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# MEMO

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| **To:** | Samantha Collins, Chair – Portsmouth Conservation Commission |
| **From:** | Joanne Theriault, CWS, CWB® - Hoyle, Tanner & Associates, Inc. |
| **Date:** | November 6, 2026 |
| **Re:** | Coakley Road/Borthwick Road Connector Project<br>100 Coakley Road/650 Borthwick Avenue, Portsmouth, NH |

Hoyle, Tanner & Associates has been contracted by the City of Portsmouth (the City) Department of Public Works (the DPW) to assist with permitting and engineering services for the Coakley Road/Borthwick Avenue Connector Project. A Land Use and Wetland Conditional Use Permit (WCUP) Application has been completed on the City's online permitting system, including this narrative document and its attachments, and the package is hereby submitted for review by the Portsmouth Conservation Commission at its October 2026 meeting.

## Project Description

The proposed project is located on Coakley Road and Borthwick Avenue in Portsmouth, NH. The purpose and need of the project is to provide an alternative route to the Coakley Road and Larry Lane neighborhood, which currently has only one vehicle access route. This alternative route would provide a detour during the upcoming replacement of the Coakley Road bridge over Hodgson Brook and improve public safety for emergency access to the neighborhood in the future.

The DPW proposes construction of a new roadway approximately 300' in length, connecting Borthwick Avenue and Coakley Road. The proposed connector road would straddle the property boundary between The Granite Group at 100 Coakley Road (Map 234, Lot 6) and the Fairfield Inn at 650 Borthwick Avenue (Map 234, Lot 7-6; Attachment A). The proposed project includes a sidewalk, closed drainage and on-street parking along the connector roadway. Drainage improvements are proposed on the Granite Group property and on-street parking and sidewalk construction are proposed on Coakley Road. The project will also include minor re-striping and landscaping.

## Existing Conditions

The project area is currently developed with two commercial buildings and associated parking lots, plantings and maintained lawns. The southwestern portion of the project area has approximately 4,700 square feet (SF) of young forest and shrub vegetation abutting Wetland A to the east. Other features currently in the project area include a concrete ramp and loading dock and a fenced-in hotel swimming pool. The proposed project would require impacts within the 100' buffer of Wetlands A-D (Attachment B).

### *Wetland A*

Wetland A is located on the southwest corner of the proposed project area with its boundary near the property line between 100 Coakley Road and 96 Coakley Road. It is a created water feature designed to

# City of Portsmouth, New Hampshire

## *Wetland Conditional Use Permit Application Checklist*

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

**Applicant Responsibilities:** Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: City of Portsmouth Date Submitted: 11/6/2026

Application # (in City's online permitting): _____

Site Address: 100 Borthwick Avenue Map: 234 Lot: 6

| ☑ | Required Items for Submittal | Item Location (e.g. Page or Plan Sheet/Note #) |
|---|---|---|
| ✔ | Complete application form submitted via the City's web-based permitting program | Submitted Online |
| ✔ | All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline. | PDFs Submitted Online, Hard Copies Delivered 11/6/2026 |

| ☑ | Required Items for Submittal | Item Location (e.g. Page/line or Plan Sheet/Note #) |
|---|---|---|
| ✔ | Basic property and wetland resource information. **(10.1017.21)** | Narrative Pages 1-3 |
| ✔ | Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)** | Narrative Pages 1-3 |
| ✔ | Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)** | Narrative Pages 3-4 |
| ✔ | Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)** | Narrative Pages 4-5 |

| ☑ | Required Items for Submittal | Item Location (e.g. Page/line or Plan Sheet/Note #) |
|---|---|---|
| ✔ | Wetland buffer enhancement plan. **(10.1017.25)** | Attachment 3 |
| ☐ | Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)** | N/A |
| ☐ | Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)** | Narrative Page 5 |
| ☐ | Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)** | N/A |
| ✔ | Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)** | Plan Sheet |
| ✔ | All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)** | Exemption Requested Narrative Page 5 |
| ☐ | An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)** | N/A |
| ☐ | Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)** | Exemption Requested Narrative Page 5 |
| ☑ | **Requested Items for Submittal** | **Item Location (e.g. Page or Plan Sheet/Note #)** |
| ✔ | A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions. | Narrative Page 1 |
| ☐ | If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit. | N/A |

**Applicant's Signature:** _____ **Date:** _____

collect stormwater from the adjacent impervious surfaces for infiltration and transport through a culvert crossing under Borthwick Avenue. Hydrophytic vegetation is rooted on the wetland margins, including sensitive fern (*Onoclea sensibilis*), green ash (*Fraxinus pennsylvanica*), poison ivy (*Toxicodendron radicans*), American elm (*Ulmus americana*), red maple (*Acer rubrum*), American basswood (*Tilia americana*) and common reed (*Phragmites australis*). The center of Wetland A is perennially flooded/ponded with sparse vegetation. Fine sandy loam soils forming a dark layer of mixed organic materials over a depleted matrix were observed on the vegetated margins and a thicker organic surface develops in the flooded center. A chain link fence crosses the lot between the 100 Coakley Road building and crosses through the interior of Wetland A. Principal functions provided by Wetland A include floodflow alteration and groundwater recharge/discharge.

The 100' buffer of Wetland A is a mix of maintained lawn, existing structures and a parking lot. The Vegetated Buffer Strip (0'-25' from the wetland boundary) above the east side of the wetland is not maintained as grass and has grown to a young forested and shrubby vegetated block with grade alteration. Plants observed in the block include Morrow's honeysuckle (*Lonicera morrowii*), smooth sumac (*Rhus glabra*), poison ivy, American beech (*Fagus americana*), multiflora rose (*Rosa multiflora*), glossy buckthorn (*Frangula alnus*) and Virginia creeper (*Parthenocissus quinquefolia*).

### *Wetland B*

Wetland B abuts the proposed project area from the opposite side of Borthwick Avenue. It is a large wetland that collects stormwater from the adjacent impervious surfaces, including the south side of the project area. Stormwaters flow into Wetlands A and C and are conveyed by culverts under Borthwick Avenue into Wetland B. Wetland B continues eastward to the NH Route 1 Bypass and then outlets via a culvert to Hodgson Brook. Wetland B has permanently flooded portions with no stream channel carrying directional surface water flow to the east.

Vegetation in Wetland B includes purple loosestrife (*Lythrum salicaria*), sensitive fern, green ash, red maple, gray alder (*Alnus incana*), glossy buckthorn, multiflora rose, high bush cranberry (*Viburnum opulus*) and broad leaf cattail (*Typha latifolia*). The majority of Wetland B is perennially saturated with perennially flooded portions, and a roadside ditch is adjacent to Borthwick Avenue and hydrologically connected to the rest of Wetland B. Principal functions provided by Wetland B include floodflow alteration and groundwater recharge/discharge. Its long hydroperiod and varied vegetative structure also make it suitable for nutrient removal/retention, sediment/toxicant retention and wildlife habitat.

The 100' buffer of Wetland B is a mix of maintained lawn, existing structures, and the paved surface of Borthwick Avenue. Borthwick Avenue lies in what would be the Vegetated Buffer Strip on the north side of Wetland B (0'-25' from the wetland boundary) and the strip has only roadside grass for retained vegetation.

### *Wetland C*

Wetland C is a created water feature designed to collect stormwater from the adjacent impervious surfaces. It runs parallel to Borthwick Avenue for approximately 60' along the frontage of 640 Borthwick Avenue. Water is conveyed under the road by a culvert under the Fairfield Inn driveway and outlets into Hodgson Brook. Vegetation is a mix of maintained grasses with non-blooming sedges (*Carex* spp.)

developing below the wetland boundary. The principal function provided by Wetland C is floodflow alteration.
The 100' buffer of Wetland C is a mix of maintained lawn, existing structures, the parking lot at 650 Borthwick Avenue and the paved surface of Borthwick Avenue. Primarily maintained lawn lies in what would be the Vegetated Buffer Strip on the north side of Wetland C (0'-25' from the wetland boundary).

### *Wetland D*

Wetland D is located adjacent to Hodgson Brook's west bank upstream/north of its crossing under Coakley Road. It extends westward approximately 425' with negligible gradient, nearly reaching the residences on the Coakley Road loop. The wetland has hydrology from a perennial interaction with ground water, creating continuously saturated soils. Soils have a loamy clay texture with redoximorphic features. Dominant vegetation in Wetland 1 includes tussock sedge (*Carex stricta*), broadleaf cattail, soft rush (*Juncus effusus*), silky dogwood (*Swida amomum*), Morrow's honeysuckle, glossy buckthorn and meadow rue (*Thalictrum* spp.). Principal functions provided by Wetland D include floodflow alteration, groundwater recharge/discharge, and sediment/shoreline stabilization. It is also suitable to provide wildlife habitat, but this function is not principal due to Wetland D's urban context.

The 100' buffer of Wetland D, on its south boundary abutting the project area, is a mix of maintained lawn, existing structures, parking lot and the paved surface of Coakley Road. Coakley Road lies in what would be the Vegetated Buffer Strip on the south side of Wetland B (0'-25' from the wetland boundary), and the strip has only roadside grass for retained vegetation.

## Wetland Buffer Impacts

The proposed project requires permanent and temporary ground disturbance in the 100' wetland buffers of Wetlands A-D (Attachment D). The southern end of the proposed connector road surface lies within the buffers of Wetlands B and C and it would require permanent alteration to the previously maintained and/or disturbed portions of these buffers but no impacts are proposed in the 25' vegetated buffer strip of either wetland. The northern end of the proposed connector road with proposed sidewalks, street side-slope grading, and on-street parking would require both permanent and temporary impacts to the buffer of Wetland D on the opposite side of Coakley Road but no impacts are proposed to the Wetland D 25' vegetated buffer strip.

Grading within the 100' buffer of Wetlands A and B is proposed to establish feasible post-construction stormwater drainage. The grading would redirect stormwater from the existing lawn area between Wetland A and the proposed connector road completely toward Wetland A, where portions of it currently drain into Wetland C. Both the pre-construction and post-construction drainage patterns direct water into Wetland B and ultimately to Hodgson Brook. The proposed grading in the buffer of Wetland A also requires approximately 1,550 SF of vegetation clearing. The proposed post-construction condition of these areas is detailed in the project's Wetland Buffer Enhancement Plan (Attachment E).

