

**SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE  
PORTSMOUTH, NEW HAMPSHIRE**

**CONFERENCE ROOM A  
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE**

*Members of the public also have the option to join the meeting over Zoom  
(See below for more details)\**

**2:00 PM**

**March 5, 2024**

**AGENDA**

**I. APPROVAL OF MINUTES**

- A. Approval of minutes from the February 6, 2024 Site Plan Review Technical Advisory Committee Meeting.

**II. OLD BUSINESS**

- A. The request of **Atlas Commons LLC (Owner)**, for property located on **581 Lafayette Road** requesting Site Plan review approval for two 4-story additions to the existing building that will total 72 residential units with associated site improvements including lighting, utilities, landscaping, and stormwater treatment/management. Said property is located on Assessor Map 229 Lot 8B and lies within the Gateway Corridor (G1) District. (LU-23-189)

**III. NEW BUSINESS**

- A. The request of **Jewell Court Properties LLC (Owner)**, for property located on **33 Jewell Court, Suite 1** requesting a Conditional Use Permit in accordance with Section 10.1112.14 of the Zoning Ordinance to provide 205 parking spaces where 242 are required. Said property is located on Assessor Map 155 Lot 5-S1 and lies within the Character District 4-W (CD4-W) and Historic District. (LU-23-205)
- B. The request of **RIGZ Enterprises LLC (Owner)**, for property located at **822 Rt 1 Bypass** requesting Site Plan review approval to demolish the existing building and construct a new commercial building as well as associated paving, stormwater management, lighting, utilities and landscaping. Said property is located on Assessor Map 160 Lot 29 and lies within the Business (B) District. (LU-23-209)

**IV. ADJOURNMENT**

[https://us06web.zoom.us/webinar/register/WN\\_poMGfs0SR-a9bZJYSve0-w](https://us06web.zoom.us/webinar/register/WN_poMGfs0SR-a9bZJYSve0-w)

**SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE  
PORTSMOUTH, NEW HAMPSHIRE**

**CONFERENCE ROOM A  
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE**

**2:00 PM**

**February 6, 2024**

**MINUTES**

**MEMBERS PRESENT:**

Peter Stith, Chairperson, Planning Manager; David Desfosses, Construction Technician Supervisor; Patrick Howe, Deputy Fire Chief; Shanti Wolph, Chief Building Inspector; Peter Britz, Director of Planning & Sustainability; Zachary Cronin, Assistant City Engineer, Eric Eby, Parking and Transportation Engineer; Mike Maloney; Deputy Police Chief, Vincent Hayes; Planner I – Development Compliance

**MEMBERS ABSENT:**

**ADDITIONAL  
STAFF PRESENT:**

Stefanie Casella, Planner II; Kate Homet, Associate Environmental Planner

[1:45] Chairman Stith opened the meeting at 2:02 p.m.

**I. APPROVAL OF MINUTES**

- A. Approval of minutes from the January 2, 2024 Site Plan Review Technical Advisory Committee Meeting.

[2:06] E. Eby made a motion to accept the January minutes as presented. P. Howe seconded the motion. The motion passed unanimously.

**II. OLD BUSINESS**

- A. The request of **Atlas Commons LLC (Owner)**, for property located on **581 Lafayette Road** requesting Site Plan review approval for two 4-story additions to the existing building that will total 72 residential units with associated site improvements including lighting, utilities, landscaping, and stormwater treatment/management. Said property is located on Assessor Map 229 Lot 8B and lies within the Gateway Corridor (G1) District. (LU-23-189)

[2:16] Chairman Stith introduced this application.

John Chagnon of Haley Ward, came to present the application along with Mark McNabb (developer), Tracy Kozak (architect), Terrence Parker (landscape architect), and Marie Bodi (McNabb Properties). Mr. Chagnon noted that they had received staff comments from the previous day and he proceeded to hand out a sheet with their responses to the comments.

[3:25] Mr. Chagnon proceeded to address each staff comment.

1. *Staff will require a document of support from Super Intendent to use the high school land for public realm improvements.*

Mr. Chagnon noted that this will be done prior to the Planning Board. Staff responded that they would like to see this all sorted out while in TAC and before the Planning Board.

2. *Staff would like the project to be completed by the applicant rather than a monetary contribution.*

They are in discussion with the School Department about this as there is an upcoming RFP they are publishing.

3. *Please connect the trail to existing infrastructure.*

They have revised the trail to now connect to Andrew Jarvis Drive. See Sheets C9 and C10.

4. *Please correct plan callouts to be fully visible (See C7 lower right corner).*

This label was cutoff and is visible on other pages but it is not really important to the calculation of open space.

5. *Space identified as "wide sidewalk: does not qualify as a wide sidewalk.*

Understood.

6. *Community space needs to meet the definition of community space.*

This has been updated on Sheet C8. There are three separate areas, wide pedestrian sidewalks, outdoor dining, and a pocket park. They will be asking for 6.4% community space where 10% is

required. This number will increase after inputting the feedback for the wide pedestrian sidewalk. Terrence Parker has updated landscape plans for the community space.

[14:27] P. Britz asked for more specific information on the community space types, especially the wide pedestrian sidewalks and the blue-colored space. He noted that they would have to talk offline about considering the offsite work as community space and any work in the right-of-way. A discussion ensued about the different possible park connections and the community space's purpose.

*7. Is the courtyard space open to the public?*

Yes, by deed as outdoor dining space.

*8. Landscape plan and community space plan have different sidewalk designs.*

The landscape plan will have a minor update to the current sidewalk.

*9. Please confirm that the ADA parking spaces in the covered parking meet the minimum width for ADA. Support columns look like they may inhibit access.*

The spaces on the right do have columns but there is five feet on either side for maneuvering outside of the columns. Updated parking plans have been passed out. The motorcycle spaces have been relocated and bicycle spaces have been added and offset the existing parking requirements. There are 65 bicycle spaces on site where 27 are required. The extra 38 bicycle spaces are being swapped for 3.5 required parking spaces for the new addition along with 2.2 parking spaces that were required by the existing restaurant use.

*10. Please assign tandem parking spaces to units and confirm they conform to Section 10.1114.33*

The tandem spaces will be assigned to the units during the final building permit process. A detail has been added to Note 10 on Sheet C3 and Note 5 on Sheet C4 to show this requirement.

*11. Please include all levels of parking (interior and exterior) in parking plan*

Please see Sheet C13 where everything has been included.

*12. Please include designated ADA spaces in parking calculation table.*

This is reflected in the updated plans, but it still needs to be updated on the chart.

*13. See Site Plan Regulation 7.6.5 (1): In the maintenance plan for stormwater devices, remove “if required”. An annual inspection and maintenance report is required. Please submit to the Department of Public Works.*

A page has been attached in the report which strikes out that ‘if required’ note.

*14. Please move the proposed transformer from its current location in the landscaped island – this will interfere with the infiltration of stormwater into the landscaped island.*

This has been removed and the open space calculation has not changed.

*15. According to 10.5A44.41 in the Zoning Ordinance: you must provide 1 landscaped island for every 10 parking spaces (A). A landscaped island must be at least 325 s.f. in area (C) and be at least 9-ft wide (Site Plan Regulation 6.6-3). Please demonstrate your compliance with these requirements.*

The applicant would like to keep the parking as it is currently shown, without additional landscaped islands. Three are required but only two are being provided. They could lose a parking space if it is desired but are requesting a waiver from this regulation.

*16. “No Right Hand Turn” signs should be added to the detail sheet, and locations of signs shown on plan.*

See the new detail on Sheet D6. E. Eby would like to see this sign changed to an arrow with a circle through it and it updated on Sheet C3 with its location.

*17. Provide summary of accessible parking spaces required and provided.*

The plans will be updated.

*18. Show how new buildings sewer will connect to the proposed sewer service.*

These connections have been shown on the updated utility plans.

*19. What is the proposed water demand and proposed flows to the sewer from the new development?*

See Note 4 on Sheet C5 for the sewer flow calculations.

*20. Provide profile of sewer service.*

The sewer service is internal with a short section outside the building. Photos have been included to show the profile.

*21. How will the sewer service be protected from cars and pedestrians?*

There will be bollards and shields, a note has been added to Sheet C4.

*22. Non buried sewer service subject to environmental conditions. May require expansion joints.*

Mr. Chagnon's understanding is that the sewer in the basement would be at a pretty constant temperature. But the pipe type, joint type, and grout selection for the through connections for the final building plans will address that issue.

*23. SDR 35 pipe may not be suitable for non buried applications.*

The newly attached photo show that SDR.

*24. Need details on pipe hangers, cleanouts, and connections.*

This will be detailed on the Building Permit plans.

*25. What is the proposed flow rate of the pump station?*

The detail has been added to Sheet D6, it will be 500 gal/day with the pump running at 20 gal/minute.

*26. What are the float elevations in the proposed pump station?*

All the elevations are now included in Sheet D6.

*27. Details on proposed pump station show 1 ½" discharge pipe and utility plan shows 2". Confirm size and pipe materials.*

The detail has been revised to show 2" pipes only.

*28. Sheet C4 shows sewer service size as 6" and utility plan shows 8". Correct.*

This will be 8".

[43:10] E. Eby asked about the loading area and the five adjacent parking spaces on the Level 1 parking plan and wondered how cars could get out if there was loading happening.

Ms. Kozak responded that those parking spaces could be made into tandem spaces.

[43:55] Z. Cronin asked about parking spot 41 and whether it cut into the corner. Ms. Kozak responded that it does and they will adjust it.

[44:30] S. Casella noted that the requirement for the tandem spaces is a 9' width but the ones displayed on the parking plan are only 8.5'. Ms. Kozak responded that they could make those adjustments.

[45:39] S. Casella asked E. Eby if handicap spots were allowed to be tandem. E. Eby did not know if there were requirements for that. Ms. Kozak responded that the tandem handicap space was a bonus, one more than they were required to provide. A discussion ensued about the requirements for assigned handicap spaces. Staff will look into this.

[47:27] E. Eby asked about the bollards used to protect the sewer line, which would have to be placed in the parking space, cutting into the length on the space. Would more length be needed for the parking space? Z. Cronin noted that this was one of the reasons for wanting to see the sewer profile. Mr. Chagnon responded that they would be about 5' off the floor. A discussion continued about potential dimensional requirements of bollards and how this would include bollards inside the parking spaces, not outside the spaces. Ms. Kozak noted that they had 2' of extra space for each parking space that they could use and an extra 1' of free space in front of each parking space which they could use to place the bollards in.

[51:48] Z. Cronin noted that the photos provided show a pipe type that is not SDR-35.

[52:35] P. Howe asked if the sprinkler system would all be 1' for all three buildings. Mr. Chagnon responded that this was still early in the process for them and they were talking about a second system, but it may be better for them to be connected together. They would have internal systems at the sprinkler room at the existing location and again at the new proposed sprinkler room in the proposed Building B. P. Howe asked if there would still be a riser. Mr. Chagnon responded yes. P. Howe noted that the fire department connection there would no longer be very accessible to the department, but they could deal with this during the sprinkler planning. The issue is the location of the hydrant. He was wondering if any yard hydrants were proposed, which would be necessary. Mr. McNabb agreed that they could add a hydrant to the plans. D. Desfosses noted that they would need a hydrant maintenance agreement to go along with the installation of a new hydrant. The discussion continued about the best locations for a new hydrant. Mr. McNabb stated that a note will be added to the plans that a final location for the hydrant will be decided with the Fire Department's input.

[56:47] P. Britz raised the issue of the parking on the NH DOT right of way. He wanted to know how it currently exists. Mr. Chagnon responded that if this was to go to the Planning Board, he would compare this issue with Route 1A in Rye and how that stretch has a 100' right of way that the public parks on. P. Britz asked if there was any information on the parking from the last

application for development of this site. Mr. McNabb responded that it had been there for decades and the encroachment was on the state's plan, with no showing of it being taken out. He noted that they could condition it so that in any event, that is not the case with the state, there will be a violation that can be corrected. P. Britz said it would be nice to have the documentation to support this. Mr. McNabb noted that the documentation would be the state's plan which Mr. Chagnon included in the latest packet in the supplemental materials.

### **III. PUBLIC HEARING**

[59:50] Chairman Stith opened the public hearing. No one spoke. The hearing closed.

### **IV. DISCUSSION AND DECISION OF THE BOARD**

[1:00:05] E. Eby asked if the five parallel spaces in the basement plans were 20' long. Ms. Kozak responded they are 19' x 8' 6" in dimension.

[1:01:04] S. Casella noted that the stall requirements are for 20' in length. Ms. Kozak said they could adjust those.

[1:01:29] E. Eby asked about the Level 1 floor plan and whether there was anything to prevent the eight vehicles pulling in from under the overhang from blocking the bicycles and scooters. Ms. Kozak and others agreed that a curb stop could do this.

[1:01:56] Mr. McNabb mentioned that they could fix everything discussed and proceed onto the Planning Board. P. Britz responded that there are a lot of comments and edits, and they just had received revisions the day of and staff is not comfortable sending things onto the Planning Board before TAC members can wrap their heads around it. He did not feel this application was ready for the Planning Board with the bits and pieces they had and with missing calculations for community spaces, parking space details, waiver details, etc.

[1:03:28] Mr. McNabb said that he did not agree with this but he did not have a vote. E. Eby agreed with P. Britz that he would like to have more time to review updates to the parking. Z. Cronin also agreed and noted that he needed more time to review the sewer details.

[1:04:07] P. Britz made a motion to postpone the application to the next TAC meeting so that the applicants could address the issues raised. E. Eby seconded the motion.

[1:04:32] P. Britz mentioned that he would like to see an easement plan before sending to the Planning Board. D. Desfosses noted that he would like to see a plan of where the landscaping is planned to be maintained, especially the off-property ones. He wanted the applicant to take care of the cross-section of sidewalk (the sidewalk going into the parking lot and the sidewalk on Ledgewood Drive) that goes where the road used to be because it is their landscaping from their property to that sidewalk. D. Desfosses also noted that the public realm improvements must be ADA compliant and this must be shown on the plan. Additionally, a fire hydrant maintenance agreement must be in place. P. Britz mentioned that he would talk to the Legal Department about the NHDOT issue with encroachment.



[1:08:02] Mr. Chagnon responded that they would like to set up two meetings to go over everything, with legal and on the other issues.

[1:08:16] Ms. Bodi spoke to the letter from the Superintendent, saying that staff had communicated with the group saying that it would not be an issue if there was no agreement just yet. Ms. Bodi noted Mr. McNabb's frustration and that of the team that there had been so many staff comments for the application that had not been previously brought up. The minutia of focus from the last month to the current month was different.

P. Britz responded that this was a very complicated plan and they would not be sending anything to the Planning Board that was half-baked and had non-compliant parts. They would like to get a product to the Planning Board that staff feels comfortable with and the current application merits the amount of focus that staff is giving to it.

[1:09:52] Ms. Bodi asked about why the staff did not prefer a donation to public realm improvements. P. Britz responded that they could not represent the wishes of the superintendent and would prefer to wait to see what they say. Staff would prefer to see what is proposed being built and that it is viable. A discussion continued about public realm improvements and potential agreements. Ms. Bodi asked if there had been any communication between TAC members and the school department about this, staff responded that they had not.

[1:11:50] The motion passed unanimously.

## **V. ADJOURNMENT**

[1:11:58] Z. Cronin made a motion to adjourn. P. Howe seconded the motion. The motion passed unanimously.

The meeting adjourned at 3:12 p.m.

Respectfully submitted,

Kate E. Homet  
Secretary for the Technical Advisory Committee



200 Griffin Road, Unit 3, Portsmouth, NH 03801  
Phone (603) 430-9282 Fax 436-2315

22 February, 2024

Peter Stith, TAC Committee Chair  
City of Portsmouth  
1 Junkins Avenue  
Portsmouth, NH 03801

**RE: Submission for Conditional Use Permit and Site Plan Approval at 581 Lafayette Road; Mixed Use Development; Tax Map 229 Lot 8B**

Dear Mr. Stith and TAC Members:

On behalf of Atlas Common, LLC (Owner) we submit the attached Plans and additional supporting material for the above-mentioned project. The revisions were based upon the comments from the February 6, 2024, Technical Advisory Committee meeting. The project consists of the addition of residential units (including 20% of the Units as Workforce Housing) at 581 Lafayette Road with two new building additions with the associated and required site improvements. The site is currently developed with two restaurants. The re-development will include creating an additional car park below first floor building level. The project specifics are as follows:

**Project Summary**

The project is located at 581 Lafayette Road and is proposed additions to an existing building. The building was renovated when the site was changed from a Cinema to the Tuscan Restaurant – Tuscan Marketplace in 2016. The site is at the corner of Lafayette Road and Ledgewood Drive, and is known as Tax Map 229, Lot 8B. The lot is a 98,124 square foot parcel with frontage on both streets. The existing conditions plan shows the current site features. The Tuscan Restaurant moved to downtown Portsmouth, and that portion of the site was re-purposed to a restaurant with golf simulators, known as Tour. The Tuscan Marketplace closed, but recently the Tuscan Marketplace space was converted to another restaurant with some outside seating.

The property is in the Gateway Neighborhood Mixed-Use District - G1. The purpose of the district is to support the goals of the cities Master Plan and Housing Policy. The aim of the policy is to encourage walkable, mixed-use development, and continued economic vitality in the cities primary gateway areas. The district seeks to ensure that new developments complement and enhance the surroundings and provide housing stock that is suitable for changing demographics and accommodate the housing needs of the city's current and future workforce. This plan works towards that standard by adding to the existing structure and

creating a mixed-use building with 72 new dwelling units. The proposed uses; being restaurant use and dwelling units (multi-family residential) are both allowed uses in the district.

### **Proposed Development**

The proposed building has been edited in footprint since the previous TAC submission, made smaller along the Ledgewood Road side of the development. Currently the project proposes additions that are set back 39 feet from Ledgewood Drive, 39 feet from Lafayette Road, 23 feet from the southerly abutting property line, and 39 feet from the easterly abutting property line. The proposed building additions maintain the ability for the free flow of traffic around the proposed additions, as required by deed restrictions and easements on the property. The building height is intended to comply with section 10.5 B 22.10, with incentives as allowed under the section. Regarding the special 90-foot setback requirement on Lafayette Road, the project is in a location where there is a significant open space in front of the subject parcel. This open space was created when the Lafayette Road, Route 1 Bypass intersection was restructured around 2011. That relocation of the intersection created this large open space area in front of the lot, which meets the special setback requirement for this parcel.

The submitted site plan shows the impervious surface calculations for the proposed development. When the site was redeveloped to the Tuscan Restaurant and Marketplace, the impervious surface coverage was allowed to increase under a Variance, up to coverage which maintained 16.5% open space. The submitted site plan proposes coverage of 80.1% with the reworking of some hardscape spaces to porous surfaces. The plan open space calculations show that when the proposed open space is adjusted for sidewalk percentage allowed to be included in open space, the proposed site open space is 21.8%, and is now conforming.

### **Project Parking**

First floor parking spaces are accessed from driveways to the parking areas at first floor level, as shown on the site plan and parking plan. Underground parking is accessed from a driveway ramp on the north side of the proposed structure off Ledgewood Drive. The total parking provided meets the ordinance requirements of the city of Portsmouth.

There is an existing encroachment of approximately 30 parking spaces (as adjusted to current code for landscape islands) in a small portion of land owned by the State of New Hampshire along Route 1. The encroachment results in parking spaces being approximately zero to seven feet onto property owned by the State of New Hampshire. The land area involved is approximately 1200 square feet. This parking encroachment has existed for many decades and the encroachment is shown on the State of New Hampshire plans for the widening of Route 1 which occurred when the overpass over Route 1 was eliminated in favor of the traffic lights and traffic lanes that exist today.

This encroachment has been accurately identified on prior site plan(s) that were approved by the City of Portsmouth Planning Board in 2015 for the Tuscan Kitchen and Marketplace conversion of the movie theater, without any requirement to bring the encroachment into compliance. The applicant proposes no changes to those parking spaces (other than adding code compliant landscape islands and a space for a new transformer) and therefore requests they be left as is in their nonconforming use.

As support for leaving the parking encroachment as-is, the Applicant proposes to pay the cost and reconfigure that immediate area, when and if required by the State of New Hampshire, in accordance with the “Alternative Parking Layout” as shown on Sheet C4 of the plan set. The proposed site plan contains a total of 181 parking spaces. If that area is required to be vacated and parking spaces installed according to the Alternative Parking Layout, then a total of 7 parking spaces would be lost. Any loss of parking spaces is easily provided for in the cross-parking easement recorded in the Rockingham Registry of Deeds with the abutting property owner.

Attached is a copy of the NHDOT Highway plans showing the relationship between the right-of-way line and the pavement at the time of the improvement project. In addition, the deeded right to shared parking is also included in the submission.

### **Project Drainage**

The existing drainage consists of some roof drain connections as well as some parking lot connections to the drainage network, which flow off-site. The property drainage is divided into two watersheds, one that flows to the south along the front of the adjacent mall and the other flows to the south along the back of the adjacent mall and across the adjacent property. The intent of this design is to maintain those flow directions and re-purpose the drainage in accordance with the proposed site addition roof drains. The roof drains will replace the catch basins and direct the water in the same direction as the previous approved design, with the same contributing area. The plan calls for the addition of a Jellyfish Filter, which will provide more advanced treatment than the existing on-site mechanical separator.

### **Proposed Public Realm**

Under Section 10.5B74.12 the development standards of that section require that there is a Public Realm Improvement associated with the development. The project proposes an off-site sidewalk connection to Portsmouth High School and an improved basketball facility with seating at the end of Ledgewood Drive (all on city property) as this component. The development team is in ongoing discussions with the School Department regarding those improvements. Concept improvements are included in the plan set. As discussions are ongoing at this time the submission includes a Draft MOU. In the MOU the Developer would be responsible for planning and building the project. Since the design needs to be completed with the input of the stakeholders and detailed cost estimates developed, we hereby request that the project be moved along to the Planning Board with a condition that the completion of this process occur at a later date.

### **Project Community Space**

The Community Space on the site consists of an Outdoor Dining Café and a Pocket Park. The Pocket Park includes a proposed public bike rack in close proximity to the existing bus stop. The Outdoor Dining Café provides an area of outside use for the public, as well as the building residents, which will be fitted with tables and chairs. The area includes an outdoor fireplace. The space dedicated to the existing restaurants for outdoor dining is not included in the Community Space Easement area. The required 10% of lot area as Community Space is not provided on site. The proposed total is 7.6%, therefore relief from the Ordinance, which is allowed to be granted by the Planning Board, will be requested. The Developer has met

with city staff and has identified areas adjacent to the on-site Community Space that can be expanded and enhanced. Those spaces will be landscaped and maintained by the developer and the area of the space, and the proposed planting is identified in the plan set.

### **Conditional Use Permit Development Standards**

The development is consistent with the Portsmouth Master Plan. The project has been designed under Article 5B Gateway Neighborhood Mixed Use Districts, Section 10.5B34.80, Mixed-Use Building and Section 10.5B42.20, Mixed-Use Development. The development standards of that section requires relief from the Planning Board for a Conditional Use Permit where development deviates from the strict standards.

In the density section of the ordinance this development would be allowed up to 24 units per structure. This project proposes a Conditional Use Permit for a density bonus as allowed in section 10.5B72 for two buildings with 36 units in each building. This increased housing density is allowed with an incentive. In order to be eligible for the bonus incentive the development shall include workforce housing. The intent of this development is to provide workforce housing as defined by the Portsmouth Ordinance in the amount of 20% of the dwelling units, or 15 units.

We believe that under section 10.5B74.30 the Planning Board is authorized to grant modifications to the standards of the section. Modifications to the Community Space requirement will be requested from the Planning Board in this application. We believe that the modifications to the strict ordinance interpretations are consistent with the purpose and intent set forth in the Gateway Neighborhood Mixed-Use District section. The site offers 7.6% Community Space where 10% is required.

### **Development Site Conditional Use Permit**

Under Section 10.5B41.10 Development Site Standards are allowed by Conditional Use Permit approval from the Planning Board. A development site is a development including more than one principal building or building type. As the proposed development includes more than one principal building and the proposed Public Realm improvements are proposed on a separate lot, a CUP to allow the use of the Development Site Standards is being requested for this proposed project.

### **Conditional Use Permit Criteria**

Under Section 10.5B41.10 the following addresses how the Project warrants the granting of a Conditional Use Permit for a Development Site by satisfying the following four (4) criteria for approval in Section 10.5B43.10 of the Zoning Ordinance:

1) The development project is consistent with the Portsmouth Master Plan. **The Project is consistent with several goals identified in the Master Plan.**

Goal 1.2 is to encourage walkable mixed-use development along existing commercial corridors. The project will promote walking and bicycling by expanding the sidewalk

network and connecting, through the Public Realm off-site improvement, the Lafayette Road sidewalk network to the Portsmouth High School property.

The plan also creates public community space consisting of a Pocket Park and an Outdoor Café. The plans identify public bicycle storage spaces in close proximity to a Coast Bus Stop.

Goal 2.1 is to ensure that new development complements and enhances its surroundings. The proposed residential building additions will add residential use to the adjacent commercial development. This creates the Mixed-Use environment that the Master Plan identifies as essential to the maintenance of a vibrant neighborhood. Residential uses expand on the commercial retail and restaurant uses located in the Lafayette Plaza and surrounding parcels. The Gateway Corridor was identified as an area where residential expansion is encouraged.

(2) The development project has been designed to allow uses that are appropriate for its context and consistent with the City's planning goals and objectives for the area. **The project provides much needed housing.**

The development will be complementary to the abutting uses. The proposed use is allowed within the zone. Creating a mixed-use environment will serve to ensure the maintenance of a vibrant neighborhood. The introduction of Workforce Housing provides much needed relief to the need for affordable housing.

(3) The project includes measures to mitigate or eliminate anticipated impacts on traffic safety and circulation, demand on municipal services, stormwater runoff, natural resources, and adjacent neighborhood character. **The project does not create excess demand for city services nor change the essential character of the neighborhood.**

The Project will generate peak traffic during different times than the surrounding commercial uses on Lafayette Road. The existing large traffic volumes will mask any impacts. The drainage design will increase treatment to stormwater runoff with the use of a more advanced stormwater filtration treatment practice. The addition of residential use will be complementary to the abutting commercial uses. City infrastructure is in place to accommodate the development.

(4) The project is consistent with the purpose and intent set forth in Section 10.5B11. **The project supports the Master Plan goals in a significant way by providing affordable housing and creating a mixed-use development.**

Section 10.5B11.10 states that the purpose of Article 5B is to implement and support the goals of the City's Master Plan and Housing Policy to encourage walkable mixed-use development and continued economic vitality in the City's primary gateway areas, ensure that new development complements and enhances its surroundings, provide housing stock that is suited for changing demographics, and accommodate the housing needs of the City's current and future workforce. Section 10.5B11.20 sets forth the intent of the standards. The project meets the standards and will create a mixed-use development that will help to create a vibrant neighborhood. The

introduction of Workforce Housing provides much needed relief to the need for affordable housing in an area outside of the downtown core, with easy access to abutting retail and public transportation. The project will be the other bookend from the recently approved residential development at the other end of this commercial strip.

### **Project Site Details**

The complete development plan is shown on the attached Proposed Site Plans and the Supplemental material submitted herewith.

### **Requested Approval**

We look forward to TAC review of this submission and the Committees feedback on the proposed design. We hereby request that the project be approved and allowed to move forward to the Planning Board.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Chagnon', with a long horizontal flourish extending to the right.

John Chagnon, PE; Ambit Engineering – Haley Ward

P:\NH\5010156-McNabb\_Properties\1397.03-Lafayette Rd., Portsmouth-JRC\2023 Site Plan 1397.03\Applications\Portsmouth Site Plan\581 Lafayette TAC Submission 2-22-24.doc



LCHIP	ROA646155	25.00
RECORDING		22.00
SURCHARGE		2.00

**WARRANTY DEED**

**JOHN GALT, LLC**, a New Hampshire limited liability company with a mailing address of 3 Pleasant Street, Suite 400, Portsmouth, New Hampshire 03801 ("Grantor") for consideration paid grants to **ATLAS COMMONS, LLC**, a New Hampshire limited liability company with a mailing address of 3 Pleasant Street, Suite 400, Portsmouth, New Hampshire 03801 ("Grantee") **WITH WARRANTY COVENANTS**

**THE FOLLOWING DESCRIBED PREMISES:**

1. A certain tract or parcel of land, together with any buildings or improvements thereon, situate in Portsmouth, County of Rockingham and State of New Hampshire, bounded and described as follows:

Beginning at a point in the Easterly sideline of Lafayette Road at the Northwestern corner of the parcel herein described and at land of the City of Portsmouth; thence running North 81°43 East by City of Portsmouth land, two hundred eighty-one and seven tenths (281.7) feet to a corner at land of Ledgewood Manor Associates; thence turning and running South 5°56' West two hundred forty-six and thirty-one hundredths (246.31) feet, South 15°05'30" West fourteen and twenty-one hundredths (14.21) feet, South 07°12' West seventy-two and no hundredths (72.00) feet, South 48°45' East thirty-three and thirty-two hundredths (33.32) feet and South 39°04' East seventy-five and seven hundredths (75.07) feet, all by land of Ledgewood Manor Associates to a corner of land now or formerly of William N. Genimatas; thence turning and running North 84°04' West three hundred thirty and forty hundredths (330.40) feet by land of said Genimatas to Lafayette Road; thence turning and running North 05°56' East two hundred thirty-nine and thirty-nine hundredths (239.39) feet and North 05°31' West ninety-six and two tenths (96.2) feet by said Lafayette Road to the point of beginning. Containing 2.25 acres, more or less.

2. Together with the perpetual right to use in common with DLR, Inc., and William N. Genimatas, their heirs, devisees, successors and assigns, the Lafayette Road entrance-exit way as developed by DLR, Inc., (formerly MDL, Inc.) near the southwest corner of the land retained by Genimatas, together with the perpetual right hereby granted to grantees,



their heirs, devisees and assigns, to use in common with said DLR, Inc., and Genimatas, their heirs, devisees, successors and assigns, the other Lafayette Road entrance-exit ways on the DLR, Inc. and the Bowl-O-Rama lots adjoining the premises hereby conveyed.

3. Subject to, and with the benefit of mutual parking rights in common with said DLR, Inc., and said Genimatas respecting this lot and the adjoining Bowl-O-Rama and DLR, Inc., lots, namely and respectively, that said DLR, Inc., Genimatas and Robbins shall have free parking as may be necessarily available on any of these three parcels of land, and such parking rights for each of them in each other's adjacent land shall be mutually interchangeable, for said Genimatas, DLR, Inc., and said Robbins, their respective heirs, devisees, successors and assigns, such mutual parking rights and benefits to extend to any other persons or corporations and any other lands and premises, which said Genimatas, said Robbins, MGR Realty and/or MGR Realty, Inc., may have heretofore conveyed and reserved such rights, benefits or privileges. The foregoing parking rights shall not limit or restricts the rights of the owners of the said lots to construct buildings or additions to same, upon the said lots, provided no unreasonable imposition of owner's parking is caused the abutters by such buildings or additions thereto.
4. Also being conveyed with the benefit of, a certain right of way in common with others, including Petzold, et al, and Ledgewood Manor Associates on the Southerly part of the DLR, Inc., Lot #3, second lot south of this lot, said right of way being also subject to a restriction against the erection of a barrier, fence or other obstruction on either side of said right of way as it runs to Lafayette Road, all as per agreement acknowledged on July 23, 1973, recorded in Rockingham Registry of Deeds, Book 2209, Page 1400.
5. The foregoing premises are further conveyed subject to, and with the benefit of, a perpetual easement for a roadway thirty (30) feet in width extending from Lafayette Road on the South, adjacent to land of Petzold, running thence along the southerly and easterly boundary of the DLR (former Tower Restaurant) Lot of 1.92 acres, the easterly boundary of the Genimatas (Bowl-O-Rama) Lot of 2.82 acres, and the easterly boundary of the Robbins (Jerry Lewis Cinema) Lot of 2.25 acres, as shown on plan of "Subdivision of Land, Portsmouth, N.H., for Genimatas and Robbins" dated November 1978, Revised June 7, 1979 which roadway easement is reserved for use in common of, and the benefit in common of, William N. Genimatas, Henry J. Robbins, Joan M. Robbins, and DLR, Inc., and their respective heirs, devisees, successors and assigns. Owners of Lots #1, 2, and 3 in said Subdivision agree that they will equally contribute to development and maintenance of such thirty (30) foot right-of-right as a passable gravel way, excluding winter maintenance such as snow plowing and clearing way of snow, ice, slush or water.
6. The premises hereby conveyed (the "Premises") shall be SUBJECT TO the restriction (this "Use Restriction") that the business of a movie theater shall not be conducted or maintained upon the Premises or any portion thereof for a period of twenty (20) years from October 10, 2007, the date of the recording of the deed from Canavan Properties, LLC, to MANI Properties, LLC recorded in the Rockingham County Registry of Deeds at Book 4851, Page 526 (the "Restriction Term"). By the acceptance of this Deed, the within grantee agrees to be bound by this Use Restriction. This Use Restriction shall run with the land and be binding upon the within grantee, the within grantee's successor and

assigns, and the Premises and every part thereof for the duration of the Restriction Term; and in each and every Deed to the Premises or any portion thereof given during the Restriction Term, the then grantor shall undertake to insert a clause referring to this Use Restriction. This Use Restriction is for the benefit of Hoyts Cinemas Corporation, a Delaware Corporation, and its subsidiaries, and their respective successors and assigns (collectively, "Hoyts"), and Hoyts, as a former tenant of the Premises and for consideration paid to the within grantor, shall have the right to enforce this Use Restriction.

7. A portion of the above premises, more particularly bounded and described as set forth below, is subject to a perpetual easement for the installation and maintenance of utility lines:

A certain tract or parcel of land situate on the Easterly side of Lafayette Road, Portsmouth, Rockingham County, New Hampshire, described as follows:

Beginning at a point in the Easterly sideline of Lafayette Road at the Northwest corner of the parcel herein described and the Southwest corner of land of the City of Portsmouth; thence running North 81°43' East two hundred eighty-one and seven tenths (281.7) feet to an iron pipe at land now or formerly of Ledgewood Manor Associates; thence turning and running South 05°56' West by said Ledgewood Manor Associates land ten and thirty-two hundredths (10.32) feet to a corner at other land now or formerly of MGR Realty; thence turning and running South 81°43' West sixty-seven and fifty-six hundredths (67.56) feet; South 59°00' West ten and eighty-eight hundredths (10.88) feet and South 66°12' West one hundred seventy-eight and ten hundredths (178.10) feet to a point; thence continuing on the arc of a curve to the left having a radius of 50 feet an arc distance of fifty-two and fifty-nine hundredths (52.59) feet to a point in the easterly sideline of Lafayette Road, said previous four courses being along land now or formerly of MGR Realty; thence turning and running North 05°56' East one and sixty-nine hundredths (1.69) feet and North 05°31' West ninety-six and two tenths (96.2) feet by the Easterly sideline of Lafayette Road to the point of beginning.

The said easement rights are preserved and more fully described in a certain Partial Termination of Easement granted by RPL Properties, LLC to DiLorenzo Lafayette Ledgewood Real Estate, LLC, dated November 3, 2015 and recorded in the Rockingham County Registry of Deeds as of the date hereof, and as set forth therein consist of the rights of RPL Properties, LLC, its successors and assigns ("RPL") to install, lay, maintain, replace and repair and use utility lines of all types including, without limitation, water mains, gas mains, electric wires (above and below grade) and telephone lines (above and below grade), storm and sanitary sewer drains and catch basins, together with all facilities related to the use, operations and maintenance of such utility lines, and the right to pass and re-pass over said premises for the foregoing purposes. Any such work performed by RPL shall be undertaken so as to minimize disruption, disturbance or damage to the premises herein conveyed, and once commenced, such work shall be diligently

pursued to completion. Any damage or disturbance to the premises herein conveyed shall be repaired or restored in a prompt and workmanlike manner as nearly as practicable to the condition that existed immediately prior to such damage or destruction.

Meaning and intending to convey Lot #1, as shown on plan entitled "Subdivision of Land, Portsmouth, N.H., for Genimatas and Robbins" dated November 1978, Revised June 7, 1979, being Durgin Plan #5558, File #689, drawn by John W. Durgin Civil Engineers, which Plan is recorded in the Rockingham County Registry of Deeds as Plan D-8806. See also Warranty Deed of DiLorenzo Lafayette Ledgewood Real Estate, LLC to Grantor dated November 9, 2015 and recorded in the Rockingham County Registry of Deeds at Book 5669, Page 667.

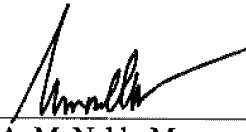
Meaning and intending to describe and convey the same premises conveyed to the Grantor by deed of OMJ Realty dated October 20, 2022 and recorded in the Rockingham County Registry of Deeds at Book 6448, Page 1309 on October 25, 2022.

**Transfer Tax:** This transfer is exempt from transfer tax pursuant to RSA 78-B:2, XXII.

**Homestead:** This is not homestead property.

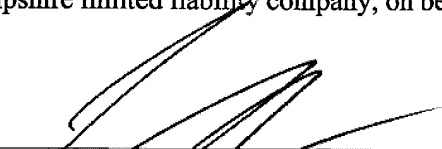
March 30, 2023

John Galt, LLC

By:   
Mark A. McNabb, Manager

STATE OF NEW HAMPSHIRE  
COUNTY OF ROCKINGHAM

The foregoing instrument was acknowledged before me this 30 day of March, 2023 by Mark A. McNabb, Manager of John Galt, LLC a New Hampshire limited liability company, on behalf of the company.

  
Notary Public/Justice of the Peace  
My Commission expires:









ABUTTERS ON WEST SIDE OF LAFAYETTE ROAD

N/F J.E. SHOLDAR, T.F. GERGEN JR., N.J. CZ/KE, R.E. GERGEN & J.M. GERGEN  
155 GREENLEAF AVENUE  
PORTSMOUTH, N.H. 03801  
5495/1685

N/F CROSS ROADS HOUSE, INC.  
600 LAFAYETTE ROAD  
PORTSMOUTH, N.H. 03801  
2773/2910

N/F OPERATION BLESSING, INC.  
P.O. BOX 4069  
PORTSMOUTH, N.H. 03802  
3767/1721

**AMBIT ENGINEERING, INC.**  
Civil Engineers & Land Surveyors  
200 Griffin Road, Unit 3  
Portsmouth, N.H. 03801-7114  
Tel (603) 430-9202  
Fax (603) 436-2315

- NOTES:**
- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
  - 2) OWNERS OF RECORD:  
DMJ REALTY, LLC  
63 MAIN STREET  
PO BOX 1195  
SALEM, N.H. 03079  
5669/0667
  - 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270E, EFFECTIVE MAY 17, 2005
  - 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
  - 5) PARCEL IS LOCATED IN THE GATEWAY (GW) DISTRICT.
  - 6) DIMENSIONAL REQUIREMENTS:  
MIN. LOT AREA: 43,560 S.F.  
FRONTAGE: 200 FT.  
DEPTH: 100 FT.  
SETBACKS: FRONT: 30 FT.  
SIDE: 30 FT.  
REAR: 50 FT.  
MAXIMUM STRUCTURE HEIGHT: 40 FT.  
MAXIMUM ROOF APPURTENANCE HEIGHT: 10 FT.  
MAXIMUM BUILDING COVERAGE: 30%  
MINIMUM OPEN SPACE: 20%
  - 7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 229 LOT 8B.
  - 8) EASEMENTS & RESTRICTIONS:  
A) ROAD/UTILITY EASEMENT AREA: SEE C-3316 AND RCRD 2110/428 AND 2184/184. THIS EASEMENT WAS PARTIALLY TERMINATED ON 11/9/15; SEE RCRD 5689/0645.  
B) 30' RIGHT OF WAY: SEE D-8806 AND 5446/2589.  
C) MUTUAL PARKING AND ACCESS RIGHTS FOR LOTS 1-3 ON PLAN D-8806 ARE OF RECORD, RCRD 2343/128 AND 5446/2588.

*— ROW*  
*— PUMT*

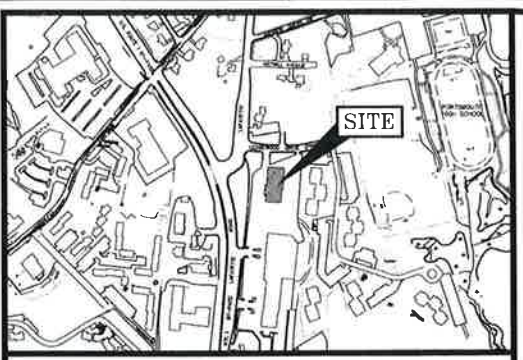
**SITE REDEVELOPMENT  
TUSCAN KITCHEN  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.**

3	REVISED NOTES 2 AND 8	12/21/15
2	ADDED HANDICAP PARKING	8/26/15
1	ADDED EXISTING FORCE MAIN	7/30/15
0	ISSUED FOR COMMENT	7/20/15
NO.	DESCRIPTION	DATE



SCALE: 1" = 30' JULY 2015

EXISTING CONDITIONS PLAN **C1**



LOCATION MAP SCALE: 1" = 400'±

**LEGEND:**

EXISTING	PROPOSED	
FM	FM	FORCE MAIN
S	S	SEWER LINE
G	G	GAS LINE
D	D	STORM DRAIN
SPP	SPP	SMOOTH PLASTIC PIPE
W	W	WATER LINE
UE	UE	UNDERGROUND ELECTRIC
UU	UU	UNDERGROUND UTILITIES
100	100	OVERHEAD ELECTRIC WIRES
97x3	98x0	CONTOUR
		SPOT ELEVATION
		EDGE OF PAVEMENT (EP)
		WOODS / TREE LINE
		UTILITY POLE
		WATER SHUT OFF/CURB STOP
		GAS SHUT OFF
		GATE VALVE
		HYDRANT
		METER (GAS, WATER, ELECTRIC)
		CATCH BASIN
		TELEPHONE MANHOLE
		SEWER MANHOLE
		DRAIN MANHOLE
		WELL
		EDGE OF WETLAND FLAGGING
		SWAMP/ MARSH
		ASBESTOS CEMENT PIPE
		CAST IRON PIPE
		CORRUGATED METAL PIPE
		CONCRETE MASONRY UNIT
		DUCTILE IRON PIPE
		POLYVINYL CHLORIDE PIPE
		REINFORCED CONCRETE PIPE
		VITRIFIED CLAY PIPE
		ELEVATION
		EDGE OF PAVEMENT
		FINISHED FLOOR
		INVERT
		TEMPORARY BENCH MARK
		TYPICAL
		VERTICAL/SLOPED GRANITE CURB
		CAPE COD BERM
		CENTERLINE
		IRON ROD/CAP FOUND
		NHDOT BOUND FOUND
		POLE/ LIGHT

**LENGTH TABLE**

LINE	BEARING	DISTANCE
L1	S15°17'27"W	14.20'
L2	S48°43'16"E	33.26'

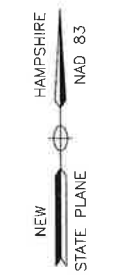
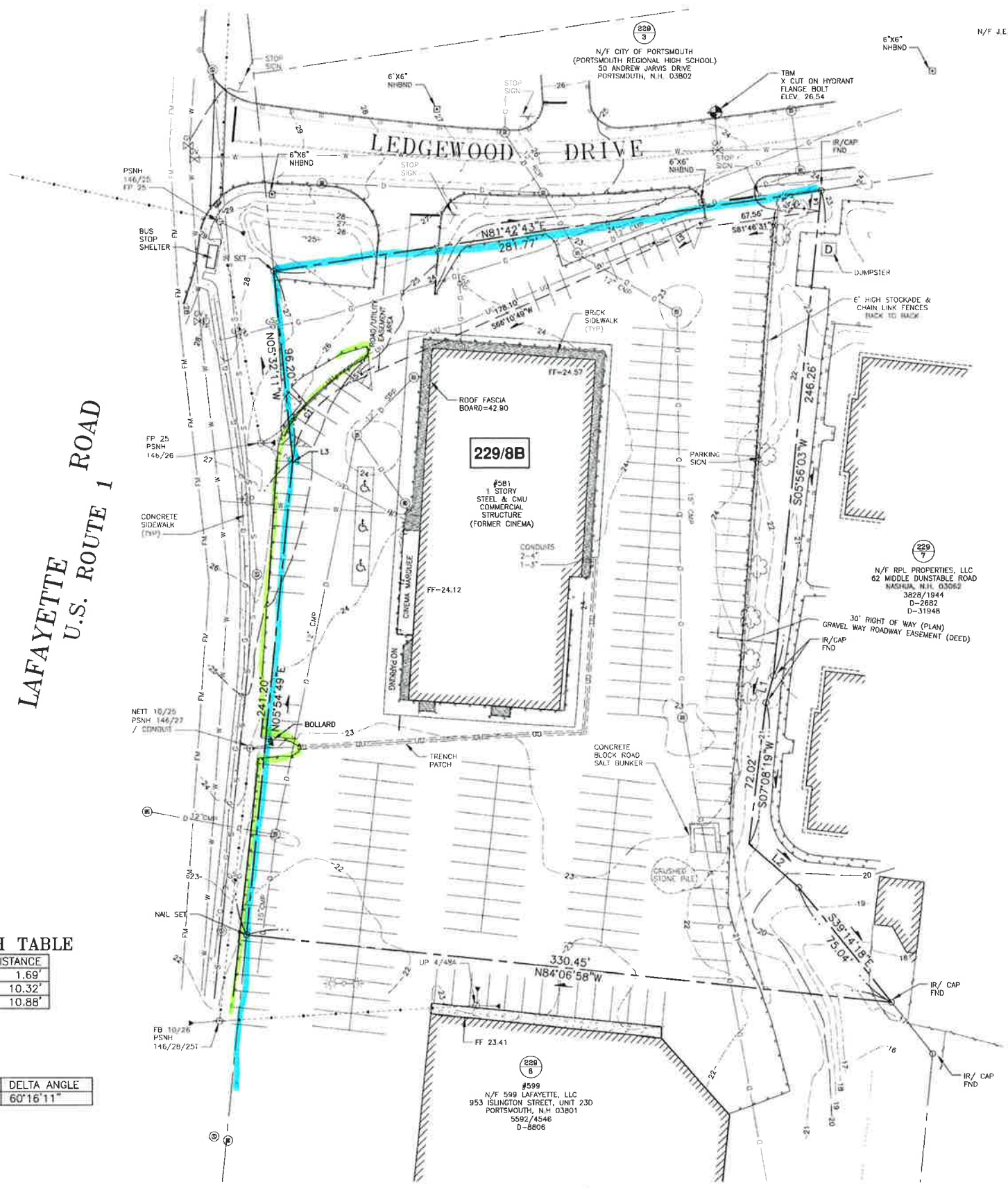
**EASEMENT LENGTH TABLE**

LINE	BEARING	DISTANCE
L3	N05°54'49"E	1.69'
L4	S05°56'03"W	10.32'
L5	S58°58'49"W	10.88'

**EASEMENT CURVE TABLE**

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	50.00'	52.60'	50.20'	S36°02'43"W	60°16'11"

LAFAYETTE  
U.S. ROUTE 1



APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**MEMORANDUM OF AGREEMENT**

THIS AGREEMENT (“Agreement”) is entered into this \_\_\_\_ day of, 2024, between the **Atlas Commons, LLC**, a New Hampshire limited liability company, with an address of 3 Pleasant Street, Suite 400, Portsmouth, NH 03801 (the “Developer”) and the **City of Portsmouth [School Board?]**, a New Hampshire municipality, with an address of 1 Junkins Avenue, Portsmouth, NH 03801 (the “City”). The Developer and the City may be collectively referred to herein as the “Parties.”

WITNESSETH:

**WHEREAS**, the Developer is the owner of certain real property located at 581 Lafayette Road in the City of Portsmouth, located at Tax Map/Lot 229/8B (the “Atlas Property”); and

**WHEREAS**, the City is the owner of certain adjacent real property located at 50 Andrew Jarvis Drive in the City of Portsmouth, located at Tax Map/Lot 229/3, which property currently serves at Portsmouth High School and which property contains a certain right of way abutting the Atlas Property known as Ledgewood Drive and associated cul-de-sac (the “School Property”); and

**WHEREAS**, the Developer has obtained certain approvals from the City’s land use boards to construct a 5-story mixed-use building with associated on-site and off-site improvements (see generally City permit number LU-23-189) (the “Developer’s Project”); and

**WHEREAS**, the Developer is seeking a density incentive bonus pursuant to Section 10.5B73 of the Portsmouth Zoning Ordinance (the “Ordinance”), and, as such, the Parties have entered into this Agreement to satisfy the requirements of Section 10.5B73.20 of the Ordinance and the Parties recognize the public benefit to be derived from creating greater pedestrian connectivity from Ledgewood Drive through and to the School Property; and

**WHEREAS**, the Parties desire for the Developer, at its sole cost, to design, engineer and construct certain public realm improvements within the School Property (collectively, and as further defined herein, the “Public Realm Improvements”).

**NOW, THEREFORE**, the Parties agree as follows:

**Section I: The Developer’s Obligations.**

A. The Public Realm Improvements

The Developer shall, at its sole cost and obligation design, engineer and install the following and other minimal Public Realm Improvements shown on the plan set entitled, “Public Realm Plan,” dated January 4, 2024, as revised, prepared by Haley Ward and attached as Exhibit A within the School Property:

1. Install an 8 foot gravel path with lighting and benches that extends from the existing sidewalk on Ledgewood Drive over and across the School Property.



2. Install public benches, a bike rack, a picnic table, basketball court markings, and other minor infrastructure within the School Property.

3. All Public Realm Improvements made by the Developer on the School Property shall be compliant with the Americans with Disabilities Act (ADA),.

4. All changes to the Public Realm Improvements from what is depicted in Exhibit A shall be submitted to the City Manager in writing and reviewed and approved by the Director of Public Works.

**B. Construction Obligations**

The Developer shall complete at its sole cost and obligation the following tasks to secure the construction of the infrastructure described in Section I, A:

1. Prior to commencing any construction, the Developer shall submit construction plans to the City (the “Construction Plans”). The construction plans must be reviewed and approved by the Director of Public Works for consistency with City standards. The City may, at its sole discretion and cost, employ a third-party engineer to conduct a peer review of the construction plans.

2. The Developer shall secure the construction of the items above via a security instrument, such as a bond or letter of credit, in a form acceptable to the City Attorney. The value of the security instrument shall be estimated by the Developer and set by the Director of Public Works.

3. The Developer shall enter into a Construction Management Mitigation Agreement (CMMP) with the City sufficient to describe the Developer’s construction plan for the Public Realm Improvements and the Developer’s Project.

4. As a part of the CMMP, the Developer shall designate a Project Manager, who shall serve as the point of contact for all public inquiries regarding the Public Realm Improvements, the Developer’s Project, and the related impacts on vehicular travel. This point of contact shall be available to respond to public inquiries and respond to requests within 24 hours.

5. The Developer shall provide the City with proof of insurance at the City’s customary levels for the period of construction of the Public Realm Improvements. The proof of insurance shall list the City as an additional insured.

**Section II: The City’s Obligations**

1. The City shall employ a third-party engineer to oversee the construction of the Public Realm Improvements. The cost of the third-party engineer shall be paid by the City.

2. The City hereby waives all fees applicable to the construction of the Public Realm Improvements. This provision shall not apply to any permit fees required pursuant to the Developer's Project.

3. The City shall designate a Project Manager for the Public Realm Improvements. All communications regarding the Public Realm Improvements from the Developer shall be addressed to the Project Manager, with a copy to the City Attorney.

4. Following approval of the Public Realm Improvements by the City's third-party engineer and the Director of Public Works, the City shall accept ownership in writing of all Public Realm Improvements. If review by the City's third-party engineer or the City's Public Works Department reveal the Public Realm Improvements are not constructed to City standards or the Construction Plans, the Developer shall cause the insufficiencies to be remedied to the City's satisfaction.

### **Section III: Miscellaneous**

1. Compliance with other laws: The Developer acknowledges that their obligations under this contract are subject to full compliance with all applicable state, federal, and local laws, and failure to adhere to such laws shall constitute a material breach of this contract.

2. Costs: Following acceptance of the Public Realm Improvements by the City, the City shall assume maintenance of the Public Realm Improvements. The City's maintenance obligations shall not exceed the ordinary maintenance responsibilities for any property in the City.

3. Entire Agreement. This Agreement and the attachments hereto, each of which is hereby incorporated herein, sets forth all the agreements, promises, covenants conditions and undertakings between the parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and understandings, inducements, or conditions, express or implied, oral or written.

4. Amendment. No waiver or modification of any of the terms of this Agreement shall be valid unless in writing and signed by each of the parties hereto. Failure by any party to enforce any rights under this Agreement shall not be construed as a waiver of such rights, and a waiver by any party of a default hereunder in one or more instances shall not be construed as constituting a continuing waiver or as a waiver of other instances of default.

5. Waiver of Breach: The failure of either party to enforce any provision of this contract shall not be construed as a waiver of subsequent breaches or as a relinquishment of the right to enforce such provisions. No waiver by either party of any breach of this contract shall be deemed to be a waiver of any other or subsequent breach.

6. Governing Law. The construction and effect of the terms of this Agreement shall be determined in accordance with the laws of the State of New Hampshire.

As authorized by vote of the Portsmouth City Council taken on \_\_\_\_\_, during its meeting that commenced \_\_\_\_\_.

**Atlas Commons, LLC**

By: \_\_\_\_\_  
Mark. A. McNabb  
Its Manager

STATE OF NEW HAMPSHIRE  
COUNTY OF ROCKINGHAM

On this \_\_\_\_ day of \_\_\_\_\_, 2024, before: me, the undersigned notary public, personally appeared Mark A. McNabb, Manager of Atlas Commons, LLC, proved to me through satisfactory evidence of identification, which was a valid driver's license, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it in his capacity as stated therein and voluntarily for its stated purpose.

\_\_\_\_\_  
Notary Public  
My Commission expires:

**City of Portsmouth, New Hampshire**

By: \_\_\_\_\_  
Karen S. Conard, City Manager

STATE OF NEW HAMPSHIRE  
COUNTY OF ROCKINGHAM

On this \_\_\_\_ day of \_\_\_\_\_, 2024, before: me, the undersigned notary public, personally appeared Karen S. Conard, City Manager of the City of Portsmouth New Hampshire, proved to me through satisfactory evidence of identification, which was a valid driver's license, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it in her capacity as stated therein and voluntarily for its stated purpose.

\_\_\_\_\_  
Notary Public:  
My Commission Expires:

581 Lafayette Road						
Unit/Parking Analysis						
February 22, 2024						
Level	Room No.	# bedrooms	Area (sf)	spaces/unit	Workforce	Accessible
LEVEL 5	B504	STUDIO	369	0.50		
LEVEL 5	A505	STUDIO	424	0.50		
LEVEL 5	A507	STUDIO	424	0.50		
LEVEL 5	A503	STUDIO	425	0.50		
LEVEL 5	A504	STUDIO	425	0.50		
LEVEL 5	A509	STUDIO	425	0.50		
LEVEL 4	B406	STUDIO	425	0.50		
LEVEL 3	B306	STUDIO	426	0.50		
LEVEL 5	B503	STUDIO	434	0.50		
LEVEL 5	A511	STUDIO	457	0.50		
LEVEL 4	B411	STUDIO- ACCESSIBLE	494	0.50	Fully Accessible-1	
LEVEL 5	A508	STUDIO	499	0.50		
LEVEL 3	B303	1BR	499	0.50		
LEVEL 3	B311	1BR	499	0.50		
LEVEL 4	B403	1BR	499	0.50		
LEVEL 3	B304	1BR	524	1.00		
LEVEL 4	B404	1BR	531	1.00		
LEVEL 5	B505	1BR	532	1.00		
LEVEL 5	B506	1BR	532	1.00		
LEVEL 5	B502	1BR	541	1.00		
LEVEL 2	B207	1BR	542	1.00		
LEVEL 3	B309	1BR	572	1.00		
LEVEL 4	B409	1BR	572	1.00		
LEVEL 4	A407	STUDIO- ACCESSIBLE	580	1.00	Fully Accessible-2	
LEVEL 4	B410	1BR	599	1.00		
LEVEL 4	A408	1BR	620	1.00		
LEVEL 3	B310	1BR	621	1.00		
LEVEL 3	B307	1BR- ACCESSIBLE	644	1.00	Fully Accessible-3	
LEVEL 4	B408	1BR	645	1.00		
LEVEL 2	B206	1BR	651	1.00		
LEVEL 3	B308	1BR	652	1.00		
LEVEL 4	B407	1BR	659	1.00		
LEVEL 2	A205	1BR	660	1.00		
LEVEL 3	A305	1BR	660	1.00		
LEVEL 4	B401	1BR	667	1.00		
LEVEL 5	A502	1BR	672	1.00		
LEVEL 3	A309	1BR	682	1.00		
LEVEL 3	A307	1BR	694	1.00		
LEVEL 2	A207	1BR	698	1.00		
LEVEL 3	A308	1BR	699	1.00		
LEVEL 4	A405	1BR	702	1.00		
LEVEL 3	B301	1BR	703	1.00		
LEVEL 4	B402	2BR	708	1.00		
LEVEL 2	A209	1BR	709	1.00		
LEVEL 2	A208	1BR	723	1.00		
LEVEL 5	B507	2BR- ACCESSIBLE	733	1.00	Fully Accessible-4	
LEVEL 4	A406	1BR	749	1.00		
LEVEL 3	B305	2BR	749	1.00		
LEVEL 4	B405	2BR	749	1.00		
LEVEL 3	B302	2BR	780	1.30		
LEVEL 2	B202	2BR	782	1.30		
LEVEL 2	A206	1BR	786	1.30		
LEVEL 3	A306	1BR	823	1.30		
LEVEL 2	B201	2BR-WORKFORCE	872	1.30		
LEVEL 2	A203	1BR- ACCESSIBLE- WF	886	1.30	Workforce 1	Fully Accessible-5
LEVEL 5	A506	1BR- ACCESSIBLE- WF	910	1.30	Workforce 2	Fully Accessible-6
LEVEL 3	A303	2BR- WF	988	1.30	Workforce 3	
LEVEL 5	B501	2BR-WORKFORCE	1007	1.30	Workforce 4	
LEVEL 2	B203	3BR-WORKFORCE	1146	1.30	Workforce 5	
LEVEL 4	A402	3BR-WORKFORCE	1365	1.30	Workforce 6	
LEVEL 2	B204	3BR- WF	1456	1.30	Workforce 7	
LEVEL 2	B205	3BR-WORKFORCE- ACCESSIBL	1497	1.30	Workforce 8	Fully Accessible-7
LEVEL 3	A302	3BR-WORKFORCE	1504	1.30	Workforce 9	
LEVEL 2	A202	3BR-WORKFORCE	1535	1.30	Workforce 10	
LEVEL 5	A510	3BR- WF	1535	1.30	Workforce 11	
LEVEL 4	A403	3BR- WF	1726	1.30	Workforce 12	
LEVEL 4	A401	3BR-WORKFORCE	2034	1.30	Workforce 13	
LEVEL 3	A301	3BR-WORKFORCE	2056	1.30	Workforce 14	
LEVEL 2	A204	3BR	2144	1.30	Workforce 15	
LEVEL 4	A404	3BR	2153	1.30		
LEVEL 3	A304	3BR-ACCESSIBLE	2172	1.30		Fully Accessible-8
LEVEL 2	A201	3BR	2200	1.30		
<b>Total Units</b>			<b>Parking Req.</b>	<b>workforce housing</b>		
<b>Total Units:</b>	<b>72</b>		71.40	20% of units	average unit size	
Visitor Parking - 1 space per every 5 dwellings			14.40			848
Residential automobile parking required (base, unadjusted)			85.80	86.00	ROUNDED UP	

Car Parking Spaces Required per Unit Size			
0-500	0.5		
500-750	1.0		
751-1900	1.3		

Bicycle Parking Required		
use	spaces required per use	total required
multifamily	1 bicycle for every 5 dwelling units	15
restaurant/rec	1 bicycle for each 10 car parking spaces	12
<b>TOTAL Required</b>		<b>27</b>
Total Provided (in building, basement + 1st floor)		80
Total Provided (outside)		8
<b>Total Provided, inside &amp; outside</b>		<b>88</b>
Excess Provided (beyond required)		61
Excess applied to New Additions (housing)	(18.0)	(3)
Excess applied to existing building	(36.0)	(6)
Net leftover excess bicycle parking	7	(9)
Scooter parking provided (none required)		7
Motorcycle parking provided (none required)		2

Apartment Types - Unit Mix & Locations					
level	number of bedrooms per apartment				
	5	1	2	3	Total
5	9	5	2	1	17
4	3	10	2	4	19
3	1	13	3	3	20
2	0	8	2	6	16
<b>total</b>	<b>13</b>	<b>36</b>	<b>9</b>	<b>14</b>	<b>72</b>
Total bedrooms	13	36	18	42	109

Apartment Types - Unit Distribution per Building				
Level	Building A	Building B	TOTAL	
5	10	7	17	
4	8	11	19	
3	9	11	20	
2	9	7	16	
<b>total units</b>	<b>36</b>	<b>36</b>	<b>72</b>	

				with gateway deduct -20%
<b>Apartments Parking Required</b>				
subtotal base parking spaces required				86.00
Gateway deduct -20%				(17.20)
Subtotal parking required				68.80
	# excess bike spaces	%	# car spaces deducted	
Bicycle parking deduction 1 space for 6 bikes, max 5%:				65.80
	(18.0)	3.50%	(3.0)	
max 5% allowed = 3.44 spaces				
<b>Apartment Parking Required (adjusted for Gateway-1 &amp; bikes)</b>				<b>66.00</b>

					subtotal w/20% gateway deduct
<b>Restaurant/Recreation Parking Required</b>					
	spaces/gfa	gfa or occ	spaces (rounded up)		
restaurant	1/100	13,982.00	140		112
mezzanine office	1/350	1,060.00	4		4
recreation (golf)	1per 4 occ.	20.00	5		4
subtotal					149
Gateway deduct -20%					-29.8
Subtotal restaurant/recreation parking required					120
	# excess bike spaces	%	# car spaces	round down	
Bicycle parking deduction - 1 space for 6 bikes, max 5%					106.0
	42.0	-5.00%	(6.0)	(6.00)	
max 5% allowed = 6.00 spaces					
<b>Restaurant/Recreation Parking Required (adjusted for Gateway-1 &amp; bikes)</b>					<b>114</b>

	<b>bicycle deduct 5%</b>	<b>total</b>
	(6.00)	106.0
	0.00	4.0
	<b>0.00</b>	<b>4.0</b>

9. Eating and Drinking Places		
9.10-9.50	All eating and drinking places	1 per 100 sf GFA
10. RECREATION USES		
4.10	Religious, sectarian or private non-profit recreational use	Parking demand analysis
4.20	Cinema or similar indoor amusement use with no live performance	0.4 per seat, or Parking demand analysis
4.30	Indoor recreation use, such as bowling alley or arcade	1 per 4 persons maximum occupancy
4.40	Health club, yoga studio, martial arts school, or similar use	1 per 250 sf GFA
4.50	Outdoor recreation use	Parking demand analysis
4.60	Amusement park, water park or theme park	NA - Prohibited Use

**TOTAL parking required all uses (adjusted for gateway & bikes) 180.0**

Shared Parking 10.1112.60 Land Use	Weekday				Weekend				Nighttime		Maximum TOTAL Required
	daytime (8am-5pm)	spaces required	evening (6-12pm)	spaces required	daytime (8am-5pm)	spaces required	evening (6-midnight)	spaces required	(midnight-6am)	spaces required	
Apartments	60%	39.6	100%	66.0	80%	52.8	100%	66.0	100%	66.0	
restaurant	70%	74.2	100%	106.0	80%	84.8	100%	106.0	10%	10.6	
Office	100%	4.0	20%	0.8	10%	0.4	5%	0.2	5%	0.2	
entertainment (golf)	40%	1.6	100%	4.0	80%	3.2	100%	4.0	10%	0.4	
<b>ADJUSTED TOTAL Required, all uses, shared</b>		<b>119.4</b>		<b>176.80</b>		<b>141.2</b>		<b>176.2</b>		<b>77.2</b>	<b>177</b>

<b>Total Parking Proposed</b>		
In-building, level 1 + basement		151
Open air, on site		30
Off-site parking per deeded easement		0
<b>Total parking proposed</b>		<b>181</b>
Excess (Defecit)		4
Existing total available-today		154
Proposed Net Increase (reduction) in parking		23

# MIXED USE DEVELOPMENT

## 581 LAFAYETTE ROAD PORTSMOUTH, NEW HAMPSHIRE SITE PERMIT PLANS

### OWNER:

ATLAS COMMONS, LLC  
3 PLEASANT STREET  
SUITE #400  
PORTSMOUTH, NH 03801

### LAND SURVEYOR & CIVIL ENGINEER:

AMBIT ENGINEERING, INC.  
A DIVISION OF HALEY WARD, INC  
200 GRIFFIN ROAD, UNIT 3  
PORTSMOUTH, N.H. 03801  
Tel. (603) 430-9282  
Fax (603) 436-2315

### ARCHITECT:

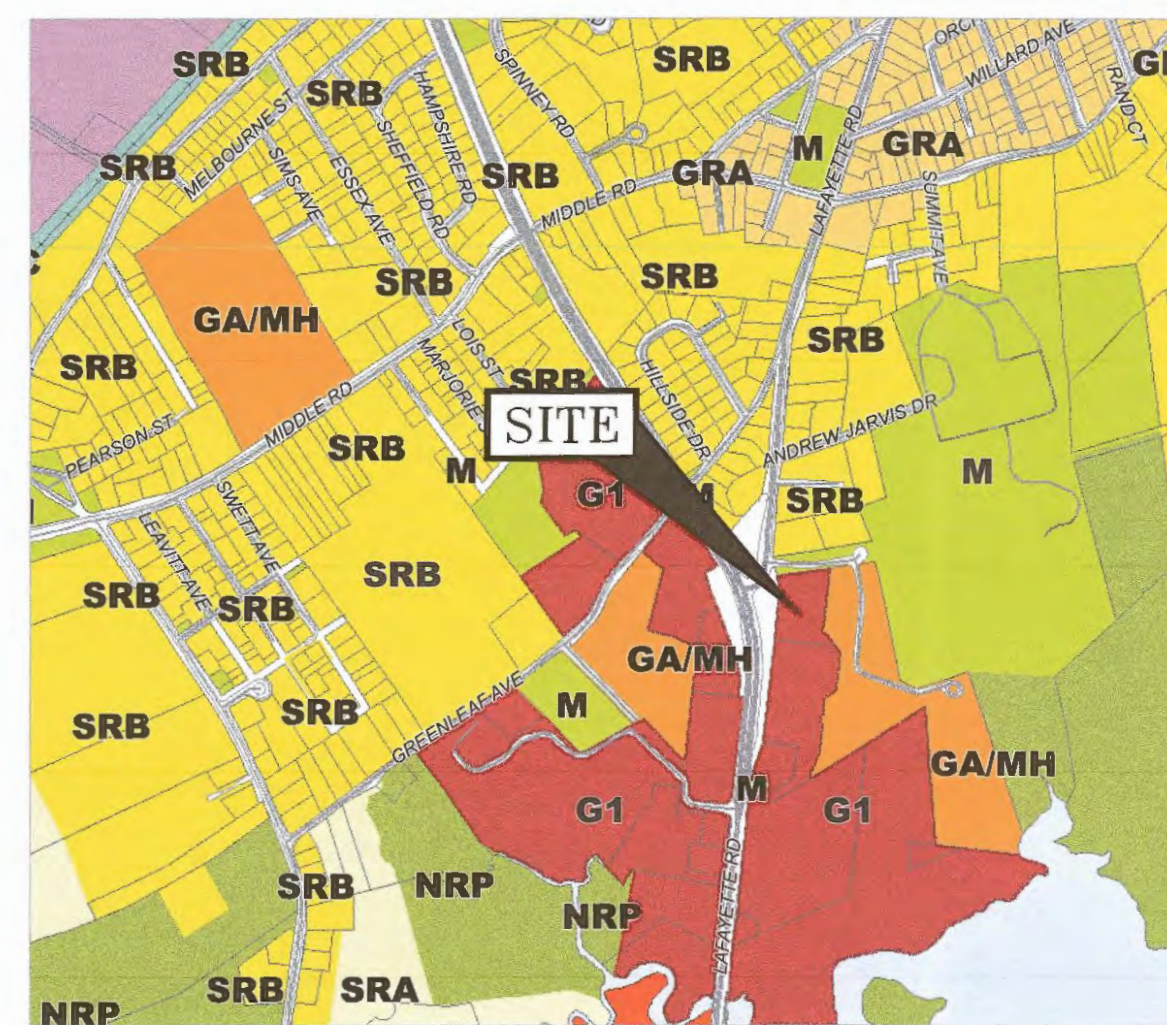
ARCOVE ARCHITECTS  
3 CONGRESS STREET, SUITE 1  
PORTSMOUTH, NH 03801  
TEL. (603) 988-0042

### LANDSCAPE ARCHITECT:

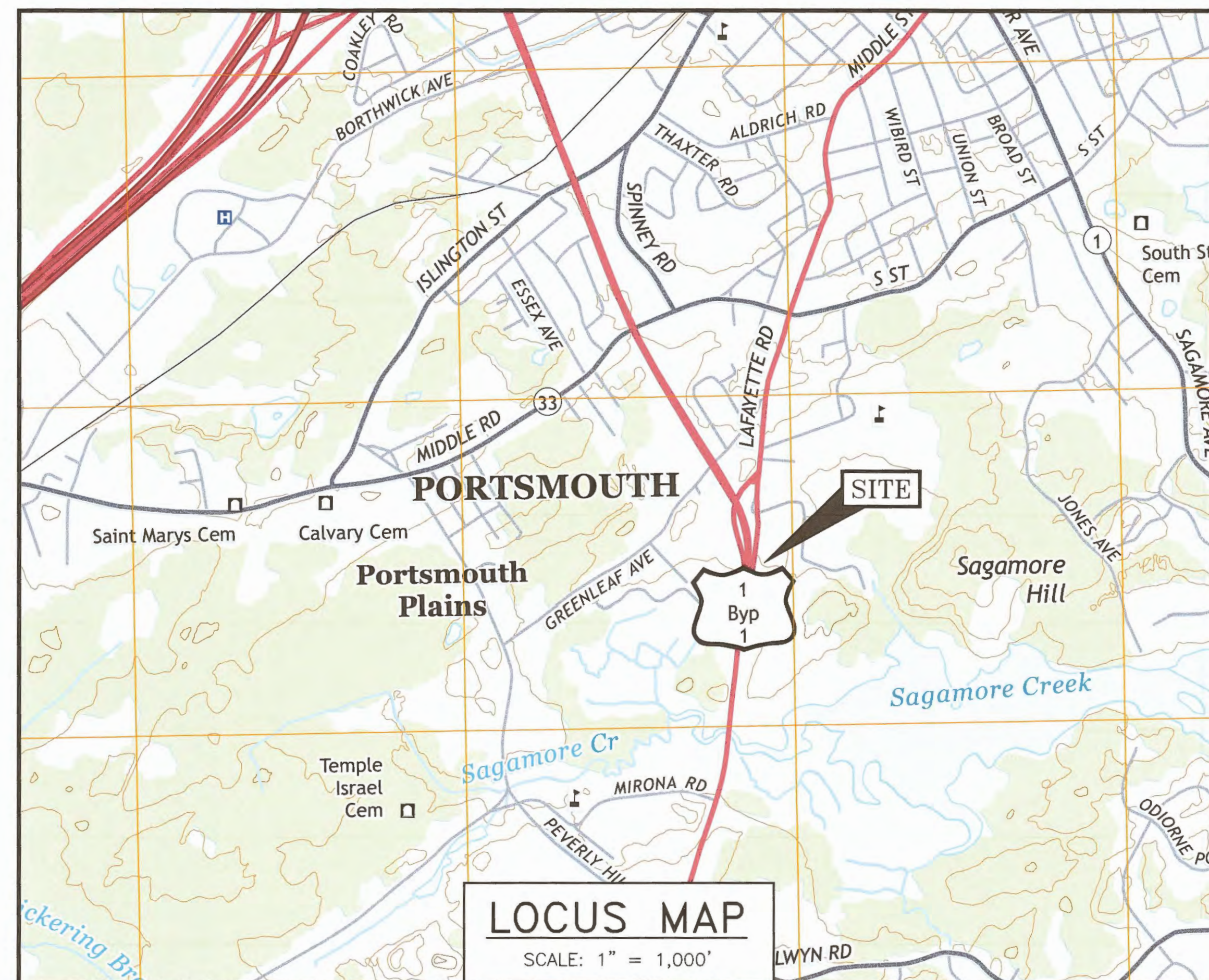
TERRA FIRMA LANDSCAPE  
ARCHITECTURE  
163A COURT STREET  
PORTSMOUTH, NH 03801  
TEL. (603) 430-8388

### PERMIT LIST:

NHDES SEWER DISCHARGE PERMIT: TO BE SUBMITTED  
PORTSMOUTH SITE PLAN APPROVAL: PENDING  
CITY COUNCIL APPROVAL: PENDING



Mixed Residential Districts	
MRO	Mixed Residential Office
MRB	Mixed Residential Business
G1	Gateway Corridor
G2	Gateway Center



### LEGEND:

EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	SETBACK
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	G	GAS LINE
D	D	STORM DRAIN
W	W	WATER LINE
WS	WS	WATER SERVICE
UGE	UGE	UNDERGROUND ELECTRIC
OHW	OHW	OVERHEAD ELECTRIC/WIRES
---	---	FOUNDATION DRAIN
---	---	EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
○	○	UTILITY POLE
☀	☀	WALL MOUNTED EXTERIOR LIGHTS
☀	☀	TRANSFORMER ON CONCRETE PAD
☀	☀	ELECTRIC HANDHOLD
☀	☀	SHUT OFFS (WATER/GAS)
☀	☀	GATE VALVE
☀	☀	HYDRANT
☀	☀	CATCH BASIN
☀	☀	SEWER MANHOLE
☀	☀	DRAIN MANHOLE
☀	☀	TELEPHONE MANHOLE
☀	☀	PARKING SPACE COUNT
☀	☀	PARKING METER
☀	☀	LANDSCAPED AREA
TBD	TBD	TO BE DETERMINED
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
AC	AC	ASBESTOS CEMENT PIPE
VC	VC	VITRIFIED CLAY PIPE
EP	EP	EDGE OF PAVEMENT
EL	EL	ELEVATION
FF	FF	FINISHED FLOOR
INV	INV	INVERT
S =	S =	SLOPE FT/FT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL



### INDEX OF SHEETS

DWG No.	Description
-	COMMUNITY SPACE EASEMENT PLAN
C1	EXISTING CONDITIONS PLAN
C2	DEMOLITION PLAN
C3	SITE PLAN
L1A, L1B, L2	LANDSCAPE PLANS - ON SITE & OFF SITE
L3	LIGHTING PLAN
C4	PARKING PLAN
C5	UTILITY PLAN
C6	GRADING, DRAINAGE, EROSION CONTROL PLAN
C7	OPEN SPACE PLAN
C8	ON-SITE COMMUNITY SPACE PLAN
C8.1	OFF-SITE LANDSCAPE MAINTENANCE AREA
C9	PUBLIC REALM PLAN
C10	PUBLIC REALM PLAN
C11	EXISTING AVERAGE GRADE PLANE
C12	PROPOSED AVERAGE GRADE PLANE
T1 & T2	TURNING PLANS
D1 - D6	EROSION CONTROL NOTES AND DETAILS
PB1.00-1.06	FLOOR PLANS
PB2.00-2.01	ELEVATIONS
PB3.01	RENDERINGS

### UTILITY CONTACTS

**ELECTRIC:**  
EVERSOURCE  
1700 LAFAYETTE ROAD  
PORTSMOUTH, N.H. 03801  
Tel. (603) 436-7708, Ext. 555.5678  
ATTN: MICHAEL BUSBY, P.E. (MANAGER)

**NATURAL GAS:**  
UNITIL  
325 WEST ROAD  
PORTSMOUTH, N.H. 03801  
Tel. (603) 294-5144  
ATTN: DAVE BEAULIEU

**CABLE:**  
COMCAST  
155 COMMERCE WAY  
PORTSMOUTH, N.H. 03801  
Tel. (603) 679-5695 (X1037)  
ATTN: MIKE COLLINS

**SEWER & WATER:**  
PORTSMOUTH DEPARTMENT OF PUBLIC WORKS  
680 PEVERLY HILL ROAD  
PORTSMOUTH, N.H. 03801  
Tel. (603) 427-1530  
ATTN: JIM TOW

**COMMUNICATIONS:**  
FAIRPOINT COMMUNICATIONS  
JOE CONSIDINE  
1575 GREENLAND ROAD  
GREENLAND, N.H. 03840  
Tel. (603) 427-5525

PORTSMOUTH APPROVAL CONDITIONS NOTE:  
ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE

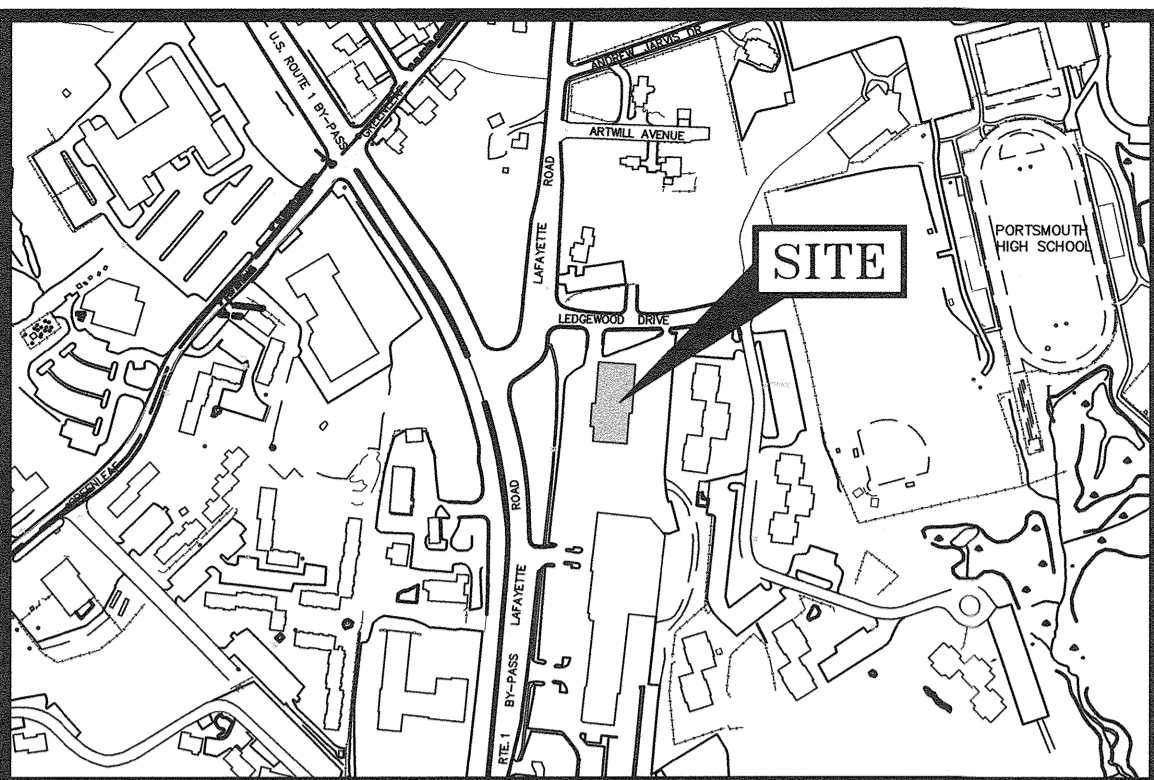
**SITE PLANS  
MIXED USE DEVELOPMENT  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.**

**AMBIT ENGINEERING, INC.**  
A DIVISION OF HALEY WARD, INC.

WWW.HALEYWARD.COM

200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.430.9282

PLAN SET SUBMITTAL DATE: 21 FEBRUARY 2024



LOCATION MAP SCALE: 1" = 400' ±

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S15°17'27"W	14.20'
L2	S48°43'16"E	33.26'

COMMUNITY SPACE

- 6,120 S.F. OF POCKET PARK
- 1,294 S.F. OF OUTDOOR DINING CAFE

PROPOSED COMMUNITY SPACE 7,414 S.F.  
LOT AREA 98,124 S.F.

COMMUNITY SPACE REQUIRED: 10%  
(PER SECTION 10.5B41.80.2)  
COMMUNITY SPACE PROVIDED: 7.6%

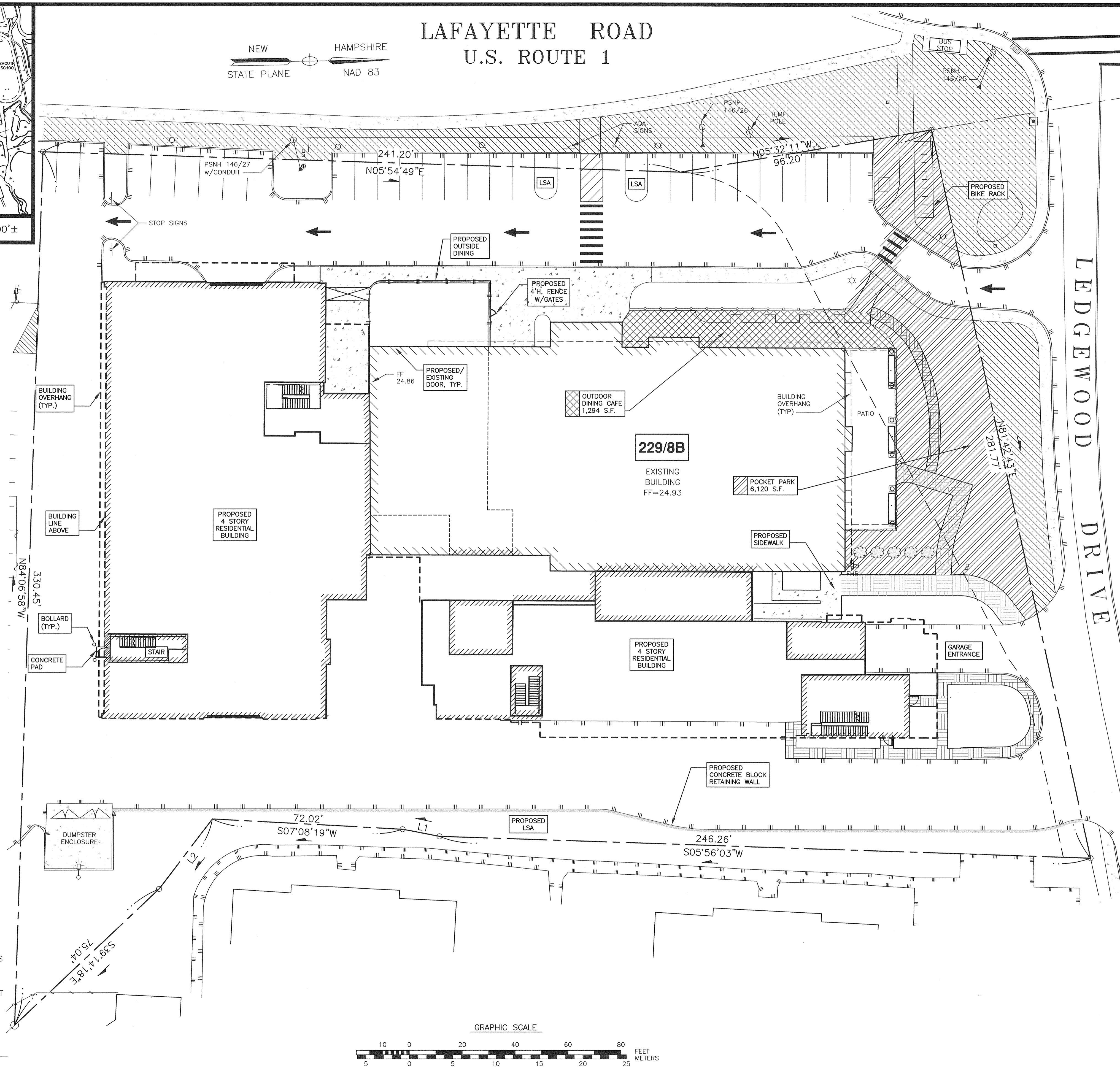
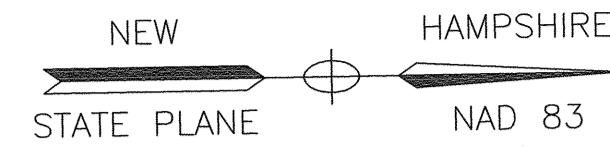
COMMUNITY SPACE USES  
(PER SECTION 10.5B102)

PROPOSED USES: OUTDOOR DINING CAFE  
POCKET PARK

MAINTENANCE AREA

9,351 S.F. OF AREA WHERE THE LANDSCAPING WILL BE MAINTAINED BY THE OWNER OF TAX MAP 229 LOT 8B.

LAFAYETTE ROAD  
U.S. ROUTE 1



200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.436.2915

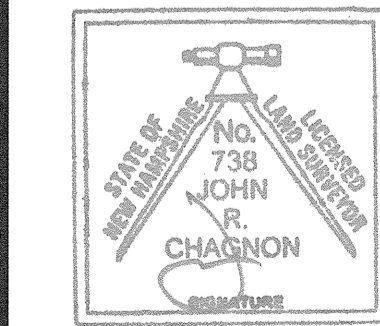
WWW.HALEYWARD.COM

NOTES:

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270F, EFFECTIVE JANUARY 29, 2021
- 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW THE COMMUNITY SPACE EASEMENT ON TAX MAP 229 LOT 8B AND THE ADDITIONAL OFF-SITE AREA WHERE CITY LANDSCAPE MAINTENANCE WILL BE THE RESPONSIBILITY OF THE TAX MAP 229 LOT 8B PROPERTY OWNER.

