

**MINUTES
CONSERVATION COMMISSION**

**1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
EILEEN DONDERO FOLEY COUNCIL CHAMBERS**

3:30 P.M.

April 13, 2022

MEMBERS PRESENT: Chair Barbara McMillan; Vice Chair Samantha Collins; Members; Jessica Blasko, Thaddeus Jankowski, Abigail Gindele, Alternate and Mika Court, Alternate

MEMBERS ABSENT: Allison Tanner, Henry Mellynchuk

ALSO PRESENT: Peter Britz, Environmental Planner/Sustainability Coordinator

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I. APPROVAL OF MINUTES

1. March 09, 2022

Chairman McMillan noted that Ms. Tanner and Mr. Mellynchuk were absent so both alternate members would be voting. Ms. Blasko attended the meeting via Zoom.

Mr. Jankowski moved to approve the March 9, 2022, Conservation Commission minutes as amended, seconded by Ms. Gindele.

Ms. Gindele commented that on page 6 paragraph 2 it should say “previously undisturbed” instead of “previously disturbed.”

Mr. Jankowski commented that the minutes should include that Attorney Sullivan commented that the Legal Department did not write the Conservation Commission’s Rules and Procedures and did not know they existed until a couple weeks ago.

The motion passed unanimously by a 6-0 vote.

II. WETLAND CONDITIONAL USE PERMITS (OLD BUSINESS)

1. 213 Jones Avenue
Donald Lowell Stickney III, Owner
Assessor Map 222, Lot 69

John Chagnon from Ambit Engineering spoke to the application. They were there last month, and the Commission thought they could come up with a better plan. The proposal is to make the existing structure a DADU and build the primary structure as a new construction. The rules for a DADU dictate the location of the primary new construction. The original proposal included a detention pond in the buffer, but the Commission was not in favor of that. The revised proposal is to create a berm and make the entire backyard a detention area. Water in the backyard will meter out slowly. There will be 1,776 sf of impact primarily for the construction of the berm. Part of the reason impact is necessary is because there is a finger of wetland that comes up further, so the buffer line is not straight. They have added to the buffer plantings and repositioned them to fully cover the area. They will be upstream from the wetland resources. The plan includes an updated drainage analysis, and they will be going to the Planning Board for a CUP and DADU approval in May.

Mr. Jankowski questioned if the septic system was for both properties. Mr. Chagnon confirmed that was correct. Mr. Jankowski questioned what the schedule was for the City to complete municipal water and sewer in that area. Mr. Chagnon responded that there were no plans to put in municipal sewer on Jones Ave. They are already on City water.

Vice Chairman Collins questioned if there as a cross section showing the berm and how it will work. Mr. Chagnon responded that the grading plan showed the elevation of the top of the berm. The berm runs from one high point to another high point on the lot. The elevation is 34.5. it will be 2.5 feet high on the backside. The front side of the berm blends into the development. Vice Chairman Collins questioned if the roof drain was coming through the berm. Mr. Chagnon responded that half of this roof was going through to the side of berm and would be infiltrated. The other half goes into the drip apron and out to the front. The rest will shed off under the driveway. Vice Chairman Collins questioned if the spill way was for emergency overflow. Mr. Chagnon responded that the storm analysis was for a 50-year storm. Anything over that will go to the spillway. Also, the driveway is porous.

Chairman McMillan questioned if they would be replacing the 4 trees that would be removed for this plan. Mr. Chagnon responded that there are already trees on the property that have been recently planted. The owner has made significant improvement in tree planting already, so they are not planning to replace them. They are planting 3,640 sf of buffer plantings, which is 27 plants total. Chairman McMillan questioned if the berm was just grass. Mr. Chagnon confirmed it would be grass. They want to be able to maintain the integrity of the berm, so it will be mowed.

Mr. Jankowski questioned if they would be following the NOFA standards. Mr. Chagnon confirmed they would.

Vice Chairman Collins questioned if the access to the current garden would be a natural path through the buffer plantings. Mr. Chagnon confirmed that was correct.

Chairman McMillan questioned if there would be a decrease in volume of water going to the wetland. Mr. Chagnon responded that there should not be. They are just holding some back for a slower release.

Chairman McMillan commented that right now the maintenance plan is very technical. They should include better language outlining what maintenance is for the homeowner and what is for the contractor. Mr. Chagnon confirmed they would look at it.

Vice Chairman Collins moved to recommend approval of the Wetland Conditional Use Permit to the Planning Board, seconded by Ms. Gindele.

The motion passed unanimously by a 6-0 vote.

2. **REQUEST TO POSTPONE**

333 Borthwick Avenue

HCA Health Services of NH, Inc. dba Portsmouth Regional Hospital, Owner

Assessor Map 240, Lot 2-1

Vice Chairman Collins moved to postpone this application to the May 11, 2022, Conservation Commission Meeting, seconded by Ms. Gindele.

Mr. Britz noted that part of the project was in the front yard setback, so the applicants are going to the ZBA first.

The motion passed unanimously by a 6-0 vote.

III. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

1. 325 Little Harbor Road
ADL Little Harbor Trust, Owner
Assessor Map 205, Lot 2

Corey Colwell and Jay Aube from TF Moran spoke to the application. Mr. Colwell commented that the Commission has seen this before, and did a site walk this past fall. Since that meeting, revisions have been made to the utilities and bridge. The Commission recommended a favorable approval for the application. This will appear at the April Planning Board Meeting. This was part one of the overall project. Part two is to replace the existing docking structure that has deteriorated over time. It is on the northern side of the island and been there for decades. The application today is to replace the dock. The application has been submitted to DES.

Mr. Aube commented that the new docking structure will go in the same location. There is very little need for disturbance along the shoreline. The landing area to access the dock will be increased slightly. They elevated it 2 feet to be more resilient to sea level rise. They screened the area to ensure they weren't impacting sensitive resources. The proposal will not impact eelgrass. There is some salt marsh to the right, but the dock will not impact that area. The area is closed to shell fishing, so there is no impact. There will not be any impact to the prime wetlands or 100-foot buffer. There will not be any net harm or impact on the functions and values. The project has a high tolerance for flood risk with no threat to public infrastructure or access to public service with sea level rise. They lifted the dock 2 feet to stay well above mean water elevation. The proposed dock will extend 47 feet out further than the existing. Mr.

Jankowski questioned how far out the existing dock goes out. Mr. Aube responded that he was not sure. They extended the new one because sometimes there is not enough water during low, low water to draft the boat. In general, it is not a good practice to have it resting on the bottom. 47 feet may seem alarming, but it does still meet DES standards. By rule, they are allowed to extend out 200 feet but are only extending 123.8 feet total. The Harbor Master Tracy Shattuck has reviewed it and concluded that there was no negative impact on navigation in the channel. The NH National Heritage Bureau indicated there may be an impact on the sturgeon and marsh elder. The plant survey shows there are no concerns on marsh elder impact. NH Fish and Game requested that they do construction between November 15th and March 15th, so there will not be any impact on the sturgeon.

Vice Chairman Collins questioned if they had to cut down any trees in that area. Mr. Aube responded that there was no tree removal required for the project. Vice Chairman Collins questioned if they were starting the landing further landward to get the additional 2 feet. Mr. Aube confirmed they were, and it was called out as permanent impact.

Chairman McMillan questioned if they would be changing the access at all or if it will still be a path. Mr. Aube responded that it would remain lawn and would be a natural pathway.

Vice Chairman Collins questioned if the sea wall was in good shape. Mr. Aube confirmed it was. It was replaced recently through a different wetlands permit process. Vice Chairman Collins commented that right now the ramp is stored on the fixed pier and questioned if that would continue. Mr. Aube confirmed that was correct. The floats would be stored off site.

Ms. Gindele questioned if there would be any impact on the nudibranches. They are in the Portsmouth Harbor and they thrive in winter. They aren't endangered though. Mr. Aube responded that he was not familiar with that species, so they did not check on that. They can look at it before they engage on the project.

Mr. Jankowski commented that they have very little control over docks for the most part, but the growth in number of docks in that area is extraordinary. People are losing places to kayak. If they need it this long, then they have a legal right to do it. However, if it could be shorter, then there are people out there that would appreciate that.

Chairman McMillan questioned if they were putting float stops in. Mr. Aube responded that would not be necessary in this case because the floats can stay above the bottom. Chairman McMillan questioned how much more depth they were getting by extending 47 feet. Mr. Aube responded that they were gaining about 2 feet of water which will prevent them from touching the bottom.

Vice Chairman Collins moved to recommend **approval** of the State Wetlands Bureau as presented, seconded by Ms. Blasko.

Chairman McMillan commented that it was too bad they have to go out that far to gain 2 feet. Vice Chairman Collins commented that she appreciated that they were using the same starting

point and access that was there today. Ms. Gindele commented that she agreed they were doing it responsibly, but also struggled with more docks going in.

The motion passed unanimously by a 6-0 vote.

2. 137 Northwest Street
Gregory J. and Amanda B. Morneault, Owners
Assessor Map 122, Lot 2

Steve Riker from Ambit Engineering spoke to the application. The project was granted variances in the fall of 2021 and went to the Planning Board in November for a wetlands CUP and subdivision. The Planning Board did not approve the wetlands CUP application, but the subdivision was approved. They revised the plan and returned to the Planning Board in January 2022. The revised plan was approved. They still need a State Wetland and Shoreland approval. The site was once one lot now, but now they are just showing the lot to the east. The existing home is on lot 2. Lot 1 is currently undeveloped but there is a City sewer pump station on the lot with a gravel turnaround. The plan has easements for the City to continue to use the pump and turnaround. This plan removes the gravel turnaround and replaces it with vegetation. The new configuration shows a driveway for cars to park for sewer pump maintenance. The proposed home on lot 1 will have an attached garage, new driveway, and walkway to the front door. The proposal includes 2,311 sf of a buffer planting area. There will be 21 native plants in that area and the planting schedule is included in the plan. They will be 3–4-gallon size plants. The stone drip apron around the home will capture and infiltrate runoff. Only a portion of the home will be in the 100-foot buffer. The revised plan moved the structure further west to reduce the amount in the buffer. There is a catch basin located in the property turnaround that goes to a discharge pipe across the street. That pipe is 3 feet above the surface of the land and has a scoured channel. This plan includes a proposal to put in rip rap there for outlet protection. That will be 35 sf of impact. This is a minor impact project because of that component.

Vice Chairman Collins questioned if the proposed turnaround surface would be impervious. Mr. Riker responded that they looked at it, but the turnaround is at elevation 9, so with projected sea level rise and associated ground level rise it would not perform as needed. If they made it pervious, then they would have to under drain it to send runoff to the catch basin.

Vice Chairman Collins questioned if the walkway to the front door would be pervious. Mr. Riker responded that it was not currently depicted as pervious, but he could suggest that to the owner. The patio would be pervious.

Chairman McMillan questioned what vegetation was above the outfall. Mr. Riker responded that it was mostly honeysuckle. Chairman McMillan questioned if that would remain. Mr. Riker confirmed that it would. Chairman McMillan questioned if there was any discussion about lowering the pipe. Mr. Riker responded that there was not. The rip rap will provide outlet protection and reduce the height some.

Chairman McMillan requested that Mr. Riker speak to what had changed from the original application they saw to this one. Mr. Riker responded that the house was moved further west. The garage doors are now facing the street, so the driveway is smaller.

Vice Chairman Collins questioned if the stone drip apron was capturing all or half of the roof runoff, and where excess runoff from the roof would go if it only captured half. Mr. Riker responded that he was not sure.

Mr. Jankowski commented that he voted against this the first time it came through and would vote against this one as well because he did not believe it met the 6 criteria.

Chairman McMillan noted that Ms. Court had to leave early, which left 5 voting members. Chairman McMillan questioned if they gave the applicant the option to vote or continue with 4 or 5 voting members. Mr. Britz responded that they give the option if there are 4 voting members. Mr. Jankowski suggested that Staff include the rules and procedures and state statutes to the Commission in their packets for quick reference.

Vice Chairman Collins moved to recommend **approval** of the State Wetlands Bureau, seconded by Ms. Blasko with the following stipulations:

1. The front walkway is the same porous material as the patio.
2. The applicant address any roof runoff that is not going into the drip apron.

Ms. Gindele agreed with Mr. Jankowski that they should be consistent with meeting the criteria. However these lots are so disturbed by human activities and there is a street between the lot and the water. The drainage in this proposal is an improvement from what is happening now. Anything would be an improvement with that storm drain.

Ms. Blasko commented that it feels hard at this point to vote to put things in the 100-foot buffer when there isn't anything there. However, Ms. Blasko did appreciate the applicant's efforts. Since being here the first time they have pulled more out of the buffer, added more plantings, and provided better storm water treatment.

Chairman McMillan commented that this was a really impacted piece of property and it was good that the house was mostly out of the buffer. The State will be looking at the outfall a lot.

The motion passed by a 4-1 vote. Mr. Jankowski opposed.

IV. OTHER BUSINESS

Ms. Gindele raised a couple points. A month ago, someone at the DPW said it would be great if there were class field trips to the landfill to show how much garbage we generate. Ms. Gindele wanted to pass that information along to the Commission to see if there was a way to help in that effort. Ms. Gindele questioned if there were any plans to restore the South Mill Pond. They could coordinate with the middle school across the street and make it an outdoor classroom. The last item Ms. Gindele wanted to raise was that a town in Wisconsin is participating in a no mow May to help the bees. It could be a good thing for Portsmouth too.

Ms. Gindele commented that she could not attend the shoreline presentation, so she had not seen it. Chairman McMillan responded that it was recorded, so she could send it out. It was helpful. Dave Burdick gave good background on why they need to do it, which was helpful for decision making and understanding the goals.

Chairman McMillan commented that organizing a trip to the landfill would require coordination with waste management. Mr. Britz commented that it would make sense to get in touch with the schools first. Mr. Jankowski commented that a field trip requires buses and funds. It may be easier to recommend a good movie or YouTube presentation on it. Chairman McMillan commented that she could send Ms. Gindele information on how to contact the schools and provide resources on recycling.

Chairman McMillan questioned if Mr. Britz could speak to the history of restoration on the South Mill Pond. Mr. Britz responded that they need planning to move forward. They can work on it and try to incorporate it as a CIP project from the Commission. Chairman McMillan commented that working with the library and middle school would be good. Mr. Britz noted that they were planting trees out there. The cherry trees on the City Hall side get flooded. It may make sense to make a bigger plan with a berm. It could be more of a master plan effort.

Mr. Jankowski commented that the rules and procedures need some updating, but they don't need to spend a lot of time on it. The Commission should make a request that the Legal Department look at them and see where they are inconsistent with state law and what needs improvement. Mr. Britz noted that Chairman McMillan requested to make the correction about the secret ballot, but it needs to be advertised 5 days in advance of the meeting. That will be handled next month. They can do that one change next month and do a bigger revision in the future depending on the timeline for the review.

Chairman McMillan noted that they originally talked about scheduling a meeting with the Commission and Legal. However, they may be able to discuss some items today, and relay any legal questions to Attorney Sullivan through Mr. Britz.

Chairman McMillan commented that another item they wanted to address was the annual report. This is something other towns do, and it makes sense to do one for Portsmouth. Mr. Britz confirmed he would follow up to see what's involved. Chairman McMillan questioned if it needed to be done at a certain time of year. Mr. Britz responded that he would look into the timeframe. Mr. Jankowski commented that it may make sense to align it with the budget schedule. Mr. Britz noted that the report should be pretty straight forward, but he would look at the State Statute to see what's required.

Chairman McMillan noted the other items they wanted to address was members adding items onto the agenda and if members could be on other Boards. Mr. Britz commented that Attorney Sullivan advised that people could be on more than one board depending on their position and the board, unless they were a member of the Planning Board. Mr. Jankowski commented that the state law would allow Planning Board members to be on more than one board. Mr. Britz

responded that it may be a City rule and confirmed he would ask Attorney Sullivan for the reference.

Chairman McMillan commented that normally the process to add something to the agenda is to bring it to the Chair. Mr. Britz commented that the role of the Conservation Commission is to look at the open space and wetland permits. It's regulatory. They would need to have a discussion on why PFAS advocacy would fit in that role. It is important for outreach, but it may need to be a separate committee or work group. Mr. Jankowski commented that according to the State and City they have a broad mission. They have a responsibility to maintain the water. The City built brand new synthetic athletic fields on top of the waste water treatment center and there is PFAS running off it. Mr. Britz commented that there were not any regulatory standards for PFAS in open water. Mr. Jankowski noted that DES tested for it and found high concentrations in Sagamore Creek. Mr. Britz agreed it was high when compared to drinking water, but not surface water. The Commission has limited time and effort and uses their rules to guide their priorities and focus. There are no Commission rules on PFAS. It may make sense to have a work group outside of the Commission that comes back with recommendations on regulations. The Conservation Commission is a land use board, and they are supposed to use the ordinance and rules to operate.

Mr. Jankowski commented that this was a discussion they should have. It is their mission by state law and city ordinance to protect city water. When they first created the Conservation Commission's for NH, they decided to make them advisory instead of regulatory. They are advisory because they can advise on anything relative to the environment and protecting water. There is a lot the Commission could be doing with that role. Mr. Britz commented that those ideas are not unfounded but that has never been the role of the Commission. They would have to work to expand that. Capacity with City Staff and Commission members is another factor that needs to be considered. These things could be addressed by another committee. Chairman McMillan agreed that there are other outlets out there. There is a PFAS advisory group that people are appointed to. There is also a sustainability group that Ms. Tanner is a part of. It is good to know what everyone is doing, but they need to consider the bandwidth of expertise and what's appropriate.

Mr. Jankowski commented that they should have this discussion with all of the members and the state law and ordinance in front of them. The Commission has people with expertise who may be interested in doing the research and coming back to report to the Commission. They should have a discussion about it. Mr. Britz commented that they were having that discussion now. Mr. Britz was not aware of any Commission in the State acting in an advocacy role vs. a regulatory role. This Commission has been busy working on permits and has not had a lot of bandwidth for other things. The Commission isn't a catch all to address everything environmental. It may make sense to address some things in a different group.

Vice Chairman Collins commented that a good starting point would be to see if anyone was interested in joining a subcommittee. Then they could bring their recommendations to the larger group to see if the Commission wants to take it on or if it was a better fit with a different group. There is an overwhelming number of things they could advocate for. They need people who are

entrenched in certain things to be the one to address that issue. Mr. Britz noted that they needed to consider what the City Council wanted them to prioritize as well.

Ms. Blasko commented that part of that discussion/research should be to find out what other groups are already addressing some of these issues. There are already several groups that exist in the City and State. It might be more effective to get in touch with existing groups and bring back information from them.

Ms. Gindele questioned if they had identification badges for Conservation Commission members. Mr. Britz confirmed they did and noted he would coordinate with her.

V. ADJOURNMENT

Mr. Jankowski moved to adjourn the meeting at 5:27 p.m., seconded by Vice Chairman Collins. The motion passed unanimously by a 5-0 vote.

Respectfully submitted,

Becky Frey,
Secretary for the Conservation Commission



Memo

TO: Conservation Commission Members
FROM: Peter Britz, Environmental Planner
DATE: May 6, 2022
SUBJ: May 11, 2022 Conservation Commission Meeting

333 Borthwick Avenue

This application is to construct an addition onto the Portsmouth Regional Hospital which will have an impact to a stormwater wetland pond. The applicant is proposing to reduce the size of the pond where the construction is proposed but increase the volume of the pond overall.

1. The land is reasonably suited to the use activity or alteration.

The Portsmouth Regional Hospital has wetlands on the adjacent property and across the street. These are the wetlands which have the buffer that is being encroached upon. While this project does include impacts in wetlands the creation of wetlands and proposed planting should offset the impact to this stormwater wetland.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

This site is very constrained by wetlands. While the proposed project is to impact within a wetland buffer the wetlands where the buffer originates from is across Borthwick Avenue and along the Liberty Mutual parking lot. This wetland is not of sufficient size to be jurisdictional and functions as a stormwater wetland. Given the size of the wetland is being expanded to accommodate the project and new wetland plantings are proposed this project is reasonable in this location. While it is likely the existing vegetation will eventually spread to the new pond area the applicant should propose a more robust planting mix to enhance the value of the wetland.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

The value of this wetland is primarily for stormwater retention. The proposed project should not impact the wetland values of surrounding wetlands as the functions should remain similar to how they exist today, especially if the planting plan is enhanced.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

Given there is a direct wetland impact and temporary disturbances of the pond and buffer the key to managing this site over the long-term is an improved planting plan and management of the pond to insure it is functioning as intended to treat stormwater. To that end, the applicant should include a management plan for the pond to insure the expansion is successful over the long-term and that it is functioning as intended.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

The proposed design does account for the filling of a portion of the pond by expanding the pond. Given the constraints of this site this appears to be the best alternative for this site.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

The applicant has proposed a conservation seed mix and fescue/bluegrass seed mix for the disturbed areas. This should be enhanced with specific plantings for this site and include recommendations for long-term maintenance

Recommendation: Staff recommends approval of the project with two stipulations:

1. That the pond and buffer upland areas adjacent to the pond are planted with a more robust seed mix suitable for this site.
2. That a maintenance plan is included for the long-term management of the pond and disturbed buffer areas.

329 Heritage Avenue

The City is planning to replace the Heritage Avenue Pump Station to improve pump station reliability, accessibility, and safety.

1. The proposed construction is in the public interest.

The Heritage Avenue Pump Station has reached the end of its useful life and is proposed for replacement along with the diesel generator located at the site. Maintaining the City's wastewater system is in the public interest.

2. Design, construction, and maintenance methods will utilize best management practices to minimize any detrimental impact of such use upon the wetland and will include restoration of the site as nearly as possible to its original grade, condition and vegetated state.

The plan to replace the station moves the driveway to the far side of the proposed new equipment on the site and includes a stormwater treatment swale to treat any runoff from the proposed driveway. Given the entire site is prior fill the proposed restoration of the disturbed area, native shrub plantings and treatment swale should minimize any impacts in the wetland buffer.

3. No alternative feasible route exists which does not cross or alter a wetland or have a less detrimental impact on a wetland.

The location of this infrastructure is not feasible to move without greater impacts and cost. The upgrades proposed should not have a detrimental impact on the adjacent wetland areas.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

The applicant has proposed restoring the existing site with a wetland seed mix and native shrub plantings which should minimize any impacts to the adjacent wetland.

Recommendation: Staff recommends approval of the project as presented.

460 FW Hartford Drive

This application is to construct a cedar dog fence within the 100 foot wetland buffer. The fenced area is within an existing lawn at the rear of the property at 460 FW Hartford Drive. While the Zoning Ordinance does provide an exemption for fences in the buffer that are supported with hand driven 3" fence posts this project seeks to install wooden fencing which is slightly larger.

1. The land is reasonably suited to the use activity or alteration.

The proposed fence posts will be hand dug and except for the gates there will be no footings installed, minimizing the footprint.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

The entire backyard is within the wetland buffer so this is the most reasonable location for the fence.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.* Given that the fence is outside of the wetland, will surround a lawn area, and will allow the movement of stormwater this project should not have an adverse impact on the wetland functions of the adjacent wetland areas.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

The construction of this fence will not impact any of the natural vegetation on the site.

5. *The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*

The proposed fence is being hand installed and should not create an adverse impact.

6. *Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*

This project contemplates a fence within a lawn area.

Recommendation: Staff recommends approval of the project as presented.



Transmittal

Date: _____ Job Number: _____

Project Name: _____

To: _____

We are sending these by

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| Hand Deliver | Courier | Other |

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| For your use | Approved as submitted | Resubmit |
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Signed:

Phone:

February 22, 2022

Updated May 5, 2022

City of Portsmouth Conservation Commission

RE: *Portsmouth Regional Hospital – Radiation Oncology Project Narrative*

The existing Portsmouth Regional Hospital is located at 333 Borthwick Ave, Portsmouth, NH 03801 (Map 240, Lot 2-1). The medical campus is located on the east side of Blue Star Turnpike (I-95), the west side of Borthwick Avenue, and can be accessed via multiple entrances from Borthwick Avenue. The scope of the proposed Radiation Oncology project consists of internal renovations, and a 1-story building addition located on the southeast corner of the existing hospital building.

The proposed footprint of the building addition is approximately ±8,700 square feet. The proposed sitework is anticipated to consist of asphalt, concrete, utility, landscape, and drive-under canopy demolition where the current patient discharge canopy and associated drive are located as well as removal of existing sidewalk and landscaping located along the south side of the existing hospital building. Site improvements are anticipated to consist of the new building addition, new drive-under canopy and associated drive, sidewalk connectivity, new granite curb, new mobile imaging pad, and associated new utilities/ utility relocations.

A portion of the project scope is located adjacent to and partially within a previously man-made stormwater management area which is now delineated as a city jurisdictional inland wetland and has an associated 100-ft wetland buffer, in which a portion of the site improvements will occur. A small amount of disturbance to the actual wetland is being proposed. Refer to the attached wetland exhibit. Please note, the overall wetland data has been calculated with older drawings by others. Only the wetland adjacent to this project was delineated and flagged by Gove Environmental Services, Inc., and surveyed by James Verra and Associates, Inc. Refer to attached letter and site survey.

Wetlands and 100-foot buffer, Overall Site

- Subject Parcel: Map 240, Lot2-1 (±20.87 ac)
- Total wetland area onsite: approximately ±2.7 acres
- Total area of 100-foot wetland buffer onsite: approximately ±8.4 acres

Wetland and 100-foot buffer, Proposed Impact

- Area of inland wetland to be disturbed:
 - Permanent (due to proposed building location): ±200 square feet (sf)
 - Temporary (due to construction of proposed building and utility relocations, but will be planted back as wetlands): ±4,400 square feet (sf)
 - Total disturbance: ±4,600 square feet (sf)
- Area of 100-ft wetland buffer to be disturbed:
 - Permanent: ±13,200 sf
 - Temporary: ±4,300 sf

Stormwater drainage summary:

The drainage area to the existing man-made stormwater management area/ inland wetland that is located within the proposed project area (**Pond 1**) was analyzed utilizing provided site surveys as well as previous design drawings for the medical campus. It appears a portion of the southeastern parking lot drains to another existing man-made stormwater management area/ inland wetland that is located along the north side of Borthwick Avenue (**Pond 2**). Pond 2 drains to Pond 1 via a 21" RCP pipe. The drainage area to the Pond 2 remains the same as the current existing condition.

The drainage area to the Pond 1 also remains relatively the same as existing conditions as a portion of the existing hospital building roof will continue to drain to Pond 1, new roof for the proposed building addition is located where existing sidewalks and drives are currently located, and some existing pavement is being removed to allow Pond 1 to expand to provide additional pond volume to attempt to offset any pond volume lost due to the proposed project. The existing 24" RCP pipe outfall from Pond 1 remains in place. Refer to the attached drainage area exhibit.

Existing pond volume: ±54,190 cubic feet (cf)

Proposed pond volume: ±56,265 cubic feet (cf)

A HydroCAD stormwater model was utilized to analyze both the pre-developed and post-developed conditions, and the following results were generated for Type III, 24-hour storm events:

Total drainage area to Pond 1: +/-4.2 acres

	CN	2-yr (cfs)	10-yr (cfs)	25-yr (cfs)	50-yr (cfs)	100-yr (cfs)
Pre-developed:	92	9.1	14.2	17.7	19.9	21.9
Post-Developed:	92	8.8	13.6	17.1	19.3	21.5

Per the table above, the stormwater discharge for the post-developed conditions from the revised Pond 1 are slightly less than the pre-developed conditions.

