

PLANNING BOARD

Tuesday, June 10, 2025 at 4:30 PM
Council Chambers, 2nd Floor, City Hall



MEMBERS

Brandon Mazer, Chair
David Silk
Michael Fox
Nicholas Messina
Kelsey Robertson
Austin Smith
Joseph Zamboni

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AGENDA:

WORKSHOP - 4:30 PM

- 1. ROLL CALL AND DECLARATION OF QUORUM**
- 2. COMMUNICATION AND REPORTS**
- 3. REPORT OF ATTENDANCE AT THE MEETING HELD ON MAY 27, 2025**

Public Hearing

9 Boyd Street: Fox, Mazer, Messina, Robertson, Silk, Smith, and Zamboni present.

Workshop

385 Congress Street: Fox, Mazer, Messina, Robertson, Silk, Smith, and Zamboni present. Smith absent.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON MAY 27, 2025

- i. Major Site Plan and Subdivision; 9 Boyd Street; Cumberland Housing, LP, Mayo Housing, LP, and Portland Housing Development Corporation, Applicant. Silk motioned and Zamboni seconded a motion to approve the subdivision application. Vote 7-0. Silk motioned and Zamboni seconded a motion to approve the major site plan application. Vote 7-0. Smith motioned and Zamboni seconded a motion to adopt the approval letter as the Planning Board's decision, and to authorize the Board Chair to sign the approval letter as drafted. Vote 7-0.

5. NEW BUSINESS

- i. Major Site Plan; 1584 Forest Avenue; Acre Properties, Applicant. The Planning Board will hold a hybrid workshop to consider a major site plan application to facilitate the development of a 50-unit multi-family development with 50 off-street parking spaces on property located at 1584 Forest Avenue, to be accessed via Belfort Street. The subject property totals 66,650 square feet and is zoned RN-5 Residential and B-1 Neighborhood Business. A project and plan summary are available for viewing on the city's CSS Portal (<https://css.portlandmaine.gov/>) by referencing Plan Number PL-003161-2024.

To: Chair Brandon Mazer & Members of the Planning Board
From: Eric Freeman
Date: May 30, 2025
Re: 1584 Forest Avenue
Project ID: PL-003161-2024
CBL: 299 D027
Meeting Date: June 10, 2025

Applicant: Acre Properties
Applicant Representative: Gorrill Palmer Engineering

I. INTRODUCTION

Gorrill Palmer Engineering and Acre Properties have submitted a Major Site Plan application for the construction of 50 residential units in two three-story multifamily buildings with 50 on-site parking spaces and associated site improvements located at 1584 Forest Avenue in the Residential Neighborhood-5 (RN-5) zone. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 13.6. Additionally, this application is required to meet the City of Portland's inclusionary zoning requirements outlined in Section 17.2 of the City's Land Use Code. This memo addresses traffic mitigation, transportation, and site access, incorporating feedback from the board and public at the April 8, 2025 workshop for this application. For a full overview of the proposed development, refer to the Staff memo dated [April 8, 2025](#)

The Planning and Urban Development Department mailed 176 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the May 29 and May 30, 2025 edition of the Portland Press Herald.

II. PRIOR PLANNING BOARD REVIEW

The Planning Board held an initial workshop open to the public on April 8, 2025, with Board discussion focusing primarily on:

1) Conservation Easement Changes

The Board discussed the Conservation Easement held by the Maine Land and Water Conservation Fund (LWCF) between the subject property and the Talbot School Driveway. The Board requested more detail regarding the process of amending the easement to enable a direct vehicular connection from the site to the Talbot School driveway and the signalized intersection on Forest Avenue.

- **Conclusion:** Planning Staff and Corporation Council met with LWCF Staff to discuss whether the easement could be amended or altered. LWCF staff explained that the existing easement covers the entire Talbot School property and that the amendment process would likely take upwards of a year or more to complete and would involve exchanges of land between multiple parties and/or monetary penalties. Given the length of time it would take to amend this easement and the uncertainty, the applicant has indicated that they would like to proceed with the Belfort Street

connection as previously proposed. , Staff are not requesting that the applicant further pursue an amendment to the LWCF easement.

2) Street Frontage

Members of the Board raised questions regarding the access easement held by Moran's Market along the subject property's Forest Avenue frontage. The Board questioned language within the easement which grants Moran's Market the right to construct a building within the easement area, and whether that would impact the frontage requirements for this application.

- **Conclusion:** The full text of the easement between Acre Properties and Moran's Market was reviewed by Corporation Council. Upon review, it was determined that the language within the easement does not exclude use of the area by the applicant and does not prevent the easement area from being considered 'frontage' for the development property at 1584 Forest Avenue.

3) Pedestrian Access

The Board noted that the proposed pedestrian connection to Forest Avenue did not fully extend to the public sidewalk and proposed transit shelter.

- **Conclusion:** The applicant has revised the design of the proposed walkway to connect directly with Forest Avenue. The applicant will also provide additional landscaping along the Forest Avenue frontage.

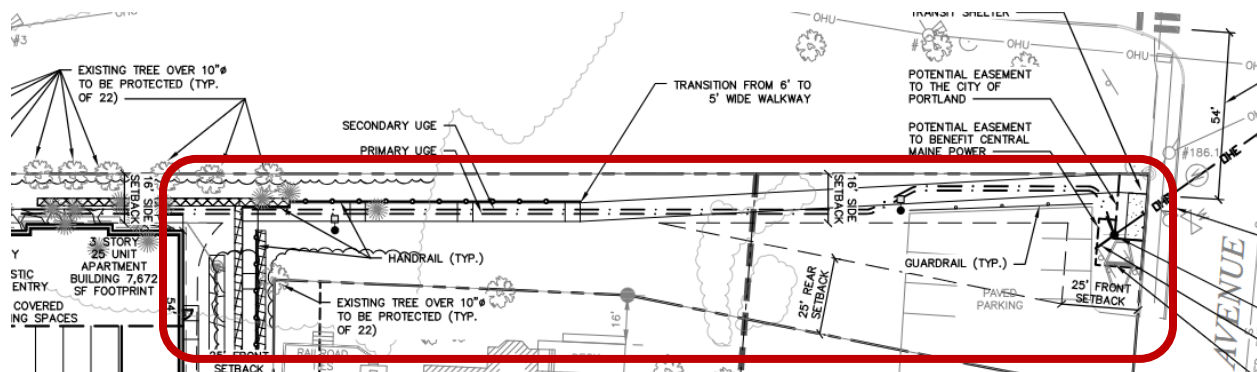


Figure 1: The revised pedestrian connection to Forest Avenue

4) Grading and Stormwater

The Board requested more detail regarding site grading and stormwater management. The Board requested that the applicant demonstrate that runoff would not be directed towards surrounding properties.

- **Conclusion:** The applicant has provided a stormwater management report, which has been reviewed by the Department of Public Works and third-party stormwater engineers. Staff have outstanding concerns related to site grading and stormwater discharge.

III. TRANSPORTATION SITE PLAN STANDARDS (Section 13.6.1)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 13.6. This memo is limited in scope and only highlights relevant transportation standards of section 13.6.1. Staff comments are below.

13.6.1.A Impact on Surrounding Streets

Primary vehicular access to the site would be provided via a 20-foot drive aisle connecting to Belfort Street. Belfort Street is a 30-foot-wide local street with on-street parking provided on both sides of the street. Belfort Street serves as the only point of access for approximately 75 homes, located on Belfort, Verrill and Iffley Streets. Belfort Street intersects with Forest Avenue approximately 350 ft. northeast of the proposed driveway. The intersection of Belfort Street and Forest Avenue is unsignalized.

At the request of Staff and the Planning Board, the applicant has provided a traffic study conducted by Gorrill Palmer Engineering, which is included as Attachment C. This study focused on the intersection of Belfort Street and Forest Avenue:

- The proposed development would generate up to 28 vehicle trips during the peak hour
- The intersection of Belfort Street and Forest Avenue is at a failing level of service, but this application is not expected to impact that condition
- The intersection has acceptable vehicle sight lines
- Right-of-way constraints on Belfort Street can inhibit vehicular movement
- The condition of sidewalks and driveways along Belfort Street is poor.

Based upon the traffic study provided by the applicant, Planning Staff and peer-review traffic engineers identified several off-site mitigation strategies to improve vehicular circulation and pedestrian safety in the vicinity of the proposed development. These mitigation strategies are intended to be proportional to the level of anticipated impact as outlined in Section 13.6.1.A.2

- Restricting on-street parking along the north side of Belfort Street extending approximately 320 feet from Moran's Market to the edge of the proposed driveway. This would reduce choke points within the right-of-way caused by parked vehicles and improve safety by creating new sightlines from four driveways. This change would impact approximately five on-street parking spaces.
- Reconstructing the pedestrian crosswalk at the intersection of Belfort Street and Forest Avenue with ADA-accessible ramps and detectable panels

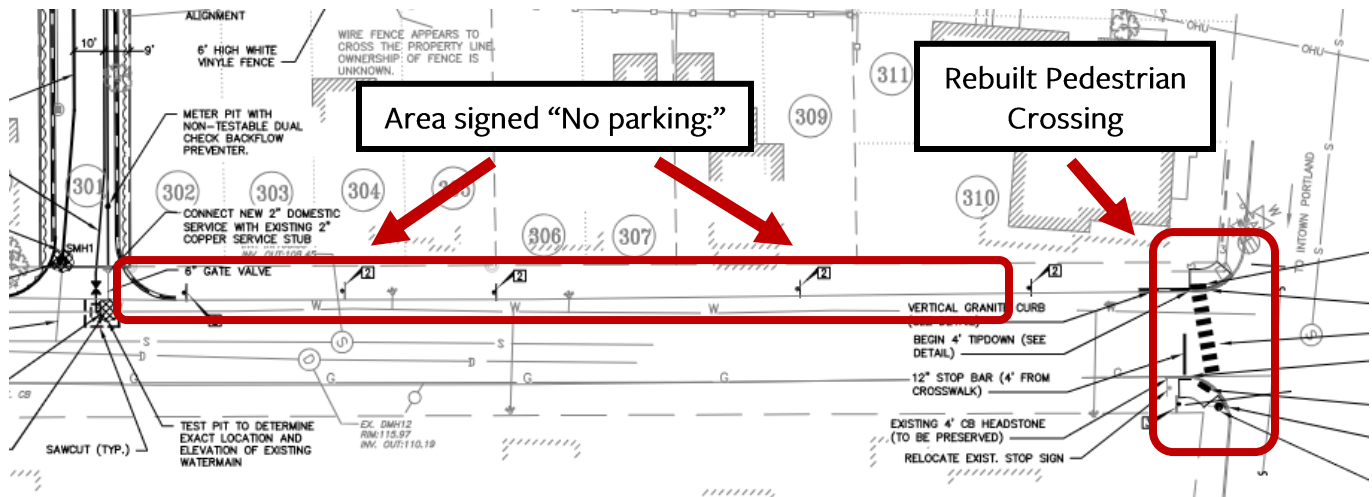


Figure 2: Proposed off-site mitigation on Belfort Street

Staff and peer-reviewers also identified several other potential off-site mitigation strategies that could be pursued by the applicant, including the removal of curb cuts along the Moran's Market frontage, rebuilding the pedestrian crossing across Forest Avenue and rebuilding the Belfort Street sidewalk from Forest Avenue to the proposed driveway. While the applicant's resubmission does not address these potential mitigation strategies, the City is continuing to explore their feasibility as part of this site plan application.

13.6.1.B Access & Circulation

Each building will feature four entrances. A lobby entrance, a parking entrance and two side entrances. Side entrances will provide direct access to the shared courtyard area, parking lot and trash enclosures. The site will have direct pedestrian access from Forest Avenue via a 6-foot wide illuminated pedestrian walkway. This walkway will also feature an ADA-accessible ramp to account for approximately 8 feet of grade change between Forest Avenue and the site.

The applicant has stated that a pedestrian connection to Belfort Street is not feasible given the spatial constraints of the property boundary along Belfort Street. Planning Staff are continuing to encourage the applicant to explore ways to accommodate a sidewalk connection to Belfort Street

13.6.1.C Public Transit Access

The site is served directly by METRO's Route 2 along Forest Avenue. The applicant intends to provide a new transit shelter on Forest Avenue with a direct ADA-accessible pedestrian connection to the site. METRO Staff have indicated that the location and configuration of the proposed shelter is acceptable for transit operations. Staff would note that there are existing transit shelters located within a quarter mile of the development site, and that the applicant has voluntarily worked with METRO to locate a shelter on their property and relocate an existing transit stop.

13.6.1.D Parking

As outlined in Section 18.1.2, the applicant is not required to provide any off-street parking for this site.

This application will provide 50 off-street surface parking spaces and intends to allocate one space per residential unit. Each building will have 10 covered parking spaces on the ground floor. Parking areas will be

screened from surrounding properties through the use of a privacy fence and a mixture of plantings.

As outlined in Table 18-A of the Land Use Code, this application is required to provide one bicycle parking space per two dwelling units (25 spaces). This application proposes storage for up to 26 bicycles, with a secure bike room located on the ground floor of each building.

A total of 10 parking spaces will be equipped with Level-2 EV chargers, with 25 additional spaces served with conduits for future EV charging equipment as needed.

IV. NEXT STEPS

Staff is seeking input from the Planning Board regarding the proposed project's compliance with Transportation Standards and the effectiveness of proposed off-site mitigation strategies. The Board is also encouraged to provide feedback on any other aspects of the proposal they would like staff or the applicant to address. This input will help guide revisions to the project before it is brought back for a public hearing.

ATTACHMENTS

Public Comment

PC1. Public comment received after April 8, 2025

PC2. Melissa Blanchard

Applicants Submittal

- A. Applicant Response to Comments
- B. Architectural Memo
- C. February 2025 Traffic Study
- D. Neighborhood Meeting Materials

Plans

- 1. Cover
- 2. Site Plan
- 3. Grading Plan
- 4. Drainage Plan
- 5. Subsurface Sand Filter
- 6. Sand Filter Details
- 7. Drip Strip Details
- 8. Outlet Control Details
- 9. Site Details
- 10. Utility Details
- 11. Utility Details 2
- 12. Erosion Control Details
- 13. Erosion Control Notes
- 14. Pump Details 1
- 15. Pump Details 2
- 16. Landscaping Plan
- 17. Revised Building Elevations



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

May 22, 2025

Eric Freeman, City Planner

City of Portland
389 Congress Street
Portland, ME 04101

Subject: Proposed Residential Development
1584 Forest Avenue, Portland, ME
Project Review Letter

Dear Eric:

On behalf of **ACRE Properties**, our office is pleased to provide this letter to respond to comments received by the City of Portland Staff since our initial response letter dated February 25, 2025. Additionally, Acre Properties and their representatives presented a summary regarding the residential development at the Planning Board Workshop hosted within the City Hall (389 Congress Street) at 4:30 PM on April 8, 2025. During the workshop, comments were noted by both the City of Portland Planning Board and the public, which are included in this letter. For ease of reference, we have repeated the applicable comments verified by the City of Portland Staff below in *italics*, followed by our responses in **bold**.

Staff Comments Received May 16th, 2025:

The applicant shall pursue the following mitigation measures:

- *Restricting parking on the north side of Belfort Street between Forest Avenue and the proposed driveway.*

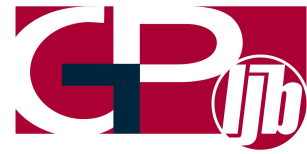
Response: Sheet C101, Site and Utility Plan, has been revised to include five (5) MUTCD R7-1R signs to prevent parking on the westerly side of Belfort Street from the proposed driveway to Forest Avenue. It is our understanding that the City will be required to enforce the restriction. Refer to the plan set included in this submission for additional information.

- *Spot improvements at the intersection of Belfort Street and Forest Avenue.*

Response: The revised plan set includes spot improvements at the intersection of Belfort Street and Forest Avenue. The spot improvements include eliminating the existing drive to currently, Moran's Market, from Belfort Street, ADA compliant ramps with detectible warning panels, crosswalk striping, and a stop bar. Refer to the plan set included in this submission for additional information.

- *Landscaping and site improvements to the Moran's Market parking lot and pedestrian walkway.*

Response: As shown on Sheet L100, Landscaping Plan, three (3) Thuja Occidnetalis 'Nigra' trees, seven (7) Clethra Alnifolia 'Vanilla Spice' shrubs, and two (2) Rudebeckia Subtomentosa 'Little Henry' perennials were added at the Moran's Market parking lot and pedestrian walkway. A guardrail was added along the portion of the parking lot that directly abuts the walkway to improve safety. Additionally, the proposed ADA walkway from the proposed dwelling was revised to connect to the existing sidewalk on Forest Avenue rather than to the backside of the existing parking lot. Refer to the plan set included in this submission for additional information.



Staff Comments Received May 20th, 2025:

Design Review:

- *Staff recommends a more prominent building entrance at the east elevation into the Lobby and recommends that the Applicant explore a porch, canopy, and/or other architectural element incorporated into the building design. Figure 1 is an example of precedent for the Applicant's consideration.*

Response: The applicant appreciates the suggestion of providing a more prominent building entrance, but the width of the site limits our ability to push beyond the building footprint as it is being developed because any projections will be overlapping the parking lot and the travel lane. The width of the site is adequate for a single row of parking and a building designed to have apartments on either side of a central hallway. To provide a second row of parking, we had to carve out space under the building which precludes the space that usually is used for entry canopies to buildings.

Any overhang projection into the drive lane will create the potential of a delivery truck striking the building. The trim band that wraps the building at the top of the lower level is 8'-6" at each entry, and the windowsill at the second floor is at 13'-2". A UPS truck is 13'-6" tall which limits our ability to create a projection that would fall within this range.

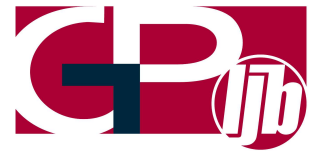
We are using recessed areas to create space for entry access. A big prominent entry to these buildings would be contrary to the more modest and simply detailed nature of the architecture in this neighborhood. A functional and understated entry is more in keeping with the neighborhood.

Refer to the architectural memo included in Attachment 1 for additional information.

- *Staff recommends the Applicant incorporate additional façade variation at the south elevation and requests the Applicant explore Staff suggestions from the design review memo dated January 22, 2025 related to the exterior design of the proposed structures. Specifically, the Applicant is requested to provide greater articulation through façade detailing, such as trim that reinforces the gable ends sections, façade projections, material variation and/or other architectural elements to reduce the building's scale.*

Response: The south façade is articulated with a roofscape that mimics the rhythm of the roof lines in the neighborhood. Adding trim to highlight the 2 gable roofs would make the façade appear taller and runs contrary to the horizontal hierarchy of the façade. The recessed parking spaces and column spacing that is required to allow for cars parking under the building creates a strong horizontal element that is reinforced by the horizontality of the second floor and roof eave line.

There are material variations with the vertical siding and concrete wall base on the lower level, a multi-level band wrapping the top of the lower level, and variety of roof eave heights. Adding additional trim to break up the façade will make it needlessly busy without reinforcing the base of the building. On the west side facing the school access road, the building façade is offset by two feet and articulation of the gabled sections genuinely follow the offsets with trim boards that follow the corner structures. Artificially articulating the same gables on the Belfort Street side will not enhance the façade.



- *Staff recommends additional façade variation with building projections along the south (Belfort Street) elevation for Building A and B to provide greater articulation for this prominent façade facing abutting properties and the street. In addition, Staff requests that the applicant provide exterior façade materials and label onto the architectural elevations.*

Response: Updated elevations with materials noted are provided in Attachment 2 of this submission.

- *Staff recommends the relocation of Lobby A in Building A that would provide building entry access at the shared courtyard to provide greater visibility of primary building entries. In addition, Staff recommends the relocation of Building A bike room at the east facade and accommodate a door entry to allow pedestrians to access at proposed walkway. Staff recommends a door entry along the west façade of Building B allow pedestrians to access at proposed walkway.*

Response: The Applicant would have preferred to place the entries across from each other at the shared courtyard and started out with that intent. The grade changes across the site proved to be a challenge and worked against that goal. The floor levels are set at different heights that would require 14-foot ramps to allow for handicap accessibility into the building. Ultimately, the grading of the parking lot and parking spaces under the building set the locations for entry to the buildings on the uphill side of the site.

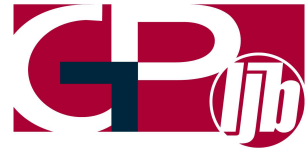
The depth of the parking spaces is such that there will be enough space to walk behind cars under cover from the entry to the bike room and past the laundry room on each building.

- *Staff prefers that the applicant provide an accessible route with additional site lighting to connect pedestrians to Forest Avenue. An alternative approach to be verified and acceptable by Dept. of Public Works is to shift proposed drive aisle to construct a walkway and extend the sidewalk at Belfort Avenue.*

Response: The walkway to Forest Avenue has been revised to be ADA compliant and directly connect to the existing Forest Avenue sidewalk. Two (2) light poles have been provided at each end of the proposed walkway which appears to provide adequate lighting per the City of Portland's Technical Manual, Section 8. Refer to the plan set included in this submission for additional information.

- *Staff recommends additional screening at the HVAC units located at the rear of the property abutting the public schoolyard property. In addition, Staff requests that the applicant consider a pedestrian walkway to connect residents to the abutting public schoolyard property.*

Response: The existing tree line at the westerly portion of the site, abutting the schoolyard property, is intended to be preserved which will provide natural buffering for the HVAC units. In the initial response provided to the City on February 25th, 2025, a *Tilia Americana* was added to the Landscape Plan (Sheet L100) to provide additional buffering within the gap of said existing tree line. In response to the comment referenced above, the *Tilia Americana* was removed, and three (3) *Tilia Occidentalis* 'Nigra' have been proposed for screening the HVAC units from the school property. The HVAC equipment is located approximately 20 feet from the property line and approximately 50 feet from the schoolyard access drive.



CLOSURE

We look forward to your review of this response package which includes revisions to accommodate the staff, planning board, and public comments received to date. Acre Properties and their representative(s) plan to attend the Planning Board Meeting scheduled for June 10, 2025. Please do not hesitate to contact our office if additional information is required, or if you have any questions about the information being submitted.

Sincerely,

GORRILL-PALMER

Douglas Reynolds, PE
Project Manager
Phone: 207-772-2515
dreynolds@gorrillpalmer.com

Attachments:

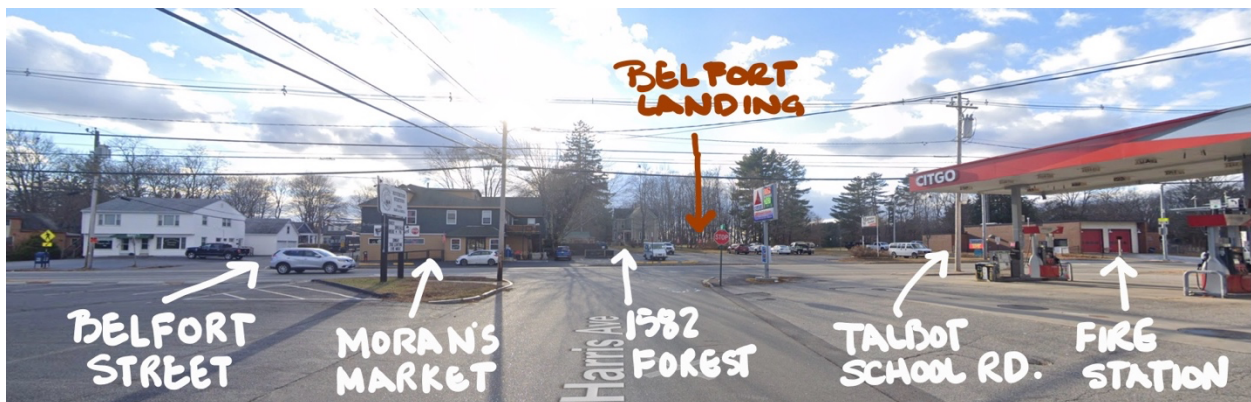
Attachment 1 – Architectural Memo
Attachment 2 – Revised Building Elevations
Revised Plan Sheets

BELFORT LANDING



BELFORT LANDING FROM TALBOT SCHOOL

Belfort Landing will be constructed in the Riverton Neighborhood of Portland. The property abuts Forest Ave to the north where Moran's Market's parking lot is located and a two-story 1871 Victorian house that is at 1582 Forest. To the west, it abuts the Gerald E. Talbot Community School along its access road. To the south and east, it abuts 7 single-family homes located on Belfort and Empire Way. Access to the property is from Belfort Street where the property parcel extends via a 30' property strip. At one time, the lot had a two and a half story barn that was part of the 1582 Forest residence.



The neighborhood is part of the Forest Ave corridor where the Portland Riverton Fire Station, Moran's Market, Riverton Gas Station, and Riverton Station Pizza Bar & Grill are located. This stretch, in between Warren Ave and Riverside Ave, is a mix of single-family homes and multi-family complexes. Princeton Pines, Meadowbrook Apartments, Forest Glen, Wellesley Estates, Riverton Park and Terrace Pond Apartments are all part of this mile and a half stretch along Forest Ave.



MORAN'S MARKET



1582 FOREST AVENUE



CORNER OF BELFORT ST: BARBER & PLUMBING CO.



RIVERTON FIRE STATION AND LIGHT AT TALBOT SCHOOL ACCESS ROAD

The residential architectural styles prevalent in the neighborhood are straightforward, traditional style "New Englander" homes with mostly gabled roofs. Primary side materials are vinyl siding replicating clapboards. Trim details are simple with flat stock boards and one foot roof overhangs. The fire station and the school are single story brick structures with flat roofs built in the 1970's. Moran's Market is a conglomeration of wood framed additions on a building that most likely started as a two-story single-family house.



BELFORT STREET VIEWS





BELFORT ST LOOKING TOWARDS FOREST AVE

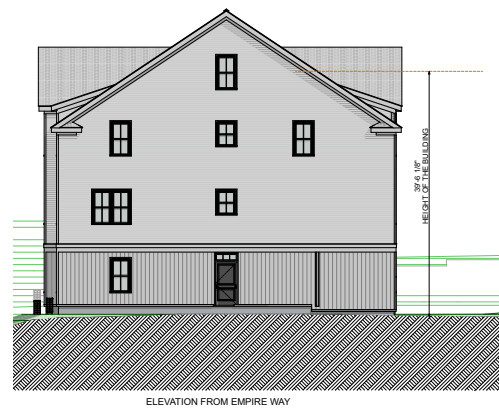
The overall massing of the proposed buildings is a gable form akin to the massing of the former barn structure. The longer facades have been broken up into 5 sections with a mixture of gable and shed dormers that break up the primary roof line into distinct areas.

The principle building facades are not directly bordering Forest Ave or Belmont St, as the property is setback from both streets. The façade facing Forest Ave is set back 310 feet and sits behind and 11 feet lower than the home at 1582 Forest. The façade facing Belfort is 170 feet from the edge of the road behind 5 other homes. The most prominent visible façade is setback roughly 50' along the school access road.





BELFORT ST LOT ACCESS





The facades facing Belfort and the school access road are the longer building facades. They are detailed with a pair of large gable dormers on either side of a large shed dormer that lifts the eave line to provide interest and space for the third story windows. The ends of the building are flanked by narrower shed dormers. All the fenestration consists of large, proportional windows with groupings positioned to emphasize the patterns of the dormer layout. Along the access road, the two gabled bays are extended beyond the main building plane to further break up the façade. On the Belmont side, we are providing parking two parking areas for 5 cars each under the building. The corners of the building anchor the building and provide an entry lobby on one side and enclosed bike storage room on the other. In between is a common laundry room. There is enough space provided for a walking lane behind all the cars so that residents have a covered space to get out of the rain for the entire length of the building.

The lower story of the building is to be sided with vertical board and batten vinyl siding. Capping the vertical siding of the first floor is a wide multi-layer horizontal trim banding with horizontal vinyl clapboard siding above that. The windows will be 5 feet tall with 2 over 2 window mullions. All these elements are typical of the neighborhood housing details.



BELFORT STREET FAÇADE RENDERING

MEMORANDUM
TRAFFIC EVALUATION
1582 FOREST AVE
PORTLAND, ME
March 3, 2025

INTRODUCTION

It is our understanding that Acre Properties would like to propose the construction of two, three-story, multi-family dwellings as new residential development in Portland, Maine. Each dwelling will consist of 25 units for a total of 50 units combined. The residential development is proposed to be accessed via Belfort Street from Forest Avenue. The physical address for the site is 1582 Forest Avenue and is currently an undeveloped 1.5-acre site.

Gorrill Palmer received a comment response on their major site plan submission from Portland City Planner Eric Freeman stating that “1. *The applicant shall conduct a traffic study with the following scope: An evaluation of conditions at the Forest Avenue / Belfort Street intersection. This shall include an evaluation of traffic operations, safety conditions, pedestrian conditions, sight distance and access management conditions.*”

This memorandum includes an evaluation of the following:

- Capacity Analysis
- Safety Conditions
- Pedestrian Conditions
- Sight distance and access management

TRIP GENERATION

Trip generation for the site has been calculated using the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation*, 11th Edition, the most recent edition accepted by MaineDOT. The proposed residential development will include 50 units. After review of the Land Use Codes (LUCs) provided in the 11th Edition of *Trip Generation*, the following was selected to calculate the trip generation for the proposed uses:

Proposed Trip Generation Variables

- LUC 220 – Multifamily Housing (Low-Rise)

The ITE provides two methodologies for determining trip generation; fitted curve and average rate. Because the number of units for the ITE studies are over 200, and 50 units are being proposed, using the fitted curve equation does not appear to yield realistic results. Therefore, the average rate was used for this evaluation. Trip generation calculations are provided in Attachment A.

The following Table I summarizes the trip generation for Multifamily Housing (Low-Rise)

Table I – Trip Generation (LUC 220 – 50 units)

Time Period	Trip Generation (Trip Ends)	
	Trip Gen Rates	Trip Generation
Weekday	6.74	337
AM Peak Hour of Adjacent Street	0.40	20
PM Peak Hour of Adjacent Street	0.51	26
AM Peak Hour Generator	0.47	24
PM Peak Hour Generator	0.57	28
Saturday Peak Hour Generator*	0.41	21

* Trip gen rates based on one study

TRAFFIC COUNT

Gorrill Palmer (GP) completed a turning movement count at the intersection of Forest Avenue / Belfort Street on Tuesday, February 25, 2025, from 2:00 PM – 6:00 PM and on Wednesday, February 26, 2025, from 7:00 AM – 9:00 AM. These time periods were approved by the City prior to counting. Raw traffic volumes on Forest Avenue were adjusted to peak summer conditions using the 2024 weekly group mean factors ($1.04 / 0.87 = 1.20$). This site is expected to be constructed in 2025, therefore it does not require an annual growth adjustment. Traffic figures are located in Attachment B.

CAPACITY ANALYSIS

A capacity analysis was completed for the intersection of Forest Avenue / Belfort Street for two scenarios; AM & PM peak hours for the predevelopment and postdevelopment conditions, Figures 2 & 4 respectively.

Capacity analysis was completed using Synchro/SimTraffic computer analysis software (Version 12). Hard copies of the capacity analysis are provided in Attachment D. Level of service rankings are similar to the academic rankings system where an 'A' is good with little control delay and an 'F' represents poor traffic conditions. If the level of service falls below a 'D' an evaluation should be made to determine if mitigation is warranted.

The following Table 2 summarizes the level of service for an unsignalized intersection based on the Highway Capacity Manual.

Table 2 – Unsignalized Intersection

Level of Service	Control Delay per Vehicle (s)
A	Less than 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

The following Table 3 summarizes the results of AM pre & postdevelopment conditions.

Table 3 – AM Capacity Analysis

Intersection Movement*	Predevelopment (delay sec./LOS)		Postdevelopment (delay sec./LOS)	
Belfort Street NB LR	9	A	10	A
Forest Avenue SEB TR	2	A	2	A
Forest Avenue NWB LT	2	A	2	A

*L=left, T=Through, R=Right, EB=Eastbound, NB=Northbound, SB=Southbound

The following Table 4 summarizes the results of PM pre & postdevelopment conditions.

Table 4 – PM Capacity Analysis

Intersection Movement*	Predevelopment (delay sec./LOS)		Postdevelopment (delay sec./LOS)	
Belfort Street NB LR	8	A	8	A
Forest Avenue SEB TR	2	A	2	A
Forest Avenue NWB LT	3	A	4	A

*L=left, T=Through, R=Right, EB=Eastbound, NB=Northbound, SB=Southbound

Based on the results from Tables 3 & 4, the intersection movements are forecast to operate at acceptable LOSs for all movements. The addition of the residential development is not forecast to have a significant impact on the operations of the intersection. Capacity analysis results are provided in Attachment C

SAFETY CONDITIONS

Gorrill Palmer requested and reviewed the latest three-year MaineDOT crash history (2021-2023) for the anticipated study area. Crash history is provided in Attachment D.

To evaluate whether a location has a crash problem, MaineDOT uses two criteria to define a High Crash Location (HCL). Both criteria must be met to be classified as an HCL.

1. A critical rate factor (CRF) of 1.00 or more for a three-year period. A CRF compares the actual crash rate to the rate for similar intersections in the state. A CRF of less than 1.00 indicates a rate of less than average **and**:
2. A minimum of eight crashes over the same three-year period.

Based on a review of the crash history, there were two crashes at the Belfort St. / Forest Ave. intersection in the three-year time period 2021-2023. There are no high crash locations in the immediate study area.

In addition, GP reviewed the safety information on the MaineDOT Crash Query website for the period of 2021-2023 to check for pedestrian and bicycle crashes. There are no reported pedestrian or bicycle crashes in the immediate study area.

PEDESTRIAN CONDITIONS

Overall pedestrian counts were completed for the intersection of Forest Avenue / Belfort Street. The pedestrian count was completed for the full time period of 7:00 AM – 9:00 AM and 2:00 PM – 6:00 PM with no peak hour designation. There was a total of approximately 10 pedestrians that crossed Belfort Street and a total of approximately 10 pedestrians that crossed Forest Avenue at the crosswalk from 7:00 AM – 9:00 AM. There was a total of approximately 33 pedestrians that crossed Belfort Street and a total of approximately 16 pedestrians that crossed Forest Avenue at the crosswalk from 2:00 PM – 6:00 PM.

There are sidewalks provided on both sides of Forest Avenue and Belfort Street. A crosswalk is striped directly to the right exiting Belfort Street with no crosswalk striped across Belfort Street. There are not pedestrian landings provided at the Forest Avenue crosswalk ends or on either corner of Belfort Street. This is an existing condition and not the responsibility of the proposed project.

There is a bicycle lane provided on both sides of Forest Avenue.

SIGHT DISTANCE & ACCESS MANAGEMENT

The site is proposed to be accessed via one full movement unsignalized driveway off Belfort Street. Per the request of the City, sight distance was measured at the intersection of Forest Avenue / Belfort Street.

Sight Distance:

The City of Portland and MaineDOT use the same standards for sight distance. The following Table 5 presents the sight distance standards for MaineDOT.

Table 5 – Standards for Sight Distance

Speed Limit (mph)	Passenger Vehicle – MaineDOT (ft)
25	200
30	250
35	305
40	360
45	425

MaineDOT sight distance evaluation methodology is as follows:

Driveway Observation Point:	10 feet from traveled way
Height of Eye at Driveway:	3.5 feet above the ground
Height of Approaching vehicle:	4.25 feet above the ground

Based on the MaineDOT Map Viewer, Forest Avenue in the site vicinity is 30 mph. This speed was used for the sight distance evaluation.

The following Table 6 summarizes the measured sight distances exiting Belfort Street onto Forest Avenue looking left and right.

Table 6 – Sight Distance Summary

Driveway	Passenger Vehicle Required (feet)	Observed Looking Left (feet)	Observed Looking Right (feet)
Belfort Street	250	Approximately 270 to intersection	400+

As seen from the results in Table 6, the available sight distances exceed MaineDOT minimum requirements, provided parked vehicles in the area do not block sight distances.

It was observed during the traffic count that vehicles parking adjacent to and in front of a local store on the southwesterly corner of the intersection causes sight-distance issues looking to the left leaving Belfort Street.

This is a long-standing existing condition and is not the responsibility of the proposed development to address.

Access Management:

The adjacent store has two significantly wide curb cuts (greater than 50 feet each) on Forest Avenue and a third curb cut located on Belfort Street approximately 25 feet from the intersection with Forest Avenue. In addition to the store, the business on the opposite side of Belfort Street, also has a significantly wide curb cut (approximately 100 feet) close to Forest Avenue.

In our opinion, the access management in the immediate area is very poor, but it is a long-standing existing condition that is not the responsibility of the proposed development to address.

