### Town of Kittery Planning Board Meeting September 12, 2019

#### ITEM 2 – 76 Dennett Road – Site Preliminary Plan Review

Action: Approve with or without conditions, continue consideration of or deny plan. Owners William J. Cullen and Sail Away, LLC and applicant William Wharff request consideration of a mixed-use residential development on 23.3+- acres of land at 76 Dennett Road (Tax Map 6 Lots 15B & 16A and Tax Map 13, Lot 4) in the Mixed Use - Neighborhood (MU-N) Zone. Agent is Shawn Tobey, P.E. Hoyle, Tanner & Associates, Inc.

PROJECT TRACKING						
REQ'D	ACTION	COMMENTS	STATUS			
YES	Sketch Plan Acceptance/Approval	5/9/2019 Meeting	APPROVED			
YES	Site Visit	7/23/2019	HELD			
YES	Preliminary Plan Review Completeness/Acceptance	Scheduled for 7/11/2019 Meeting	ACCEPTED			
YES	Public Hearing	Scheduled for 8/8/2019 Meeting	HELD			
YES	Preliminary Plan Approval	Possible for 9/12/2019 Meeting				
YES	YES Final Plan Review and Decision					
Applicant:	Prior to the signing of the a	pproved Plan any Conditions of Approval related to the Findings of Fact along	with waivers and			
variances	variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE					
THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS. As per Section						
16.4.4.L - Grading/Construction Final Plan Required Grading or construction of roads, grading of land or lots, or construction of buildings is						
prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when						
applicable.						

#### Background

The site consists of three (3) parcels totaling 23.3 +- acres which will be merged for the proposed development. The development proposes one four-story mixed-use residential building with 3,000 sf of mercantile space along Dennett Road, two four-story residential buildings at the rear of the site, a 5,250-sf amenity building, and five covered parking structures in various locations in the parking lot.

The residential buildings will have 303 dwelling units, with a mix of studio, one-bedroom and twobedroom units. The design includes the construction of a private roadway, parking lots totaling 401 spaces, landscaping, sidewalks, a pool and outdoor amenity space, a nature trail, supporting utilities, and drainage infrastructure.

At the July 11<sup>th</sup> meeting, the Board accepted the site preliminary plan as complete and scheduled a site walk for July 23<sup>rd</sup>. The site walk was conducted and the minutes were approved by the Board. At the August 8<sup>th</sup> meeting, the Board held a public hearing on the site preliminary plan and then voted to continue consideration of the plan for a period not too exceed 90 days.

#### Staff Review

#### Mixed-Use Requirements

1. All of the proposed uses are permitted in the newly created MU-N Zone. The residential units comply with the minimum land area per dwelling unit – mixed-use building and multiunit residential requirements.

#### Net Residential Acreage / Density

The MU-N Zone is exempt from Title 16.7.8.2 Net Residential Acreage Calculation but is subject to the minimum land area per dwelling unit as defined in Chapter 2 Definitions except that 50% of all wetlands may be subtracted, rather than 100%. As shown on sheet C5 Overall Site Plan, the proposed development meets the land area per dwelling unit calculations of the MU-N Zone.

#### Parking Requirements

2. Per Section 16.3.2.10.F. (4) (d) [1] and [2], Parking for development that includes trails and low intensity recreation: Development that includes the creation of public trails and low intensity recreational opportunities such as wildlife observation stations or boardwalks may apply the pertinent off-street parking standards below. All other off-street parking standards as found in § 16.8.9.4 shall apply.

Multiunit residential buildings and mixed-use buildings that include residential.

- One parking space for studio and one-bedroom dwelling units.
- One and one-half parking spaces for two-bedroom dwelling units plus one guest parking space per every four dwelling units.
- Parking spaces for more-than-two-bedroom dwelling units.
- 3. Parking calculations are listed on sheet C5 of the preliminary plans. The development will provide a total of 401 spaces:
  - a. Front Building = 114 spaces
  - b. Rear Buildings = 287 spaces

The provided parking meets and exceeds the ordinance requirements.

#### Landscaping, Screening and Buffers

4. The landscaping, screening and buffering details are provided on sheets C17 and C18. Per 16.3.2.10.F (9)(a), a landscape plan prepared by a registered landscape architect is a submission requirement. However, a landscape plan done by other design professionals may be allowed at the Planning Board's discretion. The proposed development will be landscaped and appears to meet the requirements of the MU-N zone. CMA Engineers in their initial review of the preliminary plans noted that the ordinance requires that a minimum of 10% of surface parking areas be landscaped with trees and vegetated islands. CMA questioned whether this standard was being met. In reviewing the landscaping plans, the parking lot bump-outs do include one tree and grass plantings. The applicant has indicated that shrubbery was avoided in these areas because of salting and sanding of the parking areas that could damage the plantings. Figures need to be provided for these landscaped areas to determine whether they comply with the 10% requirement and revisions made to the plans if the standard is not met. According to the landscape calculations shown on Sheets C17 & 18 they are providing over triple the number of trees per parking spaces under ordinance requirements. Update: The applicant has satisfactorily addressed this requirement by updating the landscaped island

with a tree and vegetation has been added in front of Building 1. Relative to the request by the Board at their August 8<sup>th</sup> meeting, the applicant has not indicated whether a third party has reviewed the proposed landscaping plan.

#### Wetlands / Open Space

5. The existing property contains wetlands and a vernal pool. Per the regulations for the MU-N zone, the wetlands and vernal pool were reviewed by Longview Partners, LLC as a third-party reviewer in April 2019. The review found the wetlands delineation to be accurate and within the normal range of best professional judgement and consistent with wetlands delineation standards.

Staff researched the question regarding previously approved wetlands impacts. On February 14, 2002, the Planning Board approved the site plan for a Professional and Business Park proposed by William Cullen which permitted approximately 1600 sf of total wetlands fill, primarily for a road crossing of wetlands. A permit will be required for a modification to the previously approved wetlands crossing and for disturbance to the vernal pool buffer (250'). There will be no disturbance within the vernal pool buffer (100') or the wetlands. The wetlands, vernal pool and property lines shown on the preliminary plan are based on actual survey data. Sheet C5 Overall Site Plan contains Vernal Pool Buffer Calculations, which includes 24,535 sf of buffer restoration. The applicant has submitted a Site Location of Development Act permit application with Maine DEP for the project. The culvert upsizing under the development road and the wetlands buffer impacts will be reviewed under this permit and the State's Permit by Rule (PBR) regulations. Update: A note has been added to the landscape plans stating "The vernal pool buffer restoration areas shall be monitored for one (1) full year to ensure vegetation is established". The vernal pool label has been changed to read "Significant Vernal Pool" with added Maine DEP vernal pool ID number.

6. Open space meeting the requirements of the zone will be provided (73.5% of the parcel) which will include a nature loop trail with wildlife viewing stations for passive recreation for the development. An amenity building (Building 4) and an outdoor pool are proposed to provide recreational use for the residents of the property. Notes have been added to the Overall Site Plan, Sheet C5 designating the areas of open space. Update: A dashed line has been added to the plans to graphically delineate the horizontal limits of the Open Space, Reserved.

#### Utilities / Site Improvements

7. The plans show detailed information regarding utilities that will service the site development. Water, gas, electrical, and telecommunication lines will be extended from Ranger Drive along Dennett Road to serve the site. They will be constructed underground underneath the proposed private roadway. Existing sewer is located at the rear of the property and will be extended onto and throughout the site underneath the roadway.

The applicant's engineer has met with the Kittery Water District and the Kittery Sewer Department and letters are provided to confirm they both have adequate capacity for the proposed development.

Proposed Fire Department connections are shown and noted on the plans. The Fire Chief has reviewed the plans for fire service during staff technical review and provided his comments in a memorandum dated July 3, 2019 which was provided to the Board at the July 11<sup>th</sup> meeting. Update: the applicant will revise the plans to address the Fire Chief's latest round of comments (See attached memorandum).

#### Stormwater Management

8. Under Section 16.10.5.2.C, supporting documentation must include a stormwater management plan. The applicant has submitted a Drainage Narrative to comply with Maine Department of Environmental Protection (MEDEP) Stormwater Site Location of Development Law.

According to the narrative, "The drainage design utilizes the existing hydrologic and hydraulic patterns, minimizes impacts to surrounding areas, and uses Maine's Best Management Practices (BMPs) to provide effective pollutant removal, stormwater cooling, channel protection, and flood control for pre-development and post-development peak runoff rates for the proposed site development."

A copy of the narrative has been forwarded to CMA Engineers for their review and comment. The narrative and grading and drainage plans are also being reviewed by the Town's Stormwater Coordinator in coordination with DPW.

Jessa Kellogg, Shoreland Resource Officer/Stormwater Coordinator has provided a memorandum (attached) with her and Public Works Commissioner David Rich's initial comments regarding the stormwater management plans. In the memo, they have also provided comments relative to the proposed sidewalk along Dennett Road. The Response to Review Comments letter from Hoyle, Tanner & Associates is included in the August 8<sup>th</sup> meeting packets. Update: The Stormwater Inspection and Maintenance Plan has been revised to include annual reporting to the Town of Kittery.

#### Roadway

9. CMA Engineers has submitted a review letter (attached) which notes they did not highlight the following provision of Chapter 16.8 of the LUDC (16.8.4.2 paragraph C.) which states "Any development expected to generate average daily traffic of 201 or more trips per day is to have at least two street connections with existing public street(s)". The applicant has submitted a waiver request from this provision for the Board's consideration and action.

In addition, based upon the Maine DOT pre-Scoping Meeting review, dated August 19, 2019, revised traffic generation numbers were generated for the proposed development. A week-day daily trip count of 2,575 was estimated which would classify the development roadway as a primary collector. The applicant and CMA view the roadway as a development driveway not a street and therefore not subject to the road design and construction standards on under the Section 16.8.4.3 paragraph B. of the LUDC. Staff is awaiting a follow-up opinion from CMA Engineers on whether the applicant would need to seek waivers from road design standards.

#### **Building Design Standards**

- 10. The Code requires that *new buildings must meet the general design principals set forth in the Design Handbook except as noted below. In general, buildings should be oriented to the street from which they derive frontage, with the front of the building facing the street. The front facade must contain the following:* 
  - [1] A front door for pedestrian access.
  - [2] Windows.
  - (b) Flat roofs, proposed to locate heating, cooling, or other such mechanical or electrical apparatus off the ground, are acceptable provided that such apparatus are screened from view and the

screening is designed as an integral part of the building to aid both aesthetics and noise attenuation. Flat roofs proposed for the purpose of solar array installations are also acceptable

Staff has reviewed the Design Handbook for the applicable guidelines to the proposed development with the notion that in the introduction to the Handbook it states that "where the operative word "must" is used, the provisions of the Handbook are mandatory and based upon requirements of the LUDC". Attached, staff has provided the Board with copies of the applicable "must" provisions which have been highlighted for your consideration.

#### Other Reviews

- 11. The Board packets for this item contain a letter from CMA Engineers with their initial review comments on the preliminary plans for conformance with Title 16 and general engineering practices. The Response to Review Comments letter from Hoyle, Tanner & Associates and CMA Engineer's 2<sup>nd</sup> round of review comments was included in the August 8<sup>th</sup> meeting packets. Update: CMA has stated verbally that 2<sup>nd</sup> round of review comments have been satisfactorily addressed with the exception of the traffic evaluation which will be addressed at the DOT Scoping meeting on September 11<sup>th</sup>.
- 12. Jessa Kellogg, Interim Code Enforcement Officer, has also provided a memorandum regarding her initial building code review conceptual floor plans that have been submitted. The Response to Review Comments letter from Hoyle, Tanner & Associates were included in the August 8<sup>th</sup> meeting packets. Update: All studio units have been revised to be a minimum of 650 sf. Habitable space needs to be clearly indicated in the floor plans. A legend has been added to the architectural plans and the building elevations revised to show building heights and materials.
- 13. A Maine DOT Traffic Movement Permit (TMP) is required and has been applied for by the applicant. After an initial review by Maine DOT, the trip generation rates needed to be revised and a new Traffic Movement Permit Application has been submitted to DOT. A copy of the application has also been provided to CMA Engineers and DPW Commissioner Dave Rich for review and comment. Copies of the application were included in the August 8<sup>th</sup> meeting packets. Update: Maine DOT has accepted the TMP application and has scheduled a traffic scoping meeting for Wednesday, September 11<sup>th</sup> at 12 p.m. in Kittery Town Council Chambers (see attached letter).

#### **Recommendation / Action**

Staff feels that Site Preliminary Plan can be approved by the Board with the following actions

Move to approve the waiver requested from Article IV. Streets and Pedestrian Ways/Sidewalks Site Design Standards, 16.8.4.2. paragraph C., which states "C. Any development expected to generate average daily traffic of two hundred one (201) or more trips per day is to have at least two street connections with existing public street(s).

Move to approve the site preliminary plan, dated June 20, 2019, as revised on August 22, 2019 and prepared by Hoyle, Tanner & Associates, Inc., for owners William J. Cullen and Sail Away, LLC and applicant William Wharff for a mixed-use residential development on 23.3+- acres of land at 76 Dennett Road (Tax Map 6 Lots 15B & 16A and Tax Map 13, Lot 4) in the Mixed Use - Neighborhood (MU-N) Zone with the following conditions:

1. Receipt of a Maine DOT Traffic Movement Permit;

- 2. The Conceptual Floor Plans shall be revised to indicate that the studio apartments will contain a minimum of 650 sf of habitable space;
- 3. Completion of a third-party review of the proposed landscaping plans;
- 4. Provide details of the proposed sidewalk for the full length of the property for Final Plan review; and,
- 5. Address to the satisfaction of CMA Engineers their 2<sup>nd</sup> round of plan review comments.

August 22, 2019

Jamie Steffen Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904



Pease International Tradeport 100 International Drive, Suite 360 Portsmouth, New Hampshire 03801 603-431-2520 603-431-8067 fax www.hoyletanner.com

Re: Project Design Update Proposed Mixed-Use Development at 76 Dennett Road Lots 6-15B, 6-16A, 13-4, Kittery, Maine

Dear Mr. Steffen,

Hoyle, Tanner and Associates is pleased to submit the revised site plans and documents for the abovereferenced project. All comments from the public hearing and planning board meeting on August 8, 2019 have been incorporated into the project. The second round of CMA Engineers review comments dated August 1, 2019 have also been addressed in the revised site plans and documents. The following brief narrative serves as an update for progress that has been made for the proposed 76 Dennett Road Mixed-Use Development project.

The Maine Department of Environmental Protection (DEP) Site Location of Development Application (SLODA) was filed on August 7, 2019 and we are currently awaiting notice that the application was deemed complete and that the review process has begun. The application package and site plans were well received at the pre-submittal meeting with Maine DEP.

The Traffic Movement Permit (TMP) application and supplemental data was submitted to the Maine Department of Transportation (MDOT) for review in July, 2019. We received pre-scoping meeting comments from MDOT regarding the application. All comments were addressed and a revised application was submitted. We are currently awaiting a scoping meeting with MDOT which is anticipated to take place at the end of August or early September.

Hoyle, Tanner has been in coordination with Wright Pierce and the Kittery Water District in regards to water pressure modelling for the proposed development. Wright Pierce is currently updating the overall water system model based on the proposed water main extension and current design plans to determine a preliminary water pressure supplied to the site. Based on preliminary assessments of the system, we have assumed that a booster pump will be required and have updated the plans to provide a central booster pump building for the proposed development.

At the upcoming September 12<sup>th</sup> planning board meeting, the project architect from Cube3 will present the proposed architectural design. The presentation will include how the buildings were designed to meet the requirements per the Kittery Design Handbook chapter regarding Building Architecture. Additional measures were also included in the design to mitigate highway noise.

Additional comments and changes have been made to the project documents. Listed below is a summary of all the changes made to the project for this submission:

Site Plans:

- The vernal pool label was changed to read "Significant Vernal Pool", with the added Maine DEP vernal pool ID number.
- A central booster pump building was added to the site plans to increase the water pressure for the proposed development.
- A dashed line was added to the plans to graphically delineate the horizontal limits of the open space reserved.



- The proposed silt fence was changed to a silt sock to allow for easier wildlife passage.
- Two additional accessible parking spaces were added near the entrance to the amenity building.
- Fire Protection note #2, on page C13, was revised to read "Building 4 shall have a NFPA 13 system. The building shall also have a monitored alarm system and Knox Box system installed."
- The water supply line from the booster pump to the buildings and hydrants was reduced from a 12" line to an 8" line due to the anticipated increase in pressure in the system.
- A note was added to the landscape plans stating "The vernal pool buffer restoration areas shall be monitored for one (1) full year to ensure vegetation is established."
- An additional landscaped island with a tree and vegetation was added in front of building 1.
- Additional plantings were added in the greenspace adjacent to the proposed garage structures.
- The landscaping plans were updated to include calculations to show compliance with the Town of Kittery LUDC requirements, that a minimum of 10% of surface parking areas be landscaped with trees and vegetated islands. Additional standalone color plans have been provided to graphically depict the calculations for the limits of surface parking areas, as well as the tree and vegetated islands.

#### Architectural Plans

- All studio units were revised to be a minimum of 650 SF.
- A legend was added.
- Dimensions depicting building heights were added to the elevations
- Building material callouts were added to the elevations.

#### Project Documents

 The Stormwater Inspection and Maintenance Plan was revised to include annual stormwater reporting to the Town of Kittery.

We trust that the revisions and responses have thoroughly addressed all comments and concerns. Please do not hesitate to contact our office with any additional questions or comments regarding this project.

Sincerely,

HOYLE, TANNER & ASSOCIATES, INC.

Summ Jobe

Shawn M. Tobey, P.E. Project Manager



September 4, 2019

Jamie Steffen Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904



Pease International Tradeport 100 International Drive, Suite 360 Portsmouth, New Hampshire 03801 603-431-2520 603-431-8067 fax www.hoyletanner.com

Re: Waiver Request Proposed Mixed-Use Development at 76 Dennett Road Lots 6-15B, 6-16A, 13-4, Kittery, Maine

Dear Mr. Steffen,

On behalf of Aztec, LLC and at the request of CMA Engineers in their supplemental review letter dated August 22, 2019, Hoyle, Tanner and Associates is formally submitting this written waiver request from the provision of Chapter 16.8 of the LUDC (Kittery Land Use and Development Code): *Article IV. Streets and Pedestrian Ways/Sidewalks Site Design Standards, 16.8.4.2. paragraph C.,* which states "C. Any development expected to generate average daily traffic of two hundred one (201) or more trips per day is to have at least two street connections with existing public street(s)."

Chapter 16.7 of the LUDC: Article IV. Waivers, 16.7.4.1 Waiver Authorization states "Where the Planning Board finds, due to special circumstances of a particular plan, certain required improvements do not promote the interest of public health, safety and general welfare, or are inappropriate because of inadequacy or lack of connecting facilities or in proximity to the proposed development, upon written request, it may waive or modify such requirements, subject to appropriate conditions as determined by the Planning Board."

Hoyle, Tanner has thoroughly reviewed the LUDC regulations and request the waiver be granted because the existing site configuration does not allow for the construction of a secondary street connection per the LUDC standards, the entrance has been reviewed the Kittery Fire Department (see attached memo) and does not adversely affect the interest of public health, safety and general welfare and the entrance was sized and designed in accordance with acceptable engineering practices to accommodate the anticipated traffic volumes and vehicle sizes. Listed below are detailed explanations for each of the three reasons for this waiver request.

#### LUDC Standards

The LUDC guidelines do not allow for a secondary street connection to Dennett Road at this site. As stated in LUDC Article IV. Streets and Pedestrian Ways/Sidewalks Site Design Standards, 16.8.4.2. Layout, paragraph F "Entrances onto existing or proposed arterial highways/secondary arterials may not exceed a frequency of one per one thousand (1,000) feet of frontage." Based on the standards and average daily traffic Dennett Road is considered an arterial highway/secondary arterial street.

The existing site has 641.6 feet of frontage on Dennett Road and abuts Interstate 95, the Exit 1 Southbound Onramp and undeveloped woods. Interstate 95, the Exit 1 Southbound Onramp and 145 feet of the Dennett Road frontage are Maine DOT limited controlled access and do not allow for a driveway connection. This leaves approximately 496 feet of frontage for the proposed driveway connection. To meet the requirements for safe driveway spacing per the LUDC a secondary street connection would need to be nearly 500 feet into the adjacent property. Due to the lack of connecting facilities in proximity to the proposed development, it is not feasible nor safe to provide a secondary street connection.



#### Public Health, Safety and General Welfare

Hoyle, Tanner met with the Kittery Fire Department on August 26, 2019 for a secondary review of the project and to discuss any concerns with a single site entrance. A memorandum from D. W. O'Brien, Fire Chief, CFOIII provided the following statement regarding his review of the project.

"The Fire Department sees no need for a secondary means of access or egress to this development. Proper design and review of the roadway will support emergency apparatus access and as the roadway ends in a large cul-de-sec there is adequate ways for emergency apparatus parking during emergency situations and for egress after the event."

#### **Entrance Design Standards**

The proposed site entrance was designed to accommodate the anticipated average daily traffic generated by the proposed development. A traffic analysis of the entrance using SimTraffic10 during the PM peak, which is the worst case, shows the 95<sup>th</sup> percentile queue in the development drive is 42 ft which equates to approximately two cars. The minimal traffic in Dennett Road allows for vehicles to easily leave the development without excessive delay.

Autodesk Vehicle Tracking sweep path analysis software was used to design the site entrance to account for the passing of two WB-40 intermediate semi-trailer trucks, should one be leaving the site while another is entering. To accommodate the safe passing of larger vehicles, the site entrance has tapered radii with Dennett Road and travel lanes that are widened to 14 feet. After the site roadway passes the first drive aisle, the lanes taper down to 12 feet each. Within the site there are drive aisles which loop around each development to provide for adequate access and turning movements for emergency vehicles.

We trust this letter has thoroughly addressed all requirements for a waiver as detailed in the LUDC Chapter 16.7. Please do not hesitate to contact our office with any questions or comments regarding this project.

Sincerely,

HOYLE, TANNER & ASSOCIATES, INC.

Summ Jober

Shawn M. Tobey, P.E. Project Manager





August 22, 2019

#### CMA ENGINEERS, INC. CIVIL | ENVIRONMENTAL | STRUCTURAL

35 Bow Street Portsmouth New Hampshire 03801-3819

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Jamie Steffen, Town Planner Adam Causey, Director of Planning and Development Town of Kittery 200 Rogers Road Kittery, Maine 03904

RE: Town of Kittery, Planning Board Services Mixed-Use Development Proposal – 76 Dennett Road Lots 6-15B, 6-16A, 13-4 Preliminary Plan Approval Application-Supplement to Review Letter Dated August 1, 2019 CMA #591.125

Dear Jamie and Adam:

We provide this letter as a supplement to our second project review letter dated August 1, 2019.

In previous reviews, we did not highlight the following provision of Chapter 16.8 of the LUDC: Article IV. Streets and Pedestrian Ways/Sidewalks Site Design Standards, 16.8.4.2. paragraph C., which states "C. Any development expected to generate average daily traffic of two hundred (200) or more trips per day is to have at least two street connections with existing public street(s)."

The provision applies to streets and also to "any development". The proposed development will have well over 10 times than 200 trips per day. The design includes a single connection to public street (Dennett Road).

The intersection capacity issues are dealt with by the traffic evaluation provisions of the LUDC, and also in this case by pending MEDOT Traffic Movement Permit. We believe the issues being addressed by this provision have more to do with public safety, including disruption of service on the roadway by events of fire, police, ambulance, other emergency actions, accidents, or similar occurrences.

We suggest that the applicant address the requirements of 16.8.4.2. C, either by discussion of how the proposal may not be required to meet this provision, consideration of a second access point, or potentially a requested waiver of this performance standard developed in accordance with Section 16.7 Article IV. Waivers.

Should you have any questions, please do not hesitate to call.

Very truly yours,

ENGINEERS, IN aut

William A. Straub, P.E. Project Manager

WAS/kao

cc: Shawn Tobey, P.E., HTA

591.125-Kittery-DL-190822 -76 Dennett Road Mixed-Use 2nd review supplement WAS



Janet T. Mills

STATE OF MAINE Department of Transportation Region 1 P.O. Box 358 Scarborough, Maine 04070-0358

Bruce A. Van Note

August 26, 2019

Jamie Steffen – Town Planner Town of Kittery 200 Rogers Rd Kittery, ME 03904

RE: Maine Department of Transportation Scoping Meeting Proposed Mixed-Use Residential Development, Dennett Rd

Dear Jamie,

The Maine Department of Transportation (MaineDOT) has scheduled a scoping meeting for the above referenced project pursuant to obtaining a MaineDOT Traffic Movement Permit. The project consists of four, 4-story buildings with 303 apartments and 3,000 square feet of retail space at 76 Dennett Road. The project is estimated to generate 302 and 240 trip ends during the AM and PM peak hours respectively. Access to the site is proposed via a full movement entrance on Dennett Road.

The scoping meeting will be held in the Kittery Town Hall located at 200 Rogers Rd. The meeting is scheduled for 12:00 PM on Wednesday September 11, 2019. You or your staff's input at this meeting would be welcome if you chose to attend. Please share this letter with Town officials and with staff whom you feel would have relevant input. The meeting is open to the general public, but only direct abutters may offer input.

The applicant is required to perform the following, if not already completed, prior to the scoping meeting:

- A. Submit a signed copy of the "Notice of Intent To File" to the Town
- B. Send the same notice to abutting property owners via certified mail, return receipt requested, a minimum of 7 days prior to the scoping meeting
- C. Publish the "Notice of Intent To File" in a local newspaper

If you have any questions or would like to discuss this further please feel free to contact me.

Sincerely Randy Ilian, PE

MaineDOT Region 1 Traffic Engineer

Cc: Shawn Tobey - Hoyle, Tanner & Associates, Inc. Ralph Norwood, Maine Turnpike Authority Steve Landry, State Traffic Engineer File



### Town of Kittery, Maine Fire Department

3 Gorges Road Kittery, Maine 03904 Tel (207) 439-2262

MEMORANDUM

Chief David O'Brien firechief@kitteryme.org

03 September 2019

Subj: Proposed Mixed-Use Development at 76 Dennett Road

I have conducted a second review of the subject site plan proposal for Tax Map Lot 6-15B, 6-16A, and 13-4. The following are my comments:

- a. Previous discussions with both the Review Board and the Developer resulted in the water main being upsized to 12" and run through the complete development and ending at the North end cul-de-sac. Recent plans and correspondence have added a booster pump and the subsequent downsizing of the water main to 8". The Fire Department, in conjunction with Mr. Rogers from the Kittery Water District recommends this main be 12" as originally proposed in order to support future water main construction and connection to the Route 236 corridor. The Fire Department understands the need for a booster pump to enhance pressure and supports the addition of a central booster pump building in order to achieve this.
- b. All buildings that meet the requirements of Town Code 16.8 Article XIX will have a full fire suppression system installed; including sprinkler systems, monitored fire alarm systems and KNOX Box entry systems.
- c. The minimum area of apartments must be 650 sq-ft of living space. The developer needs to ensure the standards of the Maine Unified Building and Energy Code are adopted in regards to what is considered and not considered living space.
- d. The Fire Department sees no need for a secondary means of access or egress to this development. Proper design and review of the roadway will support emergency apparatus access and as the roadway ends in a large cul-de-sac there is adequate ways for emergency apparatus parking during emergency situations and for egress after the event.

d. W. O'Brien Fire Chief, CFOIII

### **CIRCULATION PLANNING**

**Refuge Zones.** Pedestrian islands (five feet minimum width) should be installed in drive-ways and streets where the crossing distance is greater than 32 ft.



An island provides a refuge zone for pedestrians crossing this wide driveway. Permanent crosswalks should have minimized annual maintenance costs.

**Traffic Calming.** Traffic calming measures should be included where appropriate to discourage speeding within the site and between abutting properties. Measures may include speed tables, on-street parking, raised crosswalks, vertical curbing, curvilinear road alignment, roadside plantings, neck-downs, curbed islands, and signage. Traffic calming measures should be designed by a traffic engineer experienced in the development of commercial properties and traffic management.

**Drive-Throughs**. Where such uses are allowable by the LUDC, access routes leading to or from takeout windows or other drive-throughs should minimize conflicts with pedestrian circulation routes. Motorists should be made aware of pedestrians through signage, lighting, raised crosswalks, changes in paving, or other devices. The site plan should be designed to prevent queuing in parking lots or other areas which would cause congestion or unsafe conditions. **Pedestrian and Bicycle Movement.** The development plan must provide safe pedestrian and bicycle movement within the site. Pedestrian and bicycle connections between abutting properties should be coordinated with vehicular routes to encourage foot traffic and minimize vehicular movement. (See Traffic and Circulation Standards for specific zoning districts.)

**Service Drives**. Service drives should be separated from internal walkways, parking areas, or pedestrian use areas by landscaped islands, grade changes, or other devices to minimize pedestrian contact.

**Maintenance**. All painted crosswalks should be repainted on an annual or biannual basis to maintain their effectiveness.



*This planted bed is an attractive way to separate entering and exiting traffic.* 



This curbed, landscaped island divides entering and exiting traffic. The identification sign is located away from the intersection to avoid interfering with the motorists' line of sight.

### **PARKING AREAS • DISTRICT GUIDELINES**

**Dead End Circulation.** Parking lots with a single point of access are strongly discouraged. Dead-end parking lots should not contain more than ten spaces. Where dead-end lots are unavoidable, space should be provided to safely turn a vehicle around without having to back out.

**Shared Parking**. Shared parking is strongly encouraged where appropriate, particularly where abutting land uses have differing hours of peak parking demand. Cross easements may be required to allow shared parking.

**Safety.** Crosswalks should be marked by a change in pavement texture, pattern, or color to maximize pedestrian safety in parking areas and other potentially hazardous areas. Care should be taken in the selection of shrubs, ornamental grasses, walls, or other landscape elements to maintain visibility.

**Snow Storage**. Provisions should be made for snow storage in the design of all parking areas. The areas should be shown on the Site Plan to avoid conflicts with landscaping, visibility, drainage, or icing during winter months.

**Materials**. Parking areas should be constructed of high quality materials designed to withstand the rigors of Maine winters and minimize longterm maintenance. Where curbing is required for stormwater management, granite is strongly recommended, especially in highly visible areas.



Parking lot islands should be defined by durable curbing materials to protect trees and minimize maintenance.

#### DISTRICT PARKING STANDARDS

**Siting: MU and LB Districts**. All new parking areas must be located at the side or rear of the principal building. In the MU District ten or fewer spaces may be located closer to the front lot line than the principal building. In the LB District limited parking and its access drive may be located across the front of the lot between the property line and the front of the building.

**Screening: MU, LB, and C Districts**. All new or revised parking lots must be visually screened to minimize the view of parked vehicles. Where front parking is permitted between the building and the road, it should be screened by berms, fencing, low walls, trees, shrubs, perennial masses, or a combination of elements. The minimum height of the screen should be 3.5 feet to minimize the view of the vehicle while still providing a clear view of the building and signage. See pp. I-17 & 18 for additional information on screening parking lots. See LUDC for Parking Standards for specific districts.



While asphalt curbing is inexpensive to install, it is very vulnerable to snowplow damage.



A low wall and ornamental plantings effectively screen this parking lot from view.

Site development should consider the needs of the pedestrian for safe, functional, attractive walkways throughout the property.

#### **DESIGN GUIDELINES**

**Internal Walkways in the MU**, LB, C-1, and C-3 Districts. In new development continuous internal walkways must be provided from parking lots to the main customer entrance(s). Where the property abuts roads with public sidewalks the internal walkways must also connect with the sidewalk. (See LUDC Traffic and Circulation Standards for specific zoning districts.)

**Location**. Internal walkways should be located where motorists can anticipate pedestrians and react accordingly. Walkways should be designed to give the pedestrian a full view of oncoming vehicles, with minimal interference from trees, shrubs, and parked cars. Walkways should avoid drive-through lanes, access and service drives, and other high-traffic routes. Traffic control signs, light fixtures, trees, or other potential obstacles should be located far enough from walkways to prevent interference with pedestrian movement.



A well-landscape walkway becomes an integral part of the site plan.

**Orientation**. Walkways in parking lots should be aligned with the main entry or a focal point on the building to assist in wayfinding.

**Width**. Internal walkways should be a minimum of five feet wide to allow two people to pass comfortably. Additional width may be necessary in certain conditions, e.g., where shopping carts may be used, where heavy pedestrian traffic is anticipated, or where cars overhang the walkway.

**Coordination with Landscaping**. Areas adjacent to walkways should be landscaped with trees, shrubs, flower beds, ground covers, or other such materials for year-round interest. Walkways in parking lots should be coordinated with landscaped islands to provide visual relief, shade, and scale to the pedestrian. Shrubs should



This circulation system results in excessive width in front of the storefronts and creates an auto-oriented environment. The painted walkway offers little contrast and leads to the parking aisle.



This raised walkway provides a high level of contrast with the surrounding parking lot. However, the width is compromised by the overhang of cars, making pedestrian movement difficult.

Outdoor service and storage areas should be integrated into the overall site plan. They should be designed to meet the functional needs of the facility while minimizing any traffic or visual conflicts, audible noise, or smells.

#### **DESIGN GUIDELINES**

**Locations.** All facilities for service, including waste collection and storage facilities, off-street loading and unloading areas, loading docks, storage facilities, dumpsters, fueling areas, and vehicle service and maintenance areas must be located at the side or rear of the principal building. Locations that face public roadways or abutting residential properties should be avoided. Overhead doors or other vehicle entrances or exits should not be located on any façade that faces a public street or residential neighborhood. (See LUDC requirements for Outdoor Service and Storage Areas.)



Storage areas should be located at the rear or side yards, away from public view.

**Design**. Outdoor service and storage areas should be sized to fit the specific needs of the building and its intended operations. The smallest size needed to meet the building's requirements is encouraged.

**Screening.** Service areas must be screened to minimize visibility from sensitive viewpoints such as public and private roadways, main entrances, abutting neighborhoods, public open spaces, and pathways in these situations. Service areas should be screened with architectural elements such as walls or fences. Screening may be further enhanced with evergreen trees, shrubs, and earth berms. **Screening Design.** Structural screens and fencing should complement the design of the main structure by repetition of materials, detailing, scale, and color. Where chain link fencing is required for safety, it should be landscaped and painted black or a similar dark color, or coated with dark vinyl. Plastic slats in chain link fencing are not permitted. Gates should be designed to prevent sagging.