Please refer to the photos below, and attached supporting documentation. If you have any questions or need more information, please feel free to reach me by email (chris.akers@kimley-horn.com) or by phone at 615-476-4764.

Sincerely,
Chris Akers, Project Manager

Photographs	Observations
	<p>Southern portion of hospital campus with subject wetland (image taken from internal front drive).</p>
Photographs	Observations
	<p>East elevation of hospital building where Radiation Oncology addition is proposed (image taken from internal front drive).</p> <p>Construction activity from current ICU Med/ Surg Stepdown project.</p>



Southern portion of hospital campus with subject wetland (image taken from internal ambulance/ ED drive).

Photographs

Observations



Existing brick canopy at Patient Discharge to be removed.

Construction activity from current ICU Med/ Surg Stepdown project.



Brick emergency generator enclosure to remain.



February 21, 2022

Kimley-Horn and Associates, Inc.
10 Lea Avenue, Suite 400
Nashville, TN 37210

404 Wyman Street, Suite 385
Waltham, MA 02451

RE: Agent Authorization

To Whom It May Concern:

Be advised that I am the Chief Executive Officer of the Portsmouth Regional Hospital located at 333 Borthwick Ave, Portsmouth, NH 03801. I am an authorized agent to the owners of HCA Health Services of New Hampshire, Inc. dba Portsmouth Regional Hospital. As the authorized agent, I hereby authorize and empower:

Kimley-Horn and Associates, Inc. to act as agent/ representative to communicate and submit required information as necessary in obtaining site-related approvals and permits for the proposed Radiation Oncology Addition project located at 333 Borthwick Ave, Portsmouth, NH 03801.

A handwritten signature in blue ink, appearing to read "D. M. Carucci", written over a horizontal line.

Owner's Signature
Dean M. Carucci, CEO

Details

Property	
Location	333 BORTHWICK AVE
Map-Lot	0240-0002-0001
Vision Account Number	35555

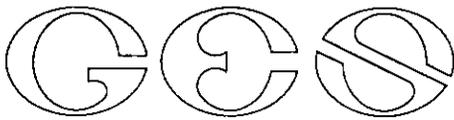
Ownership	
Owner	HCA HEALTH SVC OF NH INC D/B/A PRH 32902 C/O DUCCHARME MCMILLEN & ASSOC
Address	PO BOX 80610, INDIANAPOLIS, IN 46280

Valuation	
Total	\$86,709,000
Last Sale	\$0 on
Book/Page	2784/1340

Land	
Parcel Area (AC)	20.87

Zoning	
Zoning	OR

The image shows a map interface with a search bar at the top left containing the text 'Q Search'. Below the search bar are icons for 'Selection', 'Themes', and 'Markup'. The map displays a parcel outlined in blue, with a pink shaded area representing the property. The parcel is located near 'Blue Star Turnpike' and 'Borthwick Ave'. A 'Hospital Helipad' is marked on the map. To the right of the map is a search results panel with a search bar containing 'Q Search' and a right-pointing arrow. Below the search bar is a red button labeled 'Advanced Search'. Underneath are two buttons: 'Download Results' and 'More'. Below these buttons is the text 'Showing 1-1 results. Scroll to see more.' The search results panel displays the following information: '333 BORTHWICK AVE', 'HCA HEALTH SVC OF NH INC D/B/A PRH 3...', and '0240-0002-0001'.



GOVE ENVIRONMENTAL SERVICES, INC.

October 15, 2019

Portsmouth Regional Hospital

Subject: Wetland Delineation Report
Portsmouth Regional Hospital
333 Borthwick Ave, Portsmouth, NH

Dear Chris Akers,

Per your request, this letter is to verify that Gove Environmental Services, Inc., performed a site inspection to identify wetlands at Portsmouth Regional Hospital, 333 Borthwick Ave, Portsmouth, NH. Wetlands were evaluated utilizing the following standards:

1. *US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-12-1 (January 2012).*
2. *Field Indicators for Identifying Hydric Soils in New England – Version 4, April 2019. New England Hydric Soils Technical Committee.*
3. *US Army Corps of Engineers National Wetland Plant List, 2018.*
4. *Classification of Wetlands and Deepwater Habitats of the United States. USFW Manual FWS/OBS-79/31 (1979).*

Brenden Walden performed the site inspection on 9/17/19. During the site inspection, two areas of wetland were identified on the Site. The wetland areas were demarcated with a series of pink “Wetland Delineation” flagging consecutively labeled:

1 Start – 15 Stop & A1-A22

The attached sketch plan depicts the general location of the flag series, which were used to identify the resource areas in the field. A general description of the wetlands is also provided

The wetland demarcated by the **1 Start – 15 Stop** series of flags, delineated a drainage area dominated by emergent vegetation, hydric soils on the wetland border consisted of NE-S1 & HTM-S hydric soil classifications, soil saturation and water staining were also observed. Bordering upland area consisted developed area and impervious surface.

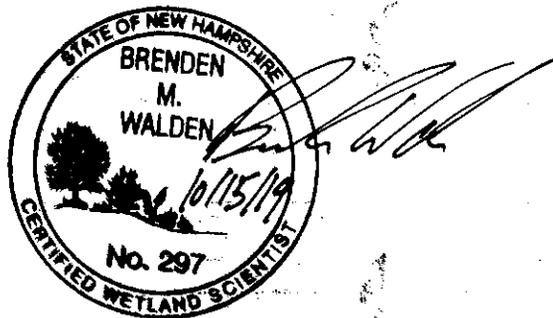
The wetland demarcated by the **A1-A22** series of flags, delineated the wetland boundary for a detention basin vegetated with emergent vegetation. The wetland boundary consisted of NE-S with areas of HTM-S. Bordering upland areas consist of maintained lawn areas and impervious surface from surrounding development.

This concludes the wetland delineation report. If I can be of further assistance, please feel free to contact me at (603) 778-0644.

Sincerely,

Brenden Walden
Business Manager & Wetland Scientist
Gove Environmental Services, Inc.

Enc. Wetland Delineation Sketch



8 Continental Dr Unit H, Exeter, NH 03833-7507

Ph (603) 778 0644 / Fax (603) 778 0654

www.gesinc.biz

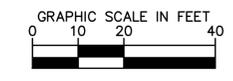
info@gesinc.biz



GRADING PLAN LEGEND	
26.60	SPOT ELEVATION
HP	HIGH POINT
TC	TOP OF CURB
TW	GRADE AT TOPSIDE OF WALL
IN	INVERT
ME	MATCH EXISTING
FFE	FINISH FLOOR ELEVATION
27	EXISTING CONTOUR
27	PROPOSED CONTOUR
LP	LOW POINT
BC	BOTTOM OF CURB / GUTTER LINE
BW	GRADE AT BOTTOM SIDE OF WALL
RM	TOP OF GRATE / COVER

WETLAND IMPACT LEGEND		
	DESCRIPTION	AREA
	TEMPORARY WETLAND DISTURBANCE	± 4,400 SF
	PERMANENT WETLAND DISTURBANCE	± 200 SF
	PROPOSED WETLANDS	± 1,150 SF

WETLAND SUMMARY	
EXISTING WETLAND AREA:	± 10,300 SF
PERMANENT WETLAND DISTURBANCE:	± 200 SF
PROPOSED WETLAND ADDED:	± 1,150 SF
NEW WETLAND AREA:	± 11,250 SF



Kimley»Horn
 404 WYMAN STREET, SUITE 385 WALTHAM, MA 02451
 MAINT/781.328.0676 | WWW.KIMLEY-HORN.COM
 © 2019 KIMLEY-HORN AND ASSOCIATES, INC.

**PORTSMOUTH REGIONAL
 HOSPITAL
 RADIATION ONCOLOGY ADDITION**
 PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	BY
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO. 118252004

**WETLAND
 DISTURBANCE
 EX. A**

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	-----	16.61	-----	23.20	28.61	36.05	41.44	47.34	PRE-DEVELOPMENT RUNOFF
2	SCS Runoff	-----	-----	16.61	-----	23.20	28.61	36.05	41.44	47.34	POST-DEVELOPMENT RUNOFF
3	Reservoir	1	-----	9.051	-----	10.72	14.18	17.71	19.92	21.93	PRE-DEVELOPMENT
4	Reservoir	2	-----	8.827	-----	10.59	13.57	17.12	19.33	21.45	POST-DEVELOPMENT

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	16.61	2	716	35,198	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	16.61	2	716	35,198	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	9.051	2	722	33,767	1	22.45	9,429	PRE-DEVELOPMENT	
4	Reservoir	8.827	2	722	33,767	2	22.41	9,733	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 2 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

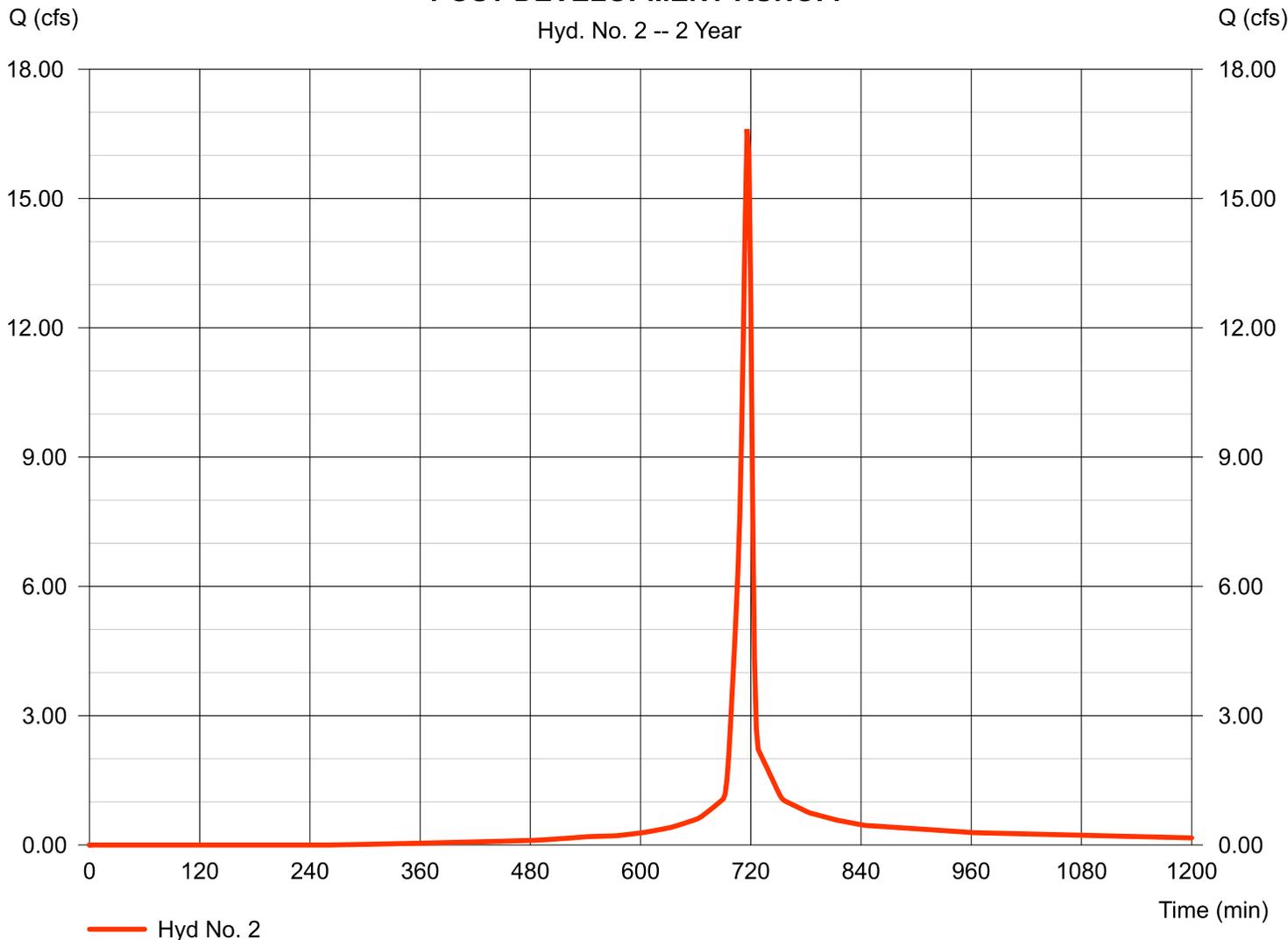
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 16.61 cfs
Storm frequency	= 2 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 35,198 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.33 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	23.20	2	716	50,272	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	23.20	2	716	50,272	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	10.72	2	722	48,841	1	22.91	13,320	PRE-DEVELOPMENT	
4	Reservoir	10.59	2	724	48,841	2	22.80	13,648	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 5 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

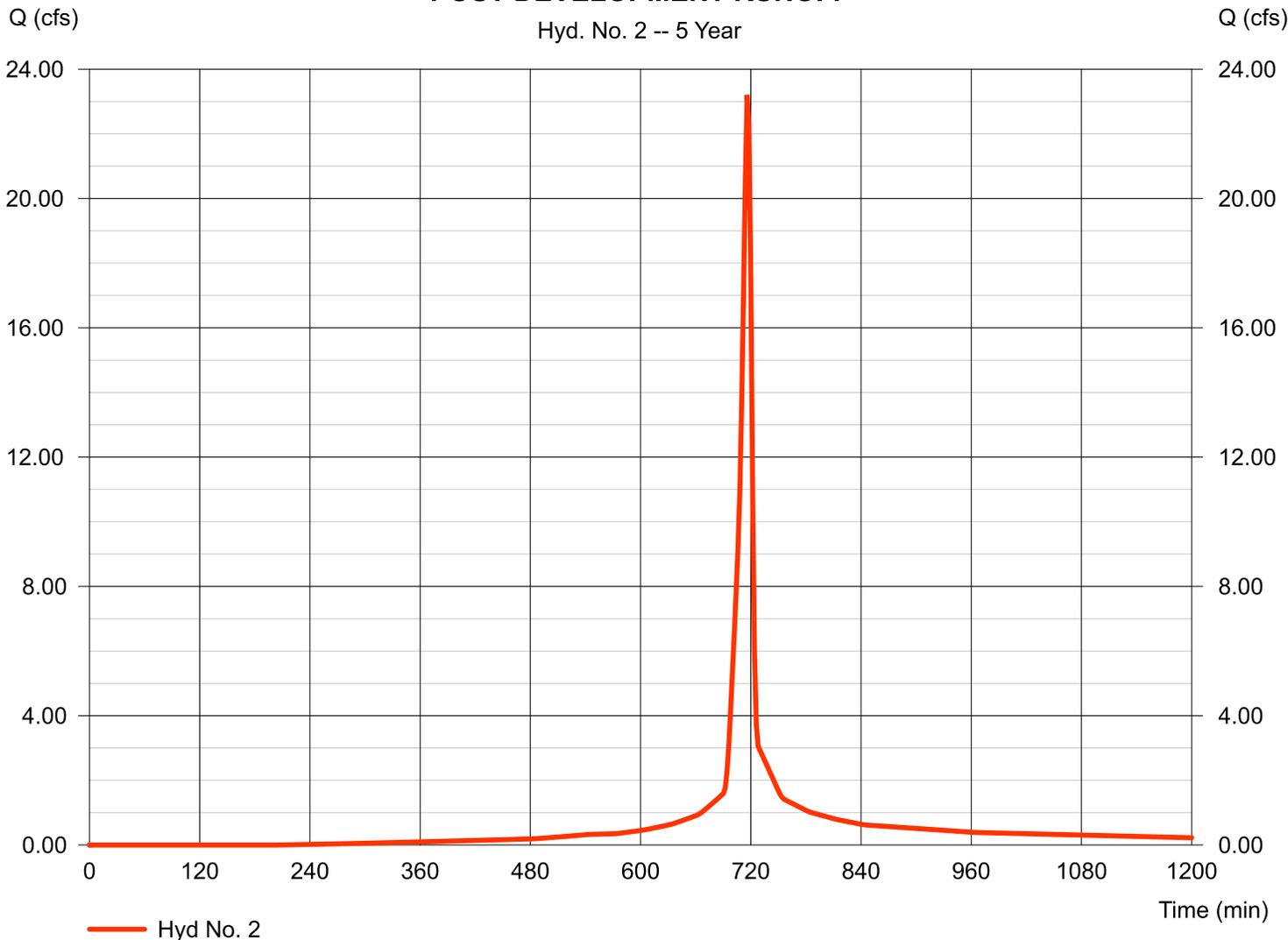
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 23.20 cfs
Storm frequency	= 5 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 50,272 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.43 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	28.61	2	716	62,900	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	28.61	2	716	62,900	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	14.18	2	722	61,470	1	23.21	16,336	PRE-DEVELOPMENT	
4	Reservoir	13.57	2	722	61,469	2	23.15	16,866	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 10 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

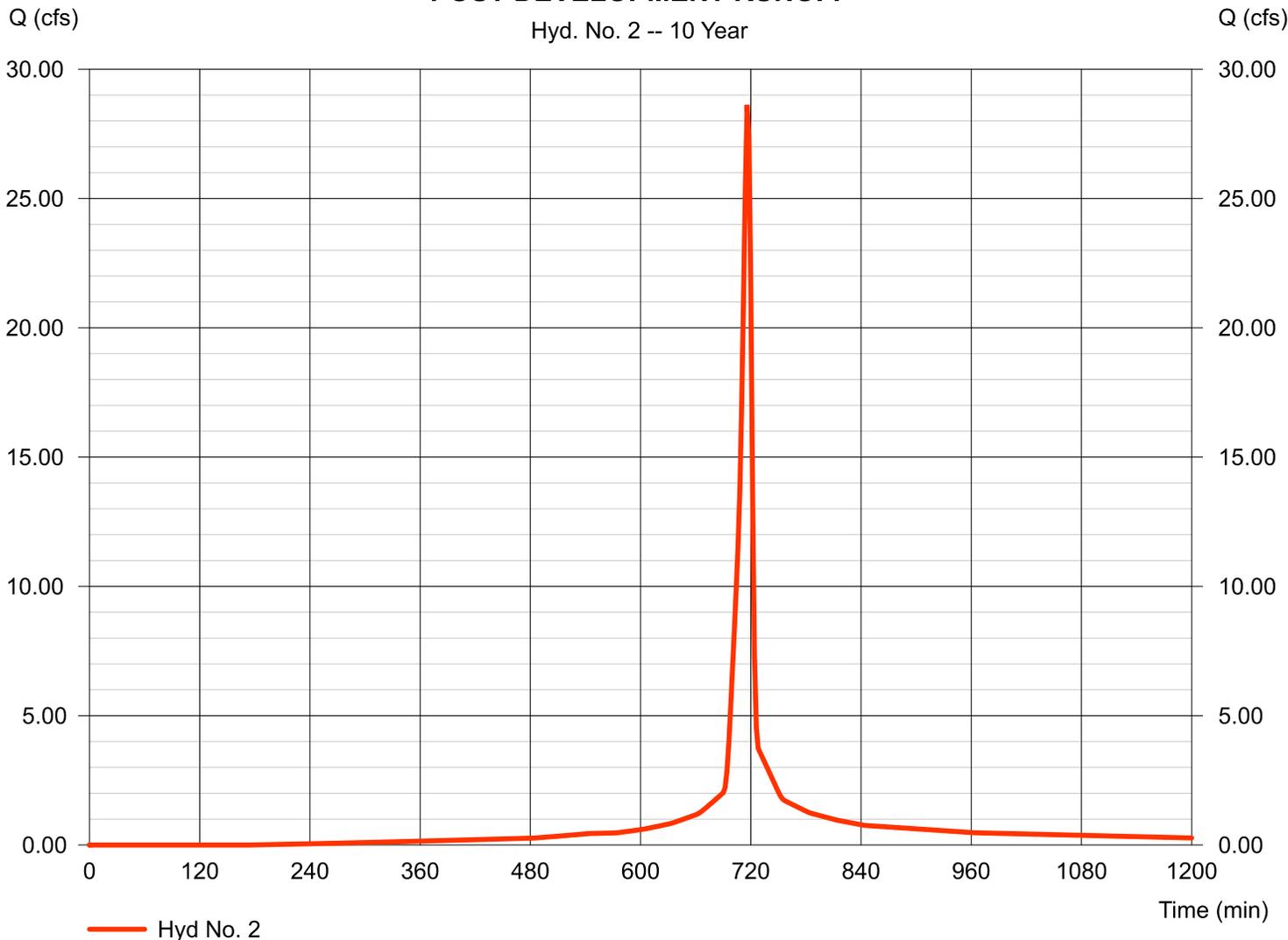
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 28.61 cfs
Storm frequency	= 10 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 62,900 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.34 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	36.05	2	716	80,516	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	36.05	2	716	80,516	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	17.71	2	722	79,085	1	23.60	20,589	PRE-DEVELOPMENT	
4	Reservoir	17.12	2	722	79,085	2	23.53	21,204	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 25 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

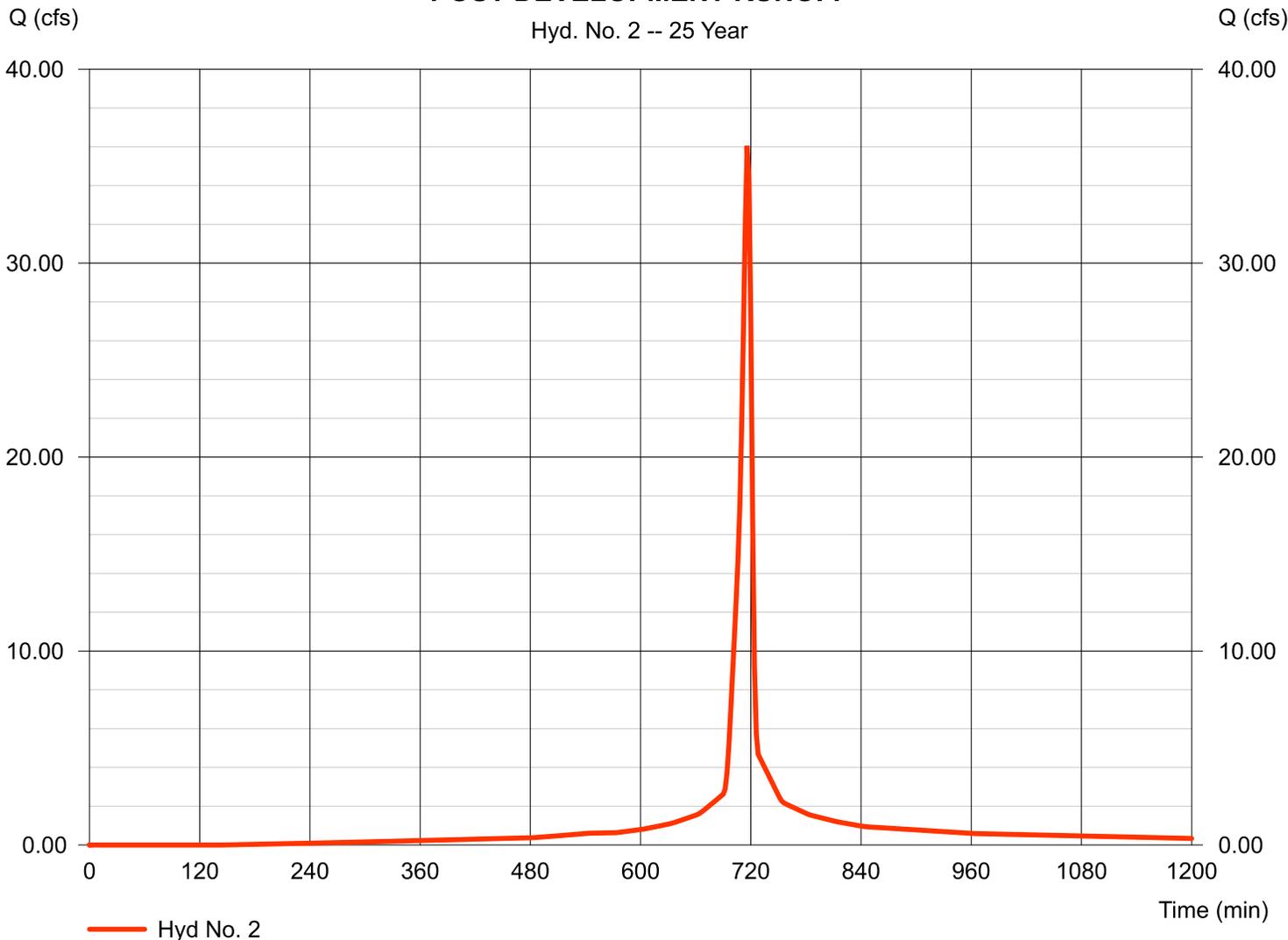
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 36.05 cfs
Storm frequency	= 25 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 80,516 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	41.44	2	716	93,438	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	41.44	2	716	93,438	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	19.92	2	722	92,008	1	23.88	23,729	PRE-DEVELOPMENT	
4	Reservoir	19.33	2	722	92,007	2	23.80	24,417	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 50 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

