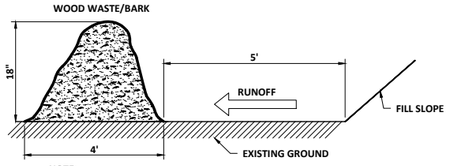


DIRT BAG
SCALE: "NTS"



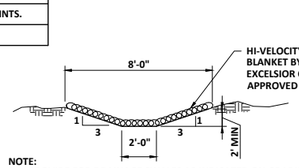
EROSION CHECK TO BE BALES OF HAY SECURED TO THE GROUND WITH TWO 4' LONG GRADE STAKES FOR EACH BALE. SAND BAG AS REQUIRED, PLACE SUFFICIENT BALES TO ESTABLISH ELEVATIONS AT (A) AT LEAST 6 INCHES ABOVE OVERFLOW AT (B)

HAY BALE CHECK DAM
SCALE: "NTS"



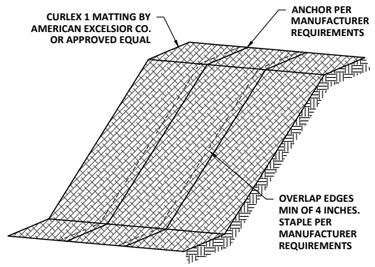
NOTE:
1. EROSION CONTROL MIX SHALL BE AS SPECIFIED ON PAGE 45 OF THE OCTOBER 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) MANUAL FOR DESIGNERS AND ENGINEERS, OR LATEST EDITION.

EROSION CONTROL MIX BERM
SCALE: "NTS"



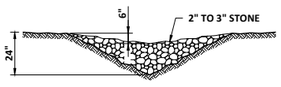
NOTE:
1. PROVIDE FOR DRAINAGE SWALES AS INDICATED ON GRADING & DRAINAGE PLAN. ADDITIONAL REQUIREMENTS MAY APPLY. SEE EROSION CONTROL - WINTER CONSTRUCTION NOTE 5 AS APPLICABLE.

EROSION CONTROL MATTING - DITCHES
SCALE: "NTS"

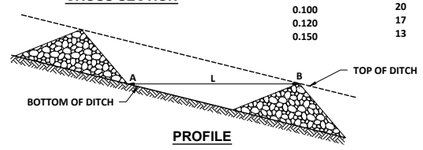


NOTE:
INSTALL ON SLOPES 3:1 OR GREATER

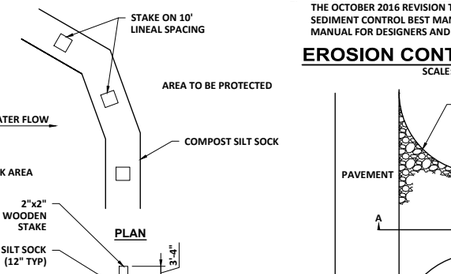
EROSION CONTROL MATTING - SLOPES
SCALE: "NTS"



DITCH SLOPE (FT/FT)	L (FT)
0.020	100
0.030	66
0.040	50
0.050	40
0.080	25
0.100	20
0.120	17
0.150	13

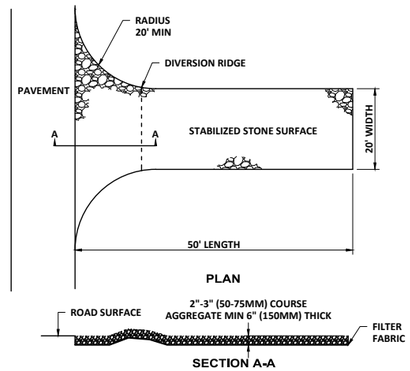


STONE CHECK DAM DETAIL
SCALE: NTS



NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS
2. SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
3. SILT SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SILT SOCK
SCALE: NTS



(TEMPORARY, TO BE REMOVED PRIOR TO FINAL SITE PAVING)

NOTE:
1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED DURING CONSTRUCTION AS REQUIRED TO PREVENT OFF-SITE TRACKING OF SEDIMENT. ANY SEDIMENT TRACKED OFF-SITE SHALL BE REMOVED AND DISPOSED OF IN A MANNER THAT SEDIMENTS DO NOT ENTER DOWN SLOPE WATER RESOURCES.

STABILIZED CONSTRUCTION ENTRANCE
SCALE: "NTS"

NO	REVISIONS	APP'D	DATE
1	RESPONSE TO COMMENTS	J.WIE	8/24
2	RESPONSE TO COMMENTS		2/26
3			
4			
5			

PROJECT NO: 21316
DESIGNED: N.EDWARDS
CAD COORD: R.BEISAW
CAD: R.BEISAW
CHECKED: N.EDWARDS
DATE: 02-2026
APPROVED: J.WIEGMAN
DATE: 02-2026
SUBMISSION: FOR PERMITTING

STATE OF MAINE
NATHAN S. EDWARDS
No. 17350
2/20/2026
LICENSED PROFESSIONAL ENGINEER

WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BEARS HOLDING, LLC
BEAR SELF STORAGE FACILITY
SITE IMPROVEMENTS
AUBURN, MAINE

EROSION CONTROL NOTES AND DETAILS

DRAWING
C-10

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Attachment 8

Previous Approval Conditions and Response to Peer Review Comments

City of Auburn, Maine
Department of Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

August 13, 2024

Applicant/Property Owner:
Bear Holdings LLC & Bear LLC
878 Center Street
Auburn, ME 04210
Email:rraubeson50@aol.com

Agent:
Wright Pierce
C/O Jan B. Wiegman
11 Bowdoin Mill Island, Suite 140
Topsham, ME 04086

Re: Approval Letter for Bear Self Storage & Auto Facility on Center Street

Dear Mr. Weigman,

This letter is to notify you that City of Auburn, Planning Board has approved the submitted Site Plan for a proposed car display and service building with office and vehicle preparation/maintenance areas and associated stormwater infrastructure and State Delegated Review for Site Location of Development, located at 864, 868, 878 and 900 Center Street and 1193 Turner Street (PIDs: 301-017- 002, 301-018, 301-019, 301-017, and 300-009) in the General Business Zoning District.

Referenced Approved Plans and Materials:

Application Set Dated June 7th 2024

Response to City Staff Review Meeting Dated June 28th 2024

Woodard & Curran Memo re: Peer Review of Bear Self Storage Dated July 10th 2024

Response to Peer Review from Wright Pierce & City Staff Dated July 31st 2024

Woodard & Curran Memo re: Peer Review of Bear Self Storage Dated August 8th 2024

Findings: Planning Board approved the changes with the following findings:
The application meets the conditions of Sec. 60-1277 in that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;
(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

(3) Adequacy of the methods of disposal for wastes; and
(4) Protection of environment features on the site and in adjacent areas.

Further, the application meets the conditions of Sec. 60-1336 in that it:

(1) Fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.
(2) Will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.
(3) Will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.
(4) Will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.
(5) Reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all of the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.
(6) The standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.
(7) Essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

The Planning Board granted one Waiver with regards to Section 46-235 of the Auburn Code of Ordinances (traffic analysis requirement) as the development is not expected to create a noticeable amount of change in traffic patterns.

Conditions:

1. No development activity until any bonding or inspection fees is determined by the Auburn Engineering Department.
2. All necessary stormwater improvements shall be shown on the plan to the satisfaction of the City Engineer prior to the issuance of building permits.
3. The applicant shall provide confirmation from CMP that use of the easement area as shown on the plans is acceptable prior to the issuance of building permits.

Sincerely,

Megan Norwood

Megan Norwood, Planning Coordinator
C: File

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

MEMORANDUM



TO: Kristopher Bennett, PE, City Engineer

FROM: Lauren Swett, PE & Julianna Monts, EI

DATE: August 8, 2024

RE: Peer Review of Bear Self Storage Facility, Auburn, ME

On behalf of the City of Auburn, Woodard & Curran has completed an engineering peer review of the Stormwater Management Plan for the proposed Bear Self Storage Facility in Auburn, Maine. Our review focused on City and State regulations related to stormwater management. The following is a summary of our comments based on the documents received. Previously issued comments are noted in *italics* and the corresponding status and response is shown below in **bold**. It should be noted that further comments may be provided upon review of additional information.

Documents Reviewed

- City of Auburn Development Review Application, prepared by Wright-Peirce Inc., dated June 7, 2024.
- Response to City's Plan Review Meeting, prepared by Wright-Peirce Inc., dated July 31, 2024. Note: The full plan set has not been included with this submission, only revised plans were included.

Comments

1. **MaineDEP Chapter 500 Basic Standard** *The Applicant has provided an erosion and sedimentation control plan and inspection, maintenance and housekeeping plan. The following comments should be addressed:*
    - *The plans do not appear to show all proposed erosion and sediment control measures. The Applicant should include erosion controls in accordance with Maine DEP Basic Standards. A written report and details have been provided, but locations of all erosion control measures should be shown on the plans in coordination with the details and notes that have been provided*. **Addressed.**
2. **General Civil Engineering**
    - *We have comments on the submitted HydroCAD model and stormwater design. These relate to the stormwater systems provided to meet both the General and Flooding standards.*
        - *The proposed Grassed Undrained Soil Filters (GUSF) note different outlet pipe lengths and slopes in comparison to the HydroCAD model. Please confirm the pipe lengths and slopes for each filter and update accordingly. In addition, an emergency spillway is not provided for either filter. The Applicant should confirm there's no risk of overflow to Center Street*. **Addressed.**
        - *The Grassed Underdrained Soil Filters should include pretreatment per the Maine DEP Best Management Practice standards for the system. The*

Applicant has shown a crushed stone strip along the adjacent pavement, and an area of stone at the one piped inlet, which are expected to meet this requirement, but the Applicant should provide verification. ***Addressed*****.**