No impacts are proposed to delineated wetlands.

# Wetland Conditional Use Permit – Required Items for Submittal

## *10.1017.23 – Criteria for Approval*

1. The land is reasonably suited to the use, activity or alteration.
   The site is well-suited to this use because it lacks constricting slopes, ledge and other constraining characteristics. The 300' path between 100 Coakley Road and 250 Borthwick Avenue constitutes the shortest length location to connect the two roads and therefore minimizes new impervious surface and manages construction and maintenance costs.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.
   The purpose and need of the project is to create a connection between Borthwick Avenue and Coakley Road, specifically to allow alternative permanent access to the Coakley Road and Larry Lane neighborhood during the replacement of the Hodgson Brook culvert. No other location is available outside of a 100' wetland buffer that would fulfill this purpose.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.
   No direct impacts are proposed to wetlands as a result of the proposed project. The principal functional values of Wetlands A-D include floodflow alteration, groundwater recharge/discharge, and shoreline stabilization; none of the proposed impacts to the buffers of these wetlands would adversely affect their ability to serve these functions.

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

   No part of the proposed project area is currently in a natural vegetative state, and there are no managed woodlands occurring on the site. The disturbed vegetated area associated with Wetland A and the proposed grading on Lot 234-6 will be transformed to maintained lawn.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.
   The proposed project has been designed to avoid and minimize impacts to environmental resources to the greatest extent practicable. The existing condition at the proposed project site is highly developed and urban with a closed drainage system controlling the flow of stormwater off the site. The addition of a 300' road will have a negligible impact on downstream water quality. Impacts to wetland buffers in this location will have no effect on the current wetlands' functions and values.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.
   Vegetation clearing within the VBS is unavoidable. The necessary elevation of the proposed road does not allow for an underground pipe to convey stormwater flow, so vegetation removal and grading in the area is necessary to direct stormwater to the west toward Wetland A. Impacted portions of the VBS will be re-vegetated per the project's Buffer Enhancement Plan (Attachment E)

### *10.1017.24 – Impervious Surface Impacts*

The existing conditions of the Wetland A-D 100' buffers are primarily maintained grass, impervious rooftops, parking lots and road surfaces, and the project requires only minimal conversion of pervious to impervious surface; however, there is no opportunity possible in the existing road rights-of-way or allowable on impacted private land to decrease existing impervious surface within the wetland buffer. The existing impervious surface of Lots 234-6 and 234-7-6 totals 91,981 SF, and the proposed post-construction impervious area is 95,956 SF, an increase of 7,210 SF. Within the 100' buffers of Wetlands A-D, an increase of 5,781 SF impervious surface will be necessary

### *10.1018.10 Stormwater Management Practices*

Stormwater management practices for the proposed project have been designed in accordance with the NHDES New Hampshire Stormwater Manual (2025), Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004 to the greatest extent practicable.

Four new catch basins will be installed along the new Connector Road, each with a 2' sump. The proposed deep-sump catch basins will provide water-quality benefits by providing pretreatment of stormwater runoff prior to discharge. The sumps provide storage below the outlet invert that promotes settling and retention of sediment, debris, and sediment-associated pollutants, thereby reducing the pollutant load conveyed downstream. This is particularly beneficial for runoff from paved roadway and parking areas, where stormwater may contain suspended solids, metals, hydrocarbons, and other pollutants.

### *10.1018.40 Wetland Boundary Markers*

An exemption is requested for this requirement. Permanent wetland boundary markers are required on newly formed lots but are unnecessary for transportation projects.

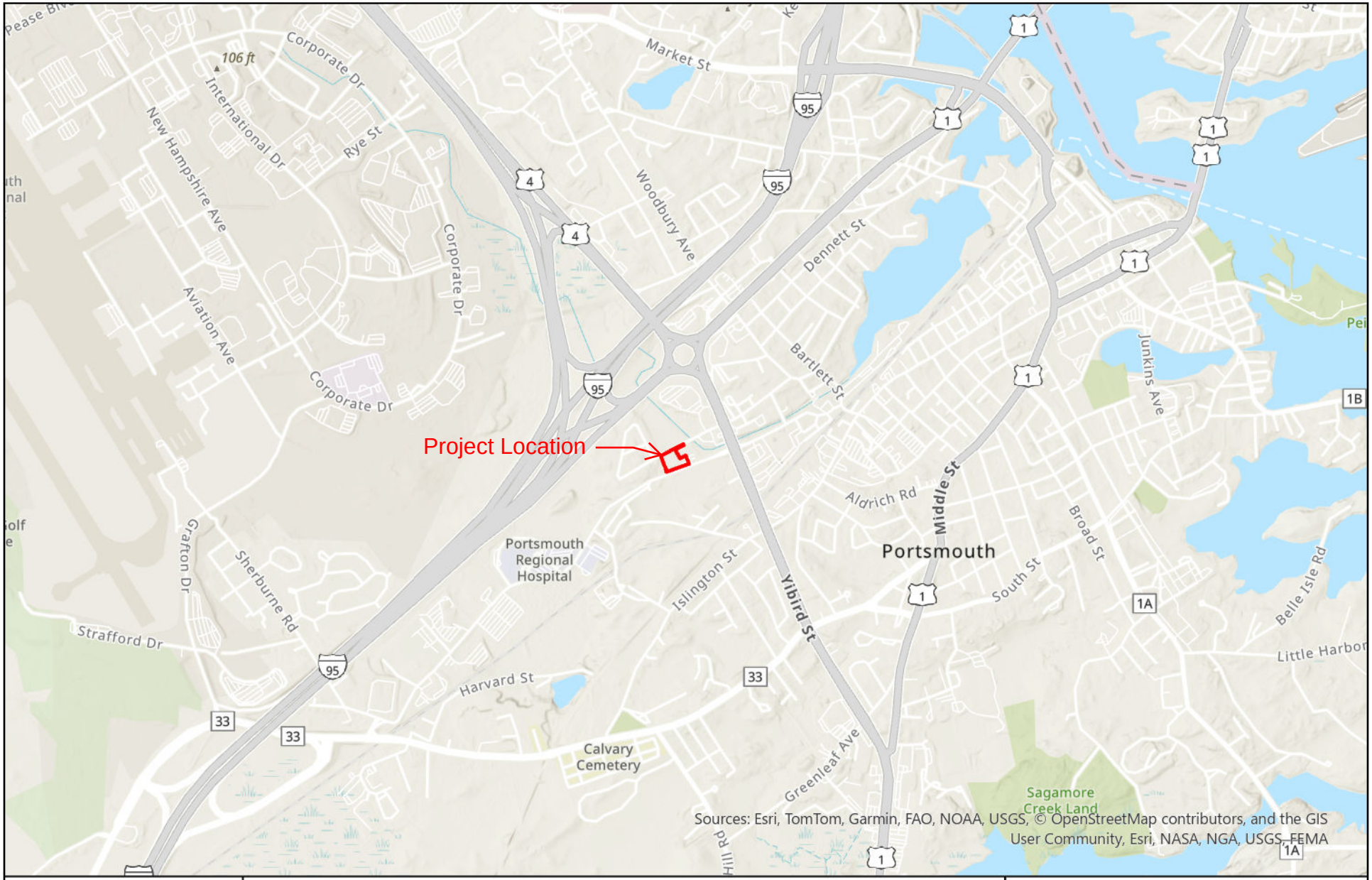
### *10.1018.31 Porous Pavement*

The City of Portsmouth Zoning Ordinance requires the use of porous pavement for all new pavement with a wetland's 100' buffer. The DPW requests an exemption to this rule for the new pavement proposed in the buffer zones of Wetlands B, C, and D. The pre-construction project area is highly developed and has a closed drainage system to manage stormwater running off existing impervious surfaces. As a result, porous pavement would have little overall impact. In addition, porous pavement is not as structurally sound as typical pavement and is therefore unsuitable for roadways.

**Attachments**

A - USGS Location Map
B - Aerial Wetland Location Map
C – Project Photos
D – Project Plans
E – Wetland Buffer Enhancement Plan

Attachment A
USGS Location Map




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# Coakley Road/Borthwick Avenue Connector Road Project
# Portsmouth, NH