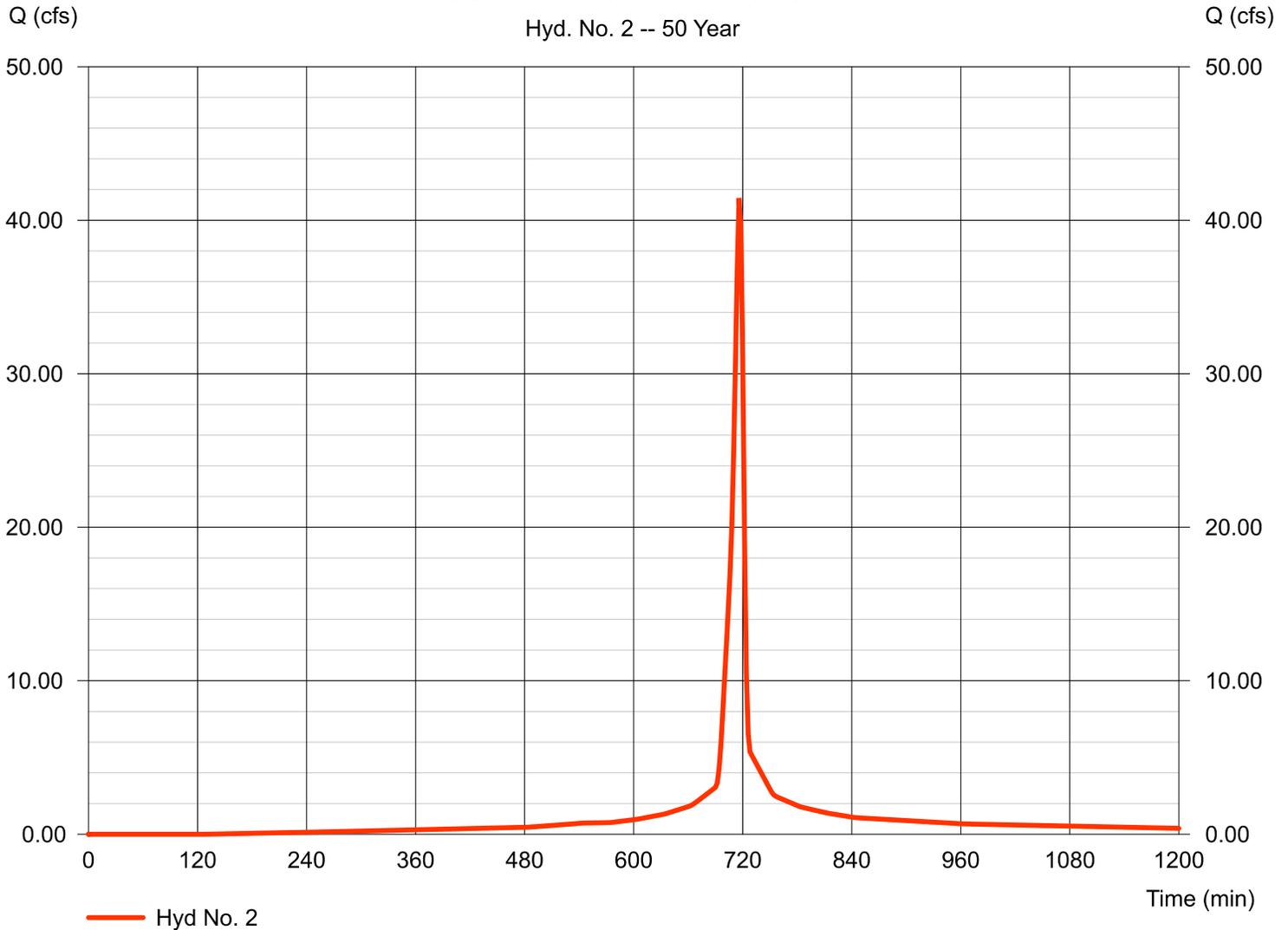
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 41.44 cfs
Storm frequency	= 50 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 93,438 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	47.34	2	716	107,662	-----	-----	-----	PRE-DEVELOPMENT RUNOFF	
2	SCS Runoff	47.34	2	716	107,662	-----	-----	-----	POST-DEVELOPMENT RUNOFF	
3	Reservoir	21.93	2	722	106,232	1	24.17	27,298	PRE-DEVELOPMENT	
4	Reservoir	21.45	2	722	106,231	2	24.10	28,058	POST-DEVELOPMENT	
POND EXISTING.gpw					Return Period: 100 Year			Thursday, 05 / 5 / 2022		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Thursday, 05 / 5 / 2022

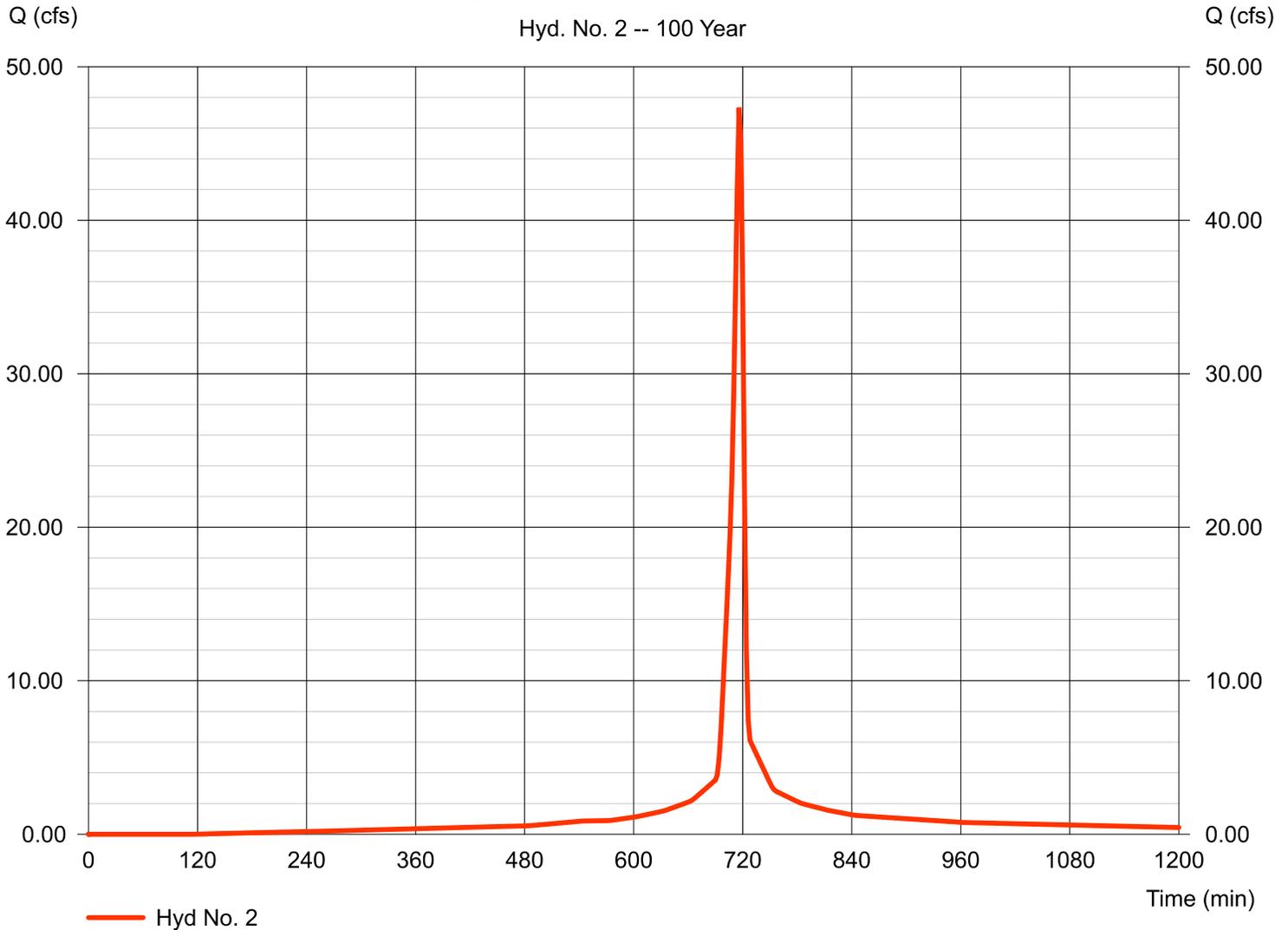
Hyd. No. 2

POST-DEVELOPMENT RUNOFF

Hydrograph type	= SCS Runoff	Peak discharge	= 47.34 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 107,662 cuft
Drainage area	= 4.180 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.53 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.910 x 98) + (1.320 x 79) + (1.950 x 98)] / 4.180

POST-DEVELOPMENT RUNOFF

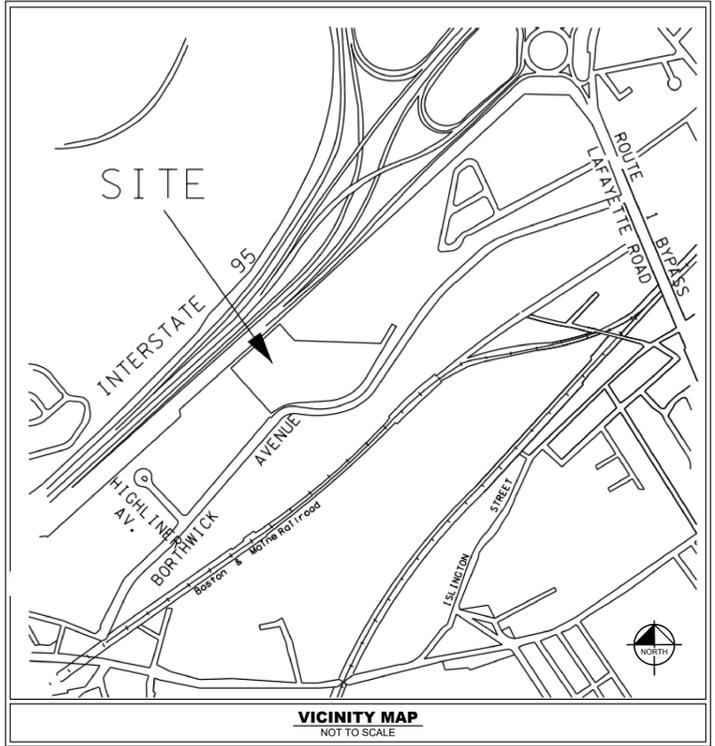


SITE CIVIL PLANS FOR PORTSMOUTH REGIONAL HOSPITAL RADIATION ONCOLOGY ADDITION

333 BORTHWICK AVENUE, PORTSMOUTH, NH 03801

CONSERVATION COMMISSION SET: MAY 5, 2022

SITE DATA TABLE		
OWNER OF RECORD	HCA HEALTH SERVICES OF NH INC D/B/A PRH 32902	
SITE ADDRESS	333 BORTHWICK AVE. PORTSMOUTH, NH 03801	
SITE AREA	± 20.87 AC	
DISTURBANCE LIMITS W/ THIS PROJECT	± 0.7 AC	
TAX MAP & LOT	TAX MAP 240, LOT 2-1	
ZONING	OR - OFFICE RESEARCH	
	REQUIRED	PROPOSED
FRONT YARD SETBACK	50'-0"	±40'
REAR YARD SETBACK	50'-0"	±157'
SIDE YARD SETBACK	75'-0"	±71" (EXISTING)
MIN. OPEN SPACE ON A LOT	30%	±39.0%
MAX BUILDING COVERAGE	30%	± 20.1%
BUILDING DATA		
	EXISTING	PROPOSED ADDITION
HOSPITAL BEDS	233	0
HOSPITAL/ MOB FLOOR PLATE	±173,916 SF	± 8,700 SF
HOSPITAL GROSS AREA	±427,495 SF	± 8,870 SF
MEDICAL OFFICE BUILDING GROSS AREA (ATTACHED TO HOSPITAL BUILDING)	±46,665 SF	0 SF
BUILDING HEIGHT	± 65'-4"	± 14'-8"



Sheet List Table	
SHEET NUMBER	SHEET TITLE
C0.00	COVER SHEET
C0.01	GENERAL NOTES
C0.02	SURVEY BY OTHERS
C1.00	EXISTING CONDITIONS - OVERALL
C2.00	SITE DEMOLITION PLAN
C3.00	EROSION CONTROL PLAN - PHASE 1
C3.01	EROSION CONTROL PLAN - PHASE 2
C3.02	EROSION CONTROL DETAILS
C4.00	SITE LAYOUT - OVERALL
C4.01	SITE LAYOUT - ENLARGEMENT
C5.00	GRADING & DRAINAGE PLAN
C6.00	SITE UTILITY PLAN
C7.00	SITE DETAILS
C7.01	SITE DETAILS

PARKING SUMMARY				
	EXISTING	DEMOLISHED	PROPOSED	NET RESULT
ONSITE STANDARD SPACES	754	11	2	745
ONSITE ACCESSIBLE (INCLUDING VAN ACCESSIBLE)	29	4	6	31
OFFSITE STANDARD SPACES*	0	0	490	490
OFFSITE ACCESSIBLE (INCLUDING VAN ACCESSIBLE)*	0	0	11	11
TOTAL				1277

*PER SATELLITE PARKING LOT DRAWINGS PREPARED BY TIGHE & BOND

REFERENCE PLANS
1. "LOT LINE REVISION PLAN FOR PORTSMOUTH HOSPITAL OFFICE BUILDING ASSOCIATION, ISLINGTON WOOD, LLC AND HCA REALTY, INC. (TAX MAP 234, LOTS 7-4A & 7-4B) (TAX MAP 240, LOT 2-2) BORTHWICK AVENUE EXTENSION PORTSMOUTH, NEW HAMPSHIRE" DATED JAN 13, 2006 PREPARED BY DOUCET SURVEY, INC., R.C.R.D. PLAN #0-33642
2. "TOPOGRAPHIC PLAN" AT PORTSMOUTH REGIONAL HOSPITAL FOR HCA HEALTH SERVICES OF NH, INC. DATED OCTOBER 10, 2007 BY DOUCET SURVEY.
3. "SIDEWALK SITE PLAN" FOR PORTSMOUTH REGIONAL HOSPITAL FOR HCA HEALTH SERVICES OF NH, INC. DATED OCTOBER 22, 2003 BY MILLETTE, SPRAGUE & COLWELL.
4. "SITE PLAN" FOR PORTSMOUTH REGIONAL HOSPITAL FOR HCA HEALTH SERVICES OF NH, INC. DATED AUGUST 19, 2002 BY MILLETTE, SPRAGUE & COLWELL. SHEET 2 OF 3.
5. JURISDICTIONAL WETLANDS WERE DELINEATED BY NHSC, INC. ON SEPTEMBER 25, 2007 IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, AS REQUIRED BY THE NH DES WETLANDS BUREAU.
6. "TOPOGRAPHIC WORKSHEET" OF THE POWERLINES BY ISLINGTON & BORTHWICK AVE. * PREPARED BY EASTERN TOPOGRAPHIC FOR DOUCET SURVEY, DATED SEPT 25, 2007.
7. "PORTSMOUTH REGIONAL HOSPITAL PHASE 1 ADDITIONS AND RENOVATIONS" BY APPELORE ENGINEERING, INC., DATED APRIL 1, 2008.
8. JURISDICTIONAL WETLANDS DELINEATION BY GOVE ENVIRONMENTAL SERVICES, INC. DATED OCTOBER 2019.
9. TOPOGRAPHIC SURVEY BY JAMES VERRA & ASSOCIATES, INC. DATED 10/2019.
10. SHEETS C-2 AND C-2A OF "PORTSMOUTH HOSPITAL EXPANSION" BY APPELORE ENGINEERING, DATED 8/4/11. *REVISED TO ADD REAR PARKING*

PROJECT DESIGN TEAM

- | | | |
|---|--|---|
| <p>ARCHITECT
GOULD TURNER GROUP, P.C.
615 3RD AVENUE SOUTH, SUITE 700
NASHVILLE, TN 37210
PHONE: (615) 254-1500
CONTACT: CHRIS DUMONT, AIA</p> | <p>CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
404 WYMAN STREET, SUITE 385
WALTHAM, MA 02451
PHONE: (781) 328-0676
CONTACT: CHRIS AKERS</p> | <p>M,P,E & T CONSULTANTS
I.C. THOMASSON ASSOCIATES, INC.
2950 KRAFT DRIVE, SUITE 500
NASHVILLE, TN 37204
PHONE: (615) 346-3400
CONTACT: BOYD JOHNSON</p> |
| <p>SURVEY
JAMES VERRA & ASSOCIATES, INC.
101 SHATTUCK WAY, SUITE 8
NEWINGTON, NH 03801
PHONE: (603) 436-3557
CONTACT: JIM VERRA, LLS</p> | <p>ENVIRONMENTAL
GOVE ENVIRONMENTAL SERVICES, INC
8 CONTINENTAL DR, UNIT H
EXETER, NH 03833
PHONE: (603) 778-0654
CONTACT: BRENDEN WALDEN</p> | <p>STRUCTURAL ENGINEER
STANLEY D. LINDSEY & ASSOCIATES, LTD.
750 OLD HICKORY BLVD, BLD 1, SUITE 175
BRENTWOOD, TN 37027
PHONE: (615) 320-1735
CONTACT: MARK HILNER</p> |

UTILITY CONTACTS

- | | | | |
|---|---|--|---|
| <p>WATER/ SANITARY SEWER
PORTSMOUTH DEPT OF PUBLIC WORKS
MIKE JENKINS
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801
PHONE: (603) 427-1530</p> | <p>NATURAL GAS
NORTHERN UTILITIES, INC.
JEFF INGLISH
325 WEST ROAD
PORTSMOUTH, NH 03801
PHONE (603) 436-0310</p> | <p>TELEPHONE/ CABLE
CONSOLIDATED COMMUNICATIONS
1575 GREENLOAD ROAD
GREENLAND, NH 03840
PHONE: (800) 240-5019</p> | <p>ELECTRIC
PUBLIC SERVICES OF NH/ EVERSOURCE
WAYNE BROOKS
1700 LAFAYETTE ROAD
PORTSMOUTH, NH 03801
PHONE:(800) 662-7764</p> |
|---|---|--|---|



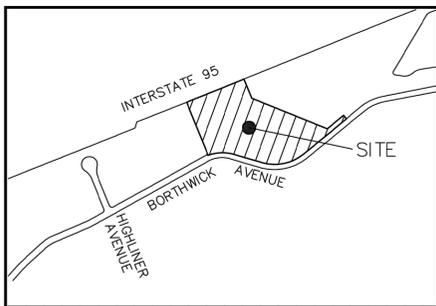
PORTSMOUTH REGIONAL HOSPITAL
RADIATION ONCOLOGY ADDITION
 PORTSMOUTH, NEW HAMPSHIRE

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DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE: 05/05/2022
KIMLEY-HORN PROJECT NO. 118252004

COVER SHEET

C0.00



LOCUS
(N.T.S.)

INTERSTATE 95
N 48°03'04" E
684.16

AS-BUILT LOCATION OF 10' WIDE GAS MAIN EASEMENT PER RCRD PLAN #D-15830

RIM AND INVERT DATA

- CB DPW#5741 RIM = 26.58
WATER LEVEL=23.57
- CB DPW#5740 RIM = 25.42
(1) INV (15"HDPE)=21.86
(2) INV (15"RCP)=INACCESS.
- CB DPW#3189 RIM = 25.66
INACCESSIBLE(FILLED)
- CONTECH DMH #4 RIM = 25.77
(1) Inv (15"HDPE)=INACCESS.
(2) Inv (15"HDPE)=INACCESS.
- SMH "A" RIM = 26.03
(1) INV (8"PVC)=19.95
(2) INV (8"PVC)=19.33
- SMH DPW#519 RIM = 26.35
(1) INV (8"PVC)=19.31
CL (18"ACP)=17.25
- SMH DPW#5481 RIM = 27.27
(1) INV (8"PVC)=18.07
(2) INV (10"PVC)=17.64
(3) INV (10"PVC)=17.59
- SMH DPW#5482 RIM = 27.65
(1) INV (8"PVC)=19.04
(2) INV (8"PVC)=23.50
(3) INV (8"PVC)=19.06
- SMH DPW#5483 RIM = 27.50
(1) INV (8"PVC)=18.44
(2) INV (8"PVC)=18.44

BOUNDARY CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA	ANGLE	CHORD BEARING	CHORD LENGTH
C2	294.05	464.64	36°15'38"	S	68°03'15" W	289.17

BOUNDARY LINE TABLE

LINE	BEARING	DISTANCE
L3	N 41°56'56" W	10.00
L15	N 87°57'24" W	895.13
L16	N 41°56'56" W	229.05

DRAINAGE INVERT ELEVATION TABLE

LOCATION	DESCRIPTION	ELEVATION
"A"	48" ARCHED CMP	21.01
"B"	24" RCP	20.52
"C"	24" RCP	20.90
"D"	21" RCP	21.04
"E"	21" RCP	21.72
"F"	12" PVC	22.04
"G"	16" PVC	21.32
"H"	16" PVC	21.44
"I"	16" PVC	21.43
"J"	16" PVC	21.51
"K"	4" PVC	24.38
"L"	15" RCP	21.18
"M"	6" METAL OUTLET	28.89
"N"	1" METAL OUTLET	28.58
"O"	4" METAL OUTLET	28.38
"P"	6" CAST IRON(C)	28.92
"Q"	12" CAST IRON(C)	21.23
"R"	12" CAST IRON(C)	21.22
"S"	6" METAL OUTLET	28.80
"T"	15" RCP	22.15

BUILDING FLOOR ELEVATION TABLE

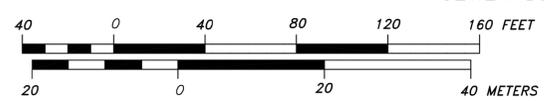
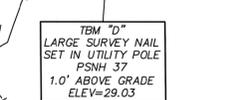
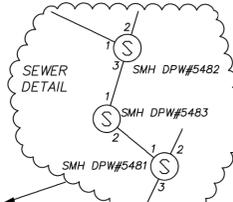
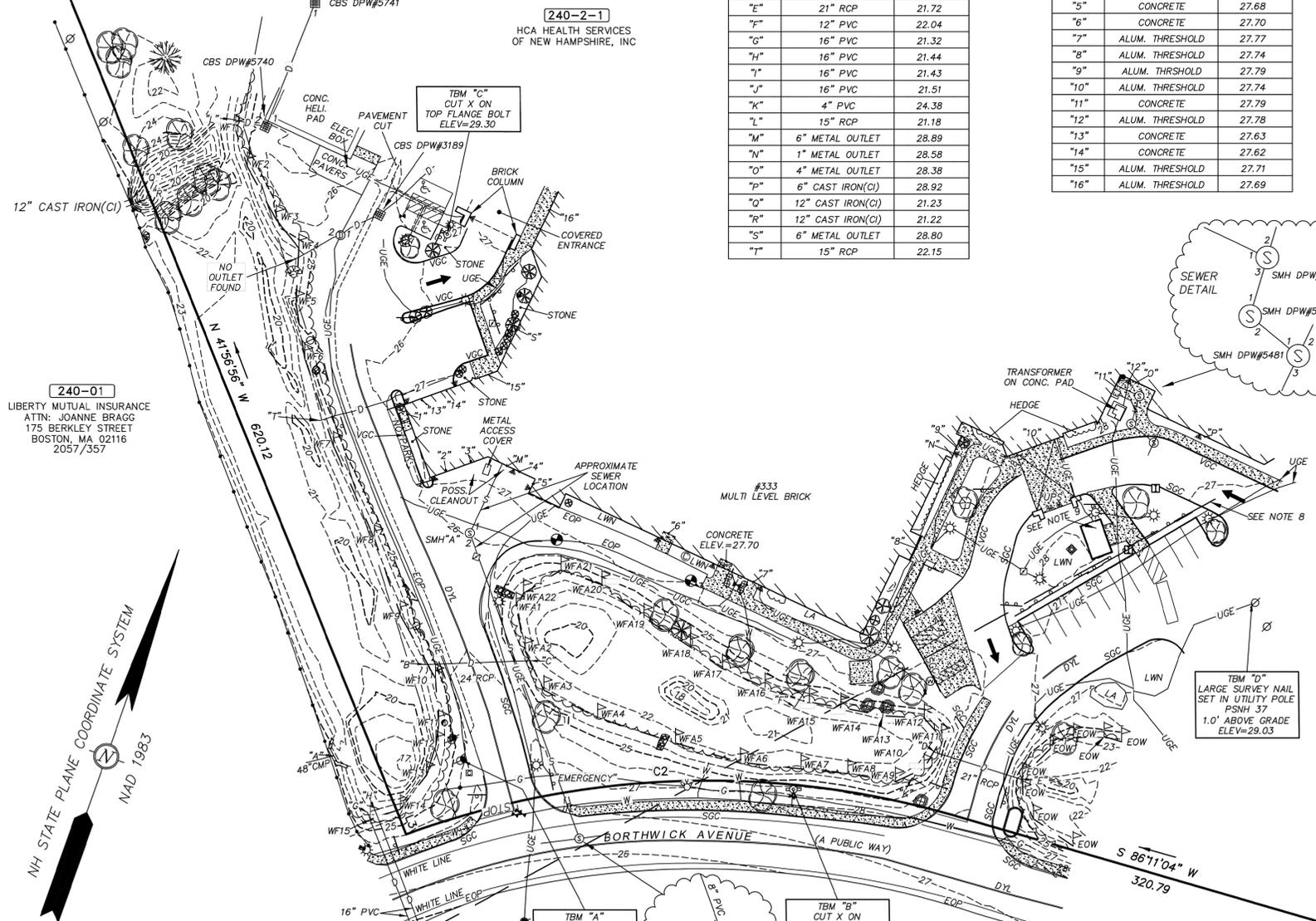
LOCATION	DESCRIPTION	ELEVATION
"1"	CONCRETE	27.68
"2"	CONCRETE	27.66
"3"	CONCRETE	27.68
"4"	ALUM. THRESHOLD	27.70
"5"	CONCRETE	27.68
"6"	CONCRETE	27.70
"7"	ALUM. THRESHOLD	27.77
"8"	ALUM. THRESHOLD	27.74
"9"	ALUM. THRESHOLD	27.79
"10"	ALUM. THRESHOLD	27.74
"11"	CONCRETE	27.79
"12"	ALUM. THRESHOLD	27.78
"13"	CONCRETE	27.63
"14"	CONCRETE	27.62
"15"	ALUM. THRESHOLD	27.71
"16"	ALUM. THRESHOLD	27.69

LEGEND:

- IRON ROD (AS NOTED)
- △ SURVEY NAIL (AS NOTED)
- CHAIN LINK FENCE
- UTILITY POLE
- ⊗ UTILITY POLE W/TRANSFORMER
- GUY
- ☆ LIGHT POLE
- ◀ DIRECTED WALL LIGHT
- OHW OVERHEAD WIRES
- OHE OVERHEAD ELECTRIC
- OHC OVERHEAD COMMUNICATION WIRES
- UGC UNDERGROUND COMMUNICATIONS
- UGE UNDERGROUND ELECTRIC
- RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
- 240-02-01 TAX SHEET / LOT NO.
- EOP EDGE OF PAVEMENT
- LA LANDSCAPED AREA
- RWS STONE RETAINING WALL
- VGC VERTICAL FACED GRANITE CURB
- SGC SLOPED FACED GRANITE CURB
- PSNH PUBLIC SERVICE CO. OF NH
- ♿ HANDICAP SPACE
- ▣ CATCH BASIN
- ⊙ DRAIN MANHOLE
- ⊙ SEWER MANHOLE
- ⊙ BOLLARD
- SIGN
- DOUBLE POST SIGN
- ELECTRICAL CONDUIT
- ELECTRICAL PANEL
- ELECTRICAL BOX
- ELECTRIC METER
- GAS VALVE
- w WATER LINE
- s SEWER LINE
- d DRAIN LINE
- c GAS LINE
- BRUSH LINE
- ☀ CONIFEROUS TREE
- ☀ DECIDUOUS TREE
- TREE LINE
- ☀ CONIFEROUS SHRUB
- ☀ DECIDUOUS SHRUB
- TREE STUMP
- ⊙ MONITORING WELL
- WATER GATE VALVE
- WATER SHUT OFF VALVE
- ⊙ WATER METER PIT
- HYDRANT
- FIRE CONNECTION
- POST INDICATOR VALVE
- RIP RAP
- CEMENT CONCRETE PAD
- BORING
- CABLE TV VAULT
- DYL DOUBLE YELLOW LINE
- STONE RETAINING WALL

240-01
LIBERTY MUTUAL INSURANCE
ATTN: JOANNE BRAGG
175 BERKLEY STREET
BOSTON, MA 02116
2057/357

240-2-1
HCA HEALTH SERVICES OF NEW HAMPSHIRE, INC



NOTES:

- OWNER OF RECORD.....HCA HEALTH SERVICES OF NH., D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOCIATES
ADDRESS.....PO BOX 80610, INDIANAPOLIS, IN 46280
DEED REFERENCE.....2784/1340
TAX SHEET / LOT.....240-02-01
PARCEL AREA.....846,664 S.F 19.44 ACRES
- ZONED:.....OFFICE/RESEARCH (OR) FRONT YARD SETBACK.....50'
MINIMUM LOT AREA...3 ACRES SIDE YARD SETBACK.....75'
FRONTAGE.....300' REAR YARD SETBACK.....50'
- THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENT AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE
- HORIZONTAL DATUM: NAD 1983 ESTABLISHED BY SURVEY GRADE GPS OBSERVATION AND NGS "OPUS" SOLUTION. REFERENCE FRAME: NAD83 (2011)(EPOCH: 2010.0000), US SURVEY FOOT.
VERTICAL DATUM: NAVD 1988. PRIMARY BENCHMARK: CITY OF PORTSMOUTH "ALBA"
- ENGINEER OR CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE ESTABLISHMENT OF ANY GRADES OR ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOCIATES, INC.
- THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260E, EFFECTIVE DATE 12/17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- LIMIT OF 300' EVERSOURCE ELECTRIC EASEMENT.
- BRICK GENERATOR ENCLOSURE. TOP OF CONCRETE ELEV.=27.20
- THE DELINEATION OF THE WETLANDS SHOWN HEREON WAS BY BRENDEN WILDEN NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #297, GOVE ENVIRONMENTAL SERVICES, 8 CONTINENTAL DRIVE, UNIT H, EXETER, NH 03833.
- THE SUBSURFACE UTILITIES SHOWN HEREON WERE IDENTIFIED BY WADE HANSEN GROUND PENETRATING RADAR SYSTEMS, INC., 5217 MONROE STREET, SUITE 100, TOLEDO, OHIO 43623.
- AN EXISTING UNTIL GAS LINE SOUTHWESTERLY OF THE HOSPITAL IN THE VICINITY OF THE LIBERTY MUTUAL PARCEL & A 6" CLDI WATER LINE IN THE SAME AREA WERE NOT FIELD LOCATED BY GROUND PENETRATING RADAR SYSTEMS, INC.