NO.	DESCRIPTION	DATE
1	EASEMENT LOCATIONS	2/21/24
0	ISSUED FOR COMMENT	1/24/24

**581 LAFAYETTE ROAD  
COMMUNITY SPACE  
EASEMENT PLAN  
TAX MAP 229 - LOT 8B  
TO  
THE CITY OF PORTSMOUTH  
OWNER  
ATLAS COMMONS, LLC  
PROPERTY LOCATED AT  
581 LAFAYETTE ROAD  
CITY OF PORTSMOUTH  
COUNTY OF ROCKINGHAM  
STATE OF NEW HAMPSHIRE**



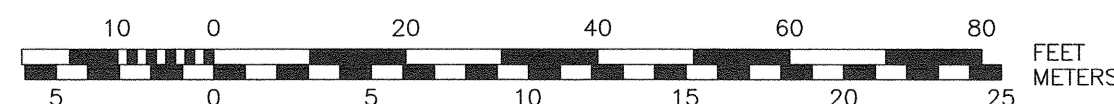
I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

*John R. Chagnon*  
JOHN R. CHAGNON, LLS-738

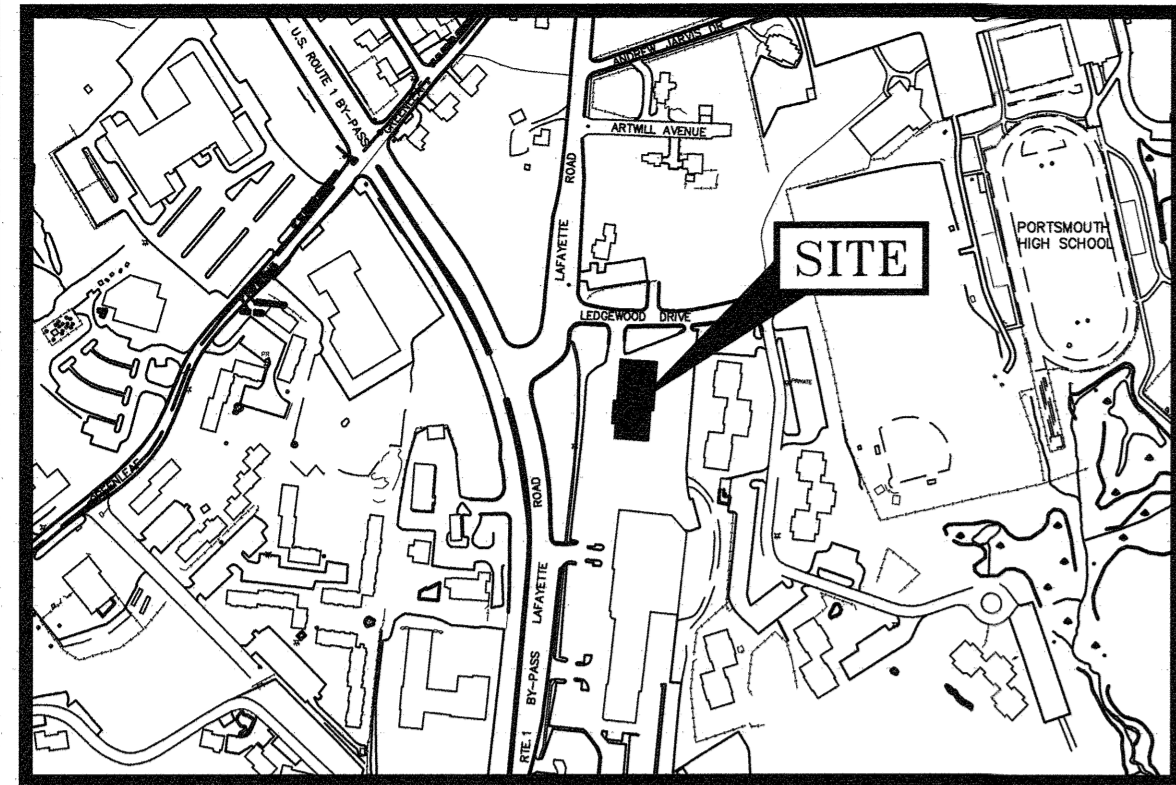
DATE 2.21.24

GRAPHIC SCALE



SCALE: 1" = 20'

JANUARY 2024

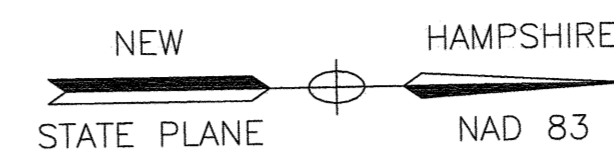


LOCATION MAP

SCALE: 1" = 400'±

LENGTH TABLE

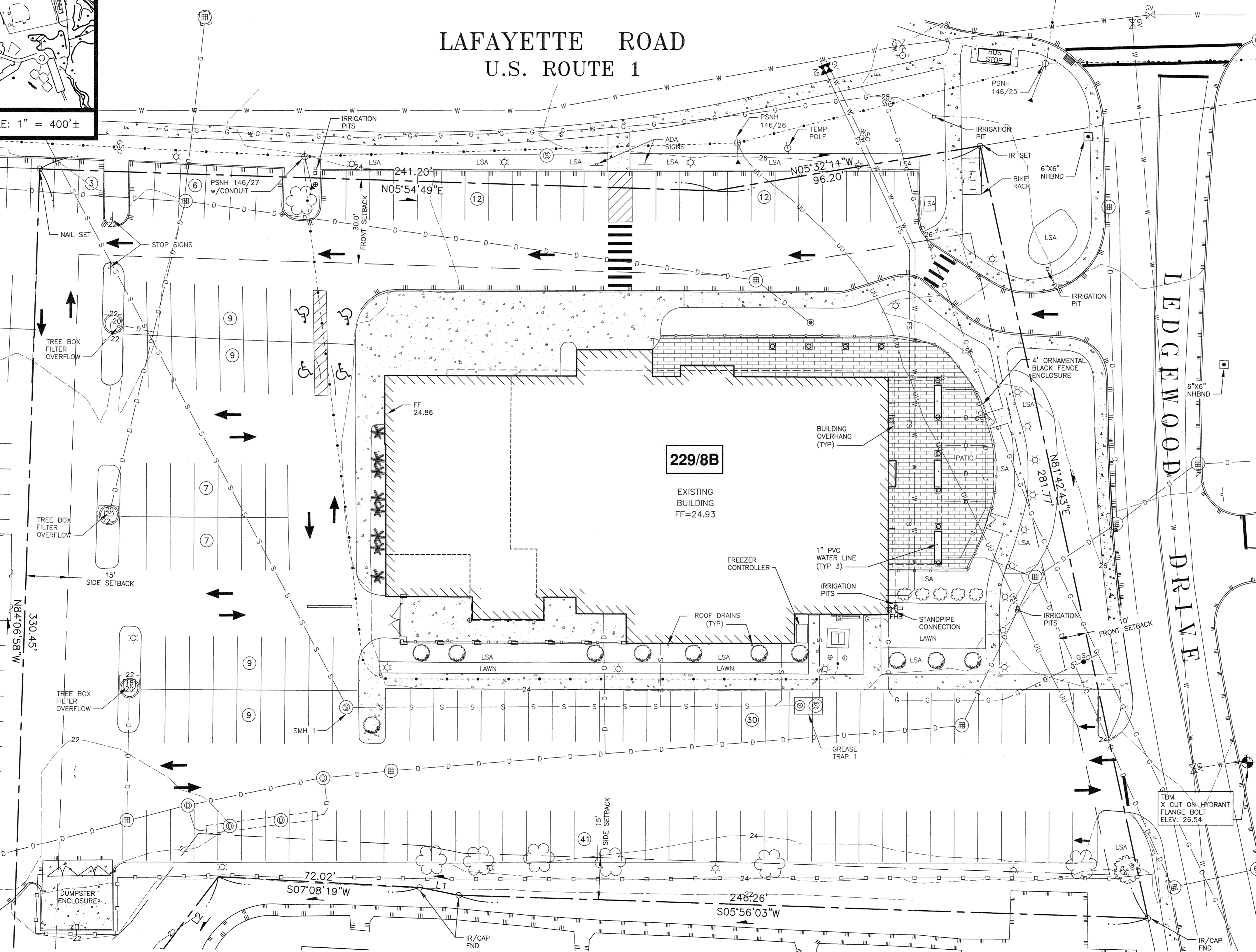
LINE	BEARING	DISTANCE
L1	S15°17'27"W	14.20'
L2	S48°43'16"E	33.26'



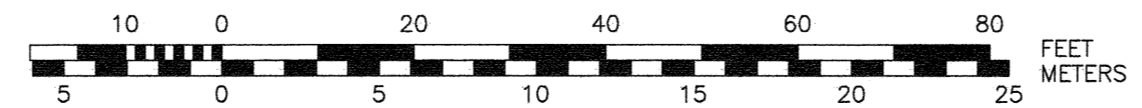
LAFAYETTE ROAD  
U.S. ROUTE 1

LEGEND

- EXISTING**
- 124/21 MAP 124 / LOT 21
  - N/F NOW OR FORMERLY
  - RP RECORD OF PROBATE
  - RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
  - BOUNDARY LINE
  - SETBACK LINE
  - RR SPK FND RAILROAD SPIKE FOUND
  - IR FND IRON ROD FOUND
  - IP FND IRON PIPE FOUND
  - DH FND DRILL HOLE FOUND
  - BND w/ DH BOUND w/ DRILL HOLE
  - FM FORCE MAIN
  - S SEWER LINE
  - G GAS LINE
  - D STORM DRAIN
  - W POTABLE WATER LINE
  - UNDERGROUND ELECTRIC
  - OVERHEAD WIRES
  - 100 CONTOUR LINE
  - 97x3 SPOT ELEVATION
  - EDGE OF PAVEMENT
  - WOODS / TREE LINE
  - UTILITY POLE (w/ GUY) (w/ LIGHT)
  - LIGHT POLE
  - SHUTOFF/CURB STOP (WATER, GAS, SEWER)
  - GATE VALVE
  - HYD. HYDRANT
  - CB CATCH BASIN
  - TELEPHONE MANHOLE
  - SEWER MANHOLE
  - DRAIN MANHOLE
  - FF FINISHED FLOOR
  - INV. INVERT
  - TBM TEMPORARY BENCHMARK
  - TYP. TYPICAL



GRAPHIC SCALE



**AMBIT ENGINEERING, INC.**  
A DIVISION OF HALEY WARD, INC.

200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.430.9282

WWW.HALEYWARD.COM

- NOTES:**
- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
  - 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
  - 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270F, EFFECTIVE JANUARY 29, 2021.
  - 4) EXISTING LOT AREA:  
98,124 S.F.  
2,2526 AC
  - 5) PARCEL IS LOCATED IN THE GATEWAY (GW) DISTRICT.
  - 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
  - 7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 229 LOT 8B.
  - 8) EASEMENTS & RESTRICTIONS:  
A) ROAD/UTILITY EASEMENT AREA: SEE C-3316 AND RCRD 2110/428 AND 2184/184. THIS EASEMENT WAS PARTIALLY TERMINATED ON 11/9/15; SEE RCRD 5669/0645.  
B) 30' RIGHT OF WAY: SEE D-8806 AND 5446/2589.  
C) MUTUAL PARKING AND ACCESS RIGHTS FOR LOTS 1-3 ON PLAN D-8806 ARE OF RECORD. RCRD 2343/128 AND 5446/2588.
  - 9) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
  - 10) THE 2011 NHDOT LAFAYETTE ROAD PROJECT IDENTIFIED THIS ENCROACHMENT.

**COMMERCIAL DEVELOPMENT**  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
2	CONTOURS, NOTE 6	1/24/24
1	ISSUED FOR APPROVAL	9/5/23
0	ISSUED FOR COMMENT	7/5/23

REVISIONS

SCALE: 1"=20' JULY 2023

**EXISTING CONDITIONS PLAN**

**C1**



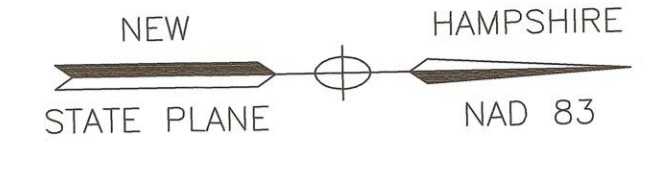


ZONING TABLE

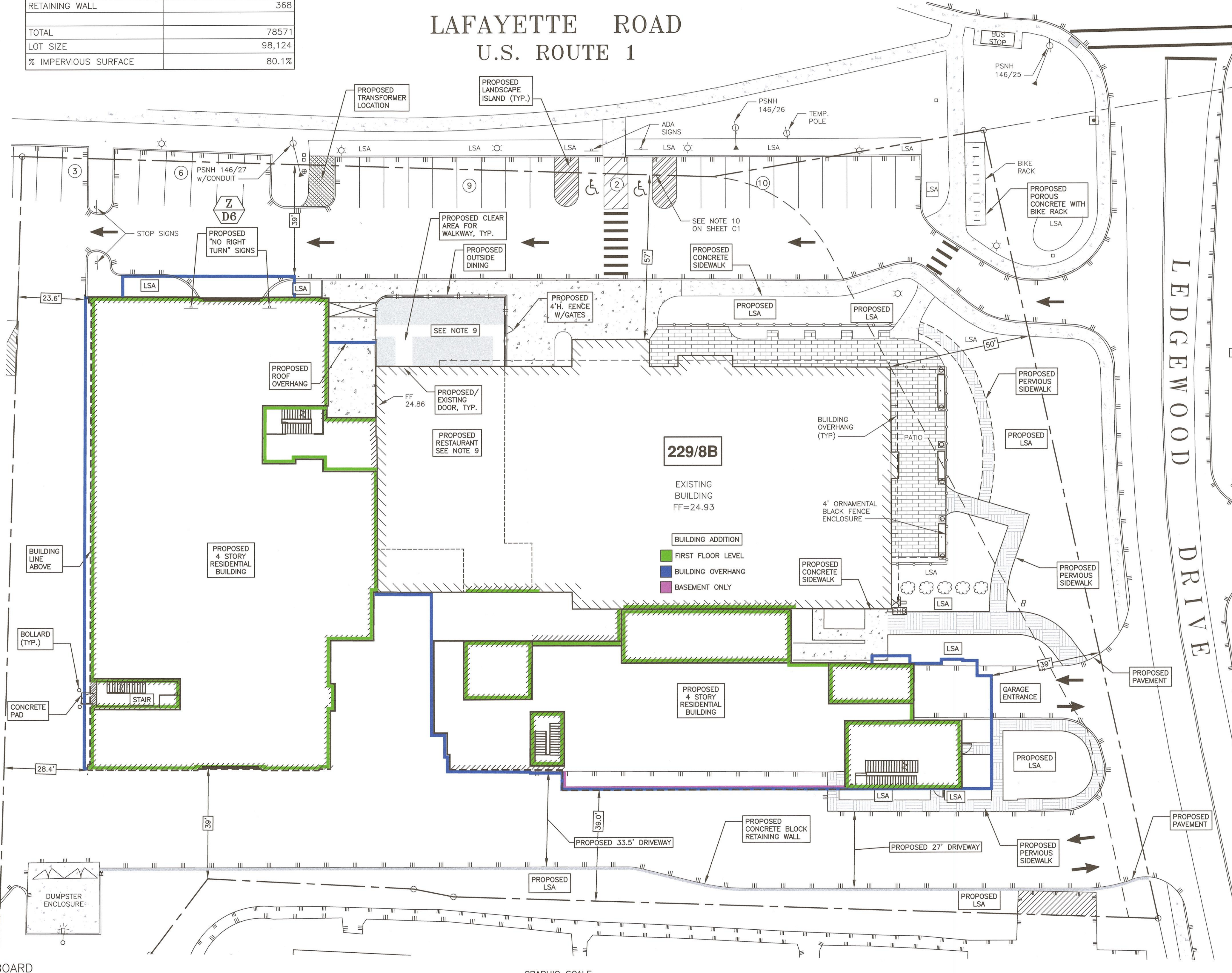
Zone	Additions	proposed
	<b>G1 allowed</b>	
Height	G1 apartments: 5 stories or 60 ft per Density Bonus 10.5872.30; 4 stories or 50 ft (+ density bonus 1 story or 10') 10.58.22.20, at streets <60' row: 35' max <25' setback 45' max <50' setback 60' max >50' setback.	<35/3 stories at street fronts <45/4 stories beyond <50/5 stories at center: Building A: 56'-9 13/16" Building B: 57'-8 1/16"
Penthouses	10' above allowed building height	<10'
Roof appurtenance	Roof decks, roof gardens, and related structures and appurtenances shall not be counted in the building height limits	<10'
Facade Types	forecourt, recessed entry, dooryard, step, porch	recessed entry Workforce Housing: 4 stories Podium parking at street level and one level below grade
Building Types	Dwelling units	
Setbacks (ft) *	Front (principal) min 30' & max 37' from Lot Line at Ledgerwood	setback is within public way
Side	Minimum side setback: 15 ft. Where a development site includes a more than one building type, the minimum building setback to interior lot lines shall be 0 feet	39'
Rear	N/A. Minimum rear setback 20 ft. (& 25 ROW easement)	39'
Front lot line buildout residential	50%	85%
Front lot line buildout commercial/mixed-use	75%	85%
Frontage, Lafayette	100 ft min	337.4'
Lot area (sf)	NR	
area per dwelling	Workforce Housing units for rent: min 10% or 2 units, min. 300 sq ft or average unit size (larger of two)	WF units are larger than average unit size: >359 sf
Coverage, maximum	50%	80.1%
Footprint, max	NR for apartment buildings For developments located on public transit with year-round, 5-days-per-week, fixed-route service and where at least 50% of the building(s) are within 1/4 mile of a transit stop, the minimum offstreet parking shall be reduced by 20%.	See attached parking summary
Offstreet parking		
ground floor area per use, max	NR	parking
Open space, minimum	20%	21.8%
permitted uses (G1)	multifamily, restaurant	multifamily
building length, max (ft)	200	<200
façade modulation length, max (ft)	A) Symmetrical and vertically articulated bays >6' & <50' wide, minimum 3. B) Buildings greater than one hundred (100) feet in width shall read as a series of smaller buildings with varied architectural design and façade glazing patterns; or include a change in vertical plane of the façade of at least four (4) feet (in depth or projection) for at least one (1) bay in width for every one hundred (100) feet of total façade width. This change in plane applies to the entire height of the façade.	modulations < 100 ft
entrance spacing, max (ft)		both entries are facing street fronts
floor height above sidewalk, max	36"	8"
ground floor height, min		12"
second floor height, min		11"
glazing, shopfront, min	20%	entrances 100%. Sides & rear: podium parking at first floor, some open and some screening
glazing, other	NR	
roof types (pitch)	structural expression of the building façade and its materials	Flat & Sloped
Parking, off-street;	1 bicycle space for each 5 dwellings units or portion thereof. Off-site parking: Less than 500 sq. ft. 0.5 spaces per unit. 500-700 sq. ft. 1.0 space per unit. Over 750 sq. ft. 1.3 space per unit. 10.1112.312 In addition to the off-street parking spaces provided in accordance with Sec. 10.1112.311, any dwelling or group of dwelling on a lot containing more than 4 dwelling units shall provide one visitor parking space for every 5 dwelling units or portion thereof.	See attached parking summary
Units density	24 units per building, 36 units exception for workforce housing Conditional Use Permit under the provisions for Density Bonuses in Section 10.5872&10.5872	36 units per building * 2 buildings = 72 units

IMPERVIOUS SURFACE AREAS (TO PROPERTY LINE)

STRUCTURE	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	43179
SIDEWALK	3,946
PAVEMENT	30,812
CURB	266
RETAINING WALL	368
TOTAL	78571
LOT SIZE	98,124
% IMPERVIOUS SURFACE	80.1%



LAFAYETTE ROAD U.S. ROUTE 1



**AMBIT ENGINEERING, INC.**  
A DIVISION OF HALEY WARD, INC.

200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.430.9282

WWW.HALEYWARD.COM

- NOTES:**
- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
  - 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
  - 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 3301500270E, EFFECTIVE MAY 17, 2005
  - 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
  - 5) PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD CORRIDOR (G1) DISTRICT.
  - 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
  - 7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED BUILDING ADDITION ON TAX MAP 229 LOT 8B.
  - 8) DESIGN BASED ON ARCHITECTURAL PLAN BY ARCOVE ARCHITECTS DATED 2/21/24.
  - 9) CONVERSION OF TUSCAN MARKETPLACE TO RESTAURANT (NORTHEASTERN THAI, LLC) APPROVED UNDER PERMIT: LU--22--254

**COMMERCIAL DEVELOPMENT**  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
6	BUILDING REVISION, PARKING LAYOUT	2/21/24
5	SIGNAGE	2/6/24
4	TABLES & PARKING	1/24/24
3	LANDSCAPE AREA, IMPERVIOUS TABLE	1/2/24
2	IMPERVIOUS SURFACE TABLE	12/19/23
1	ISSUED FOR APPROVAL	11/20/23
0	ISSUED FOR COMMENT	8/31/23

REVISIONS

SCALE: 1"=20' JULY 2023

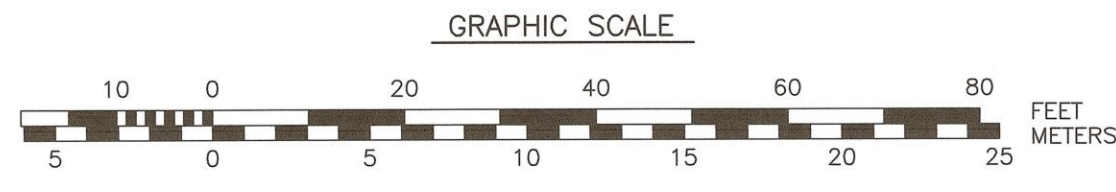
**SITE PLAN**

**C3**

- PORTSMOUTH APPROVAL CONDITIONS**
- NOTES:**
- 1) ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.
  - 2) THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
  - 3) ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



10/24/2023 10:58 AM: C:\Users\jchagnon\OneDrive\Documents\139723 Lafayette Rd., Portsmouth, NH 03801 - Rev. 139723.Plan & Specifications.dwg, 2/22/2024 4:04:47 PM, Civil 3D 2024, 0/0



**Plant List - Off-Site Perennials**

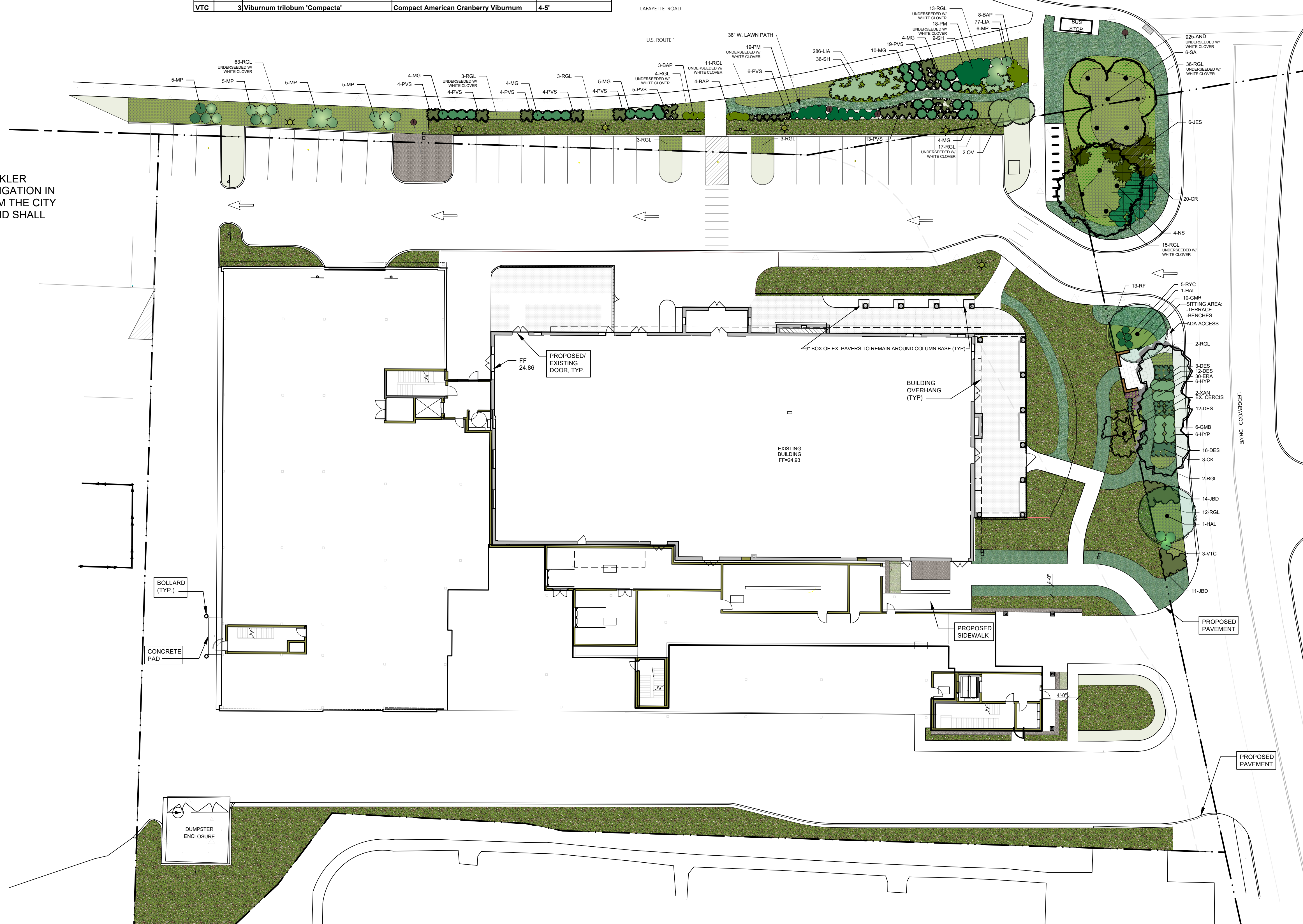
ID	Qty	Botanical Name	Common Name	Scheduled Size
AND	925	Andropogon ger. 'Blackhawks'	Big Bluestem	Plugs
BAP	15	Baptisia australis 'Screaming Yellow'	False Indigo	2 QT
DES	43	Deschampsia cespitosa	Tussock Grass	1 Gal.
ERA	30	Eragrostis spectabilis	Purple Lovegrass	2 QT
GMB	16	Geranium macrorrhizum 'Bevan's'	Cranesbill	2 QT
LIA	363	Liatris spicata	Gayfeather	2 QT
PVS	63	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 Gal.
RF	13	Rudbeckia fulgida 'Goldstrum'	Goldstrum Black-Eyed Susan	2 QT
SH	45	Sporobolus heterolepis	Prairie Dropseed	1 Gal.
XAN	2	Xanthorhiza simplicissima	Yellowroot	2 QT

**Plant List - Off-Site Trees + Shrubs**

ID	Qty	Botanical Name	Common Name	Scheduled Size
CK	3	Cladrastis kentuckea	Yellowwood	2 1/2" Cal.
CR	20	Cornus racemosa	Grey Dogwood	5 Gal.
HAL	2	Halesia carolina 'Jersey Belle'	Jersey Belle Carolina Silverbelle	1 1/2" Cal.
HYP	12	Hypericum 'Hidcote'	St. Johnswort	5 Gal.
JBD	25	Juniperus communis depressa 'AmiDak'	Blueberry Delight Juniper	2 Gal.
JES	6	Juniperus virginiana 'Emerald Sentinel'	Emerald Sentinel Red Cedar	3" Cal.
MG	31	Myrica gale	Sweetgale	2 Gal.
MP	26	Myrica pensylvanica	Northern Bayberry	2 Gal.
NS	4	Nyssa sylvatica	Black Tupelo	3" Cal.
OV	2	Ostrya virginiana	American Hophornbeam	2-2.5" Cal.
RGL	187	Rhus aromatica 'Grow Low'	Grow Low Sumac	18"+ Ht.
RYC	5	Rhododendron yaku. 'Crete'	Yaku Crete Rhododendron	3-4'
SA	6	Sassafras albidum	Sassafras	3 1/2" Cal.
VTC	3	Viburnum trilobum 'Compacta'	Compact American Cranberry Viburnum	4-5'



NOTE: IRRIGATION IN THE FORM OF SPRINKLER HEADS IN THE LAWN AREAS AND DRIP IRRIGATION IN PLANTING BEDS SHALL BE SOURCED FROM THE CITY OF PORTSMOUTH'S MUNICIPAL WATER, AND SHALL INCLUDE A BACK FLOW PREVENTION.



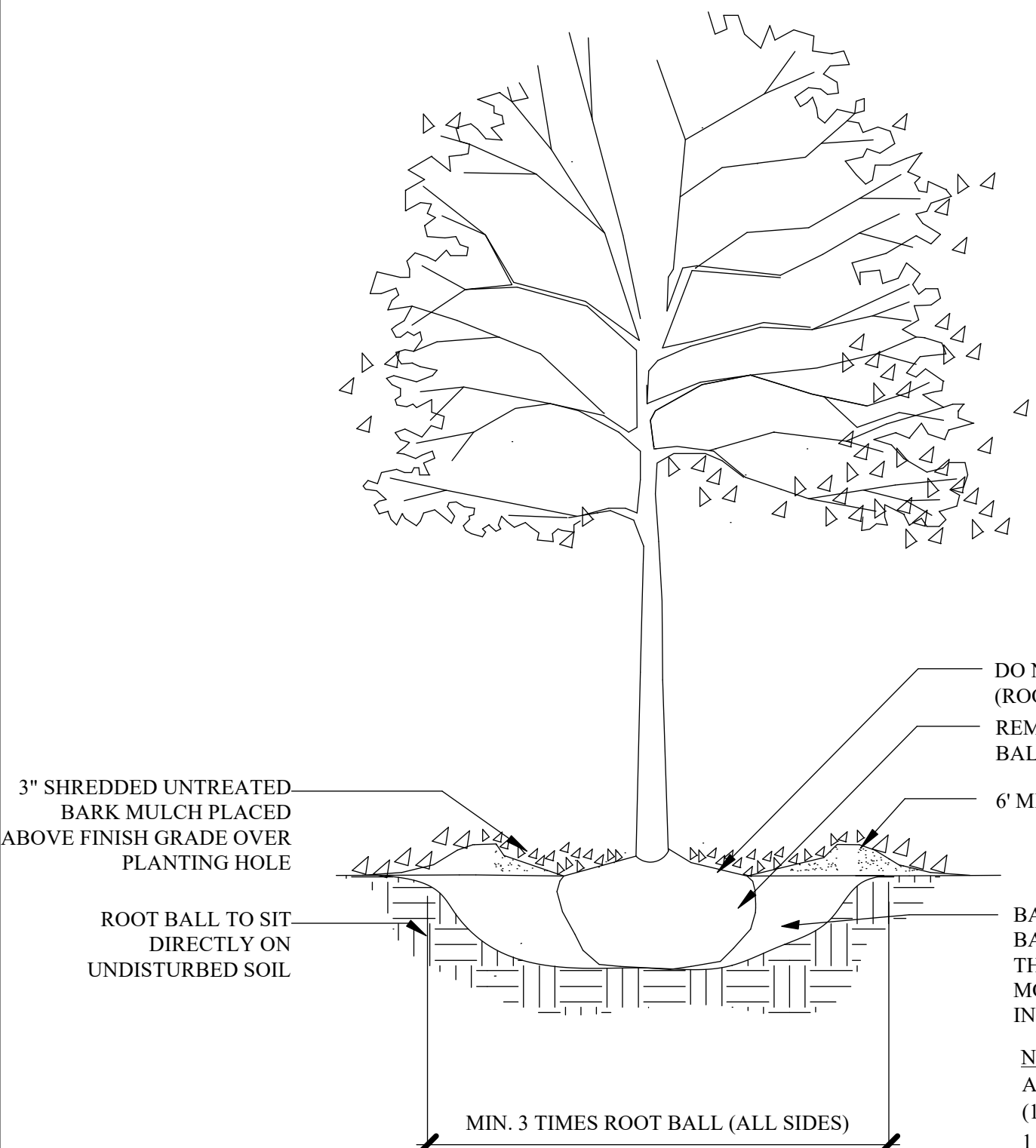
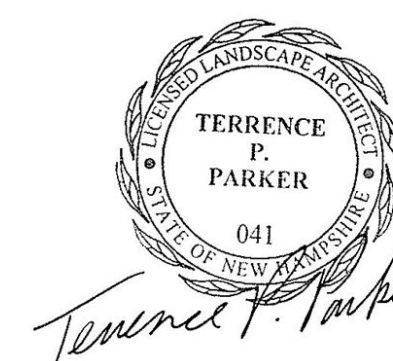
No.	Date	By	Revision Notes
E	2/21/2024		PLANNING SUBMISSION
D	2/14/2024		T+G COMMENTS (GATE REMOVAL)
C	2/12/2024		COMMUNITY SPACE DESIGN
B	1/10/2024		TREES + GREENERY COMMENTS
A	1/2/2024		TAC COMMENTS

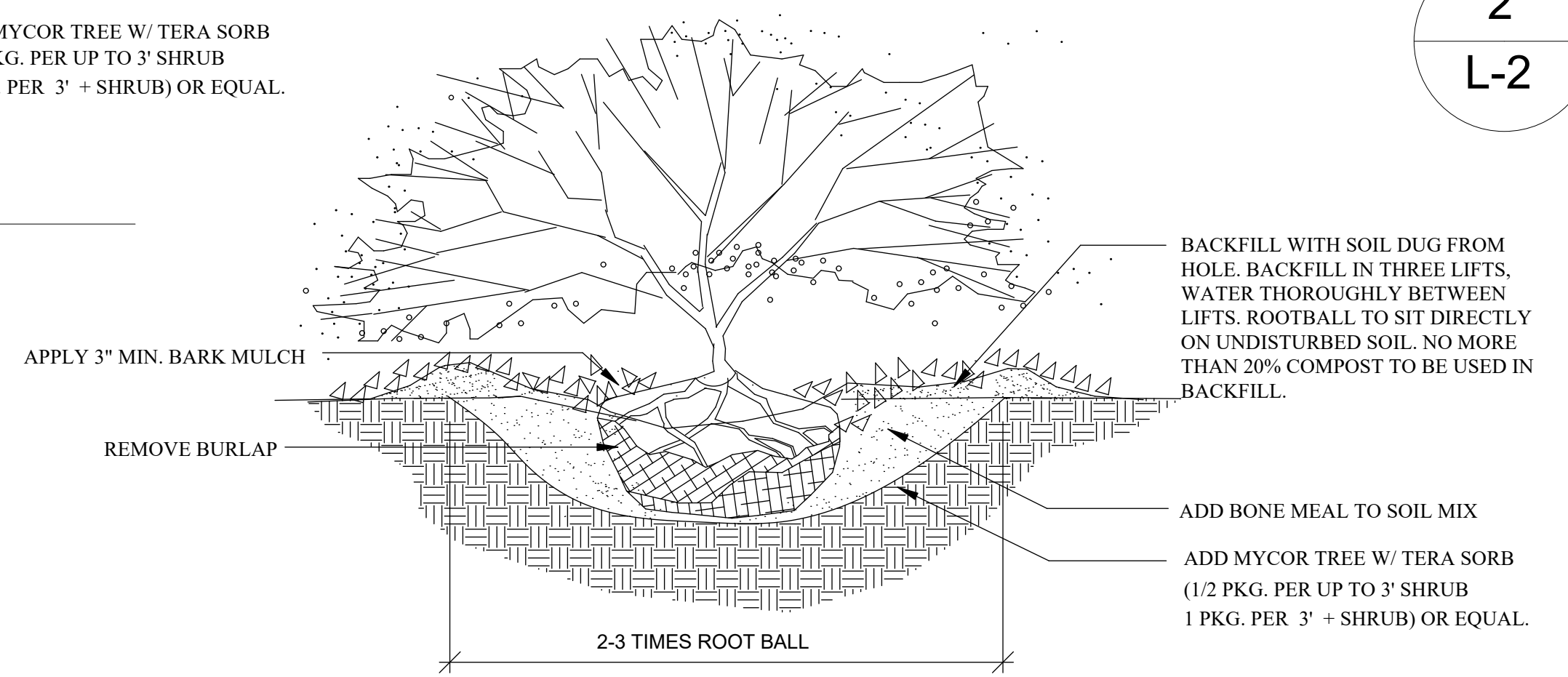
No.	Date	Issue Notes

Design Firm	terra firma landscape architecture 163.a Court Street Portsmouth, NH
Consultant	
Project Title	581 LAFAYETTE
Sheet Title	Off-Site Community Space Landscape Plan
Project Manager	Project ID: 581 LAFAYETTE
Drawn By: TC	Scale: 1:240
Reviewed By: TP	Sheet No. L-1B
Date: 11/20/2023	of 2
CAD File Name: 581LAFAYETTE2024.vwx	



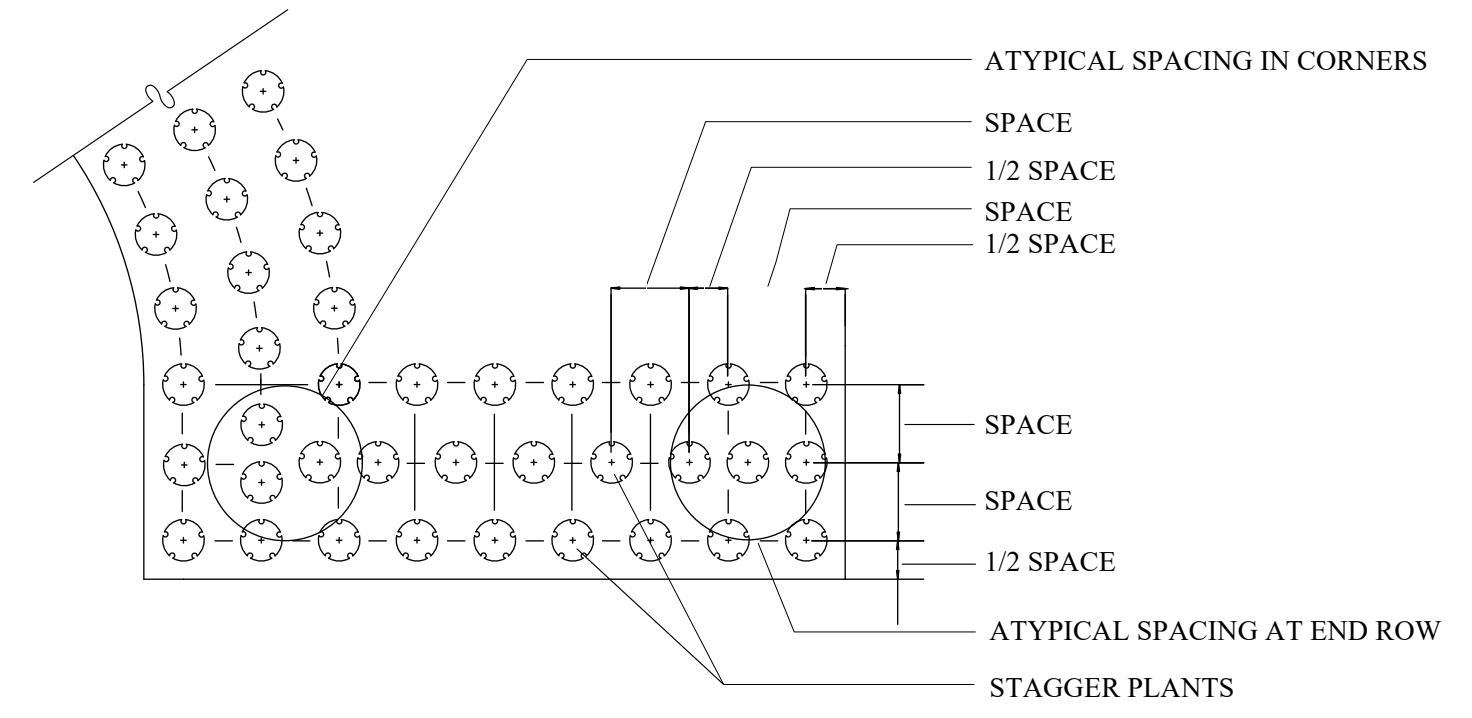
**1**  
L-2  
**TREE PLANTING - 2"+ CAL.**  
SCALE: NTS



**2**  
L-2  
**PYRAMIDAL EVERGREEN TREE PLANTING**  
SCALE: NTS

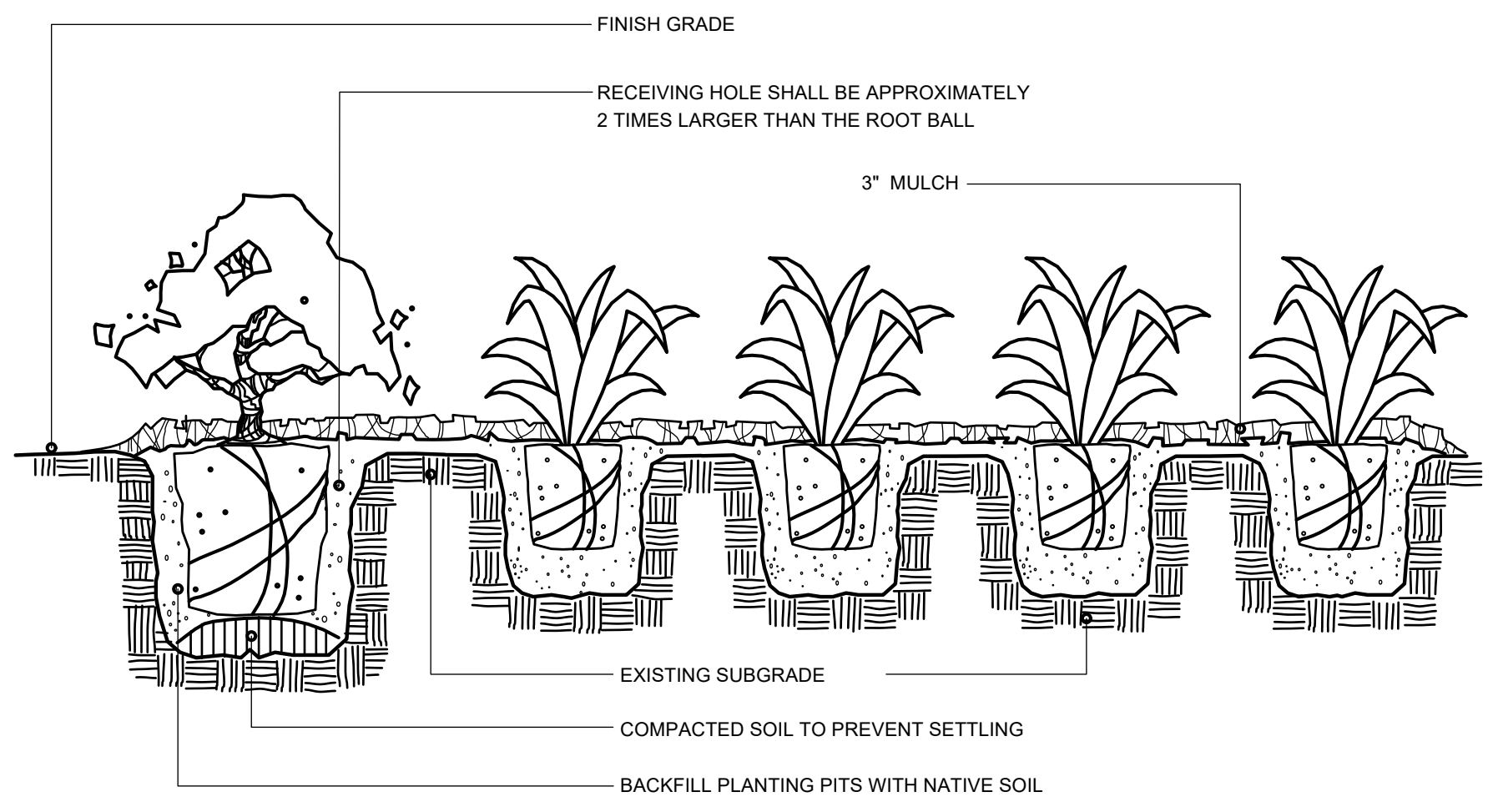


**3**  
L-2  
**B&B SHRUB PLANTING**  
SCALE: NTS

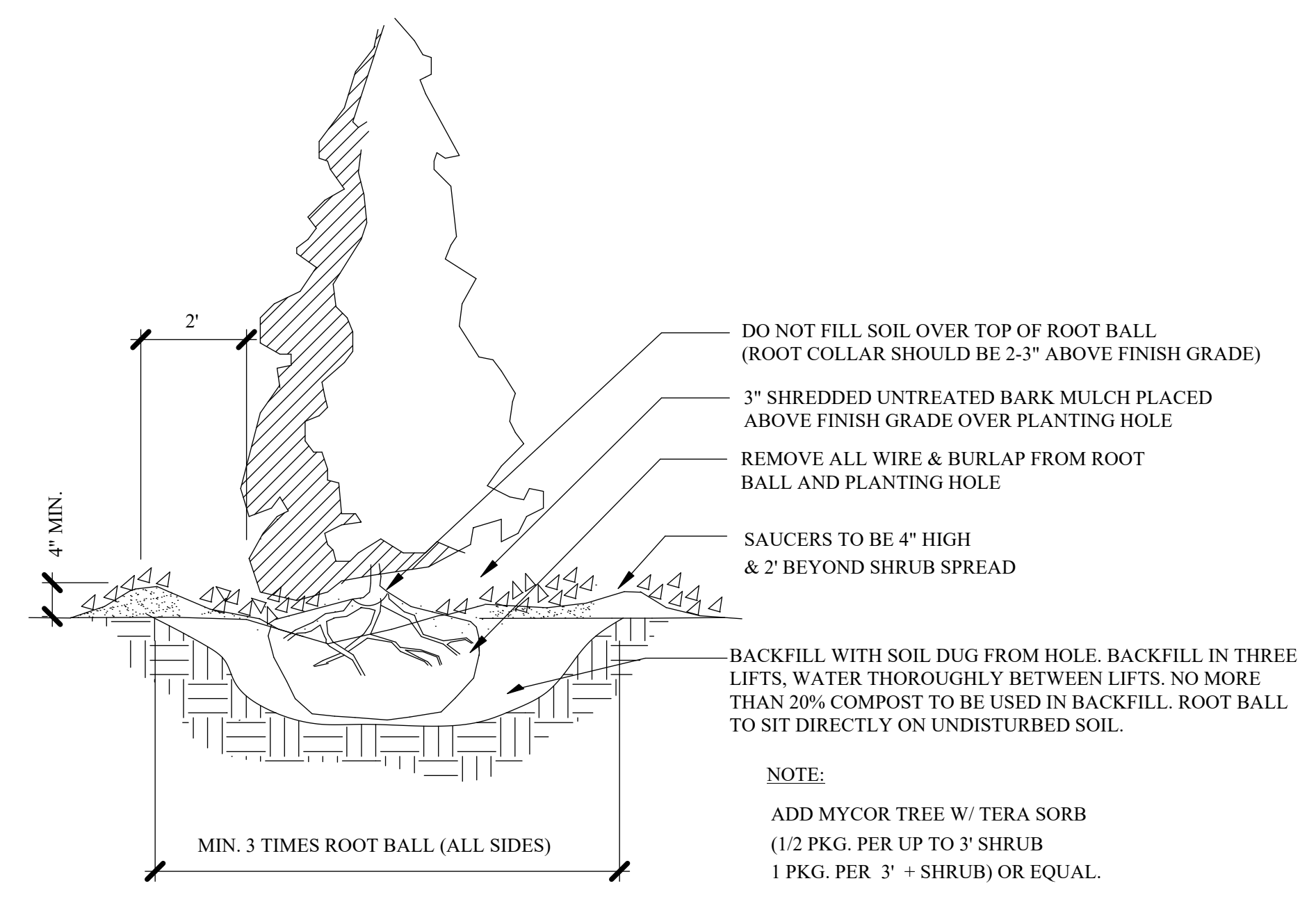


**NOTES:**  
1. PLACE PLANTS IN BED AS SHOWN, SPACING AS SPECIFIED IN PLANT SCHEDULE.  
2. GROUND COVER SHALL BE TRIANGULAR SPACED IN ROWS PARALLEL TO STRAIGHT EDGES AND SHALL BE EVENLY SPACED IN ROWS PARALLEL TO CURVE EDGES.

**4**  
L-2  
**GROUND COVER SPACING DETAIL**  
SCALE: NTS



**5**  
L-2  
**SHRUB/GROUND COVER PLANTING DETAIL**  
SCALE: NTS



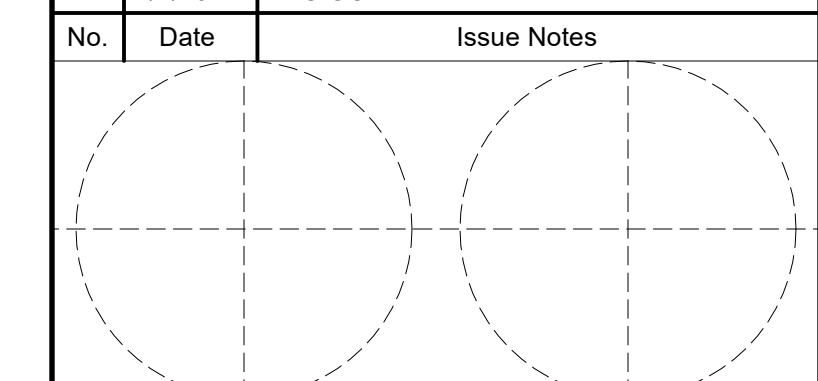
**LANDSCAPE NOTES:**

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE PLANTS.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.
9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGS DURING THE FIRST YEAR OF GROWTH.
12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD. THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.
15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.
16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. ALL MULCH AREAS SHALL RECEIVE A 2-3" LAYER OF SHREDDED PINE BARK MULCH.
20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
21. ALL PLANTING HOLES TO BE HAND-DUG, EXCEPT IN NEW CONSTRUCTION WITH NEW PLANTING PITS, PLANTING NEAR CURBS, OR AREAS WHERE SILVA CELLS WILL BE USED. IF HOLES ARE MACHINE-DUG, BOTTOM OF HOLES NEED TO BE THE APPROPRIATE HEIGHT, AND FIRMED BY THE MACHINE TO CREATE STABILITY FOR THE PLANT MATERIAL.

PLEASE NOTE: THIS SHEET IS SCALED FOR 22 BY 34 PAPER, DO NOT REDUCE OR ENLARGE.

No.	Date	By	Revision Notes

No.	Date	Issue Notes
E	2/21/2024	PLANNING SUBMISSION
D	2/14/2024	T+G COMMENTS (GATE REMOVAL)
C	2/12/2024	COMMUNITY SPACE DESIGN
B	1/10/2024	TREES + GREENERY COMMENTS
A	1/2/2024	TAC COMMENTS



Design Firm: terra firma landscape architecture  
163.a Court Street  
Portsmouth, NH

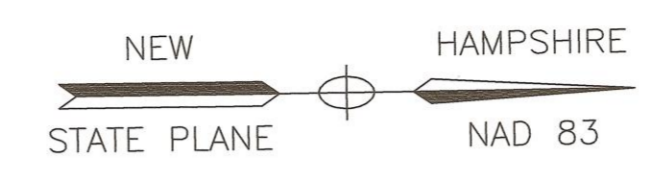
Consultant:

Project Title: 581 LAFAYETTE

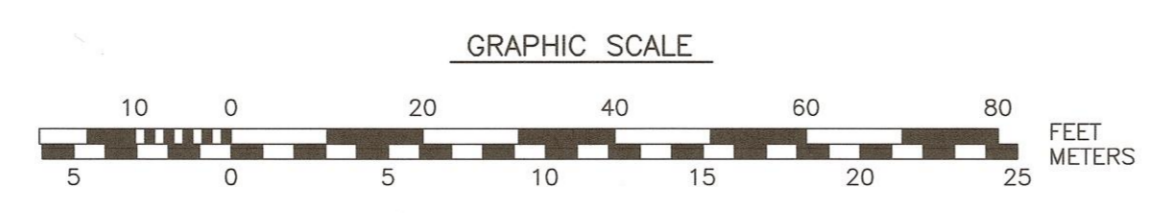
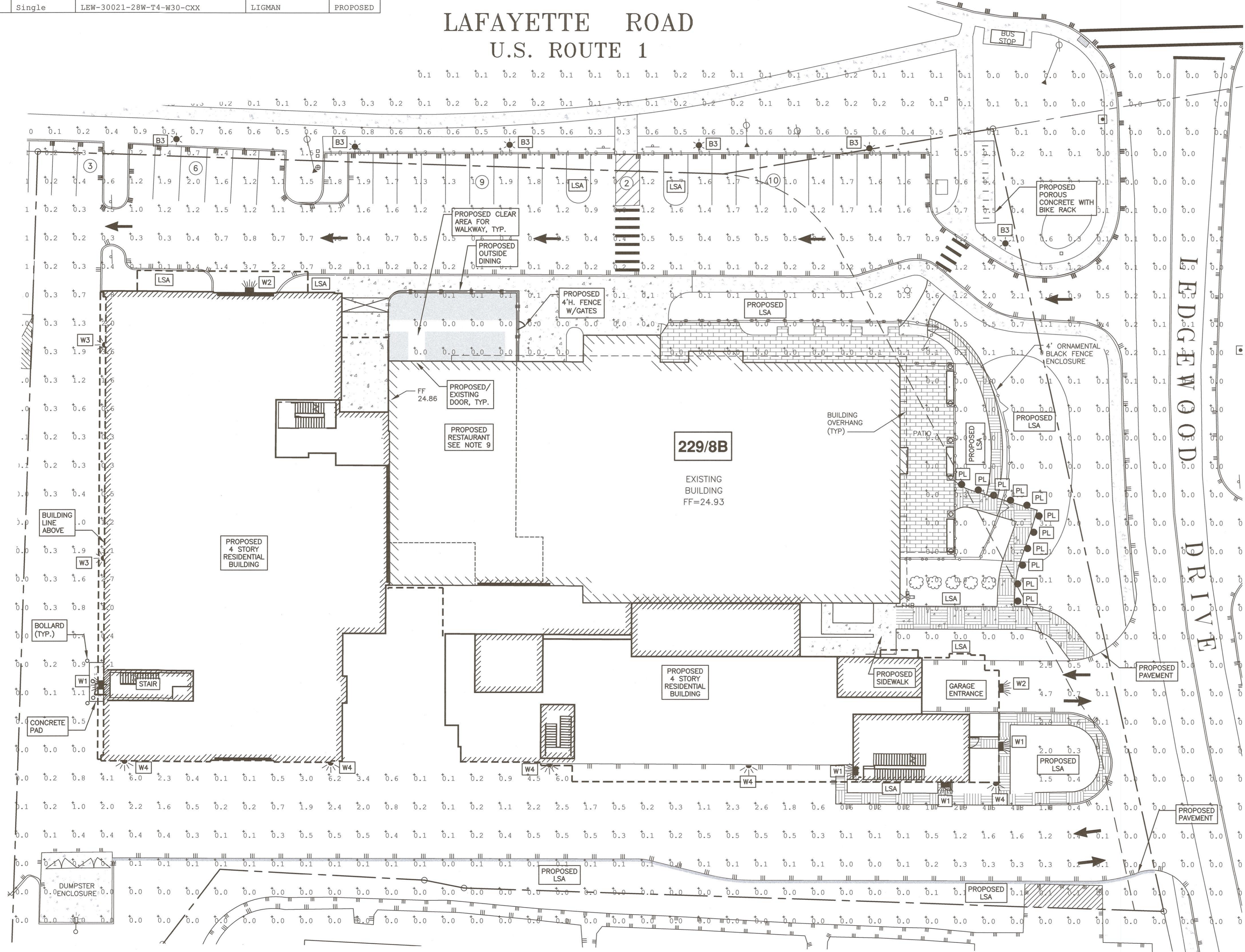
Sheet Title: Landscape Details

Project Manager	Project ID	581 LAFAYETTE
Drawn By	Scale	AS NOTED
Reviewed By	Sheet No.	L-2
Date		of
11/20/2023		2
CAD File Name		
581LAFAYETTE22024.vwx		

Symbol	Qty	Label	Arrangement	Description	[MANUFAC]	Tag
	6	B3	Single	WAT44-AC-36NB-80-3K-UNV-DIR3-PT-FINISH	BEACON PRODUCTS	EXISTING
	11	PL	Single	EL188-3L3KUV-H70	KIM LIGHTING	EXISTING
	4	W1	Single	LEW-30001-5.5W-T4-W30-CXX	LIGMAN	PROPOSED
	2	W2	Single	UGN-30081-72W-W30-XX-120/277V	LIGMAN	PROPOSED
	2	W3	Single	LEW-30021-20W-T3-W30-CXX	LIGMAN	PROPOSED
	5	W4	Single	LEW-30021-28W-T4-W30-CXX	LIGMAN	PROPOSED



## LAFAYETTE ROAD U.S. ROUTE 1



- NOTES:**
- PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
  - OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
  - THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED LIGHTING ON TAX MAP 229 LOT 8B.

### COMMERCIAL DEVELOPMENT 581 LAFAYETTE ROAD PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	BUILDING	2/21/24
0	ISSUED FOR APPROVAL	1/24/24

REVISIONS	

SCALE: 1"=20'      JULY 2023

## LIGHTING PLAN      L3

P:\NH\010105-Michalski-Properties\1397.03-Lafayette Rd., Portsmouth -R\C\2023 Site Plan 1397.03-Plan & Specs\SitePlan.dwg, 2/22/2024, 3:48:43 PM, Portsmouth Planner, 7/20/2023

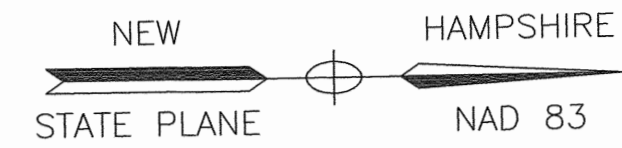




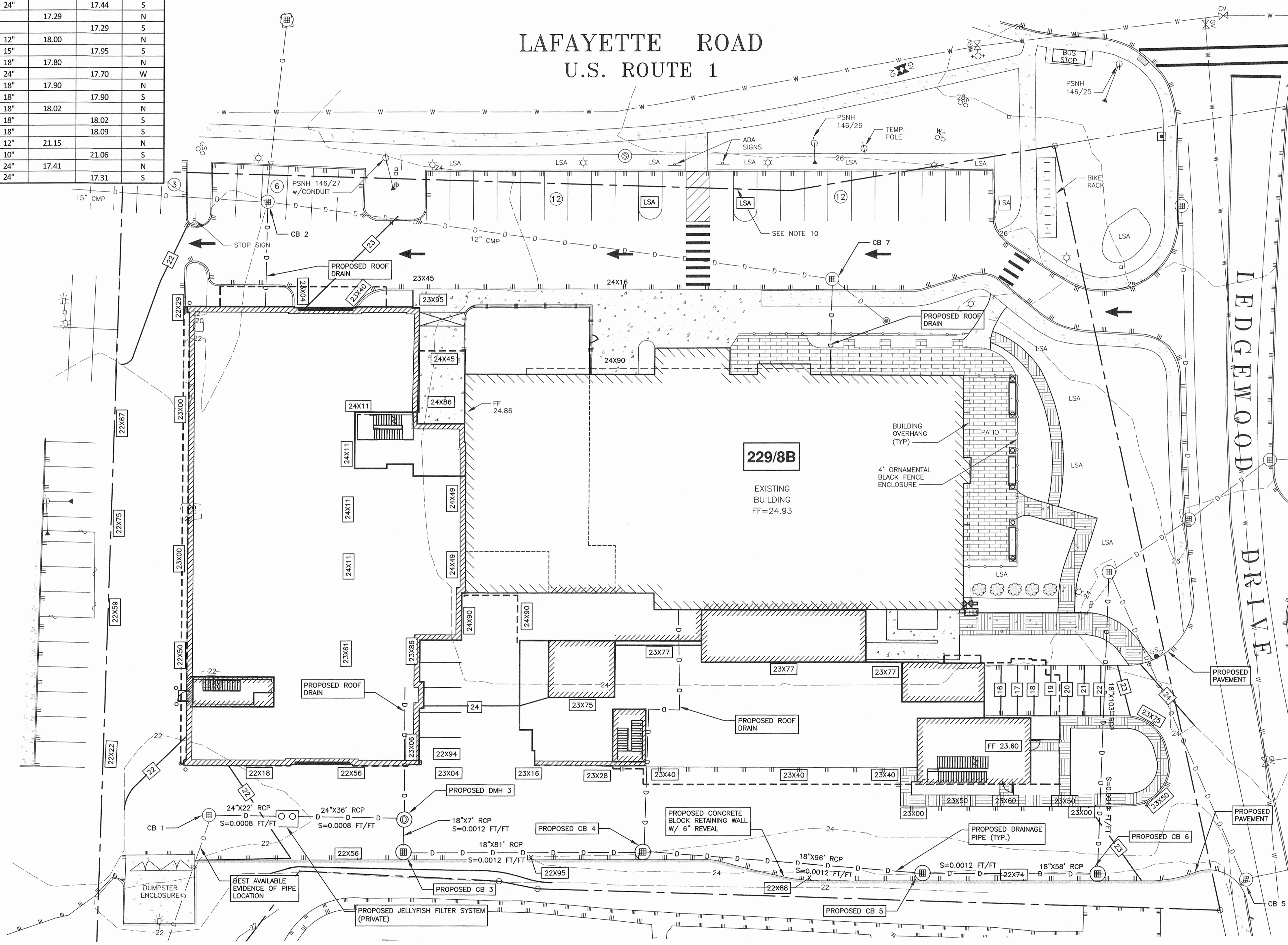


**DRAINAGE STRUCTURE SCHEDULE**

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
DMH 1	EX	22.3	15"	17.60	17.40	W
DMH 2	EX	22.3	15"	17.40	17.40	W
DMH 3	PROP		24"	17.69	17.44	E
CB 1	EX	21.46	24"	17.29	17.29	N
CB 2	EX	22.00	12"	18.00	17.95	N
CB 3	PROP	22.16	18"	17.80	17.70	N
CB 4	PROP	22.45	18"	17.90	17.90	S
CB 5	PROP	22.60	18"	18.02	18.02	S
CB 6	PROP	22.65	18"	18.09	21.06	S
CB 7	EX	24.16	12"	21.15	21.06	N
JELLYFISH FILTER	PROP	23.05	24"	17.41	17.31	S



**LAFAYETTE ROAD  
U.S. ROUTE 1**



**AMBIT ENGINEERING, INC.**  
A DIVISION OF HALEY WARD, INC.

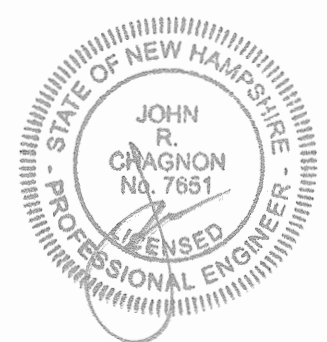
200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.430.9282

WWW.HALEYWARD.COM

- NOTES:**
- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
  - 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
  - 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

**COMMERCIAL DEVELOPMENT  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.**

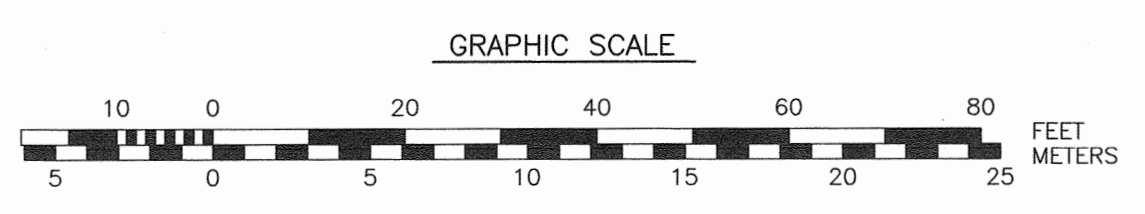
NO.	DESCRIPTION	DATE
3	BUILDING GRADES	2/21/24
2	GRADES	1/24/24
1	ISSUED FOR APPROVAL	11/20/23
0	ISSUED FOR COMMENT	2/7/23



SCALE: 1"=20' JULY 2023

**GRADING DRAINAGE  
EROSION CONTROL PLAN**

**C6**



**NOTES:**

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 3301500270E, EFFECTIVE MAY 17, 2005
- 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW THE OPEN SPACE ON TAX MAP 229 LOT 8B.

**COMMERCIAL DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

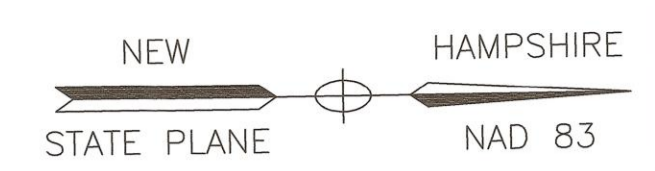
NO.	DESCRIPTION	DATE
2	UPDATE	2/21/24
1	OPEN SPACE	1/2/24
0	ISSUED FOR COMMENT	12/19/23

REVISIONS



SCALE: 1"=20' JULY 2023

OPEN SPACE PLAN **C7**

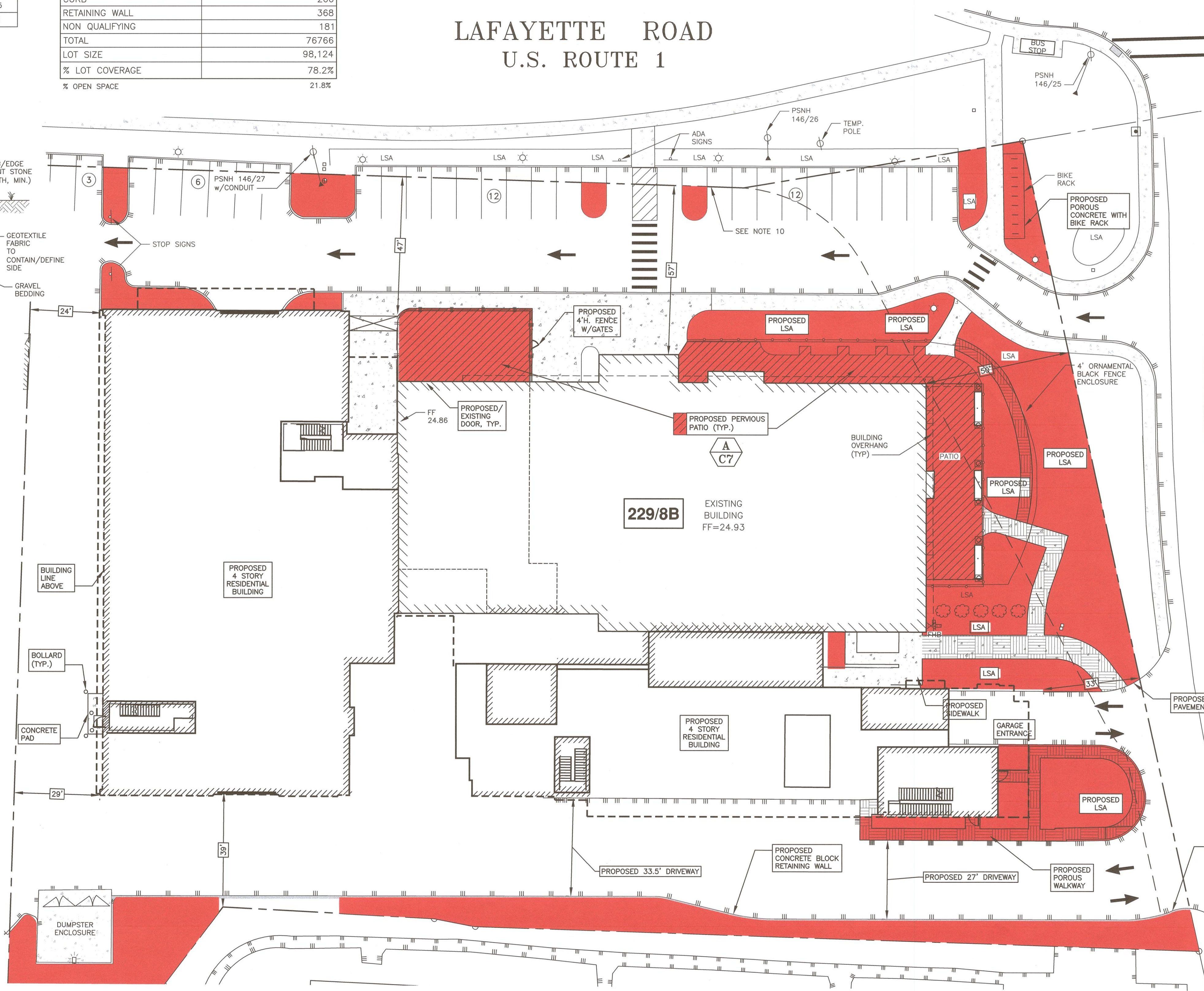


**OPEN SPACE CALCULATION**  
(TO PROPERTY LINE)

STRUCTURE	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	43179
SIDEWALK	1,960
PAVEMENT	30,812
CURB	266
RETAINING WALL	368
NON QUALIFYING	181
TOTAL	76766
LOT SIZE	98,124
% LOT COVERAGE	78.2%
% OPEN SPACE	21.8%

**SIDEWALK NOTES:**  
TOTAL WALKWAY= 5,973 S.F.  
POROUS WALKWAY= 2,027 S.F.  
49% ADDED= 1,986 S.F.  
REMAINING IMPERVIOUS= 1,960 S.F.

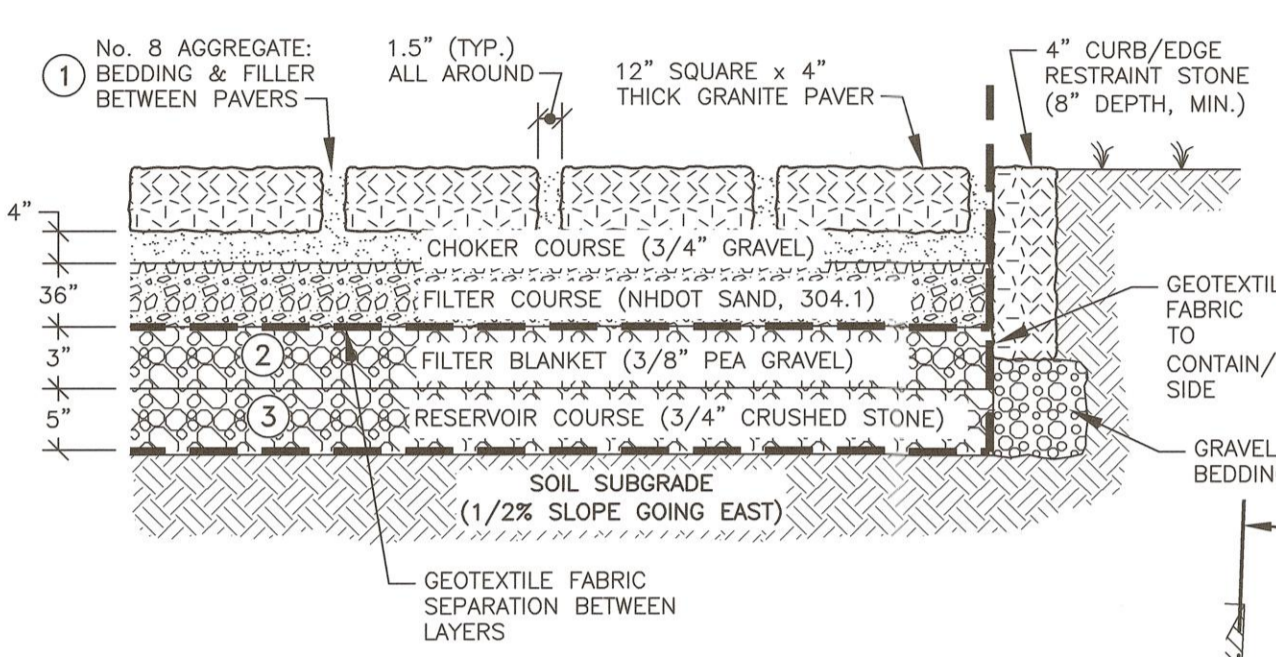
**LAFAYETTE ROAD**  
**U.S. ROUTE 1**



**ASTM D 448 GRADATION TABLE**

①		②		③	
ASTM No. 8 BEDDING & JOINT FILLER		ASTM No. 57 STONE OPEN GRADED BASE		ASTM No. 2 STONE SUBBASE	
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)
1/2" (12.5mm)	100	1.5" (37.5mm)	100	3" (75mm)	100
3/8" (9.5mm)	85-100	1" (25mm)	95-100	2.5" (63mm)	90-100
No. 4 (4.75mm)	10-30	1/2" (12.5mm)	25-60	2" (50mm)	35-70
No. 8 (2.36mm)	0-10	No. 4 (4.75mm)	0-10	1.5" (37.5mm)	0-15
No. 16 (1.16mm)	0-5	No. 8 (2.36mm)	0-5	3/4" (19mm)	0-5

- NOTES:**
- 1) PAVING SYSTEM BASE DESIGN IS SIMILAR TO BASE REQUIRED FOR THE UNI ECO-STONE PAVER. INSTALLATION SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PLACEMENT OF BASE MATERIALS.
  - 2) ALL STONE SHALL BE ANGULAR, WITH 90% FRACTURED FACES. STONE SHALL BE WASHED WITH LESS THAN 1% PASSING THE 200 SIEVE.
  - 3) CONTRACTOR SHALL SUBMIT SIEVE ANALYSIS FOR EACH COURSE MATERIAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.
  - 4) ALL FABRIC TO BE TENCATE MIRAFI 140N NONWOVEN GEOTEXTILE.

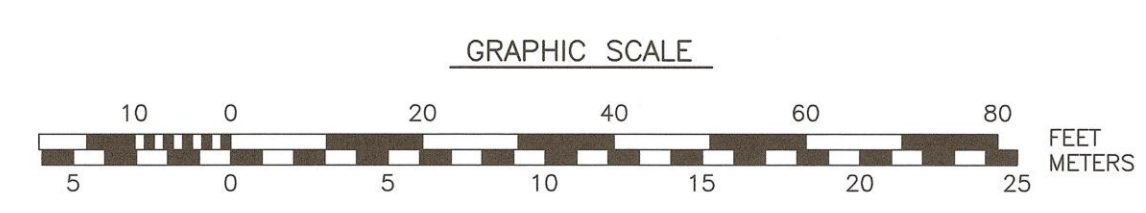


**A C7 POROUS PATIO SECTION**  
12" SQUARE GRANITE PAVERS OR APPROVED EQUAL NTS

■ OPEN SPACE

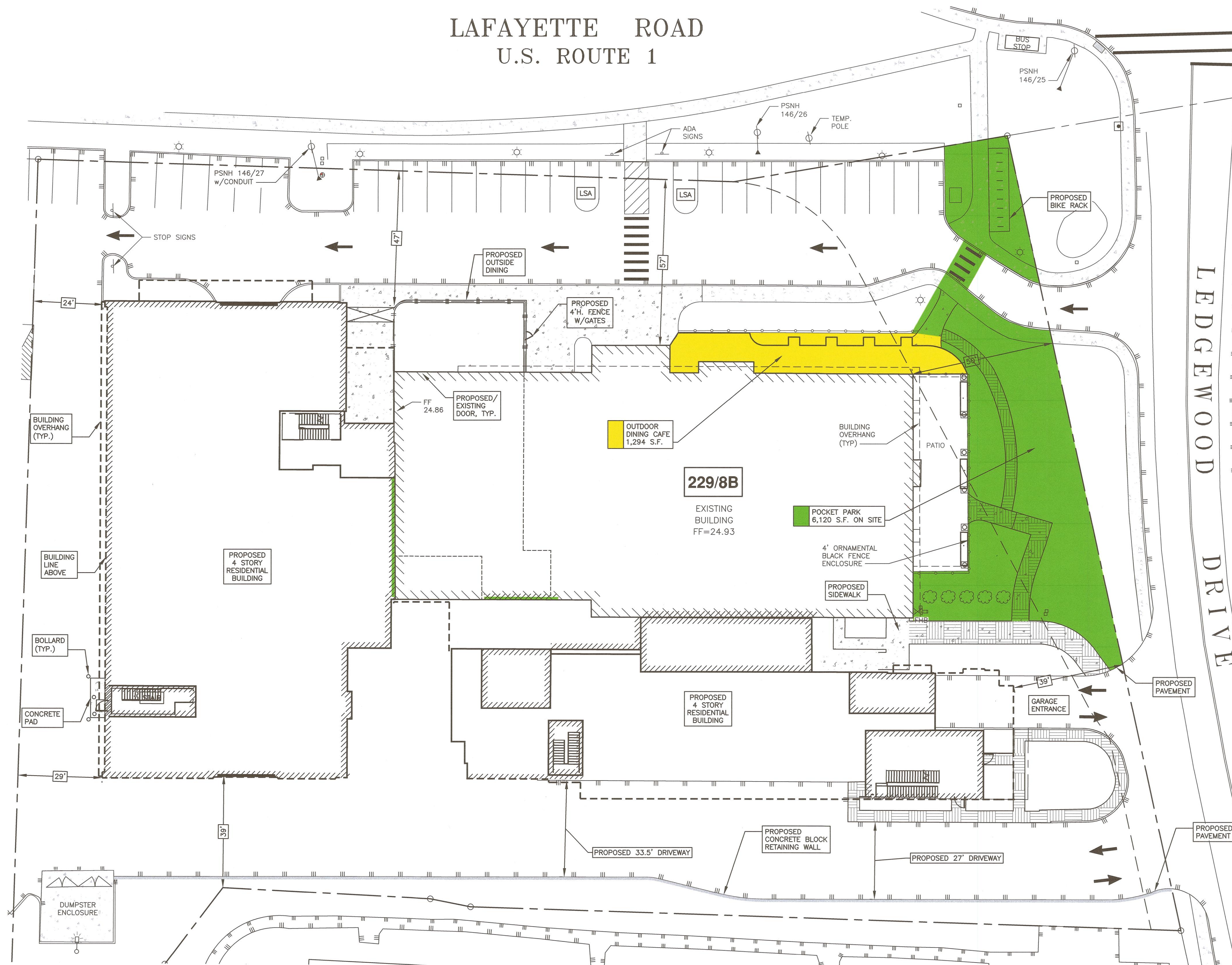
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



P:\MS2024\0125\_Ambit\Projects\581 Lafayette Rd Portsmouth NH\0125 Lafayette Rd Portsmouth NH\0125 SITE PLAN.dwg, 12/22/2024 4:02:00 PM, User: jrcagnion

LAFAYETTE ROAD  
U.S. ROUTE 1



**COMMUNITY SPACE ON-SITE**  
 POCKET PARK = 6,120 S.F.  
 OUTDOOR DINING CAFE = 1,294 S.F.  
 PROPOSED ON-SITE COMMUNITY SPACE 7,414 S.F.  
 LOT AREA 98,124 S.F.  
 COMMUNITY SPACE REQUIRED: 10%  
 (PER SECTION 10.5B41.80.2)  
 ON-SITE COMMUNITY SPACE PROVIDED: 7.6%  
 COMMUNITY SPACE USES  
 (PER SECTION 10.5B102)  
 PROPOSED USES: OUTDOOR DINING CAFE  
 POCKET PARK

**NOTES:**

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270F, EFFECTIVE JANUARY 29, 2021
- 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW THE ON-SITE COMMUNITY SPACE ON TAX MAP 229 LOT 8B.

**COMMERCIAL DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

3	AREAS/TYPES	2/21/24
2	COMMUNITY SPACE TYPES	2/6/24
1	AREAS/TYPES	1/24/24
0	ISSUED FOR COMMENT	12/19/23

NO.	DESCRIPTION	DATE
REVISIONS		



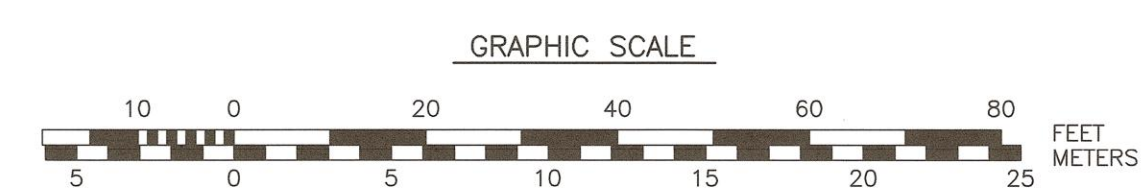
SCALE: 1"=20' JULY 2023

**ON-SITE COMMUNITY SPACE PLAN**

**C8**

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



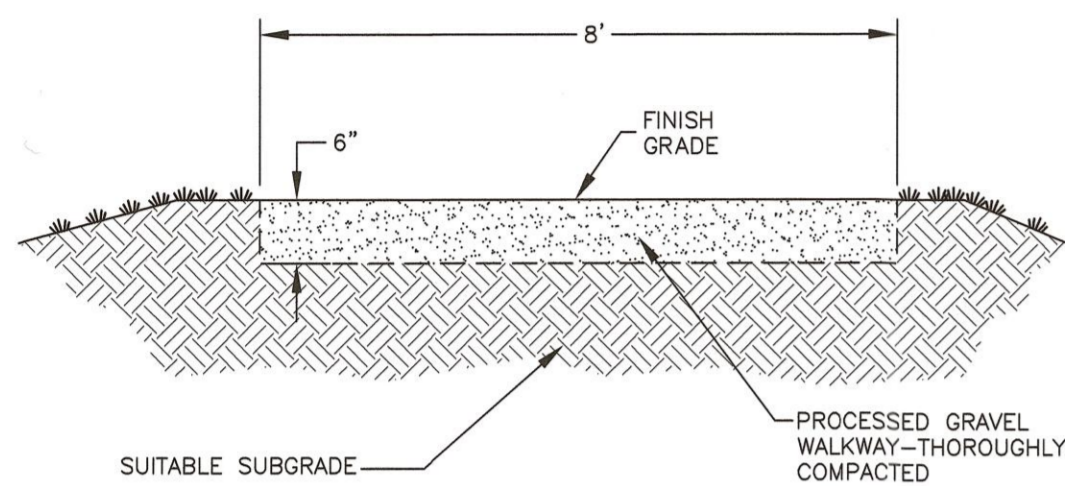




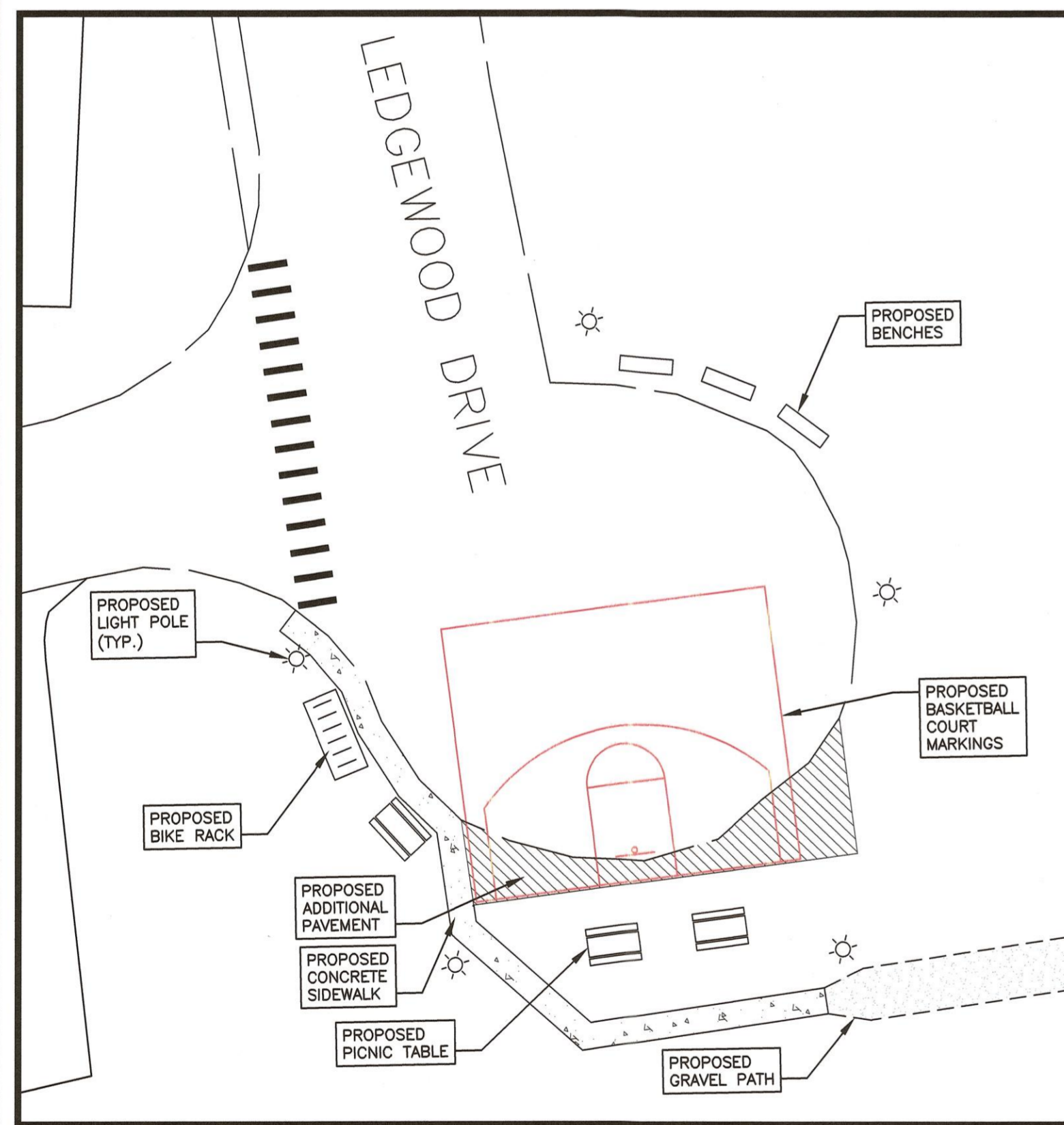
**PUBLIC REALM**

PUBLIC REALM IMPROVEMENT (PER SECTION 10.5B73.20.1)  
 LINEAR STREET FRONTAGE OF SITE: 619 FT  
 PROPOSED TRAIL NETWORK LENGTH: 622 FT

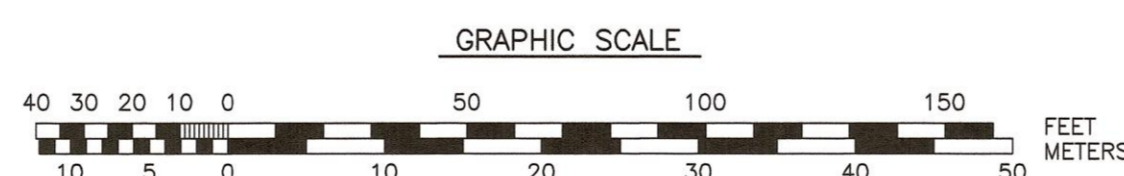
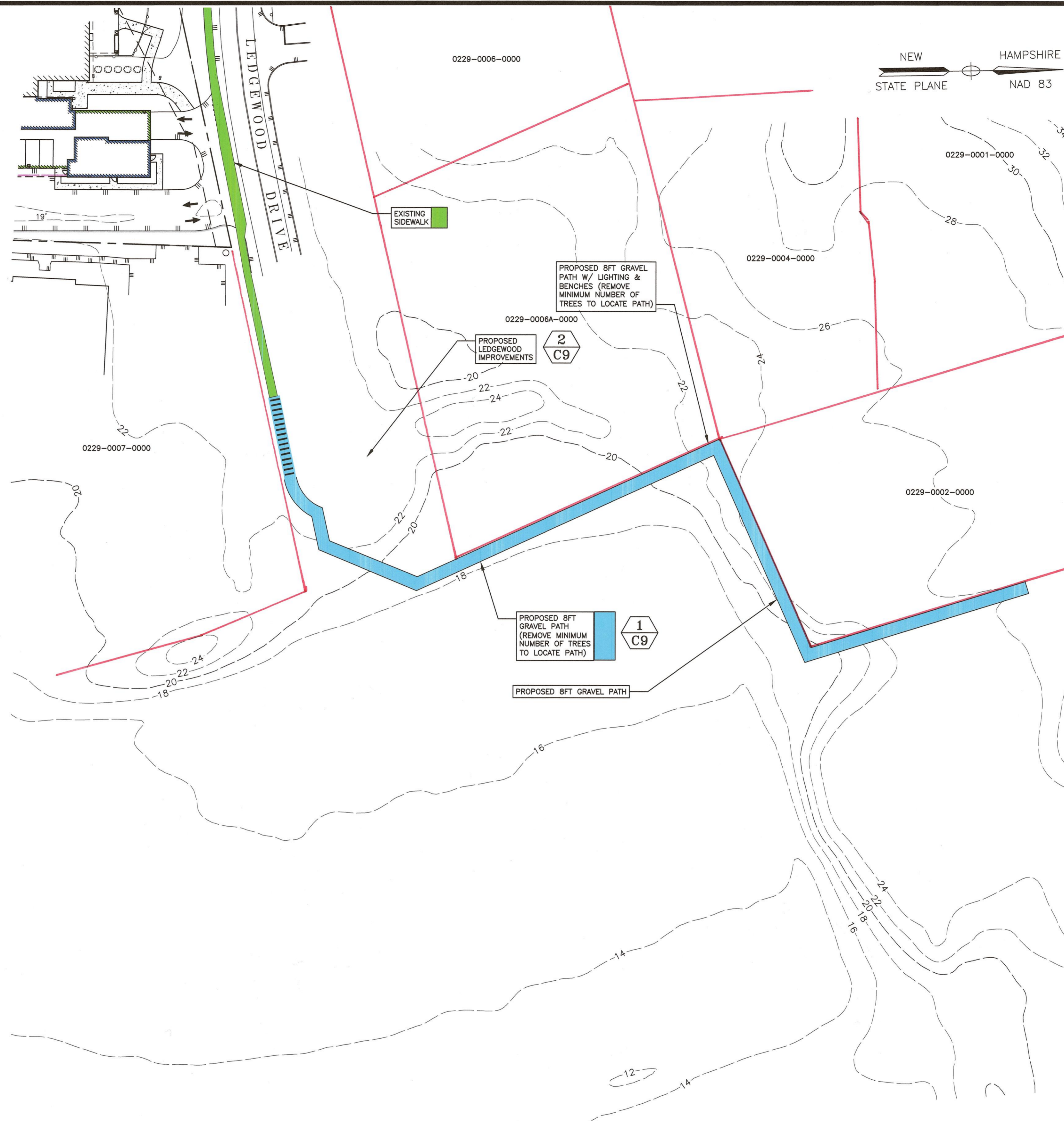
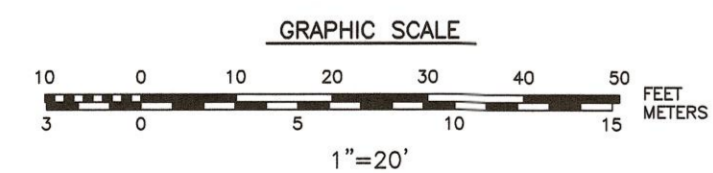
REQUIRED LENGTH: 619 FT  
 PROVIDED LENGTH: 622 FT



**1 GRAVEL PATH**  
 NTS



**2 LEDGEWOOD IMPROVEMENTS**  
 NTS



NEW HAMPSHIRE  
 STATE PLANE NAD 83

**NOTES:**

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270E, EFFECTIVE MAY 17, 2005
- 4) EXISTING LOT AREA:  
 98,124 S.F.  
 2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
 SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW PUBLIC REALM IN ACCORDANCE WITH SECTION 10.5B7320.1 ON TAX MAP 229 LOT 8B.
- 8) PUBLIC REALM IMPROVEMENTS SHOWN HEREON ARE SUBJECT TO CITY OF PORTSMOUTH SCHOOL DEPARTMENT REVIEW AND APPROVAL. FINAL DESIGN & LOCATION TO BE DETERMINED.
- 9) TOPOGRAPHY FROM LIDAR.