This service area is effectively screened by fencing that repeats the color, materials, and forms of the building.

**Service Access.** Service areas should be sited to accommodate the turning movements of vehicles used for trash pickup, deliveries, and similar functions without conflicting with other vehicles.

**Coordination**. Prior to Town submittal, the applicant should contact the representatives of utility companies, fuel suppliers, trash haulers, the fire department, and others who may have input into the design and siting of service areas and facilities.

**Protection**. Where walls or freestanding fencing is used for screening, it should be protected with granite posts or concrete filled steel bollards, or reinforced in a manner that will prevent damage from service vehicles.

**Recycling Facilities.** The installation and use of recycling bins is encouraged. All recycling facilities should be screened in a manner similar to other service areas. Dumpsters and recycling areas should be consolidated where possible.

All buildings should present an inviting, human scale facade to the street, internal drives, parking areas, and surrounding neighborhoods. Entrances should be clearly visible from the street and reinforced through site and architectural features.

LUDC Reference: Chapter 16.12.

#### DESIGN GUIDELINES

**District Standards**. The requirements for architectural design and site planning vary from district to district. See the applicable section of the LUDC for specific requirements.

**Front Elevation (MU, C, and LB Districts)**. The front facade (the facade facing the street) must be designed as the front of the building. The front elevation must contain a front door, and/or windows, and/or display cases. On corner lots, the main entrance should face the major street, or be located on the corner of the building. Building entrances should be visible from the street and provide unobstructed areas for pedestrians.

**Entrances**. Each building should have a clearly defined, highly visible customer entrance. In the case of multi-tenant buildings, each separate space should have its own customer entrance. The use of the following architectural elements is recommended to add scale to the building, provided that they are integral to the design:



The front elevation of this small convenience store has a well-defined entrance that offers some protection to its customers. Space should have been provided for the vending machine.

- canopies and covered walkways
- overhanging rooflines to provide shelter for pedestrians
- recesses or projections in keeping with the scale of the building
- · raised corniced parapets over entrances
- gables and dormers
- pilasters
- outdoor sitting or dining areas
- display windows that are visible from the sidewalk
- architectural details such as moldings which are integrated into the building design
- other features which are designed to add scale and visual interest to the facade.





These entrances on adjacent buildings are marked by a raised parapet, integrated signage, an outdoor sitting/ dining area, display windows, pedestrian-scale lighting, and planters.

#### FACADE DESIGN

**Transparency**. For retail structures, any facade that faces a public or private street should have display windows, entry areas, or other transparent features along 40% or more of its horizontal length. As an alternative, other architectural elements may be used to provide scale and visual interest to the front facade.

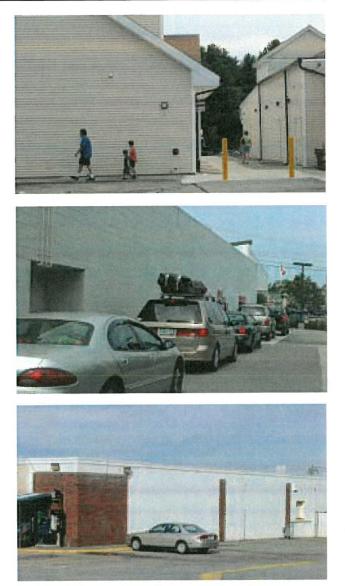


Transparency is achieved with windows on all facades of this small restaurant. The design of the building is enriched by planters, awnings, and integrated signage.

**Blank Walls (MU District).** No facade may extend for more than 50 horizontal feet in length without incorporating architectural features, such as pilasters, windows, cornices, porches, corners, or offsets. Where the plane of a wall is broken, the offset must be proportional to the building's height and length. Projections used to break up the mass of the building should extend to the ground. As an exception to this standard, walls with clapboards as their primary facade material may extend for 100 horizontal feet without such architectural features.



Small scale buildings, especially those viewed at close range, offer an opportunity to display a high level of detailing to enrich the pedestrian environment.



Facades should incorporate architectural features such as display windows and pilasters to create visual interest. This is especially important in pedestrian spaces.

#### Blank Walls (LB, C-1, C-2, C-3 Districts).

Facades should incorporate architectural features – such as pilasters, windows, cornices, porches, corners, offsets, or changes in materials – to break up the mass of the building and add visual interest. Where the plane of a wall is broken, the offset should be proportional to the building's height and length. Projections used to break up the mass of the building should extend to the ground. Blank walls should not face adjacent structures, roadways, residential areas, or other public viewpoints. **One-sided designs (MU, C-1, C-3, LB and LB-1 Districts)**. Similar materials and detailing must be used on all facades to ensure continuity and design completeness and to give the building scale and visual interest. A similar treatment should be used in the C-2 District. (See the applicable Building Design Standards of the LUDC for specific requirements.)

**Site Design**. Signage, lighting, landscaping, and other exterior elements should be designed to complement the facade, avoid visual or functional conflicts, and maintain visibility.



The facade treatment wraps around the entire structure, creating a sense of continuity and design completeness. The building takes full advantage of a dramatic site.

### Light Industrial and Boatyards (MU Dis-

**trict)**. In the Mixed Use Zone the blank wall standard applies only to the front face and the first 100 feet of the side facade for light industrial buildings and boatyard uses. (See Light Industrial and Boatyard Uses section of the LUDC.) Where such uses are located on a corner lot, the Planning Board may consider both sides that face the street to be front faces for purposes of meeting this standard. Where the facade treatment extends less than the full length of the building, the site and/or architectural design must incorporate measures to minimize contrasts resulting from the change in surface treatment.

**Window Shapes**. Windows should be vertical in orientation or square.

**Trim**. Windows, door openings, ventilation openings, and other forms of exterior fenestration in frame construction should be trimmed.

**Shutters**. If shutters are used, they should be sized to fit the openings and provided for all windows on a given wall.

**Functional Elements**. All vents, downspouts, electrical conduits, service meters, HVAC equipment, service areas, loading docks, service connections, and other functional elements of the building should be treated as integral parts of the design. Meters, utility banks, HVAC equipment, and other exterior service elements should be contained in service closets, screened with walls or fences, or located out of view from the public. Building elevations presented for Planning Board review must show the location and treatment of all functional elements.



The building's meters and service connections are located out of sight in this service cabinet.

**Vending Machines**. The site plan and architectural elevations must show the location of all vending machines. The plans should also demonstrate how vending machines will not detract from the design of the building or the site.

**Illustrations**. The Planning Board may request perspectives of the building to illustrate the threedimensional relationship between the front and side elevations. Elevation and perspective drawings should include all landscape elements (trees, shrubs, lighting, street furnishing, signs, etc.) that will be seen in conjunction with the facade.

Building materials and design details should have a positive effect on a building's style and character.

#### LUDC Reference: Chapter 16.12.

#### DESIGN GUIDELINES

Materials (MU, C-1, C-3, LB, and LB-1 Districts). Buildings must be constructed of traditional, high-quality materials common to Kittery. Acceptable materials include brick, clapboards and shingles (wood, fiberglass, concrete, vinyl, metal), wood shakes, stone or simulated stone, and vertical boards. Contemporary materials with the same visual characteristics as traditional materials (e.g., cement plank clapboards or vinyl siding) are acceptable if properly detailed with surface textures and trim at openings, corners, and changes in material. Painted medium density overlay (MDO) plywood is acceptable when used as a secondary material in combination with traditional materials to give it scale. Long-term maintenance needs should be a consideration in the selection of all building materials.

**Materials Discouraged**. Highly reflective or processed materials (e.g., sheet metal or plastic panels, brushed aluminum, bronzed glass), stucco or synthetic stucco (Exterior Insulation and Finish Systems (EIFS)), adobe, concrete block, T-111, untreated plywood, particle board, tilt-up concrete panels, and multicolored brick (incorporating occasional white bricks in a random pattern) are discouraged as the primary



Cement plank clapboard is a new material that resembles traditional wooden siding with less maintenance.

facade material. (Stucco, adobe, sheet metal, standard concrete block, tilt-up concrete panels, plywood, and particle board are prohibited in the MU District. See Predominant Exterior Building Materials section in the LUDC.)

**Colors.** Traditional colors commonly found in New England villages are appropriate for all components of the building. Facade colors must be low reflectance. The use of high intensity, high reflectance, chrome, metallic, or fluorescent colors or black is discouraged as the primary color.

**Trim.** Where trim is used, it should be painted or stained to complement the building's primary color.

**Detailing**. Arbitrary changes in materials or embellishments that are not in keeping with the rest of the building are discouraged.





Traditional materials used on new buildings to blend into historic settings.

**Roof-Mounted Equipment (MU, LB, LB-1, C-1, C-3 Districts)**. Mechanical, HVAC, and other equipment mounted on rooftops must be screened from public view or grouped in a location where visibility is limited. Where used, screening for roof-mounted equipment should be designed as an integral part of the architecture to complement the building's mass and appearance. The same treatment should also be used to screen roof mounted equipment in the C-2 District.



The apparent lack of support for this projecting tower makes the roof appear top-heavy.



The roof-mounted HVAC equipment is highly visible from the public parking lot. The projecting cupola is not integrated into the structure and appears to float.



The mechanical equipment on the peak of this roof gives it a cluttered, top-heavy appearance.

**Projections**. The use of cupolas, dormers, chimneys, and other roof projections is encouraged, provided they are designed as integral parts of the structure and do not appear to be floating or pasted on.

**Shedding Snow and Ice.** All roofs should be designed to shed snow, ice, and rainwater in a manner that does cause a safety hazard or interfere with pedestrians or vehicles.



A cupola at the peak of this roof is a traditional form used in a contemporary structure. Roof-mounted mechanical equipment has been effectively screened by balustrades.



The central cupola is integrated into the roofline and provides a welcome break in the length of this building.

### ROOFS

#### DISTRICT REQUIREMENTS

MU, LB, LB-1, & C DISTRICTS

**Roof Pitch.** Prominent roofs in these districts must have a minimum pitch of 4/12 (ratio of rise to run), unless demonstrated to the Planning Board's satisfaction that this is not practicable from an engineering or technical standpoint. (See the LUDC for standards for roofs in the applicable zoning district.)

**Roof Form**. Acceptable styles for prominent roofs in these districts include gable, gambrel, and hipped roofs. Flat roofs, shed roofs, and roof facades (such as applied mansards) are not acceptable as primary roof forms.

#### KITTERY FORESIDE DISTRICT

**Roof Pitch.** Prominent roofs on buildings in the KF district must have a minimum pitch of 8/12 (ratio of rise to run), except in the case of a hip roof where a lesser pitch is acceptable.

**Roof Form**. Acceptable styles for prominent roofs in this district include gable, gambrel, hipped and saltbox roofs.



Flat roofs are generally not allowed for commercial structures.



An office building featuring a variety of gable roofs. The pitch on the flat dormer matches the pitch on the entryway.



Examples of hipped roof in a recent addition (top) and an historic structure (below).





A gambrel roof used in a modern office building recalls the design of shingle-style summer homes.





Shed roofs such as these are not allowed for commercial structures.



### **GENERAL LANDSCAPE PRINCIPLES**

**Planting Design.** Planting design should stress simplicity in form and limit the number of species. Plantings should be massed to soften edges, corners, and pavement areas, and to integrate the building into the landscape.



*Effective landscape plans often incorporate hardy perennials as a groundcover to complement the architecture.* 

**Invasive Plant Species.** Plant species that are considered invasive or potentially invasive in Maine should not be used in the landscape. The Landscape Plan should indicate how existing invasive species present on the site will be dealt with, using Best Management Practices. The following species are among those considered invasive in Kittery:

#### Shrubs

Berberis thunbergii Elaeagnus angustifolia Elaeagnus umbellata Euonymus alatus Ligustrum sp. Lonicera japonica Lonicera morrowii Lonicera tatarica Rhamnus cathartica Rhamnus frangula Rosa multiflora

#### Trees

Acer ginnala Acer platenoides Japanese Barberry Russian Olive Autumn Olive Winged Euonymus Privet Japanese Honeysuckle Bush Honeysuckle Tatarian Honeysuckle Common Buckthorn Glossy Buckthorn Multiflora rose

Amur Maple Norway Maple

#### Vines and Perennials

Celastrus orbiculata
Fallopia japonica
Lythrum salicaria
Phragmites australis

Oriental Bittersweet Japanese Knotweed Purple Loostrife Common Reed

**Guarantee Period**. All lawns and plant materials must be guaranteed by the landscape contractor for a period of not fewer than two years. The developer shall submit a copy of a guarantee and a contract with the landscape contractor, indicating the terms of the guarantee period, or may obtain a letter of credit.

**Resources**. The following sources are recommended for additional information on the planting and care of trees:

American Standard for Nursery Stock: ANSI www.anla.org/applications/ Documents/Docs/ ANLAStandard2004.pdf

Architectural Graphic Standards. Planting Details, James Urban, ASLA. pp. 178-182. 1998.

*Principles and Practice of Planting Trees and Shrubs.* International Society of Arboriculture. 1997.

*Trees in the Urban Landscape.* Site Assessment, Design, and Installation. Peter J. Trowbridge and Nina L. Bassuk. John Wiley & Sons. 2004.



Plantings have been used to create outdoor use areas and increase the attractiveness of this commercial building.

### **GENERAL LIGHTING PRINCIPLES**

#### **OBJECTIVES**

Exterior lighting must be designed to provide the minimum level of illumination necessary for security, safety, and visual appeal for both pedestrians and vehicles. Lighting should allow activity after sunset without adding to unnecessary skyglow. Functional, aesthetic, and safety goals should be met with fixtures that are designed as integral site elements.

#### **LUDC References**

16.36.060.B.3.i: information for lighting plan. 16.08.020: definitions (e.g., cut-off fixture) 16.3.1210.G: technical requirements (e.g., mounting heights).



The color, form, and line of this fixture reflect the contemporary design of this office building. Its height and placement contributes to the human scale of the entrance.

#### **DESIGN GUIDELINES**

**Lighting Plan.** Lighting Plans required for Development Plan review must be presented with the application to enable the Planning Board to properly understand and review the lighting design.

**Luminaires.** Lighting fixtures mounted on poles or masts must be cut-off fixtures except for period or historical fixtures described below.

**Pole and Fixture Design.** The location and design of lighting should complement adjacent buildings, pedestrian amenities, and site elements. Poles and fixtures should be proportionate to the buildings and spaces they illuminate.



A cut-off fixture that complements the simple line of this commercial building. The fixture is mounted on an 18-foot pole on a one-foot base for an effective height of 19 feet.

**Period or Ornamental Fixtures**. Decorative fixtures may be used as alternatives to cut-off fixtures, provided that they comply with the LUDC. Period or ornamental fixtures should be designed or selected to complement the color, form, and lines of the architecture on the site.



Period light fixtures can be an effective and attractive way to add character and scale to the landscape. Fixtures are available with internal baffles to minimize glare.

### **GENERAL LIGHTING PRINCIPLES**

**Mounting Heights.** Light fixtures must be mounted at the lowest level allowing compliance with IESNA practices and in conformance with the LUDC.

**Safety and Energy Conservation.** Illumination levels must not exceed the minimums to provide safe conditions as currently defined by the Illuminating Engineering Society of North America (IESNA) and the requirements of the LUDC.



This pedestrian fixture has been located to illuminate the crosswalk that leads into a commercial establishment.



These tall pole-mounted fixtures are out of scale with the development.



Highly detailed ornamental lighting, mounted on 10' poles, is in scale with the pedestrian environment.

**Safety Considerations.** The design and placement of plantings, buffers, screen walls, fencing, and other landscape elements should be coordinated with the lighting plan to eliminate dark spots and potential hiding places.

**Feature Lighting.** Unique building or landscape features may be highlighted if the lighting does not create glare or distraction. Neon tubes should not be used as lighting or advertising features on the exterior of buildings.



These light fixtures complement the surrounding architecture and site through the use of similar materials and appropriate scale.

Lighting for parking lots, outdoor sales and service areas must be designed to provide the minimum lighting necessary for safety, visibility, and comfort, without causing glare or avoidable spillover onto adjacent properties or roadways, or an increase in skyglow. In general, these areas should have less illumination than other surrounding commercial uses.

#### **DESIGN GUIDELINES**

**Layout.** The alignment and spacing of fixtures in parking lots should follow a regular pattern that is coordinated with the orientation of buildings and other site elements.

**Location**. Light poles should be incorporated within raised planting areas wherever possible to avoid damage from vehicles and plows.

**Bases**. The use of bases raised above the level of plantings (when installed in islands or plant beds) or higher than one foot above the level of the pavement (when installed in walkways) is discouraged.

**Coordination with Planting Plan**. The lighting plan should be coordinated with the landscape plan to avoid obstructions from large trees, dark spots from shadows, or other conflicts as plantings mature.



These light fixtures have been coordinated with the planting plan to avoid problems as the trees mature. Slightly raised bases protect the poles from plow damage.

### **Illumination Levels.** Illumination levels must comply with Section 16.32.1220 of the LUDC.

**Design**. The design and color of fixtures used in parking lots should complement the roadway and pedestrian lighting, the architecture, and other street furnishings in terms of color, form, and style.

**Luminaires**. Metal halide lamps are strongly recommended in parking lots throughout Kittery for their color rendition and energy efficiency.

**Mounting Heights.** Light fixtures must be mounted at the lowest level allowing compliance with IESNA practices and in conformance with Section 16.32.1210 Lighting Fixtures.



The lighting in this parking area has been coordinated with the design of the lights used in the walkways and entrance drives (see examples on page 4).

Facade lighting is a way of highlighting special architectural features and attractively landscaped areas, while adding depth and variety to Kittery at night. Lighting used to illuminate building facades and landscaping should be limited to areas where it enhances particular features in accordance with the overall lighting plan and does not disturb surrounding residential areas.

#### **DESIGN GUIDELINES**

**Intent**. The lighting plan narrative must describe how the facades of individual buildings and/or landscaping will be lit (if at all) and the design intent behind such lighting.

**Levels**. Maximum level of illumination on any vertical surface should not exceed 5.0 foot-candles.

**Location**. Lighting fixtures should be properly sited, aimed, and shielded so that light is directed only onto the building facade. Lighting fixtures should not be directed toward adjacent streets, sidewalks, or properties.

**Mounting Heights.** The maximum light fixture height for building-mounted fixtures should be 15 feet on the facades facing public streets (the front lot line) and 20 feet on all other faces.

**Wall Mounted Fixtures**. Facade-mounted lighting fixtures must include full face shielding: either solid panel or louvers that direct the light upward or downward. This provision does not apply to ornamental lighting of 8,500 lumens or less.

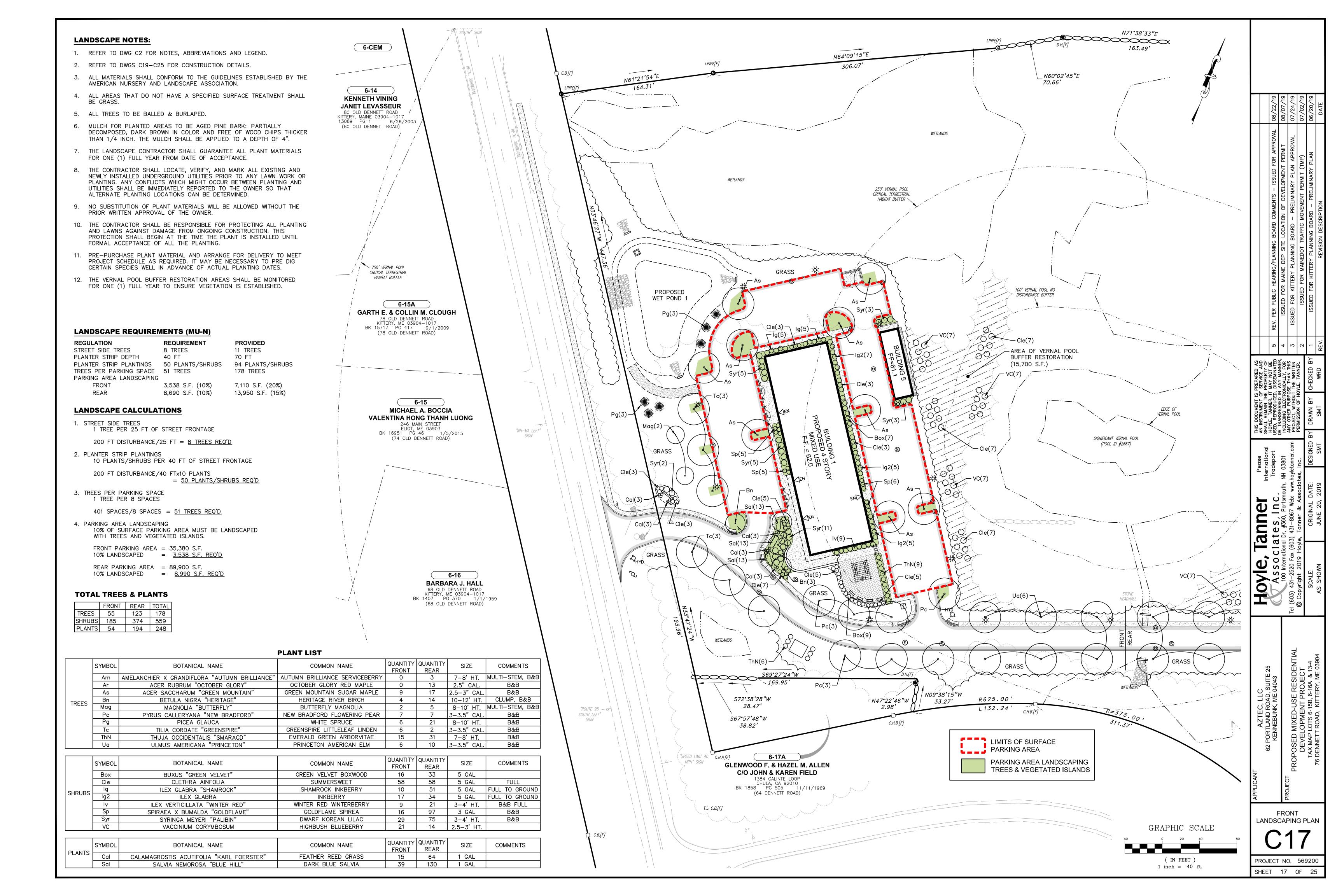
Landscape Lighting. Landscape lighting should be properly sited, aimed, and shielded so that light is directed only onto the selected tree or shrub. Lighting fixtures should not be directed toward adjacent streets, sidewalks, or properties. The lighting plan must demonstrate that the installation will not generate excessive light levels, cause glare, or direct light beyond the landscaping toward the night sky. Indirect landscape lighting (uplighting and washes) is encouraged over high branch-mounted floodlights aimed toward the ground.

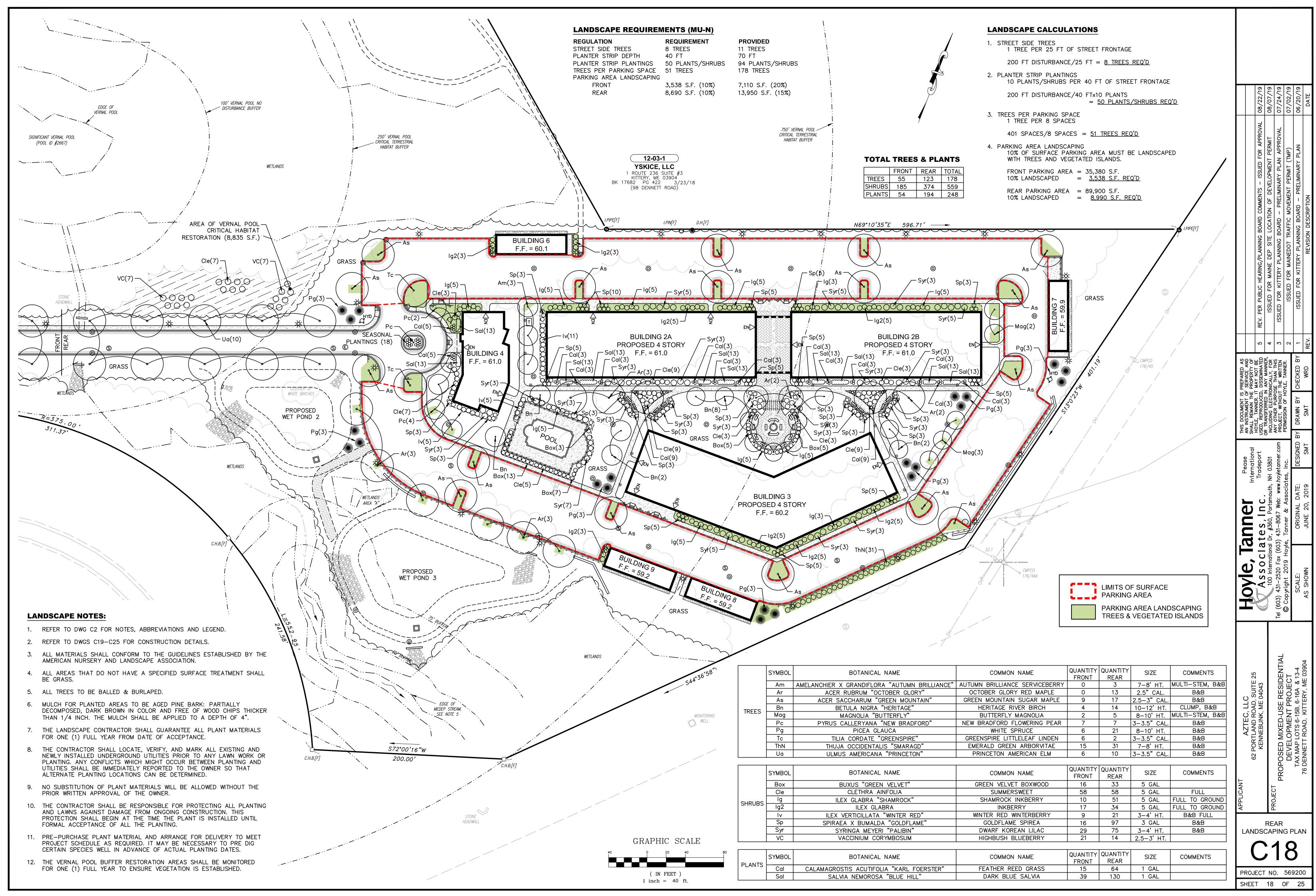


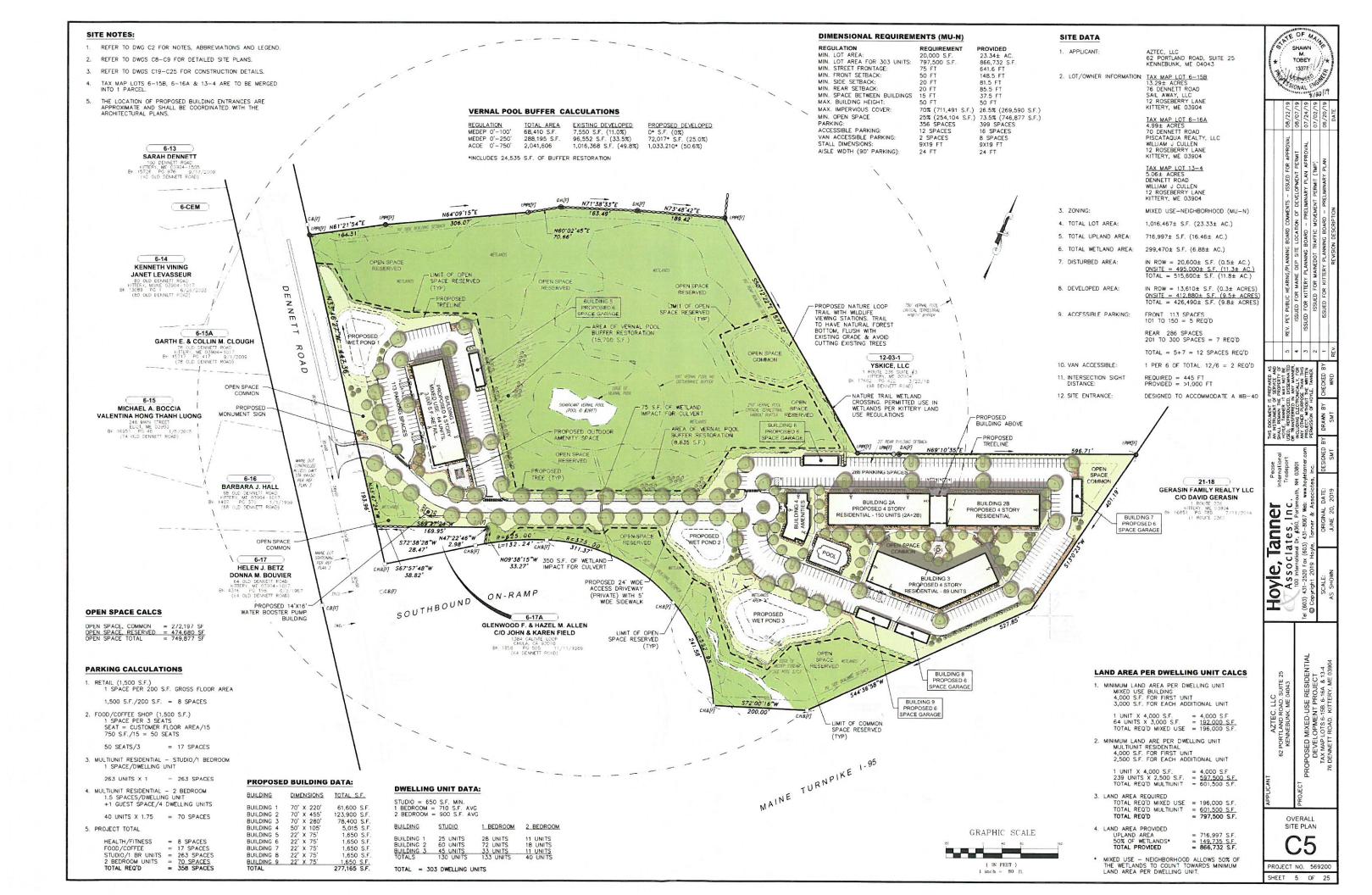
These facade-mounted lighting fixtures are visually compatible with the form and color of the building.



Unshielded facade-mounted lights are not allowed because they cause glare and spill light onto adjacent properties.