REFERENCE PLANS:

- GAS LINE AS-BUILT EASEMENT AND CONSERVATION PLAN, PREPARED FOR HOSPITAL CORPORATION OF AMERICA, PORTSMOUTH, NH, DATED 10/31/85. RCRD PLAN #D-15830.
- SCHILLER S/S-OCEAN ROAD S/S, 115 KV TRANSMISSION LINE #U181, MILE # 4, PLANR-6775-A, DATED 7/10/2009, BY NORTHEAST UTILITIES, NOT RECORDED.
- SUBDIVISION OF LAND, FRANETAL REALTY TRUST COMPANY, OPTIONED TO LIBERTY MUTUAL INSURANCE COMPANY, PORTSMOUTH, NEW HAMPSHIRE, RECORDED TO 2/19/71 RCRD PLAN #2190.

PURSUANT TO RSA 676:18,III AND RSA 672:14

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

James Verra
JAMES VERRA
11-19-2019
DATE



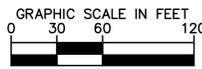
REV. NO.	DATE	DESCRIPTION	FOR REVIEW & COMMENT	APPR'D
0	11-08-2019			JV

LIMITED EXISTING CONDITIONS PLAN
333 BORTHWICK AVENUE
PORTSMOUTH, NEW HAMPSHIRE
ASSESSOR'S PARCEL #240-002-001

for
HCA HEALTH SERVICES OF NEW HAMPSHIRE

JAMES VERRA and ASSOCIATES, INC.
101 SHATTUCK WAY
SUITE 8
NEWINGTON, N.H., 03801-7876
603-436-3557

DATE: 11-19-2019
JOB NO: 23834
SCALE: 1" = 40'
DWG NAME: 23834
PLAN NO: 23834
SHEET: 1 of 1



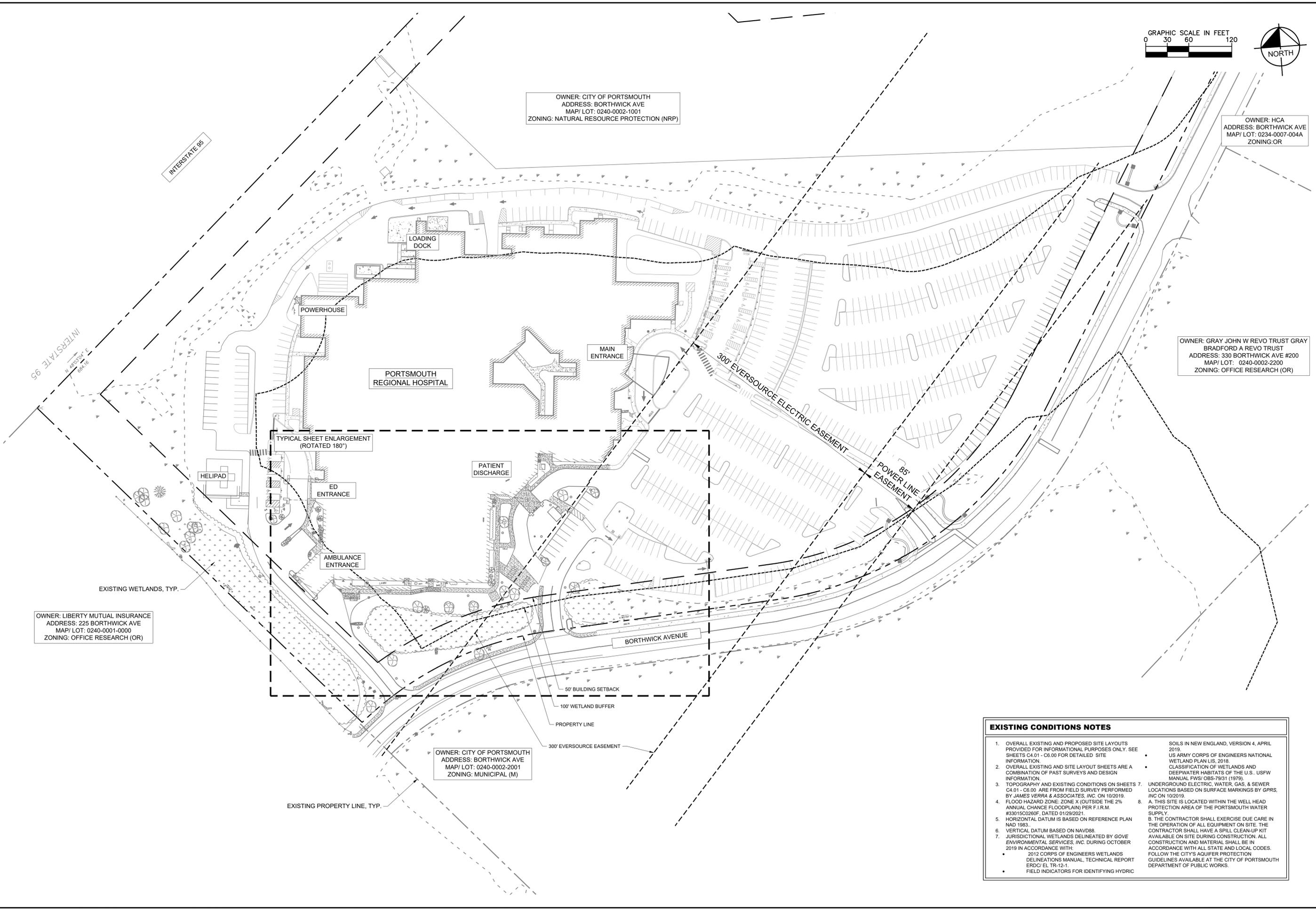
OWNER: CITY OF PORTSMOUTH
 ADDRESS: BORTHWICK AVE
 MAP/ LOT: 0240-0002-1001
 ZONING: NATURAL RESOURCE PROTECTION (NRP)

OWNER: HCA
 ADDRESS: BORTHWICK AVE
 MAP/ LOT: 0234-0007-004A
 ZONING: OR

OWNER: GRAY JOHN W REVO TRUST GRAY
 BRADFORD A REVO TRUST
 ADDRESS: 330 BORTHWICK AVE #200
 MAP/ LOT: 0240-0002-2200
 ZONING: OFFICE RESEARCH (OR)

OWNER: LIBERTY MUTUAL INSURANCE
 ADDRESS: 225 BORTHWICK AVE
 MAP/ LOT: 0240-0001-0000
 ZONING: OFFICE RESEARCH (OR)

OWNER: CITY OF PORTSMOUTH
 ADDRESS: BORTHWICK AVE
 MAP/ LOT: 0240-0002-2001
 ZONING: MUNICIPAL (M)



EXISTING CONDITIONS NOTES	
1. OVERALL EXISTING AND PROPOSED SITE LAYOUTS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SEE SHEETS C4.01 - C6.00 FOR DETAILED SITE INFORMATION.	SOILS IN NEW ENGLAND, VERSION 4, APRIL 2019.
2. OVERALL EXISTING AND SITE LAYOUT SHEETS ARE A COMBINATION OF PAST SURVEYS AND DESIGN INFORMATION.	• US ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLAN LIS, 2018.
3. TOPOGRAPHY AND EXISTING CONDITIONS ON SHEETS C4.01 - C6.00 ARE FROM FIELD SURVEY PERFORMED BY JAMES VERRA & ASSOCIATES, INC. ON 10/2019.	• CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE U.S. USFW MANUAL FWS/ OES-7931 (1979).
4. FLOOD HAZARD ZONE: ZONE X (OUTSIDE THE 2% ANNUAL CHANCE FLOODPLAIN) PER F.I.R.M. #33015C0260F, DATED 01/29/2021.	7. UNDERGROUND ELECTRIC, WATER, GAS, & SEWER LOCATIONS BASED ON SURFACE MARKINGS BY GPRS, INC ON 10/2019.
5. HORIZONTAL DATUM IS BASED ON REFERENCE PLAN NAD 1983.	8. A. THIS SITE IS LOCATED WITHIN THE WELL HEAD PROTECTION AREA OF THE PORTSMOUTH WATER SUPPLY.
6. VERTICAL DATUM BASED ON NAVD88.	B. THE CONTRACTOR SHALL EXERCISE DUE CARE IN THE OPERATION OF ALL EQUIPMENT ON SITE. THE CONTRACTOR SHALL HAVE A SPILL CLEANUP KIT AVAILABLE ON SITE DURING CONSTRUCTION. ALL CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
7. JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING OCTOBER 2019 IN ACCORDANCE WITH:	FOLLOW THE CITY'S AQUIFER PROTECTION GUIDELINES AVAILABLE AT THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.
• 2012 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT ERDC/ EL TR-12-1.	
• FIELD INDICATORS FOR IDENTIFYING HYDRIC	

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PORTSMOUTH REGIONAL
 HOSPITAL
 RADIATION ONCOLOGY ADDITION
 PORTSMOUTH, NEW HAMPSHIRE

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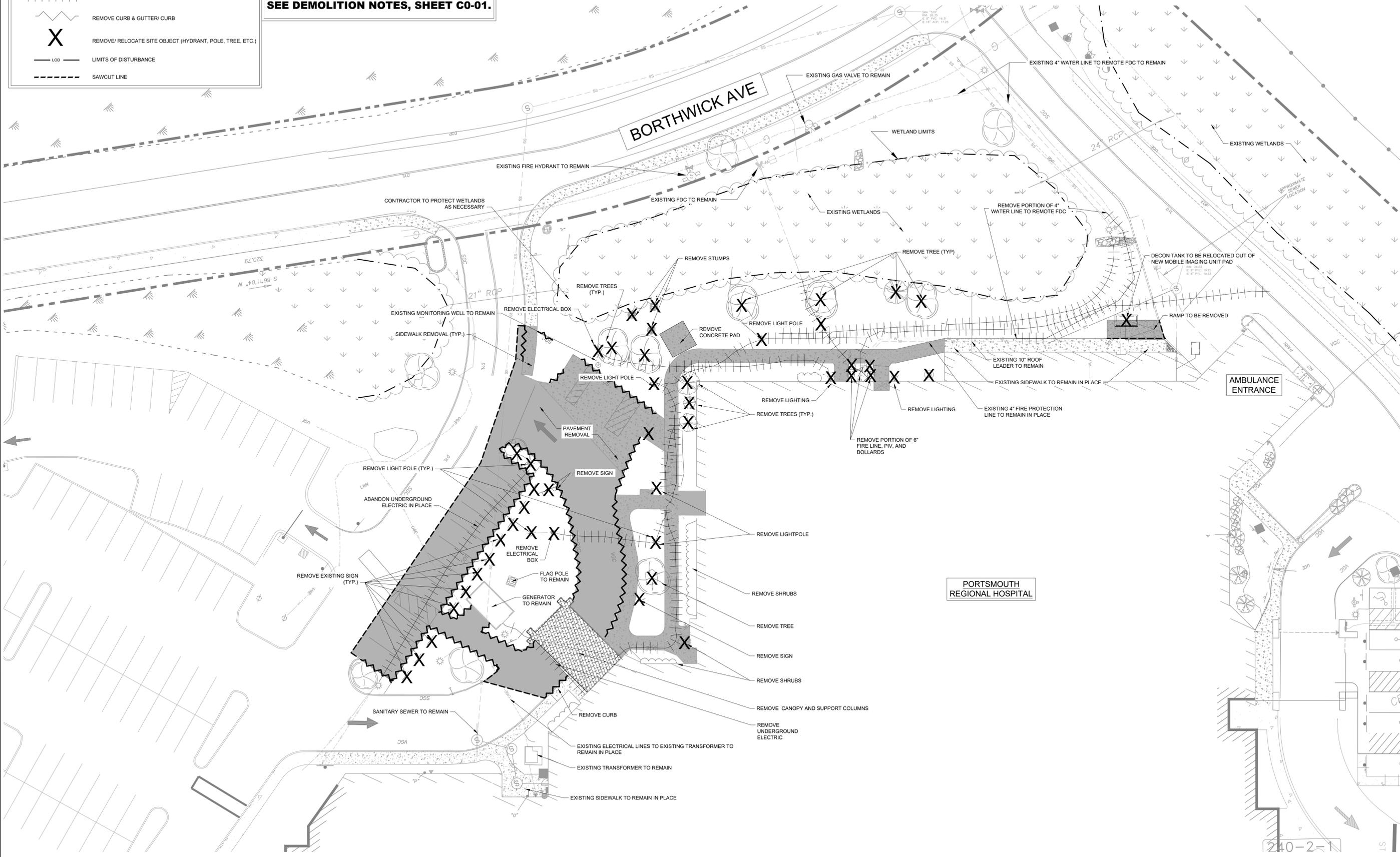
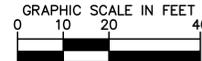
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 DRAWN BY:
 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO. 118252004

DEMOLITION LEGEND	
	REMOVE CONCRETE/ ASPHALT
	REMOVE CANOPY
	REMOVE UNDERGROUND UTILITY / STORM
	REMOVE CURB & GUTTER/ CURB
	REMOVE/ RELOCATE SITE OBJECT (HYDRANT, POLE, TREE, ETC.)
	LIMITS OF DISTURBANCE
	SAWCUT LINE

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SEE DEMOLITION NOTES, SHEET C0-01.



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 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO. 118252004

SITE DEMOLITION PLAN

C2.00

EROSION CONTROL NOTES

- CONTRACTOR SHALL COORDINATE WITH CITY OF PORTSMOUTH GROWTH MANAGEMENT AND THE COUNTY'S ENVIRONMENTAL INSPECTOR.
- ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE CITY OF PORTSMOUTH'S ENVIRONMENTAL INSPECTOR.
- THE CONTRACTOR SHALL ENSURE THAT A FOREMAN OR SUPERVISOR WHO HAS BEEN CERTIFIED UNDER THE NEW HAMPSHIRE STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM IS AVAILABLE IN PERSON OR BY PHONE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. INSPECTOR TO BE DESIGNATED AND AVAILABLE AT THE PRE-CONSTRUCTION MEETING.
- SILT FENCE SHOWN ON THESE PLANS SHALL BE INSTALLED GENERALLY IN THE LOCATIONS INDICATED. ADJUSTED FOR FIELD CONSTRAINTS. ALL PROPOSED SILT FENCE LOCATED WITHIN THE CRITICAL PROTECTION ZONE OF A TREE SHALL BE OF A NON-TRENCHED VARIETY, UNLESS ARBORICULTURAL MITIGATION STATES OTHERWISE.
- CONTRACTOR SHALL INSPECT AND REPAIR ALL BMP's AT LEAST ONCE A WEEK, AND AFTER EVERY SIGNIFICANT RAIN EVENT (> 1/2" OF RAINFALL) A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.
- ANY BMP IN NEED OF REPAIR OR REINSTALLATION SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 24 HOURS OF IDENTIFICATION OF THE NEED FOR SUCH CORRECTION.
- ADDITIONAL BMP MEASURES MAY BE NECESSARY TO ENSURE THAT TURBID WATER IS NOT DISCHARGED FROM THE CONSTRUCTION SITE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, THE N.P.D.E.S. PERMIT AND THE CONDITIONS OF THE APPLICABLE ENVIRONMENTAL RESOURCE PERMIT.
- ALL DISTURBED AREAS TO BE LEFT IDLE LONGER THAN 14 DAYS MUST BE STABILIZED WITH QUICK GROW GRASS SEED AND MULCH.
- NO TRENCHING OR EXCAVATION SHALL BE ALLOWED WITHIN THE CPZ OF PROTECTED TREES, EXCEPT WHERE DEBITS HAVE BEEN NOTED ON THE TREE REMOVAL PLANS OR WHERE TREES ARE TO BE IMPACTED/MITIGATED PER THE TREE MITIGATION PLANS.
- STREET SWEEPING WILL BE REQUIRED AS NECESSARY.
- IMPROVEMENTS SHOWN FOR REFERENCE ONLY.
- COORDINATE DISPOSAL OF EXCAVATED MATERIAL WITH OWNER.

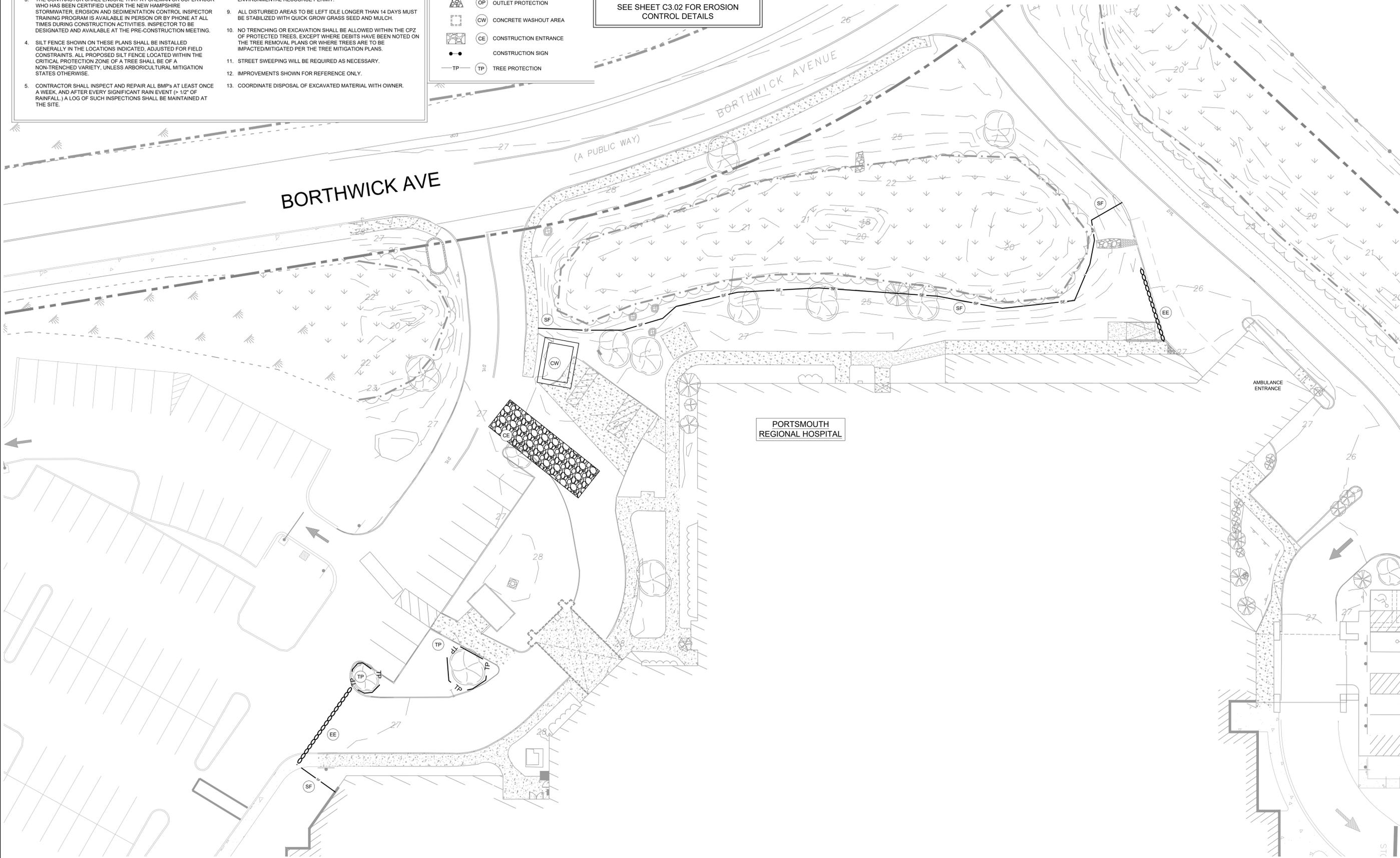
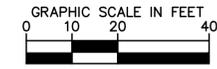
ADA COMPLIANCE

- IP INLET PROTECTION
- SF SILT FENCE
- EE EROSION EELS
- OP OUTLET PROTECTION
- CW CONCRETE WASHOUT AREA
- CE CONSTRUCTION ENTRANCE
- CS CONSTRUCTION SIGN
- TP TREE PROTECTION

PROPOSED GROUND COVER LEGEND

- CONSERVATION SEED MIX
- FESCUE/ BLUEGRASS SEED MIX

SEE SHEET C3.02 FOR EROSION CONTROL DETAILS



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DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO. 118252004

EROSION CONTROL PLAN - PHASE 1

C3.00

EROSION CONTROL NOTES

- CONTRACTOR SHALL COORDINATE WITH CITY OF PORTSMOUTH GROWTH MANAGEMENT AND THE COUNTY'S ENVIRONMENTAL INSPECTOR.
- ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE CITY OF PORTSMOUTH'S ENVIRONMENTAL INSPECTOR.
- THE CONTRACTOR SHALL ENSURE THAT A FOREMAN OR SUPERVISOR WHO HAS BEEN CERTIFIED UNDER THE NEW HAMPSHIRE STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM IS AVAILABLE IN PERSON OR BY PHONE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. INSPECTOR TO BE DESIGNATED AND AVAILABLE AT THE PRE-CONSTRUCTION MEETING.
- SILT FENCE SHOWN ON THESE PLANS SHALL BE INSTALLED GENERALLY IN THE LOCATIONS INDICATED. ADJUSTED FOR FIELD CONSTRAINTS. ALL PROPOSED SILT FENCE LOCATED WITHIN THE CRITICAL PROTECTION ZONE OF A TREE SHALL BE OF A NON-TRENCHED VARIETY, UNLESS ARBORICULTURAL MITIGATION STATES OTHERWISE.
- CONTRACTOR SHALL INSPECT AND REPAIR ALL BMP's AT LEAST ONCE A WEEK, AND AFTER EVERY SIGNIFICANT RAIN EVENT (> 1/2" OF RAINFALL) A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.
- ANY BMP IN NEED OF REPAIR OR REINSTALLATION SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 24 HOURS OF IDENTIFICATION OF THE NEED FOR SUCH CORRECTION.
- ADDITIONAL BMP MEASURES MAY BE NECESSARY TO ENSURE THAT TURBID WATER IS NOT DISCHARGED FROM THE CONSTRUCTION SITE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, THE N.P.D.E.S. PERMIT AND THE CONDITIONS OF THE APPLICABLE ENVIRONMENTAL RESOURCE PERMIT.
- ALL DISTURBED AREAS TO BE LEFT IDLE LONGER THAN 14 DAYS MUST BE STABILIZED WITH QUICK GROW GRASS SEED AND MULCH.
- NO TRENCHING OR EXCAVATION SHALL BE ALLOWED WITHIN THE CPZ OF PROTECTED TREES, EXCEPT WHERE DEBITS HAVE BEEN NOTED ON THE TREE REMOVAL PLANS OR WHERE TREES ARE TO BE IMPACTED/MITIGATED PER THE TREE MITIGATION PLANS.
- STREET SWEEPING WILL BE REQUIRED AS NECESSARY.
- IMPROVEMENTS SHOWN FOR REFERENCE ONLY.
- COORDINATE DISPOSAL OF EXCAVATED MATERIAL WITH OWNER.