**COMMERCIAL DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	1/4/24

REVISIONS

SCALE: 1"=40' JANUARY 2024

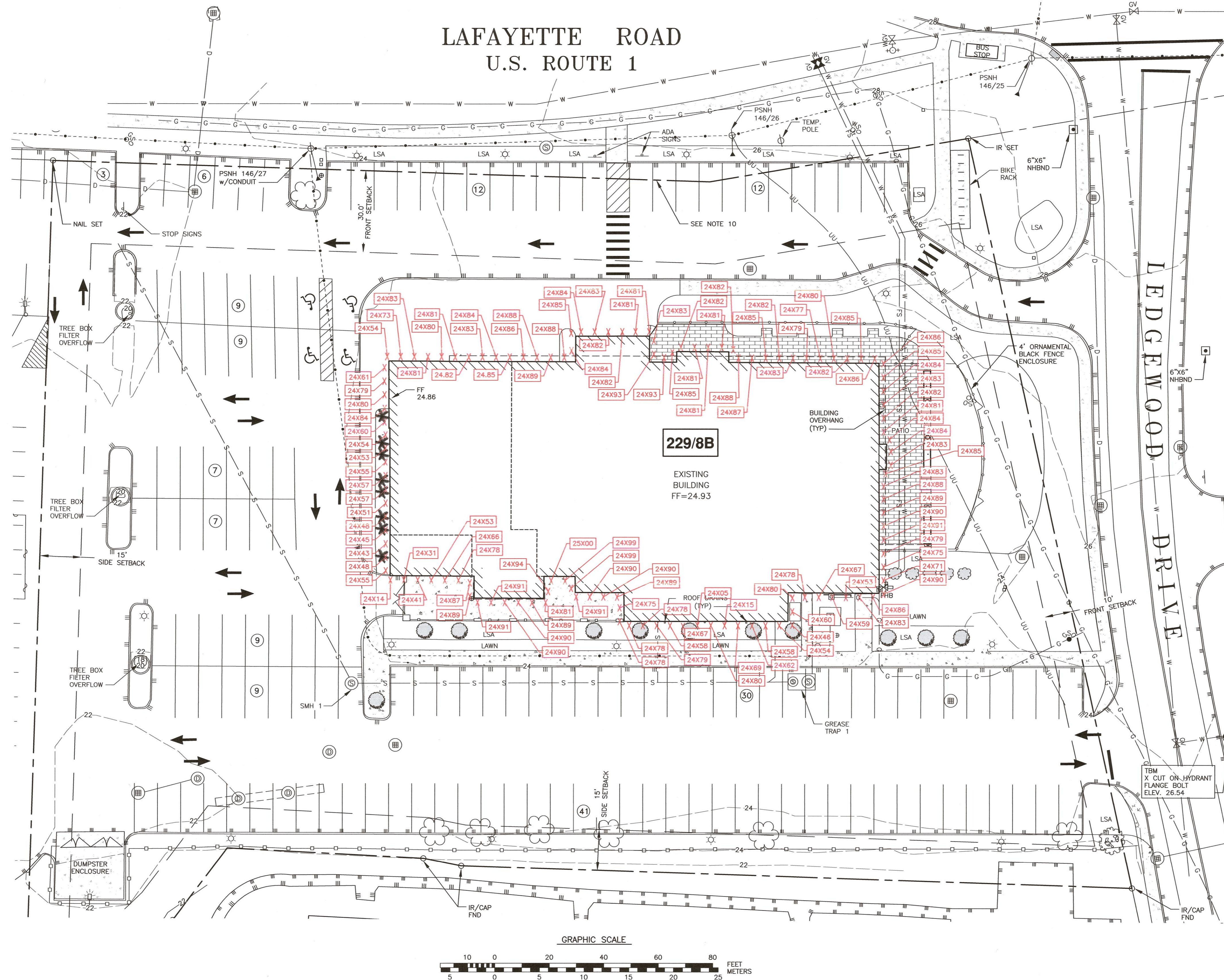
**PUBLIC REALM PLAN**

**C10**

**CONCEPT**

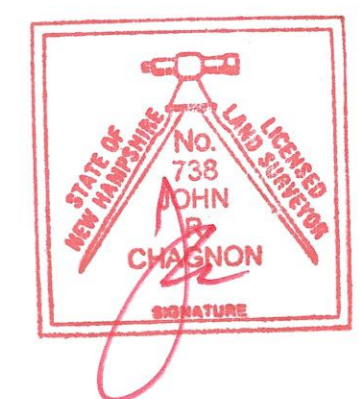
**NOTES:**

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 4) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.



**COMMERCIAL DEVELOPMENT**  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.

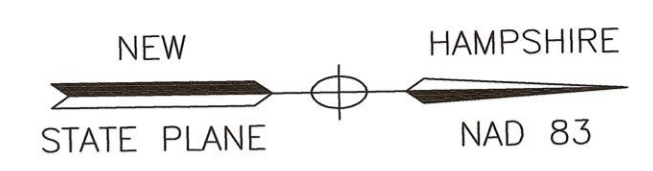
NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	1/18/24



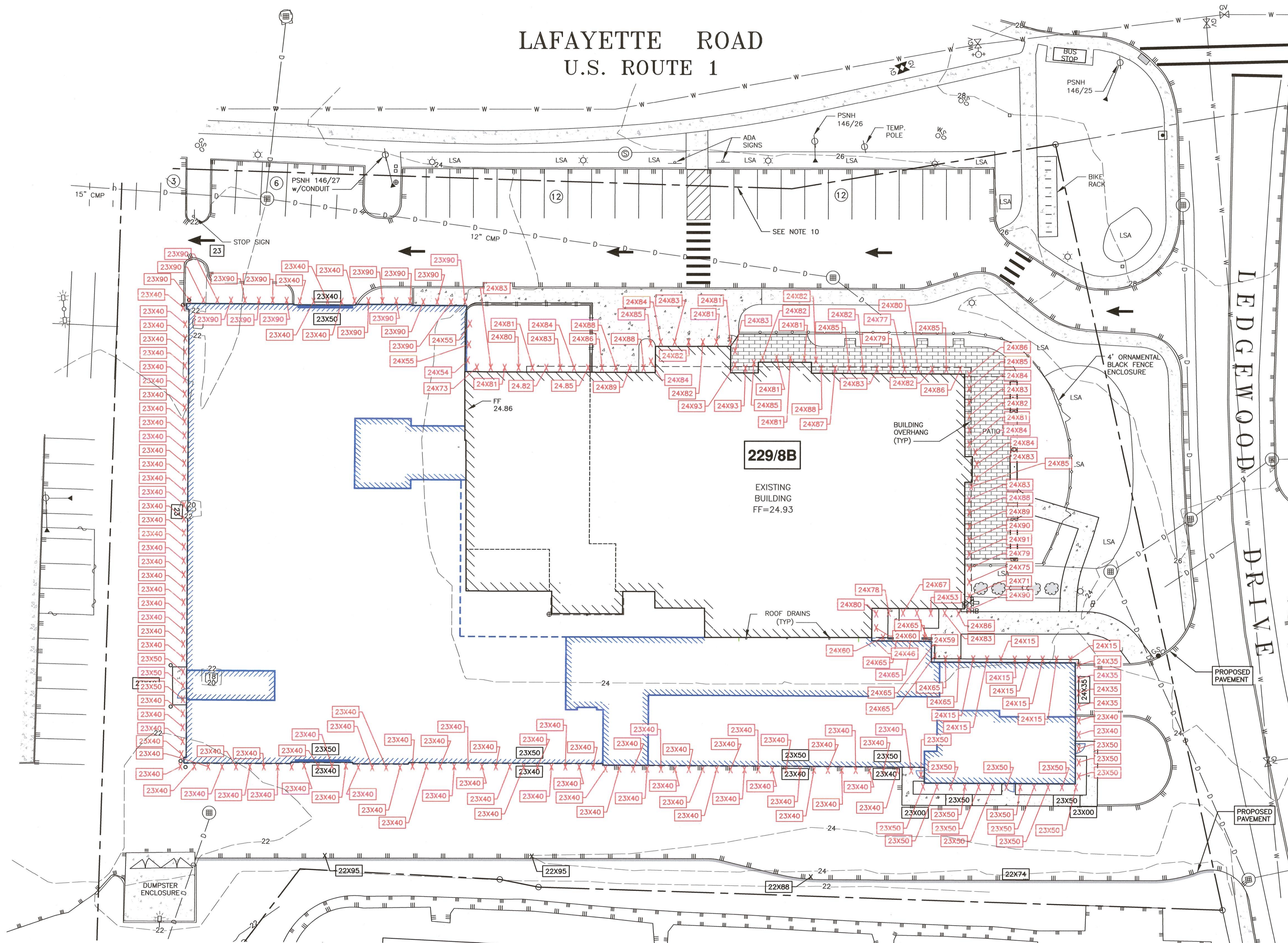
SCALE: 1"=20' DECEMBER 2023

EXISTING AVERAGE GRADE PLANE

**C11**



**LAFAYETTE ROAD  
U.S. ROUTE 1**



**NOTES:**

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 4) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.

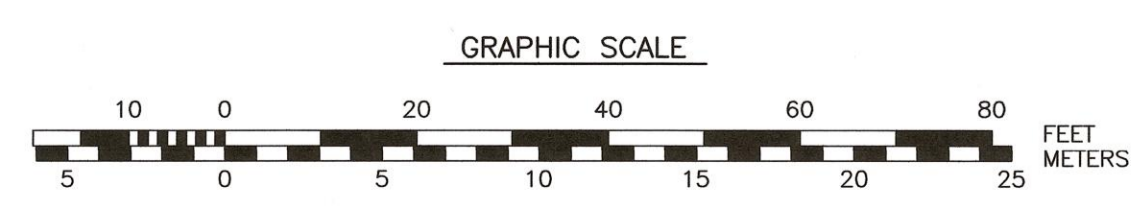
**COMMERCIAL  
DEVELOPMENT  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.**

0	ISSUED FOR COMMENT	1/11/24
NO.	DESCRIPTION	DATE

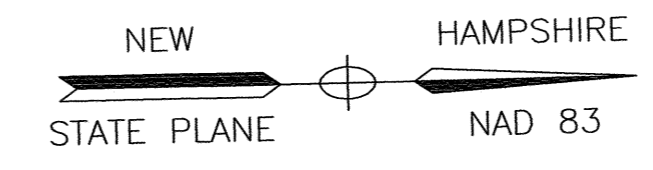


SCALE: 1"=20' DECEMBER 2023

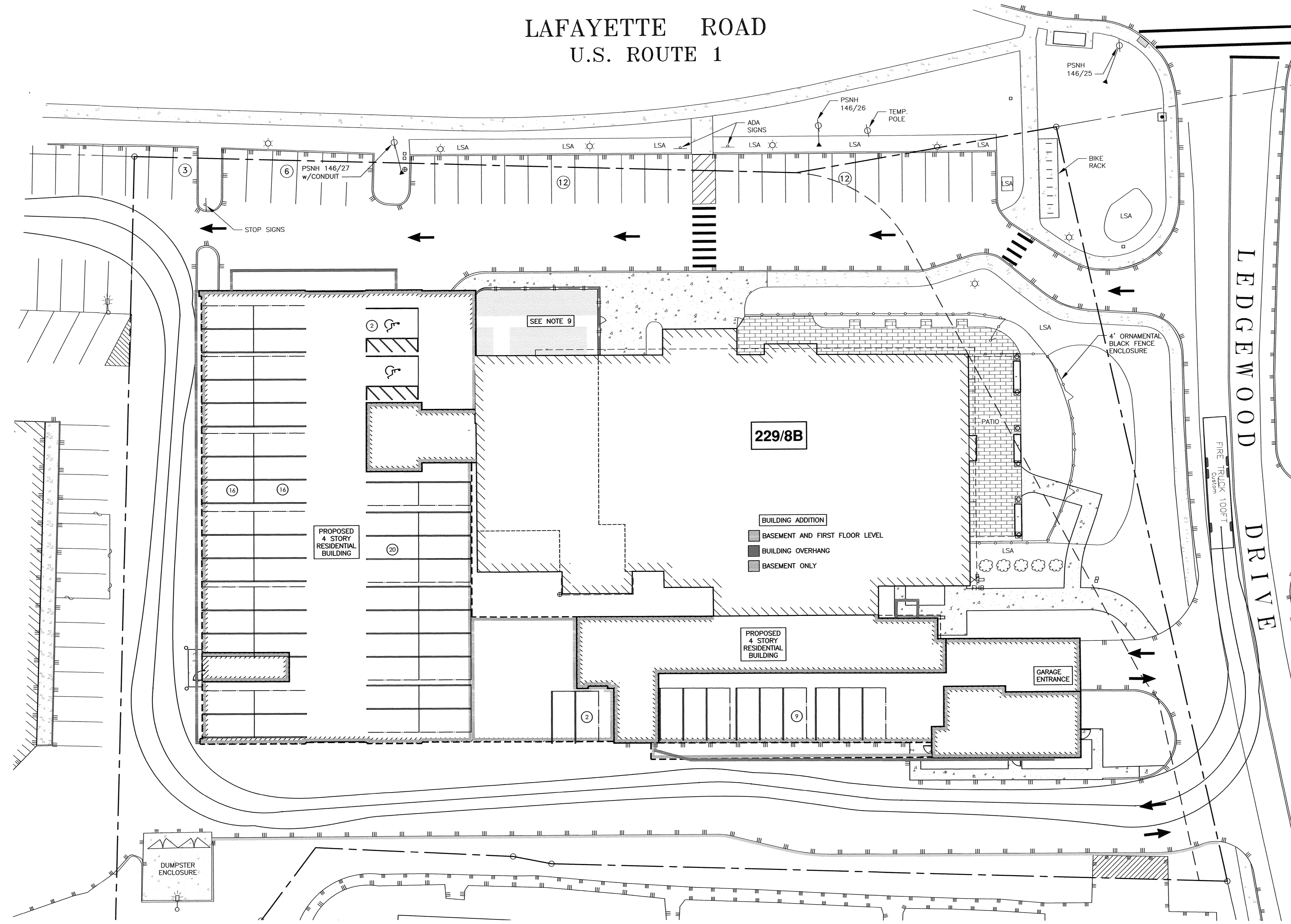
PROPOSED AVERAGE GRADE PLANE **C12**







LAFAYETTE ROAD  
U.S. ROUTE 1

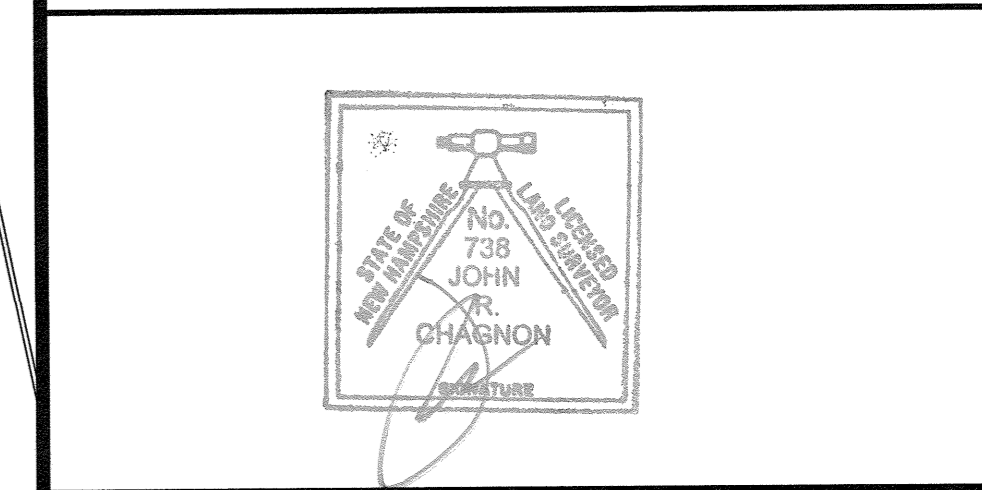


NOTES:

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270E, EFFECTIVE MAY 17, 2005
- 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW GENERAL TURNING MOVEMENTS ON TAX MAP 229 LOT 8B.
- 8) DESIGN BASED ON ARCHITECTURAL PLAN BY ARCOVE ARCHITECTS DATED 8/22/23.
- 9) CONVERSION OF TUSCAN MARKETPLACE TO RESTAURANT (NORTHEASTERN THAI, LLC) APPROVED UNDER PERMIT: LU-22-254

COMMERCIAL DEVELOPMENT  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR APPROVAL	1/24/24
0	ISSUED FOR COMMENT	8/31/23

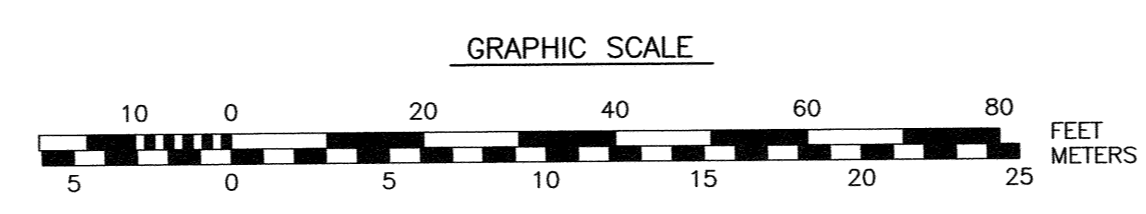


SCALE: 1"=20' JULY 2023

FIRE TRUCK TURNING PLAN **T1**

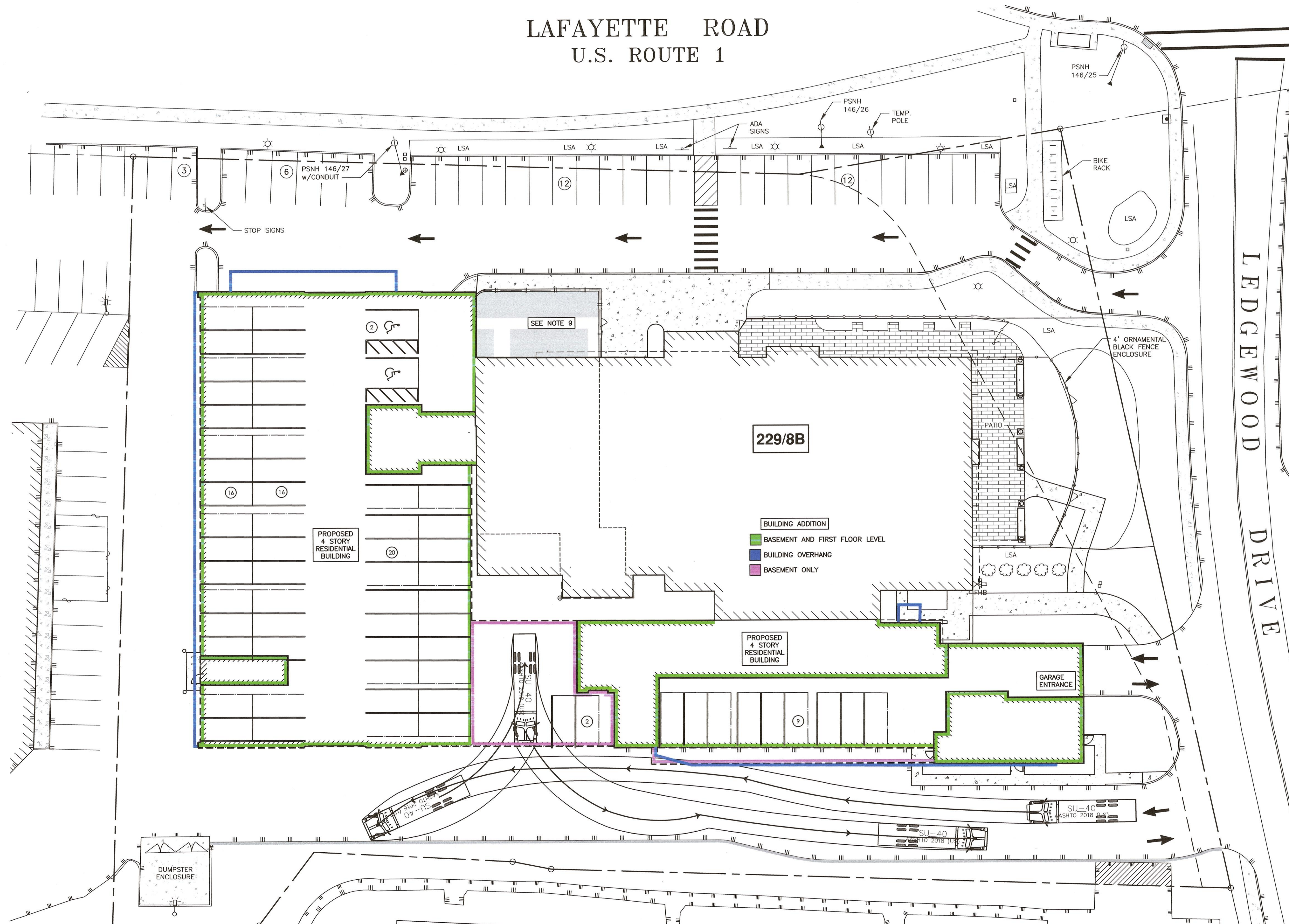
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



P:\NH\051516\_Macys\Projects\1397.04 Lafayette Rd. Portsmouth\1397.04\_DISTING 2023.dwg 1/24/24 10:53:34 PM, Appointed: Home-Care\T1000024.rvt

LAFAYETTE ROAD  
U.S. ROUTE 1



**NOTES:**

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 229 AS LOT 8B.
- 2) OWNERS OF RECORD:  
ATLAS COMMONS, LLC  
3 PLEASANT STREET, SUITE 400  
PORTSMOUTH, NH 03801  
6474/1538
- 3) THE PARCEL IS NOT IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 33015C0270E, EFFECTIVE MAY 17, 2005
- 4) EXISTING LOT AREA:  
98,124 S.F.  
2.2526 AC
- 5) PARCEL IS LOCATED IN THE GATEWAY CORRIDOR (G1) DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:  
SEE ZONING ORDINANCE SECTION 10.5B22.10
- 7) THE PURPOSE OF THIS PLAN IS TO SHOW GENERAL TURNING MOVEMENTS ON TAX MAP 229 LOT 8B.
- 8) DESIGN BASED ON ARCHITECTURAL PLAN BY ARCOVE ARCHITECTS DATED 8/22/23.
- 9) CONVERSION OF TUSCAN MARKETPLACE TO RESTAURANT (NORTHEASTERN THAI, LLC) APPROVED UNDER PERMIT: LU-22-254

**COMMERCIAL DEVELOPMENT**  
581 LAFAYETTE ROAD  
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR APPROVAL	1/24/24
0	ISSUED FOR COMMENT	8/31/23



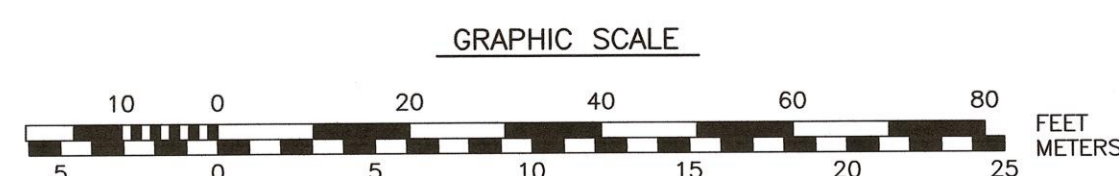
SCALE: 1"=20' JULY 2023

**DELIVERY TRUCK TURNING PLAN**

**T2**

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



**EROSION CONTROL NOTES**

**CONSTRUCTION SEQUENCE**

- DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- THE CONTRACTOR SHALL OBTAIN AN NPDES PHASE II STORMWATER PERMIT BEFORE BEGINNING CONSTRUCTION AND SHALL HAVE ON-SITE A STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) AVAILABLE FOR INSPECTION BY THE PERMITTING AUTHORITY DURING THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT THE S.W.P.P.P. AND INSPECTING AND MAINTAINING ALL BMP'S CALLED FOR BY THE PLAN. THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) FORM TO THE REGIONAL EPA OFFICE WITHIN 30 DAYS OF FINAL STABILIZATION OF THE ENTIRE SITE OR TURNING OVER CONTROL OF THE SITE TO ANOTHER OPERATOR.
- INSTALL PERIMETER CONTROLS, I.E., SILT/SOXX AROUND THE LIMITS OF DISTURBANCE AND CATCH BASIN BASKETS AS NEEDED BEFORE ANY EARTH MOVING OPERATIONS.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
- CUT AND GRUB ALL TREES, SHRUBS, SAPLINGS, BRUSH, VINES AND REMOVE OTHER DEBRIS AND RUBBISH AS REQUIRED.
- DEMOLISH EXISTING WALKWAYS, PAVEMENT, AND UTILITIES AS INDICATED ON THE PLANS.
- REPLANT TREES OR MOVE TO STABLE LOCATION.
- BEGIN CONSTRUCTION OF ADDITIONS.
- LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO 10' OF THE PROPOSED BUILDING FOUNDATIONS. CAP AND MARK TERMINATIONS OR LOG SWING TIES.
- FINISH GRADE SITE, BACKFILL ROAD SUBBASE GRAVEL IN TWO, COMPACTED LIFTS. PROVIDE TEMPORARY EROSION PROTECTION IN THE FORM OF MULCHING, JUTE MESH OR DITCH DAMS.
- INSTALL RETAINING WALL.
- INSTALL DRAINAGE SYSTEM.
- PLACE BINDER LAYER OF PAVEMENT, THEN RAISE CATCH BASIN FRAMES TO FINAL GRADE. REINSTALL BASIN INLET PROTECTION.
- PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL, SEED, MULCH AND FERTILIZER.
- AFTER BUILDINGS ARE COMPLETED, FINISH ALL REMAINING LANDSCAPED WORK.
- CONSTRUCT ASPHALT WEARING COURSE.
- REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

**GENERAL CONSTRUCTION NOTES**

- THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.
- ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.
- DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.
- SILT FENCES AND SILT/SOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND SILT/SOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.
- AVOID THE USE OF FUTURE OPEN SPACES ( LOAM AND SEED AREAS ) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.
- ADDITIONAL TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS--CONSTRUCT SILT FENCE OR SILT/SOXX AROUND TOPSOIL STOCKPILE.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED OF IN AN APPROVED FACILITY.
- ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
- ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.
- FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.
- FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.
- DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.
- THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.
- ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
  - EROSION CONTROL BLANKETS HAVE BEEN INSTALLED

**VEGETATIVE PRACTICE**

FOR PERMANENT MEASURES AND PLANTINGS:

- LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.
- FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
- SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING,

THE SOIL SHALL BE LIGHTLY RAKED, ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE:

GENERAL COVER	PROPORTION	SEEDING RATE
CREeping RED FESCUE	50%	100 LBS/ACRE
KENTUCKY BLUEGRASS	50%	
SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)		
CREeping RED FESCUE	42%	
TALL FESCUE	42%	48 LBS/ACRE
BIRDSFOOT TREFLOIL	16%	

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

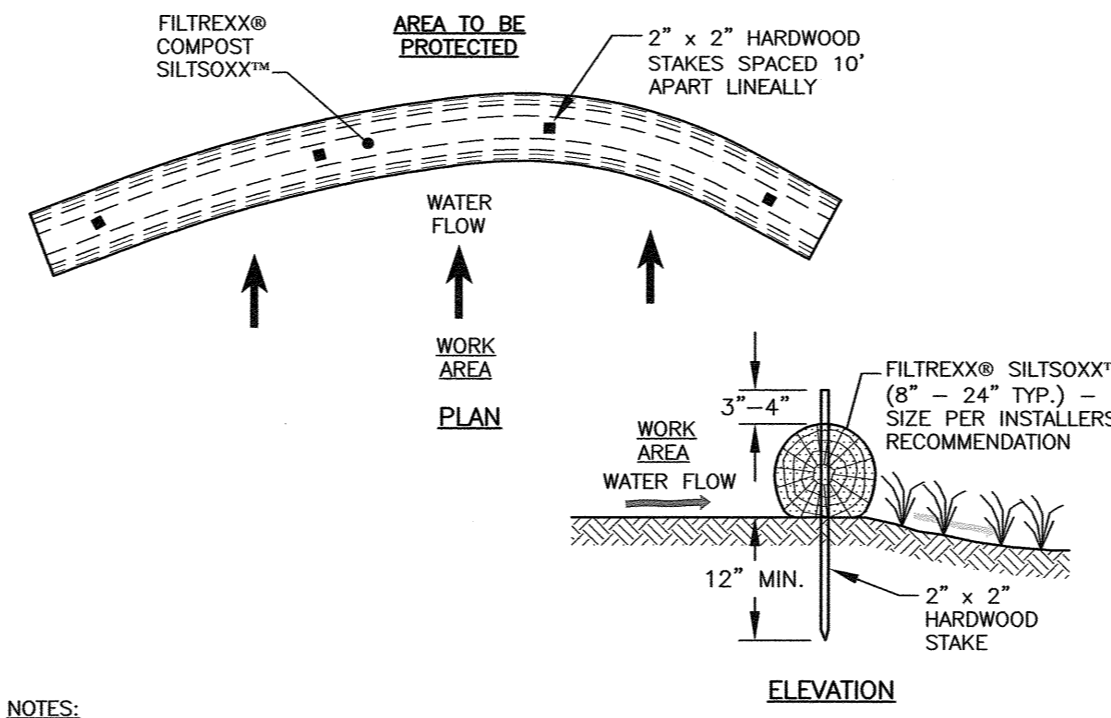
FOR TEMPORARY PROTECTION OF DISTURBED AREAS:  
 MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:  
 PERENNIAL RYE: 0.7 LBS/1,000 S.F.  
 MULCH: 1.5 TONS/ACRE

**MAINTENANCE AND PROTECTION**

- THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.
- TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.
- SEEDED AREAS WILL BE FERTILIZED AND RESEED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
- THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- THE SILT FENCE OR SILT/SOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- SILT FENCING AND SILT/SOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE AND SILT/SOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

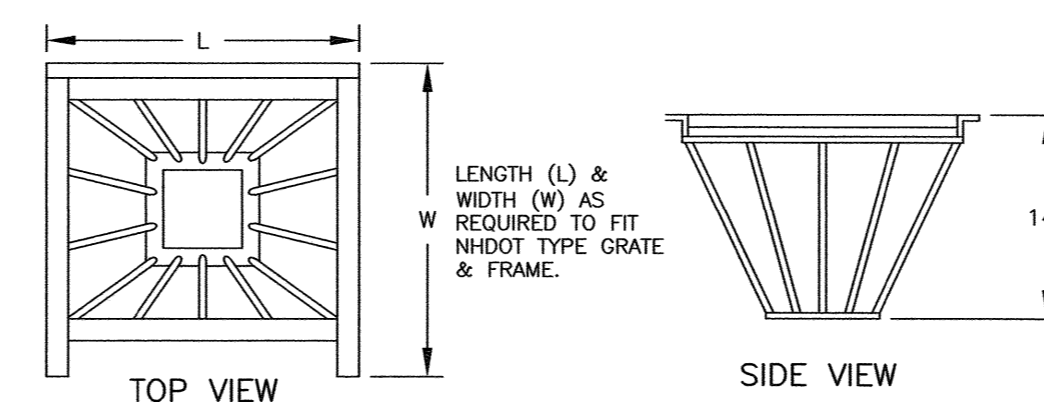
**WINTER NOTES**

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



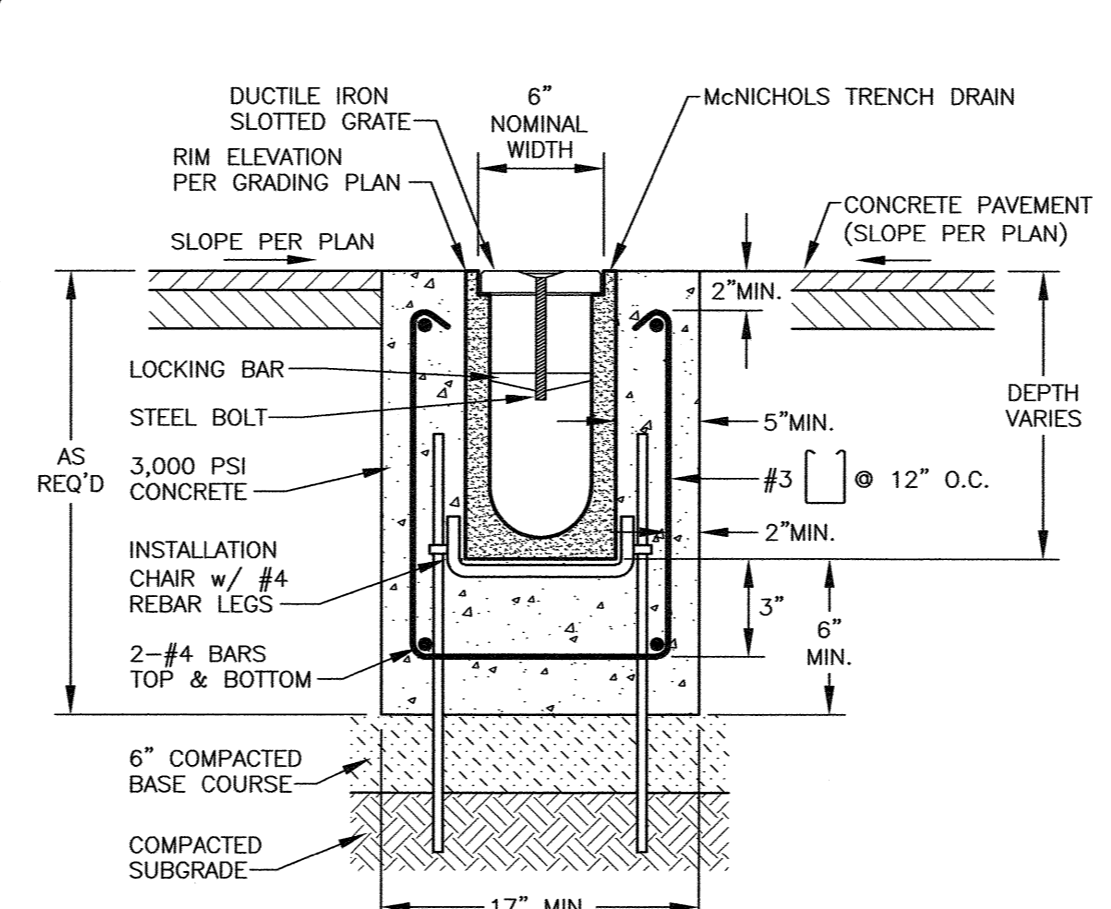
- NOTES:**
- ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
  - FILTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
  - THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
  - SILT/SOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
  - THE COMPOST FILTER MATERIAL WILL BE DISPENSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

**A** **FILTREXX® SILT/SOXX™ FILTRATION SYSTEM** **NTS**

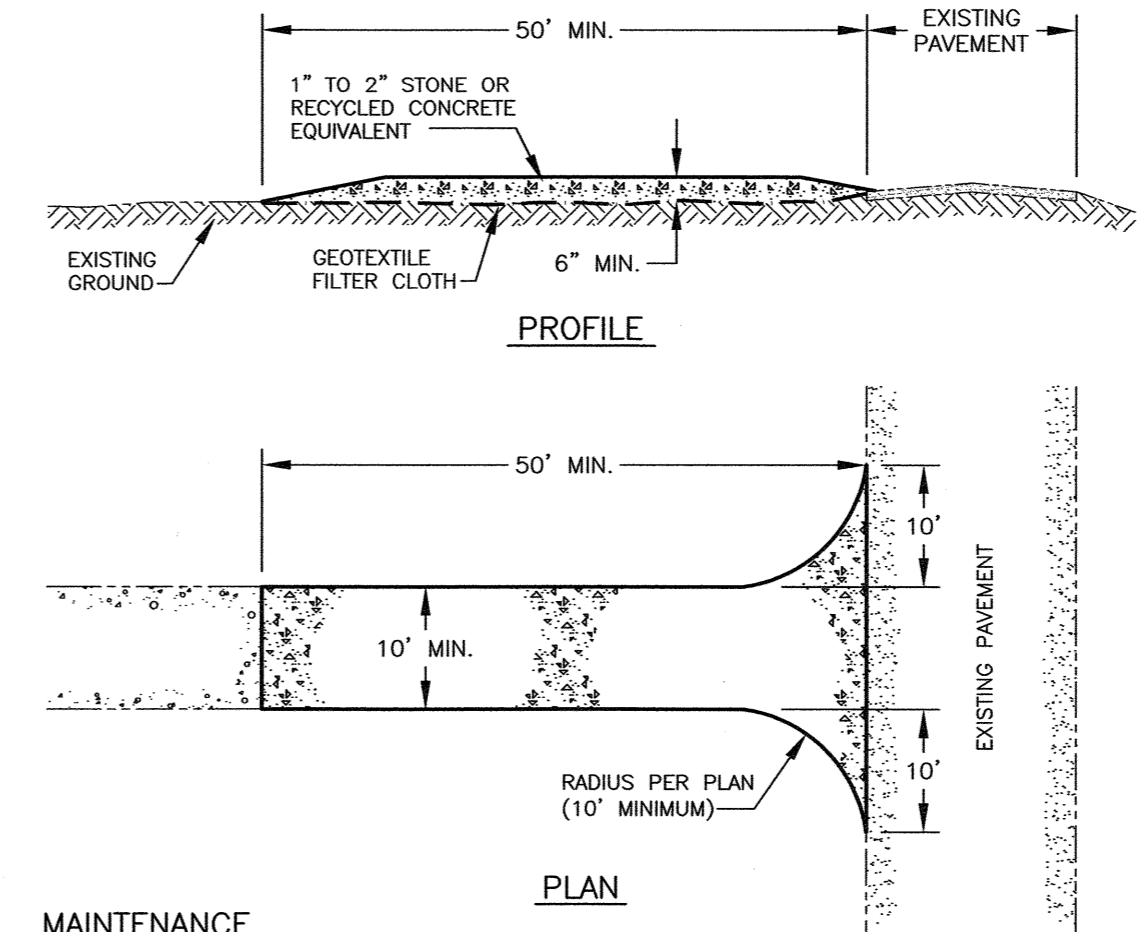


- INLET BASKETS SHALL BE INSTALLED IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION IS COMPLETE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.
- FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND, SHALL EXTEND AT LEAST 6" PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.
- THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC: POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE, OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:
  - RAB STRENGTH: 45 LB. MIN. IN ANY PRINCIPAL DIRECTION (ASTM D1682)
  - MULLEN BURST STRENGTH: MIN. 60 psi (ASTM D774)
- THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 gpm/ft. (MULTIPLY THE PERMITTIVITY IN SEC.-1 FROM ASTM 54491-85 CONSTANT HEAD TEST USING THE CONVERSION FACTOR OF 74.)
- THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.
- SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

**B** **CATCH BASIN INLET BASKET** **NTS**



**D** **EVAPORATIVE TRENCH DRAIN DETAIL** **NTS** **SECTION**

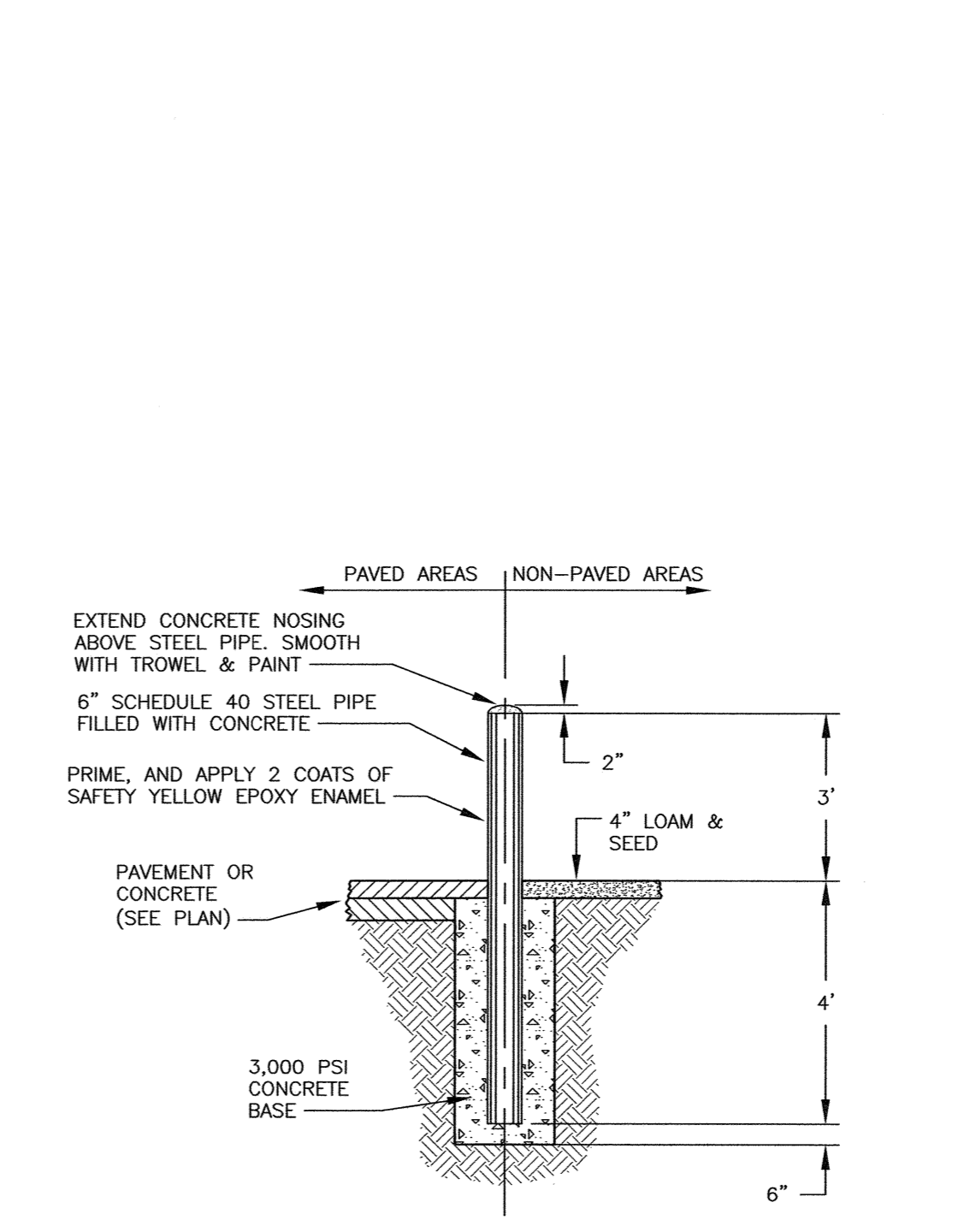


- MAINTENANCE**
- MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOP DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
  - IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

**CONSTRUCTION SPECIFICATIONS**

- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE GROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

**C** **STABILIZED CONSTRUCTION ENTRANCE** **NTS**



**E** **PIPE BOLLARD DETAIL** **NTS**

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**AMBIT ENGINEERING, INC.**  
 A DIVISION OF HALEY WARD, INC.

200 Griffin Road, Unit 3  
 Portsmouth, NH 03801  
 603.430.9282

WWW.HALEYWARD.COM

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/20/23

Professional Engineer Seal for John R. Chagnon, No. 7851, State of New Hampshire.

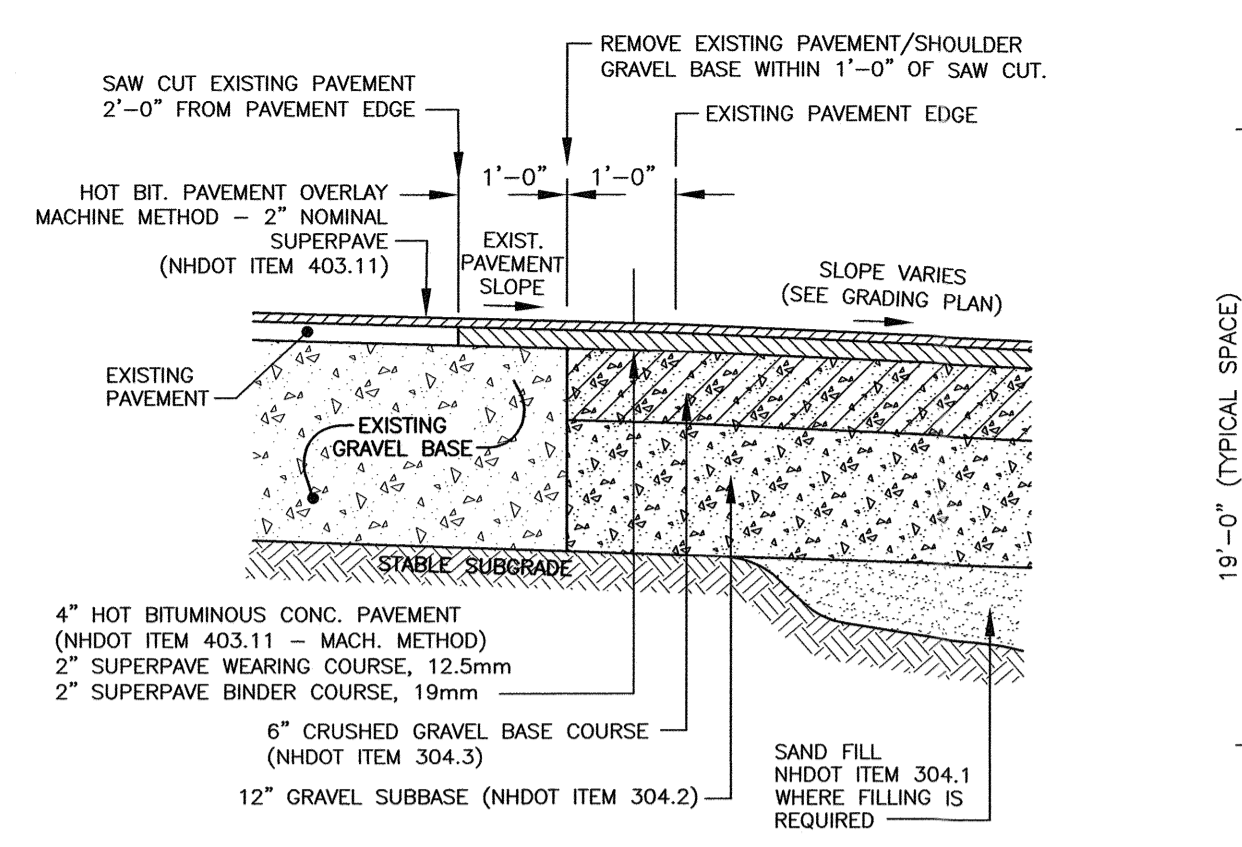
SCALE: AS NOTED NOVEMBER 2023

**EROSION CONTROL NOTES & DETAILS** **D1**

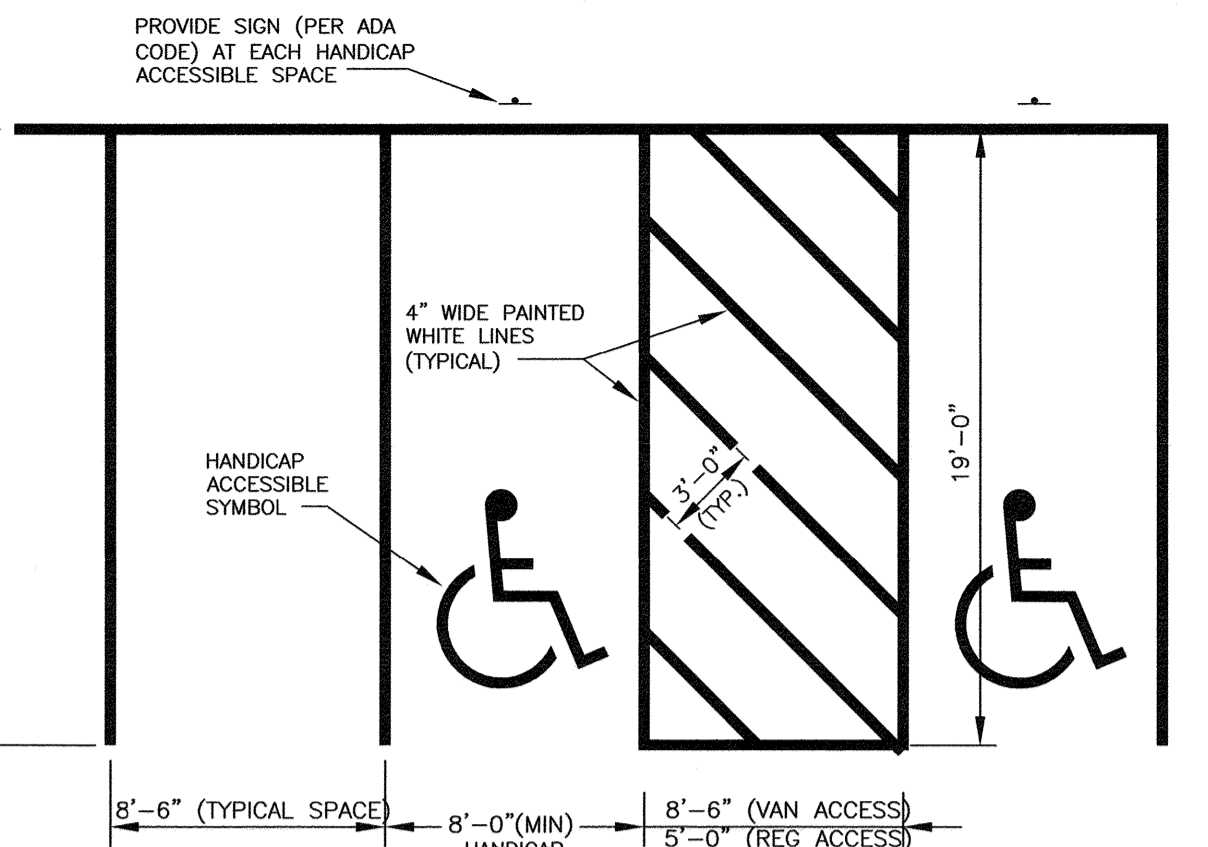
**NOTES:**  
1) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

2) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

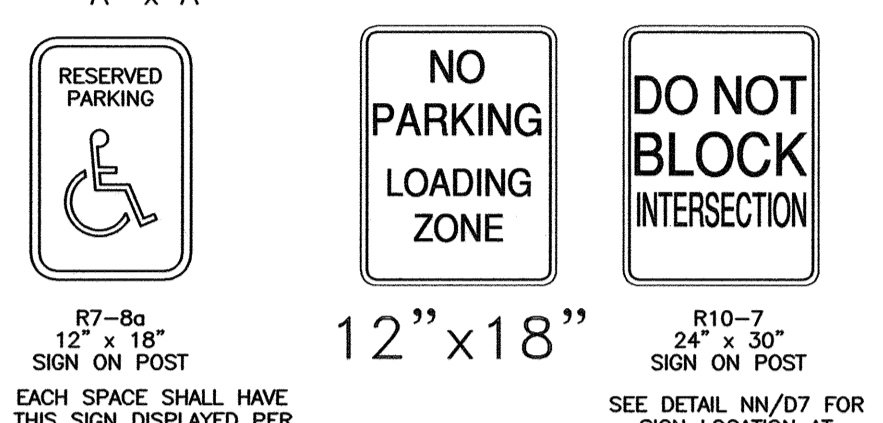
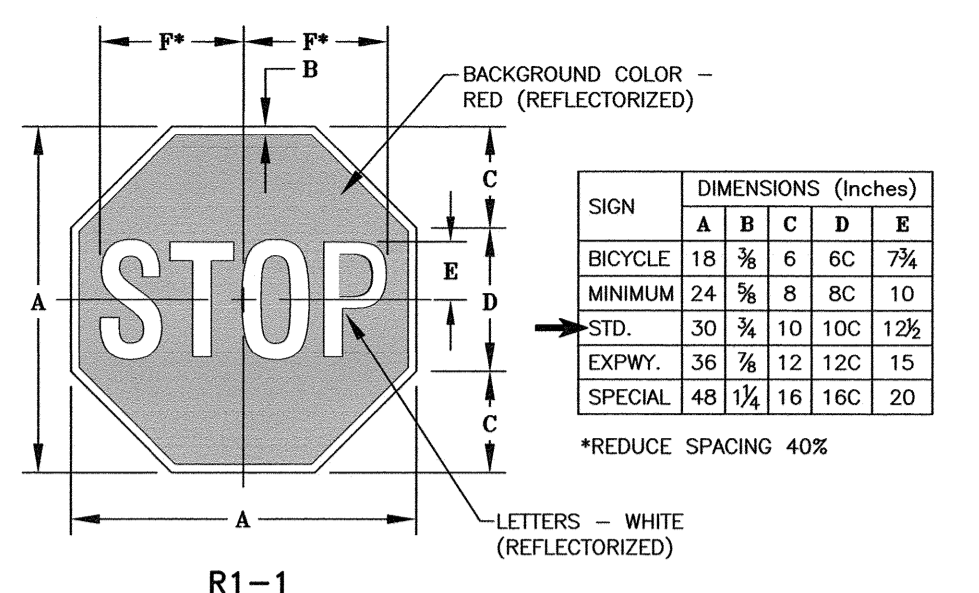
3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).



**F**  
C3  
**FULL DEPTH PAVEMENT SECTION AND PAVEMENT JOINT DETAIL**  
NTS



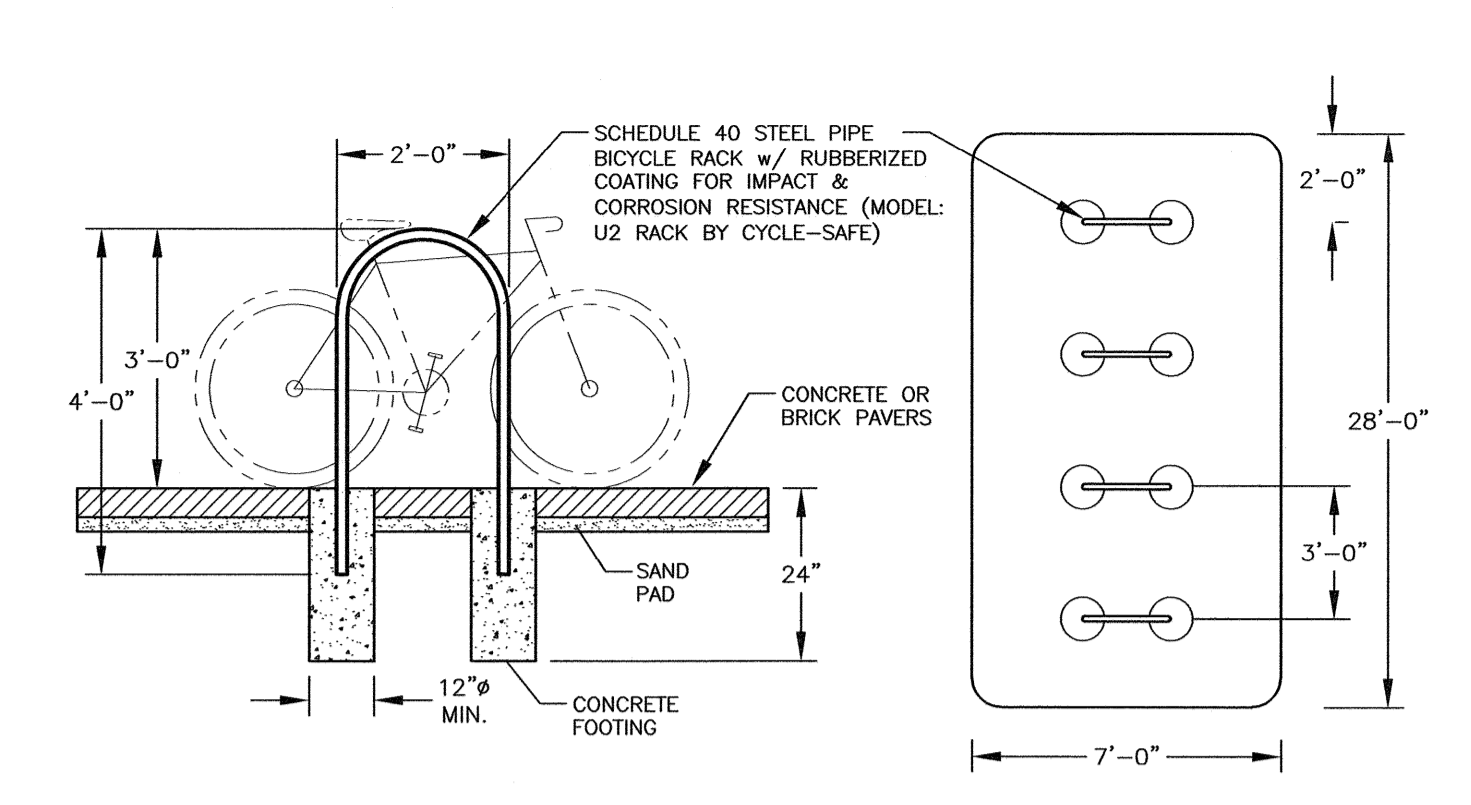
**J**  
C3  
**PARKING STALL DETAIL**  
NTS



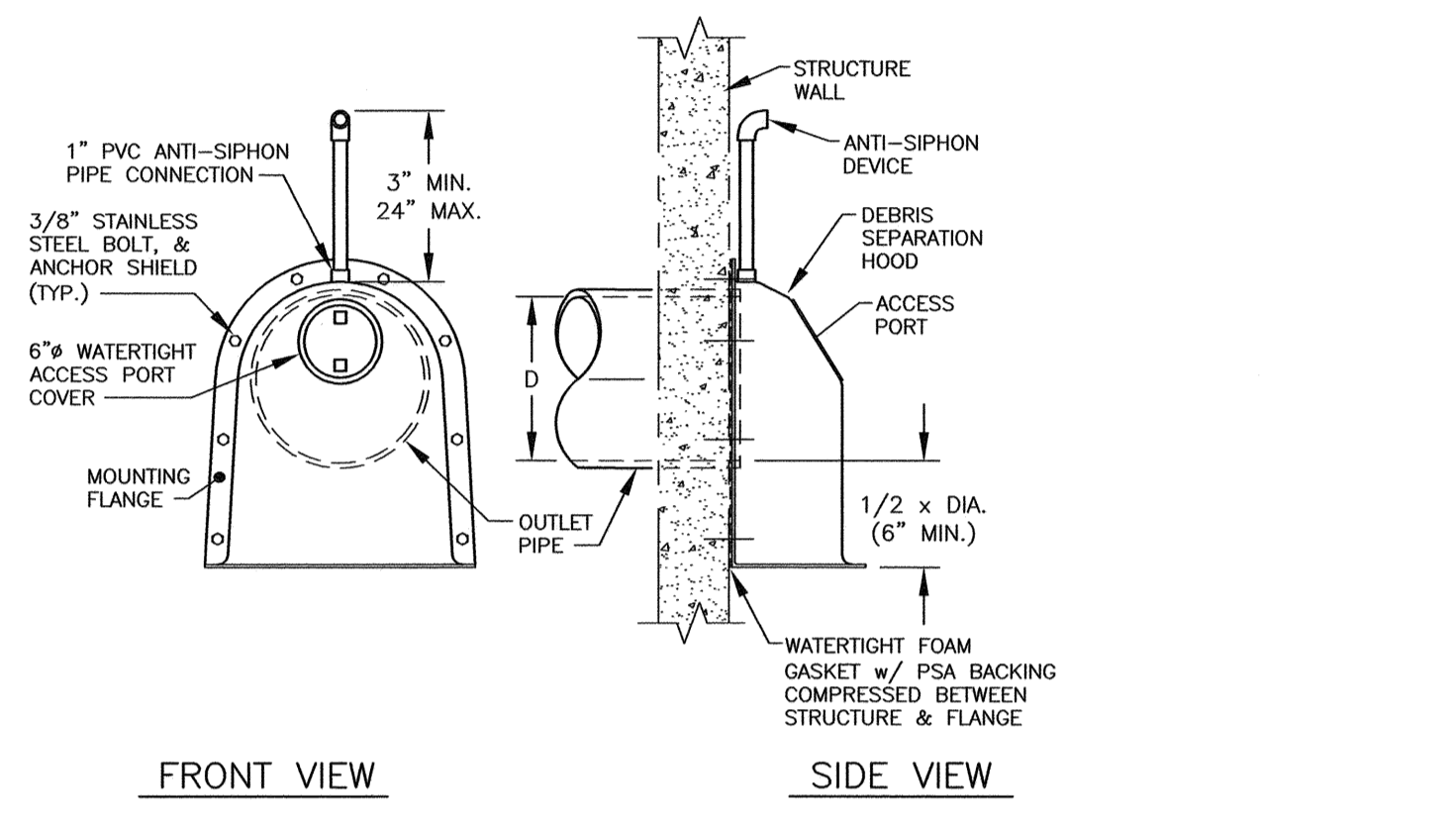
**R7-8a**  
12" x 18"  
SIGN ON POST  
EACH SPACE SHALL HAVE THIS SIGN DISPLAYED PER ADA CODE

**R10-7**  
24" x 30"  
SIGN ON POST  
SEE DETAIL NN/D7 FOR SIGN LOCATION AT INTERSECTION OF LEDGWOOD DRIVE AND LAFAYETTE ROAD

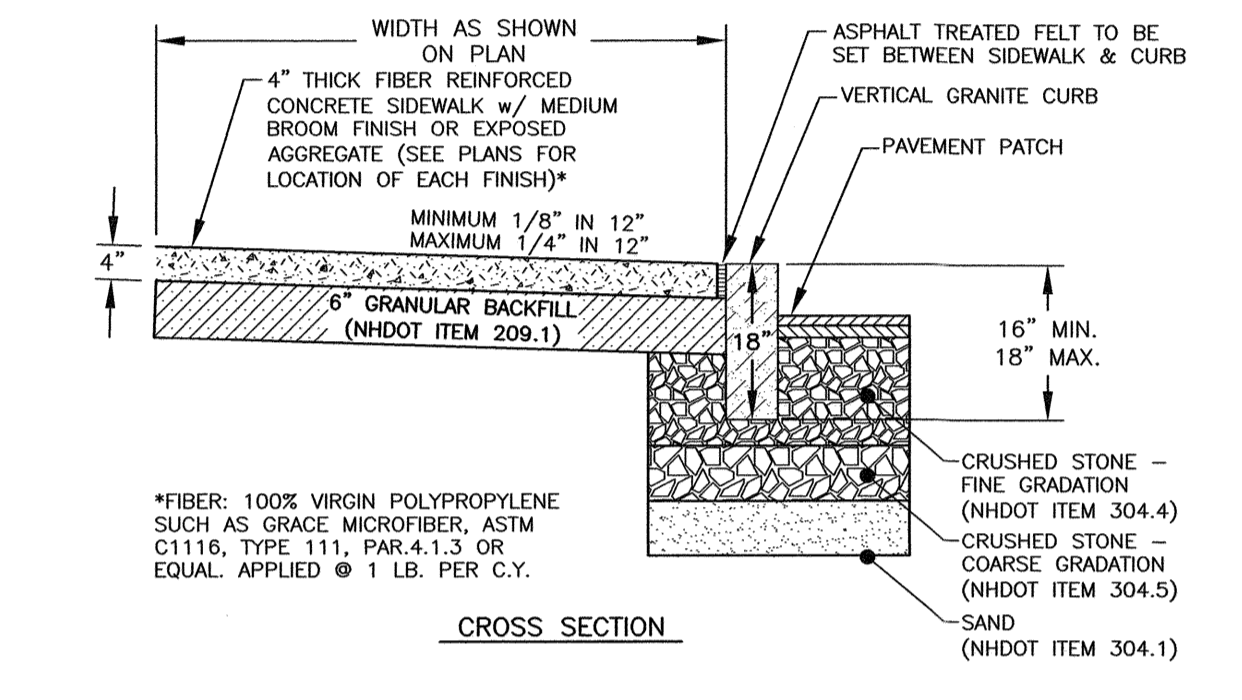
**R5-1**  
30" x 30"  
**SIGN DETAILS**  
NTS



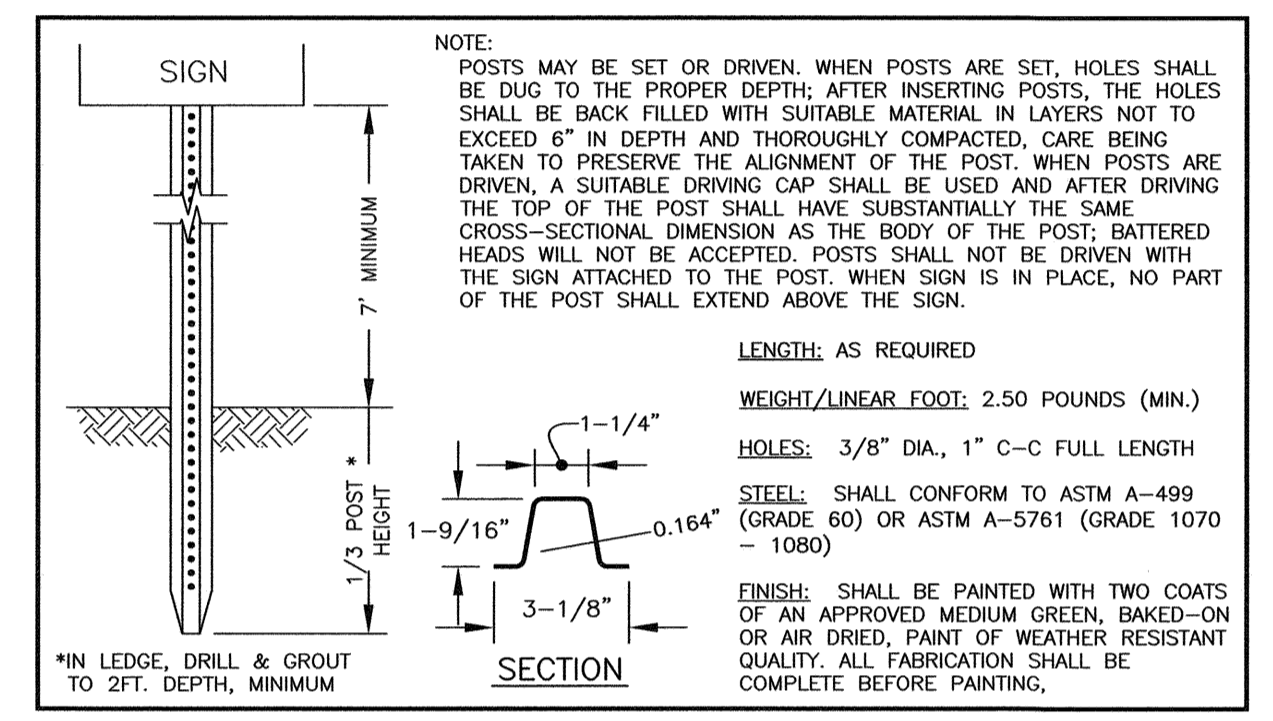
**N**  
C3  
**UPTURNED "U" BICYCLE RACK**  
NTS



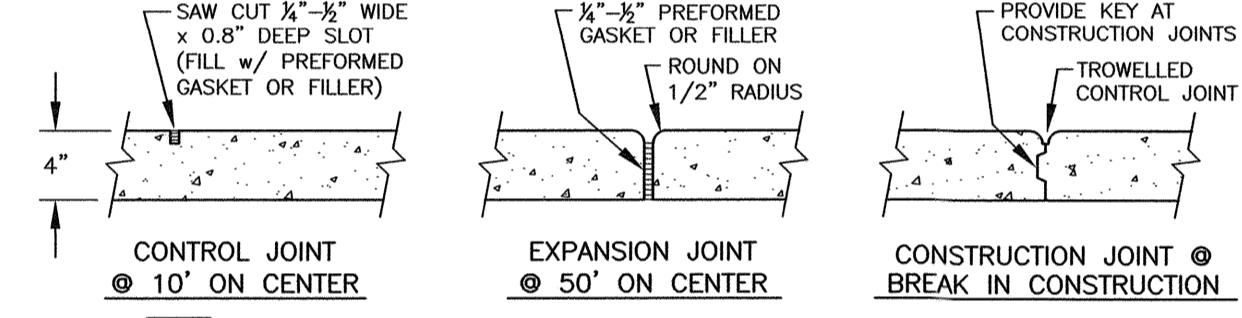
**O**  
C6  
**CATCH BASIN OUTLET HOOD DETAIL**  
NTS



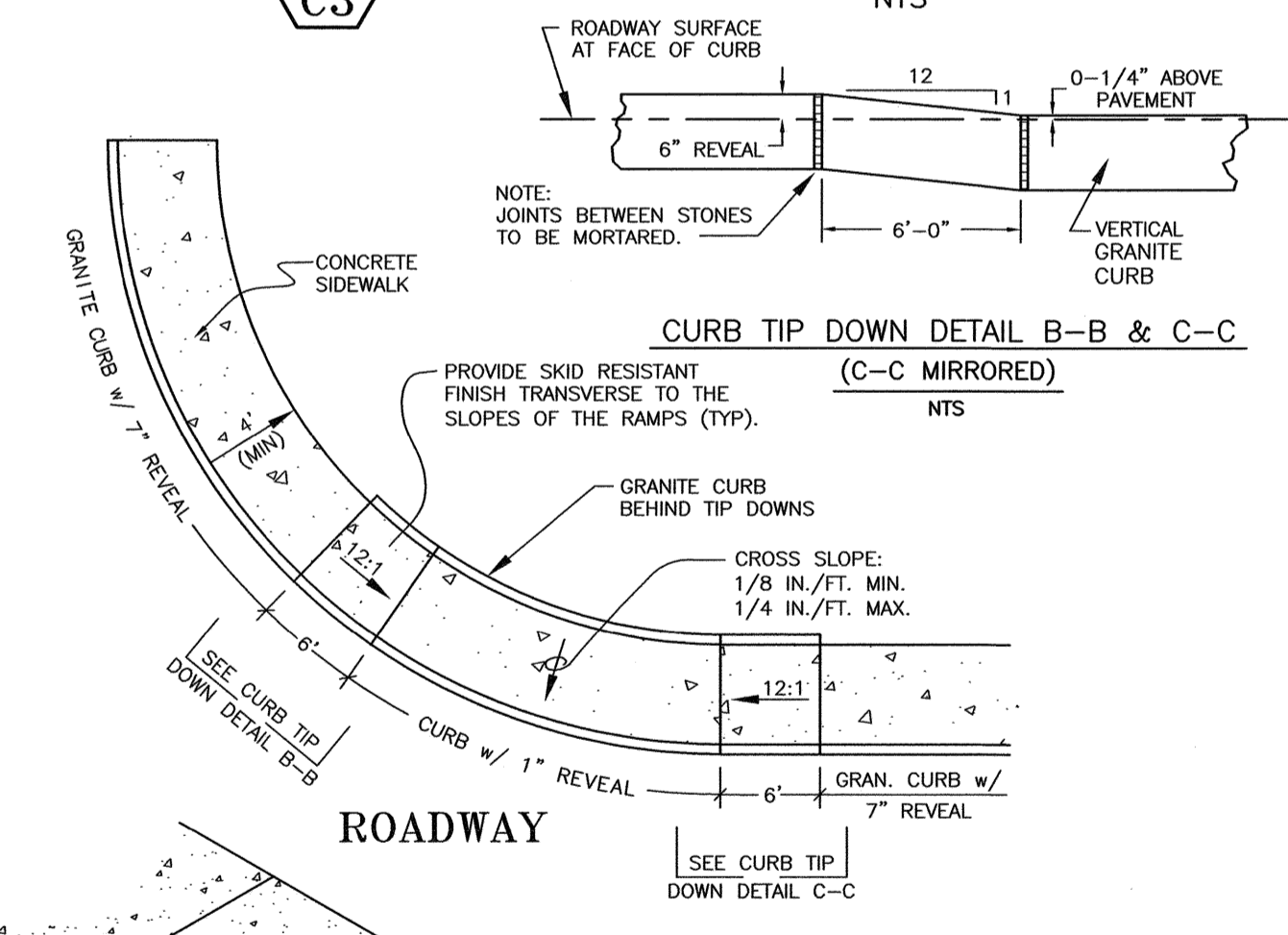
**G**  
C3  
**PORTLAND CEMENT CONCRETE SIDEWALK**  
NTS



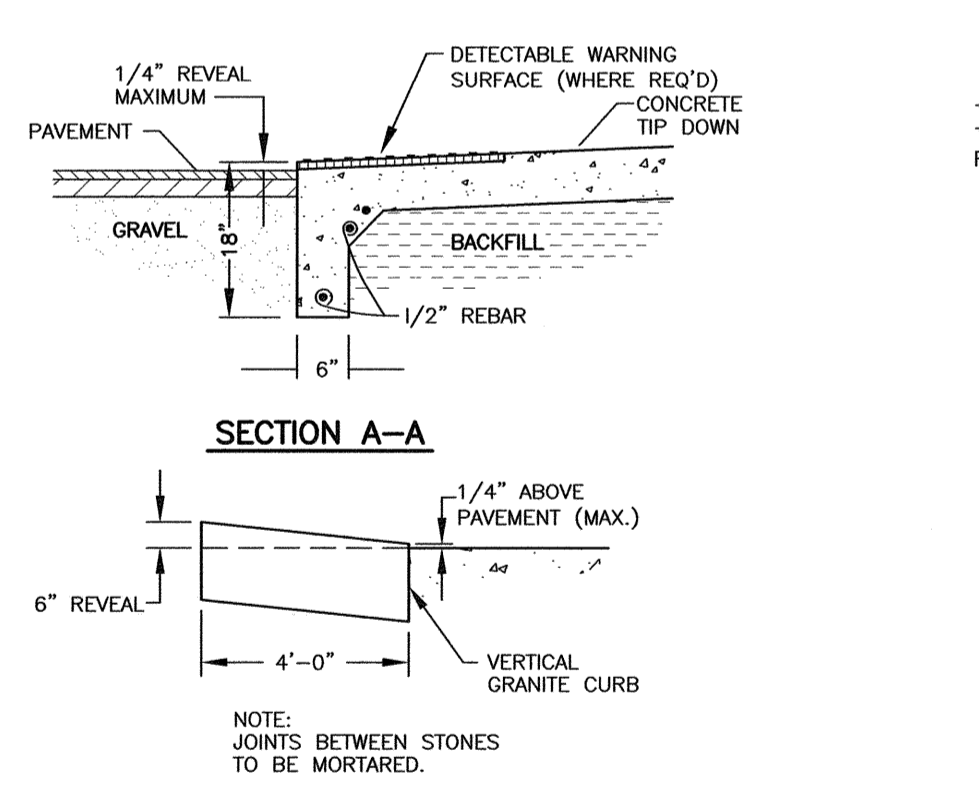
**K**  
C3  
**SIGN POST DETAIL**  
NTS



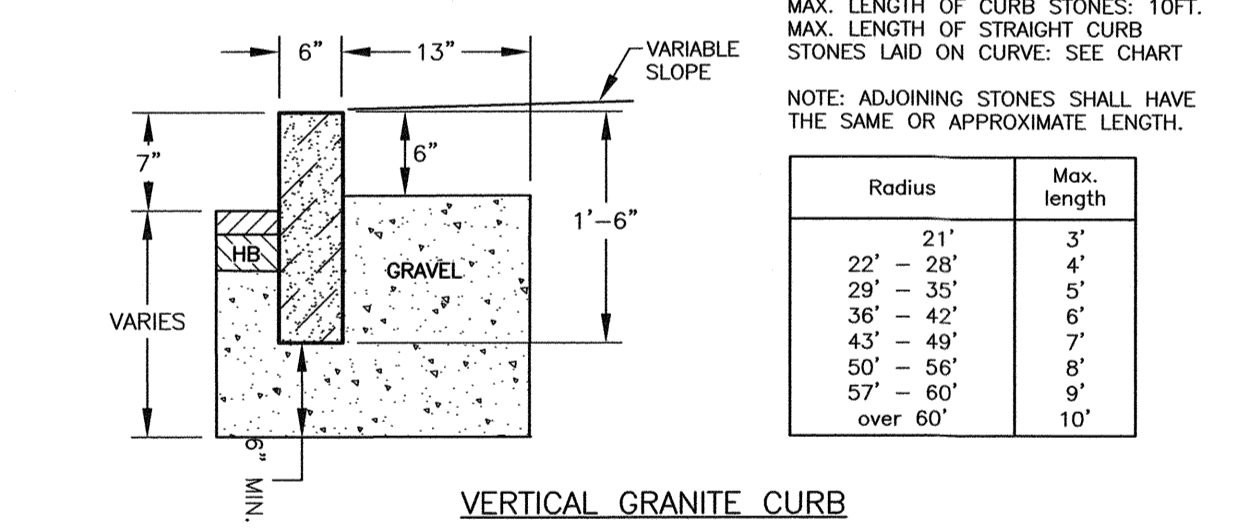
**H**  
C3  
**GRANITE CURBING DETAILS**  
(CITY OF PORTSMOUTH)  
NTS



**L**  
C3  
**TIP DOWNS FOR CONCRETE SIDEWALK**  
NTS



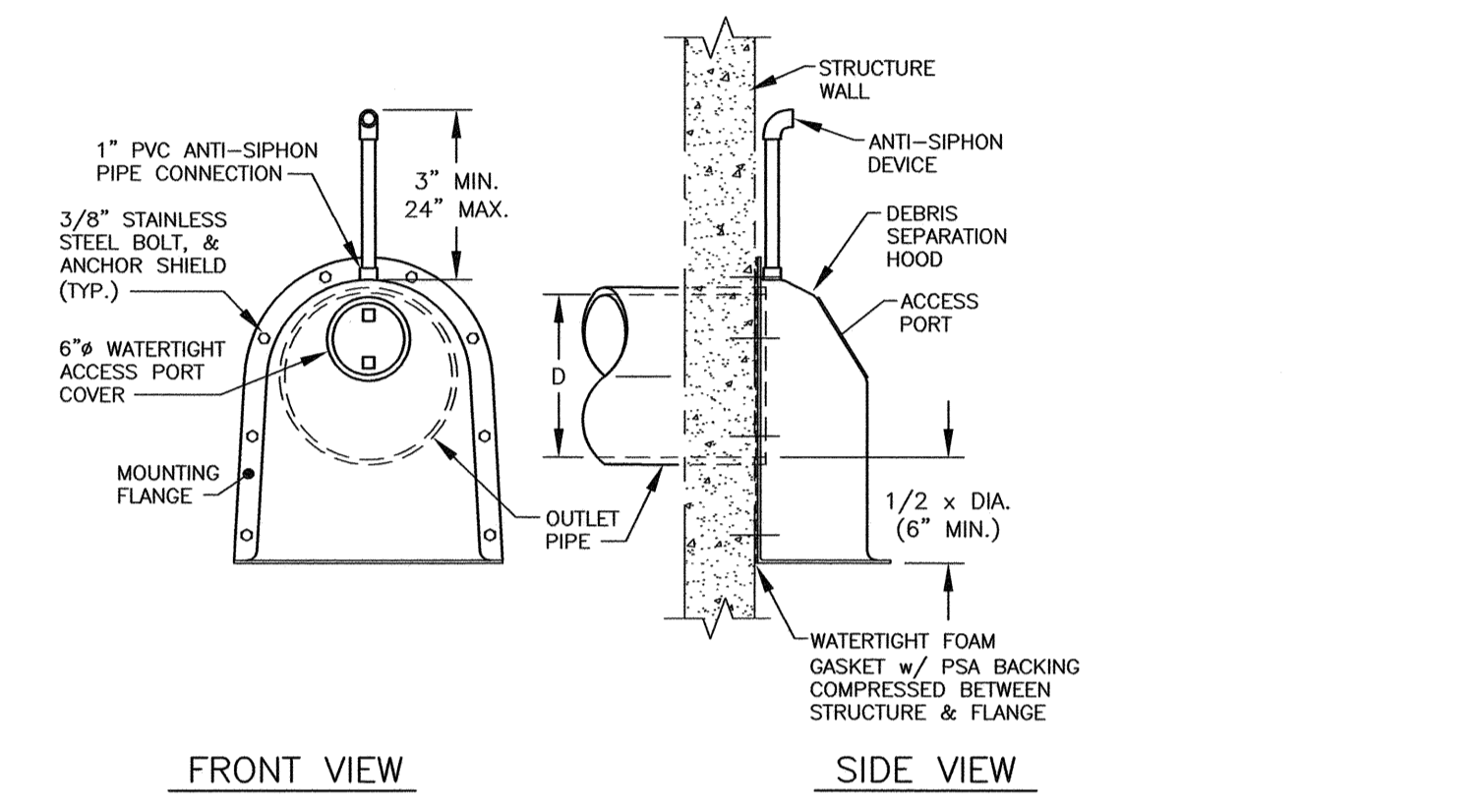
**M**  
C3  
**GRANITE CURB END FOR VERTICAL GRANITE CURB**  
NTS



**I**  
C3  
**PAINTED CROSSWALK DETAIL**  
NTS

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

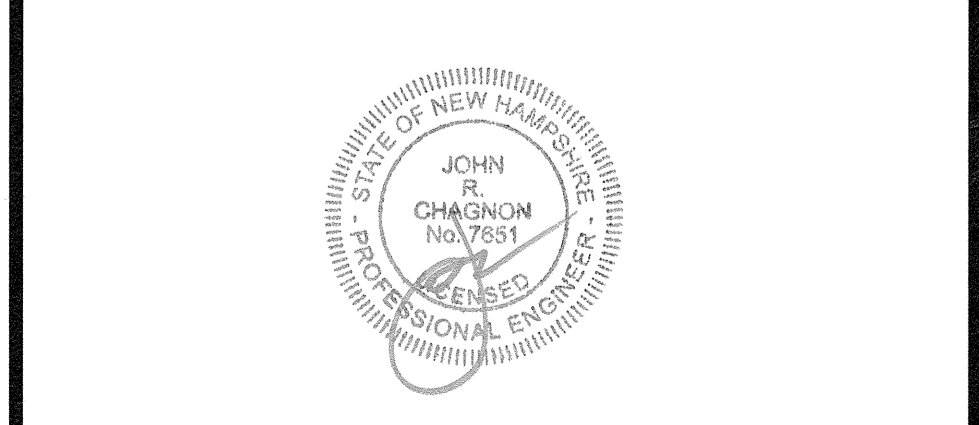


**P**  
C5  
**TRANSFORMER PAD**  
COORDINATE WITH EVERSOURCE  
NTS

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

0	ISSUED FOR COMMENT	11/20/23
NO.	DESCRIPTION	DATE

REVISIONS	



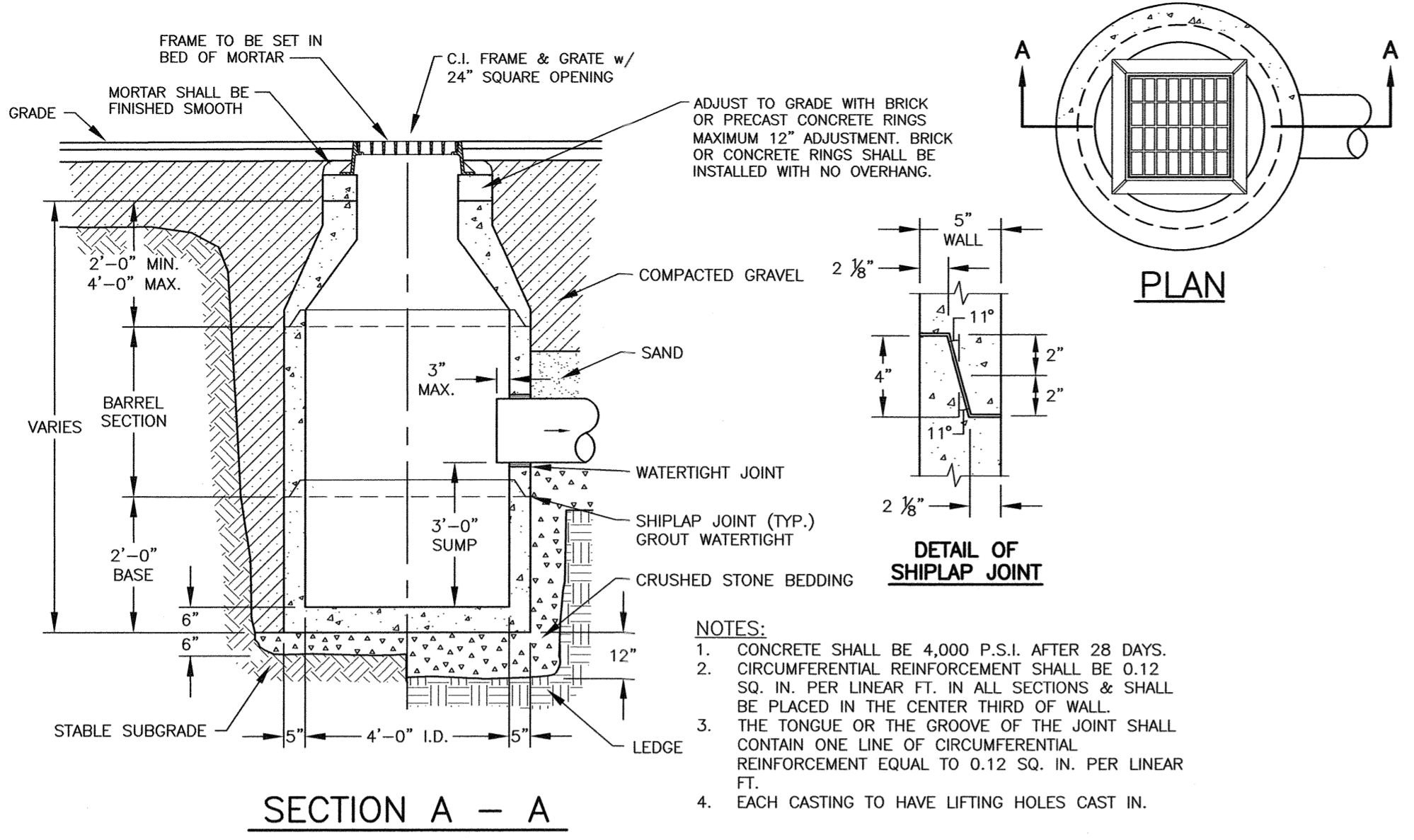
SCALE: AS NOTED NOVEMBER 2023

**DETAILS** **D2**

**NOTES:**  
1) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

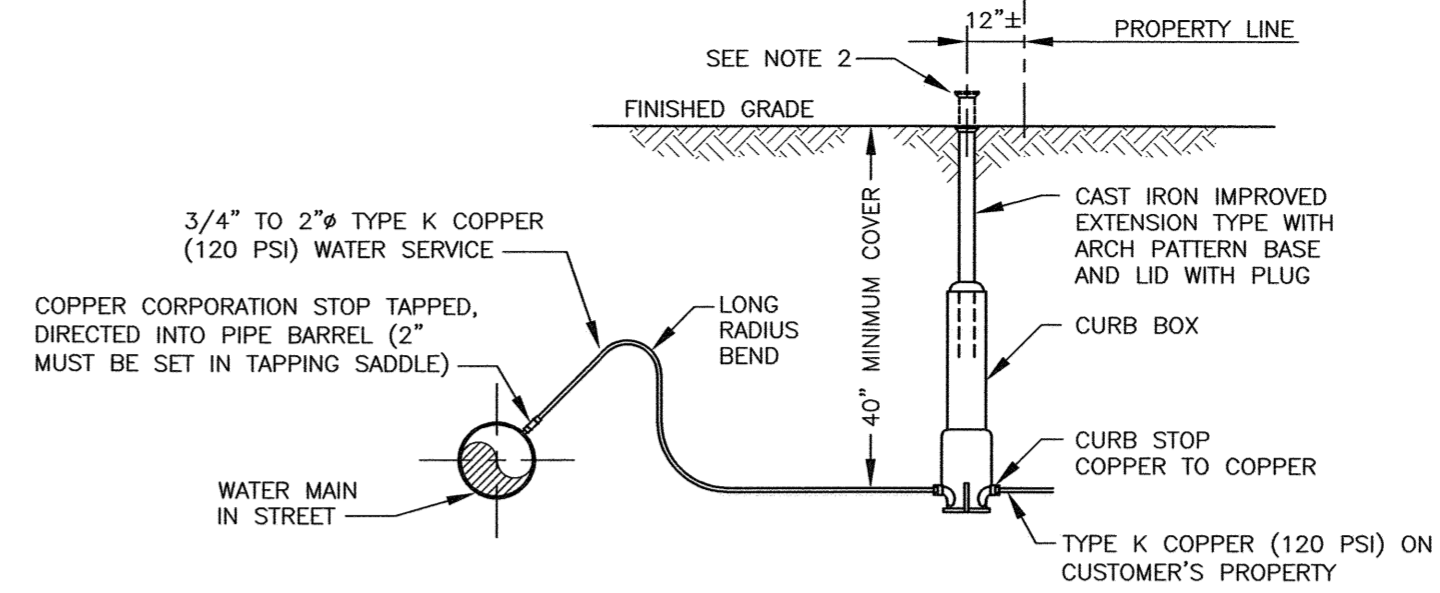
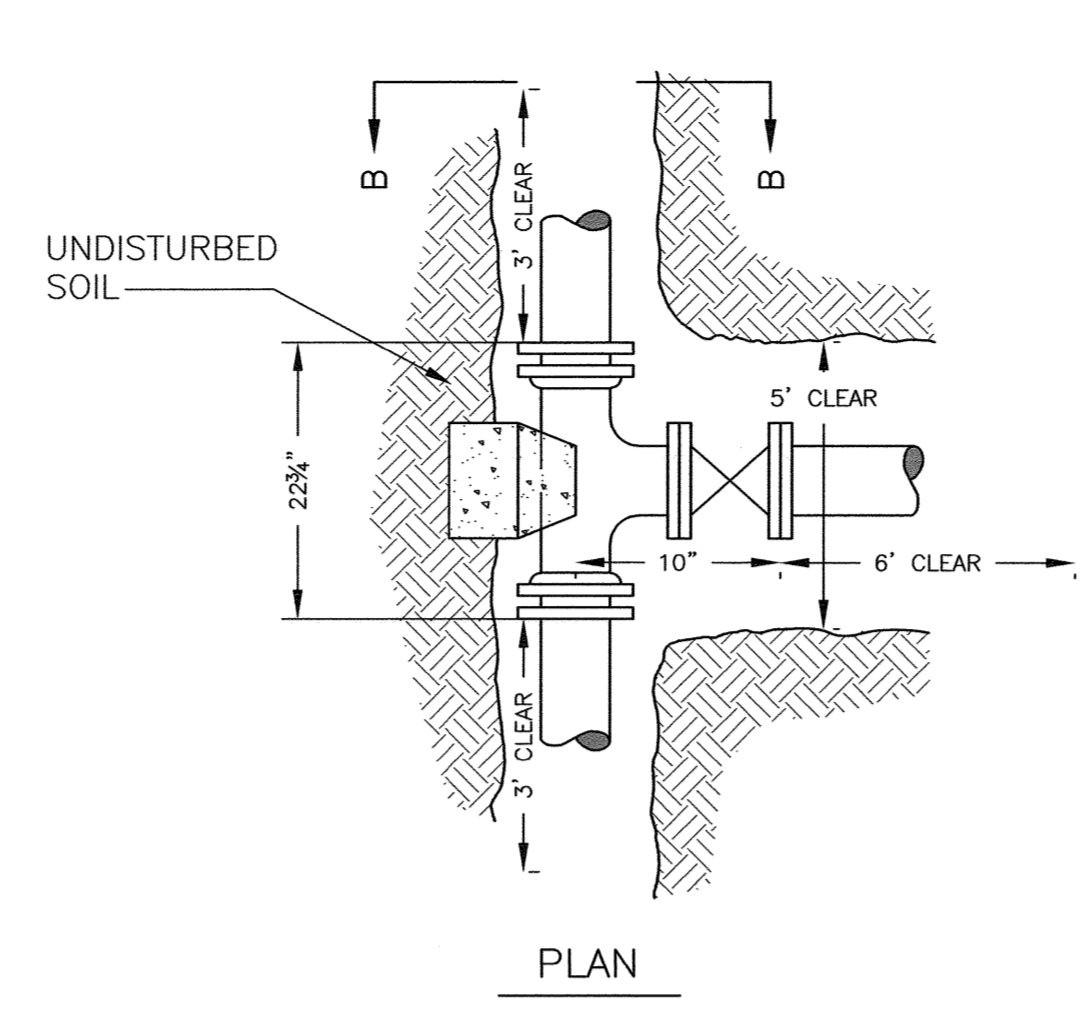
2) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).



