

Date September 15, 2022
To Town of Cumberland Planning Board
From Carla Nixon, Town Planner
Subject **Final Major Subdivision Plan Review: Snowy Owl Estates**

I. REQUEST/OVERVIEW:

The Applicant is SVR, LLC, c/o Nick Voltolina and Keven Salvo of Falmouth, Maine.
The Applicants are requesting final subdivision review for a proposed 10 unit condominium development to be located at 246 Gray Road in the Village Medium Density Residential (VMDR) zoning district as shown on Map U21, Lot 5A.
Craig Burgess, P.E. of Sebago Technics is the Applicant’s representative. Dan Diffin, P.E., of SYTDesign Engineers reviewed the plans for the Town of Cumberland.

II. PROJECT HISTORY:

Sketch Plan Review: January 18, 2022
Preliminary Plan Approval: June 21,2022

III. DESCRIPTION:

Parcel size: 5.69
Net Residential Density: 10 lots
Proposed number of lots: 1 lot with five (3 bdrm) duplex units.
Zoning: Village Medium Density Residential (VMDR)
Development Type: Clustered Subdivision
Buffer: 75’ perimeter buffer: *Partial waver requested.*
Water: 2 on-site drinking water wells.
Sewer: 2 on-site subsurface waste disposal systems.
Open Space: 68,025 sf (27% of lot area)
Wetlands: 33,240 sf
Trails: None proposed
Fire Protection: Sprinklers
Road: Proposed to be a public road that will be 20’ wide and extends 250’ from Old Gray Road.

By-ways (sidewalks or paved shoulders): Sidewalks proposed

Homeowners Association: HOA documents submitted

Right, Title and Interest: Statutory Warranty Deed

IV. OUTSIDE AGENCY APPROVALS STATUS:

Agency	Type of Permit	Status
MDEP	Stormwater Permit/General Construction Permit	
MDEP	NRPA Permit-by-Rule	
Maine Historic Preservation Commission		On file
Maine Department of Agriculture, Conservation and Forestry	Rare & Exemplary Botanical Features. None documented.	On file.
Maine Dept. of Inland Fisheries & Wildlife		On file.

V. TOWN PLANNER'S COMMENTS: None

VI. TOWN ENGINEER'S COMMENTS: Dan Diffin, Sevee and Maher Engineers

Town Engineer Comments:

Section 250-4. N. Stormwater

1. Please revise the Pre-Watershed Plan with the existing tree line on the property. It is unclear in Subcatchment 2S if the wooded area matches the existing conditions.

Response: The entire existing site to be developed is wooded. A tree line was not mapped along the entire frontage of the property. The tree line in the post development watershed plan shows the tree clearing necessary for the development.

2. The label for Subcatchment 10S is missing from the Post Watershed Plan.

Response: A label for Subcatchment 10S was added to the post-watershed plan.

3. SME recommends the driveway culvert at the intersection with Old Gray Road be upsized to 15-inches for ease of future maintenance.

Response: The culvert size was increased to 15-inches as recommended.

Section 250-29 – Review and Approval by Other Agencies

4. Please provide evidence of Army Corps of Engineers permitting for the wetland impacts shown on the plans and the Maine DEP Stormwater Permit by Rule application for greater than one acre of disturbance.

Response: ACOE and MDEP Permit-By-Rule (PBR) applications were submitted on September 15th and we are awaiting approval at the end of the month.

Section 250-34 – Water Supply

5. Please show the proposed water supply well locations on the Overall Site and Subdivision Plan.

Response: The two well locations were added to the Site Plans (Sheets 3 and 4). The southerly well (well #2), was moved north to maintain greater than 100-feet of horizontal separation from the detention pond.

6. Please add water service sizes to the Utility Plan

Response: Water service sizes were added to the Utility Plan (Sheet 7). Final service sizes and building connection locations will be coordinated with the well driller and sprinkler designer.

Section 250-35 – Sewage Disposal

7. Please provide evidence that the combined wastewater disposal rates of each system do not require review of the project as an engineered wastewater disposal system.

Response: Total flows attributed to the condominium development can be found on the HHE-200 design forms in Exhibit 9 of the application. Subsurface disposal system #1 will handle 1,080 gpd from four 3-bedroom units (two duplexes). Subsurface disposal system #2 will handle 1,620 gpd from six 3-bedroom units (three duplexes). Given that wastewater systems will handle flow from less than 2,000 gpd, an engineered wastewater disposal system will not be required.

Section 250-38 – Street Design and Construction Standards

8. The portions of the proposed access drive and Old Gray Road detail do not meet the standards of a Residential Access Street. The construction of the 10-units will require the internal streets and access to the site to meet these standards. See below for details.
 - a. Entrance drive width does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 22' wide.

Response: The access drive width increased to 22-feet wide as advised. Updated Net Residential Calculations were also updated on the Overall Site Plan, and the density remains at 10 units with a net residential area of 200,017 square feet.

- b. Road Pavement thickness for the Base Course 19.0 mm does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 2.5" thick.

Response: The detail was adjusted as recommended.

- c. Sidewalk Pavement thickness for the Base Course 19.0 mm does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 1.5" thick.

Response: The detail was adjusted as recommended.

- d. Sidewalk Aggregate thickness for the Subbase Course MDOT Type D does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 15" thick.

Response: The detail was adjusted as recommended.

PROJECT DESCRIPTION

The applicant proposes to construct five 2,400 square foot condominium buildings with 2 units in each building. These condominiums will be served by 2 private wells and 2 septic tanks with fields and utility connections from Old Gray Road. The condominiums will be accessed on Old Gray Road.

This project is being reviewed as a Major Subdivision as outlined in Chapter 250 - Subdivision of Land of the Town of Cumberland Ordinances, most recently amended and adopted on January 12, 2011, and Site Plan Review as outlined in Chapter 229, Sections 8 to 10 - Site Plan Review of the Town of Cumberland Ordinances, most recently amended and adopted on October 13, 2020.

Chapter 250: Subdivision of Land

SME has reviewed the applicable sections of Chapter 250 and has provided comments for those sections not found to be addressed by the Application. The remaining sections have been reviewed and found to comply with Chapter 250 requirements.

Section 250-4. N. Stormwater

- 9. Please revise the Pre-Watershed Plan with the existing tree line on the property. It is unclear in Subcatchment 2S if the wooded area matches the existing conditions.
- 10. The label for Subcatchment 10S is missing from the Post Watershed Plan.
- 11. SME recommends the driveway culvert at the intersection with Old Gray Road be upsized to 15-inches for ease of future maintenance.

Section 250-29 – Review and Approval by Other Agencies

- 12. Please provide evidence of Army Corps of Engineers permitting for the wetland impacts shown on the plans and the Maine DEP Stormwater Permit by Rule application for greater than one acre of disturbance.

Section 250-34 – Water Supply

- 13. Please show the proposed water supply well locations on the Overall Site and Subdivision Plan.
- 14. Please add water service sizes to the Utility Plan

Section 250-35 – Sewage Disposal

- 15. Please provide evidence that the combined wastewater disposal rates of each system do not require review of the project as an engineered wastewater disposal system.

Section 250-38 – Street Design and Construction Standards

16. The portions of the proposed access drive and Old Gray Road detail do not meet the standards of a Residential Access Street. The construction of the 10-units will require the internal streets and access to the site to meet these standards. See below for details.
- e. Entrance drive width does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 22' wide.
 - f. Road Pavement thickness for the Base Course 19.0 mm does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 2.5" thick.
 - g. Sidewalk Pavement thickness for the Base Course 19.0 mm does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 1.5" thick.
 - h. Sidewalk Aggregate thickness for the Subbase Course MDOT Type D does not meet the standards of a Residential Access Street of greater than 50 vehicles per day, a requirement of 15" thick.

Section 250-45– Waivers and modifications.

Waiver Request 1 – Waiver of 75-foot Buffer on the North and East Property Lines – SME recommends approval of this waiver based on the wetland and site constraints, and the proposed landscape buffer along the north property line.

Waiver Request 2 – Identification of 10-inch Trees on Existing Conditions Plan – SME recommends approval of this waiver.

Waiver Request 3 – Staking of Temporary Markers – SME recommends approval of this waiver.

Waiver Request 4 – Requirement for walkways within roads of a Proposed Subdivision – SME recommends approval of this waiver.

Waiver Request 5 – Waiver of K-factors on Old Gray Road – SME recommends approval of this waiver based on the intent to improve the roadway function within the current road Right of Way and without significant impact to the existing driveways.

Chapter 315: Zoning

SME has reviewed the applicable sections of Chapter 315 and does not have any outstanding comments for those sections not found to be addressed by the Application.

General Comments

1. Please provide a copy of the completed Survey or an Existing Conditions Plan identifying the existing tree line and on-site structures.
2. Please label the setbacks on the Overall Site and Subdivision Plan.
3. Net Density Calculations
 - a. Are the slopes shown on the south portion of Parcel A steep enough to be excluded from the Net Residential Area? If not, please update the calculations based on the updated amounts.
4. Grading Plan – Sheet 5:
 - a. The grades in front of Building 1 and Building 5 appear to direct runoff toward the building on the eastern most pavement area. SME recommends the Applicant consider raising the FFE of the building to be above surrounding grades in the access road.
 - b. Additional stone check dams may be required in the swale behind Building 3.

Please feel free to call me at 207.829.5016 or email me at dpd@smemaine.com with any questions, or if you would like, I could meet with you to discuss our comments.

VII. WAIVER REQUESTS:

Waiver Request 1 – Waiver of 75-foot Buffer on the North and East Property Lines – SME recommends approval of this waiver based on the wetland and site constraints, and the proposed landscape buffer along the north property line. **PLANNING BOARD GRANTED WAIVER ON 6/21/22.**

Waiver Request 2 – Identification of 10-inch Trees on Existing Conditions Plan – SME recommends approval of this waiver.

Waiver Request 3 – Staking of Temporary Markers – SME recommends approval of this waiver.

Waiver Request 4 – Requirement for walkways within roads of a Proposed Subdivision – SME recommends approval of this waiver.

Waiver Request 5 – Waiver of K-factors on Old Gray Road – SME recommends approval of this waiver based on the intent to improve the roadway function within the current road Right of Way and without significant impact to the existing driveways.

VIII. DEPARTMENT HEAD REVIEWS:

William Longley, CEO: No comments.

Police Chief Charles Rumsey: No concerns.

Fire Chief Dan Small:

- 1) Automatic fire protection sprinkler systems shall be installed in each building per Town of Cumberland Ordinance and shall also meet the requirements of the National Fire Protection Association. The individual sprinkler systems shall send a water flow signal to the attached fire alarm panel whenever water is moving throughout the system. The fire department shall receive a copy of the sprinkler system drawings that have been approved and permitted by the State of Maine Fire Marshal's Office. The sprinkler system controls shall be in a location that does not require entry into the opposing occupancy within the same building. IE: when the sprinkler system is activated in one unit it must not be required to access controls in the other attached unit.
- 2) Due to the fire protection sprinkler system requirement the buildings shall be equipped with a fire alarm system that is monitored by an approved fire alarm company. Visual alarm signaling devices shall remain active when the system is silenced. The alarm system shall identify the exact location of each individual initiation device with plain text at the fire alarm panel. The fire alarm panel shall be in a location that does not require entry into the opposing occupancy within the same building. IE: when the fire alarm is activated in one unit it must not be required to access controls in the other attached unit.
- 3) Each building shall be equipped with a hinged key box approved by the fire department. The box location(s) shall be approved by the fire department. The box shall have keys accessible to both occupancies within the same building.

IX. CUMBERLAND LANDS & CONSERVATION COMMITTEE: No concerns

X. PROPOSED FINDINGS OF FACT - Chapter 250 - Subdivision of Land

The purpose of these standards shall be to assure the comfort, convenience, safety, health and welfare of the people, to protect the environment and to promote the development of an economically sound and stable community. To this end, in approving subdivisions within the Town of Cumberland, Maine, the Board shall consider the following criteria and before granting approval shall determine that the proposed subdivision:

1. Pollution. The proposed subdivision will not result in undue water or air pollution. In making this determination, it shall at least consider:
 - A. The elevation of the land above sea level and its relation to the flood plains;
 - B. The nature of soils and subsoil and their ability to adequately support waste disposal;
 - C. The slope of the land and its effect on effluents;
 - D. The availability of streams for disposal of effluents; and
 - E. The applicable state and local health and water resource rules and regulations;

There are no flood plains on site. A subsurface investigation confirmed that the soils and subsoils are adequate to support waste disposal and passing test pits were confirmed. A nitrate evaluation was conducted that meets the requirements of the State of Maine and the Cumberland Subdivision Ordinance.

Based on the information provided, the Board finds that the standards of this section have been met.

2. Sufficient Water. The proposed subdivision has sufficient water available for the reasonable foreseeable needs of the subdivision;

The lots will be served by two drilled wells. A hydrogeologic Assessment dated April 13, 2022, was provided which states that the proposed subdivision will have adequate water available and will not adversely affect the supply of water to adjacent properties. The Town Engineer has reviewed and approved the findings of the hydrogeologic report.

Based on the information provided, The Board finds that the standards of this section have been met.

3. Municipal Water Supply. The proposed subdivision will not cause an unreasonable burden on an existing water supply, if one is to be used;

The subdivision will not utilize public water.

Based on the information provided, the Board finds the standards of this section have been met.

4. Erosion. The proposed subdivision will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results;

An erosion and sedimentation control plan that includes housekeeping procedures for maintenance has been submitted and the plan has been reviewed and approved by the Town Engineer.

Based on the information provided, the Board finds that the standards of this section have been met.

5. Traffic. The proposed subdivision will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed;

A traffic impact assessment dated March 29, 2022, was submitted that shows that the project is estimated to generate six trips during both the AM and PM peak hour periods. A Traffic Movement Permit from MDOT is not required. There are no high crash locations in the area and there is adequate site distance at the exit from the subdivision.

The application states that the development is estimated to generate six (6) vehicle trips in the peak AM and PM hours.

Based on the information provided, the Board finds that the standards of this section have been met.

6. Sewage disposal. The proposed subdivision will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services, if they are utilized;

There will be two septic systems for the 10 units. The location of the systems and depiction of the location of passing soils tests have been provided and a hydrogeologic Assessment was provided that shows the proposed septic systems will provide for adequate sewage disposal without impacting well water quality.

Based on the information provided, the Board finds that the standards of this section have been met.

7. Municipal solid waste disposal. The proposed subdivision will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be utilized;

The site plan shows the location of a 12' x 12' dumpster enclosure. A private waste hauler will be used.

Based on the information provided, the Board finds that the standards of this section have been met.

8. Aesthetic, cultural and natural values. The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline;

Letters are on file from State agencies indicating that the proposed subdivision will have no adverse impact on any of the above features.

The Board finds that the standards of this section have been met.

9. Conformity with local ordinances and plans. The proposed subdivision conforms to a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans;

The plans have been reviewed and approved by the Town Planner, the Town Engineer and Town department heads.

The Board finds that the standards of this section have been met.

10. Financial and technical capacity. The subdivider has adequate financial and technical capacity to meet the standards of this section;

Financial Capacity: The Applicant has submitted a letter dated March 29, 2022 from Gorham Savings Bank stating that bank has reviewed Mr. Salvo's financials and the details of the proposed project and finds that Mr. Salvo has the financial capacity to fund and/or obtain financing for such project.

Technical capacity is evidenced by the use of the professional technical consultants including a professional engineer, a licensed land surveyor, a landscape Designer, hydrogeologist, and a wetland

scientist. In addition, a statement from the developer was provided that gave an overview of past projects completed in the Greater Portland Area.

The Board finds that the standards of this section have been met.

11. Surface waters; outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38 chapter 3, subchapter I, article 2-B, the proposed subdivision will not adversely affect the quality of that body of water or unreasonably affect the shoreline of the body of water;

Wetlands were delineated by Gary Fullerton, LSS of Sebago Technics in November, 2020. There is one mapped wetland located in the south-east portion of the site.

Based on the information provided, the Board finds that the standards of this section have been met.

12. Ground water. The proposed subdivision will not alone, or in conjunction with, existing activities, adversely affect the quality or quantity of ground water;

The 10 unit residential subdivision, which will utilize private well water, a hydrogeologic Assessment was provided that shows the proposed septic systems will provide for adequate sewage disposal without impacting well water quality.

will not adversely affect the quantity or quality of groundwater.

Based on the information provided, the Board finds that the standards of this section have been met.

13. Flood areas. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation;

The development is not located within a 100 year flood plain as shown on FEMA Flood Insurance Rate Map 230162 0010B-0015B.

Based on the information provided, the Board finds that the standards of this section have been met.

14. Storm water. The proposed subdivision will provide for adequate storm water management;

A stormwater Management Report dated May, 2022 was included in the application. The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Run-off discharging from the site will be at or below pre-development conditions for the 2, 10, and 25- year storm events.

Based on the information provided, the Board finds that the standards of this section have been met.

15. Freshwater wetlands. All potential freshwater wetlands, as defined in 30-A M.R.S.A. §4401 (2-A), within the proposed subdivision have been identified on any maps submitted as part of the application, regardless of the size of these wetlands. Any mapping of freshwater wetlands may be done with the help of the local soil and water conservation district.

One wetland area was mapped and is shown on the plan. The development of the 10 condominium units has been designed to avoid wetland impacts to the maximum extent possible and will involve the filling of 2,558 s.f. of wetland which is below MDEP permitting thresholds.

Based on the information provided, the Board finds that the standards of this section have been met.

16. River, stream or brook... Any river, stream, or brook within or abutting the proposed subdivision has been identified on any map submitted as a part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in Title 38, Section 480-B, Subsection 9. [Amended; Effective. 11/27/89]

There were no streams identified on the site.

Based on the information provided, the Board finds that the standards of this section have been met.

IX. STANDARD CONDITION OF APPROVAL

This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted by the applicant. Any variation from the plans, proposals and supporting documents, except de minimus changes as so determined by the Town Planner which do not affect approval standards, is subject to review and approval of the Planning Board prior to implementation.

X. RECOMMENDED CONDITIONS OF PRELIMINARY AND FINAL PLAN APPROVAL:

1. A preconstruction conference shall be held prior to the start of construction.
2. A performance guarantee in an amount and form acceptable to the Town Manager will be required prior to the preconstruction conference.
3. All clearing limits shall be flagged and approved by the Peer Review Engineer prior to the preconstruction conference.
4. A blasting permit, if required, shall be obtained from the Code Enforcement Officer.
5. All legal and technical review fees shall be paid to the Town prior to the preconstruction conference.
6. An electronic copy of the as-built plans shall be submitted to the Town Planner prior to the release of any remaining inspection fees.



Town of Cumberland Final Major Subdivision

For

Snowy Owl Estates

Gray Road
Cumberland, Maine

Prepared for
Envy Construction
28 Stone Ridge Road,
Falmouth, ME 04105

Prepared by
Sebago Technics, Inc.
75 John Roberts Road
South Portland, Maine 04106

August 2022
20551

August 30, 2022
20551

Carla Nixon, Planner
Town of Cumberland
290 Tuttle Road
Cumberland, ME 04021

RE: Final Subdivision Application
Proposed Apartment Unit Development – Envy Construction,
Old Gray Road, Tax Map U21/Lot 5A

Dear Ms. Nixon:

On behalf of Envy Construction, we are pleased to submit the following final subdivision application and associated documentation for Planning Board and Town Staff consideration to support construction of a new 10-unit development on the west side of Old Gray Road. The subject parcel is depicted as Lot 5A on the Town of Cumberland Tax Map U21 and is located in the Village Medium Density Residential (VMDR) District.

In accordance with Cumberland Subdivision Review Ordinance, regarding required submittals for a final plan, we provide the following information:

1. General - Enclosed is the signed application and agent authorization forms for Subdivision Planning Board review. An application fee for **\$2,700** is enclosed with the application.
2. Final Subdivision Plan Review: Enclosed are **(2) copies of the application/attachments and (2) folded sets of full-size civil plans**, as well as a digital copy of materials.

In response to comments from the Town Planner and Town Engineer below are our responses (in bold) to the comments that were received on June 13, 2022 and June 7, 2022 respectively:

Comments from Town Planner:

1. Parcel Size: 8.52 acres or 5.69 acres? Effect on Net Res. Density

Response: Total parcel area is 8.52 acres, the 5.69-acre parcel was recently subdivided from the existing property and is the area that the Net res is calculated based on.

2. Net Residential Density Table:

Response: The Net Residential Table is depicted on the overall site plan (Sheet 3), included within the preliminary plan set submitted to the Town with the preliminary subdivision submission.

3. 75' Perimeter Buffer:

Response: The requirement for a buffer of at least 75' in width around the entire perimeter of the lot. This waiver request is only for the north property line and the property line along the Old Gray Road frontage. The structures in this development are being situated as proposed as this layout utilizes the existing conditions of the lot to the maximum extent practicable. Any movement of the development to the South would cause more disturbance of the existing on-site wetland. The development cannot be moved to the West as there is high outcroppings of bedrock that restrict the areas in which a subsurface wastewater disposal system could be sited. A setback for any structure from the subsurface wastewater disposal system is also required by the Main Subsurface Wastewater Rules which also played a part in the siting and layout of the development.

4. Open Space:

Response: An open space boundary was added to the plans and is best depicted on the Overall Site/Subdivision Plan (Sheet 3) located in the Plan Set submitted with these materials. A total of approximately 68,025 sq. ft is being proposed to be dedicated open space. This equates to approximately 27% of the total Lot area.

5. Fire Protection:

Response: All buildings will be sprinkled.

6. Roadway:

Response: As a part of this development, the applicant is planning to improve approximately 390 feet of Old Gray Road from the intersection of Gray Road to just past the driveway for the development. The driveway serving the development will be a private roadway and maintained by the property owner.

7. Trails and By-Ways:

Response: No trails or by-ways are being proposed as a result of this development.

8. There is no subdivision plan with required information including a signature block. Review Appendix D: Subdivision Requirement and Checklist:

Response: A signature block is included on Sheet 3 of the plan set. This sheet was re-named as the Overall Site and Subdivision plan.

9. The deed states that a tree line buffer is to be planted along the remaining land of the grantor.

Response: A landscaped buffer was added to the Landscape plan included within the final plan set being submitted for Final Subdivision Approval.

10. Net Residential Acreage calculation:

Response: A Net Residential Calculation table can be found on sheet 3 of the attached Plan Set.

11. Photometric Plan:

Response: A photometric plan can be found at the end of the attached Sheet Set. This plan shows plans for entrance lighting. At this time the sign for the development not be lit.

12. Homeowners Docs:

Response: Condominium documents are enclosed for review.

13. Submission of plan for upgrading Old Gray Road to Town Subdivision Standards:

Response: The design plans for the proposed roadway improvement can be found on Sheet 6 of the attached plan set.

Town Engineer Comments:

1. Please provide an estimate of the total cost within the Financial Capacity Letter:

Response: A cost estimate is enclosed for review.

2. All appendices of the Stormwater Management Report were not provided. Please provide calculations for peak flows as part of the final plan application.

Response: Refer to the complete Stormwater Report that is included in these application materials.

3. The portions of Old Gray Road that access this property do not meet the standards of a Residential Access Street. The construction of the 10-units will require the internal streets and access to the site to meet these standards. SME understands that the applicant is reviewing improvements to Old Gray Road and its intersection with Route 26/100 and will submit the design information with the Final Plan Submission.

Response: Please refer to Sheet 6 of the attached Plan Set for the proposed roadway improvement design.

Upon review of the application material and civil plans, please let me know if you have any questions or require any additional data for completeness. We look forward to meeting with the Planning Board at their next regularly scheduled meeting. Thank you for your consideration.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Craig Burgess". The signature is written in a cursive, flowing style.

Craig A. Burgess, P.E.
Senior Project Manager

CAB/AJR

APPENDIX B

APPLICATION FOR MAJOR OR MINOR SUBDIVISIONS

Applicant's Contact Information

Name: Envy Construction c/o Nick Voltolina and Kevin Salvo
Mailing Address: 28 Stone Ridge Road, Falmouth, ME 04105
Email Address: Voltolinan@yahoo.com
Phone#: Office: _____ Cell: 207-232-0351 Fax: _____
Interest in property: _____
Interest in abutting properties, if any: _____

Property Owner's Contact Information

Name: Karl C. and Eleanor A. Nielson
Mailing Address: 246 Gray Road
Email Address: _____
Phone#: Office: _____ Cell: _____ Fax: _____

Applicant's Architect, Landscape Architect, Engineer, Planner or Surveyor Contact Information (If more than one, please attach contact info for each one.)

Name: Sebago Technics c/o Craig Burgess
Mailing Address: 75 John Roberts Road, Suite 4A, South Portland, Maine, 04106
Email Address: cburgess@sebagotechnics.com
Phone#: Office: 207-200-2081 Cell: n/a Fax: n/a

Project Information

Name of Project: Snowy Owl Estates
Address of site: 246 Gray Road
CCRD Book/Page #: 3721/309 Tax Map/Lot #: U21 / 5A
Zoning District: Village Medium Residential Overlay District (If any): _____
Site size (acres): 8.52 # of Lots: 1 # Buildings: 5 # Dwellings: 10
____ Minor Subdivision ☒ Major Subdivision _____ Conservation Subdivision

OTHER INFORMATION

1. Is Board of Adjustment and Appeals approval required? No
2. Are any ordinance waivers requested? ☒ Yes _____ No (If yes, attach a list of waivers requested and reason for the request.)
3. Application fee per Town ordinance: \$ _____
4. This application form and all accompanying materials must be submitted to the Town Planner at least 21 days prior to the meeting at which it is to be considered by the Planning Board.

The undersigned, being the applicant, owner or legally authorized representative, states that all information contained in this application is true and correct to the best of his/her knowledge and hereby does submit the information for review by the Town and in accordance with applicable ordinances, statutes and regulations of the Town, state and federal governments.

Craig Burgess 08-30-2022
Signature of Applicant/Owner/Representative Date

APPENDIX D

MAJOR TRADITIONAL OR CLUSTERED SUBDIVISION SUBMISSION REQUIREMENTS AND CHECKLIST

The subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials. Major subdivision review is a two-step process: 1) preliminary plan review and approval; 2) final plan review and approval. Occasionally, both preliminary and final approval may be granted by the Planning Board at the same meeting if all required information for both preliminary and final approval have been submitted, reviewed and approved by staff.

PRELIMINARY PLAN

- A.** Preliminary plan location map. The preliminary plan shall be accompanied by a location map drawn at a scale of not over 1,000 feet to the inch to show the relation of the proposed subdivision to the adjacent properties and to the general surrounding area. The preliminary plan shall show all the area within 1,000 feet of any property line of the proposed subdivision. Within such area the location map shall show:
 - 1.** All existing subdivisions and approximate tract lines of adjacent parcels together with the names of the record owners of all adjacent parcels of land, those directly abutting or directly across any street adjoining the proposed subdivision.
 - 2.** Locations, widths and names of existing, filed or proposed streets, easements, and building lines pertaining to the proposed subdivision and to the adjacent properties.
 - 3.** The boundaries and designations of zoning districts, parks and other public spaces.
 - 4.** An outline of the proposed subdivision together with its street system and an indication of the future probable street system of the remaining portion of the tract, if the preliminary plan submitted covers only part of the subdivider's entire holding.
- B.** Preliminary plan maps and information. The preliminary plan shall be submitted in 2 copies of one or more maps or drawings which may be printed or reproduced on paper with all dimensions shown in feet or decimals of a foot, drawn to a scale of one inch equals not more than 100 feet or, for plans describing construction of required improvements, a scale of one inch equals 40 feet; drawings are not to exceed 24 inches by 36 inches. All materials must also be provided in an electronic format. All plans shall be accompanied by the following information:
 - 1.** Proposed subdivision name or identifying title and the name of the municipality.
 - 2.** Name and address of record owner, subdivider and designer of preliminary plan.
 - 3.** Date of plan submission, true North point and graphic scale.
 - 4.** Number of acres within the proposed subdivision, location of property lines, existing easements, buildings, watercourses and other essential existing physical features.
 - 5.** The names of all subdivisions immediately adjacent and the names of owners of record of adjacent acreage.

6. The space standard and setback provisions of the Chapter 315, Zoning, applicable to the area to be subdivided and any zoning district boundaries affecting the subdivision.
7. The location and size of any existing or proposed sewers and water mains, culverts, hydrants, and drains on the property to be subdivided. This shall show the connections with existing sewer or water systems. Where public water and/or sewerage is not to be provided, alternative means of water supply and sewage treatment and disposal shall be shown, both horizontally and vertically. If on-site groundwater wells are proposed, the effect of withdrawal of groundwater may be required by the Board as set forth in this chapter.
8. If individual or collective private sewage disposal system(s) is (are) proposed, the location and results of tests to ascertain subsurface soils and groundwater conditions shall be signed and numbered by a licensed site evaluator. If a cluster system or collective private sewage disposal system(s) is (are) proposed, a hydrogeologic investigation shall be submitted meeting the sewage disposal standards as set forth in this chapter. A hydrogeologic investigation may be required by the Board for individual systems as set forth in this chapter.
9. Location, names and present and proposed widths of existing and proposed streets, highways, easements, building lines, alleys, parks and other public open spaces both within and abutting the subdivision. Grades and street profiles of all streets, sidewalks or other public ways proposed by the subdivider shall be shown.
10. Contour lines at intervals of two feet or at such intervals as the Planning Board may require, based on United States Geological Survey datum and referred to mean sea level.
11. A high-intensity soil survey shall be conducted by a certified soil scientist to identify soils within the proposed development in accordance with United States Department of Agriculture Natural Resources Conservation Service National Cooperative Soil Classification. The soil boundaries and names shall be superimposed on a plot plan of the proposed development.
12. Deed reference and map of survey of tract boundary made and certified by a registered land surveyor, tied into established reference points. Deed restrictions, if any, shall be described.
13. A surface drainage plan or stormwater management plan, with profiles and cross sections drawn by a professional engineer registered in the State of Maine, showing preliminary design of all facilities and conveyances necessary to meet the stormwater management standards as set forth in this chapter.
14. The proposed lot lines with dimensions and suggested locations of buildings.
15. The location of temporary markers adequate to enable the Board to locate readily and appraise the basic layout in the field.
16. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
17. The location of all natural features or site elements to be preserved.
18. A grading and landscaping plan, including natural features to be preserved.

8. By proper designation, all public open space for which offers of cession are made by the subdivider and those spaces to which the title is reserved by him.
9. Lots and blocks within the subdivision numbered in accordance with local practice.
10. Proposed homeowners' covenants and restrictions.
11. Required MDEP stormwater maintenance documents.

D. There shall be submitted to the Board with final plan:

1. Copies of declarations, agreements or other documents showing the manner in which open space or easements are to be held and maintained.
2. Where conveyance of public open space or easements to the Town is contemplated, a written offer to make such conveyance to the Town and written evidence that the municipal officers are willing to accept such conveyances and are satisfied with the terms and conditions of the proposed conveyance and with the legal sufficiency of the proposed transfer documents. Such written evidence shall not constitute an acceptance by the municipality of any such public open space.

**COMPLETION CHECKLIST FOR MAJOR TRADITIONAL OR CLUSTERED
SUBDIVISION SUBMISSION REQUIREMENTS**

Waivers: Please make a check in the *Waiver Request* column for any requested waivers. Attach a separate sheet citing the Subdivision Ordinance section number, description, and reason for the waiver request.

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
General Submissions:			
15 copies of plans and materials. All sheet sized to be 24" x 36"	x		
1"=100' scale for general plan	x		
1"=40' scale for construction of required improvements	x		
Traffic Info?	x		
Capacity to Serve letters?	N/A		
Financial and Technical Capacity (Sec.14)	x		
Sewer user permits required? Status?	N/A		
Deed restrictions, if any, describe on separate sheet	N/A		
Cover Sheet:			
Proposed subdivision name	x		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Name & address of record owner, subdivider, and designer of preliminary plan	x		
Location Map:			
Scale 1"=1000'	x		
Shows area 1000' from property lines	x		
All existing subdivisions	x		
Approximate tract lines of adjacent parcels	x		
Approximate tract lines of parcels directly across street	x		
Location of existing & proposed streets, easements, lot lines & bldg. lines of proposed subdivision & adjacent properties.	x		
Existing Conditions Plan:			
Existing buildings	x		
Watercourses	x		
Legend	x		
Wetlands	x		
Existing physical features (trees 10" diameter or more. Stone walls			x
Trail System?	x		
Subdivision Plan:			
Date of plan submission, true north & graphic scale	x		
Net residential acreage calculations	x		
Legend	x		
Trail (connecting?)	N/A		
Widths of existing/proposed streets, easements & bldg. lines	x		
Names of existing/ proposed streets, easements & bldg. lines	x		
Boundaries & designations of zoning districts, parks, public spaces	x		
Outline of proposed subdivision w/ street system	x		
Future probable street system of remaining portion of tract.	x		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Opportunities for Connecting Road(s) (13.2D)	x		
Space and Setback of district	x		
Classification of road	x		
Width of road(s)	x		
Drainage type (open, closed, mix)	x		
Type of byway provided (8.4D)	x		
Names of adjacent subdivisions	x		
Names of owners of record of adjacent acreage	x		
Any zoning district boundaries affecting subdivision	x		
Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property	x		
Connections w/existing sewer or water systems	N/A		
Private water supply shown	x		
Private septic shown	x		
Hydro-geologic study (option for Board)	x		
Test pit locations	x		
Well locations	x		
Signature & lic. # of site evaluator	x		
Existing streets: location, name(s), widths w/in and abutting	x		
Proposed streets: location, name(s), widths w/in and abutting	x		
The above for any highways, easements, bldg. lines, alleys, parks, other open spaces w/in and abutting	x		
Grades & street profiles of all streets, sidewalks or other public ways proposed	x		
2' contour lines	x		
High intensity soil survey by cert. soil scientist	x		
Soil boundaries & names superimposed on plot plan	x		
Deed reference & map of survey of tract boundary by reg. land surveyor tied to established reference points	x		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Surface drainage or stormwater mgmt plan w/profiles & cross sections by a P.E. showing prelim. design and conveyances	x		
Proposed lot lines w/ dimensions and suggested bldg. locations.	x		
Location of temp. markers in field			x
All parcels proposed to be dedicated to public use and conditions of such.	x		
Location of all natural features or site elements to be preserved	x		
Street lighting details	N/A		
Landscaping and grading plan including natural features to be preserved	x		
Survey stamped by P.E.	x		
Soil surveys w/# of soil scientist	x		
Septic plan w/ # of prof. site evaluator	x		
Geological evals w/ reg. geologists number	N/A		
Architect's seal	N/A		
For Rt. One: 75' undisturbed buffer applicable to all buildings, structures, parking areas, drainage facilities and uses.	N/A		
Open Space?	x		
Any part of parcel in a shoreland zone?	N/A		
Flood Map Number and rating?	x		
Stormwater Report?	x		
Rivers, ponds, wetlands?	x		
Historic, archeological features?	x		
Solid waste disposal?	x		
Required Notes on Plan:			
Fire Department notes			
Clearing limits note			
Re: approval limit of 90 days before recording or null p. 10	x		
Actual field survey of boundary lines w/ monumentation shown	x		
Assessor's approval of street names and assignment of lot numbers.			

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Designation of all open spaces w/ notes on ownership	x		
Copies of declarations, agreements or other documents showing the manner in which open space or easements are to	x		
Written offer for any conveyance to the Town of open space or easements along with written evidence that the Council is willing to accept such offer	x		
Evidence of Outside Agency Approvals	x		

As per Section 7.2 - REVIEW AND APPROVAL BY OTHER AGENCIES:

E. Where review and approval of any subdivisions or site plan by any other governmental agency is required, such approval shall be submitted to the Planning Board in writing prior to the submission of the Final Plan.

Please list below all outside agency approvals that are required for this subdivision.

- **Maine Department of Environmental Protection:** *List type of permit(s) required (e.g., SLODA, NRPA (tier type?), Maine Construction General Permit, etc.)* NRPA PBR, MCGP
- **US Army Corps of Engineers**
- **Maine Department of Transportation:** *List type of permit(s) required.*
- **Maine Department of Inland Fisheries and Wildlife**
- **Cumberland County Soils and Water Conservation Service:** Required by Town.

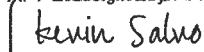
Other: (Please List): _____

AGENT AUTHORIZATION

APPLICANT/ OWNER	Name	SVR LLC. c/o Kevin Salvo and Nick Voltolina		
PROPERTY DESCRIPTION	Physical Address	246 Gray Road	Map	U21
			Lot	5A
APPLICANT'S AGENT INFORMATION	Name	Sebago Technics c/o Craig Burgess		
	Phone	207-200-2081	Business Name & Mailing Address	Sebago Technics, Inc. 75 John Roberts Road, Suite 4A South Portland, Maine 04106

APPLICANT SIGNATURE

DATE



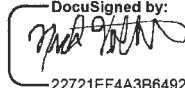
12/15/2021 | 7:29 AM PST

7A2C2EB216CA42F

PLEASE TYPE OR PRINT NAME HERE

Kevin salvo

DocuSigned by:



12/15/2021 | 9:35 AM PST

22721EF4A3B6492 ...

Nick Voltolina



11/15/2021

APPLICANT'S AGENT SIGNATURE

DATE

Craig Burgess, P.E.

PLEASE TYPE OR PRINT NAME HERE

Exhibit 1

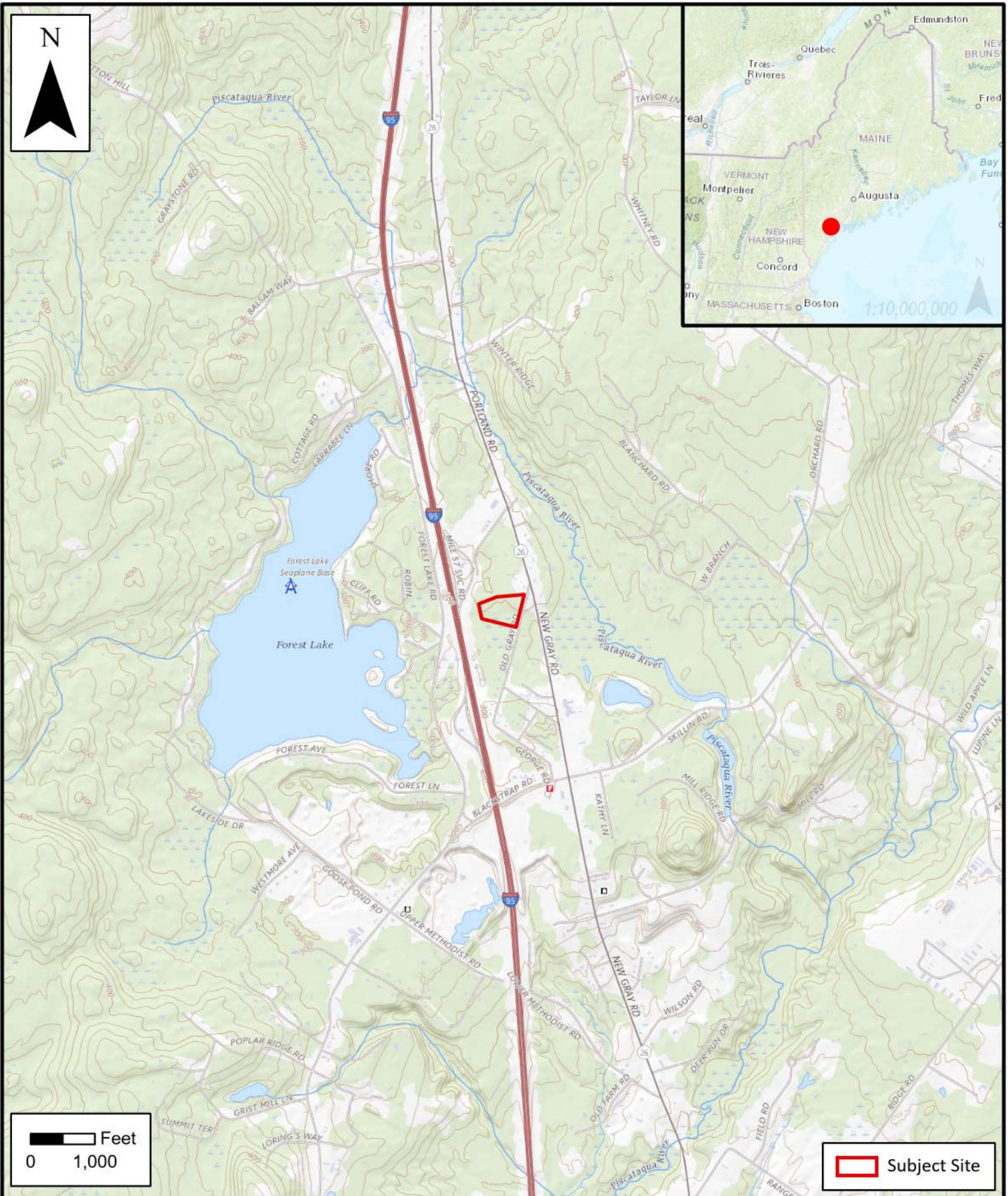
Vicinity Maps

Exhibit 1

Vicinity Maps

Enclosed please find the following vicinity maps associated with the site:

- Figure 1 –Location Map
- Figure 2 – Tax Map U21



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

**LOCATION MAP
FOR ENVY CONSTRUCTION**

LOCATION:

GRAY ROAD
CUMBERLAND, ME

INFORMATION:

MAINE GEOLIBRARY
USGS QUADRANGLE

SCALE: 1:24,000

DATE: 1/19/2022

Exhibit 2

Right, Title or Interest

Exhibit 2

Right, Title or Interest

The subject property is depicted on the Town of Cumberland Map U21, Lot 5A. The current owner of the subject site is the applicant, as noted in Deed Book 38700 Page 333 from the Cumberland County Registry. See this Exhibit for a copy of the deed.

STATUTORY WARRANTY DEED
(DLN: 1002140164083)

WE, **Karl C. Nielsen** and **Eleanor A. Nielsen**, of Cumberland, County of Cumberland and State of Maine, with a mailing address of 246 Gray Road, Cumberland, Maine 04021,

For Consideration Paid, GRANTS with WARRANTY COVENANTS TO:

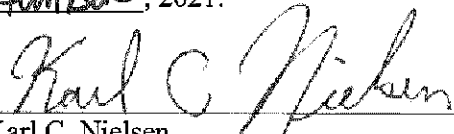
SVR LLC, a Maine limited liability company, with a principal place of business and mailing address of 91J Auburn Street #1015, Portland, Maine 04103,

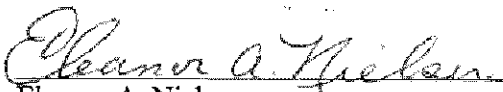
A certain lot or parcel of land, with the buildings and improvements thereon, situated in the Town of Cumberland, County of Cumberland and State of Maine, bounded and described in Exhibit A annexed hereto and made a part hereof.

This conveyance is made SUBJECT TO the restriction that there shall be no further divisions of the property for a period of five (5) years from the recording date of this deed without prior approval by the Town of Cumberland.

Further, this conveyance is made SUBJECT TO a tree line buffer to be planted by the Grantee for the benefit of Grantors' remaining land, as follows: On or before the substantial completion of construction of a dwelling on the premises by the Grantee, the Grantee, at Grantee's expense, shall plant trees of consistent variety along the division line between the premises and the remaining land of Grantors as needed to provide a dense tree buffer, the distance and spacing to be determined by the type of trees planted.

WITNESS our hands this 24th day of September, 2021.


Karl C. Nielsen

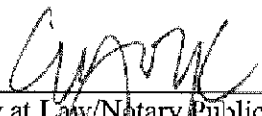

Eleanor A. Nielsen

STATE OF MAINE
CUMBERLAND, ss:

Date: September 24, 2021

Then personally appeared the above-named KARL C. NIELSEN and ELEANOR A. NIELSEN, and acknowledged the foregoing instrument to be their free act and deed.

Before me,



Attorney at Law/Notary Public
Print Name: _____
My Commission Expires: _____

Carly S. Joyce
State of Maine
Attorney At Law
Bar #9659

EXHIBIT A

A certain lot or parcel of land on the westerly side of Old Gray Road in the Town of Cumberland, County of Cumberland, State of Maine bounded and described as follows:

Beginning at a point on the westerly sideline of Old Gray Road at the northeasterly corner of land now or formerly of Amanda J. Snow & Shane S. Williams as described in a deed recorded at the Cumberland County Registry of Deeds (CCRD) in Book 35394, Page 262, bearing S 76°07'52" E, a distance of 0.68 feet from a 5/8-inch iron rod found 4 inches above grade with a cap marked "BRB INC PLS 1313";

Thence N 76°07'52" W, along land now or formerly of Amanda J. Snow & Shane S. Williams, a distance of 551.58 feet to land now or formerly of the Maine Turnpike Authority as described in a deed recorded at the CCRD in Book 3311, Page 24;

Thence N 11°47'06" W, along land now or formerly of the Maine Turnpike Authority, a distance of 234.00 feet;

Thence N 68°24'54" E, along land now or formerly of the Maine Turnpike Authority, a distance of 294.80 feet to an iron rod to be set at remaining land of Karl C. & Eleanor A. Nielsen as described in a deed recorded at the CCRD in Book 3721, Page 309;

Thence N 84°47'28" E, along land now or formerly of Karl C. & Eleanor A. Nielsen, a distance of 437.45 feet to an iron rod to be set at the westerly sideline of Old Gray Road;

Thence S 13°56'35" W, along Old Gray Road, a distance of 524.91 feet to the Point of Beginning. Containing approximately 5.69 Acres.

Basis of bearing is Grid North, Maine State Plane Coordinate System West Zone 1802, NAD83. Iron rods to be set are 5/8-inch rebar with identification caps marked "STI PLS 2513 LLS 1003".

Reference is made to a plan titled "Lot Division Plan of Nielsen Property, 246 Gray Road, Cumberland ME, For Envy Construction, 28 Stone Ridge Road, Falmouth, ME 04105" dated April 7, 2021 and revised through May 18, 2021 by Sebago Technics, Inc., Project Number 20551.

Being a portion of the premises conveyed to Grantors herein by deed of Josephine L. Sabasteanski dated August 4, 1975, and recorded at the Cumberland County Registry of Deeds in Book 3721, Page 309.

Exhibit 3

FEMA Flood Map

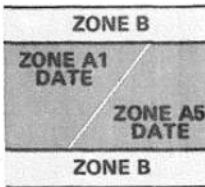
Exhibit 3

FEMA Flood Map

See this section for a copy of the FEMA Firmette panel that contains the subject site.

KEY TO MAP

500-Year Flood Boundary	→
100-Year Flood Boundary	→
Zone Designations* With Date of Identification e.g., 12/2/74	→
100-Year Flood Boundary	→
500-Year Flood Boundary	→
Base Flood Elevation Line With Elevation In Feet**	→
Base Flood Elevation in Feet Where Uniform Within Zone**	→
Elevation Reference Mark	→
River Mile	→



513

(EL 987)

RM7x

• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.



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75 John Roberts Rd., Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

FEMA FLOODPLAIN MAP FOR ENVY CONSTRUCTION

LOCATION:

GRAY ROAD
CUMBERLAND, ME

INFORMATION:

MAINE GEOLIBRARY, ESRI
2021 ORTHOREGIONAL IMAGERY
FEMA FIRM PANELS 230162 0010B-0015B

SCALE: 1:12,000

DATE: 1/19/2022

Exhibit 4

Financial and Technical Capacity

Exhibit 4

Financial and Technical Capacity

Financial Capacity

Attached is a letter from Gorham Savings Bank in regards for the applicant's ability to fund the project.

Technical Capacity

Sebago Technics, Inc. (STI) is a multi-disciplinary engineering firm with over 40 years of experience, which offers a wide range of services specializing in land development, planning, permitting and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, geotechnical services, land surveying, and environmental engineering. STI has performed the civil engineering and permitting services for the project. The resumes Sebago Technics' staff professionals involved with this project can be found in this section.

SVR LLC and Envy Construction: Technical Capacity statement for the applicant can be found in this section.

SVR LLC

The Company

SVR LLC is a real estate holding, investment and development company, focused on residential development in the Greater Portland Area. The company is owned by Kevin Salvo and Nick Voltolina; both of whom reside in Falmouth, Maine. SVR LLC was founded in 2020, after recognizing the need for quality homes, both in the real estate and rental markets in our community. In its first full year, SVR LLC built and sold \$4 million dollars' worth of new homes on the open real estate market. They are now expanding their real estate holdings in the rental market to help serve the need for more rental housing in our area. The owner's personal investment portfolios include nearly \$4.5 million dollars of real estate, and over 15 years of experience as landlords in the rental market.



All development for SVR LLC is constructed by Envy Construction, based out of Falmouth, Maine. Nick Voltolina is the sole owner and president of Envy Construction. Envy Construction has an outstanding reputation, known for delivering only the highest quality craftsmanship and expertise. Founded in 2009, Envy Construction has built and sold over 75 homes.



April 2022



March 29, 2022

Town Of Cumberland
Planning Board

RE: Kevin Salvo and/or SVR, LLC

To Whom It May Concern,

Kevin Salvo and/or SVR, LLC has provided financial disclosure for the purpose of future financing of a multifamily construction, for a total of around 10 Units, in Cumberland.

Based on my review of his financials and the proposed project, Mr. Salvo has the financial capacity to fund and/or obtain financing for such project.

If you have any further questions, I can be reached at (207) 749-1903

Sincerely,

Jason Straetz
Vice President

Exhibit 5

High Intensity Soil Survey

Exhibit 5

High Intensity Soil Survey

Included in this section is the full High Intensity Soil Survey completed by Sebago Technics Inc.



CLASS 'B' HIGH INTENSITY SOIL SURVEY REPORT

Prepared for:

EVERGREEN ESTATES

SVR LLC

28 Stone Ridge Road

Falmouth ME 04105

Prepared by:

Sebago Technics, Inc.

75 John Roberts Road Suite 4A

South Portland, Maine 04106

February 25, 2022

CLASS 'B' HIGH INTENSITY SOIL SURVEY

Residential Development

TABLE OF CONTENTS

<u>Section</u>	<u>Page No.</u>
1. Introduction.....	1
2. Purpose of Soil Survey	1
3. Site Location and Description	1
4. Site Investigation	2
5. Soil Characteristics.....	2
6. Soil Map and Map Unit Descriptions.....	3
7. Conclusions.....	3
8. Limitations	4

APPENDICES

APPENDIX A - Soil Narrative Report

APPENDIX B - Soil Legend/MDEP Form E

APPENDIX C - Soil Survey Interpretations

APPENDIX D - Soil Test Pits/MDEP Form F

APPENDIX E - Class 'B' High Intensity Soil Map

Section 1

Introduction

Sebago Technics has completed a Class 'B' High Intensity Soil Survey for the proposed residential development, located off Old Gray Road in Cumberland, Maine. The soils found on the above-referenced site have been observed in the field using test pits dug by an excavator, and one dug by hand in the wetland (see Soil Map for Survey Limits in Appendix E). The test pits were located by Global Positioning Systems (GPS) technology and incorporated into the soil map. The soil map has been merged into the existing base plan prepared by Sebago Technics. Topography is based on 2-foot contour intervals prepared using Lidar DEM from USGS (2013).

The soil map units and soil boundaries have been drawn, reviewed, and forwarded to the Project Manager, Craig Burgess, PE, Sr. Project Manager, for consideration during engineering design and layout of the proposed residential development. Soils found at the site are described below and were examined and classified to identify potential soil limitations relating to the development of the property. This report has been prepared as part of the project requirements for the Town of Cumberland, and may be used to support permitting procedures as required under the Natural Resources Protection Act (NRPA), Stormwater Management Law, or other pertinent regulation.

Section 2

Purpose of Soil Survey

The purpose of this Class 'B' High Intensity Soil Survey was to investigate, identify, describe, and map the soils on the above referenced site for the proposed residential development. The accompanying soil survey map depicts the location and types of soil found on the project site. The soil information may be used to obtain hydrologic soil group ratings to assist in the calculations for stormwater runoff curve values required by the Maine Department of Environmental Protection (MDEP). This soil information may also be used to evaluate soil suitability relating to development for the proposed Residential subdivision. A separate geotechnical report will be required to address engineering requirements for the construction of the site and structures.

Section 3

Site Location and Description

The site is located off Old Gray Road in Cumberland, Maine. The abutting properties are generally residential or wooded. The parcel abuts the Maine Turnpike to the west. There are small businesses in the area, with a lumber yard located approximately 0.3 miles to the north. The proposed development parcel includes approximately 5.7 acres of land. There is one wetland mapped on the site, in the south-east portion of the parcel. The wetlands on the property were delineated by Gary Fullerton, LSS of Sebago Technics in November, 2020.

Section 4

Site Investigation

We collected site-specific soil information at various locations across the site in February, 2022. The areas examined were designated with letters from TP 1 to TP 10. Test pits were dug by excavator or hand tools. Test pit locations were selected based on disturbance areas, topographic relief, and vegetation stands, which typically are indicative of soil type variations. Excavated test pits were examined for soil colors, rock content, texture, consistence, root depths, redoximorphic features, and depth to restrictive horizons. From this information, soil logs were completed and are included in Appendix E. In addition to these test pits, areas with suspected bedrock outcrops were probed to show these small inclusions on the soil map.

The test pits observed in the field were located by a GPS unit capable of submeter accuracy on the same day that they were excavated. These points were then incorporated into the topographic survey to aid in the preparation of a soil map of the project area. The provided base map has a scale of 1 inch = 30 feet, with two-foot contour intervals on the site.

Drainage classifications of the soils on the site were determined by parameters found in the Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping, published by the Maine Association of Professional Soil Scientists in April 1989 and revised in March 2009.

Section 5

Soil Characteristics

The soils found on the site are predominantly developed from glacial till. The landforms typically associated with these soils are drumlins, hills, ridges, and uplands. They are generally made up of fine sandy loam to loamy fine sand, with gravel or larger rock fragments.

There are wetlands on site that include poorly drained soils, with glaciofluvial (sandy) parent material. The soils in the wetlands are mapped as poorly drained Naumburg sand.

The glacial till soils include the well drained Becket fine sandy loam and Becket variant, the well drained and moderately deep Tunbridge fine sandy loam, and the excessively drained and very shallow Abram sandy loam. Becket is formed in lodgment till, with a densic horizon (hardpan). Tunbridge and Abram are formed from ablation till, with no densic horizons. These soils were found throughout the property on slopes of 3 to 25 percent.

The Becket Variant was found in five out of the ten test pits, with bedrock found within 60 inches of the ground surface. Bedrock depths in the variant ranged from 28 to 56 inches. One test pit classified as Becket due to the very deep ledge depth (60 inches or greater). See the soil logs in Appendix E for all of the test pit characteristics.

The glacial outwash soils on site are the poorly drained Naumburg sand. The Naumburg soils were found in the mapped wetland. These soils were found on land with slopes of 0 to 3 percent.

These soils should respond to use and management as determined and described in the Soil Series of Maine Soil Interpretations published by the Maine Association of Professional Soil Scientists in cooperation with the USDA Natural Resources Conservation Service, dated January 1987 and revised January 1988 and 1989. Soil survey interpretations are enclosed in Appendix C of this report.

This site may contain inclusions of soil types that differ from the soil map units. The areas where these soils were found are too small to be mapped and, for the purpose of this soil survey, there appears to be less than 1 contiguous acre of this soil in any part of the site. It also appears that the total area of this soil type in any given map unit is less than 25 percent, therefore classifying these soil types as inclusions.

Section 6

Soil Map and Map Unit Descriptions

The attached soil survey map depicts the size and location of the soil map units relative to each other and existing site features. Each soil map unit typically consists of three letters (e.g., AdB), with the first two letters representing a phase of the established soil series found within soil map unit areas as shown on the soil map. This soil map unit phase name is a representation of the soil characteristics, such as texture, stoniness, drainage, and depth to bedrock, all of which may affect the use and management of the soil. The third capitalized letter represents the surface slope gradient of the area within the soil map unit (e.g., B represents 3 to 8 percent slopes). Therefore, in this example “AdB” is interpreted as Adams loamy fine sand on a 3 to 8 percent slope. There may be small areas of different soils within a soil map unit, known as inclusions. Inclusions may exist within a delineated soil map unit, although the size of the inclusion may be too small to stand as a soil map unit alone (<1 acre). The soil map units found at the site are listed with soil potential rating classes in Appendix C of this report. Some wetland map units may be smaller than the minimum map unit size of 1 acre.

Section 7

Conclusions

The soils found on site consist of mostly lodgment glacial till materials, with lesser amounts of ablation glacial till and glacial outwash deposits. The landforms typically associated with the glacial till are drumlins, uplands, hills, and ridges. They are generally made up of coarse-loamy materials with gravel or larger rock fragments.

The glacial outwash soils were found in a low plain(wetland), and contain fine sand. The wetland area is not suitable for the proposed development in its current state. Given the size of the soil survey and extent of the development, soil and topographical conditions will vary across the development area, which is not uncommon for a development of this type and size.

Site investigations suggest some limitations typical of glacial till soils, site topography/setting and drainage features will be encountered. These limitations are expected to include high water tables associated with wetlands and shallow ledge depths, which may be overcome by appropriate planning, engineering and site preparation in these areas. Such site features as the depth to restrictive layers, runoff volumes, seasonal soil saturation depths, potential for frost and erosion activity, and jurisdictional wetland areas were examined. The following is a summary of areas and on-site features identified in the field with potential effects relating to the development of this parcel:

1. Jurisdictional wetland areas were identified on the property. Alteration to wetland areas will require regulatory permitting together with appropriate engineering to support buildings, septic systems, and roads. These soils contain fine sand deposits in the subsoil, with ponded water or saturated conditions at or near the surface throughout much of the year.
2. Very shallow to moderately deep bedrock classification areas exist in areas throughout the property. These soils include Tunbridge and Abram, some of the Becket Variant soils, as well as the areas shown as ledge outcrop on the soil map. Bedrock excavation will typically require blasting to achieve design and subgrade elevations, when encountered.

Section 8

Limitations

The scope of this investigation has been limited to this Class 'B' High Intensity Soil Survey in general accordance with standards and guidelines established by the Maine Association of Professional Soil Scientists. The soil survey report and soil map have been prepared for the exclusive use of SVR LLC and Sebago Technics, Inc. for specific application for the proposed residential development on this site located off Old Gray Road in Cumberland, Maine.

No other warranty, expressed or implied, is made. The conclusions and recommendations presented in this soil report are based on data obtained at the referenced site and our interpretations of this information. This report and soil map may not reflect soil variations that may occur between our observation test pits. Data from this soil report and soil map should not be used for any other purpose. Soils which are considered non-limiting for one use may be considered limiting for another use. The soil map units used in the soil report and on the soil map are at least in part influenced by the intended use of the soil survey, and information provided may not always be adequate for uses other than that which the soil survey was originally developed.

APPENDICES

APPENDIX A

SOIL NARRATIVE REPORT

SOIL NARRATIVE REPORT

Evergreen Estates

February 25, 2022

Date: Soil profiles observed February 2022

Base Map: Lidar topography

2 (two) foot contour intervals on-site

Map Scale 1 inch = 30 feet

Ground Control: Test pits and borings located by GPS with sub-meter accuracy


The Maine Association of Professional Soil Scientists has adopted standards for soil surveys. Soil surveys are divided into four classes of survey, which are dependent upon the amount of information required for the project. The following is a summary of requirements for this High Intensity Soil Survey.

Class 'B' High Intensity Soil Survey Standards

1. Map units will not contain dissimilar limiting inclusions larger than one acre.
2. Scale of 1 inch = 200 feet or larger.
3. Dissimilar limiting inclusions may total more than one acre per map unit delineation, in the aggregate, if not continuous.
4. Ground control - test pits for which detailed data is recorded are located by means of a compass by chaining, pacing, or taping from known survey points; or other methods of equal or greater accuracy.
5. Base map with 5-foot contour lines with ground survey.

The accompanying soil profile descriptions, soil survey map and this soil narrative report were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, March 2009.

This Soil Survey was prepared in relation to a proposed residential development.


Gary M. Fullerton, L.S.S. #462



February 25, 2022
Date

APPENDIX B

SOIL LEGEND/MDEP FORM E

CLASS 'B' HIGH INTENSITY SOIL SURVEY

SOIL LEGEND

Evergreen Estates

Cumberland, Maine

February 25, 2022

SOIL LEGEND

SYMBOL	SOIL SERIES	PHASE	SLOPE	HSG	DRAINAGE CLASS
AtB	ABRAM-TUNBRIDGE COMPLEX	FINE SANDY LOAM	3-8%	D	ED/ WD (EXCESSIVELY DRAINED/ WELL DRAINED)
AtD	ABRAM-TUNBRIDGE COMPLEX	FINE SANDY LOAM	15-25%	D	ED/ WD (EXCESSIVELY DRAINED/ WELL DRAINED)
BvB	BECKET VARIANT	FINE SANDY LOAM	3-8%	C	WD (WELL DRAINED)
BvD	BECKET VARIANT	FINE SANDY LOAM	15-25%	C	WD (WELL DRAINED)
NaA	NAUMBURG	SAND	0-3%	D	PD (POORLY DRAINED)

APPENDIX C

SOIL SURVEY INTERPRETATIONS

SOIL SURVEY INTERPRETATIONS

Soil survey interpretations are derived from the inherent soil characteristics found within the soil profile. The interpretations are predictions (numeric and descriptive) of soil suitability for a specific use, based on the soil's characteristics. These interpretations have many practical applications, such as estimating costs for land development, calculating storm water runoff, determining structural bearing strengths, estimating erodibility, etc. Soil potential ratings have been developed using soil survey interpretations to compare soil series, based on limitations or potentials, for a given use.

Limitations of Soil Interpretations

Soil interpretations are very useful for many purposes and projects, although they do have limitations, including:

1. An interpretation for a specific purpose is rarely adaptable for another use without management considerations.
2. Use of interpretations for specific areas has an inherent limitation relating to variability of the soil map unit. As the size of the soil survey area and the soil map units increase, soil interpretations provide a less reliable prediction of actual soil conditions.
3. Interpretations are also limited by the natural variability within a soil profile, which directly affects the precision of the soil interpretation.
4. Soil interpretations are predictions of potentials or limitations based on soil properties. A soil may possess several limiting factors and therefore all site-specific soil properties must be known for accurate interpretations.
5. Soil interpretations are used to predict the costs of development and to ultimately determine feasibility of a project. It should be noted that most soil limitations can be overcome with engineering solutions to make a soil suitable for a proposed use.