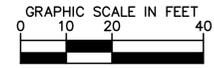
ADA COMPLIANCE

- IP INLET PROTECTION
- SF SILT FENCE
- EE EROSION EELS
- OP OUTLET PROTECTION
- CW CONCRETE WASHOUT AREA
- CE CONSTRUCTION ENTRANCE
- CS CONSTRUCTION SIGN
- TP TREE PROTECTION

PROPOSED GROUND COVER LEGEND

- CONSERVATION SEED MIX
- FESCUE/ BLUEGRASS SEED MIX

SEE SHEET C3.02 FOR EROSION CONTROL DETAILS



BORTHWICK AVE

PORTSMOUTH REGIONAL HOSPITAL

MOBILE UNIT

AMBULANCE ENTRANCE

PORTSMOUTH REGIONAL HOSPITAL
RADIATION ONCOLOGY ADDITION
PORTSMOUTH, NEW HAMPSHIRE

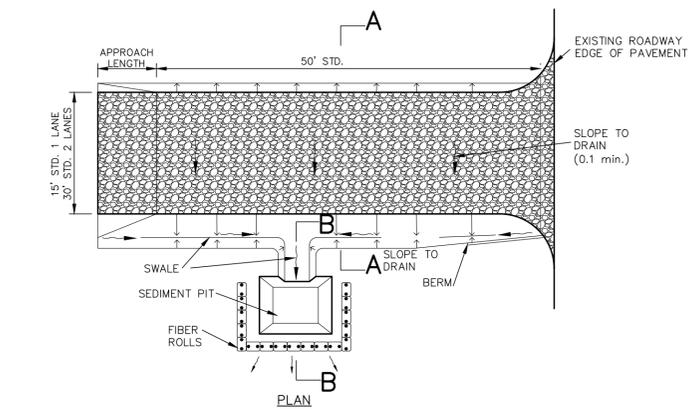
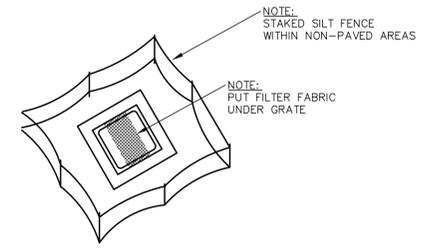
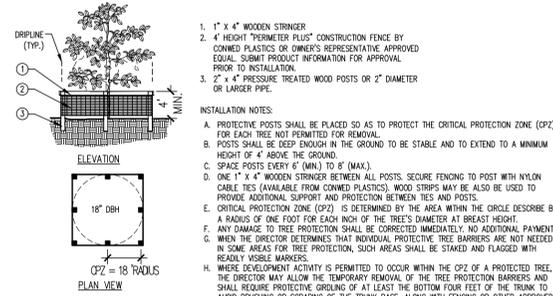
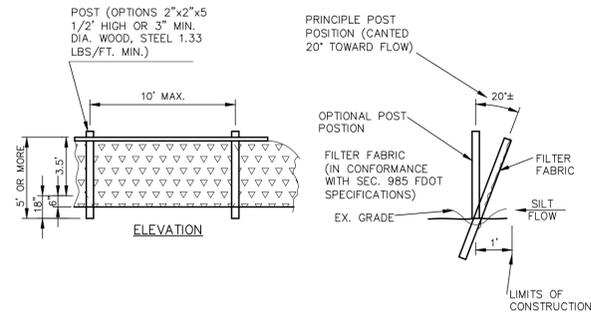
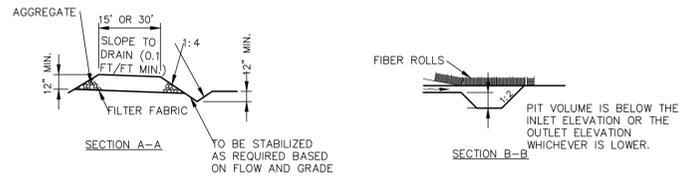
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MAIN: 781.328.0676 | WWW.KIMLEY-HORN.COM
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DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE: 05/05/2022
KIMLEY-HORN PROJECT NO. 118252004

EROSION CONTROL PLAN - PHASE 2

C3.01



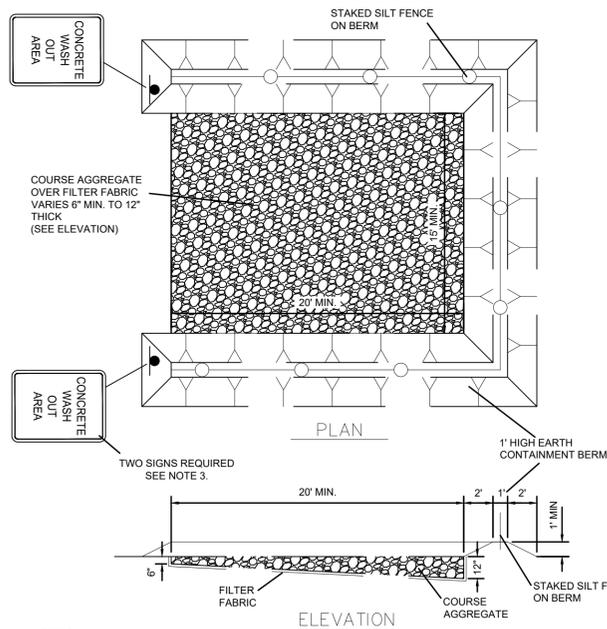
NOTES:
 1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

CE CONSTRUCTION ENTRANCE (SOIL TRACKING PREVENTION)
 NOT TO SCALE

SF SILT FENCE (SEDIMENT BARRIER)
 NOT TO SCALE

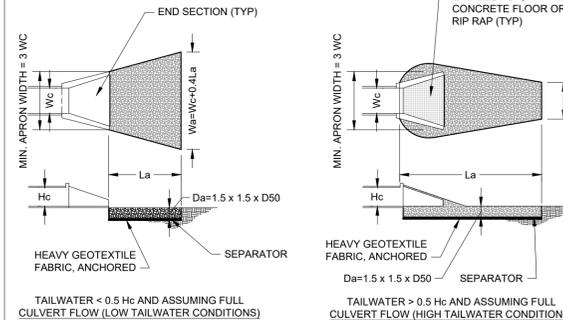
TP TREE PROTECTION
 NOT TO SCALE

IP INLET PROTECTION
 NOT TO SCALE



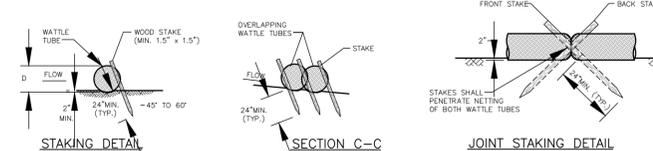
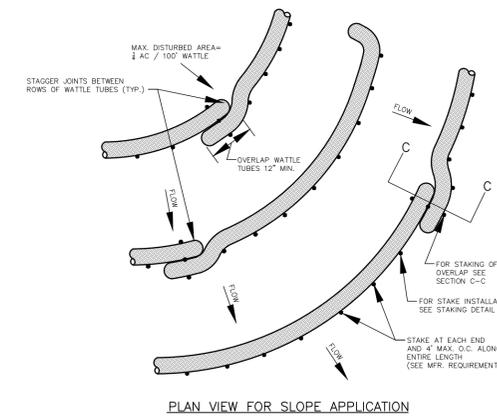
NOTES:
 1. ALL MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF THE PROJECT.
 2. AGGREGATE SHALL BE REPLACED AS DIRECTED BY THE ENGINEER OF RECORD AND/OR THE CITY WHEN EXCESSIVE MATERIALS BUILDUP RENDERS THE WASH OUT AREA NO LONGER FUNCTIONAL.
 3. SIGNS SHALL BE 18" X 12" MIN. SIZE WITH 2" BLACK LETTERING ON A WHITE BACKGROUND AND MOUNTED A MINIMUM OF 7 FEET ABOVE GRADE FROM THE LOWEST EDGE OF THE SIGN FACE.

CW CONCRETE WASHOUT
 NOT TO SCALE



TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)
 TAILWATER > 0.5 Hc AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)
 Hc = HEIGHT OF CULVERT
 Wc = WIDTH OF CULVERT
 La = LENGTH OF RIP-RAP APRON
 WLa = WIDTH OF RIP-RAP APRON AT END
 D50 = MEDIAN SIZE OF RIP-RAP
 Dmax = MAXIMUM SIZE OF RIP-RAP = 1.5 D50
 Da = DEPTH OF RIP-RAP APRON = 1.5 Dmax
 SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

OP OUTLET PROTECTION
 NOT TO SCALE



EE EROSION EELS
 NOT TO SCALE

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 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO. 118252004

EROSION CONTROL DETAILS

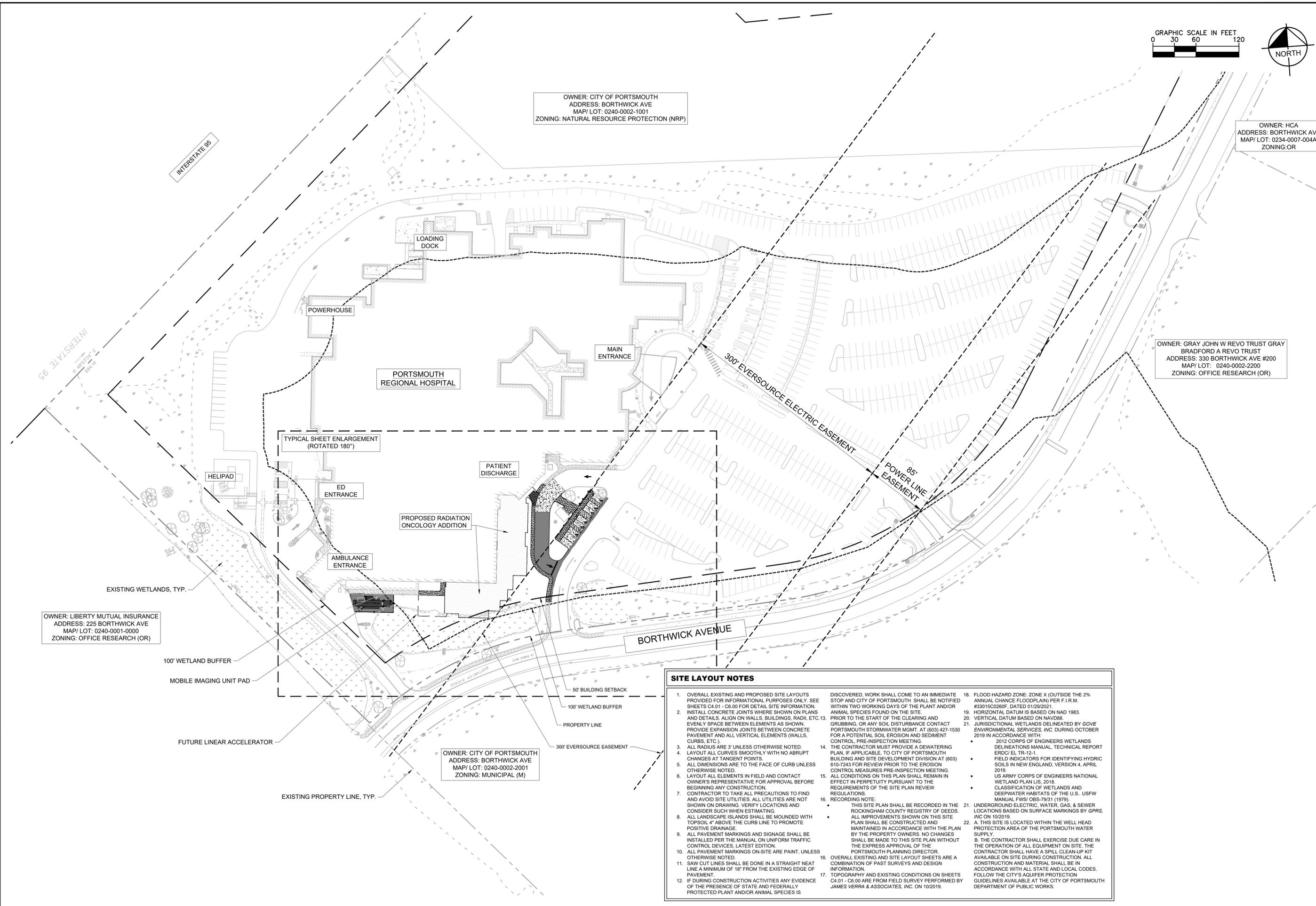
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 DRAWN BY:
 CHECKED BY:
 DATE: 05/05/2022
 KIMLEY-HORN PROJECT NO.
 118252004

**SITE LAYOUT -
 OVERALL**

C4.00



OWNER: CITY OF PORTSMOUTH
 ADDRESS: BORTHWICK AVE
 MAP/LOT: 0240-0002-1001
 ZONING: NATURAL RESOURCE PROTECTION (NRP)

OWNER: HCA
 ADDRESS: BORTHWICK AVE
 MAP/LOT: 0234-0007-004A
 ZONING: OR

OWNER: GRAY JOHN W REVO TRUST GRAY
 BRADFORD A REVO TRUST
 ADDRESS: 330 BORTHWICK AVE #200
 MAP/LOT: 0240-0002-2200
 ZONING: OFFICE RESEARCH (OR)

OWNER: LIBERTY MUTUAL INSURANCE
 ADDRESS: 225 BORTHWICK AVE
 MAP/LOT: 0240-0001-0000
 ZONING: OFFICE RESEARCH (OR)

OWNER: CITY OF PORTSMOUTH
 ADDRESS: BORTHWICK AVE
 MAP/LOT: 0240-0002-2001
 ZONING: MUNICIPAL (M)

- SITE LAYOUT NOTES**
- OVERALL EXISTING AND PROPOSED SITE LAYOUTS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SEE SHEETS C4.01 - C6.00 FOR DETAIL SITE INFORMATION.
 - INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADI, ETC. 13. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
 - ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
 - LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
 - ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 - LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
 - CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
 - ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
 - ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - ALL PAVEMENT MARKINGS ON-SITE ARE PAINT, UNLESS OTHERWISE NOTED.
 - SAW CUT LINES SHALL BE DONE IN A STRAIGHT NEAT LINE A MINIMUM OF 18" FROM THE EXISTING EDGE OF PAVEMENT.
 - IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND CITY OF PORTSMOUTH SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.
 - PRIOR TO THE START OF THE CLEARING AND GRUBBING, OR ANY SOIL DISTURBANCE CONTACT PORTSMOUTH STORMWATER MGMT. AT (603) 427-1530 FOR A POTENTIAL SOIL EROSION AND SEDIMENT CONTROL. PRE-INSPECTION MEETING.
 - THE CONTRACTOR MUST PROVIDE A DEWATERING PLAN, IF APPLICABLE, TO CITY OF PORTSMOUTH BUILDING AND SITE DEVELOPMENT DIVISION AT (603) 610-7243 FOR REVIEW PRIOR TO THE EROSION CONTROL MEASURES PRE-INSPECTION MEETING.
 - ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
 - RECORDING NOTE:
 THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
 ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
 - OVERALL EXISTING AND SITE LAYOUT SHEETS ARE A COMBINATION OF PAST SURVEYS AND DESIGN INFORMATION.
 - TOPOGRAPHY AND EXISTING CONDITIONS ON SHEETS C4.01 - C6.00 ARE FROM FIELD SURVEY PERFORMED BY JAMES VERRA & ASSOCIATES, INC. ON 10/2019.
 - FLOOD HAZARD ZONE: ZONE X (OUTSIDE THE 2% ANNUAL CHANCE FLOODPLAIN) PER F.I.R.M. #33015C0260F, DATED 01/29/2021.
 - HORIZONTAL DATUM IS BASED ON NAD 1983.
 - VERTICAL DATUM BASED ON NAVD88.
 - JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING OCTOBER 2019 IN ACCORDANCE WITH:
 2012 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT ERDC/EL TR-12-1.
 FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, APRIL 2019.
 US ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLAN LIS, 2018.
 CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE U.S. USFW MANUAL FWS/OBS-79/31 (1979).
 - UNDERGROUND ELECTRIC, WATER, GAS, & SEWER LOCATIONS BASED ON SURFACE MARKINGS BY GPRS, IWC ON 10/2019.
 - A. THIS SITE IS LOCATED WITHIN THE WELL HEAD PROTECTION AREA OF THE PORTSMOUTH WATER SUPPLY.
 B. THE CONTRACTOR SHALL EXERCISE DUE CARE IN THE OPERATION OF ALL EQUIPMENT ON SITE. THE CONTRACTOR SHALL HAVE A SPILL CLEAN-UP KIT AVAILABLE ON SITE DURING CONSTRUCTION. ALL CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. FOLLOW THE CITY'S AQUIFER PROTECTION GUIDELINES AVAILABLE AT THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.

SITE DATA TABLE		
OWNER OF RECORD	HCA HEALTH SERVICES OF NH INC D/B/A PRH 32902	
SITE ADDRESS	333 BORTHWICK AVE PORTSMOUTH, NH 03801	
SITE AREA	± 20.87 AC	
DISTURBANCE LIMITS W/ THIS PROJECT	± 0.7 AC	
TAX MAP & LOT	TAX MAP 240, LOT 2-1	
ZONING	OR - OFFICE RESEARCH	
SETBACKS	REQUIRED	PROPOSED
FRONT YARD SETBACK	50'-0"	±40'
REAR YARD SETBACK	50'-0"	±157'
SIDE YARD SETBACK	75'-0"	±71" (EXISTING)
MIN. OPEN SPACE ON A LOT	30%	±39.0%
MAX BUILDING COVERAGE	30%	± 20.1%
BUILDING DATA		
	EXISTING	PROPOSED ADDITION
HOSPITAL BEDS	233	0
HOSPITAL/ MOB FLOOR PLATE	±173,916 SF	± 8,700 SF
HOSPITAL GROSS AREA	±427,495 SF	± 8,870 SF
MEDICAL OFFICE BUILDING GROSS AREA (ATTACHED TO HOSPITAL BUILDING)	±46,665 SF	0 SF
BUILDING HEIGHT	± 65'-4"	± 14'-8"

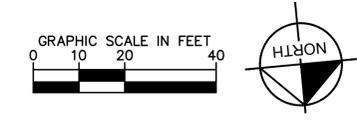
PAVEMENT LEGEND		
	DESCRIPTION	DET #/ SHEET
	SIDEWALK CONCRETE	1 / C7.00
	ASPHALT PAVEMENT	2 / C7.00
	CONCRETE PAVEMENT	3 / C7.00
	MOBILE IMAGING CONCRETE PAD	4 / C7.00
	SPECIALITY SIDEWALK PAVEMENT	NOTE THIS SHEET

SPECIALITY SIDEWALK PAVEMENT NOTE

COLORED CONCRETE SURFACE WITH MEDIUM BROOM FINISH, CONSISTING OF SCOFIELD LITHOCHROME COLOR HARDENER, COLOR TO BE SELECTED BY ARCHITECT. SEAL CURED, COLORED SURFACE WITH SCOFIELD SCOFIELD CURESEAL-VOO MATTE FINISH CLEAR SEALANT. PREPARE SURFACES AND APPLY MATERIALS PER MANUFACTURER'S SPECIFICATIONS.

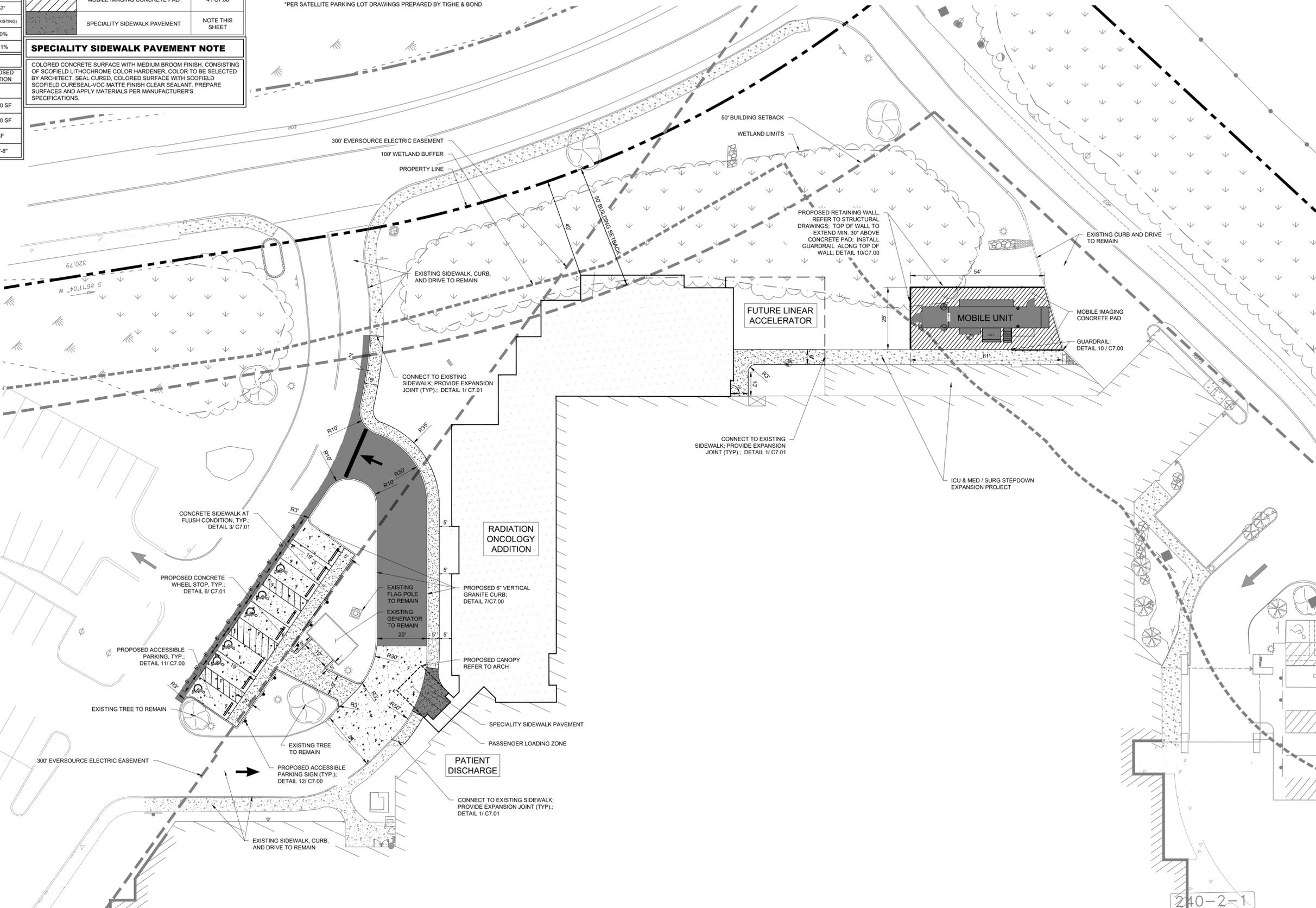
PARKING SUMMARY				
	EXISTING	DEMOLISHED	PROPOSED	NET RESULT
ONSITE STANDARD SPACES	754	11	2	745
ONSITE ACCESSIBLE (INCLUDING VAN ACCESSIBLE)	29	4	6	31
OFFSITE STANDARD SPACES*	0	0	490	490
OFFSITE ACCESSIBLE (INCLUDING VAN ACCESSIBLE)*	0	0	11	11
TOTAL				1277

*PER SATELLITE PARKING LOT DRAWINGS PREPARED BY TIGHE & BOND



SITE LAYOUT NOTES

- INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
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- ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
- RECORDING NOTE:
 - THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
 - ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
- TOPOGRAPHY AND EXISTING CONDITIONS FROM FIELD SURVEY PERFORMED BY JAMES VERRA & ASSOCIATES, INC. ON 10/2019.
- FLOOD HAZARD ZONE, ZONE X (OUTSIDE THE 2% ANNUAL CHANCE FLOODPLAIN) PER F.I.R.M. #3301500260F, DATED 01/29/2021.
- HORIZONTAL DATUM IS BASED ON NAD 1983.
- VERTICAL DATUM BASED ON NAVD88.
- JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING OCTOBER 2019 IN ACCORDANCE WITH:
 - 2012 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT ERDC/EL TR-12-
 - FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, APRIL 2019.
 - US ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLAN US, 2018.
 - CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE U.S., USFW MANUAL FWS/OBS-79/31 (1979).
- UNDERGROUND ELECTRIC, WATER, GAS, & SEWER LOCATIONS BASED ON SURFACE MARKINGS BY GPRS, INC ON 10/2019.



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PORTSMOUTH REGIONAL
 HOSPITAL
 RADIATION ONCOLOGY ADDITION
 PORTSMOUTH, NEW HAMPSHIRE

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SITE LAYOUT - ENLARGEMENT

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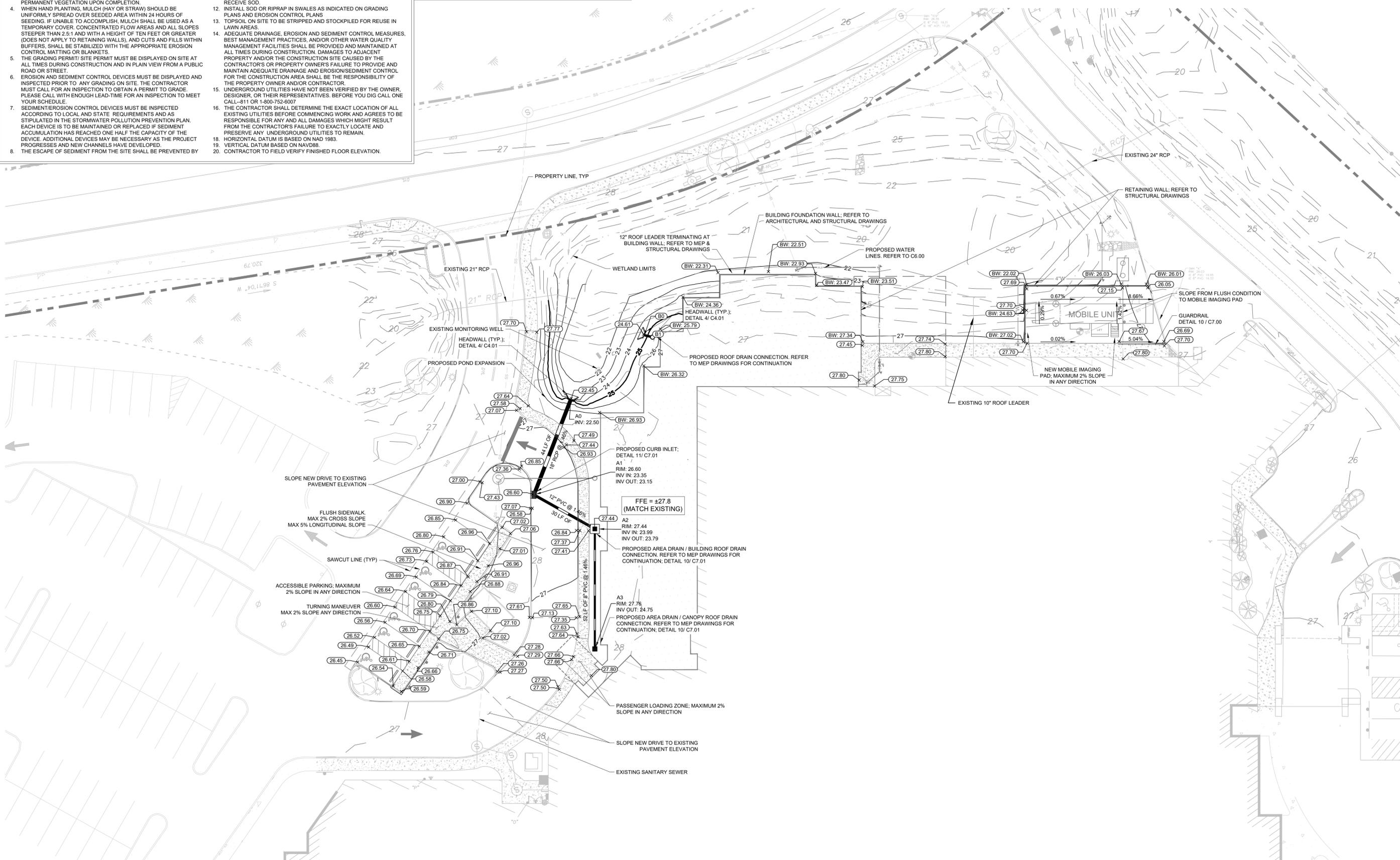
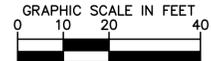
GRADING NOTES

- CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
- ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
- DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- THE GRADING PERMIT SITE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
- SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS AND AS STIPULATED IN THE STORMWATER POLLUTION PREVENTION PLAN. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES AND NEW CHANNELS HAVE DEVELOPED.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY

- THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
- INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS.
- TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
- ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
- UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL-811 OR 1-800-752-6007.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.
- HORIZONTAL DATUM IS BASED ON NAD 1983.
- VERTICAL DATUM BASED ON NAVD83.
- CONTRACTOR TO FIELD VERIFY FINISHED FLOOR ELEVATION.