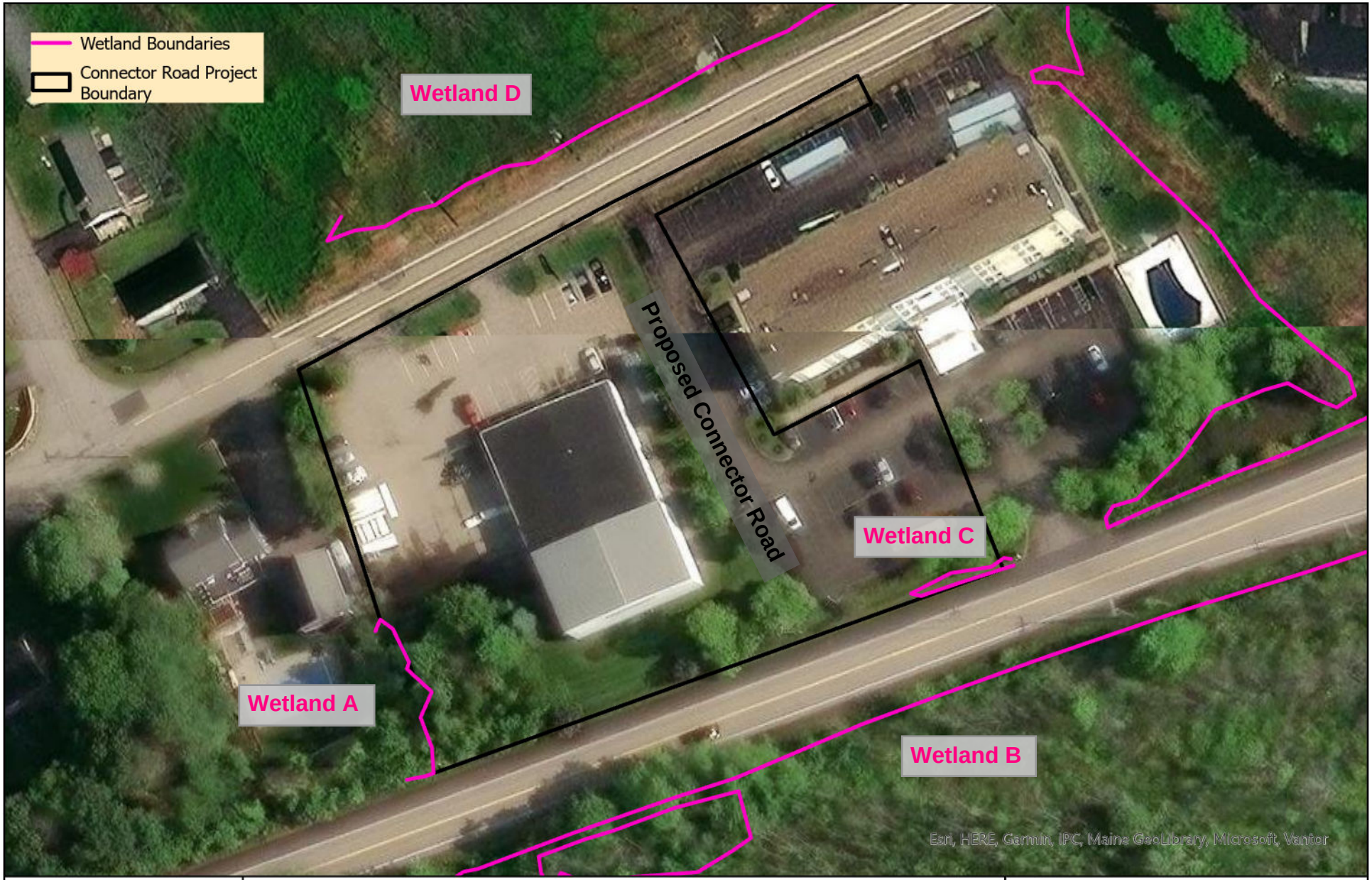
N

SCALE
1 inch = 2,000 feet

## Project Location Map

Last updated on *Friday, September 25, 2026* by *jtheriault*

Attachment B
Aerial Wetland Location Map




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# Coakley Road/Borthwick Avenue Connector Road Project
# Portsmouth, NH

N

SCALE
1 inch = 80 feet

## Wetland/Stream Delineation Map

Last updated on *Friday, September 25, 2026* by *jtheriault*

Attachment C
Project Photos



Photo 1 – View of Wetland A and Vegetated Buffer Strip Facing West



Photo 2 – View of Wetland A 100’ Buffer Facing North



Photo 3 – View of Wetland B Interior Facing North



Photo 4 – Wetland B Buffer View of Road and Roadside Managed Grass

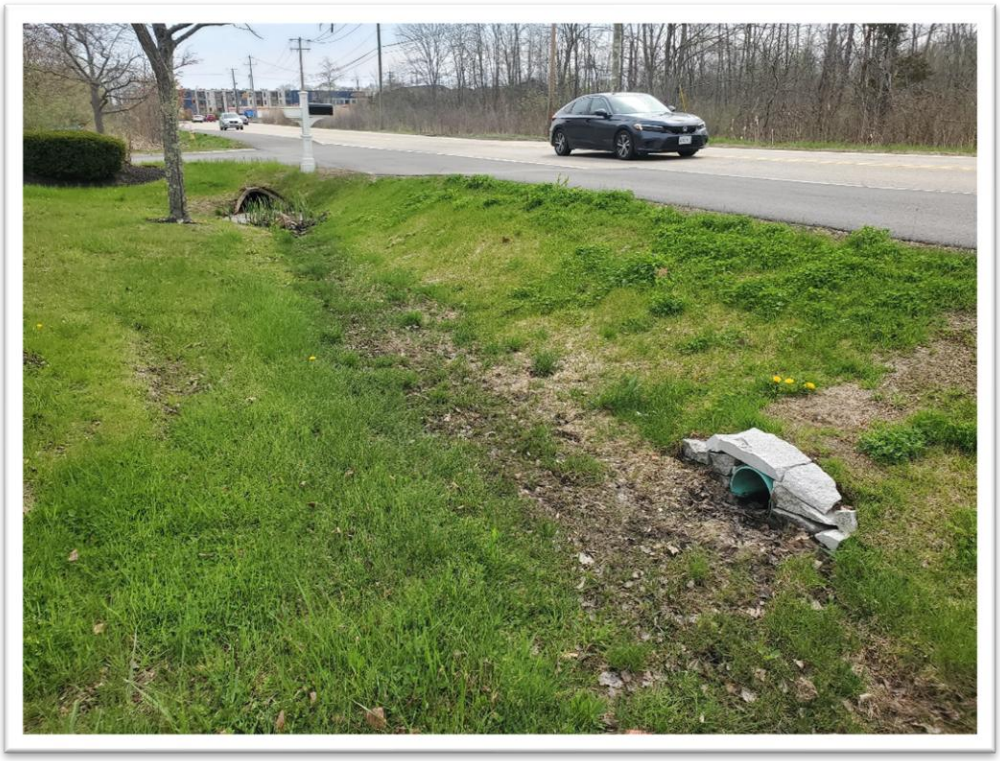


Photo 5 – Wetland C View of Wetland Facing East



Photo 6 – Wetland C View of 100’ Buffer Facing Northeast



Photo 7 – Wetland D View of Open Floodplain Section Facing West




Photo 8 – Wetland D 100’ Buffer View of Road and Proposed Impact Area Facing North

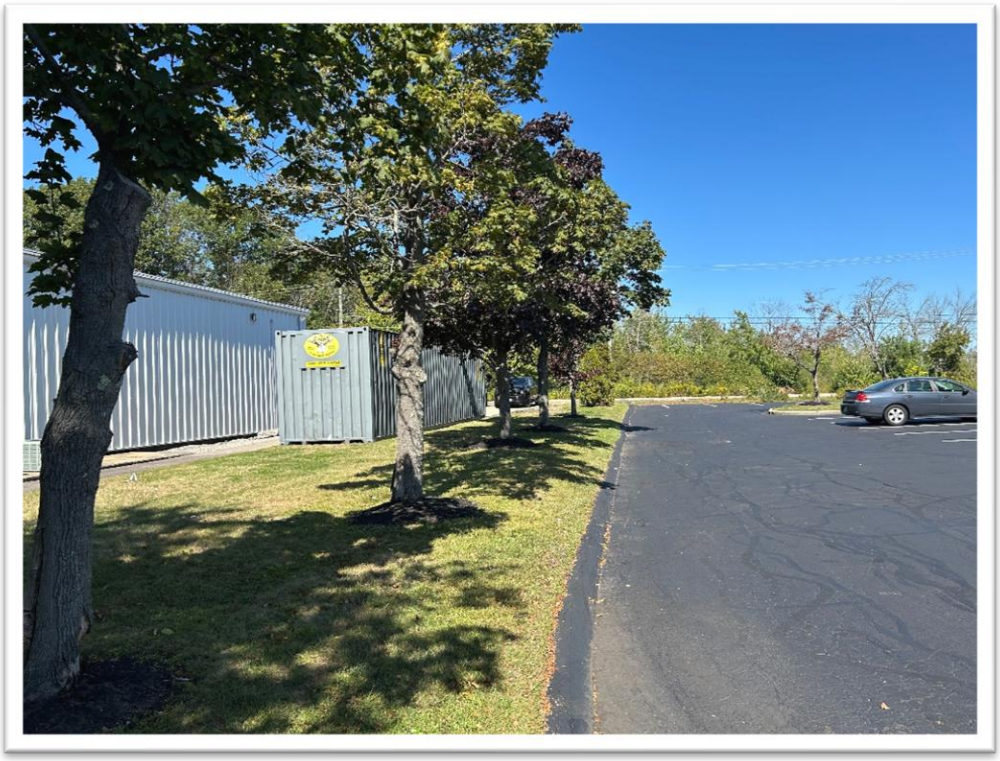


Photo 9 – View of Proposed Connector Road Location Facing North



Photo 10 – View of Proposed Connector Road Location Facing South

Attachment D

Project Plans - Provided Separately

Attachment E
Wetland Buffer Enhancement Plan

| | |
|---|---|
| **To:** | Samantha Collins, Chair – Portsmouth Conservation Commission |
| **Applicant:** | City of Portsmouth Department of Public Works |
| **Agent:** | Hoyle, Tanner & Associates, Inc.<br>150 Dow Street<br>Manchester, NH 03101<br>Attn: Joanne Theriault, CWB®, Senior Environmental Scientist<br>Phone Number: (603) 460-5578<br>Email: jtheriault@hoyletanner.com |
| **Date:** | November 6, 2026 |
| **Re:** | Coakley Road/Borthwick Road Connector Project<br>100 Coakley Road/650 Borthwick Avenue, Portsmouth, NH<br>**Wetland Buffer Enhancement Plan** |

## Purpose and Regulatory Basis

This Wetland Buffer Enhancement Plan has been prepared for the Coakley/Borthwick Road Connector Road project in Portsmouth, New Hampshire. The plan has been developed in accordance with Section 10.1017.25 of the City of Portsmouth Zoning Ordinance. The plan is intended to enhance the functions of the jurisdictional wetland buffer and partially offset impacts associated with construction of the proposed connector road.

## Existing Buffer Conditions

Existing conditions within the jurisdictional wetland buffer include maintained lawn, paved parking areas, previously developed or disturbed land, and a vegetated buffer adjacent to the wetland delineated west of the project limits. The vegetated buffer and existing tree line provide separation between the developed site and the wetland and is dominated by red oak (Quercus rubra), American elm (Alnus americana), sugar maple (Acer saccarum), quaking aspen (Populus tremuloides), and staghorn sumac (Rhus typhina) near the Borthwick Road edge. The area contains invasive plant species, including Oriental bittersweet (*Celastrus orbiculatus*), multiflora rose (*Rosa multiflora*), and Morrow's honeysuckle (*Lonicera morrowii*).