- *With our review of the routing of flow through the Subsurface Sand Filter and associated extra storage, it is unclear how exactly to relate what is proposed on the plan to the HydroCAD model. We have a few specific questions, but in general we'd suggest that the Applicant review the proposed design. Additional plan notes, flow arrow, and details may be necessary to clarify the design.*
    - *There are multiple DMH structures with weirs, and some of these weirs have orifices. Some weirs appear to be represented in the model, but not the orifices. More clarity on what has been modeled should be provided.* **Partially Addressed. The Applicant provides explanation between the model and Grading and Drainage Plans, however, the structure numbering used in the response doesn't match what is shown on the drawings. We are able to follow the route, however, so the flow path makes sense. The one remaining question is with regards to the path of the flow into the storage Stormtech chambers. Looking at the drawings, the water will flow over weirs in DMH 3 and CB 8, and after each of these structures the plans show a manhole followed by two pipes that appear to connect directly from the main stormdrain line to the storage. Please clarify this setup. The plans should include information about these pipes (i.e. size, invert) to clarify how flow enters and exits the storage. Also, as the pipes do not appear to connect through the upstream manholes, the applicant could consider if they are needed.**
    - *The orientation of the weirs in various manhole structures have not been shown. This makes the direction of flow unclear. For example, DMH 3 appears to be serving as both an inlet and an outlet to the sand filter, but more detail should be provided on how this will work with the proposed weir.* **Addressed.**
    - *Related to the weir orientation, it appears that a weir will direct flow from the sand filter to the extra storage, but it is unclear how this will occur relative to inverts that have been provided. Two pipes are shown entering either end of the extra storage area, but no inverts or other pipe information is provided to indicate how this connection will work.* **Partially Addressed. Please refer to the comment above.**
    - *The primary flow out of the sand filter is represented as infiltration that is directed to the piped stormdrain system exiting the site. It appears that this is directed to CB6 but it is unclear how flow will actually occur based on the elevations used in the HydroCAD model.* **Addressed.**

- *General details have been provided for the two Stormtech chambers but it is recommended that project-specific details be provided to show the actual elevations of elements within the cross section which will include two different sizes of chambers.* **Addressed.**

  - *The design calculations for the existing Wet Pond notes a starting elevation of 229-feet, while the HydroCAD model has a starting elevation of 234-feet. The existing conditions drawing shows a pond bottom varying from 233 to 234-feet. The Applicant should review the storage volumes for consistency in order to confirm adequate capacity of the pond.* **Addressed.**
  - *In the HydroCAD model, subcatchments 3S and 4S are routed to GUSF1 and GSF2, respectively. Whereas 3S appears to be routed to GUSF2 and 4S routed to GUSF1 in the Post Development Stormwater Plan. Please confirm exact routing and update for consistency*. **Addressed.**
  - *CB-6 appears to represent Pond 3P within the HydroCAD model. Please confirm that CB-6 is indicative of 3P. Upon confirmation, the Applicant should update the existing outlet pipe size in the model to be consistent with the existing conditions on the plan that identify a 15" pipe compared to the 18" pipe in the model.* **Addressed.**

- *The Applicant states the project will require special exception approval for the zoning district and a waiver for the traffic analysis requirement. Please provide confirmation of approval and waiver upon receipt.* **Addressed.**

WRIGHT-PIERCE
Engineering a Better Environment

11 Bowdoin Mill Island, Suite 140
Topsham, ME 04086
207.725.8721 | wright-pierce.com

February 24, 2026

Sam Peikes, Planning Coordinator
City of Auburn
60 Court Street
Auburn, ME 04210

SUBJECT: Response to Peer Review by Woodard & Curran and Planning Review by City of Auburn for Bear Self-Storage & Auto Sales Facility, 828 Center Street, Auburn, ME

Dear Sam,

On behalf of Bear Holdings LLC and Bear, LLC, Wright-Pierce has prepared a response to the peer review comments by Woodard & Curran regarding the Stormwater Management Plan and the City of Auburn's planning comments for Bear Self-Storage and Auto Sales facility located at 828 Center Street.

We offer the following responses, noted in bold, to comments received in the Woodard & Curran stormwater review memo dated August 8, 2024:

Woodard & Curran Original Comment 2. General Civil Engineering:

- We have comments on the submitted HydroCAD model and stormwater design. These relate to the stormwater systems provided to meet both the General and Flooding standards.
  - With our review of the routing of flow through the Subsurface Sand Filter and associated extra storage, it is unclear how exactly to relate what is proposed on the plan to the HydroCAD model. We have a few specific questions, but in general we'd suggest that the Applicant review the proposed design. Additional plan notes, flow arrow, and details may be necessary to clarify the design.
    - There are multiple DMH structures with weirs, and some of these weirs have orifices. Some weirs appear to be represented in the model, but not the orifices. More clarity on what has been modeled should be provided.

      WP Response 1/31/24: Flow arrows and weir orientation have been added to the plans. Elevations have been added to the Subsurface Sand Filter Detail, SC-310 Cross Section Detail, and SC-740 Detail. Additional details regarding the underdrain underneath the Stormtech 310 chambers, which is the sand filter portion of the system, has also been added to the plans. The Stormtech 740 chambers are only for additional storage capacity, not for stormwater treatment. The isolator row and inspection ports have also been added to the plans. Stormwater enters the isolator rows from both ends of the system. The intent is for stormwater to spill over the weirs in DMH-4 and CB-7 when the Stormtech 310 chambers fill up so stormwater can bypass treatment and move to the Stormtech 740 chambers for detention. The Stormtech 740 chambers are larger for additional storage capacity and can be installed lower than the Stormtech 310 chambers because there is not a sand filter and underdrain layer

below them. The filter layer is not needed since that portion of the system is only for detention. Orifices are proposed at the bottom of the weir walls in DMH-4 and DMH-5 so the chambers will fully drain after a storm. These orifices have been added to the model. These orifices and weir walls are the outlets to Pond 2P and a discharge multiplier of 4 is set since there are two structures, each with two orifices. Orifices are not needed in DMH-3 and CB-7 weir walls because stormwater will infiltrate through the sand filter media to underdrain to drain the system. We believe what we show now is enough detail to clarify the design.

Woodard & Curran Follow Up Comment 8/8/24: Partially Addressed. The Applicant provides explanation between the model and Grading and Drainage Plans, however, the structure numbering used in the response doesn't match what is shown on the drawings. We are able to follow the route, however, so the flow path makes sense. The one remaining question is with regards to the path of the flow into the storage Stormtech chambers. Looking at the drawings, the water will flow over weirs in DMH 3 and CB 8, and after each of these structures the plans show a manhole followed by two pipes that appear to connect directly from the main stormdrain line to the storage. Please clarify this setup. The plans should include information about these pipes (i.e. size, invert) to clarify how flow enters and exits the storage. Also, as the pipes do not appear to connect through the upstream manholes, the applicant could consider if they are needed.

WP Response 2/9/24: The weirs in DMH3 and CB8 are to bypass larger flows from the treatment portion of the system to storage chambers that can provide additional detention for peak flow attenuation. The treatment portion of the system includes the isolator rows and adjacent chambers that have sand filter media below them and underdrain. The detention portion is the part that is just chambers with no media below or underdrain. As previously mentioned, we used taller chambers for the detention portion (Stormtech 740 instead of 310) and there isn't a media/underdrain layer, which meant the bottom of the chambers are set lower in elevation than the treatment chambers. These elevations are shown on the SC-310 and SC-740 cross section details. We are proposing drain manholes (DMH4 and DMH7) to drop the pipe elevation leading up to the detention chambers. The referenced two pipes that connect directly to the storage chambers will connect to the main stormdrain line (between DMH4 and DMH5 and between DMH6 and DMH7) via a tee fitting. All the storm drains into the system are 12". We have added the invert and diameter of these pipes into the detention chambers to the plans. We do not believe any other elevations or sizes are missing, nor any changes to the HydroCAD modeling necessary.

- Related to the weir orientation, it appears that a weir will direct flow from the sand filter to the extra storage, but it is unclear how this will occur relative to inverts that have been provided. Two pipes are shown entering either end of the extra storage area, but no inverts or other pipe information is provided to indicate how this connection will work.

  WP Response 1/31/24: See previous comments describing the weirs and their intended function.

Woodard & Curran Follow Up Comment 8/8/24: Partially Addressed. Please refer to the comment above.

WP Response 2/9/24: See comment response above.

Please let us know if you have any additional comments or questions.

Sincerely,
WRIGHT-PIERCE

Jan Wiegman, PE
Senior Project Manager
jan.wiegman@wright-pierce.com

Attachments:

Revised Site Plans

cc: Richard Raubeson

WRIGHT-PIERCE
Engineering a Better Environment

11 Bowdoin Mill Island, Suite 140
Topsham, ME 04086
207.725.8721 | wright-pierce.com

jan.wiegman@wright-pierce.com

MAINE COMMUNITY BANK

April 15, 2026

RE: Bear Self Storage

To Whom It May Concern

Richard Raubeson and affiliated entities maintain a commercial banking relationship with Maine Community Bank, and more specifically me as his commercial lender. It is my understanding that he and/or one of his holding companies is proposing a construction project with cost estimates between $1,500,000 and $1,600,000.

Based on existing commercial commitments/facilities and my knowledge of his cash available (including cash balances held with Maine Community Bank), Mr. Raubeson maintains the financial capacity to complete a project of this size.

For more information, please feel free to reach out to me at 207-333-4585

Regards

Christopher J. Hanks

Christopher J. Hanks

VP, Commercial Banking Officer

City of Auburn, Maine
Office of Planning & Permitting
www.auburnmaine.gov | 60 Court Street
Auburn, Maine 04210 207.333.6601

To: Auburn Planning Board
From: Sam Peikes, Planning Coordinator
Re: PUBLIC HEARING SITE PLAN/SPECIAL EXCEPTION STAFF MEMO: Town Farm Recovery Options – 249 Merrow Road (PID 186-012) - Application by Zack Cameron to change the use of the residential property at 249 Merrow Road to an outpatient recovery facility. The property is located in the Industrial (I) district and will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.