Attachments:

Attachment A – Trip Generation
Attachment B – Trip Figures
Attachment C – Capacity Analysis
Attachment D – Safety Review

Attachment A

Trip Generation

Land Use: 220

Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

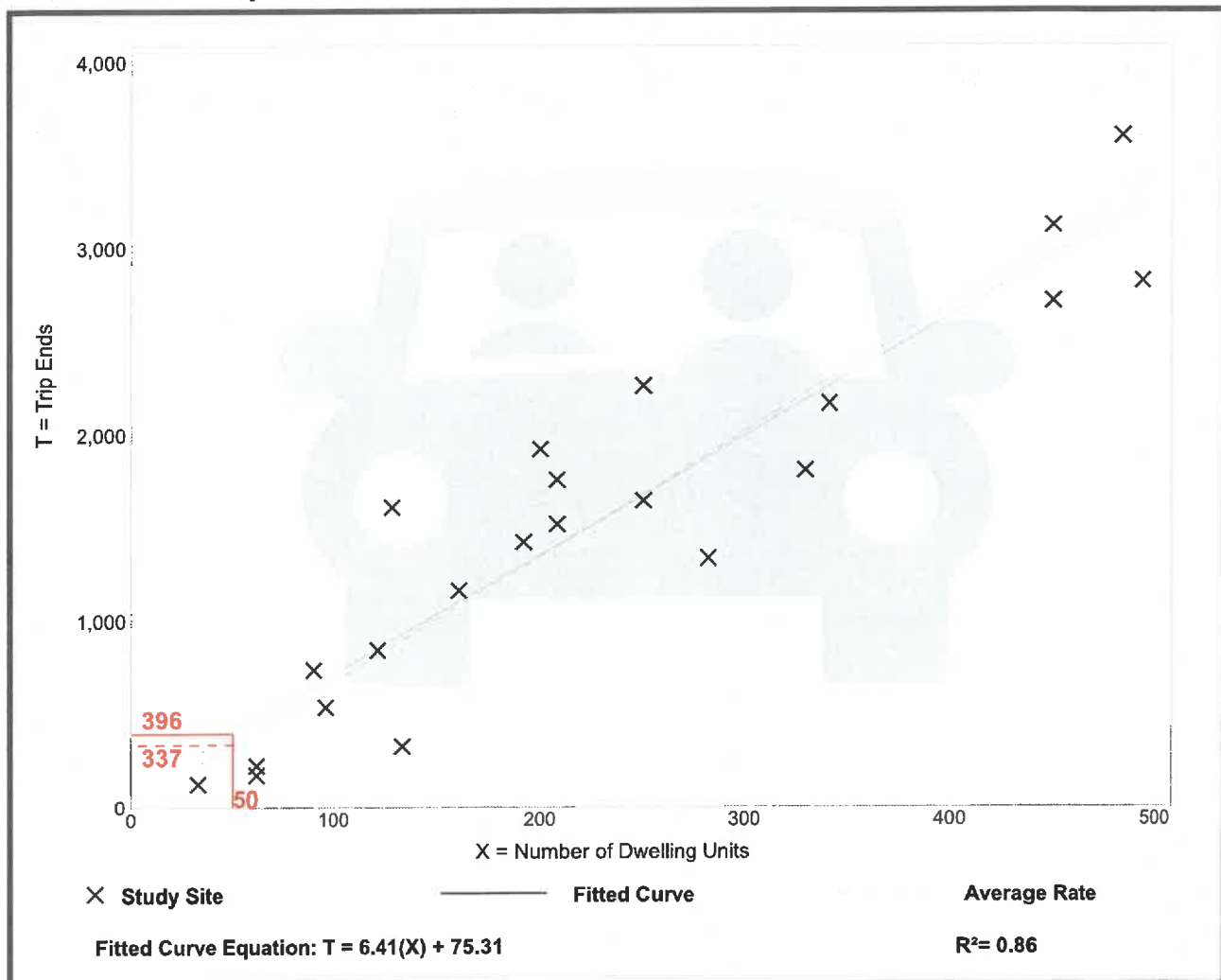
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

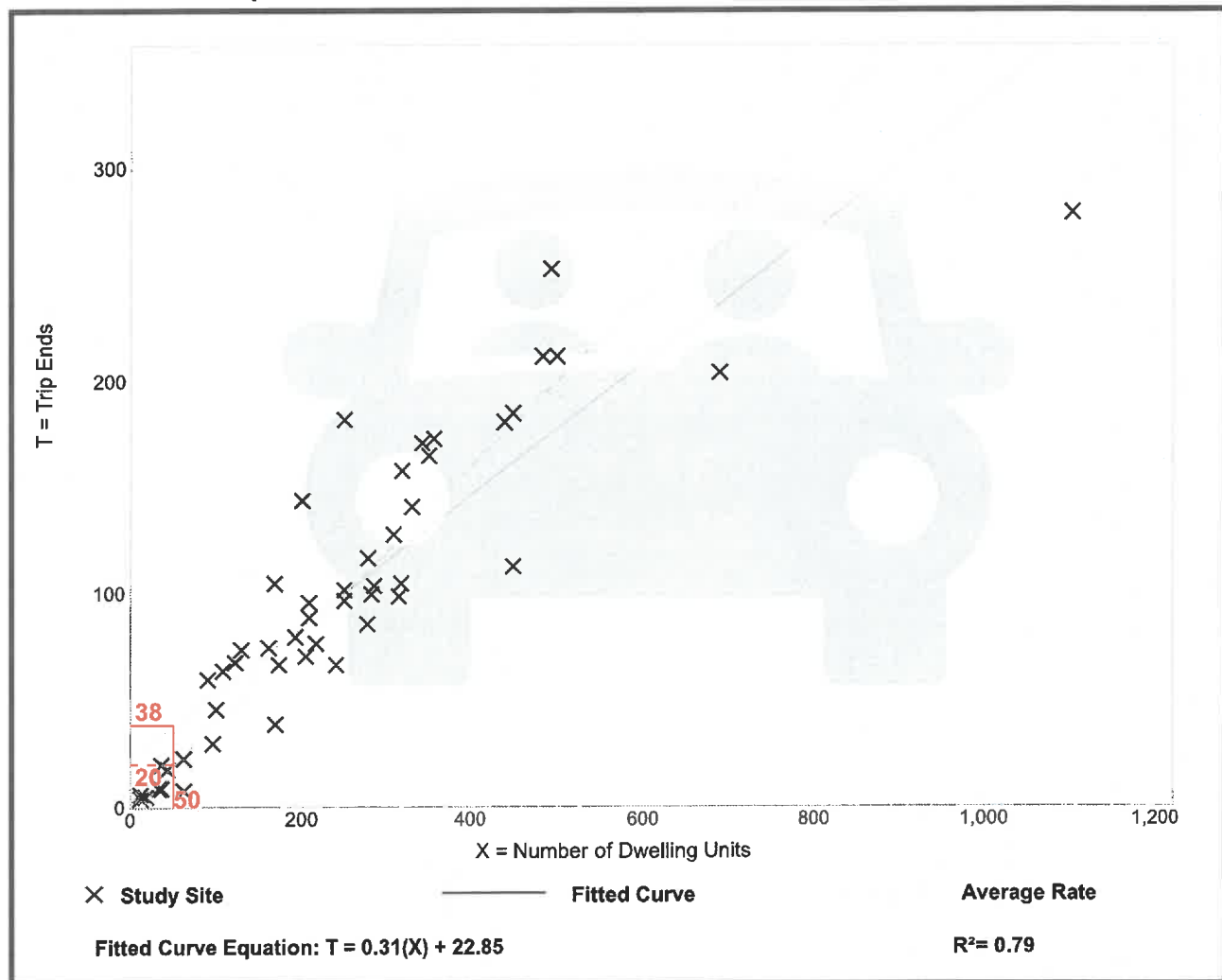
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 59

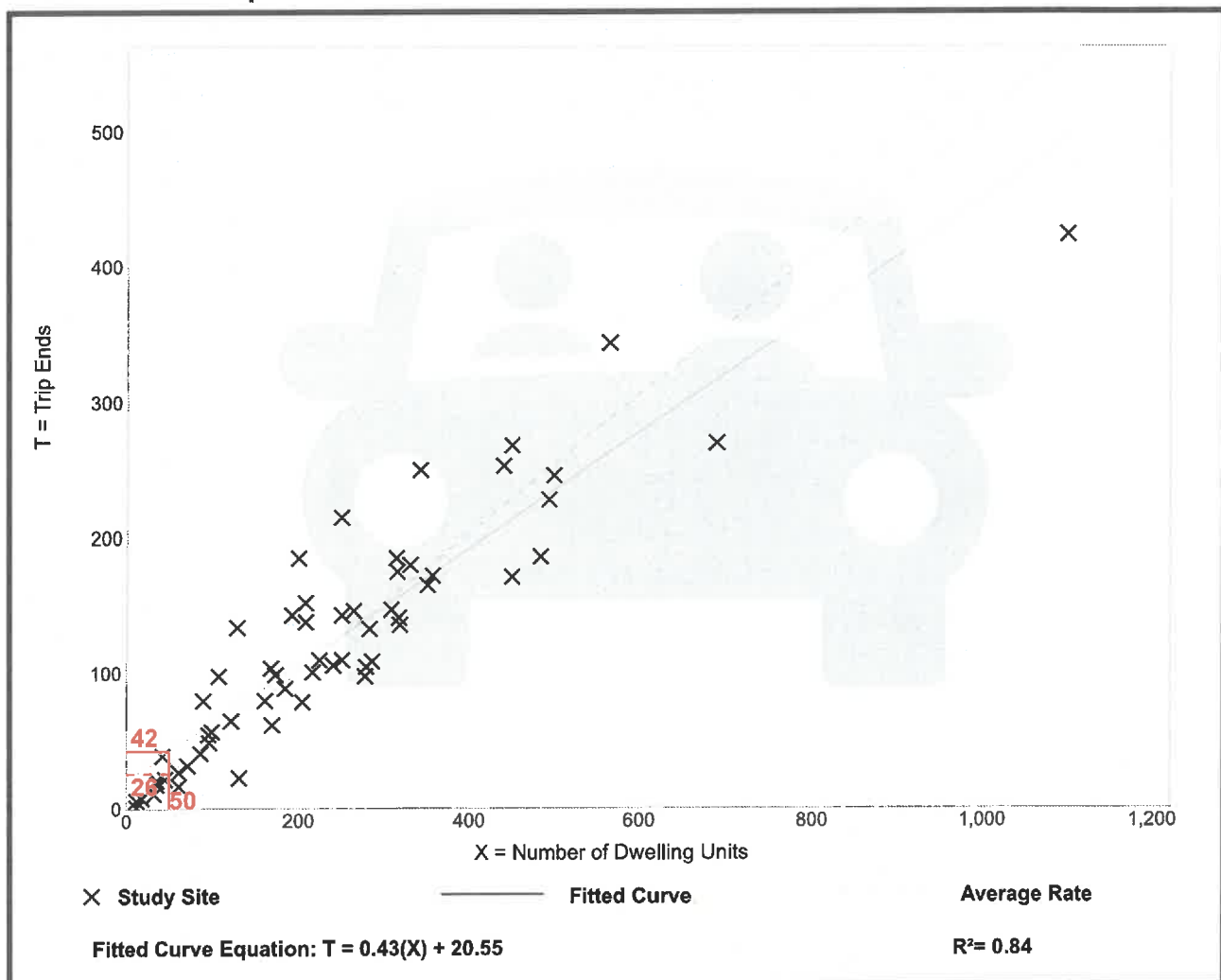
Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

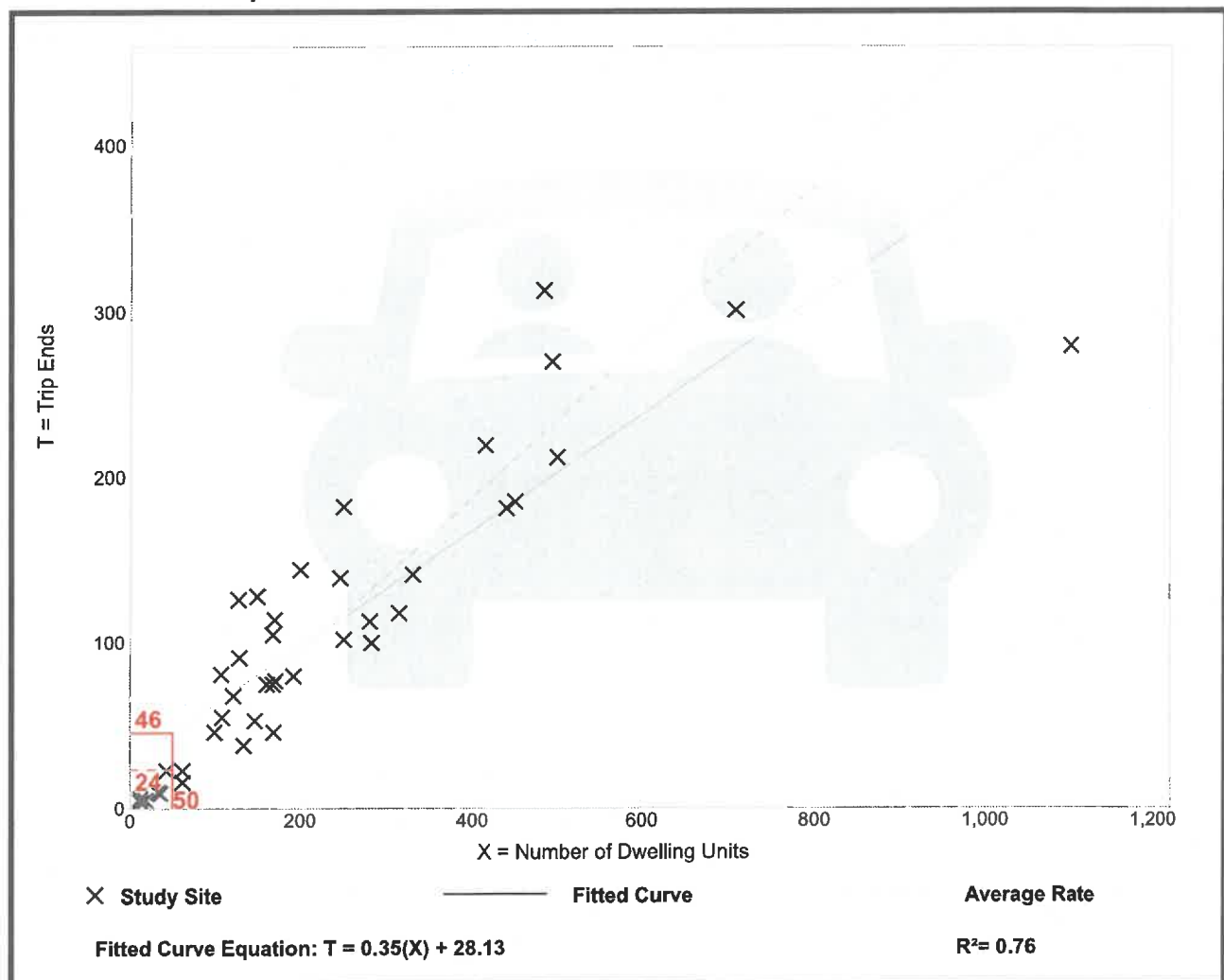
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 40
Avg. Num. of Dwelling Units: 234
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.47	0.25 - 0.98	0.16

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

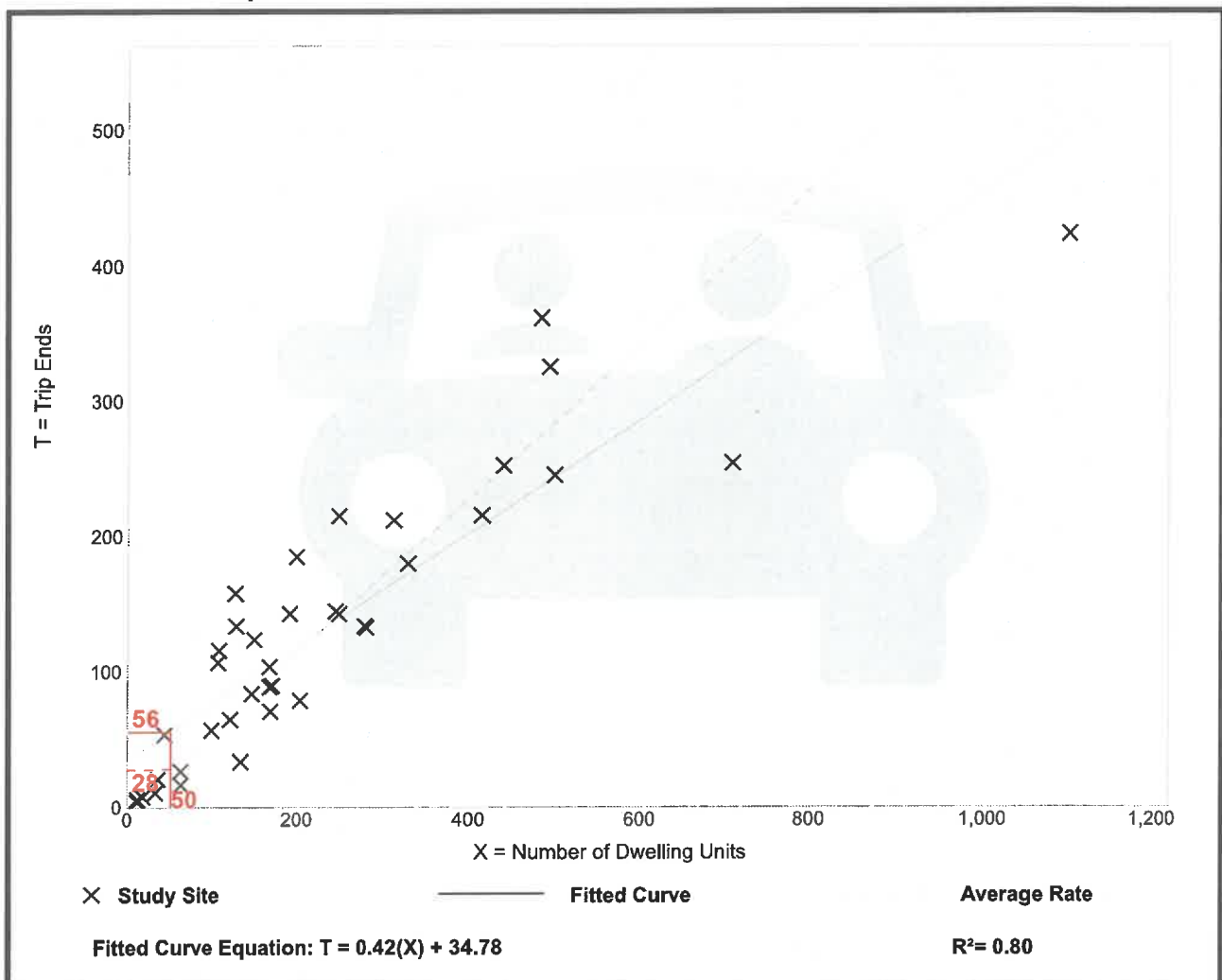
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 38
Avg. Num. of Dwelling Units: 231
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.25 - 1.26	0.20

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

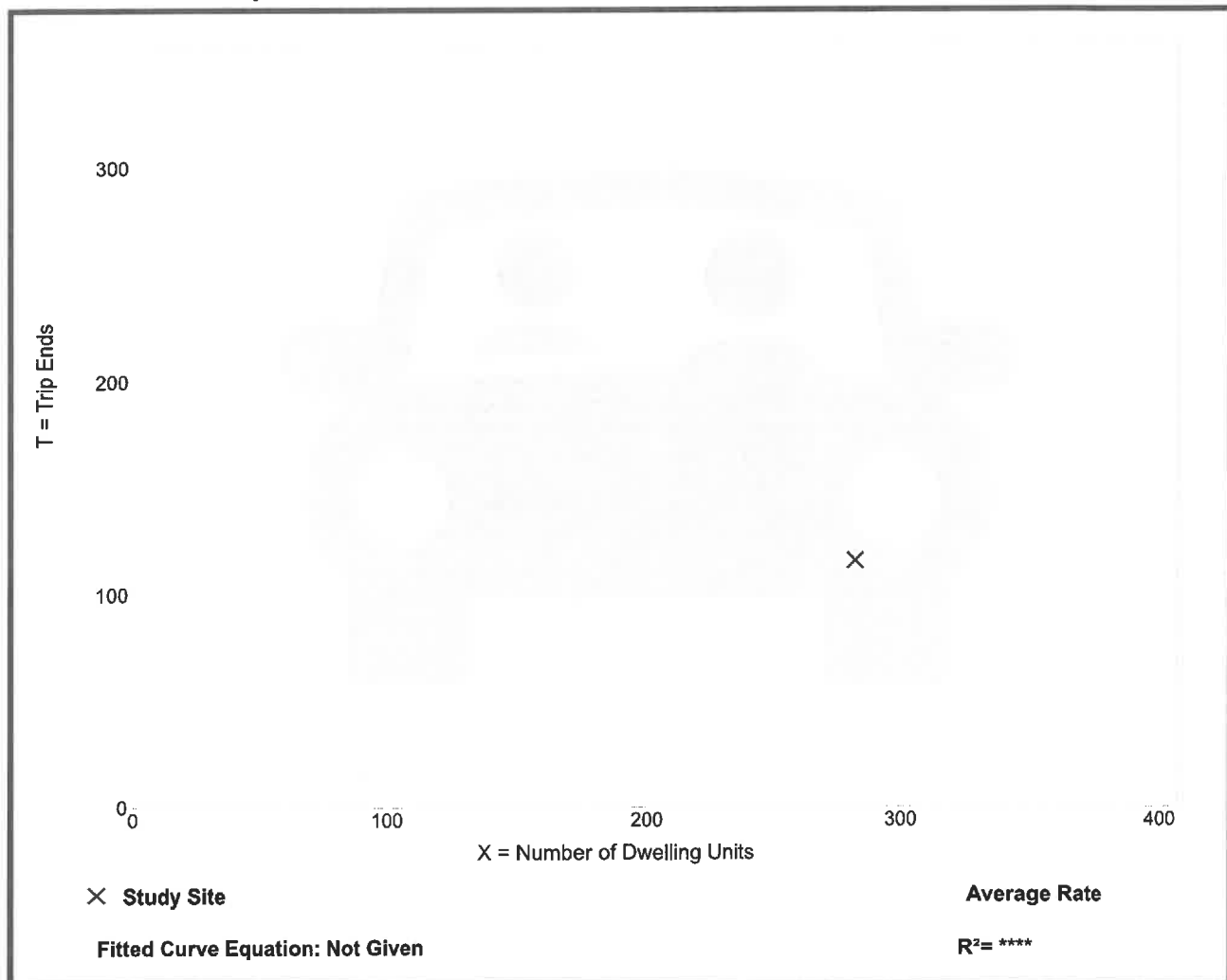
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Dwelling Units: 282
Directional Distribution: Not Available

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.41 - 0.41	*

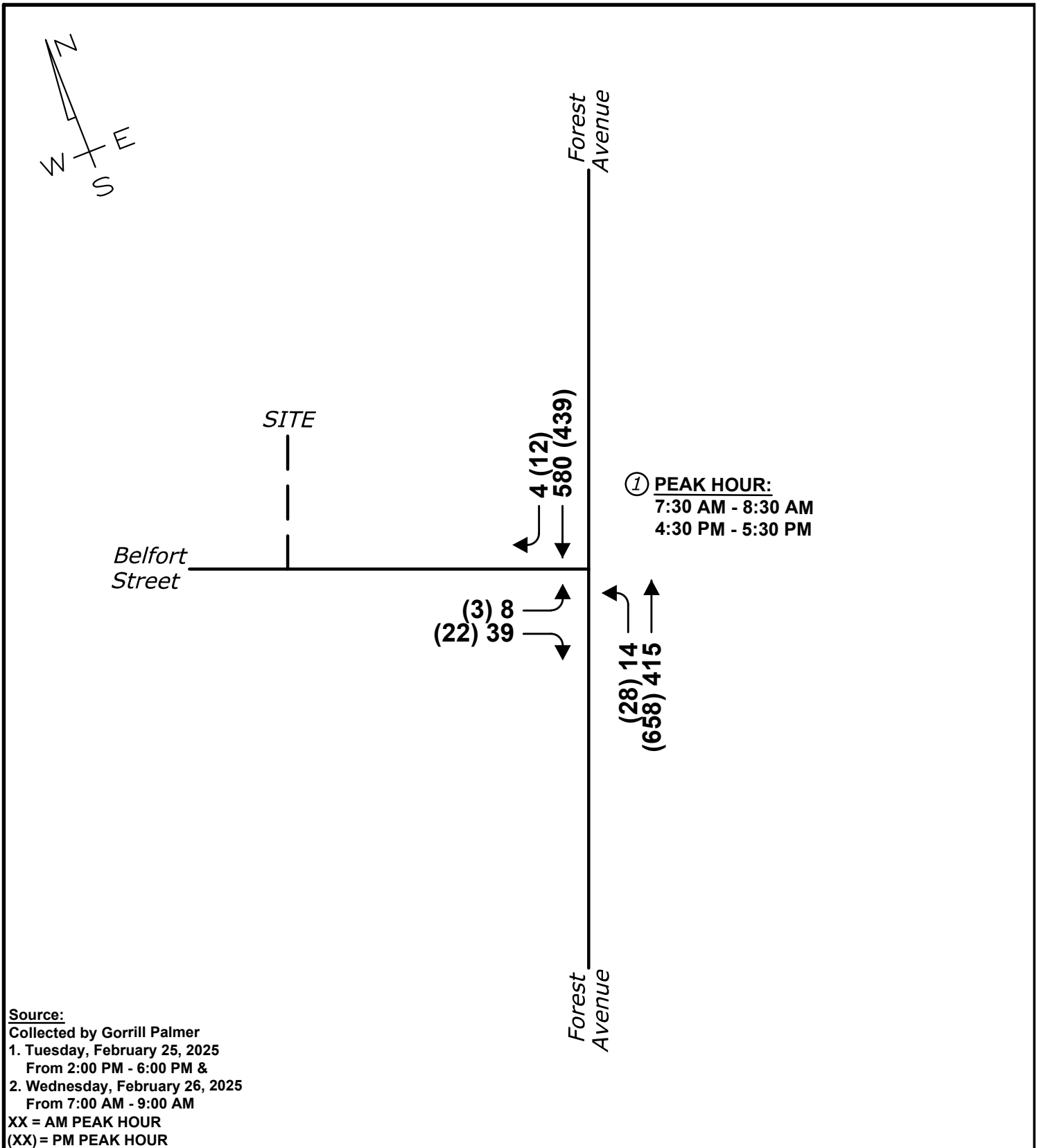
Data Plot and Equation

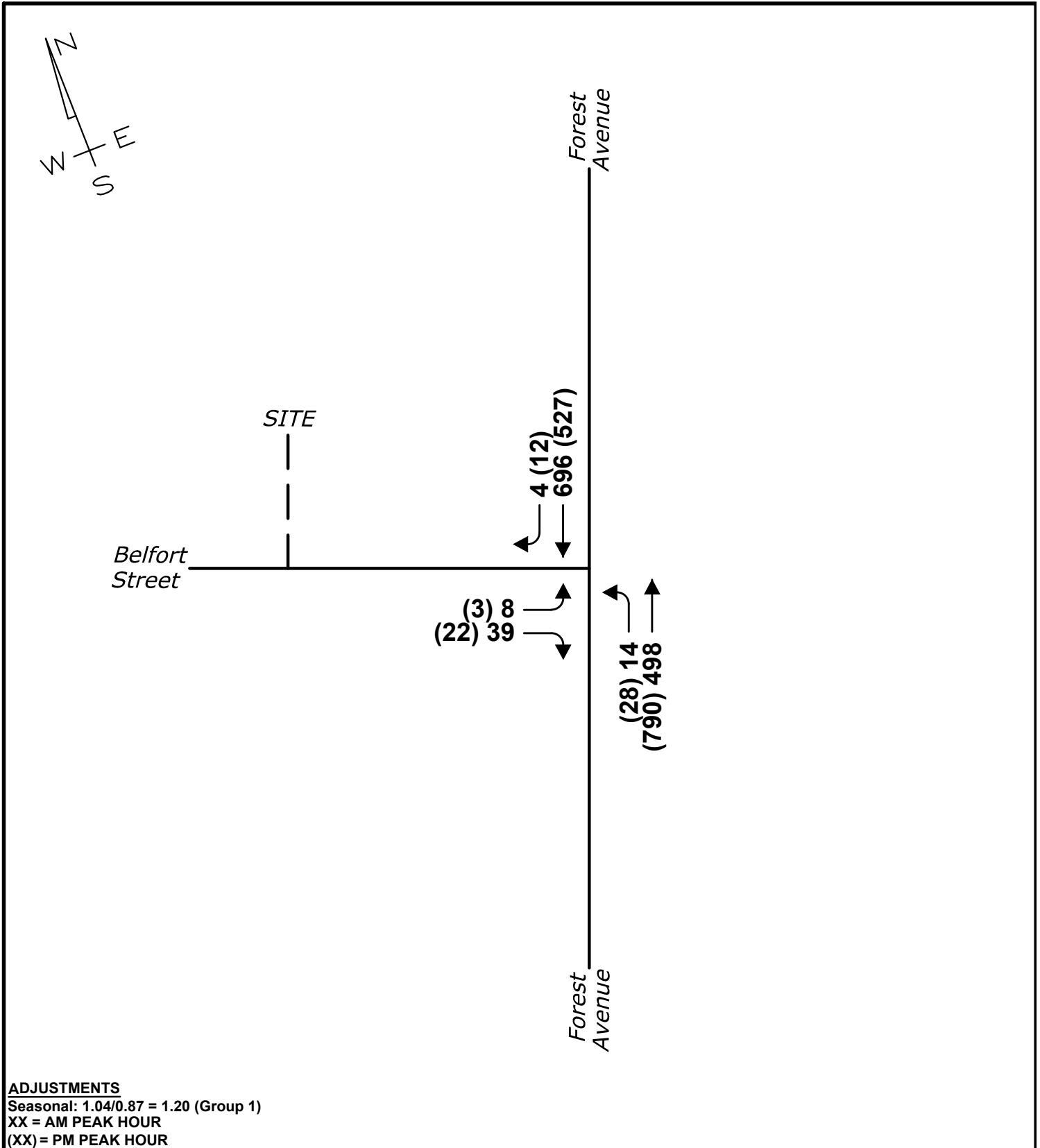
Caution – Small Sample Size



Attachment B

Trip Figures

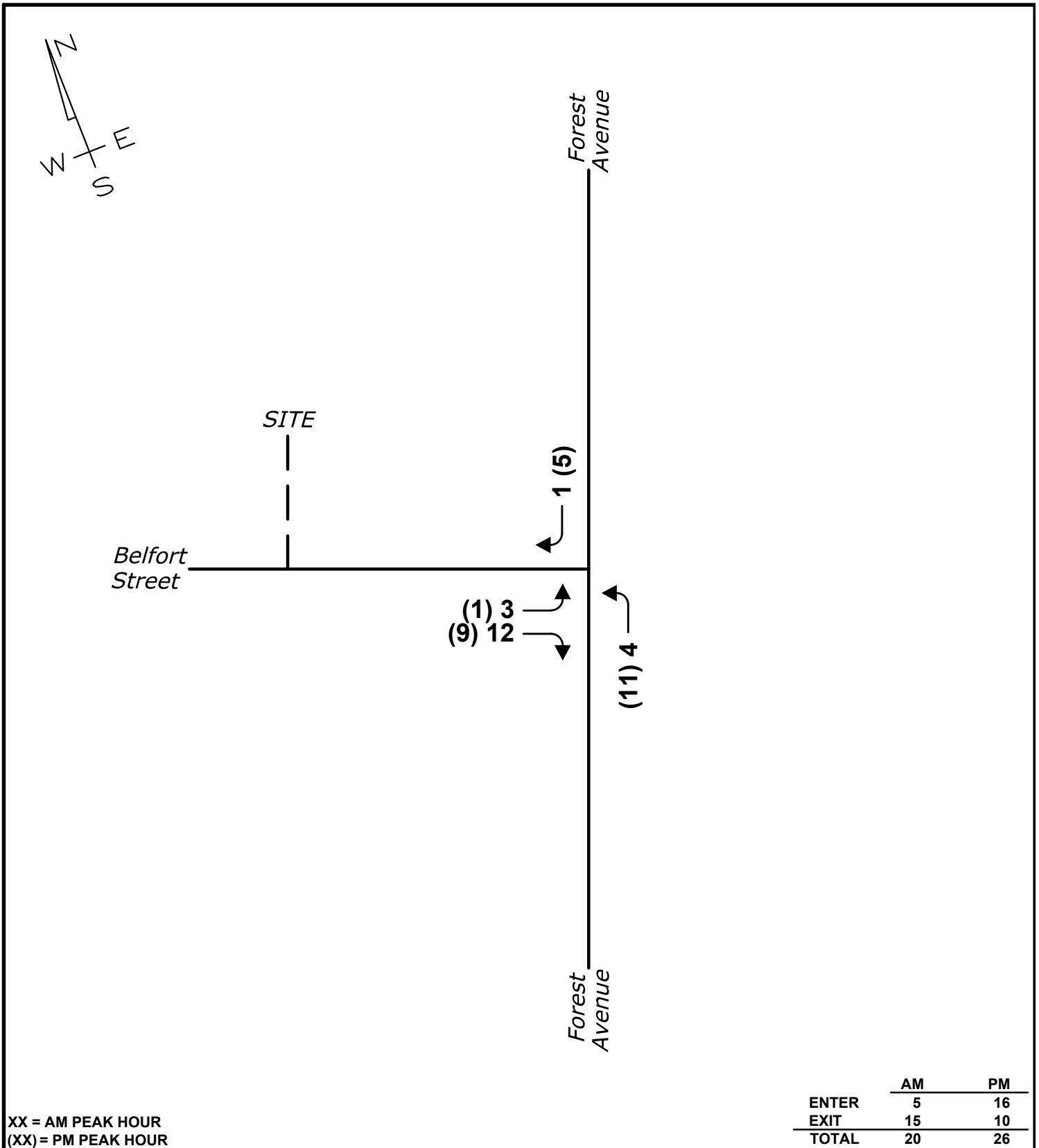




TRIP DISTRIBUTION

Figure No.

3

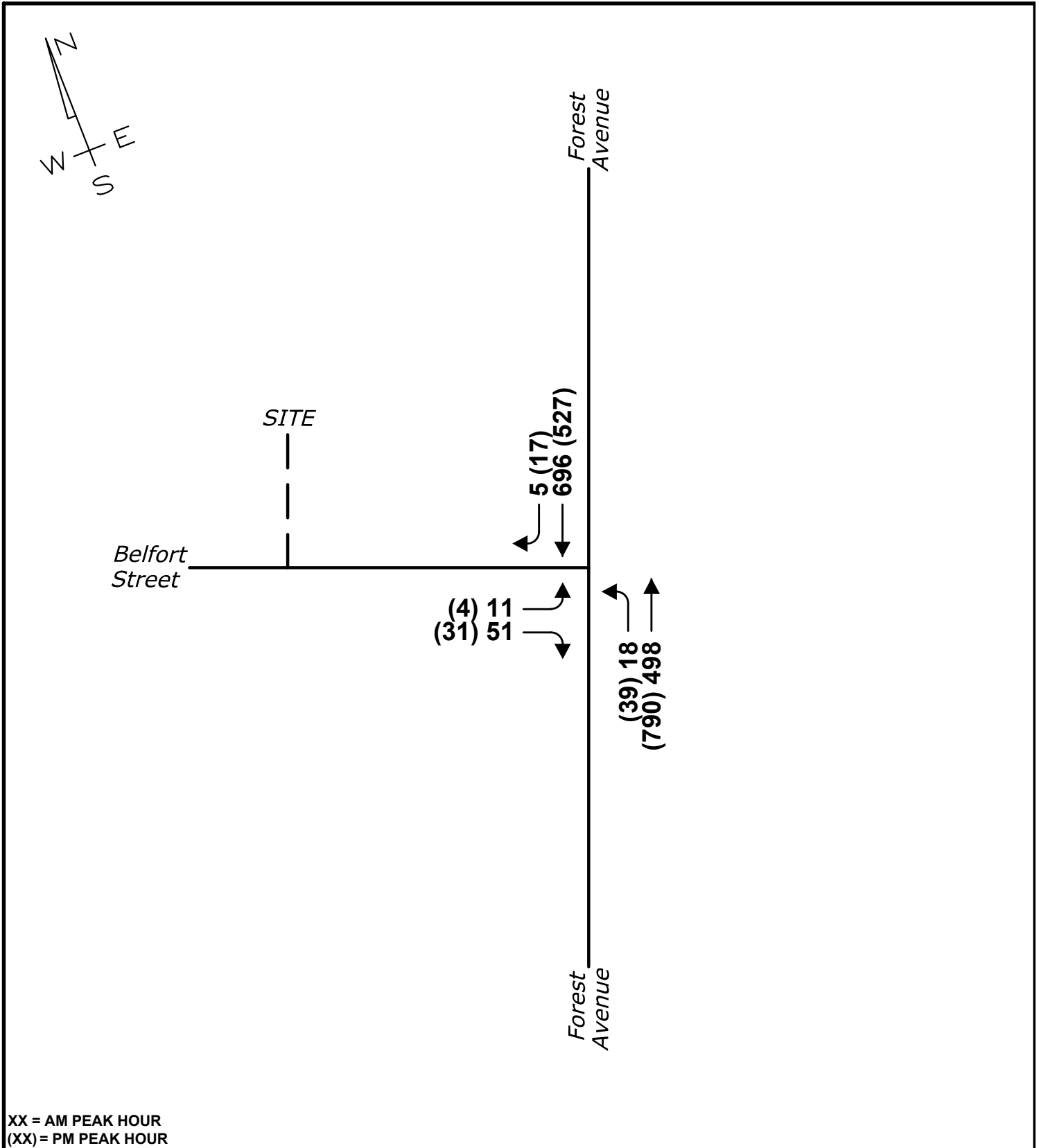


158 FOREST AVE PORTLAND, MAINE

Design: KJB Scale: NONE
Draft: KJB Date: 2/28/2025
Checked: RED File Name: Figure Set-TD.dwg



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158 FOREST AVE PORTLAND, MAINE

Attachment C

Capacity Analysis

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	7:30	7:30	7:30	7:30	7:30	7:30
End Time	8:35	8:35	8:35	8:35	8:35	8:35
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1319	1313	1258	1243	1206	1268
Vehs Exited	1316	1321	1264	1241	1205	1270
Starting Vehs	22	25	30	16	23	21
Ending Vehs	25	17	24	18	24	20
Travel Distance (mi)	682	681	655	645	627	658
Travel Time (hr)	24.9	24.8	23.9	23.2	22.8	23.9
Total Delay (hr)	1.7	1.7	1.7	1.5	1.6	1.6
Total Stops	62	71	58	64	58	63
Fuel Used (gal)	20.2	20.1	19.4	18.9	18.4	19.4

Interval #0 Information Seeding

Start Time	7:30
End Time	7:35
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:35
End Time	8:35
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1319	1313	1258	1243	1206	1268
Vehs Exited	1316	1321	1264	1241	1205	1270
Starting Vehs	22	25	30	16	23	21
Ending Vehs	25	17	24	18	24	20
Travel Distance (mi)	682	681	655	645	627	658
Travel Time (hr)	24.9	24.8	23.9	23.2	22.8	23.9
Total Delay (hr)	1.7	1.7	1.7	1.5	1.6	1.6
Total Stops	62	71	58	64	58	63
Fuel Used (gal)	20.2	20.1	19.4	18.9	18.4	19.4

3: Belfort Street & Forest Avenue Performance by lane

Lane	NB	SE	NW	All
Movements Served	LR	TR	LT	
Denied Del/Veh (s)				0.5
Total Del/Veh (s)	9.0	1.5	1.7	1.9

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	4.1

Intersection: 3: Belfort Street & Forest Avenue

Movement	NB	NW
Directions Served	LR	LT
Maximum Queue (ft)	65	112
Average Queue (ft)	28	12
95th Queue (ft)	54	56
Link Distance (ft)	977	1464
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	7:30	7:30	7:30	7:30	7:30	7:30
End Time	8:35	8:35	8:35	8:35	8:35	8:35
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1334	1340	1271	1253	1216	1283
Vehs Exited	1333	1347	1274	1253	1216	1285
Starting Vehs	23	25	30	17	23	22
Ending Vehs	24	18	27	17	23	21
Travel Distance (mi)	690	694	660	649	631	665
Travel Time (hr)	25.2	25.3	24.1	23.5	23.0	24.2
Total Delay (hr)	1.7	1.8	1.7	1.5	1.6	1.7
Total Stops	72	87	73	90	76	80
Fuel Used (gal)	20.4	20.5	19.6	19.1	18.6	19.6

Interval #0 Information Seeding

Start Time	7:30
End Time	7:35
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:35
End Time	8:35
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1334	1340	1271	1253	1216	1283
Vehs Exited	1333	1347	1274	1253	1216	1285
Starting Vehs	23	25	30	17	23	22
Ending Vehs	24	18	27	17	23	21
Travel Distance (mi)	690	694	660	649	631	665
Travel Time (hr)	25.2	25.3	24.1	23.5	23.0	24.2
Total Delay (hr)	1.7	1.8	1.7	1.5	1.6	1.7
Total Stops	72	87	73	90	76	80
Fuel Used (gal)	20.4	20.5	19.6	19.1	18.6	19.6

3: Belfort Street & Forest Avenue Performance by lane

Lane	NB	SE	NW	All
Movements Served	LR	TR	LT	
Denied Del/Veh (s)				0.5
Total Del/Veh (s)	9.2	1.5	1.8	2.0

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	4.1

Intersection: 3: Belfort Street & Forest Avenue

Movement	NB	NW
Directions Served	LR	LT
Maximum Queue (ft)	69	96
Average Queue (ft)	32	15
95th Queue (ft)	56	59
Link Distance (ft)	977	1464
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30
End Time	5:35	5:35	5:35	5:35	5:35	5:35
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1423	1461	1398	1336	1372	1399
Vehs Exited	1425	1470	1410	1325	1373	1401
Starting Vehs	30	31	31	14	17	24
Ending Vehs	28	22	19	25	16	23
Travel Distance (mi)	739	761	728	690	712	726
Travel Time (hr)	27.0	28.0	26.7	25.2	26.2	26.6
Total Delay (hr)	2.0	2.3	2.0	1.9	2.1	2.0
Total Stops	59	49	52	50	47	51
Fuel Used (gal)	22.0	22.4	21.6	20.3	21.0	21.5

Interval #0 Information Seeding

Start Time	4:30
End Time	4:35
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1423	1461	1398	1336	1372	1399
Vehs Exited	1425	1470	1410	1325	1373	1401
Starting Vehs	30	31	31	14	17	24
Ending Vehs	28	22	19	25	16	23
Travel Distance (mi)	739	761	728	690	712	726
Travel Time (hr)	27.0	28.0	26.7	25.2	26.2	26.6
Total Delay (hr)	2.0	2.3	2.0	1.9	2.1	2.0
Total Stops	59	49	52	50	47	51
Fuel Used (gal)	22.0	22.4	21.6	20.3	21.0	21.5

3: Belfort Street & Forest Avenue Performance by lane

Lane	NB	SE	NW	All
Movements Served	LR	TR	LT	
Denied Del/Veh (s)				0.6
Total Del/Veh (s)	7.4	1.3	2.8	2.3

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	4.6

Intersection: 3: Belfort Street & Forest Avenue

Movement	NB	NW
Directions Served	LR	LT
Maximum Queue (ft)	47	133
Average Queue (ft)	16	23
95th Queue (ft)	42	84
Link Distance (ft)	977	1464
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30
End Time	5:35	5:35	5:35	5:35	5:35	5:35
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1434	1487	1408	1347	1402	1416
Vehs Exited	1441	1496	1420	1339	1408	1421
Starting Vehs	32	31	30	18	22	25
Ending Vehs	25	22	18	26	16	22
Travel Distance (mi)	745	772	732	696	728	735
Travel Time (hr)	27.4	28.6	26.9	25.6	26.9	27.1
Total Delay (hr)	2.1	2.4	2.1	2.0	2.2	2.2
Total Stops	71	79	75	69	75	74
Fuel Used (gal)	22.2	22.9	21.9	20.7	21.6	21.8

Interval #0 Information Seeding

Start Time	4:30
End Time	4:35
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1434	1487	1408	1347	1402	1416
Vehs Exited	1441	1496	1420	1339	1408	1421
Starting Vehs	32	31	30	18	22	25
Ending Vehs	25	22	18	26	16	22
Travel Distance (mi)	745	772	732	696	728	735
Travel Time (hr)	27.4	28.6	26.9	25.6	26.9	27.1
Total Delay (hr)	2.1	2.4	2.1	2.0	2.2	2.2
Total Stops	71	79	75	69	75	74
Fuel Used (gal)	22.2	22.9	21.9	20.7	21.6	21.8

3: Belfort Street & Forest Avenue Performance by lane

Lane	NB	SE	NW	All
Movements Served	LR	TR	LT	
Denied Del/Veh (s)				0.6
Total Del/Veh (s)	7.5	1.3	3.1	2.5

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	4.8

Intersection: 3: Belfort Street & Forest Avenue

Movement	NB	NW
Directions Served	LR	LT
Maximum Queue (ft)	47	145
Average Queue (ft)	21	31
95th Queue (ft)	46	97
Link Distance (ft)	977	1464
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Attachment D

Safety Review

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I

☐ Section Detail

☒ Crash Summary II

☐ 1320 Public

☐ 1320 Private

☐ 1320 Summary

REPORT DESCRIPTION

Portland

Forest Ave (Rte 302) from Westlawn Dr-Commonwealth Dr (16881) to Newton St (16884) & Belfort St from Por,Belfast,Elbert St (13297) to Forest Ave (16882)

REPORT PARAMETERS

Year 2021, Start Month 1 through Year 2023 End Month: 12

Route: 0302X	Start Node: 16881 End Node: 16884	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560050	Start Node: 16882 End Node: 13297	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 3209864	Start Node: 69084 End Node: 69085	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	Injury Crashes			Percent Annual M		Crash Rate	Critical Rate	CRF	
						A	B	C	PD	Injury	Ent-Veh			
16883	0302X - 3.15	Int of FOREST AV HARRIS AV	2	2	0	0	0	0	2	0.0	6.325	0.11	0.32	0.00
P16884	0302X - 3.20	Int of FOREST AV NEWTON ST	9	3	0	0	0	0	3	0.0	6.566	Statewide Crash Rate: 0.13		
												0.15	1.17	0.00
16882	0302X - 3.13	Int of BELFORT ST FOREST AV	2	2	0	0	0	0	2	0.0	6.219	0.11	0.32	0.00
16881	0302X - 3.07	Int of COMMONWEALTH DR FOREST AV WESTLAWN RD	2	0	0	0	0	0	0	0.0	6.172	Statewide Crash Rate: 0.13		
												0.00	0.32	0.00
A69084	0302X - 3.19	Int of ENT TO RIVERTON SCHOOL FOREST AV	9	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
16882	0560050 - 0	Int of BELFORT ST FOREST AV	2	2	0	0	0	0	2	0.0	6.219	0.11	0.32	0.00
13297	0560050 - 0.24	0503711 POR,BELFAST,ELBERT ST.	2	0	0	0	0	0	0	0.0	0.219	Statewide Crash Rate: 0.13		
												0.00	0.51	0.00
A69084	3209864 - 0	Int of ENT TO RIVERTON SCHOOL FOREST AV	9	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
69085	3209864 - 0.01	End of ENT TO RIVERTON SCHOOL	2	0	0	0	0	0	0	0.0	0.002	Statewide Crash Rate: 0.71		
												0.00	-78.64	0.00
Study Years: 3.00			NODE TOTALS:											
				9	0	0	0	0	9	0.0	31.722	0.09	0.38	0.25

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	A	B	C	PD	Injury Percent	Annual HVM	Crash Rate	Critical Rate	CRF
16881	16882	3130491 Int of COMMONWEALTH DR WESTLAWN RD	0 - 0.06	0302X - 3.07 US 302	0.06	2	1	0	0	0	1	0.0	0.00359	92.72	498.87 Statewide Crash Rate: 197.04	0.00
16882	16883	3131657 Int of BELFORT ST FOREST AV	0 - 0.02	0302X - 3.13 US 302	0.02	2	2	0	0	0	2	0.0	0.00123	542.27	656.88 Statewide Crash Rate: 197.04	0.00
16883	69084	3506324 Int of FOREST AV HARRIS AV	0 - 0.04	0302X - 3.15 US 302	0.04	2	2	0	0	0	2	0.0	0.00252	264.45	546.72 Statewide Crash Rate: 197.04	0.00
69084	16884	3506325 Int of ENT TO RIVERTON SCHOOL FOREST AV	0 - 0.01	0302X - 3.19 US 302	0.01	2	0	0	0	0	0	0.0	0.00065	0.00	758.42 Statewide Crash Rate: 197.04	0.00
13297	16882	187995 0503711 POR,BELFAST,ELBERT ST.	0 - 0.24	0560050 - 0 RD INV 05 60050	0.24	2	2	0	0	0	2	0.0	0.00072	928.09	1205.03 Statewide Crash Rate: 369.86	0.00
69084	69085	3506326 Int of ENT TO RIVERTON SCHOOL FOREST AV	0 - 0.01	3209864 - 0 RD INV 3209864	0.01	2	0	0	0	0	0	0.0	0.00000	0.00	- Statewide Crash Rate: 197.04	0.00
Study Years: 3.00					Section Totals:	0.38	7	0	0	0	7	0.0	0.00872	267.63	423.70	0.63
Grand Totals:					0.38	16	16	0	0	0	16	0.0	0.00872	611.73	563.63	1.09

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
16881	16882	3130491	0 - 0.06	0302X - 3.07	1	0	0	0	0	1	2023-30715	10/23/2023	3.08	PD
16882	16883	3131657	0 - 0.02	0302X - 3.13	2	0	0	0	0	2	2022-38909	12/25/2022	3.14	PD
16883	69084	3506324	0 - 0.04	0302X - 3.15	2	0	0	0	0	2	2021-11664	05/16/2021	3.14	PD
69084	16884	3506325	0 - 0.01	0302X - 3.19	0	0	0	0	0	0	2021-18414	07/17/2021	3.17	PD
13297	16882	187995	0 - 0.24	0560050 - 0	2	0	0	0	0	2	2022-17687	06/25/2022	3.17	PD
69084	69085	3506326	0 - 0.01	3209864 - 0	0	0	0	0	0	0	2021-27983	10/17/2021	0.08	PD
											2021-4659	02/22/2021	0.21	PD
Totals:					7	0	0	0	0	7				

Crashes by Day and Hour

Day Of Week	Hour of Day												PM												Un	Tot
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	4
TUESDAY	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
WEDNESDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3
THURSDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRIDAY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	13	23-Bicyclist	0
2-(Sport) Utility Vehicle	11	24-Witness	2
3-Passenger Van	0	25-Other	0
4-Cargo Van (10K lbs or Less)	1	26-Construction	0
5-Pickup	6	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	Total	34
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	1		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crashes by Driver Action at Time of Crash						
Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Total
No Contributing Action	3	8	1	0	0	12
Ran Off Roadway	0	0	0	0	0	0
Failed to Yield Right-of-Way	1	0	0	0	0	1
Ran Red Light	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0
Drove Too Fast For Conditions	1	0	0	0	0	1
Improper Turn	0	0	0	0	0	0
Improper Backing	2	0	0	0	0	2
Improper Passing	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0
Followed Too Closely	6	4	0	0	0	10
Failed to Keep in Proper Lane	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0
Other Contributing Action	2	1	0	0	0	3
Unknown	1	0	0	0	0	1
Total	16	13	1	0	0	30

Crashes by Apparent Physical Condition And Driver						
Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Total
Apparently Normal	14	13	1	0	0	28
Physically Impaired	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	1	0	0	0	0	1
Other	0	0	0	0	0	0
Total	15	13	1	0	0	29

Driver Age by Unit Type					
Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV
09-Under	0	0	0	0	0
10-14	0	0	0	0	0
15-19	3	0	0	0	0
20-24	3	0	0	0	0
25-29	1	0	0	0	0
30-39	12	0	0	0	0
40-49	3	0	0	0	0
50-59	6	0	0	0	0
60-69	1	0	0	0	0
70-79	1	0	0	0	0
80-Over	0	0	0	0	0
Unknown	2	0	0	0	0
Total	32	0	0	0	0

Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	Total	32
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	30		
14-Parked Motor Vehicle	2		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
Traffic Control Devices			
		Traffic Control Device	Total
16-Work Zone / Maintenance Equipment	0	1-Traffic Signals (Stop & Go)	5
17-Other Non-Fixed Object	0	2-Traffic Signals (Flashing)	1
18-Impact Attenuator / Crash Cushion	0	3-Advisory/Warning Sign	0
19-Bridge Overhead Structure	0	4-Stop Signs - All Approaches	0
20-Bridge Pier or Support	0	5-Stop Signs - Other	2
21-Bridge Rail	0	6-Yield Sign	0
22-Cable Barrier	0	7-Curve Warning Sign	0
23-Culvert	0	8-Officer, Flagman, School Patrol	0
24-Curb	0	9-School Bus Stop Arm	0
25-Ditch	0	10-School Zone Sign	0
26-Embankment	0	11-R.R. Crossing Device	0
27-Guardrail Face	0	12-No Passing Zone	0
28-Guardrail End	0	13-None	8
29-Concrete Traffic Barrier	0	14-Other	0
30-Other Traffic Barrier	0	Total	16
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Injury Data			
Severity Code	Injury Crashes	Number Of Injuries	
K	0	0	
A	0	0	
B	0	0	
C	0	0	
PD	16	0	
Total	16	0	

Road Character	
Road Grade	Total
1-Level	14
2-On Grade	2
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
Total	16

Light	
Light Condition	Total
1-Daylight	12
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	3
5-Dark - Not Lighted	1
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	16

Crashes by Year and Month

Month	2021	2022	2023	Total
JANUARY	0	0	0	0
FEBRUARY	3	1	0	4
MARCH	0	0	0	0
APRIL	0	0	0	0
MAY	2	0	0	2
JUNE	0	3	0	3
JULY	1	0	2	3
AUGUST	0	0	1	1
SEPTEMBER	0	0	0	0
OCTOBER	1	0	1	2
NOVEMBER	0	0	0	0
DECEMBER	0	1	0	1
Total	7	5	4	16

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	3	0	9	0	0	1	0	0	0	0	0	0	0	0	13
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	9	0	0	4	0	0	0	0	0	0	0	0	16

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	6	0	0	0	0	0	0	0	0	0	1	7
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	3	0	0	0	0	0	0	0	0	0	0	3
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Not Lighted	0	0	0	0	0	0	1	0	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	1	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	1	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	1	0	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	10	1	0	0	0	0	2	0	0	0	3	16

ATTACHMENT 6

NEIGHBORHOOD MEETING PACKAGE

Neighborhood Meeting Certification

I, Doug Reynolds, P.E., hereby certify that a neighborhood meeting was held on Wednesday, February 5, 2025 at the Talbot Community School at 1600 Forest Avenue, Portland, Maine at 5:30 P.M.