### **BUILDING 1**

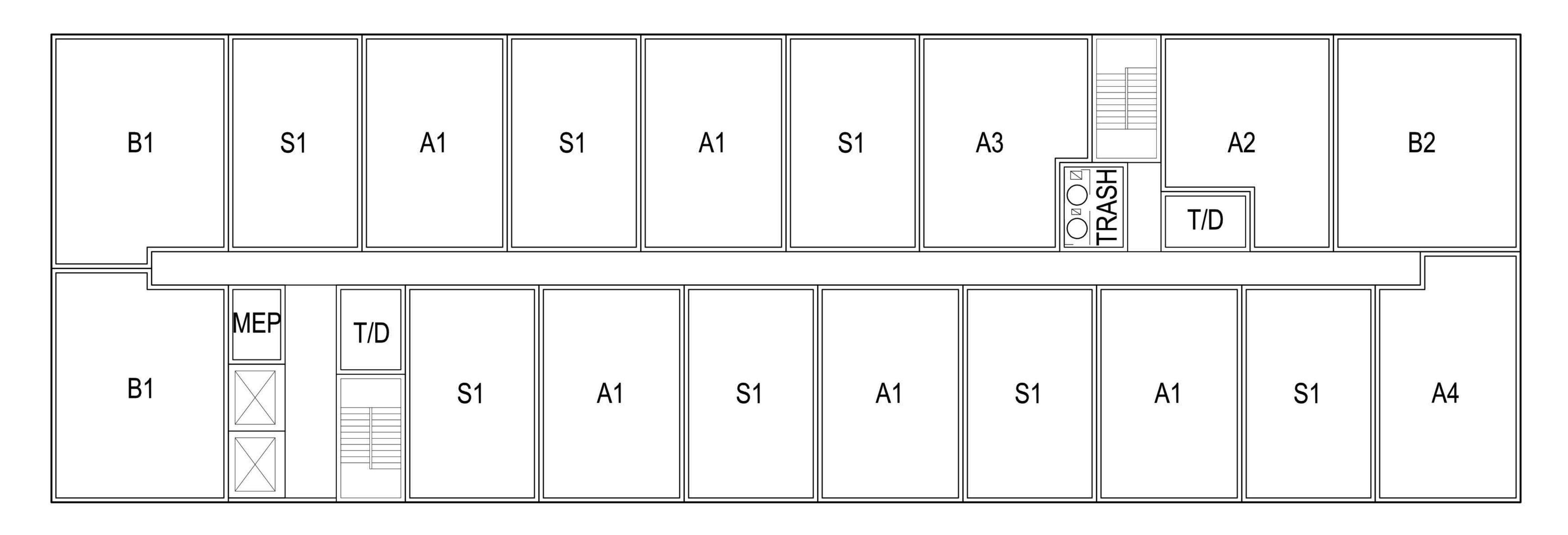
25 STUDIO	(S) (
28 1-BED	(A)
11 2-BED	(B) 9

) 650 SF MIN ) 710 SF AVG 900 SF AVG

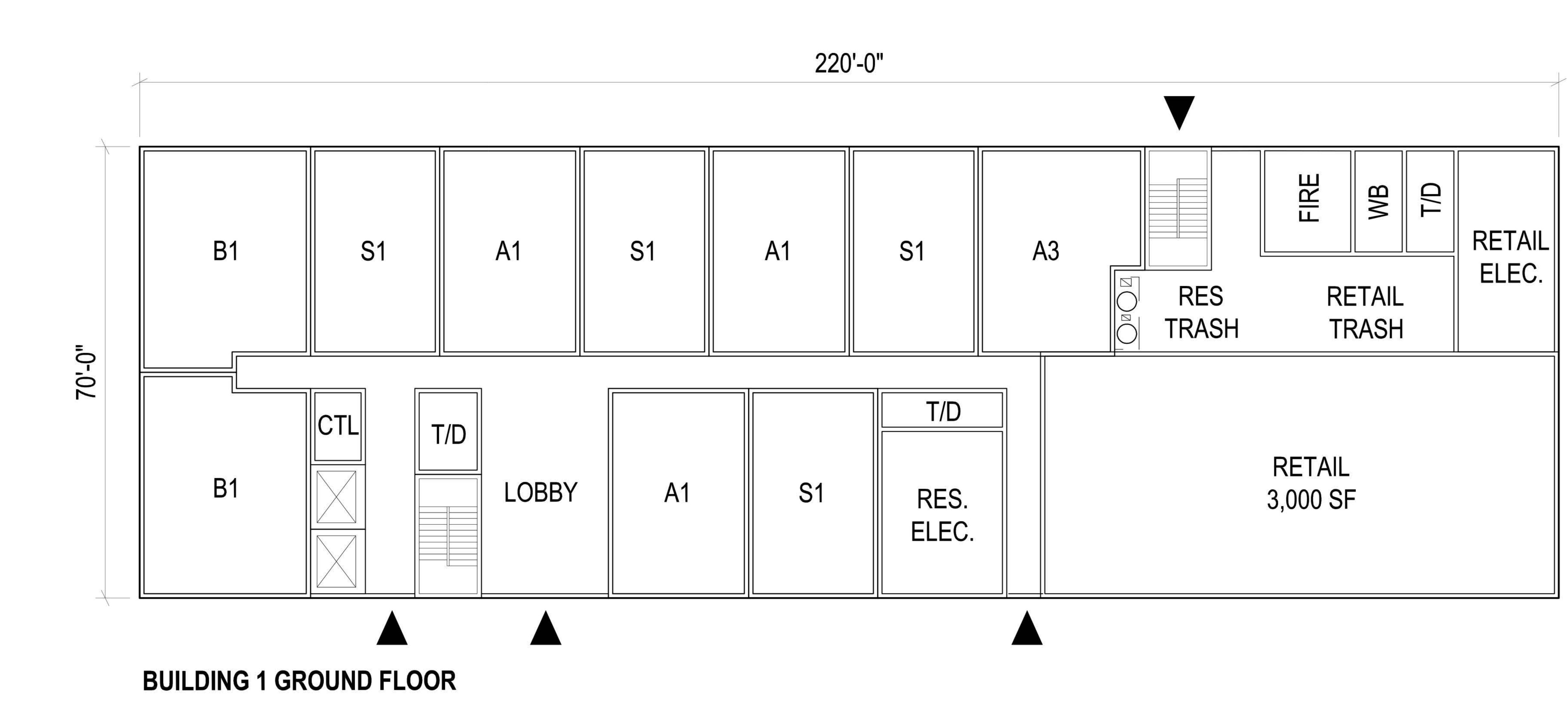
64 UNITS TOTAL

### LEGEND

CTL:	Elevator Control Ro
ELEC:	Electrical Room
FIRE:	Sprinkler Room
MEP:	Mechanical/Electric
T/D:	Tel/Data Closet
WB:	Water Booster



# **BUILDING 1 TYPICAL UPPER FLOORS 2-4**



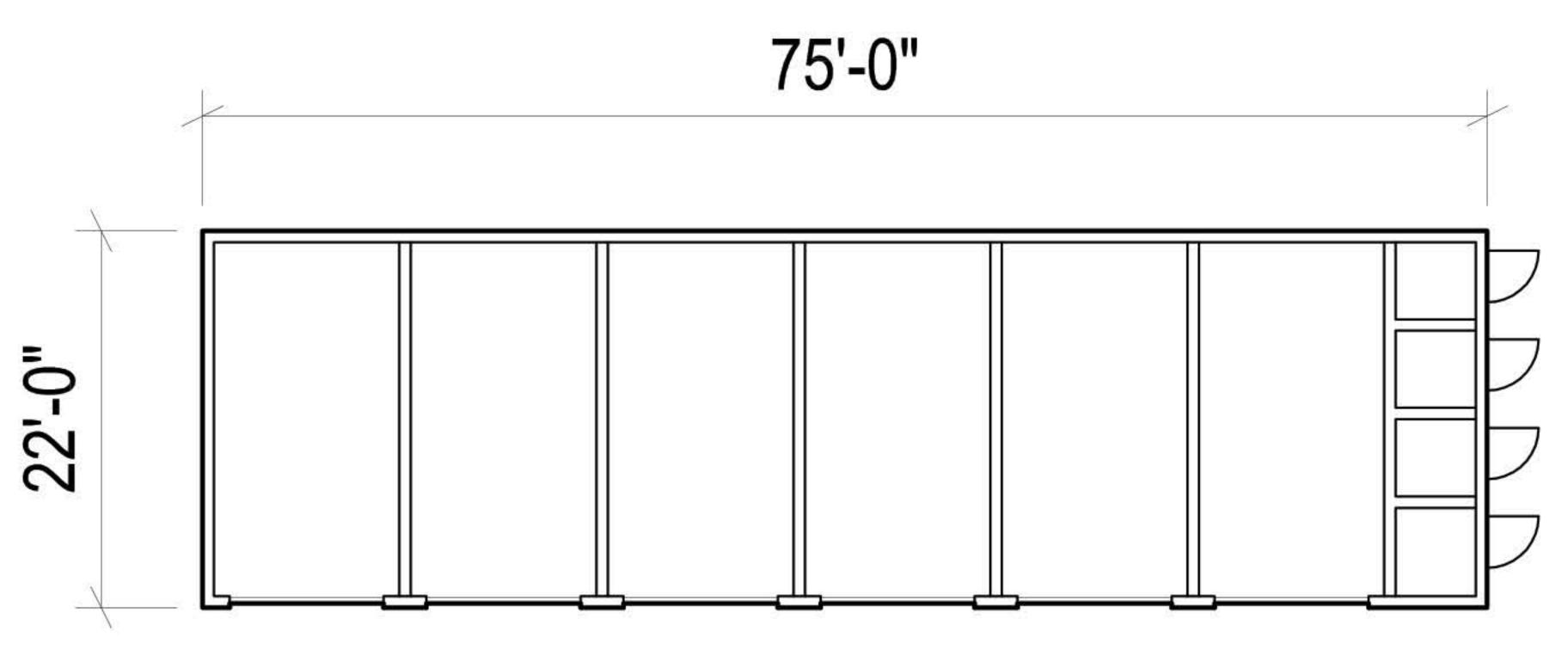
76 Dennett Road Kittery, ME 08.21.19

### Room

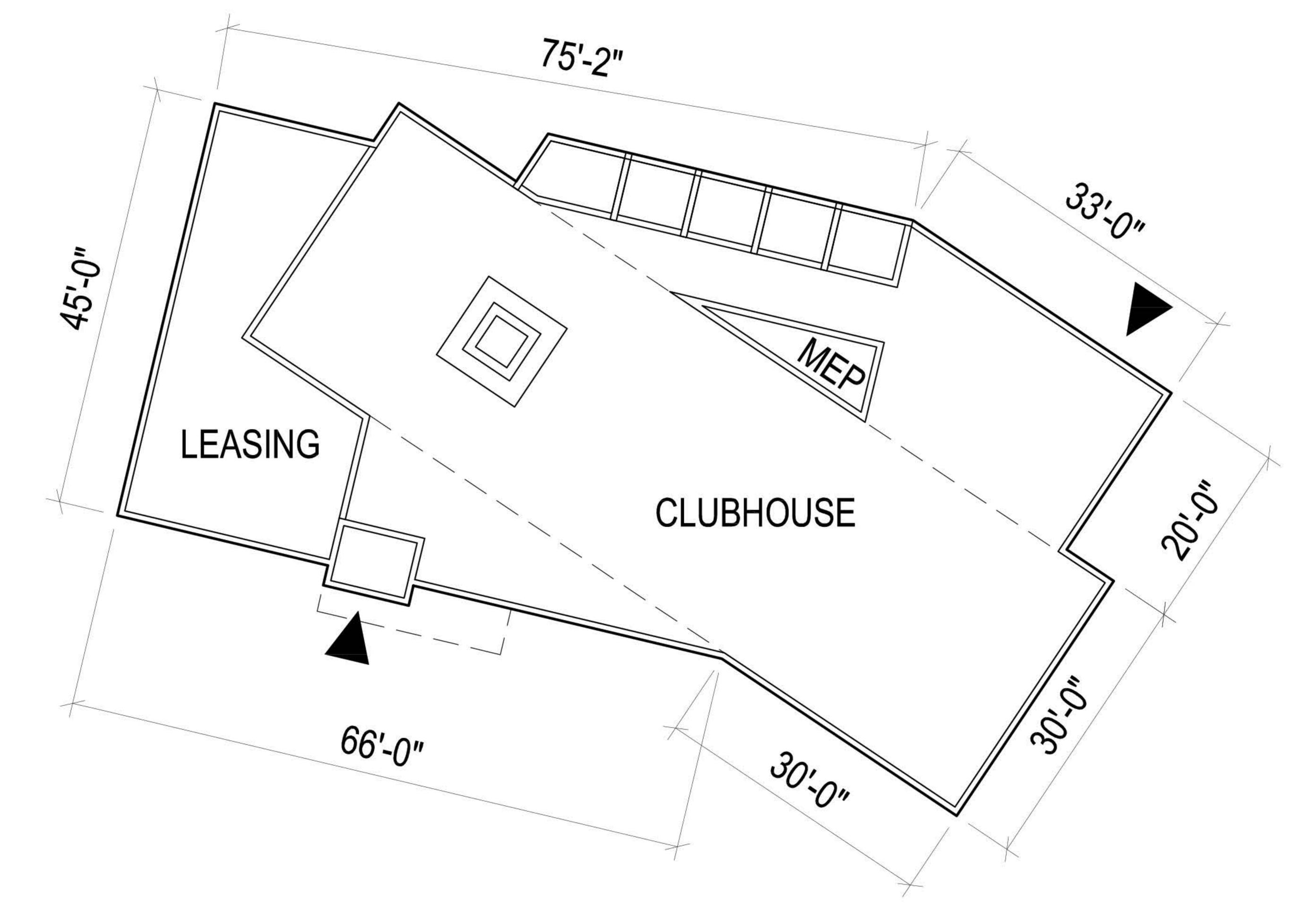
# rical/Plumbing Closet

Conceptual Floor Plans - Building 1, Clubhouse, and Garage

CUBE 3 Studio LLC | 370 Merrimack Street, Suite 337 | Lawrence, MA 01843 | 978.989.9900 | cube3.com







# LEASING / CLUBHOUSE FLOOR PLAN



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## **BUILDING 2**

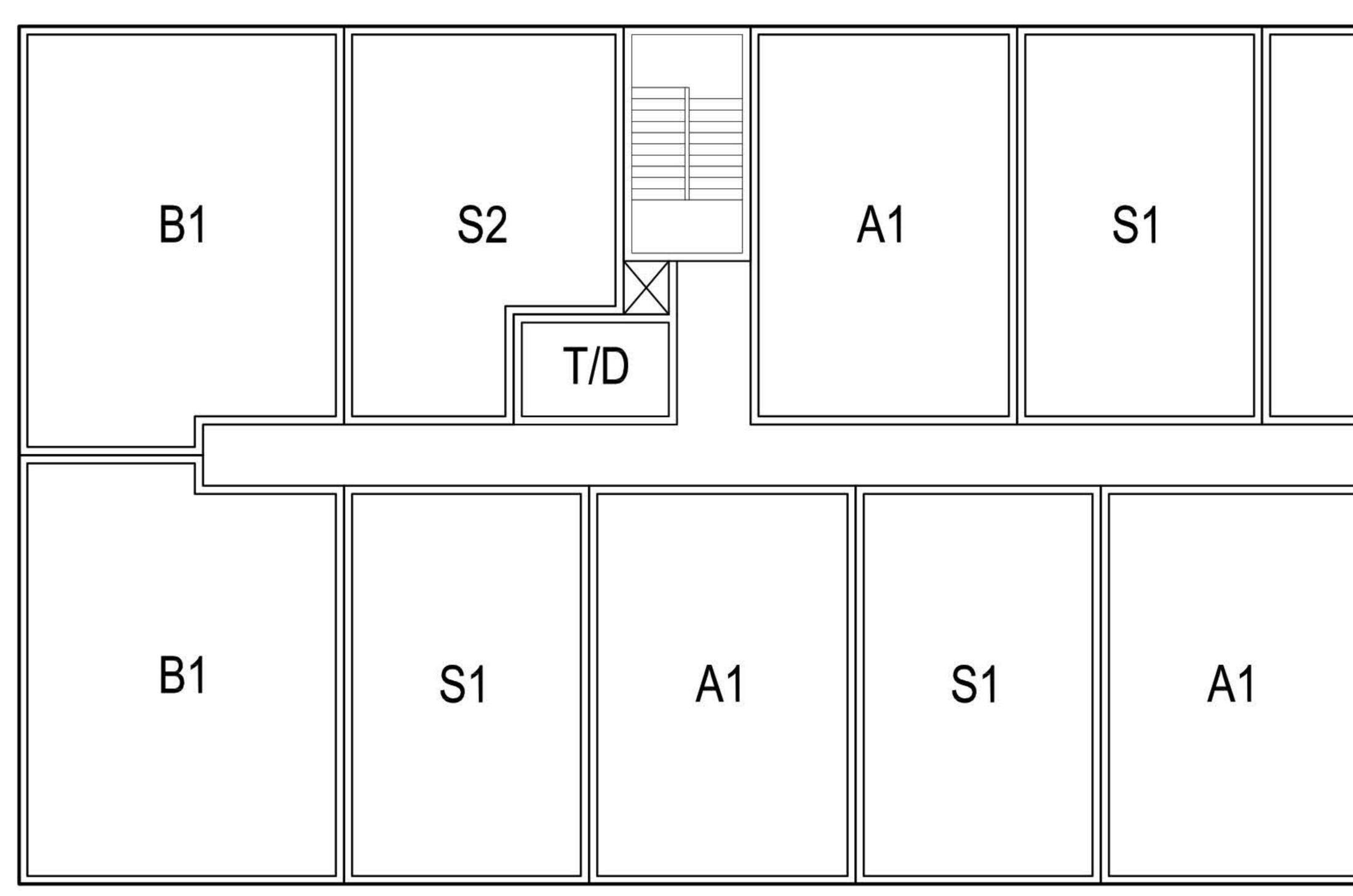
60 STUDIO
72 1-BED
18 2-BED

(S) 650 SF MIN (A) 710 SF AVG (B) 900 SF AVG

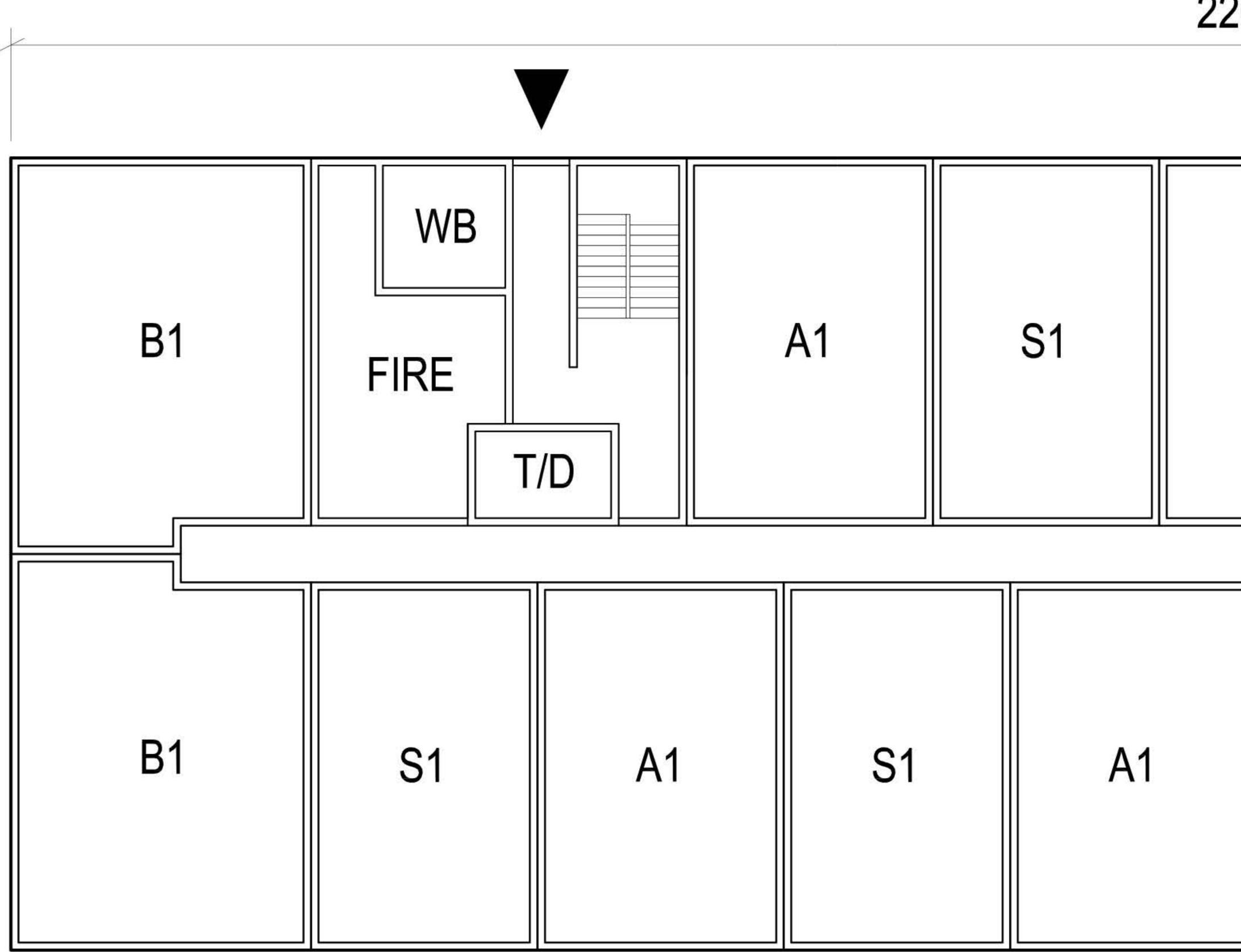
**150 UNITS TOTAL** 

## LEGEND

CTL:	Elevator Control Ro
ELEC:	Electrical Room
FIRE:	Sprinkler Room
MEP:	Mechanical/Electric
T/D:	Tel/Data Closet
WB:	Water Booster



# **BUILDING 2 TYPICAL UPPER** FLOORS 2-4



# **BUILDING 2 GROUND FLOOR**



76 Dennett Road Kittery, ME 08.21.19

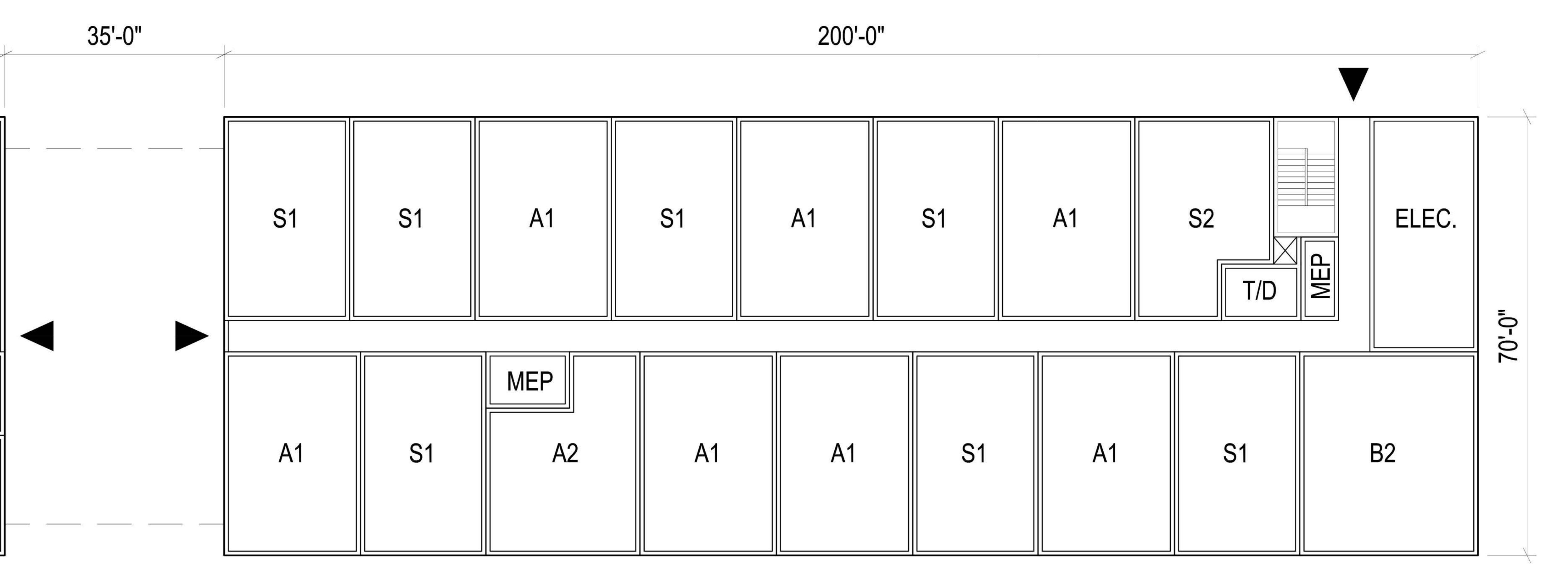
### Room

# rical/Plumbing Closet

A1		S1	A1	S2	A5	B3	S1	S1	A1	S1	A1	S1	A1	S2	A4
	S1	A1	<b>S1</b>	A1	T/D A2	B3	A1	S1	MEP A2	A1	A1	S1	A1	S1	B2

# 220'-0" LOBBY U U **S1** A1 A1 TRASH $\mathbf{U}$ S1 S1 A1 S2 A1

Conceptual Floor Plans - Building 2





45 STUDIO	(S) 650 SF MIN
33 1-BED	(A) 710 SF AVG
11 2-BED	(B) 900 SF AVG

CTL:	Elevator Control Ro
ELEC:	Electrical Room
FIRE:	Sprinkler Room
MEP:	Mechanical/Electric
T/D:	Tel/Data Closet
WB:	Water Booster





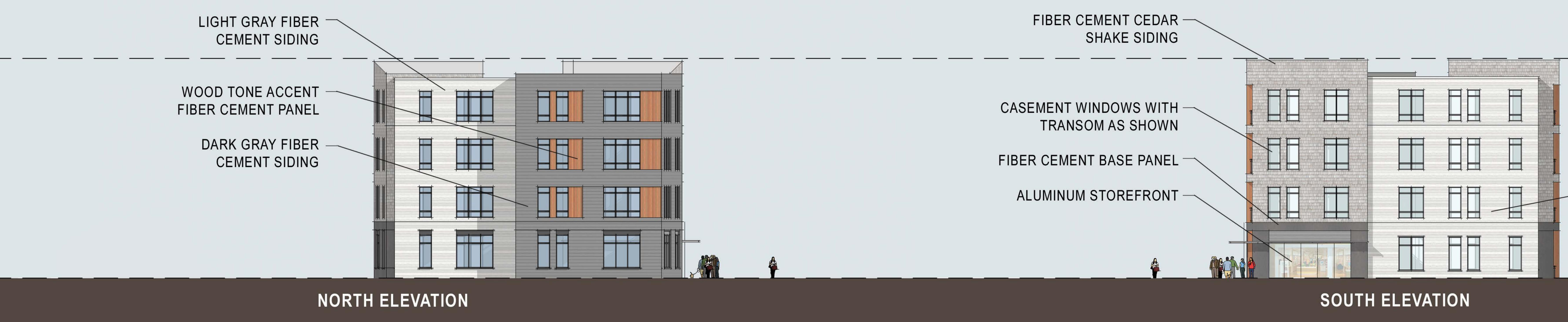
76 Dennett Road Kittery, ME 08.21.19

# **BUILDING 3 GROUND FLOOR**



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S1	A1	S1	B2
A1	A1	T/D S2	A4









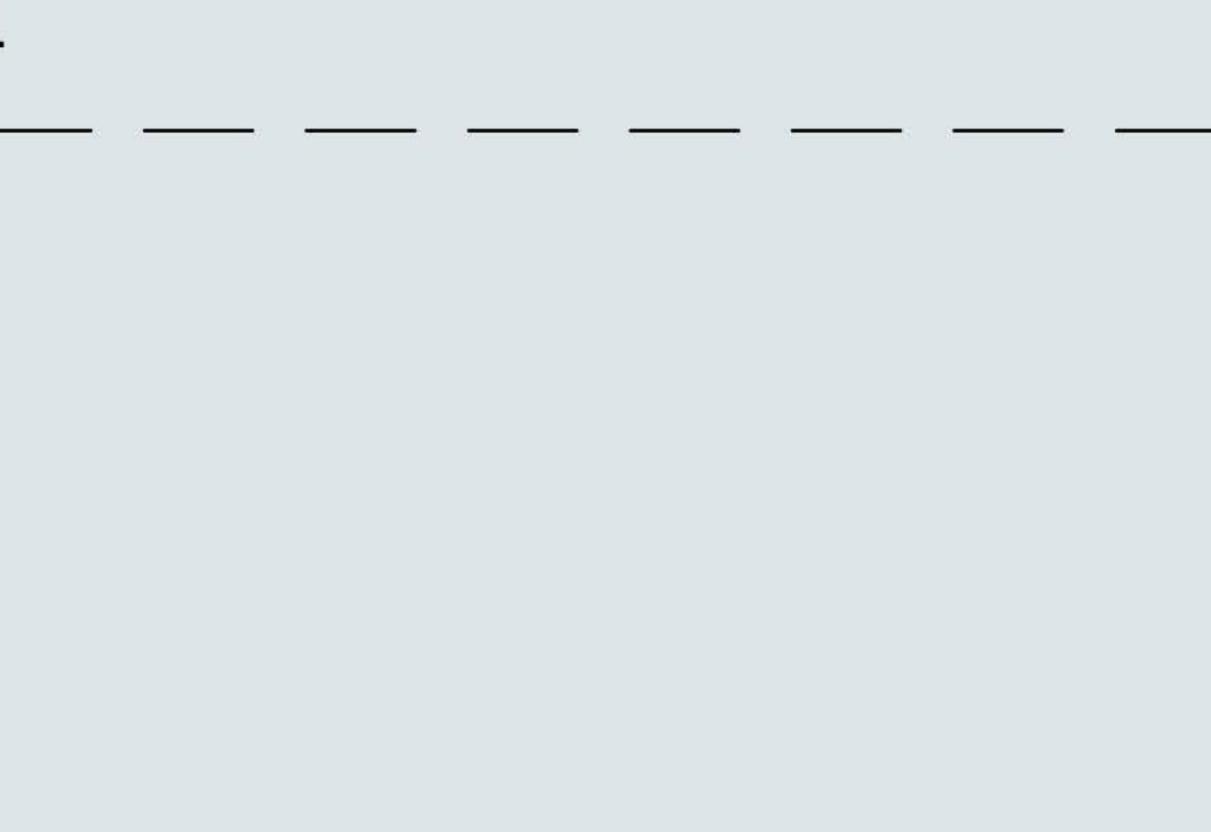
WEST ELEVATION

76 Dennett Road Kittery, ME 08.21.19



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# - LIGHT GRAY FIBER CEMENT SIDING



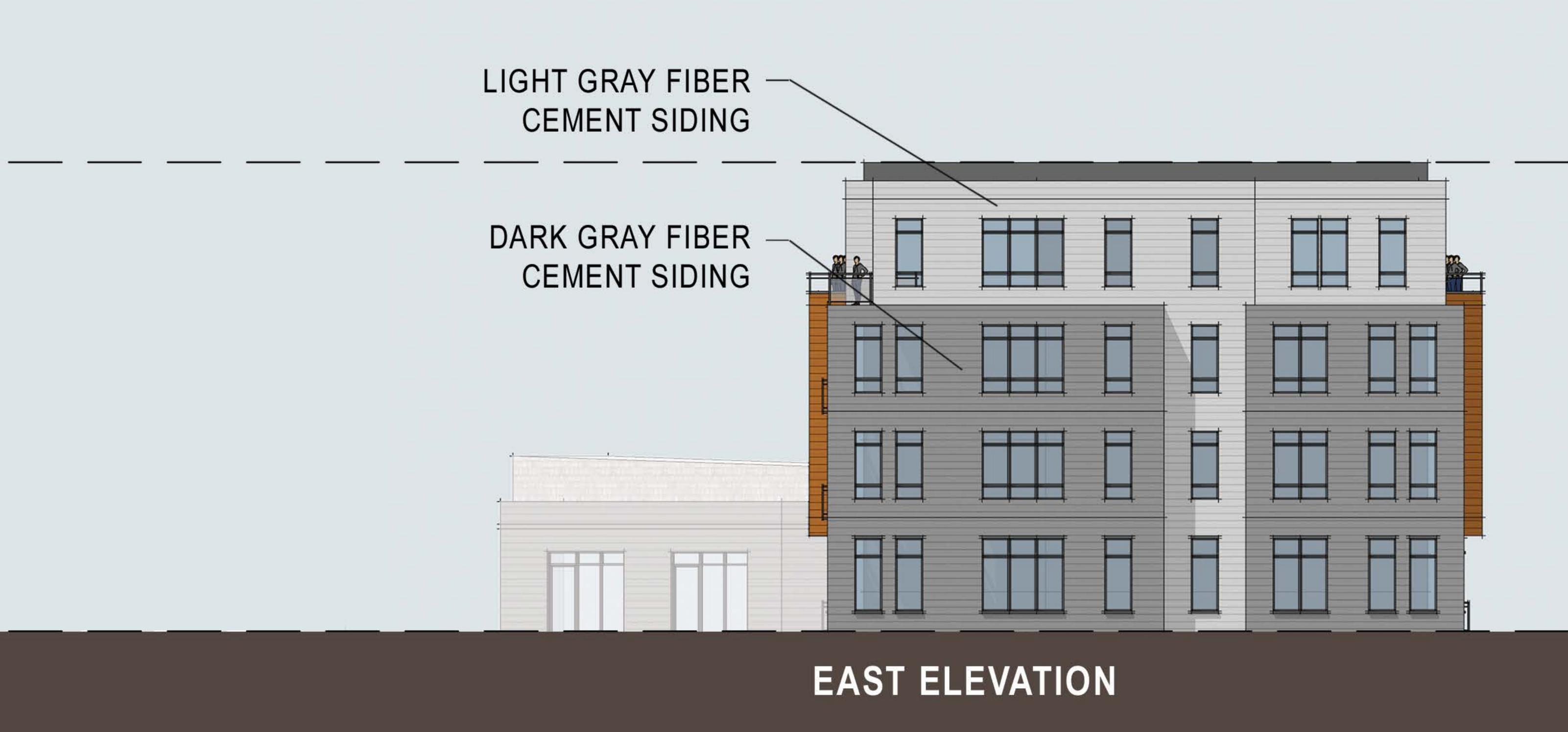
50

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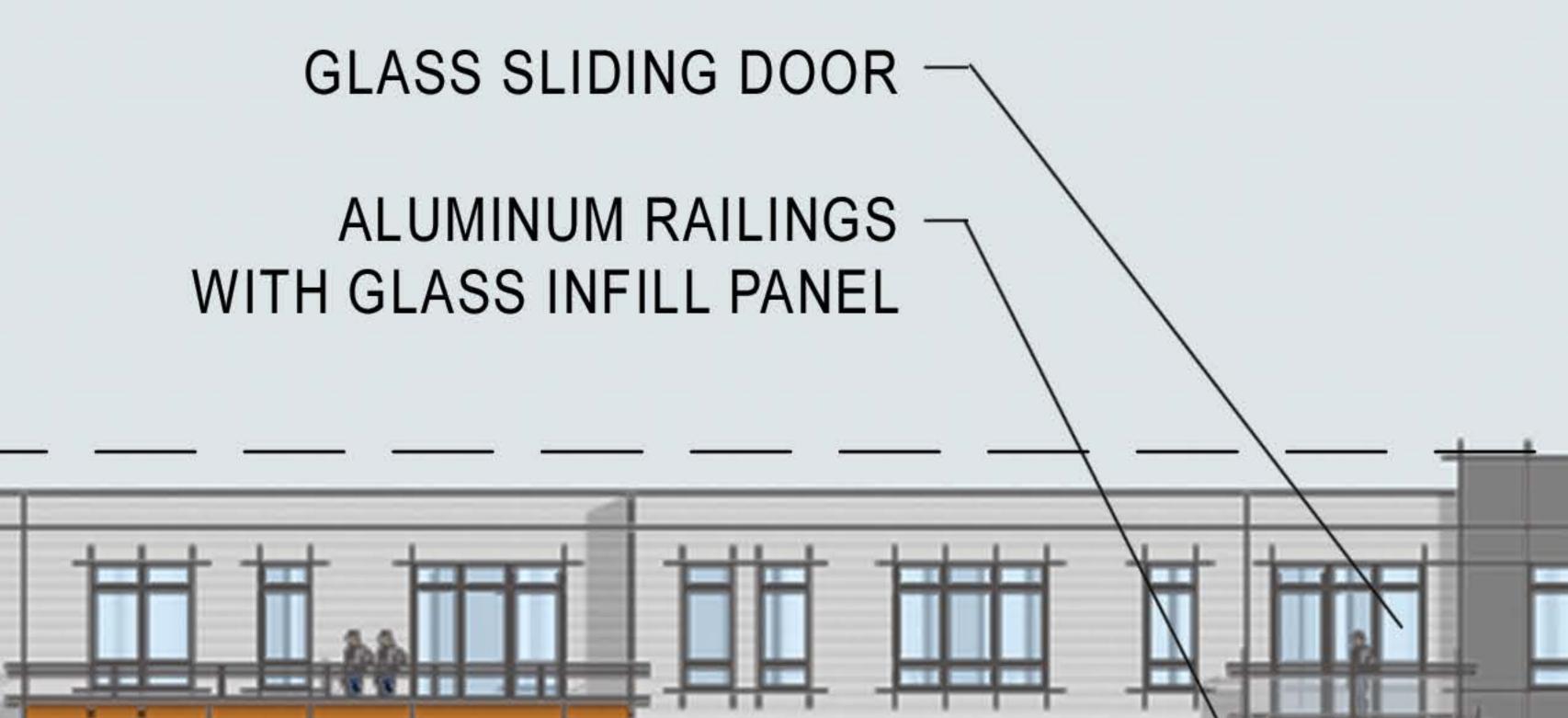