Soil Potential Rating Factors

Soil potential ratings have been developed as a useful form of soil interpretations. These ratings are based on local conditions, local experience and expertise, and laws, codes and rules governing the use of soils for various purposes. Potential ratings include the feasibility of a soil for a particular use relative to other soils within a given area. Factors considered in preparing soil potential ratings are the feasibility of using certain technology and practices to overcome limiting factors and the relative cost of implementing these practices. Some examples of unfavorable soil qualities inherent in Maine soils are listed below:

1. **Depth to Water Table** – The depth to water table affects the natural drainage of the soil in which in turn affects the soils potential for development. A soil with a shallow depth to seasonal high water table requires construction methods such as added fill and artificial drainage to overcome this limitation. A soil with a seasonal high water table deeper than 6 feet below the soil surface would have higher potential than a soil with a seasonal high water table at 18 inches.
2. **Flooding** – Soils are rated on the basis of whether they are subject to flooding or not. Flooding is separated into three categories: none, occasional (floods at least once in ten years), and frequent (floods at least once every two years). Soils subject to flooding have less potential for development than those that do not flood.

3. **Slope** – Soils are rated on the basis of slope. The less sloping areas require fewer corrective measures than the steeper areas and thus have a greater potential for development.
4. **Depth to Bedrock** – The presence of bedrock affects the use of soils for development. Soils with shallow depth over bedrock have less potential for development than deep soils.
5. **Surface Stones** – The presence of stones and boulders on the soil surface affect the use of the soil for development. In preparing a site for a dwelling or septic sewage disposal area, surface stones have to be removed.
6. **Depth to Restrictive Layer** – Some soils have a restrictive layer that begins at a shallow depth. This layer can impede natural drainage and permeability. This soil factor is important when designing a septic sewage disposal system.
7. **Soil Profile and Condition** – The Maine Subsurface Wastewater Disposal Rules provides a table by which each soil can be categorized by profile group and soil condition. The profile group is based on parent material or origin of the soil, texture of the soil, and the presence of any restricting layer within the soil profile. The soil condition refers to the depth to bedrock or drainage class.

Low density development includes single family unit residences with basements and comparable buildings and septic tank absorption fields, with or without on-site sources of water. Development may be as a single unit or as a cluster of units in a development. Paved roads in a development are also included in the rating. Soil potentials have been developed by selecting the best soil in a county for low density development. This “reference soil” is the best because it has all the best characteristics for all rated uses with regards to development. For low density urban development, a reference soil has the following properties:

- A water table level greater than 6 feet
- The soil does not flood
- Slope is 0-3 percent
- The soil lacks a restrictive layer
- The depth to bedrock is more than 5 feet
- Surface stone cover is 0.1 to 15 percent
- The soil requires a medium sized rating for a septic sewage disposal field
- There is low potential for groundwater contamination from septic field effluent

This reference soil is assigned a value of 100 index points. Costs are also developed for all other soils in the county for overcoming the various soil limitations. These costs are converted to index points and subtracted from the reference soil. The result is a method of comparing development costs for the soils in a county. Environmental constraints as well as long term maintenance costs are also a factor in developing soil potentials.

The Soil Potential index is a mathematical expression of a soil’s position in the overall range of potentials which is 100 to 0. Since the entire range is large, these numerical ratings are separated into Soil Potential Rating Classes of very low to very high.

The composite rating for development was determined by a weighted average of individual soil potential indices as follows: septic tank absorption fields, 45 percent; dwellings with basements, 20 percent; and local roads and streets, 35 percent.

Soil Potential Rating Classes

Soil Potential Rating Classes are based on the expected performance of a soil if feasible measures are taken to overcome its limitations, the cost of such measures, and the magnitude of the limitations that remain after measures have been applied. The development rating (fourth column in the rating tables) is a weighted sum of the septic, dwelling, and road indices. The septic system has the most restrictive site requirements and the dwelling has the least restrictive site requirements.

Very High Potential – Site conditions and soil properties are favorable. Installation costs are lowest for that use and there are no soil limitations. Soils in the group have soil properties similar to the reference soil. The Soil Potential Index for this rating class is 100 for each soil use.

High Potential – Site conditions and soil properties are not as favorable as the reference soil condition. The cost of measures for overcoming soil limitations is slight. The index for this rating class ranges from 83 to 99 for each soil use.

Medium Potential – Site conditions and soil properties are below soils with high potential. Costs of the measures for overcoming soil limitations are significant. The index for this rating class ranges from 60 to 82.

Low Potential – Site conditions and soil properties are significantly below soils with medium potential. Costs of measures required to overcome soil limitations are very high. The index for this rating class ranges from 40 to 59 for each soil use.

Very Low Potential – There are severe soil limitations for which economical corrective measures are prohibitive or unavailable and costs of these measures are extremely high. Also, soil limitations which detract from environmental quality may continue even after installation of corrective measures. The index for this rating class is less than 40. They may also be prohibited for use by local or state laws.

Drainage Classes

Drainage classes are the relative wetness that a soil under normal conditions has relating to the soil water table. The following seven drainage classes are used for the soils found in Maine:

1. **Excessively Drained (ED)** soils with water that is removed very rapidly. The occurrence of internal free water is very rare or very deep.
2. **Somewhat Excessively Drained (SED)** soils with water that is removed rapidly through the soil. Internal free water occurrence is very rare or very deep.
3. **Well Drained (WD)** soils with water that is removed from the soil readily but not rapidly. Internal free water occurrence commonly is deep or very deep.
4. **Moderately Well Drained (MWD)** soils with water that is moved somewhat slowly during some periods of the year. Internal free water is moderately deep and transitory to permanent throughout the soil profile.
5. **Somewhat Poorly Drained (SPD)** soils with water that is removed from the soil slowly and remains wet from significant periods of time during the growing season. The depth to internal free water is shallow to moderately deep, transitory to permanent.
6. **Poorly Drained (PD)** soils with water that is removed so slowly that the soil is wet at shallow depths during the growing season or remains in a wet state for long periods.

7. **Very Poorly Drained (VPD)** soils with water that is removed from the soil so slowly that the free water remains at or near the ground surface during the growing season. Internal free water is very shallow and persistent or permanent.

Slope Class

A	Level and nearly level	0-3 percent
B	Gently sloping (undulating)	3-8 percent
C	Strongly sloping (rolling)	8-15 percent
D	Moderately steep (hilly)	15-25 percent
E	Steep	25-45 percent
F	Very Steep	45+ percent

Depth to Bedrock

1.	Very Shallow	Less than 10-inches to bedrock
2.	Shallow	10-inches to less than 20-inches to bedrock
3.	Moderately Deep	20-inches to less than 40-inches to bedrock
4.	Deep	40-inches to less than 60-inches to bedrock
5.	Very Deep	Greater than 60-inches to bedrock

Classes of Surface Stones

1.	Stony or bouldery	0.01 to 0.1 percent surface coverage
2.	Very stony/ boulder	0.1 to 3.0 percent surface coverage
3.	Extremely stony/ bouldery	3.0 to 15 percent surface coverage
4.	Rubbly	15 to 50 percent surface coverage
5.	Very Rubbly	More than 50 percent surface coverage

CLASS 'B' HIGH INTENSITY SOIL SURVEY

SOIL POTENTIAL RATINGS

Evergreen Estates

Cumberland, Maine

February 25, 2022

SOIL POTENTIAL RATING CLASSES

MAP UNIT	SEPTICS	BUILDINGS	ROADS	DEVELOPMENT
AtB ABRAM-TUNBRIDGE COMPLEX, 3-8%	VERY LOW	VERY LOW	VERY LOW	VERY LOW
AtD ABRAM-TUNBRIDGE COMPLEX, 15-25%	VERY LOW	VERY LOW	VERY LOW	VERY LOW
BvB BECKET VARIANT, 3-8%	MEDIUM	MEDIUM	MEDIUM	MEDIUM
BvD BECKET VARIANT, 15-25%	VERY LOW	LOW	VERY LOW	VERY LOW
NaA NAUMBURG, 0-3%	VERY LOW	MEDIUM	MEDIUM	VERY LOW

Abram-Tunbridge Complex (AtB, AtD)

(Frigid Loamy or Coarse-loamy Lithic or Typic Haplorthods)

SETTING

Parent Material:	Thin mantle of loamy glacial till
Landform:	Uplands, ridges, hills and mountains less than 2,500' in Maine
Position in Landscape:	Uppermost locations, ridge crests, side slopes
Slope Gradient Ranges:	(B) 3-8% (D) 15-25%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:	Excessively drained
Typical Profile:	Surface layer: Thin black organic mat Subsurface layer: Pinkish gray very stony sandy loam, 1" Subsoil layer: Very dusky red and brown very stony sandy loam, 4" Bedrock: Bedrock is at approximately 8" or more
Hydrologic Group:	D
Surface Run Off:	Rapid, depending upon slope and bedrock exposure
Permeability:	Moderately rapid
Depth to Bedrock:	Very Shallow, 0" to 10"
Hazard to Flooding:	None

INCLUSIONS WITHIN MAPPING UNIT

Similar:	Lyman, Bedrock outcrops
Contrasting:	Naumburg

USE AND MANAGEMENT

The limiting factor for building site development is the depth to bedrock (<40") within this complex. Blasting or ripping of the bedrock is necessary for deep excavation for nearly all uses. Rippable bedrock was found in at least one test pit in this map unit.

BECKET VARIANT (BvB, BvD)

(Frigid Oxyaquic Haplorthods)

SETTING

Parent Material:	Glacial till
Landform:	Drumlins and glaciated uplands
Position in Landscape:	High and intermediate positions
Slope Gradient Ranges:	(B) 3-8% (D) 15-25%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:	Well drained
Typical Profile:	Surface layer: Dark brown fine sandy loam, 8" Subsurface layer: Reddish brown, friable, loamy sand, 24" Subsoil layer: Light olive brown, friable, gravelly sandy loam, 33" Substratum: Olive gravelly sandy loam and sand, 67"
Hydrologic Group:	C
Surface Runoff:	Slow
Permeability:	Moderate in the solum, moderately slow to slow in the substratum
Depth to Bedrock:	Moderately deep (28") to Very deep (greater than 60")
Hazard to Flooding:	None

INCLUSIONS WITHIN MAPPING UNIT

Similar:	Skerry, Westbury
Contrasting:	Croghan, Naumburg

USE AND MANAGEMENT

Development with subsurface wastewater disposal is rated "fair" due to the restrictive layer or bedrock in the substratum. A "fair" rating may be used for building site development. Use of this soil for roadways is "fair" on slopes under 15%. Compaction in this soil is rated "good".

NAUMBURG (NaA)

(Frigid Sandy Typic Endoaquods)

SETTING

Parent Material:	Glaciofluvial or sandy deltaic outwash deposits
Landform:	Nearly level to strongly sloping areas on low plains and terraces
Position in Landscape:	Lower to intermediate positions with flat gentle slopes
Slope Gradient Ranges:	(A) 0-3%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:	Poorly drained
Typical Profile	Surface layer: Black organic, 4"
Description:	Subsurface layer: Pale brown fine sandy loam, 7", mottled
	Subsoil layer: Gray, friable, fine sandy loam, 26"
	Substratum: Gray sand, 60"
Hydrologic Group:	D
Surface Runoff:	Slow
Permeability:	Rapid
Depth to Bedrock:	Very deep, >60"
Hazard to Flooding:	None

INCLUSIONS WITHIN MAPPING UNIT

Similar:	Searsport, Croghan
Contrasting:	Westbury

USE AND MANAGEMENT

Development with subsurface wastewater disposal is "fair" to "poor" due to wetness and poor filtering capability. A limiting factor for building site development is that the soil is prone to cutbanks caving in. Naumburg soils are rated "poor" for road fill materials. Proper foundation drainage or site modification is recommended for construction. Use of this soil for roadways is "poor" due to wetness. Underground piping has "severe" limitations due to wetness.

APPENDIX E

CLASS 'B' HIGH INTENSITY SOIL MAP

Exhibit 6

Hydrogeologic Assessment

Exhibit 6

Hydrogeologic Assessment

Included in this section is the full hydrogeologic assessment done by Drumlin. LLC.



Drumlin Environmental, LLC

Hydrogeologic and Engineering Consultants

April 13, 2022

Craig Burgess
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

Subject: Hydrogeologic Assessment
Evergreen Estates, Old Gray Road, Cumberland, Maine

Dear Craig,

Overview. Drumlin Environmental, LLC (Drumlin) was retained by Sebago Technics, Inc. (STI) to provide hydrogeologic services in connection with the Evergreen Estate Subdivision, which is proposed on approximately 5.69+/- acres with access off Old Gray Road in Cumberland, Maine. This area is being subdivided from an existing lot identified as Lot 5A on the Town of Cumberland Tax Map U21. An area of approximately 2.83+/- acres of Lot 5A will remain with the current owners.

The subdivision consists of ten units arranged as five three-bedroom duplex buildings around an approximately 250-foot long cul-de-sac road. The duplex buildings are located in the northeastern portion of the property and the western and southern portions of the property will remain undeveloped and used for stormwater management and wastewater disposal. The project will be served by two on-site drinking water wells and wastewater will be disposed on-site in two subsurface disposal (septic) systems. The purpose of this letter report is to address sections in the Town of Cumberland Land Use Ordinance Chapter 229 (Site Plan Review) and Chapter 250 (Subdivision of Land) pertaining to water supply and potential influence of wastewater disposal on groundwater quality.

Drumlin Environmental, LLC (Drumlin) has conducted an assessment with respect to the proposed subsurface wastewater disposal systems based on the proposed site plan layout, property boundaries, topography, wetlands, drainage conditions, projected wastewater flows, soils and groundwater information provided by Sebago Technics, Inc. (STI). The STI site plan is used as the base map for presenting the assessment findings in Figure 5. Drumlin communicated with Carla Nixon, Town of Cumberland Planner, to discuss the requirements of the hydrogeologic assessment. Based on this communication, Drumlin's assessment of the potential influence of wastewater disposal on groundwater quality is based on nitrate in leachfield effluent, which has a "standard for safe drinking water as established by the State of

Maine” of 10 mg/L. This letter report summarizes the results and includes a description of the hydrogeologic parameters and assumptions used in this assessment.

Information provided by STI and relied upon by Drumlin in conducting this hydrogeologic assessment include:

- Map of site topography;
- Soil logs from 10 test pit excavations;
- Map of subsurface wastewater disposal systems and water supply wells;
- Size (number of bedrooms) for each dwelling (which has been used to calculate the potable water demand and the volume of wastewater flow).

Site Conditions. The subdivision property is located on the west side of Old Gray Road in West Cumberland. The site location is shown in Figure 1. The 5.69-acre site includes a small portion of the lawn area on Lot 5A, but is mostly undeveloped woodland. Figure 2 shows an aerial photo of the subdivided area and surrounding residential and forested land use. The land surface elevation is highest in the north and northeast portion of the site and slopes to the south and west towards a 0.75+/- acre wetland located in the southeast part of the property. This wetland is the headwater of an unnamed tributary that flows south and west into a larger unnamed stream that flows south and crosses the Maine Turnpike flowing toward Forest Lake. Figure 2 has been annotated to show the tributary from the wetland and stream flowing south along the Maine Turnpike. Site specific topography is discussed later in this letter report.

Several domestic water supply wells are located near the site as shown in Figure 3. The Maine Geological Survey (MGS) database for domestic wells shows a well to the north located at 242 Gray Road has 2 feet of soil over bedrock. In contrast, the wells to the south have 35 to 80 feet of soil over bedrock.

Site Geologic and Hydrogeology Setting. According to the Surficial Geology Map of the Cumberland Center Quadrangle (MGS, Open-file Report No. 99-81, 1999), the northern portion of the site is mapped to be underlain by till, consisting of a mixture of gravel, sand, silt and clay. The southern portion of the site is mapped as underlain by sand and gravel identified as an ice-contact deltaic deposit. Test pit logs from the site (see Attachment A) recorded predominantly sandy loam beneath most of the site. The surficial geology map also shows the wetland deposits in the southeastern part of the site, as described above.

According to the Significant Sand and Gravel Aquifer Map of the Cumberland Center Quadrangle (MGS, Open-file Report No. 99-27, 1999) the site lies in close proximity to the north of the estimated edge of a mapped sand and gravel aquifer (see Figure 4). The test pit completed in the wetland encountered stratified fine and coarse sand to 35 inches and no bedrock was encountered. The coarser sand material encountered in this test pit is consistent with a transition toward an aquifer deposit. However the thin soil over bedrock that underlies most of the property would not be classified as part of the mapped aquifer.

The Bedrock Geology of the Portland 1:100,000 Quadrangle Maine (MGS Geologic Map 98-1, 1998) maps bedrock beneath the site is a granofels, a medium to coarse-grained metamorphic rock. According to the MGS Well Database, domestic bedrock wells within 1,500 of the site vary in depth from 130 to 580 feet. The yields range from 1 to 20 gallons per minute (gpm), with an average yield of 9.4 gpm.

Based on the site topography, shallow groundwater flow in the glacial deposits is generally inferred to follow the surface topography. For purposes of the nitrate analysis, groundwater is interpreted to flow downslope in the shallow soils above bedrock.

Groundwater Quantity. Two on-site water supply wells are proposed for this subdivision. The Maine Subsurface Wastewater Disposal Rules estimate that the water demand and wastewater disposal for domestic use is 90 gpm per bedroom. According to STI, each of the 10 units will have three bedrooms, so the water demand has been calculated to be 2,700 gallons per day(gpd) (equivalent to approximately 1.88 gpm of continuous withdrawal). Note that the Maine Subsurface Wastewater Disposal Rules are based on standard, rather than low-flow, plumbing fixtures. Low-flow plumbing fixtures are now in common use, so the actual water demand for the project is likely to be lower than 2,700 gallons per day.

The bedrock formation supplies water from fractures that are recharged by precipitation which infiltrates through the overburden deposits. Groundwater recharge rates in Maine vary depending on the soil type, slope and thickness. According to *Groundwater Recharge Estimates for Maine Using a Soil-Water-Balance Model – 25-Year Average, Range, Uncertainty, 1991 to 2015* (USGS Scientific Investigations Report 2019-5125), the median potential annual recharge for mixed forest land with soils having a C/D hydrologic group (as indicated on the STI test pit logs) is approximately 13.2 inches per year. Using this value of 13.2 inches per year of recharge into the 5.69-acre site, the annual groundwater recharge on the site is estimated to be equivalent to approximately 5590 gpd (3.9 gpm), which is more than twice the anticipated water use for the project. Under drought conditions, which are typically estimated to be 60% of average conditions, the annual groundwater recharge of 3350 gpd (2.3 gpm) exceeds the anticipated water use for the project.

As noted above, the average yield for bedrock wells in the area is 9.4 gpm, so it is reasonable to anticipate that two wells can be drilled at the site to meet the project water needs. If two wells are drilled and do not provide sufficient yield for the project, an additional well could be drilled, if needed.

Nitrate Evaluation. Drumlin completed a nitrate evaluation for the subdivision development based on the requirements of the Town of Cumberland Site Plan Review (Chapter 229-10E), which requires demonstration that groundwater at the property line comply with the drinking water standard for the State of Maine, which for nitrate is 10 mg/L. The evaluation also describes groundwater quality within the boundary of subdivision, as identified in Subdivision of Land (Chapter 250-35E).

The nitrate analysis has been conducted based on the site topography, the inferred direction of groundwater flow and soil data collected in test pit explorations conducted by STI. Where site specific data is not available, data that are believed to be representative of the site have been derived from published geologic literature.

The wastewater disposal design provided by STI indicates the two of the duplex units will be connected to Leachfield #1. Based on the Subsurface Wastewater Disposal Rules 90 gpd per bedroom design criteria, the flow to this leachfield was estimated to be 1,080 gpd. Three of the duplex units will use Leachfield #2 for wastewater disposal, with an estimated flow of 1,620 gpd.

The analytical steady state advection-dispersion model published by Domenico and Palciauskus (Groundwater, Volume 20, No. 3, 1982) has been used to estimate the migration of nitrate in groundwater from the leachfields. The concentration of nitrate downgradient of the leachfield is calculated using the following equation:

$$C = C_o * (z/H) * \text{erf} [X/4 * (\alpha_T * Y)^2]$$

Where:

- C = the calculated nitrate concentration at distance Y downgradient from the leachfield
- C_o = the concentration of nitrate in the effluent from a conventional standard septic system without advanced treatment (40 mg/L, cite in the Site Location of Development guidance)
- z = vertical mixing zone thickness under the leachfield
- H = thickness of the groundwater flow zone downgradient of the leachfield
- X = width of the leachfield perpendicular to the groundwater flow direction
- Y = distance downgradient of the leachfield
- α_T = transverse dispersivity

Groundwater flow was inferred to follow the topography at each leachfield as shown by the orange arrows in Figure 5. Based on this flow path, the distance (Y) was measured from the leachfield to the wetland, which is a groundwater discharge boundary. The thickness of the groundwater flow zone (H) was derived from the test pit logs for each leachfield and generally corresponded to the depth to bedrock, if encountered, or a restrictive layer. Because the depth to the bedrock at the two leachfields is small (2 to 6 feet), waste water from the leachfields will mix throughout the full thickness at the downgradient edge of the field and the mixing zone (z) has been set equal to the thickness of the flow zone (H). This is a conservative assumption and if the groundwater flow zone is thicker and includes the top of the bedrock, there will be more opportunity for mixing and dispersion, and the actual nitrate concentration (C) will be lower than calculated.

The method of Xu and Eckstein (Groundwater, Volume 33, No 6, 1995) was used to calculate longitudinal dispersivity (α_L) based on the downgradient distance (Y) for each leachfield. The

transverse dispersivity (α_T) was calculated as $\frac{1}{4}$ of the longitudinal dispersivity, which is in the range cited by Zech et al (Groundwater, Volume 57, No. 4, 2019).

This methodology provides a conservative estimate of the migration of nitrate from the leachfields. While advection and dispersion modeled in the analysis are the primary factors influencing nitrate concentration in groundwater downgradient of the leachfields, other factors such as mixing with additional precipitation over the plume pathway under normal or drought conditions would further dilute nitrate concentrations below those calculated using this methodology.

Table 1 below summarizes the results of the nitrate evaluation along the flow paths extending downgradient from each leachfield to the wetland, as shown in Figure 5.

Table 1
Nitrate Evaluation Summary

Field	Distance to Wetland (Y)	Flow Zone Thickness (H = z)	Field Width (X)	Transverse Dispersivity	Nitrate Concentration at Wetland Boundary (C)
Field #1	185 ft	6.5 ft	52 ft	2.63	23.8 mg/L
Field #2	90 ft	6 ft	64 ft	1.64	37.5 mg/L

As described above, the wetland on the property extends off-site to the south and west and is the headwater of a small tributary. At the time of Drumlin's site visit in March 2022, there was visible flow across the wetland to the south and downstream in this small tributary, which is indicative of shallow groundwater discharging into the wetland. Water from the leachfields is expected to follow the flow path of the shallow groundwater and also discharge to the wetland.

There may be times of the year when there is no groundwater discharge to the wetland. However, the seepage velocity of groundwater beneath the wetlands is calculated to be low (< 0.2 ft/day) and the groundwater travel time beneath the wetlands would be longer than the likely period when there was no discharge to the wetland. Based on this consideration, the nitrate plumes are expected to discharge to the wetland before reaching the property boundary. Upon discharge to the onsite wetland and tributary, the nitrate concentration would be further reduced through mixing and dilution with surface water.

Summary. Drumlin evaluated the potential impact of nitrate in shallow groundwater using the on the advection-dispersion analysis described above. Based on our interpretation of the site hydrogeologic conditions and proposed wastewater disposal systems, Drumlin has inferred that the water from the leachfields will mix with groundwater and the concentration of nitrates will decline between the leachfields and the wetland. The nitrate plumes along these flow pathways

are expected to contain concentrations higher than the 10 mg/L State of Maine standard for safe drinking water, these plumes are not expected to extend downgradient in groundwater to the subdivision property boundaries. Rather, dissolved nitrates are interpreted to discharge to the onsite wetland and tributary stream where further reduction in concentration can occur through mixing and dilution with surface water

Drumlin has completed this nitrate evaluation based on site plan, hydrogeologic data and wastewater disposal system information provided by STI for the proposed Evergreen Estates subdivision. Drumlin's scope of work did not include an evaluation of the design or performance of the wastewater disposal systems. We cannot be responsible for the actions of others taken in reliance on this report. Assumptions and data used in this report are provided. Drumlin makes no representations or warranty regarding the environmental conditions of the property. Application of the Maine Subsurface Wastewater Disposal Rules to the site conditions and development is the responsibility of others. Changes to the development plans may alter the findings of this evaluation. Should conditions differing from those described herein become evident, Drumlin requests the opportunity to review the new data and modify, as appropriate, the assessments, findings and conclusions given in this report. Supporting material for this report is being maintained in the files at Drumlin's office located at 97 India Street, P.O. Box 392, Portland, Maine 04112-0392.

If Drumlin's assistance is needed for further evaluation or discussion, please give us a call.

Very truly yours,

DRUMLIN ENVIRONMENTAL, LLC



Matthew D. Reynolds, L.G.
Senior Hydrogeologist

Report Figures

Figure 1 – Location of Evergreen Estates Subdivision

Figure 2 – Aerial of Subdivision & Surface Water Drainages

Figure 3 - Nearby Domestic Wells from MGS Database

Figure 4 – Subdivision Location and Sand & Gravel Aquifer

Figure 5 - Interpreted Groundwater Flow and Nitrate Pathways

Attachment A – Soil Test Pit Logs

REFERENCES

- Berry, H.N et al., 1998, Preliminary Report: Bedrock Geology of the Portland 1:100,000 Quadrangle, Maine and New Hampshire. Maine Geological Survey Open-File No. 98-1.
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- Retelle, Michael., et.al, 1999. Surficial Geology of the Cumberland Center Quadrangle, Maine, Maine Geological Survey Open-File No. 99-81.
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- Town of Cumberland Land Use Ordinance, Chapters 229 & 250, as amended through March 8,2021.
- Xu, M. and Y. Eckstein, 1995. "Use of Weighted Least-Squares Method in Evaluation of the Relationship Between Dispersivity and Field Scale". Ground Water, Vol. 33, No. 6, pp. 905-908.
- Zech, A., et al, 2019. "A Critical Analysis of Transverse Dispersivity Field Data". Ground Water, Vol. 57, No. 4.



Figure 1
Location of Evergreen Estates Subdivision
Drumlin Environmental, LLC



Figure 2
Aerial of Subdivision & Surface Water Drainages
Drumlin Environmental, LLC

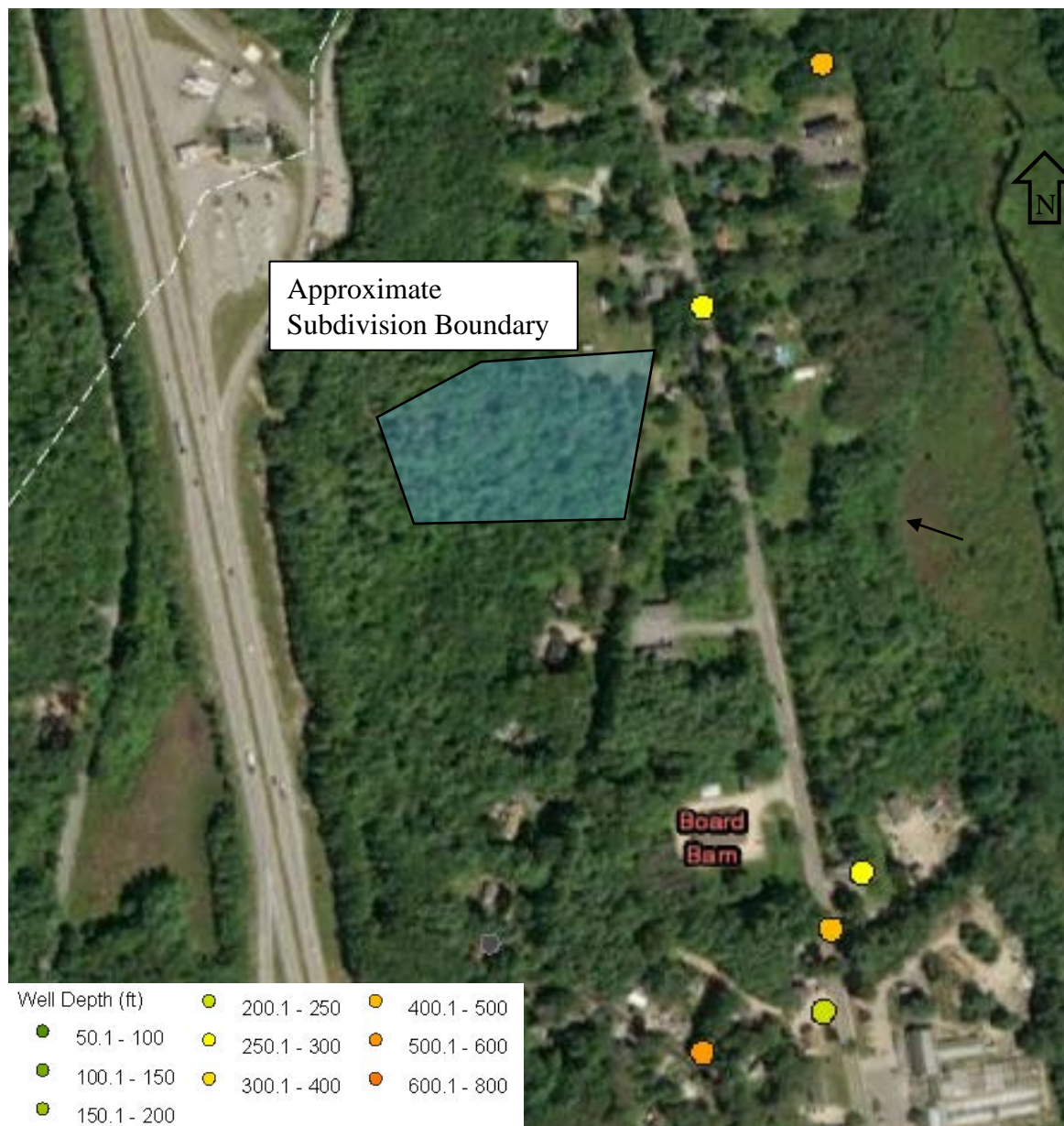


Figure 3
Nearby Domestic Wells from MGS Well Database
Drumlin Environmental, LLC

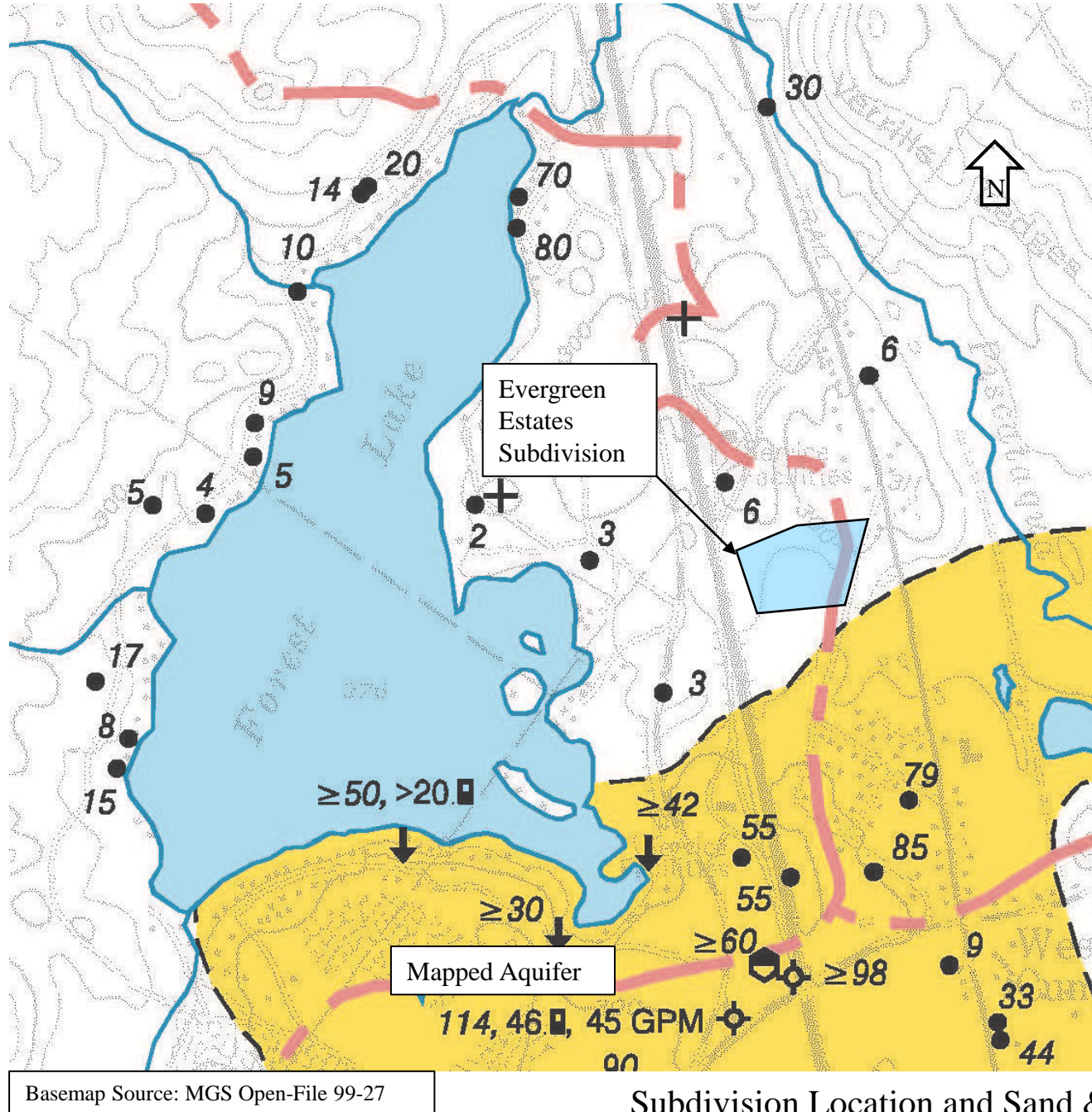


Figure 4
Subdivision Location and Sand & Gravel Aquifer
Drumlin Environmental, LLC

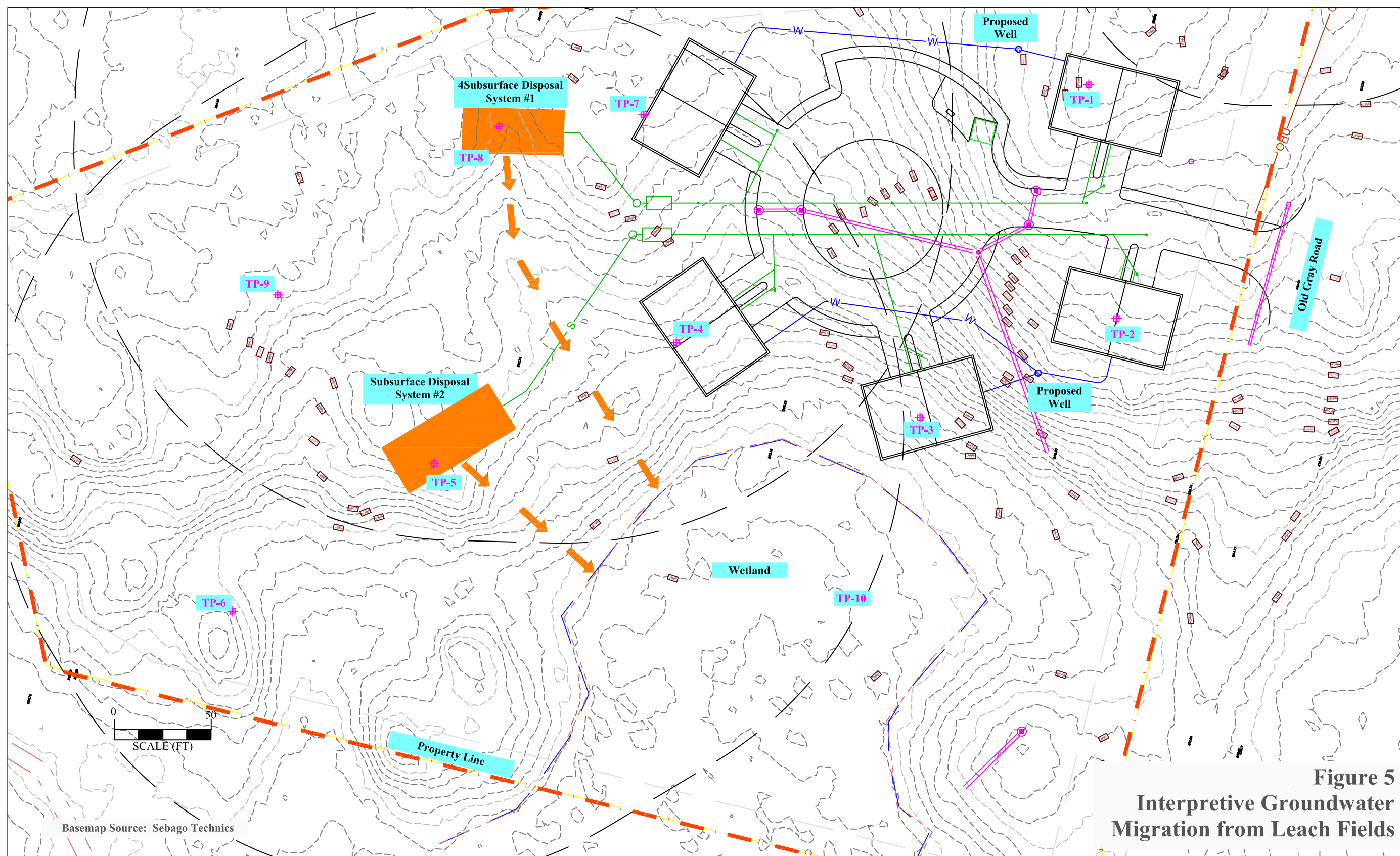



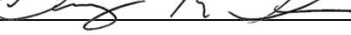
Figure 5
Interpretive Groundwater
Migration from Leach Fields

ATTACHMENT A
SOIL TEST PIT LOGS

Detailed Description of Subsurface Conditions at Project Sites

SOIL DESCRIPTION AND CLASSIFICATION					
Exploration Symbol:		TP-2	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring	
<u> 1-2 " Depth of Organic Horizon Above Mineral Soil </u>					
DEPTH BELOW MINERAL SOIL SURFACE (inches)	0	Texture	Consistence	Color	Redox
	1				
	2	FINE		10YR 3/3	NONE
	3	SANDY LOAM	FRIABLE	DARK	OBSERVED
	4			BROWN	
	5				
	6				
	7				
	8			10YR 4/6	
	9			DARK	
	10			YELLOWISH	
	12			BROWN	
	14				
	16				
	18				
	20			2.5Y 5/6	
	22			LIGHT OLIVE	
	24			BROWN	
	26	GRAVELLY	FIRM	2.5Y 6/3	
	28	SANDY LOAM		LIGHT YELLOWISH	
30			BROWN		
32	LEDGE AT 32"				
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60					
□ ■	hydic non-hydric	Slope % <u>3-8</u>	Limiting factor <u>32"</u>	□ □ ■	ground water restrictive layer bedrock
L.S.E.	Soil Series / phase name:	BECKET VARIANT	<u>WD</u>	<u>C</u>	
			Drainage Class	Hydrologic Group	
L.S.E.	Soil Classification:	<u>3</u>	<u>Alli</u>		
			Drainage Condition		

		Promote	Drainage Condition
SOIL DESCRIPTION AND CLASSIFICATION			
Exploration Symbol:		TP-4	Test Pit Boring
_____ 2-3." Depth of Organic Horizon Above Mineral Soil _____			
Texture	Consistence	Color	Redox
0			
1			
2	FINE	10YR 3/3	NONE
3	SANDY LOAM	DARK	OBSERVED
4		BROWN	
5			
6			
7			
8			
9		2.5Y 5/6	
10		LIGHT	
12		OLIVE	
14		BROWN	
16			
19			
20			
	SANDY LOAM	5Y 5/2	
		OLIVE	
	FIRM	GRAY	
28			
30	LEDGE / SAPROLITE (ROTTEN ROCK) AT 28"		
40			
50			
60			
□	hydic non-hydic	Slope % <u>3-8</u>	Limiting factor <u>28"</u>
□			ground water restrictive layer bedrock
S.S.E. Soil Series / phase name: BECKET VARIANT		<u>WD</u> Drainage Class	<u>C</u> Hydrologic Group
S.S.E. Soil Classification: <u>3</u> Profile		<u>AIII</u> Drainage Condition	

L.S.S.	signature: 	Date: 2/9/22
	name printed/typed: Gary M. Fullerton	Lic.#: 462
L.S.E.	signature: 	Date: 2/9/22
	name printed/typed: Gary M. Fullerton	Lic.#: 355



SOIL PROFILE/CLASSIFICATION INFORMATION


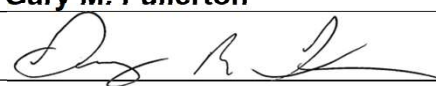
Detailed Description of Subsurface Conditions at Project Sites

Project Name: NIELSEN PROPERTY	Applicant Name: SVR LLC	Project Location (municipality): CUMBERLAND
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SOIL DESCRIPTION AND CLASSIFICATION				
DEPTH BELOW MINERAL SOIL SURFACE (inches)	Exploration Symbol: <u>TP-5</u>		<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
	1-2" Depth of Organic Horizon Above Mineral Soil			
	Texture	Consistence	Color	Redox
	1 FINE		10YR 3/3	NONE
	2 SANDY LOAM	FRIABLE	DARK BROWN	OBSERVED
	3			
	4		10YR 5/6	
	5		YELLOWISH BROWN	
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<input type="checkbox"/> hydric Slope % <u>3-8</u> Limiting factor <u>22"</u> <input type="checkbox"/> ground water <input checked="" type="checkbox"/> non-hydric <input type="checkbox"/> restrictive layer <input checked="" type="checkbox"/> bedrock				
L.S.S. Soil Series / phase name: <u>TUNBRIDGE</u> <u>WD</u> <u>C</u> Drainage Class Hydrologic Group				
L.S.E. Soil Classification: <u>3</u> <u>AIII</u> Profile Drainage Class				

SOIL DESCRIPTION AND CLASSIFICATION				
DEPTH BELOW MINERAL SOIL SURFACE (inches)	Exploration Symbol: <u>TP-7</u>		<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
	1-2" Depth of Organic Horizon Above Mineral Soil			
	Texture	Consistence	Color	Redox
	1 FINE		10YR 3/2	NONE
	2 SANDY LOAM		VERY DARK	OBSERVED
	3	FRIABLE	GRAYISH BROWN	
	4			
	5			
	6			
	7			
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<input type="checkbox"/> hydric Slope % <u>3-8</u> Limiting factor <u>28"</u> <input type="checkbox"/> ground water <input checked="" type="checkbox"/> non-hydric <input type="checkbox"/> restrictive layer <input type="checkbox"/> bedrock				
L.S.S. Soil Series / phase name: <u>BECKET</u> <u>WD</u> <u>C</u> Drainage Class Hydrologic Group				
L.S.E. Soil Classification: <u>3</u> <u>C</u> Profile Drainage Class				

Professional Endorsements (as applicable)

L.S.S.	signature: 	Date: <u>2/9/22</u>
	name printed/typed: <u>Gary M. Fullerton</u>	Lic.#: <u>462</u>
L.S.E.	signature: 	Date: <u>2/9/22</u>
	name printed/typed: <u>Gary M. Fullerton</u>	Lic.#: <u>355</u>

affix professional seal



SOIL PROFILE/CLASSIFICATION INFORMATION

Detailed Description of Subsurface Conditions at Project Sites

Project Name: NIELSEN PROPERTY	Applicant Name: SVR LLC	Project Location (municipality): CUMBERLAND
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SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-9</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1-2" Depth of Organic Horizon Above Mineral Soil				
Texture	Consistence	Color	Redox	
1				
2	FINE		10YR 4/6	NONE
3	SANDY LOAM	FRIABLE	DARK	OBSERVED
4			YELLOWISH	
5			BROWN	
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Exhibit 7

Stormwater Management

Exhibit 7

Stormwater Management

Included within this section is the full stormwater analysis for this development.



STORMWATER MANAGEMENT REPORT

For

**Snowy Owl Estates
Cumberland, Maine**

Prepared for:

Envy Construction
28 Stone Ridge Road
Falmouth, Maine 04105

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
South Portland, ME 04106

August 2022

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4. Proposed Site Improvements.....	2
5. Existing Conditions Model.....	2
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7. Stormwater Management.....	3
Basic Standard - Chapter 500, Section 4(B)	3
8. Summary.....	4

Appendices

Appendix 1A: Hydrologic Modeling– Existing Conditions (HydroCAD)Summary	
Appendix 1B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary	
Appendix 2: Inspection, Maintenance and Housekeeping Plan	
Appendix 3: Subsurface Investigations	

STORMWATER MANAGEMENT REPORT
Snowy Owl Estates
Cumberland, Maine

1. Introduction

This Stormwater Management Plan Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modifications in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable regulatory requirements.

2. Existing Conditions

The project site consists of undeveloped land located in Cumberland, Maine off of Old Gray Road. The site is approximately 5.68 acres. The site is bounded by residential house lots to the north and south with the Gray Toll Plaza and I-95 to the west.

Slopes on the site range from about 5%-20% with the steeper portions on the south and west sides of the site adjacent to the wetland.

The site is tributary to the on-site wetlands which eventually drain to the Piscataqua River.

The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the Cumberland, Community Panel 2301620010 effective May 19, 1981

3. Soils

Soil characteristics were obtained from the Class C Medium Intensity Soil Survey. The Hydrologic Groups (HSG) of the soils are classified by Technical Release TR-55 of the Soil Conservation Service as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
AtB	Abram-Turnbridge Complex	3-8	D
AtD	Abram-Turnbridge Complex	15-25	D
BvB	Becket Variant	3-8	C
BvD	Becket Variant	15-25	C
NaA	Naumberg	0-3	D

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Class C Medium Intensity Soil Survey is included in Appendix 4.

4. Proposed Site Improvements

The proposed development will consist of 5 duplex buildings with a total of 10 units. Each unit will have a footprint of 2,400 square feet. The condos will be access by a cul de sac with individual driveways to each unit. A majority of the buildings and all of the paved driveway areas will drain via both drainage structures (i.e., catch basins) and surface runoff towards a proposed detention basin. This basin will allow for stormwater to infiltrate through the sand media and get into the underdrain pipes, slowing down runoff before it gets to the on-site wetland. Areas near the subsurface disposal systems and stockpile area, will be left to revegetate and revert to the meadow condition. In total, the project will result in the creation of 0.69 acres of non-vegetated area and 2.41 acres of developed area.

5. Existing Conditions Model

The pre-development watershed plan consists of two sub-catchments labeled 1S and 2S in the HydroCAD model. Two locations were identified as Points of Analyses (POA) for comparing peak runoff rates, both POAs are headed towards the wetland complex at the Southern edge of the property with POAs on either side of a local high point.

POA-1 is located in the southwesterly corner of the site where runoff from the site leaves towards the wetland. Watershed 1S contributes to this study point with an overall area of 0.81 acres.

POA-2 is located slightly east of POA-1 on the other side of the local high point. Watershed 2S contributes runoff to this study point and has an overall area of 6.26 acres.

6. Proposed Conditions Model

The post-development watershed area consists of the same overall area as the pre-development plan, however, the pre-development subcatchments have been broken into smaller watersheds as a result of the proposed development.

POA1: Post-development subcatchment 10S represents the undeveloped land from pre-development 1S. This post-development subcatchment remains unchanged from the pre-development. The overall tributary area associated with POA-1 is 0.81 acres.

POA-2: Post-development subcatchments 20S through 20.6S are tributary to this Point of Analysis. All developed areas from this project flow toward this Point of Analysis. Subcatchments 20.1S to 20.4S are tributary to Detention Basin 1 (DB-1). This basin slows down runoff from the site and discharges towards the on-site wetlands.

7. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

The proposed stormwater measures satisfy sections 242-23 to 242-25 of the Town of Cumberland Stormwater Standards. A Maine DEP stormwater law application is not required as the impervious area in the proposed subdivision does not exceed 1 acre nor does the total developed area exceed 5 acres. We have avoided adverse impacts by providing an Erosion and Sedimentation Control Plan, and an Inspection, Maintenance, and Housekeeping Plan to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

Flooding Standard- Town of Cumberland Site Plan Review Ordinance, Section 229-10

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance, and aerial photography. Times of concentration were determined from site topographic maps in accordance with SCS procedures.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for York County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Cumberland County	
2-year	3.1
10-year	4.6
25-year	5.8

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions. A detention basin was designed to limit the peak rates of runoff at the study points.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
POA-1	2-year	0.68	0.68
	10-year	1.42	1.42
	25-year	2.05	2.05

POA-2	2-year	4.55	4.25
	10-year	9.86	9.11
	25-year	14.53	13.88

The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans which can be found in the plan set accompanying these materials. The model predicts that the peak runoff rates in the post-development condition at Points of Analysis 1, and 2 are at or below pre-development runoff rates for the 2, 10, and 25-year storm events with the implementation of the proposed stormwater management practices.

8. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Runoff discharging from the site will be at or below pre-development conditions for the 2, 10, and 25-year storm events at all three study points. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and the surrounding environment.

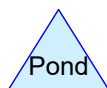
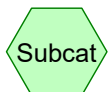
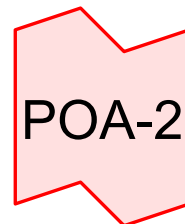
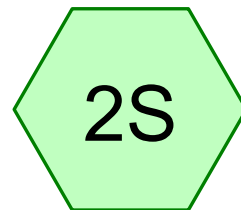
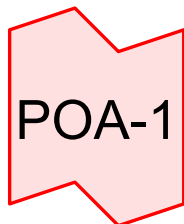
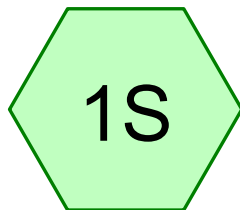
Prepared by:



CAB

Appendix 1A

Existing Conditions HydroCAD Summary



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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.097	80	>75% Grass cover, Good, HSG D (2S)
0.321	89	Gravel roads w/ ROW HSG C (2S)
3.237	70	Woods, Good, HSG C (2S)
2.425	77	Woods, Good, HSG D (1S, 2S)
7.081	75	TOTAL AREA

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 1S:

Runoff = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af, Depth= 3.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
35,542	77	Woods, Good, HSG D
35,542		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.7	130	0.0500	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.2	254	0.0700	1.32		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
21.9	384	Total			

Summary for Subcatchment 2S:

Runoff = 14.53 cfs @ 12.32 hrs, Volume= 1.625 af, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
70,100	77	Woods, Good, HSG D
141,020	70	Woods, Good, HSG C
47,800	80	>75% Grass cover, Good, HSG D
* 13,975	89	Gravel roads w/ ROW HSG C
272,895	75	Weighted Average
272,895		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	70	0.0330	0.19		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.10"
0.7	69	0.0600	1.71		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
6.5	481	0.0600	1.22		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
9.6	203	0.0200	0.35		Shallow Concentrated Flow, D-E
					Forest w/Heavy Litter Kv= 2.5 fps
22.9	823	Total			

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Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Link POA-1:

Inflow Area = 0.816 ac, 0.00% Impervious, Inflow Depth = 3.31" for 25-YR event
Inflow = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af
Primary = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link POA-2:

Inflow Area = 6.265 ac, 0.00% Impervious, Inflow Depth = 3.11" for 25-YR event
Inflow = 14.53 cfs @ 12.32 hrs, Volume= 1.625 af
Primary = 14.53 cfs @ 12.32 hrs, Volume= 1.625 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 2-YR Rainfall=3.10"

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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:Runoff Area=35,542 sf 0.00% Impervious Runoff Depth=1.14"
Flow Length=384' Tc=21.9 min CN=77 Runoff=0.68 cfs 0.078 af**Subcatchment 2S:**Runoff Area=272,895 sf 0.00% Impervious Runoff Depth=1.03"
Flow Length=823' Tc=22.9 min CN=75 Runoff=4.55 cfs 0.536 af**Link POA-1:**Inflow=0.68 cfs 0.078 af
Primary=0.68 cfs 0.078 af**Link POA-2:**Inflow=4.55 cfs 0.536 af
Primary=4.55 cfs 0.536 af**Total Runoff Area = 7.081 ac Runoff Volume = 0.614 af Average Runoff Depth = 1.04"**
100.00% Pervious = 7.081 ac 0.00% Impervious = 0.000 ac

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Snowy Owl Estates

Type III 24-hr 10-YR Rainfall=4.60"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points

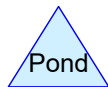
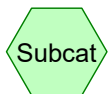
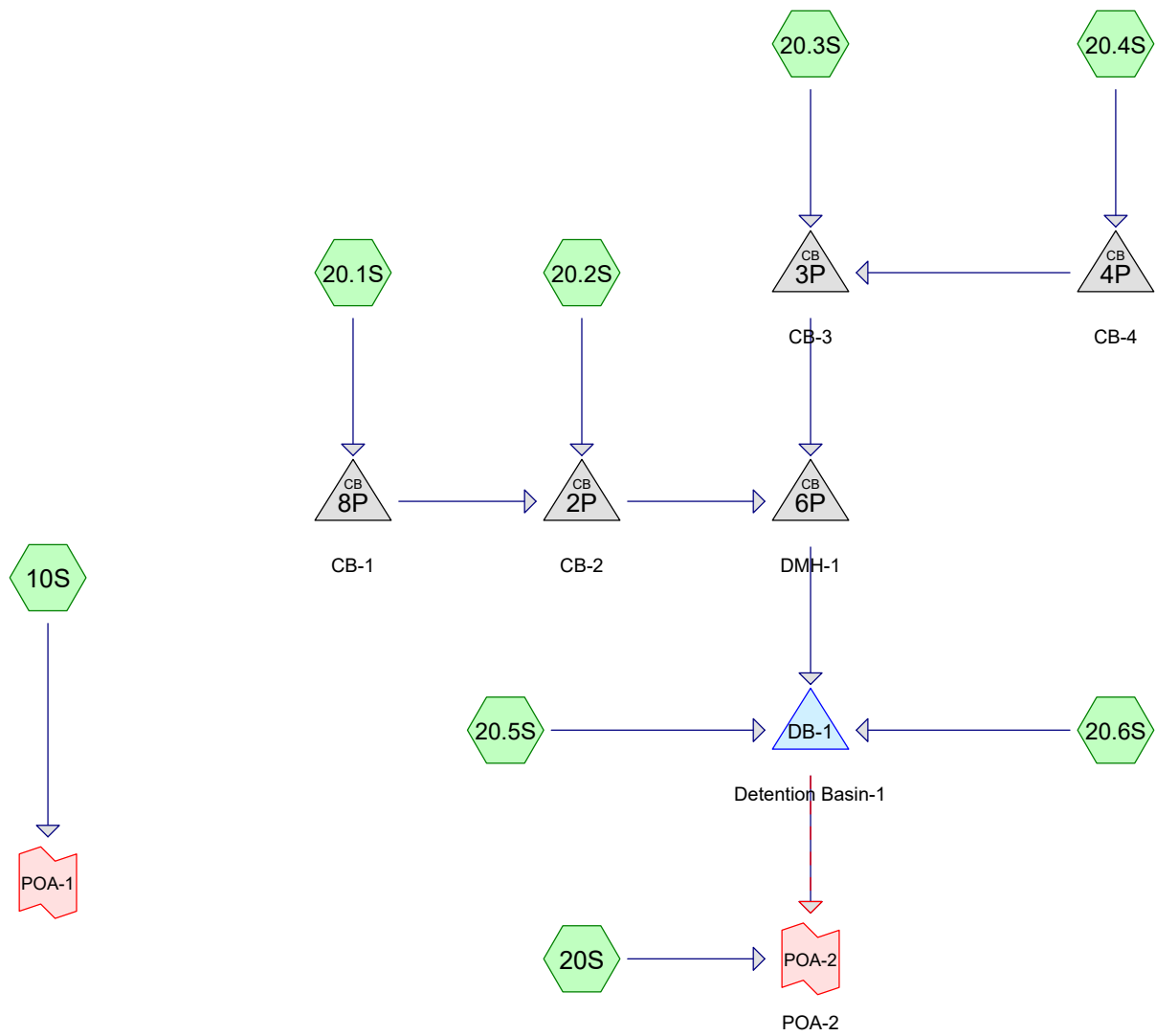
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S:Runoff Area=35,542 sf 0.00% Impervious Runoff Depth=2.29"
Flow Length=384' Tc=21.9 min CN=77 Runoff=1.42 cfs 0.156 af**Subcatchment 2S:**Runoff Area=272,895 sf 0.00% Impervious Runoff Depth=2.13"
Flow Length=823' Tc=22.9 min CN=75 Runoff=9.86 cfs 1.112 af**Link POA-1:**Inflow=1.42 cfs 0.156 af
Primary=1.42 cfs 0.156 af**Link POA-2:**Inflow=9.86 cfs 1.112 af
Primary=9.86 cfs 1.112 af**Total Runoff Area = 7.081 ac Runoff Volume = 1.267 af Average Runoff Depth = 2.15"**
100.00% Pervious = 7.081 ac 0.00% Impervious = 0.000 ac

Appendix 1B

Proposed Conditions HydroCAD Summary



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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.591	74	>75% Grass cover, Good, HSG C (20.1S, 20.2S, 20.3S, 20.4S, 20.5S, 20.6S, 20S)
0.122	80	>75% Grass cover, Good, HSG D (20S)
0.324	98	Driveways and Travelways (20.1S, 20.2S, 20.3S, 20.4S, 20.5S)
0.006	98	Dumpster Pad (20.1S)
0.307	89	Gravel roads w/ ROW, HSG C (20.5S)
0.081	71	Meadow, non-grazed, HSG C (20S)
0.261	78	Meadow, non-grazed, HSG D (10S, 20S)
0.060	98	New Sidewalk (20.1S, 20.4S, 20.5S, 20.6S)
0.021	98	Parking Stalls (20.1S)
0.276	98	Roofs (20.1S, 20.3S, 20.4S, 20.6S, 20S)
0.980	70	Woods, Good, HSG C (20.4S, 20S)
2.052	77	Woods, Good, HSG D (10S, 20S)
7.081	78	TOTAL AREA

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 10S:

Runoff = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af, Depth= 3.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
30,896	77	Woods, Good, HSG D
4,646	78	Meadow, non-grazed, HSG D
35,542	77	Weighted Average
35,542		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.7	130	0.0500	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.2	254	0.0700	1.32		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
21.9	384	Total			

Summary for Subcatchment 20.1S:

Runoff = 1.61 cfs @ 12.08 hrs, Volume= 0.126 af, Depth= 5.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
* 6,503	98	Driveways and Travelways
* 1,670	98	New Sidewalk
1,581	74	>75% Grass cover, Good, HSG C
* 925	98	Parking Stalls
* 1,680	98	Roofs
* 275	98	Dumpster Pad
12,634	95	Weighted Average
1,581		12.51% Pervious Area
11,053		87.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	184	0.0500	2.21		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
4.6					Direct Entry, Direct
6.0	184	Total			

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Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 20.2S:

Runoff = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
*	3,281	98	Driveways and Travelways
	3,959	74	>75% Grass cover, Good, HSG C
	7,240	85	Weighted Average
	3,959		54.68% Pervious Area
	3,281		45.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	72	0.0660	0.25		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.10"
1.3					Direct Entry, Direct
6.0	72	Total			

Summary for Subcatchment 20.3S:

Runoff = 0.46 cfs @ 12.08 hrs, Volume= 0.035 af, Depth= 4.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
*	1,200	98	Roofs
*	1,722	98	Driveways and Travelways
	742	74	>75% Grass cover, Good, HSG C
	3,664	93	Weighted Average
	742		20.25% Pervious Area
	2,922		79.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	117	0.0500	2.02		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
5.0					Direct Entry, Direct
6.0	117	Total			

Summary for Subcatchment 20.4S:

Runoff = 3.16 cfs @ 12.12 hrs, Volume= 0.242 af, Depth= 3.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Area (sf)	CN	Description
4,360	70	Woods, Good, HSG C
9,840	74	>75% Grass cover, Good, HSG C
19,249	74	>75% Grass cover, Good, HSG C
* 2,400	98	Roofs
* 563	98	New Sidewalk
* 1,893	98	Driveways and Travelways
38,305	77	Weighted Average
33,449		87.32% Pervious Area
4,856		12.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	78	0.0320	0.19		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.4	55	0.1000	2.21		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
1.0	84	0.0800	1.41		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
8.2	217	Total			

Summary for Subcatchment 20.5S:

Runoff = 2.11 cfs @ 12.09 hrs, Volume= 0.153 af, Depth= 4.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
* 13,367	89	Gravel roads w/ ROW, HSG C
* 725	98	Driveways and Travelways
* 68	98	New Sidewalk
4,833	74	>75% Grass cover, Good, HSG C
18,993	86	Weighted Average
18,200		95.82% Pervious Area
793		4.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	150	0.0500	2.12		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.10"
0.6	175	0.0850	4.69		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
0.5	70	0.1000	2.21		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
3.7					Direct Entry, Direct
6.0	395	Total			

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Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 20.6S:

Runoff = 1.95 cfs @ 12.09 hrs, Volume= 0.139 af, Depth= 3.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
*	320	98	New Sidewalk
	19,500	74	>75% Grass cover, Good, HSG C
*	2,120	98	Roofs
	21,940	77	Weighted Average
	19,500		88.88% Pervious Area
	2,440		11.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	100	0.1250	2.47		Shallow Concentrated Flow, A-B
					Short Grass Pasture Kv= 7.0 fps
5.3					Direct Entry, Direct
6.0	100	Total			

Summary for Subcatchment 20S:

Runoff = 9.08 cfs @ 12.32 hrs, Volume= 1.013 af, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
	58,484	77	Woods, Good, HSG D
*	4,620	98	Roofs
	34,086	74	>75% Grass cover, Good, HSG C
	38,321	70	Woods, Good, HSG C
	5,315	80	>75% Grass cover, Good, HSG D
	19,092	74	>75% Grass cover, Good, HSG C
	6,704	78	Meadow, non-grazed, HSG D
	3,513	71	Meadow, non-grazed, HSG C
	170,135	75	Weighted Average
	165,515		97.28% Pervious Area
	4,620		2.72% Impervious Area

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Snowy Owl Estates
Type III 24-hr 25-YR Rainfall=5.80"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	70	0.0300	0.18		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.10"
0.6	65	0.0600	1.71		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
7.2	526	0.0600	1.22		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
8.6	182	0.0200	0.35		Shallow Concentrated Flow, D-E
					Forest w/Heavy Litter Kv= 2.5 fps
22.8	843	Total			

Summary for Pond 2P: CB-2

Inflow Area = 0.456 ac, 72.12% Impervious, Inflow Depth = 4.81" for 25-YR event
 Inflow = 2.40 cfs @ 12.08 hrs, Volume= 0.183 af
 Outflow = 2.40 cfs @ 12.08 hrs, Volume= 0.183 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.40 cfs @ 12.08 hrs, Volume= 0.183 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Peak Elev= 296.63' @ 12.10 hrs
 Flood Elev= 299.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	295.52'	15.0" Round Stormdrain L= 91.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 295.52' / 294.98' S= 0.0059 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 1.23 sf

Primary OutFlow Max=2.32 cfs @ 12.08 hrs HW=296.62' TW=296.25' (Dynamic Tailwater)
 ←1=Stormdrain (Outlet Controls 2.32 cfs @ 2.71 fps)

Summary for Pond 3P: CB-3

Inflow Area = 0.963 ac, 18.53% Impervious, Inflow Depth = 3.45" for 25-YR event
 Inflow = 3.59 cfs @ 12.11 hrs, Volume= 0.277 af
 Outflow = 3.59 cfs @ 12.11 hrs, Volume= 0.277 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.59 cfs @ 12.11 hrs, Volume= 0.277 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Peak Elev= 300.33' @ 12.11 hrs
 Flood Elev= 304.76'

Device	Routing	Invert	Outlet Devices
#1	Primary	299.15'	15.0" Round Culvert L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 299.15' / 298.98' S= 0.0061 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Primary OutFlow Max=3.58 cfs @ 12.11 hrs HW=300.33' TW=296.25' (Dynamic Tailwater)↑**1=Culvert** (Barrel Controls 3.58 cfs @ 3.85 fps)**Summary for Pond 4P: CB-4**

Inflow Area = 0.879 ac, 12.68% Impervious, Inflow Depth = 3.31" for 25-YR event
 Inflow = 3.16 cfs @ 12.12 hrs, Volume= 0.242 af
 Outflow = 3.16 cfs @ 12.12 hrs, Volume= 0.242 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.16 cfs @ 12.12 hrs, Volume= 0.242 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 301.03' @ 12.12 hrs

Flood Elev= 304.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	299.36'	12.0" Round Stormdrain L= 18.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 299.36' / 299.25' S= 0.0061 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 0.79 sf

Primary OutFlow Max=3.15 cfs @ 12.12 hrs HW=301.02' TW=300.33' (Dynamic Tailwater)↑**1=Stormdrain** (Inlet Controls 3.15 cfs @ 4.01 fps)**Summary for Pond 6P: DMH-1**

Inflow Area = 1.420 ac, 35.76% Impervious, Inflow Depth = 3.89" for 25-YR event
 Inflow = 5.91 cfs @ 12.10 hrs, Volume= 0.460 af
 Outflow = 5.91 cfs @ 12.10 hrs, Volume= 0.460 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.91 cfs @ 12.10 hrs, Volume= 0.460 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 296.26' @ 12.10 hrs

Flood Elev= 304.34'

Device	Routing	Invert	Outlet Devices
#1	Primary	294.88'	18.0" Round Culvert L= 104.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 294.88' / 294.26' S= 0.0060 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.91 cfs @ 12.10 hrs HW=296.26' TW=288.06' (Dynamic Tailwater)↑**1=Culvert** (Barrel Controls 5.91 cfs @ 4.53 fps)

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Pond 8P: CB-1

Inflow Area = 0.290 ac, 87.49% Impervious, Inflow Depth = 5.21" for 25-YR event
 Inflow = 1.61 cfs @ 12.08 hrs, Volume= 0.126 af
 Outflow = 1.61 cfs @ 12.08 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.61 cfs @ 12.08 hrs, Volume= 0.126 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 296.80' @ 12.10 hrs

Flood Elev= 299.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	295.75'	12.0" Round Culvert L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 295.75' / 295.62' S= 0.0059 ' S= 0.0059 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.51 cfs @ 12.08 hrs HW=296.78' TW=296.61' (Dynamic Tailwater)

1=Culvert (Outlet Controls 1.51 cfs @ 2.31 fps)

Summary for Pond DB-1: Detention Basin-1

Inflow Area = 2.359 ac, 24.66% Impervious, Inflow Depth = 3.83" for 25-YR event
 Inflow = 9.95 cfs @ 12.09 hrs, Volume= 0.752 af
 Outflow = 4.87 cfs @ 12.27 hrs, Volume= 0.752 af, Atten= 51%, Lag= 10.8 min
 Primary = 4.87 cfs @ 12.27 hrs, Volume= 0.752 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 288.49' @ 12.27 hrs Surf.Area= 8,489 sf Storage= 7,902 cf

Flood Elev= 289.50' Surf.Area= 10,500 sf Storage= 14,295 cf

Plug-Flow detention time= 35.4 min calculated for 0.752 af (100% of inflow)

Center-of-Mass det. time= 35.1 min (840.2 - 805.1)

Volume	Invert	Avail.Storage	Storage Description
#1	287.00'	12,696 cf	Detention Pond (Prismatic) Listed below (Recalc)
#2	285.50'	1,599 cf	Media Storage (Prismatic) Listed below (Recalc)
		14,295 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
287.00	3,500	0	0
288.00	4,490	3,995	3,995
288.50	5,002	2,373	6,368
289.00	6,655	2,914	9,282
289.50	7,000	3,414	12,696

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Snowy Owl Estates

Type III 24-hr 25-YR Rainfall=5.80"

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Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
285.50	3,500	0.0	0	0
285.51	3,500	30.0	10	10
286.99	3,500	30.0	1,554	1,565
287.00	3,500	100.0	35	1,599

Device	Routing	Invert	Outlet Devices
#1	Primary	285.40'	18.0" Round 18" Underdrain Outlet L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 285.40' / 285.20' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	285.50'	6.0" Round 6" Underdrain X 3.00 L= 96.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 285.50' / 285.50' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 1	287.20'	12.0" W x 6.0" H Vert. OCS Orifice C= 0.600
#4	Device 1	288.42'	2.0" x 2.0" Horiz. Grate X 6.00 columns X 6 rows C= 0.600 Limited to weir flow at low heads
#5	Device 2	285.50'	6.000 in/hr Filtration over Surface area
#6	Secondary	288.50'	20.0' long x 6.0' breadth Overflow Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=4.87 cfs @ 12.27 hrs HW=288.49' TW=0.00' (Dynamic Tailwater)

1=18" Underdrain Outlet (Passes 4.87 cfs of 10.27 cfs potential flow)
 2=6" Underdrain (Passes 1.18 cfs of 2.42 cfs potential flow)
 5=Filtration (Exfiltration Controls 1.18 cfs)
 3=OCS Orifice (Orifice Controls 2.45 cfs @ 4.89 fps)
 4=Grate (Orifice Controls 1.24 cfs @ 1.24 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=285.50' TW=0.00' (Dynamic Tailwater)

6=Overflow (Controls 0.00 cfs)

Summary for Link POA-1:

Inflow Area = 0.816 ac, 0.00% Impervious, Inflow Depth = 3.31" for 25-YR event
 Inflow = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af
 Primary = 2.05 cfs @ 12.29 hrs, Volume= 0.225 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Link POA-2: POA-2

Inflow Area = 6.265 ac, 10.98% Impervious, Inflow Depth = 3.38" for 25-YR event
 Inflow = 13.88 cfs @ 12.30 hrs, Volume= 1.765 af
 Primary = 13.88 cfs @ 12.30 hrs, Volume= 1.765 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

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Snowy Owl Estates

Type III 24-hr 2-YR Rainfall=3.10"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 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 10S: Runoff Area=35,542 sf 0.00% Impervious Runoff Depth=1.14"
Flow Length=384' Tc=21.9 min CN=77 Runoff=0.68 cfs 0.078 af

Subcatchment 20.1S: Runoff Area=12,634 sf 87.49% Impervious Runoff Depth=2.55"
Flow Length=184' Slope=0.0500 '/' Tc=6.0 min CN=95 Runoff=0.82 cfs 0.062 af

Subcatchment 20.2S: Runoff Area=7,240 sf 45.32% Impervious Runoff Depth=1.67"
Flow Length=72' Slope=0.0660 '/' Tc=6.0 min CN=85 Runoff=0.33 cfs 0.023 af

Subcatchment 20.3S: Runoff Area=3,664 sf 79.75% Impervious Runoff Depth=2.35"
Flow Length=117' Slope=0.0500 '/' Tc=6.0 min CN=93 Runoff=0.22 cfs 0.016 af

Subcatchment 20.4S: Runoff Area=38,305 sf 12.68% Impervious Runoff Depth=1.14"
Flow Length=217' Tc=8.2 min CN=77 Runoff=1.05 cfs 0.084 af

Subcatchment 20.5S: Runoff Area=18,993 sf 4.18% Impervious Runoff Depth=1.75"
Flow Length=395' Tc=6.0 min CN=86 Runoff=0.89 cfs 0.064 af

Subcatchment 20.6S: Runoff Area=21,940 sf 11.12% Impervious Runoff Depth=1.14"
Flow Length=100' Slope=0.1250 '/' Tc=6.0 min CN=77 Runoff=0.65 cfs 0.048 af

Subcatchment 20S: Runoff Area=170,135 sf 2.72% Impervious Runoff Depth=1.03"
Flow Length=843' Tc=22.8 min CN=75 Runoff=2.84 cfs 0.334 af

Pond 2P: CB-2 Peak Elev=296.15' Inflow=1.15 cfs 0.085 af
15.0" Round Culvert n=0.013 L=91.0' S=0.0059 '/' Outflow=1.15 cfs 0.085 af

Pond 3P: CB-3 Peak Elev=299.78' Inflow=1.26 cfs 0.100 af
15.0" Round Culvert n=0.013 L=28.0' S=0.0061 '/' Outflow=1.26 cfs 0.100 af

Pond 4P: CB-4 Peak Elev=300.02' Inflow=1.05 cfs 0.084 af
12.0" Round Culvert n=0.013 L=18.0' S=0.0061 '/' Outflow=1.05 cfs 0.084 af

Pond 6P: DMH-1 Peak Elev=295.67' Inflow=2.37 cfs 0.185 af
18.0" Round Culvert n=0.013 L=104.0' S=0.0060 '/' Outflow=2.37 cfs 0.185 af

Pond 8P: CB-1 Peak Elev=296.35' Inflow=0.82 cfs 0.062 af
12.0" Round Culvert n=0.013 L=22.0' S=0.0059 '/' Outflow=0.82 cfs 0.062 af

Pond DB-1: Detention Basin-1 Peak Elev=287.45' Storage=3,270 cf Inflow=3.91 cfs 0.296 af
Primary=1.43 cfs 0.296 af Secondary=0.00 cfs 0.000 af Outflow=1.43 cfs 0.296 af

Link POA-1: Inflow=0.68 cfs 0.078 af
Primary=0.68 cfs 0.078 af

Link POA-2: POA-2 Inflow=4.25 cfs 0.630 af
Primary=4.25 cfs 0.630 af

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Snowy Owl Estates

Type III 24-hr 2-YR Rainfall=3.10"

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Total Runoff Area = 7.081 ac Runoff Volume = 0.708 af Average Runoff Depth = 1.20"
90.29% Pervious = 6.393 ac 9.71% Impervious = 0.688 ac

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Snowy Owl Estates

Type III 24-hr 10-YR Rainfall=4.60"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 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 10S: Runoff Area=35,542 sf 0.00% Impervious Runoff Depth=2.29"
Flow Length=384' Tc=21.9 min CN=77 Runoff=1.42 cfs 0.156 af

Subcatchment 20.1S: Runoff Area=12,634 sf 87.49% Impervious Runoff Depth=4.02"
Flow Length=184' Slope=0.0500 '/' Tc=6.0 min CN=95 Runoff=1.26 cfs 0.097 af

Subcatchment 20.2S: Runoff Area=7,240 sf 45.32% Impervious Runoff Depth=3.00"
Flow Length=72' Slope=0.0660 '/' Tc=6.0 min CN=85 Runoff=0.58 cfs 0.042 af

Subcatchment 20.3S: Runoff Area=3,664 sf 79.75% Impervious Runoff Depth=3.81"
Flow Length=117' Slope=0.0500 '/' Tc=6.0 min CN=93 Runoff=0.35 cfs 0.027 af

Subcatchment 20.4S: Runoff Area=38,305 sf 12.68% Impervious Runoff Depth=2.29"
Flow Length=217' Tc=8.2 min CN=77 Runoff=2.18 cfs 0.168 af

Subcatchment 20.5S: Runoff Area=18,993 sf 4.18% Impervious Runoff Depth=3.10"
Flow Length=395' Tc=6.0 min CN=86 Runoff=1.57 cfs 0.112 af

Subcatchment 20.6S: Runoff Area=21,940 sf 11.12% Impervious Runoff Depth=2.29"
Flow Length=100' Slope=0.1250 '/' Tc=6.0 min CN=77 Runoff=1.35 cfs 0.096 af

Subcatchment 20S: Runoff Area=170,135 sf 2.72% Impervious Runoff Depth=2.13"
Flow Length=843' Tc=22.8 min CN=75 Runoff=6.16 cfs 0.693 af

Pond 2P: CB-2 Peak Elev=296.41' Inflow=1.84 cfs 0.139 af
15.0" Round Culvert n=0.013 L=91.0' S=0.0059 '/' Outflow=1.84 cfs 0.139 af

Pond 3P: CB-3 Peak Elev=300.09' Inflow=2.52 cfs 0.195 af
15.0" Round Culvert n=0.013 L=28.0' S=0.0061 '/' Outflow=2.52 cfs 0.195 af

Pond 4P: CB-4 Peak Elev=300.42' Inflow=2.18 cfs 0.168 af
12.0" Round Culvert n=0.013 L=18.0' S=0.0061 '/' Outflow=2.18 cfs 0.168 af

Pond 6P: DMH-1 Peak Elev=296.00' Inflow=4.30 cfs 0.333 af
18.0" Round Culvert n=0.013 L=104.0' S=0.0060 '/' Outflow=4.30 cfs 0.333 af

Pond 8P: CB-1 Peak Elev=296.59' Inflow=1.26 cfs 0.097 af
12.0" Round Culvert n=0.013 L=22.0' S=0.0059 '/' Outflow=1.26 cfs 0.097 af

Pond DB-1: Detention Basin-1 Peak Elev=288.04' Storage=5,767 cf Inflow=7.20 cfs 0.542 af
Primary=2.95 cfs 0.542 af Secondary=0.00 cfs 0.000 af Outflow=2.95 cfs 0.542 af

Link POA-1: Inflow=1.42 cfs 0.156 af
Primary=1.42 cfs 0.156 af

Link POA-2: POA-2 Inflow=9.11 cfs 1.235 af
Primary=9.11 cfs 1.235 af

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Snowy Owl Estates

Type III 24-hr 10-YR Rainfall=4.60"

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Total Runoff Area = 7.081 ac Runoff Volume = 1.391 af Average Runoff Depth = 2.36"
90.29% Pervious = 6.393 ac 9.71% Impervious = 0.688 ac

Appendix 2

Inspection, Maintenance and Housekeeping Plan

INSPECTION AND MAINTENANCE PLAN

Evergreen Estates Cumberland, Maine

Introduction

The responsible party for maintenance of the stormwater management facility during and following construction will be the applicant, Envy Construction. A Homeowners Association will take over maintenance of the detention pond.

The contract documents will require the contractor to designate a person responsible for maintenance of the sedimentation control features during construction as required by the Erosion & Sedimentation Control Report. Long-term operation and maintenance for the stormwater management facilities is presented below.

The following plan outlines the anticipated inspection, maintenance, and housekeeping 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, Maintenance, and Housekeeping 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 details 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 "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

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, materials 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.
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, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).

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. The permittee shall retain a copy of the log for a period of at least five (5) years from the completion of permanent stabilization.

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.

A. 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 a 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.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. 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.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public right-of-ways.
- 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).

E. 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.

F. Stabilized Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales 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.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

A. Spill Prevention: Controls must be used to prevent pollutants from being

discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

- 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 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.
- C. Fugitive Sediment and Dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or Foundation Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, 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 must be removed from the ponded area, either through gravity or pumping, and 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.

Post-Construction

The following standards will be met after construction is complete.

- 1. **Requirement of Compliance**: The owner/operator shall demonstrate compliance with this plan as follows:
 - A. That the person (having control over the stormwater management facilities) shall, at least annually, inspect, clean, and maintain the stormwater management facilities, including, but not limited to, any parking areas, catch basins, drainage swales, detention basins, pipes, and related structures, in accordance with all Local Municipal and State inspections, cleaning, and Maintenance requirements of the approved Post-Construction Stormwater Management Plan Narrative.

- B. That the person shall repair any deficiencies found during inspections of the stormwater management facilities.
2. **Documentation:** A maintenance log will be kept (i.e. report) summarizing inspections, maintenance, and any corrective actions taken. The log will include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, the location where the sediment and debris was disposed after removal will be indicated.
3. **Inspection and Maintenance Frequency and Corrective Measures:** The following areas, facilities, and measures will be inspected and the identified deficiencies will be corrected. Clean-out must include the removal and legal disposal of any accumulated sediments and debris.
- A. Culverts:
- Inspect culverts two times per year (preferably in spring and fall) to ensure that the culverts are working in their intended fashion and that they are free of debris. Remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit and to repair any erosion damage at the culvert's inlet and outlet.
- B. Winter Sanding:
- 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.
5. Inlet/Outlet Control Structures
- Inspect structures two times per year (preferably in spring and fall) to ensure that the structures are working in their intended fashion and that they are free of debris. Clean structures when sediment depths reach 12 inches from invert of outlet. At a minimum, remove floating debris and hydrocarbons at the time of the inspection.
6. Vegetated Areas
- Inspect slopes and embankments early in the growing season 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. The facilities will be inspected after major storms and any identified deficiencies will be corrected.

7. Ditches, Swales and other Open Stormwater Channels

- Inspect two times per year (preferably in spring and fall) to ensure they are working in their intended fashion and that they are free of sediment and debris. Remove any obstructions to flow, including accumulated sediments and debris and vegetated growth. Repair any erosion of the ditch lining. Vegetated ditches will be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. Correct any erosion of the channel's bottom or sideslopes. The facilities will be inspected after major storms and any identified deficiencies will be corrected.

8. Detention Basin Maintenance Measures

- The inlet and outlet of the pond shall be checked periodically to ensure that flow structures are not blocked by debris. Inspections should be conducted monthly during wet weather conditions from March to November.
- The rip rap outlets shall be inspected after every major storm in the first few months to ensure proper function. Thereafter, the outlet should be inspected at least once every six months.
- Detention Basins shall be inspected annually for erosion, destabilization of sideslopes, embankment settling and other signs of structural failure. Corrective action should be taken immediately upon identification of problems.

Attachment: Attachment 1 – Sample Post-Construction Inspection Report

Attachment 1

Sample Stormwater Inspection and Maintenance Form

Sample Stormwater Inspection and Maintenance Form
The Homes at West Meadow
Attachment 1

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for The Homes at West Meadow. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments
Ditches and Swales	Inspect after major rainfall event producing greater than 3" of rain in 2 hours.			
	Repair erosion or damage immediately.			
Catch Basins and Culverts	Remove accumulated sediment and debris			
	Sump depth			
Vegetated Areas	Inspect Slopes			
	Replant Bare Areas			
	Check after Major Storms			
Winter Sanding	Clean annually (Spring)			
	Remove sand and sediment from roadway shoulders			
Detention Basin	Inspect inlets/outlets to ensure no blockage from debris			
	Inspect side slopes annually for erosion, destabilization, and embankment settling.			

Exhibit 8

Traffic

Exhibit 8

Traffic Memo

Included within this section is a Traffic Memo conducted by Sebago Technics Inc. dated 3/29/2022.

Memorandum

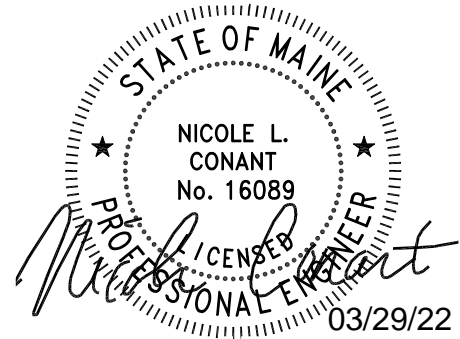
20551

To: Craig Burgess, P.E., Sebago Technics

From: Nikki Conant, P.E., Sebago Technics

Date: March 29, 2022

Subject: Traffic Impact Assessment, Evergreen Estates, Cumberland, Maine



Introduction

The purpose of this memorandum is to provide a trip generation assessment, crash data review and driveway sight distance analysis for a proposed residential development at 246 Old Gray Road, Cumberland, Maine. The development is proposed to be made up of five (5) duplexes, totaling 10 dwelling units. Access to the site is proposed via a full movement access to Old Gray Road.

Trip Generation

The 11th Edition of the Institute of Transportation Engineer's (ITE) *Trip Generation Manual* was utilized to estimate the trip generation for the duplexes. Land use code (LUC) 215 – Single-Family Attached Housing was utilized as ITE describes this LUC as “any single-family housing unit that shares a wall with an adjoining unit” and notes the data includes duplexes. The trip generation results on the basis of 10 dwelling units, are summarized in Table 1:

Table 1 – ITE Trip Generation
Land Use Code 215 – Single-Family Attached Housing
10 Dwelling Units

<i>Time Period</i>	<i>Average Rate</i>	<i>Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	7.20	72	36 (50%)	36 (50%)
AM Peak Hour – Adjacent Street (7 – 9 AM)	0.48	5	1 (31%)	4 (69%)
AM Peak Hour – Generator	0.55	6	1 (25%)	5 (75%)
PM Peak Hour – Adjacent Street (4 – 6 PM)	0.57	6	3 (57%)	3 (43%)
PM Peak Hour – Generator	0.61	6	4 (62%)	2 (38%)

As shown in Table 1, the duplexes are estimated to generate six (6) trips during both the AM and PM peak hour periods of the generator. Given this level of trip generation, a Traffic Movement Permit (TMP) will not be required from the Maine Department of Transportation (MaineDOT) as project trip generation does not exceed the 100-trip threshold to require a permit. Additionally, this level of trip generation would not be expected to have impacts off-site on the adjacent roadway system as the project is estimated to generate a maximum of four (4) new trips in a lane in an hour during the typical peak hour of the adjacent street. As such, no additional analysis is recommended.

Crash Data

The MaineDOT Public Crash Query was utilized to determine if there are any high crash locations within the immediate vicinity of the site. An intersection or section of roadway is deemed an HCL if two criteria are met: a Critical Rate Factor (CRF) greater than 1.0 and a minimum of eight (8) crashes in a three-year period. Crash data for Old Gray Road was reviewed from Gray Road south to Highland Avenue for the most recent three-year study period from 2018 – 2020. Based on the crash information, Old Gray Road in the immediate vicinity of the site, is not designated as a high crash location. As such, there are no recommendations for improvements in conjunction with this project.

Sight Distance Analysis

Sight distance from the proposed driveway location on Old Gray Road was measured on March 29, 2022. The sight distance measurements were conducted from a point 10 feet behind the apparent edge of the travel way considering a height of eye of 3.5 feet and a height of object of 4.25 feet.

The Town of Cumberland Ordinances were reviewed to determine sight distance standards. Chapter 299 – Site Plan Review notes “any driveway or proposed street must be designed so as to provide minimum sight distance according to the Maine Department of Transportation’s standards.” However, Chapter 250 – Subdivision of Land notes that “minimum sight distance for all street and roadways... shall be calculated using the standard of 10 feet of sight distance per every one mile of posted speed limit.” As such, both methodologies are shown in Table 2.

Table 2
Required Sight Distances

<i>Posted Speed (MPH)</i>	<i>Cumberland Sight Distance (feet)</i>	<i>MaineDOT Sight Distance (feet)</i>
25	250'	200'
30	300'	250'
35	350'	305'
40	400'	360'
45	450'	425'
50	500'	495'
55	550'	570'

Old Gray Road is posted at 25 MPH. Sight distance to the left, as shown in Figure 1 was measured to be 200 feet, restricted by brush along the frontage of the property. Sight distance to the right, as shown in Figure 2, was measured to exceed 400 feet. As such, sight distance from the driveway access location meets the required minimums for the posted speed limit by MaineDOT's standards. It is important to note that the development is proposing to remove the brush along the property frontage and replace with new landscaping outside of the sight triangle. This would increase sight distance by a minimum of 50 feet, therefore also meeting the Town of Cumberland Subdivision standards.



Figure 1: Sight Distance Looking Left



Figure 2: Sight Distance Looking Right

Conclusion

- The residential development on Old Gray Road is estimated to generate six (6) trips during both the AM and PM peak hour periods of the generator, respectively. As such, a TMP would not be required by the MaineDOT, as estimated trip generation for the development does not exceed the 100-trip threshold.
- There were no high crash locations along Old Gray Road within the immediate vicinity of the site. As such, there are no recommendations for improvements.
- Sight distance from the proposed driveway location on Old Gray Road currently meets required sight distances per MaineDOT's standards. With proposed brush clearing along the property frontage, the driveway will also meet additional Town of Cumberland sight distance standards for Subdivisions.

Exhibit 9

Subsurface Wastewater Disposal and Water Supply

Exhibit 9

Subsurface Wastewater Disposal and Water Supply

This development will be served by 2 septic fields. The 2 northern most buildings will be served by a 3,000-gallon septic tank. The 3 southernmost buildings will be served by a 4,000-gallon septic tank. Each respective tank feeds a lift station which carries effluent to its respective septic field for treatment.

The proposed condominium units will be served by 2 drilled wells. Drinking water analysis information can be found within the Hydrogeologic Assessment done by Drumlin LLC which is included within the materials submitted with Exhibit 6.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation	CUMBERLAND	Town/City _____	Permit # _____
Street or Road	OLD GRAY ROAD	Date Permit Issued ____/____/____	Fee: \$ _____ Double Fee Charged []
Subdivision, Lot #		Local Plumbing Inspector Signature _____ L.P.I. # _____	
OWNER/APPLICANT INFORMATION		<input type="checkbox"/> Owner <input type="checkbox"/> Town <input type="checkbox"/> State	
Name (last, first, MI)	ENVY CONSTRUCTION <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Applicant	The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Mailing Address of Owner/Applicant	28 STONE RIDGE ROAD FALMOUTH, MAINE 04105		
Daytime Tel. #	(207) 232-0351		
OWNER OR APPLICANT STATEMENT		CAUTION: INSPECTION REQUIRED	
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
_____ Signature of Owner or Applicant Date		_____ Local Plumbing Inspector Signature (2nd) Date Approved	
PERMIT INFORMATION			
TYPE OF APPLICATION	THIS APPLICATION REQUIRES	DISPOSAL SYSTEM COMPONENTS	
<input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input type="checkbox"/> b. ≥25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	<input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input checked="" type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	<input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components	
SIZE OF PROPERTY	DISPOSAL SYSTEM TO SERVE	TYPE OF WATER SUPPLY	
5.69± <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input checked="" type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: <u>4</u> <input type="checkbox"/> 3. Other: _____ (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input checked="" type="checkbox"/> Undeveloped	<input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other	
DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK	DISPOSAL FIELD TYPE & SIZE	GARBAGE DISPOSAL UNIT	DESIGN FLOW
<input checked="" type="checkbox"/> 1. Concrete <input type="checkbox"/> a. Regular <input type="checkbox"/> b. Low profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>4,000</u> GAL.	<input type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input checked="" type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. Cluster array <input type="checkbox"/> c. Linear <input checked="" type="checkbox"/> b. Regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: <u>3,744</u> <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	<input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. Multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input type="checkbox"/> d. Filter on tank outlet	<u>1,080</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities FOUR 3-BDR DWELLINGS @ 270 GPD
SOIL DATA & DESIGN CLASS	DISPOSAL FIELD SIZING	EFFLUENT/EJECTOR PUMP	LATITUDE AND LONGITUDE
PROFILE <u>3</u> CONDITION <u>C</u> at Observation Hole # <u>TP-8</u> Depth <u>28</u> " of Most Limiting Soil Factor	<input type="checkbox"/> 1. Medium--- 2.6 sq. ft. / gpd <input checked="" type="checkbox"/> 2. Medium Large--- 3.3 sq. ft. / gpd <input type="checkbox"/> 3. Large--- 4.1 sq. ft. / gpd <input type="checkbox"/> 4. Extra Large--- 5.0 sq. ft. / gpd	<input type="checkbox"/> 1. Not Required <input type="checkbox"/> 2. May Be Required <input checked="" type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ GAL.	<input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA at center of disposal area Lat. <u>43</u> d <u>49</u> m <u>22.9</u> s Lon. <u>-70</u> d <u>19</u> m <u>04.4</u> s
SITE EVALUATOR STATEMENT			
I certify that on <u>2-09-22</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).			
_____ Site Evaluator Signature		355 SE #	5-04-22 Date
Gary M. Fullerton Site Evaluator Name Printed		(207) 200-2063 Telephone Number	gfullerton@sebagotech.com E-mail Address
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.			

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WWW.SEBAGOTECHNICS.COM

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

Town, City, Plantation
CUMBERLAND

Street, Road, Subdivision
OLD GRAY ROAD

Owner or Applicant Name
ENVY CONSTRUCTION

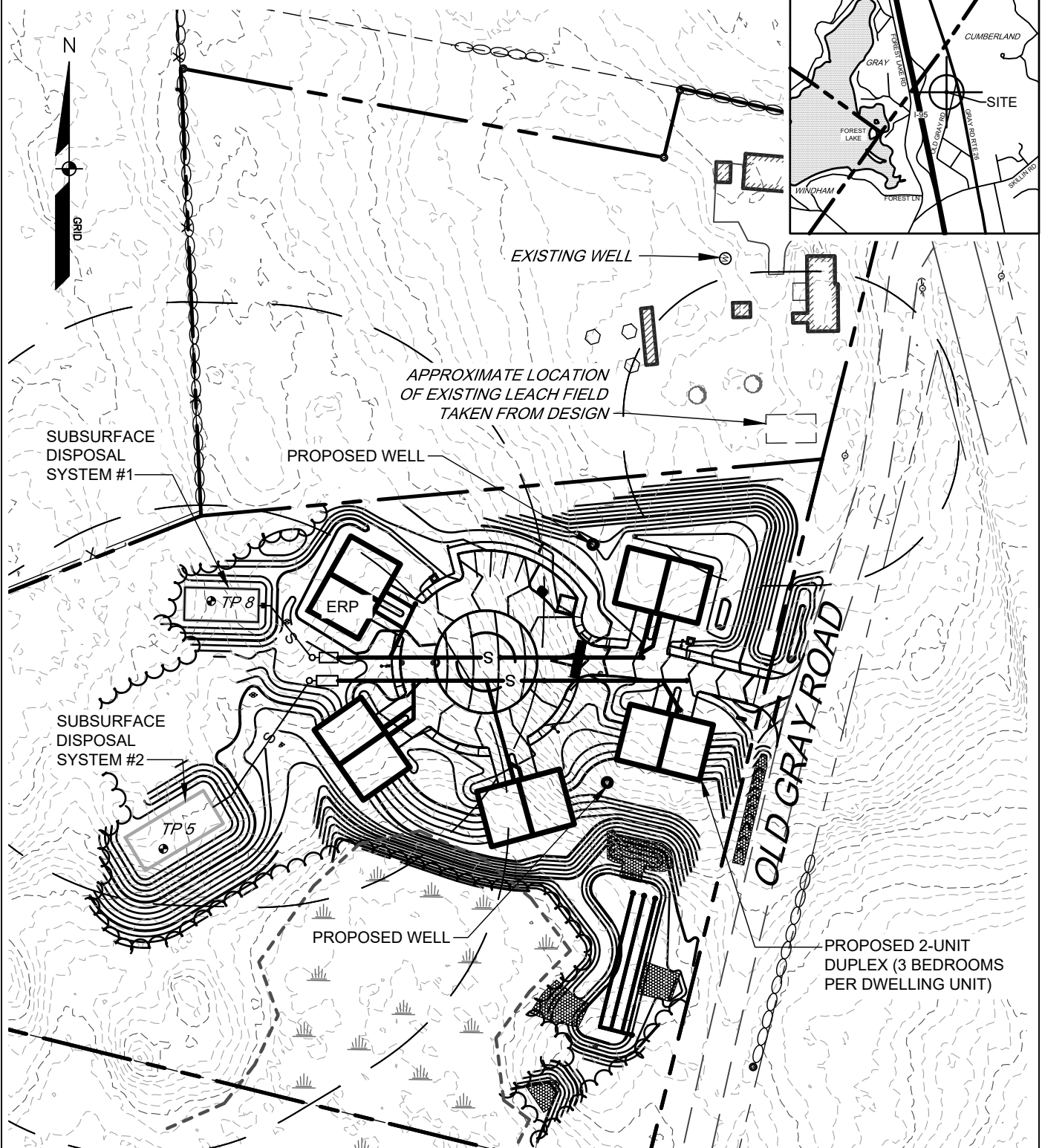
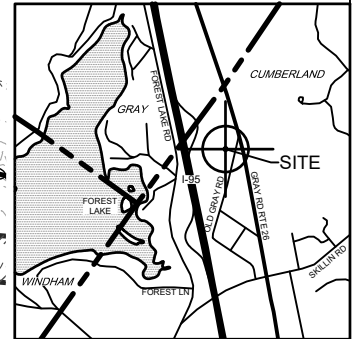
IPF = IRON PIN FOUND
TP = TEST PIT

B = BORING

SITE PLAN

Scale 1" = FT. 100

SITE LOCATION PLAN



Site Evaluator Signature

355
SE #

5-04-22
Date

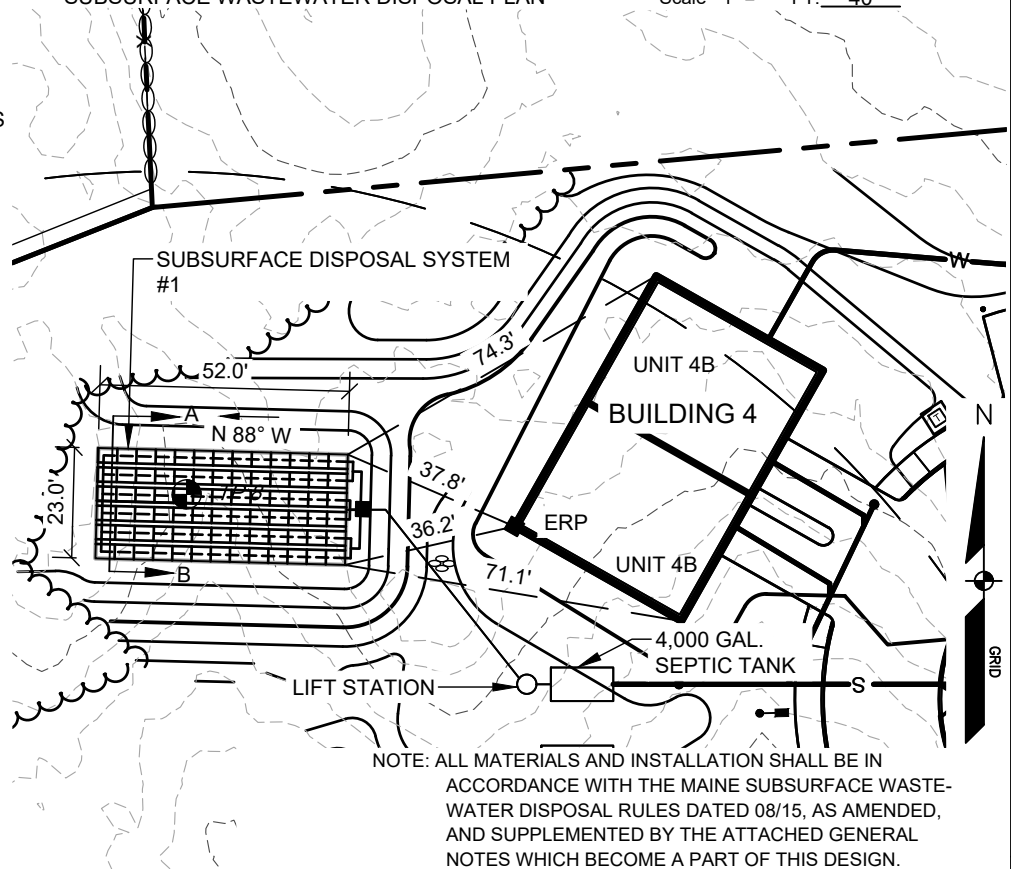
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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATIONTown, City, Plantation
CUMBERLANDStreet, Road, Subdivision
OLD GRAY ROADOwner or Applicant Name
ENVY CONSTRUCTIONERP= ELEVATION REFERENCE POINT
IPF = IRON PIN FOUND**SUBSURFACE WASTEWATER DISPOSAL PLAN**Scale 1" = FT. **40****PROPOSED DISPOSAL FIELD****6 ROWS OF 13 ELJEN GSF UNITS
IN CLUSTER ARRAY****NOTES**

1. ALLOW FOR POSITIVE DRAINAGE AROUND THE DISPOSAL FIELD.
2. REMOVE ALL VEGETATION AND SCARIFY THE AREA UNDER THE DISPOSAL FIELD, SHOULDER, AND FILL EXTENSION.
3. IF A GARBAGE DISPOSAL IS USED, THEN CHANGES TO THIS DESIGN ARE NECESSARY.
4. BURY AND/OR INSULATE PUMPED EFFLUENT LINES AS NEEDED TO PREVENT FREEZING.

EXISTING GRADES

302.0	301.6
N 88° W	
301.5	301.0



NOTE: ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATED 08/15, AS AMENDED, AND SUPPLEMENTED BY THE ATTACHED GENERAL NOTES WHICH BECOME A PART OF THIS DESIGN.

BACKFILL REQUIREMENTS

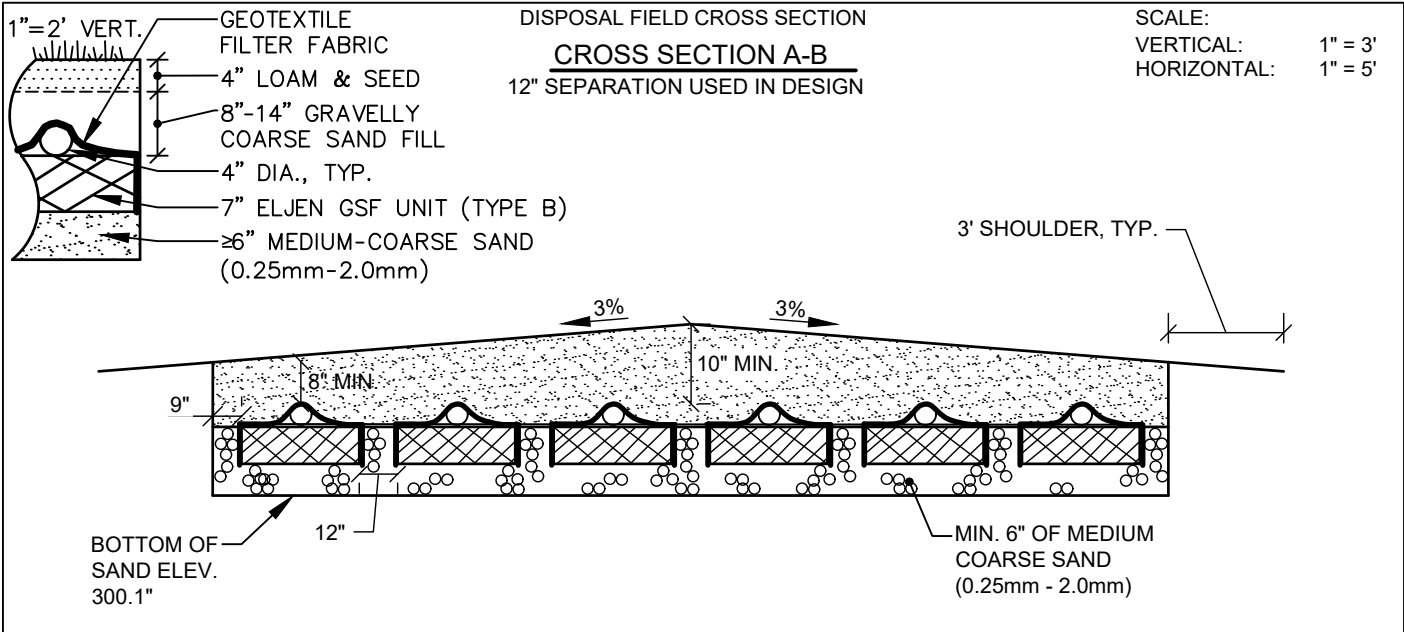
Depth of Fill (Upslope)	5 to 13"±
Depth of Fill (Downslope)	11 to 17"±

CONSTRUCTION ELEVATIONS

Finished Grade Elevation	302.6
Top of Distribution Pipe or Proprietary Device	301.6
Bottom of Disposal Area (Bottom of Eljen)	300.7

ELEVATION REFERENCE POINT

Location & Description	FINISH FLOOR
ELEVATION, SW CNR	
Reference Elevation	FFE=302.4



[Signature]
Site Evaluator Signature

355
SE #

5-04-22
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation	CUMBERLAND	Town/City _____	Permit # _____
Street or Road	OLD GRAY ROAD	Date Permit Issued ____/____/____	Fee: \$ _____ Double Fee Charged []
Subdivision, Lot #		Local Plumbing Inspector Signature _____ L.P.I. # _____	
OWNER/APPLICANT INFORMATION		CAUTION: INSPECTION REQUIRED	
Name (last, first, MI)	ENVY CONSTRUCTION	The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Mailing Address of Owner/Applicant	28 STONE RIDGE ROAD FALMOUTH, MAINE 04105		
Daytime Tel. #	(207) 232-0351		
OWNER OR APPLICANT STATEMENT I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
Signature of Owner or Applicant _____ Date _____		Local Plumbing Inspector Signature _____ (2nd) Date Approved _____	
PERMIT INFORMATION			
TYPE OF APPLICATION <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input type="checkbox"/> b. ≥25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	THIS APPLICATION REQUIRES <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input checked="" type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENTS <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components	
SIZE OF PROPERTY 5.69± <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	DISPOSAL SYSTEM TO SERVE <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input checked="" type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: <u>6</u> <input type="checkbox"/> 3. Other: _____ (specify) Current Use <input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped	TYPE OF WATER SUPPLY <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other	
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK <input checked="" type="checkbox"/> 1. Concrete <input type="checkbox"/> a. Regular <input type="checkbox"/> b. Low profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>6,000</u> GAL.	DISPOSAL FIELD TYPE & SIZE <input type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input checked="" type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. Cluster array <input type="checkbox"/> c. Linear <input checked="" type="checkbox"/> b. Regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: <u>5,376</u> <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. Multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input type="checkbox"/> d. Filter on tank outlet	DESIGN FLOW <u>1,620</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities SIX 3-BDR DWELLINGS @ 270 GPD
SOIL DATA & DESIGN CLASS PROFILE <u>3</u> CONDITION <u>All</u> at Observation Hole # <u>TP-5</u> Depth <u>22</u> " of Most Limiting Soil Factor	DISPOSAL FIELD SIZING <input type="checkbox"/> 1. Medium--- 2.6 sq. ft. / gpd <input checked="" type="checkbox"/> 2. Medium Large--- 3.3 sq. ft. / gpd <input type="checkbox"/> 3. Large--- 4.1 sq. ft. / gpd <input type="checkbox"/> 4. Extra Large--- 5.0 sq. ft. / gpd	EFFLUENT/EJECTOR PUMP <input type="checkbox"/> 1. Not Required <input type="checkbox"/> 2. May Be Required <input checked="" type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ GAL.	<input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA LATITUDE AND LONGITUDE at center of disposal area Lat. <u>43</u> d <u>49</u> m <u>21.4</u> s Lon. <u>70</u> d <u>19</u> m <u>04.8</u> s
SITE EVALUATOR STATEMENT			
I certify that on <u>2-09-22</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).			
_____ Site Evaluator Signature		355 SE #	5-04-22 Date
Gary M. Fullerton Site Evaluator Name Printed		(207) 200-2063 Telephone Number	gfullerton@sebagotech.com E-mail Address
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.			

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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

Town, City, Plantation
CUMBERLAND

Street, Road, Subdivision
OLD GRAY ROAD

Owner or Applicant Name
ENVY CONSTRUCTION

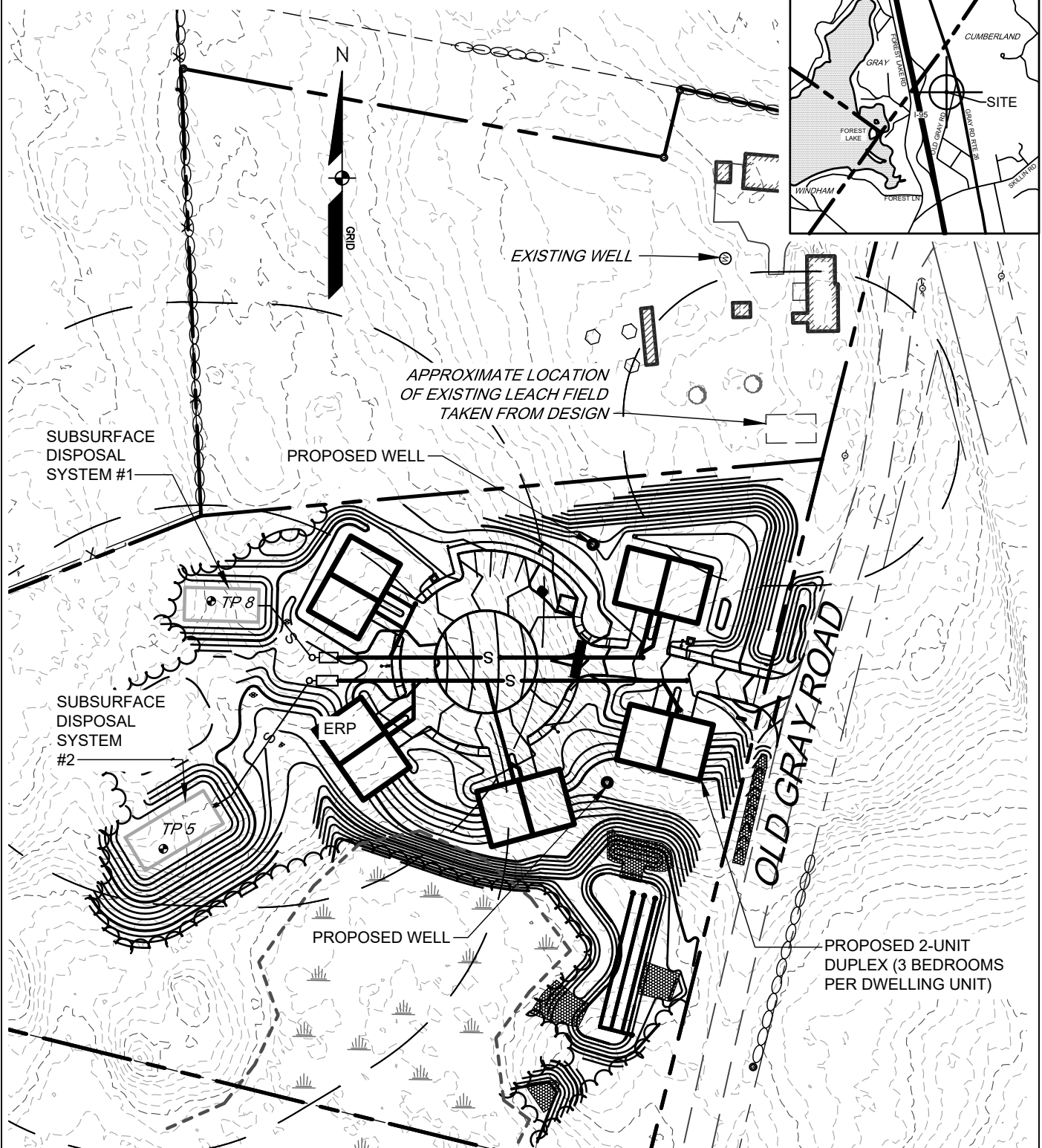
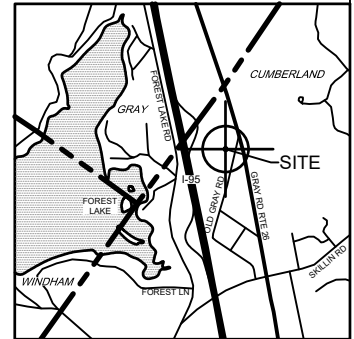
IPF = IRON PIN FOUND
TP = TEST PIT

B = BORING

SITE PLAN

Scale 1" = FT. 100

SITE LOCATION PLAN



Site Evaluator Signature

355
SE #

5-04-22
Date

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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation
CUMBERLANDStreet, Road, Subdivision
OLD GRAY ROADOwner or Applicant Name
ENVY CONSTRUCTIONERP = ELEVATION REFERENCE POINT
IPF = IRON PIN FOUND

PROPOSED DISPOSAL FIELD

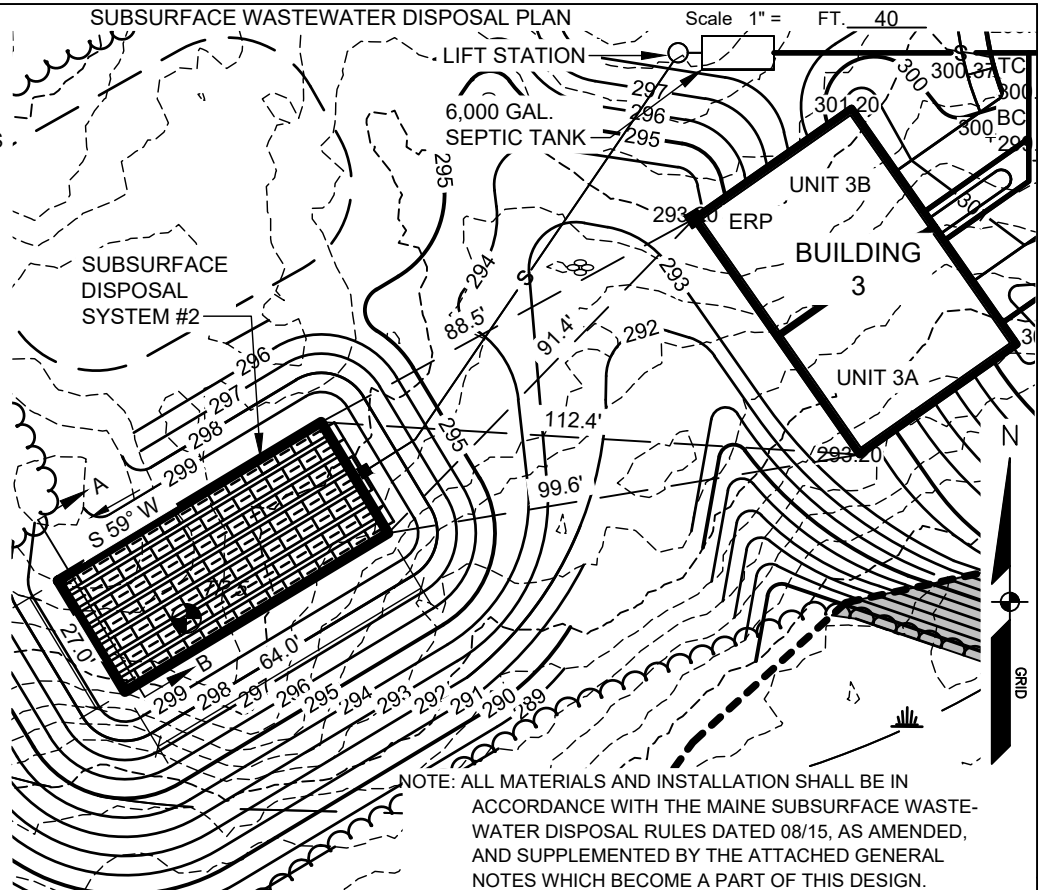
7 ROWS OF 16 ELJEN GSF UNITS
IN CLUSTER ARRAY

NOTES

1. ALLOW FOR POSITIVE DRAINAGE AROUND THE DISPOSAL FIELD.
2. REMOVE ALL VEGETATION AND SCARIFY THE AREA UNDER THE DISPOSAL FIELD, SHOULDER, AND FILL EXTENSION.
3. IF A GARBAGE DISPOSAL IS USED, THEN CHANGES TO THIS DESIGN ARE NECESSARY.
4. BURY AND/OR INSULATE PUMPED EFFLUENT LINES AS NEEDED TO PREVENT FREEZING.

EXISTING GRADES

298.0	295.3
S59°W	
294.2	293.5



BACKFILL REQUIREMENTS

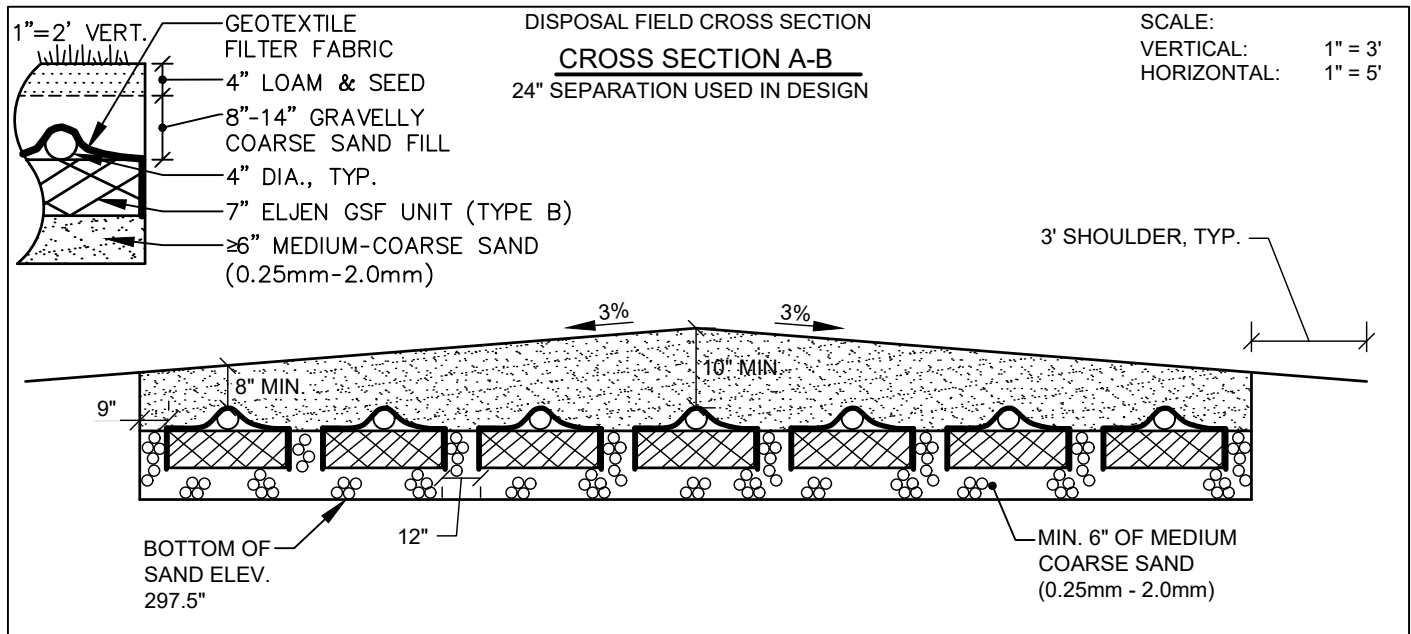
Depth of Fill (Upslope)	23-56"±
Depth of Fill (Downslope)	69-77"±

CONSTRUCTION ELEVATIONS

Finished Grade Elevation	299.9
Top of Distribution Pipe or Proprietary Device	298.9
Bottom of Disposal Area (Bottom of Eljen)	298.0

ELEVATION REFERENCE POINT

Location & Description	FINISH FLOOR
ELEVATION, SW CNR	298.9
Reference Elevation	GFE=302.7



Site Evaluator Signature

355
SE #5/04/22
DatePage 3 of 3
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Exhibit 10

Condo Docs and By-Laws

Exhibit 10

Condo Docs and By-Laws

The units within the development are proposed to be condo units. Included within this section are the condominium documents and by-laws.

**BYLAWS
OF
SNOWY OWL ESTATES CONDOMINIUM ASSOCIATION**

ARTICLE I

GENERAL PROVISIONS

A. Applicability. These Bylaws provide for the governance of Snowy Owl Estates Condominium Association pursuant to the requirements of Article 3 of the Maine Condominium Act (the “Act”) of Title 33, Chapter 31 of the Maine Revised Statutes Annotated of 1964, as amended, for Snowy Owl Estates Condominium, a condominium created under Declaration of Snowy Owl Estates Condominium dated _____, to be recorded at the Cumberland County Registry of Deeds. All unit owners, mortgagees, lessees and occupants of the units are subject to these Bylaws.

B. Office. The office of the Association and the Executive Board shall be located at the Condominium or at such other place as may be designated from time to time by the Executive Board.

ARTICLE II

THE ASSOCIATION

A. Membership. The Association shall consist exclusively of all of the unit owners, or following termination of the Condominium of all former unit owners entitled to distributions of proceeds under Section 1602-118 of the Act, or their heirs, successors or assigns, acting as a group in accordance with the Act, the Declaration and these Bylaws. The owner or owners of each unit shall be entitled to one (1) vote per unit in the Association. Membership is transferable only as provided in the Declaration or these Bylaws. The membership of a unit owner shall terminate upon the conveyance, transfer or other disposition of her/his interest in the unit, whereupon her/his membership and any interest in the assets of the Association shall automatically transfer to and be vested in the successor in ownership. Membership is otherwise non-transferable.

B. Responsibility. The Association shall have the responsibility of administering the Condominium, maintaining and repairing the Common Elements and Limited Common Elements of the Condominium, establishing the means and methods of collecting assessments and charges, arranging for the management of the Condominium and performing all of the other acts that may be required or permitted to be performed by the Association pursuant to the Act and the Declaration. The foregoing responsibilities shall be performed by the Executive Board as more particularly set forth in these Bylaws.

C. Annual Meetings. The annual meetings of the Association shall be held on the first Wednesday of September of each year unless such date shall occur on a holiday, in which event the meeting shall be held on the succeeding day that is not a holiday. At annual meetings the Executive Board shall be elected by ballot of the unit owners in accordance with the requirements of Article III.C of these Bylaws (subject to the provisions of the Declaration) and such other business as may properly come before the meeting may be transacted.

D. Place of Meetings. Meetings of the Association shall be held at the Condominium or at such other suitable place convenient to the unit owners as may be designated by the Executive Board.

shall be called by the President or Secretary in like manner and on like notice on the written request of at least two (2) members of the Executive Board.

H. Waiver of Notice. Any Executive Board member may at any time, in writing, waive notice of any meeting of the Executive Board, and such waiver shall be deemed equivalent to the giving of such notice. Attendance by an Executive Board member at any meeting of the Executive Board shall constitute a waiver of notice by her/him of the time, place and purpose of such meeting. If all Executive Board members are present at any meeting of the Executive Board, no notice shall be required and any business may be transacted at such meeting. Any action by the Executive Board required or permitted to be taken at any meeting may be taken without a meeting if all of the Executive Board members shall individually or collectively consent in writing to such action. Any such written consent shall be filed with the minutes of the proceedings of the Executive Board.

I. Quorum of the Executive Board. At all meetings of the Executive Board, all Executive Board members shall constitute a quorum for the transaction of business, and the votes of a majority of the Executive Board members present at a meeting at which a quorum is present shall constitute the decision of the Executive Board. If at any meeting of the Executive Board there shall be less than a quorum present, the Executive Board members present must adjourn the meeting to a later time. At any reconvened meeting at which a quorum is present, any business which might have been transacted at the meeting originally called may be transacted without further notice. One or more members of the Executive Board may participate in and be counted for quorum purposes at any meeting by means of conference telephone or similar communication equipment by means of which all persons participating in the meeting can hear each other.

J. Compensation. No member of the Executive Board shall receive any compensation from the Association for acting as such, but may be reimbursed for any expenses incurred in the performance of her/his duties; provided, however, that all such expenses must be authorized in advance by the Executive Board.

K. Conduct of Meetings. The President shall preside over all meetings of the Executive Board and the Secretary shall keep a minute book of the Executive Board meetings, recording therein all resolutions adopted by the Executive Board and all transactions and proceedings occurring at such meetings.

ARTICLE IV

OFFICERS

A. Designation. The principal officers of the Association shall be the President, the Secretary and the Treasurer. The officers shall be elected by the Executive Board. The Executive Board may appoint an assistant treasurer, an assistant secretary and such other officers as in its judgment may be necessary. The President and Secretary shall be unit owners and members of the Executive Board. Any other officers may, but need not be, unit owners or members of the Executive Board. An officer other than the President may hold more than one office.

B. Election of Officers. The officers of the Association shall be elected annually by a majority of all the Executive Board members at a regular meeting of the Executive Board and shall hold office at the pleasure of the Executive Board.

E. Special Meetings. The President or Secretary shall call a special meeting of the Association if so directed by resolution of the Executive Board or upon a petition signed and presented to the Secretary by unit owners holding at least fifty percent (50%) of the votes in the Association.