The project plans depict the proposed roadway, grading, drainage, existing wetland limits, wetland buffer, and areas of temporary and permanent wetland-buffer impact.

## Avoidance and Minimization

The grading along the southwest portion of the project was revised after initial design to create a defined ditch line a reduce the extent of clearing and grading on the southwest side of the proposed connector road. Creation of the ditch line reduces encroachment into the adjacent wooded buffer and limits the removal of existing trees and other established vegetation. Initial design required 12,550 SF of buffer impact and 4,400 SF of vegetation clearing in the southwest impact area, and the redesign reduced the impact area by greater than 5,000 SF (Currently proposed: 7,100 SF of impact; 1,550 SF vegetation clearing). The proposed ditch would be situated perpendicular to the existing tree line and would tie into an existing slope that drains toward the wetland west of the project limits as shown on the Grading Plan (Sheet C-301). The Landscaping Plan (Sheet C-501) identifies the proposed planting area extending approximately 5 feet on either side of the ditch, and planting details are shown on Sheet C-502.

The revised grading therefore represents an impact-minimization measure in addition to providing the location for the proposed buffer enhancement work.

## Enhancement Area

Wetland Buffer enhancement will be completed within a **580-square-foot area** located along the proposed southwest ditch and the existing slope leading toward the wetland. The enhancement area will generally include a 10-foot-wide planting zone at the lower portion of the ditch line, together with plantings on the slope where the proposed grading transitions to the existing grade.

The enhancement area was selected because it is located:

- Within the jurisdictional wetland buffer;
- Immediately upgradient of the wetland;
- Within an area that will receive and convey stormwater runoff;
- Within the existing tree line;
- On land where the project applicant can provide for establishment and maintenance; and
- In a location where enhancement can improve vegetation, habitat, slope stability, and stormwater treatment.

## Invasive-Species Removal

Oriental bittersweet, multiflora rose, and Morrow's honeysuckle will be removed by hand from the enhancement area. Hand removal is proposed to minimize disturbance to retained native vegetation, soils, and the adjacent wetland buffer.

The work will focus on removing above-ground growth and, where practicable, root systems. Care will be taken to avoid unnecessary clearing, soil disturbance, and damage to desirable native vegetation. Removed invasive plant material will be taken out of the wetland buffer and disposed of at an offsite location in a manner that prevents resprouting or the spread of fruits, seeds, roots, or other viable plant material.

## Native Planting Plan

Native herbaceous vegetation, grasses, and shrubs will be established within the proposed ditch and transition slope. Plantings will be concentrated within a 10-foot-wide area along the lowest portion of the ditch line, where they will help slow stormwater flow, promote filtration, stabilize soil, and increase vegetative cover before runoff enters the wetland.

Plantings will be installed where the proposed grading ties into the existing slope toward the wetland to function as a softscape slope-stabilization measure and will reduce the potential for erosion and sediment movement.

The proposed planting palette includes:

- Purple Joe-Pye weed (*Eutrochium purpureum*), with an anticipated mature diameter of 3';
- Sensitive fern (*Onoclea sensibilis*), with an anticipated mature diameter of 3';
- New England aster (*Symphyotrichum novae-angliae*), with an anticipated mature diameter of 4';
- Red-osier dogwood (*Swida sericea*), with an anticipated mature diameter of 5';
- Highbush blueberry (*Vaccinium corymbosum*), with an anticipated mature diameter of 5';
- Switch panicgrass (*Panicum virgatum*), with an anticipated mature diameter of 2'; and
- Wrinkleleaf goldenrod (*Solidago rugosa*), with an anticipated mature diameter of 2'.

Red-osier dogwood will be installed as bare-root stock and concentrated on or near the transition slope, where its woody root system will contribute to soil stabilization. Highbush blueberry and red-osier dogwood will add native woody cover and structural diversity within the buffer. The herbaceous perennials, ferns, and grasses will

provide complementary ground-level cover, reduce exposed soil, and increase surface roughness within the ditch.

Planting locations and spacing will account for the anticipated mature diameter of each species. Plants will be arranged in naturalized groupings rather than evenly spaced rows. The final layout will provide adequate room for mature growth while creating overlapping vegetation that reduces concentrated flow paths and limits openings that could be recolonized by invasive species.

## Enhancement of Buffer Functions

The proposed enhancement measures will improve several functions of the wetland buffer.

**Stormwater attenuation and treatment**

The dense plantings within the lower portion of the ditch will increase surface roughness and slow stormwater runoff before it reaches the wetland. Reduced flow velocity will support settling of suspended sediment and allow greater contact between runoff, vegetation, surface soils, and plant root systems.

The plantings are not intended to function as a substitute for engineered stormwater treatment practices. Rather, they will provide supplemental vegetative treatment within the buffer by slowing shallow runoff, stabilizing the ditch, and improving filtration along the final flow path toward the wetland.

**Erosion control and slope stabilization**

Switchgrass, sensitive fern, and the proposed herbaceous perennials will provide ground-level cover within the ditch and on disturbed soil. Red-osier dogwood will provide woody root structure on the transition slope. Together, these species will help retain soil, reduce erosion, and stabilize the area where the proposed grading ties into the existing slope.

**Native vegetation and invasive-species control**

Removal of oriental bittersweet, multiflora rose, and Morrow's honeysuckle will reduce competition with retained and newly planted native vegetation. Establishing a diverse native plant community following invasive-species removal will improve the ecological condition and resilience of the buffer.

**Wildlife and pollinator habitat**

Proposed plantings will provide seasonal floral and vegetative resources for pollinators and other wildlife. Native shrubs, grasses, ferns, and flowering perennials will also increase the structural diversity of the existing buffer and provide additional cover, foraging opportunities, and habitat connectivity along the wetland edge.

## Site Constraints and Alternative Enhancement Locations

The extent and location of the proposed enhancement are constrained by adjacent private property. Plantings were considered along the existing ditch southeast of the proposed connector road. That ditch is located on private property, however, and the project applicant would not have sufficient control over long-term maintenance. Plantings in that location could be inadvertently mowed or removed, and their continued establishment could not be assured. For that reason, the southeast ditch was not selected as a formal buffer-enhancement area.

The proposed southwest ditch provides a more practicable enhancement location because it is associated with the revised project grading, is situated immediately upgradient of the wetland, and can be maintained as part of the project. Concentrating enhancement within this controlled area provides greater assurance that the plantings and invasive-species management will remain effective over time.

## Implementation

The limits of the enhancement area will be shown on the final project plans. Before planting, the enhancement area will be reviewed in the field to identify existing native vegetation to be retained and invasive plants to be removed.

Planting will occur after final grading and stabilization of the ditch and transition slope. Installation will include the following:

1. Removal of identified invasive plants by hand;
2. Preparation of planting locations while minimizing disturbance to retained vegetation and existing soils;
3. Installation of native shrubs, grasses, ferns, and herbaceous perennials;
4. Installation of red-osier dogwood as bare-root stock within appropriate slope and moisture conditions;
5. Watering at the time of planting and during the establishment period, as necessary;
6. Stabilization of exposed soil using appropriate temporary or permanent erosion-control treatment; and
7. Replacement of plants that die or fail to establish during the monitoring period.

Plants will not be installed in a manner that blocks the designed conveyance area of the ditch. The final planting layout (Plan Set Sheet C-502) preserves a stable stormwater flow path while maximizing vegetative roughness, filtration, and slope protection.

### Relationship to Project Impacts

The 580-square-foot enhancement area will partially offset the impacts of the Coakley Road Connector Road by improving a disturbed portion of the wetland buffer located directly between the project and the wetland. The plan combines invasive-species removal, new native plantings, pollinator and wildlife habitat enhancement, vegetative stormwater treatment, and softscape slope stabilization.

The enhancement will not replace all wetland-buffer functions affected by the connector road. It will, however, provide a measurable improvement over the post-construction condition that would otherwise exist within the southwest ditch and transition slope. The enhancement measures directly address several of the options identified by Section 10.1017.25, including new plantings, invasive-species removal, habitat creation, and improved site hydrology.

## Future Stormwater Improvements

The Portsmouth Department of Public Works has indicated its intent to evaluate additional stormwater treatment measures during a later phase of work associated with replacement of the Coakley Road bridge over Hodgson Brook. These future measures may provide additional opportunities to improve runoff treatment within the broader project area.

Because the scope, design, permitting, funding, and schedule of the bridge-replacement phase have not yet been established as part of this Buffer Enhancement Plan, those potential measures are not relied upon to demonstrate compliance for the Connector Road project. The 580-square-foot enhancement area described above therefore represents the current project's defined and implementable buffer-enhancement commitment.