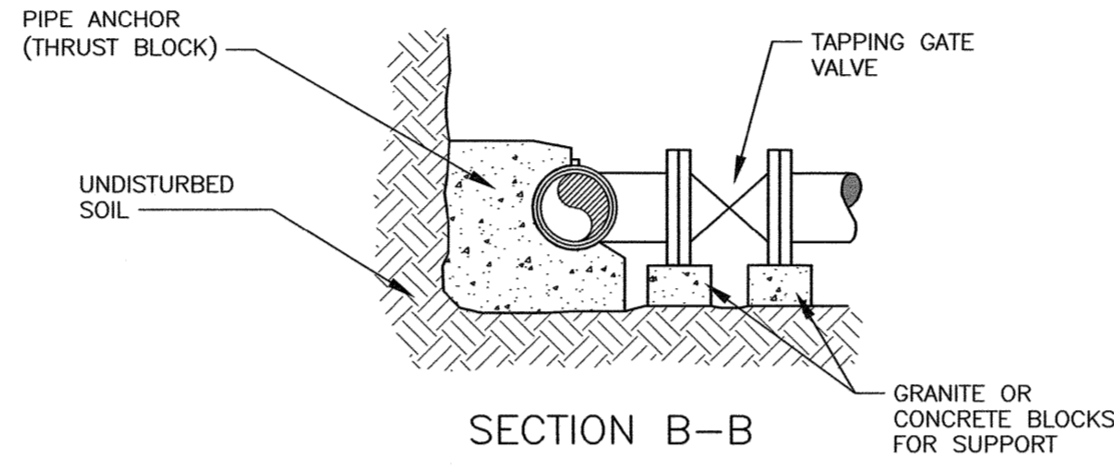
- NOTES:**
1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
  2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS & SHALL BE PLACED IN THE CENTER THIRD OF WALL.
  3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
  4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.

**Q** CATCH BASIN DETAIL  
C5 NTS



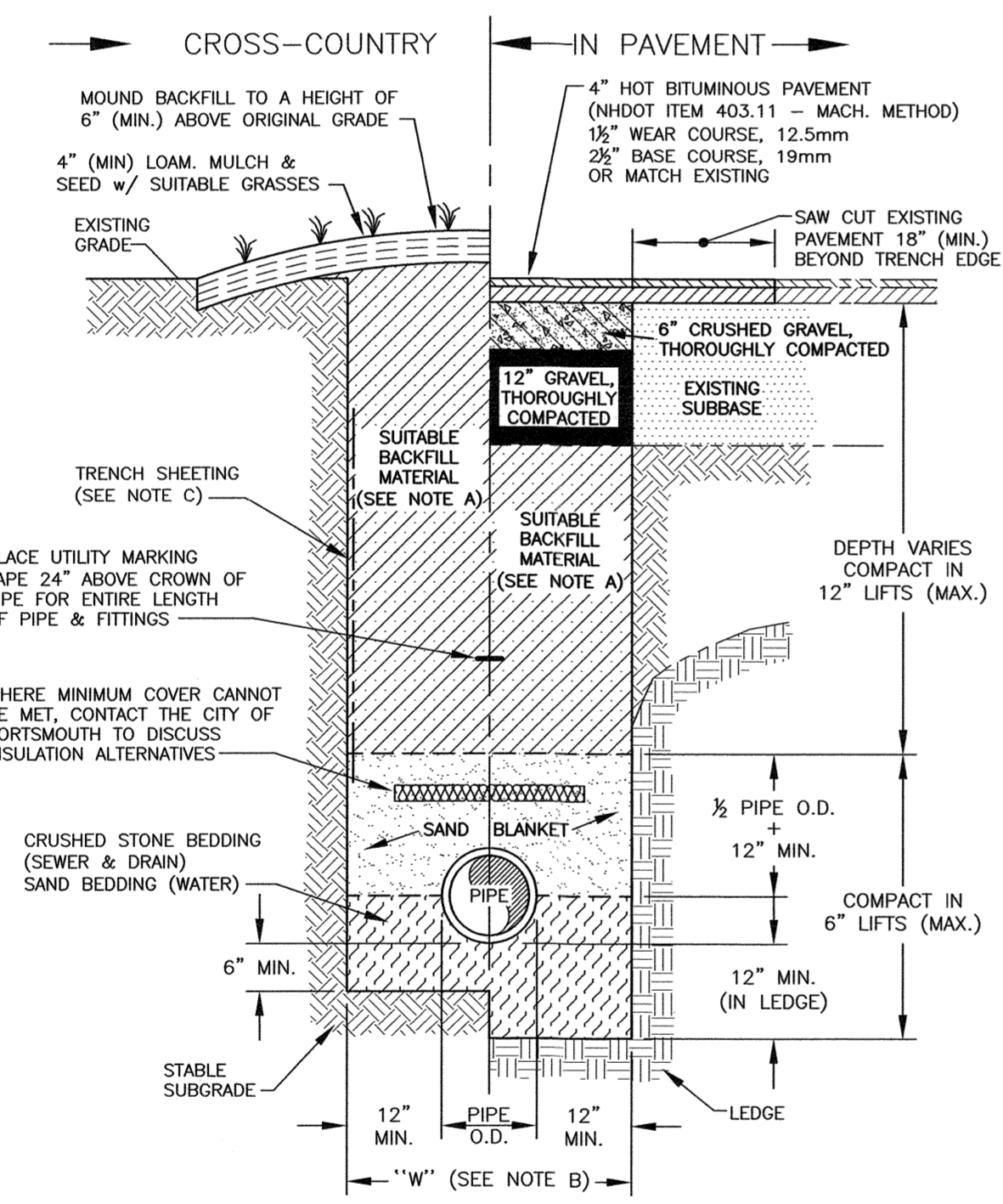
- NOTE:**
- 1) INSTALLATION OF WATER MAIN TAP & CURB STOP & BOX SHALL ONLY BE PERFORMED BY THOSE AUTHORIZED BY THE PUBLIC WORKS DEPARTMENT.
  - 2) IN AREAS OF HEAVY GROWTH THE CURB BOX COVER SHALL BE SET 6" ABOVE FINISH GRADE AND A WITNESS STAKE SET.
  - 3) CURB BOX SHALL BE SET APPROXIMATELY 12" OUTSIDE PROPERTY LINE AS SHOWN.
  - 4) PRIOR TO ACCEPTANCE, A PLAN INDICATING THE LOCATION OF THE CURB BOX SHALL BE SUBMITTED TO THE CITY OF PORTSMOUTH WATER DIVISION.

**V** WATER SERVICE CONNECTION  
C4 INSTALL PER PORTSMOUTH REQUIREMENTS NTS



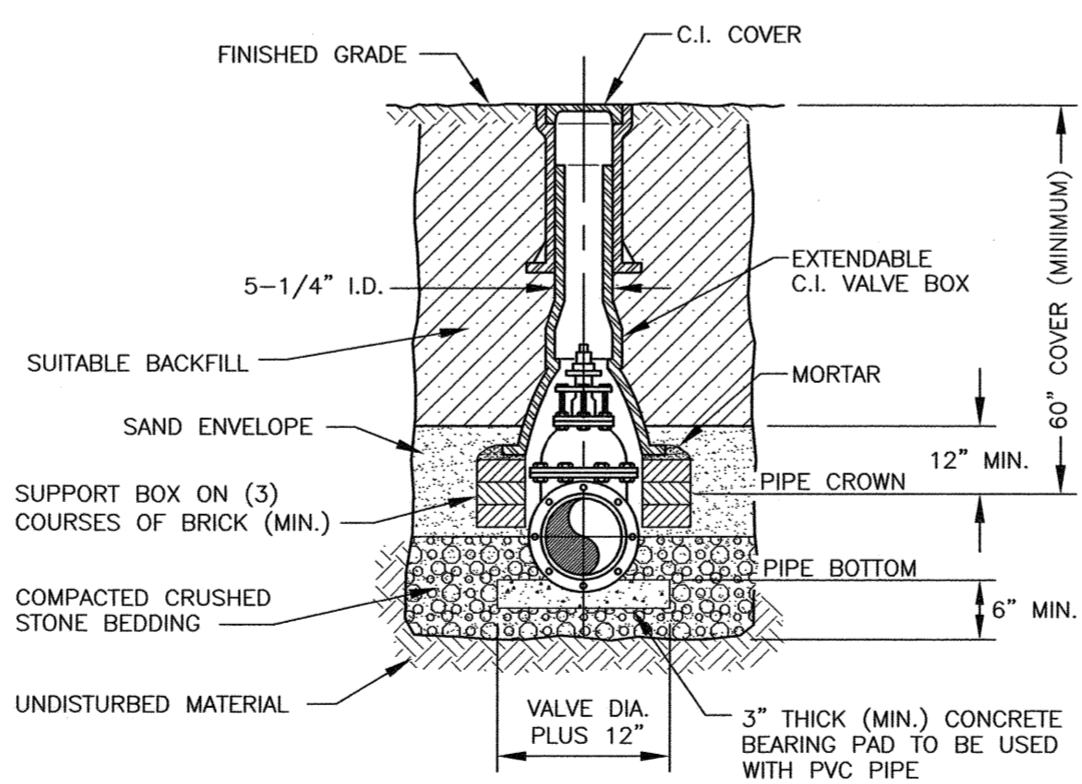
- NOTES:**
- 1) ALL MATERIALS SHALL BE APPROVED BY THE PORTSMOUTH WATER DEPARTMENT PRIOR TO INSTALLATION AND USE.
  - 2) ALL JOINTS SHALL BE MECHANICAL.
  - 3) "CLEAR" DIMENSIONS SHOWN ATE REQUIRED FOR WORKSPACE. NO JOINTS ON PIPE BEING TAPPED WITHIN "CLEAR" AREA.
  - 4) FORD TYPE STAINLESS STEEL TAPPING SADDLES OR APPROVED EQUAL ARE ALSO ACCEPTABLE.

**T** TAPPING SLEEVE AND GATE  
C4 INSTALL PER PORTSMOUTH REQUIREMENTS NTS

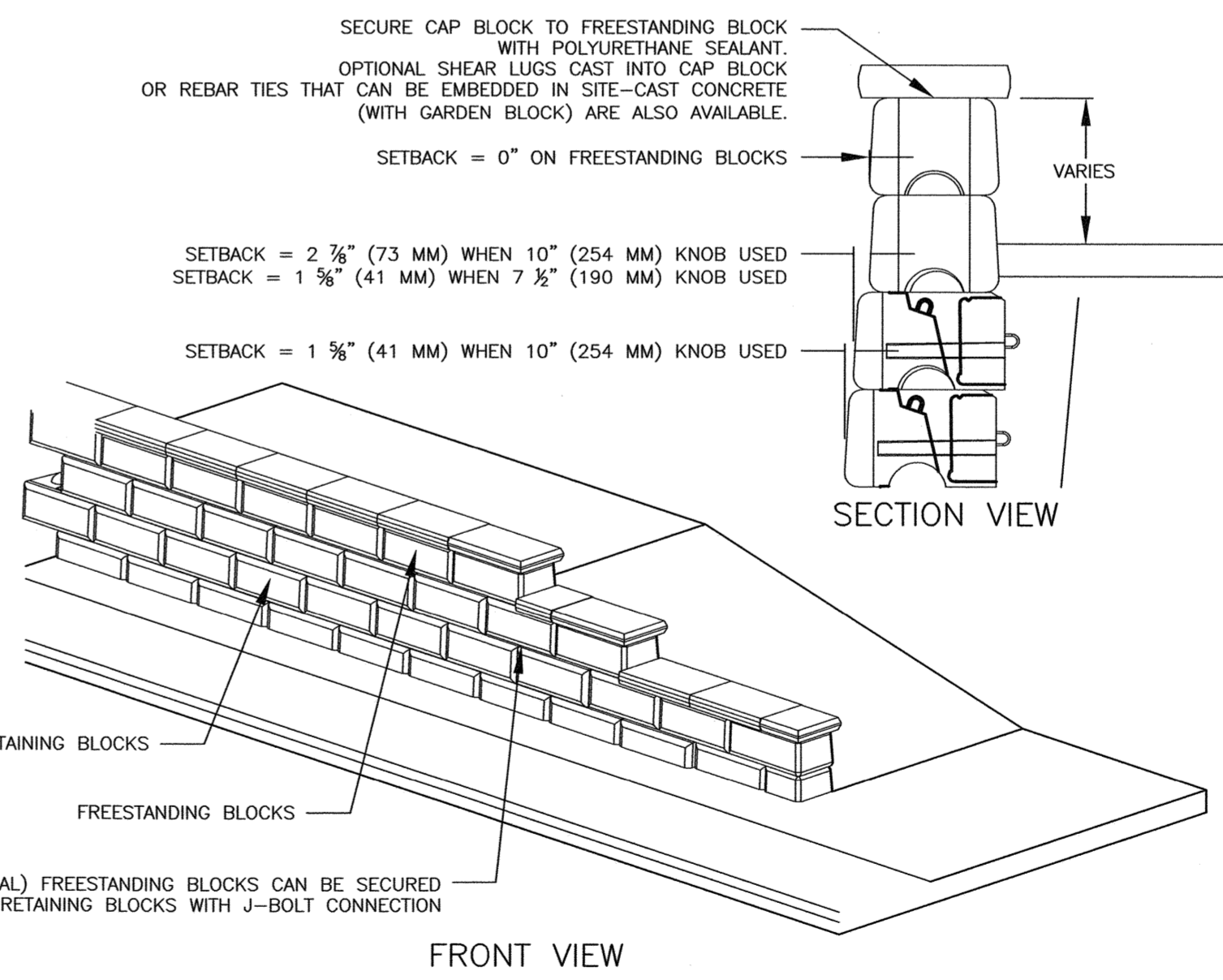


- TRENCH NOTES:**
- A) TRENCH BACKFILL:  
- IN PAVED AREAS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.
- IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE.
- B) "W" = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D..
- C) TRENCH SHEETING:  
IF REQUIRED, WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- D) MINIMUM PIPE COVER FOR UTILITY MAINS (UNLESS GOVERNED BY OTHER CODES):  
6" MINIMUM FOR SEWER (IN PAVEMENT)  
4" MINIMUM FOR SEWER (CROSS COUNTRY)  
3" MINIMUM FOR STORMWATER DRAINS  
5" MINIMUM FOR WATER MAINS
- E) ALL PAVEMENT CUTS SHALL BE REPAIRED BY THE INFRARED HEAT METHOD.

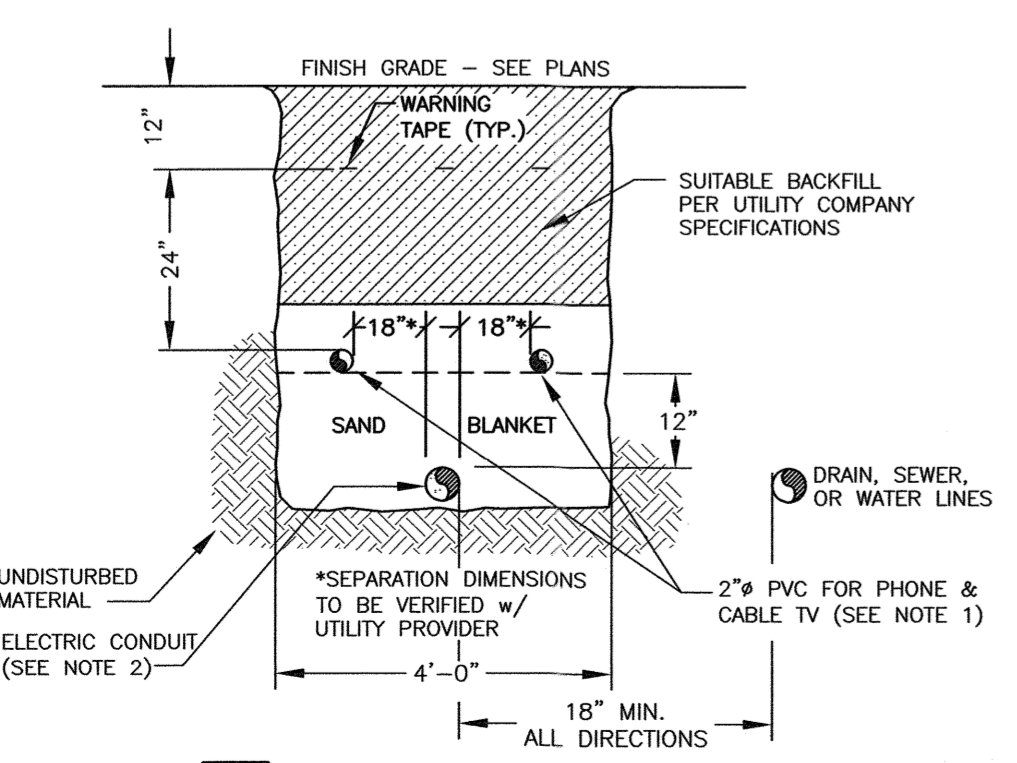
**R** TYPICAL PIPE TRENCH  
C4 NTS



**U** TYPICAL VALVE BOX INSTALLATION  
C4 INSTALL PER PORTSMOUTH REQUIREMENTS NTS



**W** SMALL BLOCK RETAINING WALL  
C3 GENEST - BRUSSELS - UNILOCK WALL COORDINATE COLOR WITH OWNER NTS



- NOTES:**
- 1) ALL CONDUIT TO BE U.L. LISTED, SCH. 80 UNDER ALL TRAVEL WAYS, & SCH. 40 FOR THE REMAINDER.
  - 2) NORMAL CONDUIT SIZES FOR PSNH ARE 3 INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4 INCH FOR THREE PHASE SECONDARY, AND 5 INCH FOR THREE PHASE PRIMARY.
  - 3) ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE (LATEST REVISION)
  - 4) INSTALL A 200# PULL ROPE FOR EACH CONDUIT
  - 5) VERIFY ALL CONDUIT SPECIFICATIONS WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION.

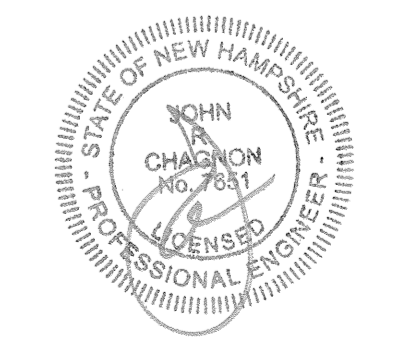
**S** UTILITY TRENCH ELECTRIC/COMMUNICATIONS  
C4 NTS

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/20/23
REVISIONS		



SCALE: AS NOTED NOVEMBER 2023

**DETAILS** **D3**

### JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

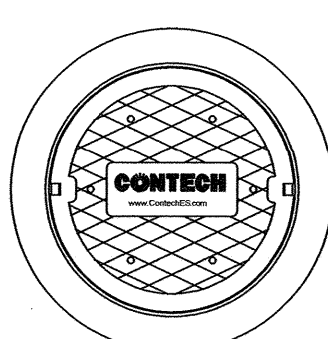
CARTRIDGE SELECTION	54"	40"	27"	15"
CARTRIDGE LENGTH	6'-4"	6'-4"	4'-3"	3'-3"
OUTLET INVERT TO STRUCTURE INVERT (A)	0.47'	0.47'	0.47'	0.47'
FLOW RATE HI-FLO / DRAINDOWN (CFS) PER CART	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00

- GENERAL NOTES:**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
  - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. [www.conteches.com](http://www.conteches.com)
  - JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
  - STRUCTURE SHALL MEET ASHSTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 10' - 12' AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET ASHSTO M308 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
  - STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-867, ASTM C-918, AND ASHSTO LOAD FACTOR DESIGN METHOD.
  - OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
  - THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
  - NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

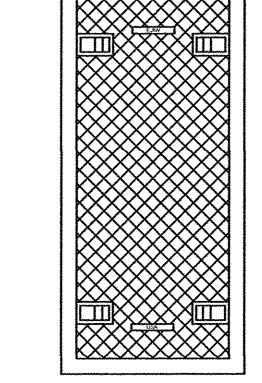
- INSTALLATION NOTES:**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
  - CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
  - CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

#### SITE SPECIFIC DATA REQUIREMENTS

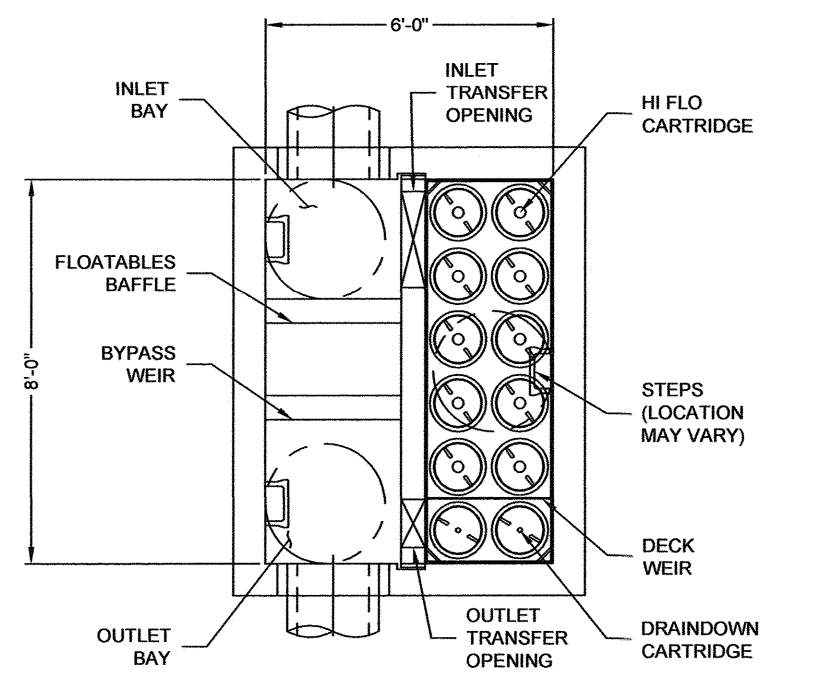
STRUCTURE ID	ID
WATER QUALITY FLOW RATE (cfs)	WQFLOW
PEAK FLOW RATE (cfs)	PEAK
RETURN PERIOD OF PEAK FLOW (yrs)	RETURN
# OF CARTRIDGES REQUIRED (HF / DD)	CART
CARTRIDGE LENGTH	SIZE
PIPE DATA: IE MATL DIA SLOPE % HGL	
INLET #1 ELEV MATL DIA SLOPE HGL	
INLET #2 ELEV MATL DIA SLOPE HGL	
OUTLET ELEV MATL DIA SLOPE HGL	
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS	
RIM ELEVATION	RIM ELEV
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
	WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	



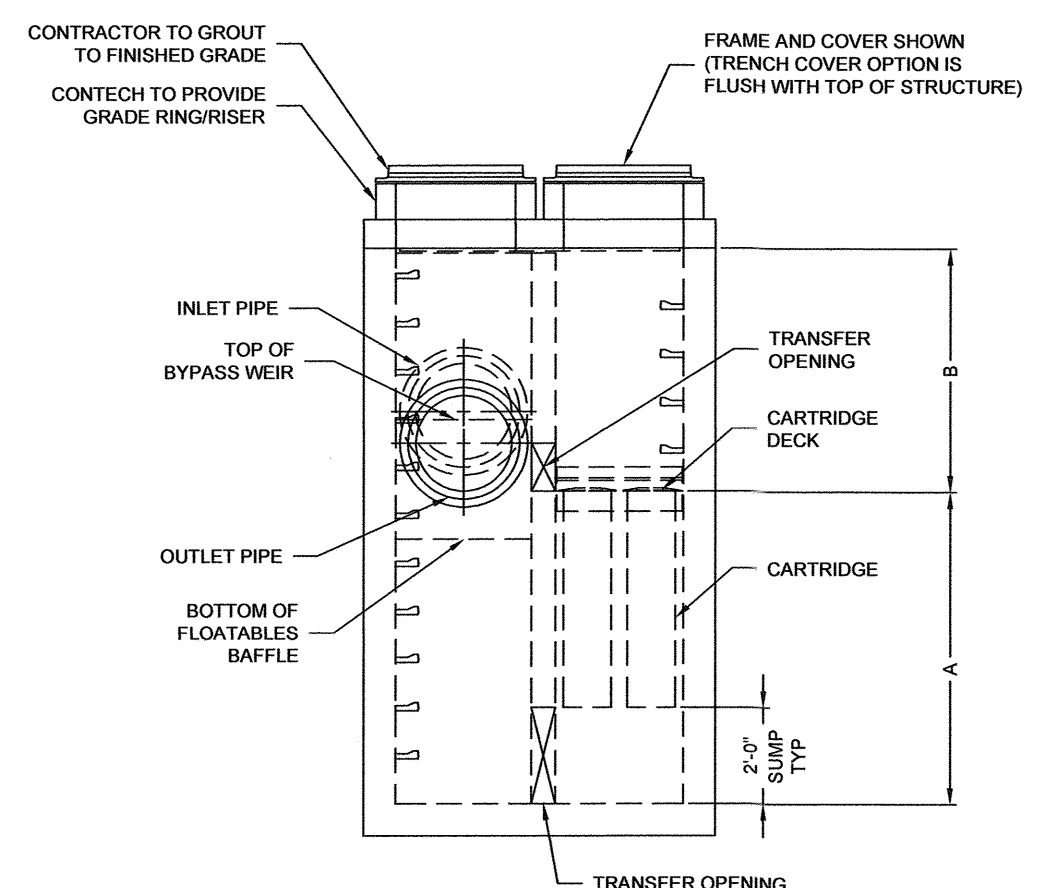
**FRAME AND COVER**  
(DIAMETER VARIES)  
N.T.S.



**24" TRENCH COVER**  
(LENGTH VARIES)  
N.T.S.



**PLAN VIEW**  
(TOP SLAB NOT SHOWN FOR CLARITY)



**ELEVATION VIEW**

## JELLYFISH FILTER DETAIL

N.T.S.

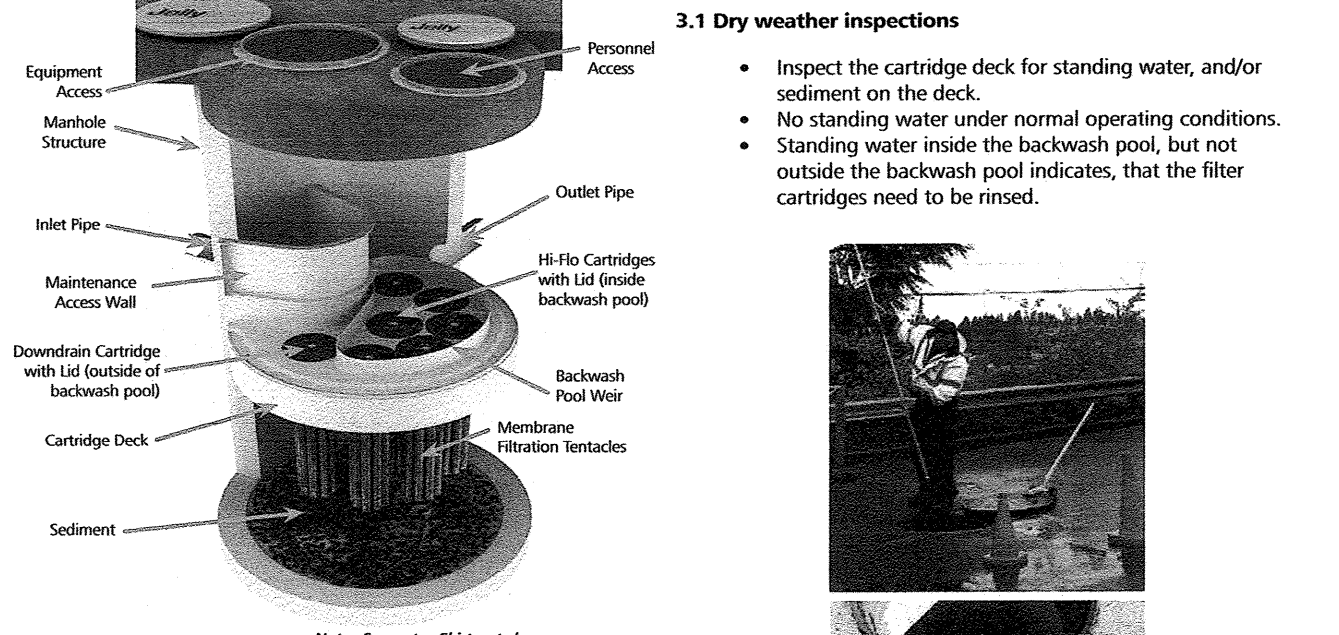
### 1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

- A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
- Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
- Inspection is recommended after each major storm event.
- Inspection is required immediately after an upstream oil, fuel or other chemical spill.

### 3.0 Inspection Procedure

- The following procedure is recommended when performing inspections:
- Provide traffic control measures as necessary.
  - Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
  - Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
  - Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
  - Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.



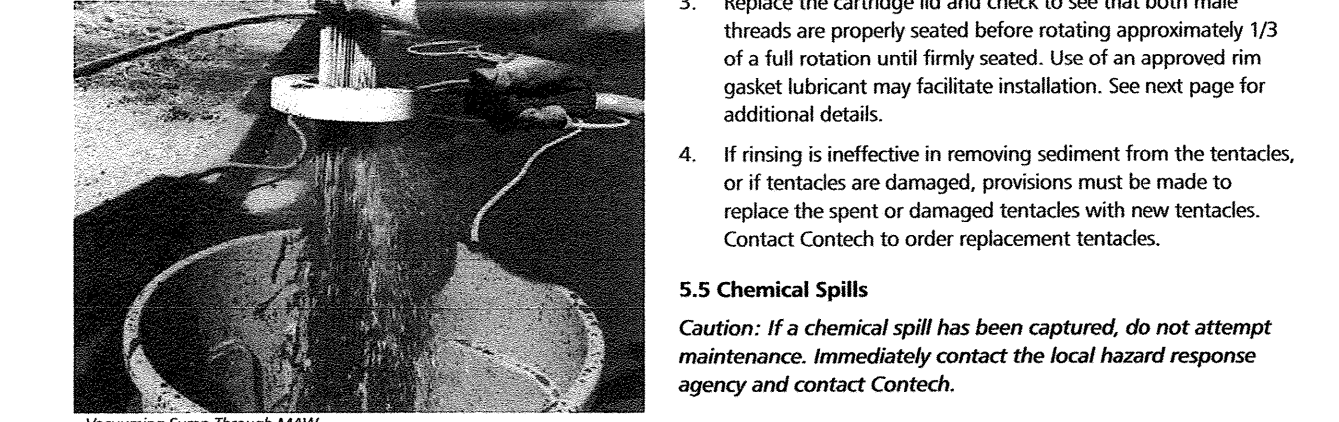
**2.0 Inspection Timing**

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below, or per the approved project stormwater quality documents (if applicable), whichever is more frequent.

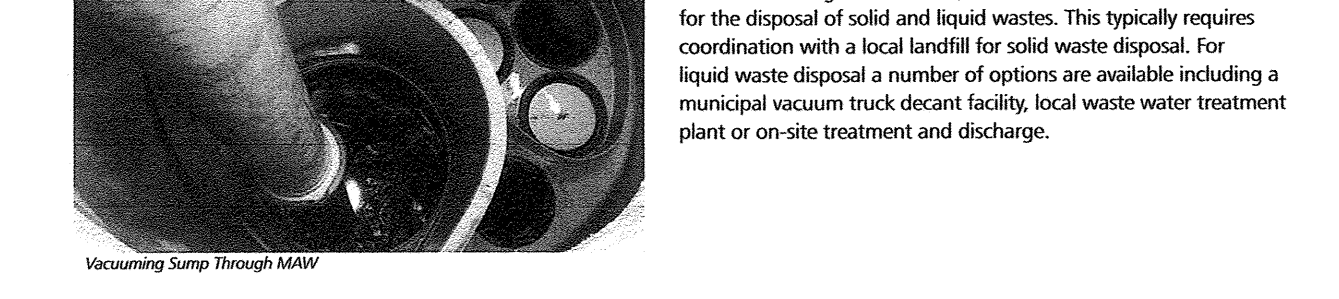
- Collected rinse water is typically removed by vacuum hose.
- Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

### 5.3 Sediment and Floatables Extraction

- Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
- Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



- Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
- Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
- Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



- For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

### 5.4 Filter Cartridge Reinstallation and Replacement

- Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
- Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. **Caution: Do not force the cartridge downward; damage may occur.**
- Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
- If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

### 5.5 Chemical Spills

**Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.**

### 5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment (≥1/16") accumulated on the deck surface should be removed.

### 3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

### 4.0 Maintenance Requirements

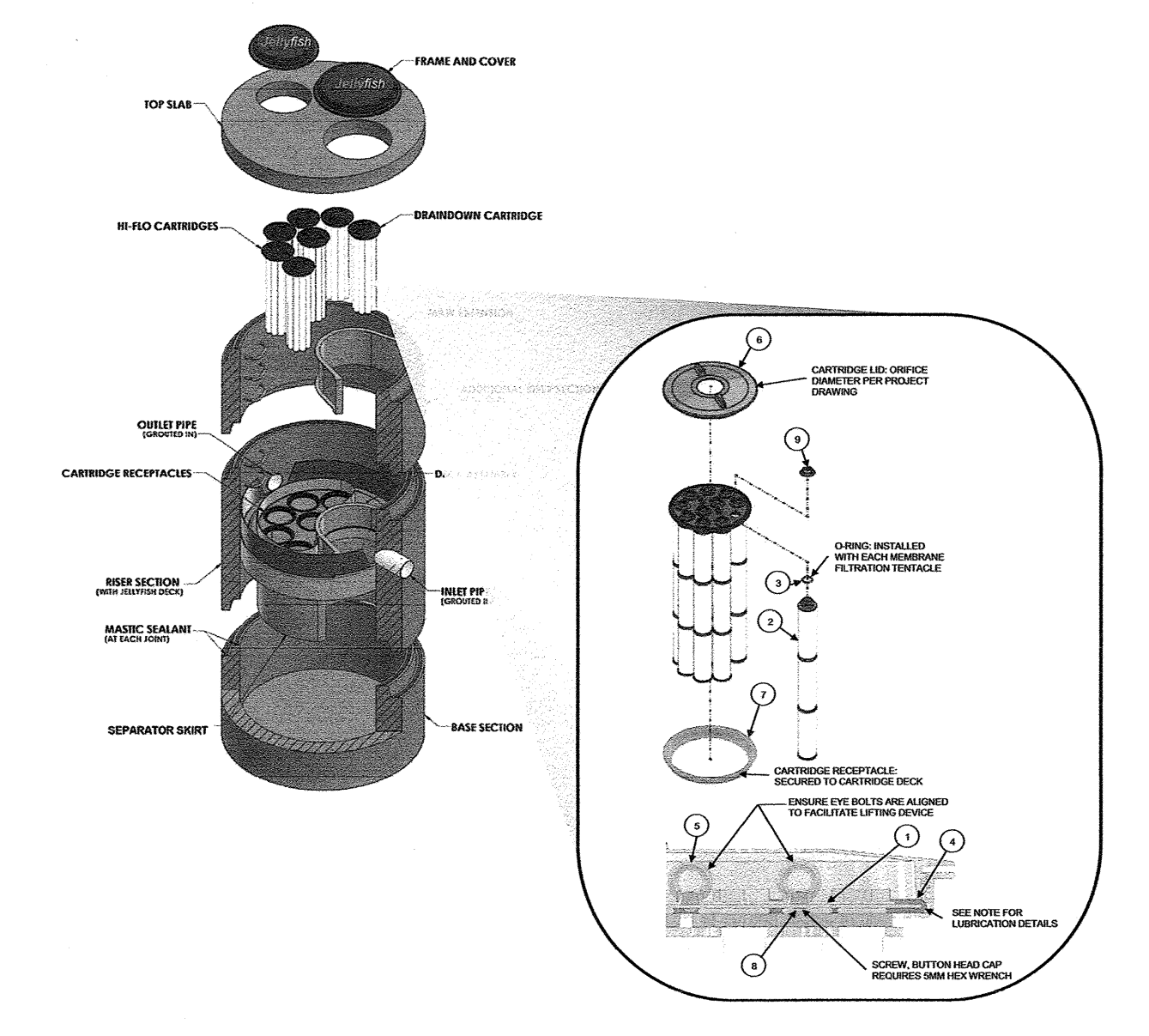
Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan, whichever is more frequent. In general, maintenance requires some combination of the following:

- Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
- Floatable trash, debris, and oil removal.
- Deck cleaned and free from sediment.
- Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
- Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
- Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
- The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

### 5.0 Maintenance Procedure

- The following procedures are recommended when maintaining the Jellyfish Filter:
- Provide traffic control measures as necessary.
  - Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. **Caution: Dropping objects onto the cartridge deck may cause damage.**

### Jellyfish Filter Components & Filter Cartridge Assembly and Installation



**TABLE 1: BOM**

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 1/4" COVER
7	JF RECEPTACLE
8	BUITON HEAD CAP
9	JF CARTRIDGE NUT

**TABLE 2: APPROVED GASKET LUBRICANTS**

PART NO.	MFR.	DESCRIPTION
78713	LA-CO	LUBR-JOINT
40501	HERCULES	DOCK BUTTER
35600	QATEY	PIPE LUBRICANT
PROJREQ-10	PROJSELECT	PIPE JOINT LUBRICANT

**NOTES:**

**Head Plate Gasket Installation:** Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2. Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lid (Item 6). Follow Lubricant manufacturer's instructions.

**Lid Assembly:** Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clockwise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

**AMBIT ENGINEERING, INC.**  
A DIVISION OF HALEY WARD, INC.

200 Griffin Road, Unit 3  
Portsmouth, NH 03801  
603.430.9262

WWW.HALEYWARD.COM

- ### NOTES:
- THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
  - UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
  - CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE EROSION AND SEDIMENT CONTROL BMP'S" PUBLISHED BY THE NEW HAMPSHIRE D.E.S. IN 2008.



- Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
- Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. **Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.**

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/20/23
REVISIONS		

SCALE: AS NOTED NOVEMBER 2023

**JELLYFISH DETAILS**

**D4**

**NOTES:**

- 1) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 2) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

**MANHOLE NOTES**

- 1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- 2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE IF POURED AS A COMPLETE MANHOLE.
- 3) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.
- 4) LEAKAGE TEST MAY NOT BE FEASIBLE, BUT SHALL CONFORM TO ENV-WQ 704.10(X) THROUGH ENV-WQ 704.10(Z).
- 5) INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE AND TANGENT TO THE CENTERLINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- 6) FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A THREE INCH (MINIMUM HEIGHT) WORD "SEWER" FOR SEWERS AND "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER. CASTINGS SHALL CONFORM TO CLASS 30, ASTM A48.
- 7) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%- 55% PASSING	3/8 INCH SCREEN
0%- 10% PASSING	#4 SIEVE
0%- 5% PASSING	#8 SIEVE

WHEN ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.

- 8) FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:  
RCP & CI PIPE - ALL SIZES - 48"
- 9) SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
- 10) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATER TIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET, IN 2 ROWS. APPROVED ELASTOMERIC SEALANTS ARE:

RAM-NEK	KENT SEAL NO. 2
EZ	

- 11) PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
- 12) THE PURPOSE OF THIS PLAN IS TO SHOW STANDARDS FOR SEWER CONSTRUCTION.
- 13) ALL WORK SHALL BE IN COMPLIANCE WITH NHDES CODE OF ADMINISTRATIVE RULES PART ENV-WQ 704 DESIGN OF SEWERS.
- 14) BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE LARGEST INCOMING PIPE.

**GENERAL NOTES**

- 1) MINIMUM PIPE SIZE FOR HOUSE SERVICE SHALL BE FOUR INCHES.
- 2) PIPE AND JOINT MATERIALS:
  - A. PLASTIC SEWER PIPE
    1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
AWWA C900	PVC (SOLID WALL)	8" THROUGH 18"

\*PVC: POLYVINYL CHLORIDE

- 2) JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON BELL AND SPIGOT TYPE.
- 3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
- 4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
- 5) HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND REFILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.
- 6) THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
- 7) TESTING: WHEN REQUIRED BY THE GOVERNING AUTHORITY, TESTING SHALL CONFORM TO ENV-WQ 704.07.
- 8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
- 9) HOUSE WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE, UNLESS IT IS ON A SHELF 12" HIGHER, AND 18" APART.
- 10) BEDDING: PROCESSED GRAVEL OR CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE FOLLOWING GRADATION (ALL STONE MUST HAVE AT LEAST 2 FRACTURED FACES):

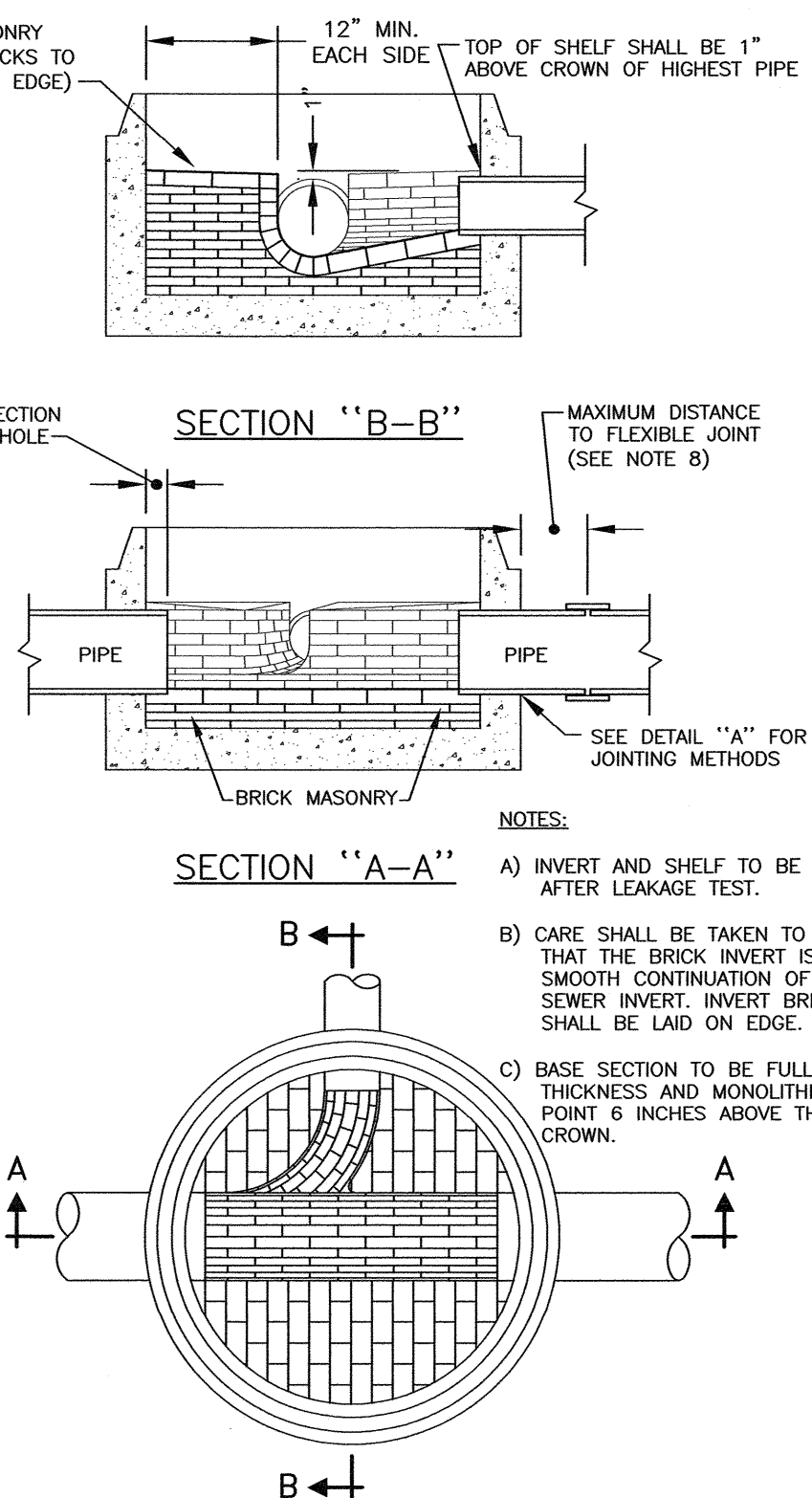
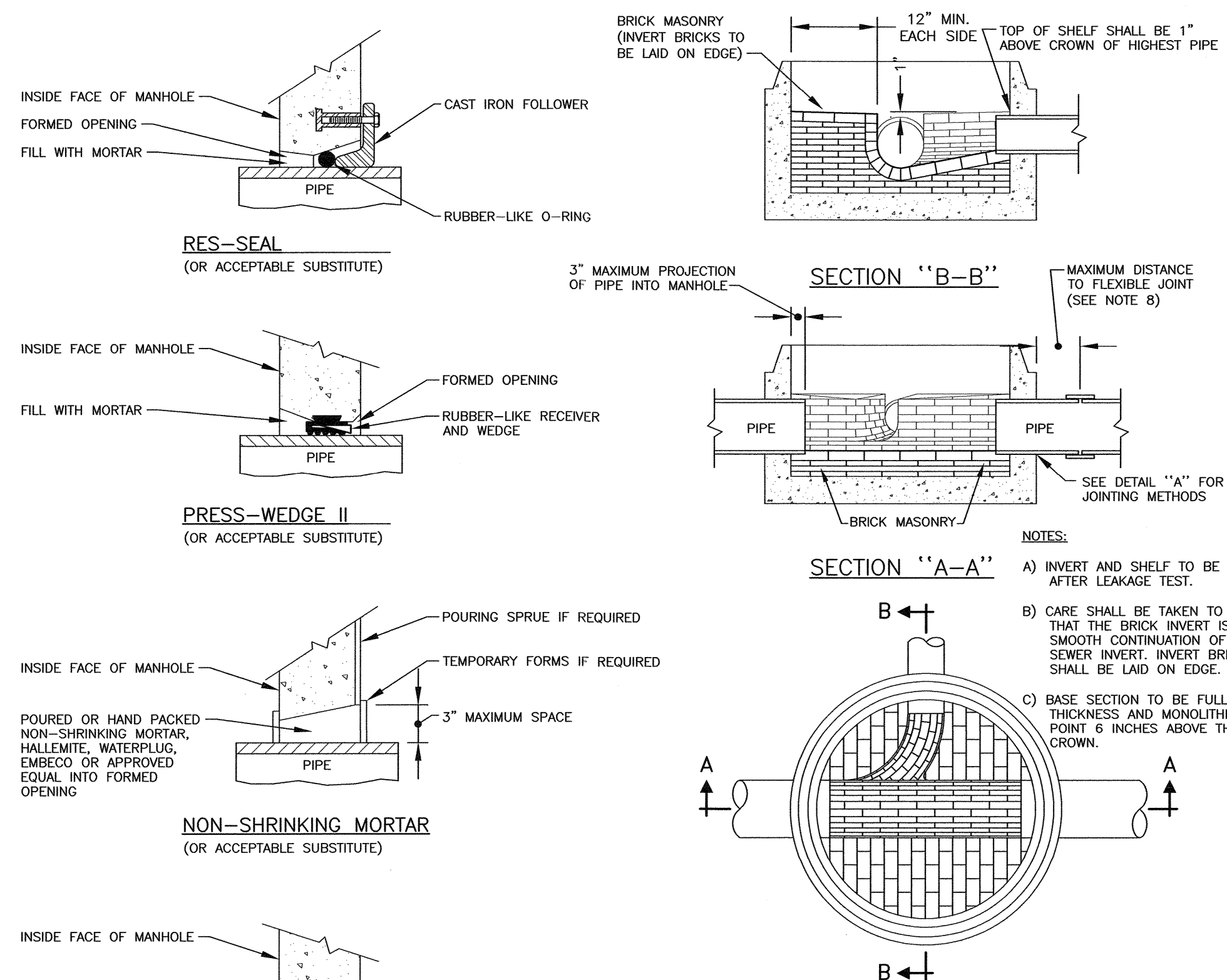
100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
0%- 75% PASSING	3/8 INCH SCREEN
0%- 25% PASSING	#4 SIEVE
0%- 5% PASSING	#10 SIEVE

WHEN ORDERED BY THE ENGINEER, OVEREXCAVATE UNSTABLE TRENCH BOTTOM AND BACKFILL WITH CRUSHED STONE.

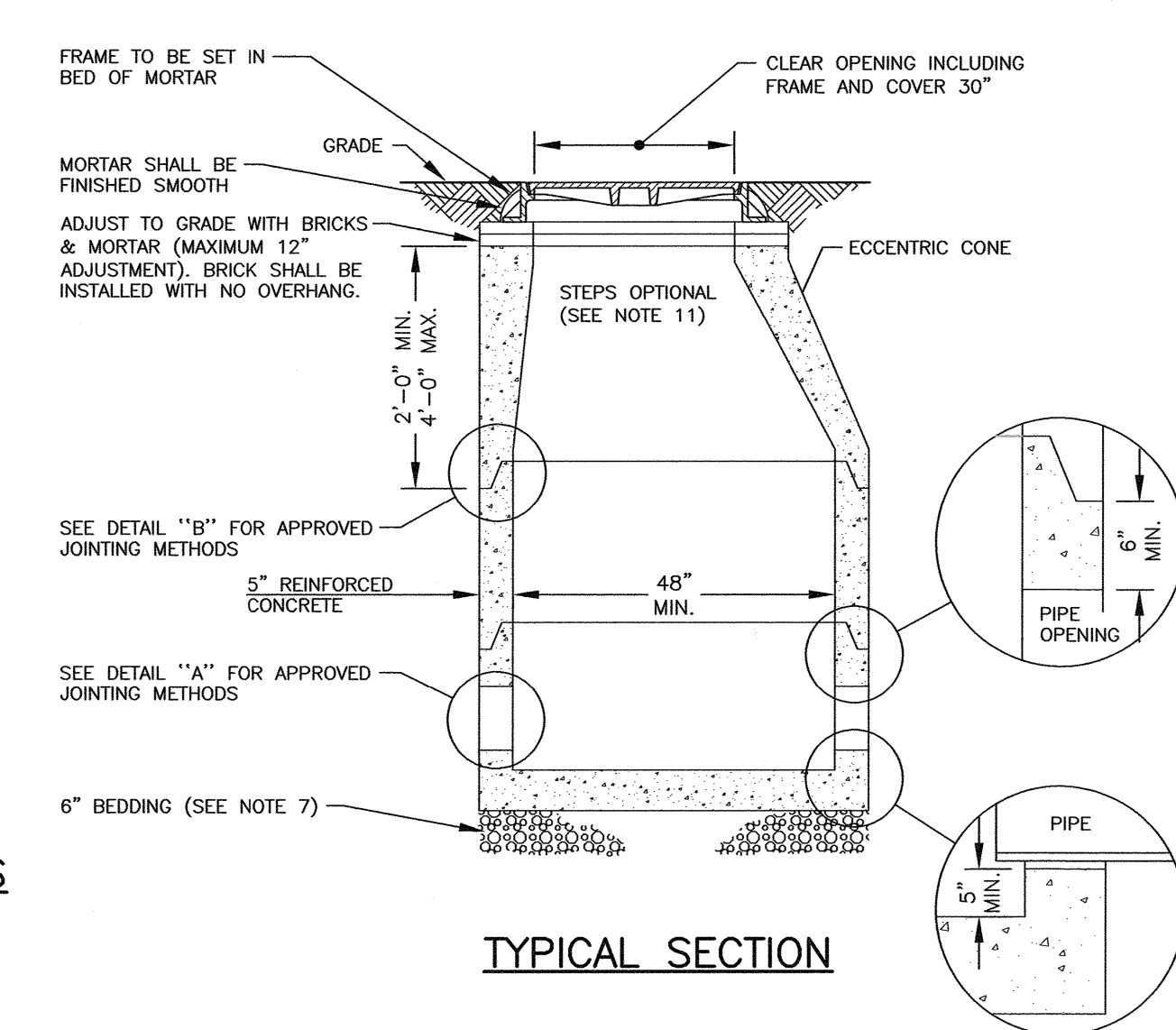
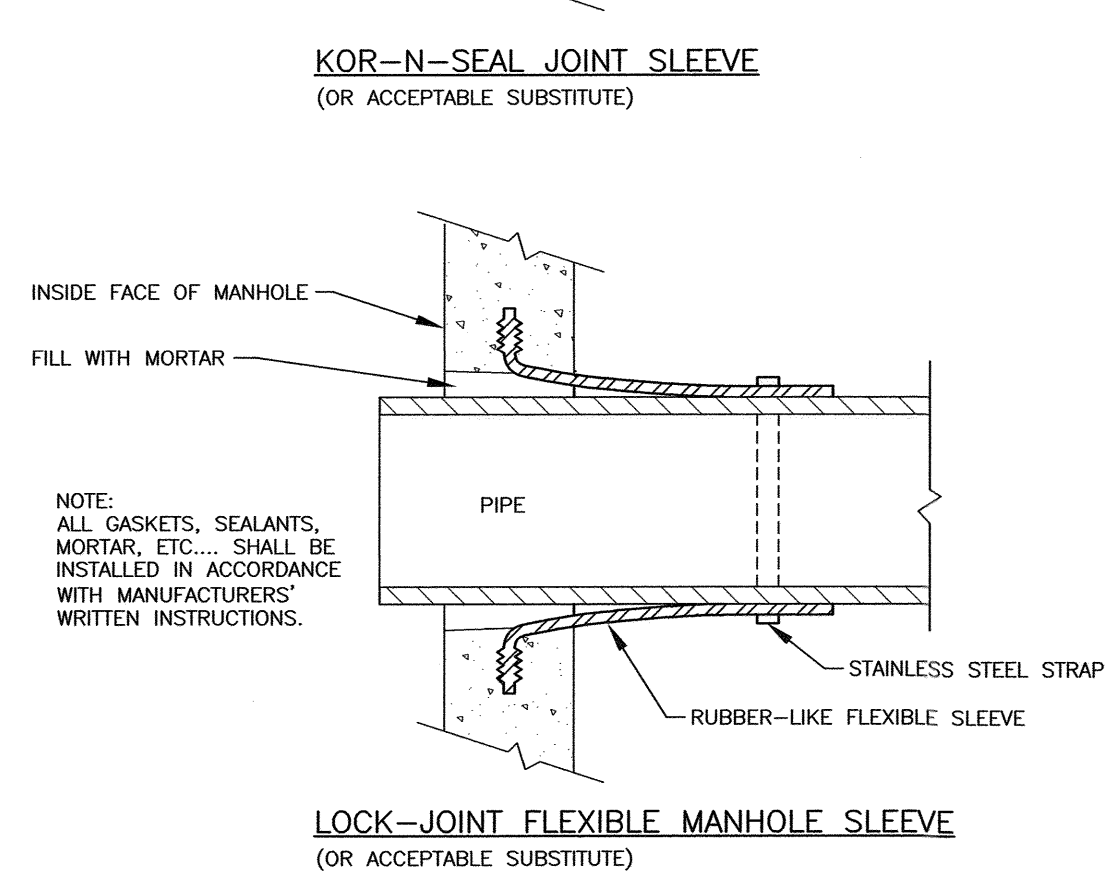
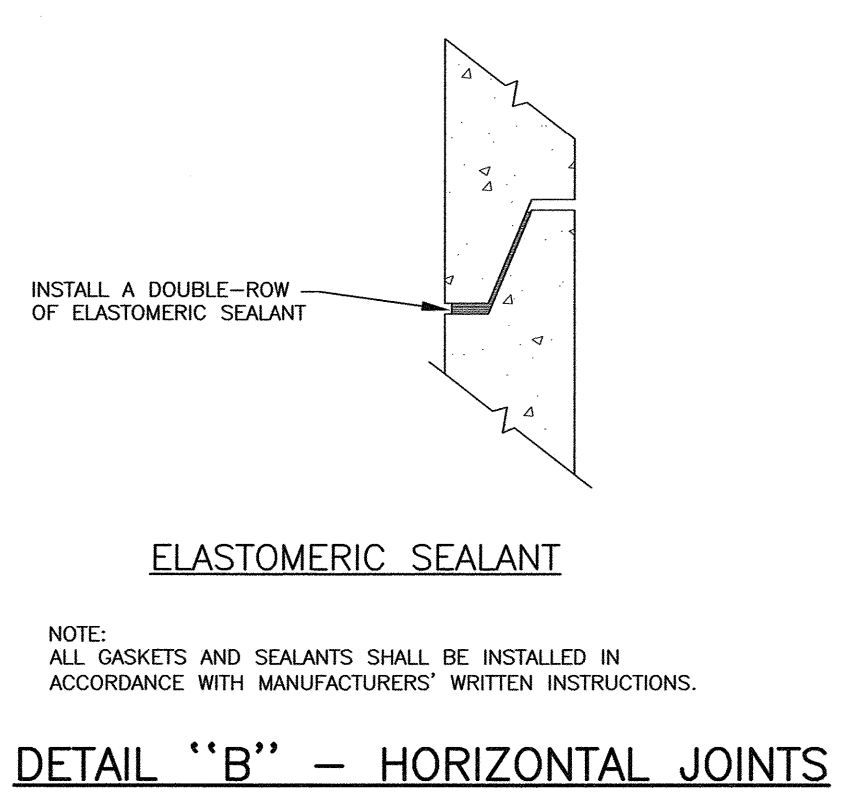
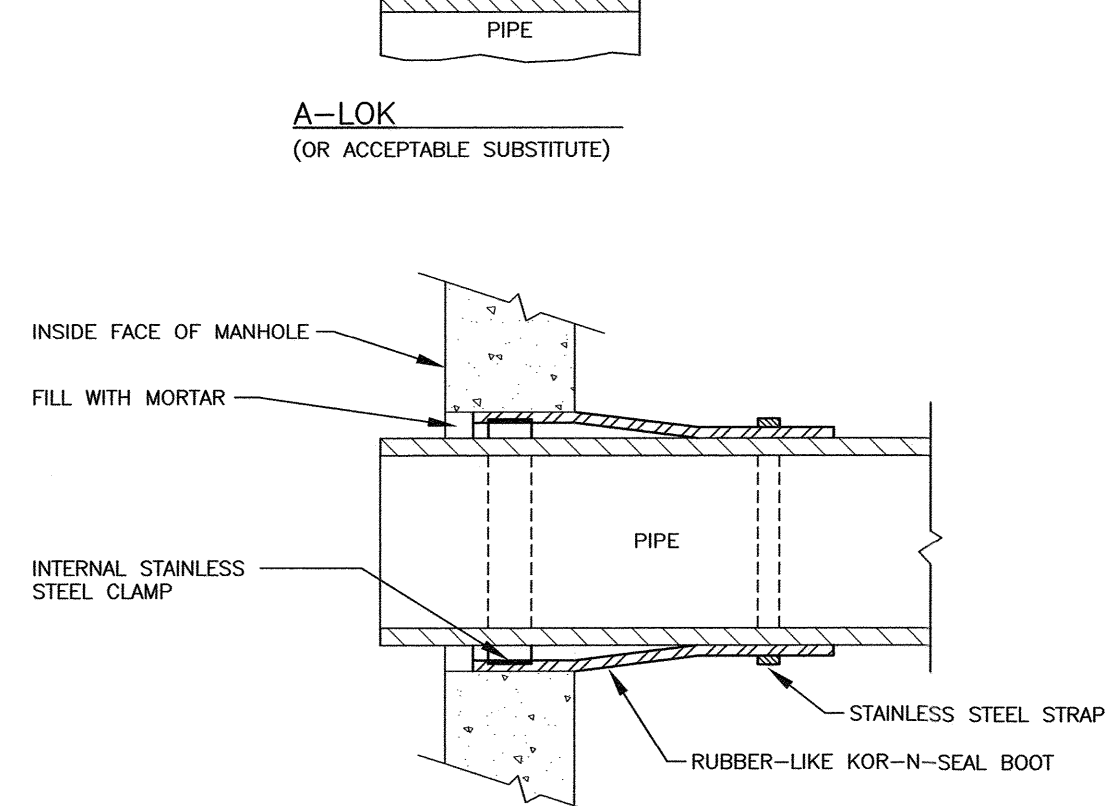
- 13) BACKFILL UP TO SUBBASE GRAVEL SHALL BE WITH EXCAVATED SOIL FROM TRENCHING OPERATIONS. COMPACT IN 8" LIFTS WITH VIBRATORY PLATE COMPACTORS TO 90% OF MODIFIED PROCTOR DENSITY. IF FINE-GRAINED, COMPACT WITH POGO STICKS OR SHEEPSFOOT ROLLERS. PLACE NO LARGE ROCKS WITHIN 24" OF PIPE. TRENCHES THAT ARE NOT ADEQUATELY COMPACTED SHALL BE RE-EXCAVATED AND BACKFILLED UNDER THE SUPERVISION OF THE DESIGN ENGINEER OR GOVERNING BODY. UNSUITABLE BACKFILL MATERIAL INCLUDES CHUNKS OF PAVEMENT, TOPSOIL, ROCKS OVER 6" IN SIZE, MUCK, PEAT OR PIECES OF PAVEMENT.
- 14) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB-SITE SAFETY AND COMPLIANCE WITH GOVERNING REGULATIONS.
- 15) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL FOR TRENCH WIDTH SEE TRENCH DETAIL.
- 16) SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90% - 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.
- 17) BASE COURSE GRAVEL, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE:
 

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION.

- 18) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- 19) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION.
- 20) THE PURPOSE OF THIS PLAN IS TO SHOW STANDARDS FOR SEWER CONSTRUCTION.
- 21) ALL WORK SHALL BE IN COMPLIANCE WITH NHDES CODE OF ADMINISTRATIVE RULES PART ENV-WQ 704 DESIGN OF SEWERS.



**TYPICAL MANHOLE - PLAN VIEW**



**DETAIL "A" - PIPE TO MANHOLE JOINTS**

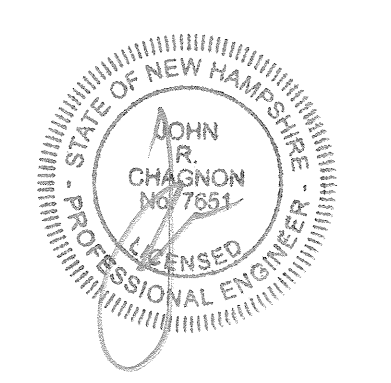
APPROVED BY THE PORTSMOUTH PLANNING BOARD

**SEWER MANHOLE DETAILS**  
INSTALL PER PORTSMOUTH REQUIREMENTS NTS

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/20/23
REVISIONS		



SCALE: AS NOTED NOVEMBER 2023

**SEWER DETAILS** **D5**

**NOTES:**

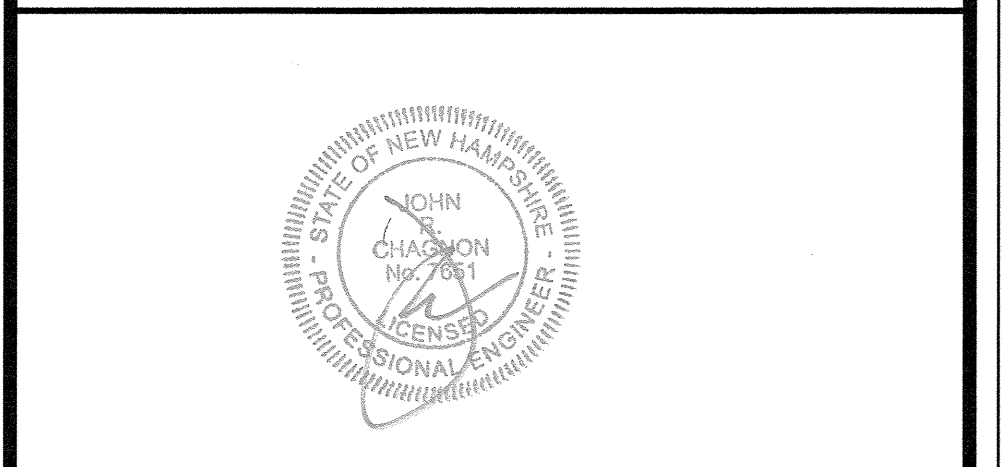
- 1) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 2) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**MIXED USE DEVELOPMENT**  
**581 LAFAYETTE ROAD**  
**PORTSMOUTH, N.H.**

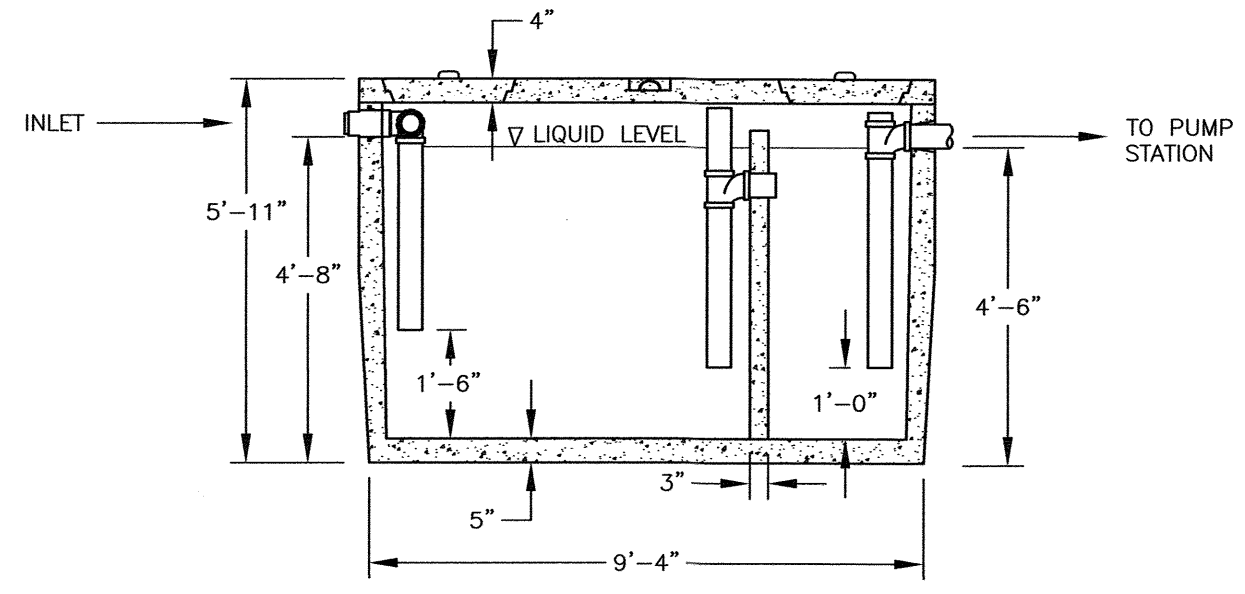
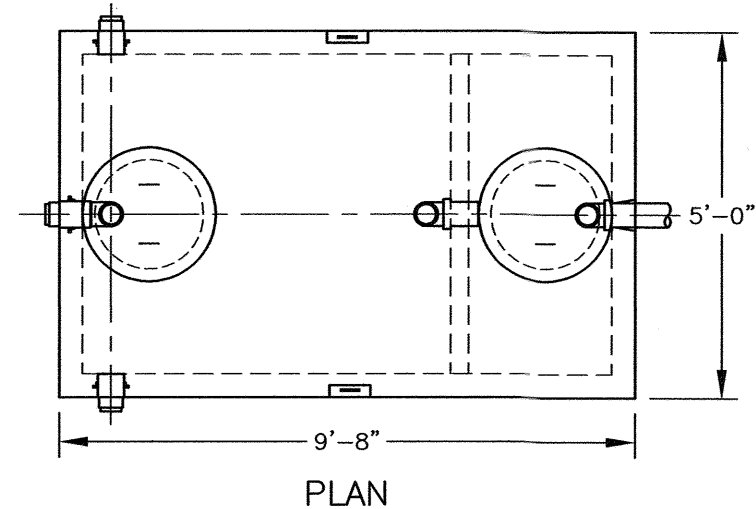
NO.	DESCRIPTION	DATE
2	DETAIL Z	2/21/24
1	DETAIL Y	2/6/24
0	ISSUED FOR COMMENT	1/2/24



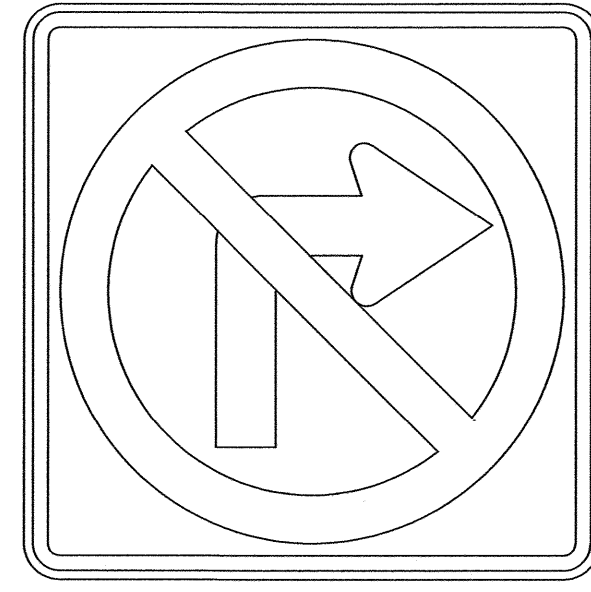
SCALE: AS NOTED JANUARY 2024

**DETAILS** **D6**

- GENERAL NOTES:**
- CONCRETE SPECIFICATIONS:**
- 1) 4000 PSI @ 28 DAYS.
  - 2) 4%-6% ENTRAINED AIR.
  - 3) TANK PENETRATIONS ARE INTEGRALLY CAST.
  - 4) ALL JOINTS SEALED WITH BUTYL RESIN.
  - 5) EXTERIOR TO BE COATED.
- GREASE TRAP INFORMATION:**
- 1) TANKS SHOULD BE PUMPED AS NEEDED.
  - 2) ACCESS COVERS SHOULD HAVE RISERS TO BRING COVER ACCESS TO GRADE.
  - 3) TANKS CAN BE VACUUM TESTED AT AN ADDITIONAL COST.