Date: May 5, 2026

PROPOSAL OVERVIEW
Zack Cameron has submitted an application to change the use of the existing residential property at 249 Merrow Road to an outpatient recovery facility. The property is located in the Industrial (I) district. The existing residential property was grandfathered, and the lot is legally nonconforming. The applicant intends to utilize the existing residence for an intensive outpatient program and individual counseling. In accordance with Sec. 60-578, an outpatient addiction treatment clinic is permitted as a special exception, which means the use requires Planning Board review and approval. Proposed changes are limited to the interior of the building. The applicant has obtained a permit by the Maine State Fire Marshall, which expires May 16, 2026. The building will need to be inspected by fire and code prior to operation. In support of the application the applicant has provided a project description, property deed, interior building plans, letter from the Maine State Fire Marshall and a hand drawn site plan. The application will be reviewed under Chapter 60, Article XVI, Division 2 – Site Plan, Division 3 – Special Exception.

At the meeting the applicant should be prepared to speak to the number of patients being treated at the facility, methods of treatment, any controlled substances on site, hours of operation, security provisions and any staffing. Additionally in accordance with Sec. 14-411, outpatient addiction treatment clinics shall not be located within 2,000 feet of any property that is occupied by a church, school, day care facility or public park or playground. The property is located in the Industrial zone and does not appear to be within 2,000 feet of a church, school, day care facility or public playground. The applicant and/or owner of the property should provide verification of this.

WAIVER REQUEST
The applicant is requesting a waiver from Sec. 60-1301 (20) perimeter boundaries of the site. The city does not have a boundary survey of the property on file. The last recorded boundary survey was from 1985. The applicant is requesting a waiver from this submission requirement because the boundary lines will not be changing. No exterior changes to the site are proposed.



SITE PLAN & SPECIAL EXCEPTION REVIEW STANDARDS

The following findings of fact relevant to the project are summarized below:

- Access: Access to the residential property will be provided from the existing driveway off Merrow Road. No changes to the existing access layout are proposed.
- Parking: The property contains existing parking spaces in front of the residence. The applicant will not be adding any additional parking.
- Traffic: The proposed recovery facility is anticipated to generate 8-10 vehicle trips in the peak hour. The proposed recovery facility will not create traffic congestion or create unsafe traffic conditions.
- Utilities: The existing property is served by public water and sewer. No changes to utilities are proposed. The applicant should coordinate with Auburn Sewer and Water District to ensure public utilities are adequate to serve the number of people using the facility.
- Exterior Lighting: The proposed recovery facility will not include any new exterior lighting. Staff recommend additional exterior lighting for security provisions.
- Solid Waste Disposal: The applicant will utilize private service for waste disposal. If an outside dumpster is to be utilized, it should be fully enclosed and screened.
- Screening: In accordance with Sec. 14-412, all clinics are required to erect and maintain opaque fencing at least six feet in height along the side and rear property lines to provide an effective screen if the property abuts a residence. The proposed recovery facility is in the Industrial (I) district and is not located in the vicinity of any residences and will not include any screening.
- Protection of Environmental Features and Natural Resources: The proposed recovery facility is not anticipated to adversely impact natural resources, scenic areas or historic sites.
- Noise, Vibration, Odors and Air Pollution: The proposed recovery facility is not anticipated to create a nuisance to surrounding properties or generate vibration, odors or air pollution.

PLANNING BOARD ACTION

The proposed project requires review and findings for approval under Sections 60-1277 and 60-1336:

Site Plan Review – Section 60-1277

In considering a site plan, the planning board shall make findings that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;

(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

(3)Adequacy of the methods of disposal for wastes; and

(4)Protection of environment features on the site and in adjacent areas.

Special Exception – Sec 60-1336

As conditions prerequisite to the granting of any special exceptions, the board shall require evidence of the following:

(1) That the special exception sought fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.
(2) That the special exception sought will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.
(3) That the special exception sought will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.
(4) That the exception sought will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.
(5) That reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.
(6) That the standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.
(7) That essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

STAFF RECOMMENDATION:

Staff recommend that more information is needed from the applicant before a final decision is made. The applicant should be prepared to address the comments noted in the overview around

number of people being treated, methods of treatment, controlled substances, security provisions, staffing, etc. Unless items are addressed at the meeting, staff recommend the application be tabled to the next meeting or a date certain.

SUGGESTED MOTION:
*I make a motion to **[approve/deny]** the application for Town Farm Recovery Options located at 249 Merrow Road (PID 186-012) in the Industrial (I) District pursuant to Chapter 60, Article XVI, Division 2 – Site Plan Review and Division 3 – Special Exception.*

City of Auburn, Maine
Office of Planning & Permitting
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: Town Farm Recovery Options - 249 Merrow Rd Remodel

PROPOSED DEVELOPMENT ADDRESS: 249 Merrow Road, Auburn, ME 04210

PARCEL ID #: 195-001

REVIEW TYPE:

Site Plan ☐	Site Plan Amendment ☐	Stormwater ☐
Subdivision ☐	Subdivision Amendment ☐	Traffic ☐
		Site Law ☐

PROJECT DESCRIPTION: Interior renovation for change of use to a recovery facility Town Farm Recovery). Scope includes structural and layout modifications to ensure full compliance with 2021 IBC, NFPA 101 (2018), and ADA Standards for Accessible Design. Improvements are dedicated to life safety and accessibility; no changes to building footprint or exterior site features are proposed.

CONTACT INFORMATION:

Applicant
Name: Peter Bolduc
Address: PO Box 149
City / State Poland, ME
Zip Code 04291
Work #: 207-797-7997
Cell #: 207-754-9234
Fax #:
Home #:
Email: pbolduc@rmime.us

Property Owner
Name: M & S Holdings, LLC
Address: PO Box 1908
City / State Lewiston, ME
Zip Code 04241
Work #: 207-783-2199
Cell #:
Fax #:
Home #:
Email: info@morinpremierproperties.com

Project Representative
Name: Zack Cameron
Address: 142 South Ave
City / State Lewiston, ME
Zip Code 04240
Work #: 207-576-0331
Cell #: 916-540-0504
Fax #:
Home #:
Email: zcameron@btbme.com

Other professional representatives for the project (surveyors, engineers, etc.),
Name: Michael Morin
Address: PO Box 1908
City / State Lewiston, ME
Zip Code 04241
Work #: 207-783-2199
Cell #:
Fax #:
Home #:
Email: info@morinpremierproperties.com

PROJECT DATA

The following information is required where applicable, in order complete the application

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	Existing - No Change sq. ft
Proposed Total Impervious Area	Existing - No Change sq. ft.
Proposed Impervious Net Change	0 sq. ft. sq. ft.
Impervious surface ratio existing	% of lot area
Impervious surface ratio proposed	0% Change % of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	sq. ft.
Proposed Building Footprint	Same as existing sq. ft.
Proposed Building Footprint Net change	0 sq ft. sq. ft.
Existing Total Building Floor Area	sq. ft.
Proposed Total Building Floor Area	Same as existing sq. ft.
Proposed Building Floor Area Net Change	0 sq. ft. sq. ft
New Building	No (yes or no)
Building Area/Lot coverage existing	% of lot area
Building Area/Lot coverage proposed	Same as existing N/A % of lot area

ZONING

Existing	N/A
Proposed, if applicable	

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	0
Proposed Number of Residential Units	
Subdivision, Proposed Number of Lots	0

PARKING SPACES

Existing Number of Parking Spaces	21 Total (15 Regular, 6 ADA)
Proposed Number of Parking Spaces	0
Proposed Total Parking Spaces	21

ESTIMATED COST OF PROJECT: $38,367

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	Existing - No Change sq. ft.
Proposed Disturbed Area	0 sq. ft.
Proposed Impervious Area	0 sq. ft.

1. ***If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.***
2. ***If the proposed impervious area is greater than one acre including any impervious area crated since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.***
3. ***If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.***
4. ***If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.***

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) 8-10 passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) Unknown passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary

Min Lot Area	Existing / No Change	/	
Street Frontage	Existing / No Change	/	
Min Front Yard	Existing / No Change	/	
Min Rear Yard	Existing / No Change	/	
Min Side Yard	Existing / No Change	/	
Max. Building Height	Existing / No Change	/	
Use Designation	Business (IOP Facility)	/	
Parking Requirement	1 space/ per N/A dwelling unit		
Total Parking:	21	/	
Overlay zoning districts (if any):	N/A	/	/

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative. (NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

To view the City of Auburn Zoning Ordinance, go to:
www.auburnmaine.gov under City Departments / Planning, Permitting & Code / Subdivisions / Land Use /Zoning Ordinance

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	Date: 4/8/26

City of Auburn, Maine
Office of Planning & Permitting
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to becomplete

PROJECT NAME: Town Farm Recovery Options - 249 Merrow Rd Remodel
PROPOSED DEVELOPMENT ADDRESS: 249 Merrow Rd Auburn, ME 04210
PARCEL #: 186-012