GRADING PLAN LEGEND

- 26.60 SPOT ELEVATION
- HP HIGH POINT
- TC TOP OF CURB
- TW GRADE AT TOPSIDE OF WALL
- INV INVERT
- ME MATCH EXISTING
- FFE 26.60 FINISH FLOOR ELEVATION
- 27 EXISTING CONTOUR
- 27 PROPOSED CONTOUR
- LP LOW POINT
- BC BOTTOM OF CURB / GUTTER LINE
- BW GRADE AT BOTTOM SIDE OF WALL
- RM RIM



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PORTSMOUTH REGIONAL HOSPITAL RADIATION ONCOLOGY ADDITION
 PORTSMOUTH, NEW HAMPSHIRE

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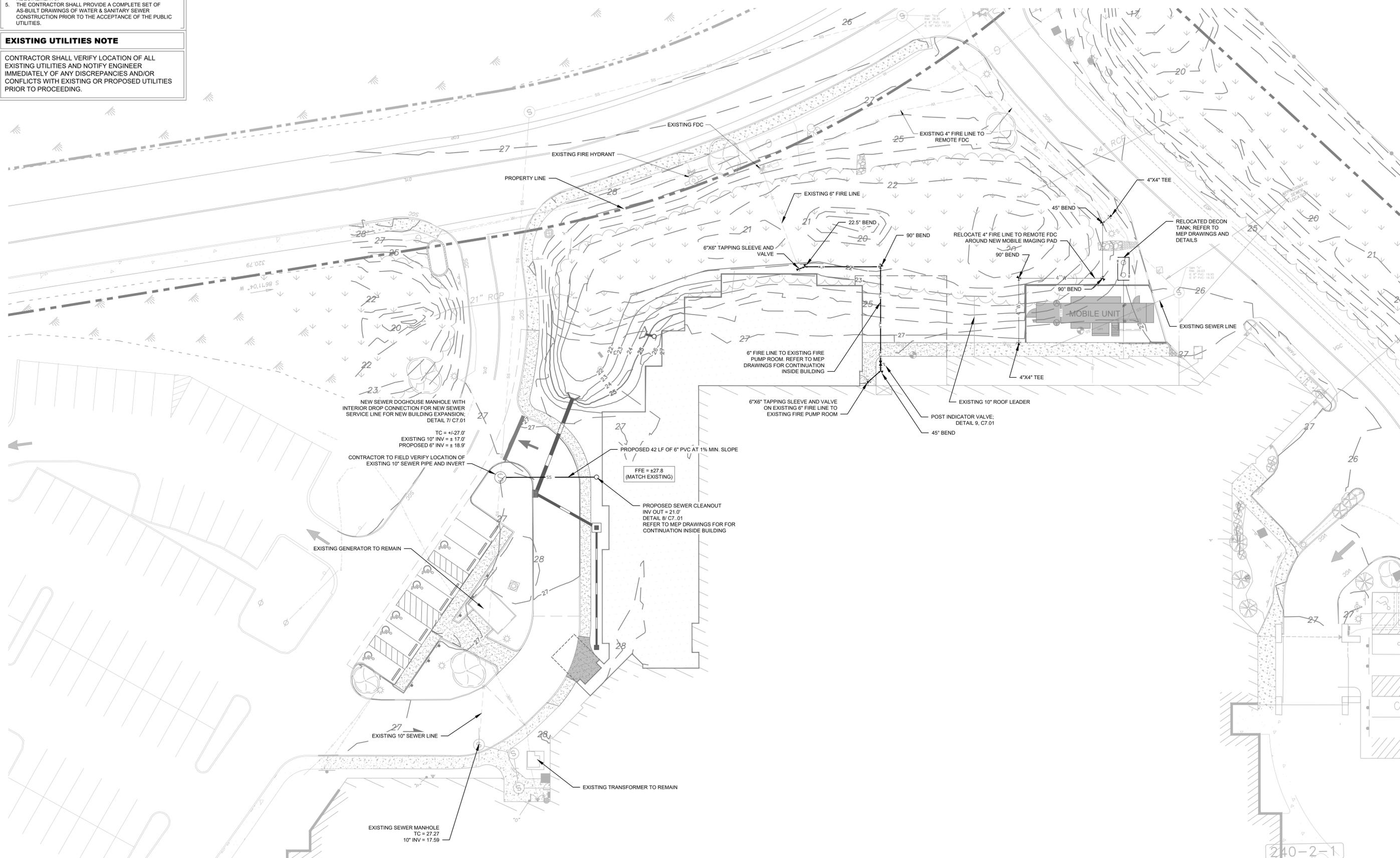
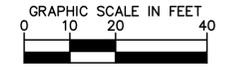
GRADING & DRAINAGE PLAN

C5.00

- UTILITY NOTES**
- CONTRACTOR RESPONSIBLE FOR VERIFYING EXISTING ELEVATIONS COMPARED TO THOSE SHOWN ON PLAN PRIOR TO GRADING. NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
 - ALL WATER AND SEWER MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH CITY OF PORTSMOUTH WATER/SEWER DEPARTMENT STANDARD SPECIFICATIONS.
 - MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER & SANITARY SEWER OR 18" VERTICAL SEPARATION AT CROSSING LOCATIONS.
 - REFER TO CITY OF PORTSMOUTH WATER/SEWER DEPARTMENT STANDARD SPECIFICATIONS FOR PIPE BEDDING REQUIREMENTS.
 - THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS OF WATER & SANITARY SEWER CONSTRUCTION PRIOR TO THE ACCEPTANCE OF THE PUBLIC UTILITIES.

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.



Kimley»Horn

404 WYMAN STREET, SUITE 385 WALTHAM, MA 02451
 MAINT/781.328.0676 | WWW.KIMLEY-HORN.COM
 © 2019 KIMLEY-HORN AND ASSOCIATES, INC.

PORTSMOUTH REGIONAL HOSPITAL
RADIATION ONCOLOGY ADDITION
 PORTSMOUTH, NEW HAMPSHIRE

REVISIONS	
NO.	DATE BY
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DESIGNED BY:

DRAWN BY:

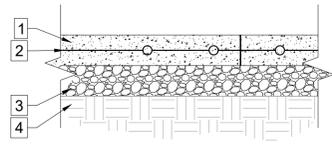
CHECKED BY:

DATE: 05/05/2022

KIMLEY-HORN PROJECT NO. 118252004

SITE UTILITY PLAN

C6.00

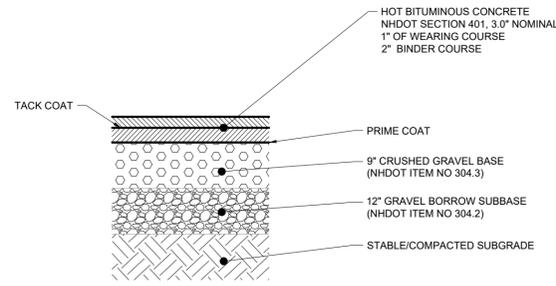


- NOTES:
- PAVEMENT SECTION TO BE PROVIDED BY GEOTECH REPORT. FINAL PAVEMENT SECTION TO BE DETERMINED BY ONSITE GEOTECH BASED UPON EXISTING SOIL CONDITIONS.
 - FIBER MESH REINFORCING CAN BE SUBSTITUTED FOR W/M. APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 - ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH NH-DOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
 - LIGHT BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

PAVEMENT LEGEND

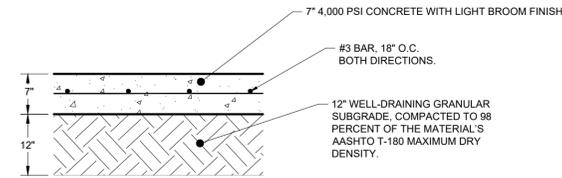
1	4" 3,500 PSI CONCRETE WITH LIGHT BROOM FINISH
2	6 X 6, 10, 10 W.W.M.
3	6" COMPACTED CRUSHED GRAVEL (NHDOT 304.3)
4	COMPACTED SUBGRADE

1 CONCRETE SIDEWALK
NOT TO SCALE



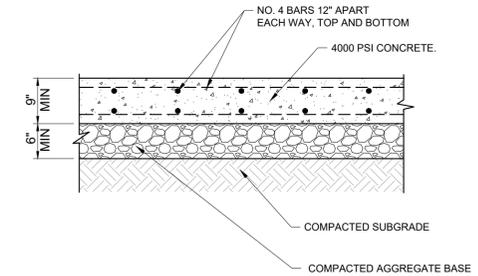
- NOTES:
- PAVEMENT SECTION PER GEOTECH ENGINEER REPORT PREPARED BY HALEY & ALDRICH, INC., DATED APRIL 2022. FINAL PAVEMENT SECTION TO BE DETERMINED BY ONSITE GEOTECH BASED UPON EXISTING SOIL CONDITIONS.
 - ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH NH-DOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.

2 HEAVY DUT ASPHALT
NOT TO SCALE



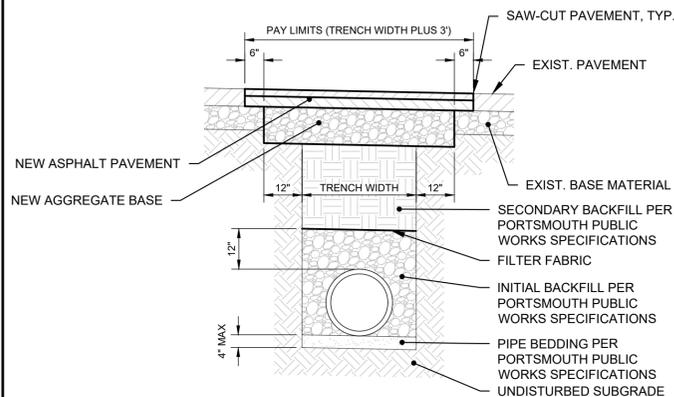
- NOTES:
- SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS. PAVING SECTION PROVIDED IS TAKEN FROM THE ASSOCIATED GEOTECH REPORT.
 - ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
 - BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
 - PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C. AND 1.75' DEEP.
 - PLACE CONTROL JOINTS AT A MAXIMUM OF 14' O.C.

3 CONCRETE PAVEMENT
NOT TO SCALE



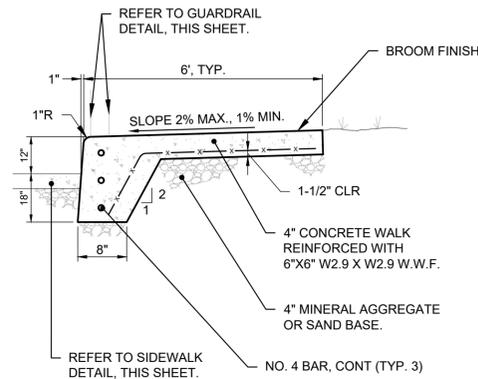
- NOTE:
- CONTRACTOR TO VERIFY SLAB THICKNESS AND REINFORCING WITH THE MOBILE IMAGING UNIT VENDOR. SOME SYSTEMS MAY REQUIRE THICKER PAVEMENT AND/OR NON-FERROUS REINFORCEMENT OR FIBERGLASS REINFORCED CONCRETE.

4 MOBILE IMAGING CONCRETE PAD
NOT TO SCALE



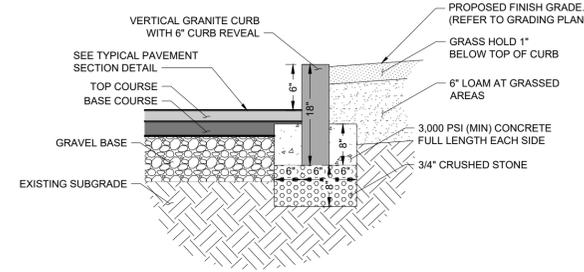
- NOTES:
- THE NEW ASPHALT PAVEMENT SHALL BE OF THE SAME TYPE AND, AT A MINIMUM, THE SAME THICKNESS AS THE EXISTING ASPHALT PAVEMENT.
 - THE NEW AGGREGATE BASE SHALL BE AT LEAST 1.5 TIMES THE THICKNESS OF THE EXISTING AGGREGATE BASE (6" MINIMUM).

5 PAVEMENT TRENCH REPAIR
NOT TO SCALE



- NOTES:
- USE 4000 PSI CONCRETE AND GRADE 60 STEEL.
 - PROVIDE CONTROL JOINTS 5' APART AND EXPANSION JOINTS 25' APART, AND WHERE SIDEWALKS ABUT RIGID MATERIALS.

6 SIDEWALK WITH 12" TURNDOWN
NOT TO SCALE

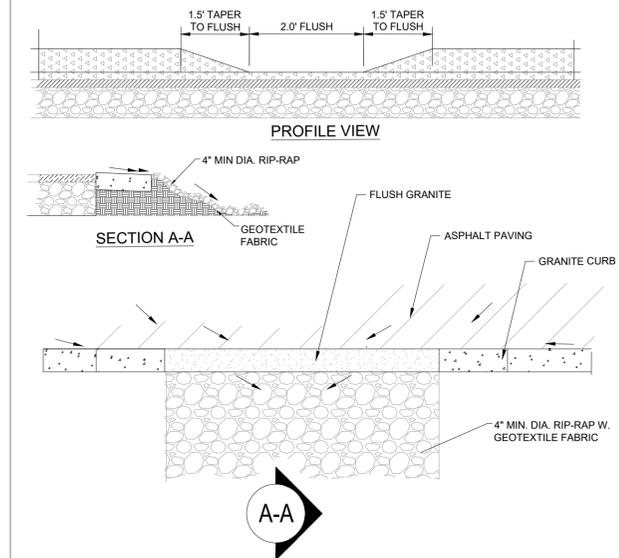


- NOTES:
- ADJOINING STONES SHALL HAVE THE SAME LENGTH.
 - JOINTS BETWEEN STONES SHALL HAVE A MAX SPACING OF 1/2" AND SHALL BE MORTARED.

CURB RADIUS TABLE

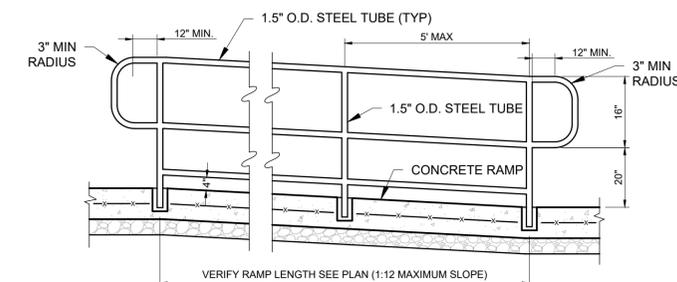
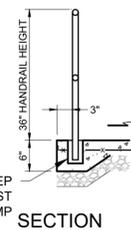
RADIUS	MAX LENGTH
<20'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>60'	10'

7 6" VERTICAL GRANITE CURB
NOT TO SCALE

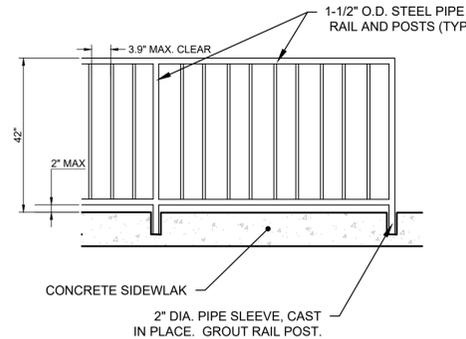


8 CURB CUT
NOT TO SCALE

- NOTES:
- PROVIDE 36" HEIGHT 1.5" O.D. HAND RAIL ON BOTH SIDES OF THE RAMP WITH 12" HAND RAIL EXTENSIONS PAST THE TOP AND BOTTOM OF THE RAMP.
 - VARIATIONS IN HAND RAIL HEIGHT SHALL NOT BE ALLOWED.
 - THE RAMP SHALL HAVE A MINIMUM WIDTH OF 60".
 - HAND RAIL SHALL BE SMOOTH-FINISH. ALL WELDED SURFACES SHALL BE PAINTED WITH TWO COATS OF ENAMEL. COLOR TO BE SELECTED BY THE ARCHITECT.
 - PROVIDE HAND RAIL/GUARD RAIL AT ALL RETAINING WALLS GREATER THAN 30" IN HEIGHT.
 - RAMP CONSTRUCTION SHALL BE SIMILAR TO CONCRETE SIDEWALKS.

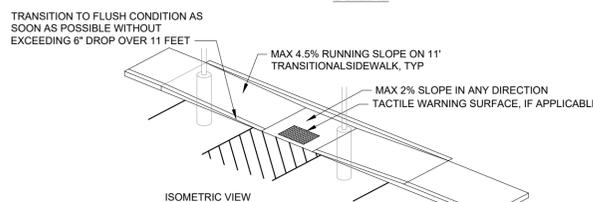
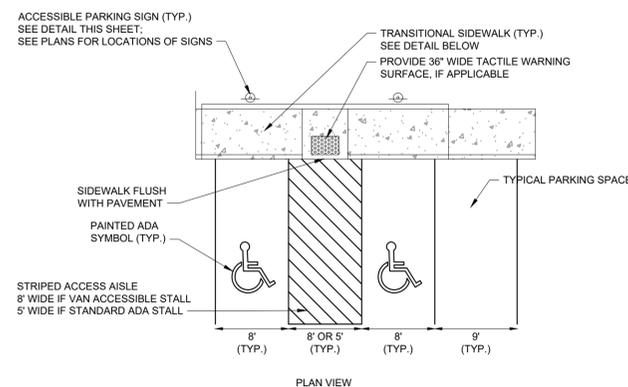


9 ACCESSIBLE RAMP WITH HANDRAIL
NOT TO SCALE

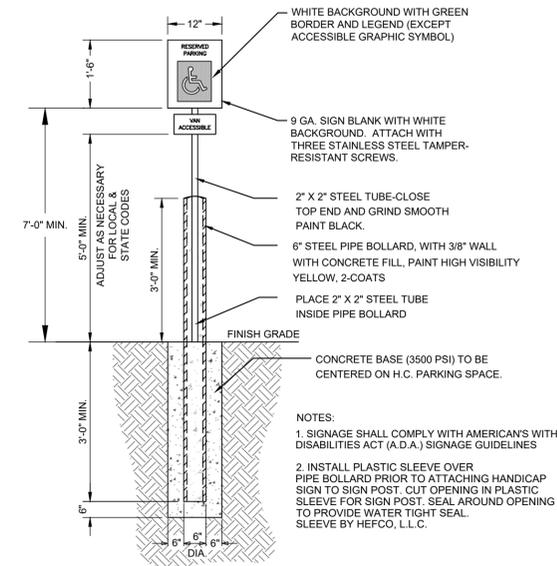


- NOTES:
- VARIATIONS IN GUARD RAIL HEIGHT SHALL NOT BE ALLOWED.
 - MAXIMUM CLEARANCE BETWEEN BOTTOM RAIL AND CONCRETE SHALL BE 2". GUARD RAIL SHALL BE SMOOTH-FINISHED. ALL WELDED SURFACES PRIMED AND PAINTED WITH TWO COATS OF ENAMEL. COLOR TO BE SELECTED BY ARCHITECT.

10 GUARD RAIL
NOT TO SCALE



11 ADA PARKING STALL LAYOUT
NOT TO SCALE

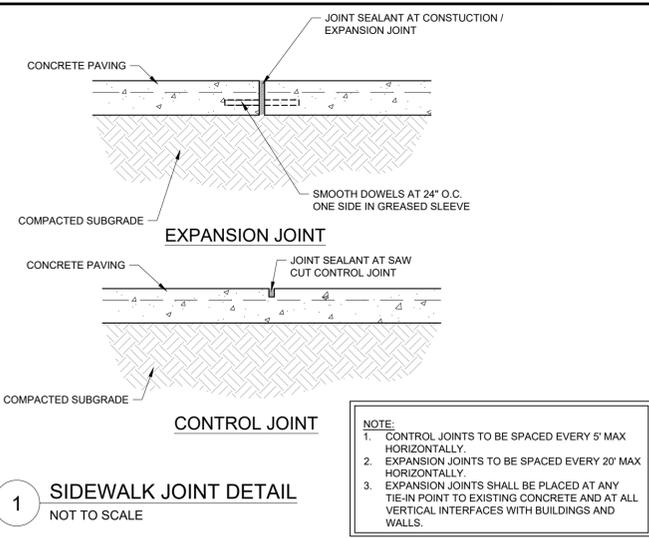


- NOTES:
- SIGNAGE SHALL COMPLY WITH AMERICAN'S WITH DISABILITIES ACT (A.D.A.) SIGNAGE GUIDELINES.
 - INSTALL PLASTIC SLEEVE OVER PIPE BOLLARD PRIOR TO ATTACHING HANDICAP SIGN TO SIGN POST. CUT OPENING IN PLASTIC SLEEVE FOR SIGN POST. SEAL AROUND OPENING TO PROVIDE WATER TIGHT SEAL. SLEEVE BY HEFCO, L.L.C.

12 ACCESSIBLE PARKING SIGNAGE
NOT TO SCALE

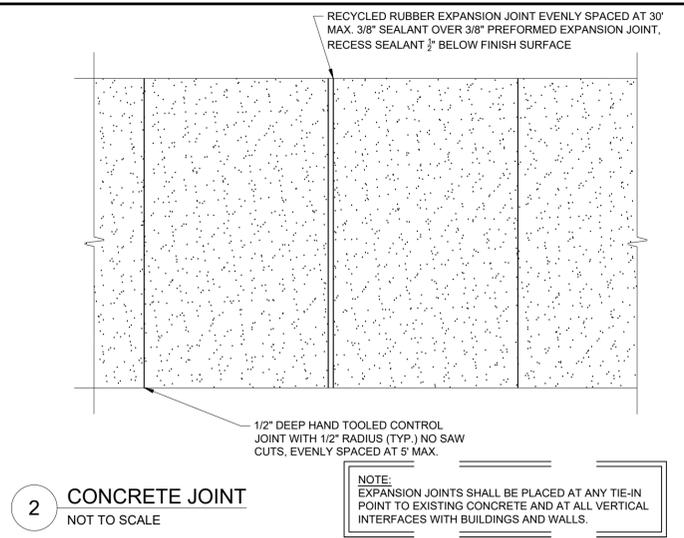
NO.	DATE	BY	REVISIONS																	
			1	2	3	4	5	6	7	8	9	10								

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
DATE: 05/05/2022
KIMLEY-HORN PROJECT NO. 118252004



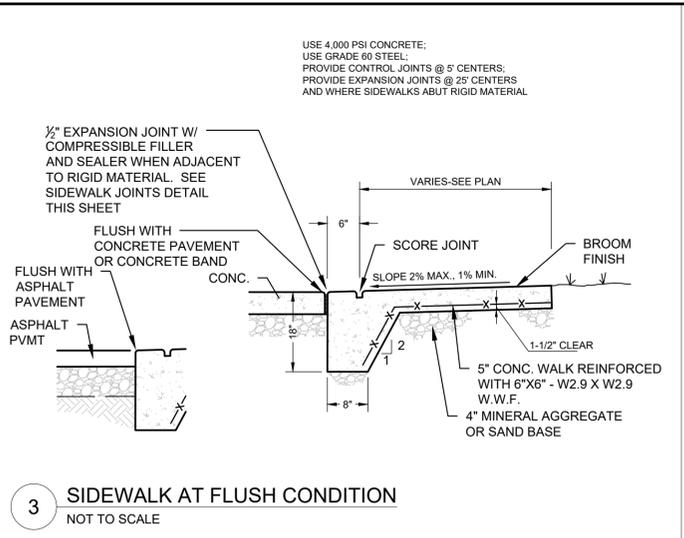
1 **SIDEWALK JOINT DETAIL**
NOT TO SCALE

NOTE:
1. CONTROL JOINTS TO BE SPACED EVERY 5' MAX HORIZONTALLY.
2. EXPANSION JOINTS TO BE SPACED EVERY 20' MAX HORIZONTALLY.
3. EXPANSION JOINTS SHALL BE PLACED AT ANY TIE-IN POINT TO EXISTING CONCRETE AND AT ALL VERTICAL INTERFACES WITH BUILDINGS AND WALLS.

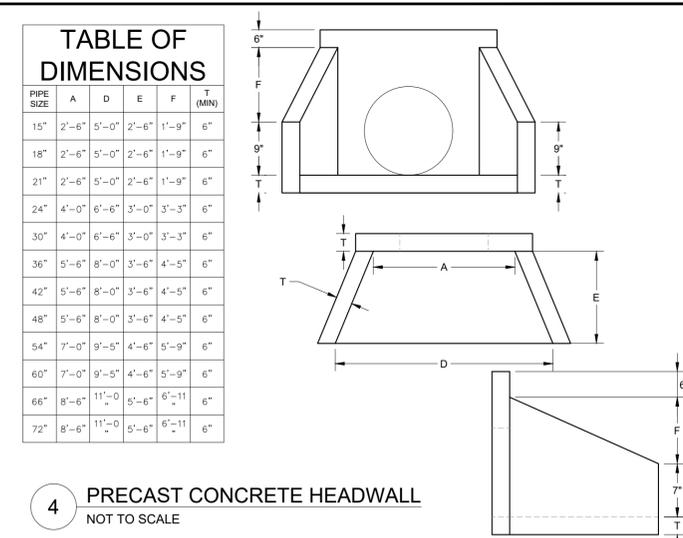


2 **CONCRETE JOINT**
NOT TO SCALE

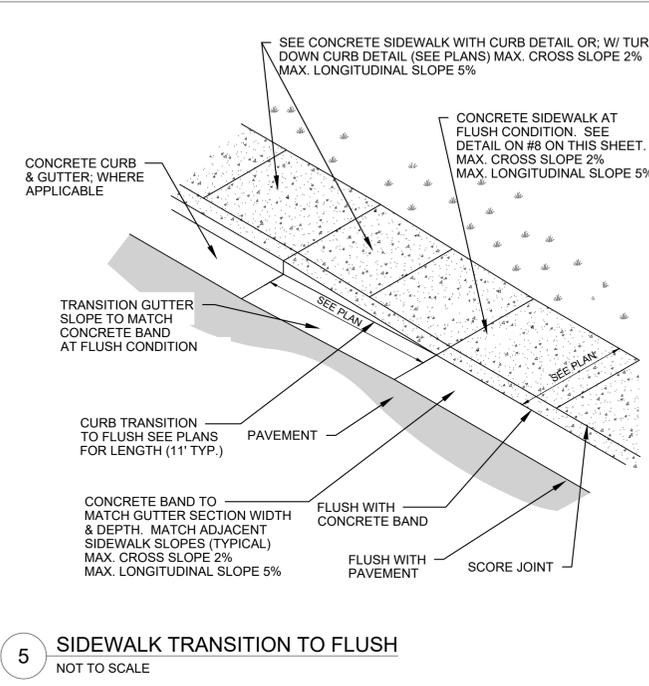
NOTE:
EXPANSION JOINTS SHALL BE PLACED AT ANY TIE-IN POINT TO EXISTING CONCRETE AND AT ALL VERTICAL INTERFACES WITH BUILDINGS AND WALLS.