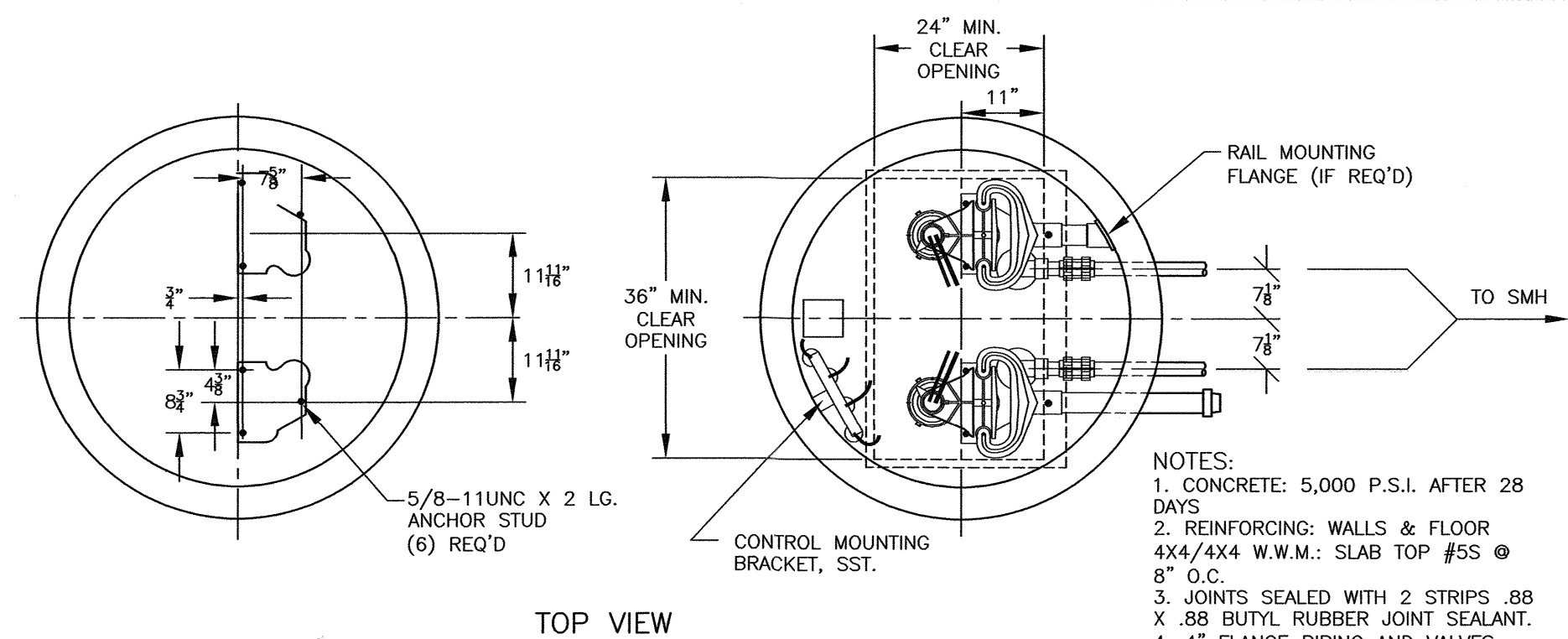
**X** SHEA CONCRETE  
**C5** 1000 GALLON 2 COMP. GREASE TRAP NTS  
14,825 Lbs  
ITEM # M1000H  
H2O LOAD RATED



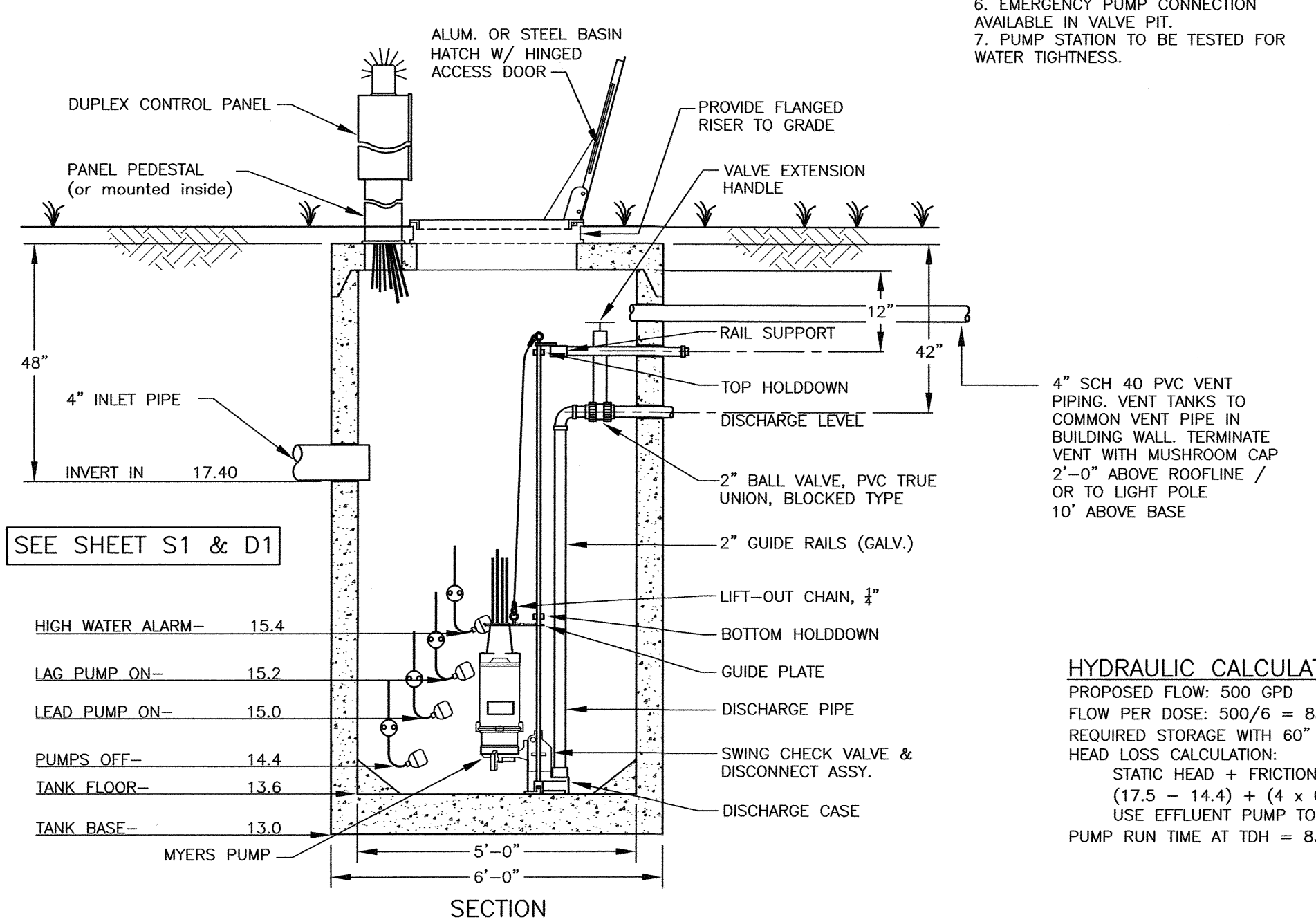
MUTCD R3-1

SIGN TO BE MOUNTED SO BOTTOM EDGE IS NO LESS THAN 7 FEET FROM GROUND SURFACE AND EDGE NEAREST STREET IS NO LESS THAN 2 FEET LATERALLY FROM EDGE OF PAVEMENT.

**Z** WALL MOUNTED NO RIGHT  
**C3** HAND TURN SIGN NTS



- NOTES:**
1. CONCRETE: 5,000 P.S.I. AFTER 28 DAYS
  2. REINFORCING: WALLS & FLOOR 4X4/4X4 W.W.M.: SLAB TOP #5S @ 8" O.C.
  3. JOINTS SEALED WITH 2 STRIPS .88 X .88 BUTYL RUBBER JOINT SEALANT.
  4. 4" FLANGE PIPING AND VALVES.
  5. PUMPS TO BE GRINDER PUMPS. PUMPS MUST MAINTAIN 3 FT/SEC MIN. VELOCITY IN FORCE MAIN.
  6. EMERGENCY PUMP CONNECTION AVAILABLE IN VALVE PIT.
  7. PUMP STATION TO BE TESTED FOR WATER TIGHTNESS.



**Y** COMMERCIAL EFFLUENT PUMP STATION NTS  
**C5** OR APPROVED EQUAL

P:\WORK\2024\02\05\20240205.dwg, Rev. 13972018.dwg, 2/14/2024 1:52:01 PM, Portsmouth, New Hampshire, Rev. 13972018.dwg









3 CONGRESS ST., SUITE1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCove.com

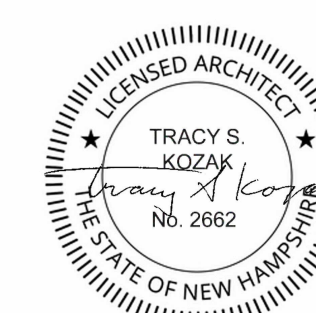
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



#### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

### LEVEL 2 FLOOR PLAN



SCALE: 1/16" = 1'-0"

DATE: 2/22/2024

DRAWN: TK/JSV

CHECKED: TK

# PB1.02



- 1 BEDROOM
- 2 BEDROOM
- 3 BEDROOM

1 LEVEL 2 - OVERALL PLAN - PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE 1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCove.com

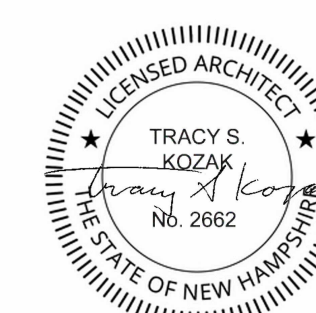
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>

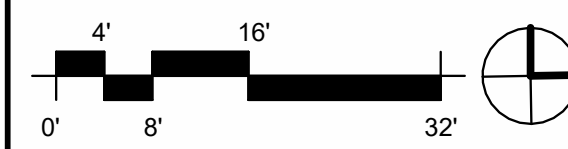


#### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

### LEVEL 3 FLOOR PLAN



SCALE: 1/16" = 1'-0"

DATE: 2/22/2024

DRAWN: TK/STV

CHECKED: TK

# PB1.03



1 LEVEL 3 - OVERALL PLAN - PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCove.com

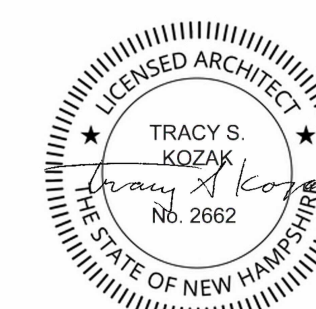
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH, 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>

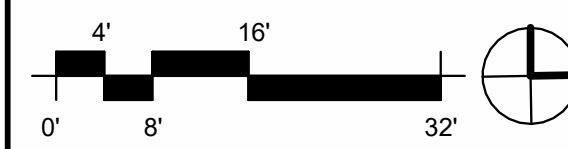


#### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

### LEVEL 4 FLOOR PLAN



SCALE: 1/16" = 1'-0"

DATE: 2/22/2024

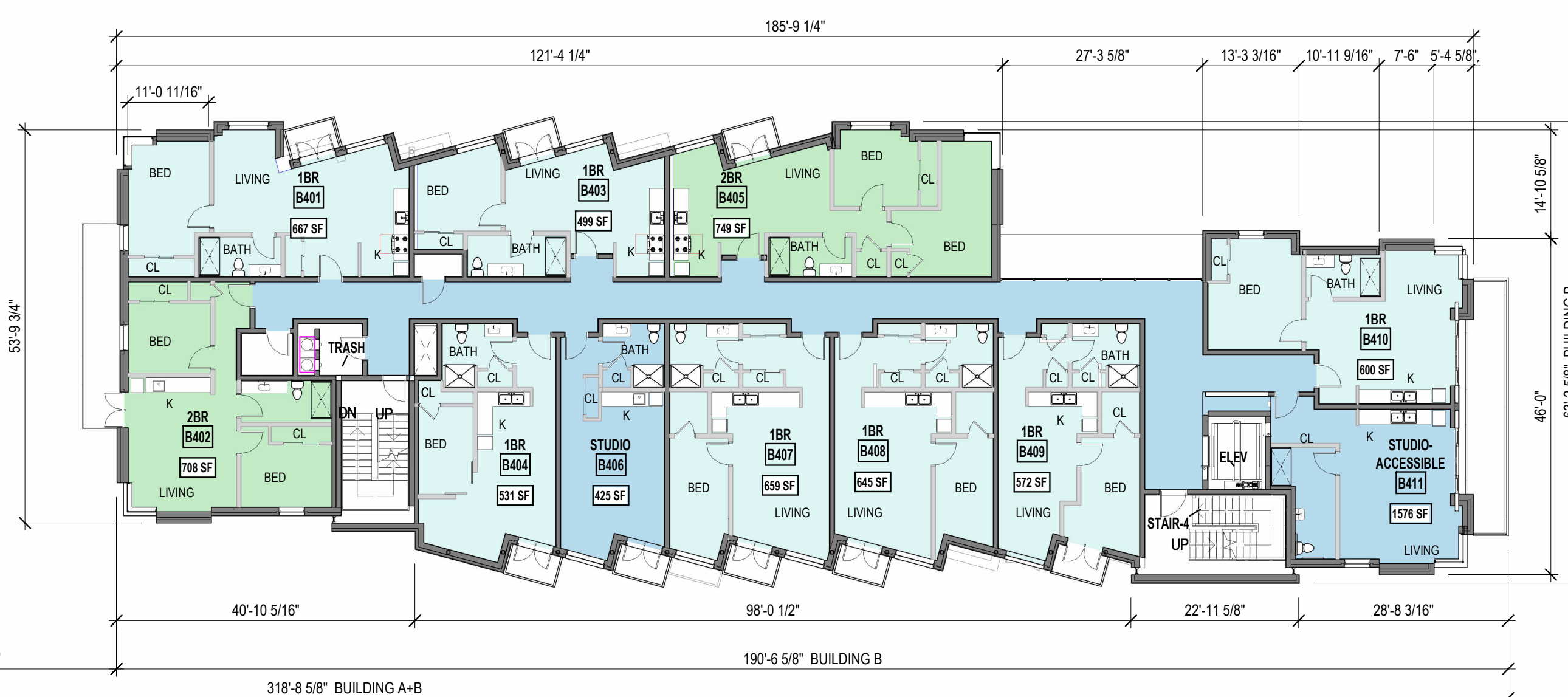
DRAWN: TK/STV

CHECKED: TK

# PB1.04



- 1 BEDROOM
- 2 BEDROOM
- 3 BEDROOM
- STUDIO



1 LEVEL 4 - OVERALL PLAN - PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE 1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCove.com

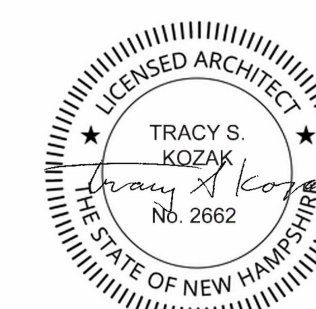
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH, 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



#### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

### LEVEL 5 FLOOR PLAN



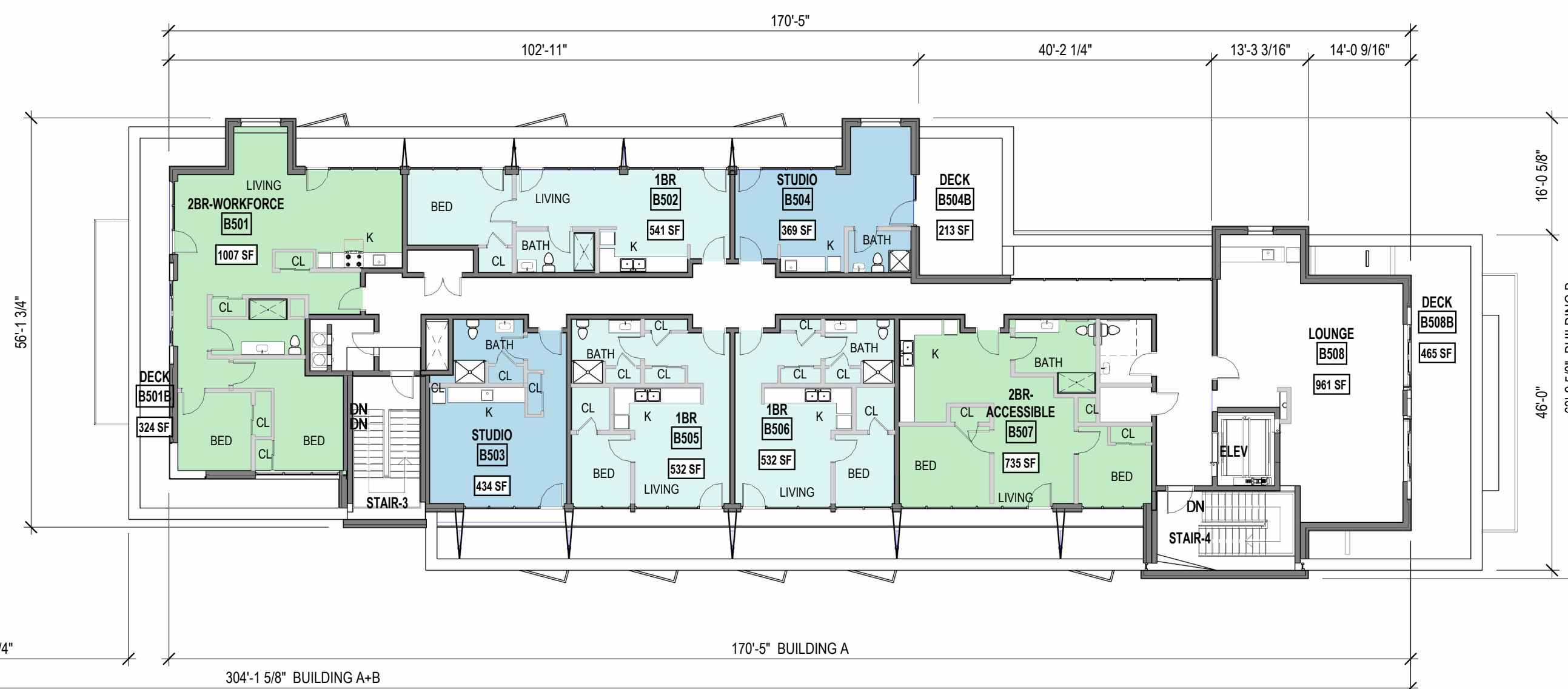
SCALE: 1/16" = 1'-0"

DATE: 2/22/2024  
 DRAWN: TK/STV  
 CHECKED: TK

# PB1.05



- 1 BEDROOM
- 2 BEDROOM
- 3 BEDROOM
- STUDIO



1 LEVEL 5 - OVERALL PLAN - PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE 1  
 PORTSMOUTH, NH 03801  
 603.988.0042  
 www.ARCove.com

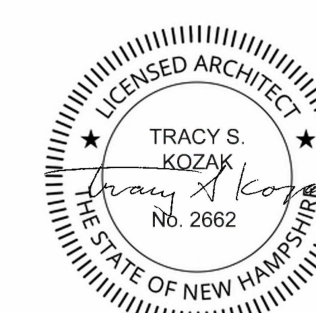
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH, 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



#### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

#### ROOF PLAN



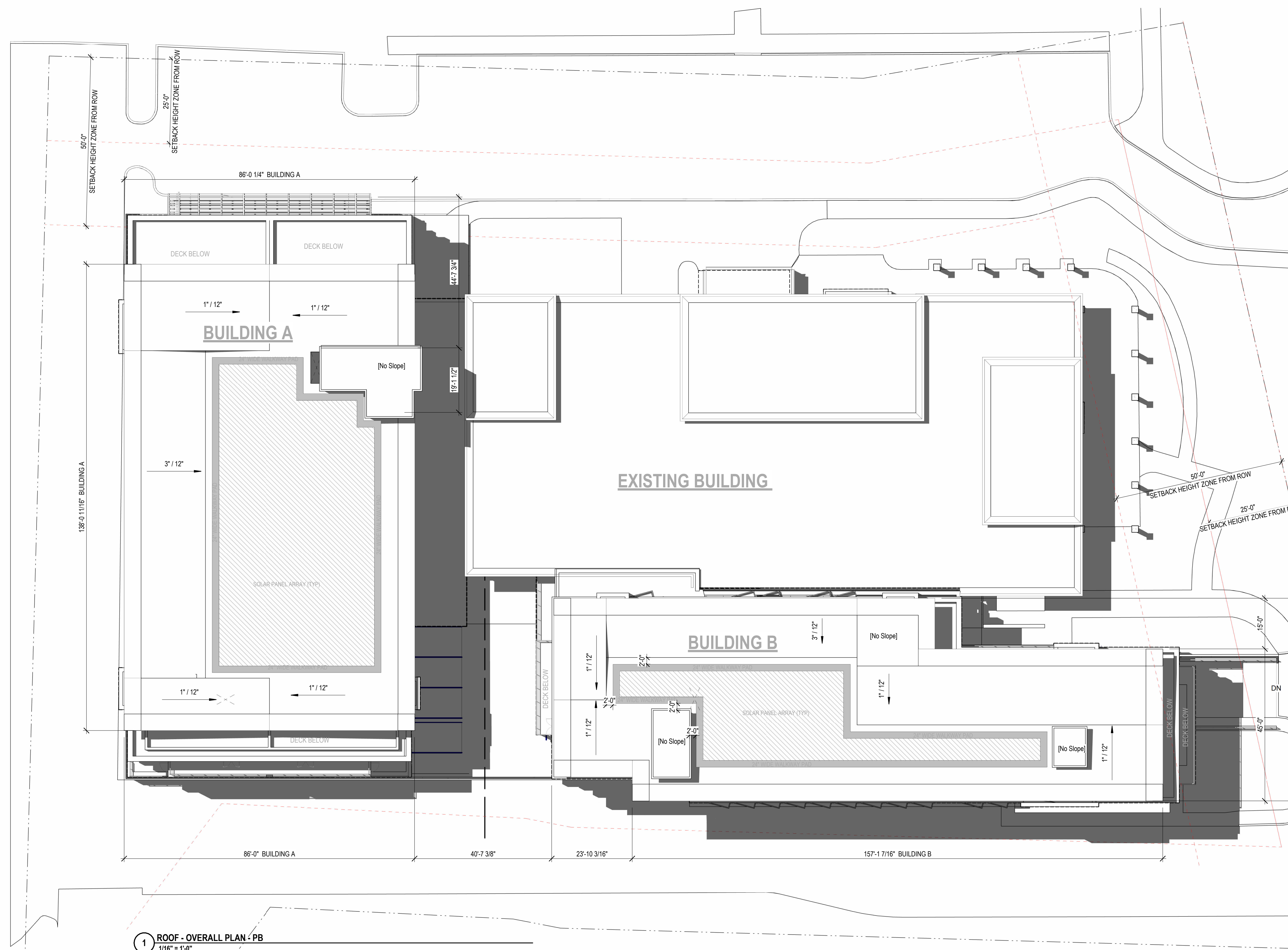
SCALE: 1/16" = 1'-0"

DATE: 2/22/2024

DRAWN: Author

CHECKED: Checker

# PB1.06



1 ROOF - OVERALL PLAN - PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCOVE.com

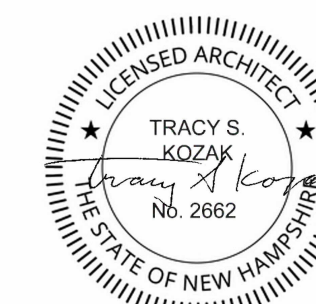
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH, 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



#### SITE PLAN REVIEW

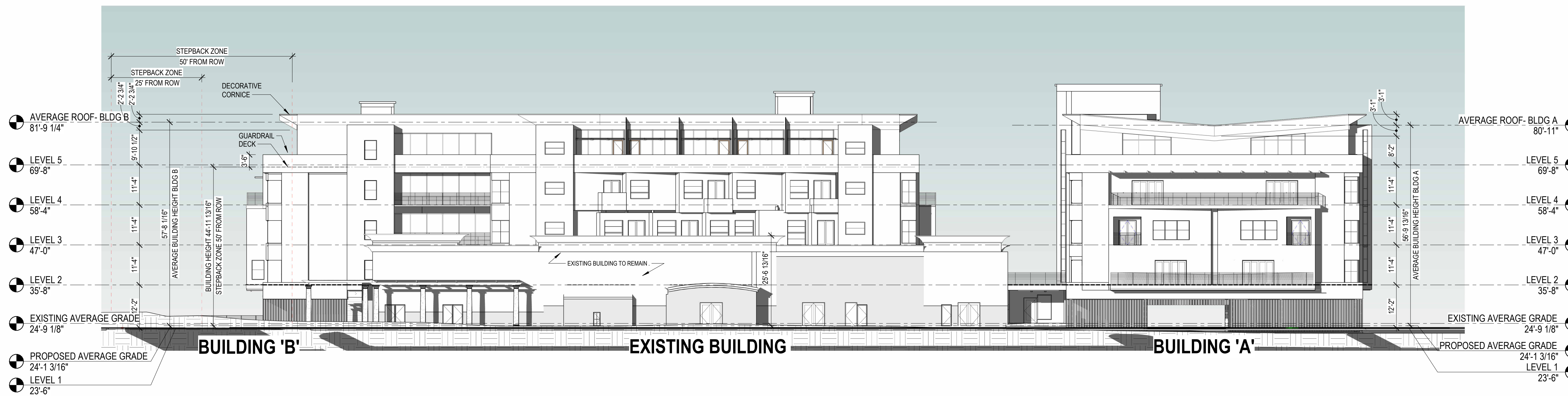
#### REVISIONS

NO.	DATE	DESCRIPTION

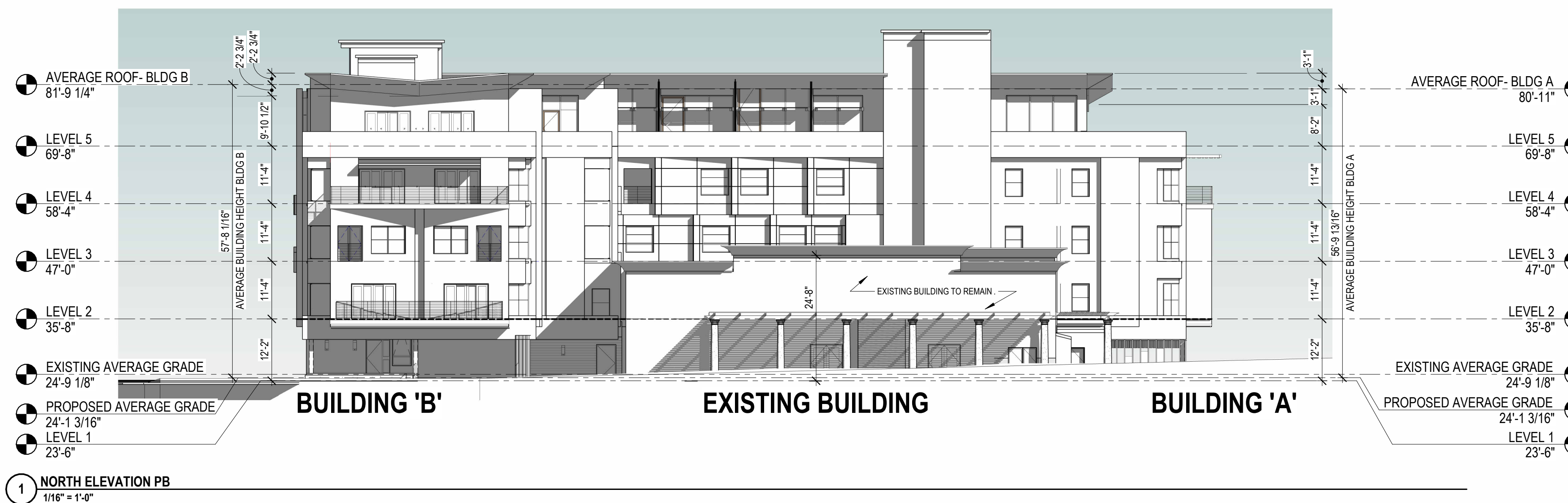
#### ELEVATIONS

SCALE: 1/16" = 1'-0"  
 DATE: 2/22/2024  
 DRAWN:  
 CHECKED:

# PB2.01



2 WEST ELEVATION PB  
 1/16" = 1'-0"



1 NORTH ELEVATION PB  
 1/16" = 1'-0"





3 CONGRESS ST., SUITE 1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCOVE.com

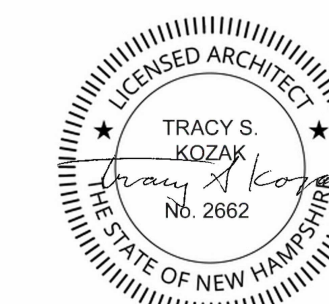
### 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



#### SITE PLAN REVIEW

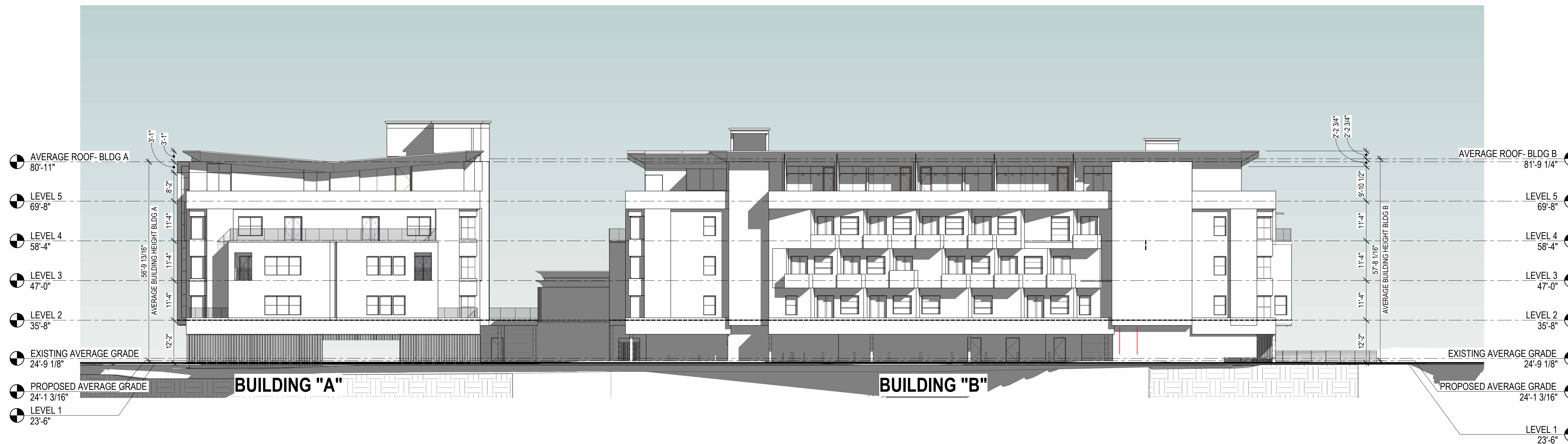
#### REVISIONS

NO.	DATE	DESCRIPTION

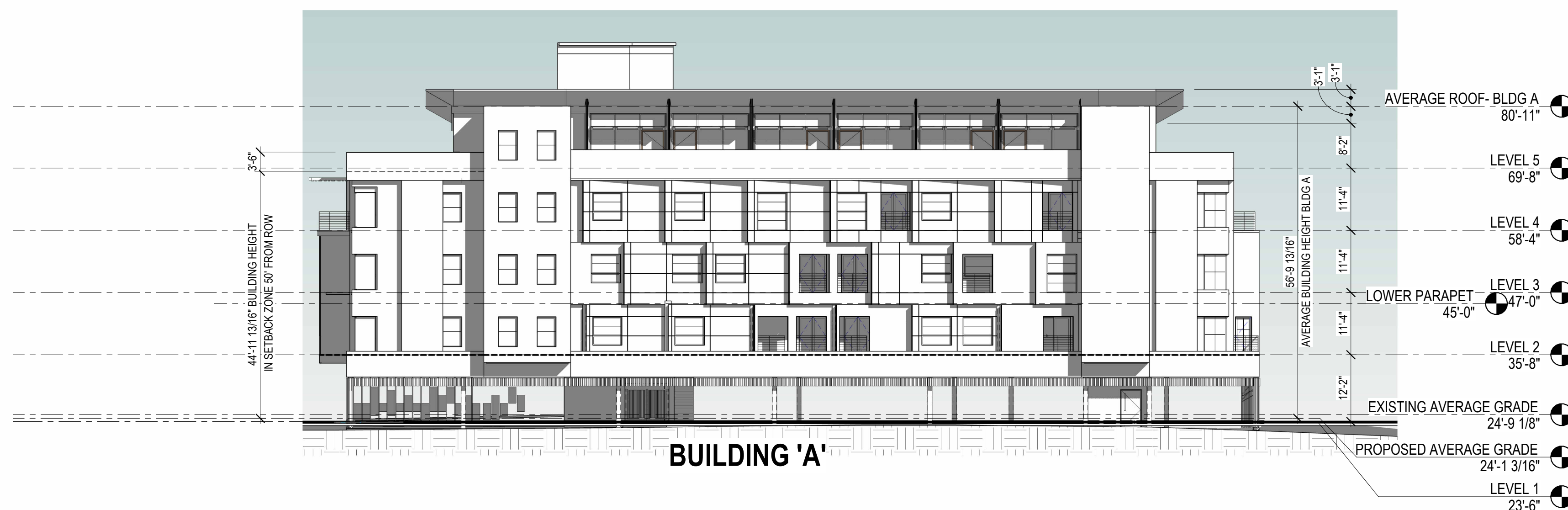
#### ELEVATIONS

SCALE: 1/16" = 1'-0"  
 DATE: 2/22/2024  
 DRAWN: Author  
 CHECKED: Checker

# PB2.02



2 EAST ELEVATION PB  
 1/16" = 1'-0"



1 SOUTH ELEVATION PB  
 1/16" = 1'-0"



3 CONGRESS ST., SUITE1  
 PORTSMOUTH NH 03801  
 603.988.0042  
 www.ARCove.com

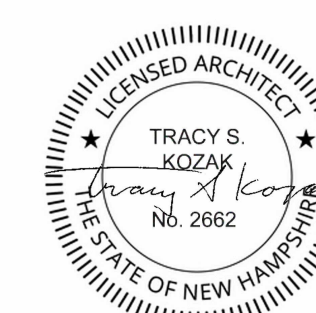
## 581 Lafayette Road Apartments

581 LAFAYETTE RD  
 PORTSMOUTH, NH, 03801

PROJECT NO: 1013

**OWNER**  
 ATLAS COMMONS, LLC  
 3 PLEASANT STREET, SUITE 400  
 PORTSMOUTH, NH 03801  
 603.427.0725

**CIVIL ENGINEERING**  
 AMBIT ENGINEERING, A DIVISION OF  
 HALEY WARD  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, NH 03801  
 603.430.9282  
<https://www.ambitengineering.com/>



### SITE PLAN REVIEW

#### REVISIONS

NO.	DATE	DESCRIPTION

### RENDERING

SCALE: 3/4" = 1'-0"

DATE: 2/22/2024

DRAWN: Author

CHECKED: Checker

# PB3.01



2 PERSPECTIVE FROM NW  
 3/4" = 1'-0"



3 PERSPECTIVE FROM SE



1 PERSPECTIVE FROM SW



**Bosen & Associates**  
ATTORNEYS AT LAW

**John K. Bosen**  
Admitted in NH & MA

**Christopher P. Mulligan**  
Admitted in NH & ME

**Molly C. Ferrara**  
Admitted in NH & ME

**Austin Mikolaities**  
Admitted in NH

**Bernard W. Pelech**  
1949 - 2021

February 16, 2024

Mr. Peter Stith, Chair  
Technical Advisory Committee  
City of Portsmouth  
1 Junkins Avenue  
Portsmouth, NH 03801

***RE: 33 Jewell Court, Tax Map 155, Lot 5-S1  
REQUEST FOR PARKING CONDITIONAL USE PERMIT***

Dear Mr. Stith:

This office represents 33 Jewell Court, LLC, the owner of the above referenced property. The property presently consists of a single, stand-alone building within a condominium association. It has 9500 square feet of office space. The applicant's principal, Ms. Jessica Kaiser, is the principal of Hawthorne Creative, which provides marketing and support services for the wedding and event industry. Hawthorne Creative's offices previously occupied the second floor of this space, and had 45 employees in the space at its peak. As a result of the pandemic, Hawthorne Creative moved to a remote office model, in April of 2020. They were able to secure a new tenant in 2021, however, that tenant is now moving out and despite extensive efforts to market the space since August, it has not received any interest.

Ms. Kaiser is seeking to leverage her twenty plus years in the wedding and event planning industry by converting the second floor into event space. A special exception for that purpose was obtained from the Board of Adjustment on January 23, 2024 (Case no. LU-23-25). A copy of that approval is attached. The applicant intends to rent the space out for events and to contractually require clients to employ shuttle or valet services. It is anticipated that the facility will host 25-35 events per year. Overflow parking, if necessary, is available at a number of nearby businesses on Islington Street, whose hours of operation will not conflict with the primarily weekend events to be hosted in the space.

The applicant requires a Conditional Use Permit pursuant to 10.1112.14 to provide less than the minimum number of off-street parking spaces otherwise required under Section 10.1112.30 relative to the proposed partial change in use at the above

location. The proposed change of use will be the conversion of 3,800 square feet of office space into event space. Based upon discussions with planning department staff, it is the applicant's understanding that the parking requirement applies only to the actual event space itself, not accessory storage, mechanical space and bathrooms.

Submitted herewith are site plan, floor plan, and parking calculation.

The parking configuration on site as it presently exists consists of 205 spaces. For the combined uses on the site, should this use be approved, the ordinance would otherwise require 242 spaces. The property received a special exception and variance in 1996 to allow 205 spaces where 244 would have otherwise been required under the zoning then in effect. The condominium association of which 33 Jewell Court is a part has allocated 28 spaces to this building. Parking has never been a problem at this location. To the extent patrons of the proposed event space require utilization of more spaces than those allocated to 33 Jewell Court, they will be contractually obligated to use the aforementioned shuttle or valet services.

The applicant maintains that the approval criteria set forth in Section 10.1112.14 are met:

10.1112.141. The number of off-street parking spaces supplied at this site is sufficient for this use. Brian Slovenski, President of Atlantic Parking Services, a valet parking company in Portsmouth NH, states: A host can expect to park a maximum of 50% of cars to attendees at any given event. Most guests will carpool or Uber to an event.

10.1112.142. The applicant's operation involves no staff on site and clients utilizing the facility will be contractually required to utilize shuttle or valet service over and above the spaces that the condominium association has allocated to 33 Jewell Court. In addition, parking for this site is within the regulatory purview the condominium association, which would have the authority to establish appropriate rules and regulations in the unlikely event parking becomes problematic as a result of this use.

10.1112.143. The number of spaces is adequate and appropriate for the proposed use of the property given the factors enumerated above.

Thank you for your attention.

Sincerely,

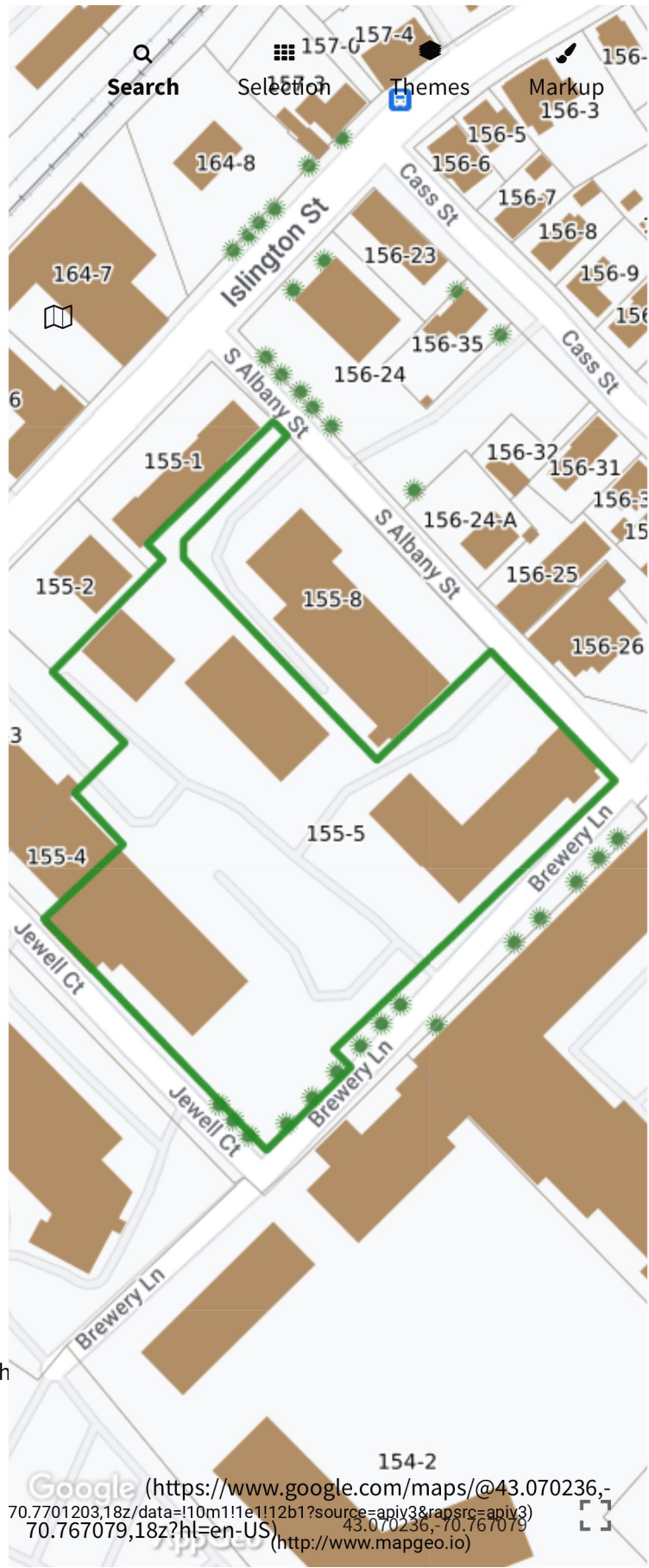
*John K. Bosen*

John K. Bosen



City of Portsmouth, NH

Property



33 Jewell

Search

Advanced Search

Download Results More

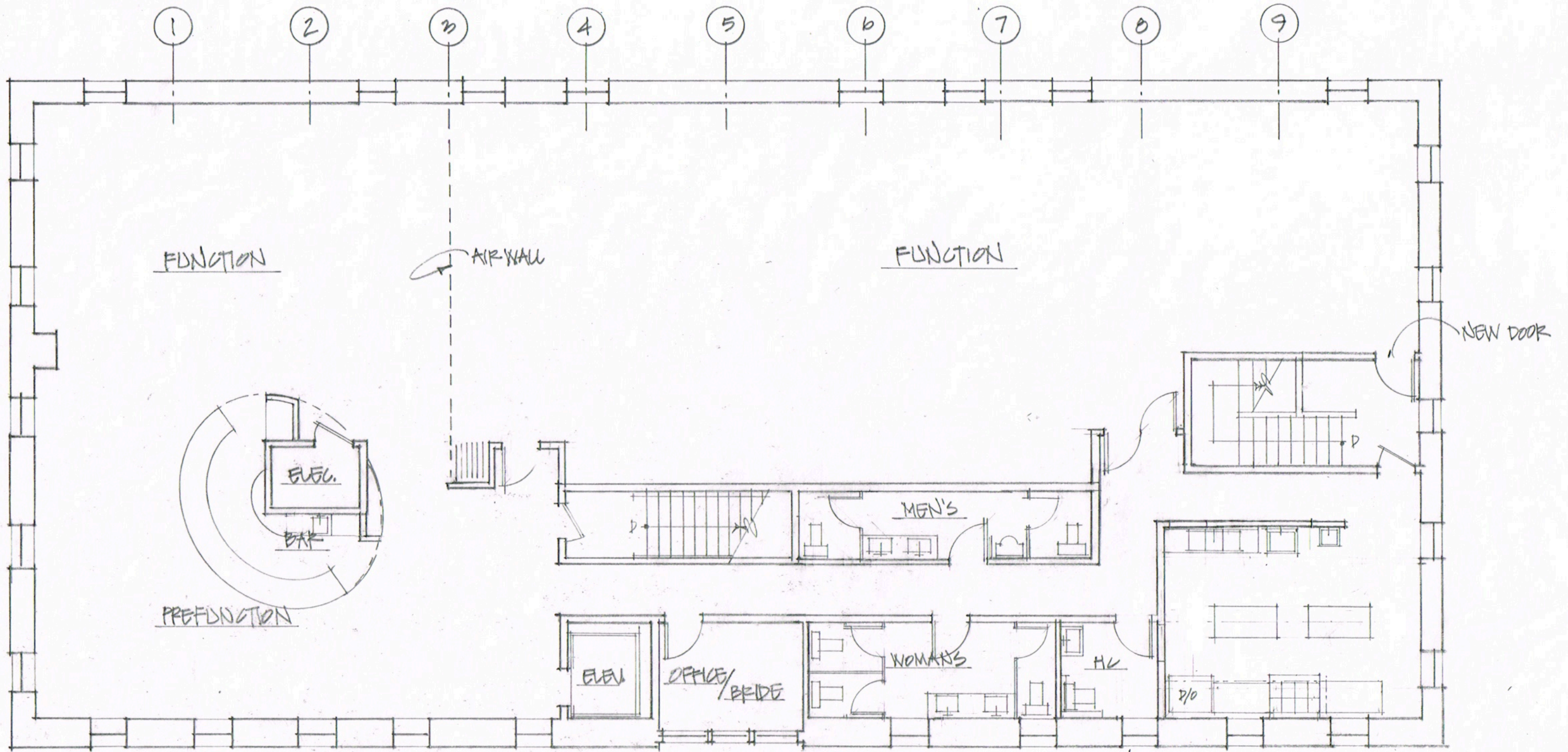
Showing 1-1 results. Scroll to see more.

33 JEWELL CT #S1  
JEWELL COURT PROPERTIES LLC  
0155-0005-00S1

Google (https://www.google.com/maps/@43.070236,-70.7701203,18z/data=!1m1!1e1!12b1?source=apiv3&rapsrc=apiv3) 70.767079,18z?hl=en-US) (http://www.mapgeo.io)







① SECOND FLOOR PLAN - PROPOSED  
 1/8" = 1'-0"



# 33 Jewell Court

Portsmouth, NH

PROPOSED  
 SECOND FLOOR  
 PLAN  
 REVISED  
 SK-04B  
 11.27.2023



A) PARKING CALC – 33 JEWELL COURT (Includes entire Schultz Brew Yard Condominium Association \*)

City	Use #	Type	Use / SF	spaces / SF	required
		COOPER HOUSE			
	13.10	Wholesale:	2,500 SF	1/2000	2
	5.10	Office:	2,500 SF	1/350	8
		SCALD HOUSE (33 Jewell Court)			
	20.10	Storage/Facilities:	2,241 SF	N/A	0
	9.10	Function Room:	3,800 SF	1/100	38
	5.10	Office:	3,459 SF	1/350	10
		KILN/MALT aka BREW HOUSE			
		Residential	52 Units	1.3/Unit	68 **
		REFRIGERATION/FERMENTATION			
	9.10	Restaurant:	3,000 SF	1/100	30
		Kitchen (per special exception in 1996)	1,500 SF	1/1000	2
	5.10	Office:	17,052 SF	1/350	49
		Residential	16 Units	1.3/Unit	21 **
**		Residential Visitor Parking	68 Units	1/5 Units	14
	TOTAL PARKING REQUIREMENT				242

\*Variance was obtained in 1996 to permit 205 spaces where 245 were required under the then current ordinance.



# CITY OF PORTSMOUTH

Planning & Sustainability  
Department  
1 Junkins Avenue  
Portsmouth, New  
Hampshire 03801  
(603) 610-7216

## **ZONING BOARD OF ADJUSTMENT**

January 29, 2024

Jewell Court Properties LLC  
30 Spring Street  
Portsmouth, New Hampshire 03801

**RE: Board of Adjustment request for property located at 33 Jewell Court Unit S1 (LU-23-205)**

Dear Property Owner:

The Zoning Board of Adjustment, at its regularly scheduled meeting of **Tuesday, January 23, 2024**, considered your application for establishing an event venue serving up to 250 people which requires a Special Exception from Section 10.440, Use # 9.42 where it is permitted by Special Exception. Said property is shown on Assessor Map 155 Lot 5-S1 and lies within the Character District 4-W (CD4W). As a result of said consideration, the Board voted to **grant** the special exception.

The Board's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Board's decision during this appeal period shall be at the applicant's risk. Please contact the Planning & Sustainability Department for more details about the appeals process.

Approvals may also be required from other City Commissions or Boards. Once all required approvals have been received, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

This approval shall expire unless a building permit is issued within a period of two (2) years from the date granted unless an extension is granted in accordance with Section 10.236 of the Zoning Ordinance.

*The Findings of Fact associated with this decision are available: attached here or as an attachment in the Viewpoint project record associated with this application and on the Zoning Board of Adjustment Meeting website:*

<https://www.cityofportsmouth.com/planportsmouth/zoning-board-adjustment/zoning-board-adjustment-archived-meetings-and-material>

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

*Phyllis Eldridge*

Phyllis Eldridge, Chair of the Zoning Board of Adjustment

cc: Shanti Wolph, Chief Building Inspector

Rosann Maurice-Lentz, City Assessor

✓ John K. Bosen, Attorney, Bosen and Associates PLLC

# Findings of Fact | Special Exception

## City of Portsmouth Zoning Board of Adjustment

Date: 1-23-2024

Property Address: 33 Jewell Court, Unit S1

Application #: LU-23-205

Decision: **Grant**

### Findings of Fact:

Effective August 23, 2022, amended RSA 676:3, It now reads as follows: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of all conditions necessary to obtain final approval.

The proposed application meets/does not meet the following purposes for granting a Special Exception:

Special Exception Review Criteria: Section 10.232.20	Finding	Relevant Facts
10.232.21 Standards as provided by this Ordinance for the particular use permitted by special exception;	Yes	<ul style="list-style-type: none"> <li>The use is allowed by special exception.</li> </ul>
10.232.22 No hazard to the public or adjacent property on account of potential fire, explosion or release of toxic materials.	Yes	<ul style="list-style-type: none"> <li>It is a dense intermingling of entertainment, hospitality, and residential use.</li> <li>Allowing the special exception will not have a detrimental impact on surrounding properties, particularly since a sound study was performed that addressed the one potential concern with noise level.</li> </ul>
10.233.23 No detriment to property values in the vicinity or change in the essential characteristics of any area including residential neighborhoods or business and industrial districts on account of the location or scale of buildings and other structures, parking areas, accessways, odor, smoke, gas,	Yes	<ul style="list-style-type: none"> <li>The parking will be contained to the condo association, so there is really no impact on the general public.</li> <li>Allowing the special exception will not have a detrimental impact on surrounding properties, particularly</li> </ul>

dust, or other pollutant, noise, glare, heat, vibration, or unsightly outdoor storage of equipment, vehicles or other materials;		since a sound study was performed that addressed the one potential concern with noise level.
10.233.24 No creation of a traffic safety hazard or a substantial increase in the level of traffic congestion in the vicinity;	<b>Yes</b>	<ul style="list-style-type: none"> <li>• The shuttle service will transport lots of people with a smaller number of vehicles.</li> <li>• It is a congested traffic area but the applicant stated that they will require the use of either a valet or shuttle service parking.</li> </ul>
10.233.25 No excessive demand on municipal services, including, but not limited to, water, sewer, waste disposal, police and fire protection and schools; and	<b>Yes</b>	<ul style="list-style-type: none"> <li>• No changes are being done to the building externally.</li> </ul>
10.232.26 No significant increase of stormwater runoff onto adjacent property or streets.	<b>Yes</b>	<ul style="list-style-type: none"> <li>• No changes are being done to the building externally.</li> </ul>

# ROSS ENGINEERING LLC

Civil/Structural Engineering  
& Surveying

909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

DATE: 2-16-2024

JOB #: 23-010

## DOCUMENT TRANSMITTAL

TO: City of Portsmouth  
ATTN: Planning Department  
1 Junkins Ave  
Portsmouth, NH 03801

VIA: By Hand

ATTACHED  SENT SEPERATELY  
 COPIES  PRINTS  REPRODUCIBLES  DIGITAL  
EACH OF:  
 DRAWINGS  SPECIFICATIONS  
 DOCUMENTS

### STATUS:

FINAL  
 PRELIMINARY  
 NO COMMENT  
 COMMENTS AS NOTED

APPROVED  
 APPROVED AS NOTED  
 UNACCEPTABLE

### PLEASE NOTE:

REVISIONS  OMISSIONS  
 ADDITIONS  CORRECTIONS  
 COMMENTS

### SENT FOR YOUR:

APPROVAL  COMMENTS  
 USE  INFORMATION  
 FILES

### RE:

Project Location: 822 US Route 1 Bypass  
Portsmouth, NH 03801  
Tax Map 160, Lot 29

Owner: Rigz Enterprises LLC  
18 Dixon Lane  
Derry, NH 03038

Attached please find the following:

1. Project Description
2. Tax Map 160
3. Site Photos
4. Signed Application Checklist
5. Waiver Request Letter
6. Abutter's List
7. Civil Plan set dated 2-16-24 (full size to scale + 11x17 not to scale)
8. Low Impact Design & Green Building Description
9. Stormwater Management Operations & Maintenance Plan
10. Architectural Plan Set (full size to scale + 11x17 not to scale)

Please call (603-433-7560) if you have any questions.

Thank you,

Alex Ross

**Ross Engineering, LLC**  
**Civil / Structural Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

**822 US Route 1 Bypass**  
**Project Description**

February 16, 2024

This site review application is for improvements to an existing fully developed site. Tax Map 160, Lot 29 is a 0.68 Acre parcel with access from Burkitt Street, and the northbound side of the Route 1 by-pass. The existing lot includes a vacant gas station building. Per the town files, the existing building was built in 1969. Just this past summer the gas pumps, and tanks were properly removed. The gas pump island roof has been removed, and the building will be removed in the near future.

If you recall we were recently before TAC for the City Tobacco improvements next door on Lot 43. The existing City Tobacco store is limited to the small building on Lot 43, so the owner would like to build a larger building on Lot 29, and move the City Tobacco store to the larger building. The owner has a successful chain of stores in many locations, including, Seabrook, Portsmouth, Rochester, Plaistow, and Sanford Maine. A new 6,010 sf retail building is planned for a “City Tobacco and Beverage” store. A new 6’ wide sidewalk will be installed at the front of the building. Adequate parking will be provided on site. A portion of the existing asphalt driveway will be replaced with landscaping. As a result, there is a decrease in impervious surface. Also a storm drainage filtration jellyfish will be installed to improve water runoff quality.

The storm drainage catch basins and lines are located in an odd configuration with piping going directly under both buildings. We have been working closely with DPW to locate the existing lines and come up with the best solution to install new lines. A utility plan has been prepared to ensure that proper drainage, sewer, water, and electrical connections will be installed. The end result of all the improvements will be a code compliant site that will provide an upgrade to the site utilities including storm drainage/water/sewer/gas/electrical, while also improving landscaping, stormwater runoff, parking, and traffic safety.

In October 20, 2023 we went to TAC work session for this site. Then in January 2024 we obtained the necessary ZBA variances for parking.

Sincerely,

Alex Ross, P.E.

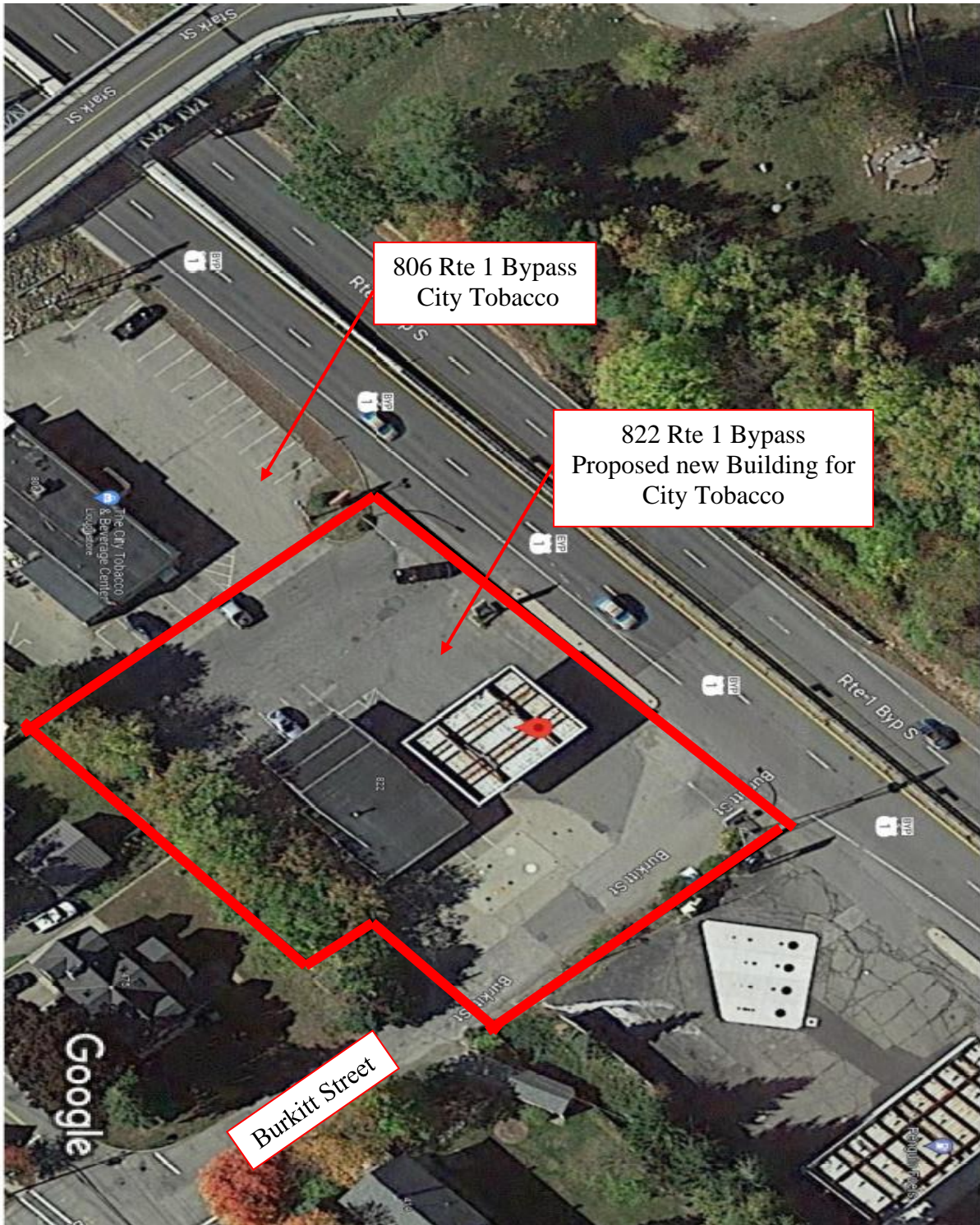




**Ross Engineering, LLC**  
**Civil / Structural Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net



**Photo 1: Google Aerial**

**Ross Engineering, LLC**  
**Civil / Structural Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

**822 Rte 1 Bypass**  
**Proposed new Building for City Tobacco**



**806 Rte 1 Bypass**  
**City Tobacco**



**Photo 2: Front view 822 & 806 Rte 1 Bypass**

**Ross Engineering, LLC**  
**Civil / Structural Engineering**

**909 Islington Street**  
**Portsmouth, NH 03801**

**603-433-7560**  
**alexross@comcast.net**



**Photo 3: View of site from Rte 1 Bypass looking to the southeast**



**Photo 4: View lot looking to the southwest**

**Ross Engineering, LLC**  
**Civil / Structural Engineering**

**909 Islington Street**  
**Portsmouth, NH 03801**

**603-433-7560**  
**alexross@comcast.net**



**Photo 5: Site view from Burkitt St.**



**Photo 6: View from Rte 1 Bypass**



# City of Portsmouth, New Hampshire

## Site Plan Application Checklist

This site plan application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. The checklist is required to be completed and uploaded to the Site Plan application in the City's online permitting system. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan review regulations for full details.

**Applicant Responsibilities (Section 2.5.2):** Applicable fees are due upon application submittal along with required attachments. The application shall be complete as submitted and provide adequate information for evaluation of the proposed site development. Waiver requests must be submitted in writing with appropriate justification.

Name of Applicant: Alex Ross Date Submitted: 2/16/2024

Application # (in City's online permitting): LU-23-209

Site Address: 822 Route 1 Bypass Map: 160 Lot: 29

Application Requirements			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Complete <a href="#">application</a> form submitted via the City's web-based permitting program (2.5.2.1(2.5.2.3A))	LU-23-209	N/A
<input checked="" type="checkbox"/>	All application documents, plans, supporting documentation and other materials uploaded to the application form in viewpoint in digital Portable Document Format (PDF). One hard copy of all plans and materials shall be submitted to the Planning Department by the published deadline. (2.5.2.8)	Online Application in Viewpoint	N/A

Site Plan Review Application Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Statement that lists and describes "green" building components and systems. (2.5.3.1B)	Low Impact Design & Green Building Description	
<input checked="" type="checkbox"/>	Existing and proposed gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. (2.5.3.1C)	Architectural Plan Set	N/A
<input checked="" type="checkbox"/>	Tax map and lot number, and current zoning of all parcels under Site Plan Review. (2.5.3.1D)	Sheet 1 "Existing Conditions" - Notes 1 & 3	N/A

<b>Site Plan Review Application Required Information</b>			
<input checked="" type="checkbox"/>	<b>Required Items for Submittal</b>	<b>Item Location (e.g. Page/line or Plan Sheet/Note #)</b>	<b>Waiver Requested</b>
<input checked="" type="checkbox"/>	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. <b>(2.5.3.1E)</b>	Rigz Enterprises LLC 18 Dixon Ln Dey, NH 030838	N/A
<input checked="" type="checkbox"/>	Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. <b>(2.5.3.1F)</b>	See Abutter list	N/A
<input checked="" type="checkbox"/>	Names, addresses and telephone numbers of all professionals involved in the site plan design. <b>(2.5.3.1G)</b>	See Abutter list	N/A
<input checked="" type="checkbox"/>	List of reference plans. <b>(2.5.3.1H)</b>	Sheet 1 "Existing Conditions"	N/A
<input checked="" type="checkbox"/>	List of names and contact information of all public or private utilities servicing the site. <b>(2.5.3.1I)</b>	Sheet 4 "Utility Plan"	N/A

<b>Site Plan Specifications</b>			
<input checked="" type="checkbox"/>	<b>Required Items for Submittal</b>	<b>Item Location (e.g. Page/line or Plan Sheet/Note #)</b>	<b>Waiver Requested</b>
<input checked="" type="checkbox"/>	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. <b>(2.5.4.1A)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. <b>(2.5.4.1B)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. <b>(2.5.4.1C)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Plans shall be drawn to scale and stamped by a NH licensed civil engineer. <b>(2.5.4.1D)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. <b>(2.5.4.1E)</b>	No wetlands on site	N/A
<input checked="" type="checkbox"/>	Title (name of development project), north point, scale, legend. <b>(2.5.4.2A)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Date plans first submitted, date and explanation of revisions. <b>(2.5.4.2B)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Individual plan sheet title that clearly describes the information that is displayed. <b>(2.5.4.2C)</b>	Required on all plan sheets	N/A
<input checked="" type="checkbox"/>	Source and date of data displayed on the plan. <b>(2.5.4.2D)</b>	Required on all plan sheets	N/A

**Site Plan Specifications – Required Exhibits and Data**

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
☑	<b>1. Existing Conditions: (2.5.4.3A)</b> <ul style="list-style-type: none"> <li>• Surveyed plan of site showing existing natural and built features;</li> <li>• Existing building footprints and gross floor area;</li> <li>• Existing parking areas and number of parking spaces provided;</li> <li>• Zoning district boundaries;</li> <li>• Existing, required, and proposed dimensional zoning requirements including building and open space coverage, yards and/or setbacks, and dwelling units per acre;</li> <li>• Existing impervious and disturbed areas;</li> <li>• Limits and type of existing vegetation;</li> <li>• Wetland delineation, wetland function and value assessment (including vernal pools);</li> <li>• SFHA, 100-year flood elevation line and BFE data, as required.</li> </ul>	Sheet 1 "Existing Conditions"	
☑	<b>2. Buildings and Structures: (2.5.4.3B)</b> <ul style="list-style-type: none"> <li>• Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation;</li> <li>• Elevations: Height, massing, placement, materials, lighting, façade treatments;</li> <li>• Total Floor Area;</li> <li>• Number of Usable Floors;</li> <li>• Gross floor area by floor and use.</li> </ul>	See Architectural & Sheet 2 "Site Plan"	
☑	<b>3. Access and Circulation: (2.5.4.3C)</b> <ul style="list-style-type: none"> <li>• Location/width of access ways within site;</li> <li>• Location of curbing, right of ways, edge of pavement and sidewalks;</li> <li>• Location, type, size and design of traffic signing (pavement markings);</li> <li>• Names/layout of existing abutting streets;</li> <li>• Driveway curb cuts for abutting prop. and public roads;</li> <li>• If subdivision; Names of all roads, right of way lines and easements noted;</li> <li>• AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC).</li> </ul>	Sheet 2 "Site Plan"	
☑	<b>4. Parking and Loading: (2.5.4.3D)</b> <ul style="list-style-type: none"> <li>• Location of off street parking/loading areas, landscaped areas/buffers;</li> <li>• Parking Calculations (# required and the # provided).</li> </ul>	Sheet 2 "Site Plan"	
☑	<b>5. Water Infrastructure: (2.5.4.3E)</b> <ul style="list-style-type: none"> <li>• Size, type and location of water mains, shut-offs, hydrants &amp; Engineering data;</li> <li>• Location of wells and monitoring wells (include protective radii).</li> </ul>	Sheet 4 "Utility Plan"	
☑	<b>6. Sewer Infrastructure: (2.5.4.3F)</b> <ul style="list-style-type: none"> <li>• Size, type and location of sanitary sewage facilities &amp; Engineering data, including any onsite temporary facilities during construction period.</li> </ul>	Sheet 4 "Utility Plan"	

<input checked="" type="checkbox"/>	<b>7. Utilities: (2.5.4.3G)</b> <ul style="list-style-type: none"> <li>The size, type and location of all above &amp; below ground utilities;</li> <li>Size type and location of generator pads, transformers and other fixtures.</li> </ul>	Sheet 4 "Utility Plan"	
<input checked="" type="checkbox"/>	<b>8. Solid Waste Facilities: (2.5.4.3H)</b> <ul style="list-style-type: none"> <li>The size, type and location of solid waste facilities.</li> </ul>	Sheet 2 "Site Plan"	
<input checked="" type="checkbox"/>	<b>9. Storm water Management: (2.5.4.3I)</b> <ul style="list-style-type: none"> <li>The location, elevation and layout of all storm-water drainage.</li> <li>The location of onsite snow storage areas and/or proposed off-site snow removal provisions.</li> <li>Location and containment measures for any salt storage facilities</li> <li>Location of proposed temporary and permanent material storage locations and distance from wetlands, water bodies, and stormwater structures.</li> </ul>	Sheet 4 "Utility Plan"	
<input checked="" type="checkbox"/>	<b>10. Outdoor Lighting: (2.5.4.3J)</b> <ul style="list-style-type: none"> <li>Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan.</li> </ul>	See Lighting Plan	
<input checked="" type="checkbox"/>	<b>11. Indicate where dark sky friendly lighting measures have been implemented. (10.1)</b>	See Lighting Plan	
<input checked="" type="checkbox"/>	<b>12. Landscaping: (2.5.4.3K)</b> <ul style="list-style-type: none"> <li>Identify all undisturbed area, existing vegetation and that which is to be retained;</li> <li>Location of any irrigation system and water source.</li> </ul>	Sheet 3 "Landscape Plan"	
<input checked="" type="checkbox"/>	<b>13. Contours and Elevation: (2.5.4.3L)</b> <ul style="list-style-type: none"> <li>Existing/Proposed contours (2 foot minimum) and finished grade elevations.</li> </ul>	Sheet 1 "Existing Conditions" & 2 "Site Plan"	
<input checked="" type="checkbox"/>	<b>14. Open Space: (2.5.4.3M)</b> <ul style="list-style-type: none"> <li>Type, extent and location of all existing/proposed open space.</li> </ul>	Sheet 1 "Existing Conditions" & Sheet 2 "Site Plan"	
<input checked="" type="checkbox"/>	<b>15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)</b>	Sheet 1 "Existing Conditions"	
<input checked="" type="checkbox"/>	<b>16. Character/Civic District (All following information shall be included): (2.5.4.3P)</b> <ul style="list-style-type: none"> <li>Applicable Building Height (10.5A21.20 &amp; 10.5A43.30);</li> <li>Applicable Special Requirements (10.5A21.30);</li> <li>Proposed building form/type (10.5A43);</li> <li>Proposed community space (10.5A46).</li> </ul>	N/A - Not in Character/Civil District	
<input checked="" type="checkbox"/>	<b>17. Special Flood Hazard Areas (2.5.4.3Q)</b> <ul style="list-style-type: none"> <li>The proposed development is consistent with the need to minimize flood damage;</li> <li>All public utilities and facilities are located and construction to minimize or eliminate flood damage;</li> <li>Adequate drainage is provided so as to reduce exposure to flood hazards.</li> </ul>	N/A - Site not located within special flood area	




Other Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Traffic Impact Study or Trip Generation Report, as required. (3.2.1-2)		✓
<input checked="" type="checkbox"/>	Indicate where Low Impact Development Design practices have been incorporated. (7.1)	Sheet 2 "Site Plan"	
<input checked="" type="checkbox"/>	Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. (7.3.1)	N/A - Not located within well head or aquifer protection area	
<input checked="" type="checkbox"/>	Stormwater Management and Erosion Control Plan. (7.4)		✓
<input checked="" type="checkbox"/>	Inspection and Maintenance Plan (7.6.5)	Sheet 11	

Final Site Plan Approval Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	All local approvals, permits, easements and licenses required, including but not limited to: <ul style="list-style-type: none"> <li>• Waivers;</li> <li>• Driveway permits;</li> <li>• Special exceptions;</li> <li>• Variances granted;</li> <li>• Easements;</li> <li>• Licenses.</li> </ul> (2.5.3.2A)	See Waiver request form	
<input checked="" type="checkbox"/>	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: <ul style="list-style-type: none"> <li>• Calculations relating to stormwater runoff;</li> <li>• Information on composition and quantity of water demand and wastewater generated;</li> <li>• Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls;</li> <li>• Estimates of traffic generation and counts pre- and post- construction;</li> <li>• Estimates of noise generation;</li> <li>• A Stormwater Management and Erosion Control Plan;</li> <li>• Endangered species and archaeological / historical studies;</li> <li>• Wetland and water body (coastal and inland) delineations;</li> <li>• Environmental impact studies.</li> </ul> (2.5.3.2B)		✓
<input checked="" type="checkbox"/>	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. (2.5.3.2D)		

**Final Site Plan Approval Required Information**

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	A list of any required state and federal permit applications required for the project and the status of same. <b>(2.5.3.2E)</b>	N/A - No State or Federal Permits Required	
<input checked="" type="checkbox"/>	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." <b>(2.5.4.2E)</b>	Sheet 2 "Site Plan"	N/A
<input checked="" type="checkbox"/>	For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. <b>(2.5.4.2F)</b>	N/A - Site not located in a SFHA	
<input checked="" type="checkbox"/>	Plan sheets submitted for recording shall include the following notes: <ul style="list-style-type: none"> <li>a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds."</li> <li>b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director."</li> </ul> <b>(2.13.3)</b>	Sheet 2 "Site Plan"	N/A

Applicant's Signature:  Date: 2/16/24

**Ross Engineering**  
**Civil/Structural Engineering & Surveying**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

February 16, 2024

Planning Department  
City of Portsmouth  
1 Junkins Ave  
Portsmouth, NH 03801  
Waiver Request Letter

Re: Waiver Request Letter  
822 US Route 1 Bypass  
Portsmouth, NH 03801  
Tax Map 160, Lot 29

Technical Advisor Committee Members, we are requesting waivers from the following regulations:

- *Section 3.2.1-2 “A traffic impact analysis shall be prepared by a professional engineer licensed in New Hampshire and experienced and qualified in traffic engineering”*

**The existing site was previously a gas station for many years. The existing site does not have adequate parking or signage. The proposed site will provide adequate parking and signage that will provide a safer site than existing. The existing access roads will not be impacted and there is no need for a traffic analysis.**

- *Section 7.4 “The applicant shall submit a Stormwater Management and Erosion Control Plan”*  
**This site is fully developed and does not meet open space requirements. The proposed plan will include landscaping beds that will reduce the impervious surface. A Jellyfish filter will be added into to the end of the drainage network, treating runoff.**
- *Section 2.5.3.2B “Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to.....”*  
**This site has been fully developed for many decades. Adequate parking will be provided as per the City Zoning Ordinance, signage will be installed that will provide safe travel, landscaping will be added reducing the impervious surface on site improving stormwater runoff, and a jellyfish filter will be installed treating runoff that is currently untreated.**

Sincerely,

Alex Ross, P.E.

**Ross Engineering  
Civil / Structural Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

**List of Abutters**

February 16, 2024

Applicant & Land Owner's Name:

Rigz Enterprises LLC  
18 Dixon Ln  
Derry, NH 03038

Location of Land:  
822 Route 1 Bypass  
Portsmouth, NH 03801  
Tax Map 160, Lot 29

Abutters:

Peter & Judi Paradis  
481 Dennett St  
Portsmouth, NH 03801  
Tax Map 160, Lot 27  
Zone: GRA

Penguin Portsmouth, LLC  
856 US Route 1 BYP  
Portsmouth, NH 03801  
Tax Map 160, Lot 30  
Zone: B

Yoko & Junichi Fukuda  
421 Dennett St  
Portsmouth, NH 03801  
Tax Map 160, Lot 31-1  
Zone: GRA

Rigz Enterprises, LLC  
18 Dixon Ln  
Derry, NH 03038  
Tax Map 161, Lot 43  
Zone: B

Portsmouth, NH 03801

David B. Platt Revocable Trust  
Tuyen Lang Revocable Trust  
475 Dennett St  
Portsmouth, NH 03801  
Tax Map 160, Lot 28  
Zone: GRA

Solano Group LLC  
419 Dennet St  
Portsmouth, NH 03801  
Tax Map 160, Lot 31  
Zone: GRA

Matthew Landry  
419 Dennet St  
Portsmouth, NH 03801  
Tax Map 160, Lot 31-2  
Zone: GRA

Lindsay Floryan & Brian Collier  
493 Dennett St  
Portsmouth, NH 03801  
Tax Map 161, Lot 45  
Zone: GRA

**Civil Engineer & Surveyor**

Alex Ross  
Ross Engineering  
Certified Professional Engineer  
Licensed Land Surveyor  
909 Islington Street

City of Portsmouth  
New Franklin School  
PO Box 628  
Portsmouth, NH 03802  
Tax Map 220, Lot 2  
Zone: M

**Ross Engineering, LLC**  
**Civil / Structural Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

**822 US Route 1 Bypass**  
**Low Impact Design & Green Building Description**

February 16, 2024

The following Low Impact Design and Green Building Design practices are proposed to be implemented.

- A jelly fish filtration system will be added to the drainage network in the southwest of the site. This will collect the stormwater from the other catch basins on #806 & #822 US Route 1 Bypass as well as catch basins in the US Route 1 Bypass.
- Landscaping around the whole parcel that will include native plantings.
- LED energy efficient lighting for the site and building interior.
- Dark sky compliant lighting.
- Low flow plumbing fixtures.

Sincerely,

Alex Ross, P.E.

## ***STORMWATER MANAGEMENT OPERATION & MAINTENANCE***

### **822 US Route 1 Bypass, Portsmouth, NH**

The proposed stormwater structures and improvements will result in a massive upgrade for stormwater runoff control and treatment. For all of these elements to work correctly in the future it is imperative to keep up with proper operation and maintenance.

#### **Inspection and Maintenance of Facilities and Property**

##### **A. Maintenance of Common Facilities or Property**

1. Future owners or assigns are responsible for maintenance of all stormwater infrastructure associated with the facility and the property. This includes the landscaped areas, drain lines, and Contech treatment structure.

##### **B. General Inspection and Maintenance Requirements**

1. Permanent stormwater and sediment and erosion control facilities to be maintained on the site include but are not limited to the following:
  - a. Parking areas
  - b. Landscaped areas
  - c. Culverts & Drain lines
  - d. Contech jellyfish
2. Maintenance of permanent measures shall follow the following schedule:
  - a. **Parking Areas:**  
Inspection at the end of every winter, prior to the start of the spring rain season. Sweeping shall be done once in early fall and then after spring snowmelt. Sand/debris that has collected off the driveway and parking lot should be removed off-site and disposed of properly.
  - b. **Landscaped Areas:**  
Annual inspection of site's vegetation and landscaping. Any areas that are bare shall be reseeded and mulched with hay or, if the case is extreme, loamed and seeded or sodded to ensure adequate vegetative cover. Landscape specimens shall be replaced in-kind, if they are found to be dead or dying.

## Ross Engineering

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

- c. **Drain Lines:**  
Inspect twice a year, more often if needed. Inspect for accumulation of debris. Remove material from inlet/outlet as necessary, dispose of offsite.
  - d. **Contech jellyfish treatment structure:**  
See attached Jellyfish Maintenance Guide.
- C. Owners shall provide a report on activities performed throughout the year. Report shall include documentation that inspection and maintenance is accomplished per this document and a certification that the systems continue to function as designed.

**Ross Engineering**

909 Islington Street  
Portsmouth, NH 03801

603-433-7560  
alexross@comcast.net

**Annual Operations and Maintenance Report**

<b>Activity</b>	<b>Date of Inspection</b>	<b>Who Inspected</b>	<b>Satisfactory: Yes, No, N/A</b>	<b>Maintenance Needed</b>	<b>Implemented date of corrective action</b>	<b>Findings of Inspector</b>
Parking Areas						
Landscaped Areas						
Culverts & Drain lines						
Contech Jellyfish						



## Jellyfish<sup>®</sup> Filter Maintenance Guide





## **JELLYFISH® FILTER INSPECTION & MAINTENANCE GUIDE**

Jellyfish units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the Jellyfish filter to be successful, it is imperative that all other components be properly maintained. The maintenance and repair of upstream facilities should be carried out prior to Jellyfish maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

### **TABLE OF CONTENTS**

Inspection and Maintenance Overview .....	3
Inspection Procedure.....	3
Maintenance Procedure.....	4
Cartridge Assembly & Cleaning.....	5
Inspection Process .....	7

## 1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

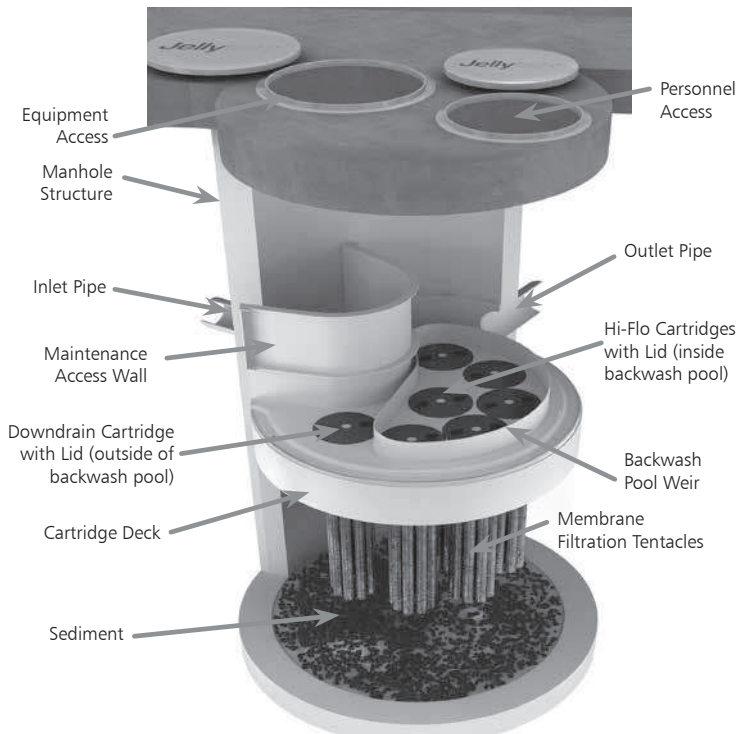
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



Note: Separator Skirt not shown

## 2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; *or per the approved project stormwater quality documents (if applicable), whichever is more frequent.*

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

## 3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures as necessary.
2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

### 3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.



Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment ( $\geq 1/16''$ ) accumulated on the deck surface should be removed.

### 3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

## 4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

## 5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

1. Provide traffic control measures as necessary.
2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures.  
**Caution: Dropping objects onto the cartridge deck may cause damage.**

3. Perform Inspection Procedure prior to maintenance activity.
4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

### 5.1 Filter Cartridge Removal

1. Remove a cartridge lid.
2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. **Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs.**
3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

### 5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.



Cartridge Removal & Lifting Device



2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. **Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.**

4. Collected rinse water is typically removed by vacuum hose.
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

### 5.3 Sediment and Floatables Extraction

1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



Vacuuming Sump Through MAW

3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes ( $\geq 8$ -ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

### 5.4 Filter Cartridge Reinstallation and Replacement

1. Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. **Caution: Do not force the cartridge downward; damage may occur.**
3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

### 5.5 Chemical Spills

**Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.**

### 5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

# Jellyfish Filter Components & Filter Cartridge Assembly and Installation

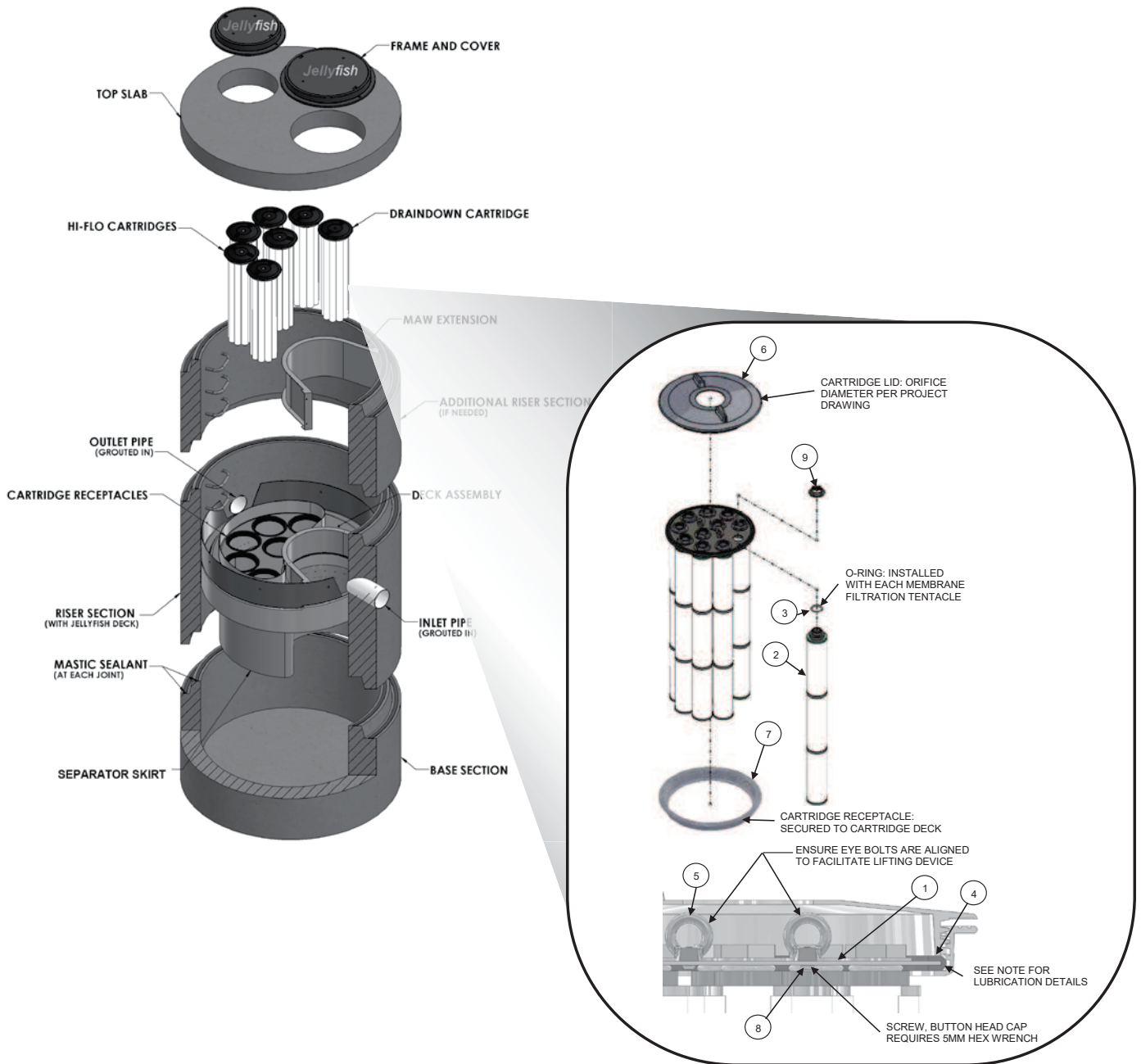


TABLE 1: BOM

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30600	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

## NOTES:

### Head Plate Gasket Installation:

Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (Item 6). Follow Lubricant manufacturer's instructions.

### Lid Assembly:

Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

## Jellyfish Filter Inspection and Maintenance Log

Owner:		Jellyfish Model No:	
Location:		GPS Coordinates:	
Land Use:	Commercial:	Industrial:	Service Station:
	Roadway/Highway:	Airport:	Residential:

Date/Time:						
Inspector:						
Maintenance Contractor:						
Visible Oil Present: (Y/N)						
Oil Quantity Removed:						
Floatable Debris Present: (Y/N)						
Floatable Debris Removed: (Y/N)						
Water Depth in Backwash Pool						
Draindown Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Draindown Cartridges: (Y/N)						
Hi-Flo Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Hi-Flo Cartridges: (Y/N)						
Sediment Depth Measured: (Y/N)						
Sediment Depth (inches or mm):						
Sediment Removed: (Y/N)						
Cartridge Lids intact: (Y/N)						
Observed Damage:						
Comments:						



#### Support

- Drawings and specifications are available at [www.conteches.com/jellyfish](http://www.conteches.com/jellyfish).
- Site-specific design support is available from Contech Engineered Solutions.
- Find a Certified Maintenance Provider at [www.conteches.com/ccmp](http://www.conteches.com/ccmp)

**Jellyfish**<sup>®</sup>

**CONTECH**<sup>®</sup>  
ENGINEERED SOLUTIONS

800.338.1122

[www.ContechES.com](http://www.ContechES.com)

© 2021 Contech Engineered Solutions LLC, a QUIKRETE Company

Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, wastewater treatment and earth stabilization products. For information on other Contech segment offerings, visit [ContechES.com](http://ContechES.com) or call 800.338.1122

NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS A WARRANTY. APPLICATIONS SUGGESTED HEREIN ARE DESCRIBED ONLY TO HELP READERS MAKE THEIR OWN EVALUATIONS AND DECISIONS, AND ARE NEITHER GUARANTEES NOR WARRANTIES OF SUITABILITY FOR ANY APPLICATION. CONTECH MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, RELATED TO THE APPLICATIONS, MATERIALS, COATINGS, OR PRODUCTS DISCUSSED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY CONTECH. SEE CONTECH'S CONDITIONS OF SALE (AVAILABLE AT [WWW.CONTECHES.COM/COS](http://WWW.CONTECHES.COM/COS)) FOR MORE INFORMATION.