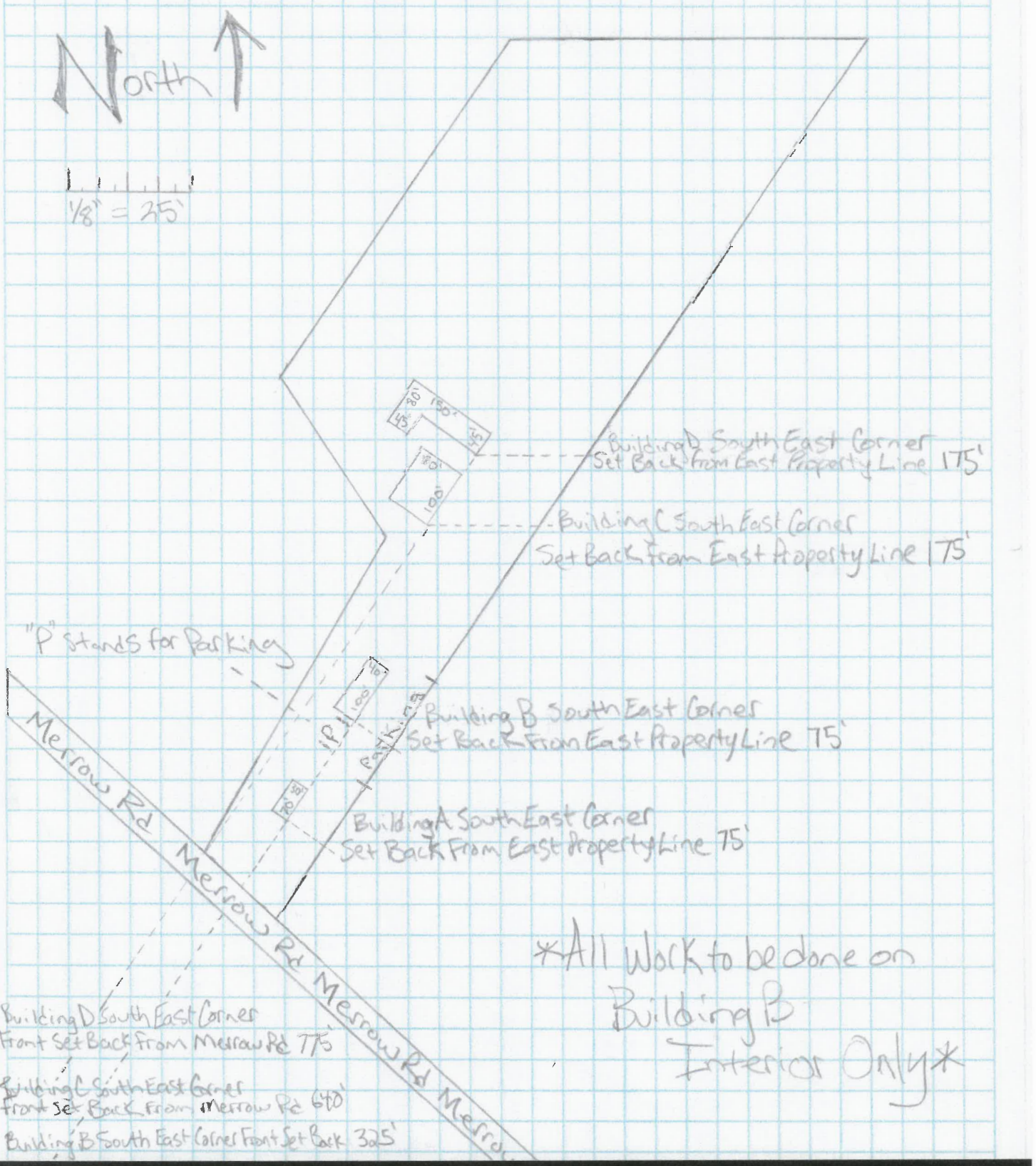
Required Information		*Check when Submitted*		*Additional Comments*
Site Plan: Sec. 60-1301		***Applicant***	***Staff***	
	Sec. 60-1301(1): Name and address of owner and developer	*M & S Holdings, LLC, PO Box 1908, Lewiston, ME 04241. See Special Warranty Deed, Book 11367, Page 34.*		
	Sec. 60-1301(2): Names of development, scale and meridian arrow	*Town Farm Recovery Options - 249 Merrow Rd Remodel. See AE Hodsdon Plan Sheets A1.0 through A1.3; Scale as noted.*		
	Sec. 60-1301(3): Name and addresses of all owners of record of all adjacent property	*Central Maine Power & Jack Bazinet (Per Deed) Listed per Exhibit A of the property deed.*		
	Sec. 60-1301(4): Current zoning boundaries and 100-year floodplain boundaries	*PIN 186-012. Not in 100-year floodplain Site is not located within a 100-year floodplain.*		
	Sec. 60-1301(5): Easements; rights-of-way	*Existing CMP Easements; No Change. Existing easements of record; No new easements proposed*		
	Sec. 60-1301(6): Topographic map of the site	*Existing - No change to grading, drainage, or exterior footprint.*		
	Sec. 60-1301(7): Location of watercourses, wetlands, marshes, surface water, rock outcroppings, wooded areas, etc.	*Existing - No outside work or site disturbance proposed.*		
	Sec. 60-1301(8): Location of buildings existing on the tract to be developed	*See Architectural Plans A1.0; Existing Building Footprint.*		
	Sec. 60-1301(9): Locations of water mains, sewer mains, wells, fire hydrants, culverts, drains, pipe sizes, grads and direction	*Existing Utilities; No change to mains, sewer, or hydrants.*		
	Sec. 60-1301(10): Existing soil conditions and soil suitability test results	*Existing Conditions; No new structures or soil disturbance.*		
	Sec. 60-1301(11): Location of proposed buildings	*N/A - No new buildings proposed. Interior renovation only.*		
	Sec. 60-1301(12): Proposed traffic circulation system	*Existing Traffic Circulation; 21 parking spaces on existing lot.*		
	Sec. 60-1301(13): Location of existing and proposed public utility lines	*Existing Public Utility Lines; No new connections required.*		

	Sec. 60-1301(14): Site developments requiring stormwater permits required plan	*N/A - Zero site disturbance; No new impervious area proposed.*		
	Sec. 60-1301(15): Location and design of proposed off-street parking and loading areas	*Existing off-street parking; 21 spaces total (6 ADA).*		
	Sec. 60-1301(16): Proposed location and direction of outdoor lighting	*Existing outdoor lighting; No new fixtures proposed.*		
	Sec. 60-1301(17): Existing and proposed planting, fences and walls, including landscaping and screening	*Existing landscaping and fencing. No change.*		
	Sec. 60-1301(18): Location, size, design and manner of illumination of signs	*N/A - No new exterior signage proposed at this time.*		
	Sec. 60-1301(19): Disposal of sewage, trash, solid waste	*Existing municipal/private services; No change to disposal.*		
	Sec. 60-1301(20): Perimeter boundaries of the site with bearings, distances and radii of curves including the name and seal of the registered land surveyor who prepared the plan	*See Special Warranty Deed (Book 11367, Page 34) for boundaries.*		
	Sec. 60-1301(21): Description and plan of capacity and location of means of sewage disposal	*Existing sewage disposal; No change to capacity or location.*		
	Sec. 60-1301(22): A statement of the amount of area of land involved in the site	*Standard office/clinic solid waste service to be utilized for disposal*	*Existing on-site dumpster*	
	Sec. 60-1301(23): Description and plan of a phase development concept	*Existing service capacity is sufficient for Change of Use to Business Occupancy.*		
	Sec. 60-1301(24): Demonstration of financial capacity	*Evidence provided via Special Warranty Deed, Book 11367, Page 34.*		

Required Information		*Check when Submitted*		*Additional Comments*
Stormwater & Erosion Control Plan: Sec. 46-209		*Applicant*	*Staff*	
	Sec. 46-209(a)(1): Erosion and sedimentation control plan	***N/A - Interior renovation only. Zero site disturbance proposed.***		
	Sec. 46-209(a)(3) a.: A stormwater management plan for 24-hour, 2, 10 and 25-year frequencies	***N/A - No change to existing impervious area or drainage patterns.***		
	Sec. 46-209(a)(3) b.: Stormwater quality	***N/A - No impact on stormwater quality; No exterior work***		
	Sec. 46-209(b)(1) a.: Location map with the boundaries of development	***PIN 186-012. See Special Warranty Deed.***		
	Sec. 46-209(b)(1) b.: USGS topographic map	***Existing - No changes proposed to site topography.***		
	Sec. 46-209(b)(1) c.: A topographic map for the project showing predevelopment contours, post development contours, etc.	***N/A - No change to contours; Interior renovation only.***		
	Sec. 46-209(b)(1) d.: SCS medium intensity soils map	***Existing conditions; No soil disturbance or new structures.***		
	Sec. 46-209(b)(1) e.: A high intensity soil survey	***N/A - No soil disturbance proposed.***		
	Sec. 46-209(b)(2) a.: Description of the development	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(2) b.: Description of stormwater handling	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(2) c.: Description of erosion and sedimentation control	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(2) d.: Schedule of construction	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(2) e.: A description of inspection and maintenance for sediment and erosion control measures	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(3) a.: Detailed drawings of any structural practices used	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(3) b.: Calculations for stormwater management practices	***N/A–Interior renovation only; no site disturbance or exterior work.***		
	Sec. 46-209(b)(3) c.: Calculations for sediment and erosion control practices	***N/A–Interior renovation only; no site disturbance or exterior work.***		

Required Information		*Check when Submitted*		*Additional Comments*
Traffic Impact Analysis: Sec. 46-215		***Applicant***	***Staff***	
	Sec. 46-235(a)(1) a.: Exact physical location of the proposed development			
	Sec. 46-235(a)(1) b.: Physical characteristics			
	Sec. 46-235(a)(1) c.: Existing land uses			
	Sec. 46-235(a)(1) d.: Land uses of adjacent property			
	Sec 46-235(a)(2): Proposed land use			
	Sec. 46-235(b)(1) a.: Current and proposed street network			
	Sec. 46-235(b)(1) b.: Geometrics and characteristics			
	Sec. 46-235(b)(1) c.: Intersection traffic control			
	Sec. 46-235(b)(1) d.: Signal timing and system operation at signalized intersections			
	Sec. 46-235(b)(1) e.: Existing or proposed intersection and development access points and configurations			
	Sec. 46-235(b)(1) f.: Existing and proposed rights-of-way			
	Sec. 46-235(b)(1) g.: Available hourly traffic counts			
	Sec. 46-235(b)(1) h.: Peak period turning movements at critical intersections			
	Sec. 46-235(b)(1) i.: Accident information			
	Sec. 46-235(b)(1) j.: Transit routes/headways			
	Sec. 46-235(b)(1) k.: Transit stops/station locations			
	Sec. 46-235(b)(2) a.: Comprehensive transportation plan			
	Sec. 46-235(b)(2) b.: Future improvements			
	Sec. 46-236: Traffic Movement Permit			

249 Merrow Rd Auburn, ME 04210 Parcel # 186-012



All Work to be done on Building B Interior Only

[redacted]

Bk 11367 Pg34 #7043
06-08-2023 @ 12:45p

USMS SWD FORM 032021

Return To:
M & S Holding LLC
ATTN: MICHAEL MORIN
PO BOX 1908
LEWISTON, ME 04241
Prepared By:
CROWN TITLE CORP
1 SANFORD AVE
BALTIMORE, MD 21228