I also certify that on January 24, 2025, invitations were mailed to the following:

1. All addresses on the mailing list provided by the Planning Division which includes property owners within 500 feet of the proposed development.
2. Residents on the "Interested parties" list.

Signed,



Doug Reynolds, P.E.

February 6, 2025

(date)

Attached to this certification are:

1. Copy of notice sent
2. Sign-in sheet
3. Record of feedback

January 24, 2025

Dear Neighbor:

Please join ACRE Properties, for a Neighborhood Meeting to discuss their proposed 50-unit residential development consisting of two, three-story, multi-family dwellings, each with a building footprint of approximately 7,560 square feet at 1582 Forest Avenue, Portland, ME. The City of Portland identifies the property on the Maine Parcel Viewer as Parcel 299, Lot D1011001. The site is to be accessed via Belfort Street with pedestrian access via Forest Avenue.

Meeting Location: Talbot Community School

Meeting Date: February 5th, 2025

Meeting Time: 5:30pm-6:30pm

The City Code requires that the applicant shall mail notice to all property owners within 500 feet of the subject property boundaries, at least 10 calendar days prior to the neighborhood outreach or event. We will take attendance and submit a sign-in sheet to the Planning Board. The meeting will last no more than 60 minutes. If you have any questions, please feel free to contact Doug Reynolds 207.772.2515.

Sincerely,

GORRILL-PALMER



Douglas E. Reynolds, PE
Project Manager
Phone 207-772-2515
DReynolds@GorrillPalmer.com

Note: Under Section 13.5.5(B) Neighborhood Outreach of the City Code of Ordinances, an applicant for a Major Site plan development is required to mail notice to all property owners within 500 feet of the subject property boundaries, at least 10 calendar days prior to the neighborhood outreach or event. The notice shall contain a brief description of the proposal and information about how to access the neighborhood outreach (e.g. the date, time, and place of the neighborhood meeting or event or other relevant information regarding approved forms of neighborhood outreach). A digital copy of the neighborhood notice shall be sent to the Planning Authority, which shall be distributed to the City's list of interested citizens. Should you wish to offer additional comments on this proposed development, you may contact the Planning Division at 874-8683 or send written correspondence to the Planning and Urban Development Department, Planning Division 4th Floor, 389 Congress Street, Portland, ME 04101.

"U:\ACRE Properties\4292 - 1582 Forest Ave Belfort Residential - ACRE Properties\G Abutters\Neighborhood meeting notice.docx"



Neighborhood Meeting Sign-In Sheet
Project: 1582 Forest Avenue, Portland, Maine

Date: February 5th, 2025

Time: 5:30 PM

Location: Talbot Community School

Name	Company	Telephone No.	Email Address
Kassey Northrop	Gorrill Palmer	315-600-6037	knorthrop@gorrillpalmer.com
Ethan Chadwick	Gorrill Palmer	207-595-5195	echadwick@gorrillpalmer.com
Alex Coupe	ACRE Properties	207-838-4546	acoupe@acreproperties.com
LEROY DOUCETTE		207-791-4215	ldoucette@gmail.com
J. L. DORTCH		207-939-3404	jsd84834@gmail.com
SPENCER		207-522-0322	
Lynne Calk		797-6765	FAA
Marianne Carter		207-329-1051	
Carol Di Pietro		207-868-9114	
Patty Debel		207-653-1671	lebel/patty@gmail.com
Jim Mary-JO Brink		207-239-5261	mjbrink1@gmail.com
Alex Rand		207-899-8062	alexrand42@gmail.com
Debbie Pappas		207-807-312	DebPappas@gmail.com
P. J. Kwiecień		732-644-9349	
Tom RANAGHAN		207-233-2100	
Michael J. McLeod			mjm2454@yahoo.com
Amy L. Walsh			amiyotree@gmail.com
Melissa Blanchard		207-899-9034	jorlms41968@gmail.com
Ryan Chamberlain		207-318-4781	ryanchamberlain@yahoo.com
GRANT CHAMBERLAIN		207-212-8447	GRANT-1221@YAHOO
Lisa Coha		207-232-1416	lizcoha3@verizon.net
Cindy Russell		207-233-5117	cindyrussell76@mc.com
Justin Russell		207-310-7912	timetoclimb@pm.me
James Spear		207-272-7998	james.spear99@gmail.com
Elizabeth Berg		207-272-2922	LBFMGT@yahoo.com
Toni Guica			Rnhappytm@gmail.com
David Guica			
Paul Moore		207-730-3677	75501 Commodo4562@yahoo
CHRIS PRICE		207-797-9896	
Haver Markham		716-640-5821	hamarkham@gmail.com
Shane White		207-735-7353	espiuu@gmail.com

RECORD OF FEEDBACK

Project: 1582 Forest Avenue, Portland, Maine

Job #: 4292

Date: February 5, 2025

Time: 5:30 P.M. – 6:30 P.M.

Location: Talbot Community School

Subject: Neighborhood Meeting

Attendees: See Attached Sign-In Sheet

In accordance with the City of Portland's Major Site Plan Requirements, a Neighborhood Meeting was scheduled to discuss the proposed 50-unit residential development consisting of two, three-story, multi-family dwellings, each with a building footprint of approximately 7,560 square feet.

The meeting was held on Wednesday, February 5, 2025 at 5:30 P.M. and Alex Coupe, President of ACRE Properties, LLC (Applicant), as well as Kassey Northrop and Ethan Chadwick, representatives from Gorrill Palmer, were present on site from 5:15 P.M. – 7:00 P.M. Please note that there were approximately seventy-six (76) attendees at the meeting, however only forty-one (41) members of the public were willing to sign in.

Brandon viger <brandonpviger@gmail.com>

Apr 12, 2025, 2:43:57 PM (2 days ago)



to planningboard@portlandmaine.gov

For consideration by the planning and zoning board in relation to the "Belfort Landing"

As the plan sits now, I am deeply offended in the audacity and vehemently oppose this current project while understanding the goals and plans of ReCode Portland. I sincerely hope that my comments are absorbed and considered.

Since the Feb 4th neighborhood meeting and especially after the April 8th hybrid meeting, I have been mired in the details on how many things in this proposal are WRONG. Taking a step back from the obvious issues that most residents have expressed. The following is an abbreviated list of my personal additions to the core issues:

1. The Belfort Landing, commonly referred to as 1584 forest ave. is NOT on Forest Ave and should NOT be considered so. to call it this is a blatant falsehood.
 - a. Access on forest is for ABUTTING 1584 Forest frontage/hiding behind Morans market parking lot. Honestly, I am not sure HOW the access works and should be looked into. Property in question is ONE FURTHER behind 1584. The plan proposes an exit/entrance on 29 BELFORT st. You have enough comments on traffic and saw in the hybrid meeting the lack of good faith traffic assessments.
 - b. I have very little faith on technical "frontage" of at least 50' required for RN5. Both on Belfort (~30ft) and on Forest (not even physically, or perhaps legally connected).
2. During ReCode 2025, city-wide, most old R3 moved to RN1. This is a welcomed move, even if not perfect. It should increase the number of smaller units on otherwise too small lots by changing offsets and limits. R5 properties were commonly moved to RN3. in fact, about HALF of R5 became RN3. This REDUCED the number of properties that can build absolutely giant structures. At that same time, there are VERY few reZones in the opposite (NEW RN5 additions in ReZone). If you look closely, you might wonder how exactly did this landlocked parcel get approval to rezone into this ridiculous disparity to adjacent properties. To benefit from the ReCode to be insanely massive and dense in comparison to everything in the surrounding neighborhoods, even all commercial space locally (industrial park, the old tortilla flats, anything on riverside) seems suspicious.
3. The design does NOT meet the neighborhood aesthetic or character in any way, nor community approval. Those that argue FOR this have only cited 'read the ReCode document' and have not considered the real world effects. Each individual case should be reviewed objectively. A few glaring PHYSICAL problems:
 - a. TWO (7600 sq ft each) 3 story, 140 ft long, 50ish wide, 48'tall at the peak. set UP OVER lower belfort by steep RIP RAP wall (4-8" jagged stones) like its the side of a highway. appears to be between 8-10 feet high. Lower neighbors will be dwarfed by 55-65 foot walls. I personally will be able to see this building from commonwealth, over top of almost all the trees.
 - b. Huge garbage corral right over lower neighbors. 50 units (30 doubles, 20 singles). that is going to be disgusting.
 - c. light pollution at night, like a prison on surrounding families.
 - d. lack of personal privacy for immediate neighbors.
 - e. looming sky rights and shadows/darkness in the day.
 - f. will the Talbot school/community center be a de-facto overflow? is that something in the rules regarding that land? or will we have cars up and down forest like when the other local developments have to clear snow, except permanently year round? or worse, belfort st?
4. The developer has not even attempted to compromise on anything since the neighborhood meeting. We all were clearly upset and had real concerns.
 - a. The Developers replies in neighborhood meeting were shocking and offensive.
 - i. "I could have built 65 units, lucky its only 50" with a sneer. Even now, the latest proposal says 165? units max is possible. which in my opinion is insane for the region (or any land in portland), clearly pointing to the zoning disparity that needs to be addressed in this particular case.
 - ii. "Rent will be 2200-2400, lucky it isn't a few years ago, it would be 2800" Rude, ignorant comments and an attitude that our questions don't matter.
 - b. His lack of respect for our community and concerns
 - i. The NEW proposal is not very different at all and not a single concern has been met.

The current notice rules of 500 ft seems incredibly rude, excluding hundreds of families potentially living in this shadow. Likewise, Current Notice timeline requirements leave little room for working people (regular citizens who don't plan insane commercial buildings on the daily and get paid for it) to review the technical drawings for the building, utilities, site plans, preparation and more. 10 days- minus USPS, for unaware neighbors to review.

Why not two big houses that have great land and single or double family aesthetics? Why not two 12 units? Why not ANY offer other than two warehouses? We are discussing a Cape community, where we aren't even allowed to build a duplex. It just does not make sense.

After further clerical, physical, and visual review/inspection of the Developer and his Associates current properties, His motives seem far from Noble. Arguably Vile. This particular property zoning needs to be investigated and reviewed.

I am saddened that our community feels completely unheard and hopeless. This development is a bad precedent to set. Especially given the clear Absolution against any compromise and seeming disdain for residents. It's difficult to hear our own district representative vouching for this while being hands-off during the neighborhood meeting. Expressing concern for us, but inevitably blindly accepting the Zoning and ReCode as Absolute. The REAL effects of this need to be considered. The Zoning makes no sense in this particular case. Perhaps this property should NOT be RN5. If this property should stay RN5, I would propose my Commonwealth dr property be moved to RN5 as well so I can build the tallest tower in all of the land.

Respectfully,
Brandon Viger
Commonwealth Drive, Riverton Community, Portland Maine.

Regarding Belfort Landing

1 message

Emily <sphinxgirl@gmail.com>
Reply-To: sphinxgirl@gmail.com
To: planningboard@portlandmaine.gov

Mon, May 5, 2025 at 9:45 AM

Hello Planning board members,
I am writing to you as a resident of Belfort Street in Portland. I know a vocal number of my neighbors have spoken out regarding this proposed development. I wanted to write and say that my wife and myself are NOT opposed to it. I realize we have a housing crisis and building more housing is one of the ways to solve it. As such, I do NOT have a problem with an apartment building going in on my street. I would, however, like to see more than one entrance road to the building. Only the access road from Belfort street does seem problematic. Also, can you guarantee a significant number of the apartments will be affordable?

Thank you so much for your time,
Emily D'Urso
[155 Belfort St](#)
[Portland](#)

Compromising Safety: The Flaws in the Belfort Landing Development Plan

Subscribe ☐

0 views



John Chaisson <jrchaiss@gmail.com>
to planningboard@portlandmaine.gov

Apr 8, 2025, 2:18:04 PM (18 hours ago)



Esteemed members of the City Planning Board, my name is John Chaisson and I am a resident of 32 Iffley St, the very end of Belfort. I email you today to express serious concerns regarding the proposed development of two 25-unit buildings in our residential neighborhood, specifically highlighting the significant safety implications posed by the proposed 16-foot wide driveway.

Our neighborhood, as you know, is characterized by single-family homes and a more traditional infrastructure. The current street widths and driveway sizes are designed for lower density living. Introducing 50 additional residential units, potentially housing dozens more vehicles, all relying on a single 16-foot wide driveway, presents a clear and unacceptable safety risk.

Firstly, consider emergency vehicle access. A 16-foot driveway is simply insufficient to allow for the unimpeded passage of fire trucks, ambulances, and police vehicles, especially if cars are parked along either side, as is common in residential settings. In the event of an emergency, precious time could be lost navigating this bottleneck, potentially with devastating consequences for our residents.

Secondly, pedestrian safety is a major concern. With increased traffic flow in and out of 50 units through a narrow driveway, the risk of accidents involving pedestrians, particularly children playing or residents walking, will drastically increase. The limited width offers little margin for error and reduces visibility for both drivers and pedestrians.

Thirdly, the sheer volume of traffic generated by 50 units funneling through a single, narrow access point will create significant congestion on our already established residential streets. This increased traffic will not only disrupt the peaceful nature of our neighborhood but also increase the likelihood of vehicle accidents at the driveway entrance and along adjacent roads. The limited width will make turning movements difficult and potentially hazardous.

Finally, consider the practicalities of daily life. Residents attempting to enter or exit the development simultaneously will face significant challenges and potential conflicts. Deliveries, waste management trucks, and service vehicles will also struggle to maneuver safely within such a constrained space.

Approving this development with such an inadequate driveway poses a direct threat to the safety and well-being of our existing residents and future occupants. It is a fundamental principle of responsible city planning to prioritize safety and ensure adequate infrastructure to support proposed developments. This 16-foot-wide driveway simply does not meet that standard for a 50-unit complex.

I must also draw your attention to another critical safety concern: the severely limited parking provision within this proposed development.

The plan allocates only 50 parking spaces for 50 residential units. Given that these are 25 two-bedroom units, and assuming a reasonable likelihood of at least one vehicle per bedroom – a

common reality in our community – we are looking at a potential shortfall of at least 50 parking spaces. Where will this overflow of vehicles go?

The answer, unfortunately, is our existing residential streets, particularly Belfort Street. As many of you know, parking on Belfort Street is already a significant issue. During normal conditions, it can be challenging for residents and visitors to find parking. However, during winter storms, the situation becomes genuinely dangerous.

Our plow trucks, essential for maintaining safe passage during Maine's harsh winters, already struggle to navigate Belfort Street due to parked vehicles. Introducing dozens of additional cars spilling onto our streets due to inadequate on-site parking will exacerbate this problem exponentially. This will not only impede snow removal, creating hazardous driving conditions and potentially blocking emergency access, but also further narrow the already tight roadways, increasing the risk of accidents.

The combination of a dangerously narrow driveway and insufficient on-site parking creates a perfect storm for safety hazards. Imagine emergency vehicles attempting to navigate a congested Belfort Street, potentially blocked by improperly parked overflow vehicles, only to then be further constricted by a 16-foot driveway. The potential for tragic delays is undeniable.

Furthermore, the increased congestion and haphazard parking will negatively impact pedestrian safety, forcing residents to navigate around parked cars in potentially icy conditions.

Approving a development with such a blatant disregard for realistic parking needs is irresponsible and will directly compromise the safety and accessibility of our neighborhood, particularly during critical winter months. We urge the board to consider the severe safety implications of this inadequate parking plan, in addition to the driveway concerns, and reject this proposal until a design that prioritizes the safety and well-being of our community is presented.

Best regards,

John

Mako Bates <makobates@pm.me>

Apr 8, 2025, 2:13:57 PM (18 hours ago)



to planningboard@portlandmaine.gov, Eric Freeman

Hello to the members of the Portland Planning Board and Eric Freeman, City Planner;

I'm writing to urge you to facilitate, rather than hinder, the construction of fifty (or however many) residential units at 1584 Forest Ave. The primary reasons to do so are that it's a legally copacetic use of the land, and that my friends and relations desperately need places to live. Other reasons to support the project (that it will encourage use and therefore frequency of the #2 bus line, that the proposed physical buildings look decent, that I want people to be able to live close to me, etc) are of relatively little weight.

I'm sorry I can't attend tonight's meeting----

---- Mako Bates

96 Irving St,
Portland ME.

Belfort Landing

1 message

Meghann McCluskey <meghann.mccluskey@gmail.com>

Thu, Apr 24, 2025 at 8:08 PM

Reply-To: meghann.mccluskey@gmail.com

To: planningboard@portlandmaine.gov

Hello,

I am a Riverton resident writing to express concerns about the Belfort Landing project. This proposed project site is extremely close to Talbot School and centered in the midst of a busy residential neighborhood. Housing is important, particularly affordable housing, but this project is not well planned and will add a significant amount of traffic to a highly congested area. Children at Talbot (including my kids, who both attend) will be subjected to increased noise levels from eighteen months of construction. It will be much more difficult to get in and out of Talbot, and Belfort Street will surely be lined with an abundance of overflow cars from the large proposed building. Please encourage this developer to build in a vicinity that will be less disruptive.

Sincerely,

Meghann McCluskey

Thomas Law <tomlawpme@gmail.com>

Apr 8, 2025, 3:11:24 PM (17 hours ago)



to Eric Freeman, planningboard@portlandmaine.gov

Hello,

I had time to review the submitted traffic study today and wanted to highlight that there seem to be a lot of very basic factual errors with the study - incorrect dates for the project and timelines that do not align with the project as submitted, it misstates location of sidewalks on the street and even the property shown in fig 3 is incorrect.

I am an engineer by trade, and I know if I was handed a study with this many factual issues in the introduction, I would seriously question the validity of the findings.

A second issue I have is that during the neighborhood meeting in February, the property owner, Alex Coupe, asserted they were breaking the law regarding their current use of the Talbot drive to access the property, and stated that they knew it was illegal but did not seem to care, referring to it as "piracy". This sets a very bad precedent for them following any future requirements or regulations and indicates to me that additional oversight is merited.

Overall, I am in support of development of this lot and hope it comes together for the benefit of the community.

As discovery and planning for this project has proceeded, it seems like there are a lot of neighborhood improvements and needs that the developer is pushing to the city - utilities, signage, transportation and pedestrian improvements, and other updates.

I ask that the city manager and planning board postpone approval of this project take the time to put together a more comprehensive plan for the area that includes and considers this project as one component before allowing the development to proceed.

I also ask that a formal regular review process be established for the project as it proceeds due to the aforementioned factual reporting issues, the relative inexperience of the developer, and the public claim of piracy/disregard for law at this early stage.

Regards,
Tom Law



Reference: Propsed Belfort Street Landing 50 Unit Apt. Buildings on Belfort Street.

1 message

Melissa Blanchard <joelmissy1968@gmail.com>

Thu, Jun 5, 2025 at 11:44 AM

Reply-To: joelmissy1968@gmail.com

To: planningboard@portlandmaine.gov, efreeman@portlandmaine.gov, Melissa Blanchard <joelmissy1968@gmail.com>

June 9, 2025

Dear Planning Board Members:

My name is Melissa Blanchard and I live at [144 Belfort Street](#) in Portland, Maine.

I am writing to express my deep concerns regarding the proposed construction of two three-story apartment buildings on Belfort Street in Portland, Maine. As a long-time resident and someone who works in the local school system for 32 years, I am worried about the significant impact this development could have on our neighborhood.

My primary concerns are as follows:

Traffic and Safety: The street currently lacks sidewalks, and many families, including myself, walk children, and pets, up and down the street each day. The proposed development includes only one parking space per each unit and just one entrance and exit on Belfort Street, which is also at the base of a steep hill. This creates a dangerous situation with limited visibility for both drivers and pedestrians, especially children. Increased traffic from 50 new units will heighten the risk of accidents. Please observe the amount of children walking up and down Belfort Street before school in the morning and after school.

Parking Overflow: With only one parking space allocated for each unit, it is likely that many renters will have more than one vehicle. This will inevitably lead to overflow parking on Belfort Street, causing congestion and making it even more hazardous for pedestrians.

Noise and Community Impact: The addition of 50 apartment units, including 13 designated as low-income housing, could significantly increase noise levels and potentially bring other challenges to our quiet, close-knit neighborhood. The increase in the number of occupants and vehicles will disrupt the peace and tranquility we have long valued. It also disregards the current tax paying citizens living in the existing residential houses on Belfort and Verrill Street.

Neighborhood Character: Our street has always been a residential, single-family neighborhood. The recent rezoning to allow apartment buildings does not, in my view, make this type of dense development appropriate for our area. The unique character and safety of our neighborhood should be preserved. This concern is not about NIMBYism, but about preserving the integrity and safety of our neighborhood as it was when we purchased our homes—strictly residential, before the recent rezoning that now allows 2-3 story apartment buildings on our street.

We respectfully urge you to reconsider allowing this project to proceed on Belfort Street, as it does not fit the size or character of our neighborhood. A more suitable alternative would be single-family homes that blend with the existing community and provide adequate parking for residents.

Just because a property has been rezoned to permit large apartment complexes does not necessarily mean it is the right choice for our residential neighborhood.

Please take these concerns into account when making your decision.

In closing, I urge the Planning Board to carefully consider the impact this project will have on the safety, character, and quality of life on our street. Please prioritize the well-being of current residents and the integrity of our neighborhood as you review this proposal.

Thank you for your attention to these concerns,

Sincerely,

Melissa J. Blanchard

[144 Belfort Street](#)

[Portland, Maine 04103](#)

U:\ACRE Properties\4292 - 1582 Forest Ave Belfort Residential - ACRE Properties\Z - CAD\UNC\4292-COVER.dwg 5/22/2025 3:10 PM

PROJECT PARCEL SITE PORTLAND ASSESSOR'S PARCEL & LOT NUMBERS	
PARCEL	LOT
299	D1011001

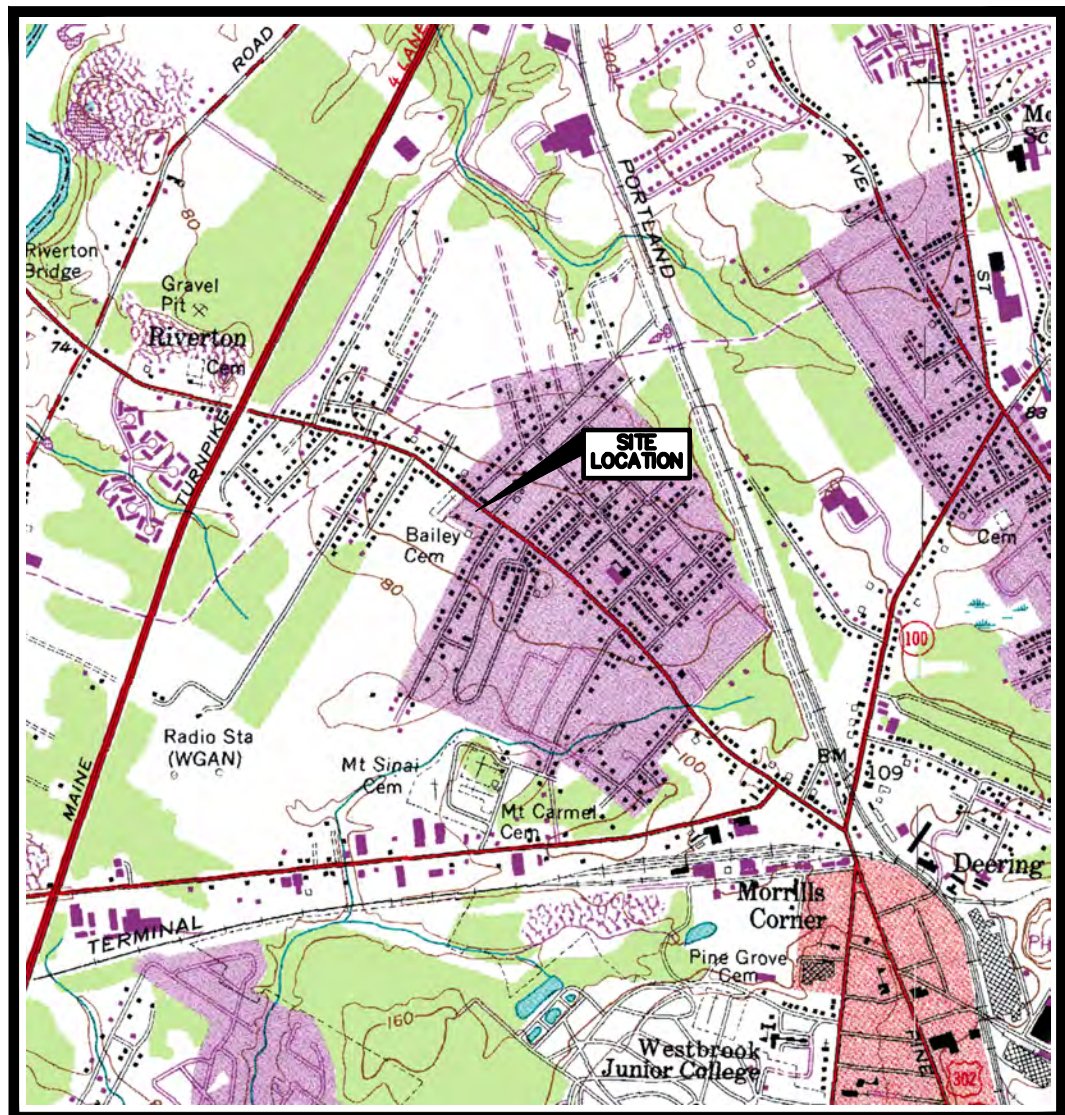
Applicant:
ACRE PROPERTIES
27 CYPRESS STREET PORTLAND, ME 04103 ATTN: ALEX COUPE

THE BELFORT LANDING RESIDENTIAL DEVELOPMENT 1582 FOREST AVENUE PORTLAND, MAINE

PREPARED BY:



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



LOCATION MAP
N.T.S.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	RIGHT OF WAY	
	PROPERTY LINE	
	BUILDING SETBACK	
	ZONE LINE	
	WETLAND BOUNDARY	
	GUIDE RAIL	
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL DRIVE	
	GRADING CONTOUR LINE	
	SPOT ELEVATION	
	TREELINE	
	TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
	OVERHEAD ELECTRIC/TELEPHONE	
	UNDERGROUND ELECTRIC/TELEPHONE	
	WATER LINE	
	STORM DRAIN LINE	
	CULVERT	
	HYDRANT	
	WATER GATE VALVE	
	WATER SHUT OFF VALVE	
	MANHOLE	
	CATCH BASIN	
	TEST PIT	
	IRON ROD (SET)	
	IRON ROD (FOUND)	
	MONUMENT	
	RIPRAP	
	SILT FENCE - PERIMETER	
	STONE SEDIMENT BARRIER	
	FENCE	
	WELL	

GENERAL NOTES

GENERAL NOTES

- TOPOGRAPHIC DATA BOUNDARY SURVEY AND EXISTING CONDITIONS WERE PREPARED BY NORTHEAST CIVIL SOLUTIONS OF SCARBOROUGH, MAINE IN JULY OF 2022.
 - THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER, THE CITY OF PORTLAND OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
 - ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
 - ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND CITY OF PORTLAND SPECIFICATIONS.
 - PAVEMENT SECTIONS AT BELFORT STREET AND FOREST AVENUE MUST BE RESTORED TO THE EXISTING DEPTH WHEN DISTURBED. A MINIMAL 1-FOOT WIDE, 1.5" DEPTH MILL FROM THE SAW CUT LIMIT MUST BE PERFORMED FOR A PROPER JOINT.
- ### PERMITTING NOTES
- THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN APPROVAL FROM THE CITY OF PORTLAND WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS. THE CONSTRUCTION WILL BE GOVERNED BY THE CITY OF PORTLAND LAND USE CODE WHICH IS AVAILABLE FOR VIEWING AT THE OFFICE OF THE ENGINEER OR THE MUNICIPAL OFFICE.
 - THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

LAYOUT NOTES

- DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB.
 - OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
 - PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE-HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
 - PROPERTY LINE AND R.O.W. MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE, BY A MAINE LICENSED LAND SURVEYOR.
 - PROPOSED RIGHT OF WAY MONUMENTS AND PROPERTY LINE PINS SHALL BE INSTALLED UNDER THE DIRECTION OF A MAINE LICENSED LAND SURVEYOR.
- ### UTILITY NOTES
- THE LOCATION OF THE PROPOSED UNDERGROUND ELECTRICAL SERVICE IS APPROXIMATE AND THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION WITH CENTRAL MAINE POWER COMPANY.
 - TEST PITS AT ALL UTILITY CROSSINGS SHALL BE COMPLETED TWO WEEKS IN ADVANCE OF THE START OF CONSTRUCTION OR ORDERING OF MATERIALS. TEST PIT INFORMATION SHALL BE PROMPTLY PROVIDED TO ENGINEER FOR REVIEW.
 - ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. ALL WATER DISTRIBUTION PIPING SHALL BE CLASS 52 DUCTILE IRON PIPE, DOUBLE GEMENT LINED AND BITUMINOUS COATED CONFORMING TO AWWA/ANSI C104/A21.4. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.
 - THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL BE PLACED ON THE WATER DISTRIBUTION LINES AT ALL BENDS, TEES, VALVES, CHANGES IN DIRECTION, ETC. THE THRUST BLOCKS OR LOCKING RETAINER GLAND SHALL MEET THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT STANDARDS.
 - THE CONTRACTOR SHALL RECEIVE THE CITY OF PORTLAND'S PUBLIC WORKS AUTHORITY ABILITY TO SERVE PRIOR TO MAKING ANY SEWER CONNECTIONS. IT IS INTENDED THAT THE ABILITY TO SERVE WILL BE DECIDED AS PART OF THE MAJOR SITE PLAN APPLICATION.

GRADING AND DRAINAGE NOTES

- UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603-- PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
REINFORCED CONCRETE PIPE, CLASS III
POLYVINYL-CHLORIDE (PVC) PIPE
SMOOTH BORE POLYETHYLENE - ADS OR HANCO
- TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY THE OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.
- THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

EROSION CONTROL NOTES

- LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
- PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE SILT SACKS.
- ALL GROUND AREAS DISTURBED FOR CONSTRUCTION WILL BE GRADED, LOAMED AND SEEDED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL REPORT PREPARED FOR THIS PROJECT.
- PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM DRAIN LINES.
- ALL STORM DRAIN INLETS & OUTLETS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.
- ALL CATCH BASINS WITH OUTLET PIPES 15" DIAMETER OR LESS SHALL BE PROVIDED WITH OUTLET HOOD (SNOUT) PER DETAIL.
- THE MAINTENANCE SCHEDULE FOR THE CATCH BASIN SEDIMENT SUMPS IS AS FOLLOWS:
THESE DEVICES SHALL BE INSPECTED IN APRIL AND OCTOBER OF EACH YEAR. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE CATCH BASIN WHEN THE DEPTH OF THE SEDIMENT IS GREATER THAN ONE FOOT. THE SEDIMENT WILL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
- THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS BASED UPON ANY THIRD PARTY REVIEW (IF MDOT) MAY RESULT IN MONETARY PENALTIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.
- ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ALL DISTURBED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING.

UTILITIES

WATER:

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PORTLAND, MAINE 04102
(207) 761-8300
CONTACT: ROBERT BARTELS

SEWER:

PORTLAND PUBLIC WORKS DEPT.
212 CANCO ROAD
PORTLAND, MAINE 04101
(207) 874-8871
CONTACT: BRAD ROLAND

ELECTRIC:

CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
(207) 826-2869
CONTACT: JAMIE COUGH

TELEPHONE:

CONSOLIDATED COMMUNICATIONS
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
(207) 797-1866

CABLE:

TIME WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
(207) 775-3431
CONTACT: MARK PELLETIER

INDEX

C001	COVER SHEET, GENERAL NOTES, & LEGEND
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C102	GRADING AND EROSION CONTROL PLAN
C103	DRAINAGE PLAN
C301	SUBSURFACE SAND FILTER DETAILS
C302	DRIP STRIP DETAILS
C303	OUTLET CONTROL STRUCTURE DETAILS
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C405	EROSION CONTROL NOTES
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C407	PUMP STATION DETAILS
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PERMITS

TYPE OF PERMIT

MAJOR SITE PLAN APPLICATION

BUILDING PERMIT

GOVERNING BODY

CITY OF PORTLAND
PLANNING AND URBAN DEVELOPMENT
389 CONGRESS STREET
PORTLAND, MAINE 04101-3509
(207) 874-8703

CITY OF PORTLAND
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(207) 874-8703

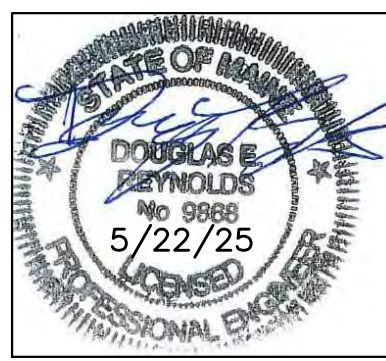
STATUS

SUBMITTED:
DECEMBER 2024

ANTICIPATED SUBMITTAL:
2025

CALL BEFORE YOU DIG
1-888-344-7233

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RESPONSE TO LOCAL COMMENTS	5/22/25	DER
RESPONSE TO LOCAL COMMENTS	2/24/25	DER
LOCAL SITE PLAN APPLICATION	12/4/24	DER
Issued For	Date	By

Design: AJK	Draft: CJG	Date: NOV 2024
Checked: DER	Scale: NTS	Job No.: 4292
File Name: 4292-COVER.dwg		
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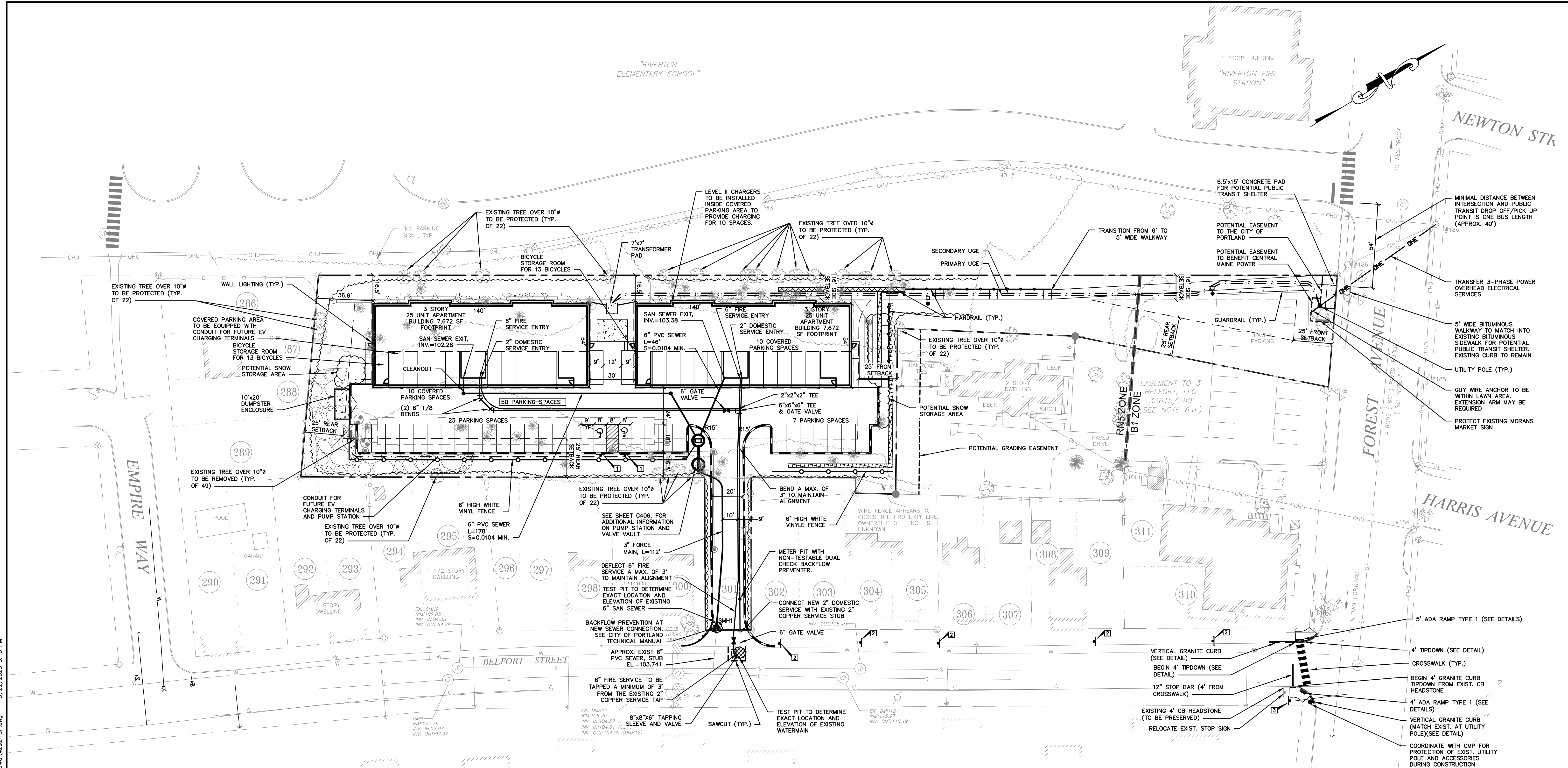
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GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:	Cover Sheet, General Notes, & Legend
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.