SOUTH ELEVATION



**NORTH ELEVATION** 

76 Dennett Road Kittery, ME 08.21.19



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# Conceptual Elevations - Building 2

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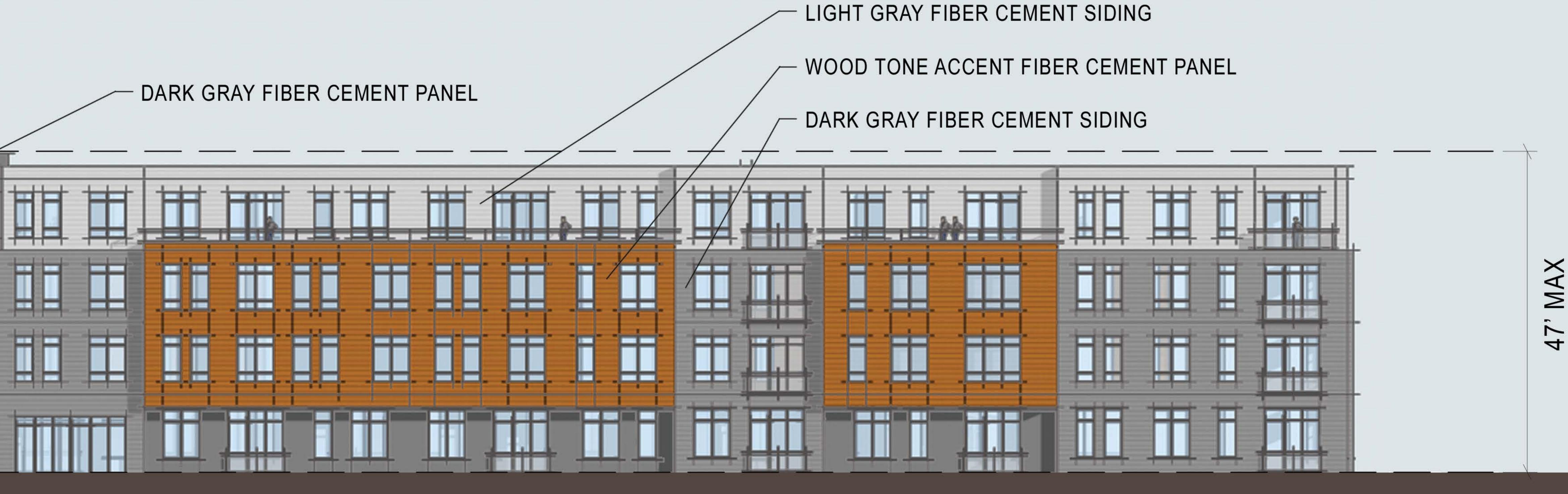
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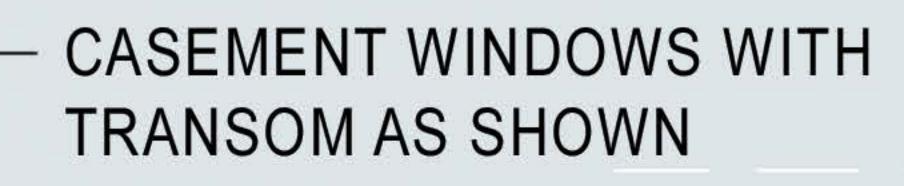
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**NORTH ELEVATION 1** 

76 Dennett Road Kittery, ME 08.21.19

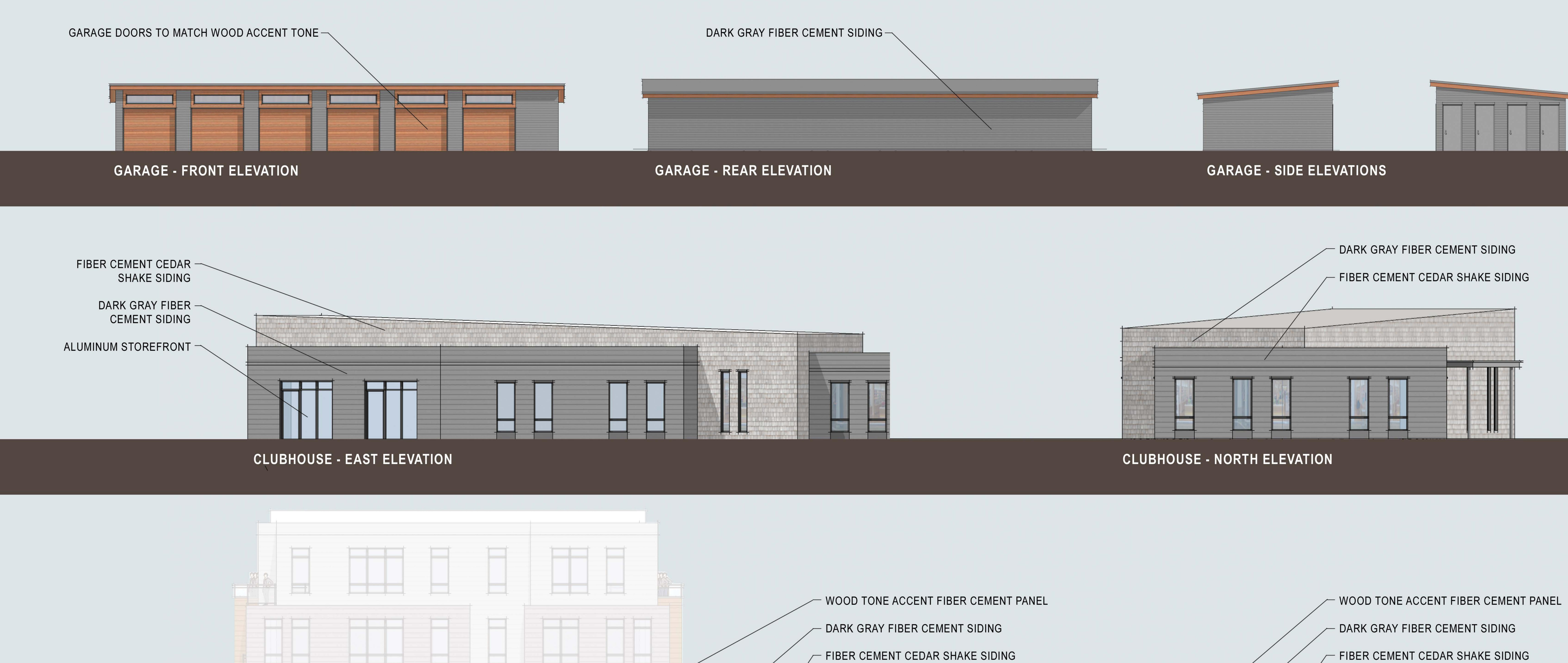


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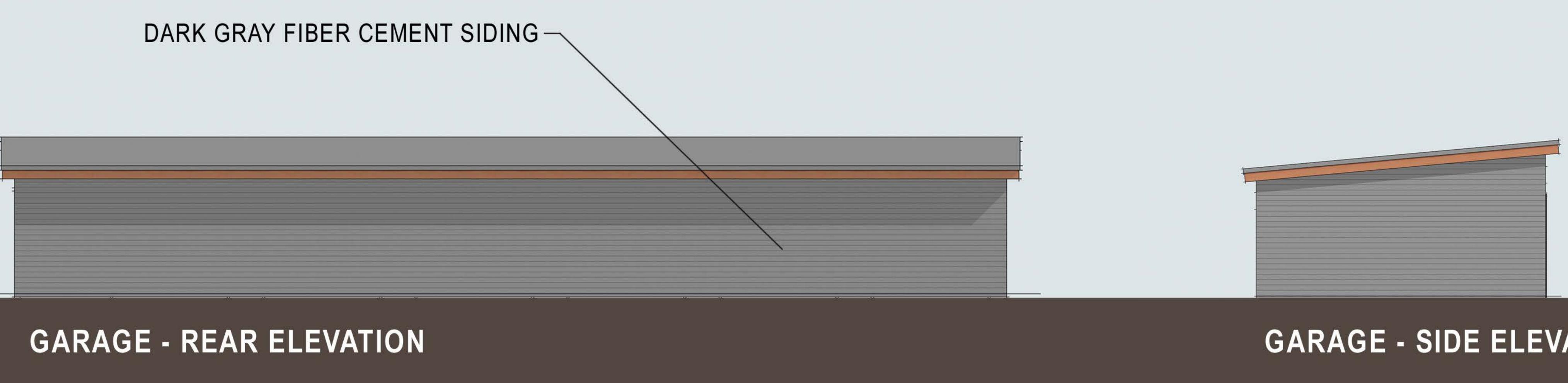
WEST ELEVATION

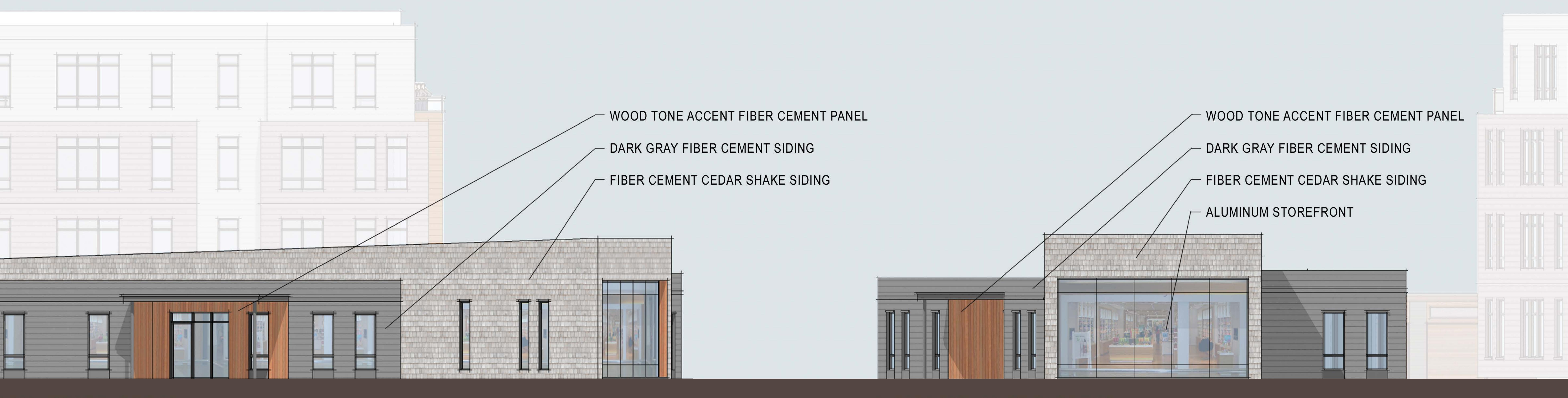




TRANSOM AS SHOWN **CLUBHOUSE - WEST ELEVATION** 

76 Dennett Roa Kittery, ME 08.21.19





Conceptual Elevations - Clubhouse and Garage

# **CLUBHOUSE - SOUTH ELEVATION**





# **PROPOSED MIXED-USE RESIDENTIAL DEVELOPMENT PROJECT 76 DENNETT ROAD KITTERY, ME 03904**

# TOWN OF KITTERY, PLANNING BOARD

CHAIR

DATE

# LIST OF DRAWINGS

DWG #	SHEET#	DWG NAME
C1	1	TITLE SHEET
C2	2	NOTES, ABBREVIATIONS & LEGEND
C3	3	OVERALL EXISTING CONDITIONS PLAN
C4	4	HIGH INTENSITY SOIL MAP
C5	5	OVERALL SITE PLAN
C6	6	E. C. & HOUSEKEEPING PLAN - FRONT
C7	7	E. C. & HOUSEKEEPING PLAN - REAR
C8	8	SITE PLAN - FRONT
C9	9	SITE PLAN - REAR
C10	10	GRADING & DRAINAGE PLAN - FRONT
C11	11	GRADING & DRAINAGE PLAN - REAR
C12	12	ROADWAY PLAN & PROFILE
C13	13	UTILITY PLAN - FRONT
C14	14	UTILITY PLAN - REAR
C15	15	LIGHTING PLAN - FRONT
C16	16	LIGHTING PLAN - REAR
C17	17	LANDSCAPING PLAN - FRONT
C18	18	LANDSCAPING PLAN - REAR
C19	19	CONSTRUCTION DETAILS 1
C20	20	CONSTRUCTION DETAILS 2
C21	21	CONSTRUCTION DETAILS 3
C22	22	CONSTRUCTION DETAILS 4
C23	23	CONSTRUCTION DETAILS 5
C24	24	CONSTRUCTION DETAILS 6
C25	25	CONSTRUCTION DETAILS 7

# **UTILITY CONTACTS:**

## WATER SERVICE:

KITTERY WATER DISTRIC 17 STATE ROAD KITTERY, ME 03904 CONTACT: MICHAEL ROGERS (207) 439-1128

## FIRE DEPARTMENT:

**KITTERY FIRE DEPARTMENT** 3 GORGES ROAD KITTERY, ME 03904 CONTACT: DAVID O'BRIEN (207) 439-2262

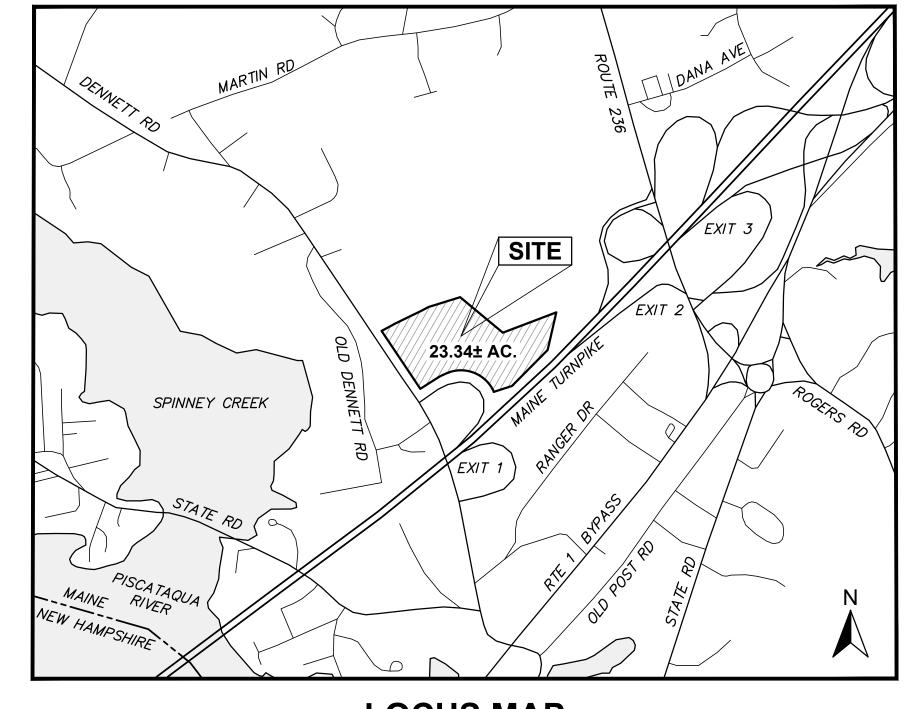
## **SEWER SERVICE:**

KITTERY SEWER DEPARTMENT 18 DENNETT ROAD ROAD KITTERY, ME 03904 CONTACT: TIM BABKIRK (207) 439-4646

# SITE DEVELOPMENT PLANS FOR A

APPLICANT AZTEC, LLC 62 PORTLAND ROAD, SUITE 25 **KENNEBUNK, ME 04043** 

LAST REVISED: AUGUST 22, 2019



LOCUS MAP 1" = 1000'

**ISSUED FOR PLANNING BOARD APPROVAL** NOT FOR CONSTRUCTION

**STORMWATER / ROW:** 

KITTERY PUBLIC WORKS 200 ROGERS ROAD KITTERY, ME 03904 CONTACT: JESSA KELLOGG (207) 475-1321

**ELECTRIC SERVICE:** 

**CENTRAL MAINE POWER COMPANY** 83 EDISON DRIVE AUGUSTA, ME 04330 CONTACT: VAN HOBGOOD (800) 750-4000

**TELECOMMUNICATIONS:** 

FAIRPOINT COMMUNICATIONS 1575 GREENLAND ROAD GREENLAND, NH 03840 CONTACT: JOE CONSIDINE (603) 427-5525

# **OWNER:**

SAIL AWAY, LLC PISCATAQUA REALTY, LLC WILLIAM J. CULLEN 12 ROSEBERRY LANE KITTERY. ME 03904

# **APPLICANT:**

AZTEC, LLC 62 PORTLAND ROAD, SUITE 25 KENNEBUNK. ME 04043

# **PARCEL INFORMATION:**

## TAX MAP LOT 6-15B TAX MAP LOT 6-16A 13.29± ACRES 76 DENNETT ROAD

12 ROSEBERRY LANE

KITTERY, ME 03904

SAIL AWAY, LLC

4.99± ACRES

70 DENNETT ROAD PISCATAQUA REALTY, LLC WILLIAM J CULLEN 12 ROSEBERRY LANE KITTERY, ME 03904

TAX MAP LOT 13-4

5.06± ACRES DENNETT ROAD WILLIAM J CULLEN 12 ROSEBERRY LANE KITTERY, ME 03904

* phone	ALL SS S	SHA TOE 13	AUNA. BEY 377 AL	NG	NA BUNN	mulmmmm
	08/22/19	08/07/19	07/24/19	07/02/19	06/20/19	DATE
	REV. PER PUBLIC HEARING/PLANNING BOARD COMMENTS - ISSUED FOR APPROVAL	ISSUED FOR MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT	ISSUED FOR KITTERY PLANNING BOARD – PRELIMINARY PLAN APPROVAL	ISSUED FOR MAINEDOT TRAFFIC MOVEMENT PERMIT (TMP)	ISSUED FOR KITTERY PLANNING BOARD - PRELIMINARY PLAN	REVISION DESCRIPTION
295		ה. גיאה 4	2 N S	5	BY 1	REV.
FREPARED A F SERVICE AN PROPERTY 0	I MAY NOT B	N ANY MANNE ONICALLY, FOI	OSE THAN THI	OYLE, IANNEK	CHECKED 1	WRD
THIS DOCUMENT IS PREPARED AS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF	HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED	OR IRANSFERRED IN ANY MANNER, INCLUDING ELECTRONICALLY, FOR	PROJECT, WITHOUT THE WRITTEN	PERMISSION OF HOYLE, IANNER.	DESIGNED BY DRAWN BY CHECKED BY	SMT
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Hoyle, Tanner	Associa	100 Internation	Tel (603) 431–2520 Fax (603) 431–8067 Web:	© Copyright 2019 Hoy	SCALE:	AS SHOWN
APPLICANT AZTEC, LLC 62 PORTI AND ROAD SLITE 25	KENNEBUNK, ME 04043	DRO IFOT		DEVELOPMENT PROJECT	TAX MAP LOTS 6-15B, 6-16A & 13-4	76 DENNETT ROAD, KITTERY, ME 03904
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PROJ			- / 	<b>1</b> 569	920	0
SHEE		1		DF	25	

Munimum CE :

# **PROJECT TEAM:**

# **CIVIL ENGINEER**

HOYLE, TANNER & ASSOCIATES 100 INTERNATIONAL DRIVE, SUITE 360 PORTSMOUTH, NH 03801 ATTN: SHAWN TOBEY (603) 431-2520

# ARCHITECT

CUBE3 370 MERRIMACK STREET, SUITE 337 LAWRENCE, MA 01843 ATTN: NICK GRIFFIN (978) 989-9900

# SURVEYOR

FIELDSTONE LAND CONSULTANTS, PLLC 206 ELM STREET MILFORD, NH 03055 ATTN: MICHAEL PLOOF (603) 672-5456

# LIGHTING DESIGN

VISUAL LIGHT, INC. 24 STICKNEY TERRACE, SUITE 6 HAMPTON, NH 03842 ATTN: SCOTT DROUIN (603) 926-6049

# **GAS SERVICE:**

UNITIL ME GAS OPERATIONS 376 RIVERSIDE INDUSTRIAL PARKWAY PORTLAND, ME 04103 CONTACT: SCOTT CARPENTER (207) 541-2543

# TRAFFIC

HOYLE, TANNER & ASSOCIATES 100 INTERNATIONAL DRIVE, SUITE 360 PORTSMOUTH, NH 03801 ATTN: JACOB SPARKOWICH (603) 431-2520

# **TRAFFIC COUNTS**

PRECISION DATA INDUSTRIES, LLC **46 MORTON STREET** FRAMINGHAM, MA 01702 ATTN: SCOTT PETTY (508) 875-0100

# WETLAND PERMITTING

ATLANTIC ENVIRONMENTAL, LLC 135 RIVER ROAD WOOLWICH, ME 04579 CONTACT: LISA VICKERS (207) 837-2199

# WETLANDS/SOIL MAPPING

JOSEPH NOEL P.O. BOX 174 SOUTH BERWICK, ME 03908 CONTACT: JOSEPH NOEL (207) 384-5587

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION DIGSAFE.COM DIAL 811

1.			
	THE BOUNDARY, SURFACE FEATURES AND TOPOGRAPHY ARE THE RESULT OF AN ON THE GROUND SURVEY CONDUCTED DURING THE MONTH OF APRIL 2019 BY FIELDSTONE LAND CONSULTANTS, PLLC. SEE DWG C3 FOR ADDITIONAL EXISTING CONDITIONS INFORMATION REGARDING THE WETLANDS, VERNAL POOL AND STREAM.	1.	THE STORM DRAINAGE SYSTEM SHALL BE CON GRADE AS SHOWN ON THE PLANS. ALL PIPE M SPECIFIED ON THE PLANS. CONSTRUCTION MET TO MAINE DOT STANDARD SPECIFICATIONS. CA MANHOLES SHALL CONFORM TO SECTION 604.
2.	THIS PROJECT IS TO BE CONSTRUCTED TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE STANDARDS OF	2.	ALL CATCH BASIN FRAMES AND GRATES SHAL APPROVED EQUAL.
3.	THE TOWN OF KITTERY, MAINE DEP AND MAINE DOT. THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN	3.	PROPOSED RIM ELEVATIONS OF DRAINAGE MAN BASINS ARE APPROXIMATE. FINAL ELEVATIONS WITH FINISH GRADES.
4.	THE MAINE DEP SITE LOCATION OF DEVELOPMENT LAW PERMIT. ALL WORK WITHIN THE STATE RIGHT-OF-WAY SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN THE MAINE DOT TRAFFIC MOVEMENT	4.	
5.	PERMIT FOR THE PROJECT. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART	5.	THE CONTRACTOR SHALL CONFIRM THE ELEVA PIPE RUNS PRIOR TO ANY INSTALLATION.
6.	FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL VERIFY AND DETERMINE THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON	6.	THE CONTRACTOR SHALL PROVIDE FOR THE HARDOWS FROM SERVICE CONNECTIONS AND MAIN EXISTING DRAINS MAY HAVE ACTIVE FLOW AND SHALL MAINTAIN CONTINUOUS FLOW WITHOUT I
	THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL LOCATE THE UTILITIES SHOWN AND THE POSSIBLE EXISTENCE OF OTHER UNDERGROUND UTILITIES BY PROVIDING	7.	THE CONTRACTOR SHALL STABILIZE ANY AND AND PONDS PRIOR TO DIRECTING STORMWATER
	OBSERVATION TEST PITS. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (DIAL 811) AND THE TOWN OF KITTERY AT LEAST 72 HOURS BEFORE DIGGING.	8.	WHEN CONNECTING NEW PIPES TO EXISTING ST MANHOLES AND CATCH BASINS, THE STRUCTU COMPLETELY CLEANED OUT. THE HOLE MADE I BE AS SMALL AS NECESSARY. THE STRUCTURE MATCH ITS ORIGINAL TYPE OF CONSTRUCTION. STRUCTURE AND THE PIPE SHALL BE MADE W THE JOINT WITH MORTAR.
7.	WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED	9.	THE CONTRACTOR SHALL CLEAN THE ENTIRE S ALL SEDIMENT AND DEBRIS, WITHIN THE LIMIT COMPLETION OF CONSTRUCTION.
8.	PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS. WHEN PREPARING THE EXISTING SITE FOR THE PROPOSED	10.	ALL DRAIN PIPES SHALL HAVE A MINIMUM GRO THE REQUIRED COVER CANNOT BE OBTAINED, SHALL BE ADS N-12 DOUBLE WALLED HDPE C INSTALL 4" OF RIGID INSULATION ABOVE THE
	DEVELOPMENT, ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES.	11.	CANNOT BE OBTAINED. ALL PROPOSED CATCH BASINS SHALL BE DEEP
9.	THE CONTRACTOR SHALL PERFORM ALL THE CLEARING AND GRUBBING NECESSARY WITHIN THE CONSTRUCTION AREA, LIMITING THE AMOUNT OF CLEARING AND GRUBBING TO THE GREATEST EXTENT POSSIBLE.	12.	WITH 4' SUMPS. THE PROPOSED STORMWATER SYSTEM AND WE
10.	CONTRACTOR SHALL MAKE EVERY ATTEMPT POSSIBLE TO SAVE EXISTING TREES AND MINIMIZE DAMAGE TO TREES ADJACENT TO CONSTRUCTION LIMITS DURING CONSTRUCTION.		MAINTAINED ACCORDING TO THE STORMWATER MAINTENANCE MANUAL PREPARED UNDER THE LOCATION OF DEVELOPMENT PERMIT. THE SYST AT A MINIMUM IN THE SPRING AND FALL.
11.	DURING CONSTRUCTION THERE SHALL BE NO DISTURBANCES TO THE EXISTING WETLANDS, VERNAL POOL, CRITICAL TERRESTRIAL HABITAT OR THE 25' STREAM BUFFER EXCEPT FOR APPROVED PERMITTING DISTURBANCES OR AREAS OF HABITAT RESTORATION.	13.	THE CONTRACTOR SHALL INSTALL PERIMETER ALL PROPOSED BUILDINGS. THE FOOTING DRAIN DAYLIGHT OUTSIDE THE LIMITS OF PAVEMENT. AND GEOTECHNICAL REPORT FOR PIPE SIZE AN LOCATIONS.
12.	THE CONSTRACTOR SHALL PROTECT AND MAINTAIN EXISTING BENCHMARKS AND BOUNDS. ALL BENCHMARKS AND BOUNDS DISTURBED	EA	RTHWORK & GRADING NOTES:
4 7	BY THE CONTRACTOR SHALL BE RE-ESTABLISHED BY A MAINE REGISTERED LAND SURVEYOR AT NO EXPENSE TO THE OWNER.		GRADE AWAY FROM BUILDING WALLS AT 2% M PROVIDE UNIFORM SLOPE BETWEEN CONTOURS
13.	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, POLICE DETAILS, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.	3.	ELEVATIONS. SPOT GRADES SHOWN ARE PAVEMENT ELEVATI UNLESS OTHERWISE NOTED.
14.	THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS OF THE SITE.	4.	ALL GRASSED AND LANDSCAPED AREAS INSIDE BE GRADED TO DRAIN TO THE PROPOSED CAT
15.	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL WORK IS DONE IN ACCORDANCE WITH OSHA REQUIREMENTS.	5.	EARTH SLOPES SHALL BE NO STEEPER THAN (HORIZONTAL: VERTICAL) AND SHALL BE FLATT
16.	ALL DEWATERING MUST BE EXECUTED IN ACCORDANCE WITH MAINE DOT STANDARD SPECIFICATIONS. REGULATIONS PROHIBIT DISCHARGING GROUNDWATER TO A SANITARY OR COMBINED SEWER WITHOUT PERMISSION.	6. 7.	THE CONTRACTOR SHALL REMOVE AND DISPOS STUMPS FOR TREES THAT ARE REMOVED. GENERAL FILL BEYOND PAVED AREAS SHALL E RUBBISH, STUMPS, AND STONES LARGER THAN
17.	THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS (PIPE, CASTINGS, STRUCTURES, ETC.) TO THE INSPECTING ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.		PLACED IN COMPACTED LAYERS NOT TO EXCE DRY DENSITY AFTER COMPACTION SHALL NOT THE STANDARD PROCTOR TEST AND DONE IN REQUIREMENTS OF ASTM D698.
18.	THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, TEMPORARY UTILITIES AND COORDINATION WITH ALL AGENCIES IN OBTAINING ACCESS TO THE SITE AND PERFORMING ALL WORK REQUIRED	8.	AFTER THE AREAS TO BE TOPSOILED HAVE BE THE SUBGRADE SHALL BE LOOSENED BY SCAR AT LEAST 2" TO ENSURE BONDING OF THE TO
19.	FOR THIS PROJECT. THE CONTRACTOR SHALL FILE AND OBTAIN A NPDES CONSTRUCTION		FILL OR TOPSOIL SHALL NEITHER BE PLACED I A FROZEN OR MUDDY CONDITION OR WHILE SU
	GENERAL PERMIT PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PRIOR TO CONSTRUCTION.		FINISH PAVEMENT SURFACES AND LAWN AREA LOW SPOTS AND PONDING AREAS.
	COORDINATE ALL WORK ADJACENT TO THE PROPOSED BUILDINGS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.	11.	ALL AREAS DISTURBED BY THE CONTRACTOR'S NOT HAVE A SURFACE TREATMENT SPECIFICAL RESTORED TO A MINIMUM OF 4" OF SEEDED T MULCH.
21.	ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE LATEST EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AMERICANS WITH DISABILITIES (ADA) ACT, AND STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS.	12.	THE CONTRACTOR SHALL COORDINATE ALL LEE REQUIREMENTS SET FORTH IN THE MAINE DEP DEVELOPMENT PERMIT FOR THIS PROJECT.
	ALL CURB SHALL BE VERTICAL GRANITE UNLESS OTHERWISE NOTED.	13.	THE CONTRACTOR SHALL SUBMIT STAMPED RE PLANS FROM THE WALL MANUFACTURER TO TH FOR REVIEW AND APPROVAL PRIOR TO INSTAL
۷۵.	THE PROPOSED DRIVEWAY AND ACCESS ROAD TO THE REAR OF THE SITE WILL BE A PRIVATE ROAD AND SHALL BE MAINTAINED BY THE PROPERTY OWNER.		TERIOR LIGHTS:
	THERE SHALL BE NO ONSITE SALT STORAGE.	1.	THE UNDERGROUND CONDUIT RUNS FOR THE F IS NOT SHOWN ON THESE PLANS. THE CONTRA COORDINATE WITH THE ELECTRICAL DESIGNER
	THE PROPOSED NATURE TRAIL SHALL BE FOR ONSITE RESIDENTS ONLY. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT IN THE FIELD	2.	LOCATIONS OF THE CONDUIT RUNS AND PULLE OUTSIDE LIGHTS MUST BE MADE UP OF A LIGH
	USING SURVEY EQUIPMENT. AN AUTOCAD FILE OF THE EXISTING AND PROPOSED FEATURES WITH CONTROL POINTS WILL BE PROVIDED TO THE CONTRACTOR FOR CONSTRUCTION LAYOUT. THE LIMIT OF WORK SHALL BE CLEARLY MARKED IN THE FIELD BEFORE ANY WORK IS TO BEGIN	 z	REFLECTOR SO THAT, ACTING TOGETHER, THE CONTROLLED AND NOT DIRECTED ACROSS A P CONSTITUTE A NUISANCE. ALL PROPOSED LIGHTING SHALL BE DARK SKY
	ONSITE.	٦.	ALL I NOFUSLU LIGHTING SHALL BE DAKK SKY

SHALL BE CONSTRUCTED TO LINE AND NS. ALL PIPE MATERIALS SHALL BE AS STRUCTION METHODS SHALL CONFORM CIFICATIONS. CATCH BASINS AND DRAIN SECTION 604.

GRATES SHALL NEENAH R-3472 OR

DRAINAGE MANHOLES AND CATCH AL ELEVATIONS ARE TO BE SET FLUSH

RM THE EXISTING GRADES AT THE HREE WET PONDS PRIOR TO ANY POND

RM THE ELEVATIONS FOR ALL DRAIN ALLATION.

DE FOR THE HANDLING OF EXISTING IONS AND MAINLINE PIPES. THE TIVE FLOW AND THE CONTRACTOR LOW WITHOUT RESTRICTIONS.

LIZE ANY AND ALL DITCHES. SWALES IG STORMWATER RUN-OFF TO THEM.

TO EXISTING STRUCTURES SUCH AS THE STRUCTURE SHALL BE HOLE MADE IN THE STRUCTURE SHALL THE STRUCTURE SHALL BE REPAIRED TO CONSTRUCTION. THE JOINT BETWEEN THE LL BE MADE WATERTIGHT BY FILLING

THE ENTIRE STORMWATER SYSTEM OF HIN THE LIMIT OF WORK UPON

A MINIMUM GROUND COVER OF 3'. IF BE OBTAINED, THE PROPOSED PIPE VALLED HDPE OR APPROVED EQUAL. N ABOVE THE DRAIN LINE IF 3' COVER

SHALL BE DEEP SUMP CATCH BASINS

YSTEM AND WET PONDS SHALL BE STORMWATER INSPECTION AND ED UNDER THE MAINE DEP SITE RMIT. THE SYSTEM SHALL BE INSPECTED AND FALL.

LL PERIMETER FOOTING DRAINS AROUND FOOTING DRAINS SHALL DRAIN TO OF PAVEMENT. SEE STRUCTURAL PLANS R PIPE SIZE AND INSTALLATION

## DTES:

ALLS AT 2% MINIMUM (TYPICAL). EEN CONTOURS AND/OR SPOT

EMENT ELEVATIONS AT THE CURBLINE

AREAS INSIDE THE SIDEWALKS SHALL PROPOSED CATCH BASINS.

TEEPER THAN 2:1 HALL BE FLATTER WHERE SHOWN.

VE AND DISPOSE OF ALL ROOTS AND REMOVED.

AREAS SHALL BE FREE OF BRUSH LARGER THAN 8". FILL SHALL BE NOT TO EXCEED 8" IN THICKNESS. THE ON SHALL NOT BE LESS THAN 95% OF AND DONE IN ACCORDANCE WITH THE

OILED HAVE BEEN BROUGHT TO GRADE. SENED BY SCARIFYING TO A DEPTH OF ING OF THE TOPSOIL AND SUBSOIL.