# Site Plan Review

## 822 Route 1 Bypass

### Portsmouth, New Hampshire

PREPARED FOR:

RIGZ ENTERPRISES LLC

PREPARED BY:

ROSS ENGINEERING, LLC

Civil/Structural Engineering  
& Surveying

909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

February 21, 2024

LIST OF PROJECT PLANS:

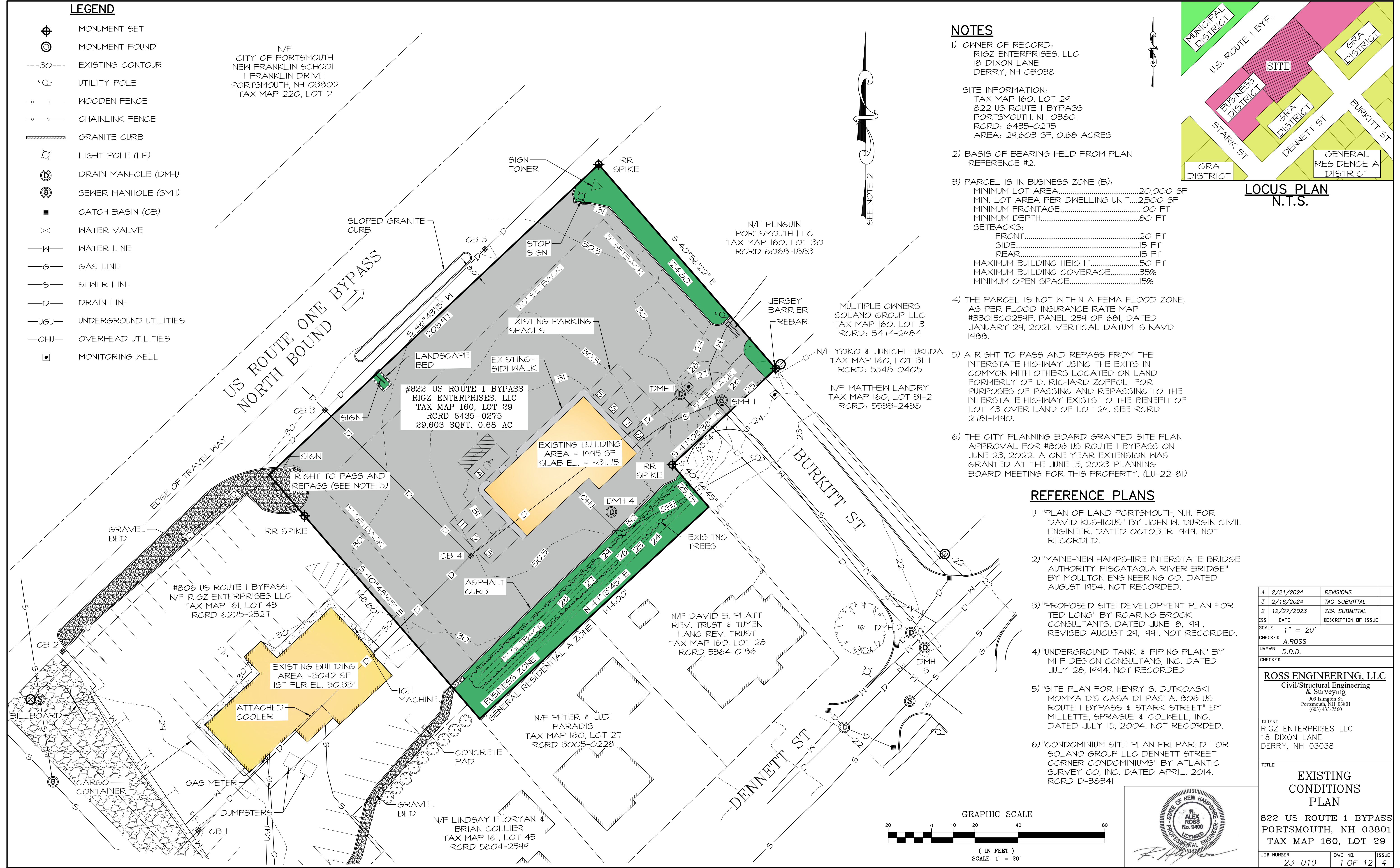
**SITE PLAN SET**

- 1 - Existing Conditions Plan
- 2 - Site Plan
- 3 - Landscape Plan
- 4 - Utility Plan
- 5 - Grading & Drainage Plan
- 6 - Existing Drain Profile
- 7 - Proposed Drain Profile
- 8 - Sewer Profile
- 9 - Sewer Details
- 10 - Details
- 11 - Sidewalk Details
- 12 - Erosion Control Plan  
Keystone Technologies Lighting Layout

**LEGEND**

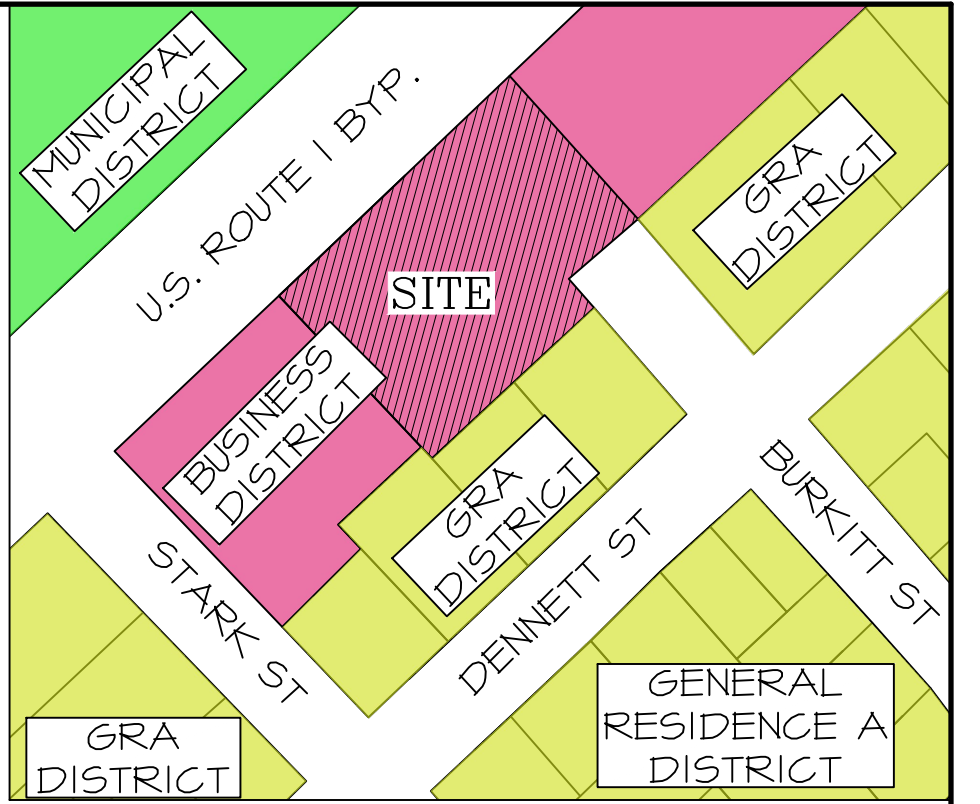
- ⊕ MONUMENT SET
- ⊙ MONUMENT FOUND
- - - 30 - - - EXISTING CONTOUR
- ⊕ UTILITY POLE
- W — WOODEN FENCE
- G — CHAINLINK FENCE
- S — GRANITE CURB
- ⊕ LIGHT POLE (LP)
- ⊙ DRAIN MANHOLE (DMH)
- ⊙ SEWER MANHOLE (SMH)
- CATCH BASIN (CB)
- ⊕ WATER VALVE
- W — WATER LINE
- G — GAS LINE
- S — SEWER LINE
- D — DRAIN LINE
- UGU — UNDERGROUND UTILITIES
- OHU — OVERHEAD UTILITIES
- ⊕ MONITORING WELL

N/F  
CITY OF PORTSMOUTH  
NEW FRANKLIN SCHOOL  
1 FRANKLIN DRIVE  
PORTSMOUTH, NH 03802  
TAX MAP 220, LOT 2



**NOTES**

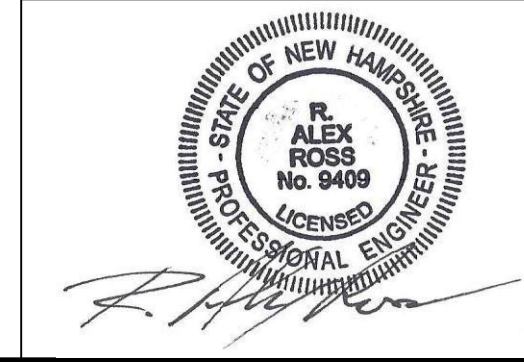
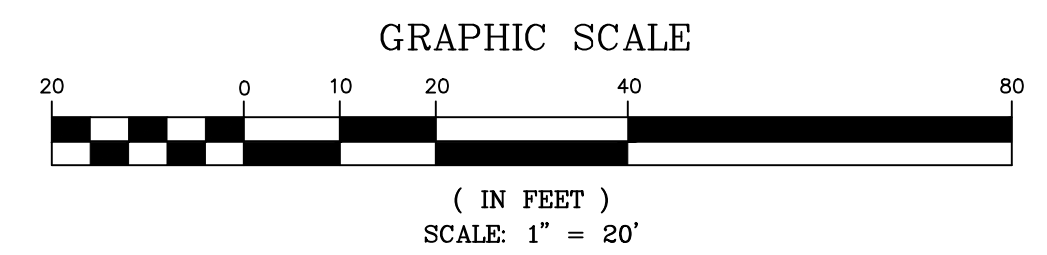
- 1) OWNER OF RECORD:  
RIGZ ENTERPRISES, LLC  
18 DIXON LANE  
DERRY, NH 03038
- SITE INFORMATION:  
TAX MAP 160, LOT 29  
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
RCRD: 6435-0275  
AREA: 29,603 SF, 0.68 ACRES
- 2) BASIS OF BEARING HELD FROM PLAN REFERENCE #2.
- 3) PARCEL IS IN BUSINESS ZONE (B):  
MINIMUM LOT AREA.....20,000 SF  
MIN. LOT AREA PER DWELLING UNIT.....2,500 SF  
MINIMUM FRONTAGE.....100 FT  
MINIMUM DEPTH.....80 FT  
SETBACKS:  
FRONT.....20 FT  
SIDE.....15 FT  
REAR.....15 FT  
MAXIMUM BUILDING HEIGHT.....50 FT  
MAXIMUM BUILDING COVERAGE.....35%  
MINIMUM OPEN SPACE.....15%
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259F, PANEL 259 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.
- 5) A RIGHT TO PASS AND REPASS FROM THE INTERSTATE HIGHWAY USING THE EXITS IN COMMON WITH OTHERS LOCATED ON LAND FORMERLY OF D. RICHARD ZOFFOLI FOR PURPOSES OF PASSING AND REPASSING TO THE INTERSTATE HIGHWAY EXISTS TO THE BENEFIT OF LOT 43 OVER LAND OF LOT 29. SEE RCRD 2781-1490.
- 6) THE CITY PLANNING BOARD GRANTED SITE PLAN APPROVAL FOR #806 US ROUTE 1 BYPASS ON JUNE 23, 2022. A ONE YEAR EXTENSION WAS GRANTED AT THE JUNE 15, 2023 PLANNING BOARD MEETING FOR THIS PROPERTY. (LU-22-81)



**LOCUS PLAN  
N.T.S.**

**REFERENCE PLANS**

- 1) "PLAN OF LAND PORTSMOUTH, N.H. FOR DAVID KUSHIOUS" BY JOHN W. DURGIN CIVIL ENGINEER. DATED OCTOBER 1949. NOT RECORDED.
- 2) "MAINE-NEW HAMPSHIRE INTERSTATE BRIDGE AUTHORITY PISCATAQUA RIVER BRIDGE" BY MOULTON ENGINEERING CO. DATED AUGUST 1954. NOT RECORDED.
- 3) "PROPOSED SITE DEVELOPMENT PLAN FOR TED LONG" BY ROARING BROOK CONSULTANTS. DATED JUNE 18, 1991, REVISED AUGUST 29, 1991. NOT RECORDED.
- 4) "UNDERGROUND TANK & PIPING PLAN" BY MHF DESIGN CONSULTANTS, INC. DATED JULY 28, 1994. NOT RECORDED.
- 5) "SITE PLAN FOR HENRY S. DUTKOWSKI MONMA D'S CASA DI PASTA, 806 US ROUTE 1 BYPASS & STARK STREET" BY MILLETTE, SPRAGUE & COLWELL, INC. DATED JULY 15, 2004. NOT RECORDED.
- 6) "CONDOMINIUM SITE PLAN PREPARED FOR SOLANO GROUP LLC DENNETT STREET CORNER CONDOMINIUMS" BY ATLANTIC SURVEY CO, INC. DATED APRIL, 2014. RCRD D-38341



DATE	REVISIONS
2/21/2024	
2/16/2024	TAC SUBMITTAL
12/27/2023	ZBA SUBMITTAL
ISS. DATE	DESCRIPTION OF ISSUE

SCALE 1" = 20'  
CHECKED: A.ROSS  
DRAWN: D.D.D.  
CHECKED:

**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering & Surveying  
909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

TITLE <b>EXISTING CONDITIONS PLAN</b>		
822 US ROUTE 1 BYPASS PORTSMOUTH, NH 03801 TAX MAP 160, LOT 29		
JOB NUMBER 23-010	DWG. NO. 1 OF 12	ISSUE 4

**LEGEND**

- MONUMENT SET
- MONUMENT FOUND
- UTILITY POLE
- WOODEN FENCE
- CHAIN LINK FENCE
- CURB
- LIGHT POLE (LP)
- DRAIN MANHOLE (DMH)
- SEWER MANHOLE (SMH)
- CATCH BASIN (CB)
- WATER VALVE
- WATER LINE
- GAS LINE
- SEWER LINE
- DRAIN LINE
- UNDERGROUND UTILITIES
- OVERHEAD UTILITIES
- MONITORING WELL

ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS

**ZBA APPROVALS**

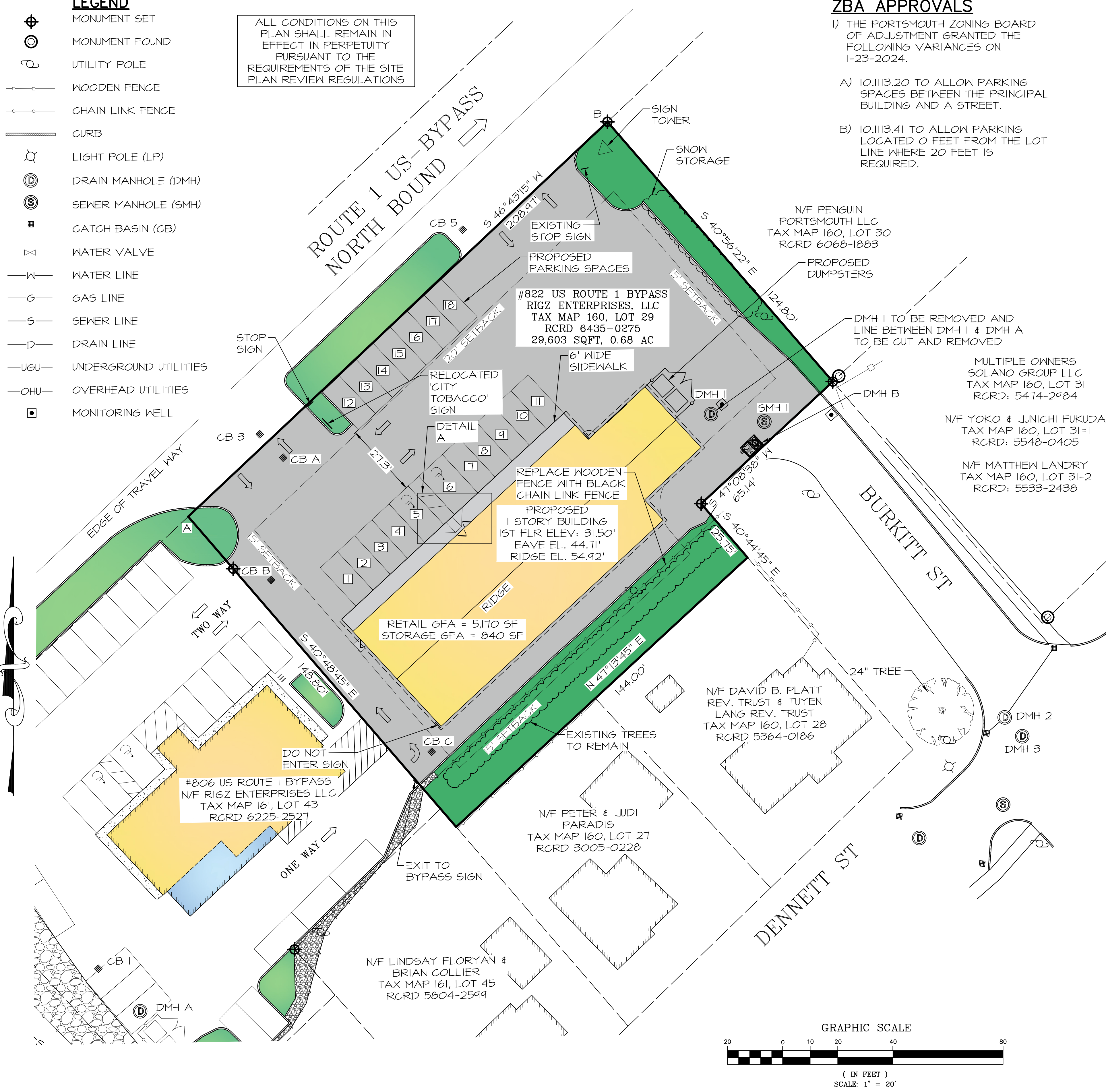
- 1) THE PORTSMOUTH ZONING BOARD OF ADJUSTMENT GRANTED THE FOLLOWING VARIANCES ON 1-23-2024.
  - A) 10.1113.20 TO ALLOW PARKING SPACES BETWEEN THE PRINCIPAL BUILDING AND A STREET.
  - B) 10.1113.41 TO ALLOW PARKING LOCATED 0 FEET FROM THE LOT LINE WHERE 20 FEET IS REQUIRED.

**NOTES**

- 1) OWNER OF RECORD: RIGZ ENTERPRISES, LLC  
18 DIXON LANE  
DERRY, NH 03038
- SITE INFORMATION:  
TAX MAP 160, LOT 29  
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
RCRD: 6435-0275  
AREA: 29,603 SF, 0.68 ACRES
- 2) COVERAGES:
 

BUILDING COVERAGE	
EXISTING BUILDING COVERAGE	
BUILDING	1995 SF
EXISTING STRUCTURE	1995 SF
BUILDING COVERAGE 1,995 / 29,603 =	6.7%
PROPOSED BUILDING COVERAGE	
BUILDING	6010 SF
PROPOSED STRUCTURE	6010 SF
BUILDING COVERAGE 6010 / 29,603 =	20.3%
OPEN SPACE	
EXISTING OPEN SPACE	1,995 SF
BUILDING COVERAGE	22,871 SF
ASPHALT	336 SF
SIDEWALK	21 SF
RETAINING WALL	132 SF
CURB	25,355 SF
TOTAL LOT COVERAGE	25,355 SF
EXISTING OPEN SPACE = 29,603 - 25,355 =	4,248 SF
EXISTING OPEN SPACE = 4,248 / 29,603 =	14.3%
PROPOSED OPEN SPACE	
BUILDING COVERAGE	18,142 SF
ASPHALT DRIVEWAY	660 SF
SIDEWALK	183 SF
CURB	24,995 SF
TOTAL LOT COVERAGE	24,995 SF
PROPOSED OPEN SPACE = 29,603 - 24,995 =	4,608 SF
PROPOSED OPEN SPACE = 4,608 / 29,603 =	15.6%
- 3) PARKING REQUIREMENTS  
PARKING SPACES  
AS PER PORTSMOUTH ZONING ORDINANCE 10.1112.321,  
PARKING SPACES FOR RETAIL USE SHALL BE 1 SPACE PER 300 SF OF GROSS FLOOR AREA.  
  
5,170 SF GFA x 1 SPACE/300 GFA = 17.2 = 18 SPACES  
18 SPACES REQUIRED  
18 SPACES PROVIDED
- 4) GIS COORDINATES OF TWO LOT CORNERS
 

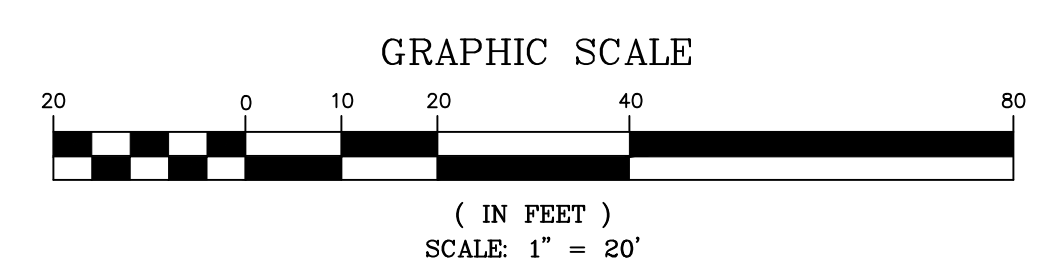
	NORTHING	EASTING
A - NW CORNER	211426.738	1222436.796
B - NE CORNER	211571.344	1222587.647
- 5) BUILDING HEIGHT:
  - AS PER THE PORTSMOUTH ZONING ORDINANCE THE GRADE PLANE SHALL BE THE FINISHED GROUND LEVEL ADJOINING THE BUILDING AT ALL EXTERIOR WALLS. WHEN THE FINISHED GROUND LEVEL SLOPES AWAY FROM EXTERIOR WALLS, THE REFERENCE PLANE SHALL BE ESTABLISHED BY THE LOWEST POINTS WITHIN THE AREA BETWEEN THE BUILDING AND THE LOT LINE, OR WHEN THE LOT LINE IS MORE THAN 6 FEET FROM THE BUILDING, BETWEEN THE BUILDING AND A POINT 6 FEET FROM THE BUILDING. THE GRADE PLANE WAS FOUND TO BE 29.90'
  - BUILDING HEIGHT FOR A PITCHED, HIP, OR GAMBREL ROOF IS CALCULATED AS THE VERTICAL MEASUREMENT FROM THE GRADE PLANE TO THE MIDWAY POINT BETWEEN THE LEVEL OF THE EAVES AND THE HIGHEST POINT ON THE ROOF RIDGE AS PER PORTSMOUTH ZONING ORDINANCE. THE LEVEL OF THE PROPOSED EAVES IS 44.71'. THE HIGHEST PROPOSED RIDGE IS 54.92'. THE PROPOSED MIDPOINT IS 49.82'.
  - THE BUILDING HEIGHT WAS DETERMINED TO BE 19.92' USING A MIDPOINT HEIGHT OF 49.82' AND A GRADE PLANE OF 29.90'.
- 6) SIGNAGE:
  - THE CITY TOBACCO SIGN LOCATED AT THE NORTH EAST CORNER OF #806 ROUTE 1 BYPASS (TAX MAP 161, LOT 43), WHICH WAS RECENTLY SUBMITTED AND APPROVED BY THE PORTSMOUTH PLANNING BOARD WILL BE RELOCATED TO #822 US ROUTE 1 BYPASS AS SHOWN ON THE PLAN.
- 7) THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 8) ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.



I ALEX ROSS, HEREBY CERTIFY:  
 A) THAT THIS SURVEY PLAT WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION.  
 B) THIS PLAN IS A RESULT OF FIELD SURVEY PERFORMED BY DDD, & SRO DURING MAY OF 2023. THE ERROR OF CLOSURE IS BETTER THAN 1/15,000. SURVEY PER NHLSA STANDARDS; CATEGORY 1, CONDITION 1.  
 C) I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUB-DIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN."

R. ALEX ROSS DATE

CITY OF PORTSMOUTH PLANNING BOARD  
 CHAIRPERSON DATE



NO	DATE	REVISIONS
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL
1	12/27/2023	ISSUE

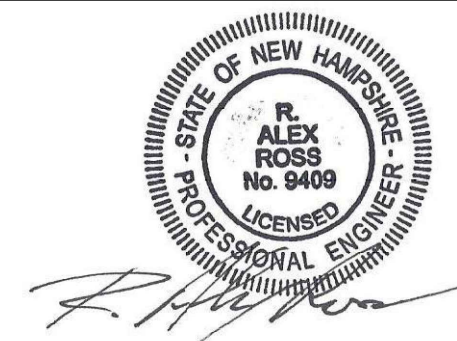
ISS: DATE DESCRIPTION OF ISSUE  
 SCALE 1" = 20'  
 CHECKED: A.ROSS  
 DRAWN: D.D.D.  
 CHECKED:

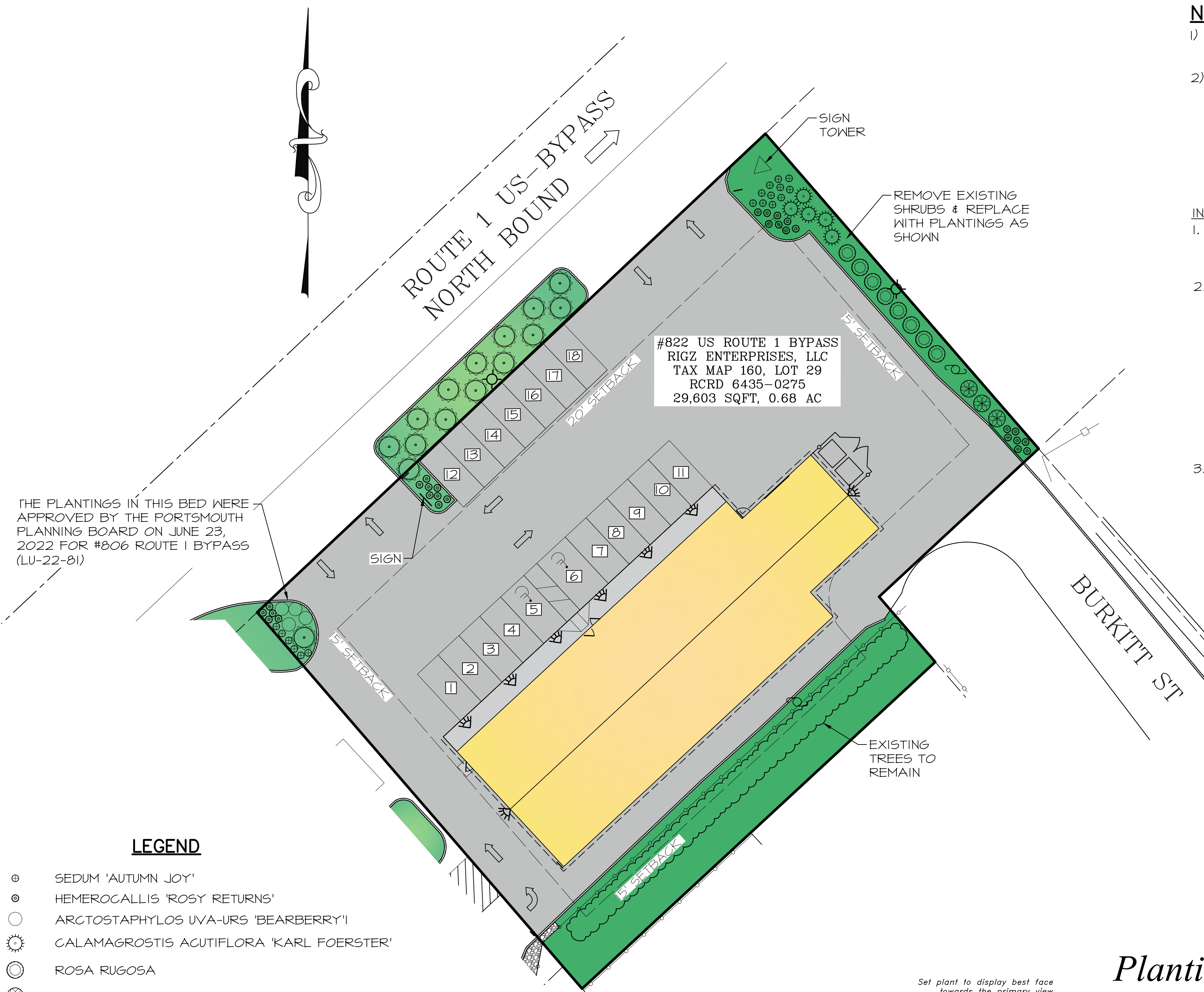
**ROSS ENGINEERING, LLC**  
 Civil/Structural Engineering & Surveying  
 909 Islington St  
 Portsmouth, NH 03801  
 (603) 433-7560

CLIENT  
 RIGZ ENTERPRISES LLC  
 18 DIXON LANE  
 DERRY, NH 03038

TITLE  
**SITE PLAN**  
 822 US ROUTE 1 BYPASS  
 PORTSMOUTH, NH 03801  
 TAX MAP 160, LOT 29

JOB NUMBER	DWG. NO.	ISSUE
23-010	2 OF 12	4





**NOTES**

- 1) THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
  - 2) ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
- INSTALLATION REQUIREMENTS:**
1. THE INSTALLATION OF A DRIP IRRIGATION SYSTEM IS RECOMMENDED TO ASSURE WELL GROWN PLANTS.
  2. IN CASE OF DROUGHT (DEFINED AS TWO WEEK PERIOD WITHOUT RAIN) ALL NEW PLANTS SHALL BE WATERED THROUGH NOVEMBER 1ST DURING THE FIRST SEASON IN WHICH THE ARE INSTALLED. THEY SHALL BE WATERED ONE TIME PER DAY FOR THE FIRST WEEK AFTER INSTALLATION AND THREE TIMES PER WEEK FOR THE REMAINDER OF THE SEASON. AFTER THE FIRST SEASON WHEN THE ROOTS OF THE PLANTS ARE ESTABLISHED THEY WILL NOT REQUIRE WATERING.
  3. SOAKER HOSES WOUND THROUGH THE BED NEAR THE BASE OF EACH PLANT ARE THE RECOMMENDED METHOD OF WATERING DURING THE FIRST SEASON. THESE CAN BE REMOVED AFTER NOVEMBER 30TH WHEN THE PLANTS ARE ESTABLISHED.

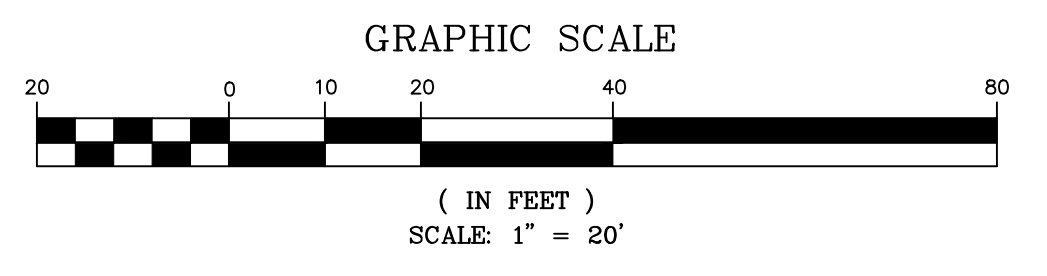
**PLANTING NOTES**

1. ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK.
2. ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.
3. AFTER PLANTING, ALL PLANTS SHALL BE FLOODED AT THE BASE WITH WATER FROM A SLOW-RUNNING HOSE FOR 5 MINUTES EACH.
4. ALL PLANTS SHALL BE INSTALLED BEFORE ANY GRASS IS SEEDED.
5. ALL SHRUBS AND PLANTING BEDS SHALL BE MULCHED WITH 3" OF DARK BROWN AGED BARK MULCH AS A FINAL STEP. MULCH MUST BE KEPT 2" AWAY FROM BASE OF EACH PLANT.
6. THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL REQUIRED SCREENING AND LANDSCAPE MATERIALS.
7. ALL REQUIRED PLANT MATERIALS SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED WHEN NECESSARY, AND KEPT FREE OF REFUSE AND DEBRIS. ALL REQUIRED FENCES AND WALLS SHALL BE MAINTAINED IN GOOD REPAIR.
8. THE PROPERTY OWNER SHALL BE RESPONSIBLE TO REMOVE AND REPLACE DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY WITH THE SAME TYPE, SIZE, AND QUANTITY OF PLANT MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED, JUSTIFIED, AND APPROVED BY THE PLANNING BOARD OR PLANNING DIRECTOR.
9. MULCH USED WILL BE NON-COMBUSTIBLE OR APPROVED BY THE PORTSMOUTH FIRE DEPARTMENT.

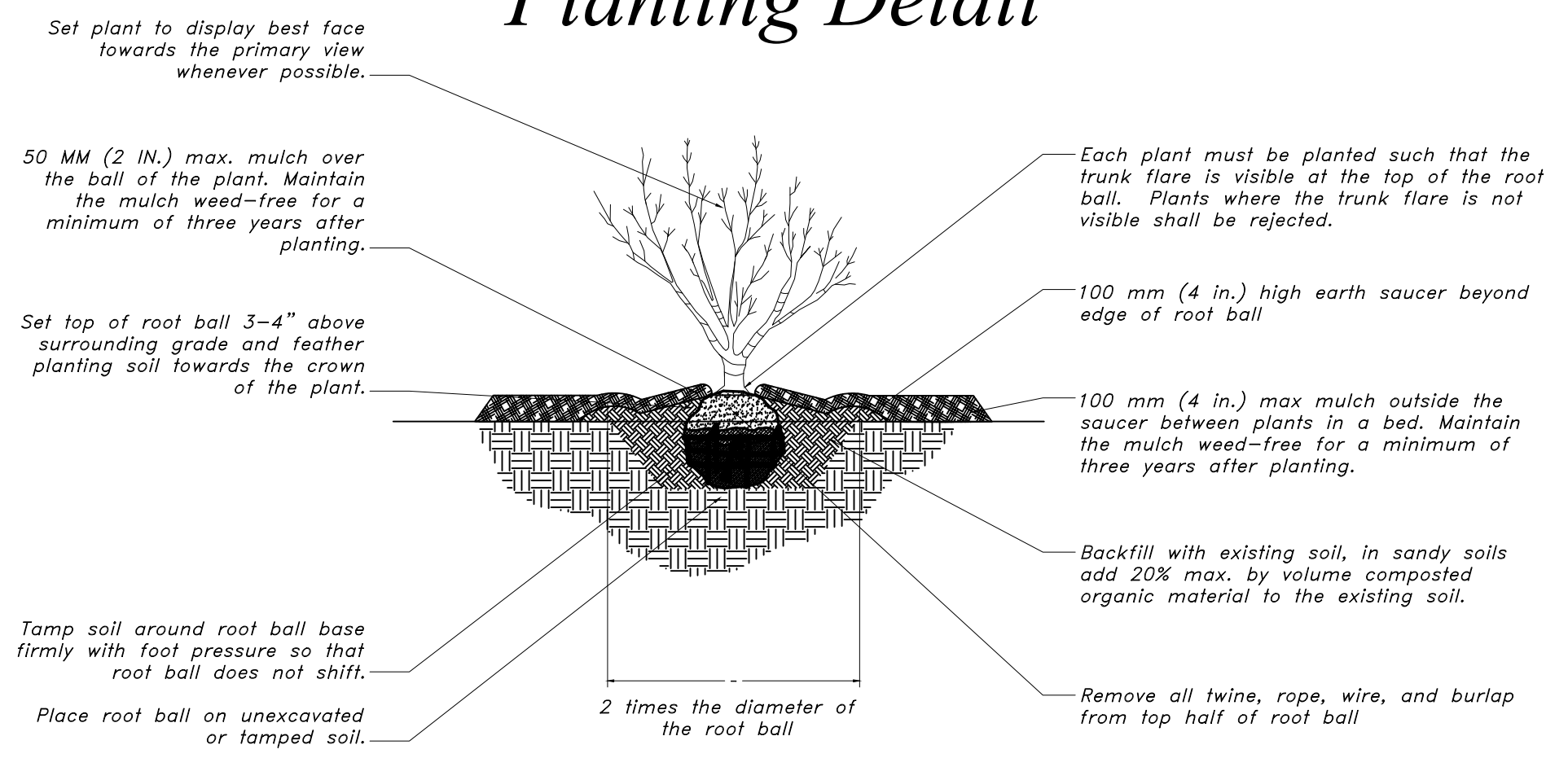
**LEGEND**

- ⊙ SEDUM 'AUTUMN JOY'
- ⊙ HEMEROCALLIS 'ROSY RETURNS'
- ARCTOSTAPHYLOS UVA-URS 'BEARBERRY'
- ☼ CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'
- ⊙ ROSA RUGOSA
- ⊙ SYRINGA MEYERI 'PALIBIN'
- ⊙ JUNIPERUS HORIZONTALIS 'BAR HARBOR'

BOTANICAL NAME	COMMON NAME	SIZE	QTY:
SEDUM 'AUTUMN JOY'	STONECROP	1 QT	17
HEMEROCALLIS 'ROSY RETURNS'	REBLOOMING DAYLILY	1 QT	28
ARCTOSTAPHYLOS UVA-URS 'BEARBERRY'	BEAR BERRY	1 GAL	4
CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	5
ROSA RUGOSA	SALT SPRAY ROSE	1 GAL	8
SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	2 GAL	3
JUNIPERUS HORIZONTALIS 'BAR HARBOR'	'BAR HARBOR' GROUND-COVER JUNIPER	1 GAL	15



**Planting Detail**



ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

CHECKED: A.ROSS  
DRAWN: D.D.D.  
CHECKED:

**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering & Surveying  
909 Islington St  
Portsmouth, NH 03801  
(603) 433-7560

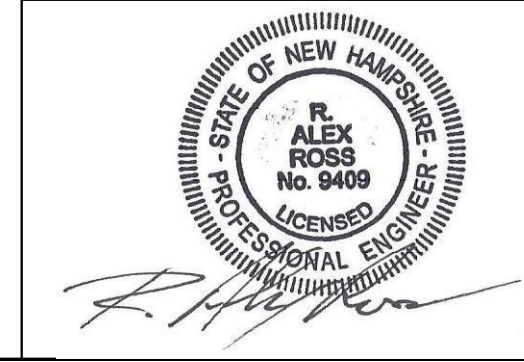
CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

TITLE

**LANDSCAPE PLAN**

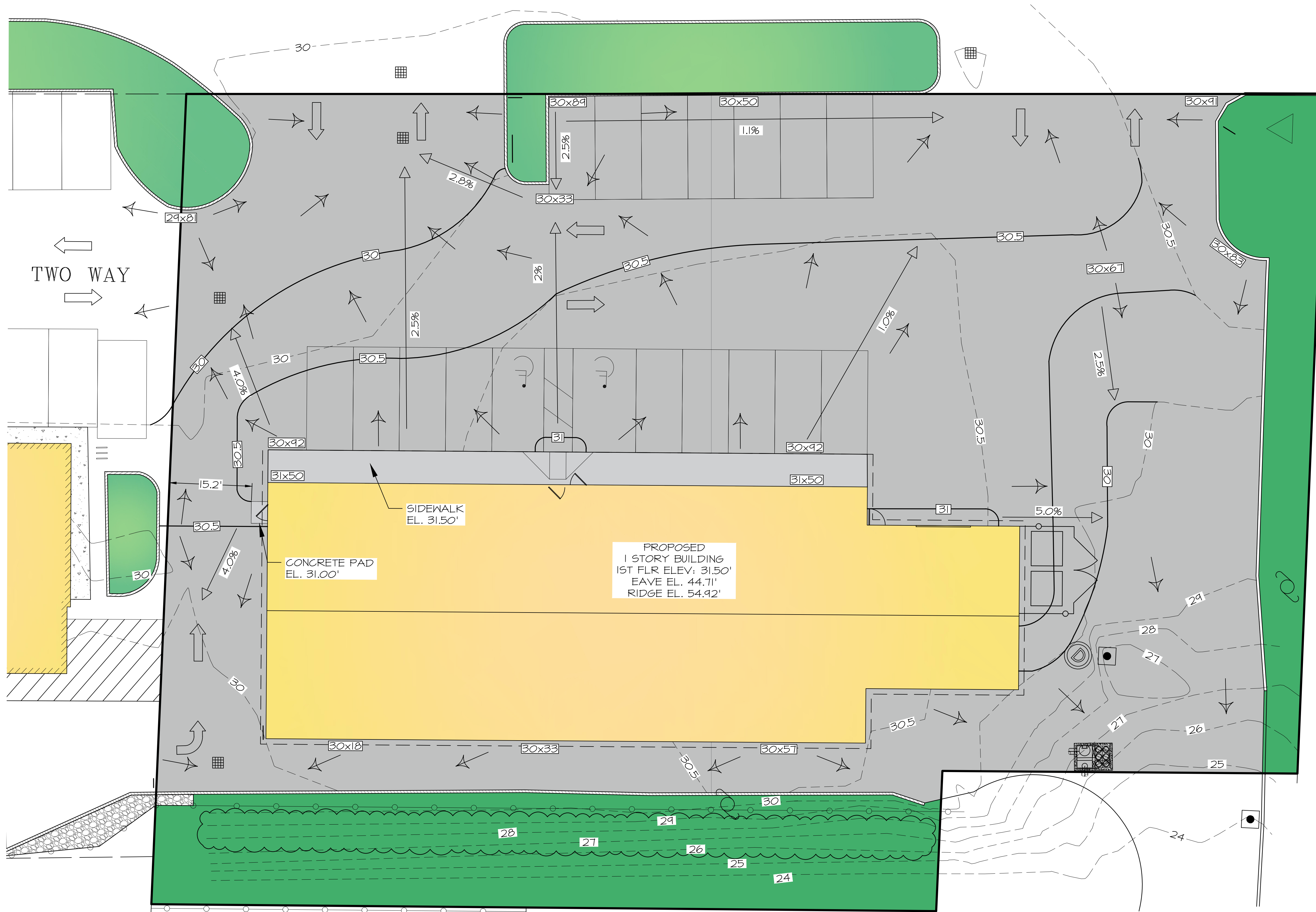
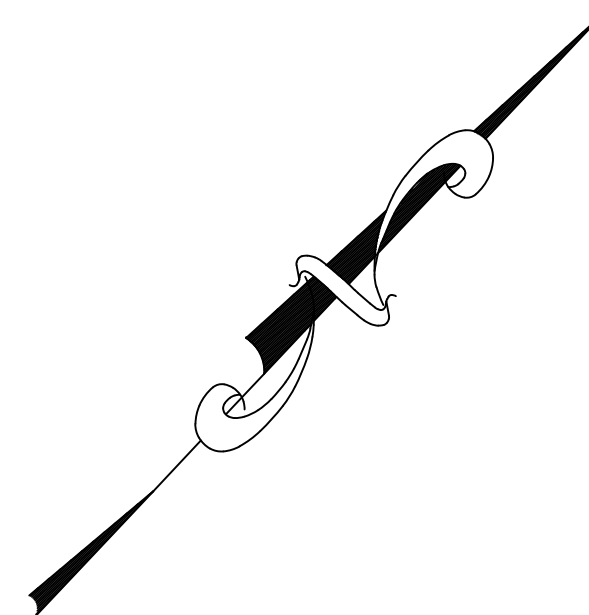
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
TAX MAP 160, LOT 29

JOB NUMBER	DWG. NO.	ISSUE
23-010	3 OF 12	4

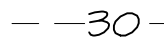
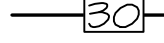
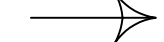


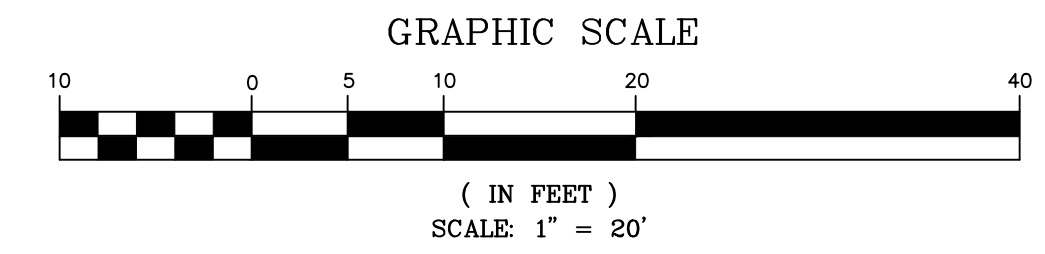


# ROUTE 1 US-BYPASS NORTH BOUND



### LEGEND

-  30 EXISTING CONTOUR
-  30.5 PROPOSED CONTOUR
-  DRAINAGE FLOW PATH



ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

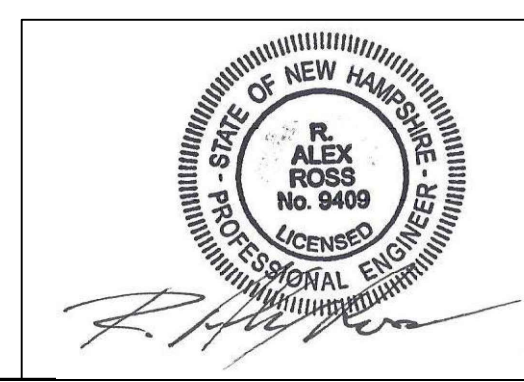
CHECKED: A. ROSS  
DRAWN: D.D.D.  
CHECKED:

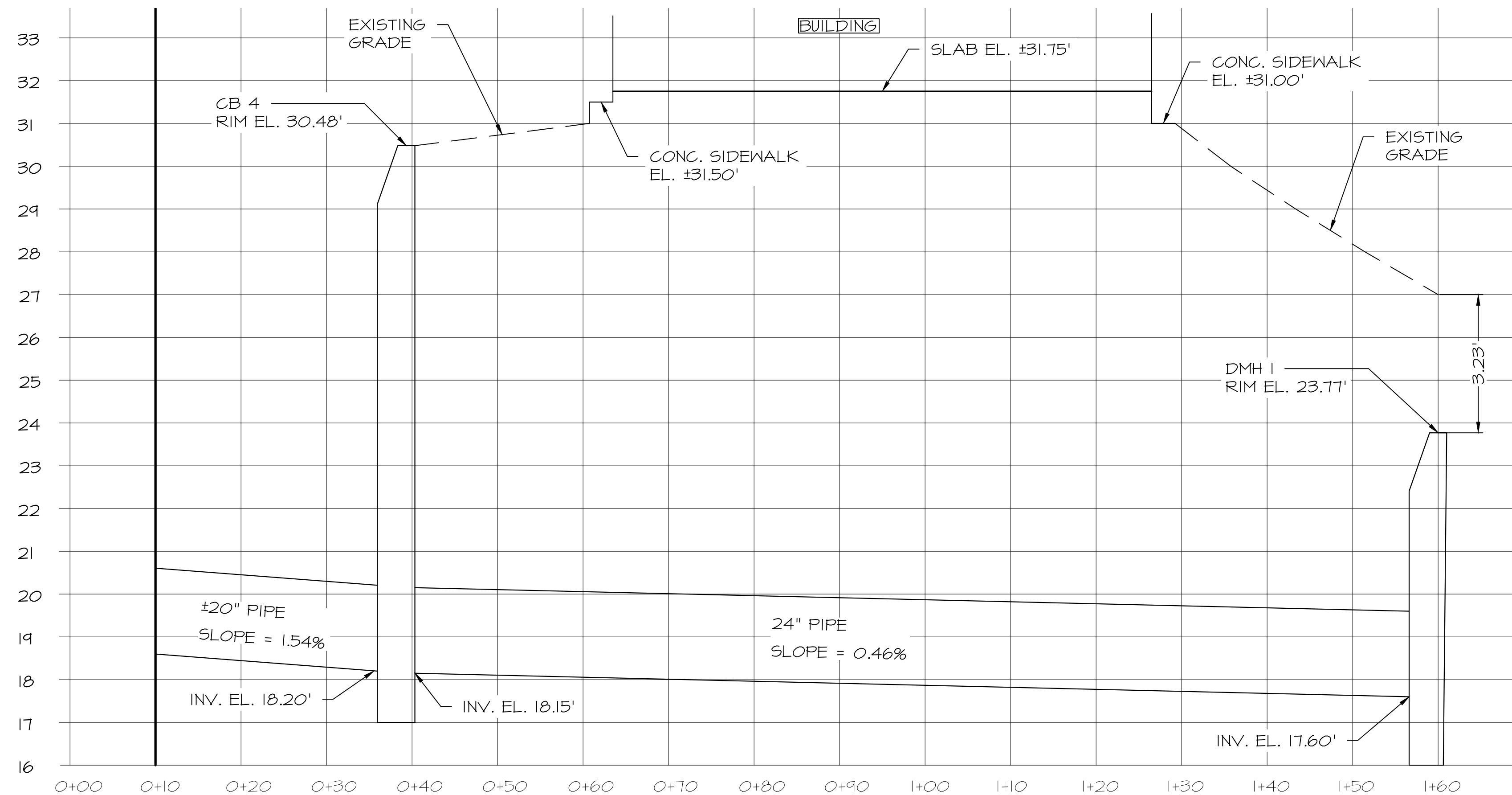
**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering  
& Surveying  
909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

TITLE  
**GRADING &  
DRAINAGE  
PLAN**  
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
TAX MAP 160, LOT 29

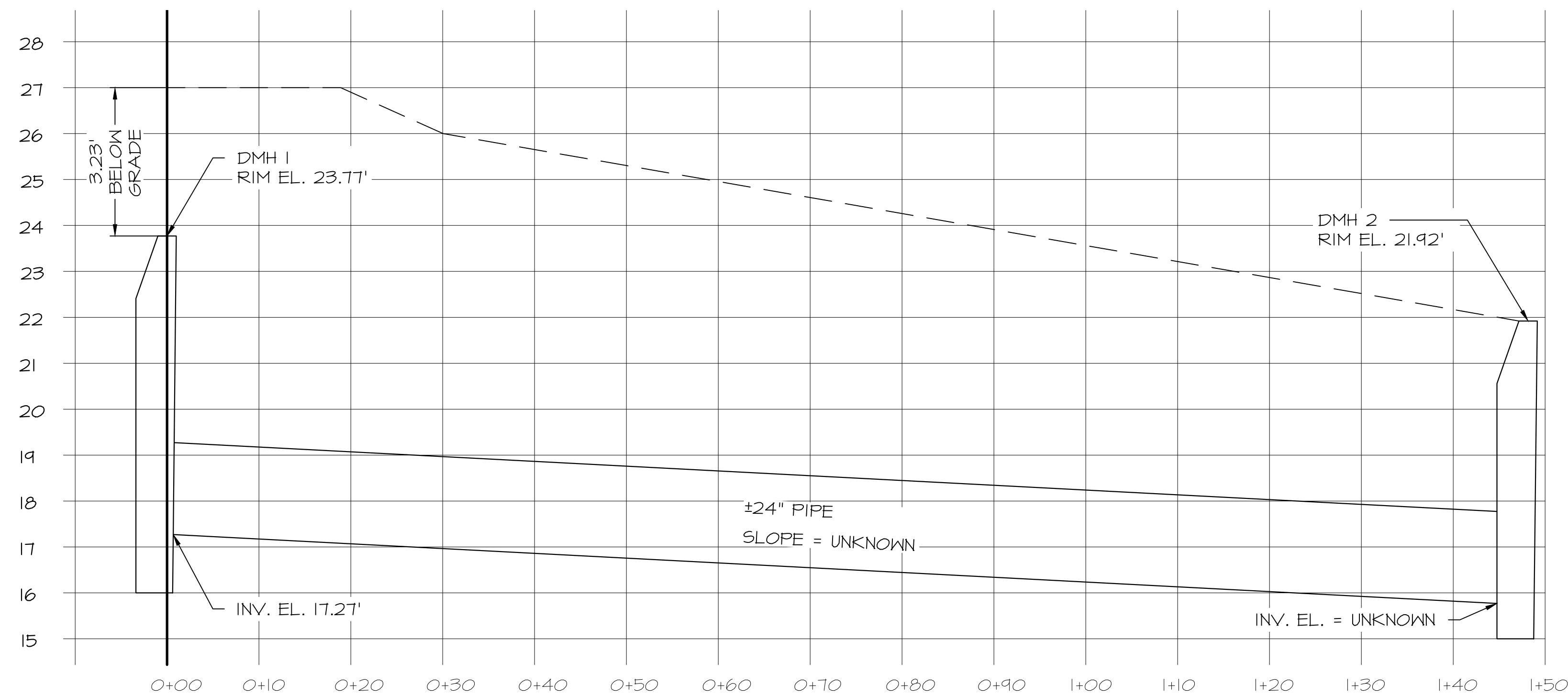
JOB NUMBER	DWG. NO.	ISSUE
23-010	5 OF 12	4





**EXISTING DRAIN LINE PROFILE**

SCALE: HORIZONTAL: 1" = 10'  
 VERTICAL: 1" = 2'



**EXISTING DRAIN LINE PROFILE (BURKITT ST)**

SCALE: HORIZONTAL: 1" = 10'  
 VERTICAL: 1" = 2'

ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

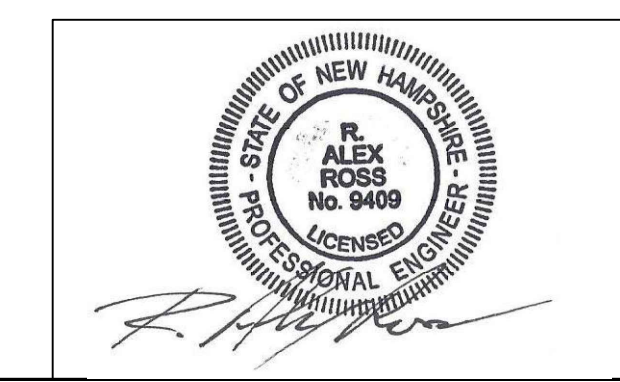
SCALE: AS SHOWN  
 CHECKED: A.ROSS  
 DRAWN: D.D.D.  
 CHECKED:

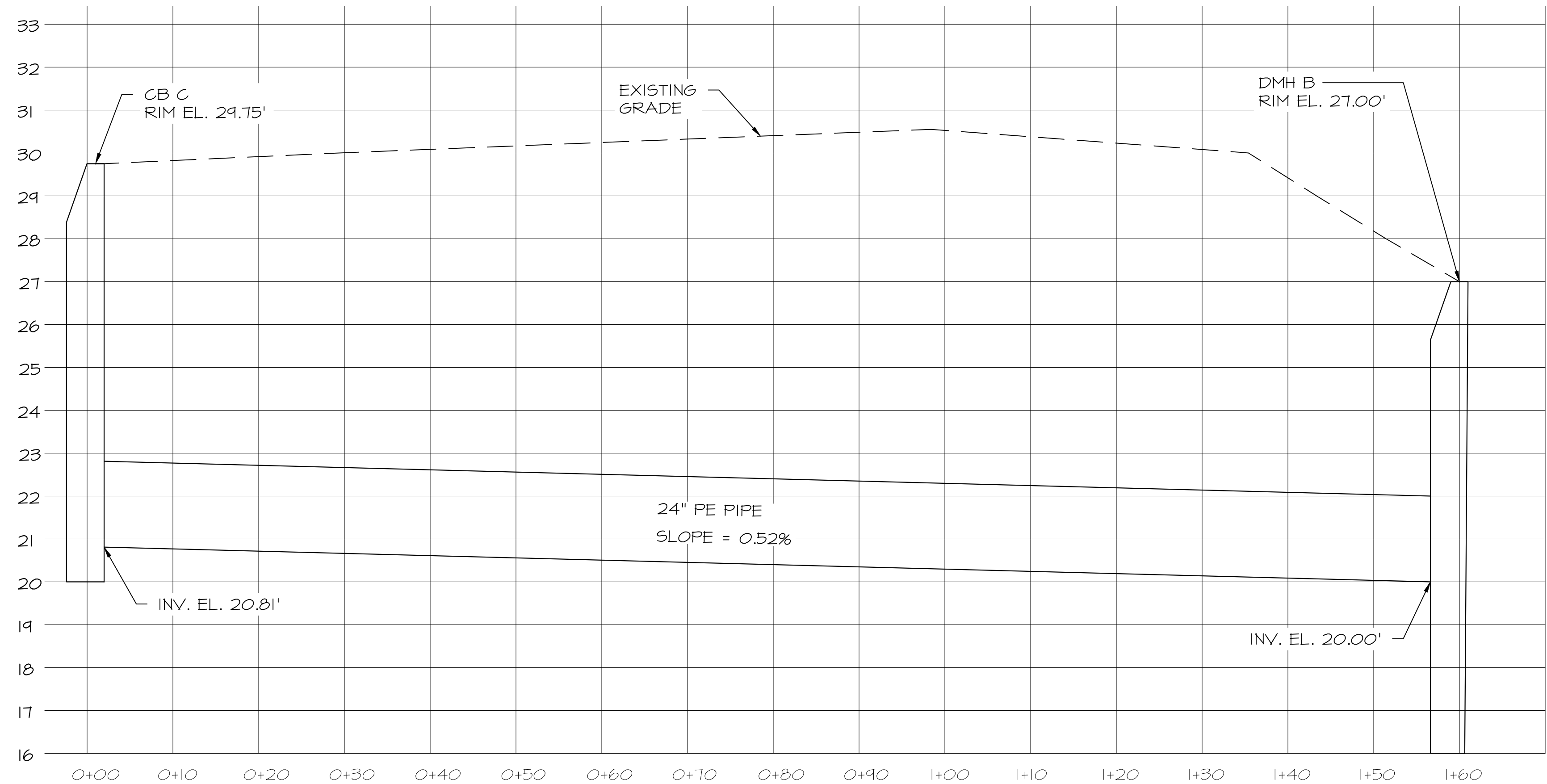
**ROSS ENGINEERING, LLC**  
 Civil/Structural Engineering  
 & Surveying  
 909 Islington St.  
 Portsmouth, NH 03801  
 (603) 433-7560

CLIENT  
 RIGZ ENTERPRISES LLC  
 18 DIXON LANE  
 DERRY, NH 03038

TITLE  
**EXISTING DRAIN PROFILE**  
 822 US ROUTE 1 BYPASS  
 PORTSMOUTH, NH 03801  
 TAX MAP 160, LOT 29

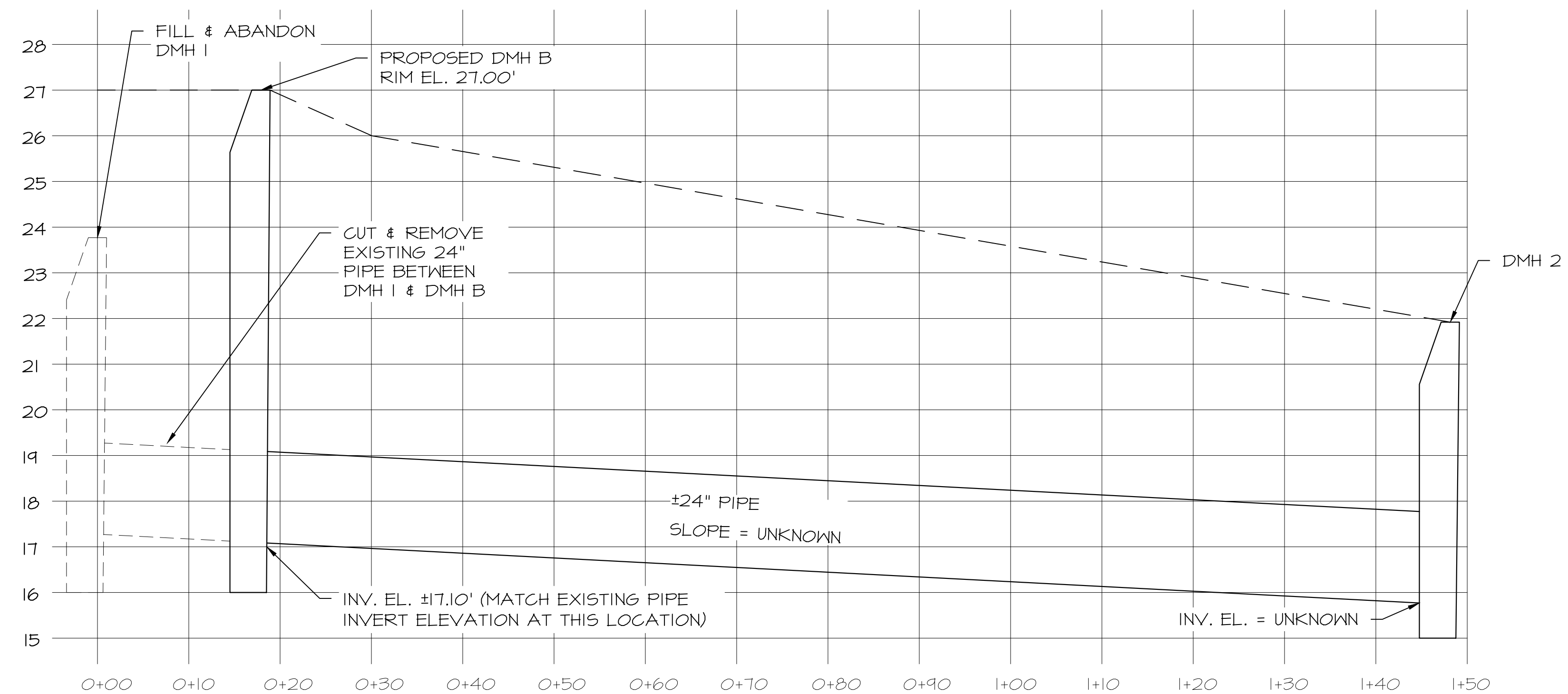
JOB NUMBER	DWG. NO.	ISSUE
23-010	6 OF 12	4





**PROPOSED DRAIN LINE PROFILE**

SCALE: HORIZONTAL: 1" = 10'  
 VERTICAL: 1" = 2'



**PROPOSED DRAIN LINE PROFILE (BURKITT ST)**

SCALE: HORIZONTAL: 1" = 10'  
 VERTICAL: 1" = 2'

ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

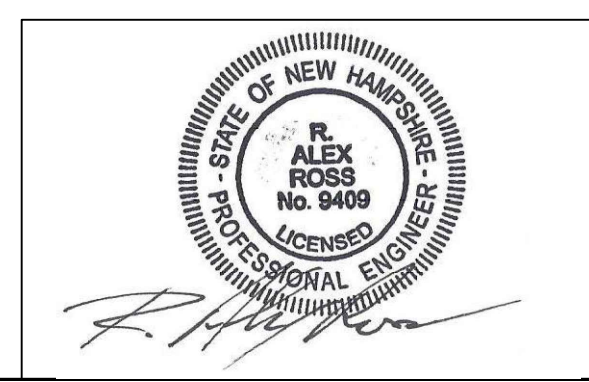
SCALE AS SHOWN  
 CHECKED A.ROSS  
 DRAWN D.D.D.  
 CHECKED

**ROSS ENGINEERING, LLC**  
 Civil/Structural Engineering  
 & Surveying  
 909 Islington St.  
 Portsmouth, NH 03801  
 (603) 433-7560

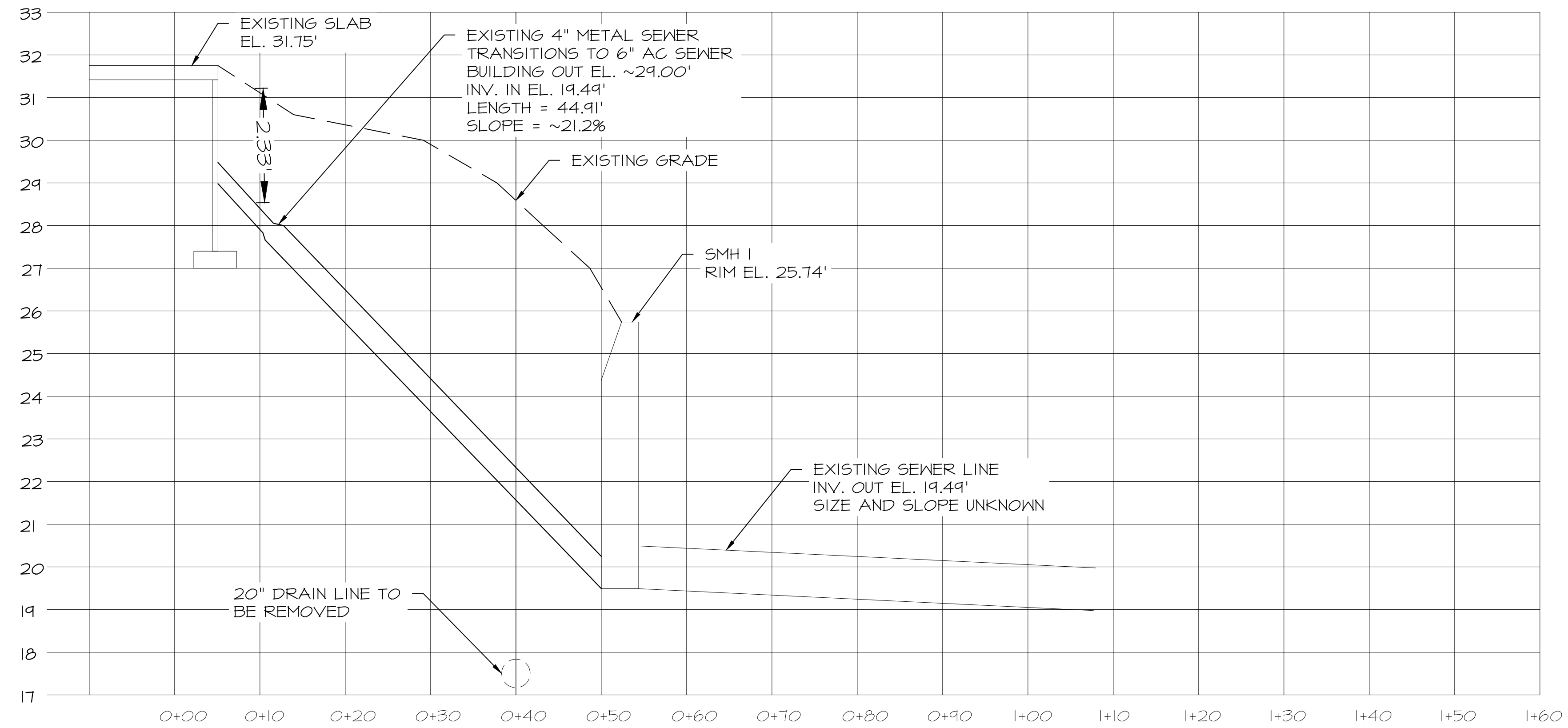
CLIENT  
 RIGZ ENTERPRISES LLC  
 18 DIXON LANE  
 DERRY, NH 03038

TITLE  
**PROPOSED DRAIN PROFILE**  
 822 US ROUTE 1 BYPASS  
 PORTSMOUTH, NH 03801  
 TAX MAP 160, LOT 29

JOB NUMBER 23-010 DWG. NO. 7 OF 12 ISSUE 4

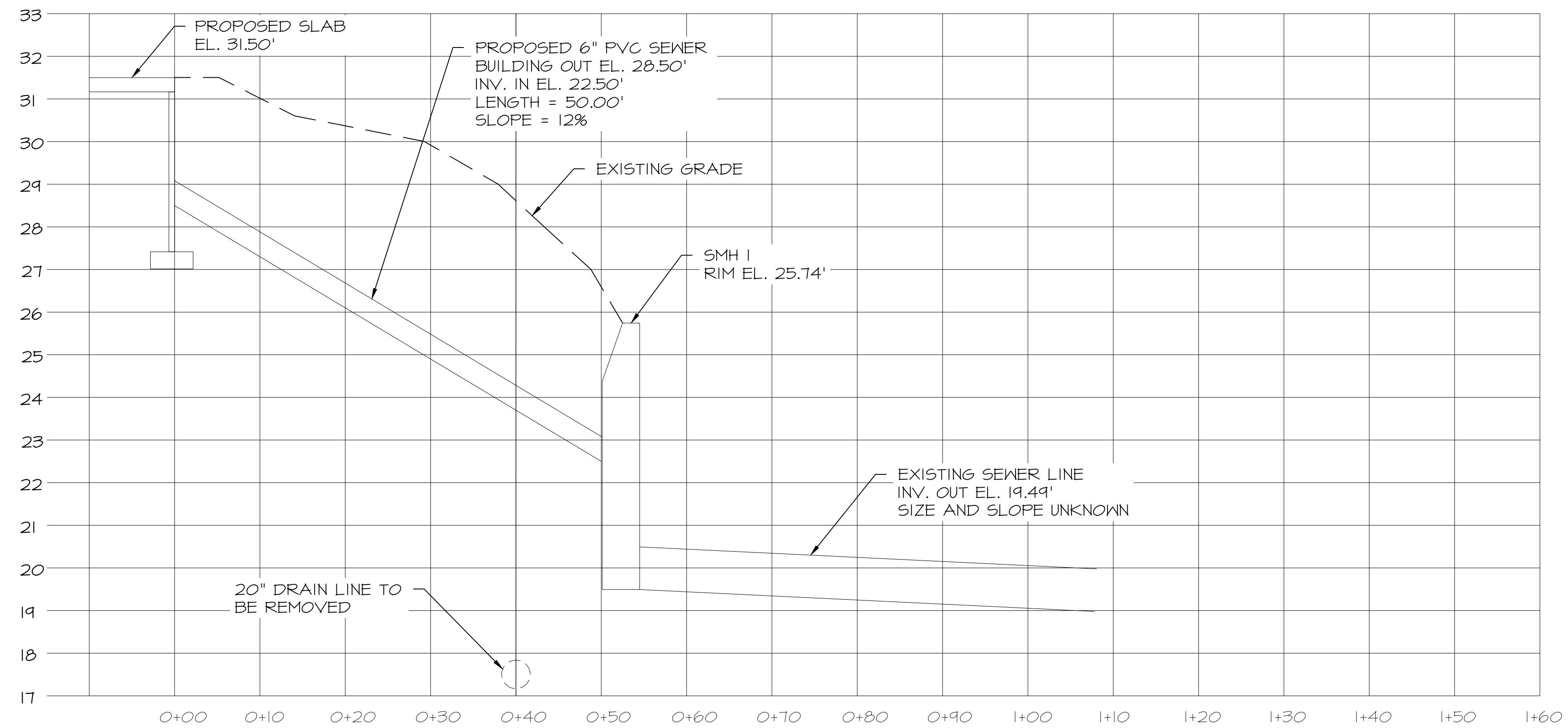






### EXISTING SEWER LINE PROFILE

SCALE: HORIZONTAL: 1" = 10'  
VERTICAL: 1" = 2'



### PROPOSED SEWER LINE PROFILE

SCALE: HORIZONTAL: 1" = 10'  
VERTICAL: 1" = 2'

ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

SCALE AS SHOWN  
CHECKED A.ROSS  
DRAWN D.D.D.  
CHECKED

**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering  
& Surveying  
909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

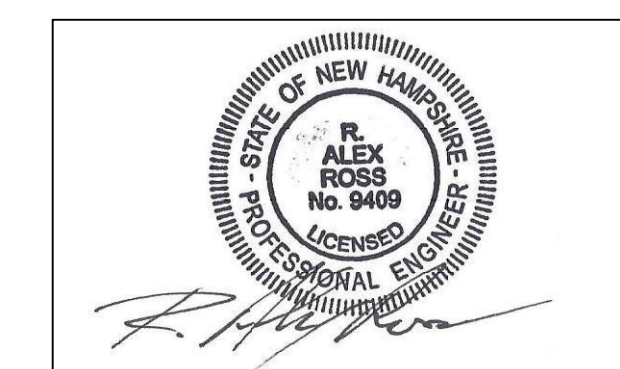
CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

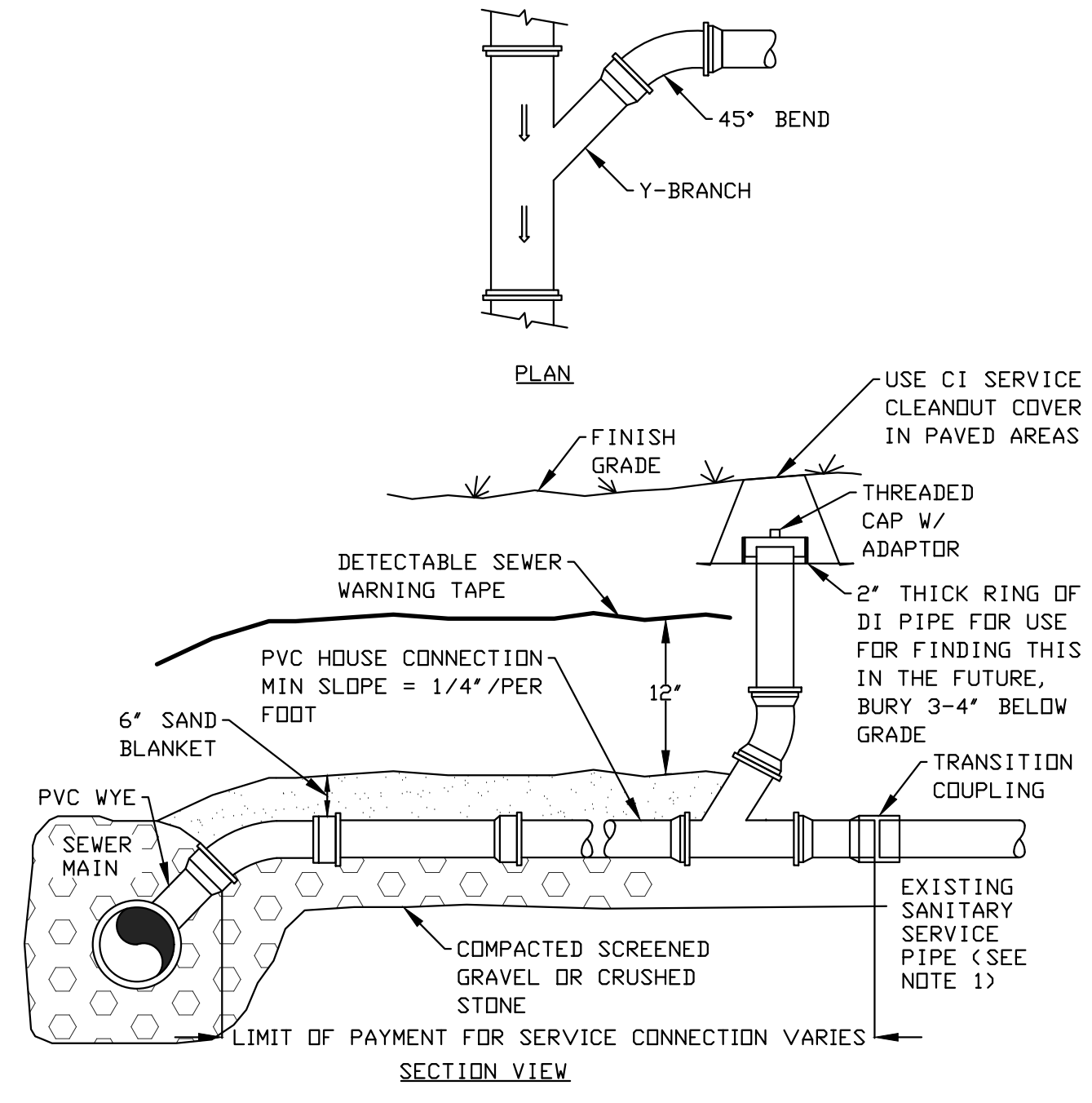
TITLE

### SEWER PROFILE

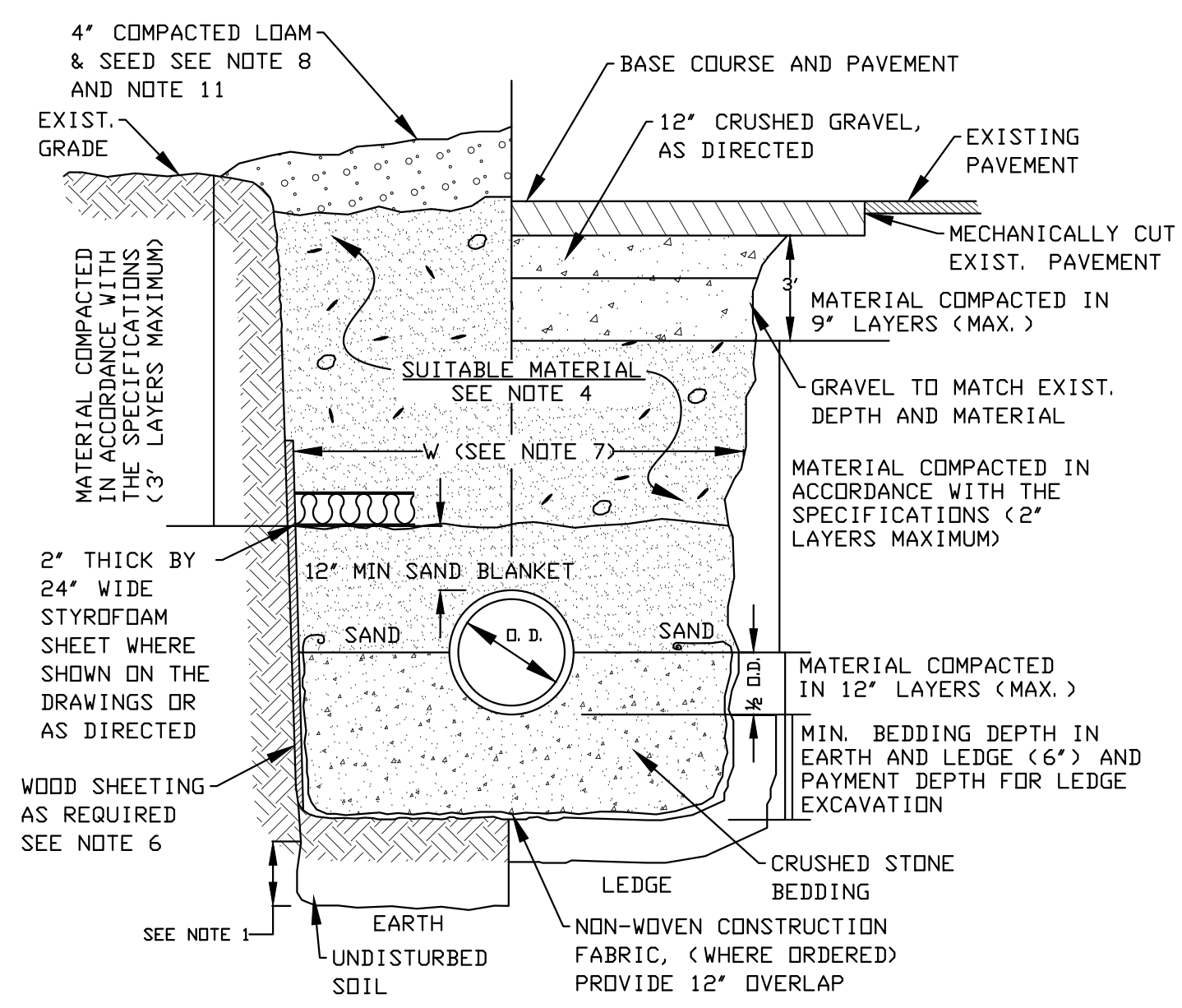
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
TAX MAP 160, LOT 29

JOB NUMBER	DWG. NO.	ISSUE
23-010	8 OF 12	4





**TYPICAL SERVICE CONNECTION**  
Scale: N.T.S.



**TRENCH DETAIL- GRAVITY SEWER**  
Scale: N.T.S.

**GRAVITY SEWER TRENCH NOTES:**

- 1) **ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE:** BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.
- 2) **BEDDING:** SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33. STONE SIZE NO. 67.  
 0-10% PASSING 1 INCH SCREEN  
 90-100% PASSING 3/4 INCH SCREEN  
 0-5% PASSING #8 SIEVE  
 20-55% PASSING 3/8 INCH SCREEN  
 WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
- 3) **SAND BLANKET:** CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 90-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. NO STONE LARGER THAN 2" SHOULD BE IN CONTACT WITH THE PIPE.
- 4) **SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION; AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WILL BE PRESERVED.
- 5) **BASE COURSE AND PAVEMENT** SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY AND LOCAL REGULATION.
- 6) **WOOD SHEATHING, IF REQUIRED:** WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION 1 FOOT ABOVE THE TOP OF PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7) **W = MAXIMUM ALLOWABLE TRENCH PAYMENT WIDTH** FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 12 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH.
- 8) **FOR CROSS COUNTRY CONSTRUCTION,** BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9) **CONCRETE FOR ENCASEMENT** SHALL CONFORM TO THE REQUIREMENTS OF SECTION 520, (NHDT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION).
- 10) **CONCRETE FULL ENCASEMENT:** IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I. D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- 11) **GRAVEL DRIVEWAY AND SHOULDER RESTORATION:** CRUSHED GRAVEL IN DRIVEWAYS AND ROAD SHOULDERS SHALL MATCH EXISTING WITH A MINIMUM OF 12". GRAVEL REPLACEMENT SHALL BE SUBSIDIARY TO SEWER CONSTRUCTION AND WILL NOT BE MEASURED FOR PAYMENT.