CATS ID: 18-DEA-641490
Actual Consideration: $750,000.00

SPECIAL WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS, that on this 5th day of June, 2023,

the ***UNITED STATES OF AMERICA,*** acting through the UNITED STATES MARSHALS SERVICE, whose address is: United States Marshals Service, Asset Forfeiture Division, Room 9054, 1215 S. Clark Street, Arlington, VA 22202, (hereinafter "Grantor");

for and in ***CONSIDERATION*** of the sum of Seven Hundred Fifty Thousand and No/100 Dollars, ($750,000.00) to said Grantor in hand, the receipt of which is hereby acknowledged; *HEREBY* does grant, bargain, sell and convey without general warranties of title; unto

M & S Holdings, LLC, a Maine Limited Liability Company, having the address of Pos Office Box 1908, Lewiston, Maine, 04241, (hereinafter "Grantee"), its successors and assigns, the following described property, together with all improvements and appurtenances thereto, to wit:

SEE EXHIBIT "A" FOR LEGAL DESCRIPTION OF PREMISES CONVEYED
Address: ***249 Merrow Road, Auburn, Maine, 04210***
PIN: ***186-012***

BEING the same property forfeited to the United States of America by Final Order of Forfeiture as to Tyler Poland, filed August 2, 2022, in the Case styled ***United States of America v. Tyler Poland, Case No. 2:18-cr-00063-GZS,*** decided in the United States District Court District of Maine recorded on December 28, 2022, in Book 11281, Page 237, and Amended Final Order Forfeiture recorded February 21, 2023, in Book 11309, Page 94, Public Records of Androscoggin County, Maine

TOGETHER with, and subject to, the rights, obligations, easements, restrictions and other provisions set forth in the Declaration and the By Laws of the Condominium, if any;

AND subject to zoning and other rules, regulations, ordinances, restrictions, covenants, conditions, easements and other matters of record;

THE GRANTOR COVENANTS TO SPECIALLY WARRANT TITLE, with limited warranty covenants only, to the Property hereby conveyed to the Grantee, its successors and assigns, that the granted premises are free from all encumbrances made by the Grantor, and that it does warrant and defend the same to the Grantee and its successors and assigns, forever, against the lawful claims and demands of all persons claiming by, through or under the Grantor, but against none other.

IN WITNESS WHEREOF, Grantor has executed this Special Warranty Deed on the day and year first above written.

UNITED STATES OF AMERICA by the
United States Marshals Service

By: _____
Name: Michael J. Armstrong
Title: Assistant Chief

STATE OF Virginia
SS
COUNTY OF Arlington

The foregoing instrument was acknowledged before me, a Notary Public in and for said County and State by means of X physical presence or ___ online notarization, this 5th day of June, 2023 personally appeared before me the above named UNITED STATES OF AMERICA, by Michael J. Armstrong as Assistant Chief, of the United States Marshals Service, who is personally known to me or who produced _____ as identification and who acknowledged that he/she did sign the foregoing instrument and the same is the free act and deed of said United States of America and of him/her personally and as such officer of said United States Marshals Service.

In testimony whereof I have set my hand and official seal at Arlington, VA, this 5th, day of June, 2023.

Alan Ray Davis [Notary Seal]
Notary Public

ALAN RAY DAVIS
NOTARY PUBLIC
REGISTRATION # 8003512
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
FEBRUARY 28, 2026

USMS SWD FORM 032021

EXHIBIT "A"

All Four certain lots or parcels of land, with any improvements thereon, situated at 249 Merrow Road, Auburn, County of Androscoggin and State of Maine; further bounded and described as follows:

PARCEL ONE:

Beginning at the southwesterly corner of land now or formerly owned by Manda Ames; thence northerly along the Merrow Road leading from Littlefield's Corner to Haskell's Corner one hundred and twenty (120) feet; thence easterly to an iron stake driven in the ground; thence southerly one hundred twenty (120) feet to land now or formerly of George Ouellette to a stake to be driven in the ground; thence westerly along line of said George Ouellette to the point of beginning; together with water rights.

PARCEL TWO:

Beginning at an iron pin as set on the northwesterly line of land now or formerly of Randy's Inc., as evidenced by deed recorded in the Androscoggin County Registry of Deeds in Book 1614, Page 322, said pin as located five hundred twenty-two and one-tenth (522.1) feet north fifty degrees twenty-eight minutes East (N 50° 28' E) of the iron pin at the southwesterly corner of the land of said Randy's Inc.; thence North twenty-four degrees five minutes West (N 24° 05' W) two hundred eighty-two and three tenths (228.3) feet to an iron pin; thence North forty-nine degrees fourteen minutes East (N 49° 14' E) five hundred ninety-seven (597) feet to an iron pin at the line of land of the Central Maine Power Company conveyed to it by deed recorded in said Registry of Deeds in Book 1143, Page 70; thence South seventy-three degrees fifty-eight minutes East (S 73° 58'E) four hundred eighty-nine and two tenths (489.2) feet along the line of land of Central Maine Power Company to an iron pin at the line of land of Jack Bazinet conveyed to him by deed recorded in said Registry of Deeds in Book 1575, Page 91; thence South fifty degrees twenty-eight minutes West (S 50" 28' W) four hundred and six tenths (400.6) feet along the line of land of said Bazinet to an iron pipe as found at the northeasterly corner of land of said Randy's Inc.; thence North thirty-one degrees two minutes West (N 31° 02' W) one hundred twenty (120) feet along the line of land of said Randy's Inc., to a point; thence South fifty degrees twenty-eight minutes West (S 50° 28' W) five hundred sixty-five and nine tenths (565.9) feet along the line of land of said Randy's Inc., to the point of beginning. Containing 5.6 acres, more or less. This description is based on a field survey done on June 11, 1985 and all bearings as given are based on magnetic north as observed at the time of said survey.

PARCEL THREE:

Beginning at an iron pin on the easterly line of Merrow Road marking the northwesterly corner of land now or formerly of Randy's Inc., as described by deed recorded in said Registry of Deeds in Book 1614, Page 322; thence North fifty degrees twenty-eight minutes East (N 50° 28' E) three hundred twenty-two and one tenth (322.1) feet to the point of beginning marked by an iron pin; thence northwesterly at a right angle to the aforesaid course twenty-five (25) feet to an iron pin; thence North fifty degrees twenty-eight minutes East (N 50° 28' E) two hundred five (205) feet, more or less, to an iron pin; thence

South twenty-four degrees five minutes East (S 24° S' E) twenty-five (25) feet, more or less, to an iron pin; thence South fifty degrees twenty-eight minutes West (S 50° 28' W) two hundred (200) feet to the point of beginning.

PARCEL FOUR:

Beginning at the most southerly corner of a parcel of land now or formerly of Randy's Inc., as described in a deed which is recorded at the Androscoggin County Registry of Deeds in Book 1955, Page 64, said point of beginning as located North fifty degrees twenty-eight minutes East (N 50° 28' E) three hundred twenty-two and one-tenth (322.1) feet from an iron pin as found at the northeasterly limit of the Merrow Road at the southwesterly corner of a parcel of land of said Randy's Inc. described in a deed recorded in said Registry of Deeds in Book 1614, Page 322; thence South fifty degrees twenty-eight minutes West (S 50° 28' W) seventy-two and five-tenths (72.5) feet along the westerly line of land of said Randy's Inc., described in a deed recorded in said Registry of Deeds at Book 1614, Page 322 to an iron pin as set; thence North thirty-nine degrees thirty-two minutes West (N 39° 32' W) twenty-five and zero tenths (25.0) feet to an iron pin as set; thence North fifty degrees twenty minutes East (N 50° 20' E) seventy-two and five tenths (72.5) feet to the southwesterly corner of land of said Randy's Inc. described in a deed dated June 13, 1986 and recorded in said Registry of Deeds in Book 1955, Page 64; thence South thirty-nine degrees thirty-two minutes East (S 39° 32' E) along the southerly line of land of said Randy's Inc., described in a deed dated June 13, 1986, recorded in said Registry of Deeds in Book 1955, Page 64, a distance of twenty-five and zero tenths (25.0) feet to the point of beginning.

Containing one thousand eight hundred twelve (1,812) square feet, more or less.

Address: ***249 Merrow Road, Auburn, ME 04210***
PIN: ***186-012***

Maine Real Estate Transfer Tax Paid
TINA M. CHOUINARD, REGISTER
ANDROSCOGGIN COUNTY MAINE E-RECORDED

Landlord Authorization for Right, Title, and Interest

Property Address:
249 Merrow Road
Auburn, ME 04210

Purpose

This document confirms that the landlord grants permission to the tenant to apply for all necessary permits for renovation and conversion of the above property into a medical recovery facility offering:

- Intensive Outpatient Program (IOP)
- Individual Counseling
- Potential future Medication Management

Authorization Statement

I, the undersigned property owner/landlord, hereby affirm that I hold legal **Right, Title, and Interest** in the property located at 249 Merrow Road, Auburn, ME 04210. I grant permission to **[Tenant Name]** to use this property for the purposes stated above and to apply for any required permits with the appropriate authorities.

Attached

- Copy of the property deed as proof of ownership.

Signatures

Landlord Name: Michael Morin / Michael Morin
Landlord Signature: Michael Morin
Date: 12-16-25

Tenant Name: Barriers to Bridges
Tenant Signature: Barriers to Bridges
Date: 12/16/25

Notarization

State of Maine
County of **Androscoggin**

On this 16th day of December, **2025**, before me, the undersigned Notary Public, personally appeared Michael Morin (Landlord), proved to me through satisfactory evidence of identification to be the person whose name is signed on this document, and acknowledged that they signed it voluntarily for its stated purpose.