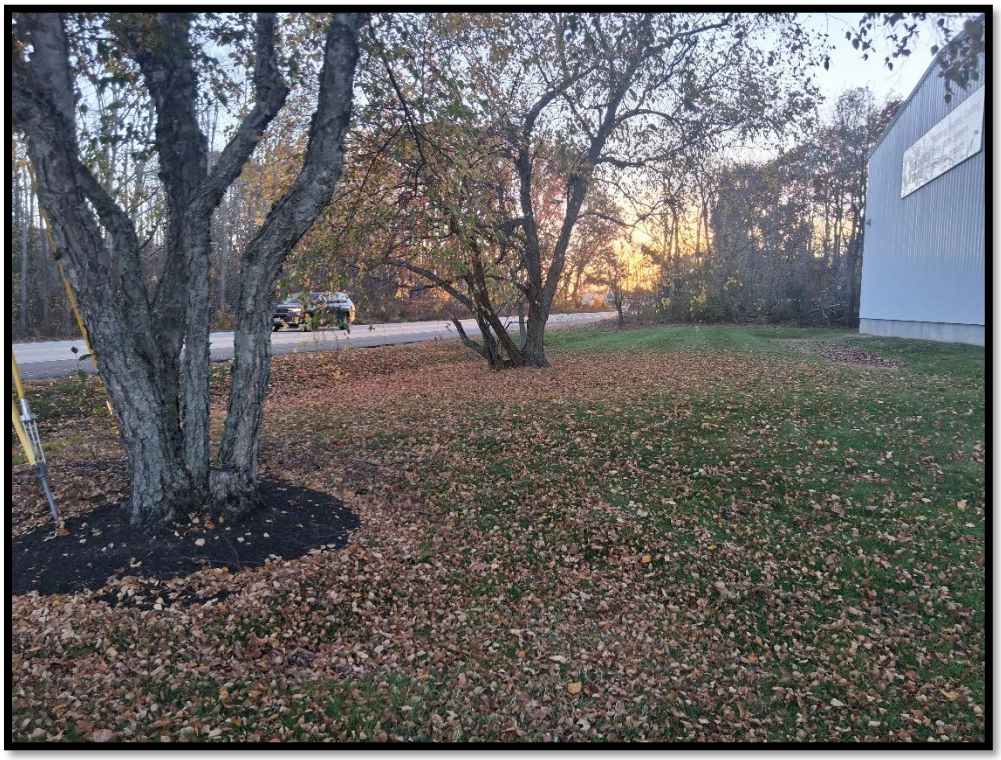


Photo 1 – Proposed Ditch Line Area from Proposed Connector Road Facing West – 11/4/2026



Photo 2 – Proposed Ditch Line Area from Existing Lawn Facing West – 11/4/2026



Photo 3 – Existing Wetland Vegetated Buffer Facing West – 11/4/2026



Photo 4 – Existing Wetland Vegetated Buffer Facing Northwest – 11/4/2026



Photo 5 – Proposed Planting Area Existing Condition Facing Northeast from Borthwick Road 11/4/2026



Photo 6 – Proposed Planting Area Existing Condition Facing Northeast from Interior – 11/4/2026

# BORTHWICK - COAKLEY CONNECTOR ROAD
# PORTSMOUTH, NEW HAMPSHIRE
# Project #7251

## 11/6/2026


DEPARTMENT OF
PUBLIC WORKS
CITY OF PORTSMOUTH, NH
680 PEVERLY HILL ROAD
603-427-1530





LOCATION MAP
SCALE: N.T.S

| INDEX | SHEET NO. |
|---|---|
| LEGEND & ESTIMATED QUANTITIES | G-101 |
| GENERAL NOTES | G-102 |
| PROPOSED RIGHT-OF-WAY PLAN | E-001 |
| PROPOSED EASEMENT PLAN | E-002 |
| DEMOLITION PLAN | C-101 |
| SITE PLAN | C-201 |
| GRADING, DRAINAGE & UTILITIES PLAN | C-301 |
| LANDSCAPING PLAN | C-501 |
| PLANTING PLAN | C-502 |
| DETAILS SHEETS | C-601 TO C-605 |
| WETLAND IMPACT PLAN | W-001 |


SURVEY BY:
SAM COMPANY
102 KENT PLACE
NEWMARKET, NH 03857
WWW.DOUCETSURVEY.COM
603-659-6560

DESIGN BY:
HOYLE, TANNER & ASSOCIATES, INC.
PEASE INTERNATIONAL TRADEPORT
183 INTERNATIONAL DRIVE, SUITE 200
PORTSMOUTH, NH 03801
603-431-2520

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# DRAFT FINAL PLANS
11/6/2026

STATE OF NEW HAMPSHIRE
JOANNE E THERIAULT
No. 305
CERTIFIED WETLAND SCIENTIST
11/6/2026

JOANNE THERIAULT, CERTIFIED WETLAND SCIENTIST #305, OF HOYLE, TANNER & ASSOCIATES, INC. OF MANCHESTER, NH, PERFORMED THE WETLAND MAPPING ON MAY 6, 2026 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE INTERIM REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

| NO. | REVISIONS | APP'D | DATE |
|---|---|---|---|
| | | | |

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: COVER SHEET

| | |
|---|---|
| DRAWING SCALE: AS SHOWN | DATE: 10/8/2026 |
| PROJECT NO.: 7251 | SHEET: C-000 |
| APPROVED BY: WCA | |

# LEGEND:

EXISTING | PROPOSED

PROPERTY LINE

RIGHT–OF–WAY

EASEMENT

BUILDING

EDGE OF PAVEMENT

EDGE OF TRAVELED WAY

CURB (VGC)

SIDEWALK

ADA RAMP

ADA SYMBOL

SIGN

MAILBOX (M)

SINGLE WHITE LINE (SWL)

DOUBLE YELLOW CENTERLINE (DYCL)

RETAINING WALL

LOOSE STONE WALL

CHAIN LINK FENCE

STOCKADE FENCE

GUARDRAIL

SHRUB

TREE

TEMPORARY BENCHMARK

1' CONTOUR (53 / 52)

WETLANDS

100' WETLANDS BUFFER

DRAINAGE (D)

WATER (W / xw)

GRAVITY SEWER (S)

LOW PRESSURE SEWER (FM)

SEWER SERVICE (xs)

UNDERGROUND TELE. (UT)

U/G POWER (UGE)

U/G ELECTRIC (xe)

OVERHEAD WIRES (OHW)

GAS (G)

FIRE HYDRANT

WATER SHUT OFF

WATER GATE VALVE

UTILITY POLE

UTILITY POLE w/ LIGHT

CATCHBASIN

MANHOLE (D / S)

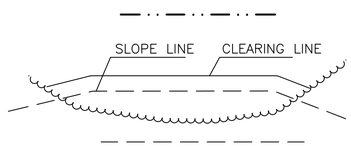
EROSION CONTROL

SAWCUT

BORING LOCATION (B1)

CONSTRUCTION BASELINE (2+50)

PROPOSED




DITCH LINE

CLEARING LINE

SLOPE LINE

SLOPE LINE (FILL)

# SUMMARY OF QUANTITIES:

| ITEM NO | ITEM DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| 201.1 | CLEARING AND GRUBBING (F) | A | 0.1 |
| 201.21 | REMOVING SMALL TREES | EA | 11 |
| 202.6 | CURB REMOVAL FOR SALVAGE | LF | 200 |
| 202.8 | REMOVAL OF FENCE | LF | 51 |
| 203.1 | COMMON EXCAVATION | CY | 1350 |
| 203.11 | COMMON EXCAVATION - LRS | CY | 45 |
| 203.601 | EMBANKMENT-IN-PLACE | CY | 173 |
| 214 | FINE GRADING | SY | 1200 |
| 214A | FINE GRADING (SIDEWALKS AND DRIVEWAYS) | SY | 1200 |
| 304.4 | CRUSHED STONE FINE IN PLACE (FOR ROADS) | CY | 743 |
| 403.118 | MACHINE INSTALLED BINDER COURSE | TON | 300 |
| 403.11W | MACHINE INSTALLED WEARING COURSE | TON | 160 |
| 403.12 | HOT BITUMINOUS ASPHALT, HAND METHOD | TON | 46 |
| 403.16 | PAVEMENT JOINT ADHESIVE | LF | 1800 |
| 410.22 | ASPHALT EMULSION FOR TACK COAT | GAL | 105 |
| 417 | COLD PLANING BITUMINOUS SURFACES | SY | 58 |
| 522.001 | CONCRETE PAD | LS | 1 |
| 550.3 | STEEL BOLLARD (REMOVABLE) | EA | 2 |
| 603.0001 | VIDEO INSPECTION | LF | 220 |
| 603.82212 | 12" PE PIPE (TYPE S) | LF | 220 |
| 604.0007 | POLYETHYLENE LINER | EA | 8 |
| 604.124 | CATCH BASINS TYPE B, 4-FOOT DIAMETER | U | 5 |
| 604.324 | DRAINAGE MANHOLES, 4-FOOT DIAMETER | U | 3 |
| 604.45 | ADJUST CB OR MANHOLE FRAME AND GRATE/COVER TO GRADE, BRICK WITH MORTAR | LF | 3 |
| 604.728 | GRATES & FRAMES, TYPE B | EA | 1 |
| 607.28 | CHAIN LINK FENCE WITH ALUMINUM COATED STEEL FABRIC, 8' HIGH | LF | 44 |
| 607.428 | POST ASSEMBLIES FOR CHAIN LINK FENCE, 8' HIGH | EA | 4 |
| 607.72816 | DOUBLE GATE CHAIN LINK FENCE WITH ALUMINUM COATED STEEL FABRIC, 16' WIDE X 8' HIGH | LF | 16 |
| 608.24 | 4" CONCRETE SIDEWALK | SY | 481 |
| 608.54 | ADA DETECTABLE WARNING PANELS | SF | 35 |
| 608.548 | ADA DETECTABLE WARNING PANELS RADIUS | SF | 85 |
| 609.015 | NEW 5" STRAIGHT VERTICAL GRANITE CURB | LF | 1050 |
| 609.025 | NEW 5" CURVED VERTICAL GRANITE CURB | LF | 230 |
| 615.03 | TRAFFIC SIGN TYPE C | SF | 13 |
| 618.6 | UNIFORMED OFFICERS | HR | 40 |
| 618.7 | UNIFORMED FLAGGERS | HR | 100 |
| 619.1 | MAINTENANCE OF TRAFFIC | LS | 1 |
| 619.11 | FLAKE CALCIUM CHLORIDE FOR DUST CONTROL | LS | 1 |
| 632.0104 | RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE | LF | 4400 |
| 632.0112 | RETROREFLECTIVE PAINT PAVE. MARKING, 12" LINE | LF | 360 |
| 632.0118 | RETROREFLECTIVE PAINT PAVE. MARKING, 18" LINE | LF | 70 |
| 632.911 | OBLITERATE PAVE. MARKING LINE, 12" WIDE & UNDER | LF | 560 |
| 641 | LOAM | CY | 390 |
| 645 | CATCH BASIN SILT SACK | EA | 7 |
| 645.512 | PERIMETER SOCK FOR EROSION CONTROL | LF | 300 |
| 645.531 | SILT FENCE | LF | 300 |
| 645.7 | STORM WATER POLLUTION PREVENTION PLAN | U | 1 |
| 645.719 | MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS | HR | 35 |
| 646.31 | TURF ESTABLISHMENT WITH MULCH AND TACKIFIERS | SY | 2350 |
| 650.201 | LANDSCAPING | U | 1 |
| 650.202 | LANDSCAPING - UNSPECIFIED | U | 1 |
| 692 | MOBILIZATION | U | 1 |
| 699 | MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL | $ | 5000 |
| 1008.4 | ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS | $ | 5000 |
| 1010.15 | FUEL ADJUSTMENT | $ | 2000 |
| 1010.2 | ASPHALT CEMENT ADJUSTMENT | $ | 5000 |