ISS.	DATE	DESCRIPTION OF ISSUE
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

SCALE 1" = 20'

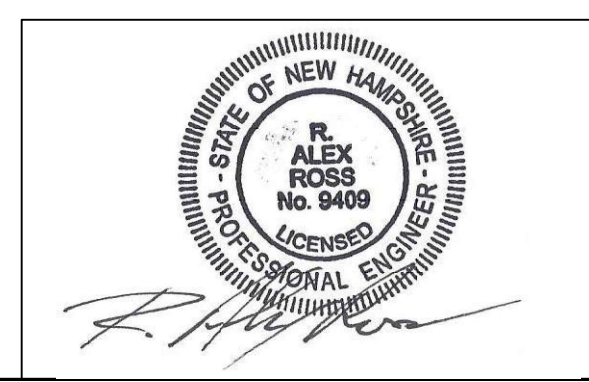
CHECKED A. ROSS  
 DRAWN D.D.D.  
 CHECKED

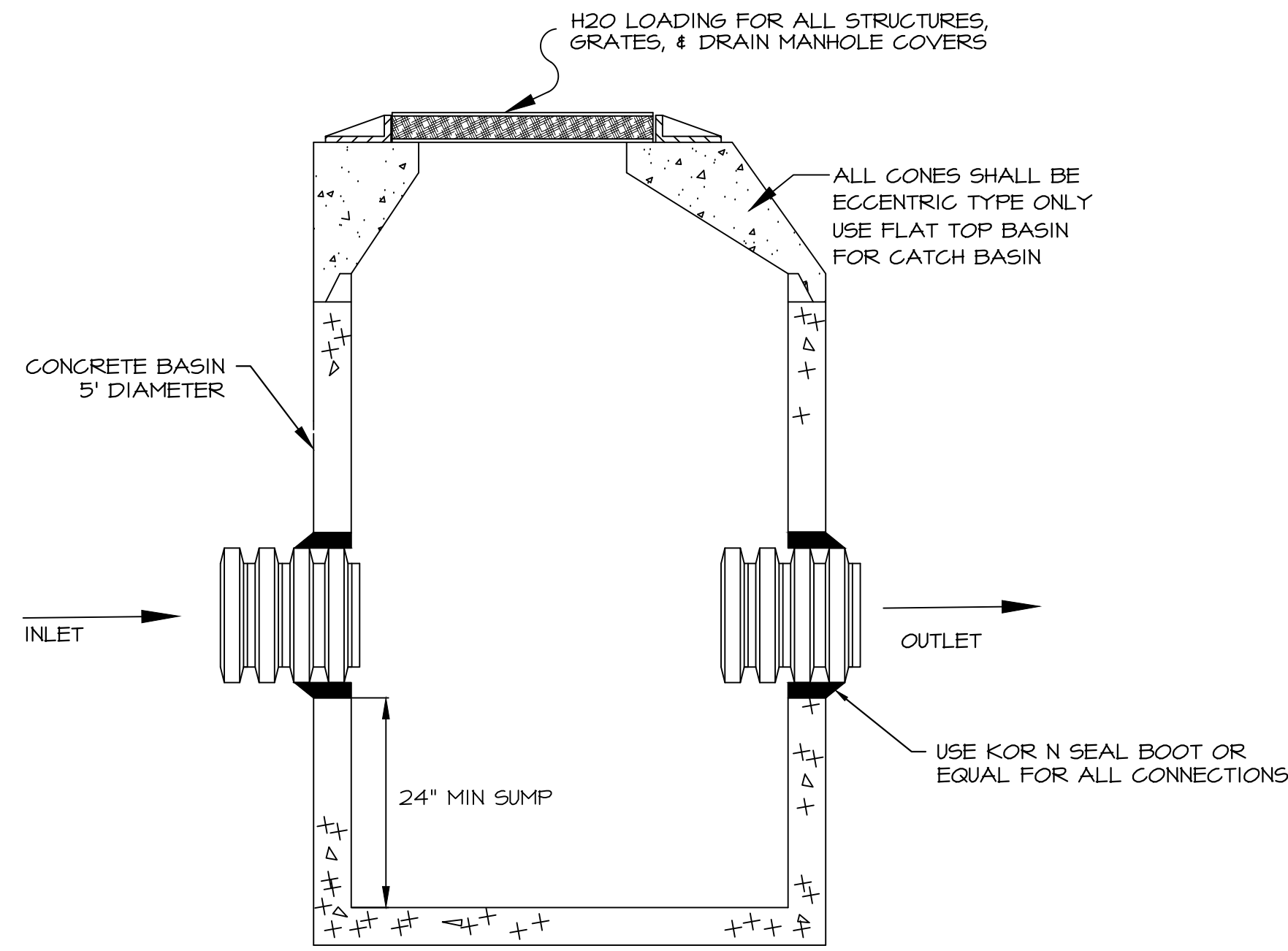
**ROSS ENGINEERING, LLC**  
 Civil/Structural Engineering  
 & Surveying  
 909 Islington St.  
 Portsmouth, NH 03801  
 (603) 433-7560

CLIENT  
 RIGZ ENTERPRISES LLC  
 18 DIXON LANE  
 DERRY, NH 03038

TITLE  
**SEWER DETAILS**  
 822 US ROUTE 1 BYPASS  
 PORTSMOUTH, NH 03801  
 TAX MAP 160, LOT 29

JOB NUMBER 23-010 DWG. NO. 9 OF 12 ISSUE 4

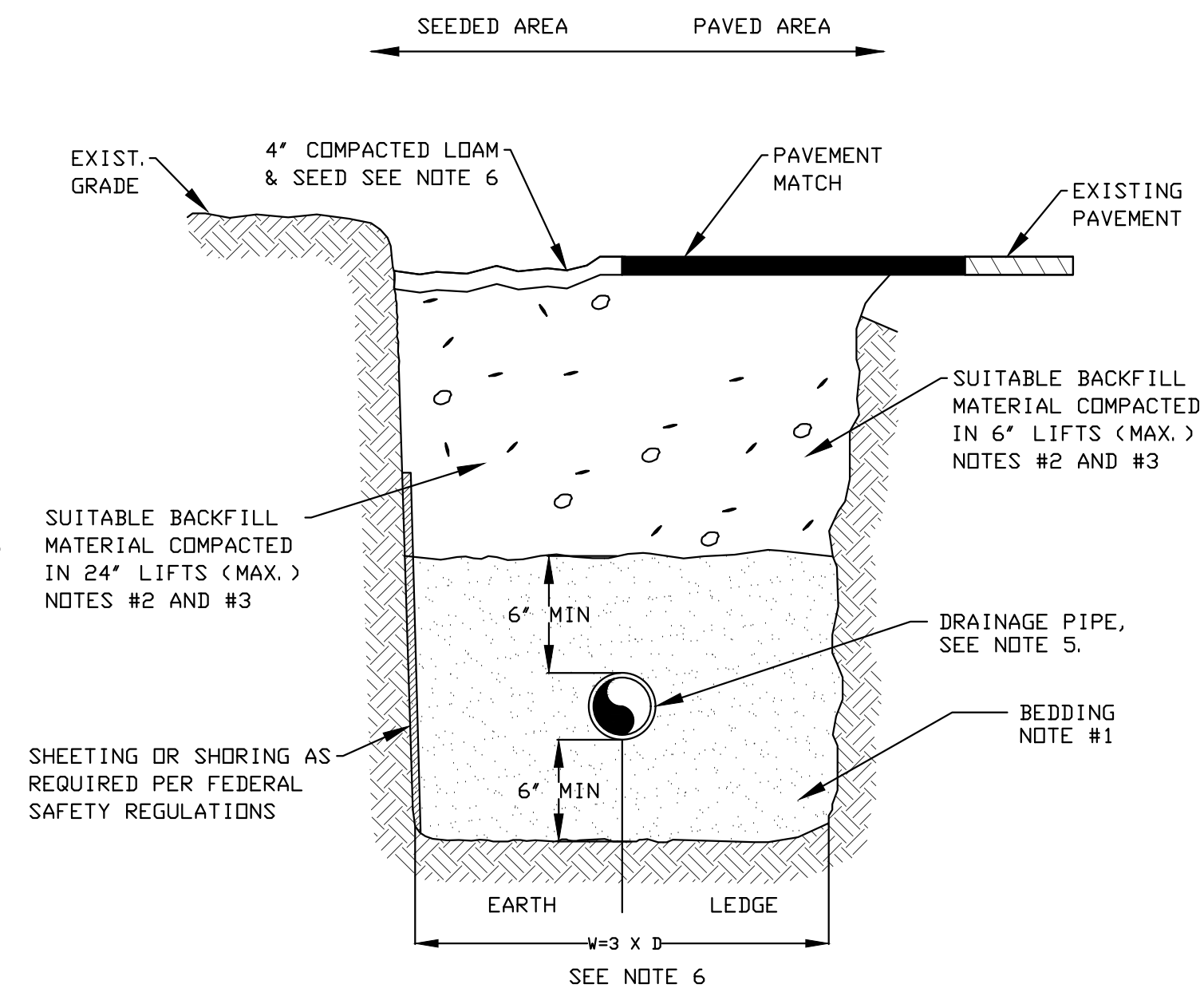




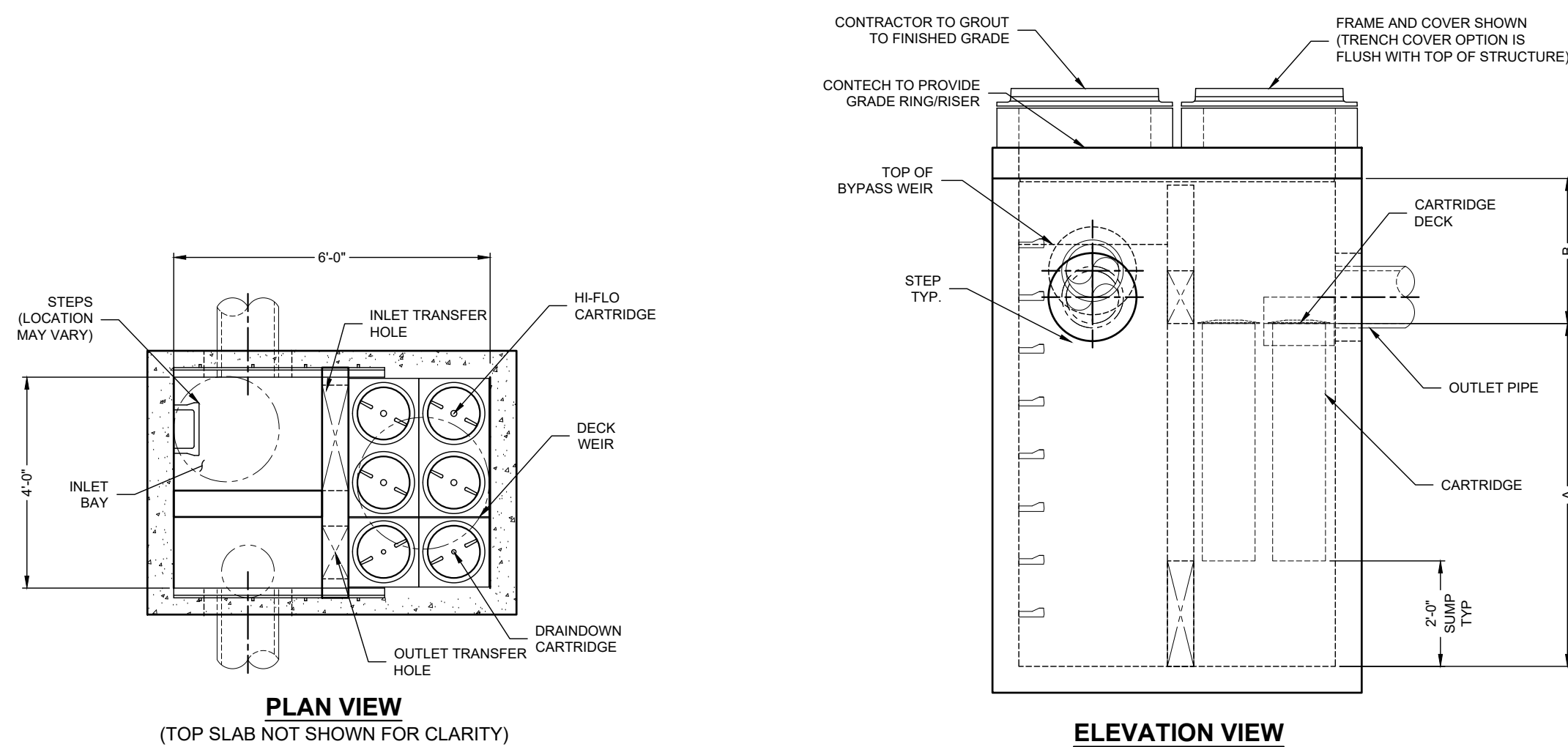
**PROPOSED DRAIN MANHOLE/CATCH BASIN (TYP.)**  
N.T.S.

**TRENCH NOTES - STORM DRAIN:**

- 1) BEDDING:** BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT. CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS. NORMAL PIPE BEDDING IS CRUSHED STONE TO THE HAUNCH OF THE PIPE AND SAND BEDDING 6' ABOVE THE CROWN. IF THE TOP OF THE PIPE IS LESS THAN 30" FROM FINISH GRADE, BED PIPE COMPLETELY IN STONE UP TO 6' ABOVE PIPE CROWN. UNDERDRAIN TO HAVE 4' MIN' OF STONE OVER PIPE OR AS NECESSARY TO BE IN CONTACT WITH GRAVEL LAYER OF SELECTS ABOVE. FILTER FABRIC TO BE PLACED IN BETWEEN ALL STONE BEDDING MATERIAL AND SUBSEQUENT LAYERS OF FILL MATERIAL.
- 2) COMPACTION:** ALL BACKFILL SHALL BE COMPACTED AT OR NEAR OPTIMUM MOISTURE CONTENT BY PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. BACKFILL BENEATH PAVED SURFACES SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ROCKS OVER 6 INCHES IN LARGEST DIMENSION; FROZEN EARTH AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.  
  
IN SEEDED AREAS, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, ROCKS UNDER 12", FROZEN EARTH OR CLAY, IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EAST ACCESS TO THE PIPE WILL BE PRESERVED.
- 4) BASE COURSE AND PAVEMENT:** SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY.
- 5) DRAINAGE PIPE:** PIPE MATERIALS SHALL BE POLYETHYLENE (SEE SPECIFICATIONS).
- 6) W=MAXIMUM ALLOWABLE TRENCH WIDTH:** W SHALL BE THE MAXIMUM PAYMENT WIDTH FOR ROCK EXCAVATION (TRENCH) AND FOR ORDERED EXCAVATION BELOW GRADE.



**TRENCH DETAIL-STORM DRAIN**  
Scale: N.T.S.



**JELLYFISH FILTER JFPD0406 (DMH B) DETAIL**  
N.T.S.

**JELLYFISH FILTER GENERAL NOTES:**

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. [www.ContechES.com](http://www.ContechES.com)
- JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
- STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
- OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
- THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
- NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

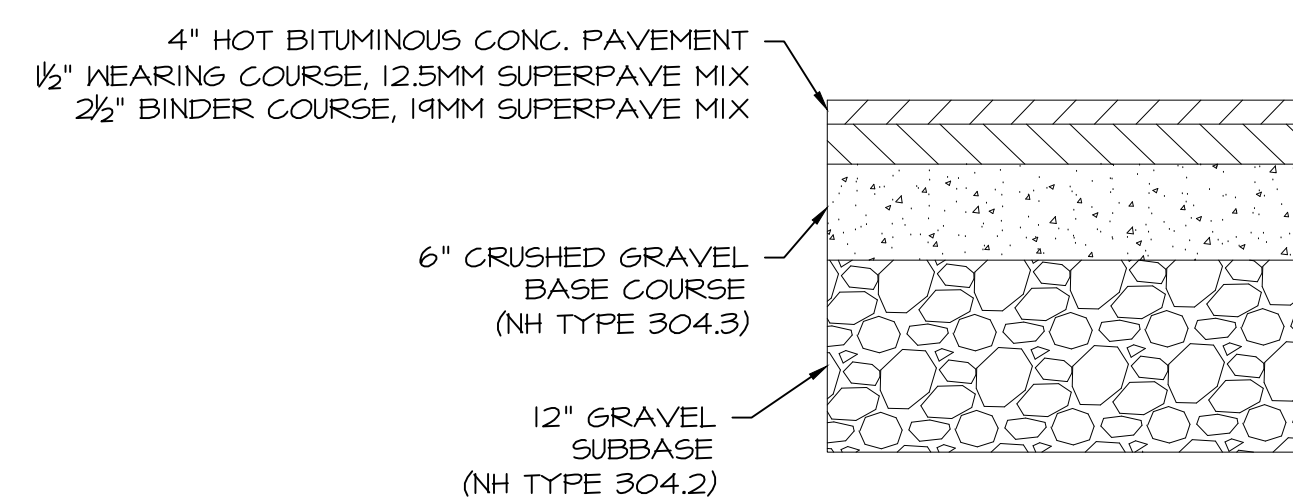
**INSTALLATION NOTES:**

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
- CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
- CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

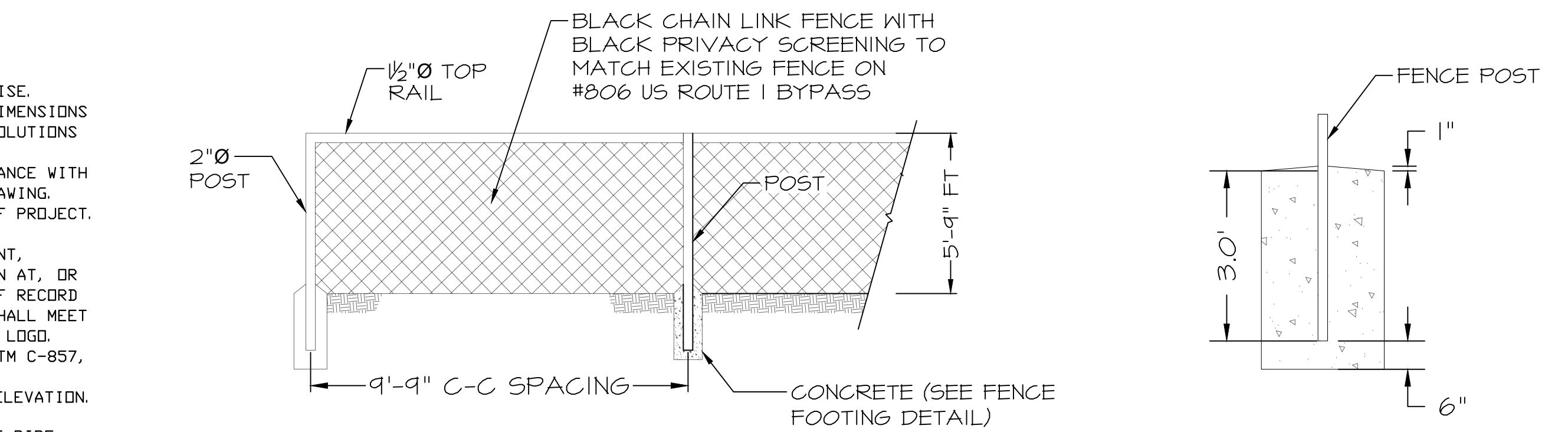
**JELLYFISH DESIGN NOTES**

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD SURFACE INLET STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTERNATE CURB INLET OR PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION				
CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
OUTLET INVERT TO RIM (MIN) (B)	5'-0"	4'-0"	4'-0"	4'-0"

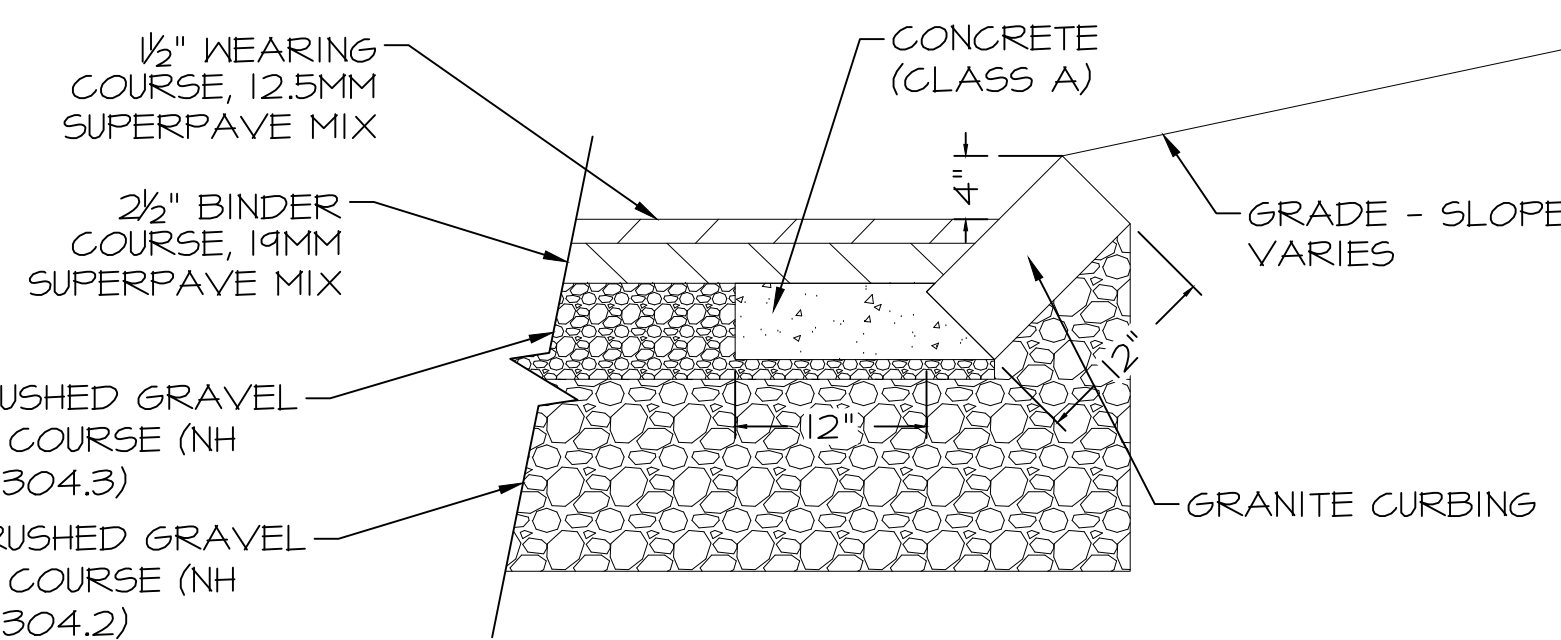


**ASPHALT PAVEMENT DETAIL**  
Scale: N.T.S.



**CHAIN LINK FENCE DETAIL**  
SCALE: NTS

**FENCE FOOTING DETAIL**  
SCALE: NTS



**SLOPED CURB DETAIL**  
Scale: NTS

NO.	DATE	REVISIONS
4	2/21/2024	REVISIONS
3	2/16/2024	TAC SUBMITTAL
2	12/27/2023	ZBA SUBMITTAL

ISS. DATE DESCRIPTION OF ISSUE

SCALE 1" = 20'

CHECKED A.ROSS

DRAWN D.D.D.

CHECKED

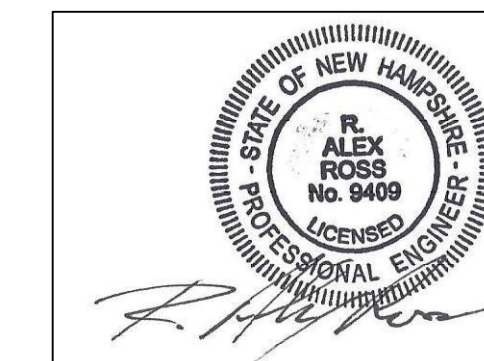
**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering & Surveying  
909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

TITLE  
**DETAILS**

822 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
TAX MAP 160, LOT 29

JOB NUMBER	DWG. NO.	ISSUE
23-010	10 OF 12	4





**EROSION AND SEDIMENTATION CONTROL CONSTRUCTION PHASING AND SEQUENCING**

- SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL PART OF THIS PROCESS.
- INSTALL SILT/SOXX FENCING AS PER DETAILS AND AT SEDIMENT MIGRATION.
- CONSTRUCT TREATMENT SWALES, LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.
- STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL & COVER WHERE PRACTICABLE.
- MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES ON SITE.
- ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.
- FINISH GRADE AND COMPACT SITE.
- RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.
- STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING.
- RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES.
- SILT SOXX FENCING TO REMAIN AND BE MAINTAINED FOR TWENTY FOUR MONTHS AFTER CONSTRUCTION TO ENSURE ESTABLISHMENT OF ADEQUATE SOIL STABILIZATION AND VEGETATIVE COVER. ALL SILT SOXX FENCING ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
- PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
- ALL TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC. MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
- PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE - BEFORE ROUGH GRADING THE SITE.
- ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

**PLANTING NOTES:**

- ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK.
- ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.
- ALL TREES AND SHRUBS SHALL HAVE WATER SAUCERS BUILT AROUND THEIR BASES AND THESE SHALL BE MULCHED WITH 4" OF DARK BROWN AGED BARK MULCH. MULCH MUST BE KEPT 2" AWAY FROM THEIR TRUNKS.
- ALL TREES AND SHRUBS SHALL BE PLANTED AND MULCHED BEFORE LAWN IS SEEDED.

**MAINTENANCE REQUIREMENTS:**

- ALL TREES, SHRUBS, AND PERENNIALS WILL NEED TO BE WATERED THROUGH THANKSGIVING DURING THE FIRST SEASON IN WHICH THEY ARE INSTALLED.
- AN UNDERGROUND DRIP IRRIGATION SYSTEM IS RECOMMENDED. IF AN UNDERGROUND DRIP IRRIGATION SYSTEM IS NOT INSTALLED, SOAKER HOSES AROUND THROUGHOUT PLANTING BEDS ARE ACCEPTABLE. ALTHOUGH OVERHEAD SPRINKLERS ARE RECOMMENDED FOR LAWN AREAS, THEY ARE NOT ACCEPTABLE FOR IRRIGATING TREES AND SHRUBS.

**SEEDING AND STABILIZATION FOR LOAMED SITE:**

FOR TEMPORARY & LONG TERM SEEDINGS USE AGWAY'S SOIL CONSERVATION GRASS SEED OR EQUAL  
 COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE,  
 FERTILIZER & LIME:  
 NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P2O5) 100 LBS/ACRE, POTASH (K2O) 100 LBS/ACRE, LIME 2000 LBS/ACRE  
 MULCH:  
 HAY OR STRAW 1.5-2 TONS/ACRE

**A) GRADING AND SHAPING**

- SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOVING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

**B) SEED BED PREPARATION**

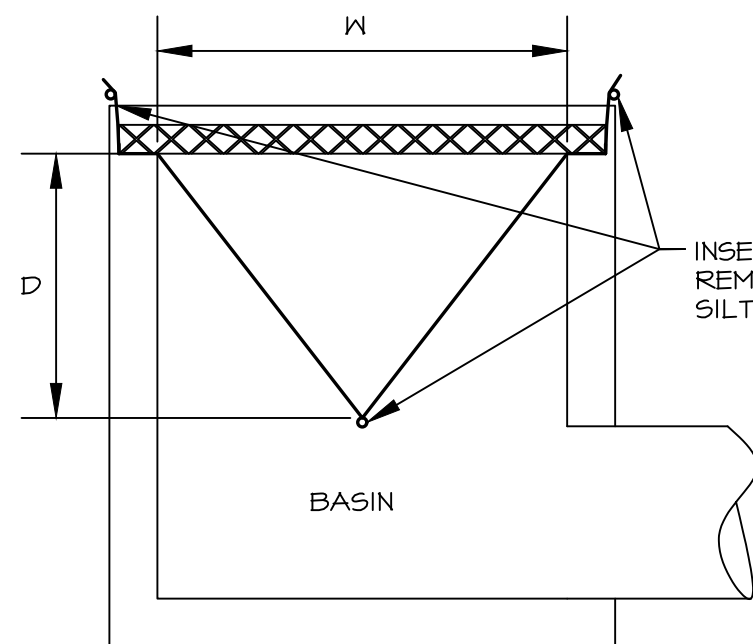
- SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

**EROSION AND SEDIMENTATION CONTROL GENERAL NOTES**

- CONDUCT ALL CONSTRUCTION IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT, BUT IN NO CASE SHALL EXCEED 2 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL DITCHES, SWALES AND PONDS MUST BE STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
- ALL GROUND AREAS OPENED UP FOR CONSTRUCTION WILL BE STABILIZED WITHIN 24 HOURS OF EARTH-DISTURBING ACTIVITIES BEING CEASED, AND WILL BE FULLY STABILIZED NO LONGER THAN 14 DAYS AFTER INITIATION. (SEE NOTE II FOR DEFINITION OF STABLE). ALL SOILS FINISH GRADED MUST BE STABILIZED WITHIN SEVENTY TWO HOURS OF DISTURBANCE. ALL TEMPORARY OR LONG TERM SEEDING MUST BE APPLIED TO COMPLY WITH "WINTER CONSTRUCTION NOTES" (SEE WINTER CONSTRUCTION NOTES). EMPLOY TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AS DETAILED ON THIS PLAN AS NECESSARY UNTIL ADEQUATE STABILIZATION HAS BEEN ASSURED (SEE NOTE II FOR DEFINITION OF STABLE).
- TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES).
- SILT/SOXX FENCING TO BE SECURELY EMBEDDED AND STAKED AS DETAILED. WHEREVER POSSIBLE A VEGETATED STRIP OF AT LEAST TWENTY FIVE FEET IS TO BE KEPT BETWEEN SILT/SOXX AND ANY EDGE OF NET AREA.
- SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO ENSURE VEGETATIVE ESTABLISHMENT.
- SEDIMENT BASIN(S), IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY.
- SILT/SOXX FENCING WILL BE CHECKED REGULARLY AND AFTER EACH SIGNIFICANT RAINFALL. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER AS WELL AS CLEANING, REMOVAL AND PROPER DISPOSAL OF TRAPPED SEDIMENT.
- TREATMENT SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATIVE COVER HAS BEEN ESTABLISHED.
- AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED.
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN THE PLAN SHALL MEET THE DESIGN BASED ON STANDARDS AND SPECIFICATIONS SET FORTH IN THE STORM WATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE (DECEMBER 2008 OR LATEST) PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, N.H. DES AND NRCS.

**WINTER CONSTRUCTION NOTES**

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND FLAGGING TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENT.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



SILT SACK IS TO BE SECURED BY HEIGHT OF BASIN GRATE TO PREVENT SEDIMENT FROM ENTERING THE DRAIN LINE

INSTALL SILT SACK TO CATCH BASINS 3, 4 & 5 PRIOR TO CONSTRUCTION & TO CATCH BASINS A, B, & C DURING CONSTRUCTION. DO NOT REMOVE SILT SACK UNTIL CONSTRUCTION IS COMPLETE AND DRAINAGE LINE IS FULLY OPERATIONAL (SEE SHEET 4)

**Silt sack**  
N.T.S.

**LONG TERM SEEDING**

\*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C	lb/ACRE	lb/1000SF
TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED CLOVER (ALSIKE)	20	0.45
TOTAL	40	1.35

LIME: AT 2 TONS PER ACRE OR 100 LBS PER 1,000 S.F.  
 FERTILIZER: 10 20 20 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.  
 MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

**GRADING AND SHAPING:**

SLOPES SHALL NOT BE STEEPER THAN 2 TO 1. 3 TO 1 OR FLATTER SLOPES ARE PREFERRED.  
 SEEDBED PREPARATION:  
 SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.  
 STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED. SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

\* FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

**SHORT TERM SEEDING**

\*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C	#/ACRE	#/1000SF
FOR APRIL 1 - AUGUST 15 ANNUAL RYE GRASS	40	1
FOR FALL SEEDING WINTER RYE	112	2.5

LIME: AT 1 TON PER ACRE OR 100 LBS PER 1,000 S.F.  
 FERTILIZER: 10 10 10 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.  
 MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

**GRADING AND SHAPING:**

SLOPES SHALL NOT BE STEEPER THAN 2 TO 1. 3 TO 1 OR FLATTER SLOPES ARE PREFERRED.

**SEEDBED PREPARATION:**

SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.  
 STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED. SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

\* FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

WHEN PROPOSED FOR ALTERATION DURING CONSTRUCTION AS BEING INFESTED WITH INVASIVE SPECIES SHALL BE MANAGED APPROPRIATELY USING THE DISPOSAL PRACTICES IDENTIFIED IN "NHDOT - BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS - 2008" AND "METHODS FOR DISPOSING NON-NATIVE INVASIVE PLANTS - UNH COOPERATIVE EXTENSION - 2010"

SEED MIXES SHALL NOT CONTAIN ANY SPECIES IDENTIFIED BY THE NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST.

**MAINTENANCE NOTES**

**A. MAINTENANCE OF COMMON FACILITIES OR PROPERTY**

1. FUTURE OWNERS OR ASSIGNS ARE RESPONSIBLE FOR MAINTENANCE OF ALL STORMWATER INFRASTRUCTURE ASSOCIATED WITH THE FACILITY AND THE PROPERTY. THIS INCLUDES THE ROOF DRAINAGE SYSTEM, CISTERN, STORMWATER POND, PERVIOUS PAVERS, STORM TECH CHAMBERS, LANDSCAPED AREAS, PERVIOUS ASPHALT AND CONTECH TREATMENT STRUCTURE.

**B. GENERAL INSPECTION AND MAINTENANCE REQUIREMENTS**

1. PERMANENT STORMWATER AND SEDIMENT AND EROSION CONTROL FACILITIES TO BE MAINTAINED ON THE SITE INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING AREAS
- LANDSCAPED AREAS
- DRAIN LINES
- CONTECH JELLYFISH

2. MAINTENANCE OF PERMANENT MEASURES SHALL FOLLOW THE FOLLOWING SCHEDULE:

**a. PARKING AREAS, DRIVEWAY:**  
 INSPECTION AT THE END OF EVERY WINTER, PRIOR TO THE START OF THE SPRING RAIN SEASON. SWEEPING SHALL BE DONE ONCE IN EARLY FALL AND THEN AFTER SPRING SNOWMELT. SAND/DEBRIS THAT HAS COLLECTED OFF THE DRIVEWAY AND PARKING LOT SHOULD BE REMOVED OFF-SITE AND DISPOSED OF PROPERLY.

**b. LANDSCAPED AREAS:**  
 ANNUAL INSPECTION OF SITE'S VEGETATION AND LANDSCAPING. ANY AREAS THAT ARE BARE SHALL BE RESEEDED AND MULCHED WITH HAY OR, IF THE CASE IS EXTREME, LOAMED AND SEEDED OR SODDED TO ENSURE ADEQUATE VEGETATIVE COVER. LANDSCAPE SPECIMENS SHALL BE REPLACED IN-KIND, IF THEY ARE FOUND TO BE DEAD OR DYING.

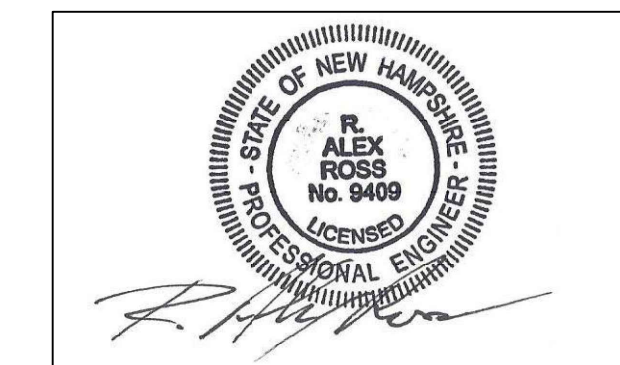
**c. DRAIN LINES:**  
 INSPECT TWICE A YEAR, MORE OFTEN IF NEEDED. INSPECT FOR ACCUMULATION OF DEBRIS. REMOVE MATERIAL FROM INLET/OUTLET AS NECESSARY, DISPOSE OF OFFSITE.

**d. CONTECH JELLYFISH TREATMENT STRUCTURE:**  
 SEE ATTACHED JELLYFISH MAINTENANCE GUIDE.





C. OWNERS SHALL PROVIDE A REPORT ON ACTIVITIES PERFORMED THROUGHOUT THE YEAR. REPORT SHALL INCLUDE DOCUMENTATION THAT INSPECTION AND MAINTENANCE IS ACCOMPLISHED PER THIS DOCUMENT AND A CERTIFICATION THAT THE SYSTEMS CONTINUE TO FUNCTION AS DESIGNED.

**STORMWATER INSPECTION & MAINTENANCE LOG**

ACTIVITY	DATE OF INSPECTION	WHO INSPECTED	SATISFACTORY: YES, NO, N/A	MAINTENANCE NEEDED	IMPLEMENTED DATE OF CORRECTIVE ACTION	FINDINGS OF INSPECTOR
PARKING AREA						
LANDSCAPE AREA						
DRAIN LINES						
CONTECH JELLYFISH						



4	2/21/2024	REVISIONS	
3	2/16/2024	TAC SUBMITTAL	
2	12/27/2023	ZBA SUBMITTAL	
ISS:	DATE	DESCRIPTION OF ISSUE	
SCALE 1" = 20'			
CHECKED A. ROSS			
DRAWN D.D.D.			
CHECKED			
<b>ROSS ENGINEERING, LLC</b> Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
CLIENT RIGZ ENTERPRISES LLC 18 DIXON LANE DERRY, NH 03038			
TITLE			
<b>EROSION CONTROL PLAN</b> 822 US ROUTE 1 BYPASS PORTSMOUTH, NH 03801 TAX MAP 160, LOT 29			
JOB NUMBER	DWG. NO.	ISSUE	
23-010	12 OF 12	4	

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	6	KT-RDLED18PS-6A-9CSE-VDIM (1	Single	N.A.	0.900	6 in Round Downlight 18.5w
	2	KT-WPLED55PS-M4-8CSB-VDIM	Single	7562.5	0.900	Wall Pack 55w
	1	KT-ALED210-L2-OSA-NM-850-VDIM 1	2 @ 90 degrees	31509.1	0.900	2@90 Area Light 210w Type 3
	1	KT-ALED210-L2-OSA-NM-850-VDIM	Single	31509.1	0.900	Single Area Light 210w Type 3

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Workplane Height
CalcPts_1	Illuminance	Fc	2.55	19	0	N.A.	N.A.	0.25

Luminaire Location Summary						
LumNo	Label	X	Y	Mount Height	Orient	Tilt
1	KT-ALED210-L2-OSA-NM-850-VDIM	204	227.5	20	224.49	15
2	KT-ALED210-L2-OSA-NM-850-VDIM 1	73.3	194.1	20	319.086	15
3	KT-RDLED18PS-6A-9CSE-VDIM (1	141	153.4	8	288.435	0
4	KT-RDLED18PS-6A-9CSE-VDIM (1	126.3	139.9	8	288.435	0
5	KT-RDLED18PS-6A-9CSE-VDIM (1	111.7	126.4	8	288.435	0
6	KT-RDLED18PS-6A-9CSE-VDIM (1	97.5	112.7	8	288.435	0
7	KT-RDLED18PS-6A-9CSE-VDIM (1	83	99.2	8	288.435	0
8	KT-RDLED18PS-6A-9CSE-VDIM (1	68.1	86.1	8	288.435	0
9	KT-WPLED55PS-M4-8CSB-VDIM	186.8	161.25	15	47.757	0
10	KT-WPLED55PS-M4-8CSB-VDIM	80.8	58.3	15	219.136	0

There are a total of 2 poles onsite.  
 1 of the poles have 2 fixtures (1x2 = 2).  
 1 of the poles have 1 fixtures (1x1 = 1).  
 2 Wall Packs and 6 Downlights  
 The total quantity is 11 fixtures.

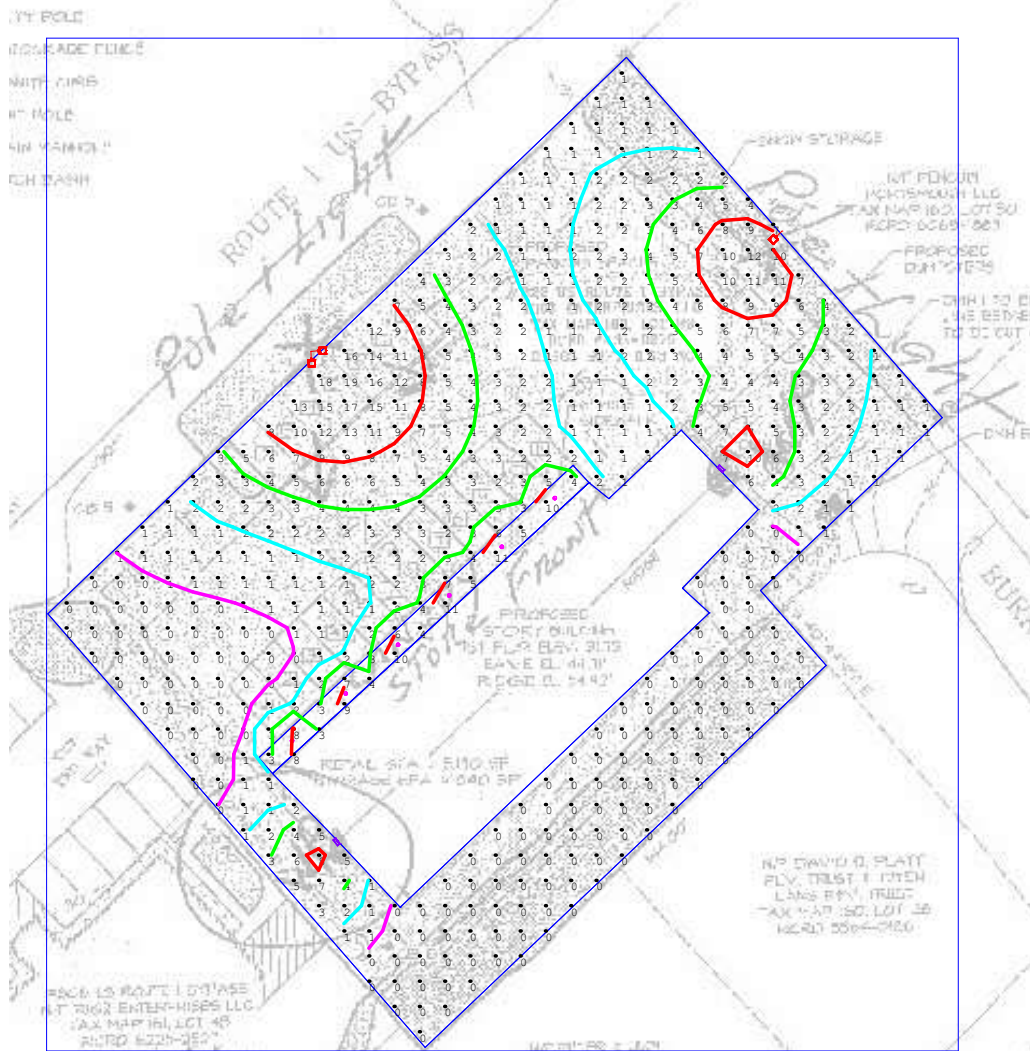


City Tabacco  
 KT-ALED210-L2-3  
 KT-WPLED55PS  
 KT-RDLED18PS  
 MH- 8', 15', 20'

### Keystone Technologies Lighting Layout

2750 Morris Road  
 Lansdale, PA 19446  
 Phone 1-800-464-2680  
 Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)

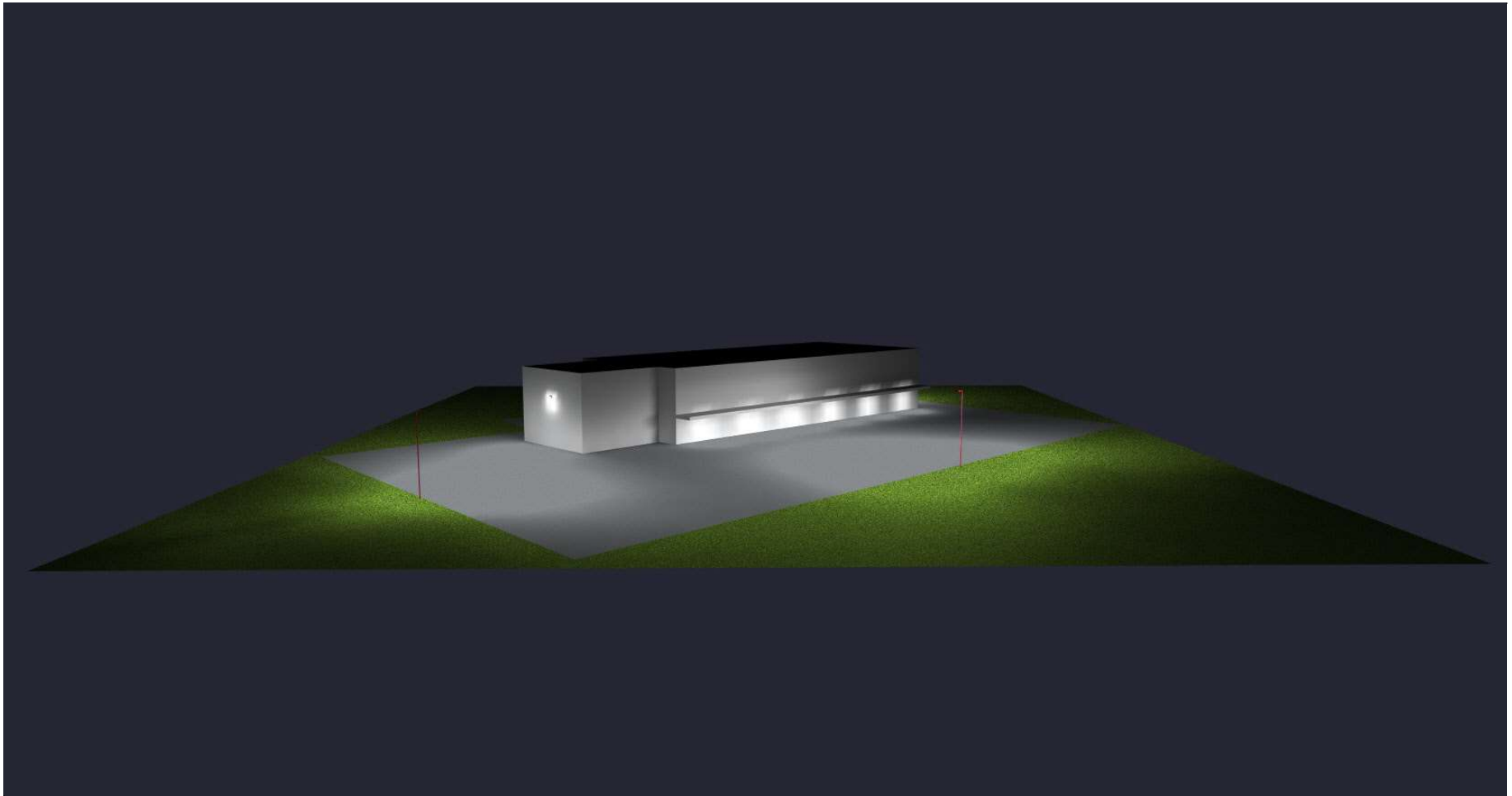




View of point by point

<p>City Tabacco          KT-ALED210-L2-3          Red = 8+ FC's Green = 4 FC          Blue = 2 FC Violet = 1 FC</p>	<p><b>Keystone Technologies Lighting Layout</b>          2750 Morris Road          Lansdale, PA 19446          Phone 1-800-464-2680          Email: <a href="mailto:LightingLayouts@keystonetech.com">LightingLayouts@keystonetech.com</a></p>
---	--





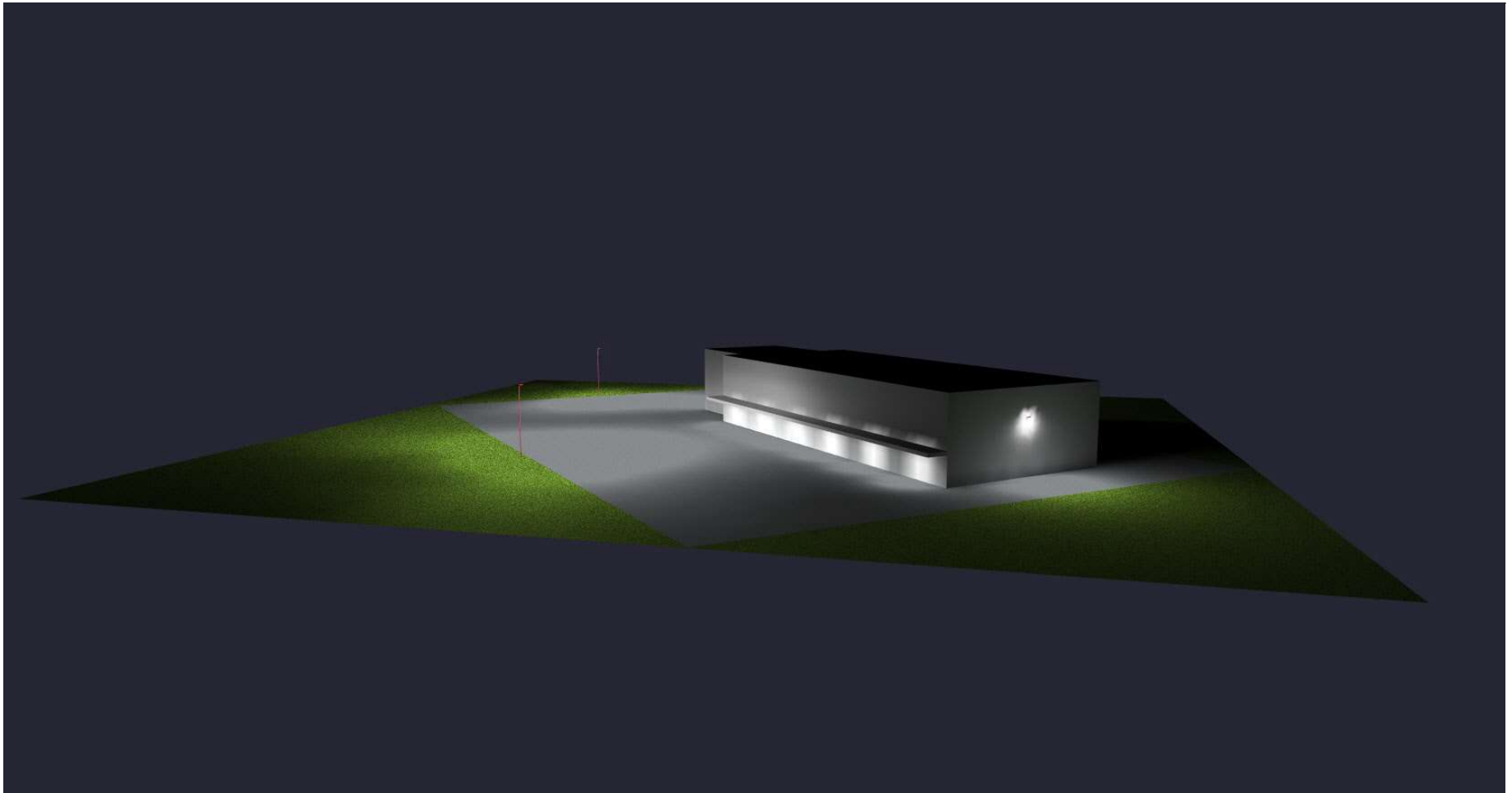
City Tabacco  
KT-ALED210-L2-3  
KT-WPLED55PS  
KT-RDLED18PS  
MH- 8', 15', 20'

### Keystone Technologies Lighting Layout

2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)







City Tabacco  
KT-ALED210-L2-3  
KT-WPLED55PS  
KT-RDLED18PS  
MH- 8', 15', 20'

### Keystone Technologies Lighting Layout

2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)



Thank you for allowing Keystone Technologies the opportunity to create and provide this Lighting Layout report.

Illumination results shown on this lighting design are based on project parametrics provided to Keystone used in conjunction with luminaire photometric testing conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results, such as (but not limited to) windows, furnishings, floor/ceiling/wall surface texture reflectivity, site cleanliness, and lighting component tolerances. Illumination results shown have not been field verified by Keystone and therefore the actual measured results may vary from actual field conditions.

The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code. In no event will Keystone Technologies be held responsible for any loss resulting from any use of this lighting design.

City Tabacco  
KT-ALED210-L2-3  
KT-WPLED55PS  
KT-RDLED18PS  
MH- 8', 15', 20'

### Keystone Technologies Lighting Layout

2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)



# *THE CITY - BUILDING ONE*

## 822 US ROUTE 1 BYPASS

### PORTSMOUTH,, NEW HAMPSHIRE

*Gleason Architects*  
P.O. BOX 596  
STRATHAM, NH 03885



603 772-7370

INDEX TO DRAWINGS

ARCHITECTURAL

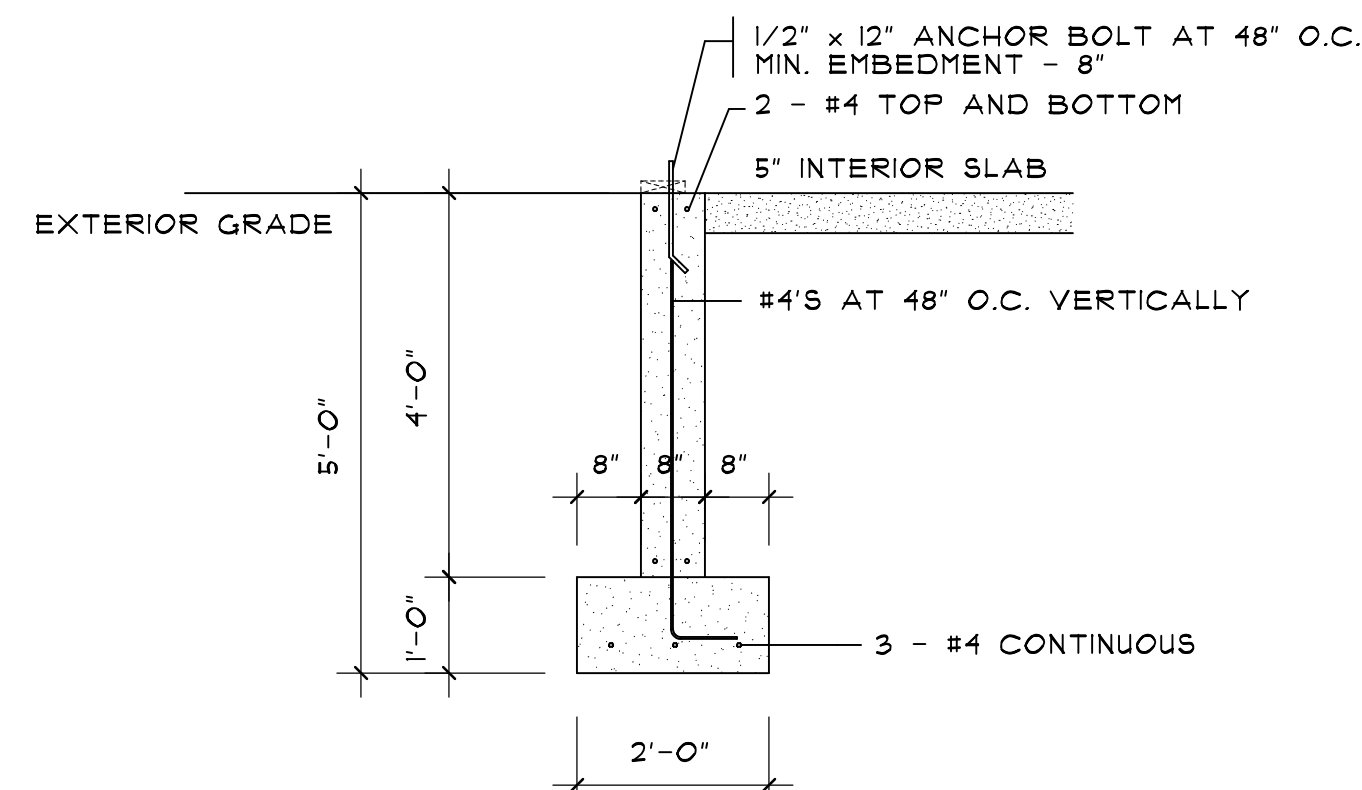
A1 - FOUNDATION PLAN, FIRST FLOOR PLAN, DETAILS AND DOOR SCHEDULE  
A2 - ELEVATIONS, SECTION AND ROOF FRAMING PLAN

#### GENERAL NOTES

1. All work meets state, local and 2015 IBC Codes.
2. Contractor(s) must visit the job site prior to submitting a bid.
3. It is assumed the soil bearing capacity is 2000 psf or better.
4. Footings are to be placed on undisturbed soil, a minimum of one (1) foot below the frost line.
5. Provide 2" rigid insulation around the foundation perimeter to 4' below grade.
6. All wood on concrete is to be pressure treated lumber with sill seal and insulation.
7. Poured in place concrete is to be 3000 psi or better.
8. Concrete slabs are to have 6/6 10x10 w.w.f., 6 mil poly vapor barrier over 6" of crush stone or gravel, unless noted otherwise.
9. Use anchor bolts at 4'-0" on center on foundation walls.
10. Exterior walls are to be 2 x 6 wood studs, min. no. 2 grade, at 16" on center with lateral bracing, 1/2" gypsum board interior 1/2" sheathing exterior and "building wrap". The walls will have full batt insulation or equal.
11. Interior walls are to be 2 x 4 wood studs at 16" on center with 1/2" gypsum board each side.
12. All material used in the construction of this building will be new. No used or reconditioned material is permitted.
13. All interior finishes are to be determined by the contract with the owner.
14. Notify the architect immediately if conditions are different than indicated on the plans.
15. Any changes to these plans must be reviewed and approved by the owner(s) and the architect.
16. These drawings are prepared for the owner(s) to meet local and state codes. Any deficiencies must be noted and architect contacted to review those deficiencies.

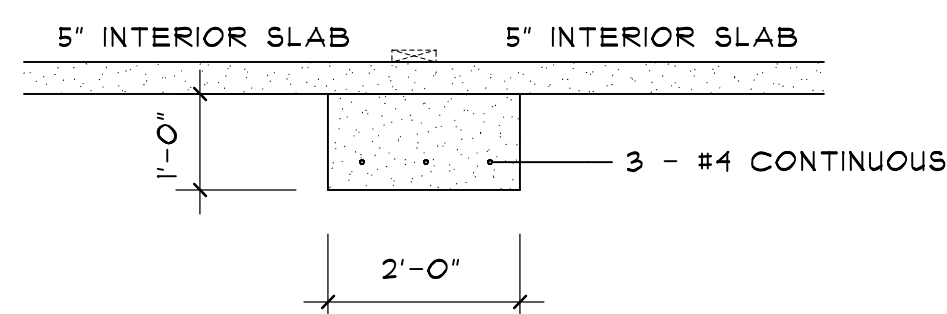
#### CODE REVIEW:

PROJECT: SINGLE STORY COMMERCIAL BUILDING - CONVENIENCE STORE  
USE GROUP: MERCANTILE - M  
TYPE OF CONSTRUCTION: 5B, WOOD FRAME, UNPROTECTED  
HEIGHT - STORIES ALLOWED WITH SPRINKLER SYSTEM, BUILDING IS TWO STORY  
BUILDING TO HAVE AN APPROVED SPRINKLER SYSTEM  
AREA - 36,000 SF, SPRINKLERED, ACTUAL SQUARE FOOTAGE - 5480 SF  
OCCUPANT LOAD - 5480 SF/40 SF PER PERSON - 92 PEOPLE (TABLE 1004.1.2  
TABLE 1011.2 EXIT ACCESS TRAVEL DISTANCE - USE M, WITH SPRINKLER - 250 FEET



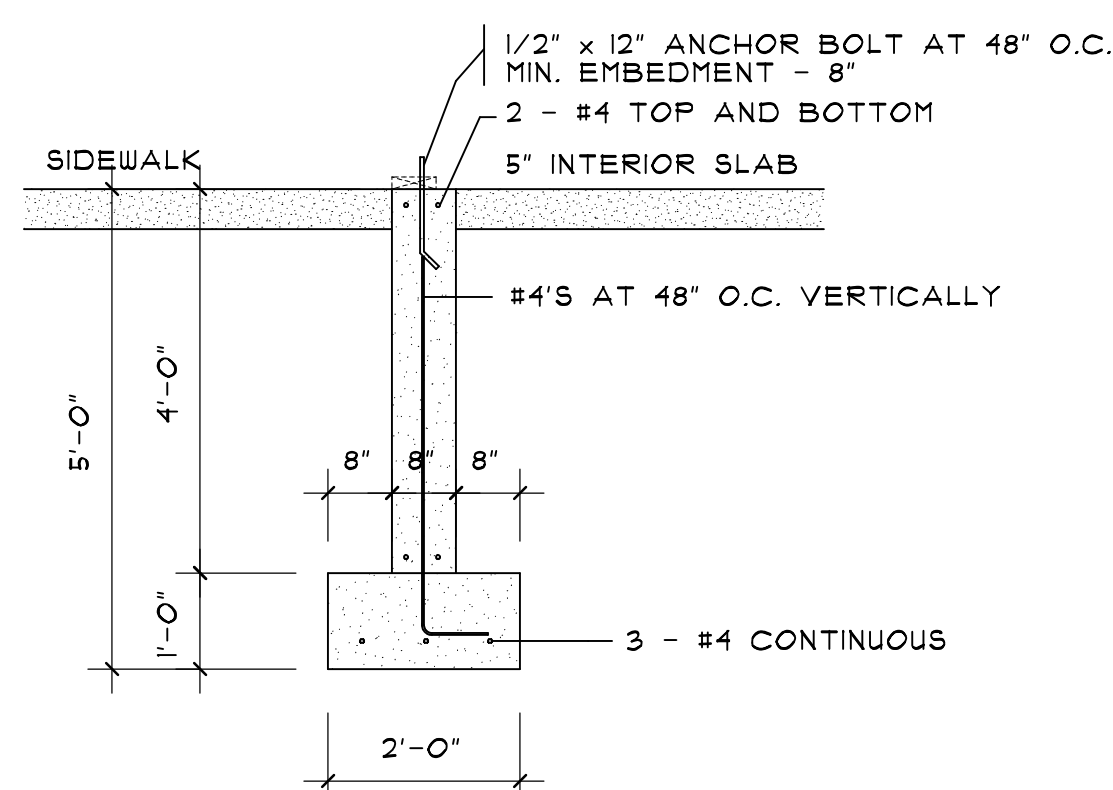
1 FOUNDATION SECTION

SCALE: 1/2" = 1'-0"



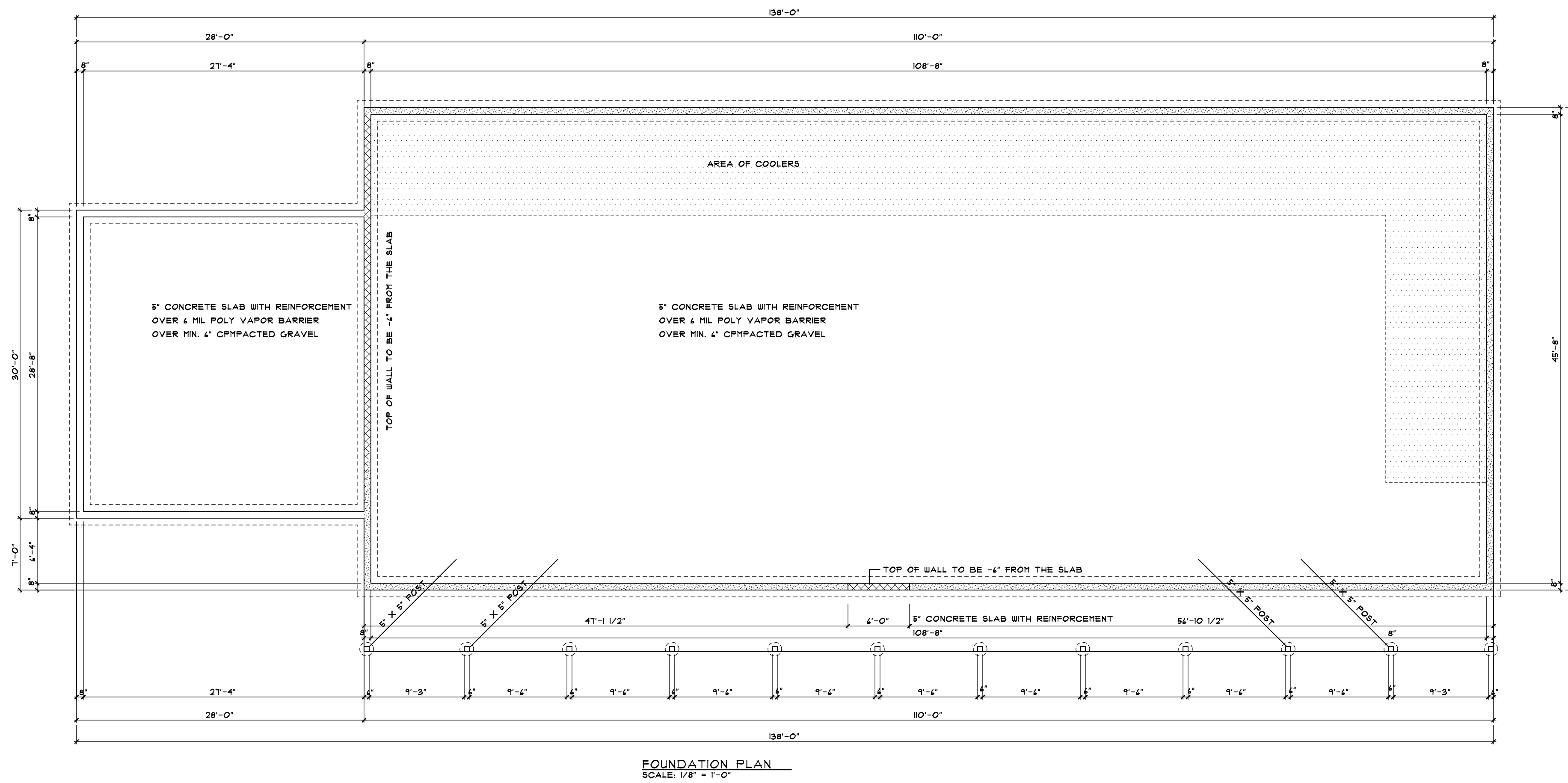
2 FOUNDATION SECTION

SCALE: 1/2" = 1'-0"



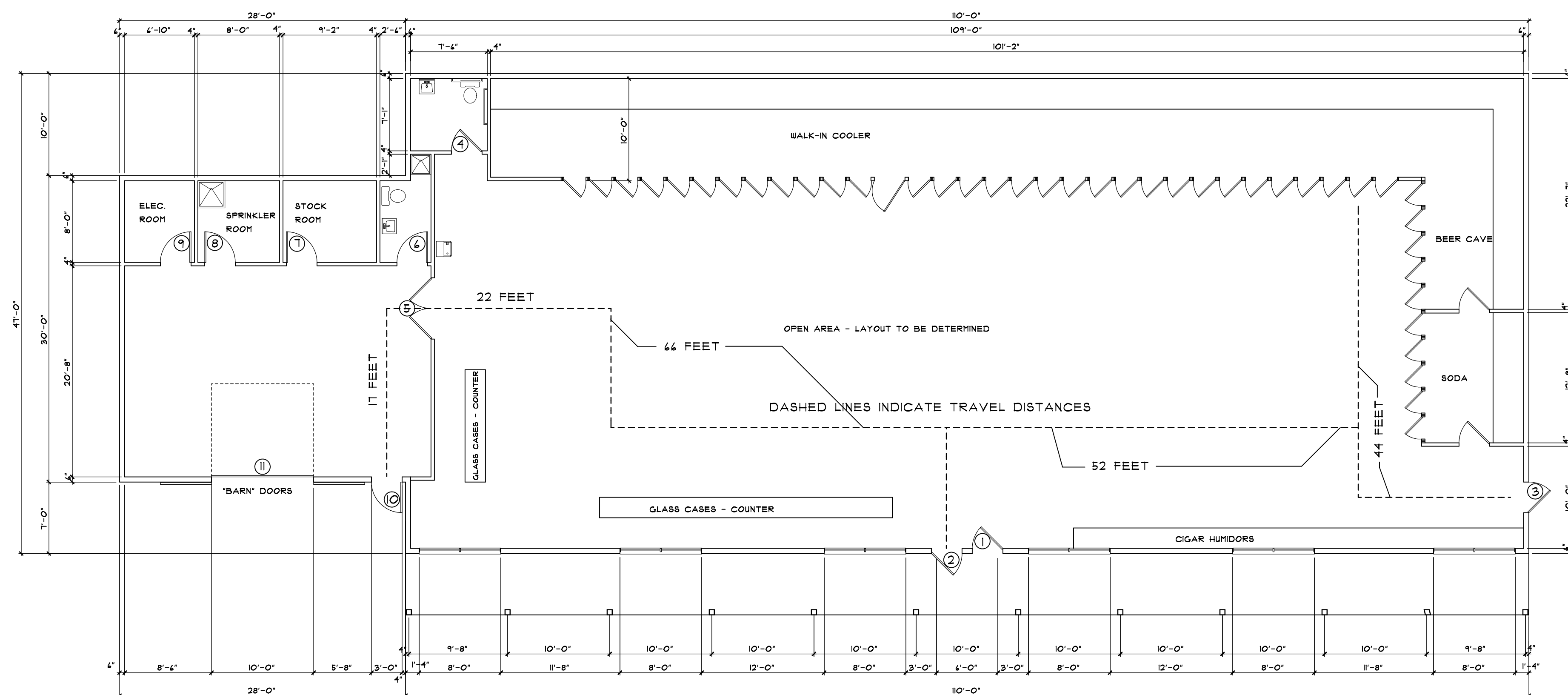
3 FOUNDATION SECTION

SCALE: 1/2" = 1'-0"



FOUNDATION PLAN

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



FLOOR PLAN

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

DOOR SCHEDULE

MARK	DOOR WIDTH	DOOR HEIGHT	REMARKS
------	------------	-------------	---------

FIRST FLOOR

1.	3'-0"	7'-0"	AL./GLASS ENTRY DOOR
2.	3'-0"	7'-0"	AL./GLASS ENTRY DOOR
3.	3'-0"	6'-8"	HM DOOR HM FRAME
4.	3'-0"	6'-8"	SCWD DOOR HM FRAME SELF CLOSING
5.	FR. 3'-0"	6'-8"	DOUBLE ACTING IMPACT DOORS WITH KICK PLATES
6.	2'-6"	6'-8"	HM DOOR HM FRAME
7.	3'-0"	6'-8"	HM DOOR HM FRAME
8.	3'-0"	6'-8"	HM DOOR HM FRAME
9.	3'-0"	6'-8"	HM DOOR HM FRAME
10.	3'-0"	6'-8"	HM DOOR HM FRAME
11.	10'-0"	9'-0"	INSULATED OVERHEAD DOOR

NO.	DESCRIPTION OF REVISION	DATE

**THE CITY - BUILDING ONE**  
 822 US ROUTE 1 BYPASS  
 PORTSMOUTH, NEW HAMPSHIRE

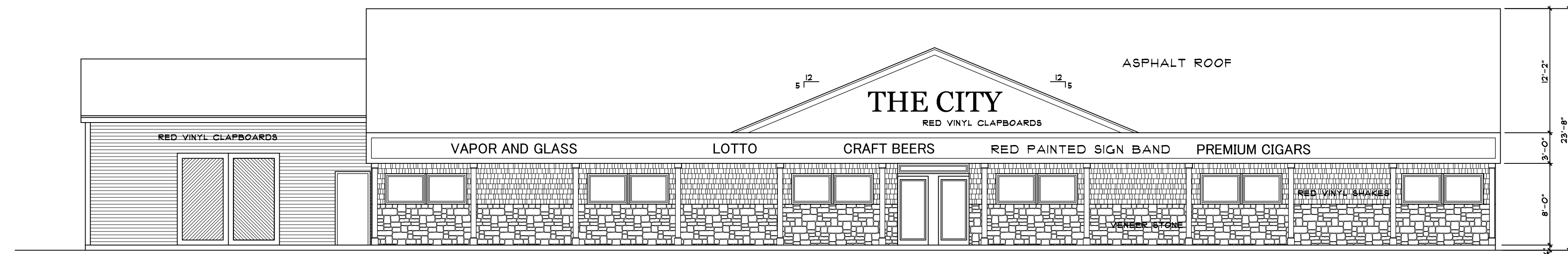
**Gleason Architects**  
 P.O. BOX 596  
 STRATHAM, NEW HAMPSHIRE 03885  
 603 772-7370



ARCHITECT

ENGINEER  
 DATE: 08/04/23  
 PROJECT NO. 202329  
 SHEET NO.

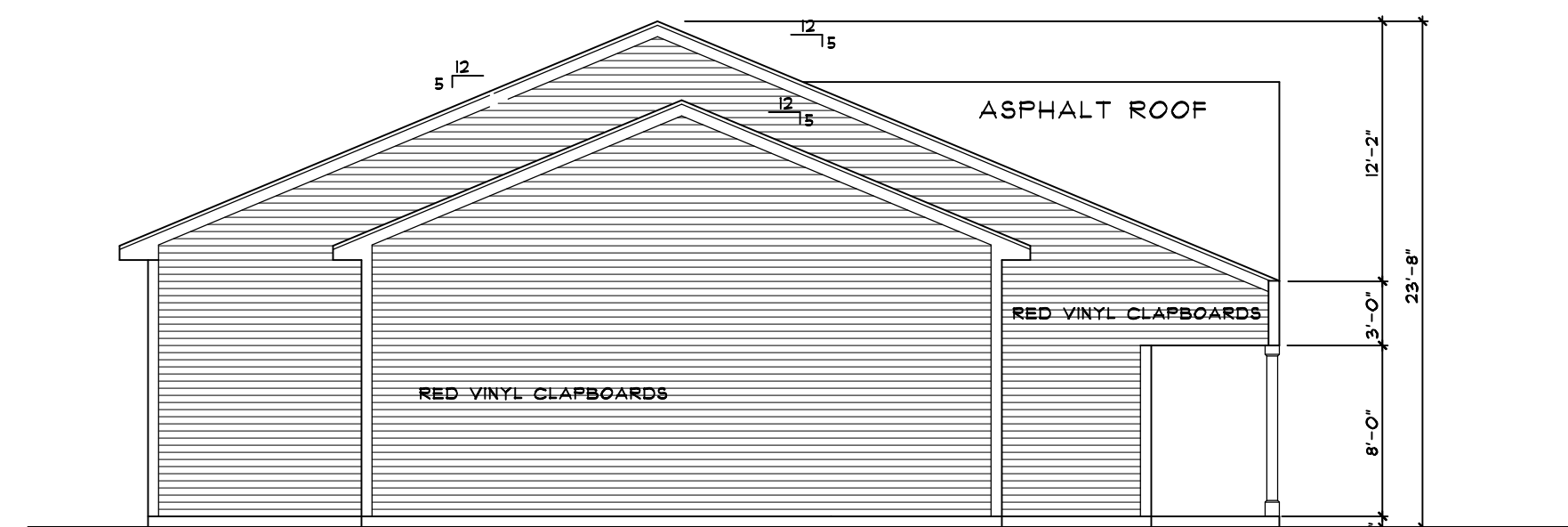
**A-1**  
 OF SHEETS



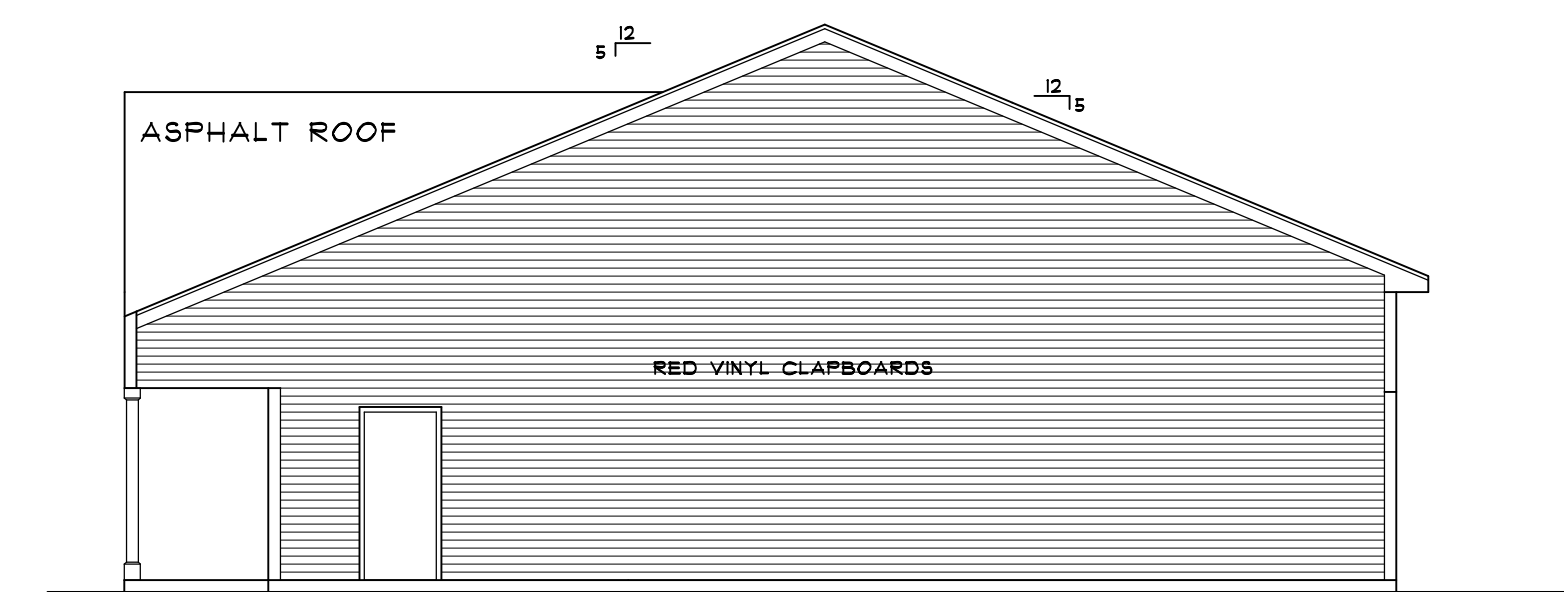
FRONT ELEVATION  
SCALE: 1/8" = 1'-0"



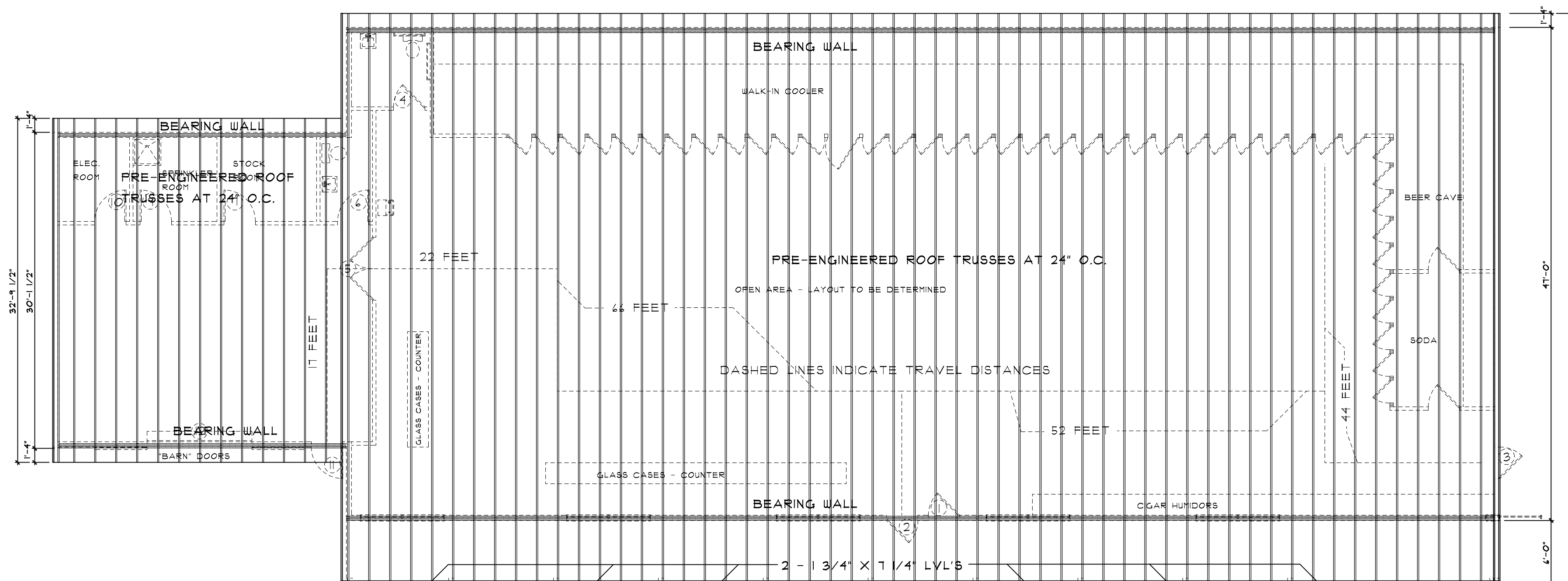
REAR ELEVATION  
SCALE: 1/8" = 1'-0"



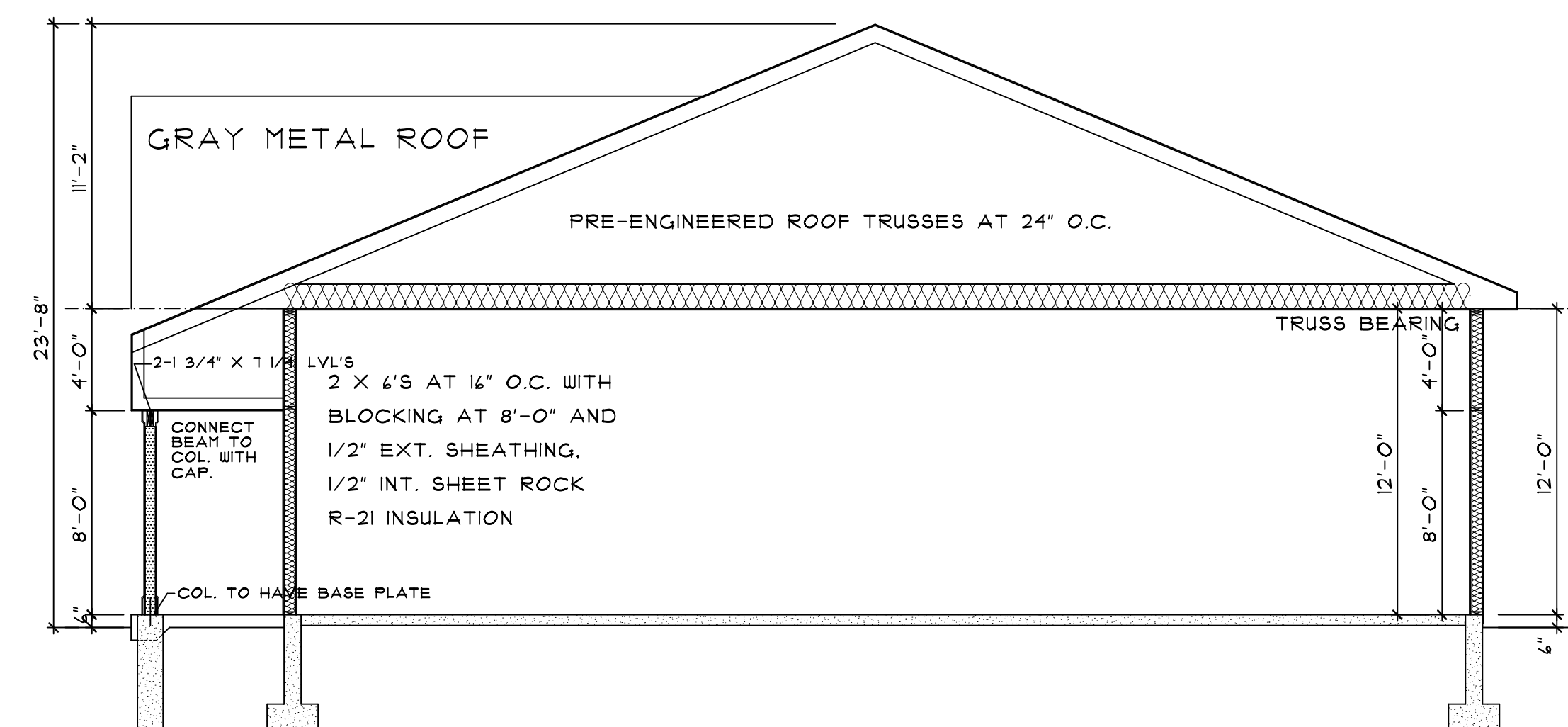
LEFT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"



RIGHT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"



ROOF FRAMING PLAN  
SCALE: 1/8" = 1'-0"



SECTION  
SCALE: 3/16" = 1'-0"

NO.	DESCRIPTION OF REVISION	DATE

**THE CITY - BUILDING ONE**  
822 US ROUTE 1 BYPASS  
PORTSMOUTH, NEW HAMPSHIRE

**Gleason Architects**  
P.O. BOX 596  
STRATHAM, NEW HAMPSHIRE 03885  
603 772-7370



ARCHITECT

ENGINEER  
DATE: 08/04/23  
PROJECT NO. 202329

SHEET NO.

**A-2**

OF SHEETS



# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

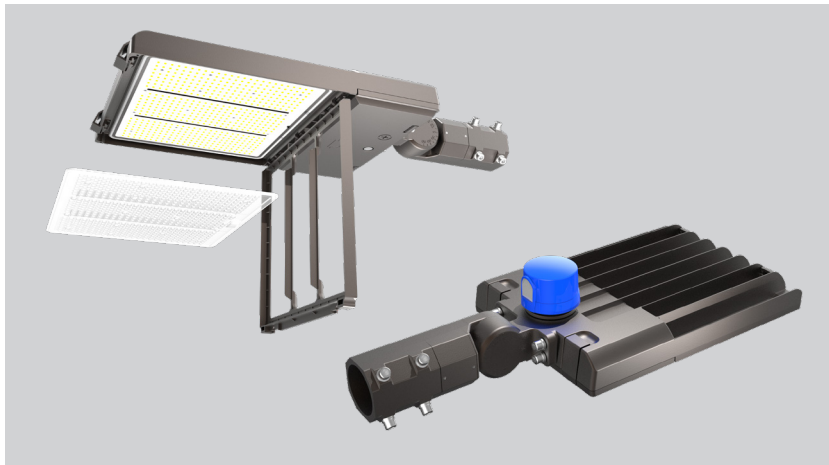
## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### DESCRIPTION

290W Power and Color Select Optic Swap LED Area Light | 120-277V Input | Bronze Housing | Slip Fitter Mount Kit Included

### APPLICATION

Pole-mount or structure-mount outdoor illumination needs (including parking lots, auto dealerships, pathways, roadways, recreational venues, and other general area lighting requirements)



### PRODUCT FEATURES

- Keystone Power Select technology (290/210/185W)
- Keystone Color Select technology (3000/4000/5000K)
- Innovative optic swap capability under door frame and latch design for quick lens change
- Three lenses in the box: Type III installed, Types IV and V included
- Type II lens sold separately. See below for details
- Heavy duty die cast aluminum housing with ample heat sinking
- Low-profile design delivers high-performance illumination and improves application site aesthetics
- True U0 design for Dark Sky friendly performance that eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 7-pin twist-lock receptacle with 3-pin photocell and shorting cap. Standard on all fixtures, simplifies ordering requirements for photo control needs
- Comes with a pre-installed slip fitter mount kit for easy and quick mounting to square or round poles
- Keystone 0-10V dimming driver
- Ambient operating temperature: -40°C/-40°F to 50°C/122°F
- UL Certified, IP65 rated
- Power factor: > 0.95
- THD: < 20%
- LED chip lifetime: L70 > 100,000 hrs @ 25°C/77°F ambient fixture temperature
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions

### PRODUCT SPECIFICATIONS

Catalog No.	Wattage	CCT	Lumens	Efficacy	Input Voltage	Dimming	CRI	Distribution Pattern	Photocell Included	Housing Color	Legacy Equivalent
KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P	290	3000K	36320	125 lm/W	120-277V	0-10V	>80	Type III Installed, Types IV and V Included	Yes	Bronze	1000W MH
		4000K	42770	147 lm/W							
		5000K	38700	133 lm/W							
	210	3000K	27300	130 lm/W							
		4000K	31710	151 lm/W							
		5000K	28980	138 lm/W							
	185	3000K	22970	124 lm/W							
		4000K	27060	146 lm/W							
		5000K	24440	132 lm/W							

\* Fixtures with Type 2 (II) and Type 4 (IV) optics are available and assembled to order. Lead times may apply. Please see catalog number breakdown for full ordering code details.

\*\*Fixtures (and mounts) with alternate housing colors are available and made to order. Extended lead times apply. Please see catalog number breakdown for full ordering code details.

# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

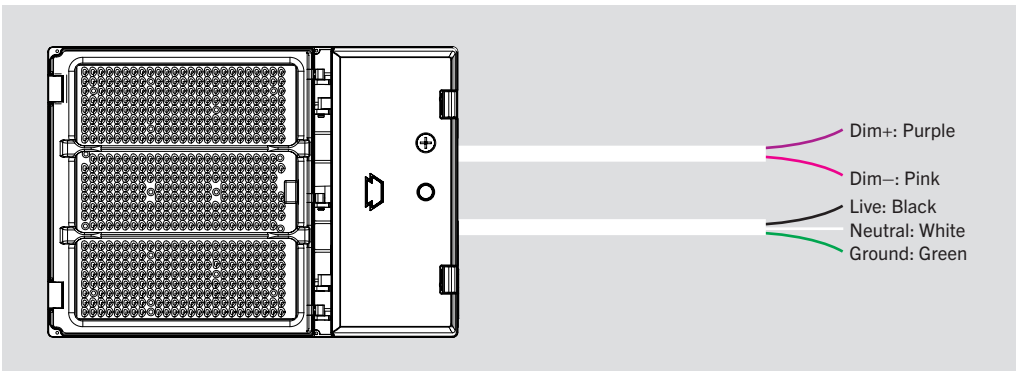
### PHYSICAL SPECIFICATIONS

#### SLIPFITTER-MOUNT LED AREA LIGHT FIXTURE

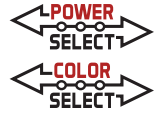
Technical drawings showing dimensions: 19.72", 29.55", 13.97", 3.01", and 3.15".

PACKAGING	
Carton Quantity	1 piece
Carton Dimensions	5.63"H x 15.95"W x 26.18"L
Carton Weight	17.53 lbs

### WIRING DIAGRAM



- This fixture comes pre-wired with a 7-pin twist-lock receptacle with shorting cap. Make input connections as needed and ensure connections are protected from exposure to the elements.
- Input voltage rating: 120–277V
- Ensure that input voltage on site matches the fixture you intend to install.



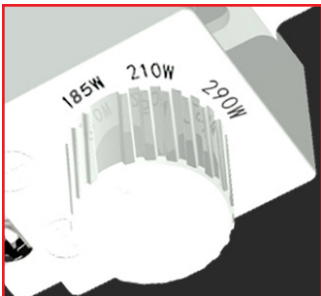
# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### POWER SELECT (WATTAGE) AND COLOR SELECT (CCT) ADJUSTMENT

This fixture is equipped with field-adjustable Keystone Power Select and Color Select technology.

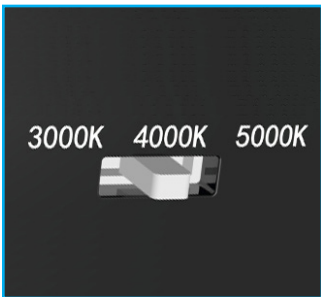
1. Ensure power is off to the fixture.
2. Open the driver compartment located on the underside of the fixture.
2. Adjust switches to desired settings.



#### POWER SELECT ADJUSTMENT DIAL

Set switch to adjust wattage between 290W, 210W, and 185W.