Notary Public Signature: _____
Printed Name: _____
My Commission Expires: _____

DANIEL S. CARROLL
Notary Public, State Of Maine
My Commission Expires November 02, 2030

STATE OF MAINE - DEPARTMENT OF PUBLIC SAFETY
OFFICE OF STATE FIRE MARSHAL
45 COMMERCE DR STE 1
AUGUSTA, ME 04333-0001

Construction Permit

No. 31605

In accordance with the provisions of M.R.S.A. Title 25, Chapter 317, Sec.317 and Title 5, Section 4594-F, permission is hereby granted to construct or alter the following referenced building according to the plans hitherto filed with the Commissioner and now approved. No departure from application form/plans shall be made without prior approval in writing. Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions.

Each permit issued shall be displayed at the site of construction.

Building: RECOVERY HEALTH OFFICE SPACE
Location: 249 MERROW RD, AUBURN, ME 04210-8319
Owner: M & S HOLDINGS LLC
Owner Address: M & S HOLDINGS LLC
PO BOX 1908
LEWISTON, ME 04241-1908

Occupancy Type: Business
Secondary Use:
Use Layout: Single Use
No Sprinkler System
No Fire Alarm System
Construction Mode: Renovation, Occupancy Change
Unprotected Wood Frame: Type V (000)
Final Number of Stories: 2

Permit Date: 11/17/2025 **Expiration Date:** 05/16/2026

Notes and additional requirements:

*Any changes to the project from what was permitted shall require updated drawings and may be subject to further review or permitting. Please update this office with any proposed changes prior to facilitating the change. The requirements of NFPA 241 2019 edition, for safeguarding of demolition, construction and renovations apply. Please be certain to review NFPA 241 and coordinate with Owner, design professional, contractors, and local officials as required.

COMMISSIONER OF PUBLIC SAFETY

Good afternoon Zack,

As long as construction begins prior to the expiration date of the permit, an extension is not needed.

If you have any questions, I can put you in touch with the plans reviewer who permitted your project and they would be happy to clear anything up.

Thank you,
Hannah Osgood
Office Assistant II
Office of State Fire Marshal
45 Commerce Dr., Suite 1
Augusta, ME 04330
Hannah.J.Osgood@maine.gov
(207) 626-3875

Date: April 29, 2026

Dear Ms. Peikes,

On behalf of Peter Bolduc, I am requesting a waiver from the requirement to provide a formal, engineered boundary survey for the Change of Use application at 249 Merrow Road.

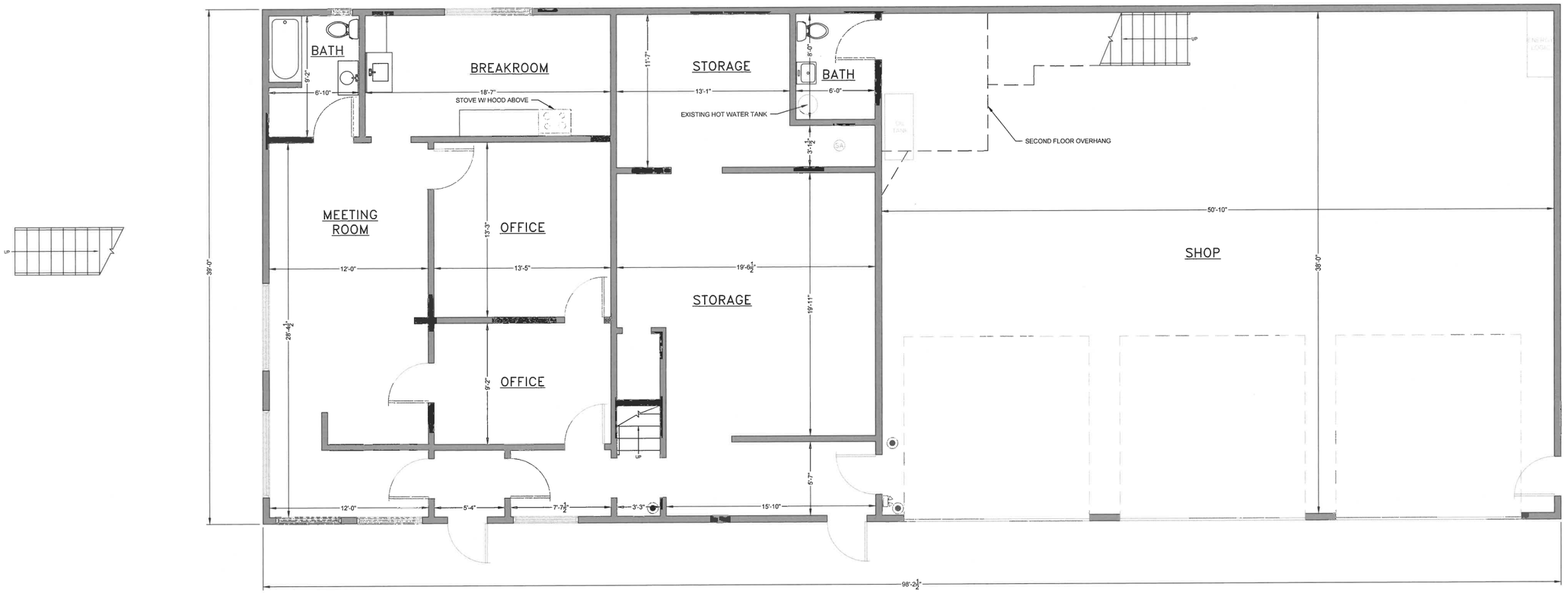
As this project is strictly for "Interior Only" work on Building B and involves no changes to the exterior footprint or property boundaries, we believe a formal survey would be an unnecessary expense. Since the property lines are not changing, we trust this request is in line with your previous guidance.

In lieu of a formal survey, I have included a site plan drawn to scale based on available city data and physical measurements. While this is not an engineered boundary survey, it accurately reflects the existing conditions, building dimensions (40' x 100'), and the specific setbacks from Merrow Road.

We appreciate your flexibility in reviewing these materials.

Sincerely,

Zack Cameron



EXISTING FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"

AEHodsdon
CONSULTING ENGINEERS
10 Common Street Waterville, Maine 04901
(207) 873-5164

©

REV:	APP'D	DATE:	STATUS:
3	BEM	09-15-2025	ISSUED FOR REVIEW
2	BEM	09-08-2025	ISSUED FOR PERMITTING
1	BEM	09-02-2025	ISSUED FOR REVIEW
0	BEM	08-25-2025	ISSUED FOR REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM AE HODSDON CONSULTING ENGINEERS, ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE EXPRESS SOLE RISK AND WITHOUT LIABILITY TO AE HODSDON CONSULTING ENGINEERS

STATE OF MAINE
BENJAMIN E. MURRAY
NO. 10128
LICENSED PROFESSIONAL ENGINEER

PRELIMINARY, NOT FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

EXISTING FIRST FLOOR PLAN
OF RECOVERY HEALTH OFFICE SPACE

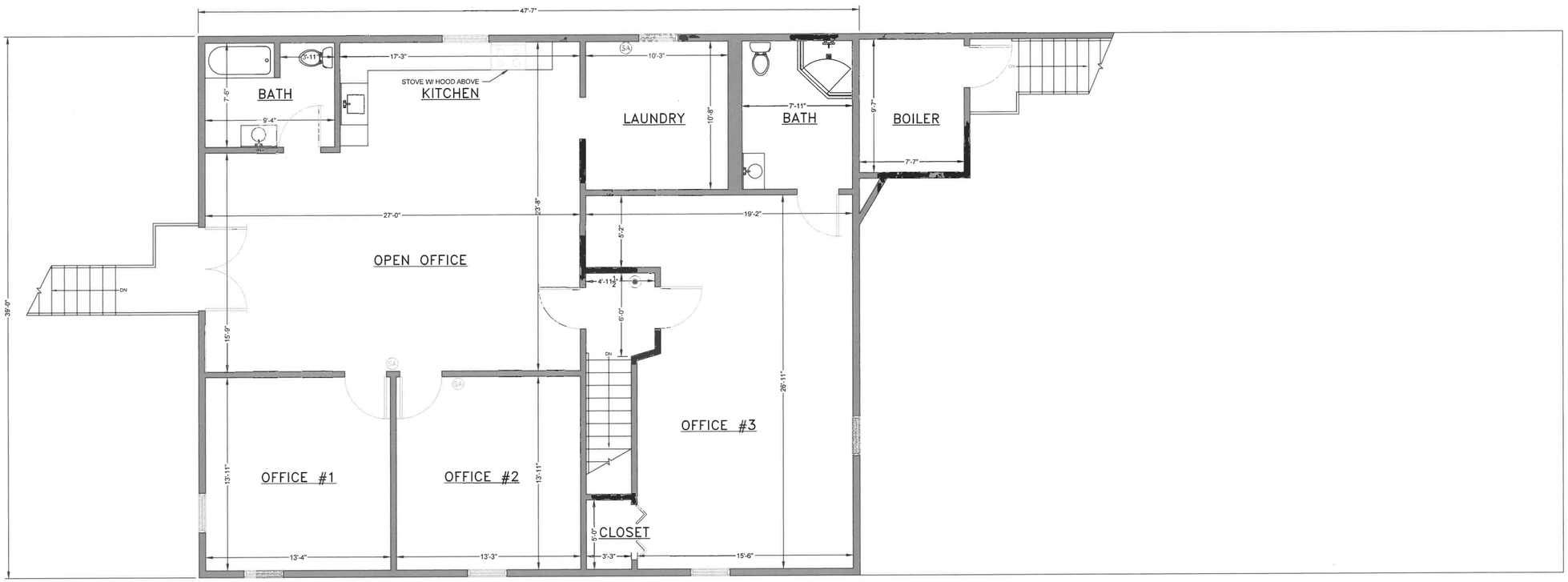
MERROW ROAD
AUBURN, MAINE

FOR:
M & S HOLDINGS LLC
P.O. BOX 1908
LEWISTON, MAINE

DRAWN	CHECKED
SR	BEM
SCALE	DATE
AS NOTED	08-25-2025

A1.0

PROJECT#: 121-25



EXISTING SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"

AEHodsdon CONSULTING ENGINEERS
10 Common Street Waterville, Maine 04901
(207) 873-5164