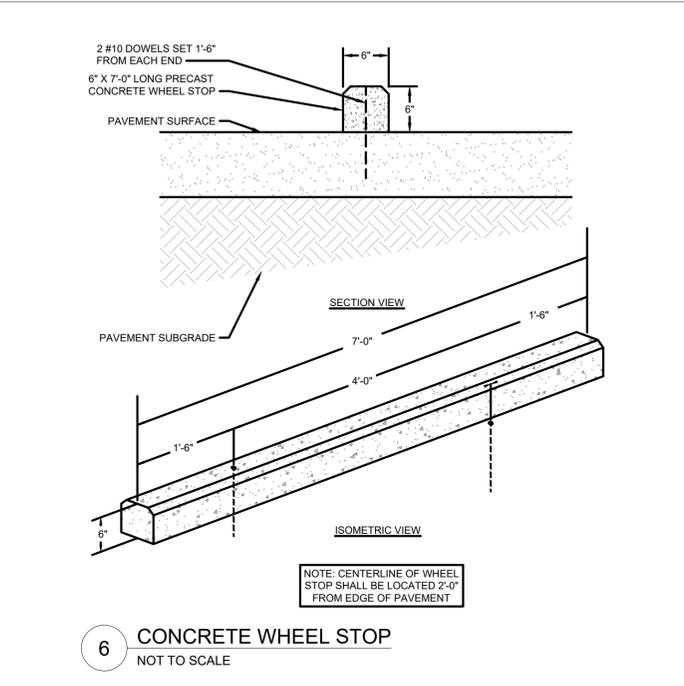
3 **SIDEWALK AT FLUSH CONDITION**
NOT TO SCALE



4 **PRECAST CONCRETE HEADWALL**
NOT TO SCALE

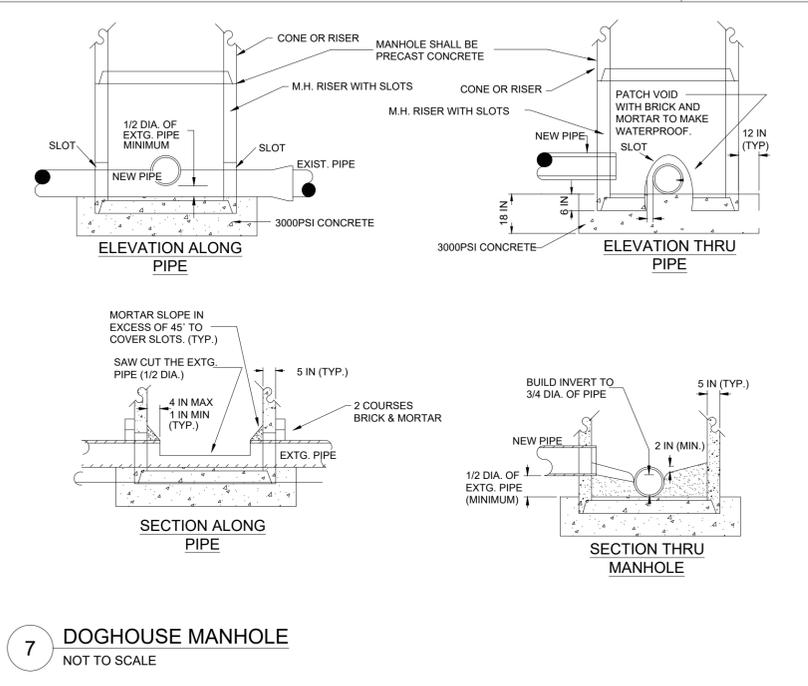


5 **SIDEWALK TRANSITION TO FLUSH**
NOT TO SCALE

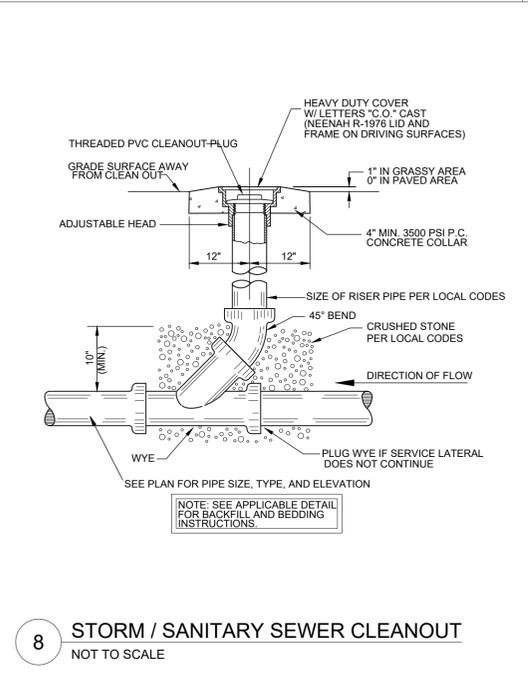


6 **CONCRETE WHEEL STOP**
NOT TO SCALE

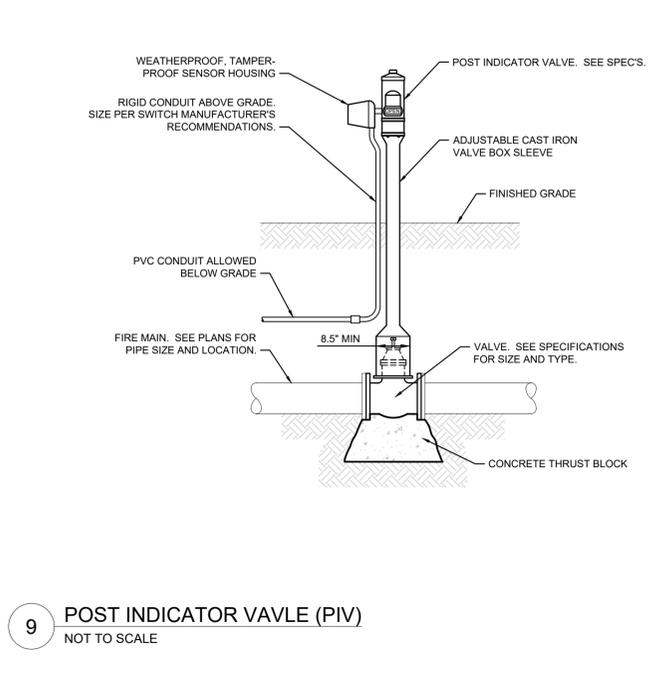
NOTE: CENTERLINE OF WHEEL STOP SHALL BE LOCATED 2'-0" FROM EDGE OF PAVEMENT



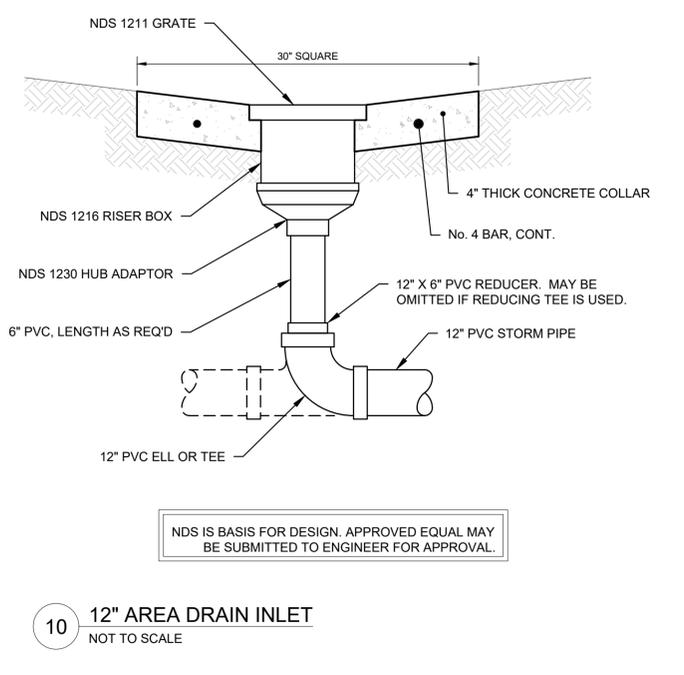
7 **DOGHOUSE MANHOLE**
NOT TO SCALE



8 **STORM / SANITARY SEWER CLEANOUT**
NOT TO SCALE

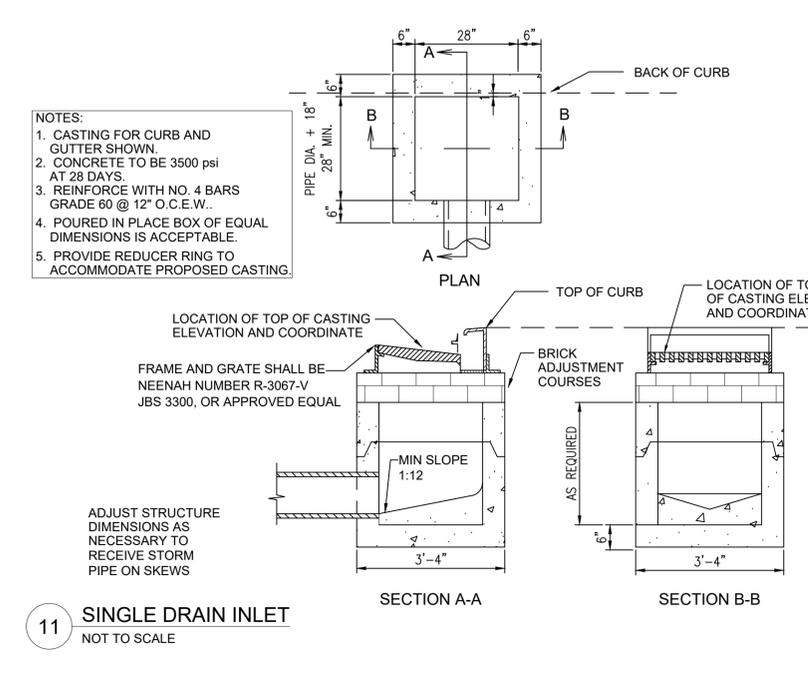


9 **POST INDICATOR VAVLE (PIV)**
NOT TO SCALE



10 **12" AREA DRAIN INLET**
NOT TO SCALE

NDS IS BASIS FOR DESIGN. APPROVED EQUAL MAY BE SUBMITTED TO ENGINEER FOR APPROVAL.



11 **SINGLE DRAIN INLET**
NOT TO SCALE

NOTES:
1. CASTING FOR CURB AND GUTTER SHOWN.
2. CONCRETE TO BE 3500 psi AT 28 DAYS.
3. REINFORCE WITH NO. 4 BARS GRADE 60 @ 12" O.C.E.W..
4. POURED IN PLACE BOX OF EQUAL DIMENSIONS IS ACCEPTABLE.
5. PROVIDE REDUCER RING TO ACCOMMODATE PROPOSED CASTING.

NO.	DATE	BY	REVISIONS																	
			1	2	3	4	5	6	7	8	9	10								

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
DATE: 05/05/2022
KIMLEY-HORN PROJECT NO. 118252004

SITE DETAILS

C7.01

May 4, 2022

To: Portsmouth Conservation Commission

From: John Rice

RE: Installation of a split rail fence in the Woodlands Buffer Zone.

This application is before you because the wetlands buffer zone line goes through the back of my house as shown on the map in your packet. I have recently acquired an athletic husky-mix dog (Tuck) that thinks nothing of bursting through typical electronic fences. Once through, like any husky, he takes off and only returns when he feels like it. I have determined that we need a humane, but effective way to contain him. Further, our neighborhood approves fences only if they conform to zoning laws and through the mutual consent of the Woodlands Board of Directors and our abutters. The abutters all love Tuck and are firmly on board with the project. The BOD is waiting for your approval before issuing me an OK, but they are also on board. I prefer a natural look for the fence as we are surrounded by woods. Therefore, we have decided with your approval to put up a natural, three-rail cedar fence with vinyl-coated mesh. The enclosure will allow Tuck to run around without stress and allow me not to worry about Tuck running off. Please note that less than 6 square feet of ground will be disturbed and absolutely no wet areas, of which there is only one in my back yard. The exact details are below.

Thank you very much for your time and consideration.

John and Joan Rice

Detailed Description of Proposed Work *

Installation of a roughly 220-foot three-railed western cedar split rail fence with three gates. The fence will be 48" tall and have a vinyl-coated chainlink over galvanized steel mesh in between rails. There will be about 30-posts installed. They are 5"X5" square. There will be two, single-leaf 4' gates and one 6' feet double leaf. The setting of these gate posts will require concrete. Two gates will be abutting the house and one will be at the end of the property near but not beyond the edge of wet. The fence will roughly follow the outline of the lawn as drawn. The purpose of the fence is to create an enclosure for my husky-mix dog who would easily break through an electric fence.

Brief Description of Existing Land Use *

This is a backyard lawn.

Land Use Application Fee Calculation

Area of disturbance in wetland or wetland buffer (s.f.)

5.2

Wetland Conditional Use Permit -- Impacted Jurisdictional Areas

Inland Wetland

--

Tidal Wetland

--

Inland Wetland Buffer

Tidal Wetland Buffer

--

Vernal Pool

--

Wetland or Wetland Buffer Activity

Total Area of Inland Wetland (both on and off the parcel)
(Sq.Ft.)

UK

Total Area of Vernal Pool (both on and off the parcel)
(Sq.Ft.)

None

Distance of proposed structure or activity to edge of
wetland (ft.):

3

Wetland Buffer Total Area on Lot (Sq.Ft.)

9,000

Wetland Buffer Area to be Disturbed (Sq.Ft.)

5.2

Inland Wetland Total Area on Lot (Sq.Ft.)

None

Inland Wetland Area to be Disturbed (Sq.Ft.)

0

Vernal Pool Total Area on Lot (Sq.Ft.)

0

Vernal Pool Area to be Disturbed (Sq.Ft.)

0

Tidal Wetland Total Area on Lot (Sq.Ft.)

7,500 (I am not sure where this number comes from.)

Tidal Wetland Area to be Disturbed (Sq.Ft.)

0



460 FW Hartl

100 Feet

50

25











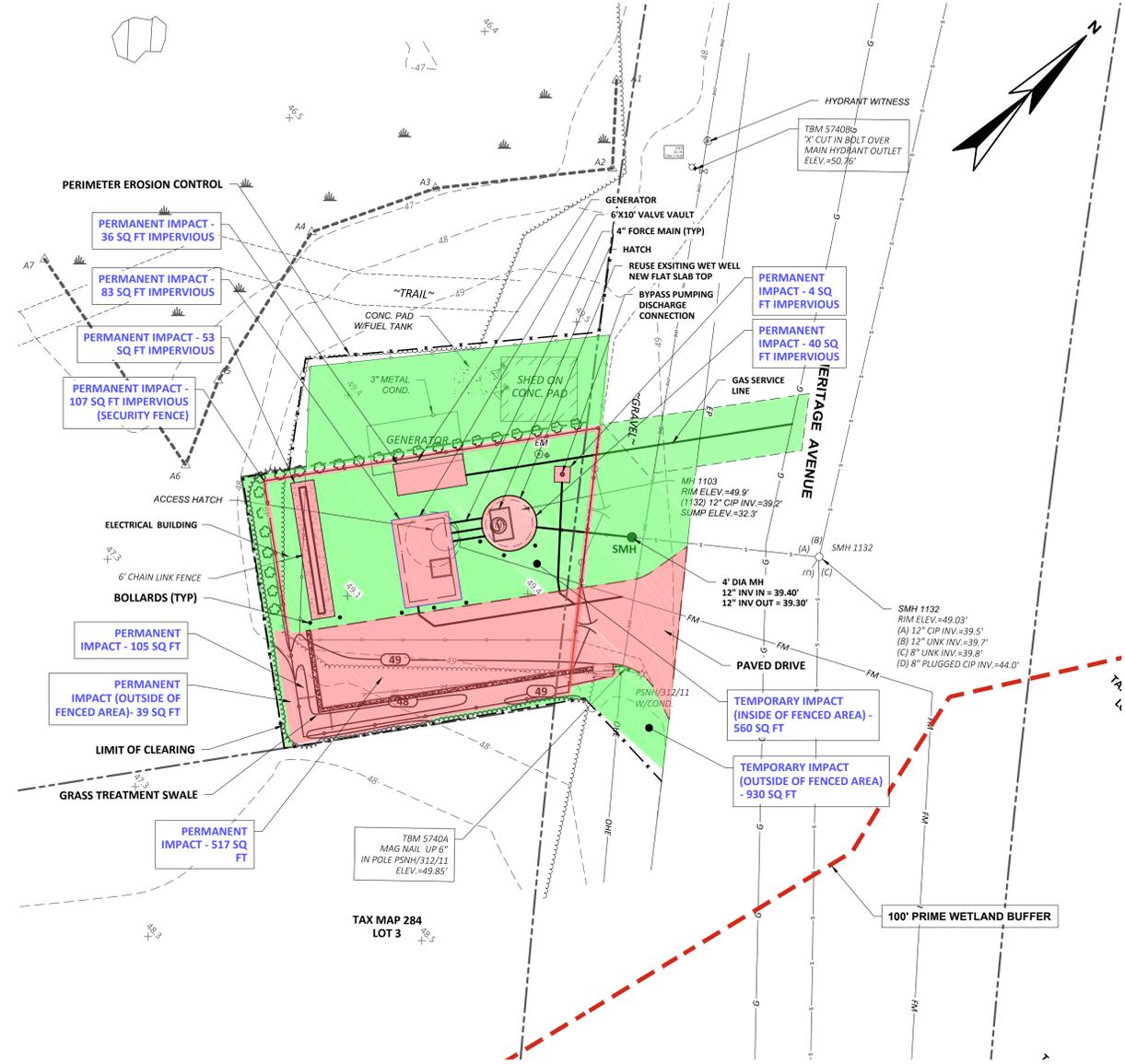


Heritage Avenue Pump Station Narrative

The City of Portsmouth, NH (City) owns, operates, and maintains the Heritage Avenue Pump Station, which is one of several City operated stations that are critical to the collection and treatment of the City's wastewater. The station is located on a fenced 1,300 square foot property on Heritage Avenue in Portsmouth. Heritage Avenue Pump Station was constructed in 1976 and is a "can" style station with constant speed pumps and piping located in a below grade steel structure adjacent to a separate, precast concrete 6-ft diameter wet well. Also located on the site are an above ground emergency generator within a fiberglass enclosure, diesel fuel tank, and pad-mounted 8-foot by 10-foot shed housing electrical gear, operator display, and pump controls.

The Heritage Avenue Pump Station and its equipment have reached the end of their useful life and warrant replacement. The City is planning to replace the Heritage Avenue Pump Station to improve pump station reliability, accessibility, and safety with the conversion from a dry pit to a submersible station. In addition, the project will demolish the existing diesel emergency generator with a new natural gas driven emergency generator at the City's request.

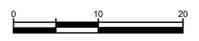
The proposed project includes 1,490 sq. ft. of temporary impacts to the 100 ft. Prime Wetland Buffer for demolition of the existing pump station, construction access, and trench pipe installation. An additional 984 sq. ft. of permanent impacts to the 100 ft. Prime Wetland Buffer for the construction of the electrical control cabinet, generator, wet well, valve vault, gravel drive, and perimeter fencing. No direct wetland impacts are proposed as a result of this project. A grass treatment swale and check dams are proposed to collect, treat, and convey stormwater. Temporary impact areas outside of the new fence will be restored using a native wetland seed mix. Additionally, native shrub plantings are proposed to between the new pump station and wetlands.



WETLANDS IMPACT FIGURE
SCALE: 1"=10'

LEGEND:

TEMPORARY PRIME WETLAND BUFFER IMPACT AREA	
PERMANENT PRIME WETLAND BUFFER IMPACT AREA	
PERIMETER EROSION CONTROL	
EDGE OF WETLANDS	
100' PRIME WETLAND BUFFER	



NOTES:
 TEMPORARY IMPACTS TO WETLAND BUFFER: 1490 SQ FT
 PERMANENT IMPACTS TO WETLAND BUFFER: 984 SQ FT
 IMPERVIOUS AREA REMOVED: 220 SQ FT
 PROPOSED IMPERVIOUS AREA : 743 SF

JURISDICTIONAL WETLANDS DEPICTED WERE DELINEATED ON AUGUST 9, 2019 BY MARC JACOBS, NH, CERTIFIED WETLANDS SCIENTIST NUMBER 90. A DELINEATION REPORT IS ATTACHED FOR REFERENCE. SURVEY OF THE PROJECT AREA WAS COMPLETED BY DOUCET SURVEY INC.

- HORIZONTAL DATUM: NEW HAMPSHIRE STATE NAD 83
- VERTICAL DATUM: APPROXIMATE NAVD88 (GEOID12A)(±.2')
- UNITS: US SURVEY FEET
- FOR NOTES, LEGEND AND ABBREVIATIONS REFER TO DRAWING C-1.
- FORCE MAIN LOCATION BASED ON CITY'S GIS. LOCATION TO BE CONFIRMED VIA TEST PITS AS SHOWN.

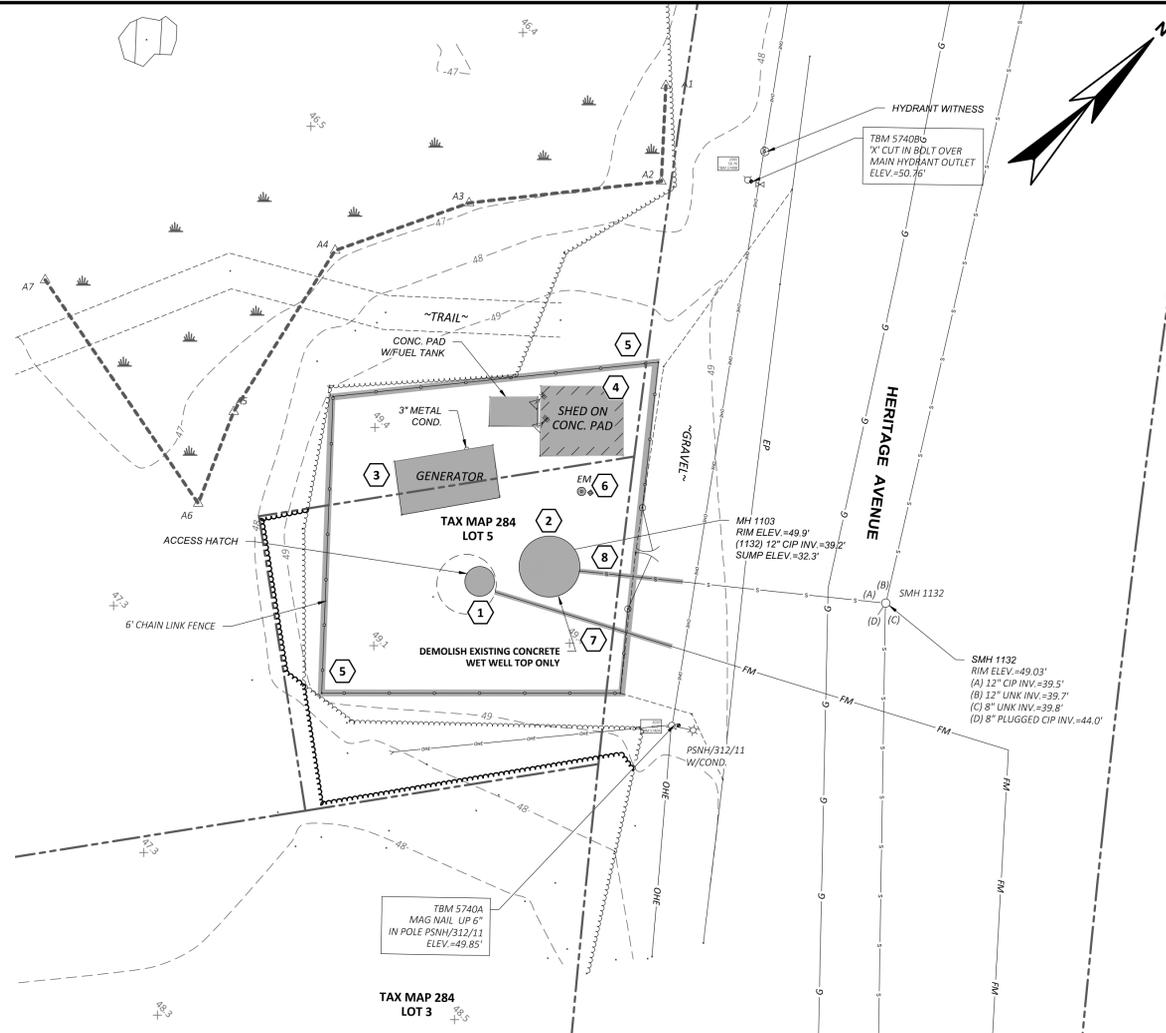
NO	REVISIONS	APPD DATE

PROJECT NO: 2005
 DESIGNED: CAD COORD: K.TURNER
 CAD: CHECKED: DATE:
 APPROVED: DATE:
 SUBMISSION: DATE:

WRIGHT-PIERCE
 603.430.3728 | www.wright-pierce.com
 230 COMMERCE WAY, SUITE 302, PORTSMOUTH, NH 03801

CITY OF PORTSMOUTH, NEW HAMPSHIRE
 HERITAGE AVENUE PUMP STATION
 REPLACEMENT

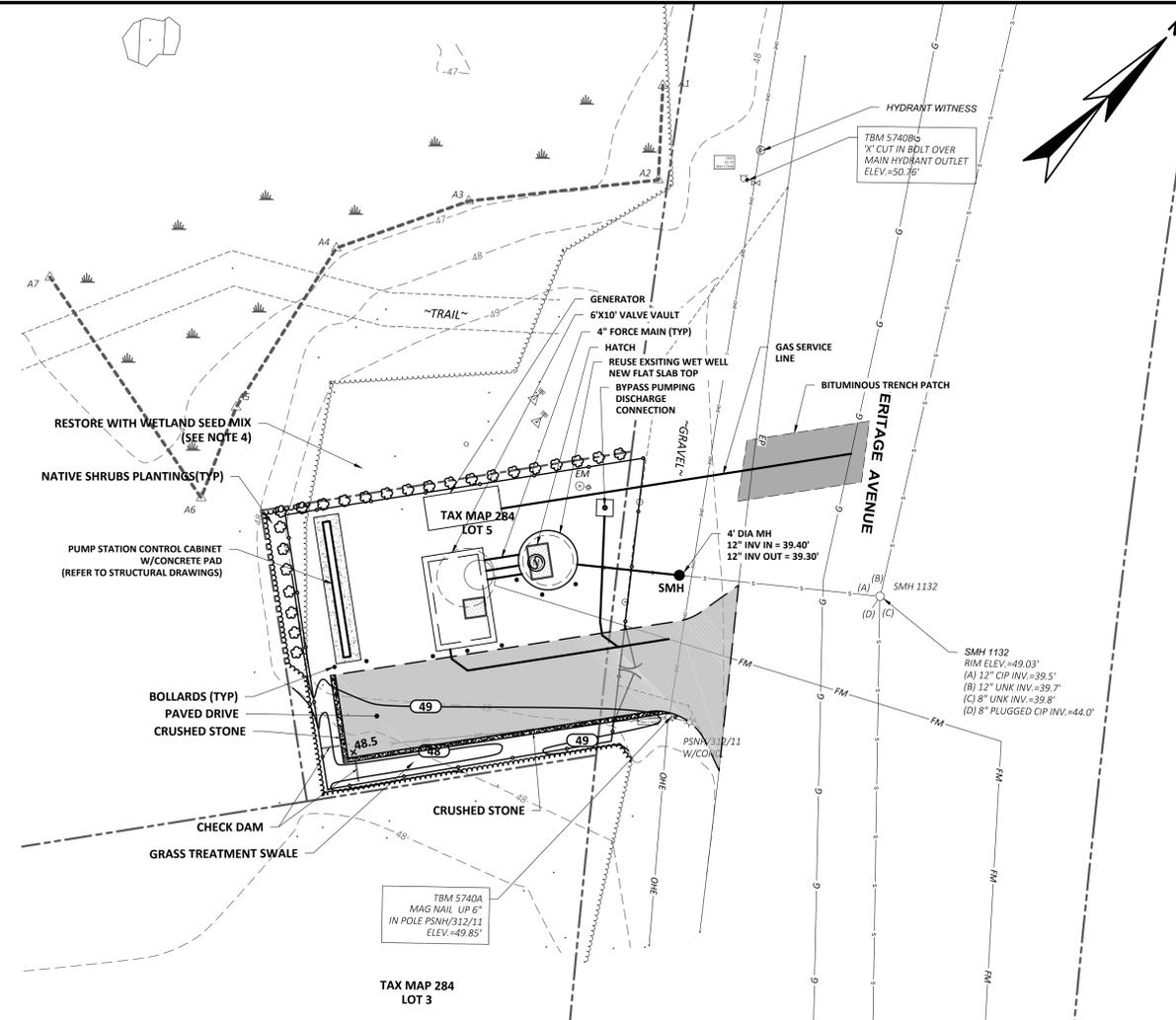
WETLANDS IMPACT FIGURE



SITE DEMOLITION PLAN
SCALE: 1"=10'

DEMOLITION NOTES:

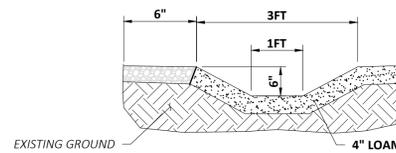
- 1 REMOVE/DEMOLISH EXISTING PUMP STATION DRY WELL, CHIMNEY, PIPING AND EQUIPMENT - DRY WELL TO BE FILLED WITH FLOWABLE FILL. REFER TO PUMP STATION DEMOLITION PLANS
- 2 REMOVE/DEMOLISH EXISTING WET WELL SLAB TOP INCLUDING CONCRETE TOP, MANHOLE COVER.
- 3 REMOVE/DEMOLISH EXISTING GENERATOR INCLUDING BUT NOT LIMITED TO GENERATOR, CONCRETE PAD, ALL ELECTRICAL APPURTENANCES, CONTROLS, UNDERGROUND ELECTRICAL FEEDS, CONDUIT ETC.
- 4 REMOVE/DEMOLISH EXISTING SHED IN IT ENTIRETY.
- 5 REMOVE/DEMOLISH EXISTING CHAIN LINK FENCE AND GATE.
- 6 REMOVE/DEMOLISH EXISTING ELECTRICAL METER AND POST.
- 7 REMOVE/DEMOLISH EXISTING CI 6" FM TO THE EXTENTS SHOWN.
- 8 REMOVE/DEMOLISH EXISTING 12" SEWER TO THE EXTENTS SHOWN.