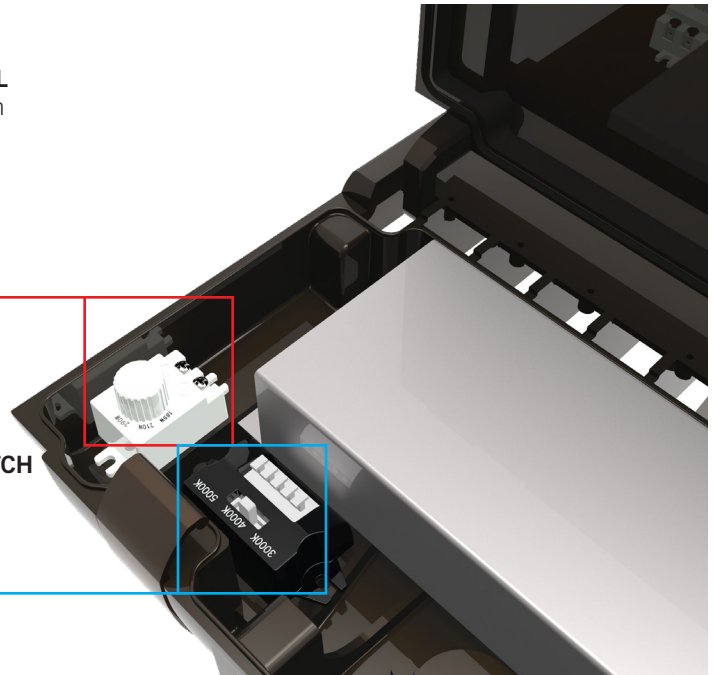
Fixture comes preset at 290W.



#### COLOR SELECT ADJUSTMENT SWITCH

Set switch to adjust CCT between 3000K, 4000K, and 5000K.

Fixture comes preset at 5000K.





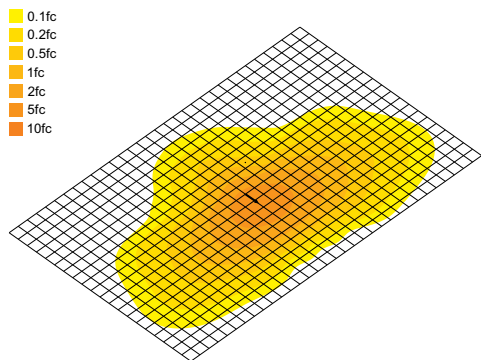
# KT-ALED290PS-L2-0SB-SF-8CSB-VDIM-P

## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

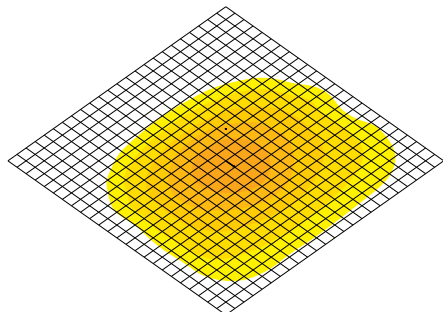
### LIGHT DISTRIBUTION PATTERN

Photometric layouts for general reference only. All fixtures are pole mounted at 35ft. Each square is 10 ft x 10 ft

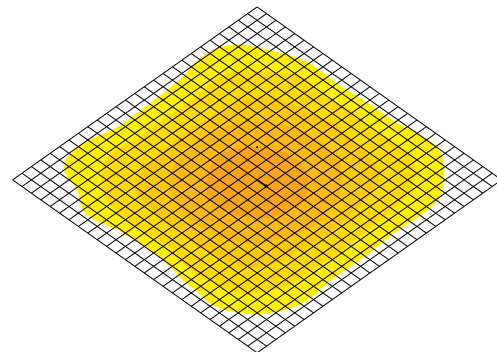
TYPE III (3)



TYPE IV (4)



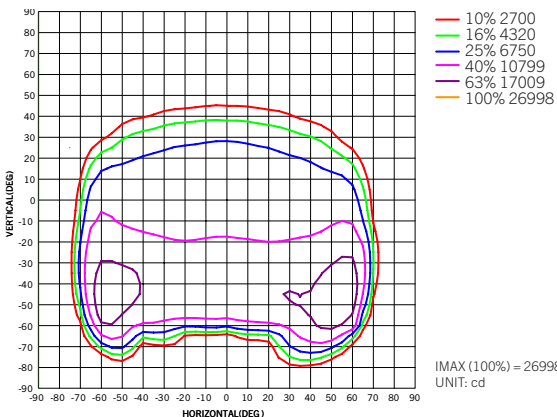
TYPE V (5)



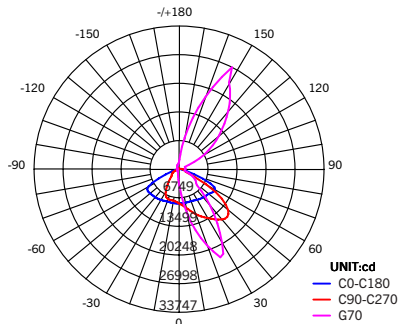
- 0.1fc
- 0.2fc
- 0.5fc
- 1fc
- 2fc
- 5fc
- 10fc

### PHOTOMETRIC SPECIFICATIONS (TYPE III [3])

#### ISOCANDELA PLOT

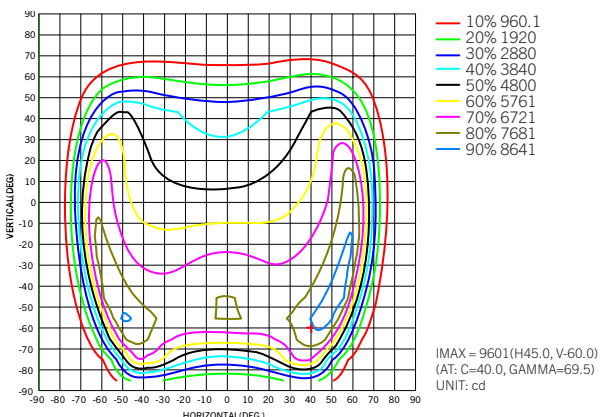


#### LUMINOUS INTENSITY DISTRIBUTION

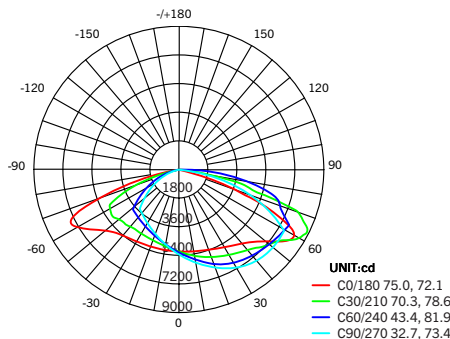


### PHOTOMETRIC SPECIFICATIONS (TYPE IV [4])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION

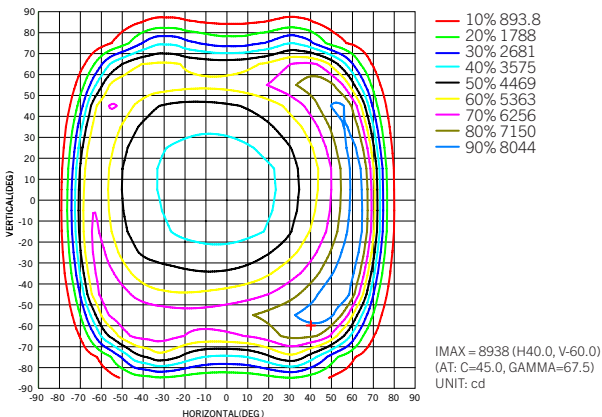


# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

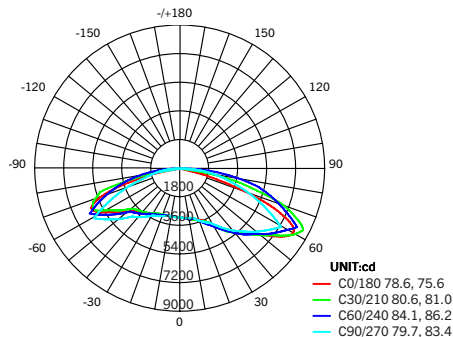
## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### PHOTOMETRIC SPECIFICATIONS (TYPE V [5])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



### EPA SPECIFICATIONS

#### LARGE-SIZE FIXTURE HOUSING

- Conditions: Horizontal winds only for calculations. Worst case total projected area used for calculations.
- All drag coefficients are set as worst case 1.2.
- For details on exact EPA calculations and assumptions, please contact [productsupport@keystonetech.com](mailto:productsupport@keystonetech.com)

EPA Calcs (1.2*ft <sup>2</sup>   View)		Single Fixture	2 Fixtures at 90°	2 Fixtures at 180°	3 Fixtures at 90°	3 Fixtures at 120°	4 Fixtures at 90°	2 Fixtures Side-by-Side	3 Fixtures Side-by-Side	4 Fixtures Side-by-Side
Mounting Application	Fixture Position									
Slip Fitter Mount	Horizontal	0.60 sq. ft.	0.98 sq. ft.	1.20 sq. ft.	1.53 sq. ft.	1.57 sq. ft.	1.53 sq. ft.	0.86 sq. ft.	1.30 sq. ft.	1.73 sq. ft.
Slip Fitter Mount	45°	1.92 sq. ft.	2.51 sq. ft.	1.92 sq. ft.	3.09 sq. ft.	4.39 sq. ft.	3.09 sq. ft.	3.84 sq. ft.	5.76 sq. ft.	7.68 sq. ft.
Slip Fitter Mount	Vertical	2.59 sq. ft.	3.19 sq. ft.	2.59 sq. ft.	3.80 sq. ft.	4.07 sq. ft.	3.80 sq. ft.	5.18 sq. ft.	7.77 sq. ft.	10.35 sq. ft.

# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

**ACCESSORIES (SOLD SEPARATELY)**

**SENSORS**

Factory-Installable OR Field-Installable (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/MW3	KTS-MW3-12V-PKO	12V Microwave Occupancy Sensor	843654130637	TRM-32
	/FC3	KTSL-FC3-12V-PKO-PIR	Bluetooth mesh wireless Smart Port LED controller for SmartLoop system with integrated daylight and PIR motion sensor.	843654138862	OCW-60
	/FC4	KTSL-FC4-12V-PKO	Bluetooth mesh wireless screw-in low voltage fixture controller for SmartLoop system	843654149066	RUN-10



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

Field-Installable / Field-Use ONLY (purchased separately)

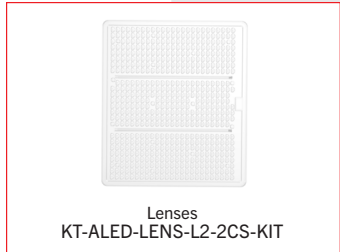
CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KTS-MW3-REMOTECONTROL	Remote Control for KTS-MW3-12V-XX Sensors, Sets/adjusts all sensor performance parameters	843654132020	XSR-61



**LENSES**

Field-Installable / Field-Use ONLY (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KT-ALED-LENS-L2-2CS-KIT	Type II Optics Lens for Color Select, Large Size Housing, Series 2 Area Lights	843654153858	HXC-12



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).



# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

## SLIPFITTER-MOUNT LED AREA LIGHT PREMIUM PACKAGE

**ACCESSORIES CONTINUED (SOLD SEPARATELY)**

**MOUNTS AND BRACKETS**

Field-Installable / Field-Use ONLY (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KT-ALED-GS-L2-KIT	Reversible Glare Shield for Large Size Housing, Series 2 Area Lights, Bronze	843654153810	RDW-18



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

**ORDERING INFORMATION**

ORDER CODE	PACK QTY.	UPC	Easy Code
KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P	1	843654153148	IYG-25

**CATALOG NUMBER BREAKDOWN**

# KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

- 1 Keystone Technologies
- 2 Fixture Type
- 3 LED Technology
- 4 Max Wattage
- 5 Power Select
- 6 Size/ Shape
- 7 Style/ Design Designation
- 8 Optic Swap
- 9 Optic Swap Designation
- 10 Slip Fitter Mount
- 11 80 CRI
- 12 Color Select
- 13 Color Select Designation
- 14 0-10V Dimming
- 15 Stock Package

**9 Optic Swap Designation**  
B Type III lens installed, Type IV and V lens included

**13 Color Select Designation**  
B 3000/4000/5000K

**ORDERING EXAMPLES**

FIXTURE WITH SINGLE FACTORY-INSTALLED ACCESSORY

KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P /7PRS

KEYSTONE FIXTURE
CATALOG NUMBER
KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

FIXTURE WITH NO FACTORY-INSTALLED ACCESSORIES

KT-ALED290PS-L2-OSB-SF-8CSB-VDIM-P

SENSORS	
✓ SUFFIX	CATALOG NUMBER
✓ /7PRS	KT-RSC-7PN

\* When ordering more than one factory-installed accessory, use multiple suffixes as shown in the ordering examples above.  
 Note: All accessories can also be ordered separately for field installation using just their regular Catalog Number, UPC, or Easy Code.



# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

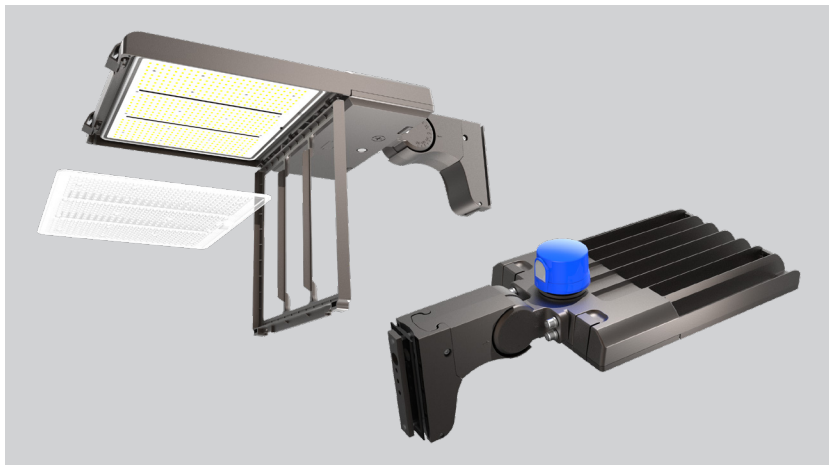
## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### DESCRIPTION

290W Power and Color Select Optic Swap LED Area Light | 120-277V Input | Bronze Housing | Adjustable Pole Mount Kit Included

### APPLICATION

Pole-mount or structure-mount outdoor illumination needs (including parking lots, auto dealerships, pathways, roadways, recreational venues, and other general area lighting requirements)



### PRODUCT FEATURES

- Keystone Power Select technology (290/210/185W)
- Keystone Color Select technology (3000/4000/5000K)
- Innovative optic swap capability under door frame and latch design for quick lens change
- Three lenses in the box: Type III installed, Types IV and V included
- Type II lens sold separately. See below for details
- Heavy duty die cast aluminum housing with ample heat sinking
- Low-profile design delivers high-performance illumination and improves application site aesthetics
- True U0 design for Dark Sky friendly performance that eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 7-pin twist-lock receptacle with 3-pin photocell and shorting cap. Standard on all fixtures, simplifies ordering requirements for photo control needs
- Comes with a pre-installed adjustable pole mount kit for easy and quick mounting to square or round poles
- Keystone 0-10V dimming driver
- Ambient operating temperature: -40°C/-40°F to 50°C/122°F
- UL Certified, IP65 rated
- Power factor: > 0.95
- THD: < 20%
- LED chip lifetime: L70 > 100,000 hrs @ 25°C/77°F ambient fixture temperature
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions

### PRODUCT SPECIFICATIONS

Catalog No.	Wattage	CCT	Lumens	Efficacy	Input Voltage	Dimming	CRI	Distribution Pattern	Photocell Included	Housing Color	Legacy Equivalent
KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P	290W	3000K	36320	125 lm/W	120-277V	0-10V	>80	Type III Installed, Types IV and V Included	Yes	Bronze	1000W MH
		4000K	42770	147 lm/W							
		5000K	38700	133 lm/W							
	210W	3000K	27300	130 lm/W							
		4000K	31710	151 lm/W							
		5000K	28980	138 lm/W							
	185W	3000K	22970	124 lm/W							
		4000K	27060	146 lm/W							
		5000K	24440	132 lm/W							

\* Fixtures with Type 2 (II) and Type 4 (IV) optics are available and assembled to order. Lead times may apply. Type II (2) lenses are sold separately. For more information, see accessories page below or contact Keystone with questions.  
 \*\*Fixtures (and mounts) with alternate housing colors are available and made to order. Extended lead times apply. Please see catalog number breakdown for full ordering code details.

# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### PHYSICAL SPECIFICATIONS

#### POLE-MOUNT LED AREA LIGHT FIXTURE

Technical drawing showing the physical specifications of the pole-mount LED area light fixture. The front view shows a rectangular fixture with a width of 28.80" and a height of 13.97". The depth of the fixture is 19.72". The side view shows a mounting arm with a length of 3.01" and a height of 6.67".

PACKAGING	
Carton Quantity	1 piece
Carton Dimensions	5.63"H x 15.95"W x 26.18"L
Carton Weight	17.53 lbs

#### ADJUSTABLE POLE MOUNT KIT DRILLING HOLES

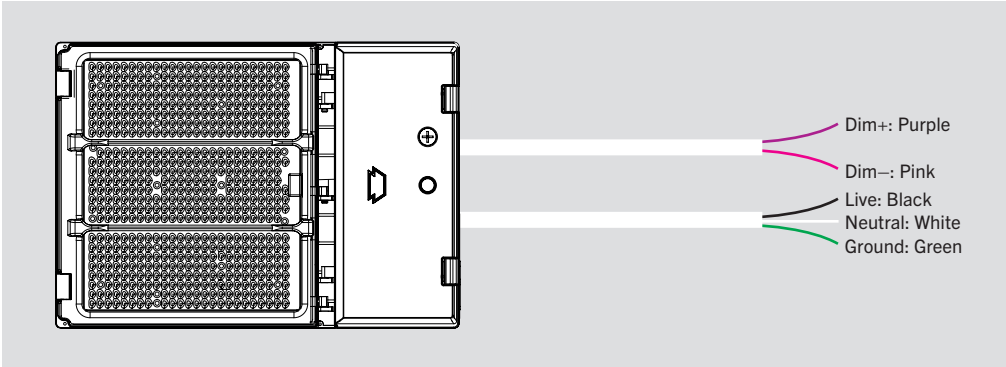
Technical drawing showing the adjustable pole mount kit drilling holes. The main view shows a vertical pole with a diameter of 2.63". The mounting holes are located at the following vertical distances from the top: 1.13" (Ø0.38"), 1.75" (Ø0.69"), 3.19" (Ø0.38"), 5.50" (Ø0.38"), and 6.69" (Ø0.38"). A secondary hole is located 2.31" from the bottom. The side view shows a mounting arm with a length of 6.69" and a height of 2.25".

Three 3D perspective views of the pole mount kit components: the mounting arm, the mounting bracket, and the mounting plate.

# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### WIRING DIAGRAM

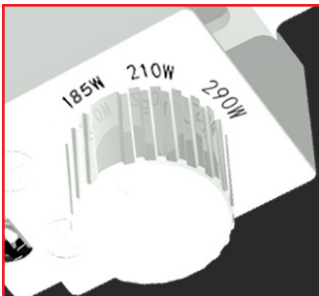


- This fixture comes pre-wired with a 7-pin twist-lock receptacle with shorting cap. Make input connections as needed and ensure connections are protected from exposure to the elements.
- **Input voltage rating: 120–277V**
- Ensure that input voltage on site matches the fixture you intend to install.

### POWER SELECT (WATTAGE) AND COLOR SELECT (CCT) ADJUSTMENT

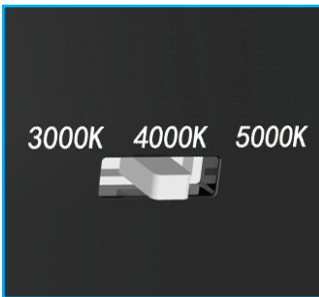
This fixture is equipped with field-adjustable Keystone Power Select and Color Select technology.

1. Ensure power is off to the fixture.
2. Open the driver compartment located on the underside of the fixture.
3. Adjust switches to desired settings.



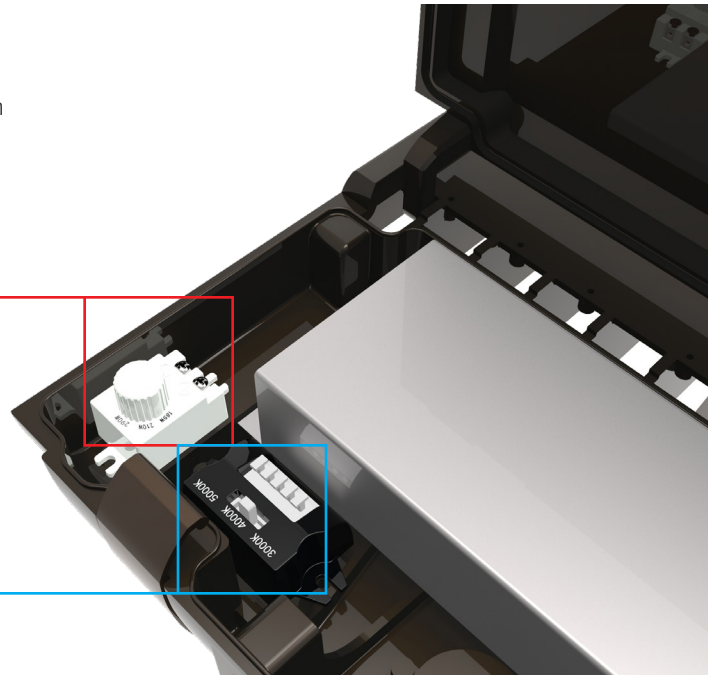
#### POWER SELECT ADJUSTMENT DIAL

Set switch to adjust wattage between 290W, 210W, and 185W. Fixture comes preset at 290W.



#### COLOR SELECT ADJUSTMENT SWITCH

Set switch to adjust CCT between 3000K, 4000K, and 5000K. Fixture comes preset at 5000K.



# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

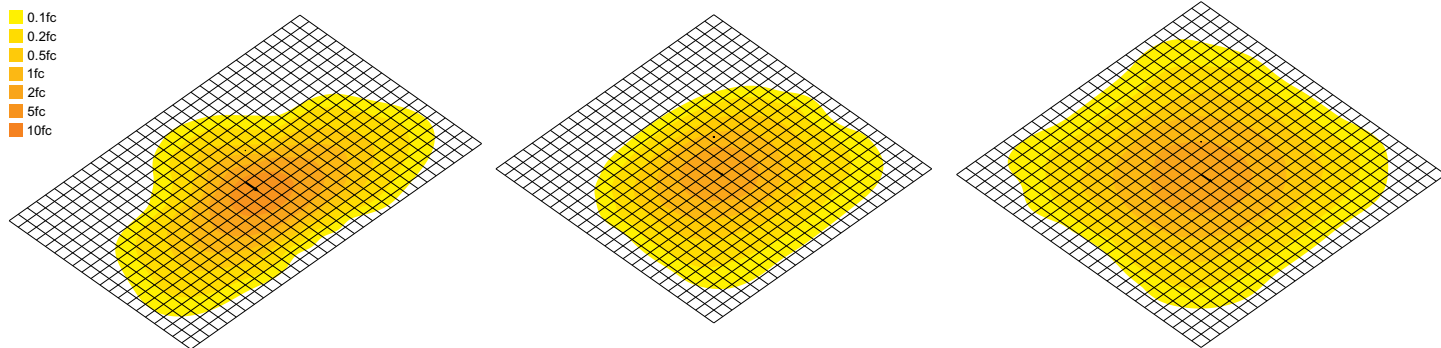
### LIGHT DISTRIBUTION PATTERN

Photometric layouts for general reference only. All fixtures are pole mounted at 35ft. Each square is 10 ft x 10 ft

TYPE III (3)

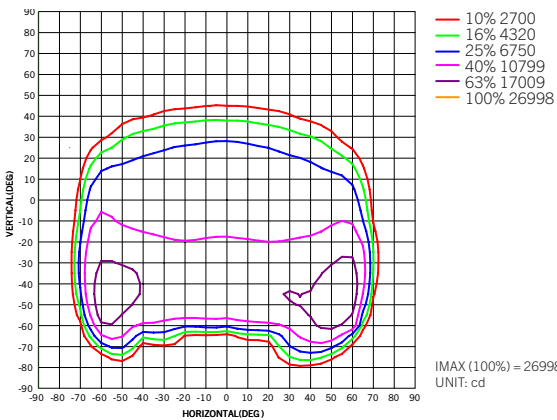
TYPE IV (4)

TYPE V (5)

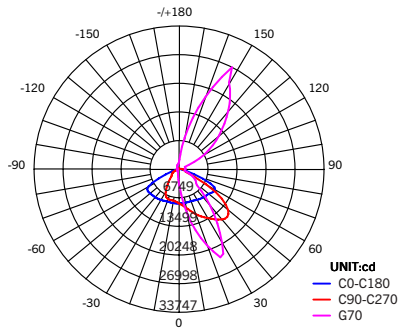


### PHOTOMETRIC SPECIFICATIONS (TYPE III [3])

ISOCANDELA PLOT

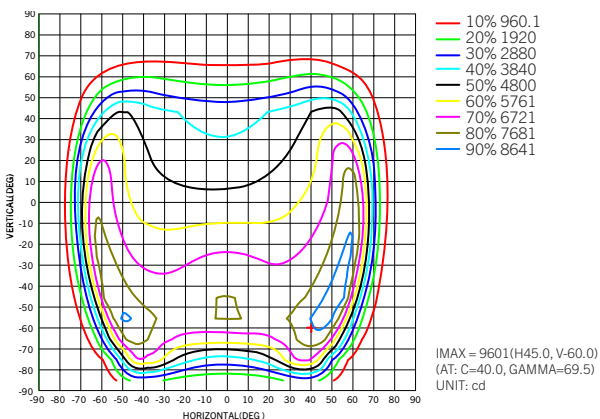


LUMINOUS INTENSITY DISTRIBUTION

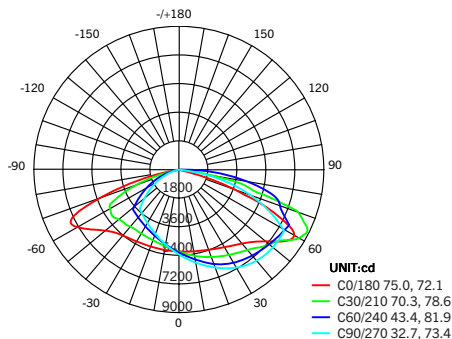


### PHOTOMETRIC SPECIFICATIONS (TYPE IV [4])

ISOCANDELA PLOT



LUMINOUS INTENSITY DISTRIBUTION



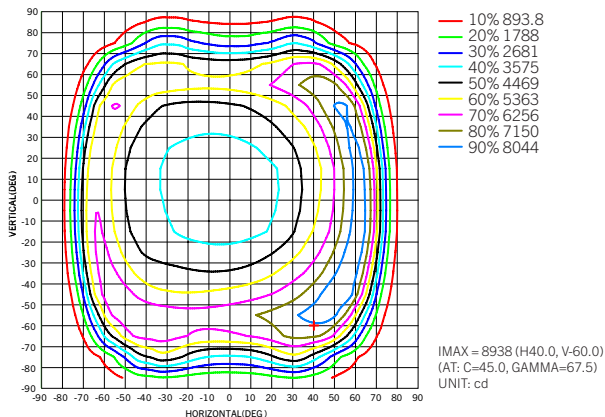


# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

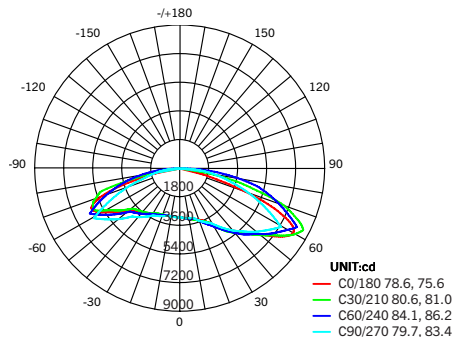
## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### PHOTOMETRIC SPECIFICATIONS (TYPE V [5])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



### EPA SPECIFICATIONS

#### LARGE-SIZE FIXTURE HOUSING

- Conditions: Horizontal winds only for calculations. Worst case total projected area used for calculations.
- All drag coefficients are set as worst case 1.2.
- For details on exact EPA calculations and assumptions, please contact [productsupport@keystonetech.com](mailto:productsupport@keystonetech.com)

EPA Calcs (1.2*ft <sup>2</sup>   View)		Single Fixture	2 Fixtures at 90°	2 Fixtures at 180°	3 Fixtures at 90°	3 Fixtures at 120°	4 Fixtures at 90°	2 Fixtures Side-by-Side	3 Fixtures Side-by-Side	4 Fixtures Side-by-Side
Mounting Application	Fixture Position									
Adjustable Pole Mount 	Horizontal	0.62 sq. ft.	0.90 sq. ft.	1.24 sq. ft.	1.42 sq. ft.	1.48 sq. ft.	1.42 sq. ft.	0.74 sq. ft.	1.11 sq. ft.	1.48 sq. ft.
	45°	1.85 sq. ft.	2.43 sq. ft.	1.85 sq. ft.	3.01 sq. ft.	4.42 sq. ft.	3.01 sq. ft.	3.70 sq. ft.	5.55 sq. ft.	7.40 sq. ft.

# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

### ACCESSORIES (SOLD SEPARATELY)

#### SENSORS

Factory-Installable OR Field-Installable (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/MW3	KTS-MW3-12V-PKO	12V Microwave Occupancy Sensor	843654130637	TRM-32
	/FC3	KTSL-FC3-12V-PKO-PIR	Bluetooth mesh wireless Smart Port LED controller for SmartLoop system with integrated daylight and PIR motion sensor.	843654138862	OCW-60
	/FC4	KTSL-FC4-12V-PKO	Bluetooth mesh wireless screw-in low voltage fixture controller for SmartLoop system	843654149066	RUN-10



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

#### Field-Installable / Field-Use ONLY (purchased separately)

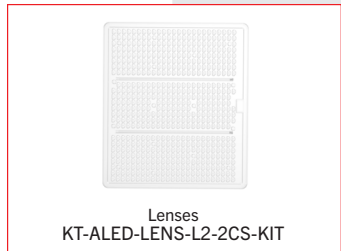
CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KTS-MW3-REMOTECONTROL	Remote Control for KTS-MW3-12V-XX Sensors, Sets/adjusts all sensor performance parameters	843654132020	XSR-61



#### LENSES

#### Field-Installable / Field-Use ONLY (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KT-ALED-LENS-L2-2CS-KIT	Type II Optics Lens for Color Select, Large Size Housing, Series 2 Area Lights	843654153858	HXC-12



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).



# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

## POLE-MOUNT LED AREA LIGHT PREMIUM PACKAGE

**ACCESSORIES CONTINUED (SOLD SEPARATELY)**

### MOUNTS AND BRACKETS

Field-Installable / Field-Use **ONLY** (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KT-ALED-GS-L2-KIT	Reversible Glare Shield for Large Size Housing, Series 2 Area Lights, Bronze	843654153810	RDW-18



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

### ORDERING INFORMATION

ORDER CODE	PACK QTY.	UPC	Easy Code
KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P	1	843654153124	LWD-80

### CATALOG NUMBER BREAKDOWN

# KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>1</b> Keystone Technologies	<b>2</b> Fixture Type	<b>3</b> LED Technology	<b>4</b> Max Wattage	<b>5</b> Power Select	<b>6</b> Size/Shape	<b>7</b> Style/Design Designation	<b>8</b> Optic Swap	<b>9</b> Optic Swap Designation	<b>10</b> Pole Mount Adjustable	<b>11</b> 80 CRI	<b>12</b> Color Select	<b>13</b> Color Select Designation	<b>14</b> 0-10V Dimming	<b>15</b> Stock Package

<b>9</b> Optic Swap Designation	<b>B</b> Type III lens installed, Type IV and V lens included
<b>13</b> Color Select Designation	<b>B</b> 3000/4000/5000K

### ORDERING EXAMPLES

FIXTURE WITH SINGLE FACTORY-INSTALLED ACCESSORY

**KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P /7PRS**

KEYSTONE FIXTURE
CATALOG NUMBER
KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P

FIXTURE WITH NO FACTORY-INSTALLED ACCESSORIES

**KT-ALED290PS-L2-OSB-PMA-8CSB-VDIM-P**

SENSORS	
SUFFIX	CATALOG NUMBER
✓ /7PRS	KT-RSC-7PN

\* When ordering more than one factory-installed accessory, use multiple suffixes as shown in the ordering examples above.  
 Note: All accessories can also be ordered separately for field installation using just their regular Catalog Number, UPC, or Easy Code.



## KT-WPLED60-M2-8XX-VDIM

### ARCHITECTURAL FULL-CUTOFF LED WALL PACK

#### DESCRIPTION

Architectural 60W Full-Cutoff LED Wall Pack | 120–277V Input |  
4000–5000K | Medium Housing | Bronze Finish | Wide Optic Lens

#### APPLICATION

Building mount for exterior illumination (perimeters, pathways,  
loading docks, and other general security lighting requirements)



**10 YEAR**  
LIMITED WARRANTY

#### PRODUCT FEATURES

- Architectural full cutoff design that improves building appearance and optimizes functional light distribution
- Heavy duty die cast aluminum housing with (5) 1/2" threaded conduit hubs: (1) on back and (1) on all four sides
- Powered by Keystone 0–10V dimming LED drivers
- Dark Sky friendly performance that eliminates undesirable sky glow and glare
- Features one translucent 3/4" threaded plug with anti-yellowing agent for use with photocell accessory KT-WPLED-PS-UV-KO, sold separately
- Precision-crafted optical lens that provides wide distribution pattern ideal for increased fixture spacing and uniformity
- Covers footprint of mid-size HID wallpacks
- Ambient operating temperature: –40°C/–40°F to 50°C/122°F
- UL Certified for wet locations; IP65 rated
- Fixture impact rating IK08
- Power Factor: >0.95
- THD: <20%
- LED chip lifetime: L70 >100,000 hrs @ 25°C/77°F ambient fixture temperature
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions
- **Compatible with Keystone LED Emergency Backups. See Accessories page for more details**

#### PRODUCT SPECIFICATIONS

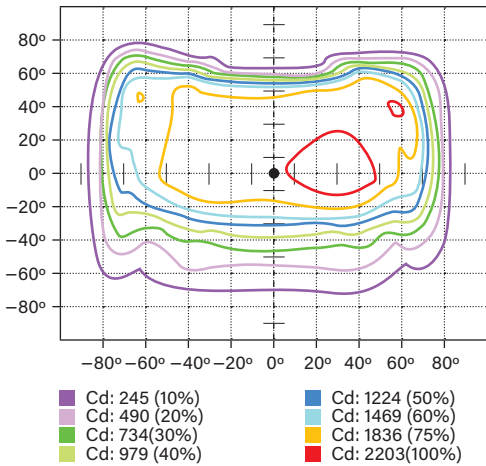
Catalog Number	Wattage	Lumens	Lumens Below 90°	Dimming	CCT	Efficacy	CRI	Housing Color	Input Voltage	Rated Life	Legacy Equivalent
KT-WPLED60-M2-840-VDIM	60W	7500	7445	0–10V	4000K	125 lm/W	>80	Bronze	120–277V	50,000 hrs	250W MH
KT-WPLED60-M2-850-VDIM		7800	7745		5000K	130 lm/W					

# KT-WPLED60-M2-8XX-VDIM

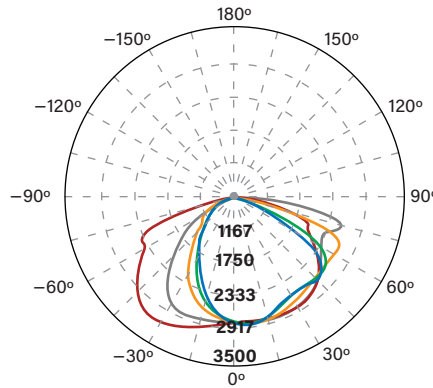
## ARCHITECTURAL FULL-CUTOFF LED WALL PACK

### PHOTOMETRIC SPECIFICATIONS

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **114.2°**

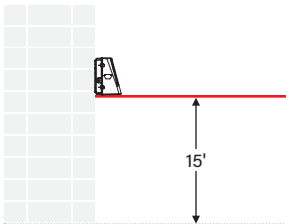
- 1 Blue - 0° H
- 2 Red - 90° H
- 3 Green - 22.5° H
- 4 Orange - 45° H
- 5 Grey - 67.5° H

#### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
<b>Forward Light</b>	4,722 lm	65.0%
0°-30°	907 lm	12.5%
30°-60°	2,329 lm	32.0%
60°-80°	1,327 lm	18.3%
80°-90°	159 lm	2.2%
<b>Back Light</b>	2,520 lm	34.6%
0°-30°	772 lm	10.6%
30°-60°	1,249 lm	17.2%
60°-80°	454 lm	6.2%
80°-90°	45 lm	0.6%
<b>Up Light</b>	25 lm	0.4%
90°-100°	4 lm	0.1%
100°-180°	21 lm	0.3%

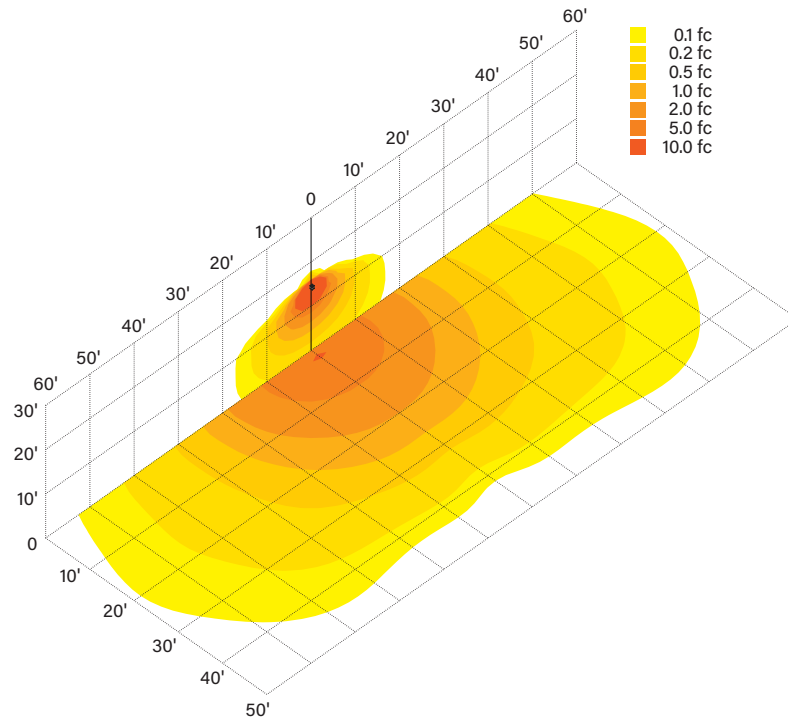
#### MOUNTING

Side view



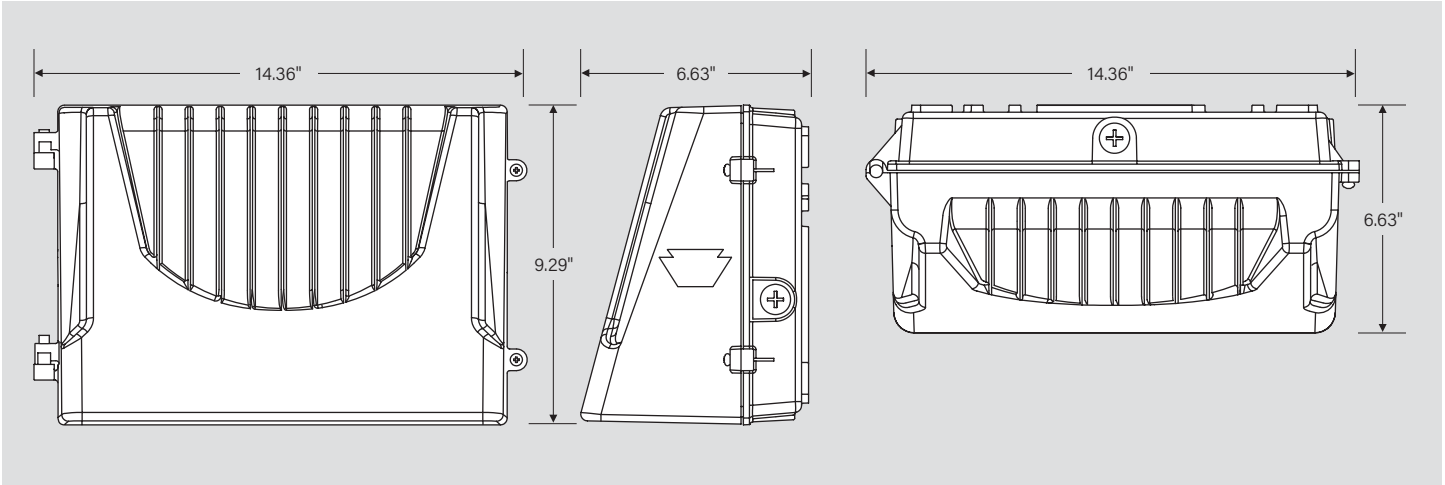
#### LIGHT DISTRIBUTION PATTERN

Isometric view from above; Luminaire mounted at 15'



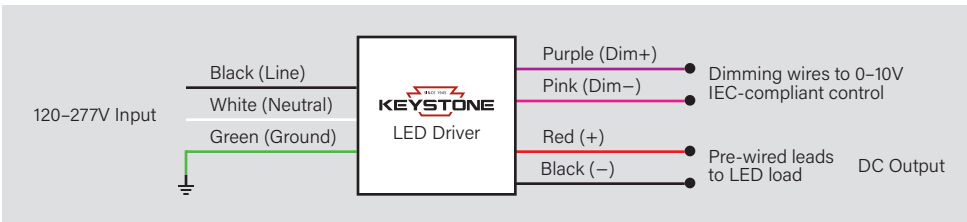
**KT-WPLED60-M2-8XX-VDIM**  
 ARCHITECTURAL FULL-CUTOFF LED WALL PACK

**PHYSICAL SPECIFICATIONS**



**GENERAL SETUP INSTRUCTIONS**

**GENERAL WIRING DIAGRAM**



**Caution:** Before installing, make certain that AC power to the fixture is off.

**Caution:** The electrical rating of this product is 120-277V. Installer must confirm that there is 120-277V at the fixture before installation.

# KT-WPLED60-M2-8XX-VDIM

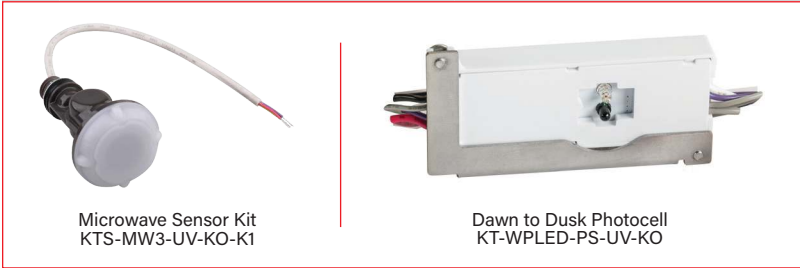
## ARCHITECTURAL FULL-CUTOFF LED WALL PACK

**ACCESSORIES**

**SENSORS**

**Factory-Installable OR Field-Installable** (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/MW3	KTS-MW3-UV-KO-K1	Microwave Sensor Kit, Includes 120-277V input to 12V DC convertor & 12V input sensor head, IP65. Bi-Level Control with Adjustable Hold Time, Dim Level and Standby Time. Installs via standard 1/2in KO	843654134147	BKG-51
	/PS	KT-WPLED-PS-UV-KO	Dawn to Dusk Photocell for WallPack fixtures. Fits M1, M2, L1 housings. 120-277V Input. Install via standard 1/2in KO	843654129198	DLU-58

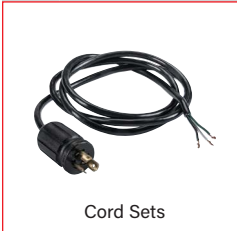


*\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).*

**CORD SETS**

**Factory-Installable OR Field-Installable** (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/515P6	KT-CS-515P-6-18/3	Cord set for high bay; 125V NEMA 5-15P; straight blade plug; 6' SJTOW cable; 18/3 wire	843654140124	UKH-26
	/L515P6	KT-CS-L515P-6-16/3	Cord set for high bays; 250V NEMA L5-15P; twist lock plug; 6' SJTOW cable; 16/3 wire	843654140186	POC-82



*\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).  
**Note:** For cord sets not listed here, please contact your Keystone sales rep.*

*(Accessories continued on next page)*

# KT-WPLED60-M2-8XX-VDIM

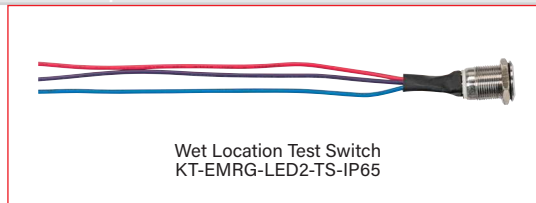
## ARCHITECTURAL FULL-CUTOFF LED WALL PACK

**ACCESSORIES (continued)**

**EMERGENCY BACKUP**

**Factory-Installable OR Field-Installable** (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/EM12	KT-EMRG-LED-12C-1200	LED Emergency Back-Up, 12W Constant Wattage Design. Approx 1200 Lumens. 120-277V Input. Remote Compact Battery Pack. CEC T20 Compliant.	843654103112	OJQ-32
	-	KT-EMRG-LED2-TS-IP65	IP65 Rated Wet Location Test Switch for 5W and 12W CEC Compliant LED Emergency Packs	843654130019	MDB-29

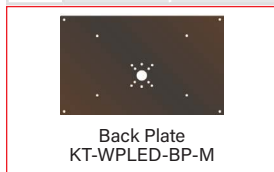


\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).  
† Factory installation of emergency backup units will automatically include any relevant mounting bracket.

**MOUNTS AND BRACKETS**

**Field-Installable / Field-Use ONLY** (purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	-	KT-WPLED-BP-M	Back Plate for Medium Size Wallpacks, Covers Legacy Style Large HID Housing Dimensions. Standard Bronze Color.	843654130613	CCJ-21



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).  
**Note:** This is needed with EM - will be added when factory installing EM

**SURGE PROTECTORS**

**Factory-Installable OR Field-Installable** (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/10KV	KTSP-10KV-C	External Surge Protector, compact design. Parallel Wiring, 120-277V Input, Max Peak Protection (10KV, 10KA)	843654129204	BUU-26



\* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).





# KT-WPLED60-M2-8XX-VDIM

## ARCHITECTURAL FULL-CUTOFF LED WALL PACK

### ORDERING INFORMATION

CATALOG NUMBER	PACK QTY.	UPC	EASY CODE	DLC PRODUCT ID
KT-WPLED60-M2-840-VDIM	1	843654129075	VMR-18	PIKA3HFT
KT-WPLED60-M2-850-VDIM	1	843654129082	OYW-93	PPT7NCOK

### CATALOG NUMBER BREAKDOWN

# KT-WPLED60-M2-8XX-VDIM

1	2	3	4	5	6	7	8	9	10
<b>1 Keystone Technologies</b>	<b>2 Fixture Type</b>	<b>3 LED Lamp</b>	<b>4 Max Wattage</b>	<b>5 Size</b>	<b>6 Style</b>	<b>7 CRI</b>	<b>8 CCT</b>	<b>9 Dimming</b>	<b>10 Additional Options</b>
	WP Wallpack			M Medium	2 Full-Cutoff	8 >80		VDIM 0-10V	
							40 4000K		
							50 5000K		

### ORDERING EXAMPLES

FIXTURE WITH MULTIPLE FACTORY-INSTALLED ACCESSORIES\*

**KT-WPLED60-M2-8XX-VDIM /MW3/515P6/EM12**

FIXTURE WITH SINGLE FACTORY-INSTALLED ACCESSORY

**KT-WPLED60-M2-8XX-VDIM /MW3**

FIXTURE WITH NO FACTORY-INSTALLED ACCESSORIES

**KT-WPLED60-M2-8XX-VDIM**

#### KEYSTONE FIXTURE

CATALOG NUMBER
KT-WPLED60-M2-8XX-VDIM

#### SENSORS

<input checked="" type="checkbox"/>	SUFFIX	CATALOG NUMBER
<input checked="" type="checkbox"/>	/MW3	KTS-MW3-UV-KO-K1

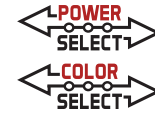
#### CORD SETS

<input checked="" type="checkbox"/>	SUFFIX	CATALOG NUMBER
<input checked="" type="checkbox"/>	/515P6	KT-CS-515P-6-18/3

#### EMERGENCY BACKUP

<input checked="" type="checkbox"/>	SUFFIX	CATALOG NUMBER
<input checked="" type="checkbox"/>	/EM12	KT-EMRG-LED-12C-1200

\* When ordering more than one factory-installed accessory, use multiple suffixes as shown in the ordering examples above.  
 Note: All accessories can also be ordered separately for field installation using just their regular Catalog Number, UPC, or Easy Code.



# KT-RDLED18PS-6A-9CSE-VDIM

## 6" RECESSED DOWNLIGHT

### DESCRIPTION

6" Recessed Downlight | Power Select Technology | Color Select Technology | Internal Driver and Integral Whip

### APPLICATION

Ideal for hospitality, retail, office, and other retrofit and new construction applications



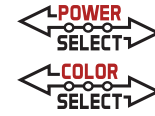
### PRODUCT FEATURES

- Keystone Power Select and Color Select technologies offer SKU reduction and allow for easy, on-the-job adjustments
- Designed with integral whip to connect directly to a junction box; Ideal for installation into existing CFL pin-based fixture infrastructure
- Integral driver eliminates the need for a traditional multi-piece fixture setup
- Ideal for new construction, remodel, and retrofit applications
- Smooth reflector trim offers clean, modern appearance
- Diffused lens reduces glare
- Interchangeable trims available in matte black, brushed nickel, and bronze
- Powered by Keystone 0–10V dimming LED driver; 10–100% dimming
- Ambient operating temperature: –20°C/–4°F to 40°C/104°F
- Suitable for use in wet locations
- Airtight and Type IC-rated
- Power factor: >0.90
- THD: <20%
- LED chip lifetime: L70 >80,000 hrs @ 25°C/77°F ambient fixture temp
- FCC Part 15, Subpart B, Class B
- CEC Compliant Flicker Rate (CEC JA10 std.)

### PERFORMANCE SPECIFICATIONS

Catalog Number	Input Voltage	Wattage (Selectable)	CCT (Selectable)*	Lumen Output	Efficacy	CRI	Power Factor	Lifetime
KT-RDLED18PS-6A-9CSE-VDIM	120–277V	18.5W	3000K	1450	78 lm/W	>90	>0.9	50,000 hrs
			3500K	1550	84 lm/W			
			4000K	1500	81 lm/W			
		13W	3000K	1000	77 lm/W			
			3500K	1100	85 lm/W			
			4000K	1050	81 lm/W			
		9W	3000K	700	78 lm/W			
			3500K	750	83 lm/W			
			4000K	725	81 lm/W			

\* Preset to highest CCT: 4000K  
Color Uniformity: CCT (Correlated Color Temperature) range as per guidelines outlined in ANSI C78.377-2017

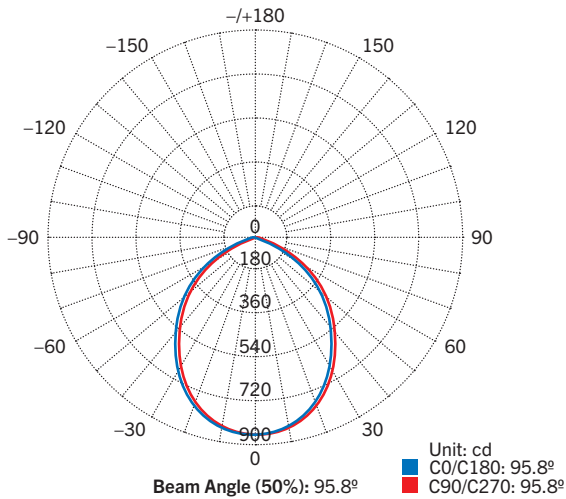


# KT-RDLED18PS-6A-9CSE-VDIM

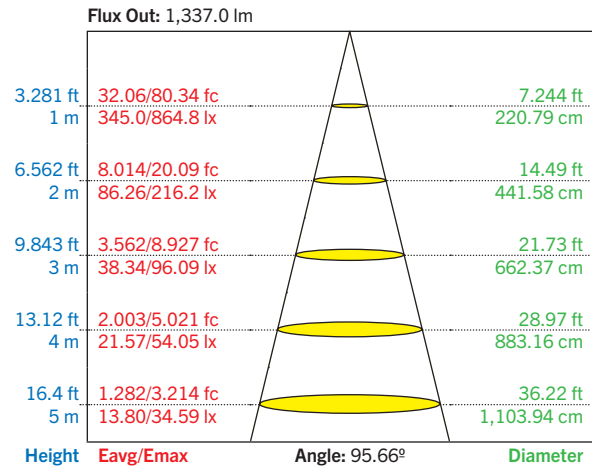
## 6" RECESSED DOWNLIGHT

### PHOTOMETRIC SPECIFICATIONS\*

#### POLAR CANDELA DISTRIBUTION

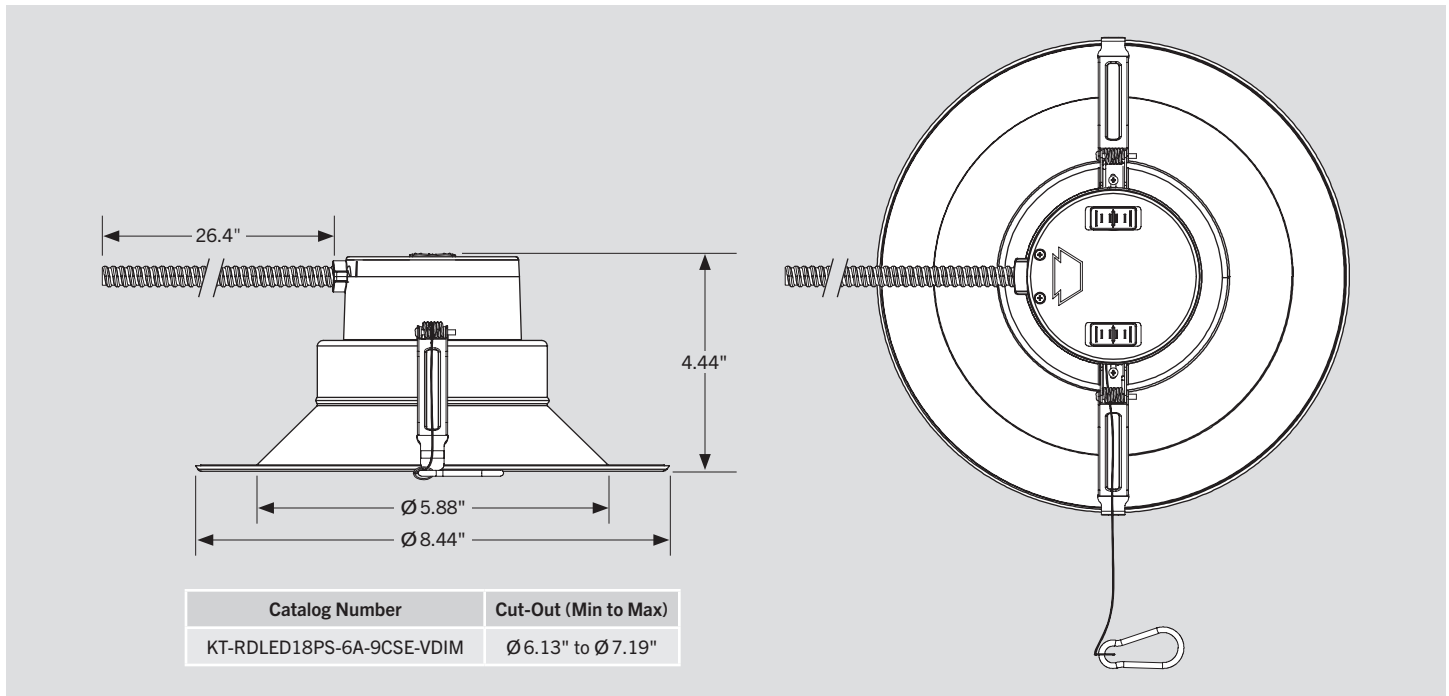


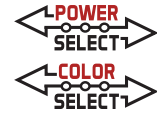
#### LUX DISTANCE CURVE



\* Tested at 18.5W and 3000K

### PHYSICAL SPECIFICATIONS





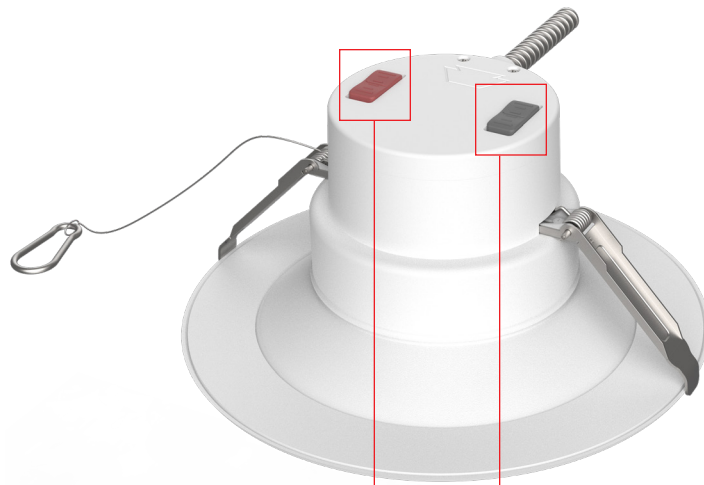
# KT-RDLED18PS-6A-9CSE-VDIM

## 6" RECESSED DOWNLIGHT

### POWER SELECT (WATTAGE) AND COLOR SELECT (CCT) ADJUSTMENT

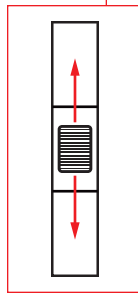
This fixture is equipped with field-adjustable Keystone Power Select and Color Select technology.

1. Ensure power is off to the fixture.
2. Adjust dip switches to desired settings.



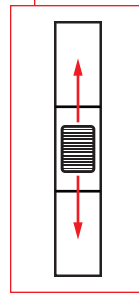
#### COLOR SELECT ADJUSTMENT SWITCH

Set dip switch to adjust CCT between 3000K, 3500K, and 4000K. Fixture comes preset at 4000K.

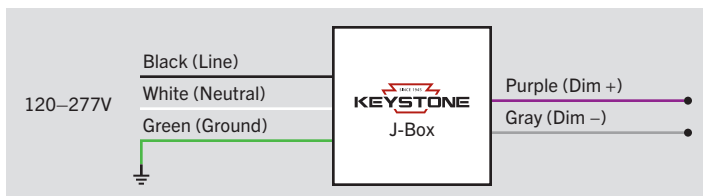


#### POWER SELECT ADJUSTMENT SWITCH

Set dip switch to adjust wattage between 9W, 13W, and 18.5W. Fixture comes preset at 18.5W.



### WIRING DIAGRAM





# ADVANTA



## KT-RDLED18PS-6A-9CSE-VDIM 6" RECESSED DOWNLIGHT

### INSTALLATION INSTRUCTIONS

#### RETROFIT INSTALLATION

- 1. Shut off power at the source of the fixture housing into which you are installing fixture.**

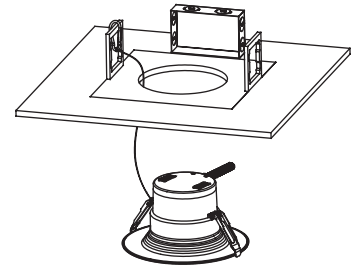
Remove existing trim and CFL or incandescent bulb.

**Note:** Follow all federal and local regulations when disposing of lamps and removed components.

- 2. Measure ceiling opening to ensure that the edge of the luminaire will cover the entire opening and still sit firmly in the ceiling (see *Physical Specifications* on page 2).**

- 3. Select desired Wattage and CCT using adjustment switches on fixture (see *Power Select (Wattage) and Color Select (CCT) Adjustment* on page 3).**

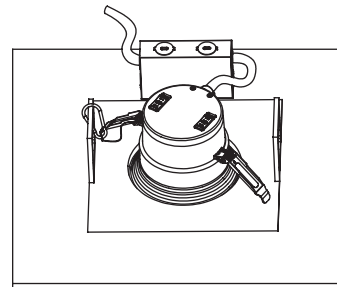
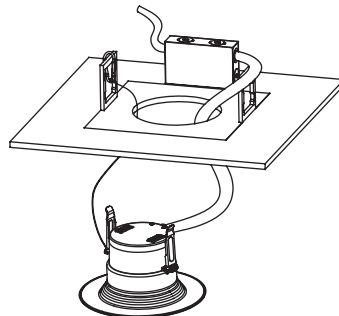
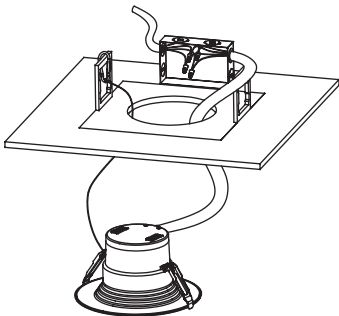
- 4. Attach carabiner safety clip to the existing fixture housing.**



- 5. Insert lamp conduit into J-box and wire to power source (see *Wiring Diagram* on page 3). Reattach J-box cover when done.**

- 6. Squeeze the two housing clips so they are in an upright position and then insert lamp into housing.**

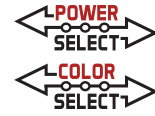
- 7. Once lamp is inside housing, release housing clips and continue to push lamp into housing until securely fixed and flush with ceiling. Restore power.**



(Installation Instructions continued on next page)



# ADVANTA

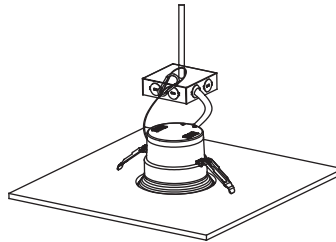
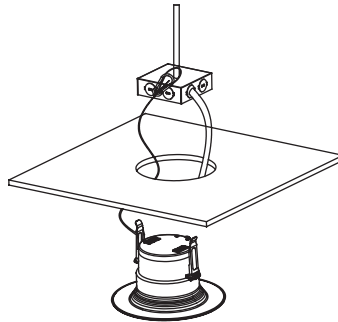
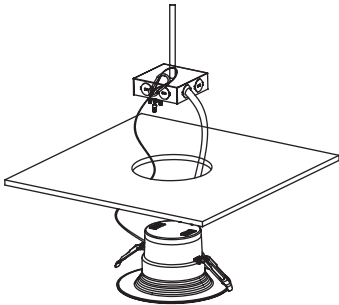
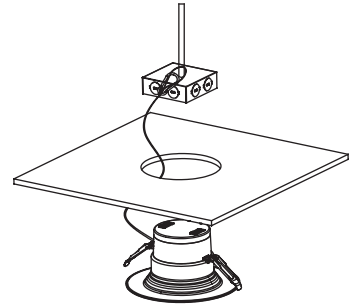


## KT-RDLED18PS-6A-9CSE-VDIM 6" RECESSED DOWNLIGHT

### INSTALLATION INSTRUCTIONS (continued)

#### NEW-CONSTRUCTION INSTALLATION\*

1. Shut off power at the source of the fixture housing into which you are installing fixture.
2. Create ceiling opening to ensure that the edge of the luminaire will cover the entire opening and still sit firmly in the ceiling (see *Physical Specifications* on page 2).
3. Select desired Wattage and CCT using adjustment switches on fixture (see *Power Select (Wattage) and Color Select (CCT) Adjustment* on page 3).
4. Attach carabiner safety clip to secure location in ceiling.
5. Insert lamp conduit into J-box and wire to power source (see *Wiring Diagram* on page 3). Reattach J-box cover when done.
6. Squeeze the two housing clips so they are in an upright position and then insert lamp into opening.
7. Once lamp is inside opening, release housing clips and continue to push lamp into opening until securely fixed and flush with ceiling. Restore power.



\* Keystone offers optional New Construction Plate (KT-RDLED-PLATE-1) for both new joist and T-grid installations. See Optional Accessories (sold separately) on page 6.



# ADVANTA



## KT-RDLED18PS-6A-9CSE-VDIM 6" RECESSED DOWNLIGHT

### OPTIONAL ACCESSORIES (sold separately)

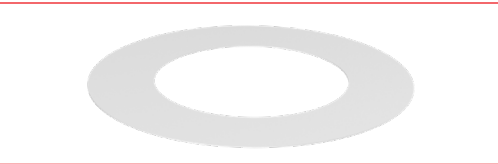
#### INTERCHANGEABLE TRIM

Catalog Number	Description	UPC	Easy Code
KT-RDLED-6A-MB-TRIM	6" Interchangeable trim for 6" recessed downlights; Matte black	843654137155	TCP-85
KT-RDLED-6A-BN-TRIM	6" Interchangeable trim for 6" recessed downlights; Brushed nickel	843654137186	CZZ-70
KT-RDLED-6A-BR-TRIM	6" Interchangeable trim for 6" recessed downlights; Bronze	843654137216	CUN-05



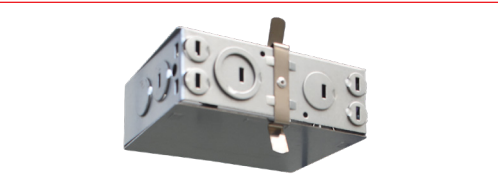
#### GOOF RING

Catalog Number	Description	UPC	Easy Code
KT-RDLED-6A-GOOF	6" Goof ring for 6" recessed downlights; 10.51" outer diameter	843654137247	LFJ-16



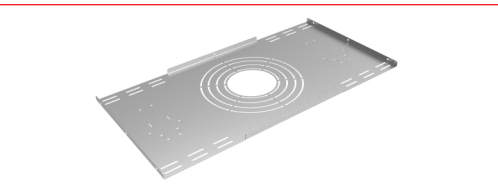
#### JUNCTION BOX

Catalog Number	Description	UPC	Easy Code
KT-RDLED-JBOX-1-KIT	Junction box for recessed downlights	843654137278	HJA-70



#### NEW-CONSTRUCTION PLATE

Catalog Number	Description	UPC	Easy Code
KT-RDLED-PLATE-1	New-construction plate for recessed downlights	843654137285	BMS-81



#### EMERGENCY PACK

Catalog Number	Description	UPC	Easy Code
KT-EMRG-LED-12-1200-AC/DF	LED Emergency Backup, 12W - 1200 Lumen Constant Power Design. 120-277V Input. Dual Flex Cable Design. Installs on Primary Side of AC Powered LED load.	843654139890	MPM-43





# KT-RDLED18PS-6A-9CSE-VDIM

## 6" RECESSED DOWNLIGHT

### ORDERING INFORMATION

Catalog Number	Pack Qty.	UPC	Easy Code
KT-RDLED18PS-6A-9CSE-VDIM	1	843654137117	EIK-33

### CATALOG NUMBER BREAKDOWN

# KT-RDLED18PS-6A-9CSE-VDIM

1 2 3 4 5 6 7 8 9 10 11

- 1 Keystone Technologies
- 2 Fixture Type
 

RD	Recessed Downlight
----	--------------------
- 3 LED Technology
- 4 Maximum Wattage
- 5 Power Select Technology
- 6 Size
 

6	6" Nominal
---	------------
- 7 Style/Design Designation
 

A	Series A
---	----------
- 8 CRI
 

9	90
---	----
- 10 Color Select Designation
 

E	3000K, 3500K, 4000K
---	---------------------
- 11 Dimming
 

VDIM	0-10V Dimming
------	---------------





# KT-SP-XSQ-XX-XXG-UNV-K1

## SQUARE STRAIGHT STEEL POLE

### DESCRIPTION

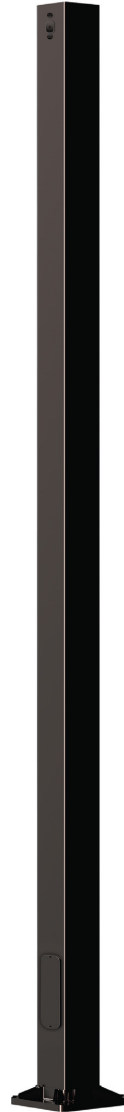
The Keystone Square Pole Kits are designed for top or side mounted luminaries, with a new universal drill pattern on all four sides of the pole. Polycarbonate black plugs are included to cover all unused holes (12 total). Kits are stocked in 15', 17', 20', 25' and 30' lengths in a dark bronze finish. Pole kit includes pole, pole cap, base plate cover, hand-hole cover, anchor bolts and anchor bolt template.

### CONSTRUCTION

- High grade steel exceeds ASTM A597 Grade C (IS 2062 E350) with minimum yield strength of 55,000 PSI
- Base plates constructed of high strength ASTM A36 steel with 36,000 PSI minimum yield strength
- Galvanized high strength ASTM A36 anchor bolts with 55,000 PSI minimum yield strength
- Poles have a standard bronze polyester powder coat finish over a base layer of zinc primer (custom finishes available, consult factory)
- Pre-drilled universal hole pattern on all four sides for flexible luminaire attachment (accommodates 2"-3" on-center hole patterns)

### INSTALLATION

- Pole includes spring-loaded polycarbonate pole cap, easily secured 2-piece base plate cover, reinforced cast-iron hand hole cover with ground screw, anchor bolts and bolt circle template
- 12 Plugs provided to seal unused drill holes at top of pole



### PERFORMANCE SPECIFICATIONS

Catalog Number	Height	Nominal Shaft Dimensions	Wall Thickness	Bolt Circle	Bolt Circle (Range)	Bolt Square (Range)	Base Plate Square	Anchor Bolt Size	Bolt Projection	Pole Weight
KT-SP-4SQ-15-11G-UNV-K1	15 ft.	4"	0.119"	9"	8" – 11"	5.66" – 7.78"	10.5"	3/4" x 30" x 4"	3.5"	127 lbs
KT-SP-4SQ-17-11G-UNV-K1	17 ft.	4"	0.119"	9"	8" – 11"	5.66" – 7.78"	10.5"	3/4" x 30" x 4"	3.5"	139 lbs
KT-SP-4SQ-20-11G-UNV-K1	20 ft.	4"	0.119"	9"	8" – 11"	5.66" – 7.78"	10.5"	3/4" x 30" x 4"	3.5"	157 lbs
KT-SP-4SQ-25-11G-UNV-K1	25 ft.	4"	0.119"	9"	8" – 11"	5.66" – 7.78"	10.5"	3/4" x 30" x 4"	3.5"	188 lbs
KT-SP-5SQ-30-11G-UNV-K1	30 ft.	5"	0.119"	11"	10.5" – 12"	7.47" – 8.63"	11"	3/4" x 30" x 4"	3.5"	275 lbs
KT-SP-5SQ-30-7G-UNV-K1	30 ft.	5"	0.179"	11"	10.5" – 12"	7.47" – 8.63"	11"	3/4" x 30" x 4"	3.5"	386 lbs

\* KT-ABOLT-K1 – Set of 4, 3/4" x 30" (included with pole)

\* KT-ABOLT-K2 – Set of 4, 1" x 36"



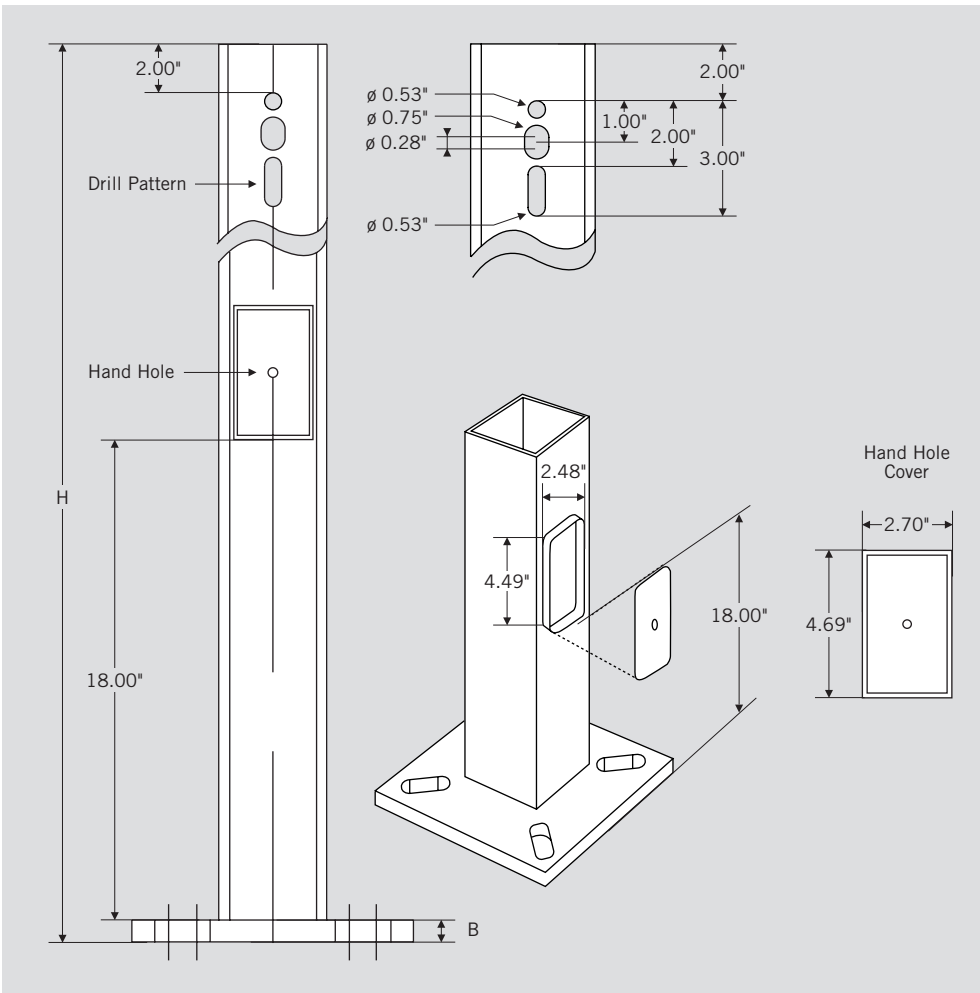
# KT-SP-XSQ-XX-XXG-UNV-K1

## SQUARE STRAIGHT STEEL POLE

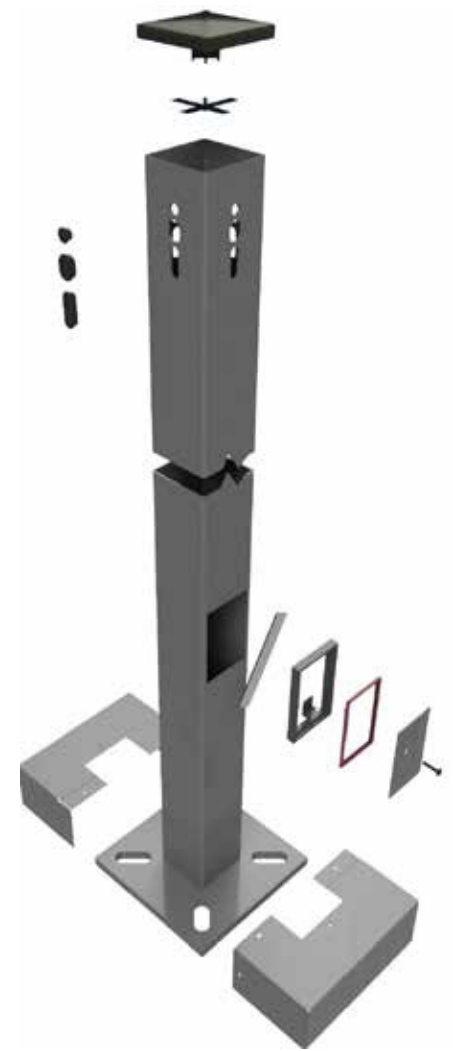
### INCLUDED ACCESSORIES

ANCHOR BOLTS JB3044 (Set of 4, 3/4" x 30")	BASE PLATE COVER	POLE CAP (Black)	HAND HOLE COVER	TEMPLATE	PLUGS (12 total)

### PHYSICAL SPECIFICATIONS



### EXPLODED VIEW



### DIMENSIONS

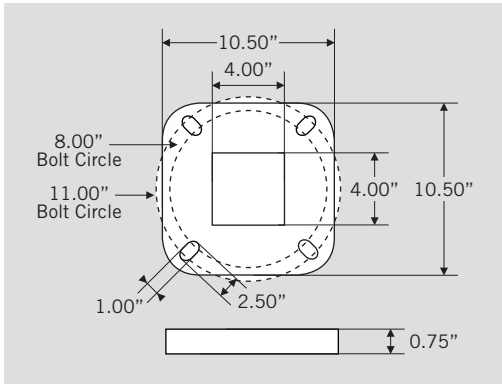
H	B
15' - 25'	0.75"
30'	1"

# KT-SP-XSQ-XX-XXG-UNV-K1

## SQUARE STRAIGHT STEEL POLE

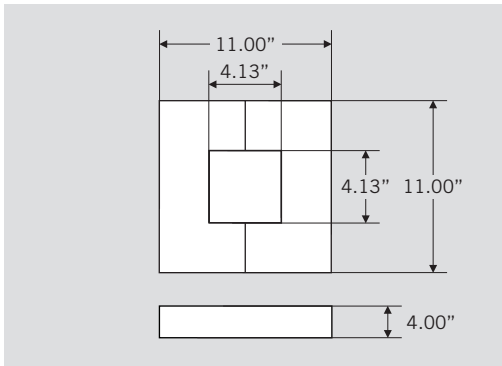
### 4" X 4" POLE SHAFT DIMENSIONS

#### BASE PLATE

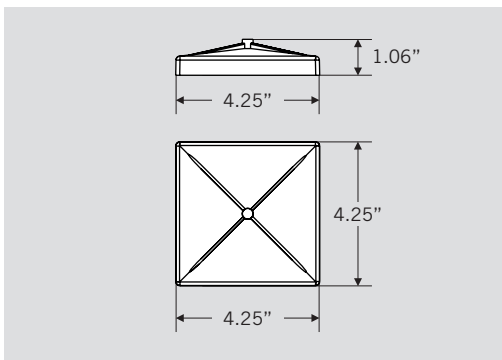


#### BASE PLATE COVER

(INCLUDED; PACKAGED SEPARATELY)

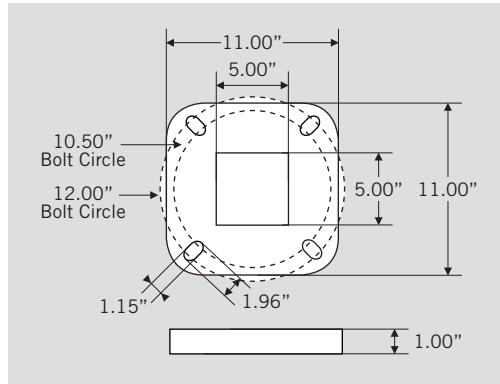


#### POLE CAP (INCLUDED)



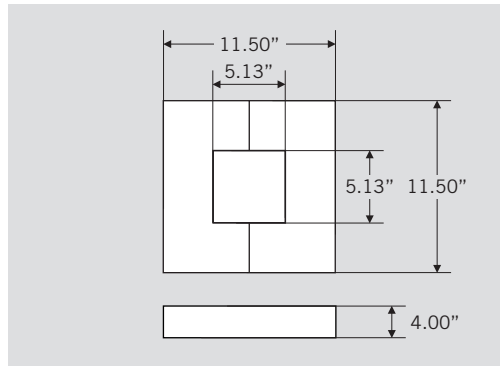
### 5" X 5" POLE SHAFT DIMENSIONS

#### BASE PLATE

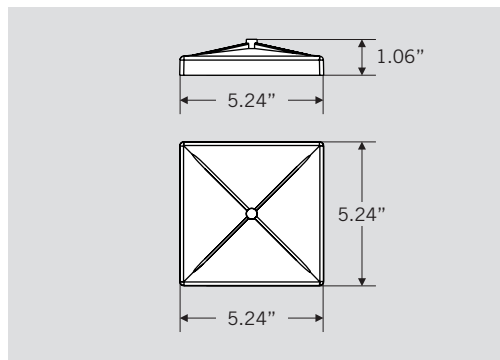


#### BASE PLATE COVER

(INCLUDED; PACKAGED SEPARATELY)



#### POLE CAP (INCLUDED)

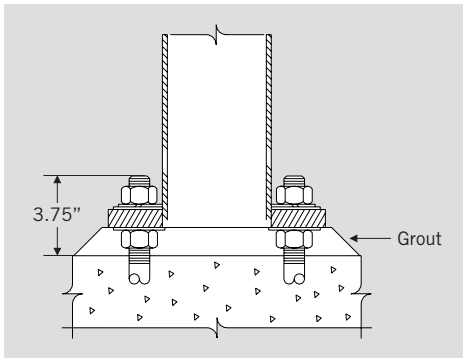




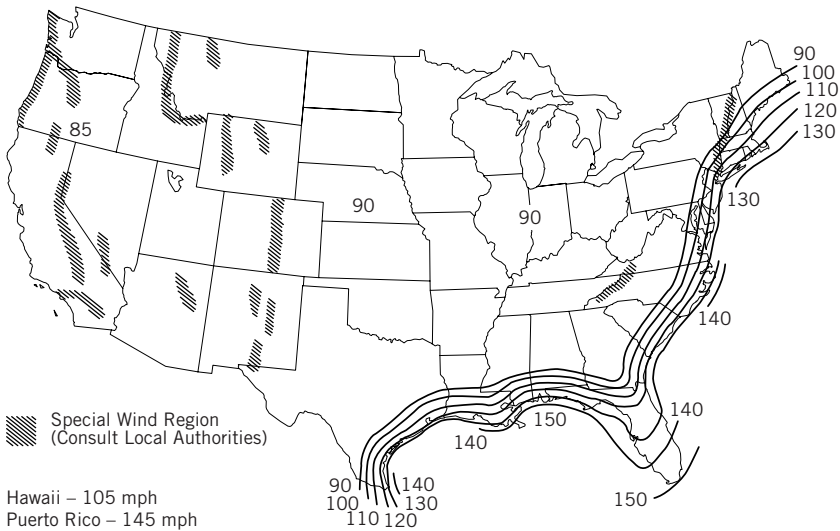
# KT-SP-XSQ-XX-XXG-UNV-K1

## SQUARE STRAIGHT STEEL POLE

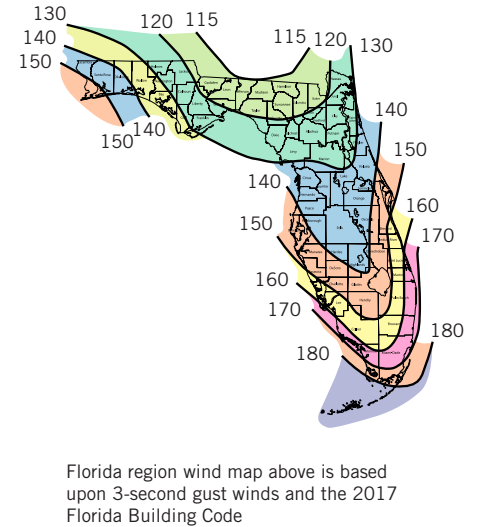
### ANCHOR BOLTS BOLT PROJ.



### WIND MAP



### FLORIDA REGION WIND MAP



### DESIGN WIND SPEED (PER AASHTO LTS-6)

Catalog Number	Mounting Height (ft)	90 mph	100 mph	110 mph	120 mph	130 mph	Anchor Bolt	
		EPA (ft <sup>2</sup> )	EPA (ft <sup>2</sup> )	EPA (ft <sup>2</sup> )	EPA (ft <sup>2</sup> )	EPA (ft <sup>2</sup> )	Diameter (in)	Length (in)
KT-SP-4SQ-15-11G-UNV-K1	15 ft.	12.3	9.8	8.5	7.0	4.9	0.75	30
KT-SP-4SQ-17-11G-UNV-K1	17 ft.	9.0	7.2	6.2	5.1	3.2	0.75	30
KT-SP-4SQ-20-11G-UNV-K1	20 ft.	7.3	5.9	5.0	4.2	2.9	0.75	30
KT-SP-4SQ-25-11G-UNV-K1	25 ft.	3.3	2.6	2.0	1.8	1.0	0.75	30
KT-SP-5SQ-30-11G-UNV-K1	30 ft.	3.4	2.7	2.1	1.7	0.7	0.75	30
KT-SP-5SQ-30-7G-UNV-K1	30 ft.	8.6	6.9	5.9	4.9	2.9	0.75	30



# KT-SP-XSQ-XX-XXG-UNV-K1

## SQUARE STRAIGHT STEEL POLE

### WARNING

- Applications: Lighting installations for side and top mounting of luminaires with an effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location.
- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The Wind Maps are intended only as a general guide. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application.
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. The responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty.
- Wind speeds and listed EPAs are for ground-mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards.
- Wind induced vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings.
- Extreme wind events like hurricanes, typhoons, cyclones, or tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings. Due to our continued efforts to improve our products, product specifications are subject to change without notice.
- Factory supplied template must be used when setting anchor bolts. Keystone Technologies will deny any warranty claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.
- For the diameter and depth of concrete pads for anchor bolts, please consult a qualified engineer.

### ORDERING INFORMATION

ORDER CODE	PACK QUANTITY	EASY CODE	UPC
KT-SP-XSQ-XX-XXG-UNV-K1	TBD	TBD	TBD

### CATALOG NUMBER BREAKDOWN

# KT-SP-XSQ-XX-XXG-UNV-K1

1 2 3 4 5 6 7 8

- 1 Keystone Technologies
- 2 Steel Pole
- 3 Size
- 4 Square Shape
- 5 Height
- 6 Wall Thickness
- 7 Drill Pattern: Universal Style
- 8 Kit Package Designation