C001

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SPACE AND BULK STANDARDS		
ZONE: RN-5	REQUIRED	PROVIDED
MIN. LOT SIZE	1,200 SF/UNIT MIN. 40,000 SF	1,331 SF/UNIT
MIN. STREET FRONTAGE	50'	72'
MAX. LOT COVERAGE (RESIDENTIAL)	60%	23%
LANDSCAPED OPEN SPACE RATIO (RESIDENTIAL)	30%	43%
SETBACKS*		
FRONT	25'	29.5'
REAR	25'	36.6'
SIDE	16'	16.5'
MAX. STRUCTURE HEIGHT	55'	47'
MAX. BUILDING LENGTH	180'	140'

* BUILDING MOUNTED MECHANICAL EQUIP. MAY ENCR OACH INTO A REQUIRED SETBACK TO AN RN ZONE BY NO MORE THAN 50% OF THE WIDTH OF SUCH REQUIRED SETBACK. PARKING SPACES MAY BE LOCATED WITHIN A REQUIRED INTERIOR SIDE OR REAR SETBACK

SITE DATA		
ZONE: RN-5		
BUILDING AREA		
MULTI FAMILY (25 UNITS)	7,672 S.F.	
MULTI FAMILY (25 UNITS)	7,672 S.F.	
TOTAL FOOTPRINT AREA	15,344 S.F.	
PARKING	REQUIRED	PROVIDED
NEW STRUCTURE		
VEHICLE SPACES (2 SP/UNIT MAX.)	< /=100	50
TOTAL	< /=100	50
BARRIER FREE	2	2
BICYCLE SPACES (1 SP/2 UNIT MIN.)	25	26

PAVEMENT LEGEND	
ALL PAVEMENT SHALL BE STANDARD DUTY EXCEPT AS FOLLOWS:	
	HEAVY DUTY BITUMINOUS CONCRETE
	PORTLAND CEMENT CONCRETE
	BITUMINOUS CONCRETE OVERLAY

CURBING LEGEND	
	VERTICAL GRANITE CURB
	MONOLITHIC CONCRETE CURB
	BITUMINOUS CURB

STRIPING LEGEND	
SIGNAGE, STRIPING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REGARDING SIZE, INSTALLATION, LOCATION & REFLECTIVITY.	
12"SL	12" WIDTH STOP LINE
4"SWLL	4" WIDTH SOLID WHITE LANE LINE
4"DYCL	4" WIDTH DOUBLE YELLOW CENTERLINE
4"DWLL	4" WIDTH DASHED WHITE LANE LINE

SANITARY SEWER SCHEDULE			
STRUCTURE	SIZE	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)
SMH1	4'-8"	110.10	103.84/8"(EXIST)

SPACE AND BULK STANDARDS		
ZONE: B-1	REQUIRED	PROVIDED
MIN. STREET FRONTAGE	20'	72'

SIGN LEGEND		
	R7-8 12"x 18"	1
	R7-1R 12"x 18"	2
	R1-1 30"x 30"	3

NOTE:

1. CONTRACTOR SHALL SCHEDULE A WATER RESOURCES INSPECTOR TO INSPECT THE PROPOSED FORCE MAIN/GRAVITY SEWER TRANSITION MANHOLE (SMH-1) CONNECTION TO THE EXISTING 6" PVC SEWER STUB IN BELFORT STREET.

2. CONTRACTOR SHALL REMOVE THE EXISTING VERTICAL GRANITE CURB AS NEEDED WITHIN THE LIMITS OF THE PROPOSED SPOT IMPROVEMENTS AT THE BELFORT STREET AND FOREST AVENUE INTERSECTION FOR CONSTRUCTION.

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Design: AJK	Draft: CJG	Date: NOV 2024
Checked: DER	Scale: 1"=30'	Job No.: 4292
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South Portland, ME 04106

Drawing Name: **Site and Utility Plan**

Project: **The Belfort Landing**
1582 Forest Ave, Portland, Maine

Client: **ACRE Properties**
27 Cypress Street, Portland, Maine 04103

Drawing No. **C101**

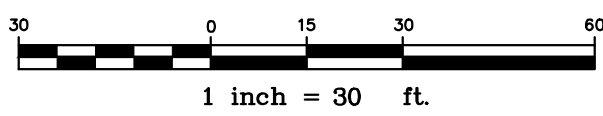
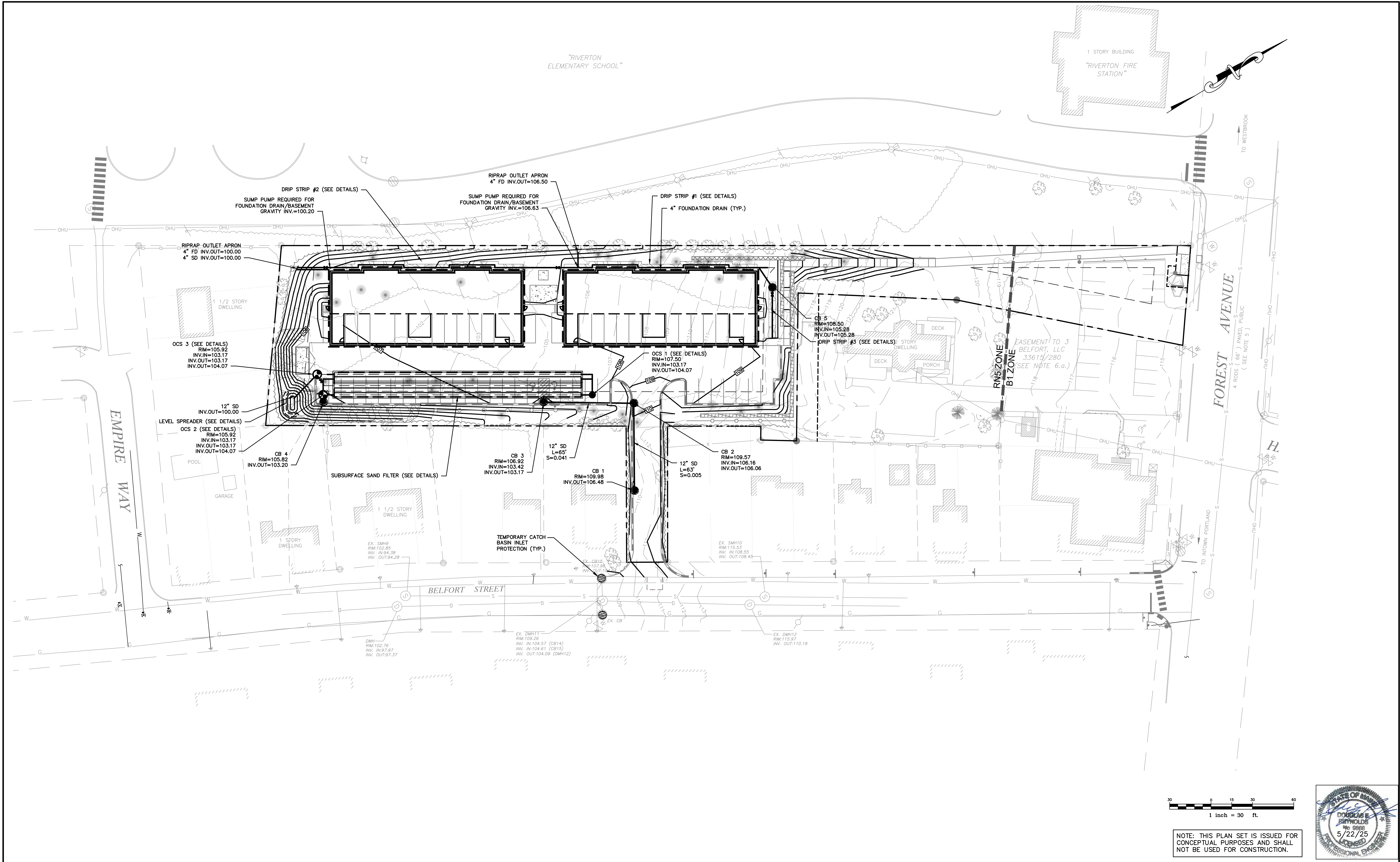
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RESPONSE TO LOCAL COMMENTS	2/24/25	DER
LOCAL SITE PLAN APPLICATION	12/4/24	DER
Issued For	Date	By


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Drawing No.
C102

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RESPONSE TO LOCAL COMMENTS	2/24/25	DER
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Issued For	Date	By

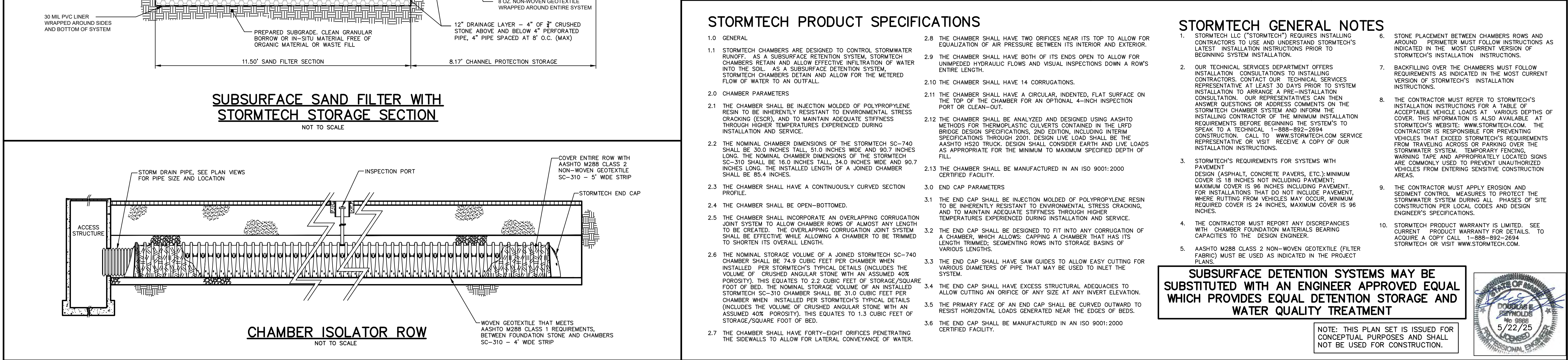
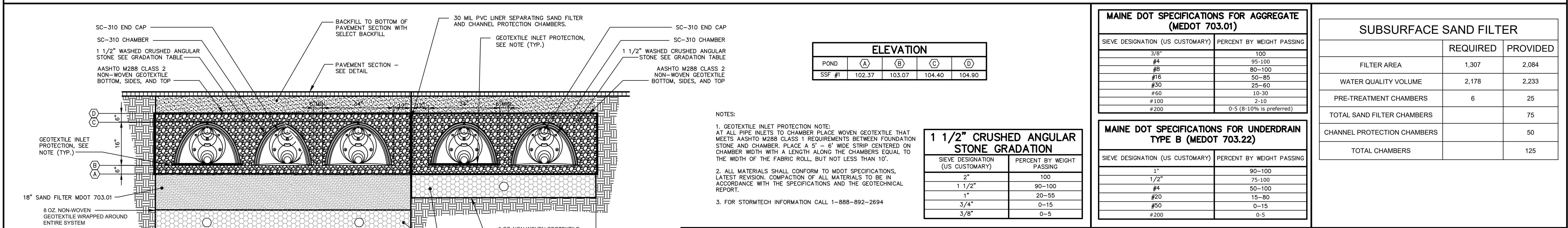
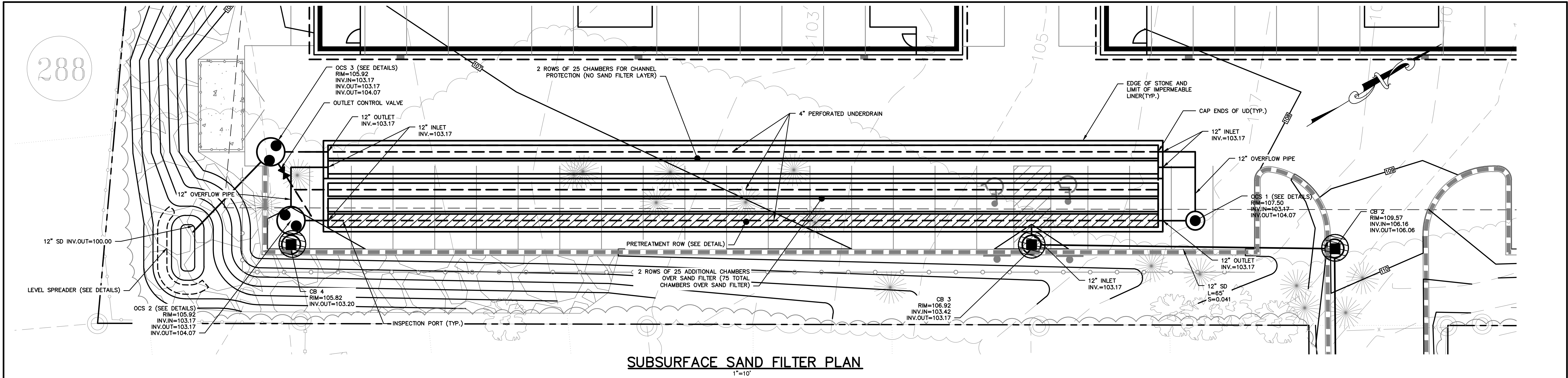
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South Portland, ME 04106

Drawing Name:	Drainage Plan
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.
C103



Rev.	Date	Revision

Design: AJK	Draft: CJG	Date: NOV 2024
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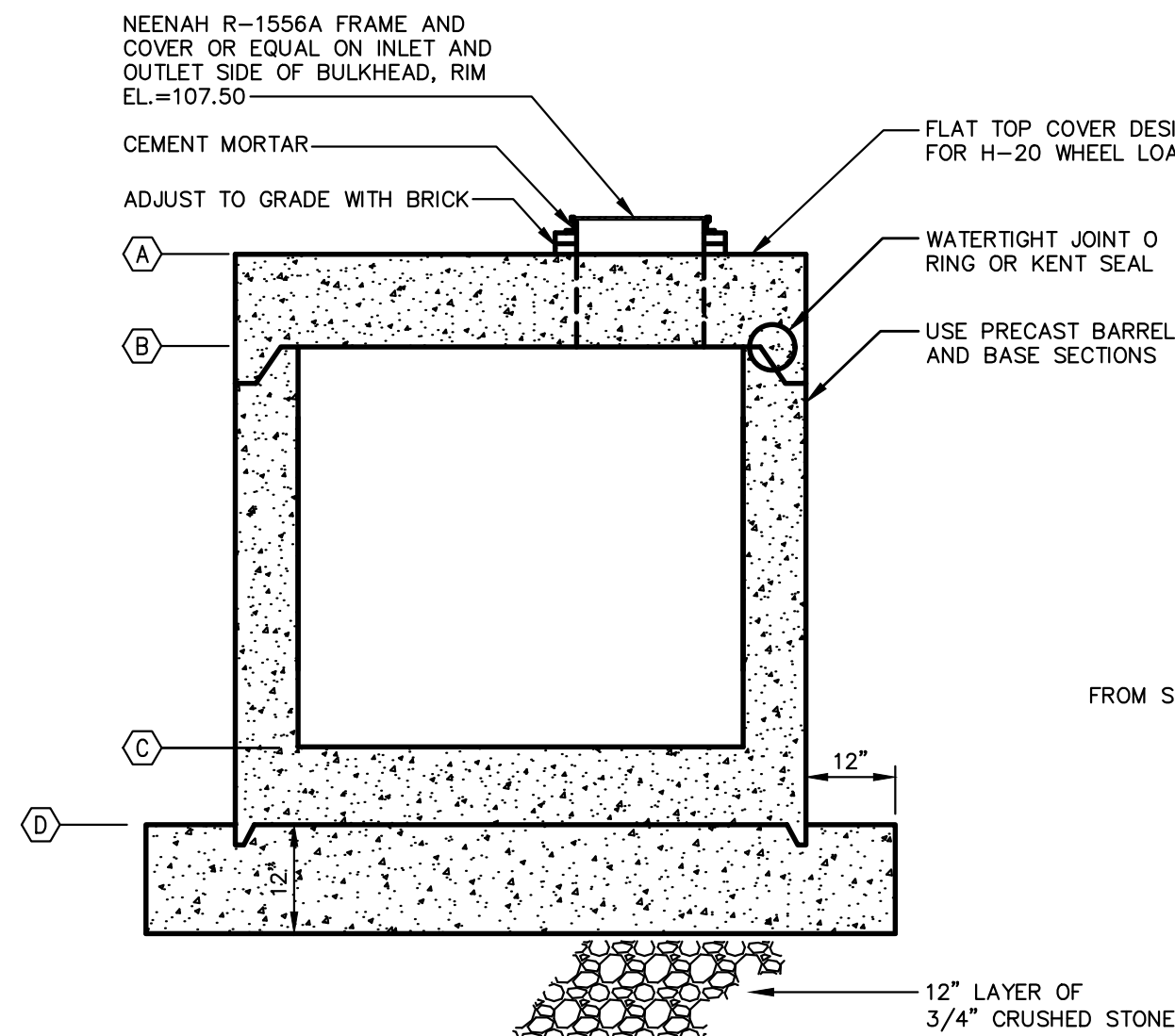


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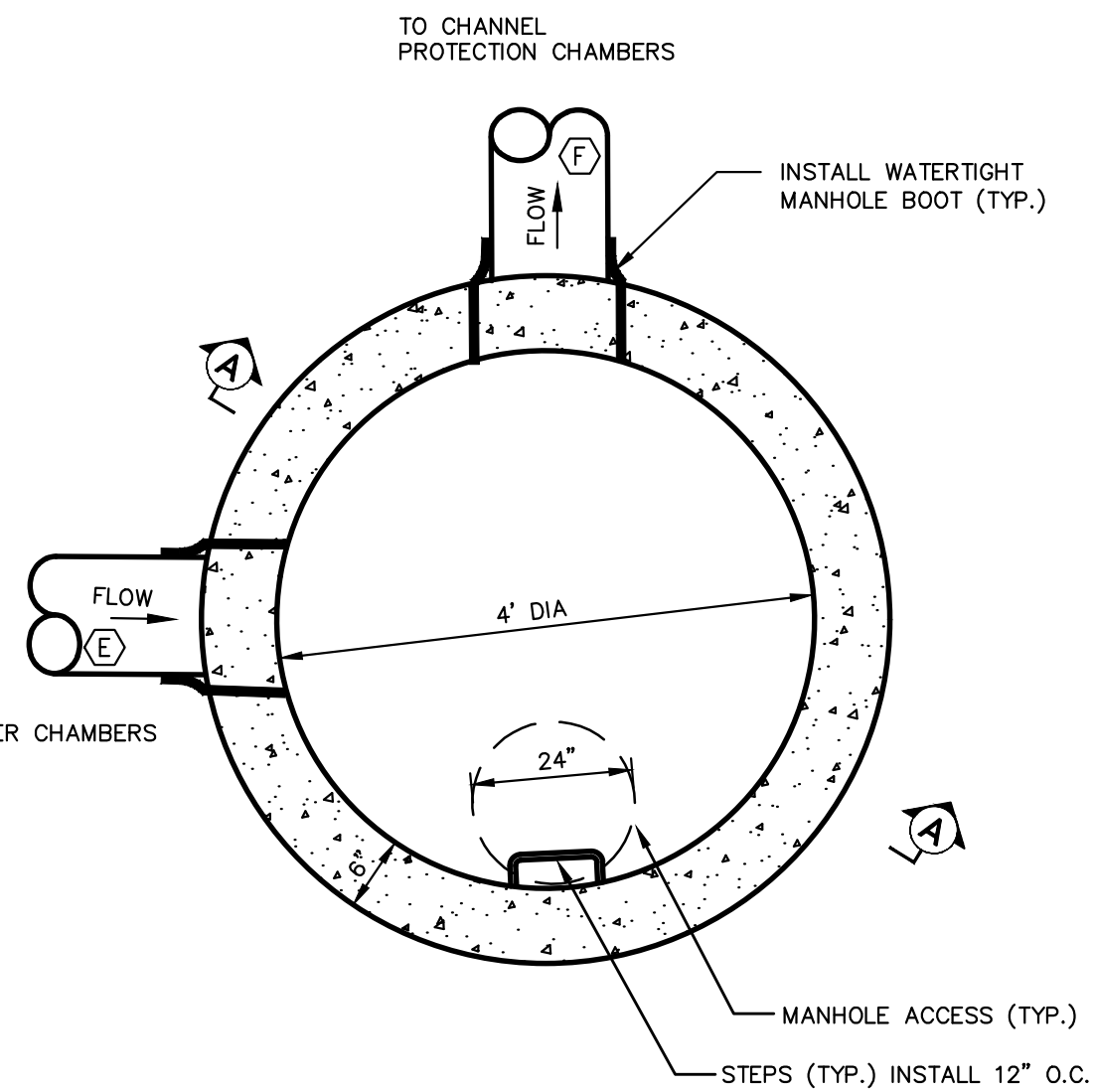
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Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.	C301
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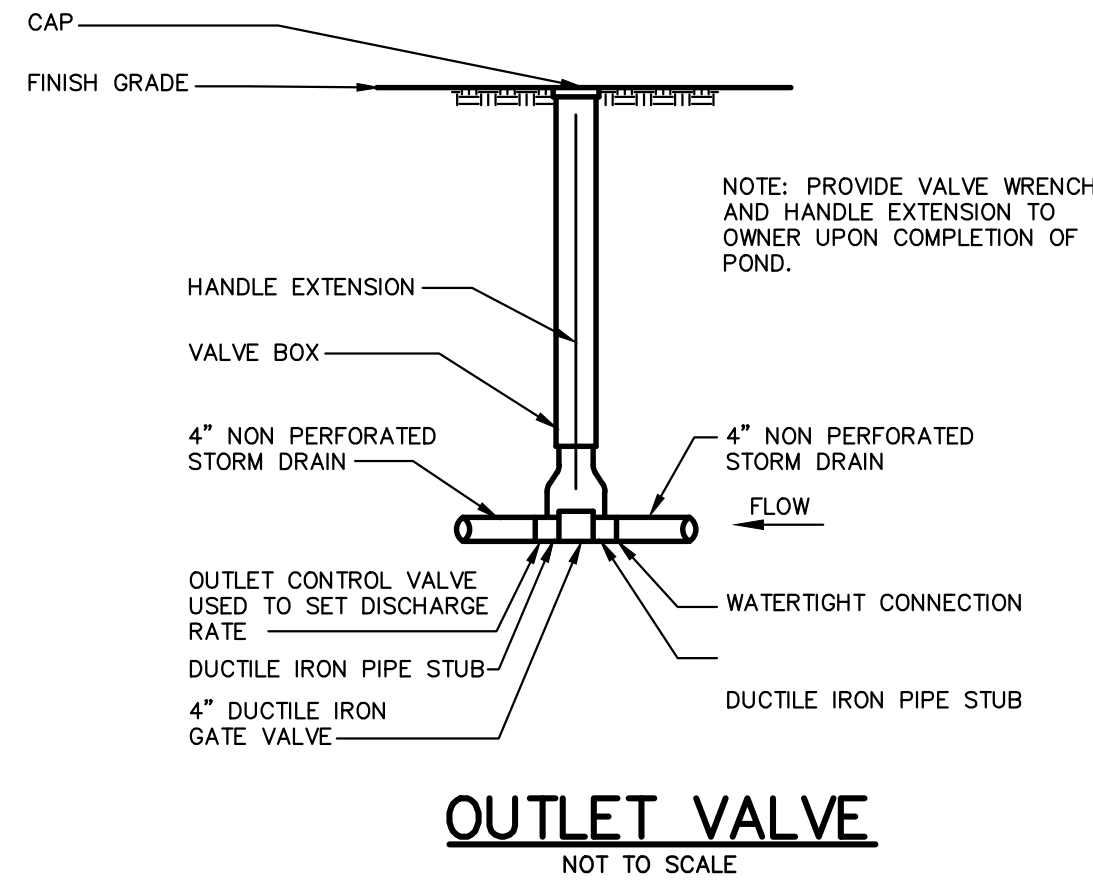


SECTION A-A
OUTLET CONTROL STRUCTURE 1 (OCS1)
NOT TO SCALE

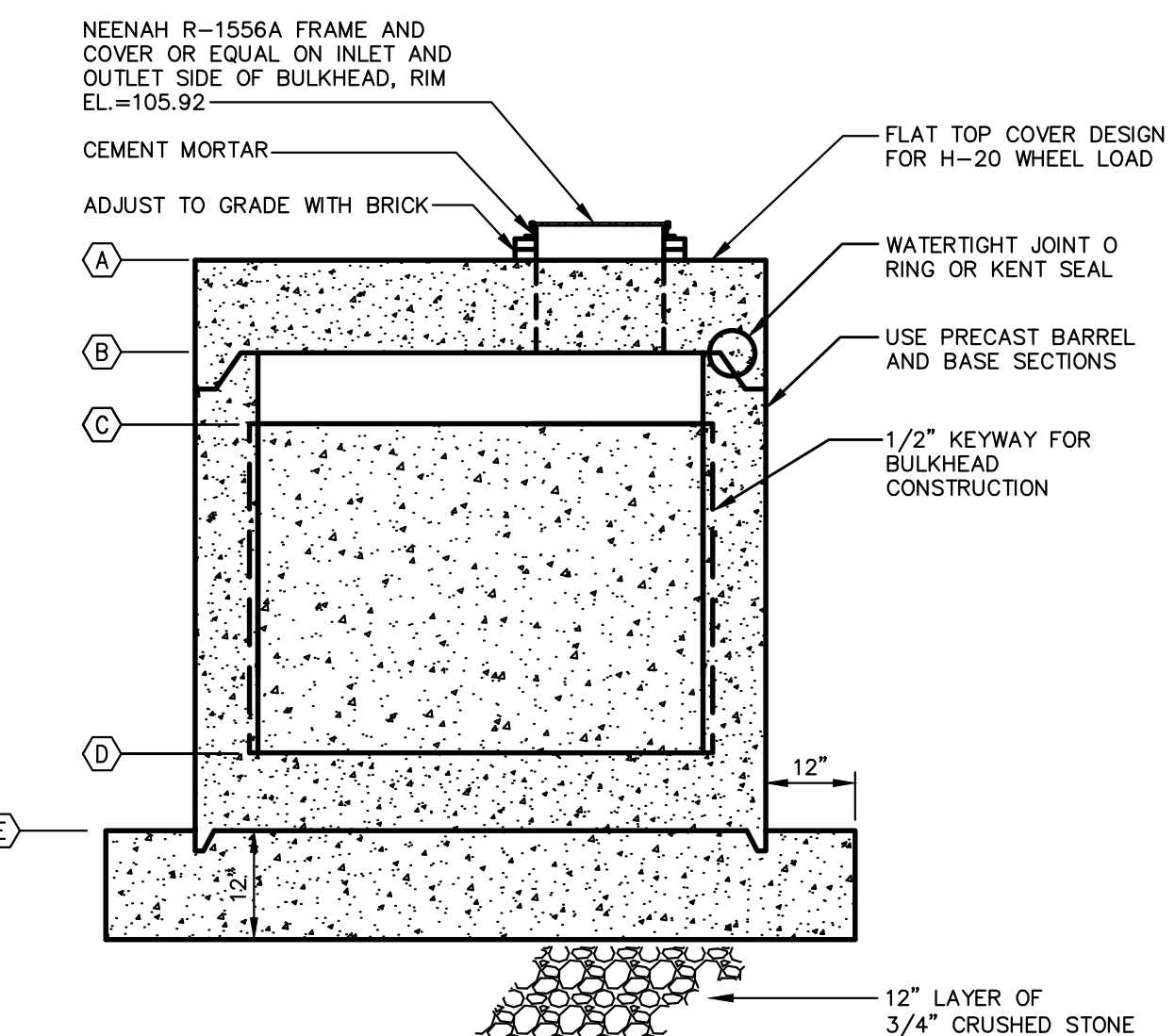


PLAN VIEW
6' OUTLET CONTROL STRUCTURE (OCS1)
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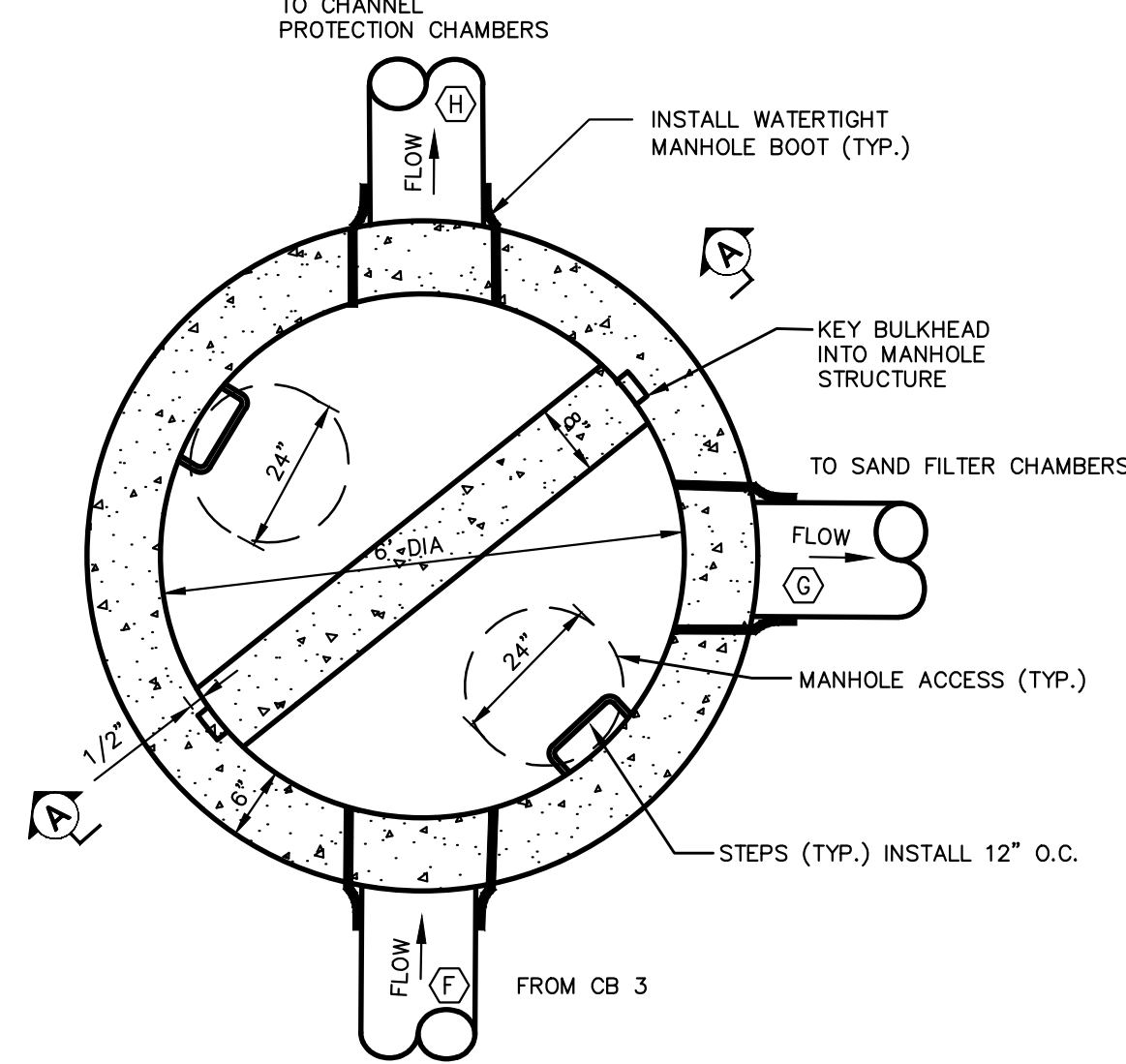
SCHEDULE C		
ITEM	DESCRIPTION	ELEVATION
A	TOP OF STRUCTURE	107.00
B	UNDERSIDE TOP SLAB	106.33
C	MANHOLE INVERT	102.17
D	BOTTOM OF STRUCTURE	101.17
E	PIPE DIAMETER	12"
F	INVERT IN	103.17
F	PIPE DIAMETER	12"
F	INVERT OUT	104.07



OUTLET VALVE
NOT TO SCALE

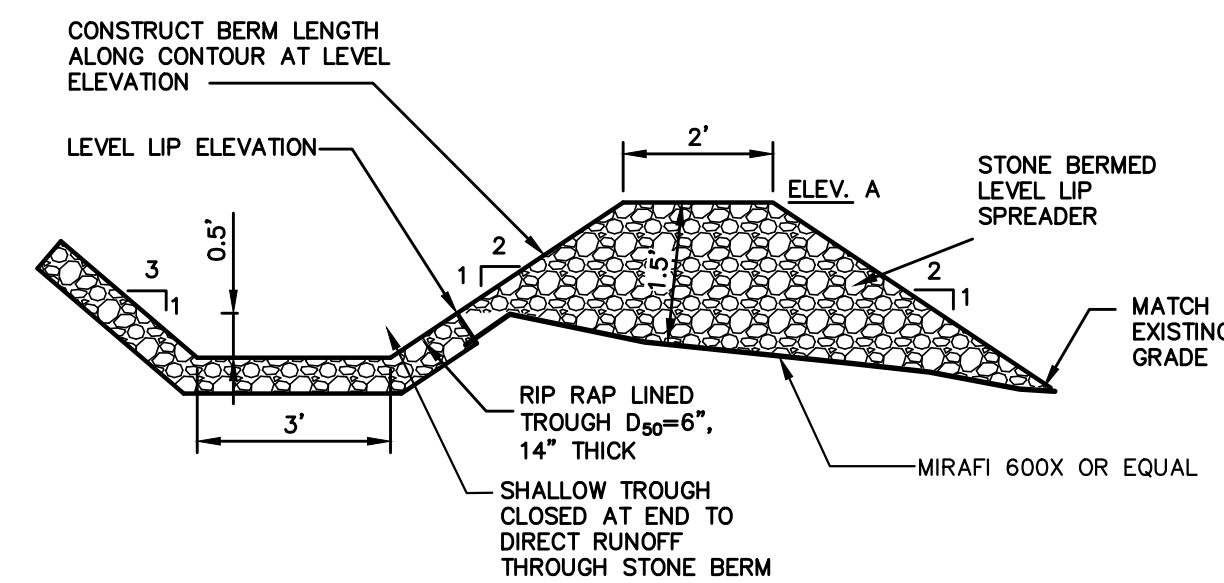


SECTION A-A
OUTLET CONTROL STRUCTURE 2 (OCS2)
NOT TO SCALE



PLAN VIEW
6' OUTLET CONTROL STRUCTURE (OCS2)
NOT TO SCALE

SCHEDULE C		
ITEM	DESCRIPTION	ELEVATION
A	TOP OF STRUCTURE	105.42
B	UNDERSIDE TOP SLAB	104.75
C	TOP CONCRETE BULKHEAD	104.07
D	MANHOLE INVERT	100.17
E	BOTTOM OF STRUCTURE	99.50
F	PIPE DIAMETER	12"
G	INVERT IN	103.17
G	PIPE DIAMETER	12"
H	INVERT OUT	103.17
H	PIPE DIAMETER	12"
H	INVERT OUT	103.17

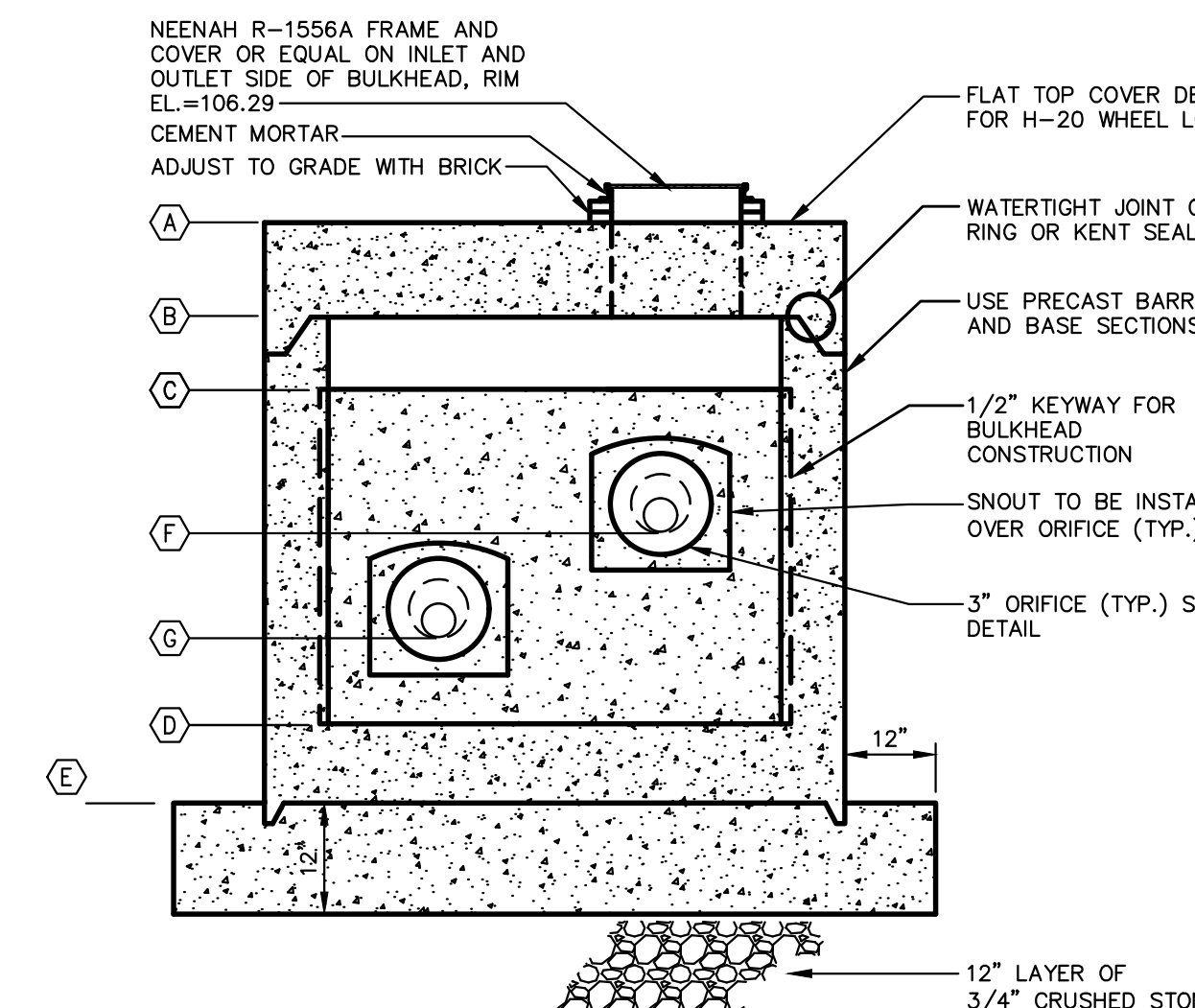


STONE BERM LEVEL LIP SPREADER
NOT TO SCALE

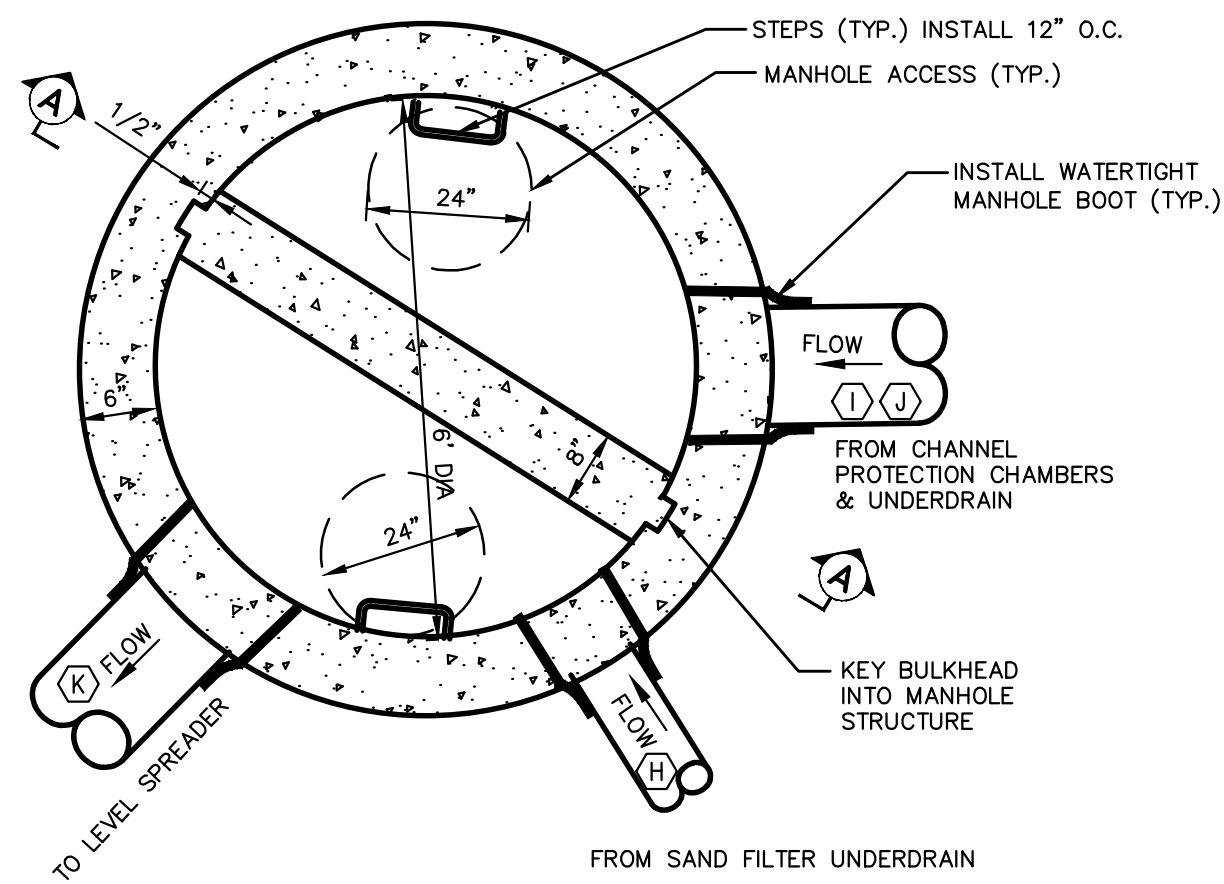
BERM STONE SIZE	
SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING
12 IN	100
6 IN	84-100
3 IN	68-83
1 IN	42-55
NO. 4	8-12

LEVEL LIP SPREADER SCHEDULE		
LEVEL LIP	ELEVATION A	LENGTH
1	101.50	15'

NOTE: PRIOR TO CONSTRUCTION OF ANY ONSITE DRAINAGE FEATURES, THE CONTRACTOR SHALL STAKE OUT THE LEVEL LIP SPREADERS FOR REVIEW BY GORRILL-PALMER. THE CONTRACTOR SHALL NOTIFY GORRILL-PALMER WHEN STAKE OUT IS COMPLETE, AND PROVIDE GROUND SURVEYED ELEVATIONS OF THE LEVEL LIP SPREADER LOCATION. GORRILL-PALMER WILL CONDUCT A SITE WALK WITHIN 48 HOURS TO CONFIRM LOCATION AND ORIENTATION TO VERIFY DESIGN INTENT.