**Bid Alternate 1 - Granite Group Delivery Area**

| | | | |
|---|---|---|---|
| 201.901 | CLEANING EXISTING BMP | LS | 1 |
| 203.1 | COMMON EXCAVATION | CY | 75 |
| 214A | FINE GRADING (SIDEWALKS AND DRIVEWAYS) | SY | 580 |
| 304.4 | CRUSHED STONE (FINE GRADATION) (F) | CY | 40 |
| 403.118 | MACHINE INSTALLED BINDER COURSE | TON | 66 |
| 403.11W | MACHINE INSTALLED WEARING COURSE | TON | 34 |
| 403.12 | HOT BITUMINOUS PAVEMENT, HAND METHOD | TON | 5 |
| 403.16 | PAVEMENT JOINT ADHESIVE | LF | 170 |
| 410.22 | ASPHALT EMULSION FOR TACK COAT | GAL | 19 |
| 417 | COLD PLANING BITUMINOUS SURFACES | SY | 20 |
| 550.3 | STEEL BOLLARD (REMOVABLE) | EA | 2 |
| 605.82251 | 24" AGGREGATE UNDERDRAIN TYPE 2, WITH 6" PERF. CORR. POLYETHYLENE PIPE | LF | 60 |

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
| | | | | |

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DRAWN JCM | CHECKED EPR | QC'D WCA | DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: LEGEND & QUANTITY TABLES

SHEET: G–101

DEMOLITION NOTES:

1. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. CONTRACTOR SHALL LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, AND COORDINATE WITH NECESSARY UTILITIES.
2. MATERIAL TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
3. ANY DAMAGE BY THE CONTRACTOR DURING DEMOLITION AND/OR CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES NECESSARY TO COMPLETE THE WORK.
5. CONTRACTOR SHALL REMOVE TREES AND BRUSH AS INDICATED AND AS REQUIRED FOR COMPLETION OF THE WORK. ALL STUMPS SHALL BE REMOVED AND SURFACES GRUBBED WITHIN THE LIMITS OF WORK.
6. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF PORTSMOUTH.
7. CONTRACTOR SHALL PROTECT ALL FIELD STONE WALLS, FENCES, MAILBOXES, STRUCTURES, ETC. THROUGHOUT THE COMPLETION OF THE WORK.
8. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION WORK. THIS INCLUDES SILT FENCE/SILT SOCK AND INLET PROTECTION BARRIERS.
9. CONTRACTOR SHALL SAWCUT PAVEMENT AT EDGES OF TRENCHES FOR CLEAN VERTICAL EDGES.
10. CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS ACCESS TO RESIDENTIAL AND COMMERCIAL PROPERTIES THROUGHOUT THE CONSTRUCTION PERIOD.
11. PAVEMENT RECLAMATION LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL RECLAMATION MAY BE REQUIRED. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT RECLAMATION.
12. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, PAVEMENT, PIPES AND HEADWALLS WITHIN THE LIMITS OF CONSTRUCTION.
13. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE UTILITIES. WORK ASSOCIATED WITH UTILITIES INCLUDES, BUT IS NOT LIMITED TO, RELOCATION OF UTILITY POLES.
14. CONTRACTOR SHALL NOTIFY DIG–SAFE 72 HOURS PRIOR TO ANY WORK STARTING. CONTRACTOR REQUIRED TO MAINTAIN AN ACTIVE DIG–SAFE PERMIT THROUGHOUT THE DURATION OF CONSTRUCTION.

GRADING NOTES:

1. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CONTRACTOR SHALL PAY CLOSE ATTENTION TO DRIVEWAY ENTRANCES.
2. EXISTING MANHOLES AND CATCH BASINS WITHIN LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADES.
3. ALL WATER SHUT OFF VALVES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADES.
4. CONTRACTOR SHALL CLEAN ALL STRUCTURES WITHIN THE CONSTRUCTION LIMITS IMMEDIATELY UPON COMPLETION OF THE WORK. ALL SEDIMENT AND DEBRIS SHALL BE DISPOSED OF PER FEDERAL, STATE AND LOCAL REGULATIONS.
5. STORM DRAIN PIPING, UNLESS OTHERWISE NOTED, SHALL BE HIGH DENSITY POLTYETHYLENE (HANCOR HI–Q, ADS N–12 OR APPROVED EQUAL).
6. PROPOSED CATCHBASINS SHALL BE EQUIPPED WITH 2' SUMPS.
7. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
8. CONTRACTOR SHALL PROVIDE THE FOLLOWING MINIMUM REQUIREMENTS FOR COMPACTION:

| | |
|---|---|
| BELOW PAVEMENT AND CONCRETE AREAS: | 95% |
| TRENCH BEDDING AND BACKFILL: | 95% |
| BELOW LOAM AND SEED AREAS: | 90% |

   COMPACTION PERCENTAGES SHALL BE THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D–1557, METHOD C. FIELD DENSITY TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM D–1556 OR ASTM–2922.
9. STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) AND CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS (DPW) STANDARD SPECIFICATIONS.
10. CONTRACTOR SHALL GRADE SLOPES TO THE LINES AND GRADES SHOWN ON THE PLANS. SLOPES STEEPER THAN 2:1 SHALL INCLUDE 6" RIP–RAP STONE FOR A DEPTH OF 18". SLOPES FROM 4:1 TO 2:1, CONTRACTOR SHALL PROVIDE A SLOPE STABILIZATION BLANKET.

SITE NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE SPECIFIED.
2. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DPW STANDARD SPECIFICATIONS.
3. CONTRACTOR SHALL PROVIDE A VERSION OF THE PLANS WITH THE FIELD CHANGES NOTED TO THE CITY OF PORTSMOUTH UPON COMPLETION OF THE PROJECT.
4. MATERIALS AND CONSTRUCTION SHALL COMPLY TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND SPECIFICATIONS.
5. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL VERTICAL AND HORIZONTAL CONTROL FOR THE PROJECT.
6. PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE LATEST REVISION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
7. CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF PORTSMOUTH FOR APPROVAL.
8. CONTRACTOR SHALL BE FAMILIAR WITH ALL AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS FOR ACCESSIBILITY.
9. PAVEMENT MARKINGS SUCH AS CROSSWALKS, STOP BARS, LEGENDS AND SYMBOLS SHALL BE THERMOPLASTIC PER AASHTO M249. CENTERLINE AND EDGE STRIPING SHALL BE TRAFFIC PAINT PER AASHTO M248 TYPE 'F'. TRAFFIC PAINT COLOR AS INDICATED IN THE PLANS.
10. ACCESS TO THE PARKING LOT ON THE NORTHWEST SIDE OF THE HOTEL SHALL BE MAINTAINED THROUGH THE DURATION OF THE CONTRACT

UTILITY NOTES:

1. CONTRACTOR SHALL IDENTIFY AND RECORD SWING TIES TO ALL EXISTING UTILITY STRUCTURES, INCLUDING, BUT NOT LIMITED TO WATER SHUT OFF VALVES, MANHOLES, FIRE HYDRANTS.
2. CONTRACTOR SHALL COORDINATE UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY.
   ELECTRIC – EVERSOURCE
   TELEPHONE – FAIRPOINT
   WATER/SEWER – CITY OF PORTSMOUTH
   GAS – UNITIL
3. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. CONTRACTOR SHALL LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, AND COORDINATE WITH NECESSARY UTILITIES.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, ARRANGE ALL INSPECTIONS, AND SUBMIT CERTIFICATES OF ACCEPTANCE TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
5. CONTRACTOR SHALL NOTIFY DIG–SAFE 72 HOURS PRIOR TO ANY WORK STARTING. CONTRACTOR REQUIRED TO MAINTAIN AN ACTIVE DIG–SAFE PERMIT THROUGHOUT THE DURATION OF CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, CATCH BASINS, FRAMES, GRATES & COVERS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF THE UTILITY COMPLETE AND OPERATIONAL.
7. CONTRACTOR SHALL PROVIDE AS–BUILT PROPOSED STORM WATER DRAINAGE SYSTEM, TO INCLUDE ELEVATIONS OF RIM AND ALL INVERTS.
8. NEW FRAMES, GATE VALVES AND CURB STOPS SHALL BE ADJUSTED TO GRADE. ADJUSTMENTS (TEMP. & FINAL) ARE INCIDENTAL TO THE PAY ITEM.
9. PROPOSED POLE LOCATIONS ARE SHOWN FOR THE CONTRACTOR'S AWARENESS. EVERSOURCE SHALL REMOVE, RELOCATE AND CONSTRUCT ANY UTILITY POLE WORK SHOWN ON THESE PLANS. THE CONTRACTOR IS TO COORDINATE WITH EVERSOURCE DURING CONSTRUCTION.

GRANITE PLUMBING DELIVERY AREA: (BID ALTERNATE 1)

WORK IN THIS AREA WILL INCLUDE:

1. REMOVAL OF EXISTING PAVEMENT.
2. REMOVAL OF 14' SECTION OF WALL AND INSTALLATION OF BOLLARDS AS NOTED ON SHEET C–201.
3. CLEAR VEGETATION FROM BMP, WITH MINOR REGRADING TO ENSURE POSITIVE DRAINAGE AND OUTLET OF WATER.
4. INSTALL APPROX. 60 LF OF 24" AGGREGATE UNDERDRAIN TYPE 2, WITH 6" PERF. CORR. POLYETHYLENE PIPE ALONG CONCRETE RETAINING WALL.
5. REGRADING TO PROVIDE FINISH GRADES SHOWN, SUPPLEMENTING EXISTING SUBBASE MATERIAL WITH CRUSHED STONE (FINE) (NHDOT 304.4).
6. REPAVING WITH A TOTAL OF THICKNESS OF 5" AS NOTED IN THE TYPICAL ROADWAY SECTION (PAVEMENT ONLY).
7. WORK IN THIS AREA TO BE COORDINATED WITH BUSINESS OWNER TO MINIMIZE DISTURBANCE OF DELIVERIES.
8. BUSINESS OWNER RESPONSIBLE FOR RELOCATION OF ANY DUMPSTER OR MATERIALS STORED IN THIS AREA.
9. FINAL PAVEMENT GRADING SHALL BE APPROVED BY RESIDENT. PARKING LOT SHOULD GRADE TO DRAIN TOWARDS 14' WIDE OPENING IN CONCRETE WALL.
10. WORK IN GRANITE GROUP DELIVERY AREA TO BE COORDINATED WITH BUSINESS OWNER TO MINIMIZE DISRUPTION OF DELIVERIES.