F. Notice of Meetings. The Secretary shall give to each unit owner a written notice of each annual, regularly scheduled or special meeting of the Association at least ten (10) but not more than sixty (60) days, prior to such meeting. The notice of any meeting must state the time and place of the meeting and the items on the agenda, including the general nature of any proposed amendment to the Declaration or Bylaws, any budget changes and any proposal to remove a member of the Executive Board or officer. The giving of a notice of meeting shall be in the manner provided for in Article IX.A of these Bylaws.

G. Quorum. Except as set forth above, the presence in person or by proxy of unit owners holding more than fifty percent (50%) of the votes in the Association at the commencement of a meeting shall constitute a quorum at all meetings of the Association. If a meeting is adjourned pursuant to Article II-I below, the quorum at such second meeting shall be deemed present throughout any meeting of the Association if persons holding more than fifty percent (50%) of the votes in the Association are present in person or by proxy at the beginning of the meeting.

H. Voting. Voting at all meetings of the Association shall be on the basis of one (1) vote per unit. If the unit owner is a corporation, joint venture, partnership or unincorporated association, the person who shall be entitled to cast the vote for such unit shall be the person named in a certificate executed by such entity pursuant to its governing documents. If the unit owner is a trust, the trustee or trustees shall be deemed to be the owner for voting purposes. Where the ownership of a unit is in more than one person, the person who shall be entitled to cast the vote of such unit shall be the person named in a certificate executed by all of the owners of such unit and filed with the Secretary, or in the absence of such named person from the meeting, the person who shall be entitled to cast the vote of such unit shall be the person owning such unit who is present. If more than one person owning such unit is present, then such vote shall be cast only in accordance with the agreement of a majority in interest of the owners pursuant to Section 1603-110(a) of the Act. There shall be deemed to be majority agreement if any one of the multiple owners casts the vote allocated to that unit without protest being made promptly to the person presiding over the meeting by any of the other owners of the unit. Such certificate shall be valid until revoked by a subsequent certificate similarly executed. Subject to the requirements of the Act, wherever the approval or disapproval of a unit owner is required by the Act, the Declaration or these Bylaws, such approval or disapproval shall be made only by the person who would be entitled to cast the vote of such unit at any meeting of the Association. Except with respect to election of members of the Executive Board and except where a greater number is required by the Act, the Declaration or these Bylaws, the vote of unit owners holding more than fifty percent (50%) of the votes present at one time at a duly convened meeting at which a quorum is present is required to adopt decisions at any meeting of the Association. No votes allocated to a unit owned by the Association may be cast. There shall be no cumulative or class voting.

I. Proxies. Votes allocated to a unit may be cast pursuant to a proxy duly executed by a unit Owner. If a unit is owned by more than one person, each owner of the unit may vote or register protest to the casting of votes by other owners of the unit through a duly executed proxy. A unit owner may not revoke a proxy given pursuant to this Section except by actual notice of revocation to the person presiding over a meeting of the Association. A proxy is void if it is not dated or purports to be revocable without notice. A proxy terminates eleven (11) months after its date, unless it specifies a shorter term.

J. Adjournment of Meetings. If at any meeting of the Association a quorum is not present, the unit owners entitled to cast a majority of the votes represented at such meeting may adjourn the meeting to such time after the time for which the original meeting was called as they shall agree.

K. Conduct of Meetings. The President (or in her/his absence, the Secretary) shall preside over all meetings of the Association and the Secretary shall keep the minutes of the meeting and record in a minute book all resolutions adopted at the meeting as well as a record of all transactions occurring at such meeting.

L. Powers. The Association shall have all powers provided to such associations by law and by the Act, including, without limitation, the power to:

(1) Adopt and amend these Bylaws and rules and regulations regarding the Condominium (the “Rules and Regulations”);

(2) Adopt and amend budgets for revenues, expenditures and reserves and collect assessments for Common Expenses from unit owners;

(3) Hire and terminate managing agents and other employees, agents and independent contractors;

(4) Institute, defend or intervene in litigation or administrative proceedings in its own name on matters affecting the Condominium;

(5) Make contracts and incur liabilities;

(6) Regulate the use, maintenance, repair, replacement and modification of Common Elements, except as set forth in the Declaration;

(7) Cause additional improvements to be made as a part of the Common Elements, except as set forth in the Declaration;

(8) Acquire, hold, encumber and convey in its own name any right, title or interest to real or personal property, provided that Common Elements may be conveyed or subjected to a security interest only pursuant to Section 1603-112 of the Act;

(9) Grant easements, leases, licenses and concessions through or over the Common Elements;

(10) Impose charges for late payment of assessments and, after notice and an opportunity to be heard, levy reasonable fines for violations of the Declaration, Bylaws and Rules and Regulations of the Association;

(11) Impose reasonable charges for the preparation and recordation of amendments to the Declaration or statements of unpaid assessments;

(12) Provide for the indemnification of its officers and Executive Board and maintain liability insurance for them;

(13) Operate, maintain and repair the Common Elements and the Limited Common Elements except as set forth in the Declaration;

(14) Exercise any other powers conferred by the Declaration;

(15) Exercise all other powers that may be exercised in this State by legal entities of the same type as the Association; and

(16) Exercise any other powers necessary and proper for the governance and operation of the Association and the Condominium.

ARTICLE III

EXECUTIVE BOARD

A. Number and Qualification. The affairs of the Association shall be governed by an Executive Board. During the Declarant Control Period (as that term is defined in the Declaration), the Executive Board shall be composed of three (3) directors. The directors of the Executive Board may be appointed, removed and replaced from time to time by the Declarant without the necessity of obtaining resignations. Upon the expiration of the Declarant Control Period, the Executive Board shall be composed of five (5) directors, who shall be appointed by vote of the unit owners.

B. Powers. Upon the affirmative vote or written consent of unit owners holding more than fifty percent (50%) of the votes in the Association, the Executive Board may act on behalf of the Association and exercise any powers of the Association described in Articles II through V of the Bylaws except as provided for in the Declaration and the Act (including, without limitation, Section 1603-103(b)).

C. Term of Office. The term of office of any Executive Board member to be elected (except as set forth herein) shall be fixed at three (3) years. The members of the Executive Board shall hold office until the earlier to occur of the election of their respective successors, their death, adjudication of incompetency, removal, or resignation. An Executive Board member may serve an unlimited number of terms and may succeed her/himself.

D. Removal or Resignation of Members of the Executive Board. At any regular or special meeting of the Association duly called, any one or more of the members of the Executive Board may be removed with or without cause by a majority of votes in the Association and a successor may then and there be elected to fill the vacancy thus created. Any unit owner proposing removal of a Board member shall give notice thereof to the Secretary. Any Board member whose removal has been proposed by a unit owner shall be given at least ten (10) days' notice by the Secretary of the time, place and purpose of the meeting and shall be given an opportunity to be heard at the meeting. A member of the Executive Board may resign at any time and, if he is a unit owner shall be deemed to have resigned upon transfer of title to her/his unit.

E. Vacancies. Vacancies in the Executive Board caused by any reason other than the removal of a member by a vote of the unit owners shall be filled by a vote of a majority of the remaining members at a special meeting of the Executive Board held for such purpose promptly after the occurrence of any such vacancy. Each person so elected shall be a member of the Executive Board for the remainder of the term of the member being replaced and until a successor shall be elected at the next annual meeting of the Association at which such seat is to be filled.

F. Regular Meetings. Regular meetings of the Executive Board shall be held on a regular basis at such time and place as shall be determined from time to time by a majority of the Executive Board members. Notice of regular meetings of the Executive Board shall be given to each Executive Board member, by mail or hand delivery, at least seven (7) days prior to the day named for such meeting.

G. Special Meetings. Special meetings of the Executive Board may be called by the President on at least five (5) days' notice to each Board member, given by mail or hand delivery, which notice shall state the time, place and purpose of the meeting. Special meetings of the Executive Board

C. Removal of Officers. Upon the affirmative vote of a majority of all members of the Executive Board, any officer may be removed, either with or without cause, and a successor may be elected at any meeting of the Executive Board called for such purpose.

D. President. The President shall be the chief executive officer of the Association and shall preside at all meetings of the Association and of the Executive Board.

E. Secretary. The Secretary shall take the place of the President and perform the duties of the President whenever the President shall be absent or unable to act. If neither the President nor the Secretary is able to act, the Executive Board shall appoint some other member of the Executive Board to act in the place of the President, on an interim basis. The Secretary shall also perform such other duties as shall from time to time be delegated or assigned him/her by the Executive Board or by the President. The Secretary shall keep the minutes of all meetings of the Association and of the Executive Board, and have charge of such books and papers as the Executive Board may direct.

F. Treasurer. The Treasurer shall be responsible for financial and fiscal matters and shall maintain all books, records, ledgers, and checking accounts relative thereto. The Treasurer need not be a unit owner.

ARTICLE V

COMMON EXPENSES AND BUDGETS

A. Fiscal Year. The fiscal year of the Association shall be the calendar year unless otherwise determined by the Executive Board.

B. Preparation and Approval of Budget. On or before the first day of November of each year (or sixty (60) days before the beginning of the fiscal year if the fiscal year is other than the calendar year), the Executive Board shall adopt an annual budget for the Association containing an estimate of the total amount considered necessary to pay the cost of maintenance, management, operation, repair and replacement of the Common Elements and those parts of the units as to which it is the responsibility of the Association to maintain, repair and replace, and the cost of wages, materials, insurance premiums, services, supplies and other expenses that may be declared to be Common Expenses by the Act, the Declaration, these Bylaws or a resolution of the Association and which will be required during the ensuing fiscal year for the administration, operation, maintenance and repair of the Condominium and the rendering to the unit owners of all related services. Such budget shall also include such reasonable amounts as the Executive Board considers necessary to provide working capital, a general operating reserve and reserves for contingencies and replacements. The budget shall segregate and allocate Limited Common Expenses among applicable unit owners. Within thirty (30) days after adoption of any proposed budget for the Condominium, the Executive Board shall provide a summary of the budget to all the unit owners, and shall set a date for a meeting of the unit owners to consider ratification of the budget not less than fourteen (14) nor more than thirty (30) days after mailing of the summary. Unless at the ratification meeting unit owners holding fifty-one percent (51%) of the votes in the Association reject the budget, the budget is ratified, whether or not a quorum is present. In the event the proposed budget is rejected, the budget last ratified by the unit owners shall be continued until such time as the unit owners ratify a subsequent budget proposed by the Executive Board. The budget shall constitute the basis for determining each unit owners' assessments for Common Expenses and Limited Common Expenses of the Association and shall automatically take effect at the beginning of the fiscal year for which it is adopted, subject to Article V.C(6) below. The Executive Board shall make reasonable efforts to meet the deadlines set forth above, but compliance with such deadlines shall not be a condition precedent to the effectiveness of any budget.

C. Assessment and Payment of Common Expenses.

(1) Common Expenses. The Executive Board shall calculate the monthly assessments for Common Expenses against each unit by multiplying the total amount of the estimated funds required for the operation of the Condominium set forth in the budget adopted by the Executive Board for the fiscal year in question by fifty percent (50%) and dividing the resultant product by the number of calendar months in such fiscal year. Such assessments shall be deemed to have been adopted and assessed on a monthly basis and not on an annual basis payable in monthly installments, shall be due and payable on the first day of each calendar month and shall be a lien against each unit owner's unit as provided in the Act and Declaration. The assessments shall be made no later than thirty (30) days after the budget is adopted, except that the first assessment shall be made no later than sixty (60) days after the first conveyance of a unit to a Purchaser. Within ninety (90) days after the end of each fiscal year, the Executive Board shall prepare and deliver to each unit owner and to each record holder of a mortgage on a unit who has registered an address with the Secretary an itemized accounting of the Common Expenses and funds received during such fiscal year less expenditures actually incurred and sums paid into reserves. Any net shortage with regard to Common Expenses, after application of such reserves as the Executive Board may determine, shall be equally assessed promptly against the unit owners and shall be payable in one or more monthly assessments, as the Executive Board may determine.

(2) Limited Common Expenses. Limited Common Expenses are those Common Expenses associated with the maintenance, repair or replacement of a Limited Common Element and shall be assessed against the unit or units to which that Limited Common Element has been assigned, except as otherwise provided in the Declaration.

(3) Reserves. The Association shall build up and maintain reasonable reserves for working capital, operations, contingencies and replacements. Extraordinary expenditures not originally included in the annual budget which may become necessary during the year may be charged first against such reserves. If the reserves are deemed to be inadequate for any reason, including non-payment of any unit owner's assessments, the Executive Board may at any time levy further assessments for Common Expenses which shall be assessed equally against the unit owners and shall be payable in one or more monthly assessments as the Executive Board may determine.

(4) Further Assessments. The Executive Board shall serve notice on all unit owners of any further assessments as permitted or required by the Act. The further assessments shall, unless otherwise specified in the notice, become effective with the next monthly assessment which is due more than ten (10) days after the delivery of such notice of further assessments. All unit owners so assessed shall be obligated to pay the amount of such monthly assessments. Such assessments shall be a lien as of the effective date as set forth in the preceding Sections.

(5) Initial Budget. At or prior to the time assessment of Common Expenses commences, the Executive Board shall adopt the budget, as described in this Article, for the period commencing on the date the Executive Board determines that assessments shall begin and ending on the last day of the fiscal year during which such commencement date occurs. Assessments shall be levied and become a lien against the unit during such period as is provided in Article V.C above.

(6) Effect of Failure to Prepare or Adopt Budget. The failure or delay of the Executive Board to prepare or adopt a budget for any fiscal year shall not constitute a waiver or

release in any manner of a unit owner's obligation to pay her/his allocated share of the Common Expenses as herein provided whenever the same shall be determined and, in the absence of any annual budget or adjusted budget, each unit owner shall continue to pay each monthly assessment at the rate established for the previous fiscal year until the new annual or adjusted budget shall have been adopted.

(7) Accounts and Audits. All sums collected by the Executive Board with respect to assessments against the unit owners or from any other source may be commingled into a single fund. All books and records of the Association shall be kept in accordance with good and accepted accounting practices.

(8) Limitations on Expenditure and Borrowing. The power of the Executive Board to expend funds, incur expenses or borrow money on behalf of the Association is subject to the requirement that the consent of unit owners holding at least fifty-one (51%) percent of the votes in the Association obtained at a meeting duly called and held for such purpose in accordance with the provisions of these Bylaws, or the unanimous written consent of unit owners holding all of the votes in the Association shall be required to (a) expend funds or incur expenses that it is reasonably anticipated will cause the aggregate amount of actual expenses (including reserves) to exceed the approved budget by more than ten percent (10%) after taking into account any projected increase in income, and (b) to borrow money.

(9) Payment of Common Expenses. Each unit owner shall pay the Common Expenses assessed by the Executive Board pursuant to the provisions of this Article V. No unit owner may exempt herself or himself from liability for her or his contribution toward Common Expenses by waiver of the use or enjoyment of any of the Common Elements or by abandonment of her/his unit. No unit owner shall be liable for the payment of any part of the Common Expenses assessed against her/his unit subsequent to the date of recordation of a conveyance by her/him in fee of such unit. All assessments against a unit shall be the personal obligation of the Owner of that unit at the time the assessment becomes due, and liability for such assessments shall not pass to the purchaser of the unit unless the purchaser agrees to assume the obligation. Any such purchaser shall be entitled to a statement setting forth the amount of the unpaid assessments against the selling unit owner within five (5) days following a written request therefor to the Executive Board. Such purchaser shall not be liable for, nor shall the unit conveyed be subject to a lien for, any unpaid assessments in excess of the amount set forth in such statements. Subject to the Act, each record holder of a mortgage on a unit who comes into possession of a unit by virtue of foreclosure or any purchaser at a foreclosure sale, shall take the unit free of any claims for unpaid assessments or charges against such unit which accrue prior to the time such holder comes into possession thereof, except for claims for a pro rata share of such assessments or charges resulting from a pro rata reallocation of such assessments or charges to all units including the mortgaged unit.

(10) Lien for Assessments. The total monthly assessment levied against each unit for Common Expenses including Limited Common Expenses, revised Common Expenses including Limited Common Expenses, or any special assessment, and any other sums duly levied against the unit pursuant to the Declaration, these Bylaws or the Act, all interest thereon and charges for late payment thereof and legal fees and other costs of collection thereof and fines, penalties and fees as provided in the Declaration or these Bylaws shall constitute the personal liability of the Owner of the unit so assessed and also shall, until fully paid, constitute a lien against the unit in favor of the Association from the date upon which such assessment or other such sum becomes due as provided in Section 1603-116 of the Act. Such lien shall, with respect to monthly assessments and revised monthly assessments, be effective on the first day of each month as to

the full amount of the monthly assessment or revised monthly assessment, and, as to special assessments and other sums duly levied including Limited Common Expenses assessed against unit owners for maintenance repair or replacement of a Limited Common Element, on the first day of the next month which begins more than ten (10) days after delivery to the unit owner of notice of such special assessment or levy. Such lien is prior to all other liens and encumbrances on a unit except (a) liens and encumbrances recorded before the recordation of this Declaration, (b) a first mortgage recorded before or after the date which the assessments sought to be enforced becomes delinquent, and (c) liens for real estate taxes and other governmental assessments or charges against the units; provided, however, that such lien is not subject to the provisions of 14 M.R.S.A. Section 4561 and 18-A M.R.S.A. Sections 2-201, *et. seq.*, as they or their equivalents may be amended or modified from time to time. The Association may impose an interest penalty for any payment for an assessment which is more than ten (10) days late.

(11) Statement of Common Expenses. The Executive Board shall promptly provide any unit owner, contract purchaser or proposed mortgagee so requesting the same in writing with a written statement of all unpaid assessments for Common Expenses due from each unit owner as required by the Act, or the resale certificate and documents required by the terms of the Act.

(12) Mortgage Liability. Any first mortgagee who obtains title to a condominium unit pursuant to the remedies in the mortgage or through foreclosure will not be liable for more than six months of the unit's unpaid regularly budgeted dues accrued before the acquisition of the title to the unit by the mortgagee.

ARTICLE VI

COMPLIANCE AND DEFAULT

Each unit owner shall be governed by, and shall comply with all of the terms of the Declaration, these Bylaws, the Rules and Regulations and the Act, as any of the same may be amended from time to time.

A. Actions by Owners. No unit owner shall have the right to object, challenge, commence any suit at law or in equity or take any other action against the Association or other unit owner(s) under any act, power or authority now in force or hereafter to be enacted except after following such procedures as are established in the Declaration and as may be established by the Executive Board by rule or regulation consistent with the provisions of the Declaration.

B. Actions by Association. Subject to prior compliance with the procedures established in Article VI.A hereof, the failure of a unit owner to comply with the Declaration, these Bylaws and the Rules and Regulations (if any) shall entitle the Association and Executive Board to the remedies provided herein, in the Declaration and in the Act, none of which shall be exclusive of any other remedies.

C. Suits. Failure to comply with the terms of the Declaration, By-Laws and the Rules and Regulations (if any), as the same may be amended from time to time, shall entitle the Association or any aggrieved unit owner, subject to the dispute resolution provisions of the Declaration, to sue for the recovery of damages or for injunctive relief, or both. Such relief shall not be exclusive of other remedies provided by law.

D. Costs and Attorney's Fees. In any proceeding arising because of an alleged failure of a unit owner to comply with the terms of the Declaration, Bylaws or Rules and Regulations (if any), the prevailing party shall be entitled to recover the costs of the proceeding and reasonable attorney's fees.

ARTICLE VII

AMENDMENTS

A. Amendments to Bylaws. These Bylaws may be modified or amended only by vote of unit owners holding at least eighty percent (80%) of the votes in the Association, except as otherwise expressly set forth herein or in the Act.

B. Approval of Mortgagees. The Declaration contains provisions concerning various rights and interests of record holders of mortgages on units. Such provisions are to be construed as covenants for the protection of such holders on which they may rely in making loans secured by such mortgages. Accordingly, no amendment or modification of the Declaration or these Bylaws impairing or affecting such rights, priorities, remedies or interests of such a holder shall be adopted without the prior written consent of such holders who have registered an address with the Secretary.

C. Amendments to the Declaration. Any two officers or Executive Board members of the Association may prepare, execute, certify and record amendments to the Declaration on behalf of the Association.

ARTICLE VIII

INSURANCE

A. Policies. The Association shall purchase, for the benefit of itself and the unit owners, those policies of insurance required by the Act and shall cause all such policies of insurance to remain in effect at all times.

ARTICLE IX

MISCELLANEOUS

A. Notices. All notices, demands, bills, statements or other communications under these Bylaws shall be in writing and shall be deemed to have been duly given if delivered personally or if sent by certified mail, return receipt requested, postage prepaid, (i) if to a unit owner, at the address of the unit owner, or (ii) if to the Association or the Executive Board, at such address as shall be designated by notice in writing to the unit owners pursuant to this Section. If a unit is owned by more than one Person, each such Person who so designates a single address in writing to the Secretary shall be entitled to receive all notices hereunder.

B. Captions. The captions herein are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of these Bylaws or the intent of any provision thereof. The use of the masculine gender in these Bylaws shall be deemed to include the feminine and neuter genders and the use of the singular shall be deemed to include the plural, and vice versa, whenever the context so requires.

Date Adopted: _____.

**DECLARATION
OF
SNOWY OWL ESTATES CONDOMINIUM**

SVR LLC, a Maine limited liability company with a principal place of business in Portland, Maine, and a mailing address of 91J Auburn St #1015, Portland, Maine 04103 (together with its successors and assigns, the “Declarant”), does by this Declaration hereby create and declare “Snowy Owl Estates Condominium” (the “Condominium”) on, within, and upon certain land situated on or about Old Gray Road in the Town of Cumberland, County of Cumberland, State of Maine, commonly known and identified as Lot 5E on Tax Map U21 now on file with the Assessor’s Office of the Town of Cumberland, containing 5.69 acres, more or less, and on, within, and upon all appurtenant easements and rights now or hereafter pertaining thereto, all as more particularly described on Schedule A annexed hereto and incorporated herein by reference (the “Premises”). This Declaration is recorded pursuant to Section 1602-101 of the Maine Condominium Act, as appears in the Maine Revised Statutes Annotated, as amended, Title 33, Chapter 31, Sections 1601-101 et seq., as amended (the “Act”), to which reference is specifically made and to which all owners of Units described herein, their heirs, successors and assigns, shall be bound, except to the extent that this Declaration lawfully provides otherwise. The Condominium is depicted on condominium plans titled “Overall Site and Subdivision Plan of Evergreen Estates, 246 Old Gray Road, Cumberland, ME” dated January 11, 2022, prepared by Sebago Technics, Inc., to be recorded herewith (the “Plans”).

ARTICLE I

Submission of the Premises

Section 1.1 Description of Land Declarant hereby submits the Premises to the provisions of the Act. The Premises are subject to and shall have the benefit of all easements, rights of way and matters affecting title of record on date hereof, including without limitation, any described on Schedule A attached hereto.

Section 1.2 Creation of Units The Condominium initially shall consist of ten (10) Units, numbered 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, and 5B.

ARTICLE II

Unit Boundaries

Section 2.1 Identification and Location of Units The identification number and approximate location of each Unit within the Condominium are depicted on the Plans.

Section 2.2 Interior Dimensions of Units; Common Elements The interior dimensions of each Unit are shown in architectural plan set titled “TBD” dated TBD, prepared by Curran Drafting & Design, a copy of which is attached hereto as Schedule B (the “Architectural Plan Set”). Each Unit shall have appurtenant to it an undivided tenant-in-common interest in and to all Common Elements within the Condominium in the percentages set forth on Schedule C attached hereto.

Section 2.3 Unit Boundaries

(a) Upper and Lower (Horizontal) Boundaries: The upper and lower boundaries of each Unit are as shown in the Architectural Plan Set and otherwise as follows:

(i) Upper Boundary: The horizontal plane of the lower side of the gypsum board or other finished ceiling material.

(ii) Lower Boundary: The horizontal plane of the top surface of the subfloor.

(b) Vertical (Perimeter) Boundaries: The vertical boundaries of each Unit are as shown in the Plans. Boundary lines shall also be the interior surface of doors, windows and storm windows and their frames, sills, and thresholds.

Section 2.4 Maintenance Responsibilities Notwithstanding the ownership of the various portions of the Common Elements and the Units by virtue of the foregoing boundary description, the provisions of this Declaration shall govern the division of maintenance and repair responsibilities between the Unit owners and Snowy Owl Estates Condominium Association (the “Association”).

Section 2.5 Relocation of Unit Boundaries and Subdivision of Units Relocation of boundaries between Units is permitted subject to compliance with the provisions in Section 1602-112 of the Act. The subdivision of Units is not permitted, but the leasing of a portion of a Unit shall not be considered a subdivision for purposes of this Declaration.

ARTICLE III

Common Elements & Limited Common Elements

Section 3.1 Common and Limited Common Elements

(a) The locations of the Limited Common Elements to which each Unit has or Units have exclusive use, in addition to the Limited Common Elements described in Section 1602-108 of the Act and identified as “LCE” on the Plans are as follows:

i. The garages shown on the Plans, which are numbered on the Plans to correspond to the Unit to which such driveways are allocated, are Limited Common Elements allocated to such Unit.

- ii. The driveways and walkways shown on the Plans, which are numbered on the Plans to correspond to the Unit(s) to which such driveways and walkways are allocated, are Limited Common Elements allocated to such Unit(s).
 - iii. The individual mailboxes shown on the Plans, which are numbered on the Plans to correspond to the Unit to which such mailboxes are allocated, are Limited Common Elements allocated to such Unit.
 - iv. Any heating, ventilation and air conditioning and water heating equipment, fixtures, ducts, pipes and other improvements serving any single Unit are Limited Common Elements allocated to such Unit served.
- (b) The Condominium is served by a common well(s) and common septic system(s), all fees and costs for which shall be billed to the Condominium on one or more accounts in the Board's discretion and billed as common expenses. All well and septic system components serving the Premises (inclusive of components situated within and outside the boundaries of the Premises) are Common Elements of the Condominium until such point as they intersect with the common well(s) or septic system(s). Separate services are provided for electricity, telephone, natural gas and/or propane, and cable television and telecommunications, and the meters, equipment and fixtures relating thereto shall be Limited Common Elements allocated to the Unit(s) served.
- (c) Except as indicated otherwise on the Plans, and except as otherwise expressly set forth herein, the land, with the benefit of and subject to all easements, covenants, agreements, and restrictions of record as of the date hereof, all exterior elements, including without limitation, the entryways, the parking lot, entry steps and landings, doors, windows and storm windows and their frames, sills and thresholds, roofs, floor joists and pilings, foundation, ceiling joists, rafters, and siding, all attic space, and all other parts of the Premises necessary or convenient to its existence, maintenance and safety or normally in common use, except as otherwise expressly provided in this Declaration, are Common Elements of the Condominium. Some portions of the Common Elements are allocated to the exclusive use of a Unit owner or Units owners as Limited Common Elements as provided in subsection (a) above or elsewhere in this Declaration.

ARTICLE IV

Easements; Development Rights; Special Declarant Rights; Special Provisions Applicable to Unit 1

Section 4.1 Easements In addition to the easements created by Section 1602-114 of the Act, each Unit and Common Element shall have an easement for lateral and subjacent support from every other Unit and Common Element.

Section 4.2. Declarant Control Period The Declarant Control Period shall be the period of time commencing as of the date of recording of the first deed from the Declarant to a purchaser of a Unit in the Condominium until the date upon which Declarant has

conveyed one hundred percent (100%) of the units that Declarant is allowed to create under this Declaration. Upon the expiration of the Declarant Control Period as aforesaid, all Declarant's rights and obligations hereunder shall automatically transfer to the Association without further act or instrument.

Section 4.3. Ingress & Egress The Association shall adopt no rule or regulation which impedes, prohibits, or unreasonably limits access to any Unit from a Common Element.

Section 4.4. Common Element Association & Board Access The Declarant reserves in favor of the Association and its Board, officers, agents, employees, and the managing agent (if any), and every other person authorized by the Board the irrevocable right and easement to have access to each Unit as may be necessary for the inspection, maintenance, repair, or replacement of any of the Common Elements therein or accessible therefrom or the making of any addition or improvements thereto; or the making of repairs as are reasonably necessary for safety purposes or to prevent damage to any other Unit or Units or the Common Elements; or the abating of any violation of law, orders, rules or regulations of the Association or of any governmental authorities having jurisdiction thereof. In case of an emergency, such right of entry shall be immediate, whether or not the Unit owner or Occupant (as that term is defined in Article IX) is present at the time. In the event of an emergency, the Board may, in its sole discretion, bar access to any portion of the Condominium, including access to the Units by Unit owners or Occupants.

Section 4.5 Development Rights. The Declarant reserves for the benefit of itself and its successors and assigns, the following development rights: to convert Common Elements into Units, to convert Units into Common Elements, to relocate Unit boundaries of unsold Units from those shown on the Plans and to modify or relocate Common Elements in connection therewith (provided that no such modification or relocation shall be undertaken in such a manner so as to permanently deprive any Unit of access or utilities). The real estate subject to the development rights is the Premises. The Declarant agrees that improvements constructed by Declarant in the exercise of its development rights will be generally compatible with the architectural style and quality of construction of other improvements in the Condominium. The development rights must be exercised within twenty (20) years from the date of recording of this Declaration in the Registry of Deeds provided that the Declarant Control Period as permitted by Section 1603-103(d) of the Act, and as reserved in Section 4.2 above, shall terminate in accordance with the provisions thereof. For purposes of this Section, development rights shall be deemed to be exercised at such time as this Declaration is amended to reflect the exercise of development rights and the amendment is recorded in the Registry, if such exercise requires an amendment to this Declaration.

Section 4.6 Special Declarant Rights. In addition to the Declarant Control Period as set forth in Section 4.2 above, the Declarant reserves, in favor of itself and any successor declarant, the following Special Declarant Rights with respect to the Condominium until the construction of Units, Common Elements and Limited Common Elements are complete and the marketing and sale of all Units are complete:

A. To construct the Units, Common Elements and Limited Common Elements in accordance with this Declaration and the Plans;

B. To locate and relocate in the Premises, even though not depicted on the Plans, and grant and reserve easements for the installation, maintenance, repair, replacement and inspection of utility lines, wires, pipes, conduits and facilities servicing the Premises including but not limited to water, septic, electric, telephone, cable television and other communications, natural gas, propane, and security system and transformers, meters and other equipment related thereto, provided that no such easement shall be effective until duly recorded in the Registry, that no such easements may be granted through Units sold by Declarant to third parties without such Unit owner's consent, which consent shall not be unreasonably withheld, conditioned or delayed, and that the Common Elements and Limited Common Elements promptly shall be restored upon installation and repair of such utility lines;

C. To connect with and make use of utility lines, wires, pipes and conduits located on the Premises for construction and sales purposes, provided that the Declarant shall be responsible for the cost of services so used;

D. To use the Common Elements for ingress and egress, for the alteration, repair and construction of Units, Common Elements and Limited Common Elements, including without limitation the movement and temporary storage of construction materials and equipment and ingress and egress by construction workers, along with the materials, tools and equipment used by such workers, and to generate noise and dust in connection with Declarant's construction activities, which noise and dust shall be deemed not to be a nuisance; and

E. To use the Common Elements and Limited Common Elements for the ingress and egress for itself, its officers, employees, agents, contractors and subcontractors and for prospective purchasers of Units; to use any Units owned or leased by the Declarant as models, management offices, sales offices for its project or customer service offices and to relocate the same from time to time within the Premises; to maintain on both the interior and exterior of the Premises such advertising and marketing signs as may comply with applicable governmental regulations, which may be placed in any location on the Premises and may be relocated or removed, all at the sole discretion of the Declarant; and

F. To sell the Units in the Condominium without the consent of the other Unit owners.

ARTICLE V

Amendment to Condominium Instruments During Declarant Control Period; Required Consent

Section 5.1. Amendments Any amendment to this Declaration requires approval from at least eighty percent (80%) of the allocated interests of Unit owners as set forth in Section 18, except that during the Declarant Control Period, no amendment that eliminates or modifies rights reserved to the Declarant shall be effective unless Declarant approves such amendment in writing. No amendment of the Declaration may be made without the prior written approval of the required percentage of Eligible Mortgage Holders where such approval is required by this Declaration or by the Act.

ARTICLE VI

Fraction of Common Element Interests, Voting Rights, and Common Expense Liabilities

Section 6.1 Allocated Interests; Voting Rights The fraction of undivided interest in the Common Elements, voting rights and common expense liabilities appertaining to each Unit is set forth at Schedule B attached hereto and incorporated herein by reference. Such undivided interests are an approximately equal (with rounding to equal 100%) prorata allocation based on the number of Units, which is the methodology that shall be used to reallocate the undivided interests in the event that the Development Right to create an additional Unit is exercised. Except in connection with the exercise of a Development Right, no fraction of undivided interest allocated to any Unit shall be altered except upon the unanimous vote of all Unit owners and the required percentage of Eligible Mortgage Holders.

ARTICLE VII

Encroachments

Section 7.1. Encroachments If any portion of the Common Elements, or any other Unit, encroaches at any time upon any Unit or upon any portion of the Common Elements, as a result of minor variations of the actual improvements from those shown on the Plans, settling of the building, alteration or repair to the Common Elements made by or with the consent of the Board, repair or restoration of a Unit or any building after damage by fire or other casualty or as a result of condemnation or other eminent domain proceedings, an easement shall exist for the encroachment and for its maintenance so long as the building stands.

ARTICLE VIII

Eminent Domain

Section 8.1. Payment of Eminent Domain Award If a Unit is acquired by eminent domain, or if a part of a Unit is acquired by eminent domain leaving the Unit owner with a remnant that may not practically or lawfully be used for any purpose permitted by this Declaration, any award therefor shall be paid to the Unit owner as compensation for his or her Unit and its allocated interest, whether or not any allocated interest is acquired.

Upon condemnation acquisition, unless the decree otherwise provides, that Unit's entire allocated interest, votes in the Association, and common expense liability shall be re-allocated to the remaining Units in proportion to the respective interests, votes and liabilities of those Units before the taking, and the Association shall promptly prepare, execute and record an amendment to this Declaration reflecting the reallocations. Any remnant of a Unit remaining after part of a Unit is taken under this Section 8.1 shall be thereafter a Common Element.

Section 8.2. Effect on Allocated Interests Except as provided in Section 8.1 hereinabove, if part of a Unit is acquired by eminent domain, any award therefor shall be paid to the Unit owner as compensation for the reduction in value of that Unit and that Unit's allocation of Common Element interest and Common Expense liability shall remain unchanged.

Section 8.3. Condemnation of Common Elements If a part of the Common Elements is acquired by eminent domain, the Association shall represent the Unit owners in any condemnation proceedings or in negotiations, settlements and agreements with the condemning authority and the award shall be paid to the Association for the use and benefit of the Unit owners and their mortgagees as their interests may appear. The Association shall divide any portion of the award not used for any restoration or repair of the remaining Common Elements among the Unit owners in proportion to their respective allocated interest before the taking, but the portion of the award attributable to the acquisition of a Limited Common Element must be equally divided among the owners of the Units to which that Limited Common Element was allocated at the time of acquisition.

Section 8.4. Priority Nothing in this Declaration, the Bylaws, or the rules and regulations of the Association shall be deemed to give the Unit owner or any other party priority over any rights of a first mortgagee of a Unit pursuant to its mortgage documents in the case of a distribution to such Unit owner of condemnation awards for the taking of Units and/or Common Elements.

ARTICLE IX

Restrictions on Use & Occupancy; Services

Section 9.1. Compliance with Bylaws and Use and Occupancy Restrictions Each Unit owner shall comply strictly with the Bylaws and with the rules and regulations adopted by the Board, with the covenants, conditions and restrictions set forth in this Declaration and with the Act. Failure to so comply shall be grounds for an action to recover damages or for injunctive relief or both maintainable by the Board on behalf of the Association or by an aggrieved Unit owner. An aggrieved Unit owner shall have a right of action against the Association for failure to comply with or to enforce this Declaration, the Bylaws, any rules and regulations duly adopted or any requirements imposed by the Act.

Section 9.2. Use Restrictions and Association Services

- (a) The Units shall be used only for residential purposes, except that such restriction shall not prohibit the use of Units as home offices provided that such use complies with applicable zoning or land-use ordinances.
- (b) No Unit owner: (i) shall permit or suffer anything to be done or kept upon the Condominium which will materially increase the rate of insurance on the Condominium or on the contents thereof; (ii) shall obstruct or interfere with the rights of Unit owners or Occupants or annoy them by unreasonable noise or otherwise; (iii) shall commit or permit any nuisance or commit or suffer any immoral or illegal act to be performed anywhere in or upon the Condominium; and/or (iv) shall cause or permit any noxious odors to emanate from any portion of the Condominium.
- (c) All leases of Units must be in writing. No Unit shall be rented for transient or hotel purposes or in any event for an initial term of less than six (6) months. The written lease of any Unit must: (a) require the lessee to comply with this Declaration, the Bylaws and any rules and regulations of the Association; (b) provide that failure to comply therewith constitutes a default under the lease; and (c) provide that the Association has the power to terminate the lease and to bring summary proceedings to evict the lessee in the name of the lessor thereunder after thirty (30) days prior written notice to the Unit owner, in the event of a default by the lessee in the performance of the lease. Each Unit owner, promptly following the execution of any lease of a Unit, shall forward a conformed copy thereof to the Association.
- (d) The Association shall be responsible for providing the following services, in addition to others provided in this Declaration, the expenditures for which shall be a Common Expense: the provision of water and septic service to the Units; waste removal; snow plowing and snow removal from common sidewalks, drives, and parking areas (provided, however, that each Unit owner shall be responsible for the removal of snow and ice from their own driveways and walkways at its own cost and expense); landscaping and groundskeeping; lighting drive areas and Common Elements. Any of the foregoing services may be contracted for by the property manager with the cost of such services to be billed as common expenses.
- (e) No Unit owner or his or her family, guests, tenants, invitees, employees, agents or contractors (together, "Occupant" or "Occupants") shall place or store any personal property or other items on the Common Elements of the Condominium, except to the extent allowed by decision of the Board. All Unit owners shall also take appropriate care not to leave rubbish, debris, or waste on any portion of the Common Elements at any time. No Unit

owner shall hang or install political or promotional signs in or on the windows of his or her Unit or on the Common Elements or Limited Common Elements.

- (f) The keeping, boarding and/or raising of animals, laboratory animals, livestock, poultry, or reptiles of any kind, regardless of number, shall be and is prohibited within any Unit or upon the Common Elements, except that the keeping of dogs, cats, caged birds, or aquarium fish is permitted subject to regulation by the Board. All pets and animals shall be kept so as to not be bothersome or offensive to the Unit owners or Occupants, and pets and animals shall not be permitted on the Common Elements, except being restrained and under the immediate supervision of a responsible person. The Unit owner is responsible for the cleanup of the pet's excrement and for the cost to repair any damage to the Common Elements or another Unit caused by the pet. The Board shall have the power to further regulate pets and animals under the rules and regulations of the Association as promulgated or amended from time to time, including without limitation, the express power to establish additional behavior requirements, breed restrictions, and weight limits, and to expel any offending pets and animals from the Premises. Notwithstanding the foregoing, dogs that qualify as service animals shall not be prohibited from the Premises.
- (g) No Unit owner shall play or permit to be played any musical instrument or operate or permit to be operated a stereo system, television, or other electronic or mechanical, sound-producing machinery, appliance or device inside or outside his or her Unit between the hours of 11:00 p.m. and 8:00 a.m. if such playing or operation shall disturb or annoy the Unit owner or Occupants of any other Unit.

Section 9.3. Rules & Regulations Reasonable rules and regulations, not in conflict with the provisions of this Declaration, for the general welfare of Unit owners and Occupants concerning the use and enjoyment of the Common Elements or the occupancy of Units, may be promulgated from time to time by the Board. Copies of any rules and regulations adopted and any amendments thereto promptly shall be provided to the Unit owners by the Board. The Board shall consistently and uniformly enforce the rules and regulations.

Section 9.4. Waste Disposal Each Unit owner shall be responsible for removing its own trash, garbage, recycling and other waste generated by or in its Unit to such location on the Premises as the Board shall determine for regular pickup by a private waste service company or companies to be engaged by the Board with the cost of such service to be billed to the Unit owners as a Common Expense.

Section 9.5. Electrical Wiring No member shall overload the electrical wiring in any Unit or operate any machinery, appliances, accessories or equipment in such a manner as to cause, in the reasonable judgment of the Board, any unreasonable disturbance,

annoyance or risk, or make any alterations, repairs or modifications to or connections with the electrical or plumbing systems that involves hard wiring or plumbing into such systems, without the prior written consent of the Board.

Section 9.6. Structural Changes No member shall make structural alteration to or within the Unit or any changes to the Common Elements without the written approval of the Board. Non-structural alteration are permitted so long as they are made within the Unit and so long as such alterations do not unreasonably disturb other Unit owners or Occupants and are performed in compliance with any rules and regulations imposed by the Board.

Section 9.7. Restriction Against Changes to Exterior Appearance No member shall make changes in exterior of the Unit, other than replacement of window glass, without the approval of the Board.

ARTICLE X

Common Expenses

Section 10.1. Common Expenses Except as expressly provided in this Declaration or the Act, each Unit owner shall pay to the Association, or its authorized representative, his or her proportionate share of the budgeted expenses of maintenance, repair, replacement, administration and operation of the Common Elements; management of the Condominium, including property management fees; groundskeeping; snow and ice removal from Common Elements; insurance premiums; real estate taxes and assessments; water and septic charges; waste removal; and maintenance of adequate working capital and capital repair and replacement reserves, which expenses are hereinafter referred to collectively as “common expenses.” Such proportionate share shall be in the same ratio as said Unit owner’s percentage of ownership in the Common Elements, as indicated on Schedule B attached hereto. Each Unit owner shall also pay to the Association, or its authorized representative, his or her share of the budgeted expenses of maintenance, repair, and replacement of all of the Limited Common Elements associated with his or her Unit, which payments may be assessed by the Board in a lump sum or in monthly installments.

Section 10.2. Failure to Pay Common Expenses or Charges In the event of the failure of a Unit owner to pay common expenses when due, the amount thereof together with a late fee equal to five percent (5.0%) of the amount due and default interest at the greater of (i) 18% per annum and (ii) the highest amount permitted by law, or at such other fees or rates established by the Board, costs and reasonable attorney’s fees incurred in collection (whether or not an action is commenced) shall constitute a lien on the Unit, as provided by the Act, which lien may be foreclosed in like manner as a mortgage on real estate. The recordation of this Declaration constitutes record notice of the lien. The lien for unpaid common expenses, however, shall be subordinate to the lien of the recorded first mortgage on Unit, and the foreclosure of such mortgage, sale or transfer pursuant to foreclosure or transfer to mortgagee in lieu of foreclosure shall extinguish the subordinate

lien for common expenses. Such foreclosure shall not release the delinquent Unit owner from personal liability to the Association for unpaid common expenses.

In addition to the foregoing, the Association shall have the power to separately charge a Unit and the owner thereof for services rendered to that Unit, and interest and costs of collection in connection with service charges, and for fines assessed against a Unit owner for violation of this Declaration, the Bylaws and the rules and regulations of the Association. Such charges and fines shall be a lien on the Unit with the same status as a lien for common expense assessments under the Act and this Declaration, which lien for service charges may be foreclosed in like manner as a mortgage on real estate. The recordation of this Declaration constitutes record notice of the lien.

Service charges shall include without limitation:

(a) If a Unit owner requests the Association or its agent to perform repair and maintenance work on the Unit other than required of the Association by this Declaration, or the Unit owner or Occupants damage the Common Elements or fail to perform maintenance and repair work required by this Declaration and the Association performs such work, the expense thereof as determined by the Board may be assessed to the Unit owner as a service charge.

(b) Fees, if any, which may be established by the Board for the use and maintenance of the utility services and equipment. The expense of charges for water and septic services and of equipment maintenance and repair and reasonable reserve allowances may also be calculated by the Board in its discretion and assessed in a lump sum or monthly installments as a service charge to each Unit. At the election of the Board, the expense of capital improvements, major repairs or renovations to the water and septic lines may be assessed either as a common expense or as a service charge.

(c) Insurance premiums on permanent improvements to Units installed by Unit owners and insured by the request of the Unit owner with the Association's hazard insurance carrier.

(d) Any increase in fire and other casualty insurance premiums paid by the Association resulting from the activities of Unit owner or Occupants or improvements made by a Unit owner to its Unit.

Multiple owners of a Unit shall each be jointly and severally liable with one another for all unpaid common expense assessments, service charges, interest, penalties and costs of collection during their period of Unit ownership up to the time of the grant or conveyance. A grantee shall not be prevented from exercising any right to recover from the grantor such amounts paid by grantee for those common expenses assessments, service charges, etc. arising prior to the conveyance. A grantee or proposed purchaser under a purchase and sale contract for a Unit may obtain, upon request and the payment of such reasonable fee as may be established from time to time by the Board, a statement from the Association setting forth the amount of unpaid common expense assessments and service charges, interest, penalties and costs of collection against the Unit as of the

date of such statement and containing such other information required by the Act. The grantee shall not be liable for, and the Unit conveyed shall not be subject to a lien for any unpaid amounts due from the grantor before the statement date in excess of the amount set forth in the statement. All regular and special assessments and service charges assessed against a Unit shall be paid without any offset or deduction whatsoever.

Section 10.3 Reserves. The Board may maintain capital repair and replacement reserves for repairs and replacement of those Common Elements which must be replaced on a periodic basis. Any capital replacement reserve shall be funded by reserve contributions that are included in the annual operating budget. The existence of such capital replacement reserve shall not preclude the levy by the Board of a special assessment for the cost of necessary repairs or replacements that exceed the balance of then existing reserves. The Board also shall maintain working capital reserve equal to at least two months' assessments for each existing Unit, which initially shall be partially funded by the payment of two month's assessments by the initial purchasers of Units from Declarant, which payment shall be made by such purchasers to the Association at closing and which payment shall not be credited against regular monthly assessments payable on the Units.

Section 10.4. Access to Common Elements Upon Default Any Unit owner in default in the payment of any amount due the Association or in violation of any provisions of the Act, this Declaration, the Bylaws, or the rules and regulations of the Association, which violation continues for ten (10) days after notice thereof by the Association to the Unit Owner, may be prohibited by the Board from voting on Association or Condominium matters and may be prohibited from the use and enjoyment of any and all of the Common Elements not essential to access the Unit, in addition to all other remedies available to the Board.

ARTICLE XI

Maintenance

Section 11.1. Maintenance Each Unit owner shall furnish and be responsible for, at his or her own expense, all the maintenance, repairs and replacements within his or her own Unit; provided, however, such maintenance, repair and replacements as may be required for the supply of water and septic for the Unit, shall be furnished by the Association as part of the common expenses. Maintenance, repairs and replacements of the electrical or mechanical appliances (including all heating, ventilation and air-conditioning systems) which may be located outside of but serving exclusively the Unit shall be the responsibility of the Association but the cost thereof shall be paid by the Unit owner as a limited common element expense assessment. If due to the negligent act or omission of a Unit owner or of Occupants, damage shall be caused to the Common Elements or to a Unit or Units owned by others, and maintenance, repairs or replacements shall be required which are not covered by insurance and which would otherwise be a common expense, then such Unit owner shall pay for such damage and the maintenance, repairs and replacements, as may be determined by the Board, as a service charge.

Section 11.2. Maintenance of Limited Common Elements The Association shall furnish and be responsible for all the maintenance, repairs and replacements of Limited Common Elements, the cost of such maintenance, repairs and replacements to be paid as a common expense by the Unit(s) to which such Limited Common Elements are allocated.

Section 11.3. Repairs to the Common Elements The Association is responsible for maintenance, repair and replacement of the Common Elements. Each Unit owner shall afford to the Association and the other Unit owners, and to their agents, contractors or employees, access through his or her Unit reasonably necessary for those purposes. If damage is inflicted on the Common Elements or any Unit through which access is taken, the Unit owner responsible for the damage, or the Association if it is responsible, is liable for the prompt repair thereof. If a Unit owner or Occupant causes damage to the Common Elements or another Unit, whether or not the Unit owner or Occupant is negligent in the cause of such damage, the Unit owner shall be responsible for the cost of repairing such damage.

Section 11.4 Property Management Contracts. Any management contract, employment contract and any contract entered into by Declarant which may become binding on the Association shall provide that such contract or lease may be terminated by either party without cause and without payment of a termination fee on not more than ninety (90) days' written notice and the Association may terminate said agreement for cause upon thirty (30) days' written notice without payment of a termination fee.

ARTICLE XII

Association of Unit Owners

Section 12.1. The Association & Executive Board.

(a) Prior to the date of this Declaration and the recording hereof, the Association, a non-profit and non-stock corporation, was duly incorporated under the laws of the State of Maine. The Association shall be the governing body for the Condominium and all of the Unit owners with respect to the operation, administration, maintenance, repair and replacement of the Premises as provided by the Act, this Declaration, in the Bylaws of the Association. The Bylaws may be amended from time to time as provided therein and such amendments need not meet the requirements for amendment to this Declaration and shall not be deemed to be amendments to this Declaration.

(b) During the Declarant Control Period, the Executive Board (the "Board") shall be composed of three (3) directors. During the Declarant Control Period, the directors of the Board may be appointed, removed and replaced from time to time by the Declarant without the necessity of obtaining resignations. Upon the expiration of the Declarant Control Period, the Board shall be composed of five (5) directors, who shall be appointed by vote of the Unit owners.

(c) The Board shall possess all of the duties and powers granted to the Board by the Act, and in addition shall have the specific requirement of yearly preparation and approval of an Association budget for operating and maintenance expenditures and capital improvements. The proposed budget approved by the Board shall be adopted unless rejected by the vote of at least two-thirds in interest of the Unit owners. The Board shall have the power and authority to assess common expenses benefitting fewer than all of the Units to the Units benefitted. The Board and Association also shall have the power and authority to borrow money for purposes of capital repairs and replacements to the Condominium and to pledge the future income of the Association as collateral for the loan.

Section 12.2. Membership in the Association Each Unit owner and/or owners shall be a member of the Association. Membership shall be appurtenant to a Unit, and the transfer of title to a Unit automatically shall transfer the membership appurtenant to that Unit to the transferee(s). The grant of an interest in a Unit by mortgage or other lien, however, shall not transfer membership until foreclosure or sale in lieu of foreclosure.

Section 12.3. Covenants Running with the Land The provisions of this Declaration and the rights and obligations established thereby shall be deemed to be covenants running with the land, so long as the Premises remain subject to the provisions of the Act, and shall inure to the benefit of and be binding upon each and all of the Unit owners and their respective heirs, representatives, successors, assigns, purchasers, lessees, grantees and mortgagees.

Section 12.4. Delivery of Condominium Documents The Association shall make available to Unit owners and Eligible Mortgage Holders current copies of the Declaration, Bylaws and rules and regulations governing the Condominium, and other books, records and financial statements of the Association, all as required by the Act. This requirement may be satisfied by making the documents available for inspection upon request during normal business hours or under other reasonable circumstances.

ARTICLE XIII

Separate Taxation and Utilities

Section 13.1. Separate Taxation It is understood that real estate taxes are to be separately taxed to each Unit owner for his or her Unit and his or her corresponding percentage of ownership in the Common Elements, as provided in the Act. In the event that for any year such taxes are not separately taxed to each Unit owner, but are taxed on the Premises as a whole or greater than single Units, then each Unit Owner shall pay his or her proportionate share thereof in accordance with his or her respective percentage allocated interest in the Common Elements.

Section 13.2. Utilities Each Unit owner shall pay for his or her own telephone, telecommunications, electricity, natural gas and/or propane, and other utilities which are separately metered or billed to each user by the respective utility company.

Notwithstanding anything herein to the contrary, utilities which are not separately metered or billed to Units shall be treated as part of the common expenses.

ARTICLE XIV

Insurance and Related Matters

Section 14.1. Insurance (a) The Association shall obtain and maintain in effect a broad “special form” insurance policy covering direct physical loss to the Premises with extended coverage, vandalism, malicious mischief, windstorm, debris removal, cost of demolition and water damage endorsements, issued by an insurance company authorized to do business in the State of Maine (which company shall also meet the ratings requirements of the Federal National Mortgage Association), insuring as a single entity the entire Premises including the Common Elements, the Limited common Elements, the Units as originally constructed by Declarant, and the fixtures, supplies and common personal property belonging to the Association, *excepting* the land, foundations, excavations, and other similar items customarily excluded from property insurance policies and also *excepting* furniture, furnishings or other personal property supplied or installed by Unit owners. The policy shall cover the interests of and name as insureds the Association, the Board, and all Unit owners and their mortgagees as their insurable interests may appear.

Such blanket or master insurance policy shall be in an amount equal to one hundred percent (100%) of the then current replacement cost of the insured Premises (exclusive of the land, excavations, foundations and other similar items customarily excluded from such coverage), without deduction for depreciation, together with coverage for the payment of common expenses with respect to damaged Units during the period of reconstruction. Such insurance policy may, at the option of the Board, contain such deductible as the Board shall deem appropriate but not to exceed the lesser of \$10,000 or one (1) percent of the policy’s face amount. Unless otherwise established by the Board from time to time, a Unit owner shall pay the expense of repair of damage to his or her Unit, or any other Unit(s) damaged by the Unit owner’s negligence or breach of this Declaration notwithstanding that the Association’s insurance shall be primary, in the amount not covered by the insurance (e.g., the deductible). Such casualty insurance policy shall also include the following provisions:

- (1) The following endorsements or their equivalent: (a) “no control,” meaning that coverage shall not be prejudiced by any act or neglect of any Occupant or Unit owner or their agents, when such act or neglect is not within the control of the insured, or the Unit owners collectively, nor by any failure of the insured, or the Unit owners collectively, to comply with any warranty or condition with regard to any portion of the Condominium over which the insured, or the Unit owners collectively, have no control; (b) “Construction Code Endorsement” or “increased cost of construction,” (c) “agreed amount” or elimination of co-insurance clause; and (d) “inflation guard,” when it can be obtained;

- (2) That any “no other insurance” clause shall expressly exclude individual Unit owners’ policies from its operation, so that the property damage policy purchased by the Board shall be deemed primary coverage and any individual Unit owners’ property damage policies shall be deemed excess coverage, and in no event shall the insurance coverage obtained and maintained by the Board hereunder provide for or be brought into contribution with property insurance purchased by individual Unit owners or their mortgagees; and
- (3) The recognition of any Insurance Trust Agreement whereby the Board may designate in writing an Insurance Trustee to hold any insurance proceeds in trust for disbursement, as provided under the Act.

The policies shall require the insurer to notify in writing the Board and each Eligible Mortgage Holder named in the mortgagee clause at least twenty (20) days before it cancels or substantially changes the Premises’ coverage.

(b) The Board shall obtain comprehensive public liability insurance in such amounts as it shall deem desirable, insuring each Unit owner and the Association, the Board and managing agent, if any, from liability in connection with the Common Elements. Such policy shall provide coverage of at least \$1,000,000.00 for bodily injury and Premises damage for any single occurrence resulting from the operation, maintenance or use of the Common Elements, and coverage for any legal liability resulting from lawsuits related to employment contracts in which the Association is a party. Such policy shall provide for at least twenty (20) days written notice to the Board and to each Eligible Mortgage Holder before the insurer can cancel or substantially modify the insurance coverage. Also, the Board shall have authority to purchase insurance to indemnify the Board and Officers for losses in managing the Association’s affairs.

(c) The premiums for all the aforementioned insurance coverage shall be a common expense. Each Unit owner, at his or her own cost, shall be responsible for his or her own insurance on the contents of his or her own Unit and his or her additions and improvement thereto and decorations, floor coverings, wall coverings, appliances, furnishings, personal property therein and stored elsewhere on the Premises, and his or her personal liability to the extent not covered by the liability insurance provided by the Association. The Association will not maintain insurance on the personal property of Unit owners, no matter where located on the Condominium. AS SUCH, UNIT OWNERS ARE STRONGLY ENCOURAGED TO OBTAIN AND MAINTAIN ADEQUATE INSURANCE ON THEIR PERSONAL PROPERTY.

ARTICLE XV

Mortgagee Provisions

Section 15.1. Eligible Mortgage Holders Any holder of record of a recorded first Mortgage encumbering a Unit in the Condominium which has delivered written notice to the Association by prepaid United States Mail, return receipt requested, or by delivery in hand securing a receipt therefor, stating the name and address of the said holder of the Mortgage, the name and address of the Owner of the Unit encumbered by such Mortgage, the identifying number of such Unit, and containing a statement that such Mortgage is a recorded first Mortgage shall become an Eligible Mortgage Holder for purposes of this Declaration.

Section 15.2. Notices of Default to Eligible Mortgage Holders The Board, when giving notice to a Unit owner of a default in paying common expense assessments or other violation of the provisions of this Declaration, the Bylaws or rules and regulations, may send a copy of such notice to each Eligible Mortgage Holder.

Section 15.3. Additional Eligible Mortgage Holder and Mortgagee Rights Notwithstanding anything to the contrary elsewhere contained in this Declaration or Bylaws, the following provisions shall govern in the case of Eligible Mortgage Holder rights:

- (a) Any Eligible Mortgage Holder will, upon request, be entitled to inspect the books and records of the Association during normal business hours.
- (b) No provision of this Declaration or of the Bylaws shall be deemed or construed to give a Unit owner, or any other party, priority over any rights of first mortgagees of Units pursuant to their mortgages in the case of a distribution to the Unit owners of insurance proceeds or condemnation awards for losses to or a taking of Units and/or Common Elements.
- (c) A first mortgagee of a Unit who requests to the Board in writing shall be entitled to prompt written notification from the Board of (i) any default by the Unit owner in the performance of such Unit owner's obligations under this Declaration and/or the Bylaws, which is not cured within thirty (30) days; (ii) any event of substantial destruction to, or condemnation or governmental taking of, such Unit or any portion of the Common Elements appurtenant thereto; (iii) any lapse or modification of insurance coverage; (iv) any proposed action of which an eligible mortgage holder is entitled to notice under Section 1602-119(b) of the Act.
- (d) Any first mortgagee of a Unit who obtains title to the Unit pursuant to the remedies provided in the mortgage, or through foreclosure of the mortgage, or through deed in lieu of foreclosure, shall take the Unit free of any claims for unpaid assessments or charges against such Unit which accrue prior to the acquisition of title to such Unit by the mortgagee, but the foregoing shall not preclude the Association from collecting such deficiency in operating expenses from Unit owners in the future, whether by regular or special

assessment or for liability for assessments after foreclosure or deed in lieu of foreclosure.

ARTICLE XVI

Method of Amending Declaration

Section 16.1. Amendments Except to the extent expressly permitted or required by the Act, this Declaration may be amended by a vote or by written approval of the Unit owners of Units to which at least eighty percent (80%) of the votes in the Association are allocated and written approval from the required percentage of Eligible Mortgage Holders.

Section 16.2. Unanimous Votes Required Regardless of any amendment hereto or revision of the Act that may provide otherwise, unanimous consent of all Unit owners and the written approval of the required percentage of Eligible Mortgage Holders shall be required for any amendment that would:

- (a) Seek to terminate the legal status of the Premises as a condominium for reasons other than substantial destruction or condemnation of the Premises;
- (b) Change the pro rata interest, common expenses payment obligations or other obligations or voting rights of any Unit;
- (c) Abandon, partition, subdivide, encumber, sell or transfer the Common Elements. The granting of easements for public utilities or for other purposes consistent with the intended use of the Common Elements by the Condominium shall not be deemed a transfer within the meaning of this clause;
- (d) Use hazard insurance proceeds from losses to the Premises (whether to Units or to Common Elements) for other than repair, replacement or reconstruction of such improvements, except as provided by this Declaration or the Act in case of substantial destruction of the Condominium.

Section 16.3. Special Amendments. Notwithstanding the foregoing, this Declaration may also be amended by special amendment as follows: The Declarant, without the consent of any Unit owner or mortgagee, may execute and record, as long as it owns any Units or holds any Special Declarant Rights, amendments in order to (i) correct any errors and/or omissions in this Declaration, provided no such correcting amendment shall materially and adversely affect the rights of any Unit owner or mortgagee; or (ii) to make this Declaration comply with the provisions of the Maine Condominium Act, any other law, code, permit or approval, or the requirements or guidelines of the Federal National

Mortgage Association (“FNMA”), the Federal Home Loan Mortgage Corporation (“FHLMC”) or any other insurer or guarantor of Unit Mortgages.

ARTICLE XVII

Removal from the Condominium Act

Section 17.1 Termination of the Condominium. The submission of the Premises to the Act herein shall not be terminated unless (i) and (ii) the required percentage of the Eligible Mortgage Holders, shall agree to such revocation or removal of the Premises from the provisions of the Act, their agreement to be established by written instrument duly recorded.

Section 17.2 Ownership upon Termination. Upon removal of the Premises from the Act, the Unit owners shall hold the Premises and any proceeds thereof as tenants in common in accordance with the Act, with any mortgages or liens affecting a Unit to attach in order of priority against the resulting common ownership interest. Removal of the Premises from the Act shall not bar the subsequent re-submission of the Premises to the Act.

ARTICLE XVIII

Miscellaneous

Section 18.1. Remedies All rights, remedies, and privileges granted to the Declarant, the Association or a Unit owner pursuant to the terms of this Declaration, the Bylaws, and the rules and regulations shall be deemed to be cumulative to any other right or remedy under said documents or afforded by law or equity.

Section 18.2 Conflict. In the event of any conflict or discrepancy between this Declaration, the Bylaws and the Plans, this Declaration shall govern. If any provision of this Declaration, the Bylaws or the rules and regulations be in conflict with any applicable laws, including the Act, then such laws shall control and such invalid provision shall be of no force and effect, but the validity of the remainder of this Declaration, the Bylaws and rules and regulations shall not be affected thereby and shall remain in full force and effect as if such invalid provision had not been included. A provision in this Declaration which is permissible under the Act shall not be considered to be inconsistent with the Act.

Section 18.3 Captions. The captions herein are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Declaration or the intent of any provisions hereof.

Section 18.4 Context. The use of the singular number in this Declaration shall be deemed to include the plural, the plural the singular, and the use of any one gender shall be deemed applicable to all genders and gender identities.

Section 18.5 No Waiver. No provision contained in this Declaration shall be deemed to have been abrogated or waived by reason of any failure to enforce the same irrespective of the number of violations or breaches that may occur or the duration of such breach.