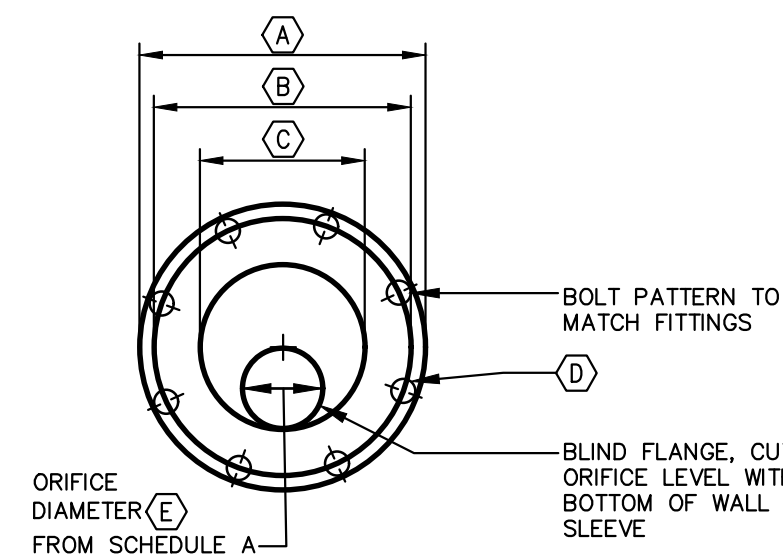
SECTION A-A
OUTLET CONTROL STRUCTURE 3 (OCS3)
NOT TO SCALE



PLAN VIEW
6' OUTLET CONTROL STRUCTURE (OCS3)
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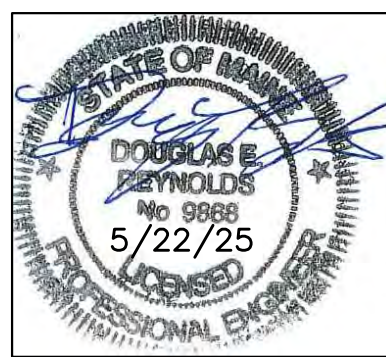
SCHEDULE C		
ITEM	DESCRIPTION	ELEVATION
A	TOP OF STRUCTURE	105.70
B	UNDERSIDE TOP SLAB	105.04
C	TOP CONCRETE BULKHEAD	104.30
D	MANHOLE INVERT	99.65
E	BOTTOM OF STRUCTURE	98.98
F	ORIFICE DIAMETER	3"
F	ORIFICE INVERT	102.30
G	ORIFICE DIAMETER	3"
G	ORIFICE INVERT	101.70
H	PIPE DIAMETER	4"
H	INVERT IN	100.15
I	PIPE DIAMETER	12"
I	INVERT IN	103.17
J	PIPE DIAMETER	4"
J	INVERT IN	101.90
K	PIPE DIAMETER	12"
K	INVERT OUT	100.15

SCHEDULE B ORIFICE		
ITEM	DESCRIPTION	DIMENSION / ELEVATION
A	FLANGE O.D.	13.5"
B	BOLT CIRCLE	11.75"
C	NOMINAL PIPE DIAMETER	8"
D	BOLT HOLE DIAMETER	0.875"
E	ECCENTRIC ORIFICE DIAMETER	3"



ORIFICE DETAIL
SEE SCHEDULE B
NOT TO SCALE

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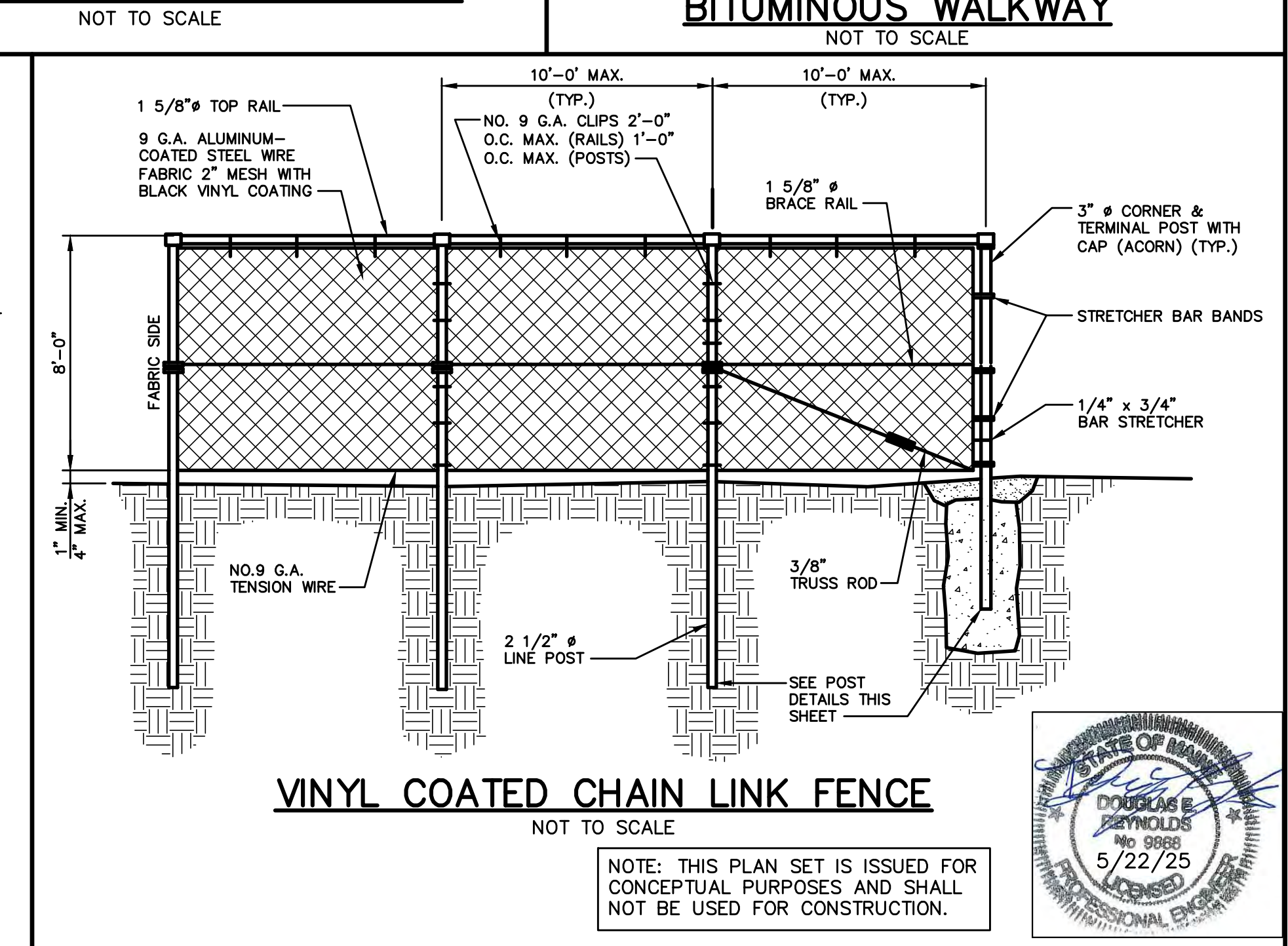
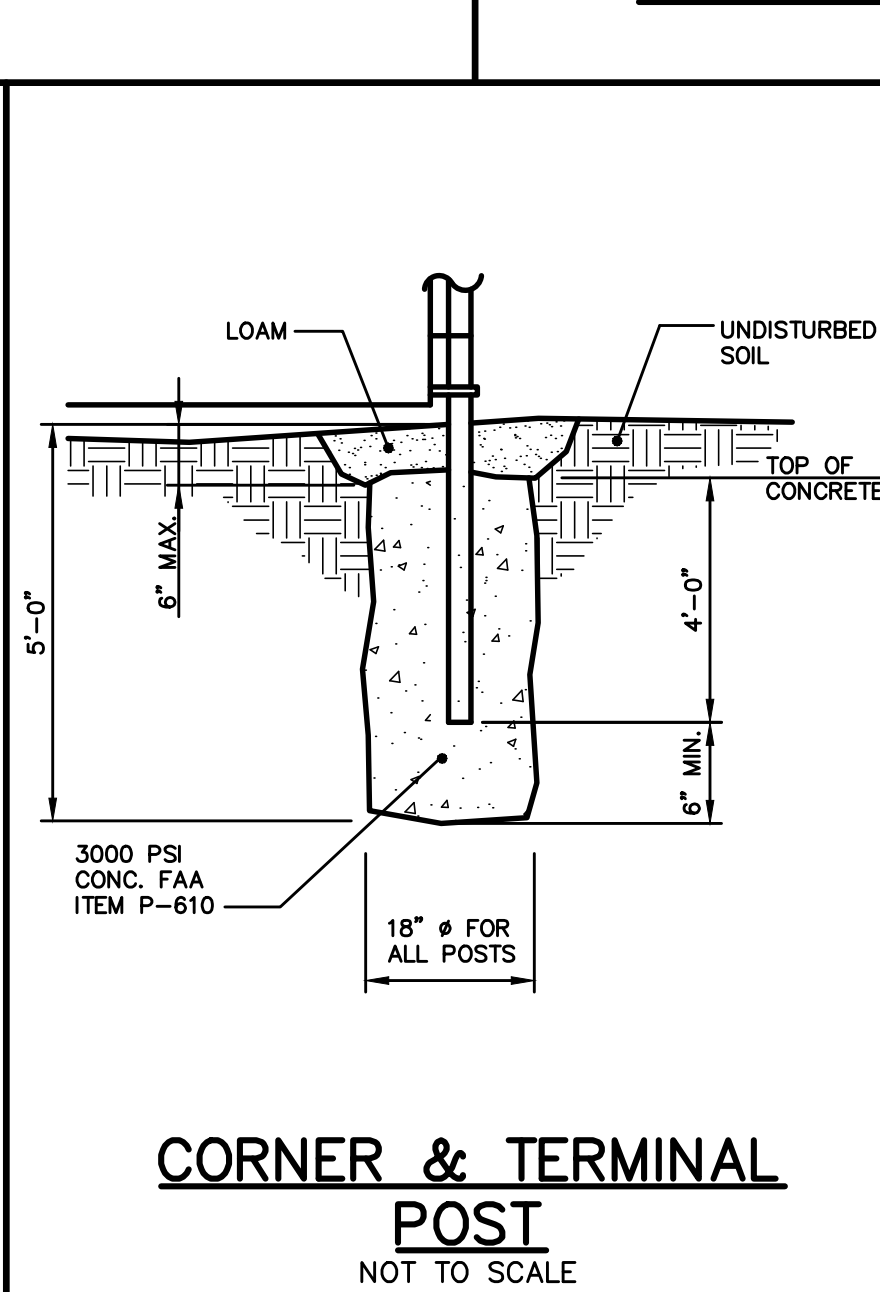
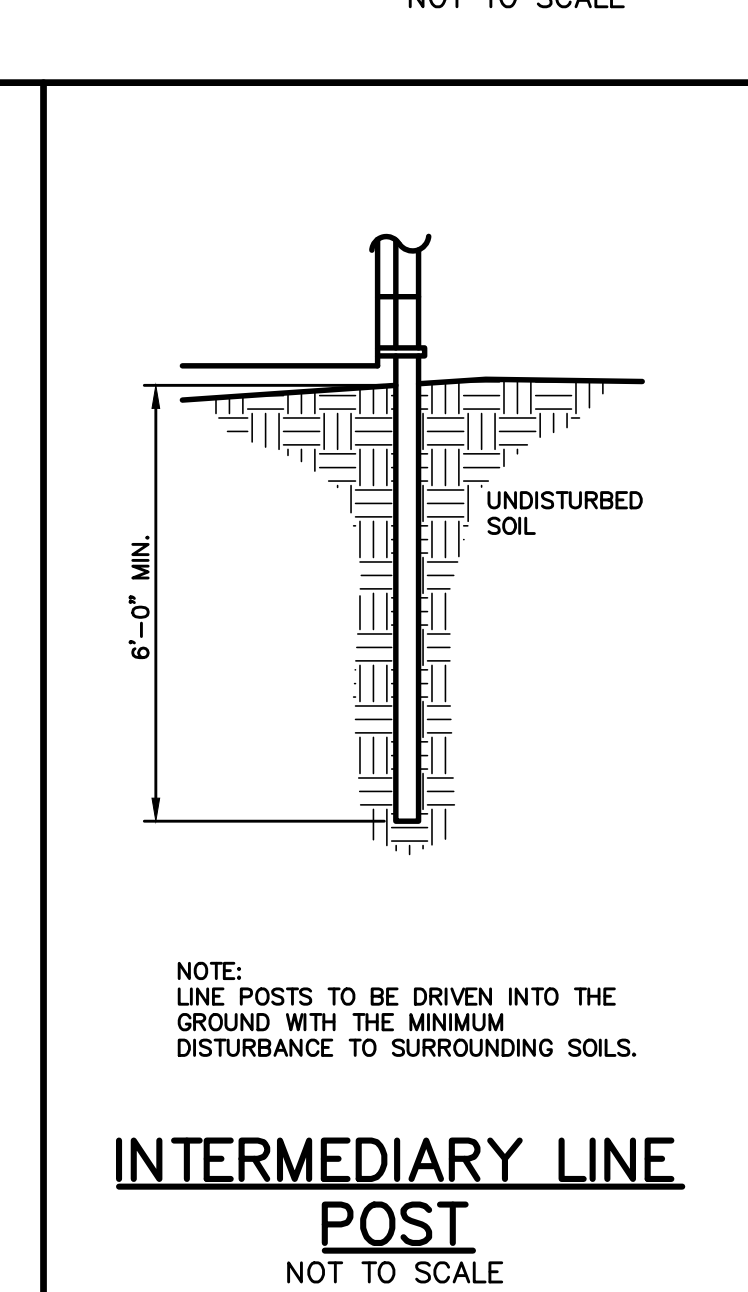
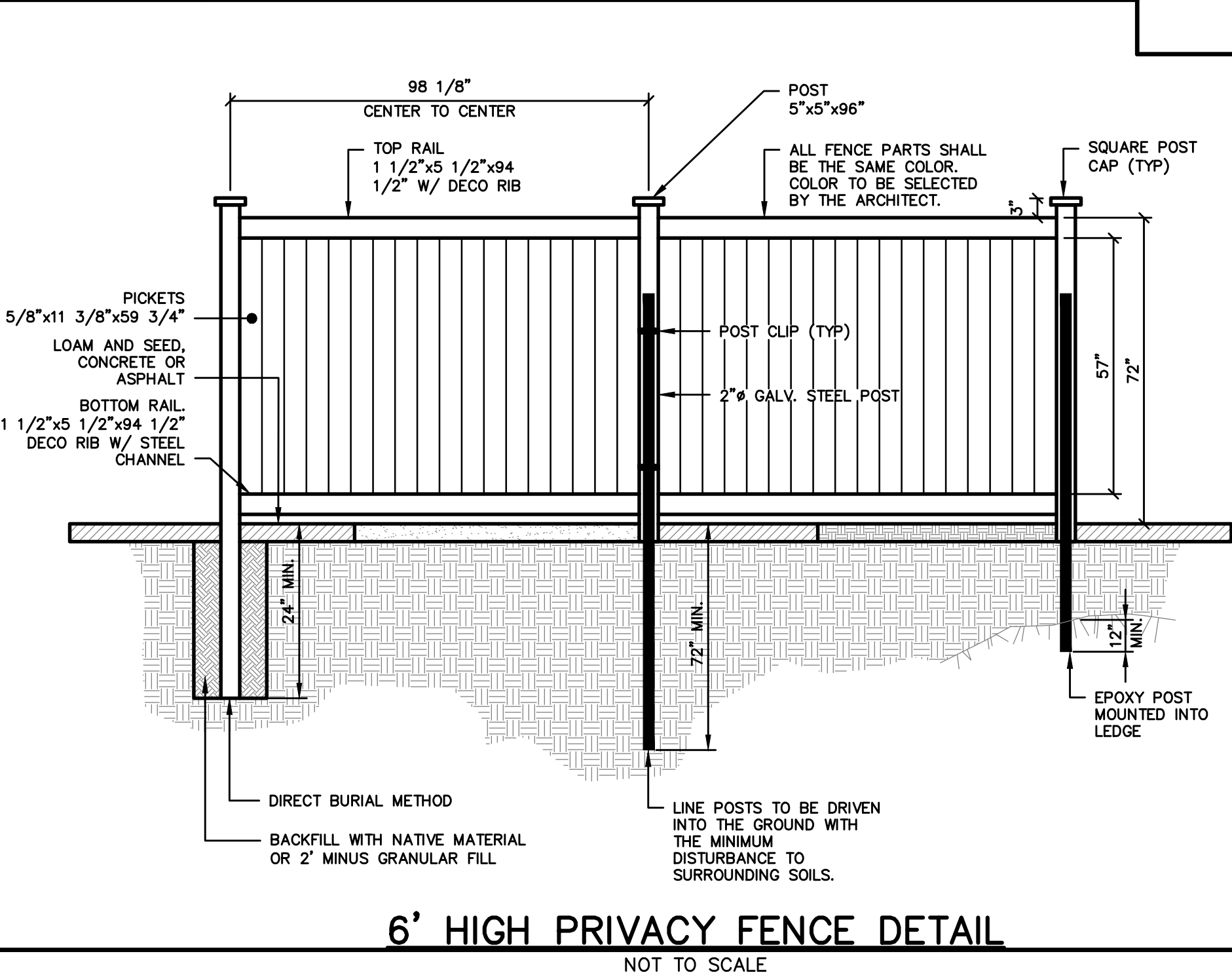
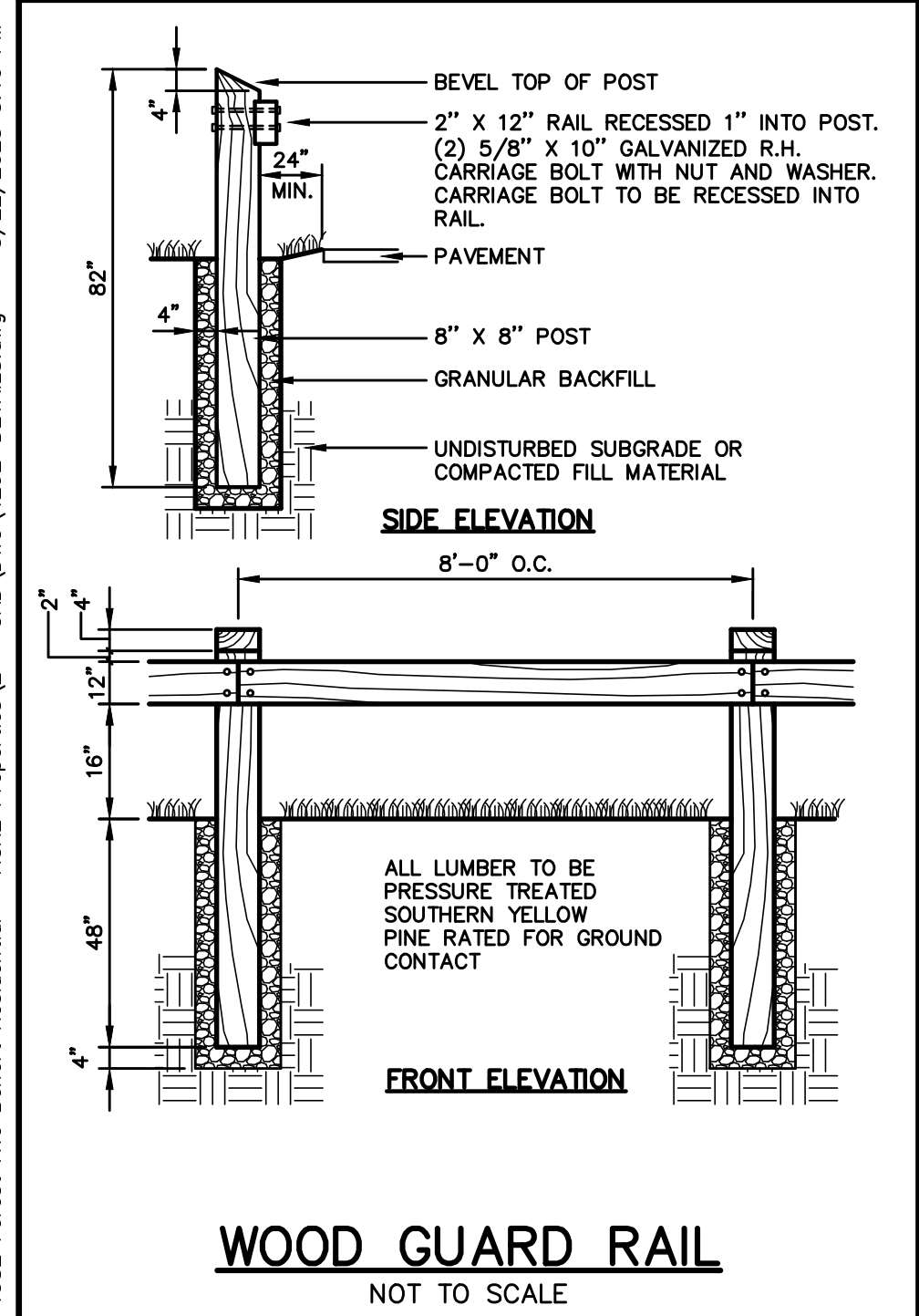
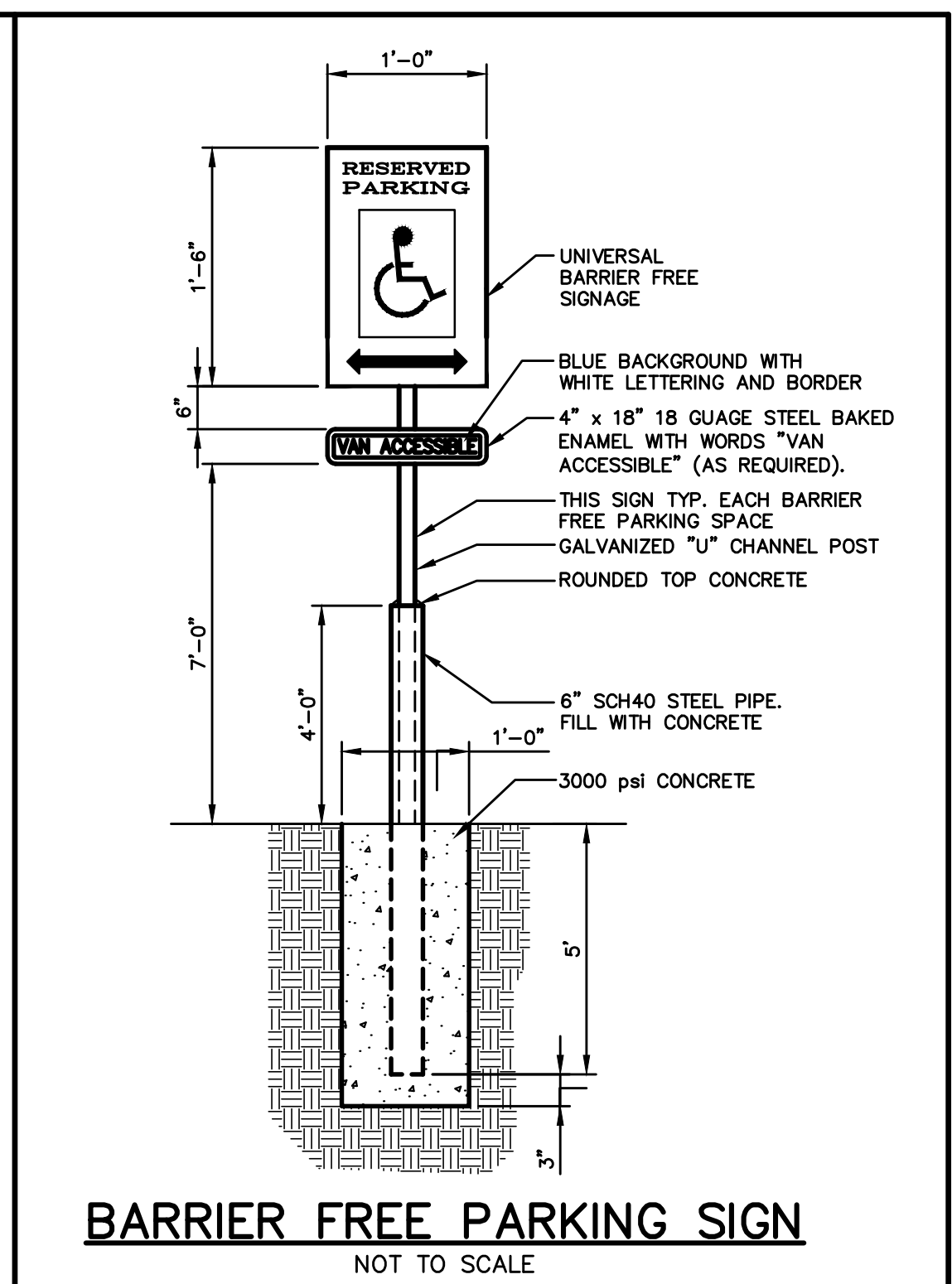
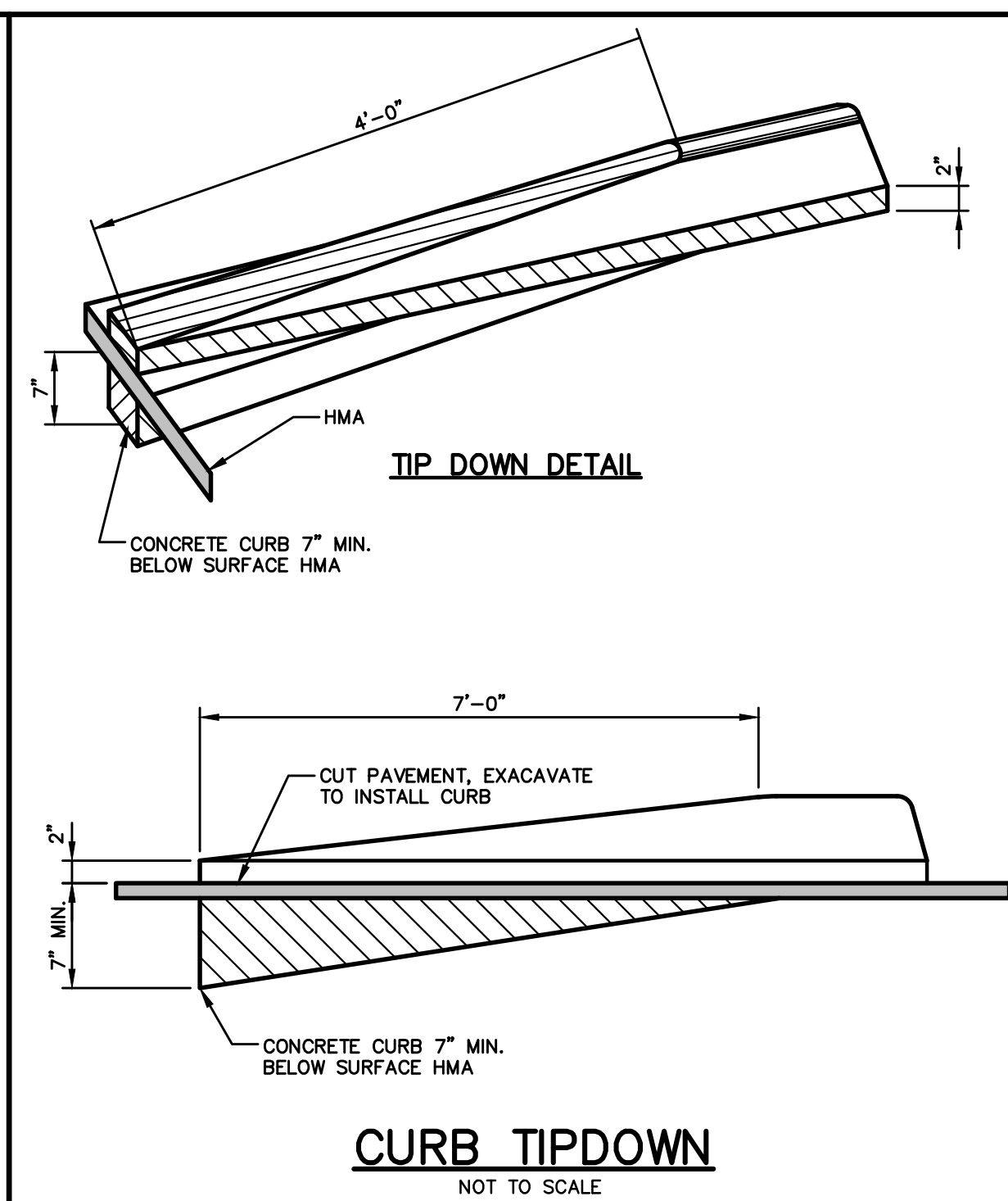
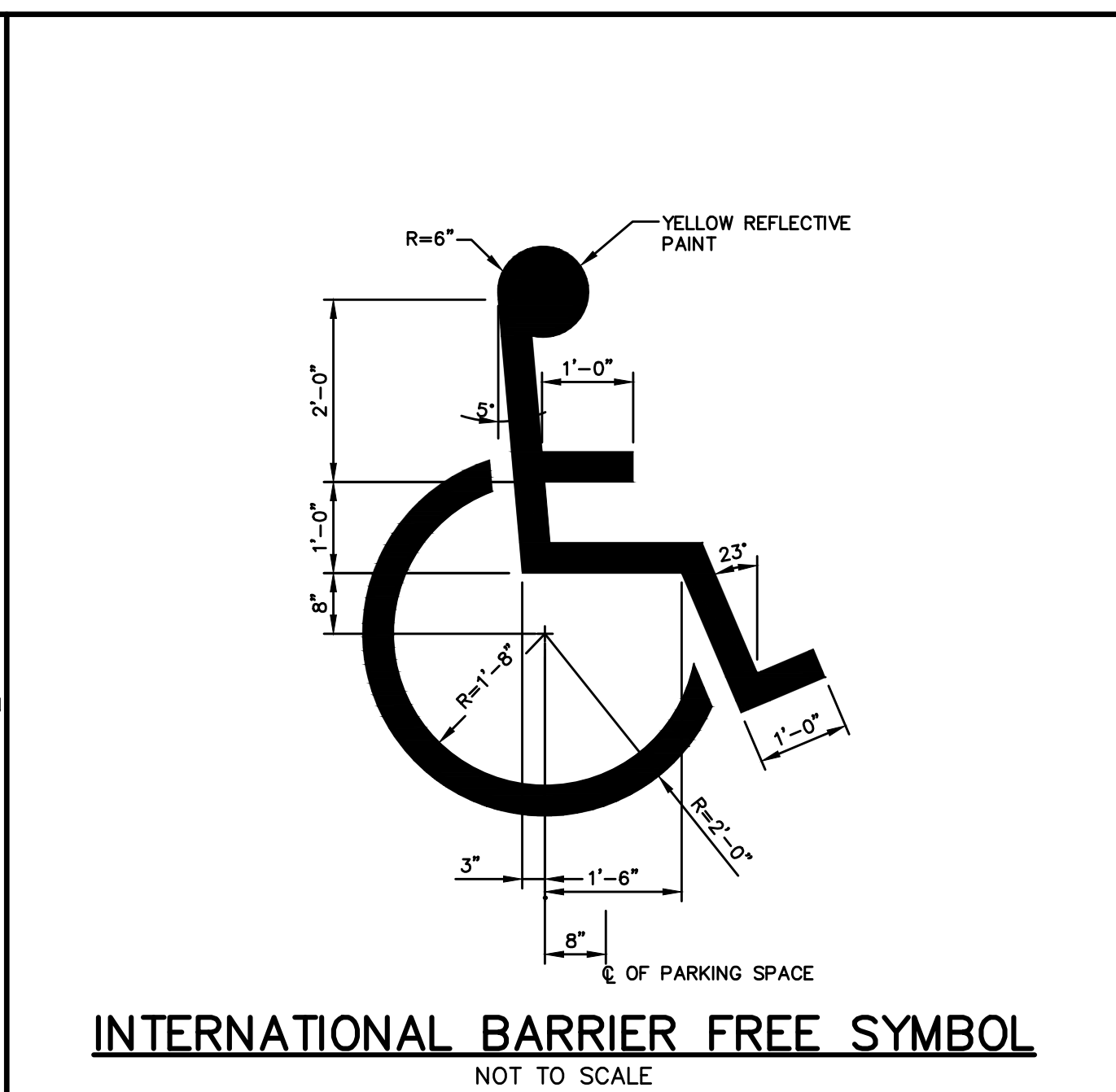
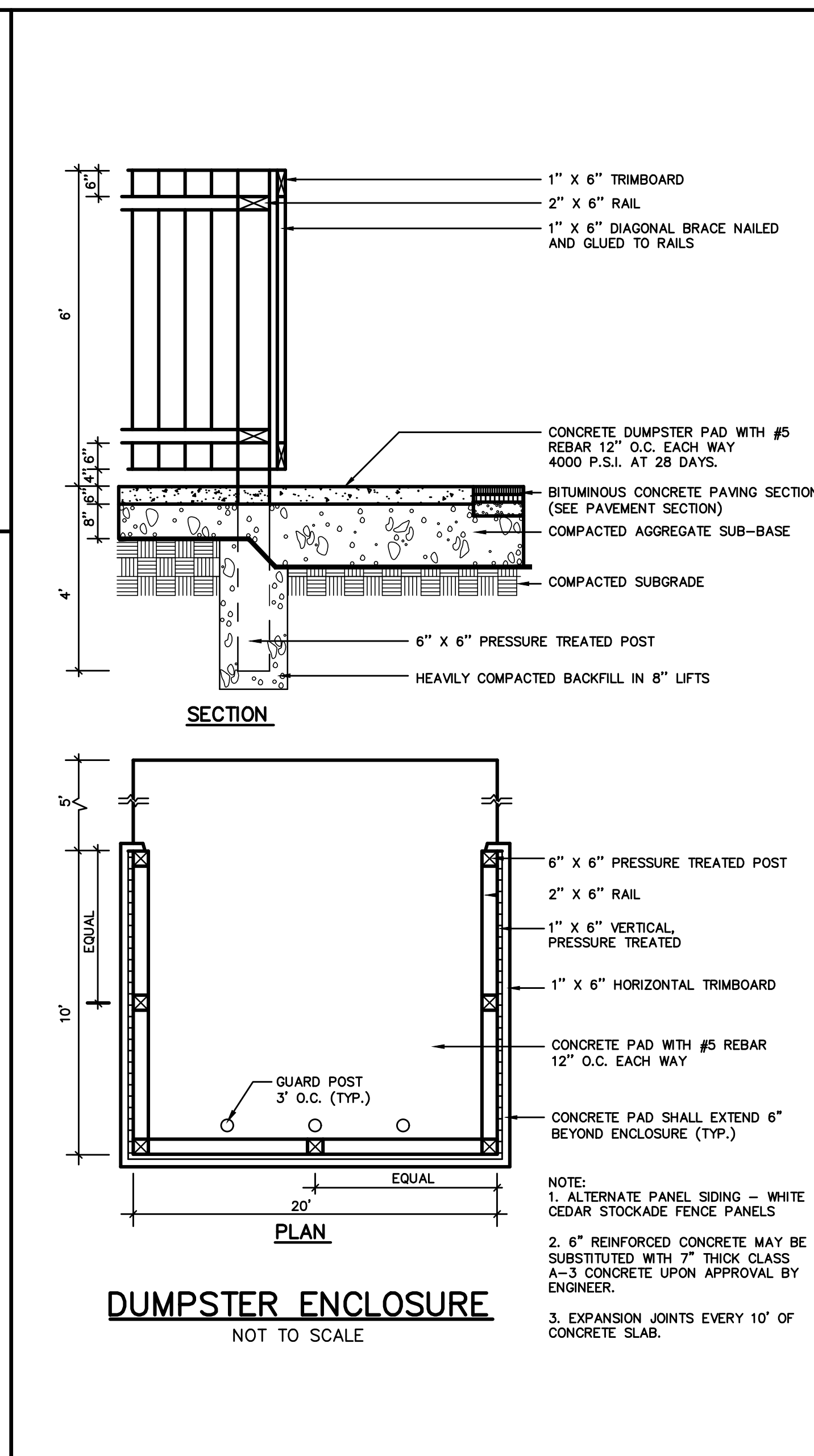
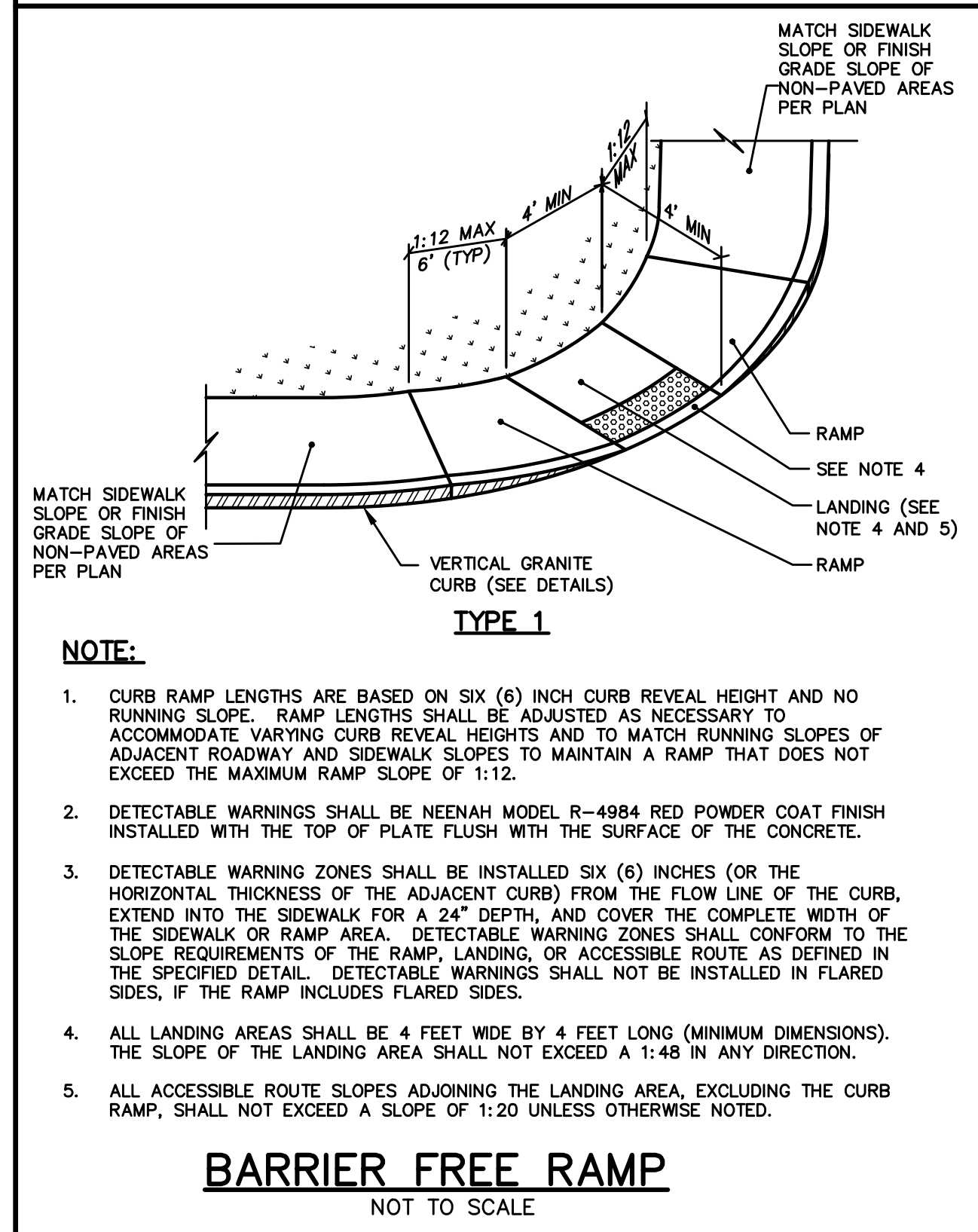
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(207) 772-2515
300 Southborough Drive - Suite 200
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Drawing Name:	Outlet Control Structure Details
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.	C303
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Design: AJK	Draft: CJG	Date: NOV 2024
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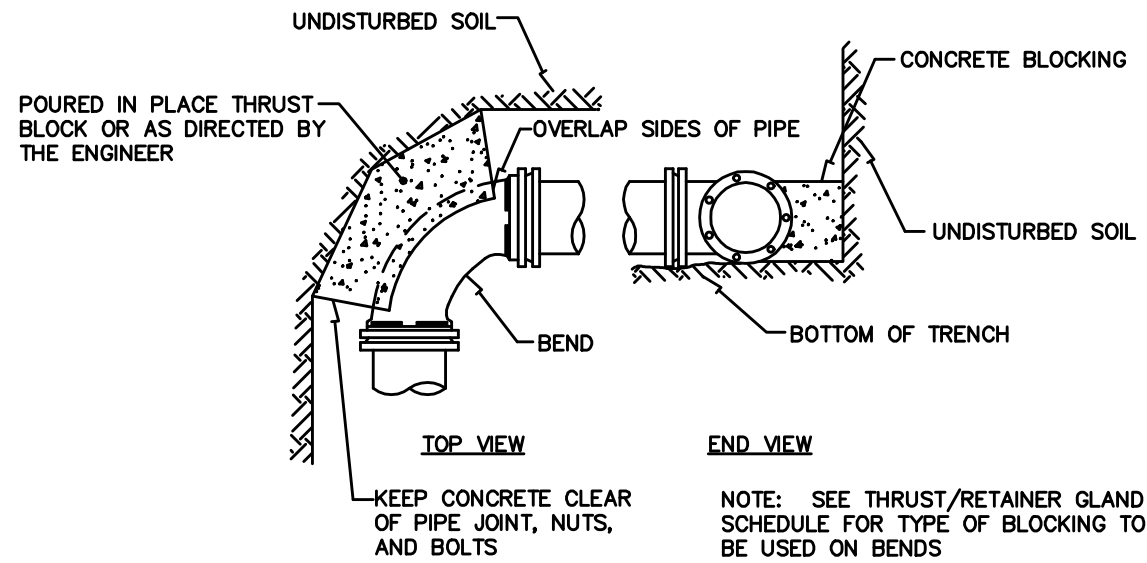