WETLAND NOTES:

1. PERMANENT WETLAND BOUNDARY MARKERS SHALL BE SHOWN ON THE PLAN AND INSTALLED DURING CONSTRUCTION.
2. THE FOLLOWING VEGETATION PRACTICES SHALL BE AVOIDED IN ALL WETLAND BUFFERS, EXCEPT WHERE SPECIFICALLY ALLOWED (PER PORTSMOUTH ZONING ORDINANCE ARTICLES 10.1018.23, 10.1018.24 AND 10.1018.25):
   2.1. CHEMICAL CONTROL OF VEGETATION
   2.2. REMOVAL OR CUTTING OF VEGETATION IN THE VEGETATED BUFFER STRIP (VBS)
   2.3. REMOVAL OF >50% OF TREES GREATER THAN 6" DBH IN THE LIMITED CUT AREA (LCA)
   2.4. USE OF ANY FERTILIZER IN A WETLAND OR VBS
   2.5. USE OF ANY FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW–RELEASE NITROGEN FERTILIZERS IN A WETLAND BUFFER
   2.6. USE OF PESTICIDES IN A WETLAND BUFFER

GENERAL NOTES:

1. EXISTING SIGNS WITHIN THE PROJECT FOOTPRINT, TO BE RELOCATED WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.
2. ALL COSTS ASSOCIATED WITH FURNISHING, INSTALLING, AND MAINTAINING TEMPORARY EROSION AND SEDIMENT CONTROL SHALL BE SUBSIDIARY TO 645.71 – MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS.

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
| | | | | |

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DRAWN JCM | CHECKED EPR | QC'D WCA | DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: GENERAL NOTES

SHEET: G–102

COAKLEY ROAD

BORTHWICK AVENUE

TBM 8824H
MAG NAIL IN
CONC. LIGHT POLE BASE
ELEV.=22.48'

TBM 8824G
MAG NAIL SET UP 10"
IN POLE PSNH/271/4/4
ELEV.=23.38'

NO TEST DRIVERS
LOCAL TRAFFIC ONLY

3191/5/NETT/271/5/8T
W/CABLE BOX & COND

65T/4 1/2

30T/ES271/3Y

EXISTING COAKLEY
ROAD R.O.W.

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

5/8" REBAR FND.
DOWN 3" NO CAP

N62°30'47"E
22.54'

N62°30'47"E
26.85'

28.2'

N62°30'47"E 273.87'

N62°30'47"E 212.00'

~PAVED DRIVE~

MB#96

~GRASS~

THE GRANITE GROUP

~PAVED~
PARKING

PROPOSED
NEW R.O.W.

~PAVED PARKING~

N17°40'14"W 35.98'

45'

22.5'

22.5'

36.1'

8.6'

EXISTING
PROPERTY
LINE

260.91'
S24°11'41"E

39.1'

189.82'
S24°11'41"E

263.67'
S24°11'41"E

7.4'

8.8'

N17°40'14"W 39.35'

5/8" REBAR FND.
DOWN 7" W/ID CAP
TRITECH ENGINEERING

8' WOODEN
STOCKADE FENCE

100' WETLANDS SETBACK

SLIDING GATE

8' CHAIN LINK FENCE

~CONC. RAMP~

FF=22.6'

DUMPSTERS

100'
WETLANDS
BUFFER

CONC. RET. WALL

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

PROPOSED
NEW R.O.W.

EXISTING SEWER
EASEMENT CENTERLINE.
EASEMENT DOES NOT
SPECIFY WIDTH

N24°09'47"W 234.98'

5/8" REBAR FND.
UP 2" NO CAP

EXISTING DRAINAGE
EASEMENT

EXISTING
BORTHWICK
AVENUE R.O.W.

S69°31'16"W 212.23'

S69°31'16"W
26.41'

S69°31'16"W
22.55'

5/8" REBAR FND.
FLUSH W/ID CAP ILLEGIBLE

PSNH3101X1/7/NETT

TBM 8824A
MAG NAIL SET UP 7"
IN POLE PSNH/3101X1/6/7/NETT
ELEV.=23.30'

COAST BUS STOP

TBM 8824B
MAG NAIL SET UP 6"
IN POLE ES3101X1/7
ELEV.=20.20'

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

CB 3237 (2750)
RIM ELEV.=21.4'
DEBRIS ELEV.=18.8'
(A) 4" PVC INV.=19.4'
(3236) 10" UNK INV.=19.0'*
*CRUSHED & BROKEN

CB 3236 (3639)
RIM ELEV.=21.2'
DEBRIS ELEV.=18.8'
(A) 6" PVC INV.=19.0'
(3237) UNK INV.=18.9'*
(B) 10" UNK INV.=18.9'
*CRUSHED & BROKEN

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

CONC. WALK

VINYL STOCKADE
FENCE

DUMPSTER ENCLOSURE
8' CHAIN LINK FENCE

CONC. BLOCK
RET. WALL

~POOL~
ENCLOSURE

METAL
PICKET
FENCE

ENTRANCE
SIGN

100'
WETLANDS
BUFFER

TBM 8824C
CHISELED BOX IN
CORNER OF CONC. PAD
ELEV.=22.22'

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

S47°22'54"E 242.28'

S66°58'05"W 449.00'

S69°31'16"W 226.12'

MB#650

35MPH

~PAVED WALK~

NETT/7809/10

ES3101X1/7Y
W/COAST BUS STOP SIGN

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

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DRAWN JCM
CHECKED EPR
QC'D WCA
DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: PROPOSED RIGHT-OF-WAY PLAN

SHEET: E-001

COAKLEY ROAD

BORTHWICK AVENUE

TBM 8824H
MAG NAIL IN
CONC. LIGHT POLE BASE
ELEV.=22.48'

TBM 8824G
MAG NAIL SET UP 10"
IN POLE PSNH/271/4/4
ELEV.=23.38'

NO TEST DRIVERS
LOCAL TRAFFIC ONLY

3191/5/NETT/271/5/8T
W/CABLE BOX & COND

65T/4 1/2

30T/ES271/3Y

CONSTRUCT 24'
TEMPORARY DRIVEWAY

EXISTING COAKLEY
ROAD R.O.W.

5/8" REBAR FND.
DOWN 3" NO CAP

PROPOSED PERMANENT
R.O.W. EASEMENT
5,901± S.F.

N62°30'47"E
22.54'

N62°30'47"E
26.85'

28.2'

24'-0"

N62°30'47"E 111.12' (TIE LINE)

N62°30'47"E 140.21'

S62°25'48"W 77.51'

S27°29'13"E
6.47'

N62°30'47"E 119.91'

N62°30'47"E 65.37' (TIE LINE)

MB#96

~PAVED DRIVE~

~GRASS~

THE GRANITE GROUP

~PAVED~
~PARKING~

5/8" REBAR FND.
DOWN 7" W/ID CAP
TRITECH ENGINEERING

8' WOODEN
STOCKADE FENCE

N27°12'57"W 35.48'

N27°12'57"W 57.26'

S63°39'10"W 103.67'

PROPOSED TEMPORARY
CONSTRUCTION ACCESS
16,745± S.F.

PROPOSED TEMPORARY
CONSTRUCTION ACCESS
14,800± S.F.
~PAVED PARKING~

S27°34'12"E
57.71'

100' WETLANDS SETBACK

N68°32'38"E 46.00'

PROPOSED TEMPORARY
CONSTRUCTION ACCESS
7150± S.F.

N66°27'36"E 38.97'

SIDING SHED

6' CHAIN LINK FENCE

S22°5'53"E 19.51'

S67°14'38"W
11.34'

EXISTING
PROPERTY
LINE

N61°30'19"W 50.58'

CONC. WALK

TH=23.2'

CB 3237 (2750)
RIM ELEV.=21.4'
DEBRIS ELEV.=18.8'
(A) 4" PVC INV.=19.4'
(3236) 10" UNK INV.=19.0'*
*CRUSHED & BROKEN

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

CB 3236 (3639)
RIM ELEV.=21.2'
DEBRIS ELEV.=18.8'
(A) 6" PVC INV.=19.0'
(3237) UNK INV.=18.9'*
(B) 10" UNK INV.=18.9'
*CRUSHED & BROKEN

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

S47°52'54"E 242.26'

~GRASS~

N23°57'3"W
81.97'

DUMPSTER

CONC. RAMP

S68°37'43"W 20.94'

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

N22°56'08"W
88.37'

189.82'
S24°11'41"E

260.91'
S24°11'41"E

S27°33'29"E 85.18'

N62°30'39"E
21.89'

VINYL STOCKADE
FENCE

CONC. WALK

S27°20'39"E 35.47'

DUMPSTER ENCLOSURE
8' CHAIN LINK FENCE

CONC. BLOCK
RET. WALL

~POOL~
ENCLOSURE

METAL
PICKET
FENCE

N62°39'21"E 74.39'

~PAVED PARKING~

S27°19'26"E
46.00'

S62°40'34"W 96.70'

100'
WETLANDS
BUFFER

TBM 8824C
CHISELED BOX IN
CORNER OF CONC. PAD
ELEV.=22.22'

ENTRANCE
SIGN

N27°07'11"W 21.14'

N62°39'14"E 6.09'

N27°20'46"W 13.13'

MB#650

~PAVED WALK~

CENTERLINE OF
SEWER MAIN.
EASEMENT DOES
NOT SPECIFY
WIDTH

N67°28'32"E
32.30'

S22°52'47"E
17.06'

PROPOSED PERMANENT
R.O.W. EASEMENT
5,979± S.F.