REV:	APP'D	DATE:	STATUS:
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2	BEM	09-08-2025	ISSUED FOR PERMITTING
1	BEM	09-02-2025	ISSUED FOR REVIEW
0	BEM	08-25-2025	ISSUED FOR REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM A.E. HODSDON CONSULTING ENGINEERS. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO A.E. HODSDON CONSULTING ENGINEERS

STATE OF MAINE
BENJAMIN E. MURRAY
NO. 10128
LICENSED PROFESSIONAL ENGINEER

PRELIMINARY - NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

EXISTING SECOND FLOOR PLAN
OF:
RECOVERY HEALTH OFFICE SPACE
MERROW ROAD
AUBURN, MAINE
FOR:
M & S HOLDINGS LLC
P.O. BOX 1908
LEWISTON, MAINE

DRAWN	CHECKED
SR	BEM
SCALE	DATE
AS NOTED	08-25-2025

A1.1

PROJECT#: 121-25

DOOR SCHEDULE

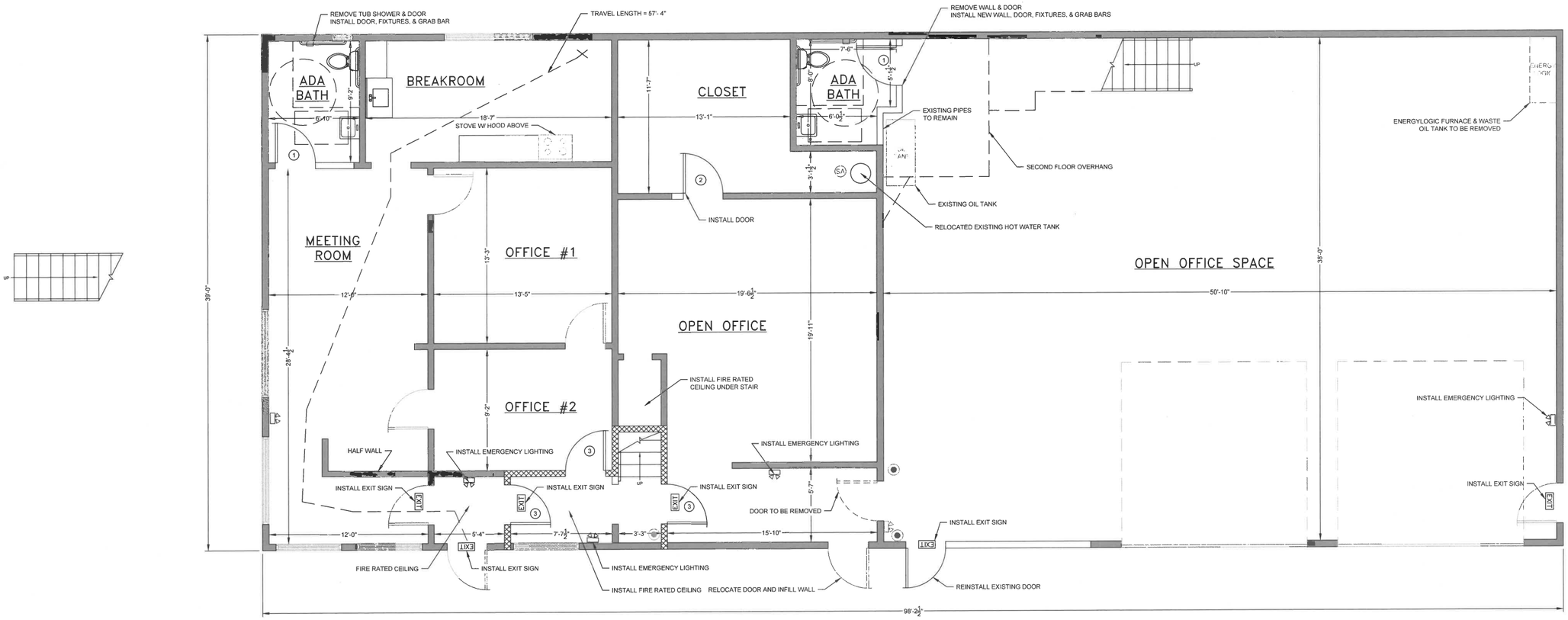
NO.	QUANTITY	SIZE	TYPE	FRAME	REMARKS
1	2	3'-0" x 6'-8"	SOLID WOOD	METAL	HINGES, LEVER HARDWARE, PRIVACY LOCKSET
2	1	3'-0" x 6'-8"	SOLID WOOD	WOOD	HINGES, LEVER HARDWARE, PASSAGE LOCKSET
3	5	3'-0" x 6'-8"	SOLID WOOD FIRE RATED	METAL	HINGES, LEVER HARDWARE, PASSAGE LOCKSET, CLOSER, 60 MIN. FIRE RATED

PLAN SUBMISSION NOTES

1. THIS PLAN IS FOR CITY OF AUBURN BUILDING CODE, LIFE SAFETY CODE, ADA, FIRE MARSHAL AND OCCUPANCY APPROVAL ONLY.
2. PLAN BASED ON PLAN PROVIDED BY THE OWNER.
3. THE PLUMBING, ELECTRICAL, MECHANICAL, AND STRUCTURAL DESIGN OF THE BUILDING IS BY THE OWNER.
4. IBC 2015 USE GROUP: BUSINESS
5. 2018 NFPA LIFE SAFETY OCCUPANCY: BUSINESS
6. CONSTRUCTION TYPE: V B (UNPROTECTED)
7. ALL EXISTING KNOB HARDWARE TO BE REPLACED WITH LEVER HARDWARE.

LEGEND

- EXISTING WALL
- PROPOSED WALL
- 1-HR. FIRE RATED WALL
- EXIT SIGN
- EMERGENCY LIGHTING
- SMOKE DETECTOR
- FIRE EXTINGUISHER



PROPOSED FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"

AEHodsdon CONSULTING ENGINEERS
10 Common Street Waterville, Maine 04901
(207) 873-5164

REV:	APP'D	DATE:	STATUS:
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THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM A.E. HODSON CONSULTING ENGINEERS. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO A.E. HODSON CONSULTING ENGINEERS

STATE OF MAINE
BENJAMIN E. MURRAY
NO. 10128
LICENSED PROFESSIONAL ENGINEER

PROPOSED FIRST FLOOR PLAN OF RECOVERY HEALTH OFFICE SPACE

MERROW ROAD
AUBURN, MAINE
FOR
M & S HOLDINGS LLC
P.O. BOX 1908
LEWISTON, MAINE

DRAWN	CHECKED
SR	BEM
SCALE	DATE
AS NOTED	08-25-2025

A1.2

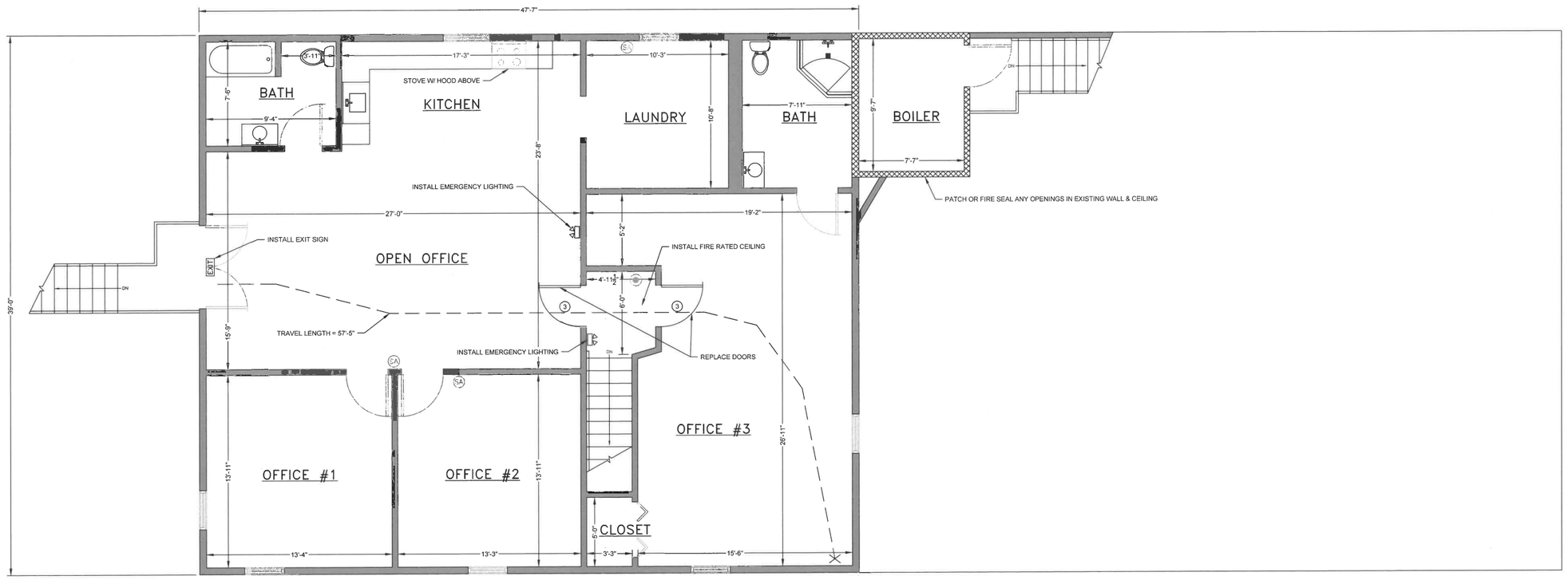
PROJECT#: 121-25

PLAN SUBMISSION NOTES

1. THIS PLAN IS FOR CITY OF AUBURN BUILDING CODE, LIFE SAFETY CODE, ADA, FIRE MARSHAL AND OCCUPANCY APPROVAL ONLY.
2. PLAN BASED ON PLAN PROVIDED BY THE OWNER.
3. THE PLUMBING, ELECTRICAL, MECHANICAL, AND STRUCTURAL DESIGN OF THE BUILDING IS BY THE OWNER.
4. IBC 2015 USE GROUP: BUSINESS
5. 2018 NFPA LIFE SAFETY OCCUPANCY: BUSINESS
6. CONSTRUCTION TYPE: V B (UNPROTECTED)
7. ALL EXISTING KNOB HARDWARE TO BE REPLACED WITH LEVER HARDWARE.