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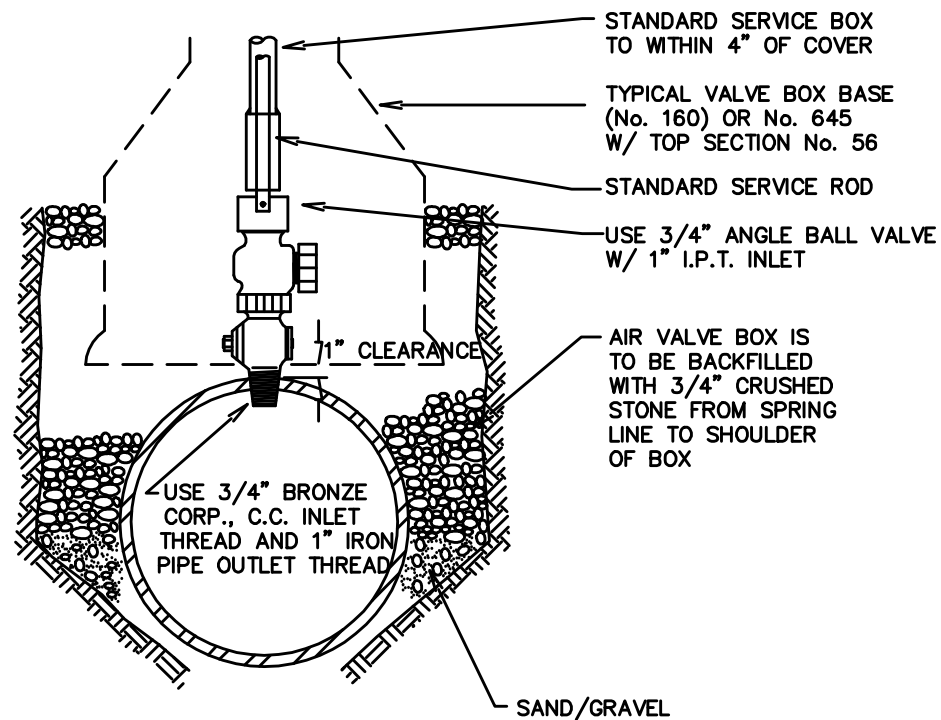
Drawing Name:	Site Details
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.
C401

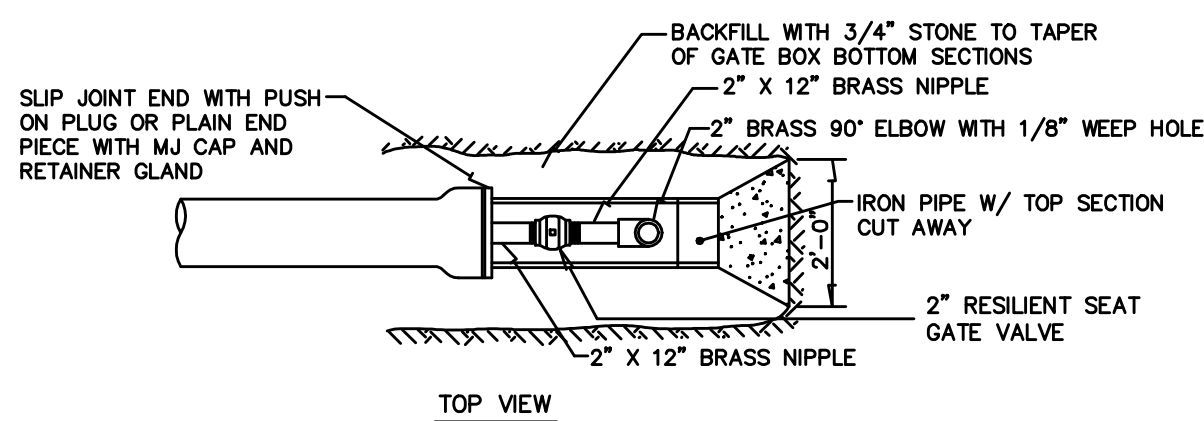
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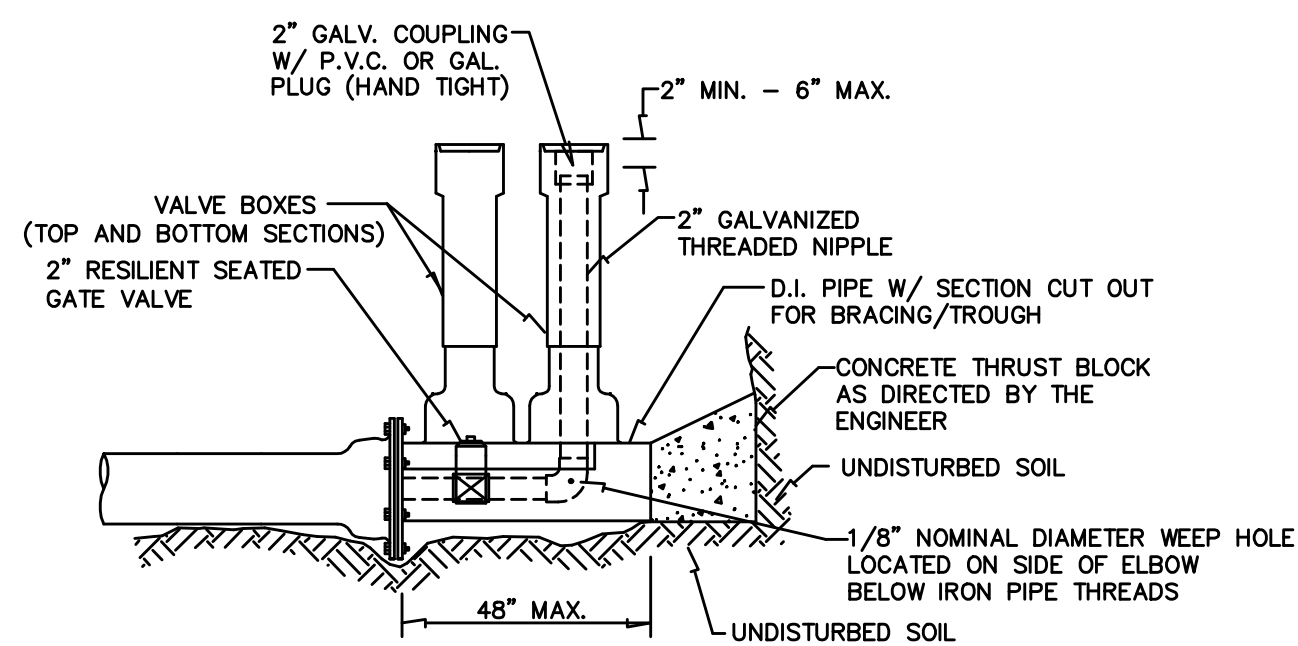
STANDARD BEND BLOCKING



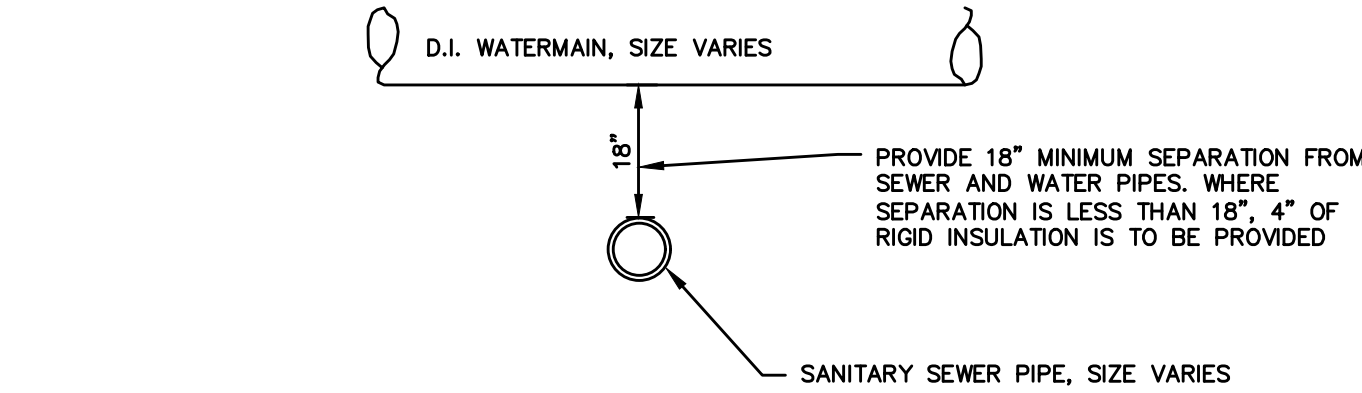
TYPICAL AIR VALVE (1")
NOT TO SCALE



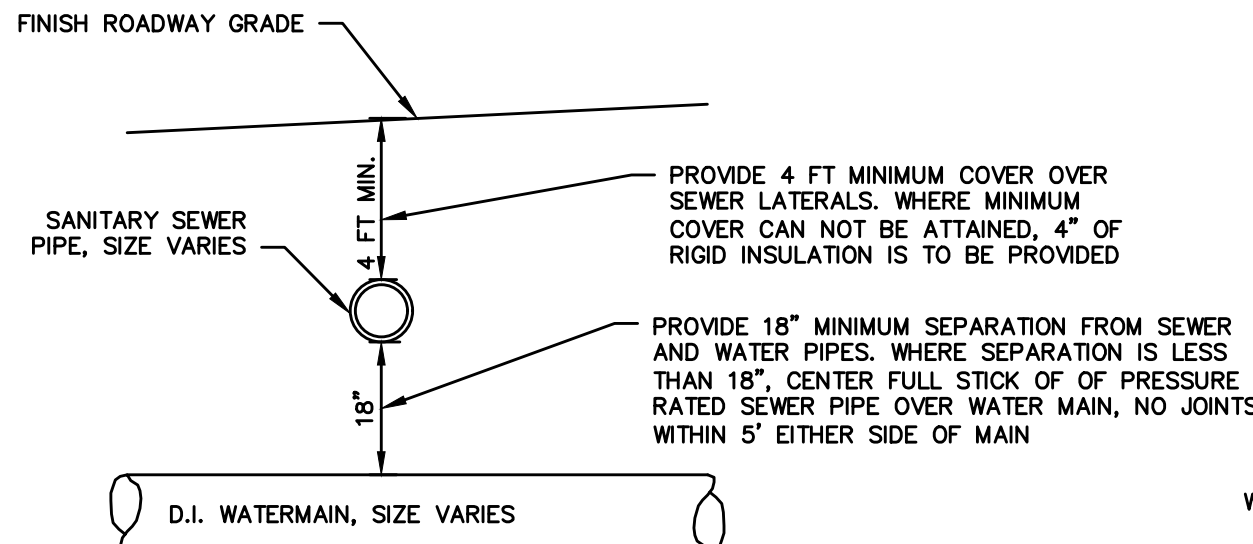
STANDARD 2" BLOW OFF
NOT TO SCALE



GRANITE TIPDOWN CURB
NOT TO SCALE

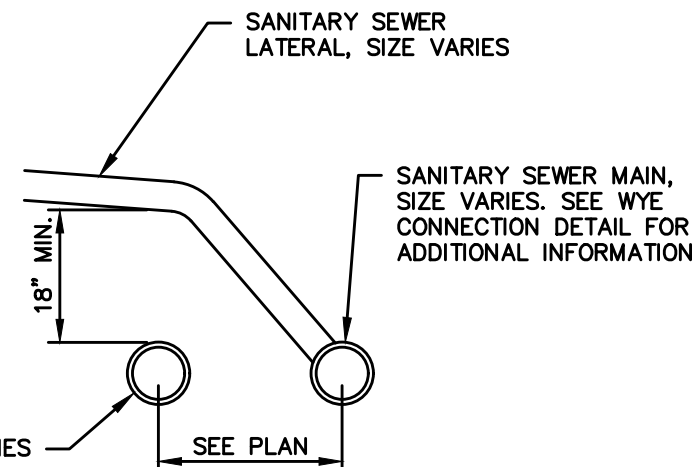


METHOD 1 - WATER ABOVE SEWER



METHOD 2 - SEWER ABOVE WATER

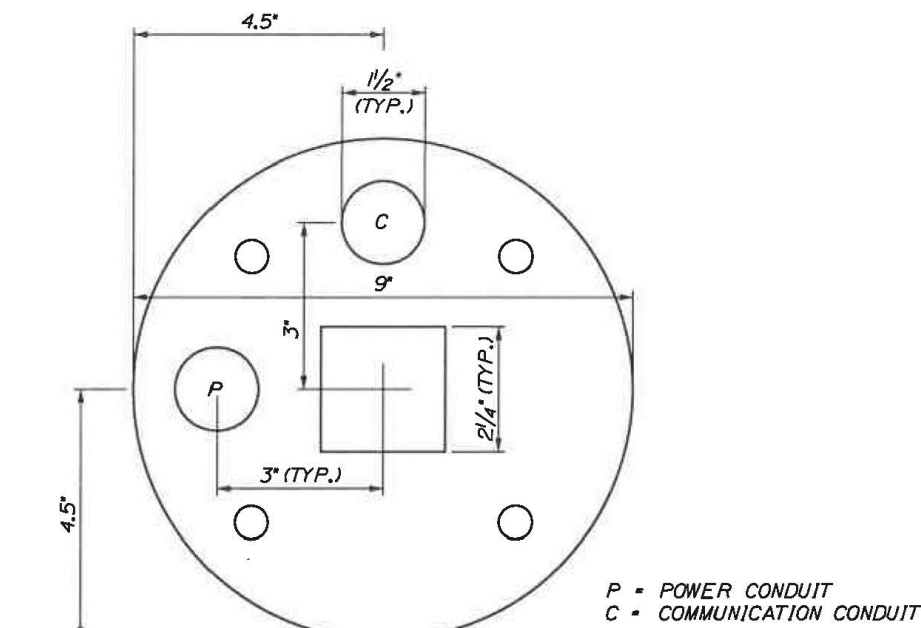
NOTE:
SITE CONDITIONS TO DETERMINE WHICH METHOD IS UTILIZED.



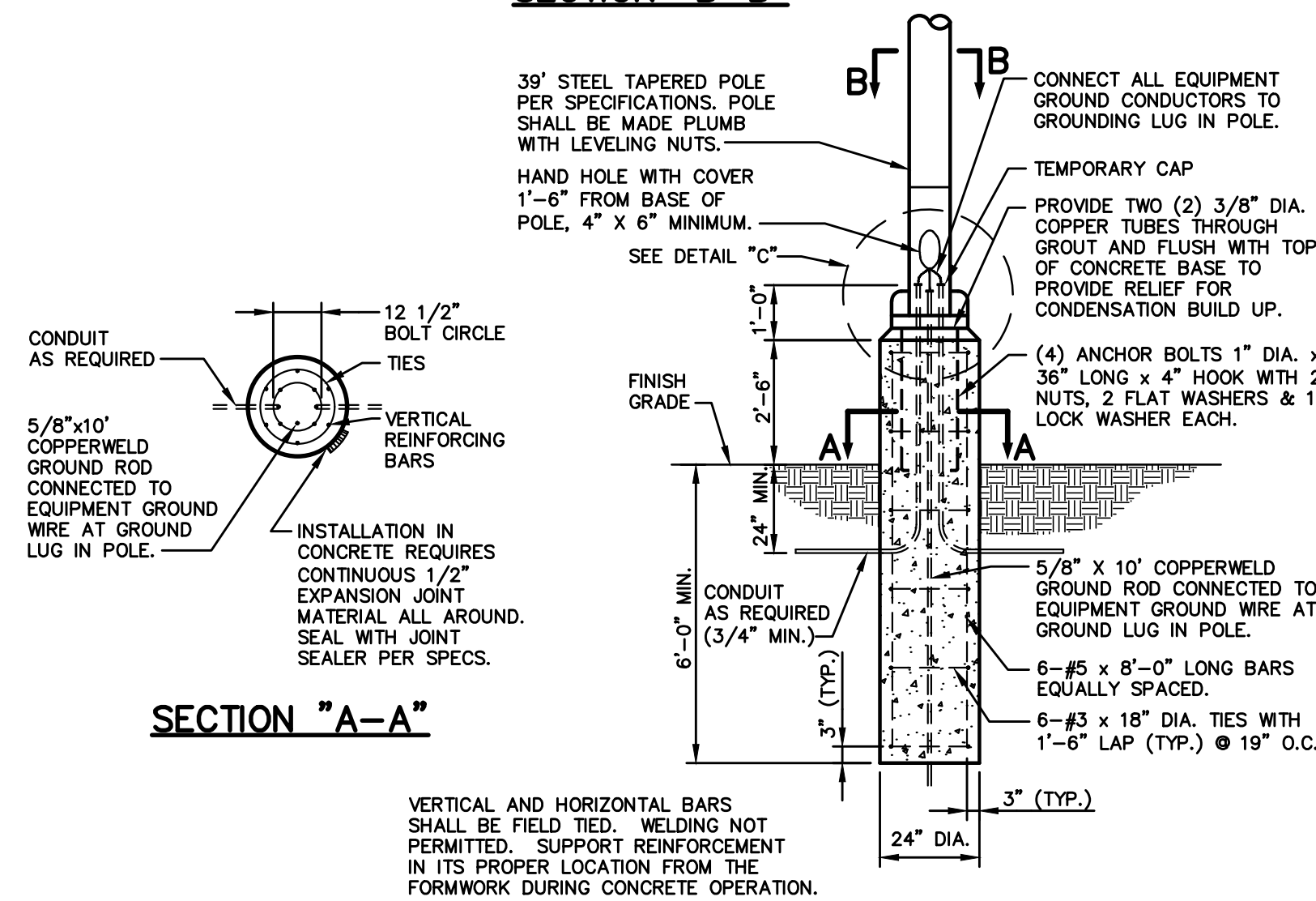
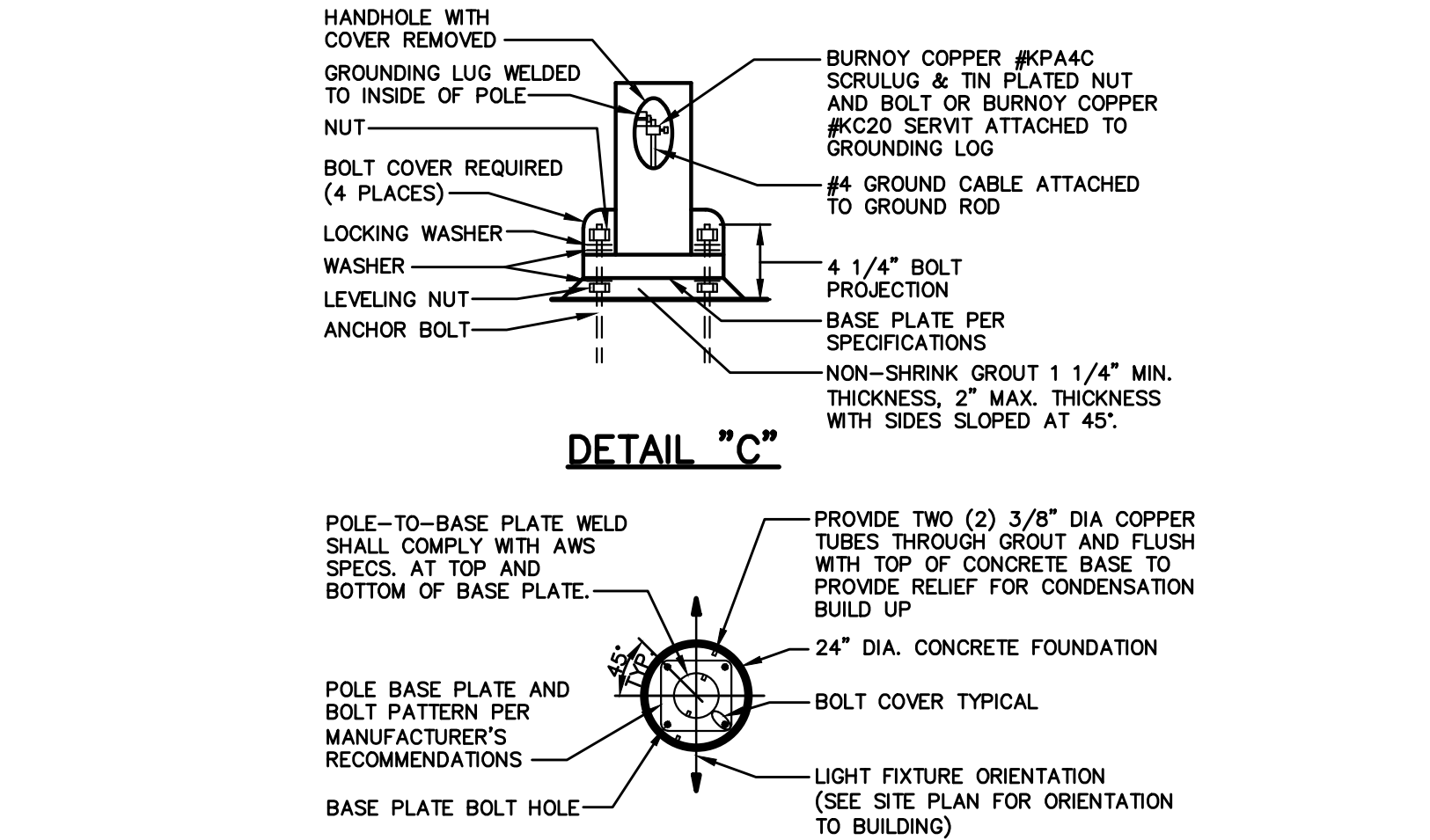
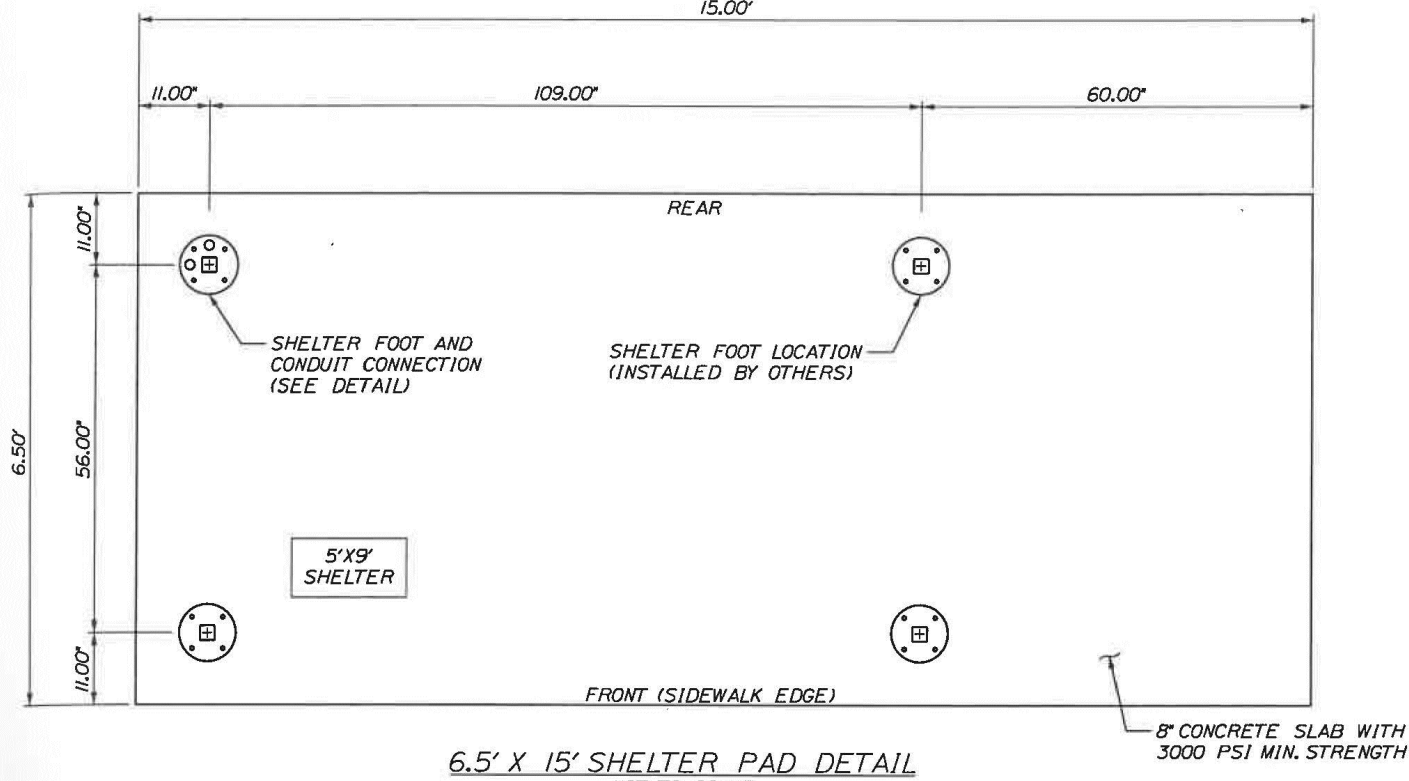
METHOD 2 - CROSS SECTION VIEW

TYPICAL SEWER AND WATERMAIN CROSSING

N.T.S.



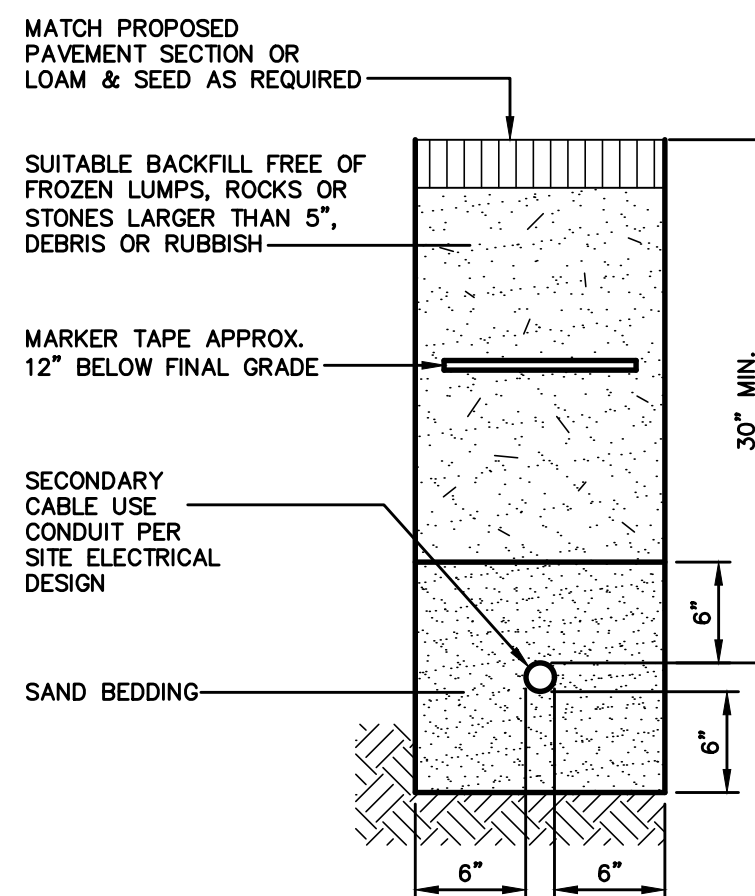
SHELTER FOOT & CONDUIT CONNECTION DETAIL
NOT TO SCALE



- NOTES:
- 3500 P.S.I. MIN. 28 DAY COMPRESSIVE STRENGTH CONC. WITH GRADE 60 REIN. STEEL.
 - IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
 - FOUNDATION EXCAVATION SHALL BE BY 24\"/>

PARKING LOT LIGHTING POLE FOUNDATION

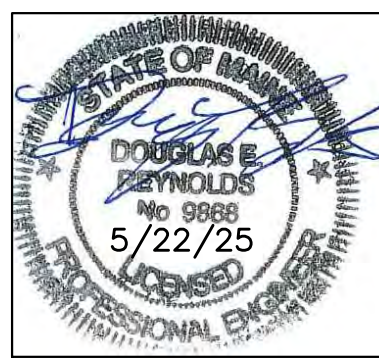
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SECONDARY ELECTRICAL TRENCH

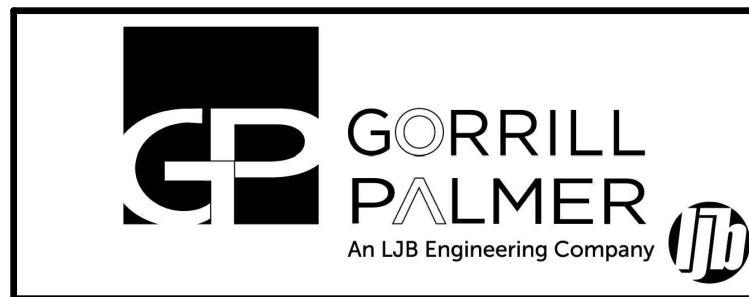
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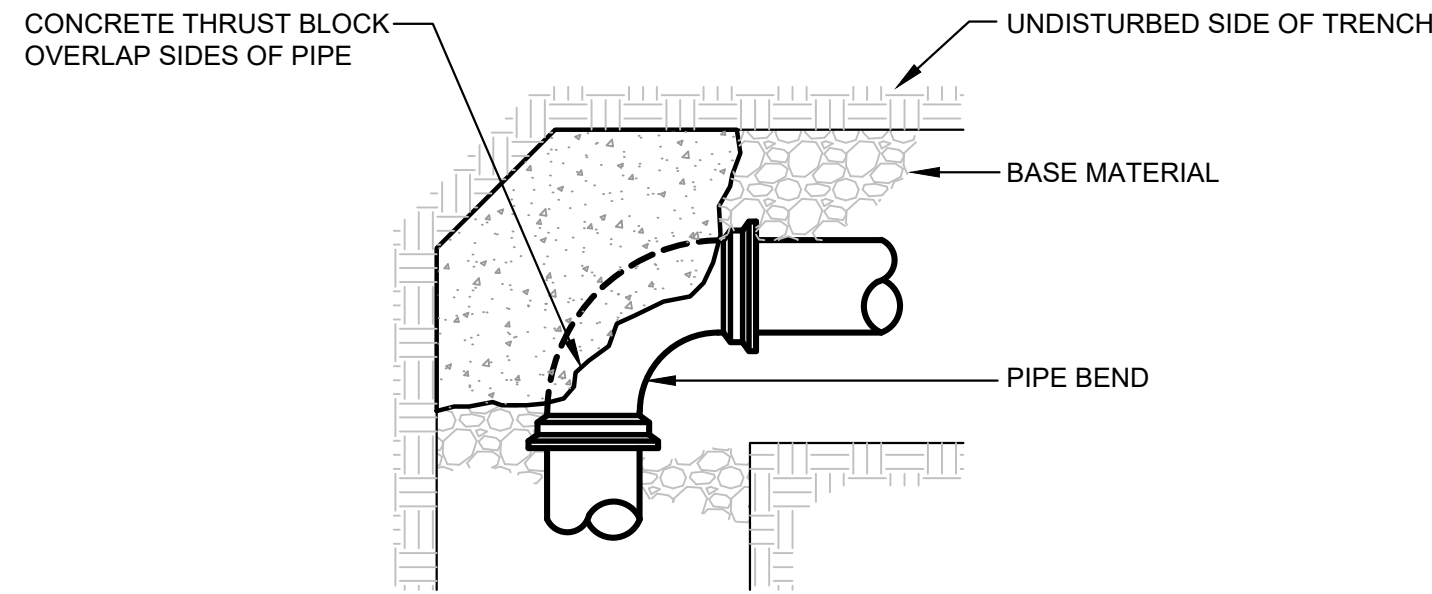
Design: AJK	Draft: CJG	Date: NOV 2024
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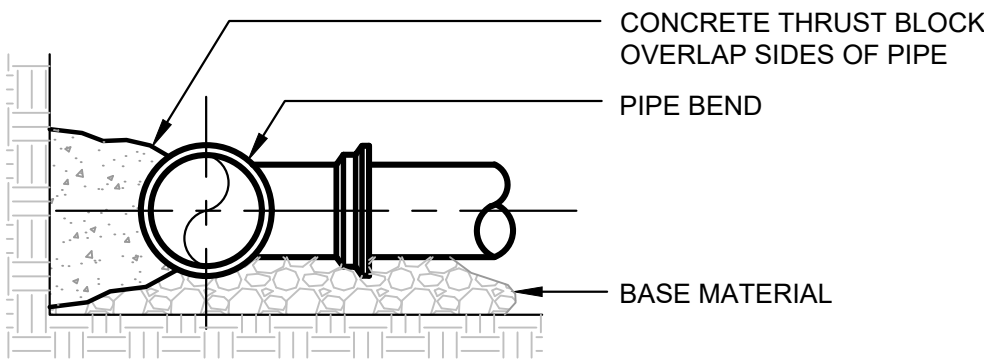
Drawing Name:	Site and Utility Details
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.	C402
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NOTE:
KEEP CONCRETE CLEAR OF
PIPE JOINT, NUTS AND BOLTS

PLAN



SECTION

THRUST/RETAINER GLAND SCHEDULE		
1/4 BEND	(90°)	USE POURED-IN-PLACE THRUST BLOCK WITH GRIPRING™ MECHANICAL JOINT RESTRAINT
1/2 BEND	(45°)	THRUST BLOCK W/ GRIPRING™
3/4 BEND	(22 1/2°)	THRUST BLOCK W/ GRIPRING™
1/2 BEND	(11 1/4°)	THRUST BLOCK W/ GRIPRING™

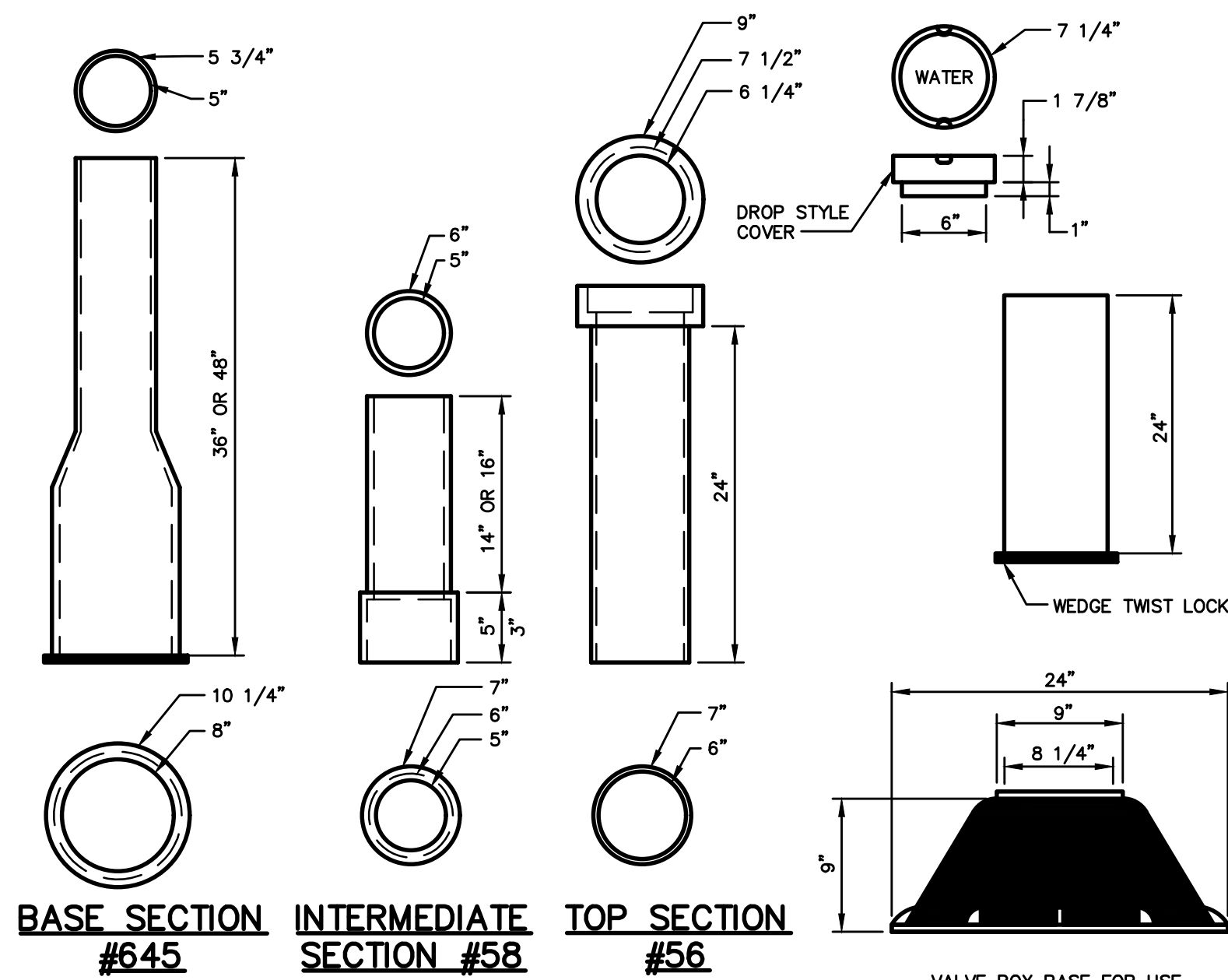
THE ABOVE SCHEDULE IS SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR DUE TO SOILS AND WORKING PRESSURES IN THE AREA.

NOTES:

- THE PORTLAND WATER DISTRICT MAY HAVE INSPECTION FEES AND REQUIRE OBSERVATION OF ALL PIPING INSTALLATION BEFORE BURIAL. REFER TO SPECIFICATIONS.
- FOR WATER MAIN LAYOUT SEE DRAWING C-5.0
- FOR WATER MAIN TRENCH DETAILS SEE DRAWING C-7.4
- REFER TO SPECIFICATIONS FOR TESTING AND CHLORINATION REQUIREMENTS.
- ALL HYDRANTS AND VALVES TO BE EPOXY COATED, NUTS & BOLTS TO BE STAINLESS STEEL.
- SERVICE RODS FOR DOMESTIC SERVICE OR AIR VALVES TO BE STAINLESS STEEL.

THRUST BLOCK PLACEMENT ON BENDS

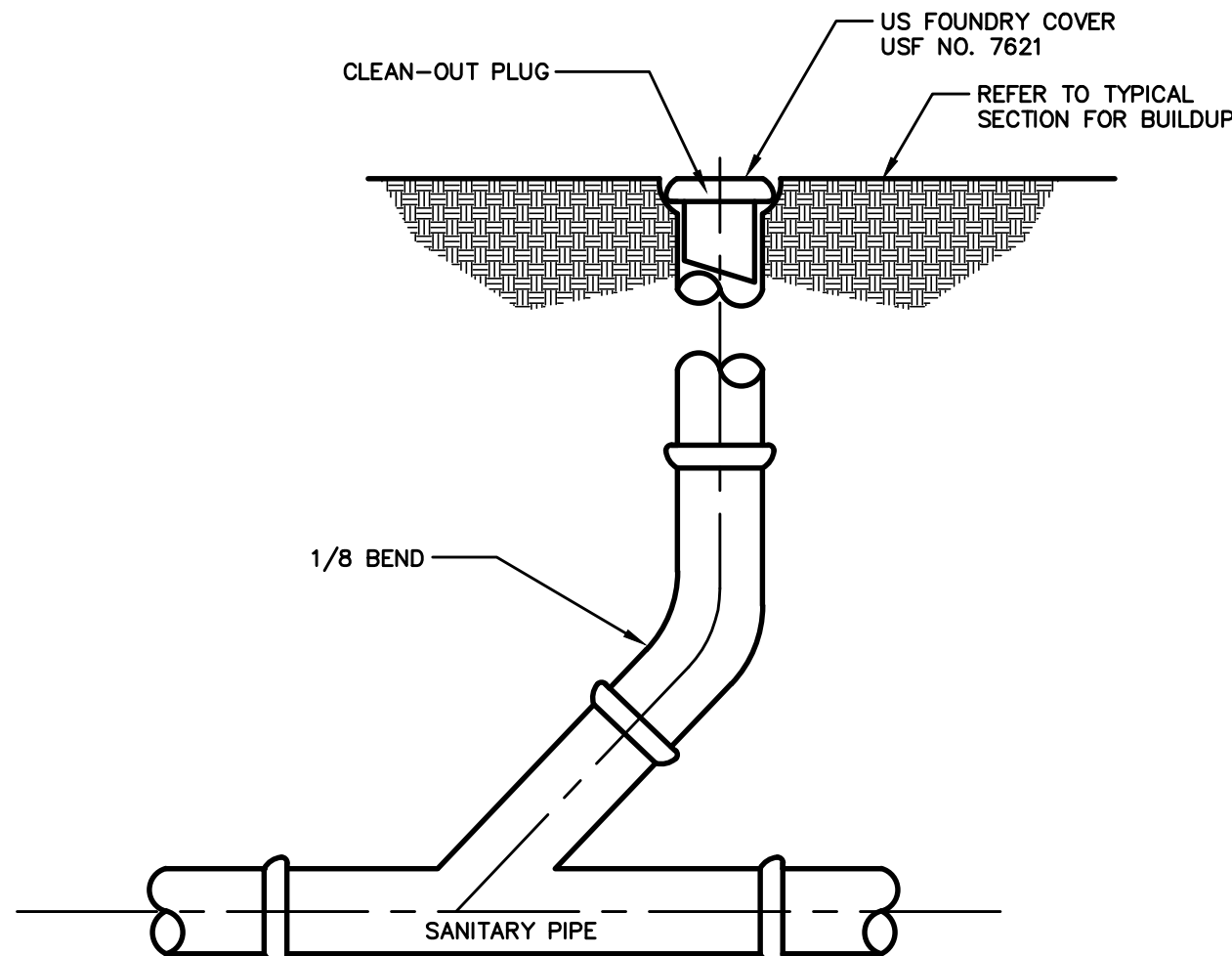
NOT TO SCALE



NOTE:
BUFFALO VALVE BOXES
NUMBERS ARE FOR 5.25"

TYPICAL VALVE BOXES

NOT TO SCALE



CLEANOUT

NOT TO SCALE

- THE BEARING SURFACE OF THE THRUST BLOCK SHALL BE THE SURFACE AREA OF THE THRUST BLOCK WHICH IS CAST AGAINST THE TRENCH WALL. THE BEARING SURFACE SHALL NOT EXCEED THE FOLLOWING LOADINGS:

IN-SITU CONDITION	ALLOWABLE
BEDROCK	3,000 psf
SAND OR OUTWASH DEPOSITS	1,500 psf
OTHER SOILS	1,000 psf

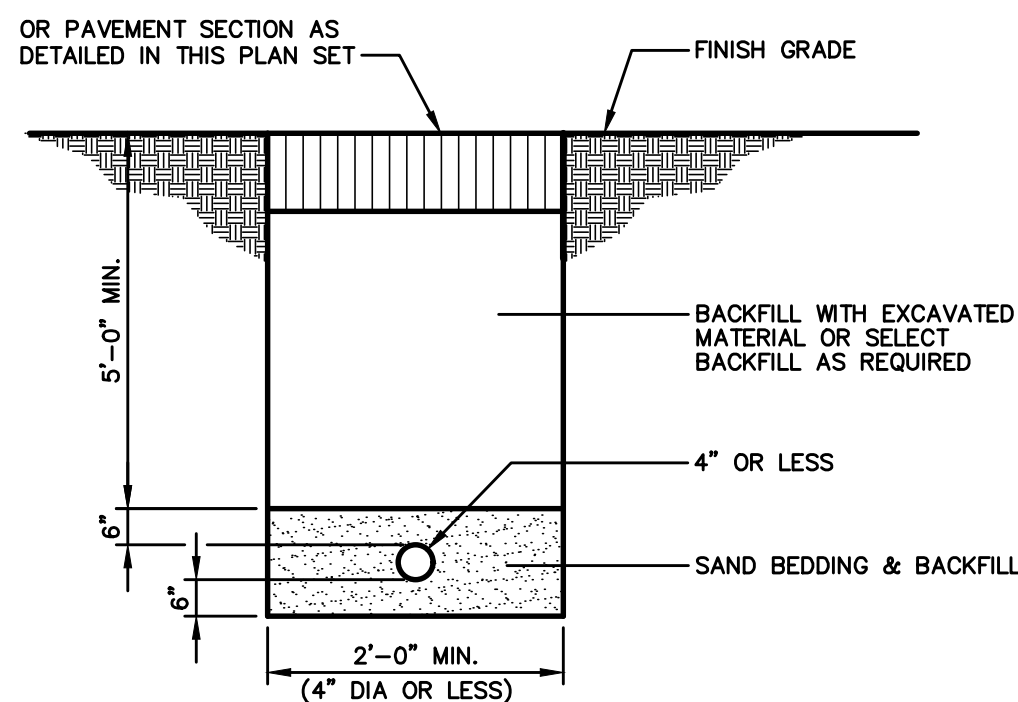
THE THRUST SHALL BE COMPUTED ON THE BASIS OF 150 psi x THE CROSS SECTIONAL AREA OF THE PIPE. FOR EXAMPLE, A THRUST BLOCK FOR A 1/4 BEND ON AN 8" WATER MAIN BEARING AGAINST CLAY WOULD REQUIRE A BEARING SURFACE OF 7.5 s.f.

$$150 \text{ psi} \times 50 \text{ sq. in.} = 7.5 \text{ s.f.}$$

- INSTALL POLY BARRIER BETWEEN PIPE AND ALL THRUST BLOCKS.