R BE PLACED NOR COMPACTED WHILE IN N OR WHILE SUBGRADE IS FROZEN.

ND LAWN AREAS SHALL BE FREE OF

CONTRACTOR'S OPERATIONS THAT DO ENT SPECIFICALLY SPECIFIED SHALL BE OF SEEDED TOPSOIL, FERTILIZER, AND

DINATE ALL LEDGE REMOVAL WITH THE THE MAINE DEP SITE LOCATION OF PROJECT.

T STAMPED RETAINING WALL DESIGN ACTURER TO THE INSPECTING ENGINEER RIOR TO INSTALLATION.

JNS FOR THE PROPOSED LIGHT POLES S. THE CONTRACTOR SHALL CAL DESIGNER FOR THE INSTALLATION JNS AND PULLBOXES.

UP OF A LIGHT SOURCE AND OGETHER, THE LIGHT BEAM IS D ACROSS A PROPERTY LINE SO AS TO

BE DARK SKY FRIENDLY.

LOCATIONS WITH. CONDUIT ROUTING. PLY FOR SITE LIGHTING WITH

## **UTILITY NOTES:**

- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE UTILITY COMPANIES FOR RELOCATING AND/OR SUPPORTING THEIR UTILITIES IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO EXISTING 2. FACILITIES AT ALL TIMES. IF ANY DISRUPTION MUST OCCUR, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH FACILITY AT LEAST 72 HOURS IN ADVANCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF - 3. EXISTING UTILITIES AND STRUCTURES DAMAGED OR REMOVED BY THE CONTRACTOR DURING THEIR OPERATIONS.
- THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
- 5. FINAL ELEVATIONS OF UTILITY STRUCTURES ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES, AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF WORK.
- DURING EXCAVATION, IT IS ANTICIPATED THAT EXISTING UTILITIES AND 6. SEWERS WILL BE EXPOSED. THE CONTRACTOR SHALL PROVIDE PROTECTION AND SUPPORT OF THESE FACILITIES AND REPAIR ANY DAMAGE CAUSED BY THE WORK IN A MANNER SATISFACTORY TO THE OWNER.
- THE SEWER SYSTEM SHALL HAVE A MINIMUM GROUND COVER OF 4' WHEN CROSS COUNTRY AND A MINIMUM GROUND COVER OF 6' WHEN BENEATH PAVEMENT. IF THE REQUIRED MINIMUM AMOUNT OF COVER CANNOT BE OBTAINED, INSTALL 4" OF RIGID INSULATION ABOVE THE SEWER LINE.
- THE PROPOSED SEWER LINE FROM THE EXISTING SMH TO BUILDING 1 WAS SIZED AND DESIGNED FOR A POSSIBLE FUTURE CONNECTION WITH MAP LOT 12-03-1. IF A FUTURE CONNECTION IS NOT ANTICIPATED, THE OWNER MAY REDUCE THE SIZE OF THE PIPE AND RAISE THE PROPOSED SEWER RUN WITH APPROVAL OF THE DESIGN ENGINEER.
- THE CONTRACTOR SHALL CONFIRM THE EXISTING SEWER MANHOLE TIE-IN INVERT AND THE ELEVATIONS FOR ALL SEWER PIPE RUNS PRIOR TO ANY INSTALLATION.
- 10. REFER TO PLANS TITLED "WATER MAIN DESIGN" BY KLEINFELDER DATED APRIL 2016, FOR WATER LINE INSTALLATION FROM RANGER DRIVE UP DENNETT ROAD TO THE ENTRANCE OF THE PROJECT SITE.
- 11. THE PROPOSED WATER LINE CONFIGURATION SHOWN ON THESE PLANS IS BASED ON DUCTILE IRON PIPE WITH 22.5" AND 45" BENDS. THE CONTRACTOR MAY SUBSTITUTE DUCTILE IRON PIPE FOR HDPE.
- 12. ALL ELECTRIC MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE AS WELL AS STATE AND LOCAL CODES.
- 13. INSTALL NYLON PULL ROPES IN UNDERGROUND CONDUITS TO FACILITATE PULLING CABLES.
- 14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
- 15. THE EXACT LOCATION, NUMBER, TYPE, AND SIZE OF NEW UTILITY SERVICES AND CONDUITS SHALL BE DETERMINED BY THE UTILITY COMPANY.
- 16. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- 20. CONTRACTOR TO COORDINATE UNDERGROUND ELECTRIC, INCLUDING BUT NOT LIMITED TO SIZE, LOCATION, MATERIAL, CONDUIT, AND HAND HOLES.
- 21. ALL ON-SITE UTILITIES SHALL BE UNDERGROUND.
- 22. BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
- 23. ALL FIRE PROTECTION FOR THE BUILDINGS SHALL BE COORDINATED WITH THE TOWN OF KITTERY FIRE DEPARTMENT AND STATE FIRE MARSHALL. REFER TO UTILITY PLANS FOR ADDITIONAL NOTES.

## **CONSTRUCTION SEQUENCE:**

- INSTALL SILT SOCK. MULCH BERMS AND CONSTRUCTION ENTRANCE AS SHOWN, PRIOR TO THE START OF ANY CONSTRUCTION.
- 2. REMOVE AND DISPOSE OF EXISTING VEGETATION AS SHOWN.
- 3 STRIP THE TOPSOIL AND STOCKPILE ONSITE. CONSTRUCT A SILT SOCK PERIMETER AROUND ALL STOCKPILES.
- 4. BLAST AND REMOVE LEDGE AS REQUIRED FOR BUILDING AND UTILITIES.
- 5. CONSTRUCT THE BUILDING FOOTINGS, FOUNDATION WALLS AND PLACE BACKFILL.
- 6. CONSTRUCT AND STABILIZE CUT AND FILL SLOPES. APPLY TEMPORARY (OR PERMANENT) SEED AND MULCH WITHIN 72 HOURS OF THEIR CONSTRUCTION.
- 7. INSTALL ALL DRAINAGE, WATER, SEWER, ELECTRIC, TELECOM AND GAS UTILITIES.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL 8. MEASURES. MINIMIZE EXTENT AND DURATION OF EXPOSURE OF DISTURBED AREAS.
- 9. CONSTRUCT THE BUILDINGS.
- 10. PLACE ROADWAY SELECTS AND INSTALL BINDER PAVING COURSE.
- 11. INSTALL VERTICAL GRANITE CURBING AND POUR CONCRETE SIDEWALKS. 12. INSTALL LANDSCAPE PLANTINGS.
- 13. INSTALL SCREENED LOAM (4" MIN.) ON ALL DISTURBED SURFACES AND APPLY PERMANENT SEEDING.
- 14. INSTALL FINISH PAVEMENT, PAVEMENT MARKINGS AND SIGNAGE.
- 15. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES. CLEAN THE ENTIRE STORMWATER SYSTEM OF ALL SEDIMENT AND DEBRIS, WITHIN THE LIMIT OF WORK.

## ABB

	ATIONS:		LEGE	ND	SHAWN SHAWN
AN	ABANDONED	EXISTING	PROPOSED	DESCRIPTION	TOBEY /
	ASBESTOS CONCRETE			PROPERTY LINE	SM1, 133777
ROX	ADJUST APPROXIMATE			RIGHT OF WAY	POLLYDENSED IN
	BOTTOM=			BUILDING SETBACK	S/22
M	BOTTOM OF CURB BITUMINOUS CONCRETE BERM	• A O		PARKING SETBACK	8100
CONC	BITUMINOUS CONCRETE		• A o	SURVEY MONUMENT EDGE OF PAVEMENT	/22/19 /07/19 /24/19
G	BUILDING BOTTOM OF SLOPE			EDGE OF CONCRETE	08/2 07/2 07/7
.L	BROKEN WHITE LANE LINE	<i>CC</i>	CC	CONCRETE CURB	
	BOTTOM OF WALL CATCH BASIN	SGC	SGC	SLOPED GRANITE CURB	
RND	CATCH BASIN ROUND	VGC	VGC	VERTICAL GRANITE CURB	JR APPROVAL PERMIT APPROVAL IP)
SQ	CATCH BASIN SQAURE CAST IRON			VERNAL POOL/STREAM	
-	CAST IRON CEMENT LINED		···	WETLANDS	
	CAST IN PLACE CENTER LINE		· <u> </u>	VERNAL POOL/STREAM BUFFER	
	CHAIN LINK FENCE	V		SAWCUT	MENTS - IS OF DEVELOI RELIMINARY EMENT PER
)	CORRUGATED METAL PIPE CLEAN OUT			BUILDING	
	COLUMN	<pre> </pre> O		BUILDING ENTRANCE BOLLARD	
1C	CONCRETE CONCRETE PIPE		- <del></del> -	SIGN	
	CONDENSATE RETURN		<ul><li>(`) </li></ul>	TREE	
/	DESIGN HIGH WATER DUCTILE IRON		∽∽∽ <b>×₩</b> ∽ 	FENCE	
-	DUCTILE IRON CEMENT LINED	-00	_ooo	SILT SOCK	SITE SITE
ł	DIAMETER DRAIN MANHOLE	/->	-/->	DRAINAGE FLOW	
;	DRAWING	>>	> >	SWALE	
L ELEV	DOUBLE YELLOW CENTER LINE ELEVATION	98	98	MINOR CONTOUR	
С	ELECTRIC	— — 100— —	100	MAJOR CONTOUR	<u> </u> □   [b   <b>Σ</b>   [b   ]
I ST	ELECTRIC MANHOLE EXISTING	(10) 	10 SWL	PARKING COUNT	
51	FLARED END SECTION	DYL	SWL DYL	SINGLE WHITE LINE	
	FINISH FLOOR ELEVATION FORCE MAIN			DOUBLE YELLOW LINE STOP LINE	
	GRANITE CURB	11111111		CROSSWALK	IS,
	GAS GATE GAS METER			ACCESSIBLE CURB RAMP	
	GUARDRAIL			DETECTABLE WARNING PANEL	Ω 4 Ω 7
C	GUY WIRE HIGH DENSITY POLYETHYLENE	Ĺ,	£	ACCESSIBLE PARKING	ᇱᅌᇊᆄᄪᇊᇠᇮᆂᄿ
E	HAND HOLE	E. VAN	لگر VAN	VAN-ACCESSIBLE PARKING	
IZ	HORIZONTAL	× <sup>97.5</sup>	× <sup>97.5</sup>	SPOT ELEVATION	PREPARED SERVICE A SERVICE A MAY NOT DISSEMINA ANY MANY NICALLY, F NICALLY, F THE WRITT THE WRITT THE TANNE
.C	HANDRAIL HEAT VENT AIR CONDITIONING		$\mathbf{O}$	KSAT TEST LOCATION	
)	HYDRANT	8		TEST PIT LOCATION	
	INVERT INVERT=			MONITORING WELL	■ 両山 チャロ 告コ ビビッ ■
	IRON PIPE	======	D	DRAIN	S DOCUME IN STRUME ILL FRANI LL TANN CLE, TANN C EPRO C OTHER MISSION
	LIGHT POLE LANDSCAPED	S	S	SEWER	
	LEFT	OHW	—— онw ———	OVERHEAD WIRE	
x	METAL COVER MAXIMUM	W	W	WATER FIRE PROTECTION	ease hational deport 3801 canner.com inc.
N	MEAN HIGH WATER	G	G	GAS	Pease ernation radeport l 03801 Metanner. , Inc.
#	MINIMUM NUMBER	-	-	UNDERGROUND ELECTRIC	,
Ħ S	NOT TO SCALE	ST	ST	STEAM	N NF A tes
5	OUTLET CONTROL STRUCTURE	—— T ——	— т ——	TELEPHONE	bi www. ssocia
	OVERHANG PULL BOX			CATCH BASIN	
F	PERFORATED			DOUBLE CATCH BASIN	
)P	PLASTIC PROPOSED	$\bigcirc$	Ø	DRAIN MANHOLE	<b>S, In</b> 1360, Port 1360, Port - 8067 W
	POUNDS PER SQUARE INCH	E	ے د0	PLUG OR CAP	Lann, #31–8
)	POLYVINYL CHLORIDE POST VALVE INDICATOR	000	000	CLEANOUT	
	RIM=			HEADWALL	Ho) (66
)	REINFORCED CONCRETE PIPE ROOF DRAIN	S o <sup>wso</sup>	୍ତ ୦ <sup>พร୦</sup>	SEWER MANHOLE	
:)	RECORD	o <sup>nice</sup> ₩V ⊠	WV	WATER SHUT-OFF	<b>S S S</b> 0 Inter 1 201
	RETAINING RIGHT	⊠ <i>TSV</i> ↔	⊠ TSV op	WATER VALVE & BOX TAPPING SLEEVE,VALVE&BOX	AS AS AS 100 Vright
;	RIGHT SLOPED GRANITE CURB	HYD ₽	HYD ₽₽	FIRE HYDRANT	(603) 431–2 (504) (504) (504)
ł	SEWER MANHOLE	↓ ↓		THRUST BLOCK	
VT	SEASONAL HIGH WATER TABLE SANITARY SEWER	$O^{P/V}$	OPIV	POST INDICATOR VALVE	
	STEAM	GV M	GV M	GAS GATE	
IH	STATION STEAM MANHOLE	E	Ē	ELECTRIC MANHOLE	
	SIDEWALK	*	•=	LIGHT POLE	
L	SOLID WHITE EDGE LINE SOLID WHITE LANE LINE	Т	T	TRANSFORMER PAD	AL
	TOP OF CURB		С	UTILITY POLE	ITE 25 43 81DENTIAL
	TRAFFIC CONTROL BOX TELEPHONE	0—	0-	GUY POLE	BIDET 13 13 13 13 13 13 13 13 13 13 13 13 13
	TRAFFIC LIGHT	( @	Т́	GUY WIRE & ANCHOR	
NS	TELEPHONE MANHOLE TRANSFORMER	$\bigcirc$	۲ ۲	TELEPHONE MANHOLE	
	TOP OF SLOPE			INLET PROTECTION	
	TOP OF WALL TYPICAL			STONE CHECK DAM	
	UTILITY POLE		$\otimes$	TREE TO BE REMOVED	AZTEC, LL 62 PORTLAND ROAD KENNEBUNK, ME ROPOSED MIXED-USE DEVELOPMENT PI
	VITRIFIED CLAY		<b>E3333333</b>	STABILIZED CONSTRUCTION	
т	VERTICAL VERTICAL GRANITE CURB				
	WATER			STRUCTURE TO BE REMOVED	
Т					
	WYE CONNECTION			PAVEMENT TO BE REMOVED	
	WYE CONNECTION WETLAND FLAG WATER GATE				
T	WYE CONNECTION WETLAND FLAG WATER GATE WROUGHT IRON PIPE			PAVEMENT TO BE REMOVED BITUMINOUS CONCRETE PAVING	
	WYE CONNECTION WETLAND FLAG WATER GATE			BITUMINOUS	APPLICANT PROJECT PRO

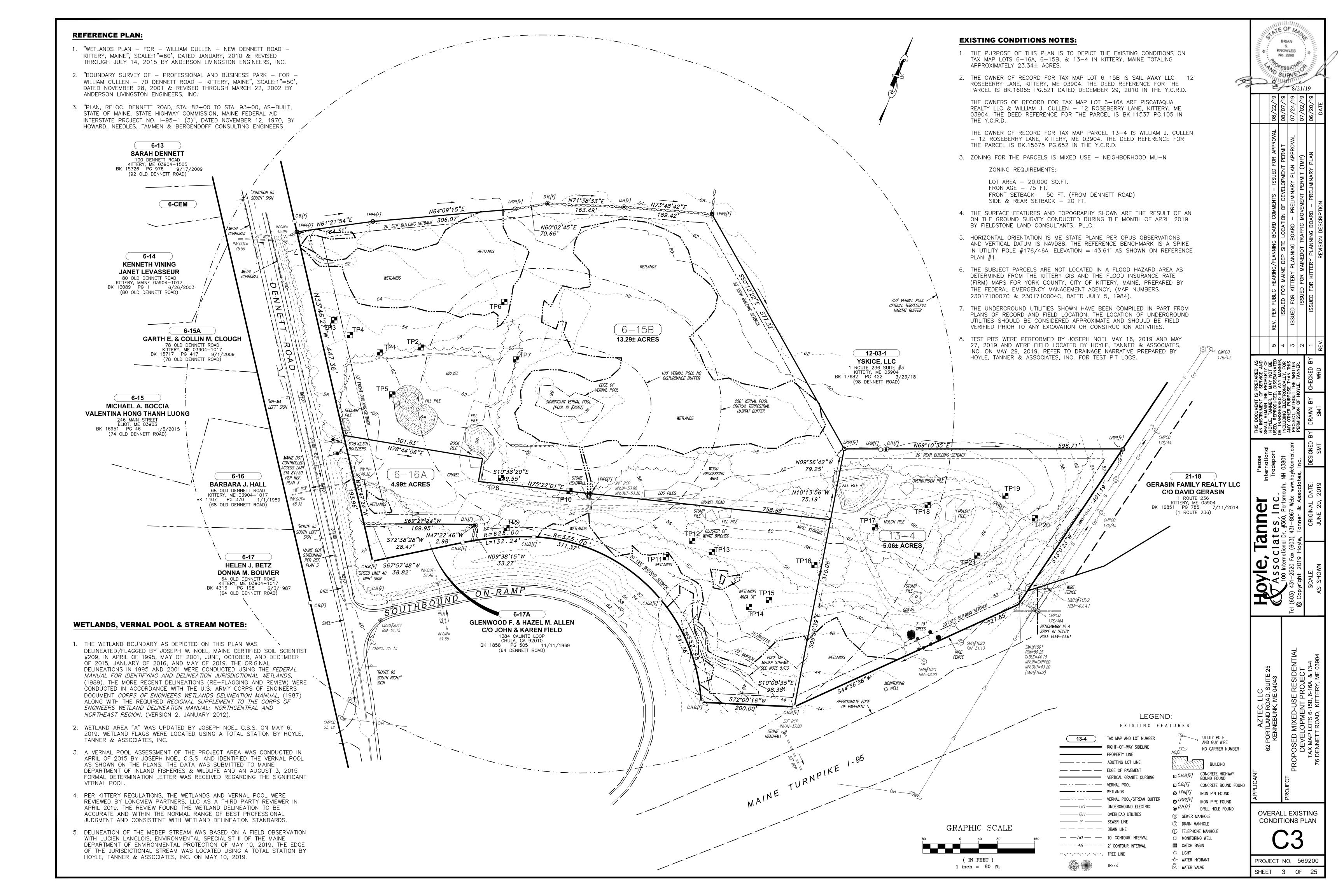
**ABBREVIATIONS** 

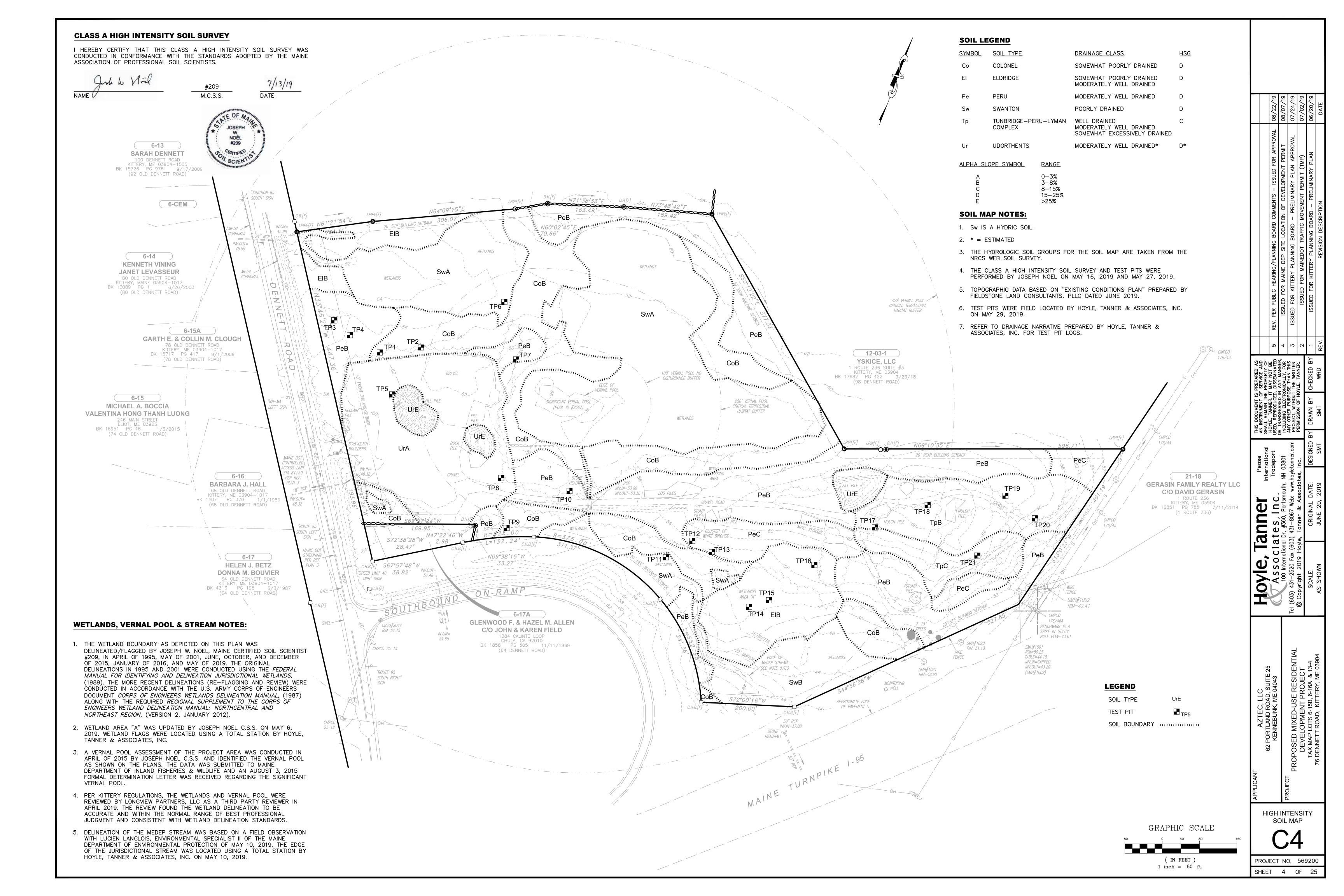
& LEGEND

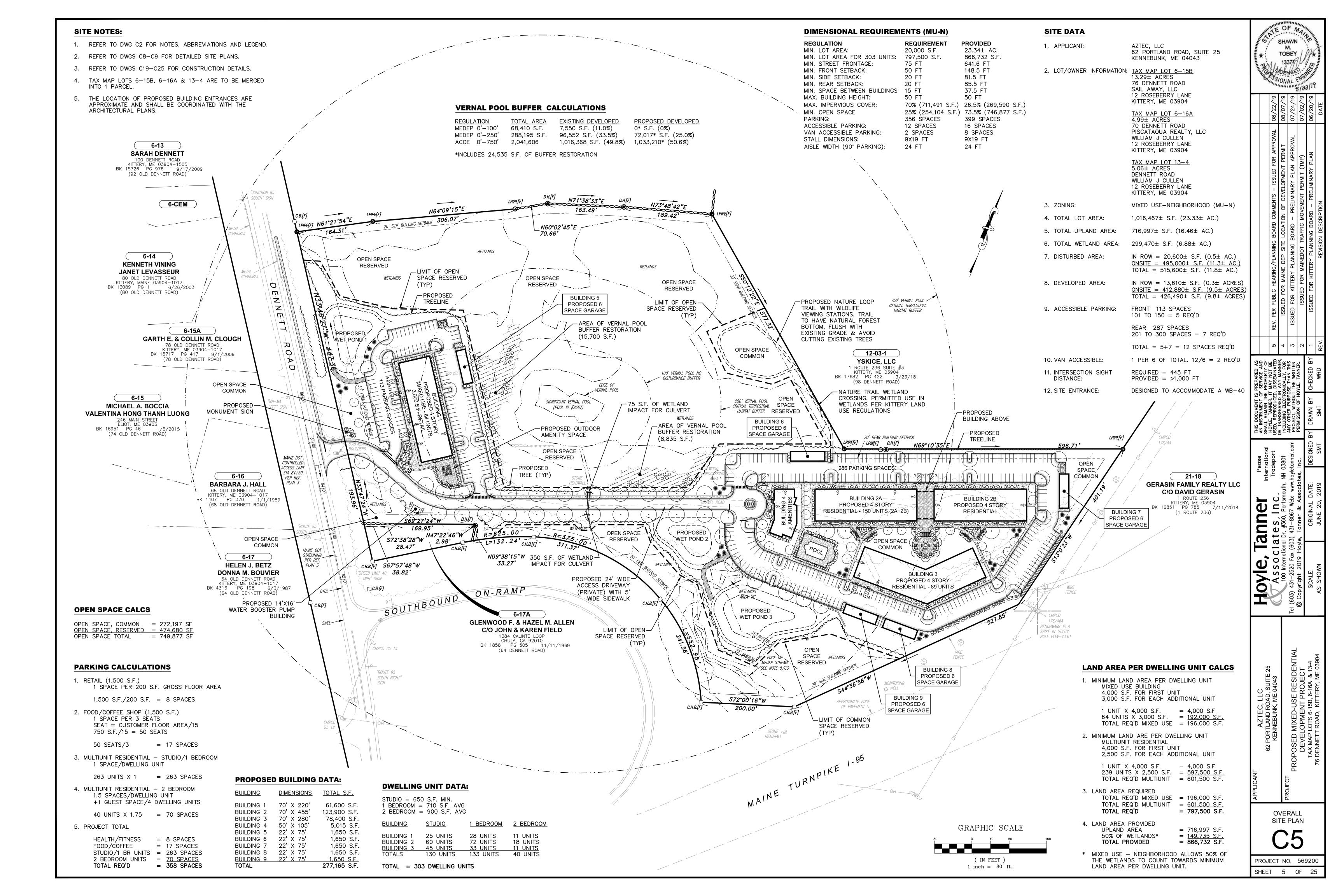
**M** 

PROJECT NO. 569200

SHEET 2 OF 25





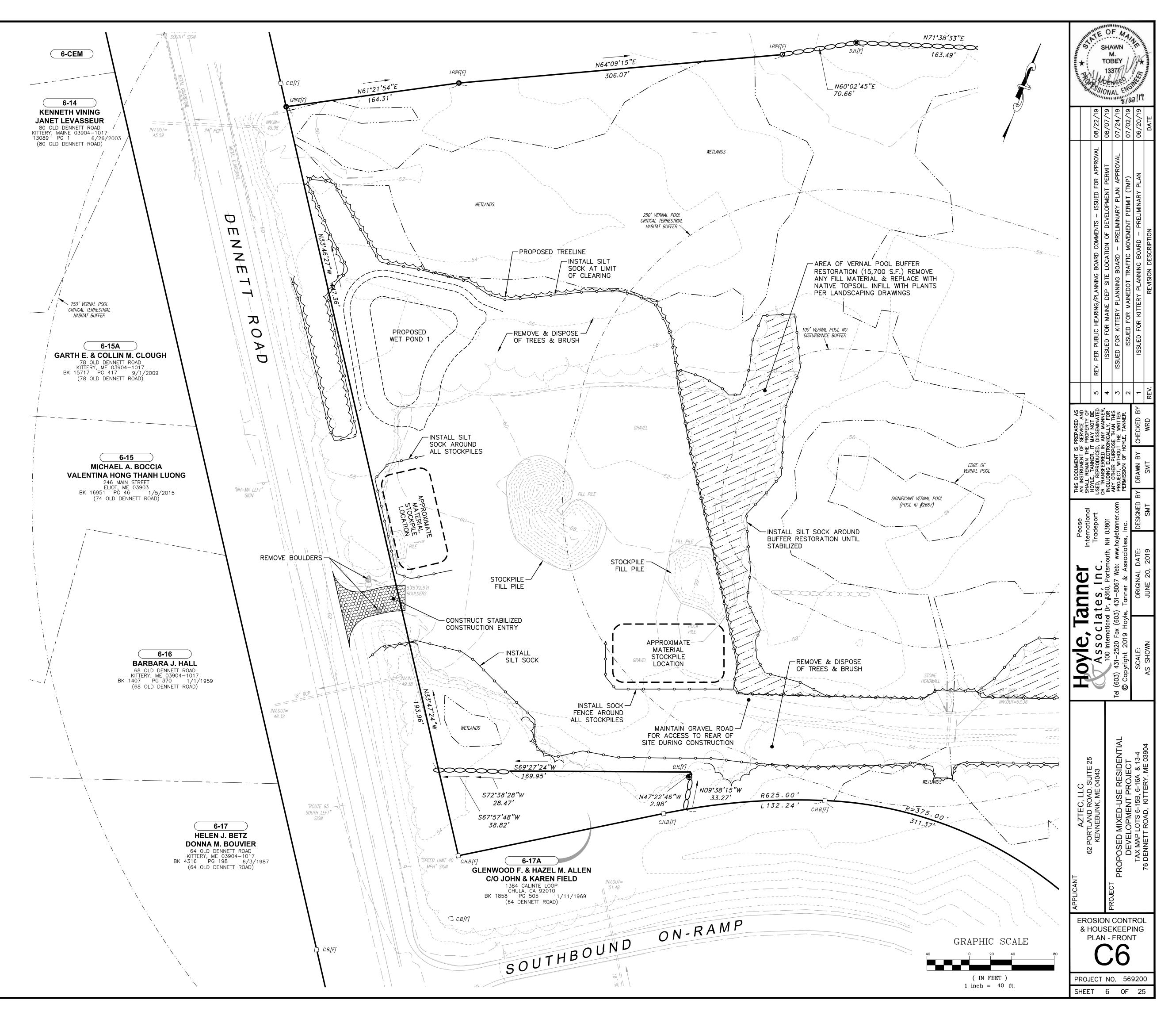


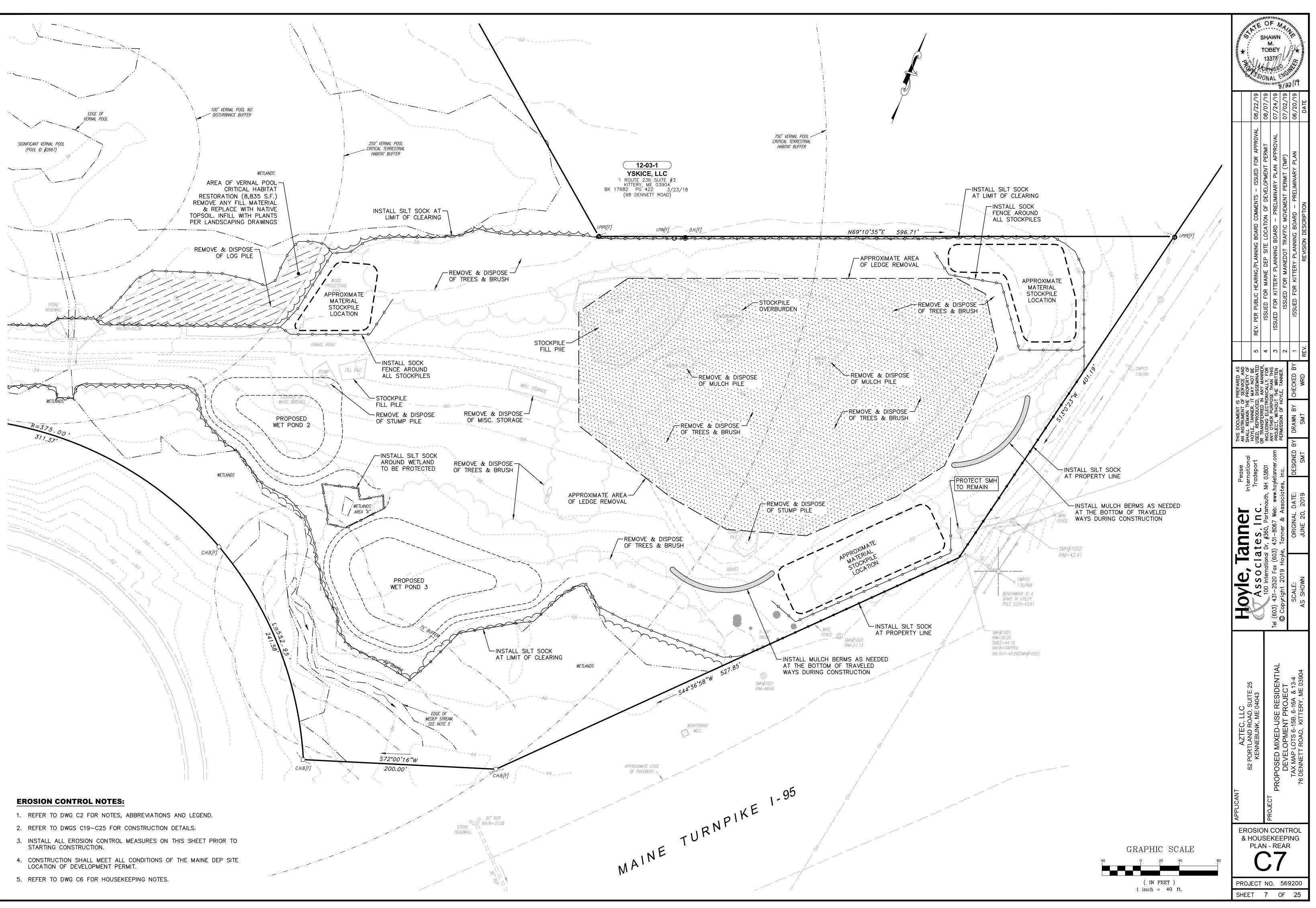
## **EROSION CONTROL NOTES:**

- 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND.
- 2. REFER TO DWGS C19-C25 FOR CONSTRUCTION DETAILS.
- 3. INSTALL ALL EROSION CONTROL MEASURES ON THIS SHEET PRIOR TO STARTING CONSTRUCTION.
- 4. CONSTRUCTION SHALL MEET ALL CONDITIONS OF THE MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT.