Section 18.6 Invalidity. If any term, covenant, provision, phrase or other element of this Declaration, the Bylaws, or the rules and regulations of the Association is held to be invalid or unenforceable for any reason whatsoever, such holdings shall not affect, alter, modify, or impair in any manner, any other term, covenant or provision, phrase or other element of such documents.

Section 18.7 Dispute Resolution. Except as provided in this Declaration, the Association and/or any aggrieved Unit owner shall have a right of action against any other Unit owner who fails to comply with this Declaration, the Bylaws, the rules and regulations issued by the Association or a decision of the Association.

Section 18.8 Notice. Any notice required or given pursuant to this Declaration to the Association or to any Unit owner may be delivered to any Association director or officer or to such Unit owner respectively either by sending it to the Unit or the Registered Agent for the Association by first-class United States mail, postage prepaid, or by delivering it to the Unit by hand, or as otherwise permitted by the Bylaws.

[SIGNATURE APPEARS ON FOLLOWING PAGE]

IN WITNESS WHEREOF, SVR LLC, as Declarant, has caused this Declaration to be executed and ensealed by its duly authorized agent as of this _____ day of _____, 2022.

WITNESS

SVR LLC

By: _____

Print Name:

Its:

STATE OF MAINE

COUNTY OF CUMBERLAND, ss.

_____, 2022

Then personally appeared before me the above-named _____, duly authorized _____ of SVR LLC, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of SVR LLC.

Print Name:

Notary Public/Attorney at Law

My Commission Expires: _____

SCHEDULE A

[DESCRIPTION OF PREMISES]

A certain lot or parcel of land, with the buildings and improvements thereon, situated on the westerly side of Old Gray Road in the Town of Cumberland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a point on the westerly sideline of Old Gray Road at the northeasterly corner of land now or formerly of Amanda J. Snow and Shane S. Williams as described in a deed recorded at the Cumberland County Registry of Deeds (CCRD) in Book 35394, Page 262, bearing S 76°07'52" E, a distance of 0/68 feet from a 5/8-inch iron rod found 4 inches above grade with a cap marked "BRB INC PLS 1313";

Thence N 76°07'52" W, along and now or formerly of Amanda J. Snow & Shane S. Williams, a distance of 551.58 feet to land now or formerly of the Maine Turnpike Authority as described in a deed recorded at the CCRD in Book 3311, Page 24;

Thence N 11°47'06" W, along land now or formerly of the Maine Turnpike Authority, a distance of 234.00 feet;

Thence N 68°24'54: E, along land now or formerly of Karl C. & Eleanor Nielsen, a distance of 437.45 feet to an iron road to be set at the westerly sideline of Old Gray Road;

Thence S 13°56'35" W, along Old Gray Road, a distance of 524.91 feet to the Point of Beginning.

Basis of bearing is Grid North, Maine State Plan Coordinate System West Zone 1802, NAD83. Iron roads to be set are 5/8-inch rebar with identification caps marked "STI PLS 2513 LLS 1003".

Reference is made to a plan titled "Lot Division Plan of Nielsen Property, 246 Gray Road, Cumberland, ME, for Envy Construction, 28 Stone Ridge Road, Falmouth, ME 04105" dated April 7, 2021 and revised through May 18, 2021 by Sebago Technics, Inc., Project Number 20551.

Being all of the same premises described in deed from Karl C. Nielsen and Eleanor A. Nielsen to SVR LLC dated September 24, 2021 and recorded in the CCRD.

SUBJECT TO the following restrictions contained in such deed:

- (1) There shall be no divisions of the above-described premises for a period of five (5) years from September 24, 2021 without prior approval by the Town of Cumberland.

- (2) A tree line buffer to be planted by SVR LLC for the benefit of Nielsen's remaining land, as follows: On or before the substantial completion of construction of a dwelling on the above-described premises by SVR LLC, SVR LLC, at its own expense, shall plant trees of consistent variety along the division line between the above-described premises and the remaining land of Nielsen as needed to provide a dense tree buffer, the distance and spacing to be determined by the type of trees planted.

FURTHER SUBJECT TO AND WITH THE BENEFIT OF all other easements, covenants, restrictions, and matters of record affecting the above-described premises.

SCHEDULE B

[ARCHITECTURAL PLAN SET]

FORTHCOMING

SCHEDULE C

[ALLOCATION OF UNDIVIDED INTEREST IN COMMON ELEMENTS, VOTING
RIGHTS, AND COMMON EXPENSE LIABILITY APPERTAINING TO EACH
UNIT]

Unit 1A	10%
Unit 1B	10%
Unit 2A	10%
Unit 2B	10%
Unit 3A	10%
Unit 3B	10%
Unit 4A	10%
Unit 4B	10%
Unit 5A	10%
Unit 5B	10%

TOTAL:	100%
--------	------

Exhibit 11

Lighting

Exhibit 11

Lighting

Attached is the fixture cut sheets for the proposed lights on the development submitted by Swaney Electric.



Date: Mar 3, 2022

Swaney Lighting
PO Box 1597
Scarborough ME 04070
Phone: (207) 883-7100
Fax: (207) 885-9606

Job Name
CUMBERLAND CONDOS
SLA22-51387
CUMBERLAND ME

Bid Date
Mar 2, 2022

Submittal Date
Mar 3, 2022



Transmittal

Swaney Lighting

PO Box 1597

Scarborough ME 04070

Phone: (207) 883-7100

From: Therese "TC" Freeman X-103

Project CUMBERLAND CONDOS

Quote# SLA22-51387

Location CUMBERLAND ME

Contact:


ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- | | | |
|-----------------------------------|--|--------|
| <input type="checkbox"/> Drawings | <input type="checkbox"/> Specifications | Other: |
| <input type="checkbox"/> Prints | <input type="checkbox"/> Information | |
| <input type="checkbox"/> Plans | <input checked="" type="checkbox"/> Submittals | |

THESE ARE TRANSMITTED FOR:

- | | | |
|--|---|---------------------------------|
| <input type="checkbox"/> Prior Approval | <input type="checkbox"/> Resubmittal for Approval | <input type="checkbox"/> Record |
| <input checked="" type="checkbox"/> Approval | <input type="checkbox"/> Corrections | Bids due on: |
| <input type="checkbox"/> Approval as Submitted | <input type="checkbox"/> Your Use | Other: |
| <input type="checkbox"/> Approval as Noted | <input type="checkbox"/> Review and Comment | |

Type	MFG	Part
A3	BEACON PRODUCTS	VP-1-160L-100-3K7-3-UNV-A-***
A3	BEACON PRODUCTS	SSSB20-40A-1-B3-***
	Item Note: QUOTING 20FT POLE ON FLUSH BASE	
A4	BEACON PRODUCTS	VP-1-160L-115-3K7-4W-UNV-A-***
A4	BEACON PRODUCTS	SSSB20-40A-1-B3-***
	Item Note: QUOTING 20FT POLE ON FLUSH BASE	

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

MICROSTRIKE | OPTICS STRIKE



FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, wiSCAPE and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles.
- All mounting hardware included

INSTALLATION (CONTINUED)

- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater than 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard

CONTROLS (CONTINUED)

- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration


CERTIFICATIONS

- Meets the qualifications for DLC Premium
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	5,000–80,000
Wattage Range	36–600
Efficacy Range (LPW)	92–155
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE OPTICS – ORDERING GUIDE

Example: VP-2-320L-145-3K7-2-R-UNV-A3-BLT


CATALOG #

VP							
Series	Optic Platform	Size	Light Engine	CCT/CRI	Distribution	Optic Rotation	Voltage
VP Viper	Micro Strike	1 Size 1	160L-35 ⁶ 5500 lumens 160L-50 ⁶ 7500 lumens 160L-75 10000 lumens 160L-100 12500 lumens 160L-115 15000 lumens 160L-135 18000 lumens 160L-160 21000 lumens 320L-145 21000 lumens 320L-170 24000 lumens 320L-185 27000 lumens 320L-210 30000 lumens 320L-235 33000 lumens 320L-255 36000 lumens 320L-315 ⁶ 40000 lumens 480L-285 40000 lumens 480L-320 44000 lumens 480L-340 48000 lumens 480L-390 52000 lumens 480L-425 55000 lumens 480L-470 60000 lumens 720L-435 60000 lumens 720L-475 65000 lumens 720L-515 70000 lumens 720L-565 ⁶ 75000 lumens 720L-600 ⁶ 80000 lumens CLO Custom Lumen Output ¹	AP AP-Amber Phosphor Converted 27K8 2700K, 80 CRI 3K7 3000K, 70 CRI 3K8 3000K, 80 CRI 35K8 3500K, 80 CRI 3K9 3000K, 90 CRI 4K7 4000K, 70 CRI 4K8 4000K, 80 CRI 4K9 4000K, 90 CRI 5K7 5000K, 70 CRI 5K8 5000K, 80 CRI	2 Type 2 3 Type 3 4F Type 4 Forward 4W Type 4 Wide 5QM Type 5 Square Medium 5QW Type 5 Square Wide	L Optic rotation left R Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
		2 Size 2					
		3 Size 3					
		4 Size 4					

Mounting	Specify Std. finish	Options	Network Control Options
A Arm mount for square pole/flat surface A_ Arm mount for round pole ² ASQU Universal arm mount for square pole A_U Universal arm mount for round pole ² AAU Adjustable arm for pole mounting (universal drill pattern) AA_U Adjustable arm mount for round pole ² ADU Decorative upswept Arm (universal drill pattern) AD_U Decorative upswept arm mount for round pole ² MAF Mast arm fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket, horizontal tenon with MAF WM Wall mount bracket with decorative upswept arm WA Wall mount bracket with adjustable arm	Color BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Gloss Textured PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured Color Option CC Custom Color	Options F Fusing 2PF Dual Power Feed 2DR Dual Driver TE Toolless Entry BC Backlight Control TB Terminal Block	Network Control Options NXSPW-14F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{1,3,4} NXSPW-40F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{1,3,4} NXSP-14F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{3,4} NXSP-40F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{3,4} NXWE NX Wireless Enabled (module + radio) ^{3,4} WIR wiSCAPE® In-Fixture Module ^{3,4} WIRSC wiSCAPE® Module and Occupancy Sensor ^{3,4} Stand Alone Sensors BTS-14F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁴ BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁴ BTSO-12F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height ⁴ 7PR 7-Pin Receptacle ⁴ 7PR-SC 7-Pin Receptacle with shorting cap ⁴ 3PR 3-Pin twist lock ⁴ 3PR-SC 3-Pin receptacle with shorting cap ⁴ 3PR-TL 3-Pin PCR with photocontrol ⁴ Programmed Controls ADD AutoDim Timer Based Dimming ⁴ ADT AutoDim Time of Day Dimming ⁴ Photocontrols PC Button Photocontrol ^{4,7}

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
 2 – Replace “_” with “2” for 2.5”-3.4” OD pole, “3” for 3.5”-4.13” OD pole, “4” for 4.18”-5.25” OD pole, “5” for 5.5”-6.5” OD pole
 3 – Networked Controls cannot be combined with other control options
 4 – Not available with 2PF option

5 – Not available with Dual Driver option
 6 – Some voltage restrictions may apply when combined with controls
 7 – Not available with 480V

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

STRIKE OPTIC – ORDERING GUIDE

Example: VP-ST-1-36L-39-3K7-2-UNV-A-BLT


CATALOG #

VP	Series	Optic Platform	Size	Light Engine	CCT/CRI	Distribution	Optic Rotation	Voltage
VP	Viper	ST Strike	1 Size 1	36L-39 ⁸ 5500 lumens 36L-55 ⁸ 7500 lumens 36L-85 10000 lumens 36L-105 12500 lumens 36L-120 14000 lumens 72L-115 15000 lumens 72L-145 18000 lumens 72L-180 21000 lumens 72L-210 24000 lumens 72L-240 27000 lumens 108L-215 ⁸ 27000 lumens 108L-250 30000 lumens 108L-280 33000 lumens 108L-325 36000 lumens 108L-365 40000 lumens 162L-320 40000 lumens 162L-365 ¹⁰ 44000 lumens 162L-405 48000 lumens 162L-445 52000 lumens 162L-485 55000 lumens 162L-545 ⁸ 60000 lumens CLO Custom Lumen Output ¹	AM monochromatic amber, 595nm 27K8 2700K, 80 CRI 3K7 3000K, 70 CRI 3K8 3000K, 80 CRI 3K9 3000K, 90 CRI 35K8 3500K, 80 CRI 4K7 4000K, 70 CRI 4K8 4000K, 80 CRI 4K9 4000K, 90 CRI 5K7 5000K, 70 CRI 5K8 5000K, 80 CRI	FR Auto Front Row 2 Type 2 3 Type 3 4F Type 4 Forward 4W Type 4 Wide 5QN Type 5 Square Narrow 5QM Type 5 Square Medium 5QW Type 5 Square Wide 5W Type 5 Wide (Round) 5RW Type 5 Rectangular C Corner Optic TC Tennis Court Optic	L Optic rotation left R Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
			2 Size 2					
			3 Size 3					
			4 Size 4					

Mounting	Color	Options	Network Control Options
A Arm mount for square pole/flat surface A_ Arm mount for round pole ³ ASQU Universal arm mount for square pole A_U Universal arm mount for round pole ³ AAU Adjustable arm for pole mounting (universal drill pattern) AA_U Adjustable arm mount for round pole ³ ADU Decorative upswept Arm (universal drill pattern) AD_U Decorative upswept arm mount for round pole ³ MAF Mast arm fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket, horizontal tenon with MAF WM Wall mount bracket with decorative upswept arm WA Wall mount bracket with adjustable arm	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Gloss Textured PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VG Verde Green Textured Color Option CC Custom Color	F Fusing E Battery Backup ^{12,7,8,9} 2PF Dual Power Feed 2DR Dual Driver TE Toolless Entry BC Backlight Control TB Terminal Block	NXSPW-14F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{1,4,5} NXSPW-40F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{1,4,5} NXSP-14F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{4,5} NXSP-40F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{4,5} NXWE NX Wireless Enabled ^{4,5} WIR wiSCAPE® In-Fixture Module ^{4,5} WIRSC wiSCAPE® Module and Occupancy Sensor ^{4,5} Stand Alone Sensors BTS-14F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁵ BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁵ BTSO-12F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height ⁵ 7PR 7-Pin Receptacle ⁵ 7PR-SC 7-Pin Receptacle with shorting cap ⁵ 3PR 3-Pin twist lock ⁵ 3PR-SC 3-Pin receptacle with shorting cap ⁵ 3PR-TL 3-Pin PCR with photocontrol ⁵ Programmed Controls ADD AutoDim Timer Based Dimming ⁵ ADT AutoDim Time of Day Dimming ⁵ Photocontrols PC Button Photocontrol ^{5,6}

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
 2 – Battery temperature rating -20C to 55C
 3 – Replace “_” with “2” for 2.5”-3.4” OD pole, “3” for 3.5”-4.13” OD pole, “4” for 4.18”-5.25” OD pole, “5” for 5.5”-6.5” OD pole
 4 – Networked Controls cannot be combined with other control options
 5 – Not available with 2PF option
 6 – Not available with 480V
 7 – Not available with 347 or 480V
 8 – Not available with Dual Driver option

9 – Only available in Size 1 housing
 10 – Some voltage restrictions may apply when combined with controls

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE (CONTINUED)

CATALOG #

Accessory Type	Size	Option	Color	Hubbell Control Solutions — Accessories (Sold Separately)
SHD Shield	1 Size 1 2 Size 2 3 Size 3 4 Size 4	HSS-90-B House Side Shield 90° Back HSS-90-F House Side Shield 90° Front HSS-90-S House Side Shield 90° Side HSS-270-BSS House Side Shield 270° Back/Side/Side HSS-270-FSS House Side Shield 270° Front/Side/Side HSS-270-FSB House Side Shield 270° Front/Side/Back HSS-360 House Side Shield 360° BC Back Light Control A Arm Mount for square pole/flat surface ASQU Universal Arm Mount for square pole AAU Adjustable Arm for pole mounting ADU Decorative upswep Arm RPA Round Pole Adapter MAF Mast Arm Fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket (compatible with universal arm mounts)	BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Gray Gloss Smooth PSS Platinum Silver Smooth WHS White Gloss Smooth WHT White Matte Textured VGT Green Landscape Decorative LEG Legacy Colors Color Option CC Custom Color	NX Distributed Intelligence™ <input type="checkbox"/> NXOFM-1R1D-UNV On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120–480VAC wiSCAPE® Lighting Control <input type="checkbox"/> WIR-RME-L On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110–480VAC <input type="checkbox"/> SCP-REMOTE Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor <small>For additional information related to these accessories please visit www.hubbellcontrolsolutions.com. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.</small>
MTG Mounting				
MSC Miscellaneous		BIRD SPK Bird Spike		

CONTROLS



Control Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
NXWE	–	✓	✓	–	–	✓	✓	–	–
NXSPW_F	NXSM-P	✓	✓	✓	✓	✓	✓	–	14ft, 40ft
NXSP_F	NXSM-P	–	–	✓	✓	✓	–	–	14ft, 40ft
BTSO12F	BTSMP-OMNI	–	–	✓	✓	✓	Bluetooth	–	12ft
BTS_F	BTSMP	–	–	✓	✓	–	–	–	14ft, 40ft
ADD	–	–	✓	–	–	✓	–	✓	–
ADT	–	–	✓	–	–	✓	–	✓	–
7PR	–	Paired with external control	Paired with external control	–	Paired with external control	Paired with external control	–	✓	–
7PR-SC	–	–	–	–	–	–	–	✓	–
3PR	–	–	–	–	–	Paired with external control	–	✓	–
3PR-SC	–	–	–	–	–	–	–	✓	–
3PR-TL	–	–	–	–	✓	✓	–	✓	–
WIR	–	✓	✓	–	✓	✓	Gateway	–	–
WIRSC	BTSMP	✓	✓	✓	✓	✓	Gateway	–	14ft, 40ft



Job Name:
CUMBERLAND CONDOS

Catalog Number:

VP-1-160L-100-3K7-3-UNV-A-***

Notes:

Type:**A3**

SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

DELIVERED LUMENS

For delivered lumens, please see Lumens Data PDF on www.hubbellighting.com

PROJECTED LUMEN MAINTENANCE


Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L ₇₀ (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	—	0.841	—
3000K	0.977	0.861	0.647
3500K	—	0.900	—
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.250		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	—	0.859	—
3000K	0.941	0.912	0.703
3500K	—	0.906	—
4000K	1	0.894	0.734
5000K	1	0.879	0.711
Monochromatic Amber Multiplier			
Amber	0.255		

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	


ELECTRICAL DATA: MICRO STRIKE

# OF LEDS	160						
NOMINAL WATTAGE	35	50	75	100	115	135	160
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33

# OF LEDS	320						
NOMINAL WATTAGE	145	170	185	210	235	255	315
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91
480	0.30	0.35	0.39	0.44	0.49	0.53	0.66

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25

Submitted by Swaney Lighting		Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
	Job Name: CUMBERLAND CONDOS	Notes:	
		SLA22-51387	



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ELECTRICAL DATA: STRIKE

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	115
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	113.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.33	0.46	0.71	0.88	1.00
208	0.19	0.26	0.41	0.50	0.58
240	0.16	0.23	0.35	0.44	0.50
277	0.14	0.20	0.31	0.38	0.43
347	0.11	0.16	0.24	0.30	0.35
480	0.08	0.11	0.18	0.22	0.25

# OF LEDS	72				
NOMINAL WATTAGE	120	145	180	210	215
SYSTEM POWER (W)	120.9	143.2	179.4	210.2	214.8
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.96	1.21	1.50	1.75	2.00
208	0.55	0.70	0.87	1.01	1.15
240	0.48	0.60	0.75	0.88	1.00
277	0.42	0.52	0.65	0.76	0.87
347	0.33	0.42	0.52	0.61	0.69
480	0.24	0.30	0.38	0.44	0.50

# OF LEDS	108				
NOMINAL WATTAGE	240	250	280	320	325
SYSTEM POWER (W)	241.7	250.8	278.3	322.1	324.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.79	2.08	2.33	2.71	3.04
208	1.03	1.20	1.35	1.56	1.75
240	0.90	1.04	1.17	1.35	1.52
277	0.78	0.90	1.01	1.17	1.32
347	0.62	0.72	0.81	0.94	1.05
480	0.45	0.52	0.58	0.68	0.76

# OF LEDS	162				
NOMINAL WATTAGE	365	405	445	485	545
SYSTEM POWER (W)	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.67	3.38	3.71	4.04	4.54
208	1.54	1.95	2.14	2.33	2.62
240	1.33	1.69	1.85	2.02	2.27
277	1.16	1.46	1.61	1.75	1.97
347	0.92	1.17	1.28	1.40	1.57
480	0.67	0.84	0.93	1.01	1.14



Job Name:
CUMBERLAND CONDOS

Catalog Number:
VP-1-160L-100-3K7-3-UNV-A-***

Notes:

Type:

A3

SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

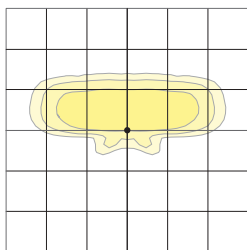
TYPE: _____ PROJECT: _____

CATALOG #: _____

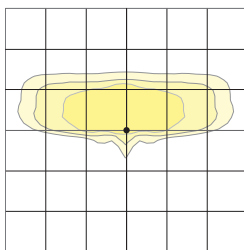
MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

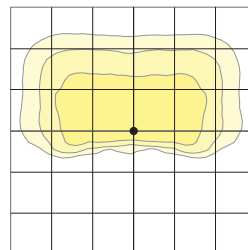
Type 2



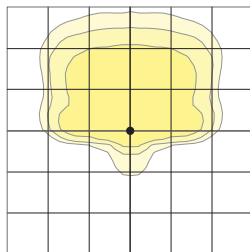
Type 3



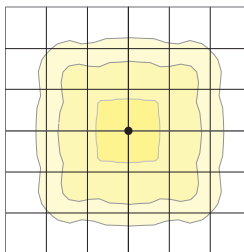
Type 4 Wide



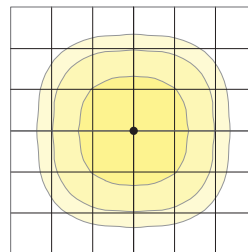
Type 4F



Type 5QM



Type 5QW



HUBBELL
Lighting



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

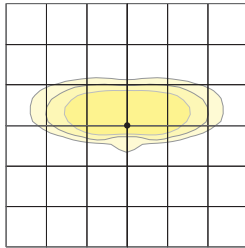
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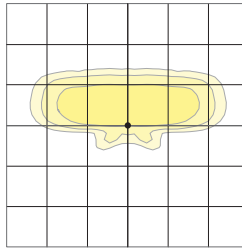
OPTIC STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

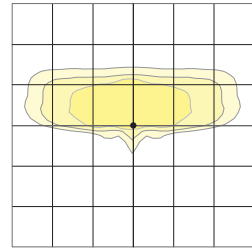
Type FR – Front Row/Auto Optic



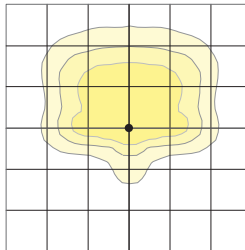
Type 2



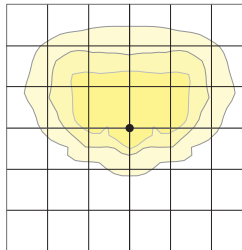
Type 3



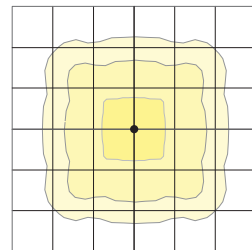
Type 4 Forward



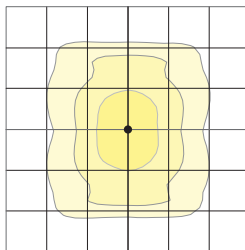
Type 4 Wide



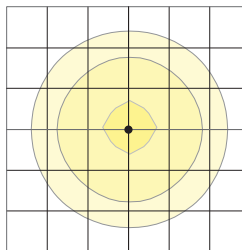
Type 5QM



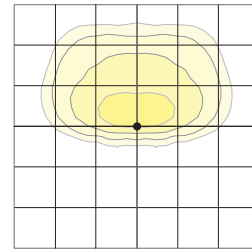
Type 5R (rectangular)



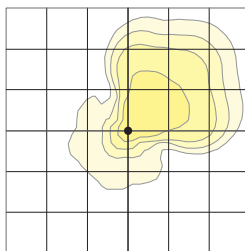
Type 5W (round wide)



Type TC



Type Corner





Job Name:
CUMBERLAND CONDOS

Catalog Number:
VP-1-160L-100-3K7-3-UNV-A-***

Notes:

Type:

A3

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VIPER Area/Site

VIPER LUMINAIRE

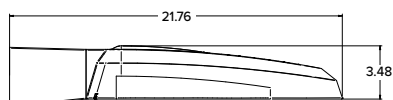
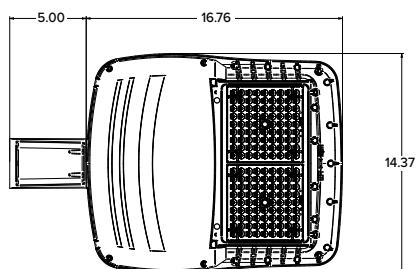
DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

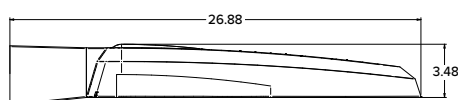
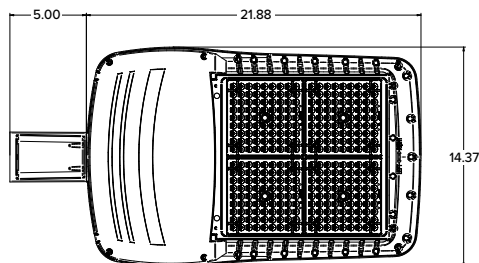
CATALOG #: _____

DIMENSIONS

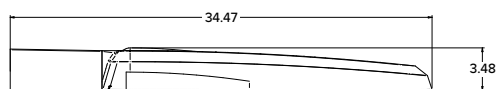
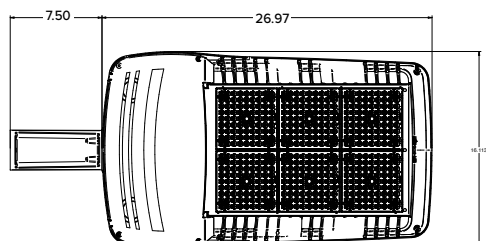
SIZE 1



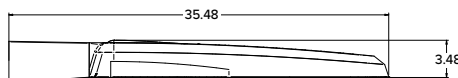
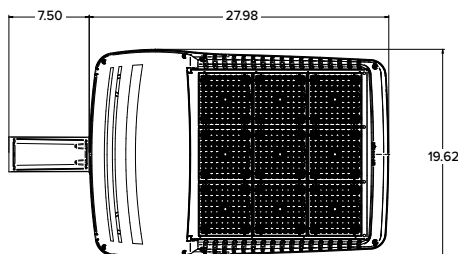
SIZE 2



SIZE 3



SIZE 4



	EPA				Config.
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

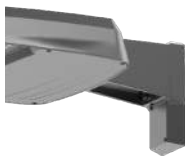
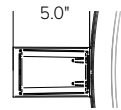
CATALOG #: _____

MOUNTING



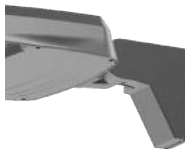
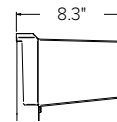
ASQ-STRAIGHT ARM MOUNT

Fixture ships with integral arm for ease of installation. Compatible with Hubbell Outdoor B3 drill pattern. For round poles add applicable suffix (2/3/4/5)



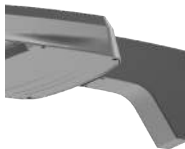
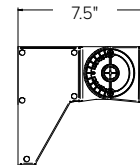
ASQU-UNIVERSAL ARM MOUNT

Universal mounting block for ease of installation. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5)



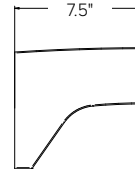
AAU-ADJUSTABLE ARM FOR POLE MOUNTING

Rotatable arm mounts directly to pole. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5). Rotatable in 15° aiming angle increments. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



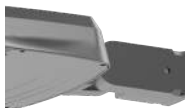
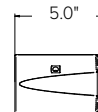
ADU-DECORATIVE UPSWEPT ARM

Upswept Arm compatible with drill patterns from 2.5" to 4.5". For round poles add applicable suffix (2/3/4/5).



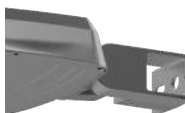
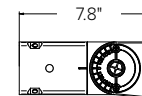
MAF-MAST ARM FITTER

Fits 2-3/8" OD horizontal tenons.



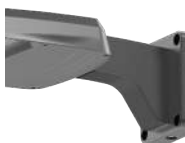
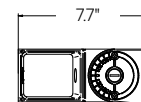
K-KNUCKLE

Knuckle mount 15° aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



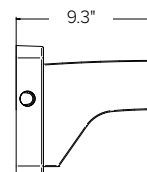
T-TRUNNION

Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



WM-WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.





Job Name:
CUMBERLAND CONDOS

Catalog Number:
VP-1-160L-100-3K7-3-UNV-A-***

Notes:

Type:

A3

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VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

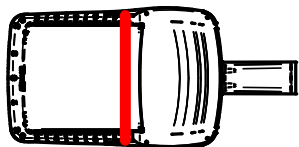
TYPE: _____ PROJECT: _____

CATALOG #: _____

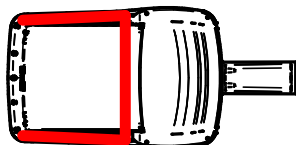
ADDITIONAL INFORMATION (CONTINUED)

HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

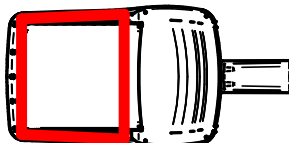
VPR2x HSS-90-B-xx



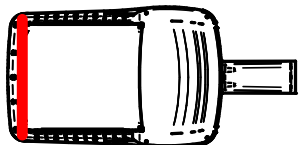
VPR2x HSS-270-BSS-xx



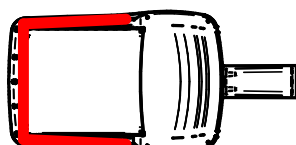
VPR2x HSS-360-xx



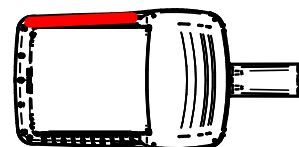
VPR2x HSS-90-F-xx



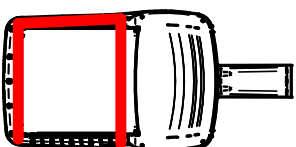
VPR2x HSS-270-FSS-xx



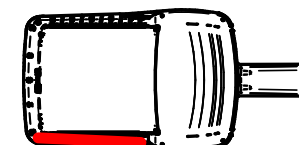
VPR2x HSS-90-S-xx



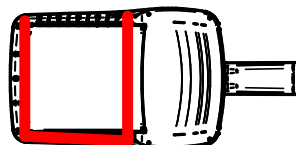
VPR2x HSS-270-FSB-xx




VPR2x HSS-90-S-xx



VPR2x HSS-270-FSB-xx



Submitted by Swaney Lighting		Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
	Job Name: CUMBERLAND CONDOS	Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ADDITIONAL INFORMATION (CONTINUED)

PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

- Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

EX: ADD-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option


- Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM

USE OF TRADEMARKS AND TRADE NAMES

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Submitted by Swaney Lighting		Catalog Number: VP-1-160L-100-3K7-3-UNV-A-***	Type: A3
	Job Name: CUMBERLAND CONDOS	Notes:	SLA22-51387

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SSS-B SERIES POLES

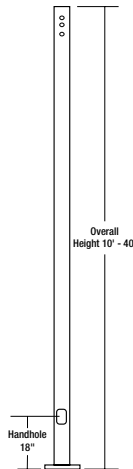
SQUARE STRAIGHT STEEL

Cat.#

Job

Type

Approvals


BEACON
design · performance · technology
**APPLICATIONS**

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT:** One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER:** Two-piece square aluminum base cover included standard
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

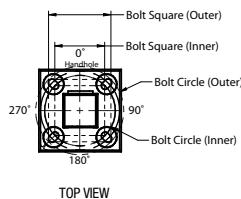
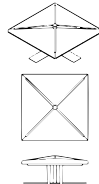
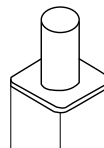
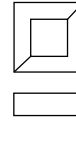
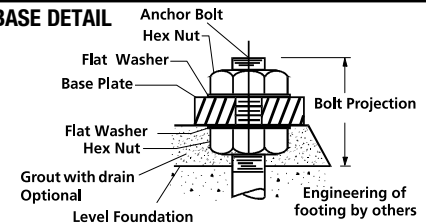
1 x 36 x 4 — TAB-36-M38

FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

WAREHOUSE 'STOCKED' POLES:

- SSSH20-40A-4-HV-DB-RDC, SSSH25-40A-4-HV-DB-RDC and SSSH30-50B-4-HV-DB-RDC
- The HV designation in the above catalog numbers is a combination drill pattern of the Hubbell Outdoor S2 pattern and the Beacon B3/B4 Viper pattern (rectangular arm mounting)

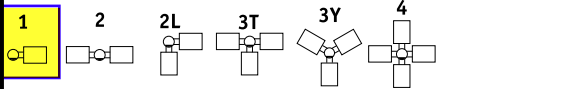
**POLE CAP****TENON****BASE COVER****BASE DETAIL****ORDERING INFORMATION**

ORDERING EXAMPLE:

Reference page 2 for available configurations

SSS - B - 25 - 40 - A/B/C - 2L - B3 - Specify Std. finish - UL

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	FINISH	OPTIONS
SSS-B Square Straight Steel Pole Beacon	Reference page 2 Ordering matrix 20	Reference page 2 Ordering matrix 40	Reference page 2 Ordering matrix A	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 90° TA Tenon (2.38" OD x 4" Tall) TB Tenon (2.88" OD x 4" Tall) TC Tenon (3.5" OD x 6" Tall) TR¹ Removable Tenon (2.375 x 4.25) OT Open Top (includes pole cap)	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VG Verde Green Textured Color Option CC Custom Color	GFF² 20 Amp GFCI Receptacle and Cover EHH² Extra Handhole C05² .5" Coupling C07² .75" Coupling C20² 2" Coupling MPB² Mid-pole Luminaire Bracket VM2 2nd mode vibration damper LAB Less Anchor Bolts UL UL Certified

MOUNTING ORIENTATION

- Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the "TR" notation. Example: SSS-B-25-40-A-1-B1-TR-BBT
- Specify option location using logic found on page 2 (Option Orientation)
- VM1 recommended on poles 20' and taller with EPA of less than 1.

ACCESSORIES - Order Separately

Catalog Number	Description
VM1 ³	1st mode vibration damper
VM2SXX	2nd mode vibration damper

DRILL PATTERN

- B1** Cruiser, "AM" arm
- B3** 2 bolt (2-1/2" spacing), Viper "A" arm
- S2** 2 bolt (3-1/2" spacing), Viper "AD" arm



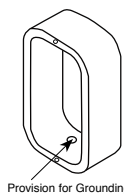

Job Name:
CUMBERLAND CONDOS
Catalog Number:
SSSB20-40A-1-B3-***
Notes: QUOTING 20FT POLE ON FLUSH
BASE
Type:
A3

SLA22-51387

ORDERING INFORMATION Cont.

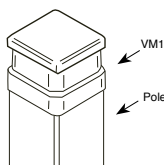
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight
	Feet	Meters									
SSS-B-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77
SSS-B-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90
SSS-B-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103
SSS-B-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116
SSS-B-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129
SSS-B-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142
SSS-B-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175
SSS-B-14-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152
SSS-B-16-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171
SSS-B-18-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190
SSS-B-20-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209
SSS-B-25-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	257
SSS-B-30-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	304
SSS-B-16-50-B-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219
SSS-B-18-50-B-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243
SSS-B-20-50-B-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267
SSS-B-25-50-B-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	327
SSS-B-30-50-B-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387
SSS-B-25-50-C-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427
SSS-B-30-50-C-XX-XX	30	9.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	507
SSS-B-20-60-B-XX-XX	20	6.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	329
SSS-B-25-60-B-XX-XX	25	7.6	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	404
SSS-B-30-60-B-XX-XX	30	9.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	479
SSS-B-35-60-B-XX-XX	35	10.7	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	554
SSS-B-40-60-B-XX-XX	40	12.2	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	629

NOTE: Factory supplied template must be used when setting anchor bolts. Beacon Products will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

**EHH - EXTRA
HANDHOLE**


Provision for Grounding

**C05 - C07 - C20 -
COUPLING**

**VM1 - VIBRATION DAMPER
1ST MODE**


Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 25' and taller with a total EPA of 1.0 or less.

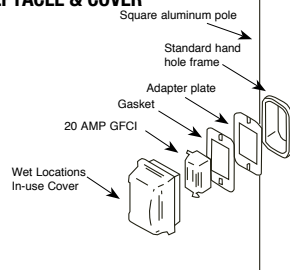
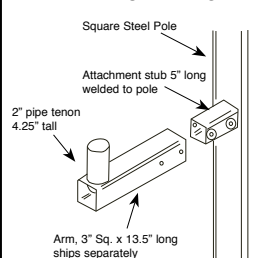
**VM2 - VIBRATION DAMPER
2ND MODE**


Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

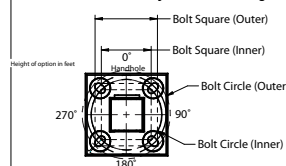
**VM2SXX - VIBRATION DAMPER
2ND MODE**


VM2S08 - 8'
VM2S12 - 12'
VM2S16 - 16'
VM2S20 - 20'
VM2S24 - 24'

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

**GFI - 20 AMP GFCI
RECEPTACLE & COVER**

MPB - MID POLE BRACKET

OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: SSS-B-20-40-A-TA-DB-C05-0-15 (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.



For more information about pole vibration and vibration dampers, please consult https://hubbellcdn.com/ohwassets/HLL/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HL010022.pdf. Due to our continued efforts to improve our products, product specifications are subject to change without notice.



Beacon Products • 701 Millennium Blvd, Greenville, SC 29607 • Phone: 864-678-1000

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

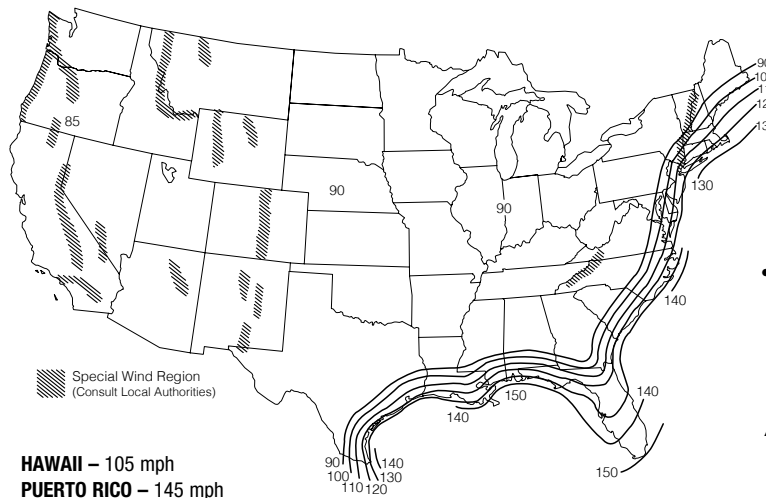
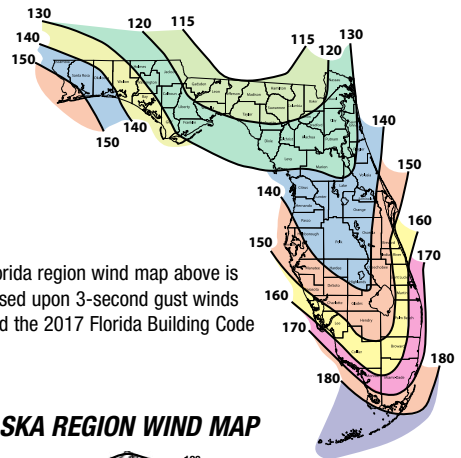
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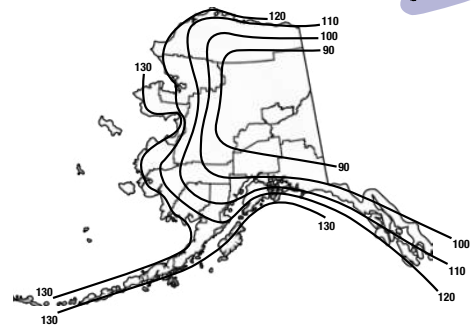
HUBBELL
Lighting

SSS-B POLES-SPEC

JULY 28, 2020 8:45 AM

**ASCE7-05 WIND MAP****FLORIDA REGION WIND MAP**


- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP
ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds
 (Use for all locations except Florida)

Catalog Number	85	90	100	105	110	120	130	140	145	150
SSS-B-10-40-A	25.0	25.0	25.0	22.8	20.6	17.0	14.2	11.9	11.0	10.1
SSS-B-12-40-A	25.0	25.0	20.0	18.0	16.1	13.2	10.8	8.9	8.1	7.4
SSS-B-14-40-A	23.1	20.4	16.1	14.3	12.8	10.2	8.2	6.6	5.9	5.3
SSS-B-16-40-A	19.0	16.7	13.0	11.5	10.1	7.9	6.2	4.7	4.1	3.6
SSS-B-18-40-A	15.6	13.6	10.0	9.0	7.8	5.9	4.4	3.1	2.6	2.1
SSS-B-20-40-A	12.7	10.9	7.9	6.9	5.9	4.2	2.8	1.7	1.3	0.9
SSS-B-25-40-A	7.3	5.9	3.8	2.9	2.1	0.8	NR	NR	NR	NR
SSS-B-14-40-B	25.0	25.0	23.3	20.8	18.6	15.1	12.3	10.2	9.2	8.4
SSS-B-16-40-B	25.0	24.9	19.4	17.3	15.4	12.3	9.9	8.0	7.2	6.4
SSS-B-18-40-B	24.0	20.8	16.1	14.2	12.5	9.8	7.7	6.1	5.3	4.7
SSS-B-20-40-B	20.2	17.5	13.2	11.6	10.1	7.7	5.9	4.4	3.8	3.2
SSS-B-25-40-B	12.8	11.0	7.9	6.7	5.5	3.7	2.3	1.2	0.7	NR
SSS-B-30-40-B	8.0	6.6	4.1	3.1	2.2	0.8	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	24.8	20.1	16.5	13.6	12.3	11.2
SSS-B-18-50-B	25.0	25.0	25.0	22.9	20.4	16.4	13.2	10.7	9.6	8.6
SSS-B-20-50-B	25.0	25.0	21.3	18.9	16.7	13.2	10.4	8.1	7.2	6.3
SSS-B-25-50-B	20.7	17.8	13.3	11.5	9.8	7.2	5.0	3.3	2.6	1.9
SSS-B-30-50-B	13.5	11.3	7.7	6.2	4.9	2.8	1.1	NR	NR	NR
SSS-B-25-50-C	25.0	25.0	19.4	17.1	15.1	11.7	9.0	6.9	6.0	5.1
SSS-B-30-50-C	20.1	17.3	12.7	10.9	9.3	6.6	4.5	2.8	2.1	1.4
SSS-B-20-60-B	25.0	25.0	25.0	25.0	25.0	20.2	16.1	12.9	11.5	10.3
SSS-B-25-60-B	25.0	25.0	20.6	18.0	15.6	11.8	8.7	6.2	5.2	4.2
SSS-B-30-60-B	21.4	18.1	12.9	10.7	8.8	5.7	3.3	1.3	NR	NR
SSS-B-35-60-B	14.0	11.3	6.9	5.2	3.6	1.0	NR	NR	NR	NR
SSS-B-40-60-B	8.1	5.8	2.2	nr	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds
 (Use for Florida only)

Catalog Number	115	120	130	140	150	160	170	180
SSS-B-10-40-A	25.0	25.0	25.0	25.0	21.4	18.4	15.9	13.9
SSS-B-12-40-A	25.0	25.0	23.6	19.8	16.7	14.2	12.1	10.4
SSS-B-14-40-A	25.0	23.1	19.0	15.7	13.1	10.9	9.1	7.6
SSS-B-16-40-A	20.8	18.7	15.2	12.3	10.1	8.2	6.7	5.4
SSS-B-18-40-A	16.8	15.0	11.9	9.4	7.5	5.9	4.5	3.4
SSS-B-20-40-A	13.6	11.9	9.2	7.1	5.3	3.9	2.7	1.7
SSS-B-25-40-A	7.4	6.2	4.1	2.5	1.1	NR	NR	NR
SSS-B-14-40-B	25.0	23.6	19.4	16.1	13.4	11.2	9.4	7.8
SSS-B-16-40-B	21.4	19.2	15.6	12.7	10.4	8.5	6.9	5.6
SSS-B-18-40-B	17.2	15.4	12.2	9.7	7.7	6.1	4.7	3.6
SSS-B-20-40-B	13.9	12.3	9.5	7.3	5.5	4.1	2.9	1.9
SSS-B-25-40-B	7.7	6.4	4.3	2.6	1.3	NR	NR	NR
SSS-B-30-40-B	3.2	2.1	NR	NR	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	25.0	21.4	18.2	15.5
SSS-B-18-50-B	25.0	25.0	25.0	24.4	20.4	17.0	14.2	11.9
SSS-B-20-50-B	25.0	25.0	24.4	19.9	16.3	13.4	11.0	8.9
SSS-B-25-50-B	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-B	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-25-50-C	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-C	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-20-60-B	25.0	25.0	25.0	21.9	17.8	14.5	11.7	9.4
SSS-B-25-60-B	23.8	20.9	16.1	12.3	9.2	6.6	4.5	2.8
SSS-B-30-60-B	14.6	12.3	8.4	5.3	2.8	0.8	NR	NR
SSS-B-35-60-B	7.5	5.6	2.4	NR	NR	NR	NR	NR
SSS-B-40-60-B	1.8	NR	NR	NR	NR	NR	NR	NR

Submitted by Swaney Lighting		Catalog Number: SSSB20-40A-1-B3-***	Type: A3
	Job Name: CUMBERLAND CONDOS	Notes: QUOTING 20FT POLE ON FLUSH BASE	SLA22-51387

NOTES

Wind-speed Website disclaimer:

Hubbell Lighting has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Hubbell Lighting has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Hubbell Lighting Inc. does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. <http://windspeed.atcouncil.org>

NOTES

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings. Consult Hubbell Lighting's Pole Vibration Application Guide for environmental risk factors and design considerations. https://hubbellcdn.com/ohwassets/HLJ/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HLQ10022.pdf
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

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HUBBELL
Lighting

SSS-B POLES-SPEC

JULY 28, 2020 8:45 AM



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____
TYPE: _____ PROJECT: _____
CATALOG #: _____

MICROSTRIKE | OPTICS STRIKE



FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, wiSCAPE and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles.
- All mounting hardware included

INSTALLATION (CONTINUED)

- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater than 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard

CONTROLS (CONTINUED)

- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration


CERTIFICATIONS

- Meets the qualifications for DLC Premium
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	5,000–80,000
Wattage Range	36–600
Efficacy Range (LPW)	92–155
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
		Notes:	SLA22-51387



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE OPTICS – ORDERING GUIDE

Example: VP-2-320L-145-3K7-2-R-UNV-A3-BLT


CATALOG #

VP							
Series	Optic Platform	Size	Light Engine	CCT/CRI	Distribution	Optic Rotation	Voltage
VP Viper	Micro Strike	1 Size 1	160L-35 ⁶ 5500 lumens 160L-50 ⁶ 7500 lumens 160L-75 10000 lumens 160L-100 12500 lumens 160L-115 15000 lumens 160L-135 18000 lumens 160L-160 21000 lumens 320L-145 21000 lumens 320L-170 24000 lumens 320L-185 27000 lumens 320L-210 30000 lumens 320L-235 33000 lumens 320L-255 36000 lumens 320L-315 ⁶ 40000 lumens 480L-285 40000 lumens 480L-320 44000 lumens 480L-340 48000 lumens 480L-390 52000 lumens 480L-425 55000 lumens 480L-470 60000 lumens 720L-435 60000 lumens 720L-475 65000 lumens 720L-515 70000 lumens 720L-565 ⁶ 75000 lumens 720L-600 ⁶ 80000 lumens CLO Custom Lumen Output ¹	AP AP-Amber Phosphor Converted 27K8 2700K, 80 CRI 3K7 3000K, 70 CRI 3K8 3000K, 80 CRI 35K8 3500K, 80 CRI 3K9 3000K, 90 CRI 4K7 4000K, 70 CRI 4K8 4000K, 80 CRI 4K9 4000K, 90 CRI 5K7 5000K, 70 CRI 5K8 5000K, 80 CRI	2 Type 2 3 Type 3 4F Type 4 Forward 4W Type 4 Wide 5QM Type 5 Square Medium 5QW Type 5 Square Wide	L Optic rotation left R Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
		2 Size 2					
		3 Size 3					
		4 Size 4					

Mounting	Specify Stnd. finish	Options	Network Control Options
A Arm mount for square pole/flat surface A_ Arm mount for round pole ² ASQU Universal arm mount for square pole A_U Universal arm mount for round pole ² AAU Adjustable arm for pole mounting (universal drill pattern) AA_U Adjustable arm mount for round pole ² ADU Decorative upswept Arm (universal drill pattern) AD_U Decorative upswept arm mount for round pole ² MAF Mast arm fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket, horizontal tenon with MAF WM Wall mount bracket with decorative upswept arm WA Wall mount bracket with adjustable arm	Color BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Gloss Textured PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured Color Option CC Custom Color	Options F Fusing 2PF Dual Power Feed 2DR Dual Driver TE Toolless Entry BC Backlight Control TB Terminal Block	Network Control Options NXSPW-14F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{1,3,4} NXSPW-40F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{1,3,4} NXSP-14F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{3,4} NXSP-40F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{3,4} NXWE NX Wireless Enabled (module + radio) ^{3,4} WIR wiSCAPE® In-Fixture Module ^{3,4} WIRSC wiSCAPE® Module and Occupancy Sensor ^{3,4} Stand Alone Sensors BTS-14F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁴ BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁴ BTSO-12F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height ⁴ 7PR 7-Pin Receptacle ⁴ 7PR-SC 7-Pin Receptacle with shorting cap ⁴ 3PR 3-Pin twist lock ⁴ 3PR-SC 3-Pin receptacle with shorting cap ⁴ 3PR-TL 3-Pin PCR with photocontrol ⁴ Programmed Controls ADD AutoDim Timer Based Dimming ⁴ ADT AutoDim Time of Day Dimming ⁴ Photocontrols PC Button Photocontrol ^{4,7}

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
 2 – Replace “_” with “2” for 2.5”-3.4” OD pole, “3” for 3.5”-4.13” OD pole, “4” for 4.18”-5.25” OD pole, “5” for 5.5”-6.5” OD pole
 3 – Networked Controls cannot be combined with other control options
 4 – Not available with 2PF option

5 – Not available with Dual Driver option
 6 – Some voltage restrictions may apply when combined with controls
 7 – Not available with 480V

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

STRIKE OPTIC – ORDERING GUIDE

Example: VP-ST-1-36L-39-3K7-2-UNV-A-BLT


CATALOG #

VP	Optic Platform	Size	Light Engine	CCT/CRI	Distribution	Optic Rotation	Voltage
Series							
VP Viper	ST Strike	1 Size 1	36L-39 ⁸ 5500 lumens 36L-55 ⁸ 7500 lumens 36L-85 10000 lumens 36L-105 12500 lumens 36L-120 14000 lumens 72L-115 15000 lumens 72L-145 18000 lumens 72L-180 21000 lumens 72L-210 24000 lumens 72L-240 27000 lumens 108L-215 ⁸ 27000 lumens 108L-250 30000 lumens 108L-280 33000 lumens 108L-325 36000 lumens 108L-365 40000 lumens 162L-320 40000 lumens 162L-365 ¹⁰ 44000 lumens 162L-405 48000 lumens 162L-445 52000 lumens 162L-485 55000 lumens 162L-545 ⁸ 60000 lumens CLO Custom Lumen Output ¹	AM monochromatic amber, 595nm 27K8 2700K, 80 CRI 3K7 3000K, 70 CRI 3K8 3000K, 80 CRI 3K9 3000K, 90 CRI 35K8 3500K, 80 CRI 4K7 4000K, 70 CRI 4K8 4000K, 80 CRI 4K9 4000K, 90 CRI 5K7 5000K, 70 CRI 5K8 5000K, 80 CRI	FR Auto Front Row 2 Type 2 3 Type 3 4F Type 4 Forward 4W Type 4 Wide 5QN Type 5 Square Narrow 5QM Type 5 Square Medium 5QW Type 5 Square Wide 5W Type 5 Wide (Round) 5RW Type 5 Rectangular C Corner Optic TC Tennis Court Optic	L Optic rotation left R Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
		2 Size 2					
		3 Size 3					
		4 Size 4					

Mounting	Color	Options	Network Control Options
A Arm mount for square pole/flat surface A_ Arm mount for round pole ³ ASQU Universal arm mount for square pole A_U Universal arm mount for round pole ³ AAU Adjustable arm for pole mounting (universal drill pattern) AA_U Adjustable arm mount for round pole ³ ADU Decorative upswept Arm (universal drill pattern) AD_U Decorative upswept arm mount for round pole ³ MAF Mast arm fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket, horizontal tenon with MAF WM Wall mount bracket with decorative upswept arm WA Wall mount bracket with adjustable arm	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Gloss Textured PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VG Verde Green Textured Color Option CC Custom Color	F Fusing E Battery Backup ^{12,7,8,9} 2PF Dual Power Feed 2DR Dual Driver TE Toolless Entry BC Backlight Control TB Terminal Block	NXSPW-14F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{1,4,5} NXSPW-40F NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{1,4,5} NXSP-14F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' ^{4,5} NXSP-40F NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' ^{4,5} NXWE NX Wireless Enabled ^{4,5} WIR wiSCAPE® In-Fixture Module ^{4,5} WIRSC wiSCAPE® Module and Occupancy Sensor ^{4,5} Stand Alone Sensors BTS-14F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁵ BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ⁵ BTSO-12F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height ⁵ 7PR 7-Pin Receptacle ⁵ 7PR-SC 7-Pin Receptacle with shorting cap ⁵ 3PR 3-Pin twist lock ⁵ 3PR-SC 3-Pin receptacle with shorting cap ⁵ 3PR-TL 3-Pin PCR with photocontrol ⁵ Programmed Controls ADD AutoDim Timer Based Dimming ⁵ ADT AutoDim Time of Day Dimming ⁵ Photocontrols PC Button Photocontrol ^{5,6}

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
 2 – Battery temperature rating -20C to 55C
 3 – Replace “_” with “2” for 2.5”-3.4” OD pole, “3” for 3.5”-4.13” OD pole, “4” for 4.18”-5.25” OD pole, “5” for 5.5”-6.5” OD pole
 4 – Networked Controls cannot be combined with other control options
 5 – Not available with 2PF option
 6 – Not available with 480V
 7 – Not available with 347 or 480V
 8 – Not available with Dual Driver option

9 – Only available in Size 1 housing
 10 – Some voltage restrictions may apply when combined with controls

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE (CONTINUED)

CATALOG #

Accessory Type	Size	Option	Color	Hubbell Control Solutions — Accessories (Sold Separately)
SHD Shield	1 Size 1 2 Size 2 3 Size 3 4 Size 4	HSS-90-B House Side Shield 90° Back HSS-90-F House Side Shield 90° Front HSS-90-S House Side Shield 90° Side HSS-270-BSS House Side Shield 270° Back/Side/Side HSS-270-FSS House Side Shield 270° Front/Side/Side HSS-270-FSB House Side Shield 270° Front/Side/Back HSS-360 House Side Shield 360° BC Back Light Control A Arm Mount for square pole/flat surface ASQU Universal Arm Mount for square pole AAU Adjustable Arm for pole mounting ADU Decorative upswept Arm RPA Round Pole Adapter MAF Mast Arm Fitter for 2-3/8" OD horizontal arm K Knuckle T Trunnion WB Wall Bracket (compatible with universal arm mounts)	BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Gray Gloss Smooth PSS Platinum Silver Smooth WHS White Gloss Smooth WHT White Matte Textured VGT Green Landscape Decorative LEG Legacy Colors Color Option CC Custom Color	NX Distributed Intelligence™ <input type="checkbox"/> NXOFM-1R1D-UNV On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120–480VAC wiSCAPE® Lighting Control <input type="checkbox"/> WIR-RME-L On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110–480VAC <input type="checkbox"/> SCP-REMOTE Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor <p>For additional information related to these accessories please visit www.hubbellcontrolsolutions.com. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.</p>
MTG Mounting				
MSC Miscellaneous		BIRD SPK Bird Spike		

CONTROLS



Control Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
NXWE	–	✓	✓	–	–	✓	✓	–	–
NXSPW_F	NXSM-P	✓	✓	✓	✓	✓	✓	–	14ft, 40ft
NXSP_F	NXSM-P	–	–	✓	✓	✓	–	–	14ft, 40ft
BTSO12F	BTSMP-OMNI	–	–	✓	✓	✓	Bluetooth	–	12ft
BTS_F	BTSMP	–	–	✓	✓	–	–	–	14ft, 40ft
ADD	–	–	✓	–	–	✓	–	✓	–
ADT	–	–	✓	–	–	✓	–	✓	–
7PR	–	Paired with external control	Paired with external control	–	Paired with external control	Paired with external control	–	✓	–
7PR-SC	–	–	–	–	–	–	–	✓	–
3PR	–	–	–	–	–	Paired with external control	–	✓	–
3PR-SC	–	–	–	–	–	–	–	✓	–
3PR-TL	–	–	–	–	✓	✓	–	✓	–
WIR	–	✓	✓	–	✓	✓	Gateway	–	–
WIRSC	BTSMP	✓	✓	✓	✓	✓	Gateway	–	14ft, 40ft



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

DELIVERED LUMENS

For delivered lumens, please see Lumens Data PDF on www.hubbellighting.com

PROJECTED LUMEN MAINTENANCE


Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L ₇₀ (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	—	0.841	—
3000K	0.977	0.861	0.647
3500K	—	0.900	—
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.250		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	—	0.859	—
3000K	0.941	0.912	0.703
3500K	—	0.906	—
4000K	1	0.894	0.734
5000K	1	0.879	0.711
Monochromatic Amber Multiplier			
Amber	0.255		

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
		Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	


ELECTRICAL DATA: MICRO STRIKE

# OF LEDS	160						
NOMINAL WATTAGE	35	50	75	100	115	135	160
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33

# OF LEDS	320						
NOMINAL WATTAGE	145	170	185	210	235	255	315
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91
480	0.30	0.35	0.39	0.44	0.49	0.53	0.66

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25

Submitted by Swaney Lighting		Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
	Job Name: CUMBERLAND CONDOS	Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ELECTRICAL DATA: STRIKE

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	115
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	113.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.33	0.46	0.71	0.88	1.00
208	0.19	0.26	0.41	0.50	0.58
240	0.16	0.23	0.35	0.44	0.50
277	0.14	0.20	0.31	0.38	0.43
347	0.11	0.16	0.24	0.30	0.35
480	0.08	0.11	0.18	0.22	0.25

# OF LEDS	72				
NOMINAL WATTAGE	120	145	180	210	215
SYSTEM POWER (W)	120.9	143.2	179.4	210.2	214.8
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.96	1.21	1.50	1.75	2.00
208	0.55	0.70	0.87	1.01	1.15
240	0.48	0.60	0.75	0.88	1.00
277	0.42	0.52	0.65	0.76	0.87
347	0.33	0.42	0.52	0.61	0.69
480	0.24	0.30	0.38	0.44	0.50

# OF LEDS	108				
NOMINAL WATTAGE	240	250	280	320	325
SYSTEM POWER (W)	241.7	250.8	278.3	322.1	324.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.79	2.08	2.33	2.71	3.04
208	1.03	1.20	1.35	1.56	1.75
240	0.90	1.04	1.17	1.35	1.52
277	0.78	0.90	1.01	1.17	1.32
347	0.62	0.72	0.81	0.94	1.05
480	0.45	0.52	0.58	0.68	0.76

# OF LEDS	162				
NOMINAL WATTAGE	365	405	445	485	545
SYSTEM POWER (W)	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.67	3.38	3.71	4.04	4.54
208	1.54	1.95	2.14	2.33	2.62
240	1.33	1.69	1.85	2.02	2.27
277	1.16	1.46	1.61	1.75	1.97
347	0.92	1.17	1.28	1.40	1.57
480	0.67	0.84	0.93	1.01	1.14



Job Name:
CUMBERLAND CONDOS

Catalog Number:
VP-1-160L-115-3K7-4W-UNV-A-***

Notes:

Type:

A4

SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

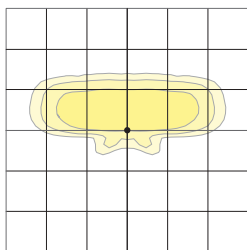
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CATALOG #: _____

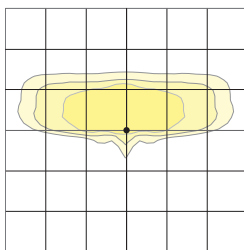
MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

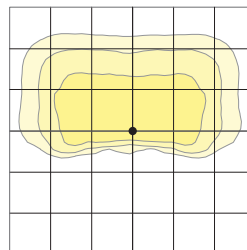
Type 2



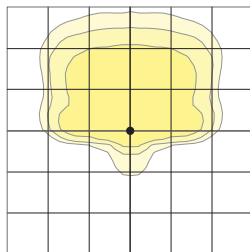
Type 3



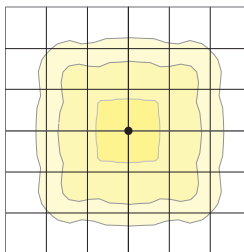
Type 4 Wide



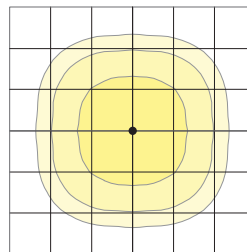
Type 4F



Type 5QM



Type 5QW



HUBBELL
Lighting



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

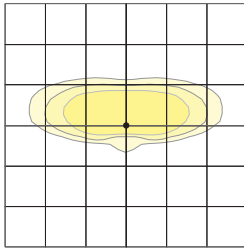
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CATALOG #: _____

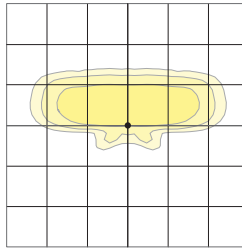
OPTIC STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

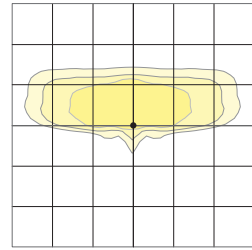
Type FR – Front Row/Auto Optic



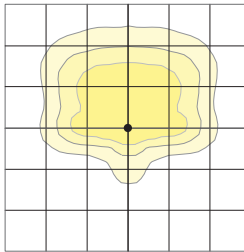
Type 2



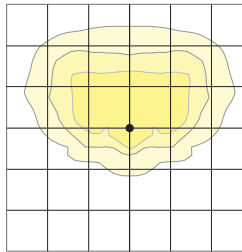
Type 3



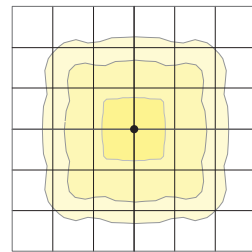
Type 4 Forward



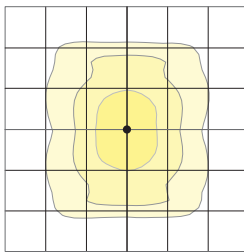
Type 4 Wide



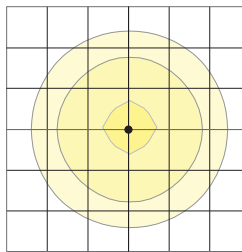
Type 5QM



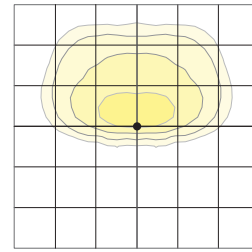
Type 5R (rectangular)



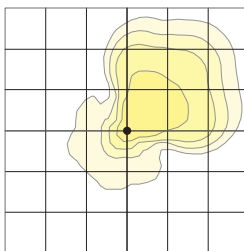
Type 5W (round wide)



Type TC



Type Corner





Job Name:
CUMBERLAND CONDOS

Catalog Number:
VP-1-160L-115-3K7-4W-UNV-A-***

Notes:

Type:

A4

SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

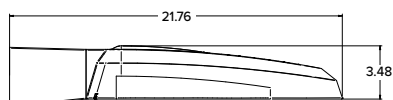
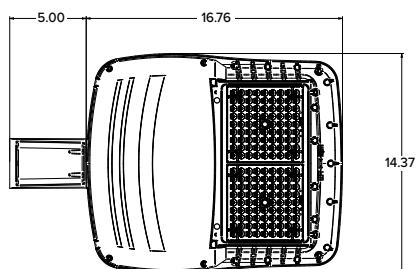
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TYPE: _____ PROJECT: _____

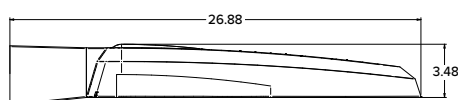
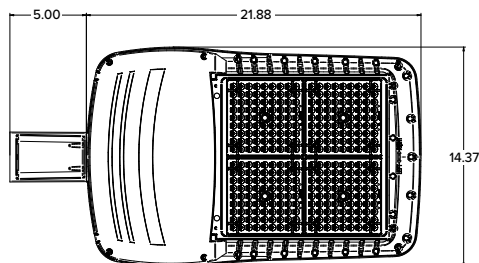
CATALOG #: _____

DIMENSIONS

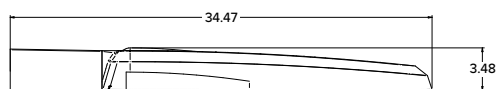
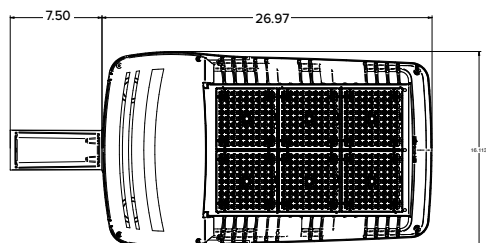
SIZE 1



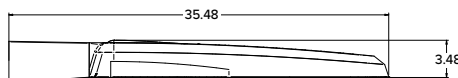
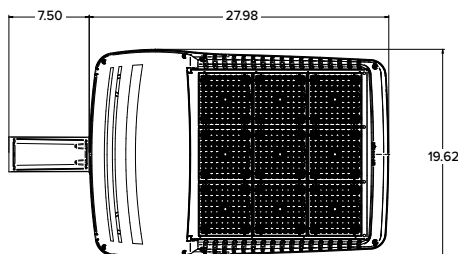
SIZE 2



SIZE 3



SIZE 4



	EPA				Config.
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9



VIPER Area/Site

VIPER LUMINAIRE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

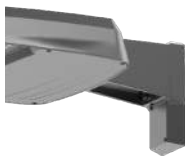
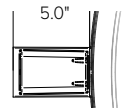
CATALOG #: _____

MOUNTING



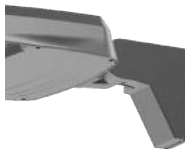
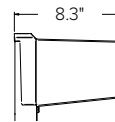
ASQ-STRAIGHT ARM MOUNT

Fixture ships with integral arm for ease of installation. Compatible with Hubbell Outdoor B3 drill pattern. For round poles add applicable suffix (2/3/4/5)



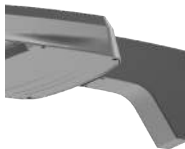
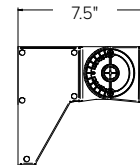
ASQU-UNIVERSAL ARM MOUNT

Universal mounting block for ease of installation. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5)



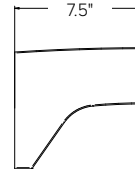
AAU-ADJUSTABLE ARM FOR POLE MOUNTING

Rotatable arm mounts directly to pole. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5). Rotatable in 15° aiming angle increments. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



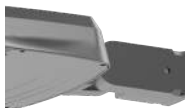
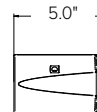
ADU-DECORATIVE UPSWEPT ARM

Upswept Arm compatible with drill patterns from 2.5" to 4.5". For round poles add applicable suffix (2/3/4/5).