- ANY WORK RELATED TO WATER PIPING OR DETAILS SHALL BE IN ACCORDANCE WITH THE MAINE WATER COMPANY SPECIFICATIONS.

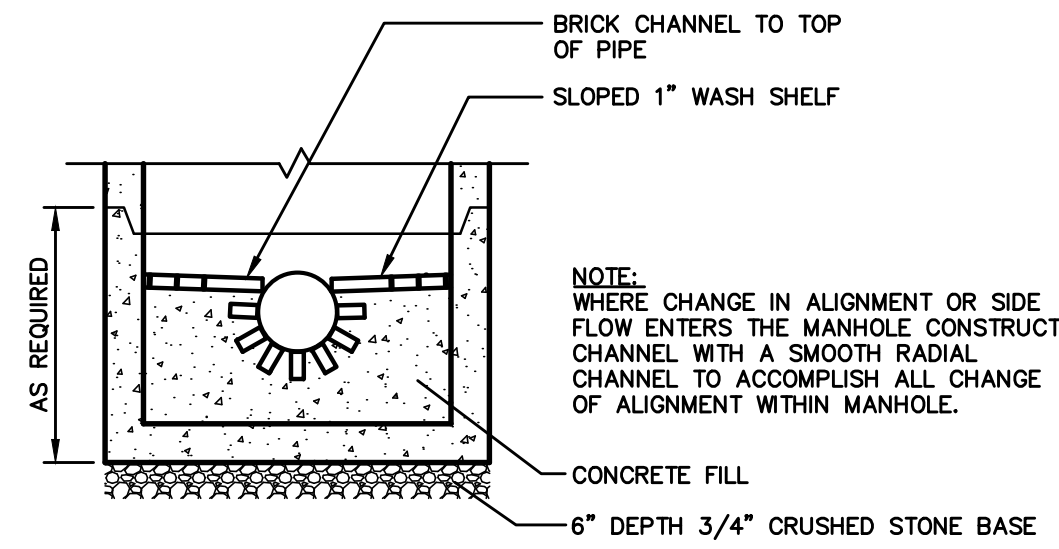
THRUST BLOCK NOTES



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

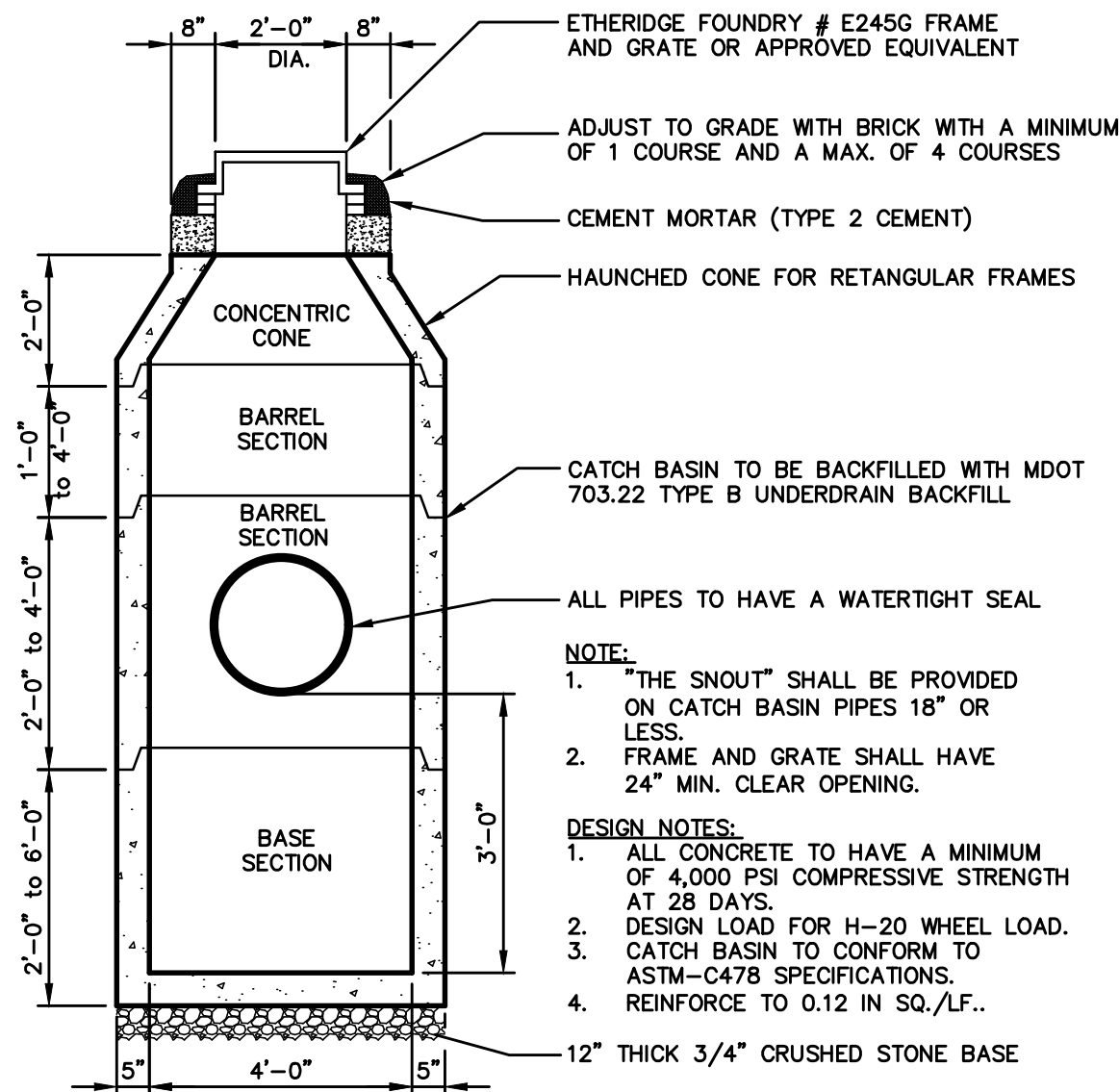
WATER SERVICE TRENCH SECTION

NOT TO SCALE



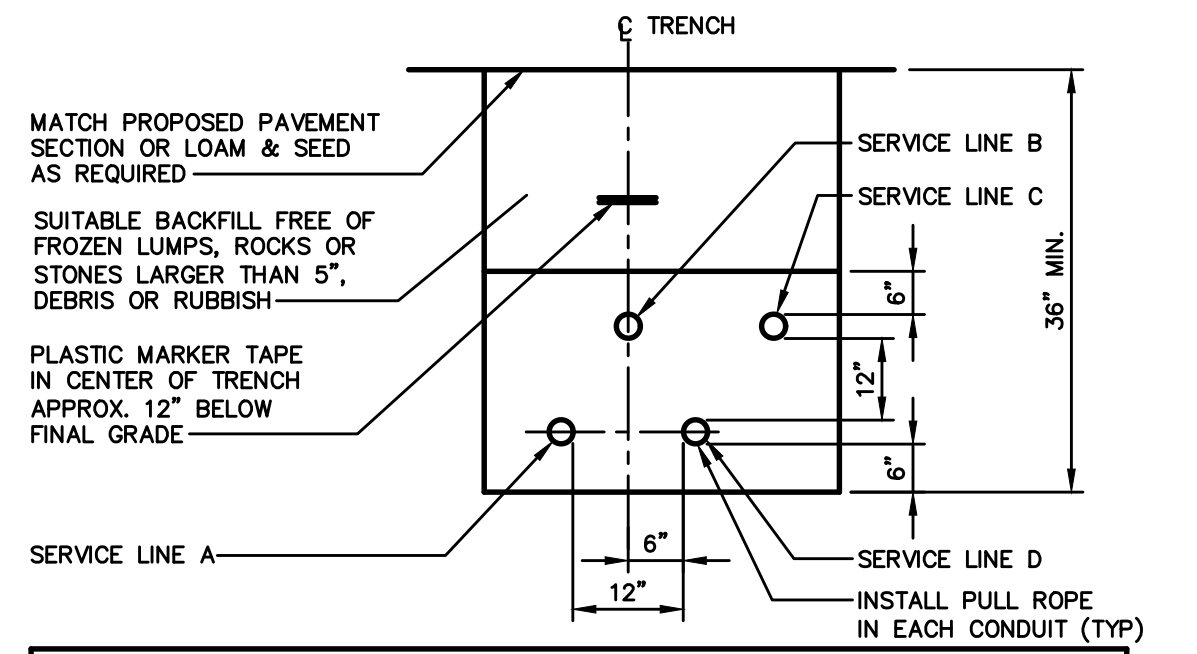
SANITARY SEWER MANHOLE
BRICK CHANNEL INSTALLATION

NOT TO SCALE



4'-0" PRECAST CATCH BASIN

NOT TO SCALE



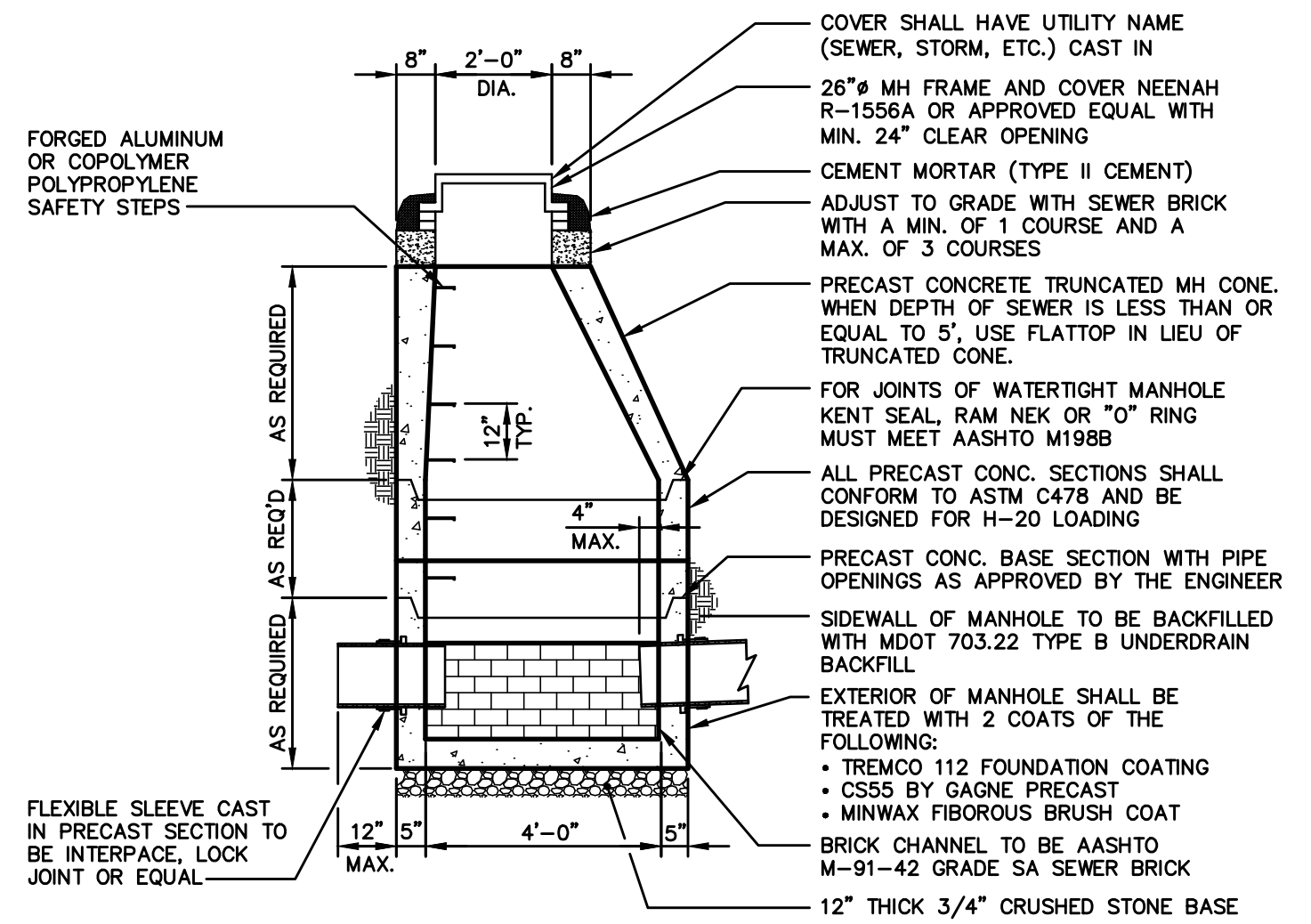
CONDUIT TYPE SCHEDULE

SERVICE	CONDUIT SIZE	GRASS & PAVED AREAS	UTILITY	REMARKS
A	2-5"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE
B	2-4"	SCHEDULE 40	TELEPHONE	SEE NOTE
C	2-4"	SCHEDULE 40	CABLE	SEE NOTE
D	2-4"	SCHEDULE 40 PVC ELECTRICAL GRADE	SPARES	SEE NOTE

NOTE:
ONE CONDUIT CAPPED FOR SPARE. PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10" ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS.

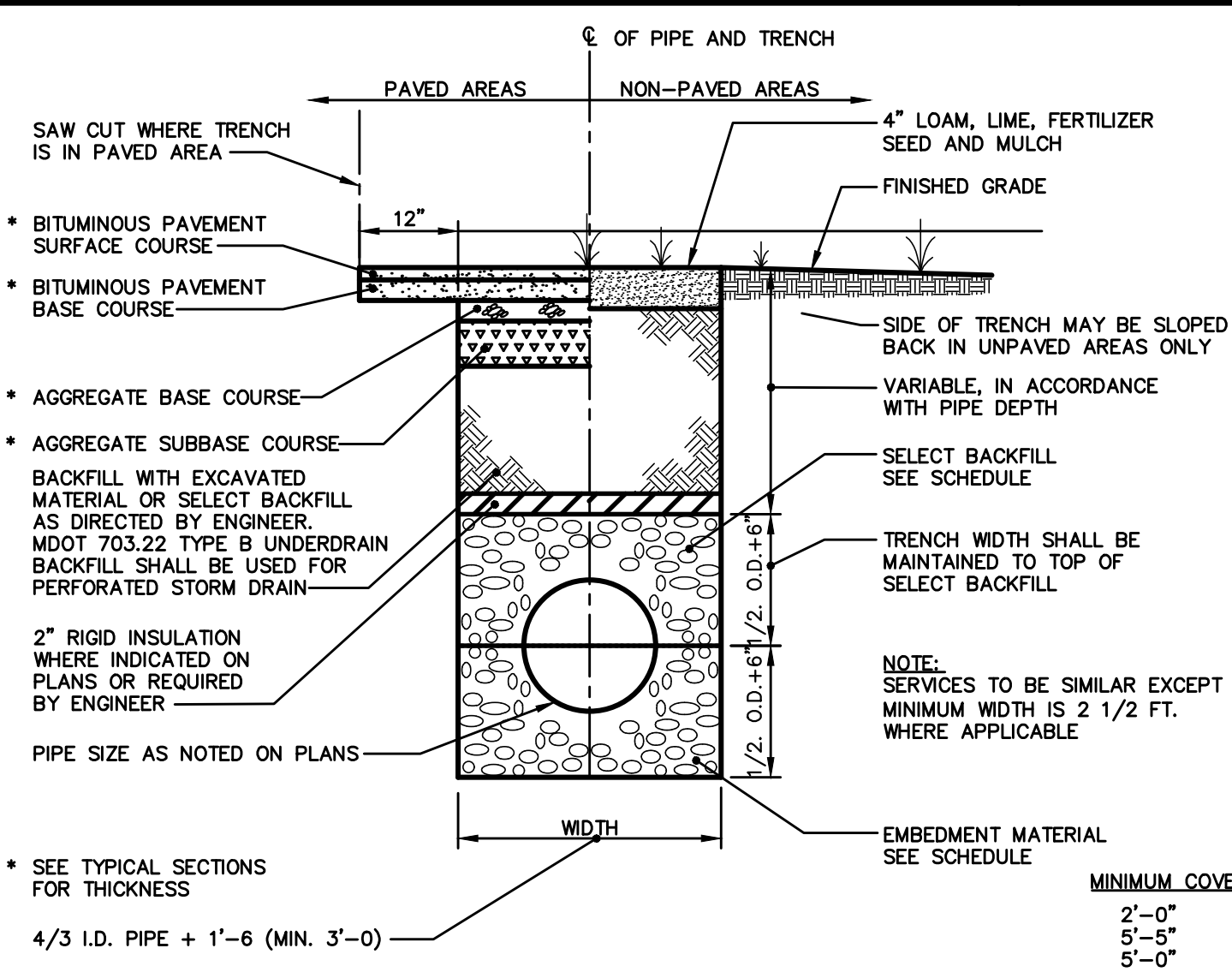
UTILITY TRENCH - PRIMARY AND SECONDARY
POWER, TELEPHONE, AND CABLE

NOT TO SCALE



4'-0" PRECAST SEWER MANHOLE
AND DRAIN MANHOLE

NOT TO SCALE



TRENCH SECTION

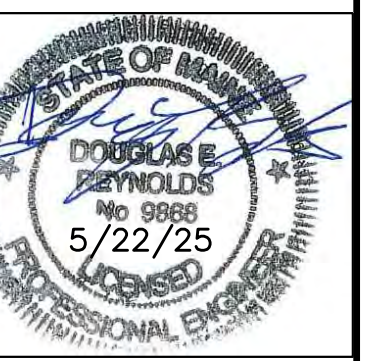
N.T.S.

SCHEDULE OF TRENCH BACKFILL		
TYPE OF PIPE	EMBEDMENT MATERIAL	SELECT BACKFILL
OMP DUCTILE IRON RCP	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL
PERFORATED PVC-SDR35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE

- NOTE:
- BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - INSTALL WARNING TAPE DIRECTLY ABOVE UTILITIES, 12" BELOW FINISH GRADE.

- (1) COVER BETWEEN 2' AND 3' SHALL INCLUDE 4" RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2" RIGID INSULATION.

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Rev.	Date	Revision

RESPONSE TO LOCAL COMMENTS	5/22/25	DER
RESPONSE TO LOCAL COMMENTS	2/24/25	DER
LOCAL SITE PLAN APPLICATION	12/4/24	DER
Issued For	Date	By

Design: AJK	Draft: CJG	Date: NOV 2024
Checked: DER	Scale: NTS	Job No.: 4292
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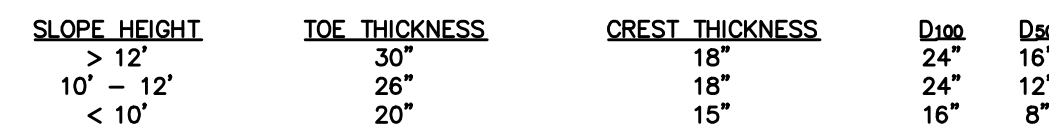


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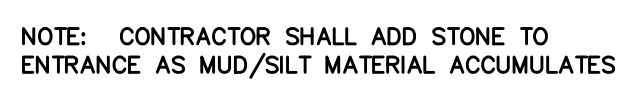
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Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
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Drawing No.

C403



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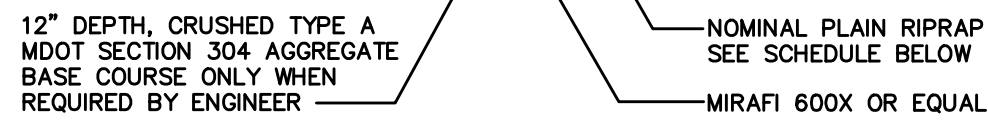
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SILT FENCE

SECTION B-B

SECTION A-A

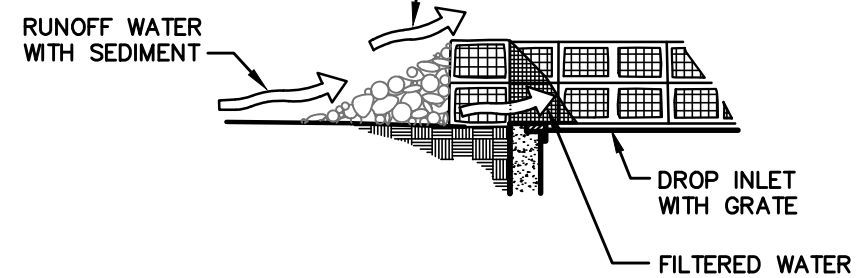
NOT TO SCALE



SECTION A-A

SCHEDULE

NOT TO SCALE



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING THE BLOCKS TO A MINIMUM OF 4" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24" HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER PERMITS PERMEATION OF WATER, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

NOT TO SCALE



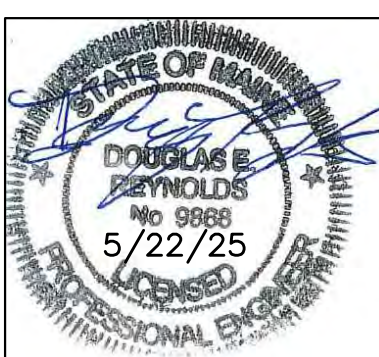
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RESPONSE TO LOCAL COMMENTS	2/24/25	DEF
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Project:

Erosion Control Details

Project: **The Belfort Landing**
1582 Forest Ave, Portland, Maine

Client: **ACRE Properties**
27 Cypress Street, Portland, Maine 04103

C404

EROSION CONTROL MEASURES AND SITE STABILIZATION

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

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

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

A.DEWATERING

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

B.INSPECTION AND CONSTRUCTION MONITORING

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

THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

- 1.INSPECTION AND CORRECTIVE ACTION. AN ENGINEER OR SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER STANDARDS AS DESCRIBED IN THE CONDITIONS OF THE PERMIT SHALL INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES (INCLUDING CATCH BASIN INLET PROTECTION MEASURES, SEDIMENT FILTER MEASURES, AND STABILIZATION OF SLOPES), MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES.
- 2.MAINTENANCE. IF EROSION AND SEDIMENTATION CONTROL (ESC) MEASURES NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE ASSOCIATED WITH THESE INSPECTIONS. IF ADDITIONAL ESC MEASURES OR SIGNIFICANT REPAIR OF ESC MEASURES ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION THROUGHOUT PERMANENT STABILIZATION MEASURES.
- 3.DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, DISTURBED AND IMPERVIOUS AREAS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE THE DATE, TIME, AND LOCATION OF ANY EROSION OR SEDIMENTATION PROBLEMS, THE TYPE OF EROSION OR SEDIMENTATION, THE LOCATION, AND LOCATION(S) WHERE ADDITIONAL ESC MEASURES ARE NEEDED. FOR EACH ESC MEASURE REQUIRING MAINTENANCE, REPAIR, REPLACEMENT, AND LOCATION NEEDING ADDITIONAL ESC MEASURES, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

C.TEMPORARY EROSION CONTROL MEASURES

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

1. A CRUSHED STONE--STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE APPROVED ACCESS DRIVE AS DEPICTED ON THE PLANS.
2. SILTATION FENCE OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF-- BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. PER WOOD WASTE COMPOST BERMS SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THIS PACKAGE AND INSPECTED AT LEAST ONCE A WEEK AND BEFORE AND IMMEDIATELY AFTER A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE OR BERM LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM. WOOD WASTE COMPOST BERMS ARE NOT TO BE USED ADJACENT TO WETLAND AREAS THAT ARE NOT TO BE DISTURBED.
3. STRAW OR HAY MULCH INCLUDING HYDROSEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND OCTOBER 15TH ON SLOPES OF LESS THAN 15 PERCENT SHALL BE ANCHORED BY APPLYING WATER. MULCH PLACED ON SLOPES OF EQUAL TO OR STEEPER THAN 15 PERCENT SHALL BE ANCHORED BY A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. FABRIC NETTING AND STAPLES SHALL BE USED ON DISTURBED AREAS WITHIN 50' OF LAKES, STREAMS, AND WETLANDS REGARDLESS OF THE UPSTREAM SLOPE. MULCH PLACED BETWEEN OCTOBER 15TH AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT SHALL BE COVERED WITH A FABRIC NETTING AND ANCHORED WITH STAPLES. THE MANUFACTURER'S RECOMMENDATIONS. SLOPES STEEPER THAN 3:1 AND EQUAL TO OR FLATTER THAN 2:1, WHICH ARE TO BE REVEGETATED, SHALL RECEIVE CURLEX BLANKETS BY AMERICAN EXCELSIOR OR EQUAL. SLOPES STEEPER THAN 2:1 SHALL RECEIVE RIPRAP AS NOTED ON THE PLANS. THE MULCH APPLICATION RATE FOR BOTH TEMPORARY AND PERMANENT SEEDING IS 75 LBS PER 1000 SF AS IDENTIFIED IN ATTACHMENT A OF THIS SECTION. MULCH OVER SNOW.
4. TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION WILL BE PROTECTED AS FOLLOWS:
 - A.) TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN 50 FEET OF ANY WETLANDS WHICH WILL NOT BE DISTURBED AND SHALL BE LOCATED AWAY FROM DRAINAGE SWALES.
 - B.) STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS BY EITHER TEMPORARILY SEEDING THE STOCKPILE BY A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH, SUCH AS HAY, STRAW, OR EROSION CONTROL MIX.
 - C.) STOCKPILES SHALL BE SURROUNDED BY A SEDIMENTATION BARRIER AT THE TIME OF FORMATION.
5. ALL DENUDED AREAS THAT ARE WITHIN 50 FEET OF AN UNDISTURBED WETLAND, WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN A BUILDING PAD, PARKING AREA, OR ACCESS DRIVE SUBBASE AREA, SHALL RECEIVE MULCH OR EROSION CONTROL MESH FABRIC WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL. ALL AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW. IN OTHER AREAS, THE TIME PERIOD MAY BE EXTENDED TO 7 DAYS.
6. FOR WORK WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENUDED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 2 DAYS FOR ALL AREAS.
7. BELFORT STREET SHALL BE SWEEP TO CONTROL MUD AND DUST AS NECESSARY.
8. DURING GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS AND AS DIRECTED ON THE EROSION CONTROL PLANS.
9. SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE ANCHORED.
10. WOOD WASTE COMPOST/BARK BERMS MAY BE USED IN LIEU OF SILTATION FENCING. BERMS SHALL BE REMOVED AND SPREAD IN A BOTTOM NOT TO EXCEED 3" THICK UPSTREAM AREAS ARE COMPLETED AND A 90% CATCH OF VEGETATION IS ATTAINED.
11. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MDOT SPECIFICATIONS -- SECTION 637 -- DUST CONTROL.
12. LOAM AND SEED IS INTENDED TO SERVE, AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DENUDED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP. APPLICATION RATES ARE PROVIDED IN ATTACHMENT A OF THIS SECTION. SEEDING SHALL NOT OCCUR OVER SNOW.

D.PERMANENT EROSION CONTROL MEASURES

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

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, GRAVEL SUBBASE, ETC.) WILL BE LOAMED, UMED, FERTILIZED, MULCHED, AND SEEDED. FABRIC NETTING, ANCHORED WITH STAPLES, SHALL BE PLACED OVER THE MULCH IN AREAS AS NOTED IN TEMPORARY EROSION CONTROL MEASURES. AFTER THE FIRST RAINFALL, THE MULCH SHALL BE REMOVED AND THE AREAS SHALL BE REVEGETATED. THE MULCH SHALL BE REMOVED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48-HOUR WINDOW. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
2. ALL STORM DRAIN PIPE OUTLETS SHALL HAVE RIPRAP APRONS AT THEIR OUTLET TO PROTECT THE OUTLET AND RECEIVING CHANNEL FROM SCOUR AND DETERIORATION. INSTALLATION DETAILS ARE PROVIDED IN THE PLAN SET. THE APRONS SHALL BE INSTALLED AND STABILIZED TO THE EXTENT PRACTICABLE PRIOR TO DIRECTING RUNOFF TO THE TRIBUTARY PIPE OR CULVERT.

IMPLEMENTATION SCHEDULE

THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE REQUIRED TO ENSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPTIMIZED: THE IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN IN SPRING OF 2025, WITH FIRST OCCUPANCY ANTICIPATED BY THE END OF 2025.

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

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

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

1. THE ABOVE CONSTRUCTION SEQUENCE SHOULD GENERALLY BE COMPLETED IN THE SPECIFIED ORDER; HOWEVER, SEVERAL SEPARATE ITEMS MAY BE CONSTRUCTED SIMULTANEOUSLY. WORK MUST ALSO BE SCHEDULED OR PHASED TO REDUCE THE EXTENT OF THE EXPOSED AREAS AS SPECIFIED BELOW. THE INTENT OF THIS SEQUENCE IS TO PROVIDE FOR EROSION CONTROL AND TO HAVE STRUCTURAL MEASURES SUCH AS SILT FENCE AND CONSTRUCTION ENTRANCES IN PLACE BEFORE LARGE AREAS OF LAND ARE DENUDED.
2. THE WORK SHALL BE CONDUCTED IN SECTIONS WHICH SHALL:
 - LIMIT THE AMOUNT OF EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 30 DAYS.
 - REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT, OR TEMPORARILY STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL FOR AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND AND 7 DAYS FOR ALL OTHER AREAS. AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW.
 - INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEM AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE. THE DITCHES SHALL BE IMMEDIATELY LINED OR REVEGETATED AS SOON AS THEIR INSTALLATION IS COMPLETED.

EROSION, SEDIMENTATION AND STABILIZATION CONTROL PLAN

THE EROSION CONTROL INFORMATION IS INCLUDED IN THE PLAN SET.

DETAILS AND SPECIFICATIONS

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

WINTER STABILIZATION PLAN

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

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO ONE ACRE OR AN AREA THAT IS NOT EXPOSED TO ANY SNOW EVENT.

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

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

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

1. SOIL STOCKPILES
 - STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 SQUARE-Feet (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE SHALL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 50 FEET FROM ANY NATURAL RESOURCES.
2. NATURAL RESOURCES PROTECTION
 - ANY AREAS WITHIN 75 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 90% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (L.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 75 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.
3. SEDIMENT BARRIERS
 - DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.
4. MULCHING
 - AN AREA SHALL BE CONSIDERED DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 SQUARE-Feet OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

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

5. MULCHING OF SLOPES AND DITCHES
 - SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 SQUARE FEET ON ALL SLOPES GREATER THAN 8%.
 - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR AREAS TO BE INSTALLED PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH HAY OR STRAW OR EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.
6. SEEDING
 - BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15TH, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FURTHER ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED. ALL AREAS WITHIN 50 FEET OF LAKES, STREAMS, AND WETLANDS SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 90% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED, AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

7. WINTER CONSTRUCTION INSPECTION

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

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

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

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

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

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

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT SHALL MONITOR THE GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 15% OF THE DISTURBED SLOPE OR COVER AT LEAST 90% OF THE DISTURBED SLOPE BEFORE NOVEMBER 1, THEN THE APPLICANT SHALL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM III OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM IV OF THIS STANDARD.

STABILIZE THE SLOPE WITH SOD -- THE APPLICANT SHALL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY SEPTEMBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD TO SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT SHALL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE APPLICANT SHALL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE COMPOST, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT SHALL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP -- THE APPLICANT SHALL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER UNDERNEATH THE RIPRAP.

3. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE APPLICANT SHALL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% IF THE APPLICANT FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT SHALL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 15% OF THE DISTURBED SOIL OR COVER AT LEAST 90% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE APPLICANT SHALL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.

STABILIZE THE SOIL WITH SOD -- THE APPLICANT SHALL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY SEPTEMBER 15. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT SHALL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

MAINTENANCE OF FACILITIES

THE STORMWATER FACILITIES WILL BE MAINTAINED BY THE APPLICANT, AFD PROPERTIES, LLC OR THEIR ASSIGNED HEIRS. THE CONTRACT DOCUMENTS WILL REQUIRE THE CONTRACTOR TO DESIGNATE A PERSON RESPONSIBLE FOR MAINTENANCE OF THE SEDIMENTATION CONTROL FEATURES DURING CONSTRUCTION AS REQUIRED BY THE EROSION CONTROL REPORT. LONG-TERM OPERATION/MAINTENANCE RECOMMENDED FOR THE STORMWATER FACILITIES IS PRESENTED BELOW.

THE RESPONSIBLE PARTY MAY CONTRACT WITH SUCH PROFESSIONALS, AS MAY BE NECESSARY IN ORDER TO COMPLY WITH THIS PROVISION AND MAY RELY ON THE ADVICE OF SUCH PROFESSIONALS IN CARRYING OUT ITS DUTY HEREUNDER. PROVIDED, THAT THE FOLLOWING OPERATION AND MAINTENANCE PROCEDURES ARE HEREBY ESTABLISHED AS A MINIMUM FOR COMPLIANCE WITH THIS SECTION. A MAINTENANCE LOG OF THE INSPECTIONS SHALL BE KEPT BY THE RESPONSIBLE PARTY.

INSPECTION AND MAINTENANCE FREQUENCY AND CORRECTIVE MEASURES:

THE FOLLOWING AREAS, FACILITIES, AND MEASURES WILL BE INSPECTED AND THE IDENTIFIED DEFICIENCIES WILL BE CORRECTED. CLEAN-OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS.

CULVERTS: INSPECT CULVERTS 2 TIMES PER YEAR (PREFERABLY IN SPRING AND FALL) TO ENSURE THAT THE CULVERTS ARE WORKING IN THEIR INTENDED FASHION AND THAT THEY ARE FREE OF DEBRIS. REMOVE ANY OBSTRUCTIONS TO FLOW. REMOVE ACCUMULATED SEDIMENTS AND DEBRIS AT THE INLET, AT THE OUTLET, AND WITHIN THE CONDUIT AND REPAIR ANY EROSION DAMAGE AT THE CULVERT'S INLET AND OUTLET.

VEGETATED AREAS: INSPECT SLOPES AND EMBANKMENTS EARLY IN THE GROWING SEASON TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE SPECT, WHERE RILL EROSION IS EVIDENT. ARMOR THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSION FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOW. THE FACILITIES WILL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES WILL BE CORRECTED.

ROADWAYS AND PARKING SURFACES: CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR, PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING. ACCUMULATIONS OF SAND ALONG ROAD SHOULDERS MAY BE REMOVED BY GRADING EXCESS SAND TO THE PAVEMENT EDGE AND REMOVING IT MANUALLY OR BY A FRONT-END LOADER. REPAIR POTHOLES AND OTHER ROADWAY OBSTRUCTIONS AND HAZARDS. PLOWING AND SANDING MAY BE NECESSARY TO MAINTAIN ADEQUATE ROADWAY CAPACITY. ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO BE REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP ON AREAS WHERE ANY UNDERLYING FILTER FABRIC OR

UNDERDRAIN GRAVEL IS SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISLOADED. CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDESLOPES. THE FACILITIES SHALL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES SHALL BE CORRECTED.

RECERTIFICATION

AS PART OF THE STORMWATER PERMIT, THE APPLICANT IS REQUIRED TO MEET THE STANDARDS IN APPENDIX B OF THE CHAPTER 500 RULES. APPENDIX B STATES THAT A PROJECT MUST SUBMIT A CERTIFICATION OF THE FOLLOWING TO THE DEPARTMENT WITHIN THREE MONTHS OF THE EXPIRATION OF EACH FIVE-YEAR INTERVAL FROM THE DATE OF ISSUANCE OF THE PERMIT.

- (a) IDENTIFICATION AND REPAIR OF EROSION PROBLEMS. ALL AREAS OF THE PROJECT SITE HAVE BEEN INSPECTED FOR AREAS OF EROSION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO PERMANENTLY STABILIZE THESE AREAS.
- (b) INSPECTION AND REPAIR OF STORMWATER CONTROL SYSTEM. ALL ASPECTS OF THE STORMWATER CONTROL SYSTEM HAVE BEEN INSPECTED FOR DAMAGE, WEAR, AND MALFUNCTION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO REPAIR OR REPLACE THE SYSTEM, OR PORTIONS OF THE SYSTEM.
- (c) MAINTENANCE. THE EROSION AND STORMWATER MAINTENANCE PLAN FOR THE SITE IS BEING IMPLEMENTED AS WRITTEN, OR MODIFICATIONS TO THE PLAN HAVE BEEN SUBMITTED TO AND APPROVED BY THE DEPARTMENT, AND THE MAINTENANCE LOG IS BEING MAINTAINED.