## **HOUSEKEEPING NOTES:**

- 1. <u>SPILL PREVENTION.</u> CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES. ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : <u>HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/</u>
- 2. <u>GROUNDWATER PROTECTION.</u> 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. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
- 3. <u>FUGITIVE SEDIMENT AND DUST.</u> 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, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY, NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS THAT EXPERIENCE FUGITIVE DUST PROBLEMS SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
- 4. <u>DEBRIS AND OTHER MATERIALS.</u> MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- 5. <u>EXCAVATION DE-WATERING.</u> EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
- 6. <u>AUTHORIZED NON-STORMWATER DISCHARGES.</u> IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
  - A. DISCHARGES FROM FIREFIGHTING ACTIVITY;
  - B. FIRE HYDRANT FLUSHINGS;
  - C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
  - D. DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
  - E. ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
  - F. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
  - G. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;H. UNCONTAMINATED GROUNDWATER OR SPRING WATER;
  - I. FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT
  - CONTAMINATED; J. UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN
  - APPENDIX C(5)); K. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
  - L. LANDSCAPE IRRIGATION.
- 7. <u>UNAUTHORIZED NON-STORMWATER DISCHARGES.</u> THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
  - A. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
  - B. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
  - C. SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
  - D. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.
- 8. <u>ADDITIONAL REQUIREMENTS.</u> ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.





### **SITE NOTES:**

- 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND.
- 2. REFER TO DWG C4 FOR OVERALL SITE PLAN, SITE CALCULATIONS AND DIMENSIONAL REQUIREMENTS.
- 3. REFER TO DWGS C19-C25 FOR CONSTRUCTION DETAILS.
- 4. ALL OPEN SPACE BETWEEN THE LIMITS OF COMMON SPACE, RESERVED, AND THE PROPOSED PAVEMENT/BUILDINGS SHALL BE DESIGNATED AS OPEN SPACE, COMMON.
- 5. THERE ARE NO SETBACKS FOR THE NON-SIGNIFICANT FORESTED WETLANDS.
- 6. THE LOCATION OF PROPOSED BUILDING ENTRANCES ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS.
- 7. COORDINATE ALL WORK ADJACENT TO THE PROPOSED BUILDING WITH THE ARCHITECTURAL DRAWINGS.
- 8. ALL CURBING ONSITE SHALL BE VERTICAL GRANITE.
- 9. THE CONTRACTOR SHALL INSTALL DETECTABLE WARNING PANELS ON ALL TIP-DOWN RAMPS LOCATED WITHIN THE SUBJECT PARCEL.

#### **DIMENSIONAL REQUIREMENTS (MU-N)**

#### SITE DATA

#### 1. APPLICANT:

AZTEC, LLC 62 PORTLAND ROAD, SUITE 25 KENNEBUNK, ME 04043

2. LOT/OWNER INFORMATION: <u>TAX MAP\_LOT\_6-15B</u> 13.29± ACRES 76 DENNETT ROAD SAIL\_AWAY, LLC 12 ROSEBERRY LANE

KITTERY, ME 03904

TAX MAP LOT 6-16A 4.99± ACRES 70 DENNETT ROAD PISCATAQUA REALTY, LLC WILLIAM J CULLEN 12 ROSEBERRY LANE KITTERY, ME 03904

TAX MAP LOT 13-4 5.06± ACRES DENNETT ROAD WILLIAM J CULLEN 12 ROSEBERRY LANE KITTERY, ME 03904

MIXED USE-NEIGHBORHOOD (MU-N)

 $IN ROW = 20,600 \pm S.F. (0.5 \pm AC.)$ 

 $ONSITE = 495,000 \pm S.F. (11.3 \pm AC.)$ 

 $TOTAL = 515,600 \pm S.F. (11.8 \pm AC.)$ 

IN ROW =  $13,610 \pm$  S.F. (0.3 $\pm$  ACRES)

<u>ONSITE = 412,880 $\pm$  S.F. (9.5 $\pm$  ACRES)</u>

 $TOTAL = 426,490 \pm S.F. (9.8 \pm ACRES)$ 

 $1,016,467 \pm S.F.$  (23.33  $\pm AC.$ )

716,997± S.F. (16.46± AC.)

299,470± S.F. (6.88± AC.)

FRONT 113 SPACES

REAR 287 SPACES

REQUIRED = 445 FT

PROVIDED = >1,000 FT

101 TO 150 = 5 REQ'D

201 TO 300 SPACES = 7 REQ'D

TOTAL = 5+7 = 12 SPACES REQ'D

1 PER 6 OF TOTAL. 12/6 = 2 REQ'D

DESIGNED TO ACCOMMODATE A WB-40

3. ZONING:

5. TOTAL UPLAND AREA:

4. TOTAL LOT AREA:

6. TOTAL WETLAND AREA:

8. DEVELOPED AREA:

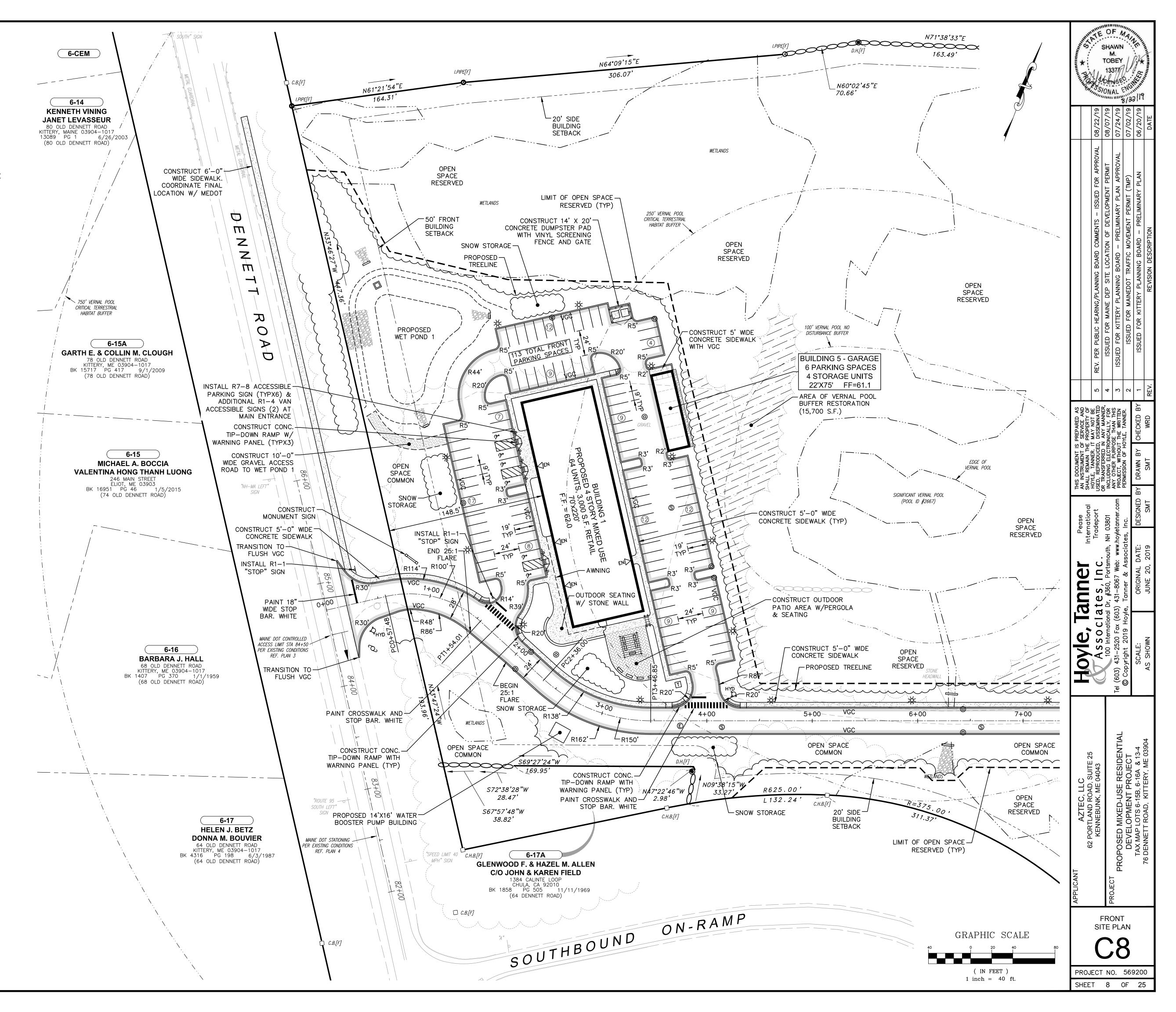
7. DISTURBED AREA:

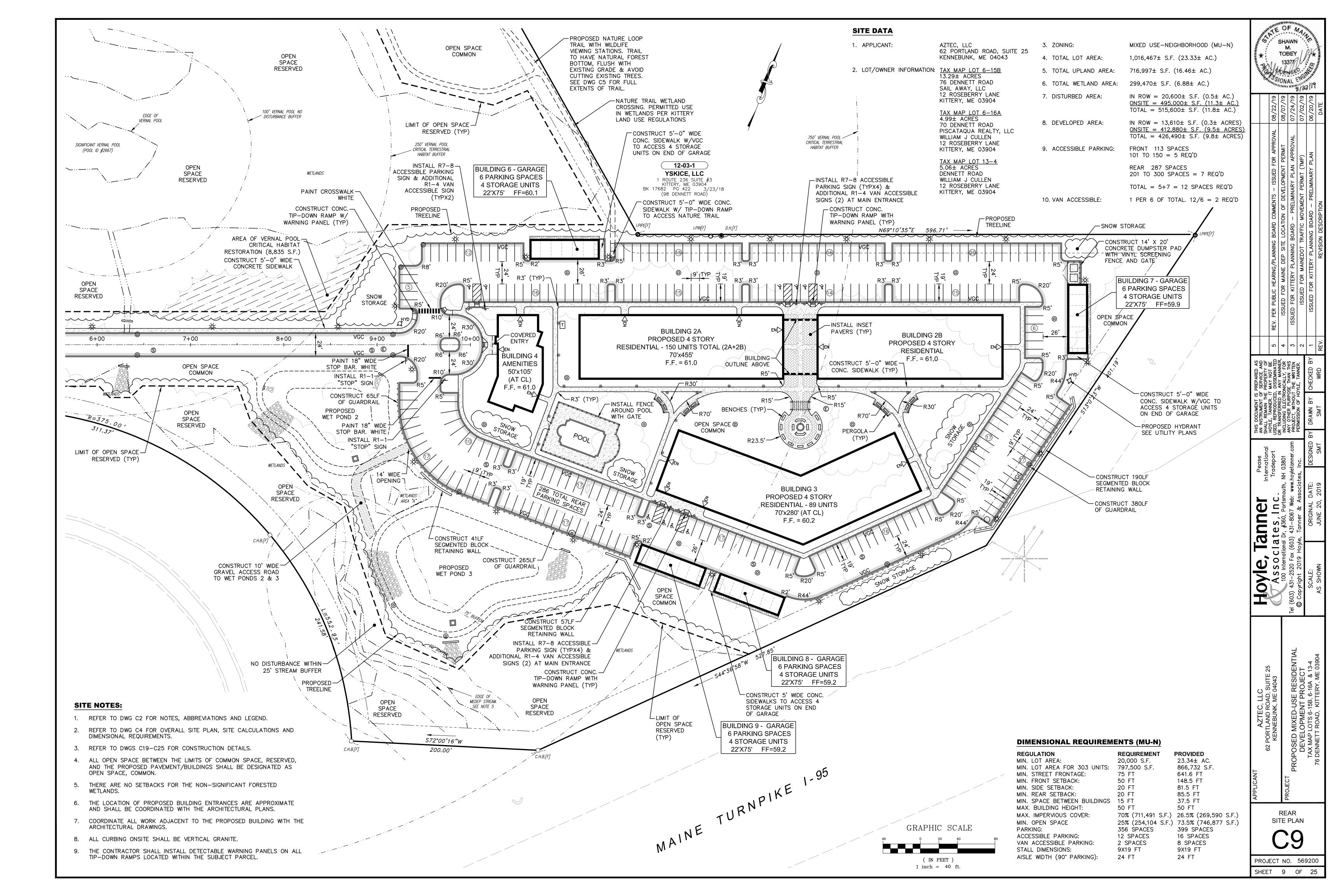
9. ACCESSIBLE PARKING:

10. VAN ACCESSIBLE: 11. INTERSECTION SIGHT

DISTANCE:

12. SITE ENTRANCE:





### **GRADING & DRAINAGE NOTES:**

- 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND.
- 2. REFER TO DWG C6-C7 FOR ADDITIONAL EROSION CONTROL MEASURES.
- 3. REFER TO DWGS C19-C25 FOR CONSTRUCTION DETAILS.
- 4. CONSTRUCTION SHALL MEET ALL CONDITIONS OF THE MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT.
- 5. ALL DRAINAGE STRUCTURES HAVE AN INTERNAL DIAMETER OF 4'-0" UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 6. INSTALL INLET PROTECTION ON ALL PROPOSED CATCH BASINS AFTER INSTALLATION. REMOVE WHEN CONSTRUCTION IS COMPLETED.
- 7. THE LOCATION OF PROPOSED BUILDING ENTRANCES ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS.
- 8. ACCESSIBLE PARKING STALLS HAVE SLOPES LESS THAN 2% IN ALL DIRECTIONS.
- 9. TEST PIT DATA IS BASED ON FIELD OBSERVATIONS FOR LEDGE AND APPROXIMATE SEASONAL HIGH WATER FROM PITS DUG ON MAY 16, 2019 AND MAY 27, 2019.
- 10. REFER TO DRAINAGE NARRATIVE FOR TEST PIT LOGS AND DETAILED WET POND CALCULATIONS.

#### WET POND NOTE:

1. THE APPLICANT SHALL RETAIN A PROFESSIONAL ENGINEER TO PROVIDE THE ENGINEERING OVERSIGHT SERVICES FOR THE WET POND CONSTRUCTION. THE ENGINEER SHALL INSPECT THE EMBANKMENT FOUNDATION PREPARATION, THE PLACEMENT OF THE EMBANKMENT FILL, THE CONSTRUCTION OF THE UNDERDRAINED GRAVEL TRENCH OUTLET, THE INSTALLATION OF THE OUTLET CONTROL STRUCTURE, AND THE CONSTRUCTION OF THE EMERGENCY SPILLWAY. ALL SOIL AND AGGREGATE USED FOR THE CONSTRUCTION OF THE WET POND'S IMPOUNDMENT EMBANKMENT AND THE UNDERDRAINED GRAVEL TRENCH OUTLET MUST BE CONFIRMED BY TESTING. THE CONTRACTOR SHALL ENSURE THAT THE SAMPLING AND TESTING OF THESE MATERIALS ARE COMPLETE AND APPROVED BY THE ENGINEER BEFORE THE FILL OR AGGREGATE IS PLACED. ONCE THE WET POND IS CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A COPY OF THE TEST RESULTS FOR ANY SOIL FILL OR AGGREGATE MATERIALS USED IN THE CONSTRUCTION OF THE WET POND AND A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT.

### WET POND 1 DATA:

REGULATION	F
PERMANENT POOL VOLUME:	1
PERM. POOL AVERAGE DEPTH:	3
CHANNEL PROTECTION VOLUME:	6
LENGTH TO WIDTH RATIO	2
SEDIMENT FOREBAY 1 CAPACITY:	1
SEDIMENT FOREBAY 2 CAPACITY:	3
UNDERDRAIN LENGTH:	2

REQUIREMENT
13,379 CF
3.0 FT
6,689 CF
2:1
16 CF
38 CF
23 FT

PROVIDED

18,313 CF

3.09 FT

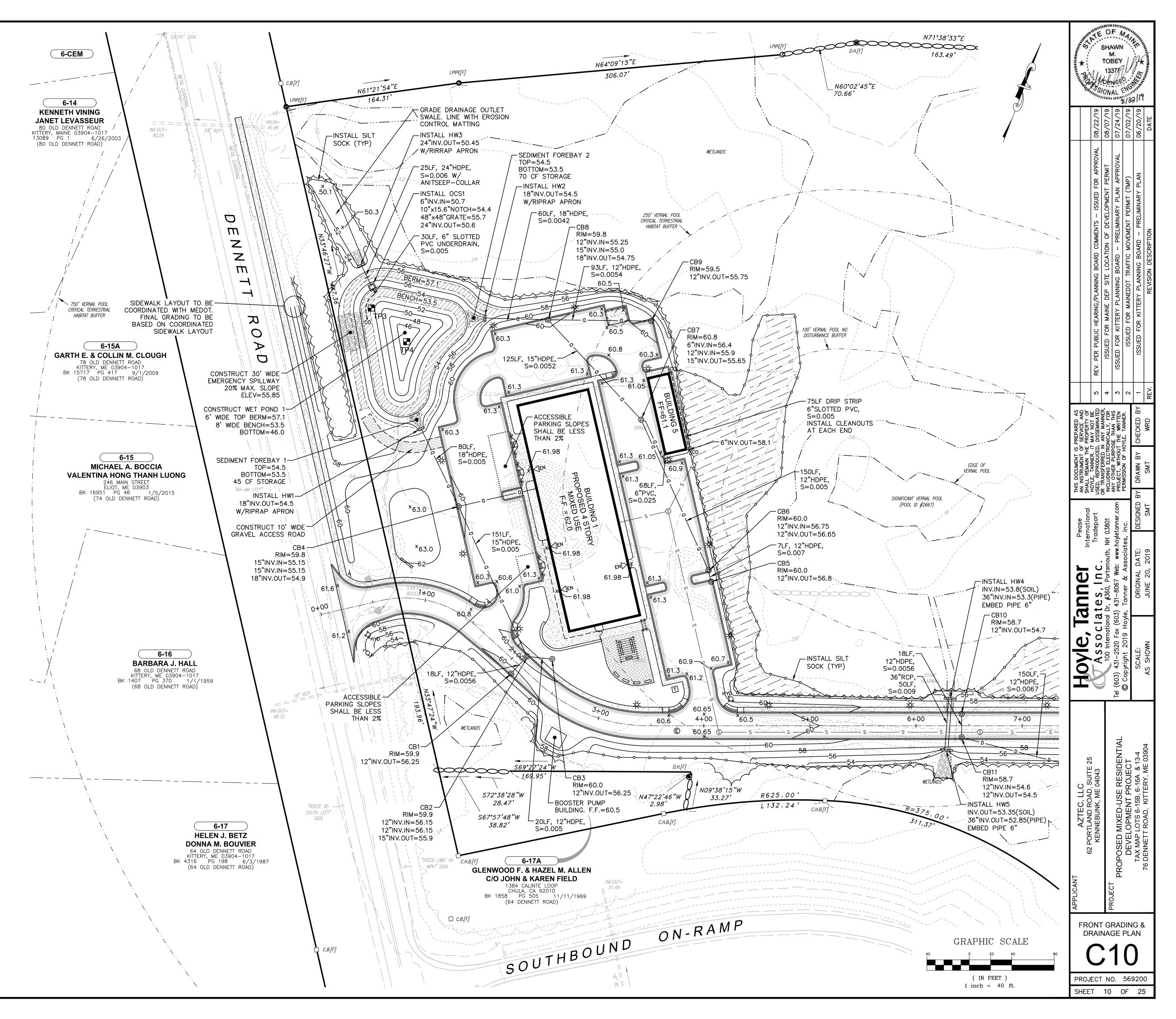
2:1

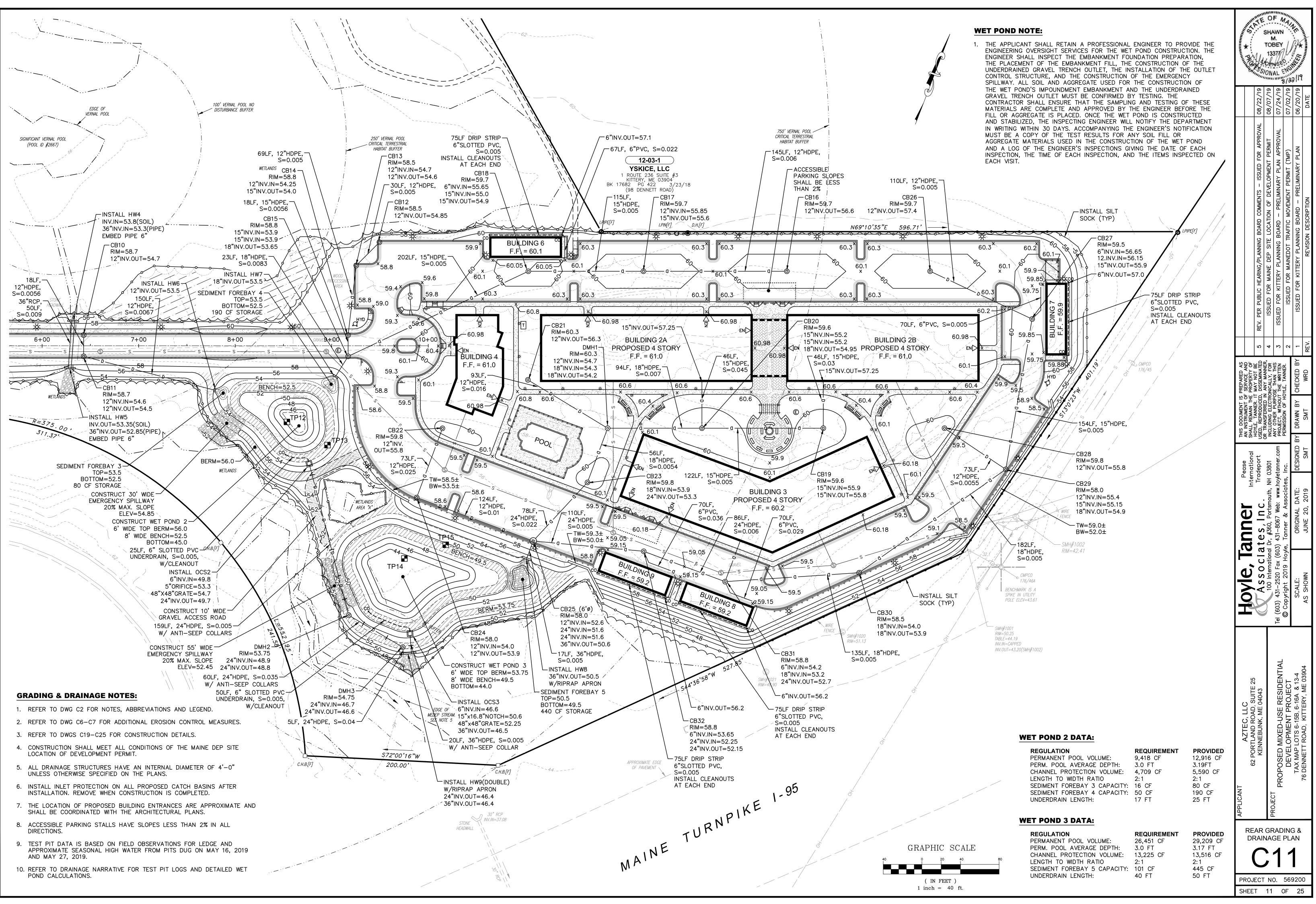
45 CF

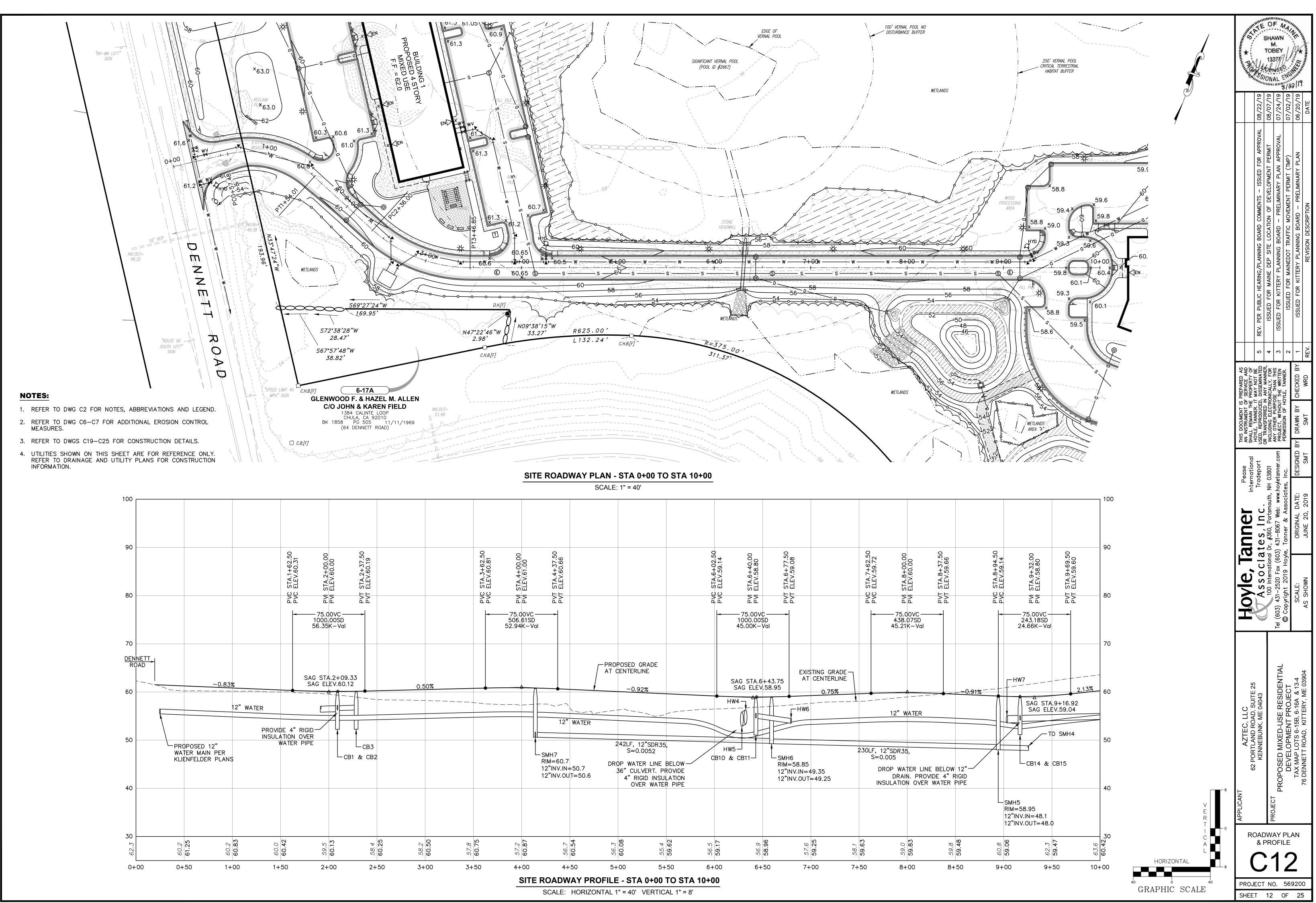
70 CF

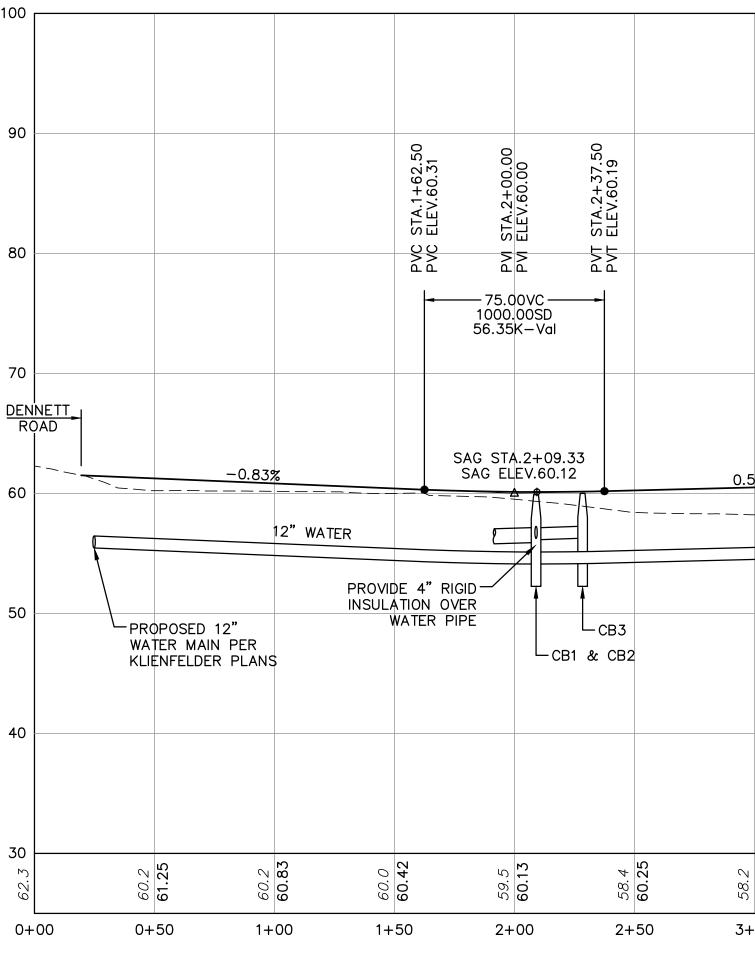
30 FT

7,507 CF









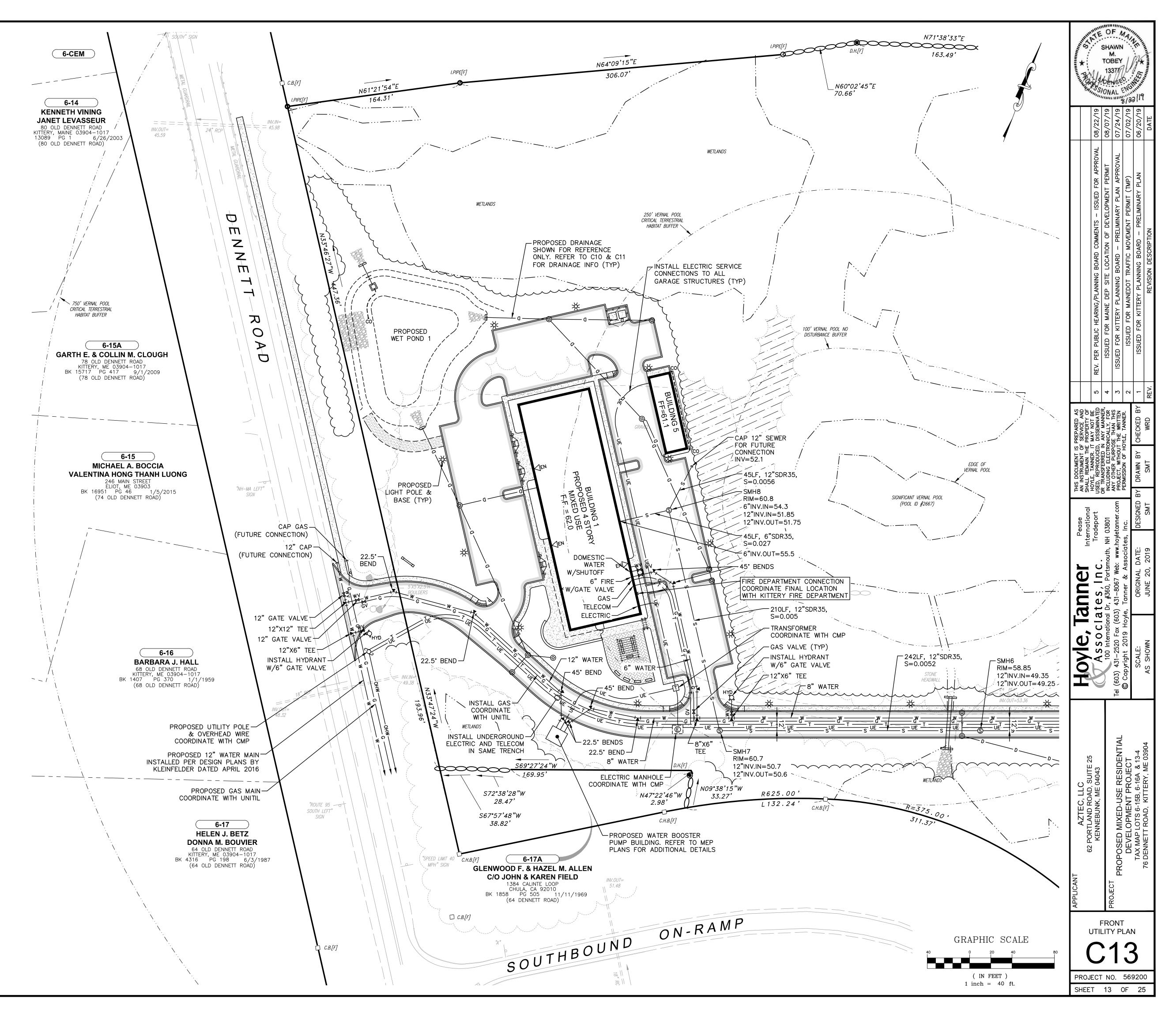
		SITE	ROADWAY PRO	OFILE - STA	0+00 TO ST	A 10+00				
00	3+50	4+00	4+50	5+00	5+50	6+00	6+50	7+00	7+50	8-
60.50	<i>57.8</i> <b>60.75</b>	57.2 60.87	56.7 60.54	56.3 60.08	55.4 <b>59.62</b>	56.5 <b>59.17</b>	56.9 58.96	57.6 <b>59.25</b>	58.1 <b>59.63</b>	С 65 С
			- SMH7 RIM=60.7 12"INV.IN=50.7 12"INV.OUT=50.6	S=0. DROP WATE 36" CUL 4" RIC OVE	TR LINE BELOW	HW5- CB10 & CH	B11 SMH RIM= 12"I 12"I	=58.85 NV.IN=49.35 NV.OUT=49.25	S	F, 12"SDR3 S=0.005 DROP WA DRA INSULATIO
						HW4 -		 HW6	<u>\</u>	 12" \
0%				- PROPOSED G AT CENTERLI -0.9	INE		STA.6+43.75 G ELEV.58.95	EXISTING GRA AT CENTERLI 0.75%	NE	