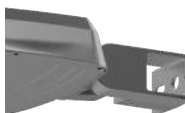
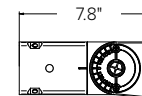
MAF-MAST ARM FITTER

Fits 2-3/8" OD horizontal tenons.



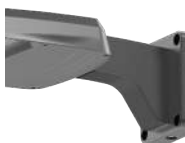
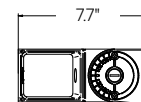
K-KNUCKLE

Knuckle mount 15° aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



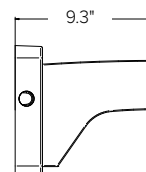
T-TRUNNION


Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



WM-WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.



Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
		Notes:	SLA22-51387



VIPER Area/Site

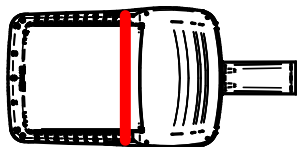
VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

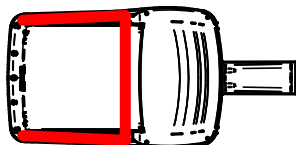
ADDITIONAL INFORMATION (CONTINUED)

HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

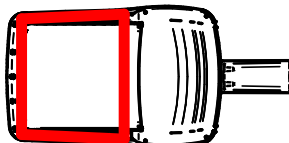
VPR2x HSS-90-B-xx



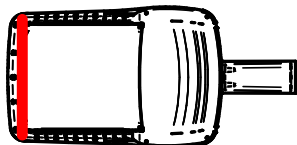
VPR2x HSS-270-BSS-xx



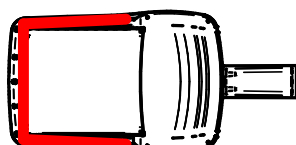
VPR2x HSS-360-xx



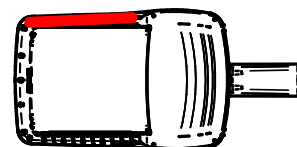
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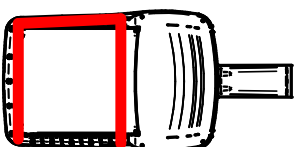
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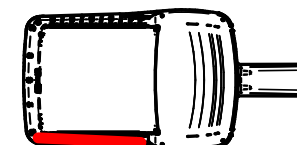
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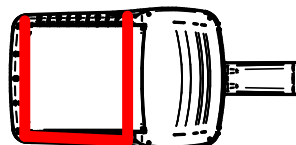
VPR2x HSS-270-FSB-xx




VPR2x HSS-90-S-xx



VPR2x HSS-270-FSB-xx



Submitted by Swaney Lighting		Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
	Job Name: CUMBERLAND CONDOS	Notes:	SLA22-51387



VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ADDITIONAL INFORMATION (CONTINUED)

PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

- Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

EX: ADD-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option


- Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM

USE OF TRADEMARKS AND TRADE NAMES

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Submitted by Swaney Lighting		Catalog Number: VP-1-160L-115-3K7-4W-UNV-A-***	Type: A4
	Job Name: CUMBERLAND CONDOS	Notes:	SLA22-51387

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SSS-B SERIES POLES

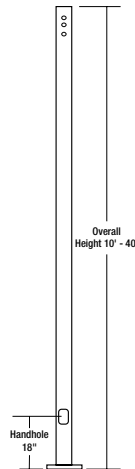
SQUARE STRAIGHT STEEL

Cat.#

Job

Type

Approvals


BEACON
design · performance · technology
**APPLICATIONS**

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT:** One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER:** Two-piece square aluminum base cover included standard
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

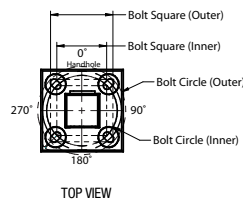
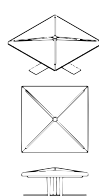
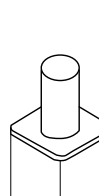
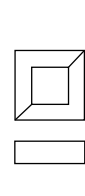
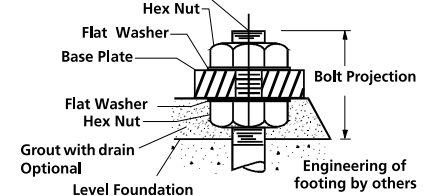
1 x 36 x 4 — TAB-36-M38

FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

WAREHOUSE 'STOCKED' POLES:

- SSSH20-40A-4-HV-DB-RDC, SSSH25-40A-4-HV-DB-RDC and SSSH30-50B-4-HV-DB-RDC
- The HV designation in the above catalog numbers is a combination drill pattern of the Hubbell Outdoor S2 pattern and the Beacon B3/B4 Viper pattern (rectangular arm mounting)

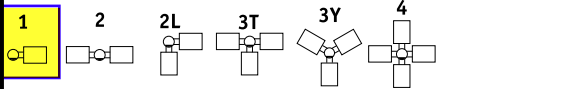
**POLE CAP****TENON****BASE COVER****BASE DETAIL****ORDERING INFORMATION**

ORDERING EXAMPLE:

Reference page 2 for available configurations

SSS - B - 25 - 40 - A/B/C - 2L - B3 - Specify Std. finish - UL

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	FINISH	OPTIONS
SSS-B Square Straight Steel Pole Beacon	Reference page 2 Ordering matrix 20	Reference page 2 Ordering matrix 40	Reference page 2 Ordering matrix A	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 90° TA Tenon (2.38" OD x 4" Tall) TB Tenon (2.88" OD x 4" Tall) TC Tenon (3.5" OD x 6" Tall) TR Removable Tenon (2.375 x 4.25) OT Open Top (includes pole cap)	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VG Verde Green Textured Color Option CC Custom Color	GFF 20 Amp GFCI Receptacle and Cover EH Extra Handhole C05 .5" Coupling C07 .75" Coupling C20 2" Coupling MPB Mid-pole Luminaire Bracket VM2 2nd mode vibration damper LAB Less Anchor Bolts UL UL Certified

MOUNTING ORIENTATION

- Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the "TR" notation. Example: SSS-B-25-40-A-1-B1-TR-BBT
- Specify option location using logic found on page 2 (Option Orientation)
- VM1 recommended on poles 20' and taller with EPA of less than 1.

ACCESSORIES - Order Separately

Catalog Number	Description
VM1 ³	1st mode vibration damper
VM2SXX	2nd mode vibration damper

DRILL PATTERN

- B1** Cruiser, "AM" arm
- B3** 2 bolt (2-1/2" spacing), Viper "A" arm
- S2** 2 bolt (3-1/2" spacing), Viper "AD" arm



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SSS-B POLES-SPEC

JULY 28, 2020 8:45 AM


HUBBELL
Lighting


Job Name:
CUMBERLAND CONDOS

Catalog Number:
SSSB20-40A-1-B3-***

Notes: QUOTING 20FT POLE ON FLUSH
BASE

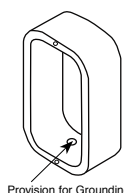
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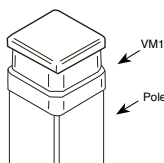
SLA22-51387

ORDERING INFORMATION Cont.

Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight
	Feet	Meters									
SSS-B-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77
SSS-B-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90
SSS-B-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103
SSS-B-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116
SSS-B-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129
SSS-B-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142
SSS-B-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175
SSS-B-14-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152
SSS-B-16-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171
SSS-B-18-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190
SSS-B-20-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209
SSS-B-25-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	257
SSS-B-30-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	304
SSS-B-16-50-B-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219
SSS-B-18-50-B-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243
SSS-B-20-50-B-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267
SSS-B-25-50-B-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	327
SSS-B-30-50-B-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387
SSS-B-25-50-C-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427
SSS-B-30-50-C-XX-XX	30	9.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	507
SSS-B-20-60-B-XX-XX	20	6.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	329
SSS-B-25-60-B-XX-XX	25	7.6	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	404
SSS-B-30-60-B-XX-XX	30	9.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	479
SSS-B-35-60-B-XX-XX	35	10.7	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	554
SSS-B-40-60-B-XX-XX	40	12.2	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	629

NOTE: Factory supplied template must be used when setting anchor bolts. Beacon Products will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

**EHH - EXTRA
HANDHOLE**

**C05 - C07 - C20 -
COUPLING**

**VM1 - VIBRATION DAMPER
1ST MODE**


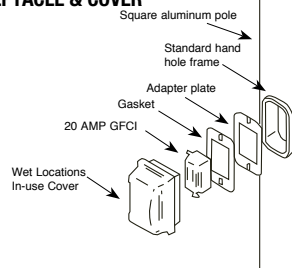
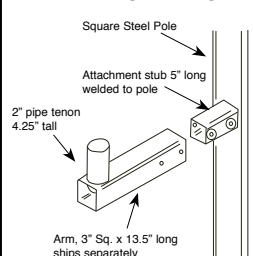
Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 25' and taller with a total EPA of 1.0 or less.

**VM2 - VIBRATION DAMPER
2ND MODE**

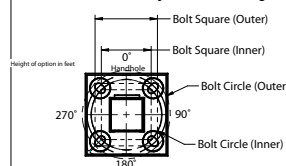

Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

**VM2SXX - VIBRATION DAMPER
2ND MODE**


VM2S08 - 8'
VM2S12 - 12'
VM2S16 - 16'
VM2S20 - 20'
VM2S24 - 24'

**GFI - 20 AMP GFCI
RECEPTACLE & COVER**

MPB - MID POLE BRACKET

OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: SSS-B-20-40-A-TA-DB-C05-0-15 (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.



For more information about pole vibration and vibration dampers, please consult https://hubbellcdn.com/ohwassets/HLL/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HL010022.pdf
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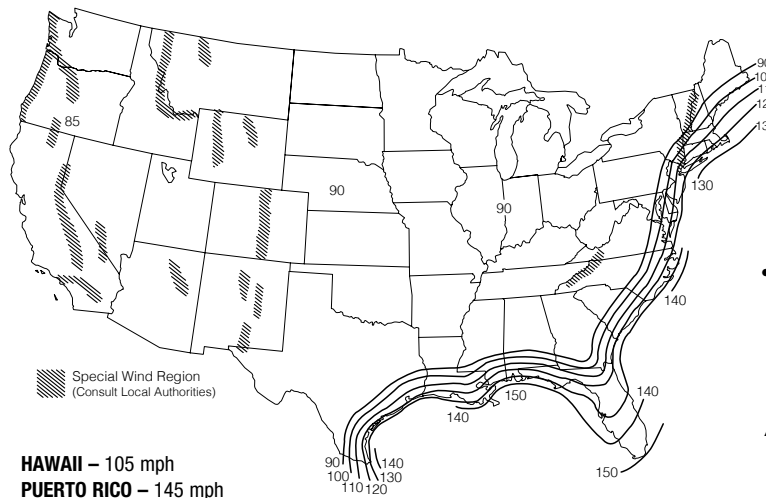
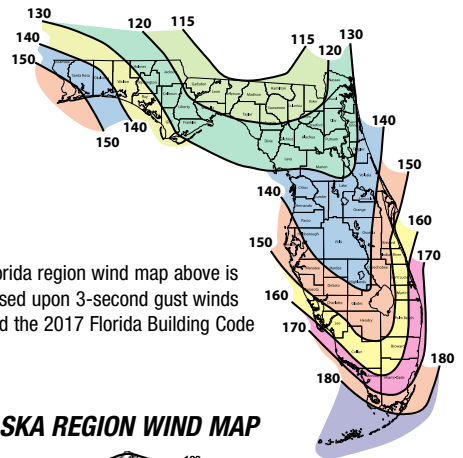
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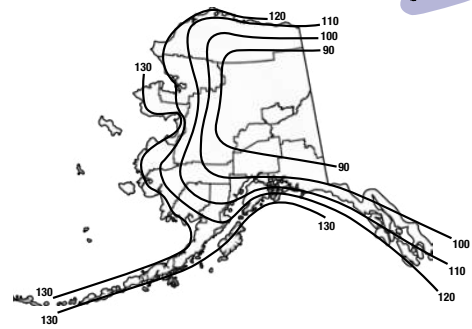
HUBBELL
Lighting

SSS-B POLES-SPEC

JULY 28, 2020 8:45 AM

**ASCE7-05 WIND MAP****FLORIDA REGION WIND MAP**


- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP
ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds
 (Use for all locations except Florida)

Catalog Number	85	90	100	105	110	120	130	140	145	150
SSS-B-10-40-A	25.0	25.0	25.0	22.8	20.6	17.0	14.2	11.9	11.0	10.1
SSS-B-12-40-A	25.0	25.0	20.0	18.0	16.1	13.2	10.8	8.9	8.1	7.4
SSS-B-14-40-A	23.1	20.4	16.1	14.3	12.8	10.2	8.2	6.6	5.9	5.3
SSS-B-16-40-A	19.0	16.7	13.0	11.5	10.1	7.9	6.2	4.7	4.1	3.6
SSS-B-18-40-A	15.6	13.6	10.0	9.0	7.8	5.9	4.4	3.1	2.6	2.1
SSS-B-20-40-A	12.7	10.9	7.9	6.9	5.9	4.2	2.8	1.7	1.3	0.9
SSS-B-25-40-A	7.3	5.9	3.8	2.9	2.1	0.8	NR	NR	NR	NR
SSS-B-14-40-B	25.0	25.0	23.3	20.8	18.6	15.1	12.3	10.2	9.2	8.4
SSS-B-16-40-B	25.0	24.9	19.4	17.3	15.4	12.3	9.9	8.0	7.2	6.4
SSS-B-18-40-B	24.0	20.8	16.1	14.2	12.5	9.8	7.7	6.1	5.3	4.7
SSS-B-20-40-B	20.2	17.5	13.2	11.6	10.1	7.7	5.9	4.4	3.8	3.2
SSS-B-25-40-B	12.8	11.0	7.9	6.7	5.5	3.7	2.3	1.2	0.7	NR
SSS-B-30-40-B	8.0	6.6	4.1	3.1	2.2	0.8	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	24.8	20.1	16.5	13.6	12.3	11.2
SSS-B-18-50-B	25.0	25.0	25.0	22.9	20.4	16.4	13.2	10.7	9.6	8.6
SSS-B-20-50-B	25.0	25.0	21.3	18.9	16.7	13.2	10.4	8.1	7.2	6.3
SSS-B-25-50-B	20.7	17.8	13.3	11.5	9.8	7.2	5.0	3.3	2.6	1.9
SSS-B-30-50-B	13.5	11.3	7.7	6.2	4.9	2.8	1.1	NR	NR	NR
SSS-B-25-50-C	25.0	25.0	19.4	17.1	15.1	11.7	9.0	6.9	6.0	5.1
SSS-B-30-50-C	20.1	17.3	12.7	10.9	9.3	6.6	4.5	2.8	2.1	1.4
SSS-B-20-60-B	25.0	25.0	25.0	25.0	25.0	20.2	16.1	12.9	11.5	10.3
SSS-B-25-60-B	25.0	25.0	20.6	18.0	15.6	11.8	8.7	6.2	5.2	4.2
SSS-B-30-60-B	21.4	18.1	12.9	10.7	8.8	5.7	3.3	1.3	NR	NR
SSS-B-35-60-B	14.0	11.3	6.9	5.2	3.6	1.0	NR	NR	NR	NR
SSS-B-40-60-B	8.1	5.8	2.2	nr	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds
 (Use for Florida only)

Catalog Number	115	120	130	140	150	160	170	180
SSS-B-10-40-A	25.0	25.0	25.0	25.0	21.4	18.4	15.9	13.9
SSS-B-12-40-A	25.0	25.0	23.6	19.8	16.7	14.2	12.1	10.4
SSS-B-14-40-A	25.0	23.1	19.0	15.7	13.1	10.9	9.1	7.6
SSS-B-16-40-A	20.8	18.7	15.2	12.3	10.1	8.2	6.7	5.4
SSS-B-18-40-A	16.8	15.0	11.9	9.4	7.5	5.9	4.5	3.4
SSS-B-20-40-A	13.6	11.9	9.2	7.1	5.3	3.9	2.7	1.7
SSS-B-25-40-A	7.4	6.2	4.1	2.5	1.1	NR	NR	NR
SSS-B-14-40-B	25.0	23.6	19.4	16.1	13.4	11.2	9.4	7.8
SSS-B-16-40-B	21.4	19.2	15.6	12.7	10.4	8.5	6.9	5.6
SSS-B-18-40-B	17.2	15.4	12.2	9.7	7.7	6.1	4.7	3.6
SSS-B-20-40-B	13.9	12.3	9.5	7.3	5.5	4.1	2.9	1.9
SSS-B-25-40-B	7.7	6.4	4.3	2.6	1.3	NR	NR	NR
SSS-B-30-40-B	3.2	2.1	NR	NR	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	25.0	21.4	18.2	15.5
SSS-B-18-50-B	25.0	25.0	25.0	24.4	20.4	17.0	14.2	11.9
SSS-B-20-50-B	25.0	25.0	24.4	19.9	16.3	13.4	11.0	8.9
SSS-B-25-50-B	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-B	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-25-50-C	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-C	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-20-60-B	25.0	25.0	25.0	21.9	17.8	14.5	11.7	9.4
SSS-B-25-60-B	23.8	20.9	16.1	12.3	9.2	6.6	4.5	2.8
SSS-B-30-60-B	14.6	12.3	8.4	5.3	2.8	0.8	NR	NR
SSS-B-35-60-B	7.5	5.6	2.4	NR	NR	NR	NR	NR
SSS-B-40-60-B	1.8	NR	NR	NR	NR	NR	NR	NR

Submitted by Swaney Lighting	Job Name: CUMBERLAND CONDOS	Catalog Number: SSSB20-40A-1-B3-***	Type: A4
		Notes: QUOTING 20FT POLE ON FLUSH BASE	SLA22-51387

NOTES

Wind-speed Website disclaimer:

Hubbell Lighting has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Hubbell Lighting has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Hubbell Lighting Inc. does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. <http://windspeed.atcouncil.org>

NOTES

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings. Consult Hubbell Lighting's Pole Vibration Application Guide for environmental risk factors and design considerations. https://hubbellcdn.com/ohwassets/HLJ/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HLI010022.pdf
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

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HUBBELL
Lighting

SSS-B POLES-SPEC

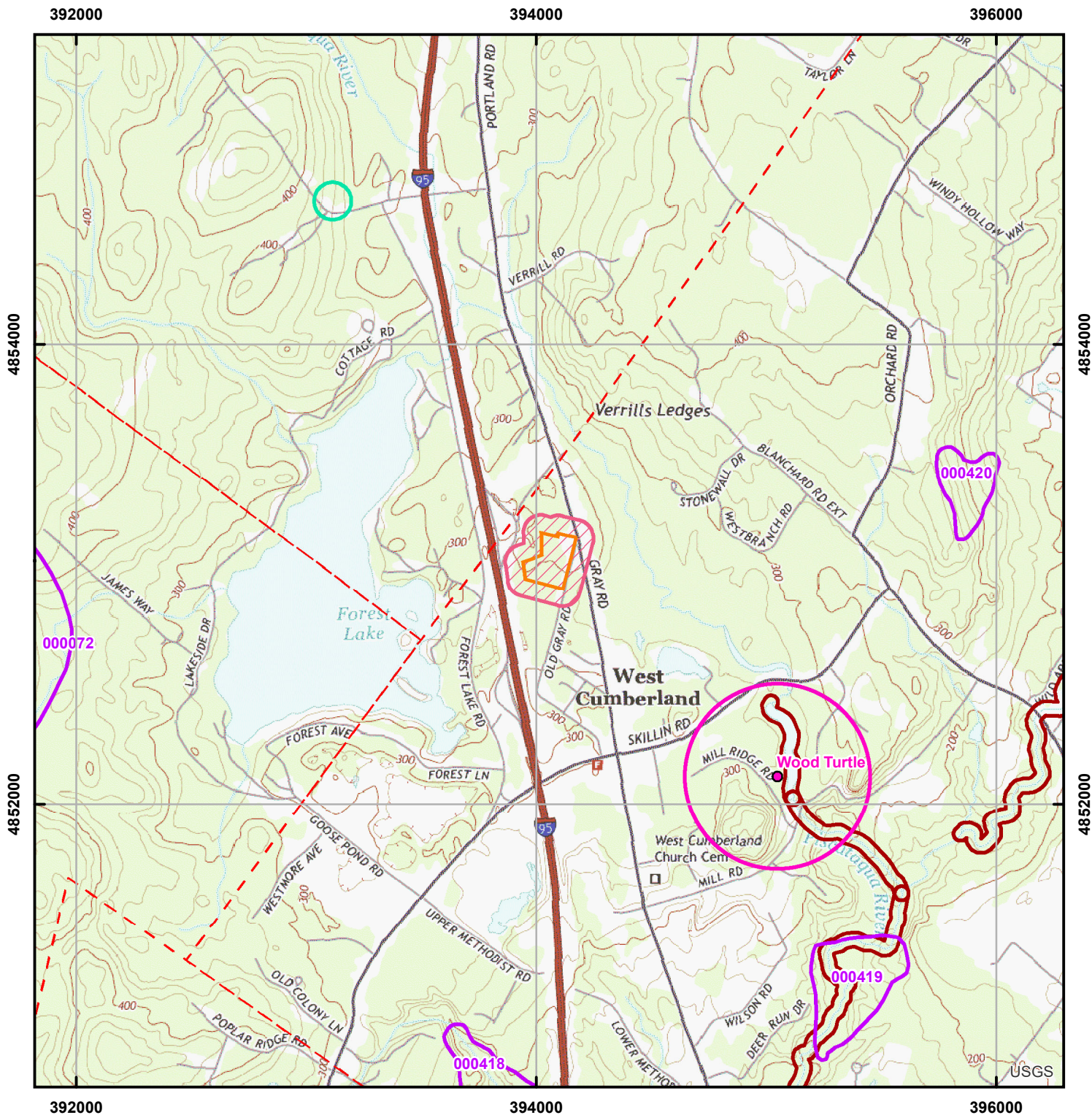
JULY 28, 2020 8:45 AM

Exhibit 12

Other Agency Approvals

Other Agency Approvals

See this exhibit for review letters from MDIFW, MNAP and MHPC



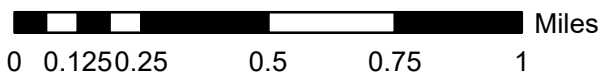
Environmental Review of Fish and Wildlife Observations and Priority Habitats

Project Name:

Condo Development, Cumberland
(Version 1)



Maine Department of
Inland Fisheries and Wildlife



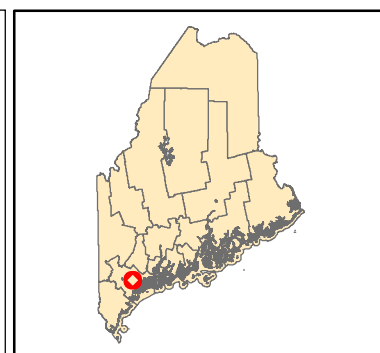
Projection: UTM, NAD83, Zone 19N

Date: 2/26/2022

- ProjectSearchAreas - All Versions
- Maine Cliff and Talus Areas

- Deer Winter Area
- LUPC p-fw
- Cooperative DWAs
- Seabird Nesting Islands
- Shorebird Areas
- Inland Waterfowl and Wading Bird
- 2008 lwwh - Shoreland Zoning
- Tidal Waterfowl and Wading Bird
- Significant Vernal Pools
- Environmental Review Polygons

- Roseate Tern
- Piping Plover and Least Tern
- Aquatic ETSc - 2.5 mi review
- Rare Mussels - 5 mi review
- Maine Heritage Fish Waters
- Arctic Charr Habitat
- Redfin Pickerel and Swamp Darter Habitats - buffer100ft
- Special Concern occupied habitats - 100ft buffer
- Wild Lake Trout Habitats





STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
353 WATER STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041



March 17, 2022

Aaron Radziucz
Sebago Technics
75 John Roberts Road, Suite 4A
South Portland, ME 04106

RE: Information Request – Condo Development Project, Cumberland

Dear Aaron:

Per your request received on February 24, 2022, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and inland fisheries habitat concerns within the vicinity of the *Condo Development* project in Cumberland.

Our Department has not mapped any Essential Habitats or inland fisheries habitats that would be directly affected by your project.

Endangered, Threatened, and Special Concern Species

Bat Species – Of the eight species of bats that occur in Maine, the three *Myotis* species are protected under Maine's Endangered Species Act (MESA) and are afforded special protection under 12 M.R.S. §12801 - §12810. The three *Myotis* species include little brown bat (State Endangered), northern long-eared bat (State Endangered), and eastern small-footed bat (State Threatened). The five remaining bat species are listed as Special Concern: big brown bat, red bat, hoary bat, silver-haired bat, and tri-colored bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during migration and/or the breeding season. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

Wood Turtle - Occurrences of wood turtle, a State Species of Special Concern, have been documented within the vicinity of the search area of the proposed project. Wood turtles use a mix of aquatic and terrestrial habitats throughout the year including riparian meadows, shrub thickets, farmland, and deciduous forests as well as bogs, forested wetlands, vernal pools, and streams. If these habitats are present in the project area, we recommend that they be avoided and adequately buffered with a 300-foot undisturbed, intact vegetative cover.

Significant Wildlife Habitat

Significant Vernal Pools - At this time MDIFW Significant Wildlife Habitat (SWH) maps indicate no known presence of SWHs subject to protection under the Natural Resources Protection Act (NRPA) within the project area, which include Waterfowl and Wading Bird Habitats, Seabird Nesting Islands, Shorebird Areas, and Significant Vernal Pools. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. Therefore, we recommend that surveys for vernal pools

be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Agency for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

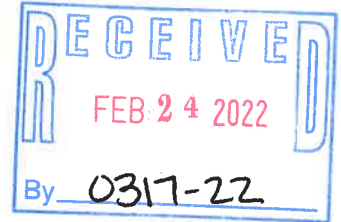
This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas Program, Maine Department of Marine Resources, and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

A handwritten signature in black ink, appearing to read 'Becca Settele', with a stylized, flowing script.

Becca Settele
Wildlife Biologist



February 24, 2022
20551

Mr. Kirk Mohny
Maine Historic Preservation Commission
65 State House Station
Augusta, Maine 04333

Email submittal: claudette.coyne@maine.gov

Evergreen Estates
246 Gray Road, Cumberland, ME
Tax Map U21 Lot 5A

Dear Mr. Mohny:

On behalf of Envy Construction, Sebago Technics respectfully requests a site review for a proposed condominium development on a 5.69-acre site at 246 Gray Road. As part of the site reconnaissance, we request review by the Maine Historic Preservation Commission for any properties, structures or archaeological areas of historic significance in the vicinity of the proposed site.

Existing land cover on the property is undeveloped and consists of primarily of woods. Review of available local historic information did not identify known historic sites in close proximity to the proposed development. We note that the *Section 12 Historic and Archeological* section of the 2014 Town of Cumberland Comprehensive Plan states that the Maine Historic Preservation Commission has identified no historic archaeological sites. Review of the assessor appraisal information identified a few structures on abutting properties that are older than 50 years of age. We have included their locations on a key map and the associated cards for your reference. This submittal includes a USGS Site location map, and key map and assessor cards with images of abutting structures > 50 years in age.

At your earliest convenience, could you please review the material and let me know of your findings. If you have any questions on this project or if you required additional information, please do not hesitate to contact me at aradziucz@sebagotechnics.com or on my direct line at (207) 200-2096. I look forward to hearing from you.

Sincerely,
SEBAGO TECHNICS, INC.

Aaron Radziucz, E.I.
Civil Engineer

AR/sn

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohny,
State Historic Preservation Officer
Maine Historic Preservation Commission

3/7/22
Date



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

February 28, 2022

Aaron Radziucz
Sebago Technics
75 John Roberts Road, Suite 4A
South Portland, ME 04106

Via email: aradziucz@sebagotechnics.com

Re: Rare and exemplary botanical features in proximity to: Project #20551, Evergreen Estates Condominiums,
246 Old Gray Road, Cumberland, Maine

Dear Mr. Radziucz:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received February 24, 2022 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Cumberland, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-804490
WWW.MAINE.GOV/DACF/MNAP

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

**Rare and Exemplary Botanical Features within 4 miles of
Project: #20551, Evergreen Estates, 246 Old Gray Road, Cumberland, Maine**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Broad Beech Fern						
	SC	S2	G5	2016-09-04	28	Hardwood to mixed forest (forest, upland)
Engelmann's Spikerush						
	PE	SH	G4G5	1916-08-31	2	Open wetland, not coastal nor rivershore (non-forested,
Enriched Northern Hardwoods						
		S3	GNR	2001-08-28	34	Hardwood to mixed forest (forest, upland)
Fern-leaved False Foxglove						
	SC	S3	G5	1902-09-02	13	Dry barrens (partly forested, upland),Hardwood to mixed
Great Blue Lobelia						
	PE	SX	G5	1905-09	3	Forested wetland,Non-tidal rivershore (non-forested,
Horned Pondweed						
	SC	S2	G5	1913-09-13	9	Tidal wetland (non-forested, wetland)
Marsh Milkwort						
	PE	SH	G5T4	1903-08-18	1	Dry barrens (partly forested, upland),Open wetland, not
Oak - Hickory Forest						
		S1	G4G5	2014-08-21	5	Hardwood to mixed forest (forest, upland)
Pocket Swamp						
		S2	G5	2017-07-27	24	Forested wetland,Hardwood to mixed forest (forest,
Rattlesnake Hawkweed						
	E	S1	G5T4Q	1909-07	1	Dry barrens (partly forested, upland)
Smooth Winterberry Holly						
	SC	S3	G5	2017-08-23	45	Forested wetland
Spotted Pondweed						

Spotted Pondweed						
T	S1	G5	2016-06-22	3	Open water (non-forested, wetland)	
Spotted Wintergreen						
T	S2	G5	2009-07-26	30	Conifer forest (forest, upland),Hardwood to mixed forest	
Water-plantain Spearwort						
PE	SH	G4	1903-07-29	2	Open water (non-forested, wetland)	

Date Exported: 2022-02-28 16:12

Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 G1	Critically Imperiled – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 G2	Imperiled – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 G3	Vulnerable – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 G4	Apparently Secure – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 G5	Secure – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX GX	Presumed Extinct – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH GH	Possibly Extinct – Known from only historical occurrences but still some hope of rediscovery.
S#S# G#G#	Range Rank – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU GU	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR SNR	Unranked – Global or subnational conservation status not yet assessed.
SNA GNA	Not Applicable – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
Qualifier	Definition
S#? G#?	Inexact Numeric Rank – Denotes inexact numeric rank.
Q	Questionable taxonomy that may reduce conservation priority – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The “Q” modifier is only used at a global level.
T#	Intraspecific Taxon (trinomial) – The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	Endangered – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	Threatened – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	Special Concern – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	Potentially Extirpated – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	Excellent – Excellent estimated viability/ecological integrity.
B	Good – Good estimated viability/ecological integrity.
C	Fair – Fair estimated viability/ecological integrity.
D	Poor – Poor estimated viability/ecological integrity.
E	Extant – Verified extant, but viability/ecological integrity not assessed.
H	Historical – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	Extirpated – Documented loss of population/destruction of habitat.
U	Unrankable – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	Not Ranked – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information
<http://www.maine.gov/dacf/mnap>



Exhibit 13

Cost Estimate

Town of Cumberland Maine

PERFORMANCE GUARANTEE COST ESTIMATE WORKSHEET

OWNER/APPLICANT: Envy Construction

20551

PROJECT NAME: Snowy Owl Estates

	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	1	\$5,000.00	\$5,000.00
2	Erosion/Sediment Control	Lump Sum	1	\$5,000.00	\$5,000.00
3	Site Stabilization	Lump Sum	1	\$5,000.00	\$5,000.00
4	Imported Fill	CY	8,010	\$10.00	\$80,100.00
5	Excavation	CY	9,136	\$5.00	\$45,680.00
6	Water Services				
	Well Drilling	Lump Sum	2	\$8,000.00	\$16,000.00
	Services	Linear Foot	409	\$50.00	\$20,450.00
7	Sewer Services				
	Pump Station	Each	2	\$10,000.00	\$20,000.00
	3,000 Gallon Septic Tank	Each	1	\$8,000.00	\$8,000.00
	4000 Gallon Septic Tank	Each	1	\$10,000.00	\$10,000.00
	Septic Field #1	Each	1	\$5,000.00	\$5,000.00
	Septic Field #2	Each	1	\$7,000.00	\$7,000.00
	8" Sewer Main	Linear Foot	622	\$60.00	\$37,320.00
	4" Sewer Service	Linear Foot	359	\$40.00	\$14,360.00
8	Electric				
	Conduit/Wiring	Linear Foot	564	\$50.00	\$28,200.00
	Utility Pole	Each	1	\$2,500.00	\$2,500.00
	Transformer Bases	Each	2	\$1,500.00	\$3,000.00
9	Storm Drainage				
	4-inch Storm Drain	Linear Foot	268	\$50.00	\$13,400.00
	8-inch Storm Drain	Linear Foot	90	\$66.00	\$5,940.00
	12-inch Storm Drain	Linear Foot	92	\$75.00	\$6,900.00
	15-inch Storm Drain	Linear Foot	129	\$80.00	\$10,320.00
	18-inch Storm Drain	Linear Foot	68	\$90.00	\$6,120.00
	Stormwater Structure	Each	8	\$4,000.00	\$32,000.00
10	Stormwater Management				
	Detention Basins	Lump Sum Each	1	\$10,000.00	\$10,000.00
11	Roadways				
	Subbase Gravel	Cubic Yard	833	\$40.00	\$33,320.00
	Base/Finish Gravel	Cubic Yard	140	\$60.00	\$8,400.00
	Base Paving	Ton	17.5	\$100.00	\$1,750.00
	Finish Paving	Ton	13	\$100.00	\$1,300.00
12	Sidewalks				
	Subbase Gravel	Cubic Yard	27	\$40.00	\$1,080.00
	Base/Finish Gravel	Cubic Yard	15	\$60.00	\$900.00
	Base Paving	Ton	0	\$0.00	\$0.00
	Finish Paving	Ton	5	\$100.00	\$500.00
13	Curbing				
	Curbing -Slip-Form	Linear Foot	565	\$36.00	\$20,340.00
	Curbing – Granite	Linear Foot	225	\$45.00	\$10,125.00
14	Loam and Seed	1,000 Square Feet	43	\$500.00	\$21,500.00
15	Riprap	Cubic Yard	40	\$55.00	\$2,200.00
16	Landscaping	Lump Sum	1	\$18,000.00	\$18,000.00
17	Street Lights	Each	3	\$5,000.00	\$15,000.00
18	Monuments/Iron Pipes	Lump Sum	1	\$2,000.00	\$2,000.00
19	Clean Up	Lump Sum	1	\$2,500.00	\$2,500.00

COST ESTIMATE TOTAL:

\$536,205.00

Town of Cumberland Maine

PERFORMANCE GUARANTEE COST ESTIMATE WORKSHEET

OWNER/APPLICANT: Envy Construction

20551

PROJECT NAME: Old Gray Road - Roadway Improvments

	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	0.5	\$5,000.00	\$2,500.00
2	Erosion/Sediment Control	Lump Sum	1	\$2,000.00	\$2,000.00
3	Site Stabilization	Lump Sum	1	\$2,000.00	\$2,000.00
4	Ledge Removal	Lump Sum	1	\$2,000.00	\$2,000.00
5	Imported Fill	CY	38	\$10.00	\$380.00
6	Excavation	CY	6200	\$5.00	\$31,000.00
7	Electric				
	Reset Utility Pole	Each	2	\$3,000.00	\$6,000.00
8	Roadways				
	Subbase Gravel	Cubic Yard	613	\$40.00	\$24,520.00
	Base/Finish Gravel	Cubic Yard	102	\$60.00	\$6,120.00
	Base Paving	Ton	130	\$100.00	\$13,000.00
	Finish Paving	Ton	100	\$100.00	\$10,000.00
9	Curbing				
	Curbing -Slip-Form	Linear Foot	230	\$36.00	\$8,280.00
10	Loam and Seed	1,000 Square Feet	15	\$500.00	\$7,500.00
11	Riprap	Cubic Yard	5	\$55.00	\$275.00
12	Clean Up	Lump Sum	1	\$2,500.00	\$2,500.00

COST ESTIMATE TOTAL:

\$118,075.00

FOR OFFICE USE ONLY

EROSION CONTROL/SITE STABILIZATION BOND (IF APPLICABLE):

Exhibit 14

Waiver Requests



Waiver Request

In accordance with the Town of Cumberland Planning Board Standards for Reviewing Clustered Subdivisions, the following waiver requests are being submitted for Planning Board Approval

1. Section 250-10 – Subdivision Regulations

The requirement for a buffer of at least 75 feet in width around the entire perimeter of the lot. This waiver request is only for the north property line and the property line along the Old Gray Road frontage. The structures in this development are being situated as proposed as this layout utilizes the existing conditions of the lot to the maximum extent practicable. Any movement of the development to the South would cause more disturbance of the existing on-site wetland. The development cannot be moved to the West as there is high outcroppings of bedrock that restrict the areas in which a subsurface wastewater disposal system could be sited. A setback for any structure from the subsurface wastewater disposal system is also required by the Main Subsurface Wastewater Rules which also played a part in the siting and layout of the development. A Landscape Plan is enclosed with the final application to depict dense buffering along Old Gray Road.

2. Section 250 – Subdivision Regulations

The requirement for trees 10-inch or greater in diameter to be flagged and shown on the Existing Conditions plan. The project is minimizing tree clearing to the greatest extent practicable.

3. Section 250 – Subdivision Regulations

The requirement for temporary markers in the field staking key site features.

4. Section 250 – Subdivision Regulations

The requirement for walkways within roads of a proposed subdivision. This waiver request is because the development is currently proposing sidewalks along all proposed travel ways within the development which are protected by curbing. The access road into the development is a private road and will be maintained by the Property Owner.

5. Section 250 – Table 2: Geometric Design Standards

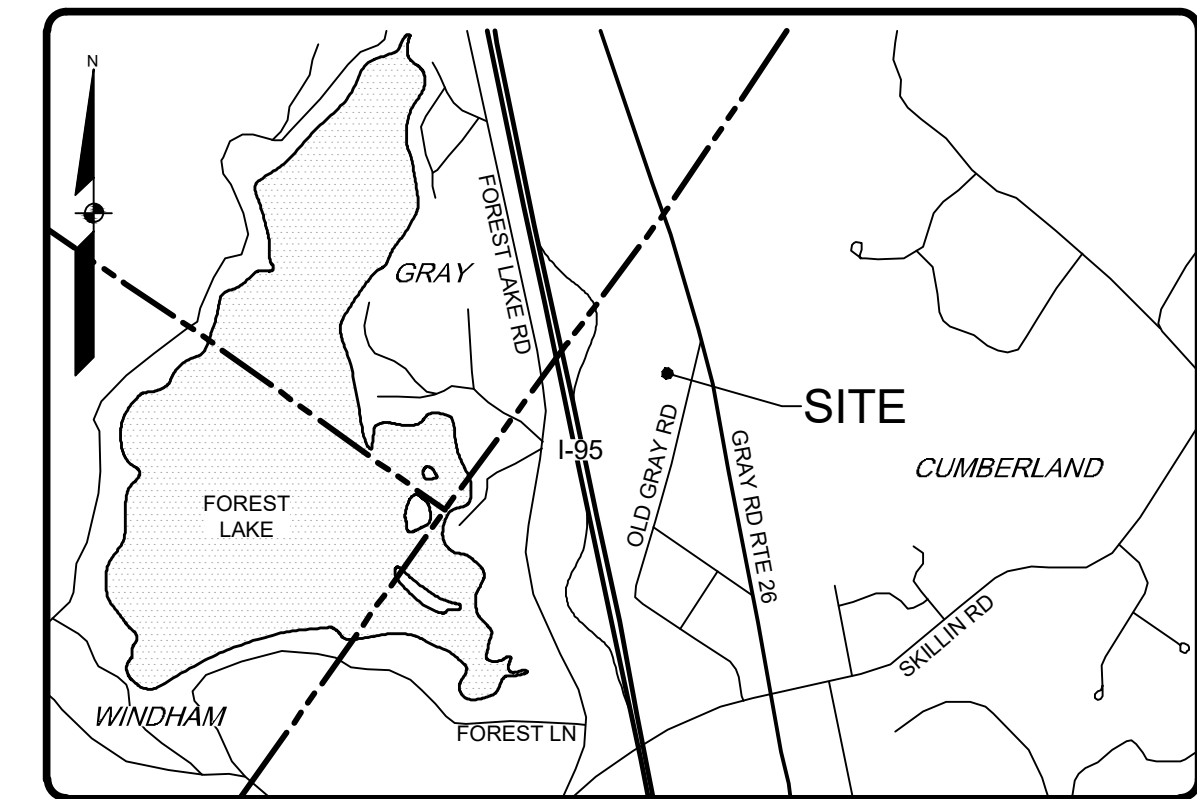
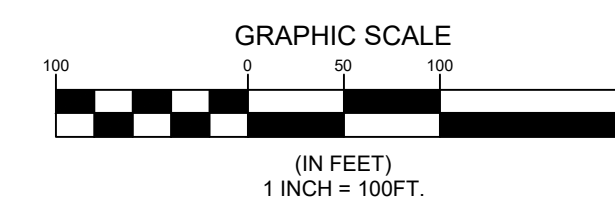
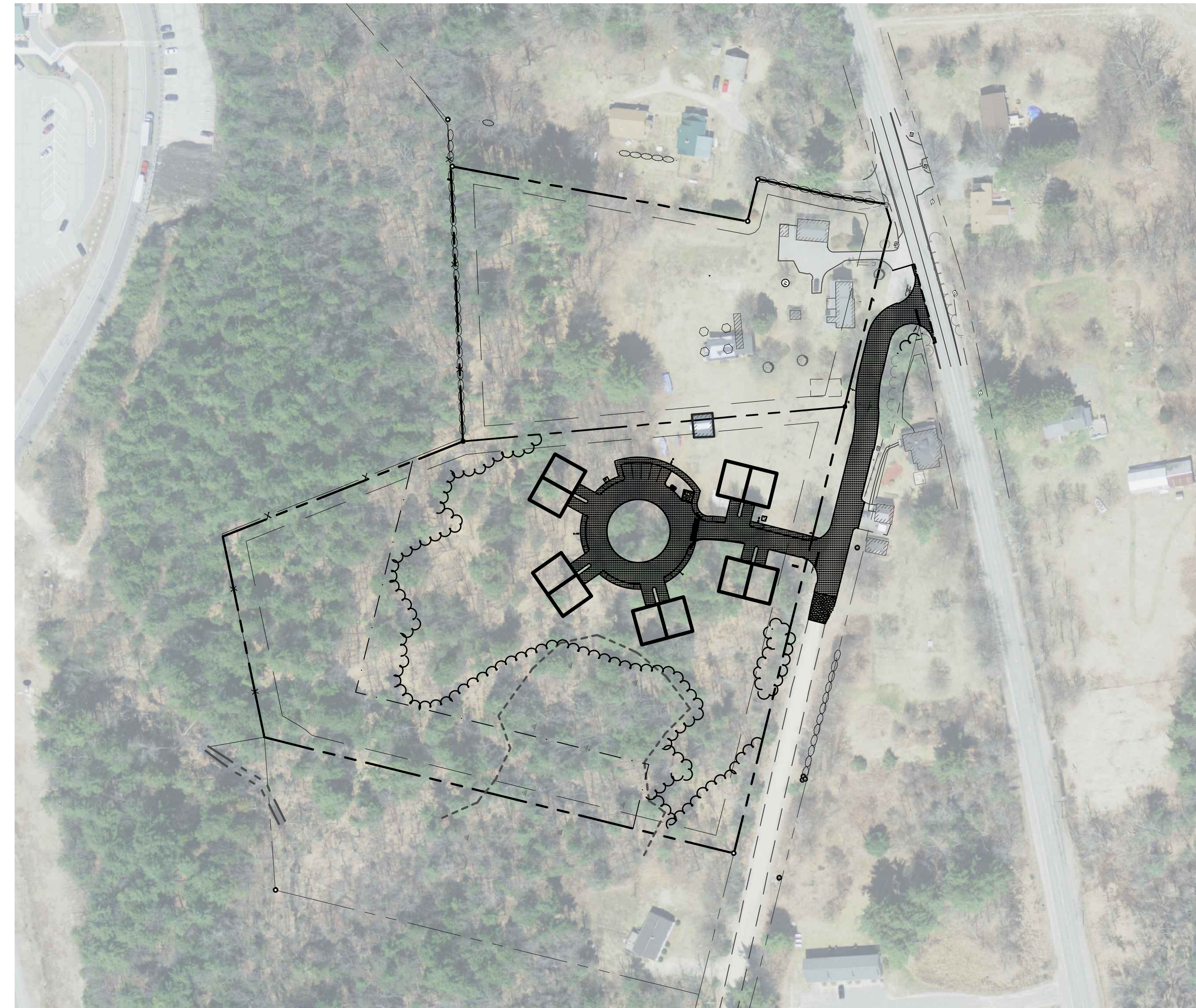
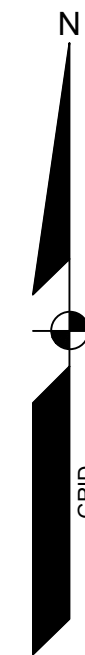
Old Gray Road will be improved as part of the project so that the section of roadway between Gray Road and the project better meets roadway design standards. The intersection at Gray Road will also be improved by with the creation of a turning radii on both sides. A portion of the existing roadway to the south is fairly steep (>8%). Given the intent is to best match existing conditions, the vertical K factors were do not meet the local standards for a residential roadway with more than 50 vehicle trips per day. There are a total of four vertical curves:

- a. The two vertical curves on the north side (and closer to Gray Road) are in general conformance with AASHTO standards for a roadway with a speed limit of 25 MPH.**

- b. The two vertical curves to the south were designed to generally match existing conditions and will be constructed in general conformance with AASHTO standards for a roadway with a speed limit of 15 MPH. Decreasing slopes and lowering roadway elevations to increase K values was not feasible with the location of an existing residential driveway in the vicinity of Station 3+70.**

246 OLD GRAY ROAD
CUMBERLAND, ME

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100



LOCATION MAP

1	COVER SHEET
2	NOTES, LEGEND AND ABBREVIATIONS
3	OVERALL SITE AND SUBDIVISION PLAN
4	SITE PLAN
5	GRADING PLAN
6	PLAN AND PROFILE
7	UTILITY PLAN
8	LANDSCAPE PLAN
9	EROSION CONTROL NOTES
10	DETAILS 1
11	DETAILS 2
12	DETAILS 3
13	DETAILS 4
1 OF 2	PRE WATERSHED
2 OF 2	POST WATERSHED
1 OF 1	FIRE ACCESS PLAN
1 OF 1	PHOTOMETRIC PLAN

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	AS NOTED
PROJECT	20551

SHEET 1 OF 13

COVER SHEET
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A

D	CAB	08/30/2022	ISSUED TO TOWN FOR FINAL REVIEW
C	CAB	08/05/2022	ISSUED FOR CURSORY REVIEW OF ROADWAY IMPROVEMENTS
B	CAB	05/31/2022	ISSUED TO TOWN FOR PRELIMINARY REVIEW
A	CAB	05/05/2022	ISSUED TO TOWN FOR STAFF REVIEW
REV:	BY:	DATE:	STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

[illegible]

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
CRAIG BURGESS
08/30/2021

EXISTING		PROPOSED
—	PROPERTY LINE/R.O.W.	—
—	ADJUTER LINE/R.O.W.	—
—	DEED LINE/R.O.W.	—
—	TIE LINE	—
—	SETBACK	—
—	EASEMENT	—
—	BUFFER	—
—	FLOODPLAIN	—
—	FLOODWAY	—
—	CENTERLINE	—
□	MONUMENT	■
⊙	IRON PIPE/ROD	●
—	DRILL HOLE	⊙
C1/L1	DEED CALL	—
C1/L1	CURVILINE NO.	C1/L1
—	SOILS	—
—	ZONE LINE	—
—	ZONE LINE ON PL	—
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1. THE RECORD OWNER OF THE PARCEL IS KARL C. & ELEANOR A. NIELSEN BY DEED DATED AUGUST 4, 1975 AND RECORDED AT THE CUMBERLAND COUNTY REGISTERY OF DEEDS (CCRD) IN BOOK 3721 PAGE 309.
2. THE PROPERTY IS SHOWN AS LOT 54 ON THE TOWN OF CUMBERLAND TAX MAP U21 AND IS LOCATED IN THE VILLAGE MEDIUM DENSITY RESIDENTIAL (VMDR) DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE VMDR DISTRICT ARE AS FOLLOWS:
NET RESIDENTIAL DENSITY: 20,000 SF/UNIT
MINIMUM LOT SIZE: 20,000 SF
MINIMUM STREET FRONTAGE: 100 FT
MINIMUM FRONT YARD: 25 FT
MINIMUM SIDE YARD: 15 FT, COMBINED WIDTH AT LEAST 35 FEET
MINIMUM REAR YARD: 25 FT
* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 8.51 ACRES.
5. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. IN FEBRUARY OF 2021.
6. PLAN REFERENCES:
A. SKETCH PREPARED BY BRUCE BOWMAN
B. B. "PROPERTY PLAN, MAINE TURNPIKE AUTHORITY, MAINE TURNPIKE, SECTION 2-PORTLAND TO AUGUSTA" DATED MARCH 1955 AND RECORDED AT THE CCRD IN PLAN BOOK 56, PAGE 34.
7. A WETLAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE ON NOVEMBER 06, 2021 BY GARY FULLERTON, LICENSED SOIL SCIENTIST OF SEBAGO TECHNICS, INC. THIS DELINEATION CONFORMS TO THE STANDARDS AND METHODS OF THE 1987 WETLANDS DELINEATION MANUAL AND NORTHEAST REGIONAL SUPPLEMENT AUTHORED AND PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS. ALL WETLAND FLARES WERE LOCATED USING GLOBAL POSITIONING SYSTEMS (GPS) TECHNOLOGY CAPABLE OF SUBMETER ACCURACY.
8. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
9. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
10. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
11. PROVIDE ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
12. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
13. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
14. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
15. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMP'S" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OCTOBER 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
17. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (811) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO THE PROPOSED EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
18. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
19. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSAS 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
20. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
21. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
22. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
23. IMMEDIATELY UPON COMPLETION OF CUT/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
24. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
25. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
26. WHERE THE TERMS "APPROVED EQUAL," "OTHER APPROVED," "EQUAL TO," "ACCEPTABLE" OR "AS SHOWN" ARE USED, THEY SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGEMENT OF SEBAGO TECHNICS, INC.
27. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
28. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
29. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
30. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
31. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
32. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H: V) SHALL BE LINED WITH EROSION CONTROL BLANKET.

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H:V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL (EMSC) MANUAL, PUBLISHED BY BUREAU OF LAND AND WATER, U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, OCTOBER 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. WETLANDS, ASSOCIATED SETBACKS AND STREAM SETBACKS TO BE STAKED BY OWNER PRIOR TO SITE DISTURBANCE.
3. BEFORE TREE CLEARING, REFER TO PLANS FOR WOODED BUFFER LOCATIONS. TREES SHALL NOT BE CLEARED WITHIN DESIGNATED WOODED BUFFER AREAS.
4. GRADING AND CLEARING LIMITS SHALL NOT ENCRATCH ON ADJACENT PROPERTIES UNLESS NOTED OTHERWISE ON THE PLANS.
5. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL, SO THAT AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. CONSTRUCTION BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED, SURFACES SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER DRAINAGES. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

PLANT QUANTITIES SHOWN ON PLANT LISTS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.

SIZE AND VERIFYING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF "U.S.A. STANDARD FOR NURSERY STOCK," BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.

ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.

PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION. DURING THE ONE YEAR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.

ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.

EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.

ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHEARED DARK BROWN BARK MULCH.

THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODED OR SEEDDED. PLANTING AREAS SHALL RECEIVE 12" ROLLED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.

ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.

WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWER BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-SORTED OR DEHYDRATED MANURE OR COMPOST. ROTTMILL BEDS TO A DEPTH OF 6 INCHES.

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT EXISTING ONSITE SEWER PIPE AND ADJUST MANHOLE RIMS TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM TO MAINTAIN PIPES ON PIPE RUNS 30 FEET OR LESS. THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE OR NOT TO USE A GROUND LASER.
3. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL BE PROVIDE 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND PIPE OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
4. PIPE:
 - SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
 - FORCEMAIN PIPE SHALL BE DR-11 HDPE OR APPROVED EQUAL.
 - STORMDRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
5. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
6. COORDINATE UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
7. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
9. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
10. CONTRACTOR SHALL FURNISH AND INSTALL TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITIES. ELECTRICAL AND TELECOM/DATA PROVIDERS WILL PULL PRIMARY SERVICE TO TRANSFORMER AND PANEL. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
11. WILL BE DRILLED BY OTHERS. ELECTRICAL CONNECTION, PUMP SIZING, GROUNDWATER TESTING AND OTHER RELATED SERVICES TO BE COORDINATED BY WELL DRILLER WITH DESIGN ENGINEER, MECHANICAL ENGINEER AND ELECTRICAL ENGINEER.

FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

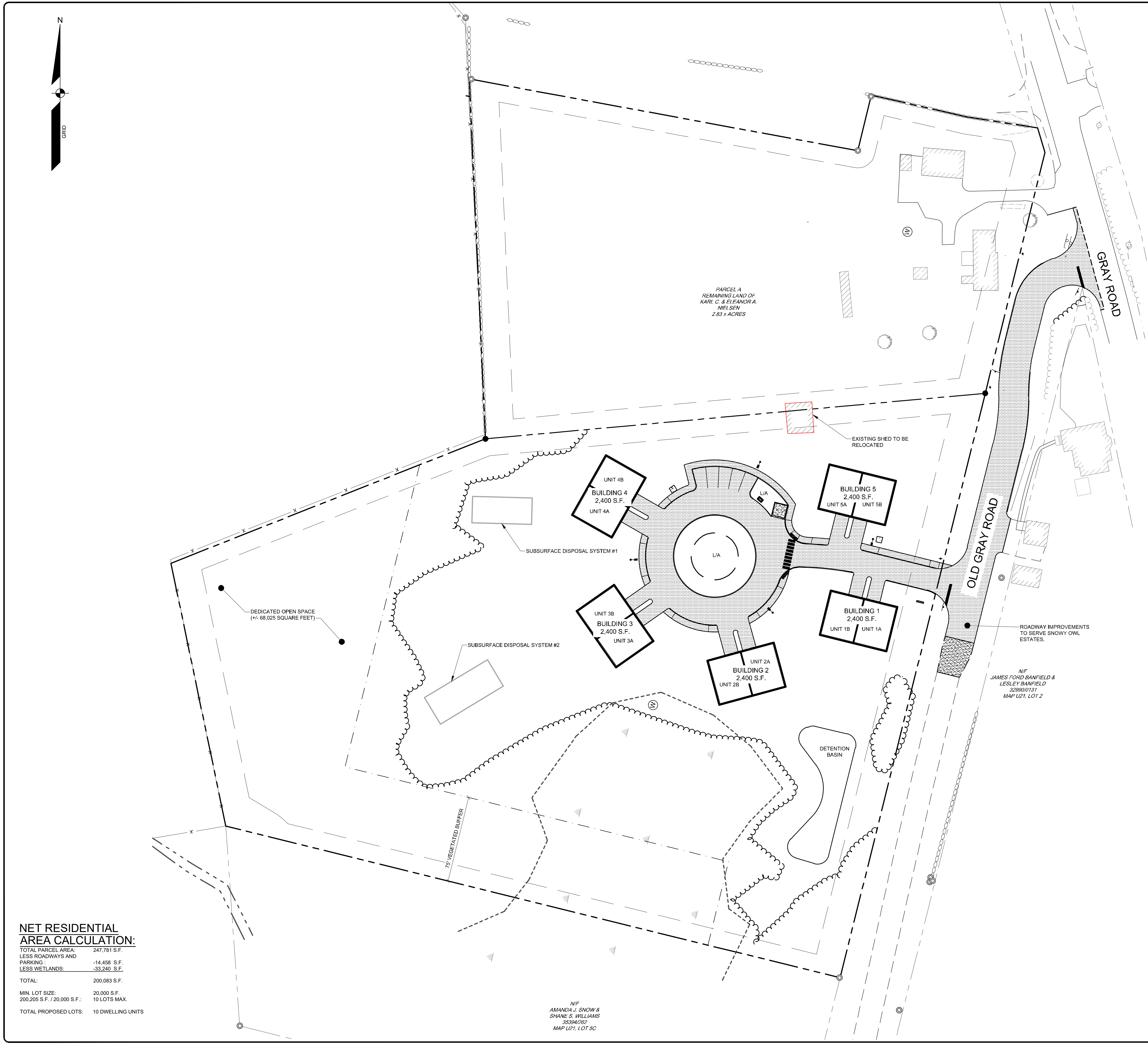
SHEET 2 OF 13



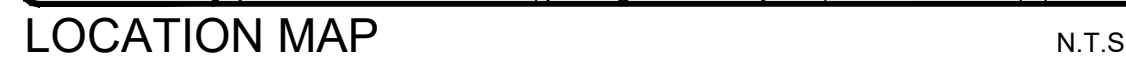
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C	CAB	08/05/2022	ISSUED FOR CURSORY REVIEW OF ROADWAY IMPROVEMENTS
B	CAB	05/31/2022	ISSUED TO TOWN FOR PRELIMINARY REVIEW
A	CAB	05/05/2022	ISSUED TO TOWN FOR STAFF REVIEW
REV. BY:	DATE:	STATUS:	

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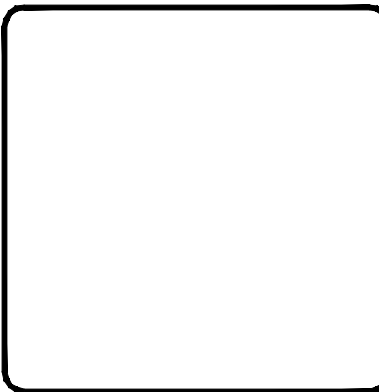
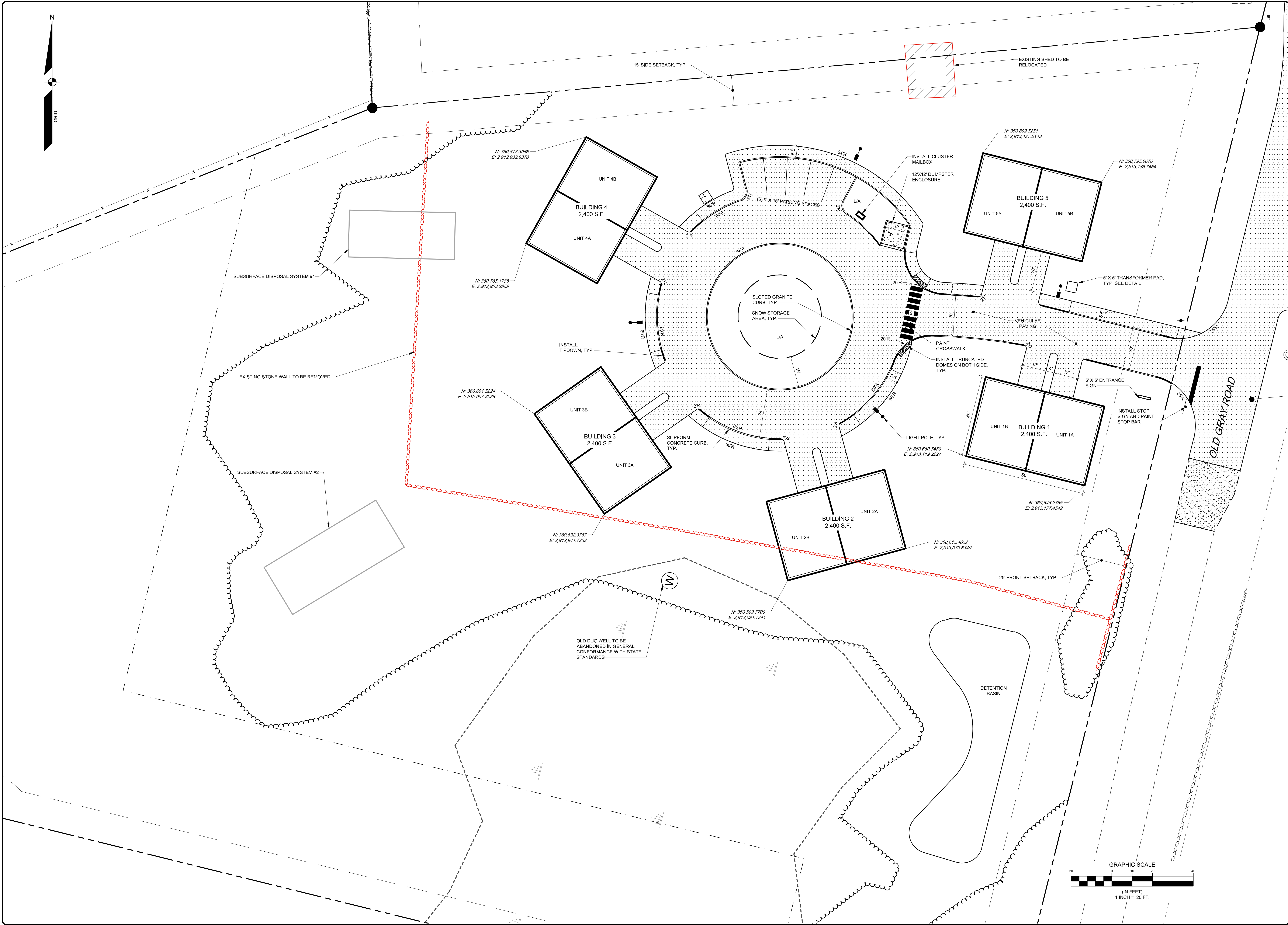


N/F
AMANDA J. SNOW &
SHANE S. WILLIAMS
35394/262
MAP U21, LOT 5C



CRAIG A. BURGESS, P.E. 12635 JACOB I. BARTLETT, PLS 2513





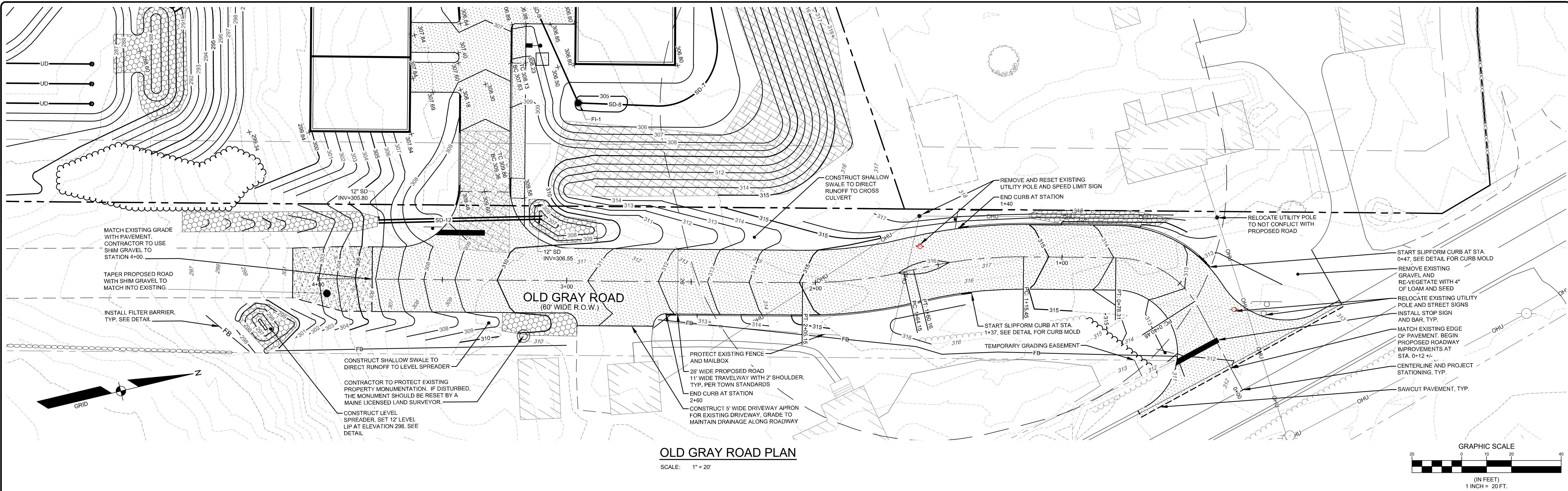
ISSUED TO TOWN FOR FINAL REVIEW	08/30/2022	CAB
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ISSUED TO TOWN FOR STAFF REVIEW	05/05/2022	CAB

REV.	BY	DATE	STATUS
1	AJB	08/30/2022	ISSUED TO TOWN FOR FINAL REVIEW
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SEBAGO
TECHNICS
www.sebagotechnics.com
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-260-2100

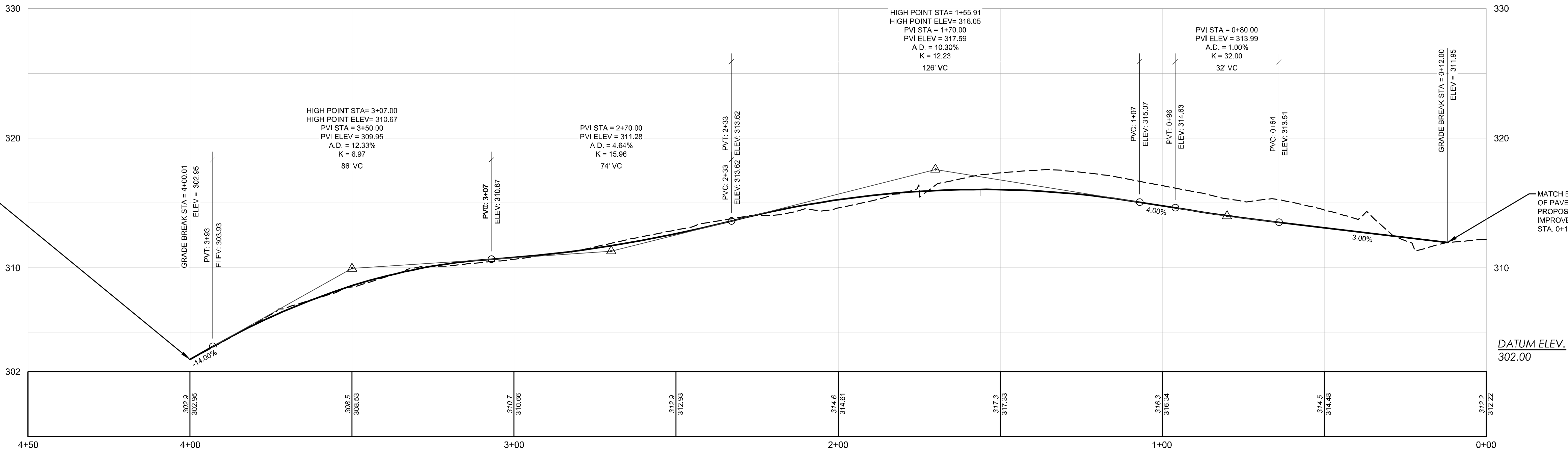
SITE PLAN
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	1" = 20'
PROJECT	20551



OLD GRAY ROAD PLAN

SCALE: 1" = 20'



OLD GRAY ROAD PROFILE

SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL

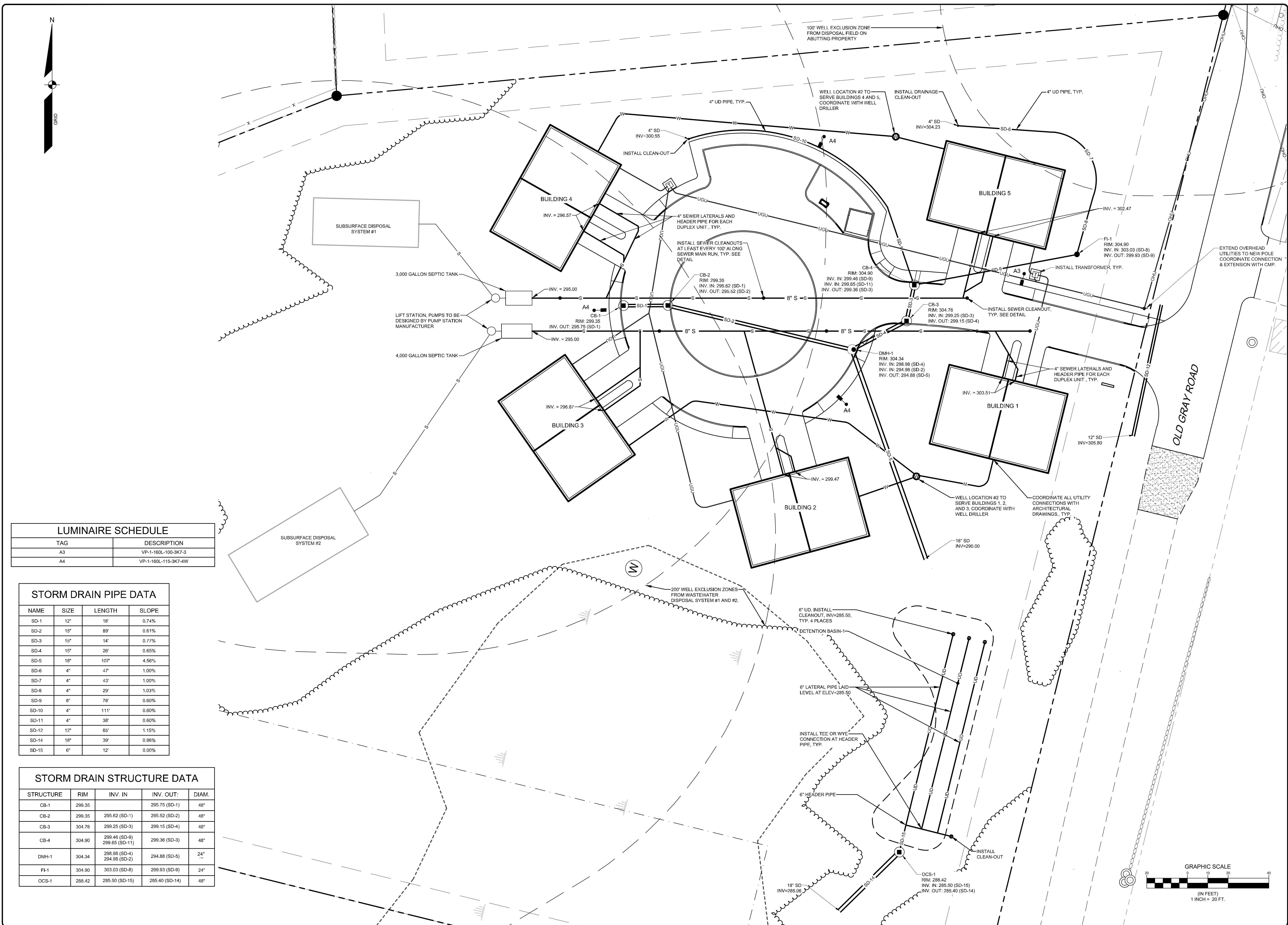


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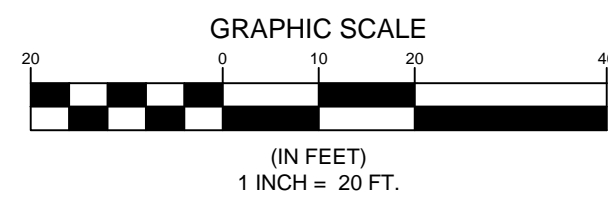


PLAN AND PROFILE
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	AS NOTED
PROJECT	20551



LUMINAIRE SCHEDULE	
TAG	DESCRIPTION
A3	VP-1-160L-100-3K7-3
A4	VP-1-160L-115-3K7-4W



KEY	BOTANICAL NAME
AR	ACER X FREEMANII
ZS	ZELKOVA SERRATA
AC	ABIES CONCOLOR
AF	ABIES FRASERI
PO	PICEA OMORIKA
POd	PHYSCARPUS OPULIFOLIUS 'DIABOLO'
CS	CORNUS SERICEA 'ARCTIC FIRE'
MS	MISCANTHUS SINENSIS 'MORNING LIGHT'

SEED MIX A: MDOT METHOD #1 PARK MIX [APPLY IN DISTURBED AREAS]
(FOR MORE INFORMATION PLEASE VISIT DIVISION 700 OF THE MAINE DEPARTMENT OF TRANSPORTATION)

COMMON NAME	SIZE / NOTES
FREEMAN RED MAPLE	2.5' CAL.
ZELKOVA	2' CAL.
WHITE FIR	6'-7' HGT.
FRASER FIR	6'-7' HGT.
SERBIAN SPRUCE	6'-7' HGT.
MONLO NINEBARK	#5 CONT.
ARCTIC FIRE REDTWIG DOGWOOD	#5 CONT.
MORNING LIGHT MAIDENHAIR GRASS	#2 CONT.

REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS

CINCH TIE TREE

HOSE

FINISH GRADE

4" BARK MULCH

EXISTING SOIL

2"x2" WOOD STAKE AT ANGLE TOWARDS PREVAILING WIND

REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL

2X THE ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED

DO NOT MULCH DIRECTLY AGAINST ROOT FLARE

SLOW RELEASE FERTILIZER PACKET 6-8" DEPTH 3 PACKETS REQUIRED

2:1 SIDE SLOPE

ALT. TREE STAKING: (2) 2 1/2" DRYWALL SCREWS

2"x2"x4" WOOD CROSS MEMBER

2"x2"x4" WOOD STAKE WITH LONG TAPER MIN. 18"

NOTES:

REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS

HOSE

2"x2" STAKE IN LINE W/TRUNK (SEE NOTES)

PLASTIC CHAIN-LOCK OR GUY WIRE WHOSE APPROX. 4" ABOVE GROUND (SEE NOTES)

DO NOT MULCH DIRECTLY AGAINST ROOT FLARE

3" BARK MULCH

EARTH SAUCER

FINISH GRADE

EXISTING SOIL

REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL

2X THE DIAMETER OF ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED

2"x2"x4" WOOD STAKE

2"x2"x4" CROSS MEMBER

(2) 2"x2" DRYWALL SCREWS, TYP.

4'-0" TREE

ALT. TREE STAKING PLAN
NOT TO SCALE

NOTES:
INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
1. THE TREE IS OF SUBSTANTIAL SIZE
2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

SLOW RELEASE FERTILIZER PACKET 6-8" DEPTH 3 PACKETS REQUIRED

ALT. TREE STAKING—2"x2"x4" WOOD CROSS MEMBER

(2) 2"x2" DRYWALL SCREWS

2"x2"x4" WOOD STAKE WITH LONG TAPER MIN. 18"

ALT. TREE STAKING PLAN
NOT TO SCALE

2"x2"x4' WOOD STAKE
2x2x4' CROSS MEMBER
2x2 DRYWALL SCREWS, TYP.
4'-0" TREE

REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS

CINCH TIE TREE
HOSE

2"x2" WOOD STAKE AT ANGLE TOWARDS PREVAILING WIND

SLOW RELEASE FERTILIZER PACKET 6" DEPTH 3 PACKETS REQUIRED

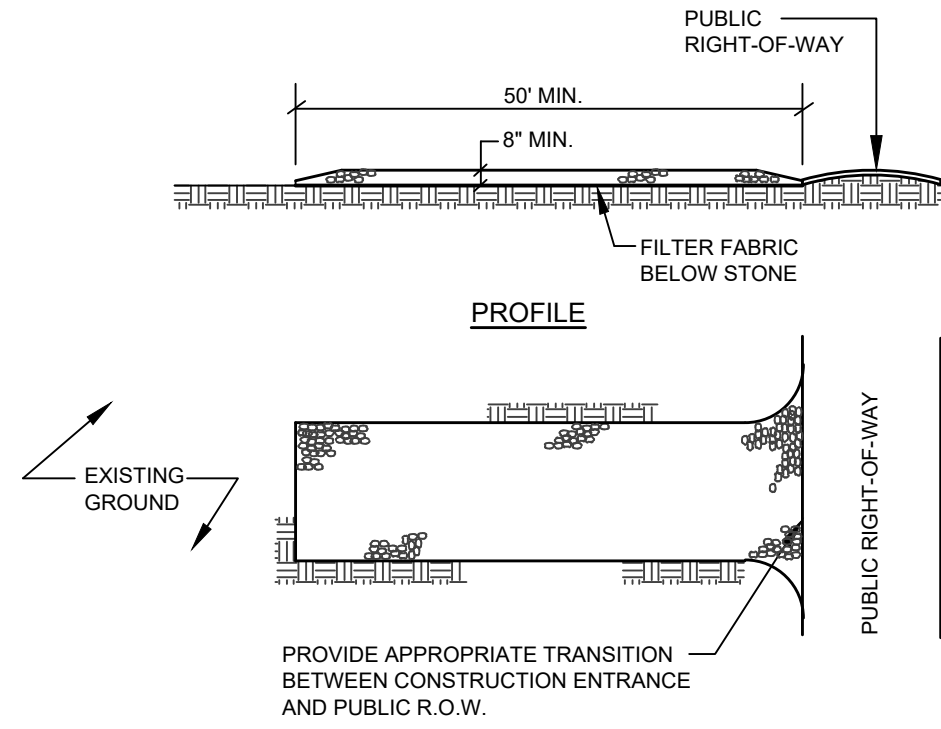
DO NOT MULCH DIRECTLY AGAINST ROOT FLARE

3" BARK MULCH
EARTH SAUCER
FINISH GRADE
EXISTING SOIL
REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL
2X THE DIAMETER OF ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED

ALT. TREE STAKING:
(2) 2 1/2" DRYWALL SCREWS
2"x2"x4' WOOD CROSS MEMBER
2"x2"x4' WOOD STAKE WITH LONG TAPER MIN. 18"

Diagram illustrating the correct application of the Root Ball Fertilizer System:

- REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS
- 3" BARK MULCH
- EARTH SAUCER
- FINISH GRADE
- EXISTING SOIL
- REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL
- 2X THE DIAMETER OF ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED
- DO NOT MULCH DIRECTLY AGAINST ROOT FLARE
- SLOW RELEASE FERTILIZER PACKET 2 (2 PACKETS REQUIRED)

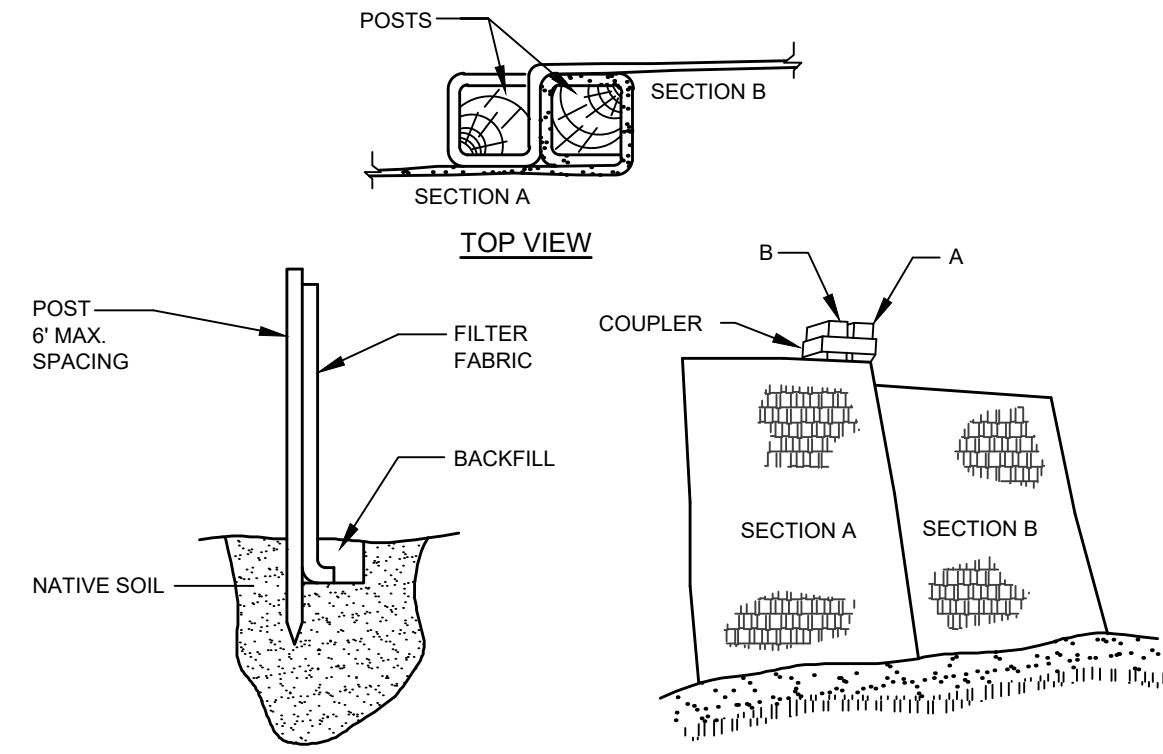


PLAN

NOTES:

- STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
- LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
- THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
- WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
- MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN-OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

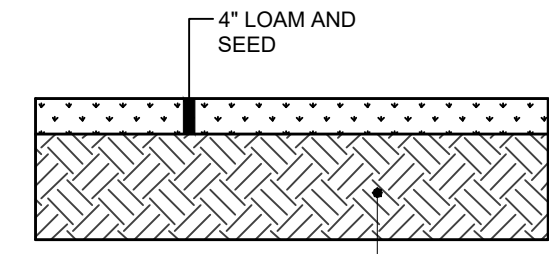
STABILIZED CONSTRUCTION EXIT
NOT TO SCALE



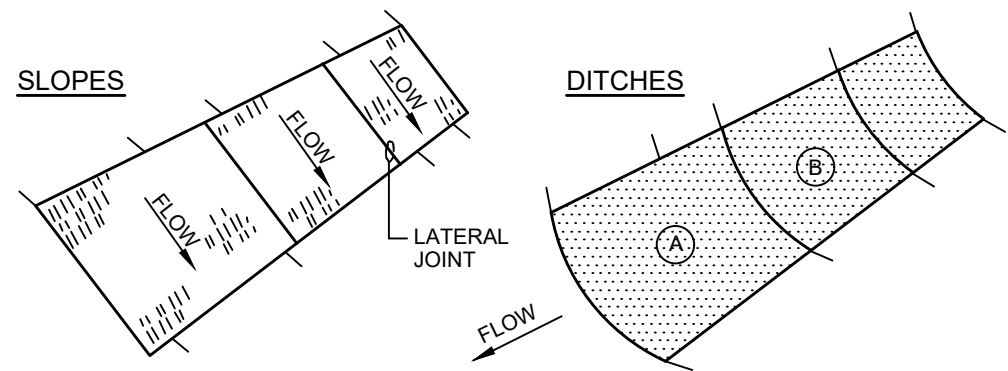
INSTALLATION NOTES:

- EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
- UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
- DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
- 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 ACCOMPANIED BY AN INTERCEPTION DITCH.
- JOIN SECTION AS SHOWN ABOVE.
- BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

FILTER BARRIER
NOT TO SCALE



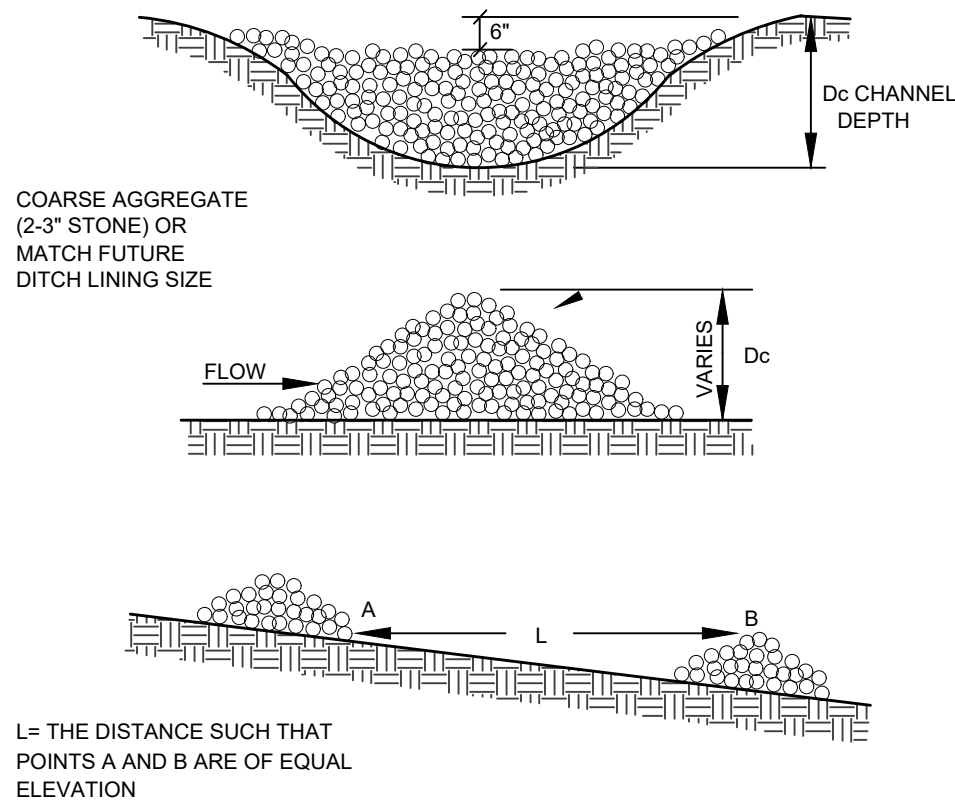
LOAM & SEED SECTION
NOT TO SCALE



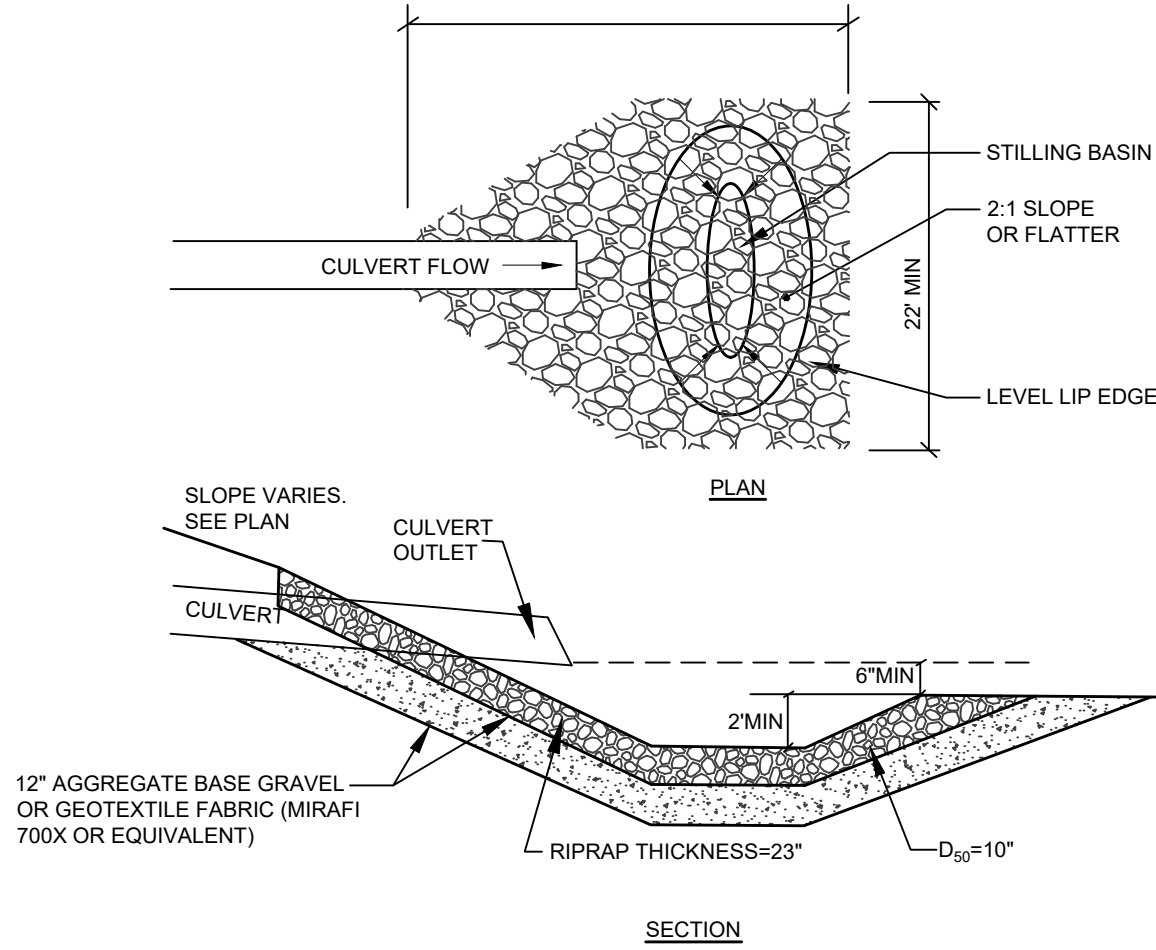
NOTES:

- BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
- FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
- LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
- STAPLE OUTSIDE LATERAL EDGE 2" ON CENTER.
- WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE.
- USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUAL.

EROSION CONTROL BLANKET
NOT TO SCALE



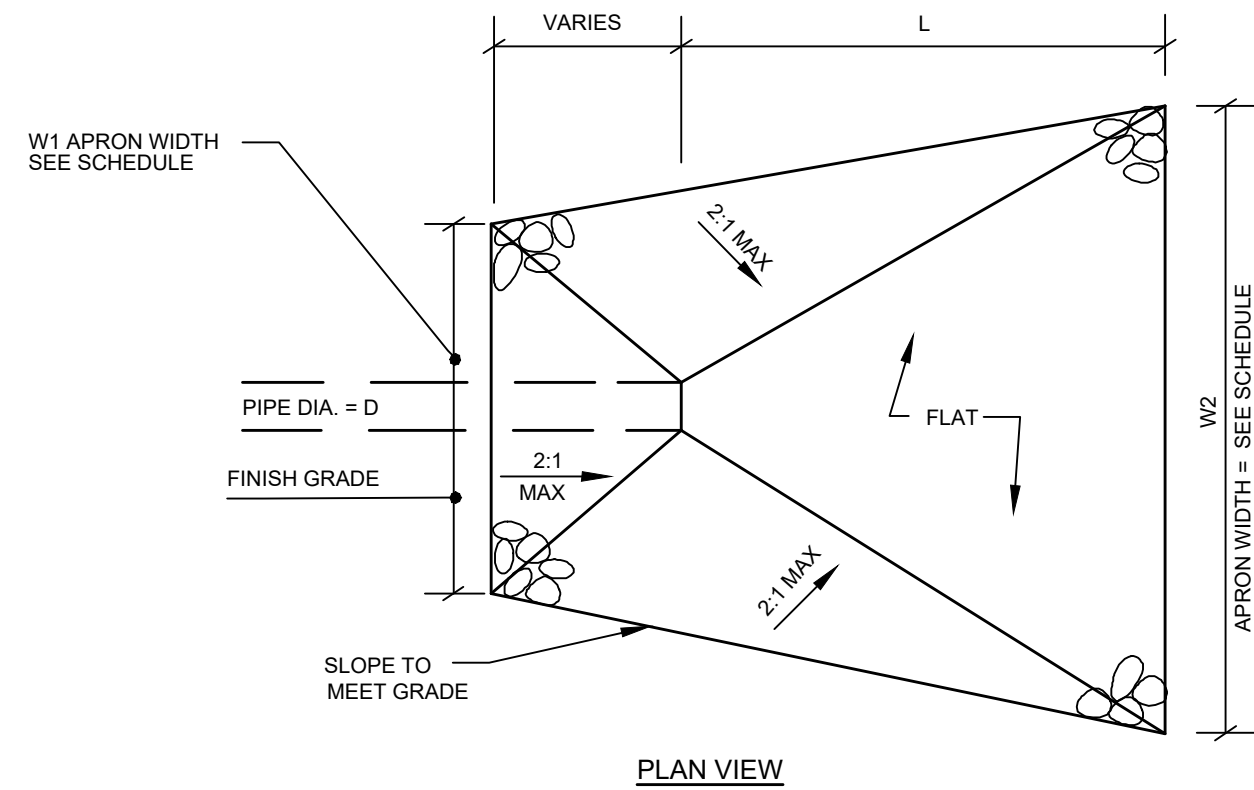
STONE CHECK DAM
NOT TO SCALE



PLUNGE POOL DETAIL
NOT TO SCALE

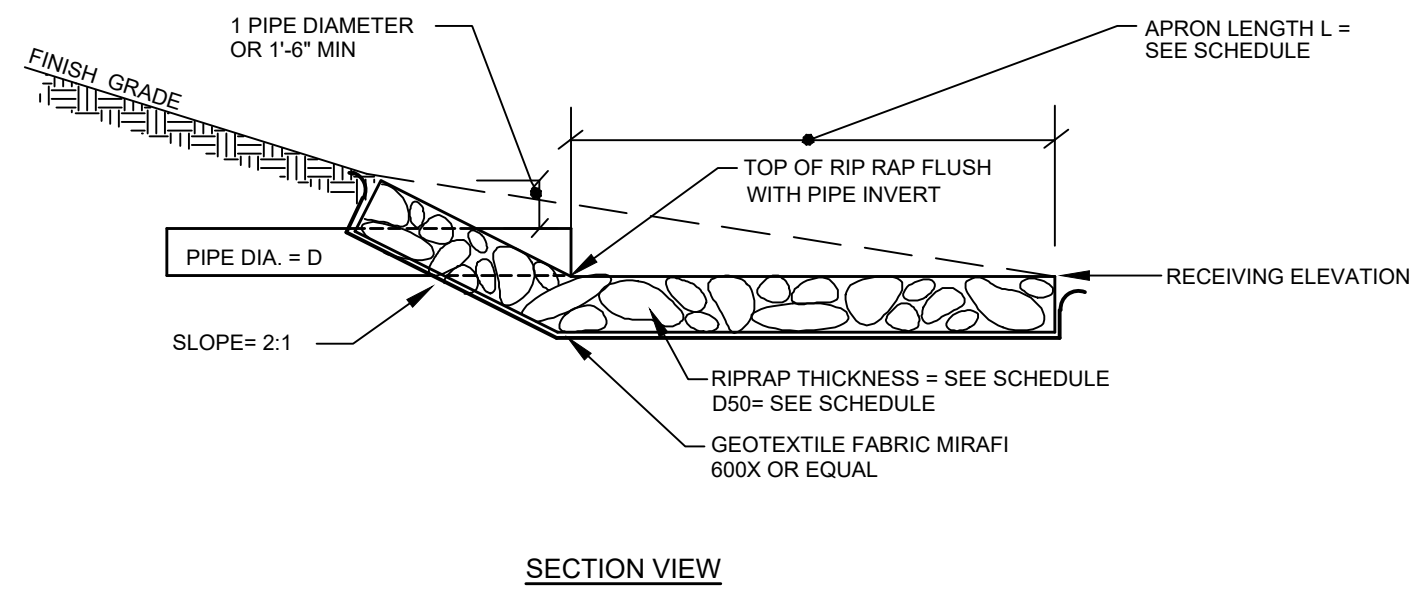
TYPICAL RIPRAP APRON SCHEDULE

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH -W1 (FT)	WIDTH -W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18

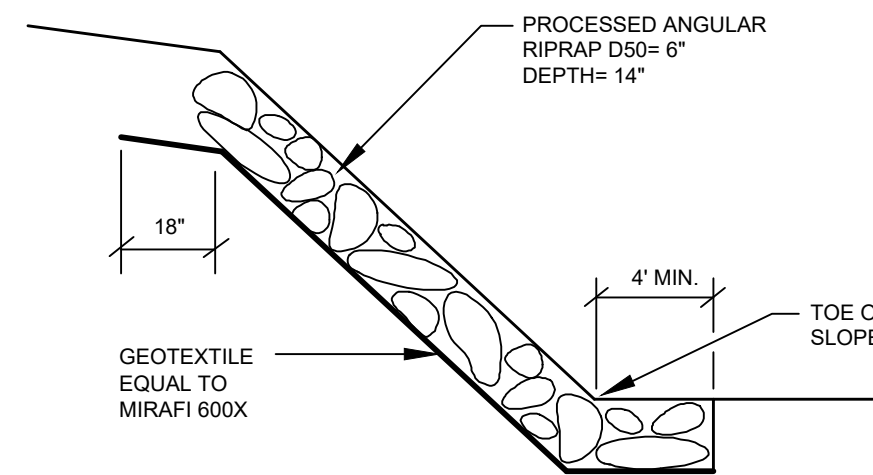


NOTES:

- RIPRAP TO BE PROCESSED ANGULAR ROCK
- RIPRAP GRADATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D50 SIZE TO 25 PERCENT OF THE D50 SIZE
- THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE UPWARD
- STONES SHALL BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12" ONTO THE GEOTEXTILE
- THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED SURFACE



RIPRAP APRON
NOT TO SCALE



SIDE SLOPE RIPRAP
NOT TO SCALE

CRAIG A. BURGESS, P.E. 12635



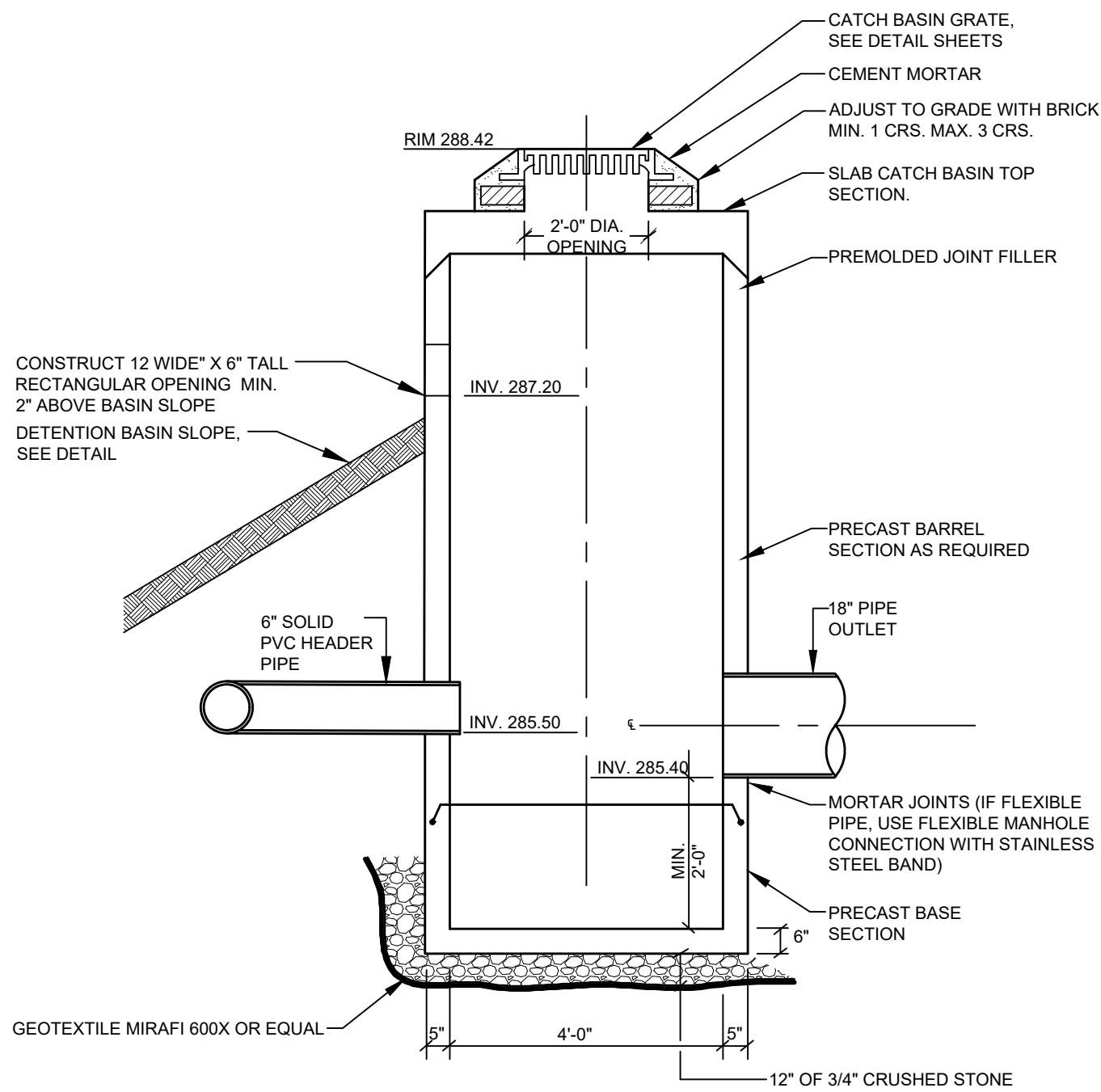
REV.	BY	DATE	STATUS
D	CAB	08/30/2022	ISSUED TO TOWN FOR FINAL REVIEW
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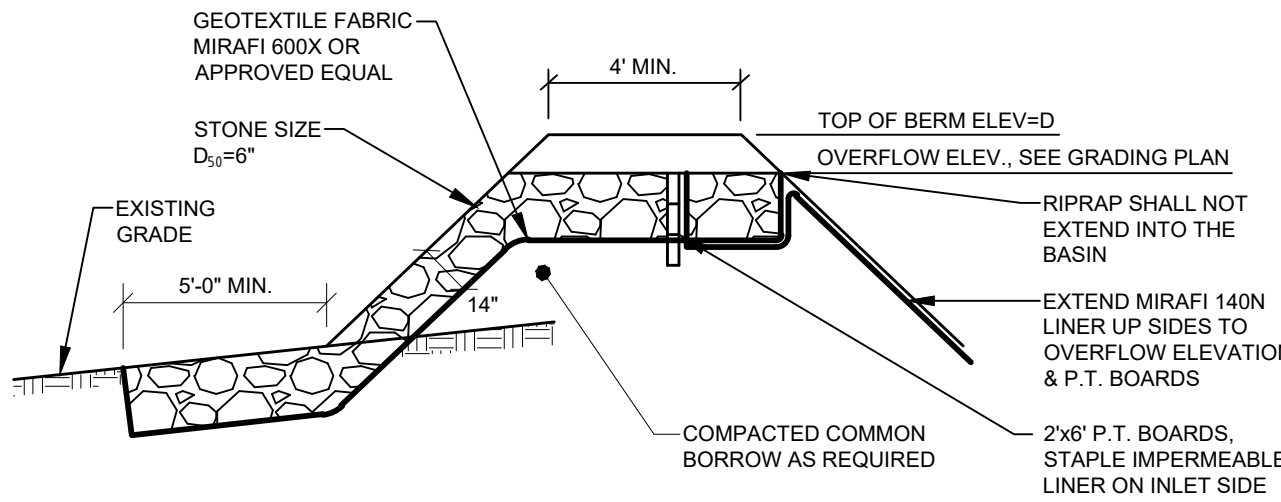


DETAILS 1
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	NONE
PROJECT	20551

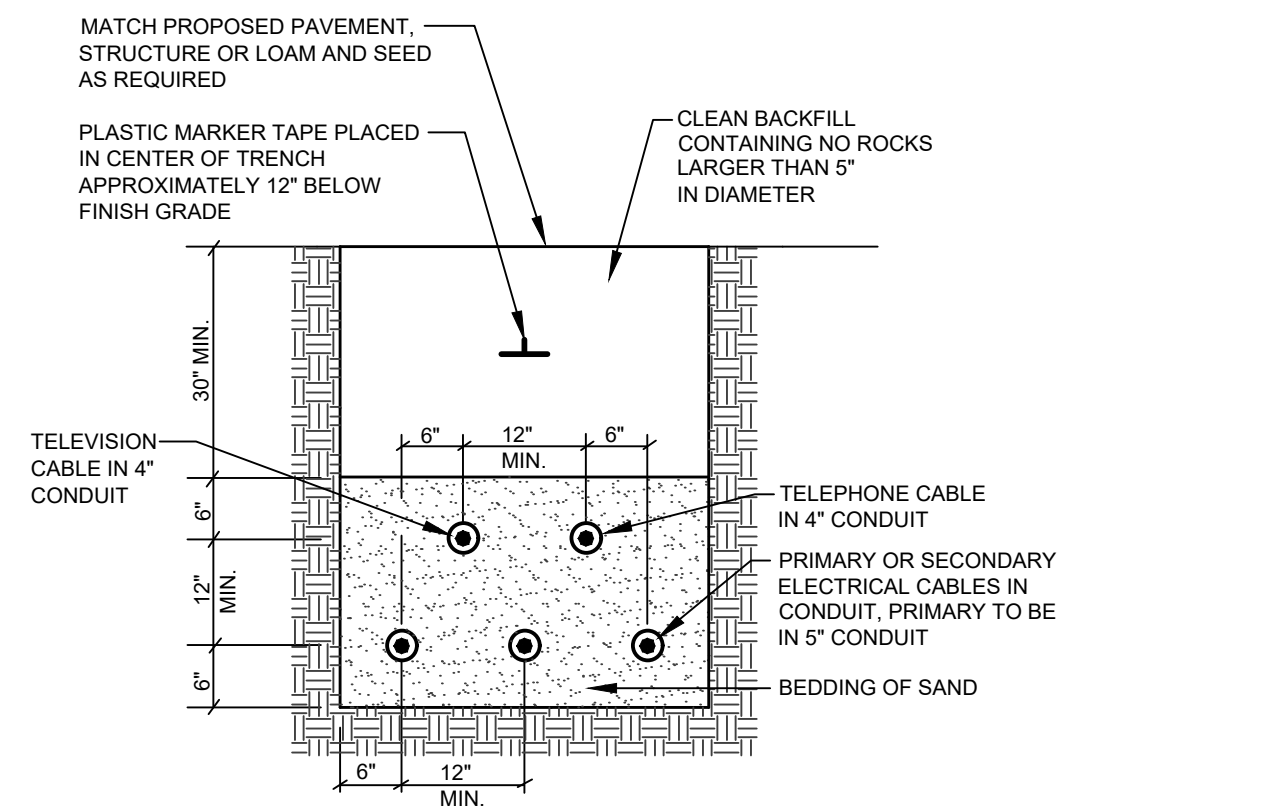


OUTLET CONTROL STRUCTURE (OCS-1) DETAIL
NOT TO SCALE



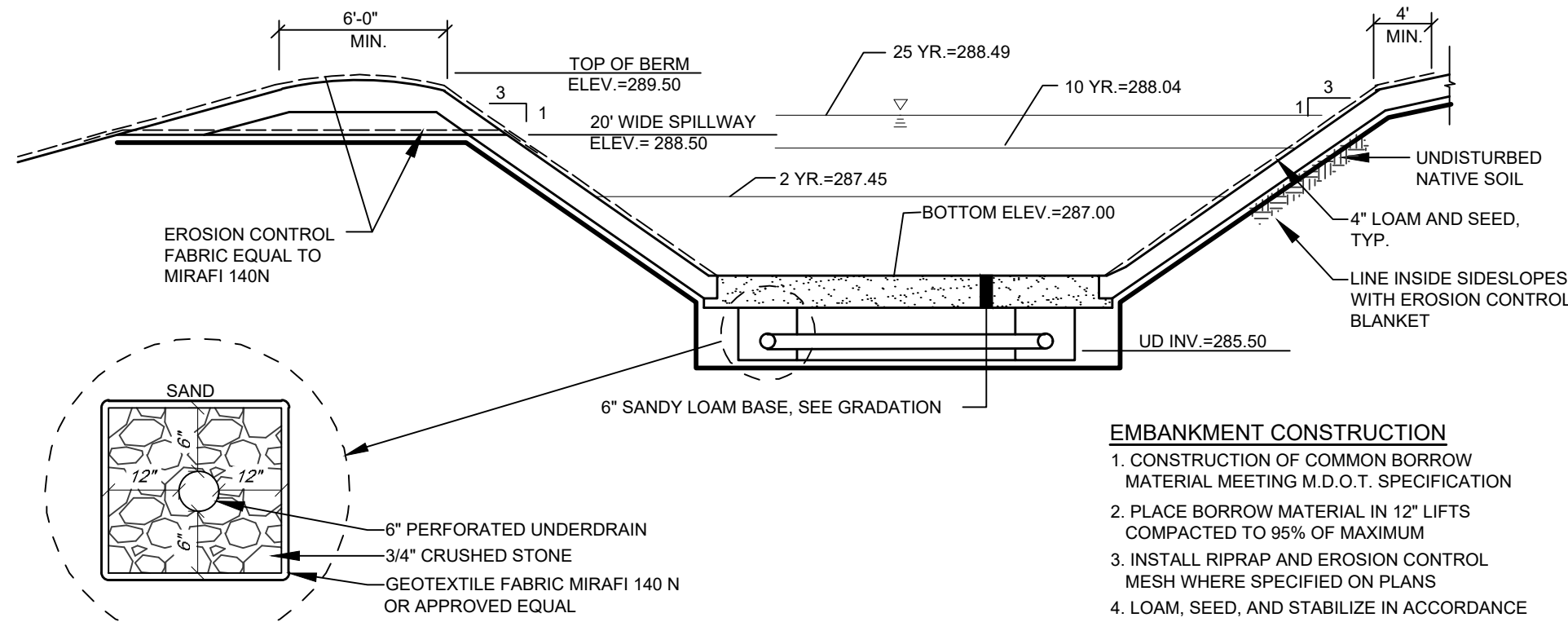
- EMBANKMENT CONSTRUCTION**
1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION.
 2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
 3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
 4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

**EMERGENCY OVERFLOW
SPILLWAY LONGITUDINAL SECTION**
NOT TO SCALE

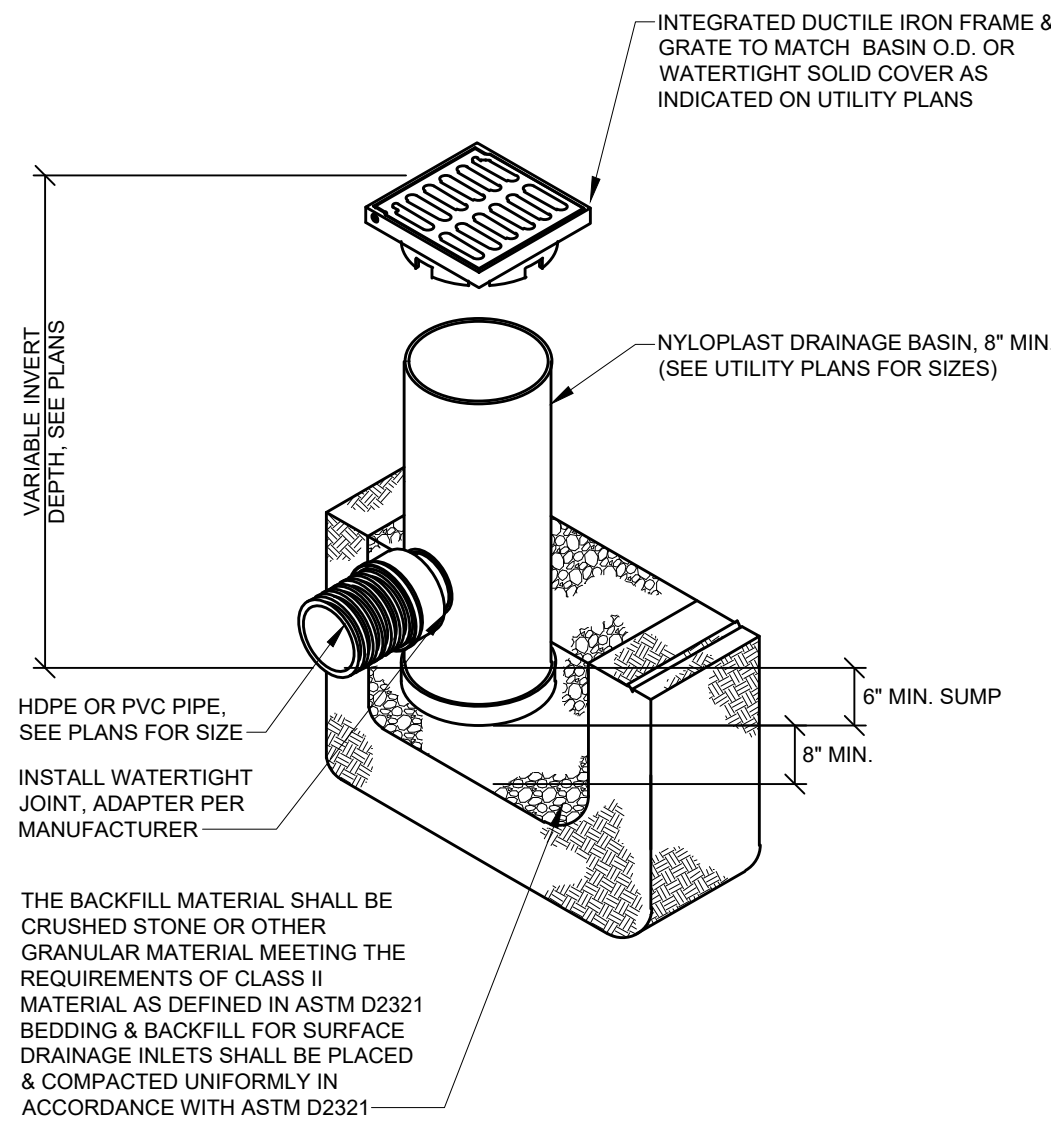


- NOTES:**
1. CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.
 2. DUCT BANK FOR 3-PHASE POWER TO BE COORDINATED WITH CMP.

**TYPICAL UNDERGROUND
CABLE INSTALLATION**
NOT TO SCALE

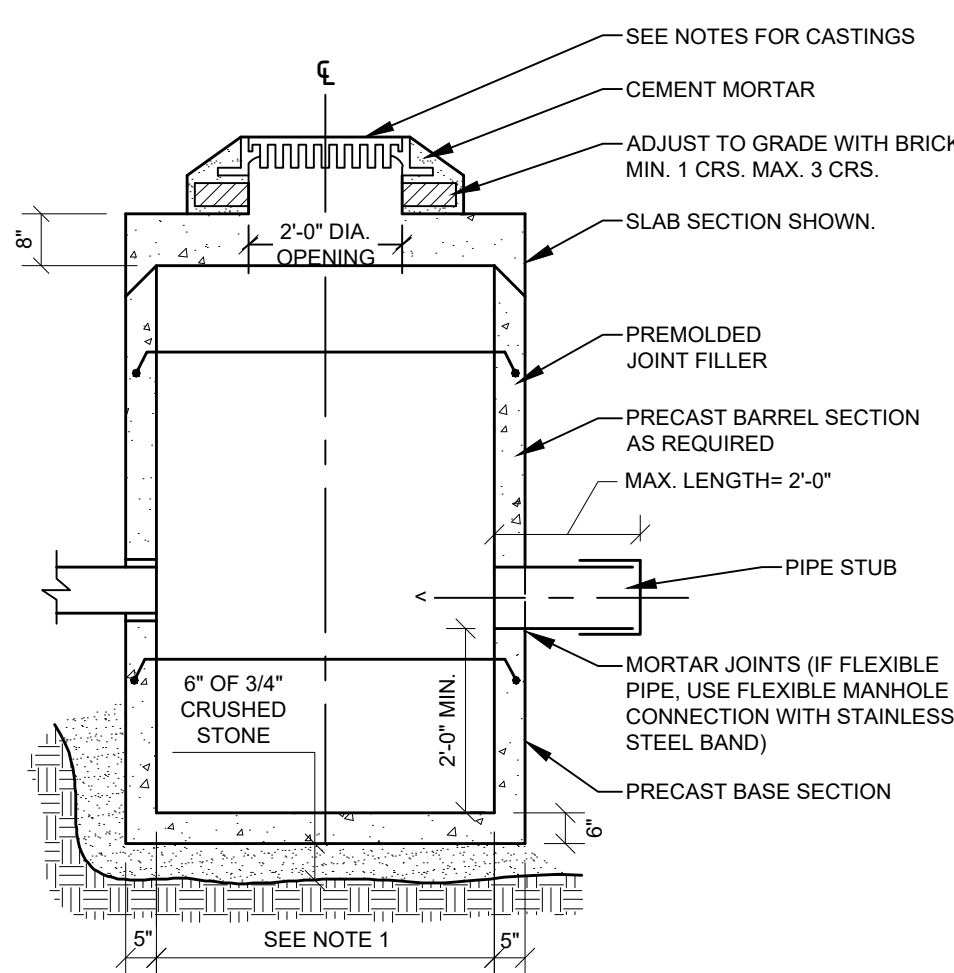


DETENTION BASIN-1 SECTION
NOT TO SCALE



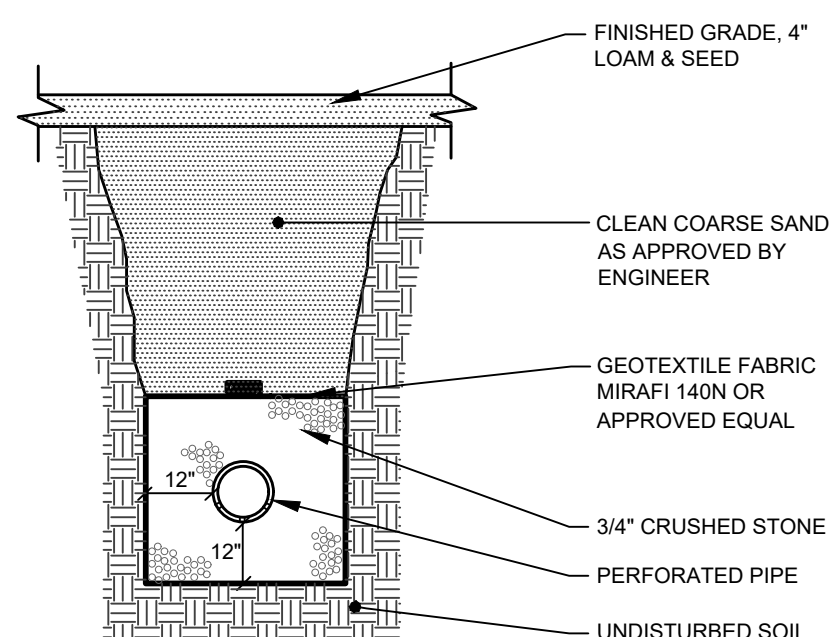
- NOTES:**
1. INSTALL BASIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2. INSTALL DOME GRATE IN PLANT BED AREAS.