SITE MODIFICATION PLAN
SCALE: 1"=10'

MODIFICATIONS NOTES:

- 1. PROVIDE A MINIMUM OF 5- FEET OF SEPARATION BETWEEN GENERATOR AND BUILDING.
- 2. PROVIDE A MINIMUM OF 5- FEET OF SEPARATION BETWEEN WET WELL VENT PIPE TO ANY ELECTRICAL EQUIPMENT.
- 3. SET TOP OF VALVE VAULT AT ELEVATION 50.80
- 4. RESTORE DISTURBED AREA OUTSIDE OF FENCE LINE WITH WETLAND SEED MIX. SEE SPECIFICATION 02485.



GRASS TREATMENT SWALE
SCALE: NTS

NOTES:

- 1. FOR NOTES, LEGEND AND ABBREVIATIONS REFER TO DRAWING C-1.
- 2. FORCE MAIN LOCATION BASED ON CITY'S GIS. LOCATION TO BE CONFIRMED VIA TEST PITS AS SHOWN.



NO	REVISIONS	APPD DATE

PROJECT NO: 2005
DESIGNED: K.TURNER
CAD COORD: K.TURNER
CAD: K.TURNER
CHECKED: K.TURNER
DATE: K.TURNER
APPROVED: K.TURNER
DATE: K.TURNER
SUBMISSION: K.TURNER

WRIGHT-PIERCE
603.430.3728 | www.wright-pierce.com
230 COMMERCE WAY, SUITE 302, PORTSMOUTH, NH 03801

CITY OF PORTSMOUTH, NEW HAMPSHIRE
HERITAGE AVENUE PUMP STATION REPLACEMENT
EXISTING SITE CONDITIONS DEMOLITION AND MODIFICATIONS PLAN
DRAWING C-2

EROSION AND SEDIMENTATION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE NEW HAMPSHIRE STORMWATER MANUAL BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, TERRAIN ALTERATION BUREAU, DATED DECEMBER 2008

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES REQUIRED ARE SHOWN ON THE DRAWINGS. PROVIDE SILT FENCE, STONE CHECK DAMS AND OTHER EROSION CONTROL MEASURES AS REQUIRED TO ADEQUATELY PREVENT SEDIMENT TRANSPORT AS NOTED IN THE BMP.

ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL AND THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, ENV-WQ 1500: ALTERATION OF TERRAIN, DECEMBER 2008

- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION, IN NO CASE AT MORE THAN 5 ACRES AT A TIME, WILL BE MAINTAINED IN AN UNTREATED OR UN-VEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL, AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
- TEMPORARY STORAGE OF STOCKPILED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION.
- EROSION CONTROL MEASURES SUCH AS SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) AND OUTLET PROTECTION (WHERE APPLICABLE) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OR EARTH MOVING OPERATIONS OF UPGRADIENT DRAINAGE AREAS.
- FUGITIVE DUST MUST BE CONTROLLED IN ACCORDANCE WITH NEW HAMPSHIRE STANDARDS.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED AND/OR WILL NOT ERODE UNDER THE CONDITIONS OF A 10-YEAR STORM. STABILIZATION SHALL BE DEFINED AS ONE OF THE FOLLOWING:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIALS SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL NOT BE STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3 TO 1) UNLESS STABILIZED WITH PERMANENT EROSION CONTROL MEASURES. IF MOWING IS TO OCCUR, MAXIMUM SLOPE ANGLE SHALL BE THREE HORIZONTAL TO ONE VERTICAL (3 TO 1). ON SLOPES FOUR HORIZONTAL TO ONE VERTICAL (4 TO 1), FINAL PREPARATION SHOULD INCLUDE SURFACE ROUGHING.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND RE-GRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER. AT NO TIME SHALL THE INTEGRITY OF THE EROSION CONTROL FENCE BE IN DANGER DUE TO BUILD UP OF SEDIMENT.
- RE-VEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND RE-VEGETATED.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 2 BALES (70-90 LBS) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE.
- DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- SEED MIX SELECTION AND APPLICATION RATES WILL BE CONSISTENT WITH THE FOLLOWING TABLES AS REFERENCED FROM MINNICK, E.L. AND H.T. MARSHALL, STORMWATER MANAGEMENT AND EROSION CONTROL FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, ROCKINGHAM COUNTY CONSERVATION DISTRICT, AUGUST 1992, AND TABLES 4-1 THROUGH 4-3 OF SECTION 3 IN THE NEW HAMPSHIRE STORMWATER MANUAL. NOTE: REED CANARY GRASS SHALL NOT BE USED.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE WORK AREA IS STABILIZED.
- WETLANDS (EXCEPT THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- IN GENERAL, AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS SHALL HAVE A MAXIMUM PERIOD OF EXPOSURE OF NOT MORE THAN 15 DAYS.
- FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IN ALL AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS.

EROSION CONTROL DURING WINTER CONSTRUCTION

- WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH MAY 1
- WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- EXPOSED AREAS SHOULD BE LIMITED TO WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY PRECIPITATION EVENT.
- ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3

LIME AND FERTILIZER SCHEDULE

SEEDING TYPE	SEED DATES	LIME RATE (TONE/ACRE)	FERTILIZER RATE/RATIO (TYPE) (LBS/1,000 SQ. FT.)
PERMANENT AND/OR TEMPORARY	MAY. 1 - SEPT. 15	3	600/ENGINEER APPROVED (N-P205-K20)

- NOTES:
- USE LOW PHOSPHATE FERTILIZER AT ALL TIMES AND SLOW RELEASE NITROGEN FERTILIZER WHEN BETWEEN 25 AND 250 FEET OF A SURFACE WATER BODY.
 - NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
 - APPLY LIMESTONE AT 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE.

TEMPORARY VEGETATION (TABLE 4-1)

ADDITIONAL TEMPORARY SEED MIXTURE (FOR PERIODS LESS THAN 12 MONTHS)

DATES	SEED	RATE
PRIOR TO MAY 15	OATS	80 LBS/ACRE
AUG. 15 - SEP. 15	ANNUAL RYE GRASS	40 LBS/ACRE
AUG. 15 - SEP. 15	WINTER RYE GRASS	112 LBS/ACRE
APR. 1 - JUN. 1 (AUG. 15 - SEP. 15)	PERENNIAL RYE GRASS	40 LBS/ACRE

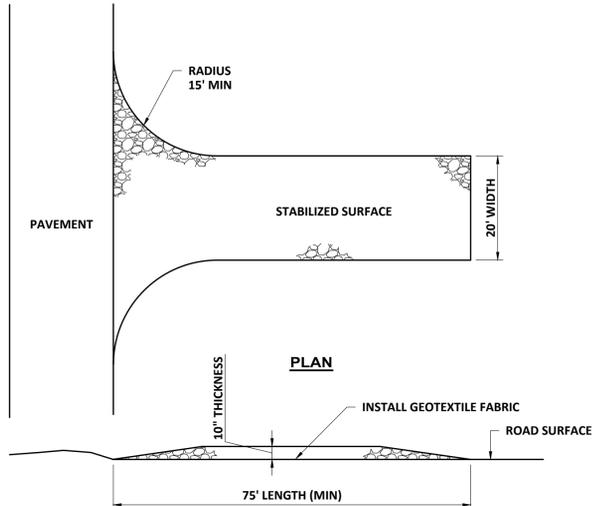
PERMANENT VEGETATION (TABLE 4-2)

USE	MIXTURE TABLES	SOIL DRAINAGE			
		I.	II.	III.	IV.
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXC.	GOOD
WATERWAYS, EMERGENCY SPILLWAYS AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXC.	EXC.	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXC.	EXC.	FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF)	F	FAIR	EXC.	EXC.	
	G	FAIR	EXC.	EXC.	

- NOTES:
- I. DROUGHTY
II. WELL DRAINED
III. MODERATELY WELL DRAINED
IV. POORLY DRAINED
 - EXC. = EXCELLENT
 - REFER TO TABLE 4-3 FOR SEED MIXTURE AND APPLICATION RATES

PERMANENT VEGETATION (TABLE 4-3)

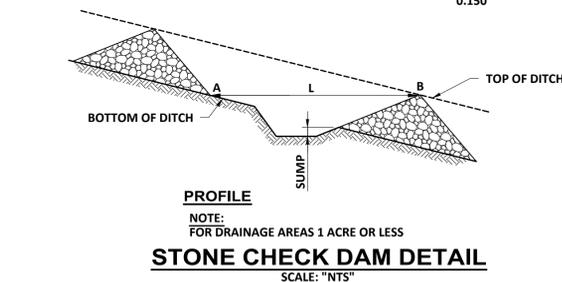
MIXTURE	SPECIES	RATE-POUNDS PER ACRE 1,000 SQ. FT.	
A	TALL FESCUE	20	0.45
	CREeping RED FESCUE	20	0.45
	REDTOP	2	0.05
	TOTAL	42	0.95
B	TALL FESCUE	15	0.35
	CREeping RED FESCUE	10	0.25
	CROWN VETCH/OR	15	0.35
	FLATPEA	30	0.75
	TOTAL	40 OR 55	0.95 OR 1.35
C	TALL FESCUE	20	0.45
	CREeping RED FESCUE	20	0.45
	BIRDSFOOT TREFOIL	8	0.2
	TOTAL	48	1.10
E	CREeping RED FESCUE	50	1.15
	KENTUCKY BLUEGRASS	50	1.15
	TOTAL	100	2.30
F	TALL FESCUE	150	3.60



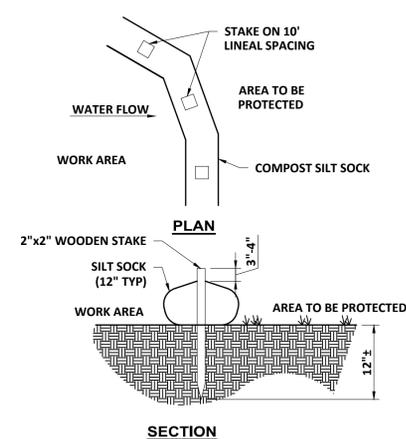
STABILIZED CONSTRUCTION EXIT
SCALE: "NTS"

CROSS SECTION

DITCH SLOPE (FT/FT)	L (FT)
0.020	100
0.030	66
0.040	50
0.050	40
0.080	25
0.100	20
0.120	17
0.150	13

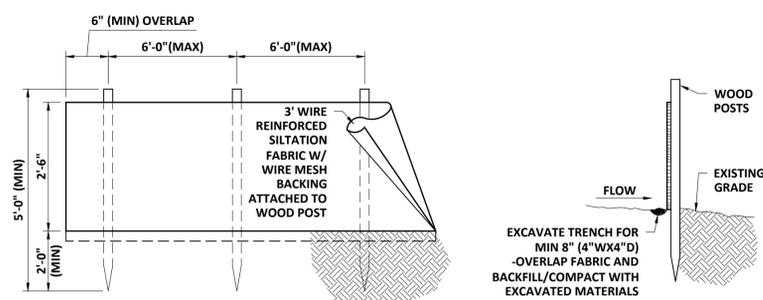


STONE CHECK DAM DETAIL
SCALE: "NTS"



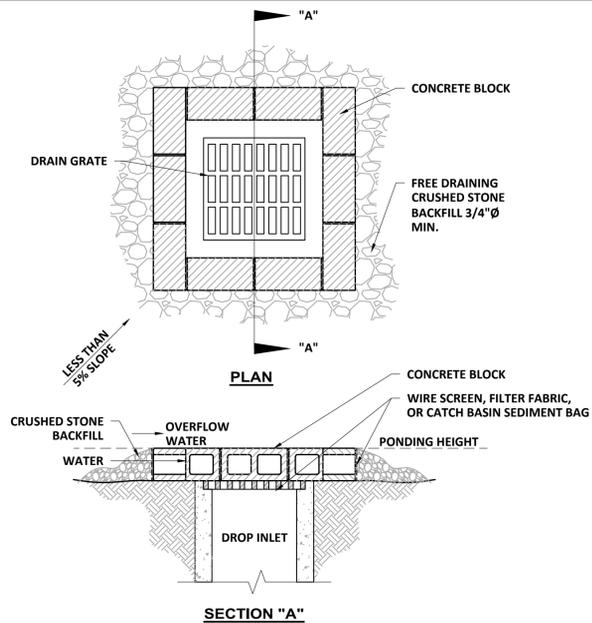
- NOTES:
- ALL MATERIAL TO MEET SPECIFICATIONS
 - SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
 - SILT SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER
 - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

SILT SOCK INSTALLATION DETAIL
SCALE: "NTS"



- NOTES:
- MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET
 - MAXIMUM SLOPE ABOVE FENCE SHALL BE 2H TO 1V

SILT FENCE INSTALLATION DETAIL
SCALE: "NTS"



- NOTES:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS(LESS THAN 3%).
 - EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
 - THE TOP OF THE STRUCTURE, PONDING HEIGHT, MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
 - SILT BAGS MAY ALSO BE USED FOR CB GRATE INLET PROTECTION.

DROP INLET SEDIMENT BARRIER DETAIL
SCALE: "NTS"

NO	REVISIONS	APPD	DATE

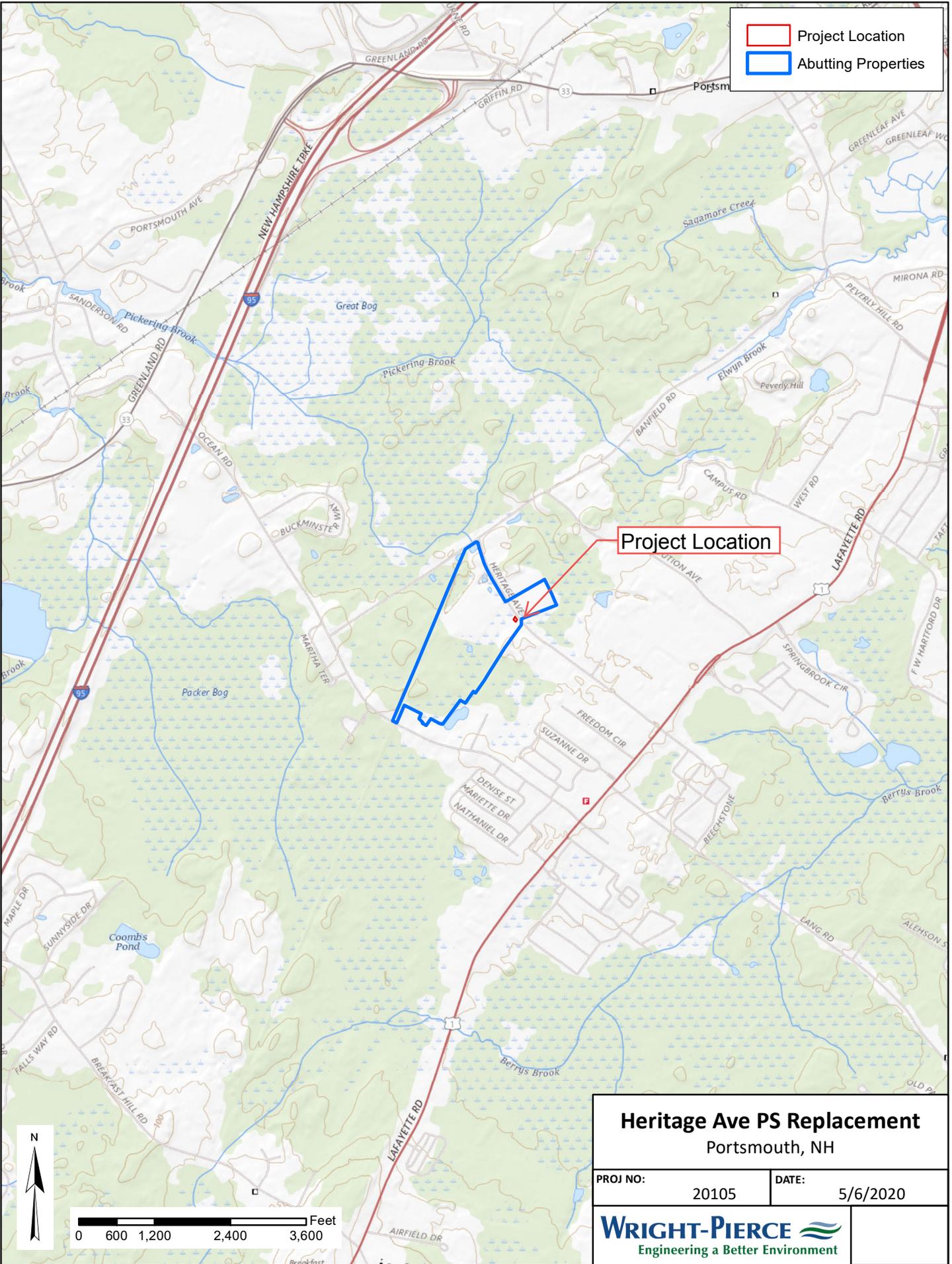
PROJECT NO: 20105
 DESIGNED: CAD COORD: K.TURNER
 CAD: CHECKED: DATE: APPROVED: DATE: SUBMISSION: DATE:

WRIGHT-PIERCE
 603.430.3728 | www.wright-pierce.com
 230 COMMERCE WAY, SUITE 302, PORTSMOUTH, NH 03801

CITY OF PORTSMOUTH, NEW HAMPSHIRE
 HERITAGE AVENUE PUMP STATION
 REPLACEMENT

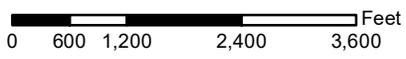
EROSION CONTROL NOTES AND DETAILS

DRAWING
C-4



	Project Location
	Abutting Properties

Project Location



Heritage Ave PS Replacement	
Portsmouth, NH	
PROJ NO:	20105
DATE:	5/6/2020
WRIGHT-PIERCE 	
Engineering a Better Environment	

JDM W:\GIS_Development\Projects\NH\Portsmouth\20105_HeritageAvePS\IMXD\TaxMap-8x11.mxd



Heritage Ave PS Replacement Tax Map Portsmouth, NH

PROJ NO: 20105 DATE: 5/6/2020

WRIGHT-PIERCE 
Engineering a Better Environment

New Hampshire Natural Heritage Bureau

NHB DataCheck Results Letter

To: Jacob Shactman, Wright-Pierce
230 Commerce Way
Suite 302
Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Date: 4/12/2022 (valid until 4/12/2023)

Re: Review by NH Natural Heritage Bureau of request submitted 3/24/2022

Permits: GRANT APP - Portsmouth, NHDES - Wetland Permit by Notification (PBN)

NHB ID: NHB22-1139

Applicant: Jacob Shactman

Location: Portsmouth
329 Heritage Ave

Project

Description: The proposed Heritage Avenue Pump Station Upgrade will convert the existing station to a submersible type station to improve pump station reliability, accessibility, and safety. In addition, the project will replace the existing diesel emergency generator with a new natural gas driven emergency generator, along with the addition of a 512 sq ft gravel driveway to improve access to the pump station.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 2022-03-24 5:13:21 PM, and cannot be used for any other project.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: **NHB22-1139**

NHB22-1139



Construction Sequence

The proposed project is anticipated to begin construction in Spring 2023. A general sequence of construction activities is provided below. The final schedule will be determined by the City and contractor upon receipt of permit approvals.

General Schedule:

1. Contractor mobilizes to project area (Spring 2023).
2. Install applicable erosion and sedimentation control practices.
3. Furnish, install, and test temporary bypass pumping system and discharge pipelines.
4. Begin site demolition as shown on Site Demolition Plan (Drawing C-2).
5. Construct new pump station and associated mechanical/electrical appurtenances while maintaining wastewater pumping capabilities as shown on Site Modification Plan (Drawing C-2).
6. Construct gas service line and demonstrate operation of generator.
7. Take bypass pump offline and demonstrate proper operation of the new pump station .
8. Construct gravel drive and security fencing to provide permanent stabilized site access.
9. Restore disturbed areas with loam and seed.
10. Once the site is permanently stabilized, remove all temporary erosion control measures.

Photographs



Photograph 1: Existing Pump Station (Facing Southwest)



Photograph 2: Existing Pump Station (Facing West)



Photograph 3: Existing Pump Station (Facing South)



Photograph 4: Existing Pump Station (Facing Southwest)



Via email to: Rebecca.saucier@wright-pierce.com

January 10, 2020

Ms. Rebecca Saucier, P.E.
Wright-Pierce
230 Commerce Way, Suite 302
Portsmouth, NH 03801

RE: Sewer Pump Station
Heritage Avenue
Portsmouth, NH
WP # 20105

Dear Ms. Saucier,

The following preliminary remarks summarize observations made during a site inspection at the above-referenced location conducted on August 9, 2019 to identify and delineate wetlands and/or other resource areas. The approximate area-of-interest (AOI) is depicted below in Figure 1.

FIGURE 1



Certification Note

Jurisdictional wetlands within the AOI were delineated in August 2019 by Marc Jacobs, Certified Wetland Scientist number 090, according to the standards of the US Army Corps of Engineers - Wetlands Delineation Manual; the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region; the Code of Administrative Rules, NH Department of Environmental Services - Wetlands Bureau – Env-Wt 100-900 and Article 10 – Environmental Protection Standards of the City of Portsmouth, NH Zoning. Soils were evaluated utilizing the Field Indicators for Identifying Hydric Soils in New England, Version 4, April 2019 and the Field Indicators of Hydric Soils in the United States, Version 8, 2016. The indicator status of vegetation as hydrophytic was determined according to the U.S. Army Corps of Engineers - Northcentral and Northeast 2016 Regional Wetland Plant List. Copies of any site plans which depict the delineation that have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project.

Jurisdictional freshwater wetlands were identified and the wetland-upland boundaries within the AOI were delineated in the field with solid color pink survey flags. Each flag bears a letter and number to assist in subsequent field location by survey instrument as well as to ascertain exact field position during any site visits when referencing site plans. The following flag sequence was used: A1-A7.

General Wetland Description

Wet flags A1-A5± appear to represent a man-made wetland-upland boundary located at the toe-of-fill which was presumably deposited for construction of the sewer pump station. (The pump station is situated entirely on filled soils.) The fill was not deposited recently (within the last year) but may have been placed after the wetlands law became effective in 1969. Additional investigations would be needed to establish the extent of fill or when the fill was placed. The wetland is bisected by a foot path located on the north side of the sewer pump station. The wetland does not constitute a vernal pool within the confines of the AOI.

Signs of wetland hydrology observed during site investigations suggest that intermittent stream flow enters the wetland near wetland flag A6. Any flow generally originates along Heritage Avenue and is conveyed in a northerly direction by a man-made ditch parallel to Heritage Avenue. Any flow then turns southerly and travels along the base of the east side of the existing fill pad described above and finally spreads out on the south side of the fill pad.

The ditch along Heritage Avenue was created primarily by excavation and, after leaving the ditch, any flow is confined by fill on the north side and adjacent natural topography on the south side where it flows adjacent to the existing sewer pump station. Any stream flow is constituted by storm water runoff originating from Heritage Avenue and the channel / stream does not drain other upgradient jurisdictional wetland areas. The channel / stream was observed to be in a no-flow condition during site investigations.

Wet flags A1-A7± identify wetlands having a substrate of poorly drained mineral soils (adjacent to the wetland-upland boundary) and which are classified as palustrine forested (PFO) according to the Cowardin system. The dominant tree species observed within the canopy includes red maple (*Acer rubrum*). The forested wetland gradually transitions to a palustrine scrub-shrub wetland having very poorly drained mineral soils which closely resemble Maybid series (*Typic Humaquepts*) silt loam soils.

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900. The NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction.

Shoreland Protection

There are no water bodies identified on the Comprehensive List of Water Bodies subject to RSA 483-B, the Shoreland Water Quality Protection Act, which are located within 250 feet of the AOI.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Portsmouth has designated municipal prime wetlands which are recognized by NHDES. The subject wetland is identified as a prime wetland. Portsmouth prime wetlands receive a 100-foot state buffer.

Local Zoning

Chapter 10 of the Portsmouth Zoning Ordinance, specifically Article 10 – Environmental Protection Standards and Section 10.1010 – Wetland Protection, take jurisdiction over the following areas:

- Any inland wetland area greater than 10,000 square feet in size;
- Any vernal pool regardless of size;
- Any non-tidal perennial river or stream; and,
- Any tidal wetlands.

The zoning requires a buffer of all land within 100–feet of any jurisdictional area.

Permitted uses in wetlands and the wetland buffer include any use that does not involve the erection or construction of any structure or impervious surface and will not alter the natural surface configuration by the addition of fill or dredging.

Any use or activity not specifically permitted is prohibited unless authorized by the Portsmouth Planning Board by Conditional Use Permit (CUP) after review by the Portsmouth Conservation Commission. Regarding CUP applications, the following specific criteria for approval apply to public and private utilities within rights-of-way in wetlands and wetland buffers:

- The proposed construction is in the public interest;
- Design, construction and maintenance methods will utilize best management practices to minimize impact and will include restoration of sites as nearly as possible to the original grade;
- No alternative feasible route exists; and
- Alteration of natural vegetation will occur only to the extent necessary.

Wright-Pierce
Heritage Avenue
January 10, 2020

The zoning identifies performance standards for stormwater management and vegetation management, including fertilizer and herbicide application, within local jurisdiction. The zoning requires vegetation buffers within the overall 100-foot buffer.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Portsmouth Planning Department or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,



Marc Jacobs, CWS, PWS, CSS, CPESC