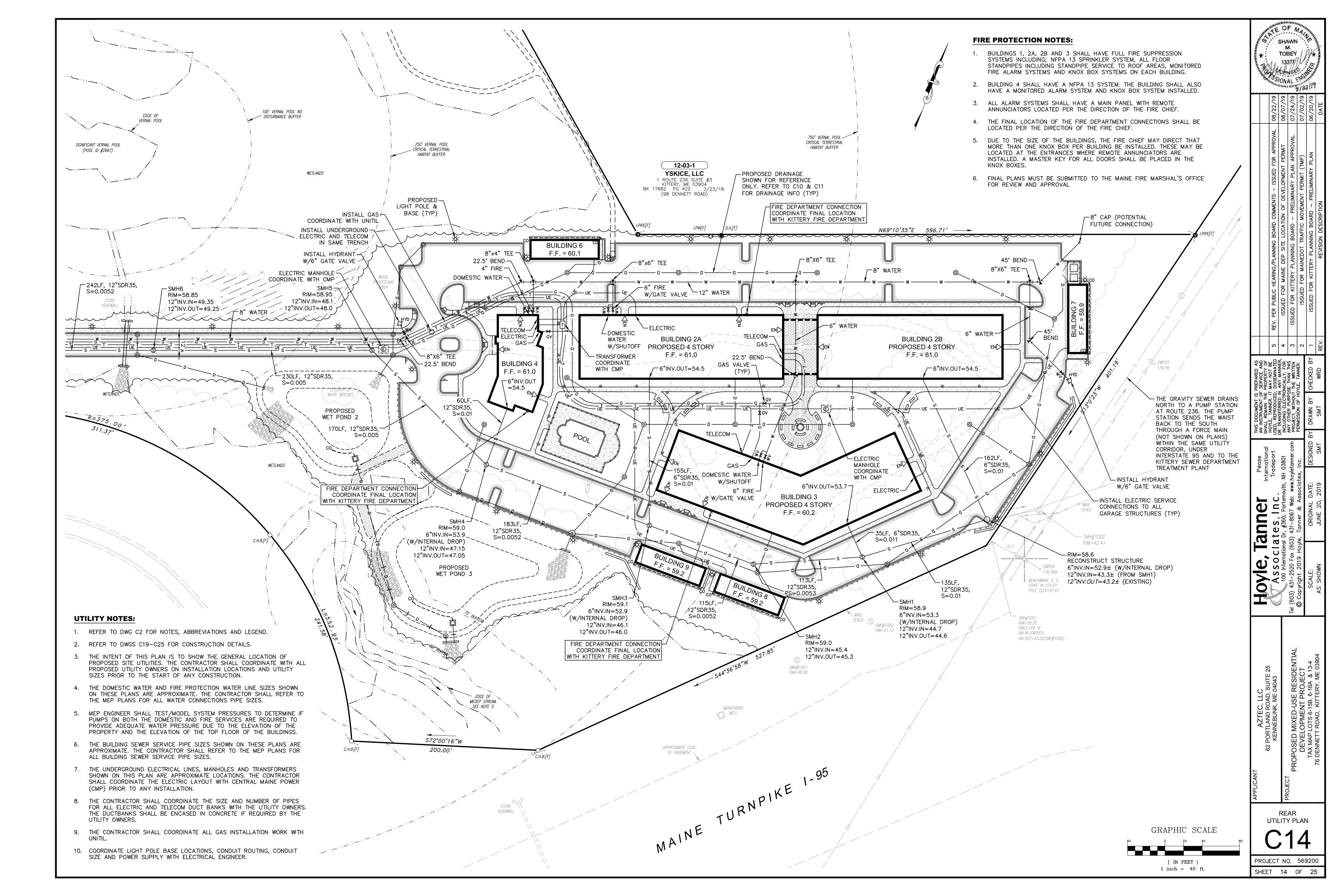
## **UTILITY NOTES:**

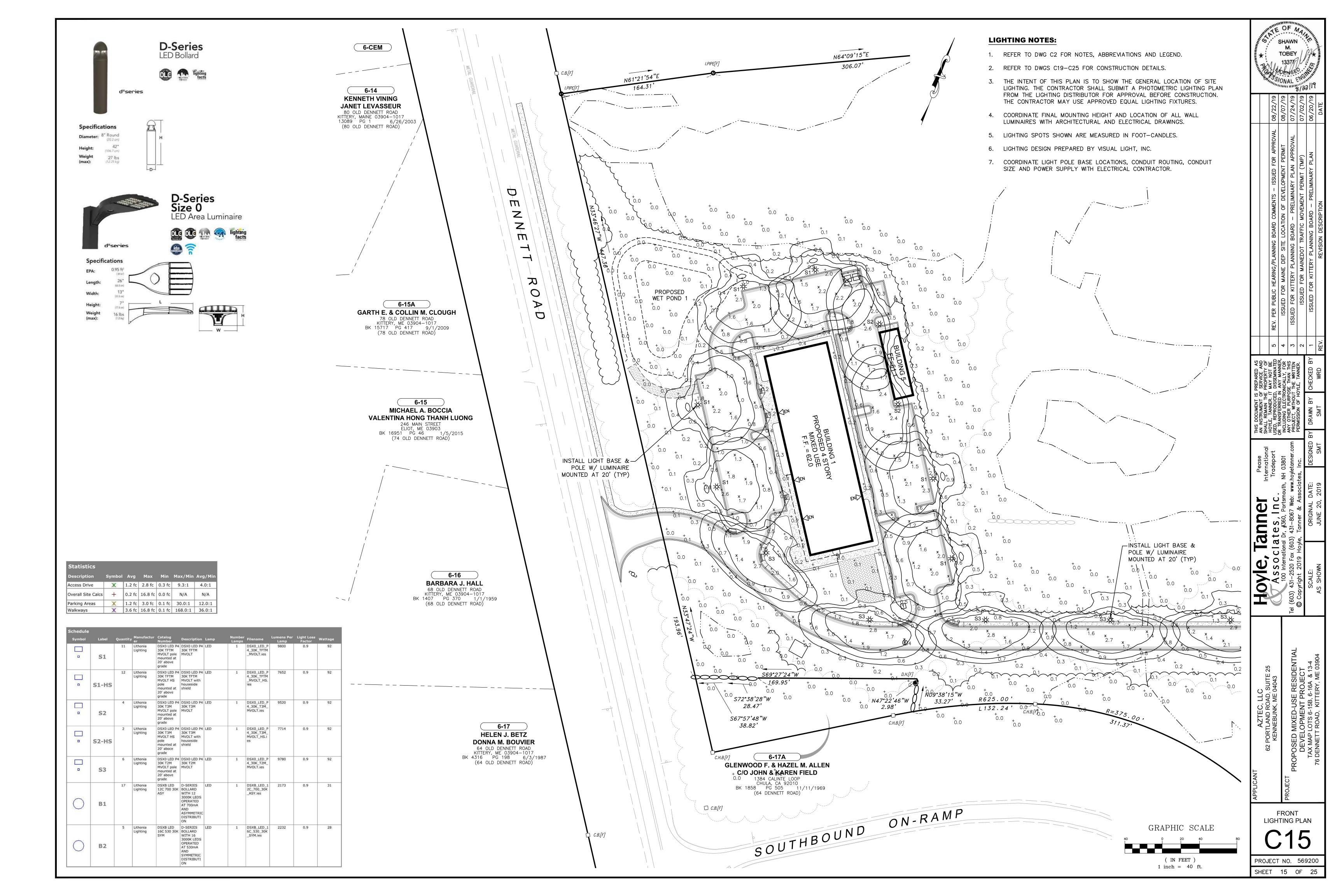
- 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND.
- 2. REFER TO DWGS C19-C25 FOR CONSTRUCTION DETAILS.
- 3. THE INTENT OF THIS PLAN IS TO SHOW THE GENERAL LOCATION OF PROPOSED SITE UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH ALL PROPOSED UTILITY OWNERS ON INSTALLATION LOCATIONS AND UTILITY SIZES PRIOR TO THE START OF ANY CONSTRUCTION.
- 4. THE DOMESTIC WATER AND FIRE PROTECTION WATER LINE SIZES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL REFER TO THE MEP PLANS FOR ALL WATER CONNECTIONS PIPE SIZES.
- 5. MEP ENGINEER SHALL TEST/MODEL SYSTEM PRESSURES TO DETERMINE IF PUMPS ON BOTH THE DOMESTIC AND FIRE SERVICES ARE REQUIRED TO PROVIDE ADEQUATE WATER PRESSURE DUE TO THE ELEVATION OF THE PROPERTY AND THE ELEVATION OF THE TOP FLOOR OF THE BUILDINGS.
- 6. THE BUILDING SEWER SERVICE PIPE SIZES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL REFER TO THE MEP PLANS FOR ALL BUILDING SEWER SERVICE PIPE SIZES.
- 7. THE UNDERGROUND ELECTRICAL LINES, MANHOLES AND TRANSFORMERS SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL COORDINATE THE ELECTRIC LAYOUT WITH CENTRAL MAINE POWER (CMP) PRIOR TO ANY INSTALLATION.
- 8. THE CONTRACTOR SHALL COORDINATE THE SIZE AND NUMBER OF PIPES FOR ALL ELECTRIC AND TELECOM DUCT BANKS WITH THE UTILITY OWNERS. THE DUCTBANKS SHALL BE ENCASED IN CONCRETE IF REQUIRED BY THE UTILITY OWNERS.
- 9. THE CONTRACTOR SHALL COORDINATE ALL GAS INSTALLATION WORK WITH UNITIL.
- 10. COORDINATE LIGHT POLE BASE LOCATIONS, CONDUIT ROUTING, CONDUIT SIZE AND POWER SUPPLY WITH ELECTRICAL ENGINEER.

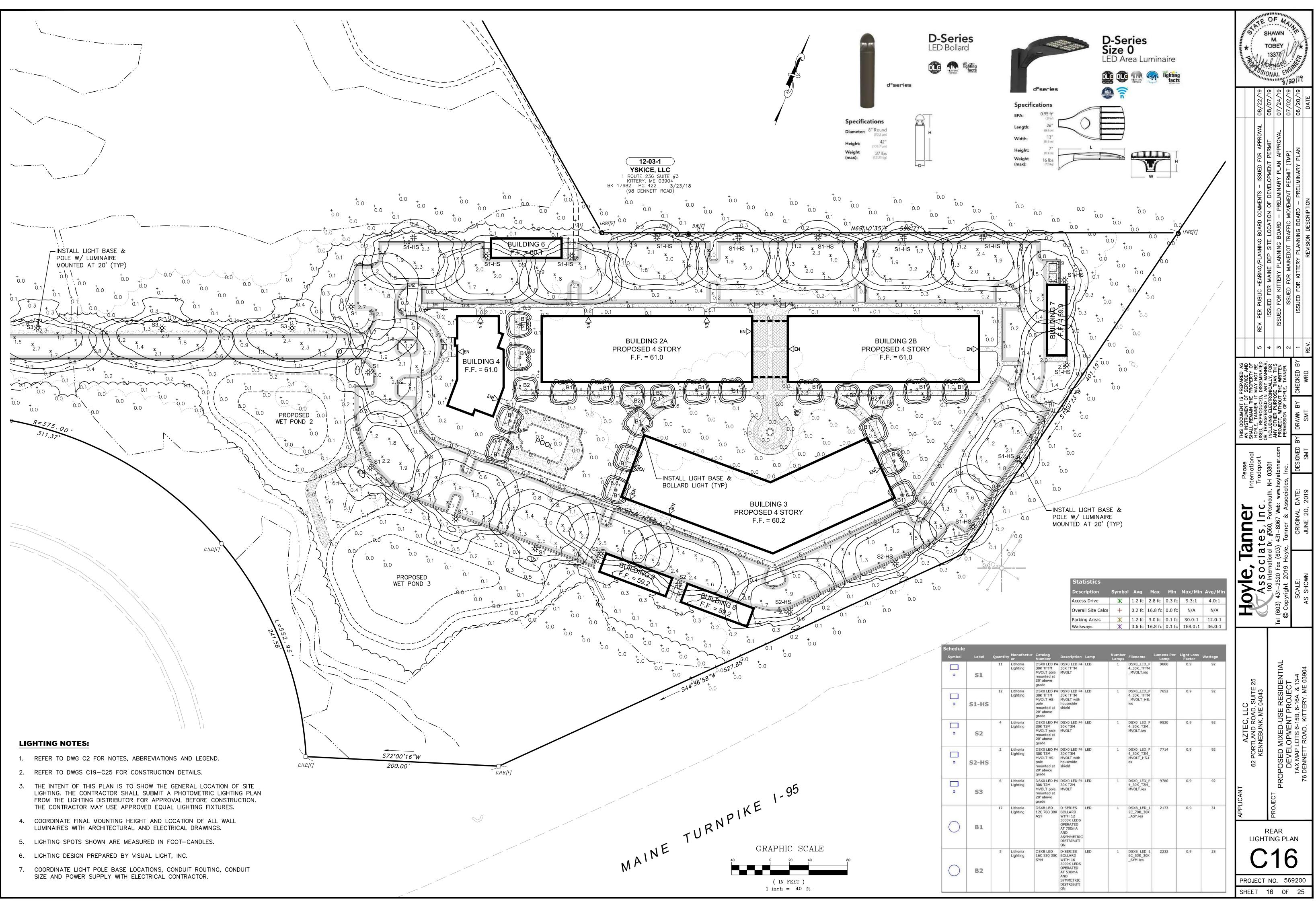
## FIRE PROTECTION NOTES:

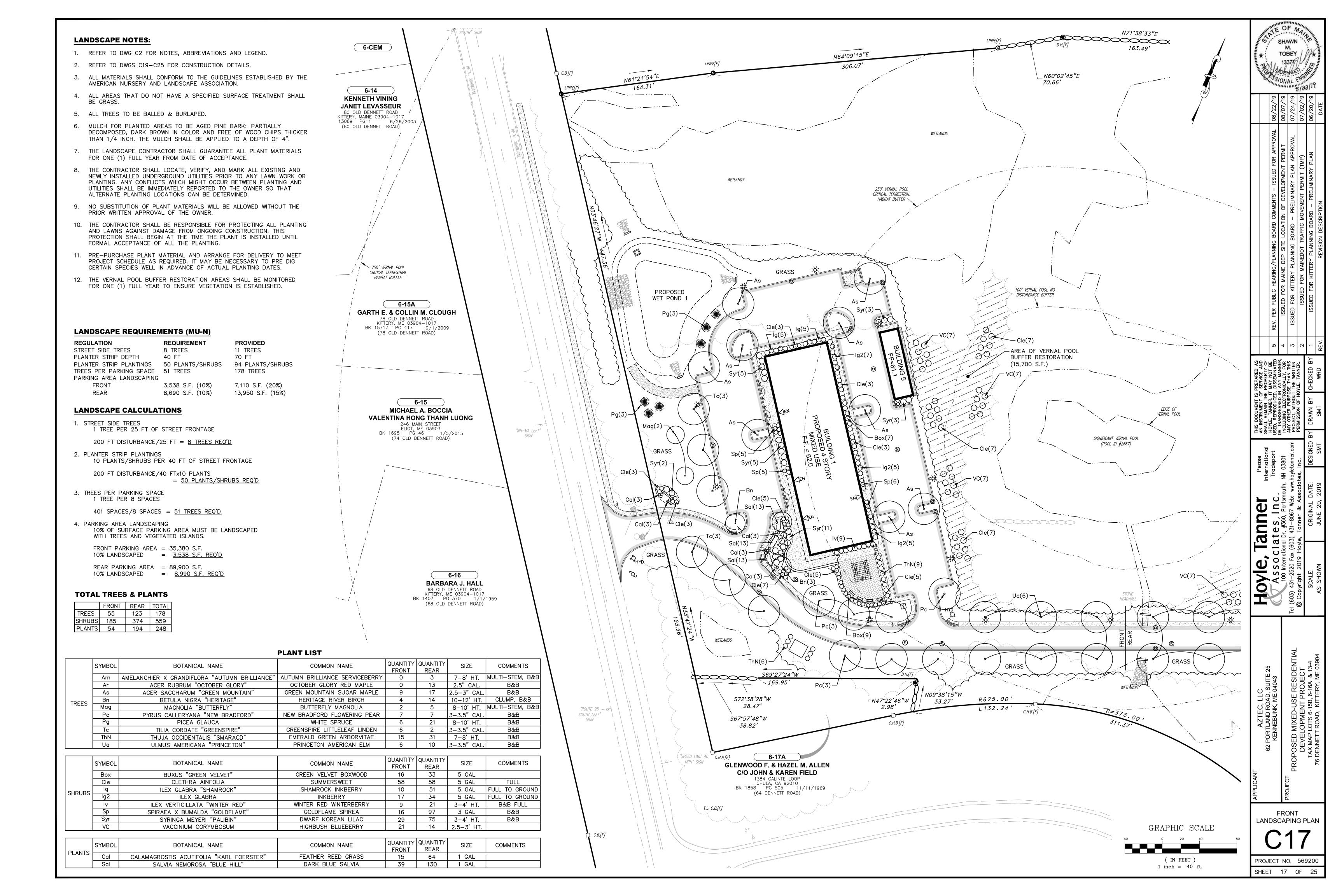
- 1. BUILDINGS 1, 2A, 2B AND 3 SHALL HAVE FULL FIRE SUPPRESSION SYSTEMS INCLUDING; NFPA 13 SPRINKLER SYSTEM, ALL FLOOR STANDPIPES INCLUDING STANDPIPE SERVICE TO ROOF AREAS, MONITORED FIRE ALARM SYSTEMS AND KNOX BOX SYSTEMS ON EACH BUILDING.
- 2. BUILDING 4 SHALL HAVE A NFPA 13 SYSTEM. THE BUILDING SHALL ALSO HAVE A MONITORED ALARM SYSTEM AND KNOX BOX SYSTEM INSTALLED.
- 3. ALL ALARM SYSTEMS SHALL HAVE A MAIN PANEL WITH REMOTE ANNUNCIATORS LOCATED PER THE DIRECTION OF THE FIRE CHIEF.
- 4. THE FINAL LOCATION OF THE FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED PER THE DIRECTION OF THE FIRE CHIEF.
- 5. DUE TO THE SIZE OF THE BUILDINGS, THE FIRE CHIEF MAY DIRECT THAT MORE THAN ONE KNOX BOX PER BUILDING BE INSTALLED. THESE MAY BE LOCATED AT THE ENTRANCES WHERE REMOTE ANNUNCIATORS ARE INSTALLED. A MASTER KEY FOR ALL DOORS SHALL BE PLACED IN THE KNOX BOXES.
- 6. FINAL PLANS MUST BE SUBMITTED TO THE MAINE FIRE MARSHAL'S OFFICE FOR REVIEW AND APPROVAL

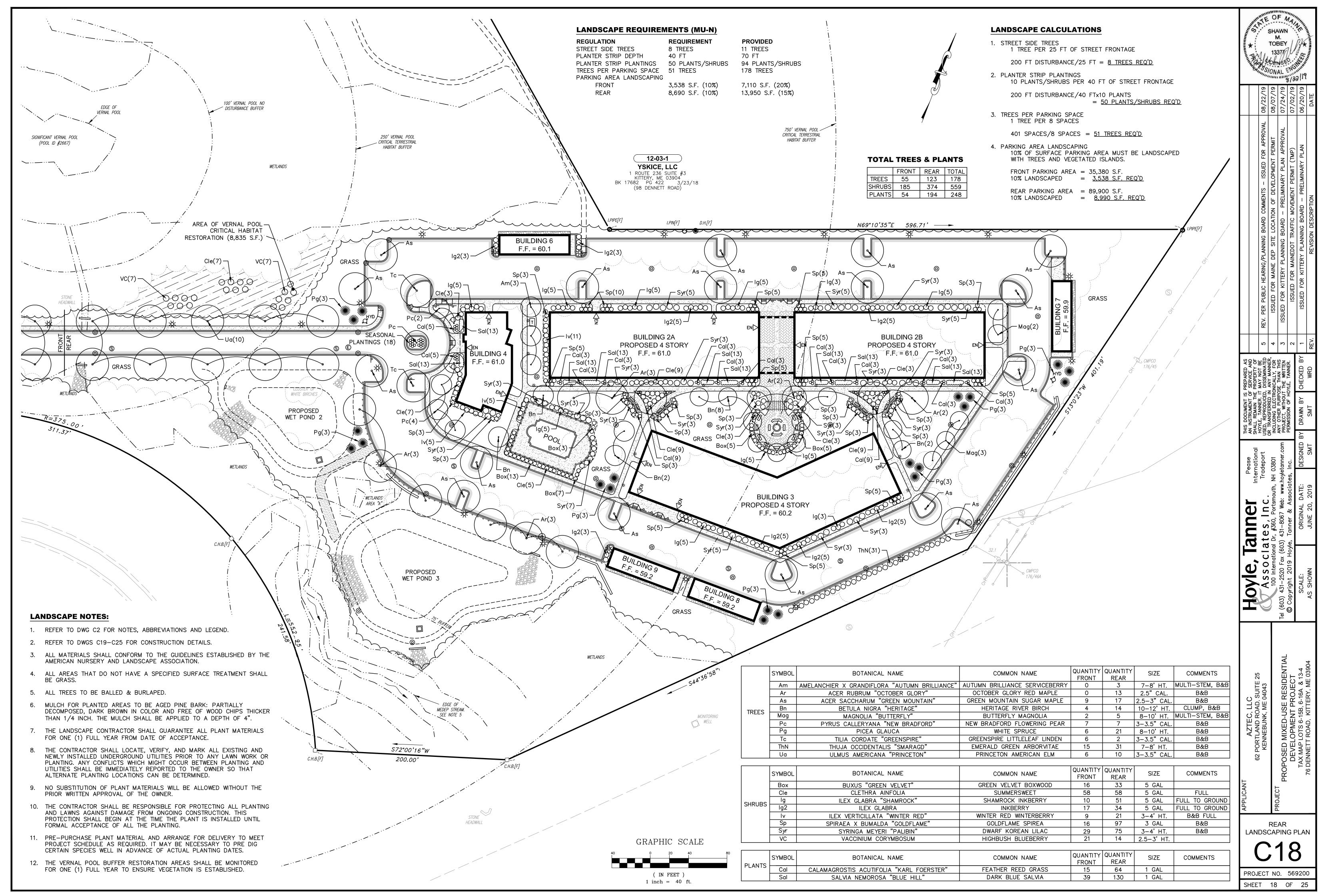












#### **EROSION CONTROL NOTES:**

- 1. POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
- 2. SEDIMENT BARRIERS. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER, UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.
- 3. STABILIZED CONSTRUCTION ENTRANCE. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
- 4. TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
- 5. <u>REMOVAL OF TEMPORARY MEASURES.</u> REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.
- 6. <u>PERMANENT STABILIZATION.</u> IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIP-RAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING. PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT, ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.
- 7. SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
  - A. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
  - B. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
  - C. RIP-RAP. FOR AREAS STABILIZED WITH RIP-RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIP-RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP-RAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
  - D. AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND). PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
  - E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUB-BASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT
  - F. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIP-RAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.

- 8. <u>WINTER CONSTRUCTION.</u> "WINTER CONSTRUCTION" IS CONSTRUCTION NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.
  - MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
  - B. SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A DOUBLE ROW OF SEDIMENT BARRIERS.
  - STANDARD BY THE DEPARTMENT.
  - SLOPES.
- 9. STORMWATER CHANNELS. DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN ABOVE.
  - OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
  - THE OPPORTUNITY EXISTS.
- 10. SEDIMENT BASINS. SEDIMENT BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, AT LEAST 1/2 OF THE DESIGN CAPACITY OF THE BASIN. THE USE OF OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE CATIONIC TREATMENT CHEMICALS, YOU MUST DESCRIBE APPROPRIATE TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE CHEMICALS.
- 11. ROADS. GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO INLETS, OR STREET GUTTERS.
- 12. CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APRONS, TO PREVENT SCOUR OF THE STREAM WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.
- 13. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.
- 14. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER

A. SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED.

PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A

C. DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS

D. SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE

CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS RUN-OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER APPENDIX A(5)(G)

A. THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION

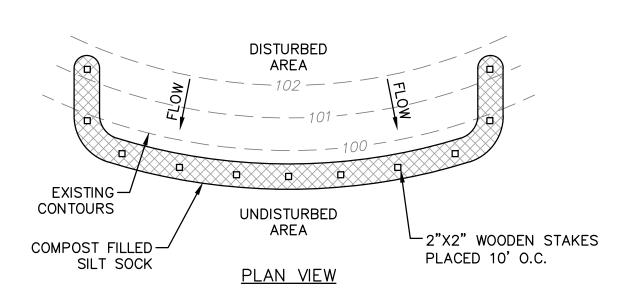
B. WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN 1/4 ACRE OF IMPERVIOUS AREA. DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE

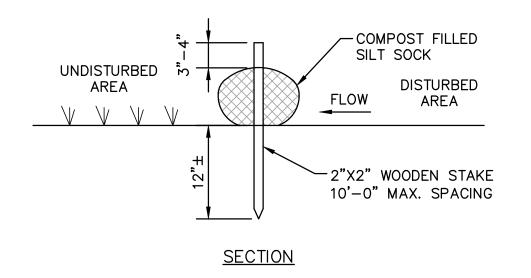
24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTING APPROVAL TO USE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION. YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE, CHEMICALS TO BE USED AND HOW THEY ARE TO BE APPLIED AND IN WHAT QUANTITY, ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY

ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN

CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY

GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREA'S SUB-BASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE



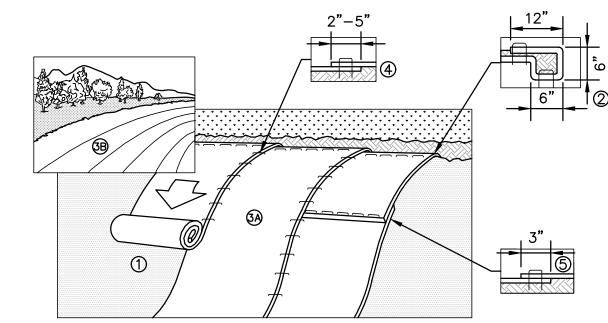


SILT SOCK NOTES:

- 1. SILT SOCK SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
- 2. INSTALL SILT SOCK AROUND ALL MATERIAL STOCKPILES.
- 3. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT THE MATERIAL NEAR WETLANDS OR WATERCOURSES.

#### SILT SOCK EROSION CONTROL DETAIL

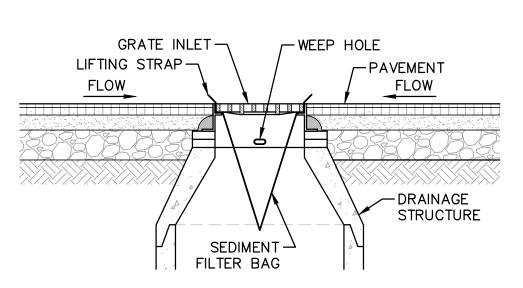




SLOPE PROTECTION INSTALLATION NOTES:

- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA. APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH
- 6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- 7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

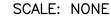
**SLOPE PROTECTION EROSION CONTROL MATTING DETAIL \C19**/ SCALE: NONE



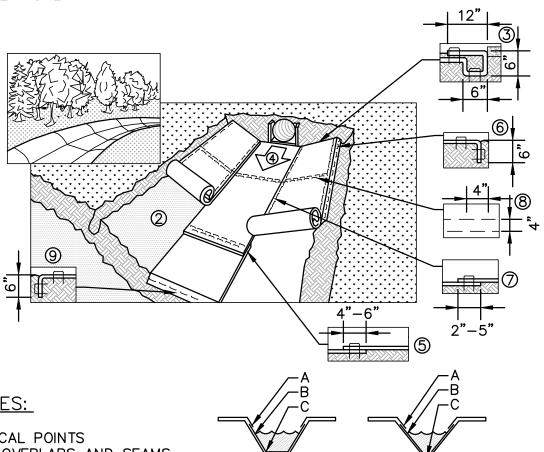
INLET PROTECTION NOTES:

- 1. THE SEDIMENT FILTER BAG SHALL BE DESIGNED FOR CATCH BASIN INLET PROTECTION. FILTER FABRIC IS NOT AN ACCEPTABLE SEDIMENT FILTER BAG.
- 2. REMOVE DRAINAGE INLET GRATE AND PLACE SEDIMENT FILTER BAG AROUND THE FRAME, REPLACE GRATE AND SEDIMENT FILTER BAG IN POSITION OR FOLLOW MANUFACTURER'S RECOMMENDATIONS. LIFTING STRAPS SHALL BE EXPOSED AND READY FOR MAINTENANCE PROCEDURES.
- 3. INSPECT SEDIMENT FILTER BAG WEEKLY AND AFTER EVERY RAINFALL EVENT.
- 4. REPLACE, CLEAN OR REMOVE SEDIMENT FILTER BAG AS DIRECTED.

## INLET PROTECTION DETAIL



\C19/



NOTES:

- CRITICAL POINTS
- A. OVERLAPS AND SEAMS 3. PROJECTED WATER LINE
- C. CHANNEL BOTTOM/SIDE SLOPE VERTICES
- \*\* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- \*\* IN LOOSE SOIL CONDITIONS. THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS

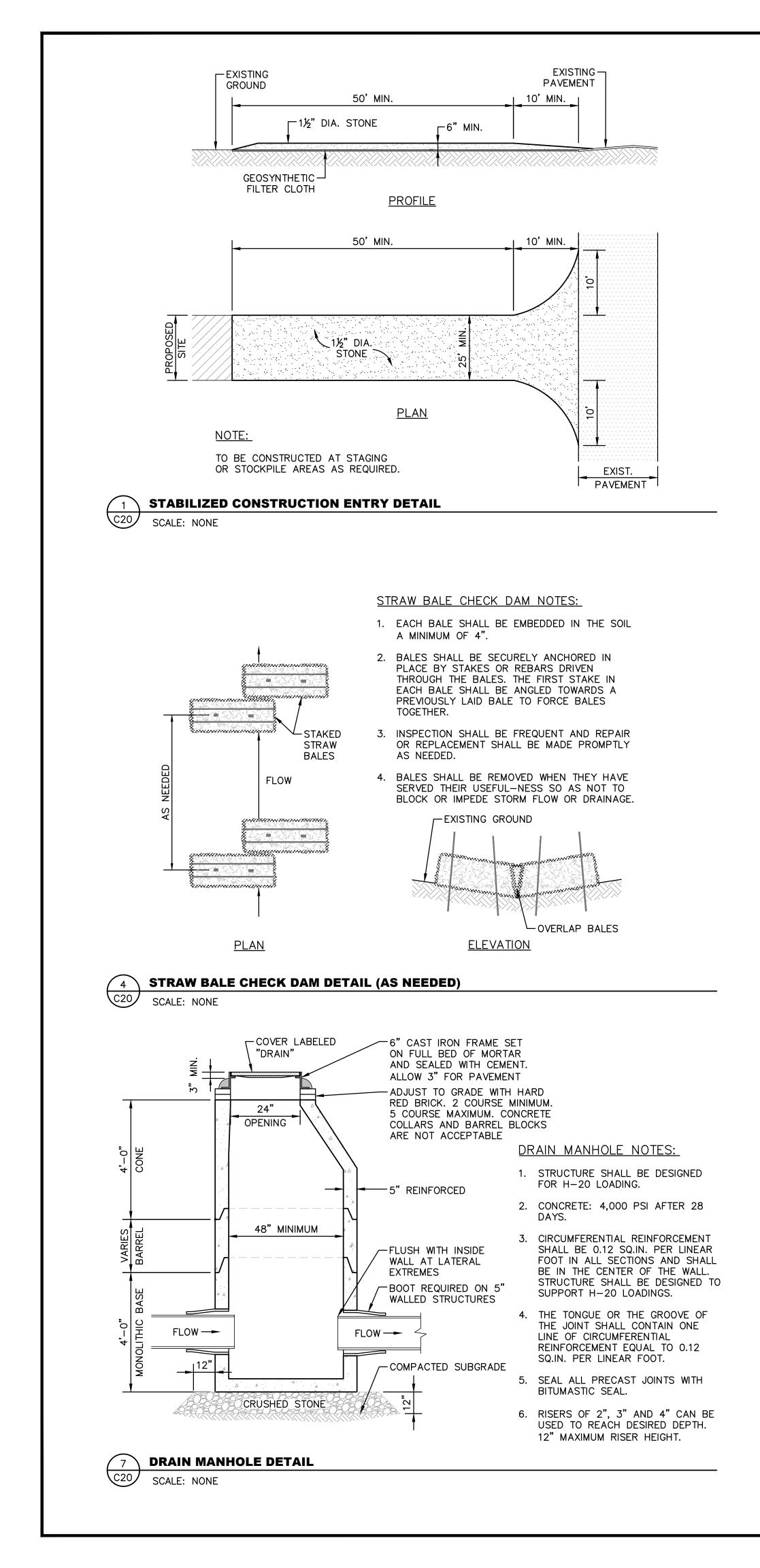
#### CHANNEL INSTALLATION NOTES:

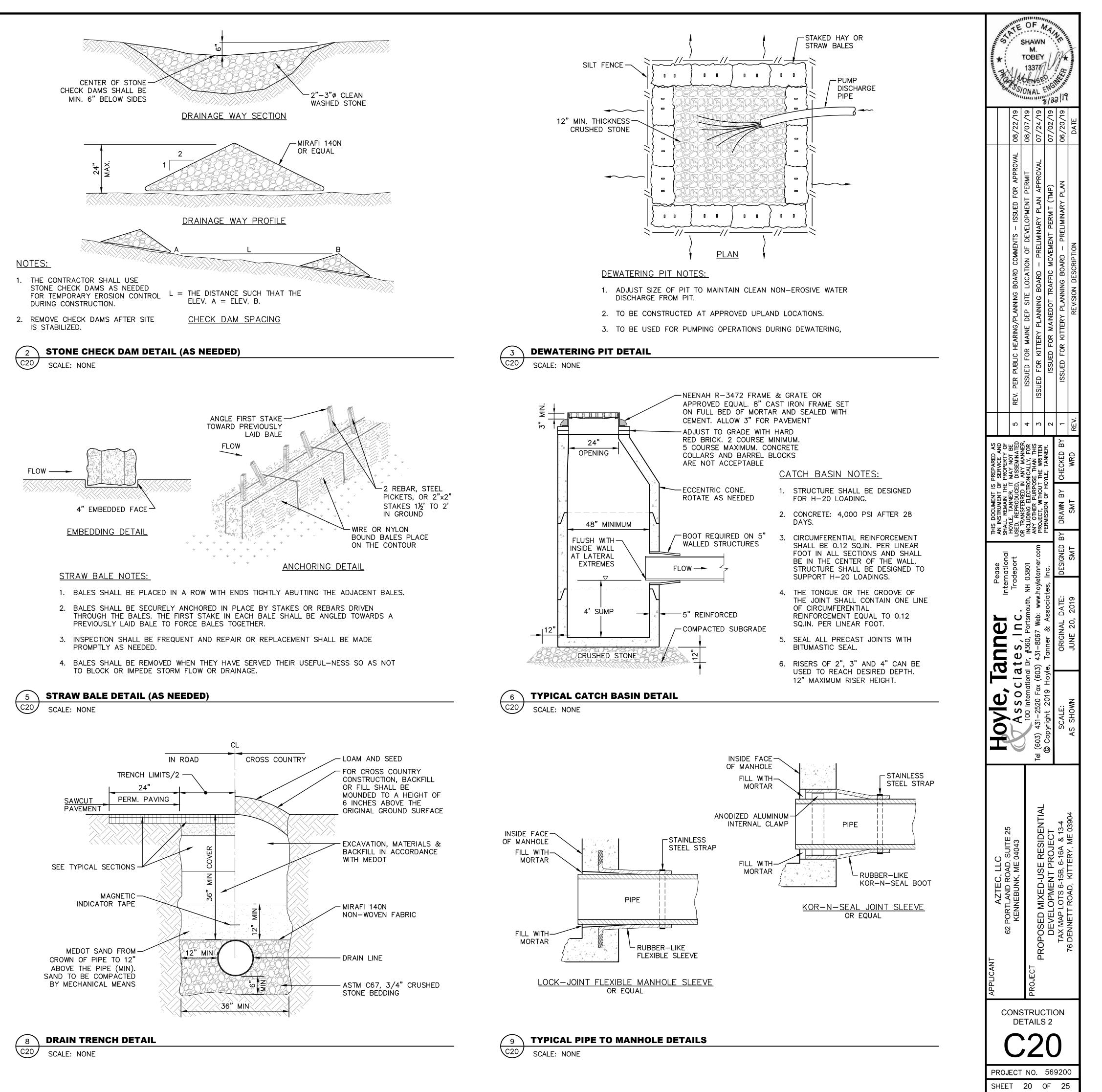
- 1. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
- 2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH THE PAPER SIDE DOWN.
- 3. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 4. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 5. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A  $4^{-6}$ OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"(10") ON CENTER TO SECURE BLANKETS.
- 6. FULL-LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6"DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 7. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
- 8. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF CHANNEL.
- 9. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

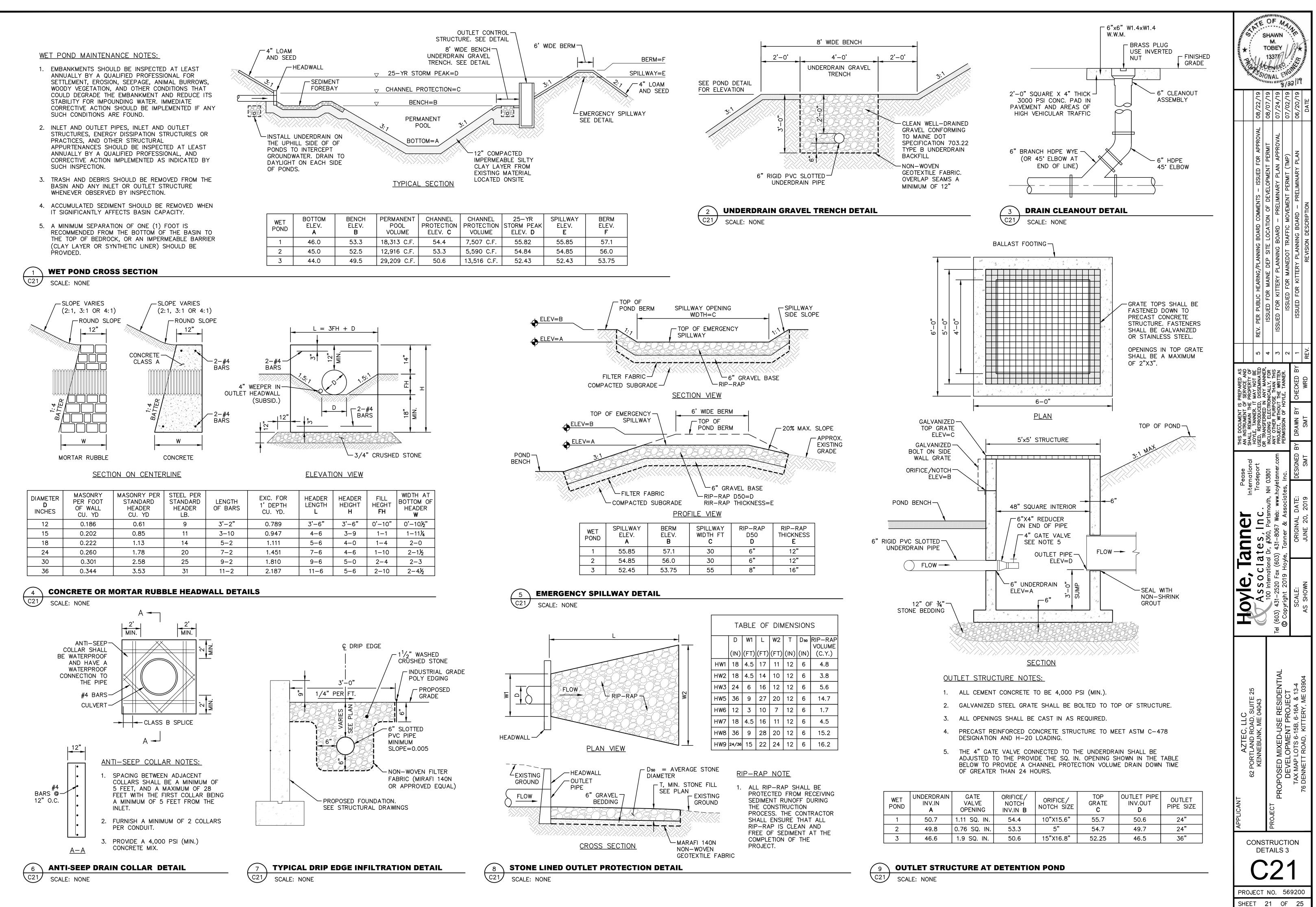
#### CHANNEL EROSION CONTROL MATTING DETAIL **\**C19∕

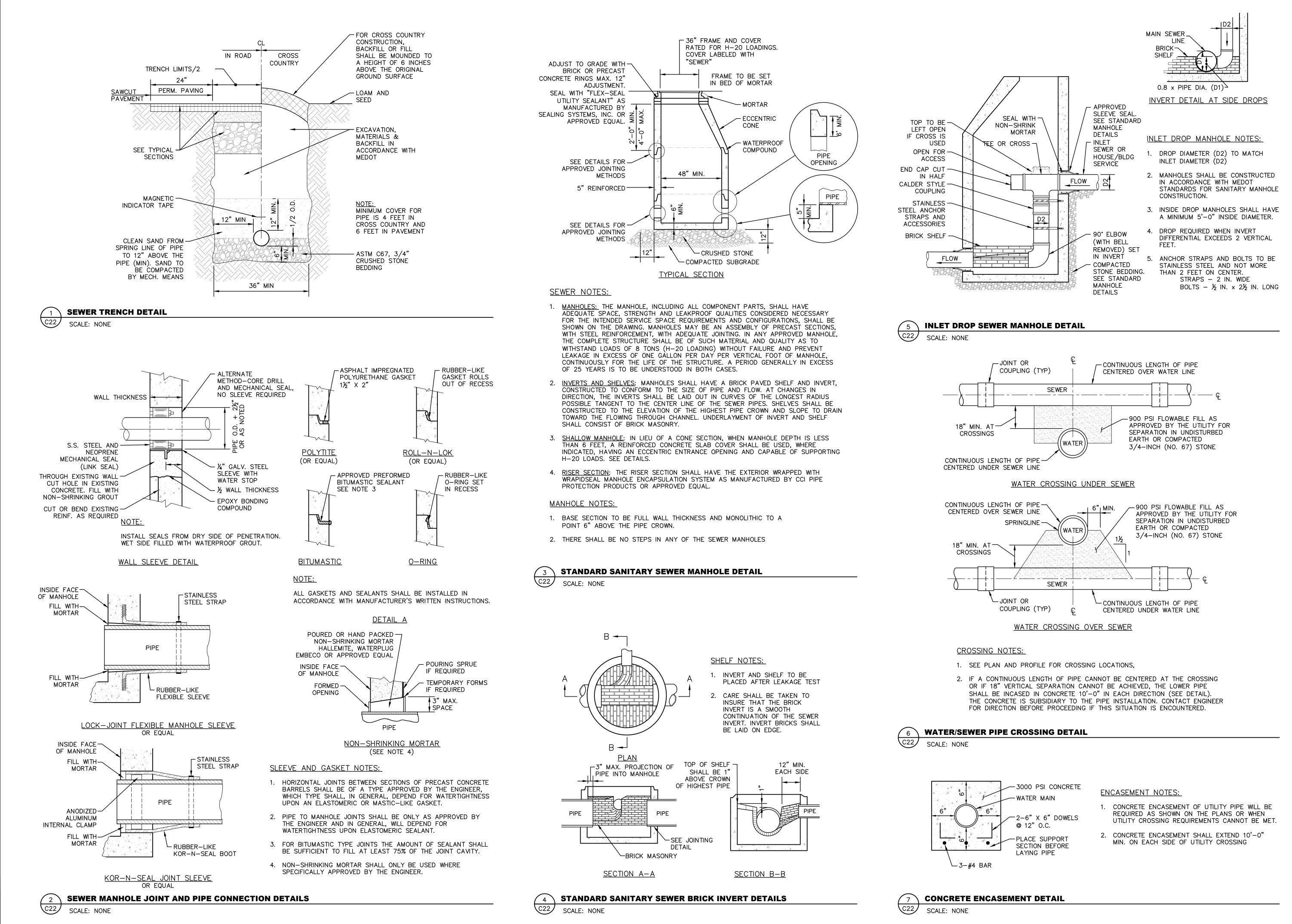
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-	-	100 International Dr, #360, Portsmouth, NH 03801	Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com	© Copyright 2019 Hoyle, Tanner & Associates, Inc.	ORIGINAL DATE:	JUNE 20, 2019			
Hovle. Tanner	Associa	100 Internation	Tel (603) 431-2520 Fax (60	© Copyright 2019 Hoy	SCALE:	AS SHOWN			
APPLICANT AZTEC, LLC	62 PORTLAND ROAD, SUITE 25 KENNEBUNK, ME 04043		PROPOSED MIXED-USE RESIDENTIAL	DEVELOPMENT PROJECT	TAX MAP LOTS 6-15B, 6-16A & 13-4	76 DENNETT ROAD, KITTERY, ME 03904			
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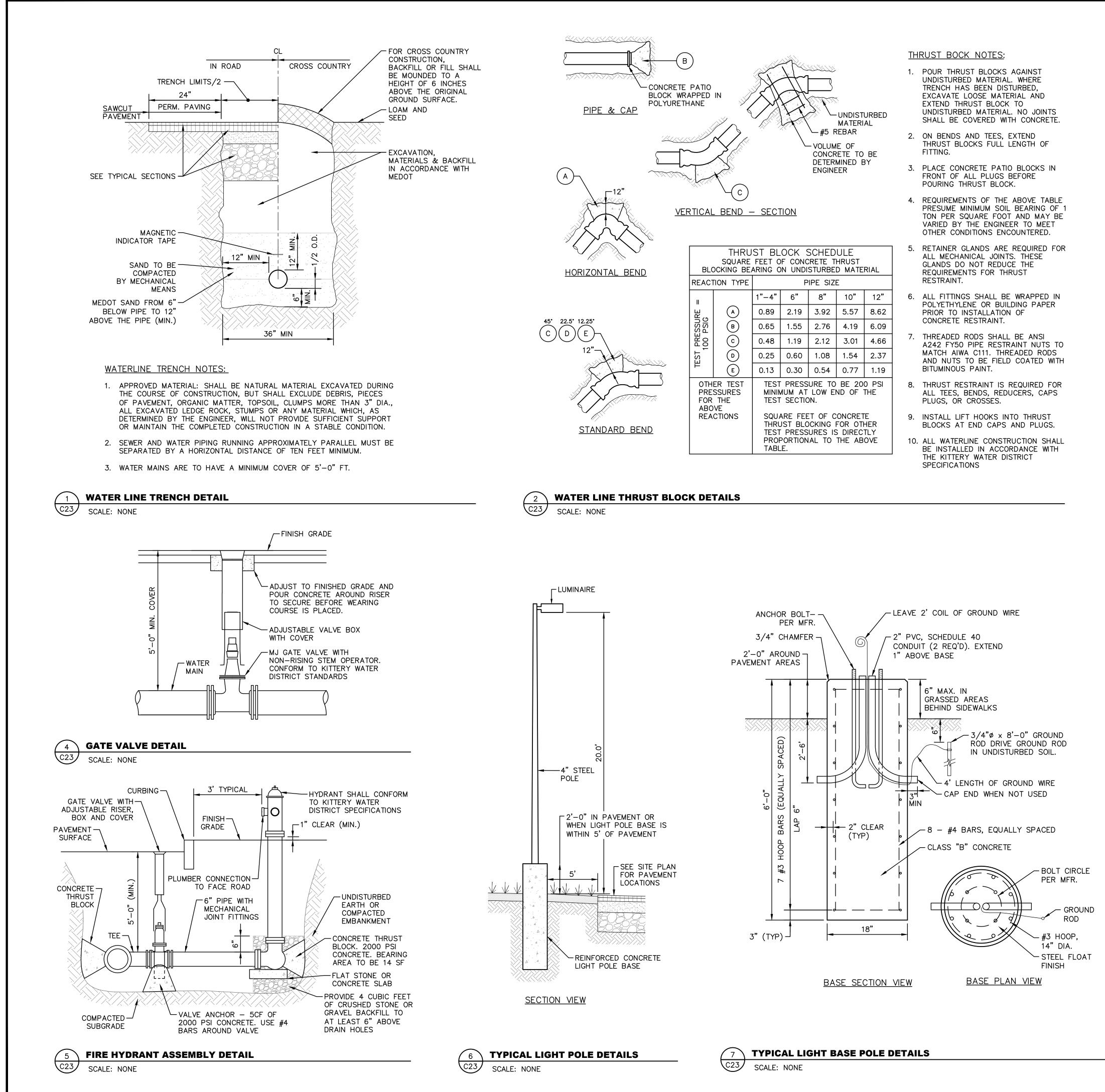


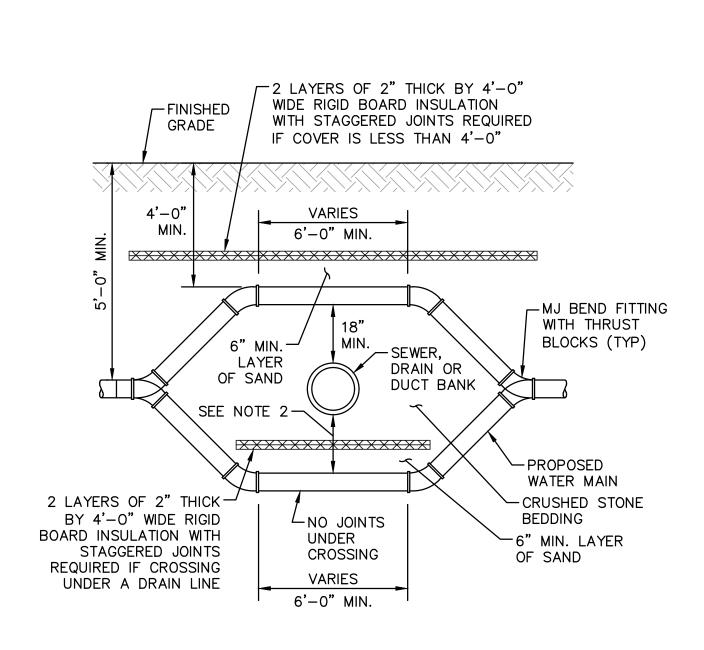




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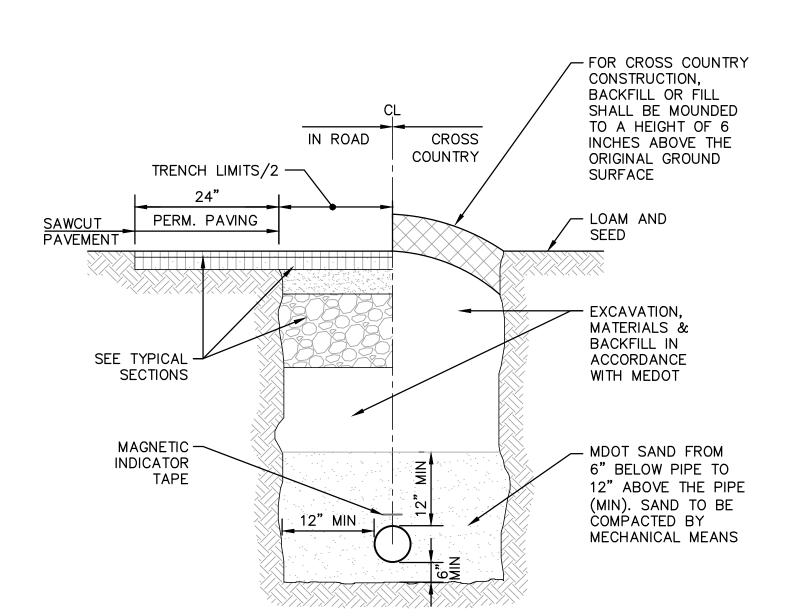
CROSSING NOTES:

- 1. SEE PLAN AND PROFILE FOR CROSSING LOCATIONS.
- 2. DROP WATER LINE BELOW UTILITY CONFLICT WITH 4 MJ BEND FITTINGS.
- 3. VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES AND ALL OTHER UTILITIES SHALL BE A MINIMUM OF 18".

## WATER UTILITY CONFLICT CROSSING DETAIL

SCALE: NONE

C23



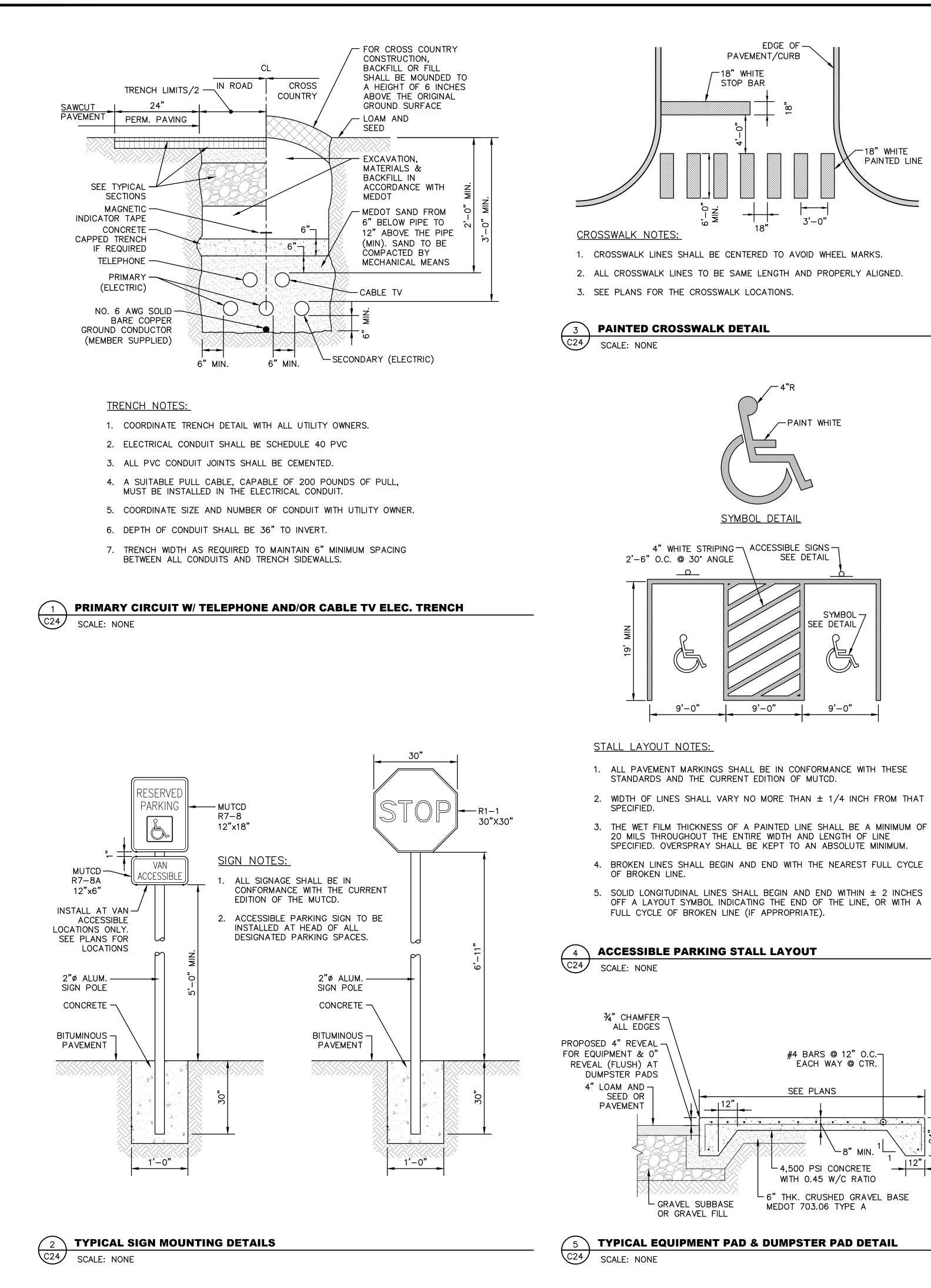
## TRENCH NOTES:

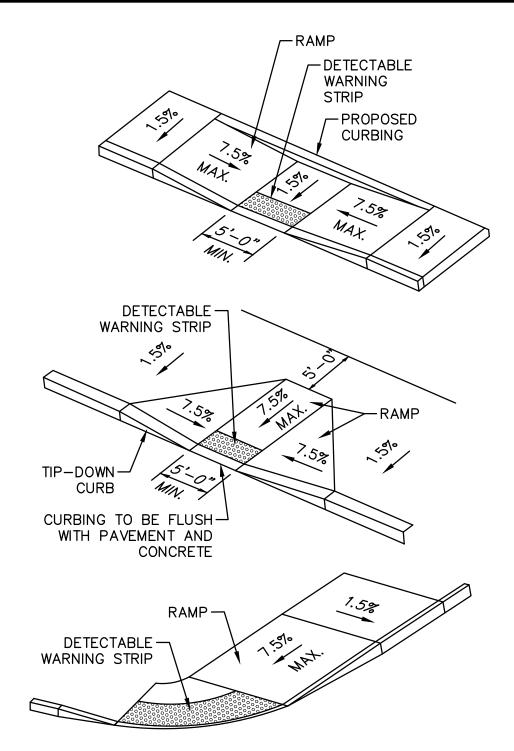
- 1. ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 PVC AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC-2-1990 AND BE UL LISTED.
- 2. ALL PVC CONDUIT JOINTS SHALL BE CEMENTED.
- 3. A SUITABLE PULL CABLE, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE ELECTRICAL CONDUIT.
- 4. COORDINATE SIZE OF CONDUIT WITH OWNER.
- 5. DEPTH OF CONDUIT SHALL BE 36" TO INVERT.



C23 SCALE: NONE

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	Associates Inc.	uth, NH	Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com	© Copyright 2019 Hoyle, Tanner & Associates, Inc.	ORIGINAL DATE:	JUNE 20, 2019
Hoyle, Tanner	Associa	100 Internationa	Tel (603) 431-2520 Fax (60	© Copyright 2019 Hoy	SCALE:	AS SHOWN
APPLICANT AZTEC, LLC 62 PORTI AND ROAD SUITE 25	KENNEBUNK, ME 04043		PROPOSED MIXED-USE RESIDENTIAL	DEVELOPMENT PROJECT	`ı	76 DENNETT ROAD, KITTERY, ME 03904
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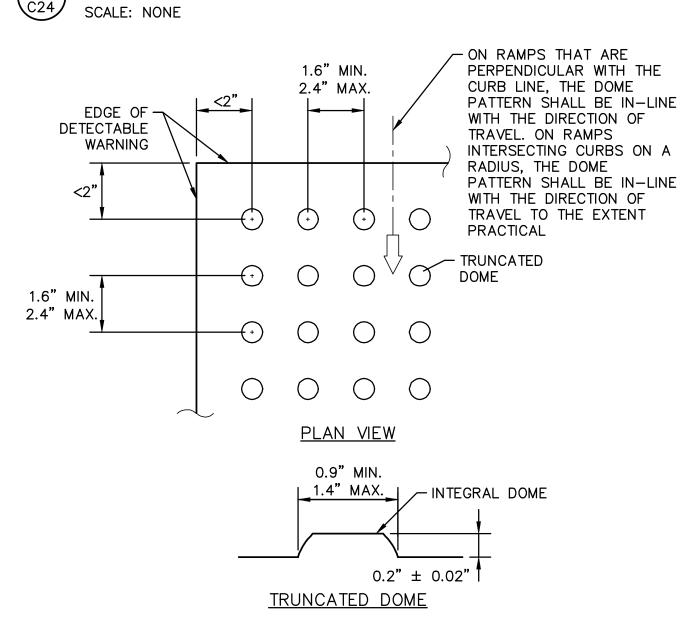




SIDEWALK RAMP NOTES:

- 1. THE MAXIMUM ALLOWABLE SIDEWALK AND TIP-DOWN RAMP CROSS SLOPE SHALL BE 1.5% (1% MIN.)
- 2. THE MAXIMUM ALLOWABLE SLOPE OF THE ACCESSIBLE ROUTE EXCLUDING TIP-DOWN RAMPS SHALL BE 5%.
- 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT TIP-DOWN RAMPS SHALL BE 7.5%.
- 4. A MINIMUM OF 3 FEET CLEARANCE SHALL BE PROVIDED BETWEEN ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE.
- 5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
- 6. AN ADA DETECTABLE WARNING TRUNCATED DOME PANEL SHALL FINISH TRANSVERSE THE SLOPE OF THE TIP-DOWN RAMP.DETECTIBLE WARNING PANELS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
- 7. CURBING SHALL BE SET FLUSH WHERE TIP-DOWN RAMP ABUTS PAVEMENT.
- 8. MAINTAIN THE NORMAL GUTTER PROFILE THROUGHOUT THE RAMP AREA. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF THE RAMP.

ACCESSIBLE TIP-DOWN RAMPS

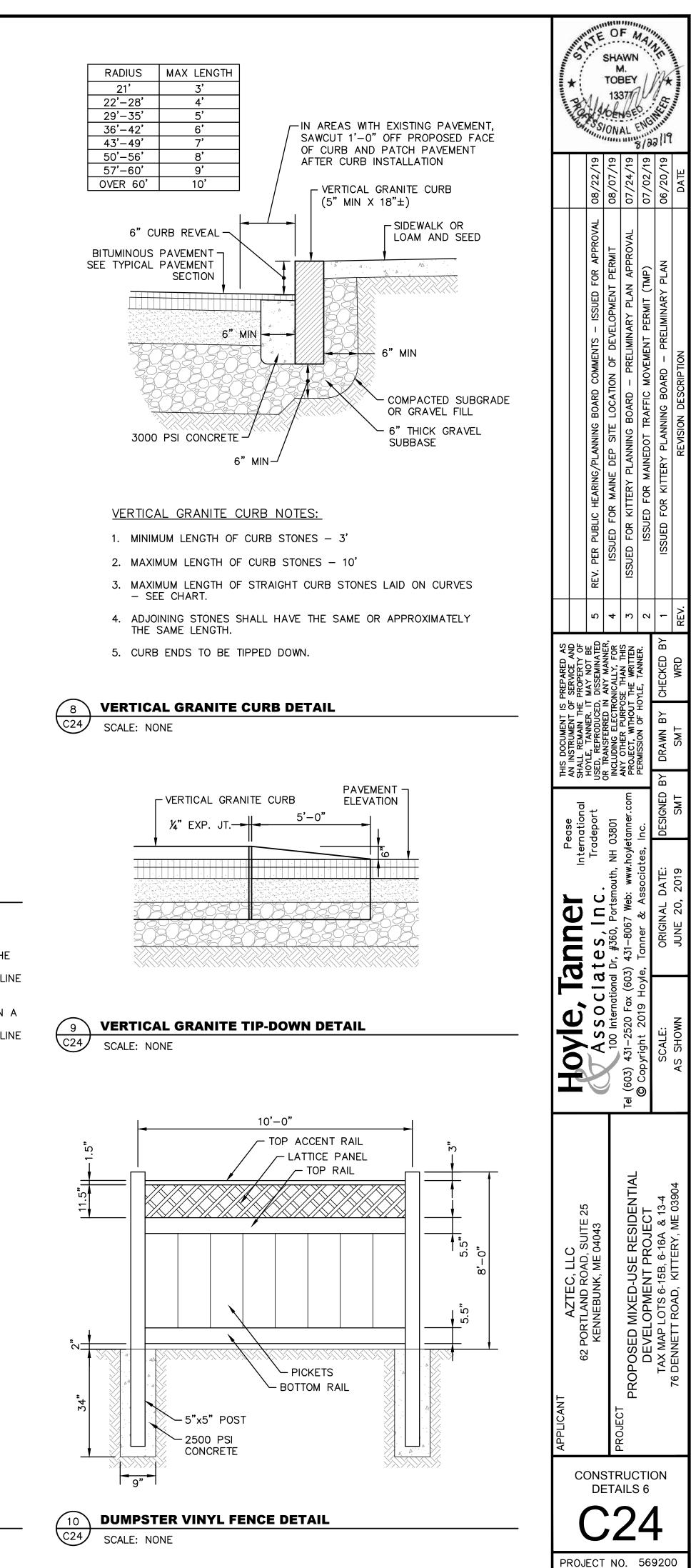


DETECTABLE WARNING NOTES:

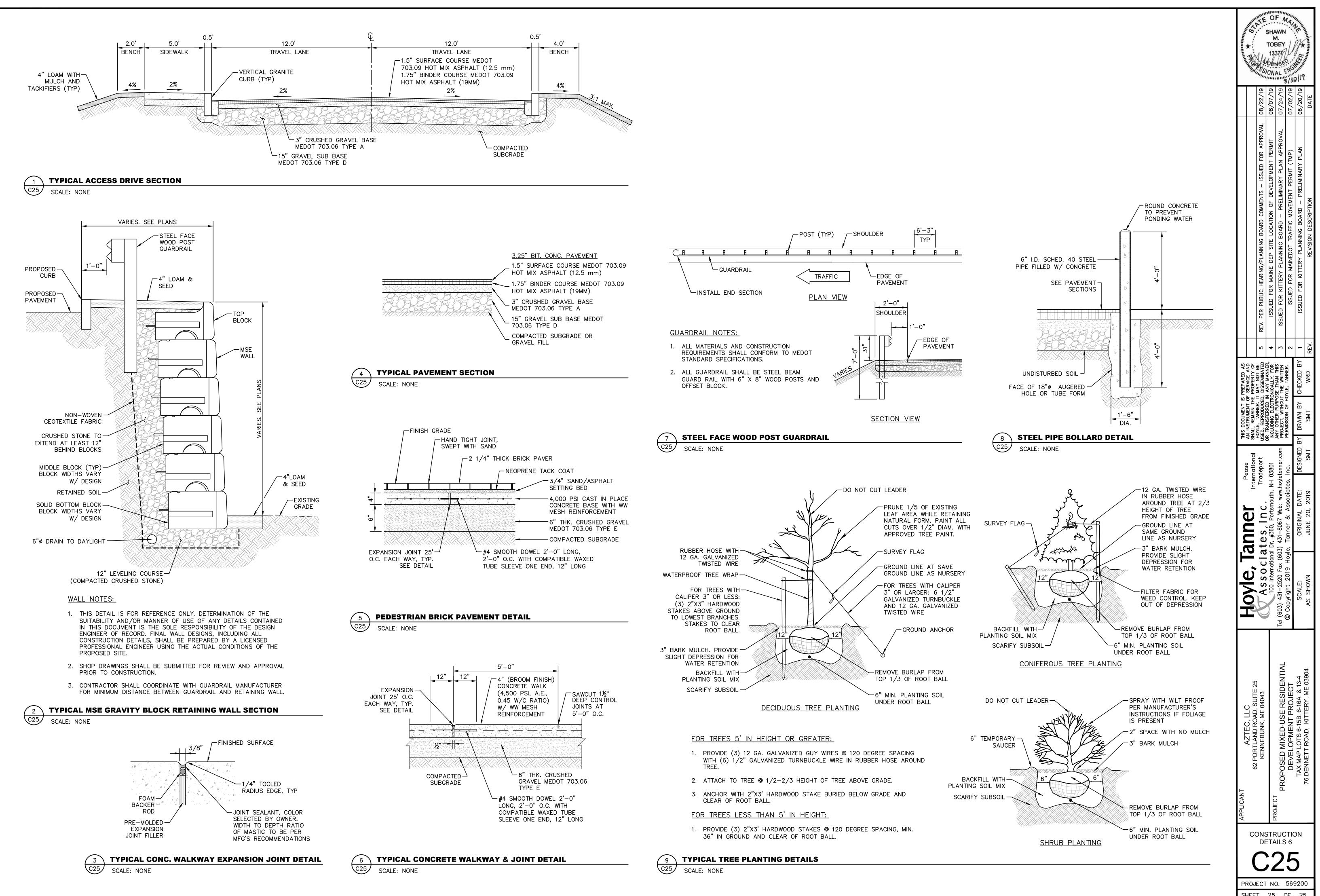
- 1. BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.
- 2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES FROM THE BACK OF CURB.
- 3. THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.
- 4. WARNING PANELS TO BE CAST IRON AND PAINTED YELLOW.

## **TYPICAL DETECTABLE WARNING DETAILS**

C24 SCALE: NONE



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