TYP. NYLOPLAST FIELD INLET
NOT TO SCALE

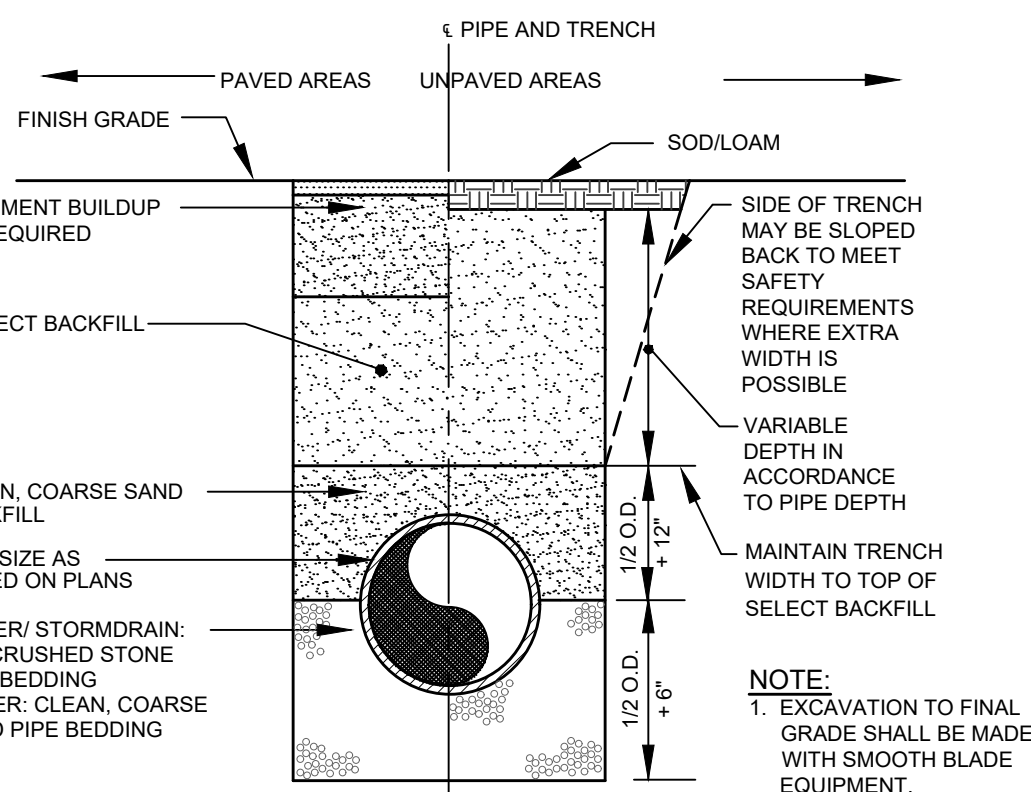


- NOTES:**
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
 2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
 3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
 4. CATCH BASIN FRAME AND GRATE TO BE GENERAL FOUNDRIES 12461, OR APPROVED EQUAL.

CATCH BASIN
NOT TO SCALE

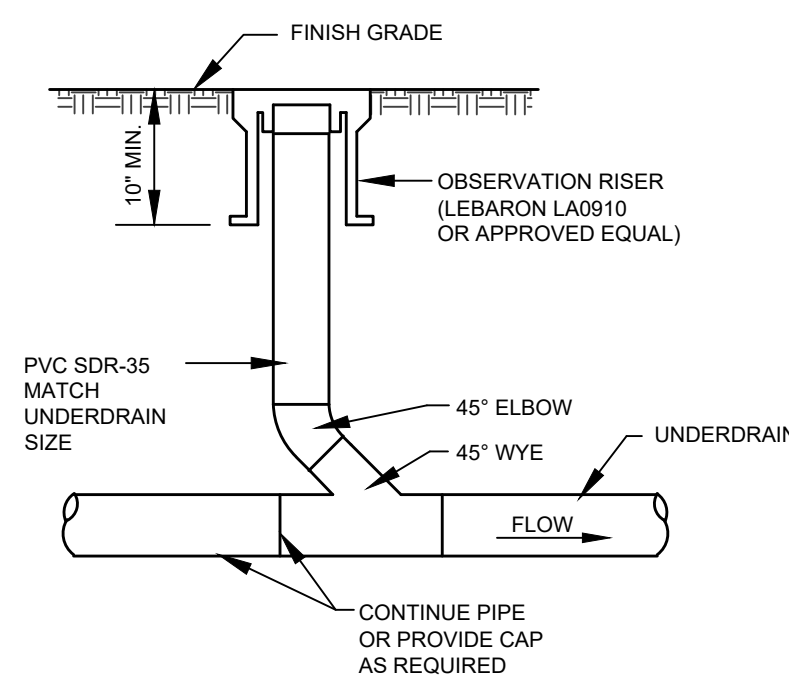


**TYP. PERFORATED UNDERDRAIN
TRENCH SECTION**
NOT TO SCALE

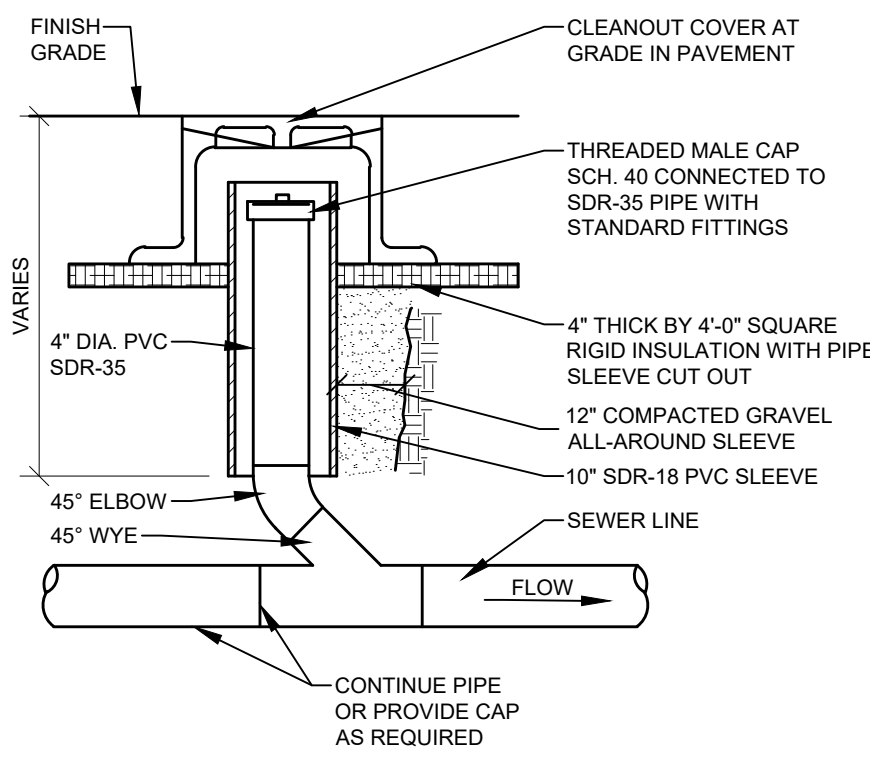


- NOTE:**
1. EXCAVATION TO FINAL GRADE SHALL BE MADE WITH SMOOTH BLADE EQUIPMENT.

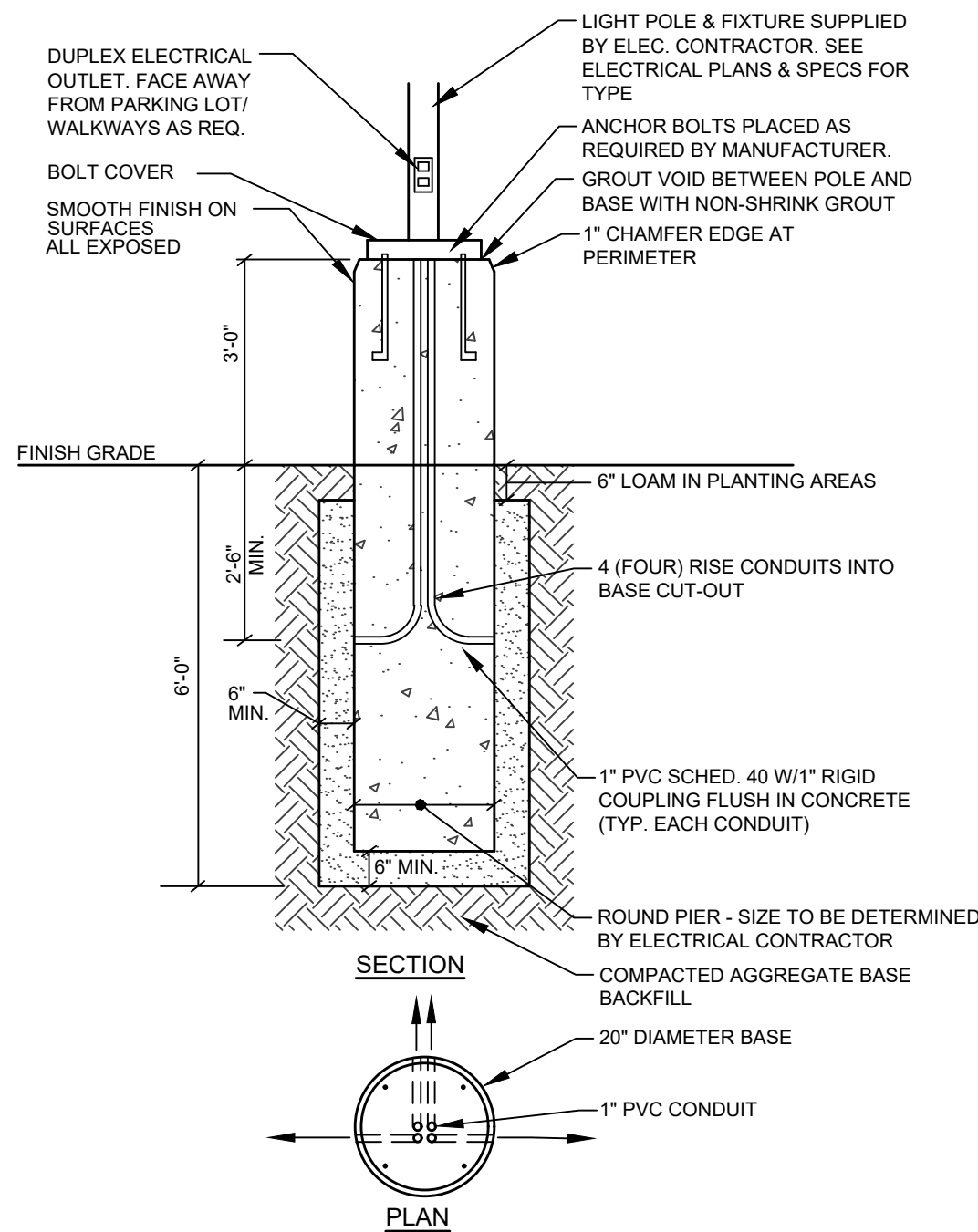
TYPICAL TRENCH SECTION
NOT TO SCALE



**CLEAN-OUT IN
GRASSED AREAS**
NOT TO SCALE



**SEWER CLEANOUT IN
PAVEMENT AREAS**
NOT TO SCALE



- NOTES:**
1. CONCRETE f_c =5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT
 2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONTRACTOR
 3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
 4. INSTALL BASE WITH 36 INCHES OF REVEAL ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE WITHIN 3 FEET OF VEHICULAR PAVEMENT. PROVIDE 6 INCHES OF REVEAL ABOVE FINISHED GRADE IN LANDSCAPE AREAS WHEN LIGHT POLE BASE IS 3 FEET OR MORE FROM PAVED AREAS
 5. LIGHT POLE BASE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL.

LIGHT POLE BASE
NOT TO SCALE

CRAIG A. BURGESS P.E. 12635



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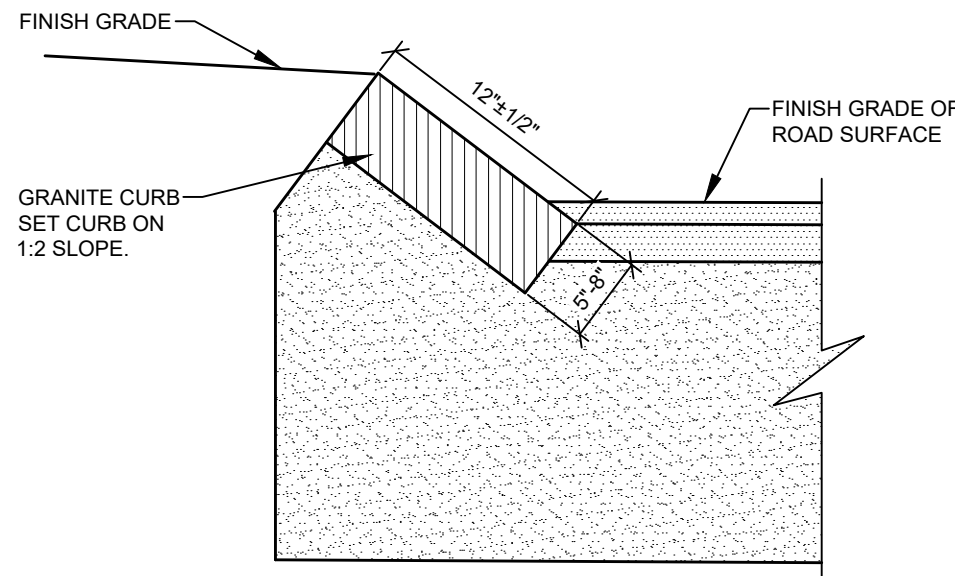


DETAILS 2
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	NONE
PROJECT	20551

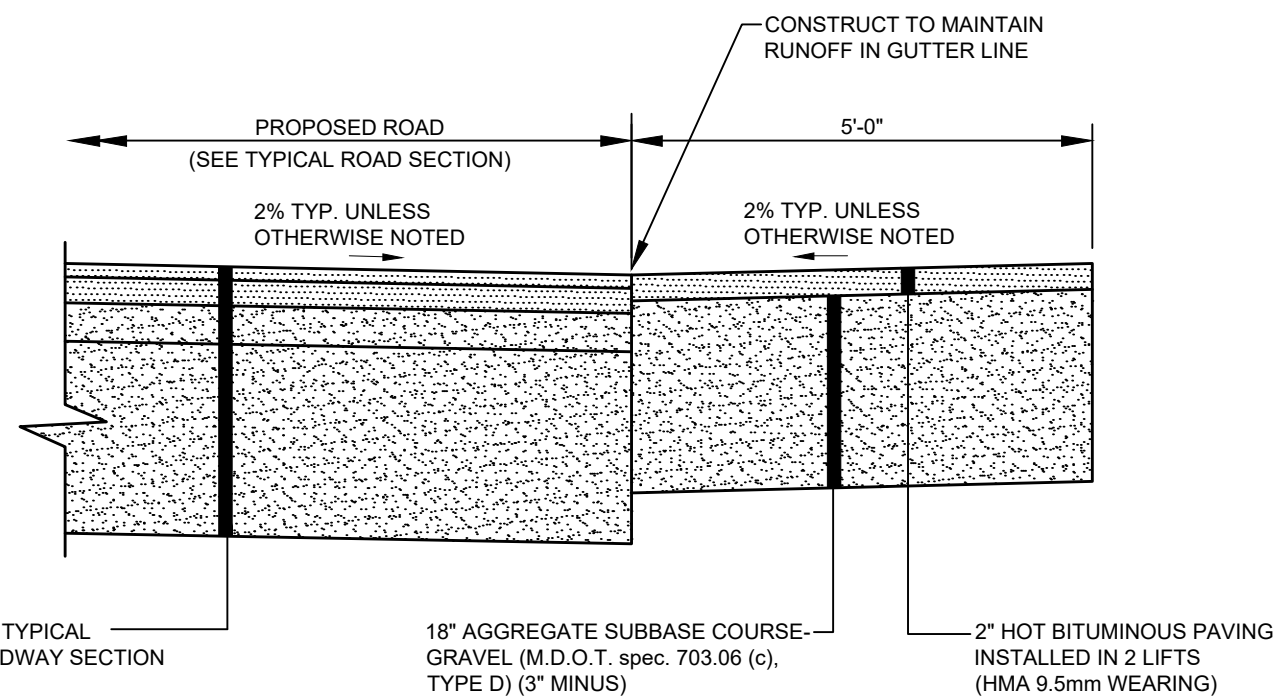
SHEET11 OF 13

20551D-06w, TAB-11 DETAILS 2



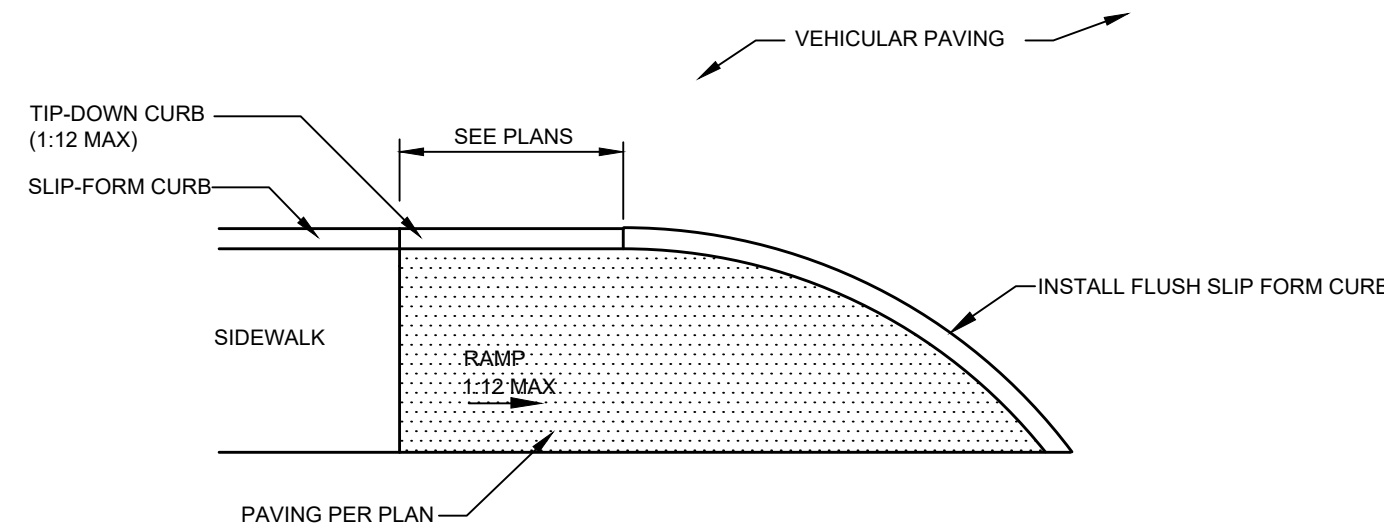
NOTE: REUSE EXISTING GRANITE CURB WHEN POSSIBLE

SLOPED GRANITE CURB (6x12)
NOT TO SCALE

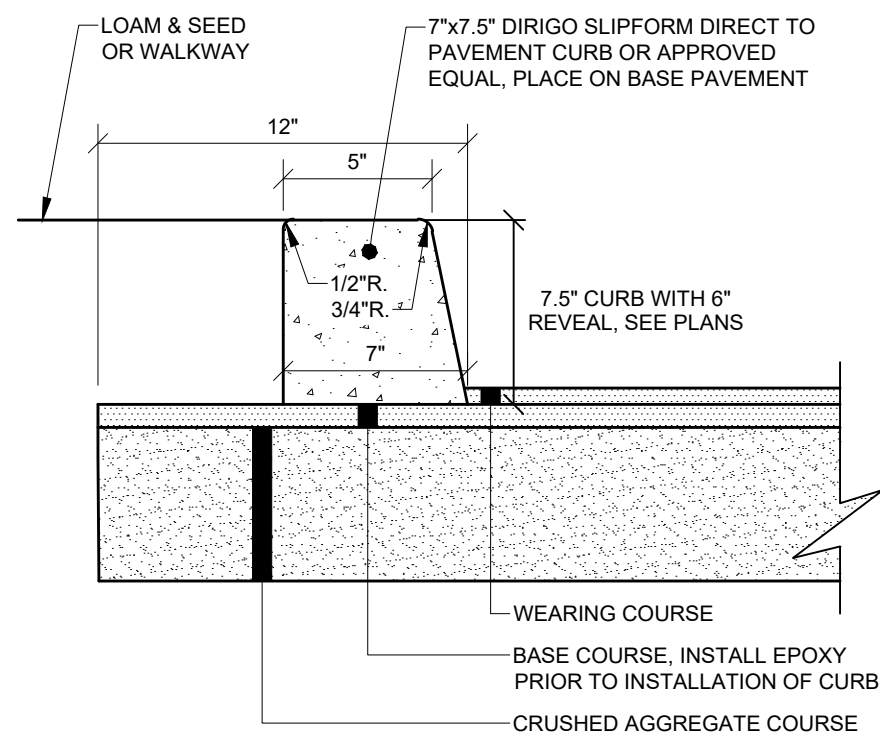


NOTE:
1. DRIVEWAY LOCATIONS BE COORDINATED WITH LOT DEVELOPMENT.

TYPICAL DRIVEWAY SECTION
NOT TO SCALE

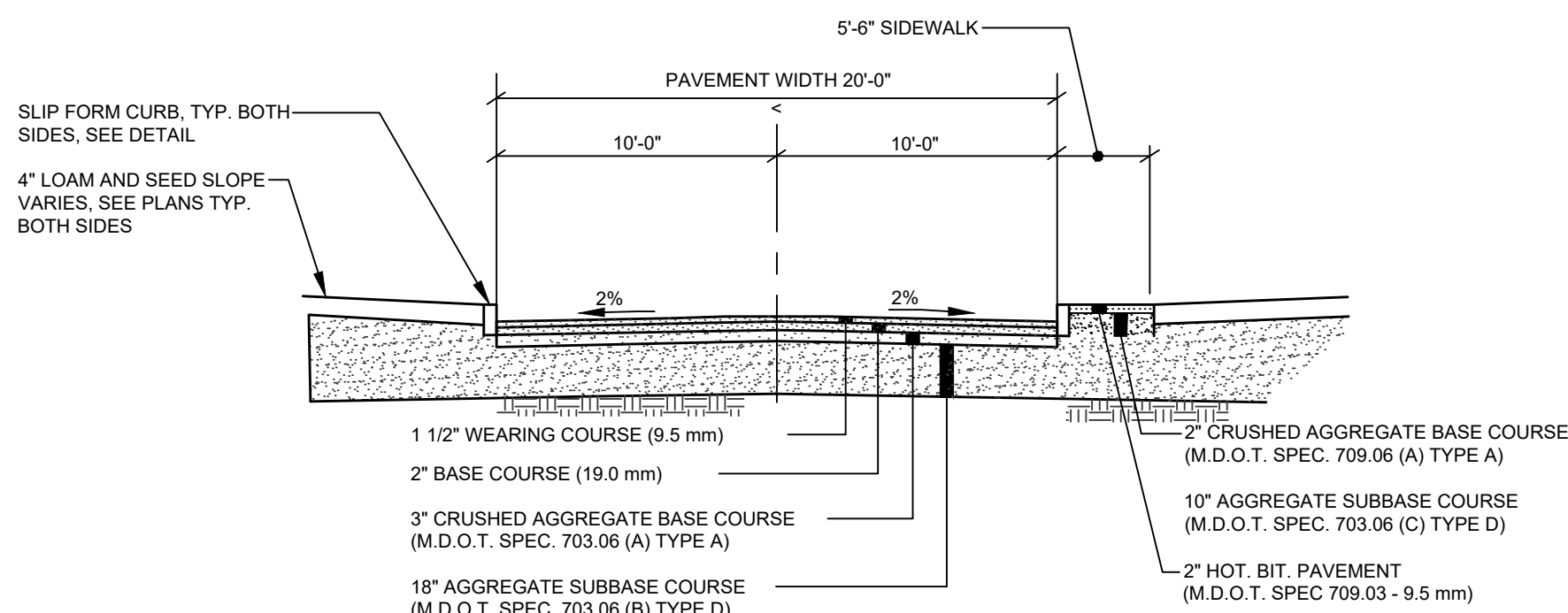


RAMP AND TERMINAL CURB
NOT TO SCALE



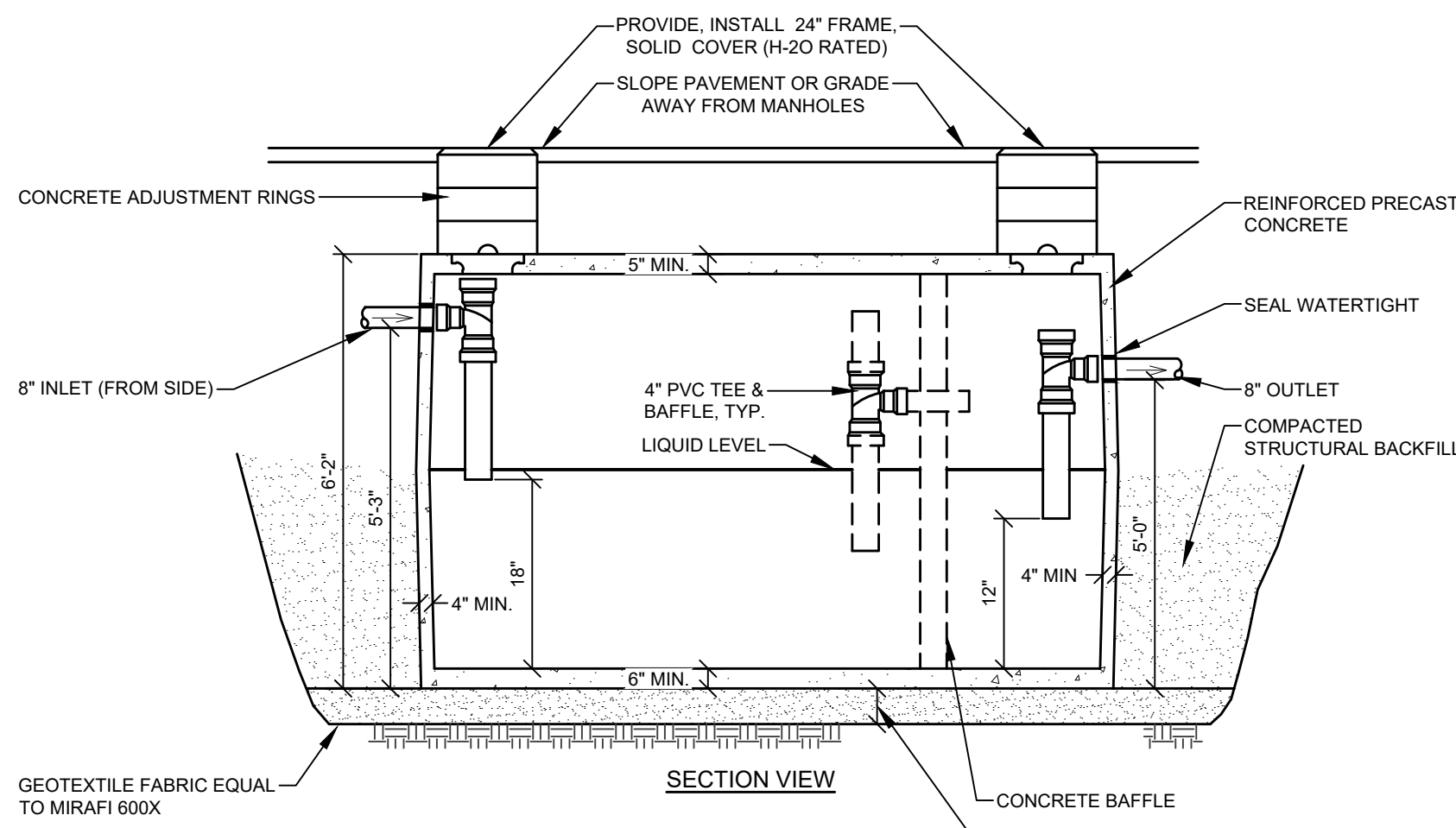
NOTE:
1. SEE TYPICAL ACCESS DRIVE SECTION FOR ROADWAY MATERIAL SPECIFICATIONS AND DEPTHS.
2. 6" TIPDOWNS SHALL BE PROVIDED AS SHOWN ON PLANS.

SLIPFORM CURB SECTION
NOT TO SCALE



NOTES:
1. COMPACT GRAVEL SUBBASE AND BASE COURSES TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. HOT MIX ASPHALT SURFACE COURSE SHALL BE COMPACTED TO 95% OF ITS THEORETICAL MAXIMUM DENSITY (ASTM D-2041). BASE COURSE SHALL BE COMPACTED TO 95% ±2.5% OF ITS THEORETICAL MAXIMUM DENSITY (ASTM D-2041).
3. APPLY TACK COAT BETWEEN SUCCESSIVE LIFTS OF BITUMINOUS PAVEMENT.
4. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

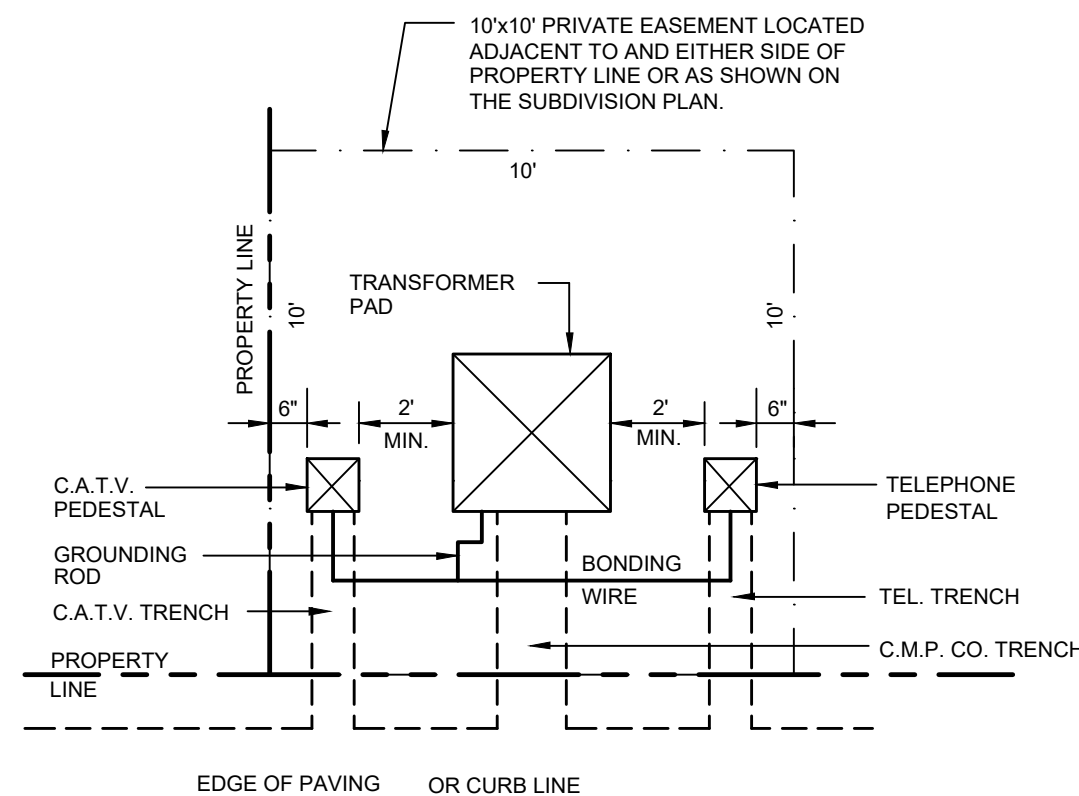
ENTANCE ACCESS ROAD SECTION
NOT TO SCALE



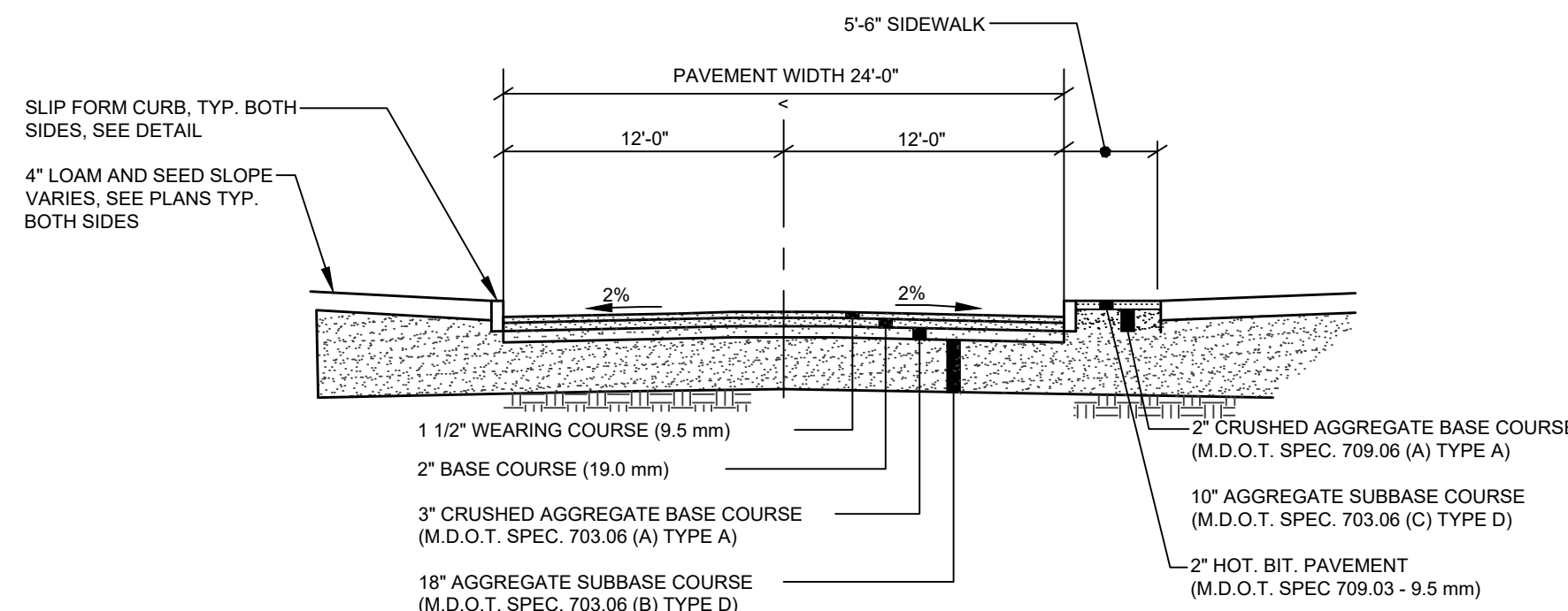
CAPACITY	LENGTH	WIDTH	HEIGHT	INLET	OUTLET
3,000 GAL.	13'	7'	8'-4"	295.00	294.75
4,000 GAL.	17'	8'	7'-6"	295.00	294.75

NOTES:
1. COAT INTERIOR OF TANK WITH EPOXY SEALER
2. ALL CONCRETE HAS A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.
3. SHALL BE DESIGNED FOR H-20 LOADINGS.
4. THE TONGUE AND GROOVE CENTER SEAM IS SEALED WITH A BUTYL SEALANT.
5. THE PVC TEE BAFFLES FOR THIS TANK CAN BE MOVED TO ANY OF THE (3) INLETS OR OUTLETS.
6. POLYLOK PIPE SEALS STANDARD AT ALL PIPE PENETRATIONS.
7. DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. CONTRACTOR SHALL SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF INTERCEPTOR. PROVIDE INTERCEPTOR WITH ADEQUATE STRUCTURAL STRENGTH TO ACCOMMODATE VEHICULAR TRAFFIC AT INSTALLATION LOCATION.
8. COAT EXTERIOR OF CONCRETE WITH BITUMASTIC SEALANT.
9. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS.
10. SEE UTILITY PLANS FOR INLET AND OUTLET PIPE SIZES AND INVERTS.
11. GREASE TRAP TO BE 2,000 GAL. DOUBLE COMPARTMENT AS MANUFACTURED BY AMERICAN CONCRETE INDUSTRIES OR APPROVED EQUAL.

TYPICAL SEPTIC TANK
NOT TO SCALE

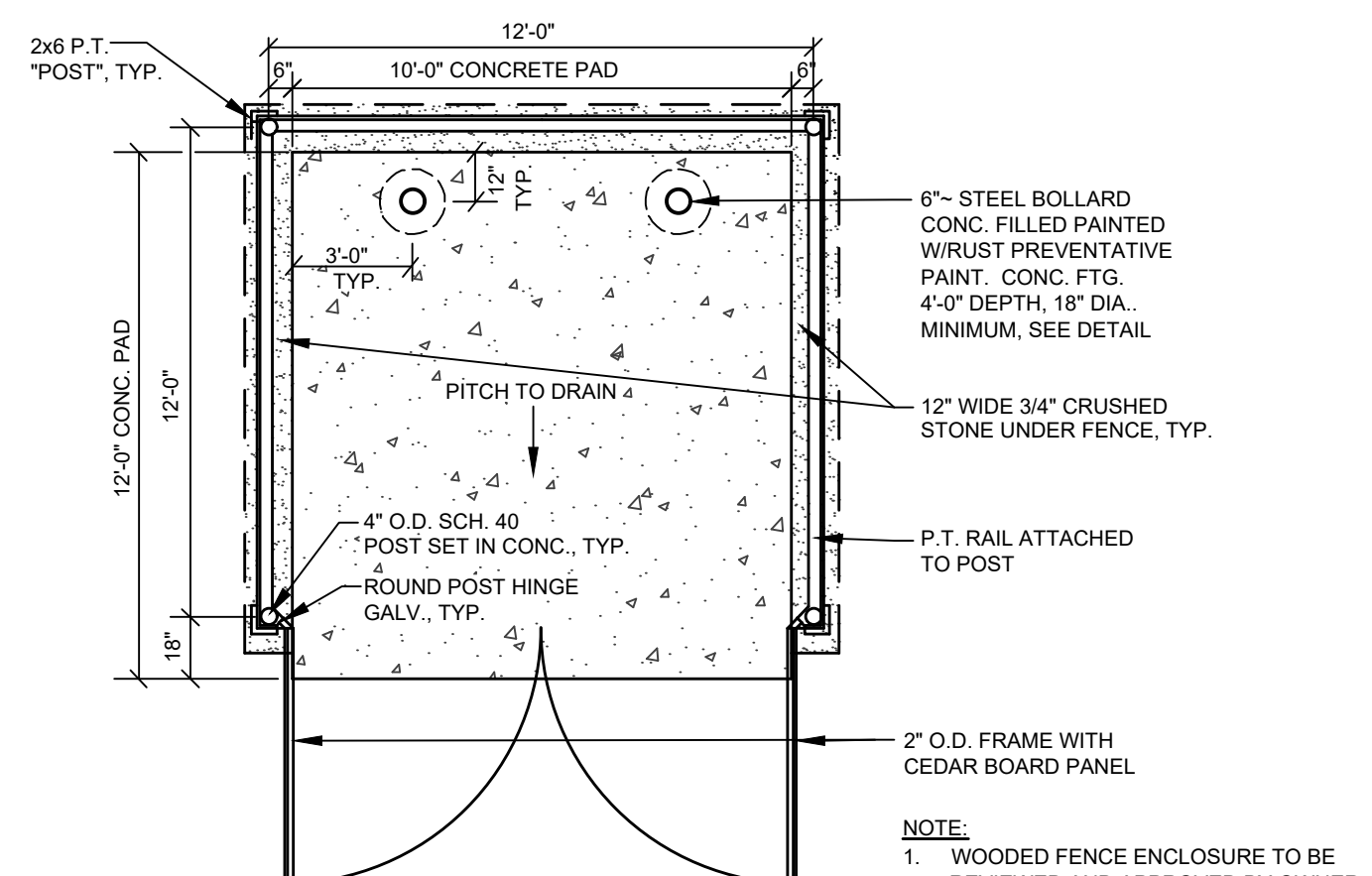


TRANSFORMER DETAIL
NOT TO SCALE

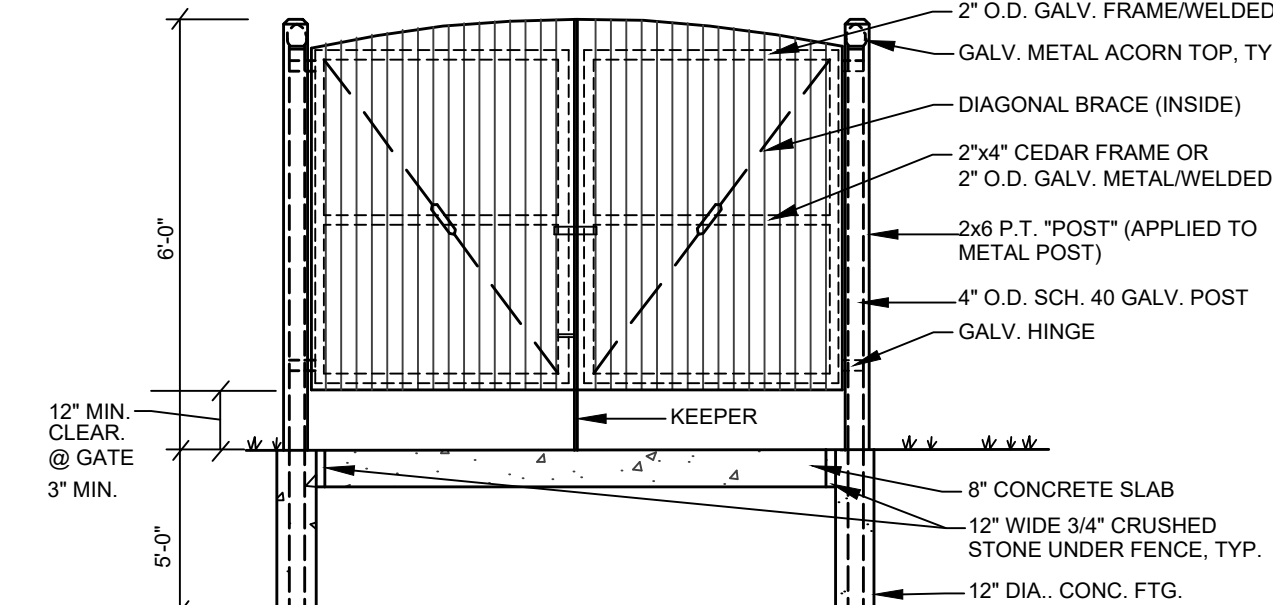


NOTES:
1. COMPACT GRAVEL SUBBASE AND BASE COURSES TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. HOT MIX ASPHALT SURFACE COURSE SHALL BE COMPACTED TO 95% OF ITS THEORETICAL MAXIMUM DENSITY (ASTM D-2041). BASE COURSE SHALL BE COMPACTED TO 95% ±2.5% OF ITS THEORETICAL MAXIMUM DENSITY (ASTM D-2041).
3. APPLY TACK COAT BETWEEN SUCCESSIVE LIFTS OF BITUMINOUS PAVEMENT.
4. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

CUL DE SAC TURNAROUND SECTION
NOT TO SCALE



TYPICAL DUMPSTER ENCLOSURE
NOT TO SCALE



CRAIG A. BURGESS P.E. 12635

STATE OF MAINE
CRAIG A. BURGESS
No. 12635
Professional Seal
08/30/2022

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TECHNIQS
WWW.SEBAGOTECHNIQS.COM

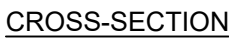
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-260-2100

DETAILS 3

OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME

FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	NONE
PROJECT	20551



CONSTRUCTION SPECIFICATIONS:

1. CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
3. DIVERSION BERM SHALL BE CONSTRUCTED OF COMMON BORROW MATERIAL MEETING M.D.O.T. spec. 703.18. MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 90% MAX. DRY DENSITY
4. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RECONCENTRATE IMMEDIATELY BELOW THE SPREADER.
5. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.

LEVEL SPREADER

NOT TO SCALE

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TECHNICALS

WWW.SEBAGOTECHNICS.COM

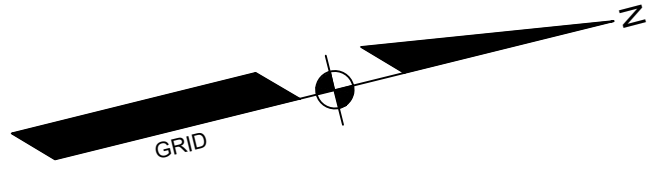
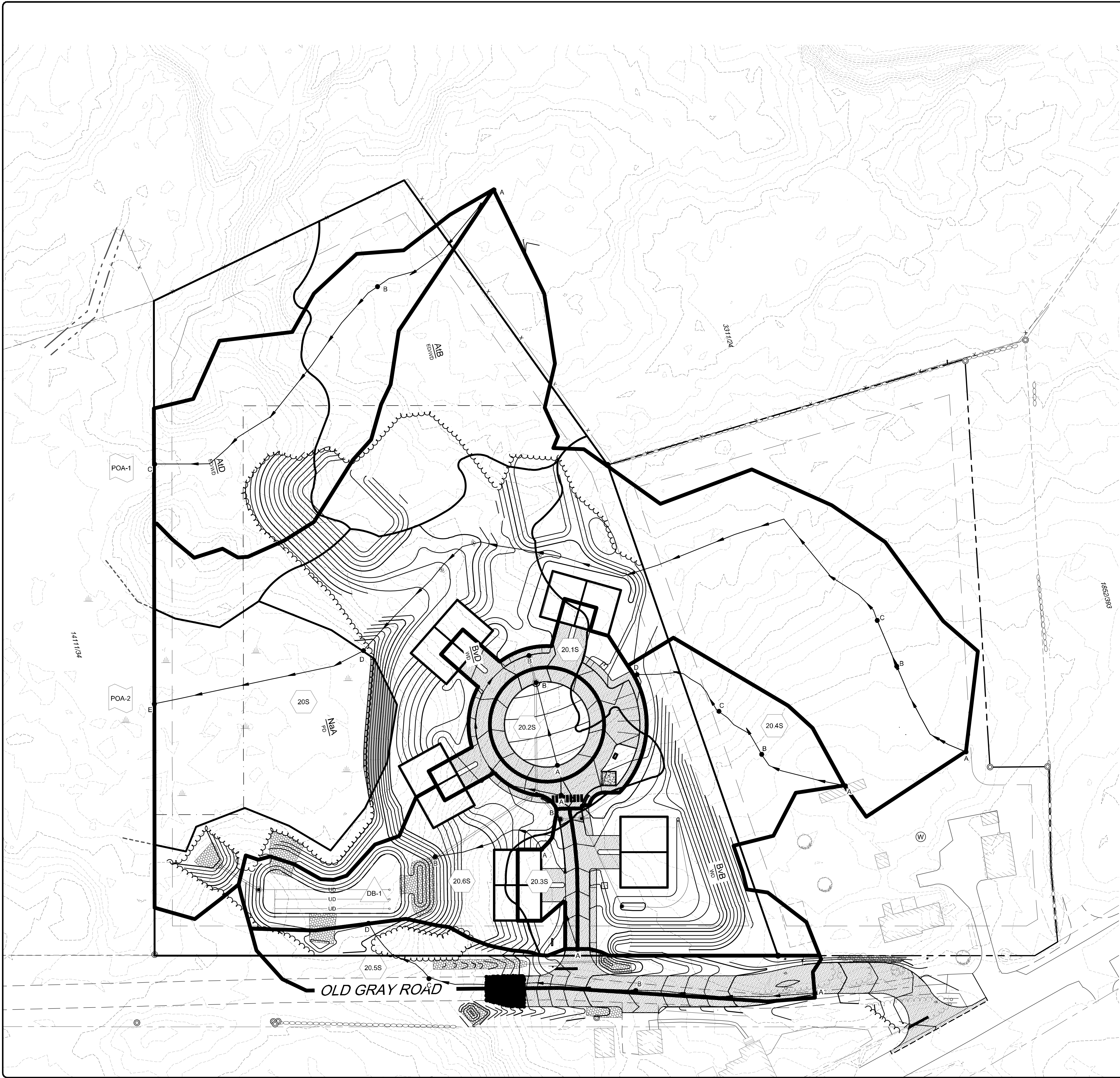
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

DETAILS 4

OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME

FOR:
ENVY CONSTRUCTION
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	NONE
PROJECT	20551



SOIL LEGEND

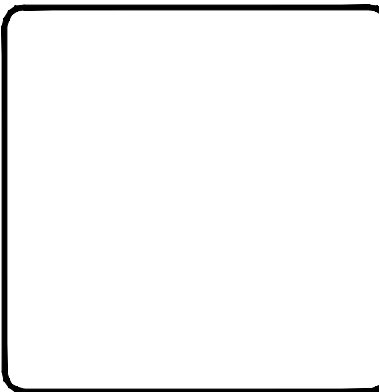
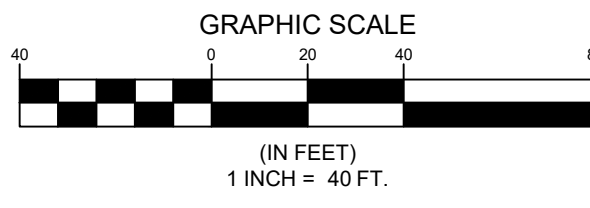
SYMBOL	SOIL SERIES	PHASE	SLOPE	HSG	DRAINAGE CLASS
AIB	ABRAM-TUNBRIDGE COMPLEX	FINE SANDY LOAM	3-8%	D	ED/WD (EXCESSIVELY DRAINED/ WELL DRAINED)
AID	ABRAM-TUNBRIDGE COMPLEX	FINE SANDY LOAM	15-25%	D	ED/WD (EXCESSIVELY DRAINED/ WELL DRAINED)
BvB	BECKETT VARIANT	FINE SANDY LOAM	3-8%	C	WD (WELL DRAINED)
BvD	BECKETT VARIANT	FINE SANDY LOAM	15-25%	C	WD (WELL DRAINED)
NAB	NAUMBURG	V.F. SANDY LOAM	0-3%	D	PD (POORLY DRAINED)

NOTES

SOILS ARE FROM A CLASS 'B' HIGH-INTENSITY SOIL SURVEY REPORT COMPLETED BY SEBAGO TECHNICS INC., DATED FEBRUARY 23, 2022.

PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- SUBCATCHMENT LABEL
- REACH
- POINT OF ANALYSIS
- STORMWATER TREATMENT/DETENTION POND
- HSG #
- SOILS BOUNDARY



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SEBAGO
TECHNICS
www.sebagotechnics.com
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-260-2100

POST WATERSHED
OF:
SNOWY OWL ESTATES
246 OLD GRAY ROAD
CUMBERLAND, ME
FOR:
SVR LLC
28 STONE RIDGE ROAD
FALMOUTH, ME 04105

DESIGNED	AJR
DRAWN	ER
CHECKED	CAB
DATE	01/11/2022
SCALE	1" = 40'
PROJECT	20551

PARCE
REMAINING L
KARL C. & ELE
NIELSEN
2.83 ± ACR

S 84°47'28" W
437.45'

MAINE TURNPIKE AUTHORITY
3311/24

W

FRONT OVERHANG

OLD GRAY ROAD

FIRE LADDER TRUCK

N

JAMES FORD BANFIELD &
LESLEY BANFIELD
3299000131
MAP U21, LOT 2

PARCE
REMAINING L
KARL C. & ELE
NIELSEN
2.83 ± ACR

S 84°47'28" W
437.45'

MAINE TURNPIKE AUTHORITY
3311/24

W

FRONT OVERHANG

OLD GRAY ROAD

FIRE LADDER TRUCK

N

JAMES FORD BANFIELD &
LESLEY BANFIELD
3299000131
MAP U21, LOT 2

PARCE
REMAINING L
KARL C. & ELE
NIELSEN
2.83 ± ACR

S 84°47'28" W
437.45'

OLD GRAY ROAD

FIRE LADDER TRUCK

FRONT OVERHANG

N/F
JAMES FORD BANFIELD &
LESLEY BANFIELD
3299000131
MAP U21, LOT 2

MAINE TURNPIKE AUTHORITY
N/F
3311/24

PARCE
REMAINING L
KARL C. & ELE
NIELSEN
2.83 ± ACR

S 84°47'28" W
437.45'

N/F
MAINE TURNPIKE AUTHORITY
3311/24

FIRE LADDER TRUCK

FRONT OVERHANG

OLD GRAY ROAD

N/F
JAMES FORD BANFIELD &
LESLEY BANFIELD
329900/0131
MAP U21, LOT 2

PARCE
REMAINING L
KARL C. & ELE
NIELSEN
2.83 ± ACR

S 84°47'28" W
437.45'

MAINE TURNPIKE AUTHORITY
3311/24

W

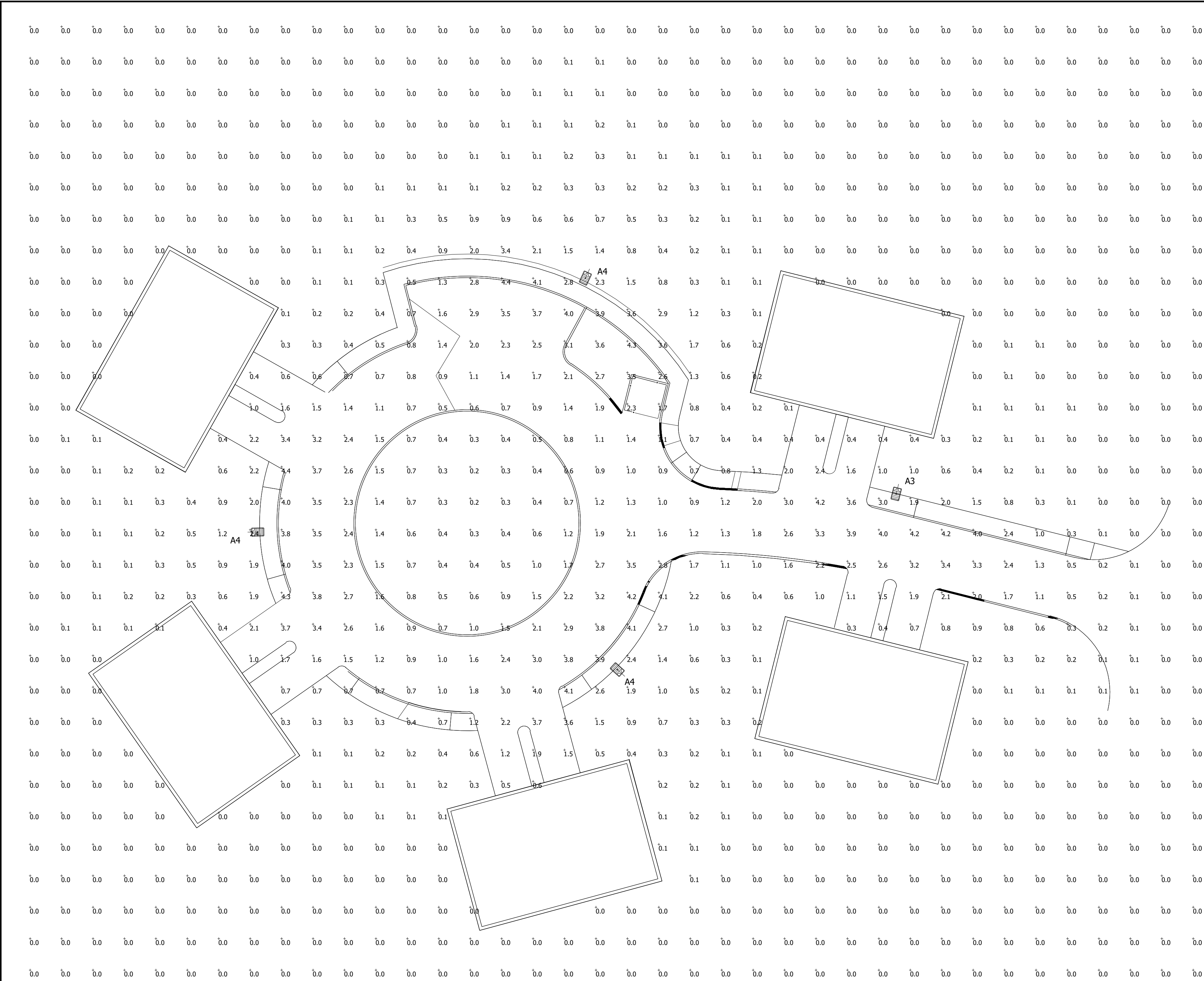
FRONT OVERHANG



OLD GRAY ROAD

FIRE LADDER TRUCK

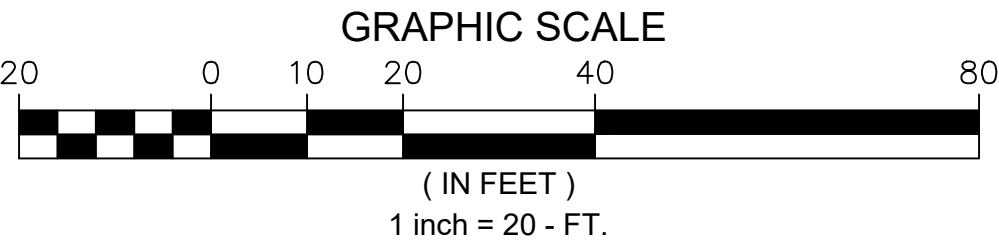
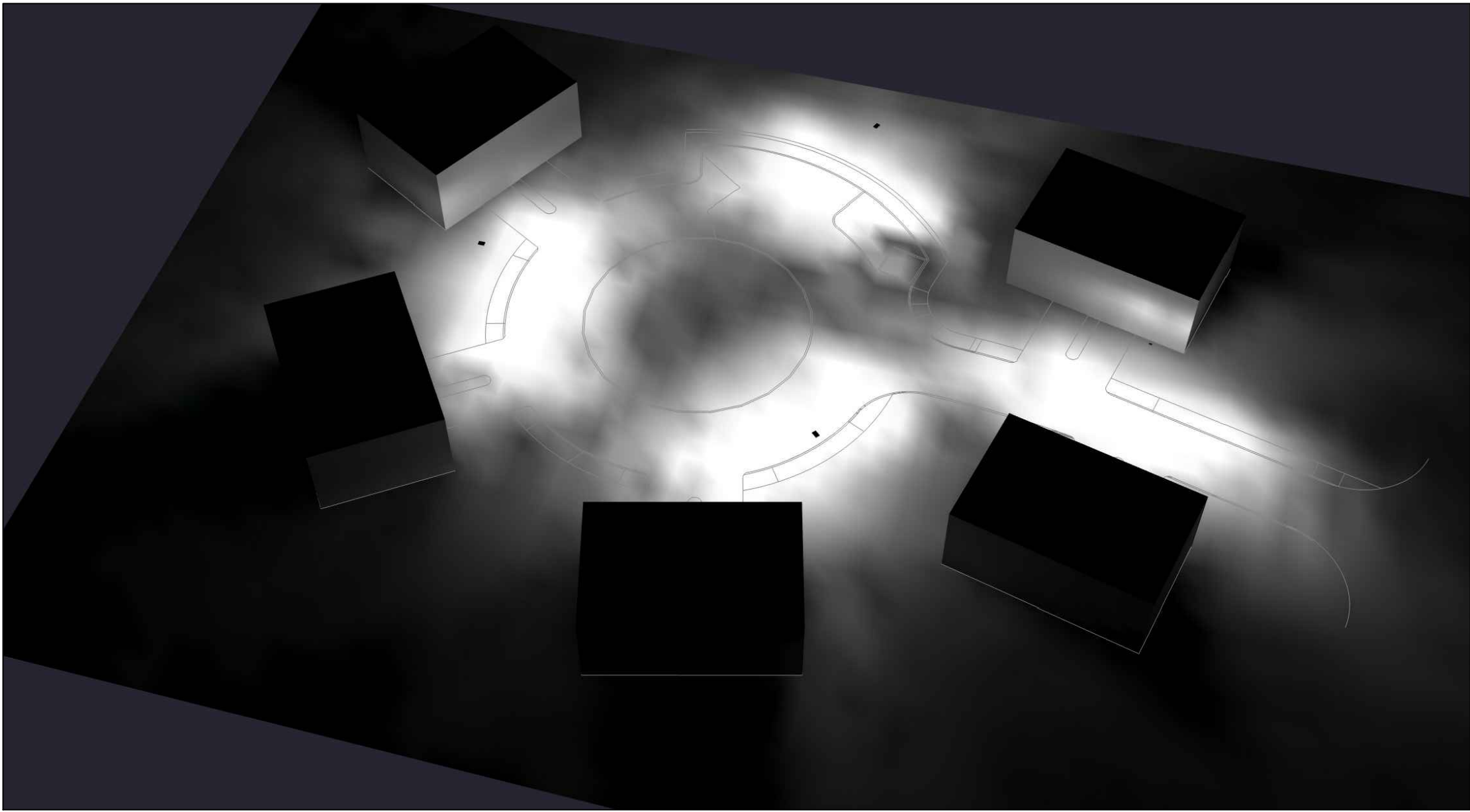
N

JAMES FORD BANFIELD &
LESLEY BANFIELD
3299000131
MAP U21, LOT 2



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
	1	A3	20' - 0" AFG	0.900	14109	100	VP-1-160L-100-3K7-3
	3	A4	20' - 0" AFG	0.900	15931	115	VP-1-160L-115-3K7-4W

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.51	4.4	0.0	N.A.	N.A.
Paved Area	Illuminance	Fc	2.23	4.4	0.5	4.46	8.80



1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.


2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

CUMBERLAND CONDOS
CUMBERLAND, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):



Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

ON BY:
DHK

REV. BY:

QUOTE:
N/A

DATE:
03/02/22

DATE:

DRAWING / DESIGN NO:
2229272

CHK BY:
N/A

SCALE:
AS NOTED