LEGEND

- EXISTING WALL
- PROPOSED WALL
- 1-HR. FIRE RATED WALL
- EXIT SIGN
- EMERGENCY LIGHTING
- SMOKE DETECTOR
- FIRE EXTINGUISHER



PROPOSED SECOND FLOOR PLAN
SCALE 1/4" = 1'-0"

AEHodsdon
CONSULTING ENGINEERS
10 Common Street Waterville, Maine 04901
(207) 873-5164

REV:	APP'D	DATE:	STATUS:
3	BEM	09-15-2025	ISSUED FOR REVIEW
2	BEM	09-08-2025	ISSUED FOR PERMITTING
1	BEM	09-02-2025	ISSUED FOR REVIEW
0	BEM	08-25-2025	ISSUED FOR REVIEW

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STATE OF MAINE
BENJAMIN E. MURRAY
NO. 10128
LICENSED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION OR BID SEAL

PROPOSED SECOND FLOOR PLAN OF RECOVERY HEALTH OFFICE SPACE

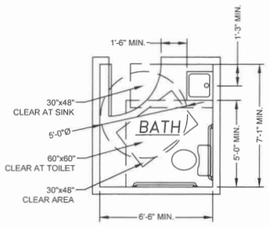
MERROW ROAD
AUBURN, MAINE

FOR:
M & S HOLDINGS LLC
P.O. BOX 1908
LEWISTON, MAINE

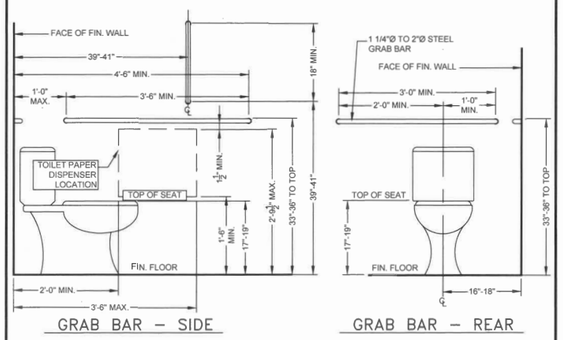
DRAWN	CHECKED
SR	BEM
SCALE	DATE
AS NOTED	08-25-2025

A1.3

PROJECT#: 121-25

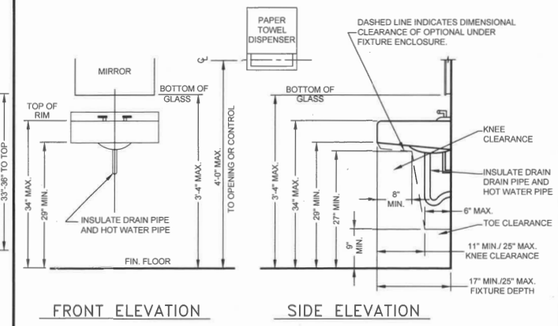


HANDICAP BATHROOM DETAIL
NO SCALE



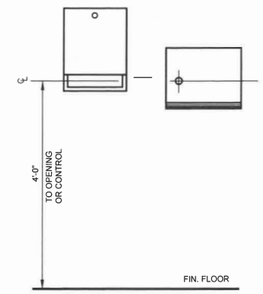
NOTE:
1. FIXTURES TO MEET ABOVE REQUIREMENTS WITH NO VARIANCE.
2. SOLID WALL BLOCKING TO BE PROVIDED AT ALL GRAB BAR LOCATIONS

BARRIER FREE TOILET DIMENSIONAL REQUIREMENTS
NO SCALE

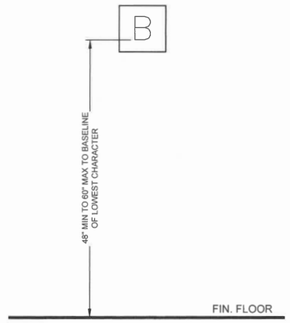


NOTE:
FIXTURES TO MEET ABOVE REQUIREMENTS WITH NO VARIANCE.

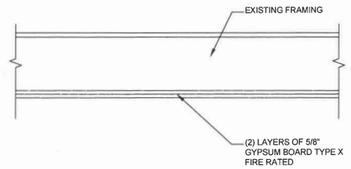
BARRIER FREE LAVATORY DIMENSIONAL REQUIREMENTS
NO SCALE



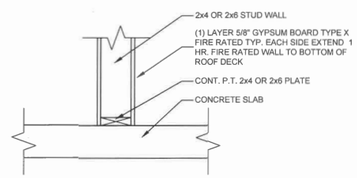
PAPER TOWEL DISPENSER
NOT TO SCALE



TACTILE SIGNAGE DETAIL
NOT TO SCALE



1-HR. FIRE RATED CEILING DETAIL
GA FC-5406
NO SCALE



1-HR. FIRE RATED WALL DETAIL
UL DES U305
NO SCALE

A.E.Hodsdon
CONSULTING ENGINEERS
10 Common Street Waterville, Maine 04901
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STATE OF MAINE
BENJAMIN E. MURRAY
NO. 10128
LICENSED PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION, BIDDING OR PERMIT - ARE INCOMPLETE

DETAILS
OF:
RECOVERY HEALTH OFFICE SPACE
MERROW ROAD
AUBURN, MAINE
FOR:
M & S HOLDINGS LLC
P.O. BOX 1088
LEWISTON, MAINE

DRAWN	CHECKED
SR	BEM
SCALE	DATE
AS NOTED	08-25-2025

A5.0

PROJECT#: 121-25

Supplemental Information for Planning Board Review

249 Merrow Road, Building B — Auburn, Maine

Proposed Use: Intensive Outpatient Program (IOP) — Substance Use Disorder Treatment

Submitted: May 4, 2026

Submitted by: Town Farm Recovery Options

This document is submitted in response to a request from the Planning Coordinator for additional information to assist the Planning Board in its review. The items below address the number of patients proposed to be treated, methods of treatment, hours of operation, security provisions, and staffing.

1. Number of Patients Proposed to Be Treated

Initial Operations:

- One treatment group will operate at program launch, with a maximum of 10 patients per group.
- Total initial patient capacity: 10 patients per day.

Long-Term Operations (as program grows):

- The program anticipates expanding to two daily treatment groups, each with a maximum of 10 patients.
- Total long-term daily capacity: up to 20 patients.
- Individual counseling sessions will also be available throughout the day for enrolled patients, on a scheduled basis, in addition to group programming.

2. Methods of Treatment and Substances Addressed

The program is classified as an ASAM Level 2.1 Intensive Outpatient Program (IOP) for adult substance use disorders, licensed under Maine 10-144 CMR Chapter 123. Treatment methods include:

- Group therapy — structured therapeutic group sessions, the core service of the IOP model
- Individual counseling — one-on-one sessions available to enrolled patients throughout the program day
- Psychoeducation — evidence-based educational programming on substance use, recovery, and life skills
- Treatment planning — individualized assessment and goal-setting for each patient using the ASAM criteria
- Medication-Assisted Treatment (MAT) — the program will offer MAT services under the direction of a licensed Medical Director (MD or DO). MAT will be included in the program's Chapter 123 license from the date of opening.

Substances addressed include alcohol, opioids, stimulants, and other substances consistent with the adult SUD population served by the program. The program does not dispense controlled substances on-site beyond the scope of licensed MAT services under physician direction.

3. Hours of Operation

Initial Operations:

- Monday through Friday, 9:00 AM to 5:00 PM
- One afternoon treatment group: 1:00 PM to 4:00 PM
- Individual counseling and administrative functions scheduled throughout the 9 AM–5 PM window

Long-Term Operations (as program grows):

- Monday through Friday, 9:00 AM to 9:00 PM
- Two daily treatment groups: 1:00 PM to 4:00 PM and 6:00 PM to 9:00 PM
- The evening group is designed to serve patients who are employed during daytime hours
- Individual counseling available throughout the expanded program day

4. Security Provisions

The program does not employ dedicated security staff. This is consistent with standard practice for licensed outpatient behavioral health and substance use disorder programs in Maine.

The program operates in a professional clinical setting. Patients are voluntary participants in outpatient treatment — not a residential or overnight program. Security considerations are addressed through the following measures:

- Clinical staff are trained in de-escalation techniques consistent with behavioral health best practices
- Patient conduct expectations are established in writing at intake
- The program retains the right to discharge patients who pose a safety concern to staff or other patients
- Staff will coordinate with appropriate emergency services if a situation warrants

The operator does not anticipate that the proposed use will generate public safety concerns beyond those of any standard medical or behavioral health outpatient office.

5. Staffing

The program will maintain the minimum staffing levels required under Maine state law and Maine DHHS Chapter 123 licensing standards. The following roles will be employed:

- Clinical Director (LADC-CCS) — Licensed Alcohol and Drug Counselor with Certified Clinical Supervisor credential. Required by Maine regulation for program oversight and supervision of counseling staff. 1.0 FTE.
- Primary Counselor (LADC) — Licensed Alcohol and Drug Counselor. Responsible for group facilitation, ASAM assessments, treatment planning, and individual counseling. 1.0 FTE.
- Secondary Counselor / Co-Facilitator (CADC) — Certified Alcohol and Drug Counselor. Co-facilitates groups under CCS supervision as required by clinical standards. Part-time to full-time depending on census.
- Administrative / Intake Coordinator — Handles patient intake, scheduling, insurance verification, and billing. No clinical credential required. 0.5 FTE.
- Medical Director (MD or DO) — Licensed physician serving as part-time consulting Medical Director, as required under MBM Section 65 for program direction and MAT oversight. Independent contractor.

As the program grows and medication management services expand, additional clinical support staff will be added consistent with licensing requirements and patient census.

All staff will undergo Maine DHHS-required background checks within 90 days of hire, prior to direct patient contact.

The applicant is available to present this information at the Planning Board meeting and to answer any questions the Board may have. If the Board requires any additional materials or clarification prior to the meeting, please contact Zack Cameron at 207-577-0331