CHAPTER 500: APPENDIX C -- GOOD HOUSEKEEPING

AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE APPROPRIATE USE OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

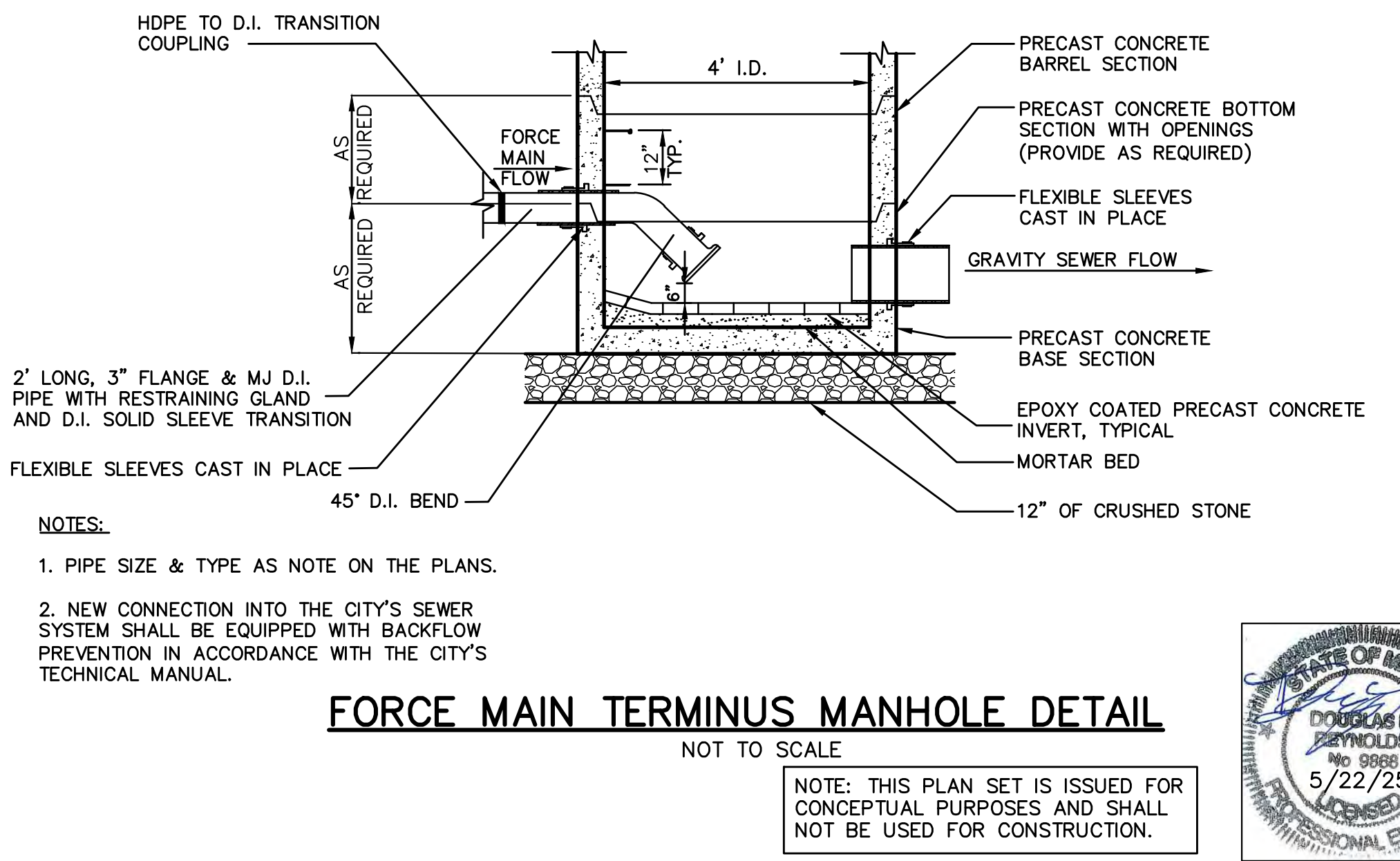
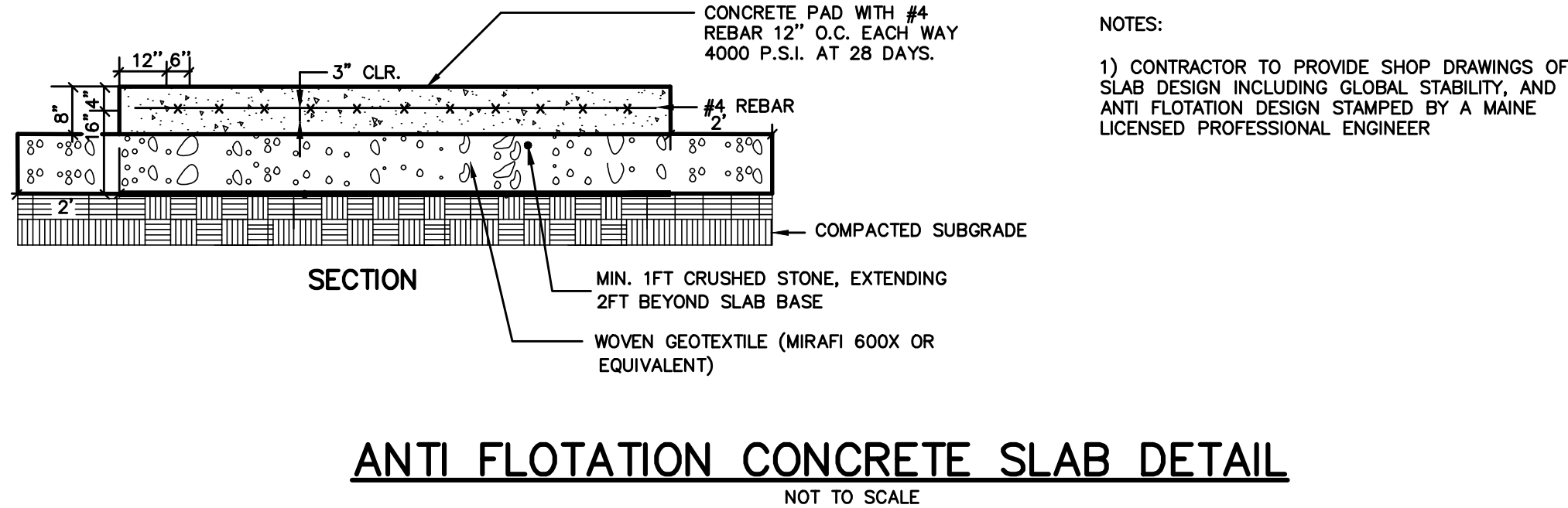
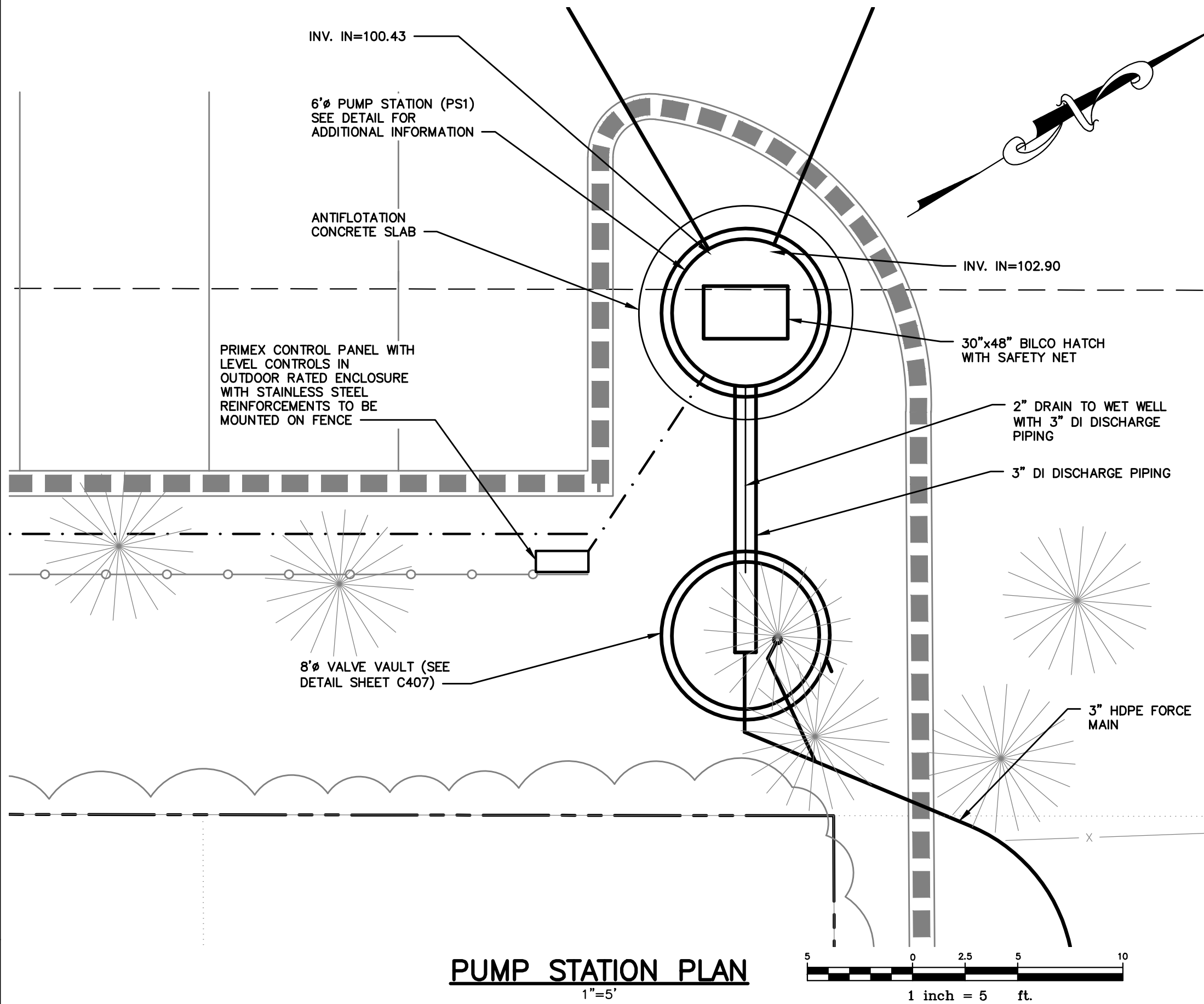
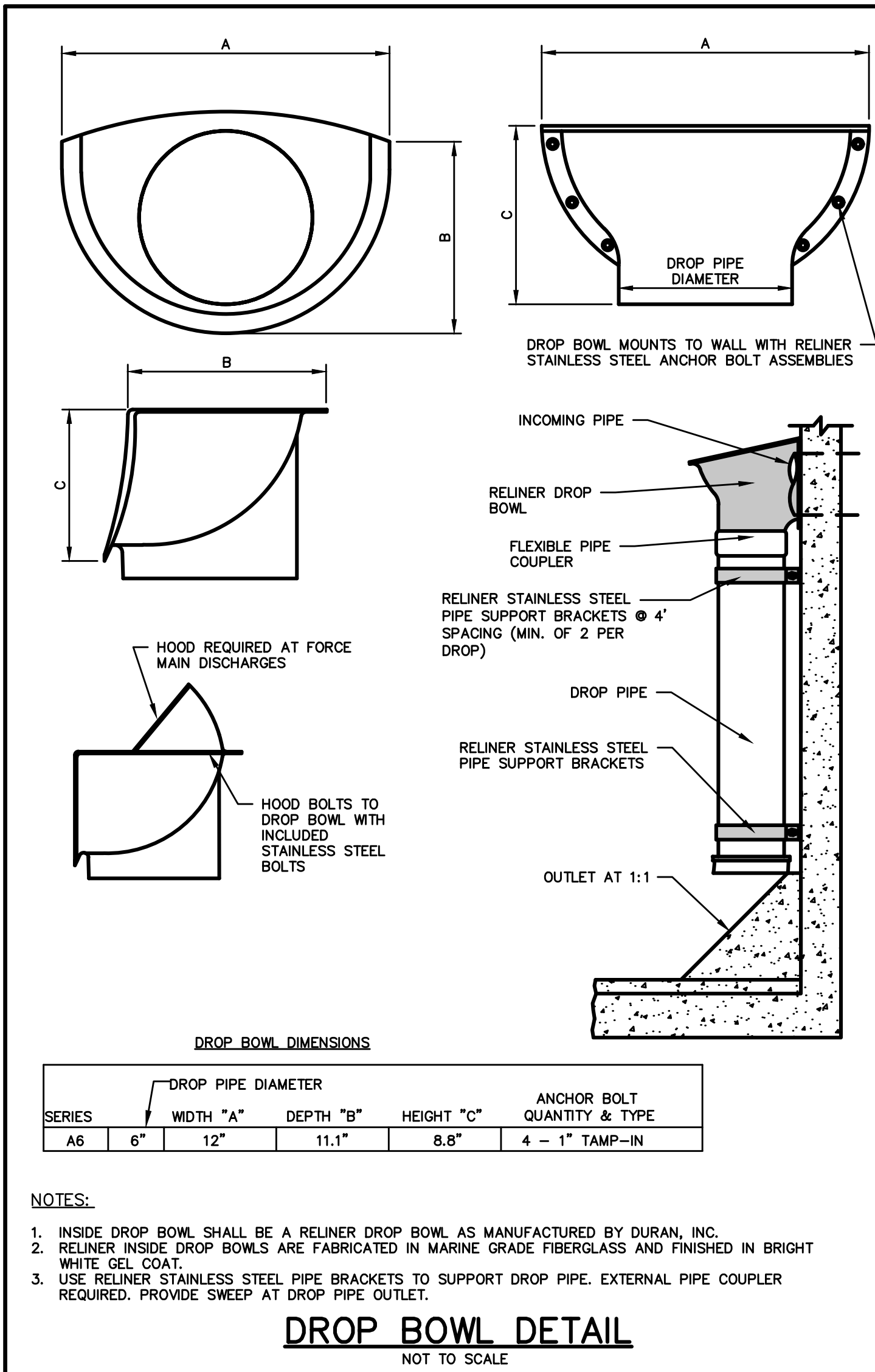
1. DISCHARGES FROM FIREFIGHTING ACTIVITY;
2. DISCHARGES FROM FIREFIGHTING ACTIVITY;
3. FIRE HYDRANT FLUSHINGS;
4. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
5. DUST CONTROL, RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
6. ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
7. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
9. UNCONTAMINATED GROUNDWATER OR SPRING WATER;
10. FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
12. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
13. LANDSCAPE IRRIGATION.

UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

1. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
2. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
3. SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
4. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

SEEDING PLAN		SEEDING PLAN	
PROJECT:	THE BELFORT LANDING	PROJECT:	THE BELFORT LANDING
SITE LOCATION:	BELFORT STREET, PORTLAND, ME	SITE LOCATION:	BELFORT STREET, PORTLAND, ME
TEMPORARY SEEDING		PERMANENT SEEDING	
1. INSTRUCTION ON PREPARATION OF SOIL: PREPARE A GOOD SEED BED FOR PLANTING METHOD USED		1. INSTRUCTION ON PREPARATION OF SOIL: PREPARE A GOOD SEED BED FOR PLANTING METHOD USED	

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Rev.	Date	Revision

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RESPONSE TO LOCAL COMMENTS	2/24/25	DER
LOCAL SITE PLAN APPLICATION	12/4/24	DER
Issued For	Date	By

Design: AJK	Draft: CJG	Date: NOV 2024
Checked: DER	Scale: AS NOTED	Job No.: 4292
File Name: 4292-DETAILS.dwg		
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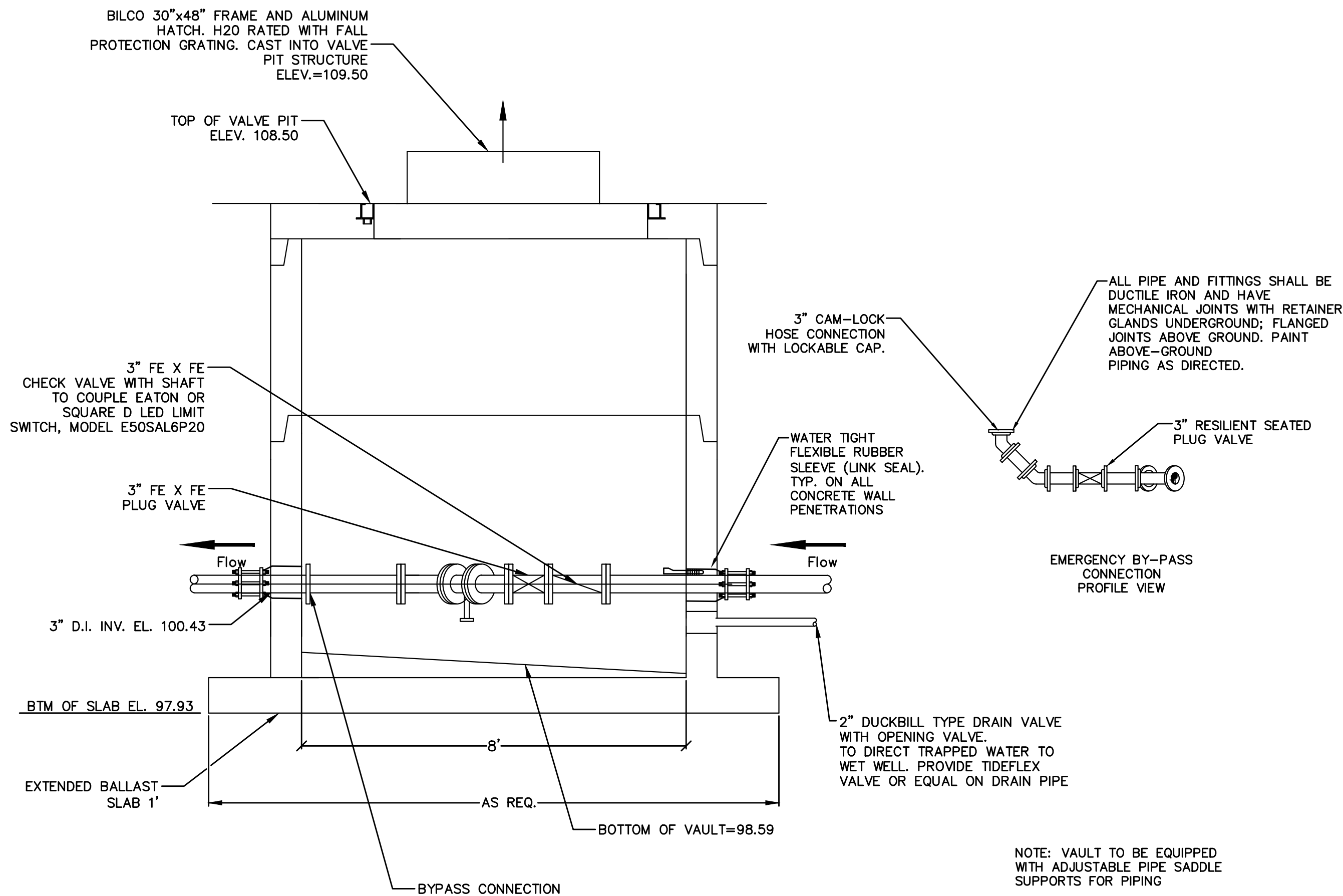
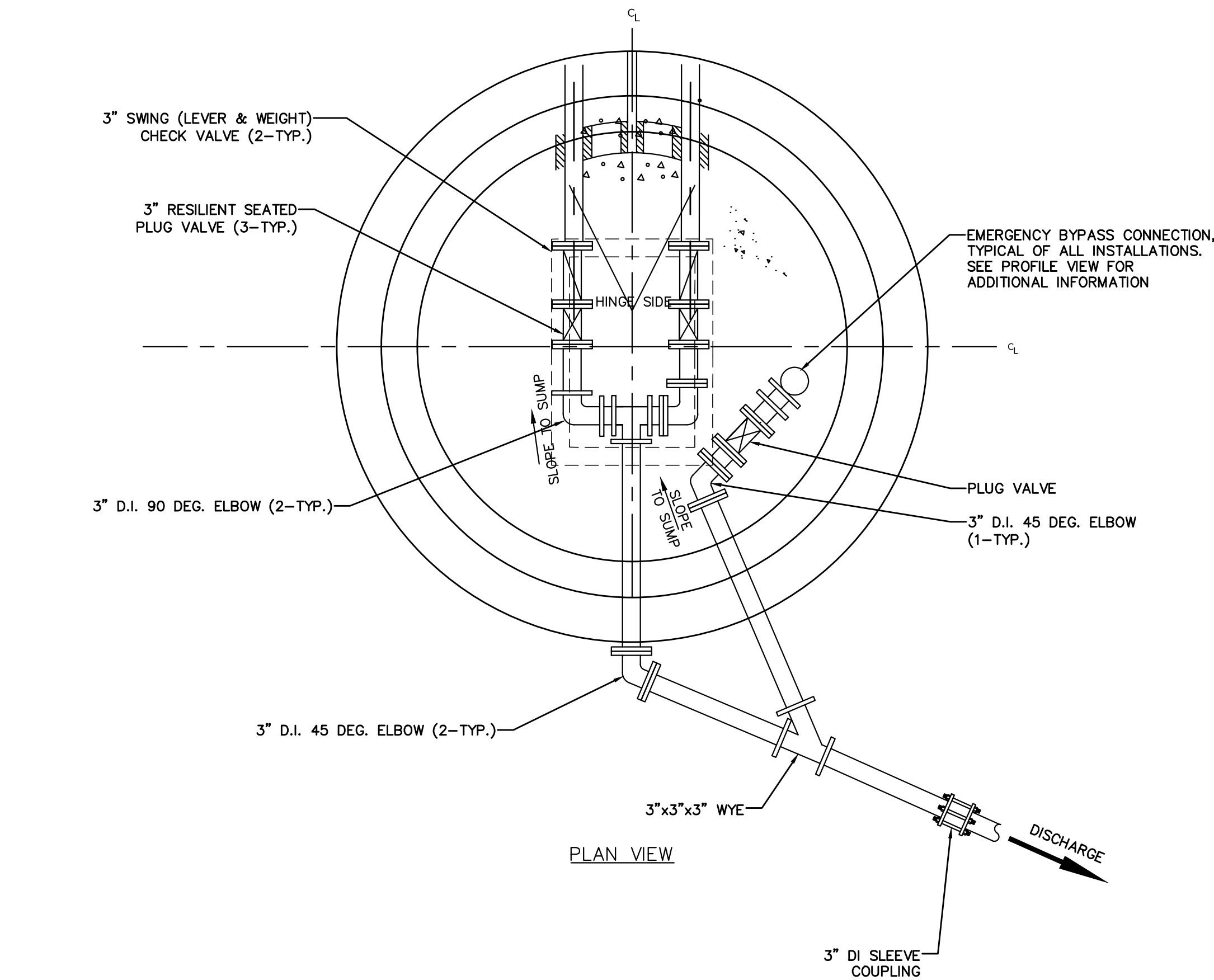


Gorriil Palmer, an LJB Engineering Company
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(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:	Pump Station Plan and Details
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.	C406
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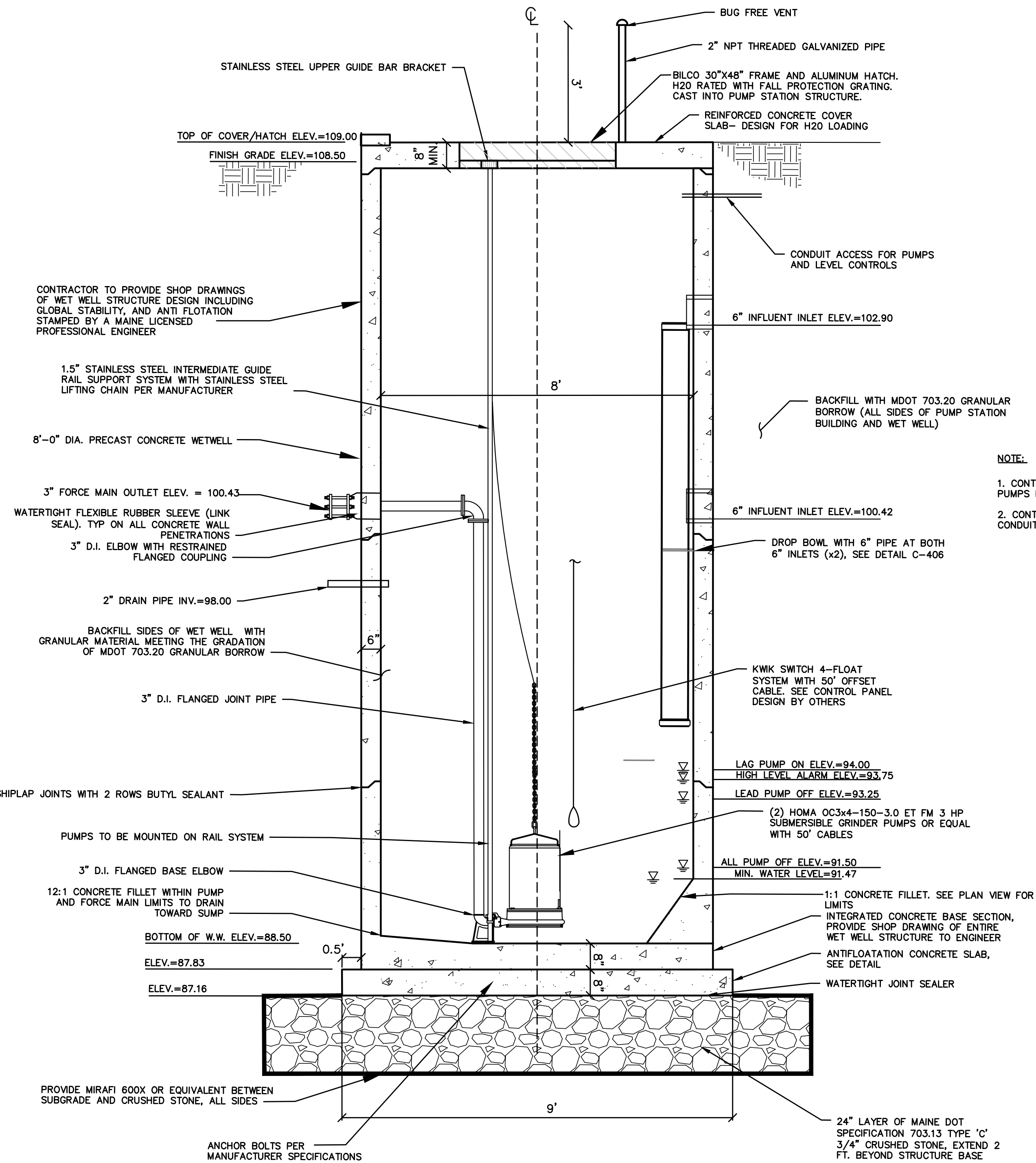
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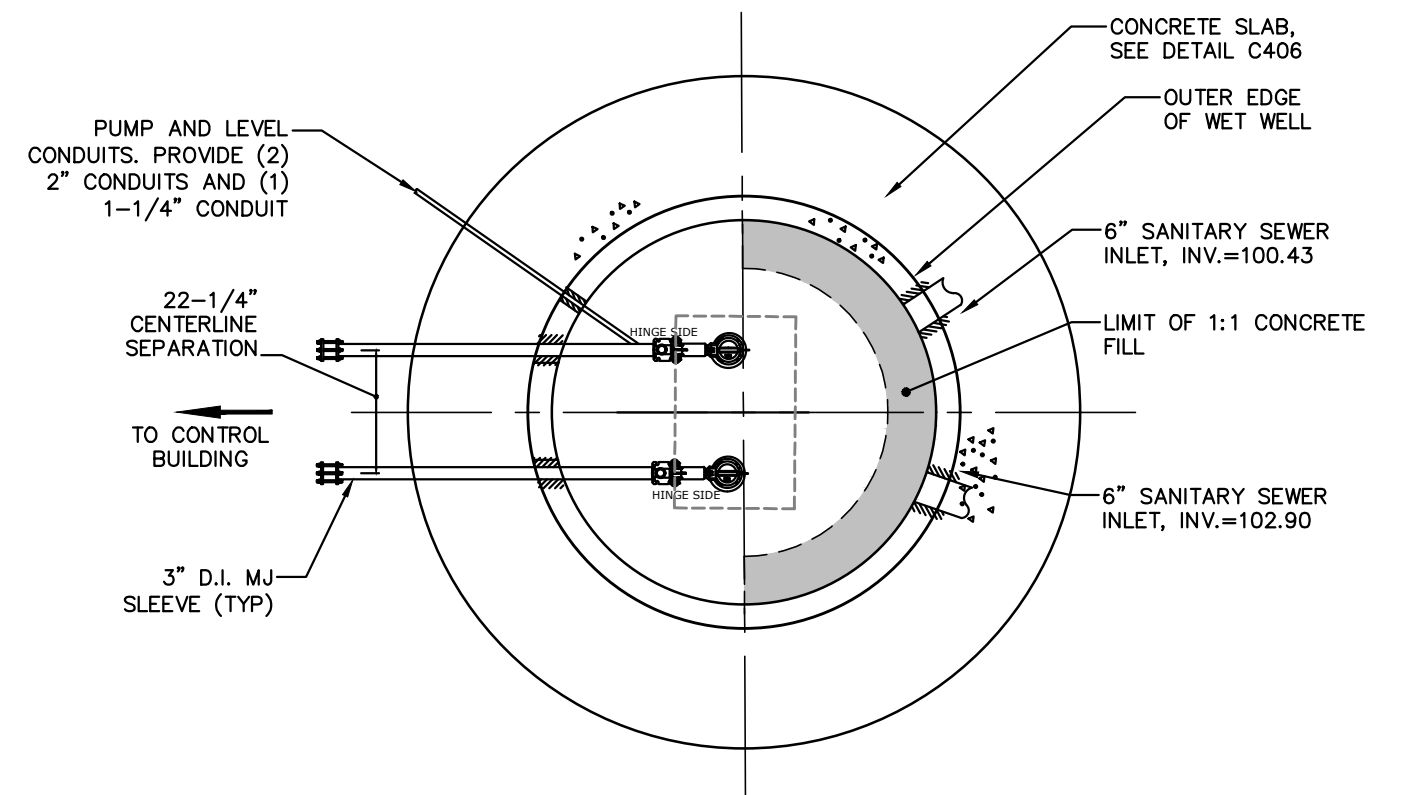
VALVE VAULT
1"=2'

NOTES:

1. ALL WORK ASSOCIATED WITH THE PUMP STATION SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT.
2. A MATERIALS LIST SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.
3. ALL FASTENERS SHALL BE STAINLESS STEEL.
4. ALL PIPING SUPPORTS AND HANGERS INSIDE WET WELL AND VALVE PIT SHALL BE STAINLESS STEEL.
5. ALL PIPING AND FITTINGS SHALL BE PAINTED IN ACCORDANCE WITH TR-16 REQUIREMENTS.
6. ALL PENETRATIONS INTO THE WET WELL AND VALVE PIT TO BE LINK SEALS.
7. CONFINED SPACE ENTRY SIGNAGE AS APPLICABLE WILL BE REQUIRED.
8. ALL FLOATS SHOULD BE MERCURY FREE.
8. GAS SEAL OFF REQUIRED FOR ALL CONDUITS.



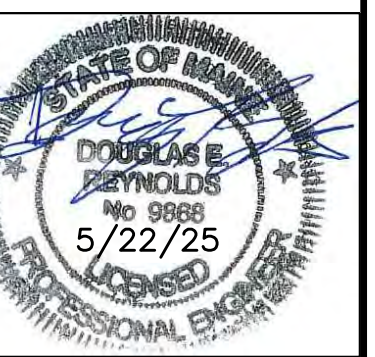
PUMP STATION SECTION
1"=2'



WET WELL PLAN DETAIL
1"=4'

NOTE:

1. CONTRACTOR SHALL CONFIRM SPACING OF DUPLEX PUMPS PRIOR TO ORDERING.
2. CONTRACTOR SHALL CONFIRM NUMBER OF PUMP CONDUITS PRIOR TO ORDERING.



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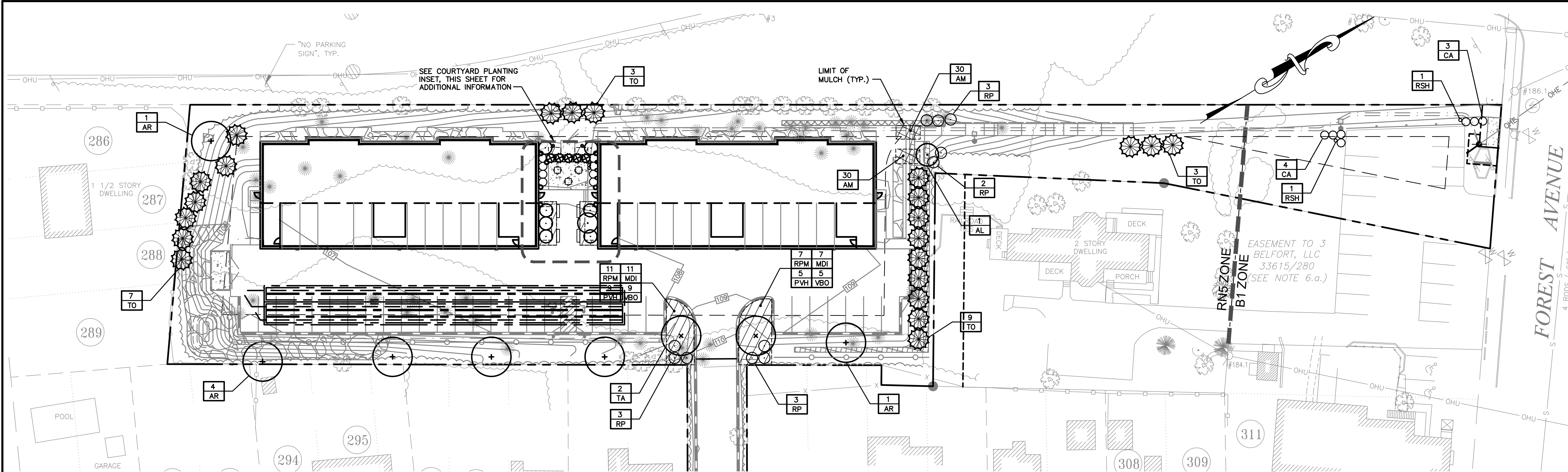


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South Portland, ME 04106

Drawing Name:	Pump Station Details
Project:	The Belfort Landing 1582 Forest Ave, Portland, Maine
Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

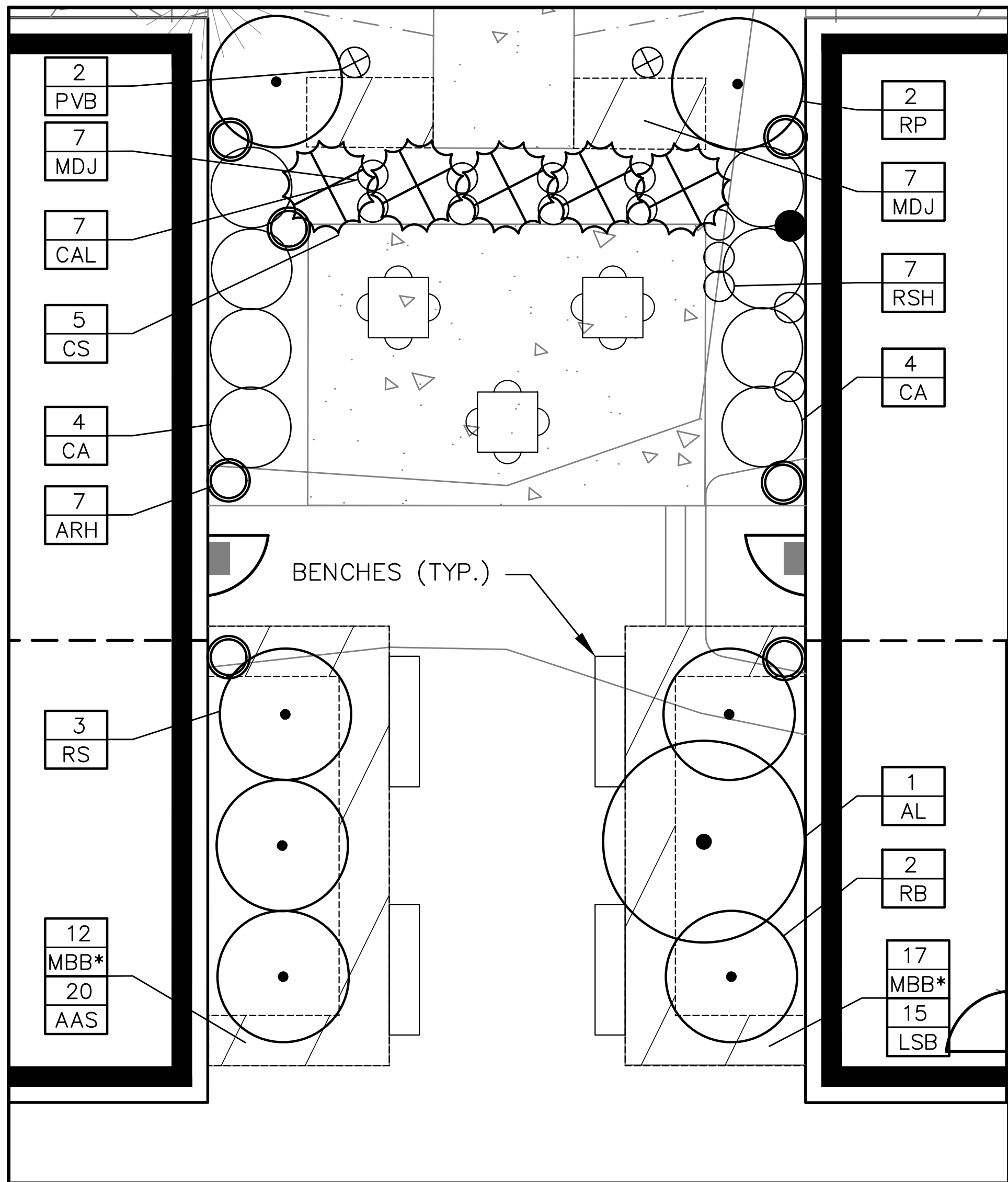
Drawing No.

C407



GENERAL PLANTING NOTES

1. CALL DIG-SAFE (1-888-344-7233) PRIOR TO BEGINNING WORK. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO OWNER.
2. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SITE CONDITIONS PRIOR TO CONSTRUCTION BIDDING.
3. DO NOT SCALE FROM DRAWINGS. ANY OMISSIONS IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT. ANY DISCREPANCIES BETWEEN DRAWINGS, PLANT QUANTITIES, DETAILS, NOTES AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ANY ADDITIONAL WORK PROCEEDS.
4. PROVIDE SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING CONDITIONS.
5. CONTRACTOR SHALL FURNISH AND PLACE 18 INCHES OF LOAM IN ALL SHRUB BEDS, 30 INCHES IN ALL TREE PITS, AND 6 INCHES UNDER ALL TURF AREAS. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
6. ALL PLANT MATERIAL INSTALLED SHALL MEET THE SPECIFICATIONS OF "AMERICAN STANDARDS FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN".
7. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
8. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING STAKING OR GUYING WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE FROM THE OWNER.
9. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
10. EXISTING TREES TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY, OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR GROUND COVER AND PERENNIAL BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DAMAGE TO EXISTING SITE IMPROVEMENTS DURING INSTALLATION OF LANDSCAPE MATERIAL SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
14. CONTRACTOR SHALL COORDINATE INSPECTION OF PLANT MATERIAL AND LOCATIONS WITH PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ALL PLANT MATERIAL SHALL BE ON-SITE AND PLACED BEFORE INSPECTION CAN BE COMPLETED. A MINIMUM OF 48 HOUR NOTIFICATION SHALL BE REQUIRED.
15. MAINTENANCE REQUIREMENTS: PRUNE DEAD OR DAMAGED BRANCHES, MAINTAIN GUY POSTS AND WATER AS REQUIRED UNTIL PROJECT COMPLETION AND ACCEPTANCE BY OWNER.
16. WATERING: ALL PLANTINGS SHALL BE THOROUGHLY WATERED UPON INSTALLATION, AND THEN WEEKLY WHENEVER ANY DRY SPELLS OCCUR, UNTIL ACCEPTANCE BY OWNER.
17. LANDSCAPE CONTRACTOR OR PLANT SUPPLIER SHALL GUARANTEE PLANTS AND PROVIDE REPLACEMENTS FOR TWO YEARS FROM INSTALLATION.
18. CONTRACTOR SHALL PLACE 3" SHREDDED BARK MULCH AROUND SHRUB BEDS AND TREE PITS.

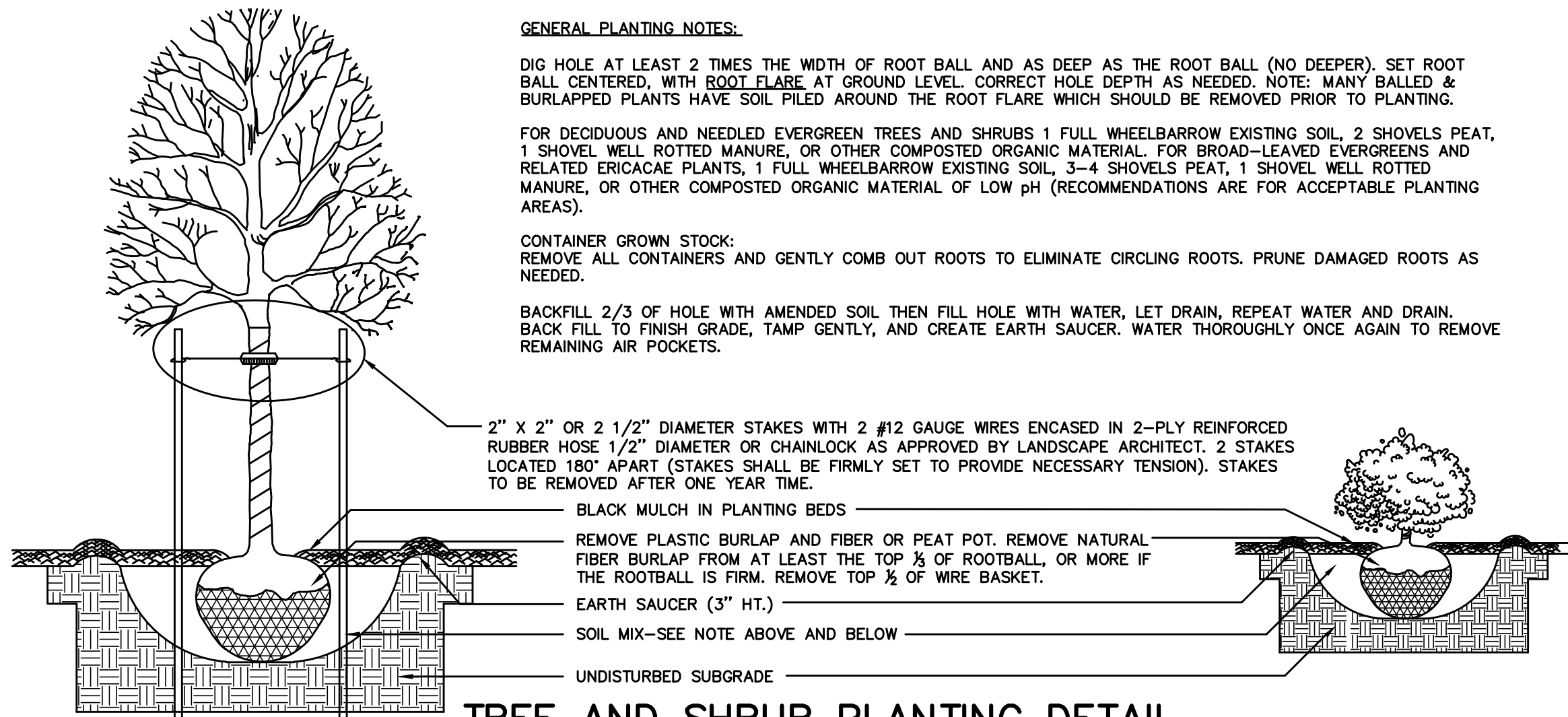


COURTYARD PLANTING DETAIL

1"=5'

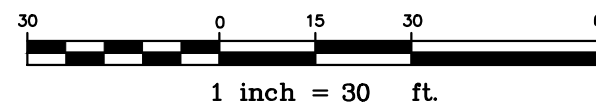
PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	SIZE
TREES			
AR	ACER RUBRUM 'BOWHALL'	BOWHALL COLUMNAR RED MAPLE	2-1/2" CAL.
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	8'-10' HGT. CLUMP
TO	THUJA OCCIDENTALIS 'NIGRA'	DARK AMERICAN ARBORVITAE	7'-8' HGT.
TA	TILIA AMERICANA	AMERICAN BASSWOOD	2-1/2" CAL.
SHRUBS			
CA	CLETHRA ALNIFOLIA 'VANILLA SPICE'	VANILLA SPICE SUMMERSWEET	24"- 30" HGT.
CS	CLETHRA ALNIFOLIA 'SUGARTINA CRYSTALLINA'	SUGARTINA CRYSTALLINASUMMERSWEET	#3 GAL.
ML	MELANOCARPA 'LOW SCAPE MOUND'	LOW SCAPE MOUND CHOKEBERRY	#3 GAL.
RP	RHODODENDRON MAXIMUM 'ROSEUM'	PINK ROSEBAY RHODODENDRON	30"-36" HGT.
PERENNIALS			
ARH	ACTEA 'RACEMOSA' 'HILLSIDE BLACK BEAUTY'	HILLSIDE BLACK BEAUTY SNAKE ROOT	NO. 2 CONT.
AAS	ASTILBE 'MILK AND HONEY'	MILK AND HONEY ASTILBE	NO. 1 CONT.
CAL	CALAMAGROSTIS X ACUTIFOLIA 'LIGHTNING STRIKE'	LIGHTNING STRIKE FEATHER REED GRASS	NO. 1 CONT.
EPM	ECHINACEA PURPUREA 'MAGNUS'	MAGNUS PURPLE CONE FLOWER	NO. 1 CONT.
LSB	LEUCANTHEMUM SUPERBUM 'BECKY'	BECKY SHASTA DAISEY	NO. 1 CONT.
MDJ	MONARDA DIDYMA 'JACOB CLINE'	JACOB CLINE BEE-BALM	NO. 1 CONT.
MBB	MONARDA BEE-YOU 'BEE-LIEVE'	BEE-YOU 'BEE-LIEVE' BEE-BALM	NO. 1 CONT.
PVH	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	NO. 1 CONT.
RSH	RUDEBECKIA SUBTOMENTOSA 'LITTLE HENRY'	SWEET CONE FLOWER	NO. 1 CONT.
VBO	VERBENA BONARIENSIS	TALL VERBENA	NO. 1 CONT.



TREE AND SHRUB PLANTING DETAIL

NOT TO SCALE



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Client:	ACRE Properties 27 Cypress Street, Portland, Maine 04103

Drawing No.

L100



1 EAST (BELFORT ELEVATION) 3/32" = 1'-0"



2 SOUTH ELEVATION 3/32" = 1'-0"



3 NORTH (FOREST) ELEVATION 3/32" = 1'-0"



4 WEST ELEVATION 3/32" = 1'-0"



1 EAST (BELFORT ELEVATION) 3/32" = 1'-0"



2 SOUTH ELEVATION 3/32" = 1'-0"



3 NORTH (FOREST) ELEVATION 3/32" = 1'-0"



4 WEST ELEVATION 3/32" = 1'-0"