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

S67°23'29"W
2.87'

N34°44'13"W
15.81'

N67°21'41"E 93.87'

N24°09'47"W 234.98'

S22°41'42"E 61.95'

S22°52'47"E 32.97'

N20°36'13"W 71.34'

N67°17'09"E
80.33'

5/8" REBAR FND.
DOWN 2" W/ID CAP
ILLEGIBLE

CONC. RET. WALL

8" CHAIN LINK FENCE

100'
WETLANDS
BUFFER

N22°25'51"W 44.58'

N22°26'21"W 50.36'

N22°25'51"W 39.35'

EXISTING DRAINAGE
EASEMENT

EXISTING
BORTHWICK
AVENUE R.O.W.

S69°31'16"W
182.66'

S69°31'16"W
26.41'

S69°31'16"W
42.43'

S69°31'16"W
22.55'

5/8" REBAR FND.
FLUSH W/ID CAP ILLEGIBLE

PSNH3101X1/7/NETT

COAST BUS STOP

TBM 8824B
MAG NAIL SET UP 6"
IN POLE ES3101X1/7
ELEV.=20.20'

NETT/7809/10

ES3101X1/7Y
W/COAST BUS STOP SIGN

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

NOTES:
1. A TEMPORARY DRIVEWAY, MINIMUM 24' WIDTH SHALL BE CONSTRUCTED WITHIN THE PROPOSED TEMPORARY ACCESS LIMITS. DRIVE SHALL BE CONSTRUCTED AND MAINTAINED TO ALLOW FOR ACCESS TO THE PARKING LOT ON THE NORTHWEST SIDE OF THE HOTEL THROUGH THE DURATION OF THE CONSTRUCTION.

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PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: PROPOSED EASEMENT PLAN

SHEET: E–002

COAKLEY ROAD

BORTHWICK AVENUE

TBM 8824H
MAG NAIL IN
CONC. LIGHT POLE BASE
ELEV.=22.48'

TBM 8824G
MAG NAIL SET UP 10"
IN POLE PSNH/271/4/4
ELEV.=23.35'

TBM 8824B
MAG NAIL SET UP 6"
IN POLE ES3101X1/7
ELEV.=20.20'

TBM 8824C
CHISELED BOX IN
CORNER OF CONC. PAD
ELEV.=22.22'

TREE TO BE REMOVED, REMOVAL OF CAST IRON WELL IS SUBSIDIARY TO REMOVAL OF TREE

TREE TO REMAIN

SIGN TO REMAIN

LIGHT TO REMAIN

FENCE TO REMAIN

TREES TO REMAIN, PROTECT DURING CONSTRUCTION

REMOVE 14' OF CONCRETE RETAINING WALL

ACTIVE SEWER LINE APPROXIMATE LOCATION

PROPOSED NEW R.O.W.

EXISTING PROPERTY LINE

APPROXIMATE LIMITS OF DEMOLITION (12,840± SF)

APPROXIMATE LIMITS OF DEMOLITION (5,040± SF)

APPROXIMATE LIMITS OF DEMOLITION (14,645± SF)

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY, LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

THE GRANITE GROUP

CB 3237 (2750)
RIM ELEV.=21.4'
DEBRIS ELEV.=18.8'
(A) 4" PVC INV.=19.4'
(3236) 10" UNK INV.=19.0'*
*CRUSHED & BROKEN

CB 3236 (3639)
RIM ELEV.=21.2'
DEBRIS ELEV.=18.8'
(A) 6" PVC INV.=19.0'
(3237) UNK INV.=18.9'*
(B) 10" UNK INV.=18.9'
*CRUSHED & BROKEN

NOTES:
1. DEMOLITION PLAN INTENDED TO SHOW LIMITS OF FULL DEPTH CONSTRUCTION, EXCAVATION & FILL LIMITS OUTSIDE OF THE CITY'S RIGHT-OF-WAY. COLD PLANING WILL OCCUR OUTSIDE THE LIMITS OF DEMOLITION WHERE NECESSARY. THE LIMIT OF DEMOLITION SERVES AS THE LIMIT OF COMMON EXCAVATION AS SHOWN ON THE COLD PLANE DETAIL ON SHEET 11.
2. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT EXACT. CONTRACTOR SHALL LOCATE ALL UTILITIES BEFORE WORKING IN THE RESPECTIVE AREAS.

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

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PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DEMOLITION PLAN

SHEET: C–101

COAKLEY ROAD

BORTHWICK AVENUE

SHOULDER RECONSTRUCTION IS TO BE PER THE VERTICAL GRANITE CURB FOR ROADWAY DETAIL

3191/5/NETT/271/5/8T W/CABLE BOX & COND

65T/4 1/2

NO TEST DRIVERS LOCAL TRAFFIC ONLY

SIGN TO BE SET ON NEW POLE

30T/ES271/3Y

100' WETLANDS BUFFER

PROPOSED DETECTABLE WARNING PANEL (TYP.)

PROPOSED 5.5' WIDE CONCRETE SIDEWALK (TYP.)

PROPOSED CR (TYP.)

4" SSLW

END VGC (6' TIP)

END SAWCUT

N62°30'47"E 273.87'

N62°30'47"E 212.00'

+43.40 15.55 RT

+43.33 15.33 LT

BEGIN VGC (3' TIP)

PROP. R1-1

PROP. LANDSCAPING

5/8" REBAR FND. DOWN 3" NO CAP

5/8" REBAR FND. DOWN 7" W/ID CAP TRITECH ENGINEERING

EXISTING PARKING SPACES (TYP.)

PROPOSED PARKING SPACES (TYP.)

SEE NOTE. 1

REMOVE CURB (ITEM 202.6) (TYP.)

END VGC (MATCH)

100' WETLANDS SETBACK

8' WOODEN STOCKADE FENCE

REGRADE AND PAVE AREA AS SEEN IN SHEET C-301

SLIDING GATE

8' CHAIN LINK FENCE

BEGIN VGC (MATCH)

PROP. R7-1d

PROP. LOAM & SEED

CONSTRUCT 60 LF OF 24" AGGREGATE UNDERDRAIN TYPE 2, WITH 6" PERF. CORR. POLYETHYLENE PIPE ALONG WALL

DUMPSTERS

ACTIVE SEWER LINE APPROXIMATE LOCATION

BOLLARDS TO BE LOCATED TO PREVENT VEHICULAR ACCESS

CLEAR VEGETATION FROM BMP. WITH MINOR REGRADING TO ENSURE POSITIVE DRAINAGE AND OUTLET OF WATER

CONC. RET. WALL

SAWCUT 14' SECTION OF CONCRETE RETAINING WALL. REMOVE TO FINISHED GRADE. PAID FOR UNDER COMMON EX.

100' WETLANDS BUFFER

CLEARING LINE

SLOPE LINE

5/8" REBAR FND. UP 3" NO CAP

PROPOSED 5.5' CONCRETE SIDEWALK (TYP.)

+5.43 13.00 RT

+5.43 113.00 LT

PROP. CR (TYP.)

RESET R2-1

PROP. R1-1

REGRADE AREA AS SEEN IN SHEET C-301

S69°31'16"W 212.26'

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

PARKING COUNT:
EXISTING – 20
PROPOSED – 20

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

PROP. R7-1d

4" SSLW

4" DSLY

PROP. LOAM & SEED

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

PARKING COUNT:
EXISTING – 115
PROPOSED SITE – 106
PROPOSED STREET – 9

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

PROPOSED LANDSCAPING

PROPOSED 5.0' WIDE CONCRETE SIDEWALK (PRIVATE) (TYP.)

BEGIN VGC (MATCH)

DUMPSTER ENCLOSURE 8' CHAIN LINK FENCE

FULL-DEPTH HMA CONSTRUCTION 3'R

END VGC

6"STEEL BOLLARD (TYP.)

PROPOSED DUMPSTER PAD w/ FENCE AND GATE

EXISTING PARKING LINES TO BE REMOVED

EXISTING PARKING SPACES (TYP.)

PROPOSED PARKING SPACES (TYP.)

100' WETLANDS BUFFER

CONC. BLOCK RET. WALL

POOL ENCLOSURE

METAL PICKET FENCE

ENTRANCE SIGN

VINYL STOCKADE FENCE

CONC. WALK

~PAVED PARKING~

~PAVED WALK~

~GRASS~

~PAVED DRIVE~

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

S47°52'34"E 242.26'

S69°31'16"W 226.12'

S66°58'05"W 449.00'

N24°09'47"W 234.98'

(R&R) 35MPH

END VGC (MATCH)

PROP. LIMITS OF SAWCUT

PROP. CROSSWALK (TYP.)

BEGIN VGC (MATCH)

5/8" REBAR FND. FLUSH W/ID CAP ILLEGIBLE

PSNH3101X1/7/NETT

COAST BUS STOP (R&R) WITH NEW UTILITY POLE

NETT/7809/10

ES3101X1/7Y W/COAST BUS STOP SIGN

NOTES:
1. INSTALLATION OF CURBING TO ALLOW FOR GRANITE GROUP SIGN AND FOUNDATION TO REMAIN IN PLACE DURING AND POST-CONSTRUCTION.
2. CONTRACTOR TO MAINTAIN PEDESTRIAN TRAFFIC DURING CONSTRUCTION (SUBSIDIARY TO OTHER PAY ITEMS)
3. EXISTING SIGNS WITHIN THE PROJECT FOOTPRINT TO BE REMOVED OR RELOCATED WILL BE CONSIDERED SUBSIDIARY TO THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.
4. ALL PARKING STALLS TO BE STRIPED SHALL BE STRIPED WITH 4" SSLW

PAVEMENT MARKING LEGEND
{}SSL()* = {SIZE IN INCHES} SINGLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)
{}DSL()* = {SIZE IN INCHES} DOUBLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

NH STATE PLANE COORDINATE SYSTEM NAD 1983

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PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: SITE PLAN

SHEET: C-201

COAKLEY ROAD

BORTHWICK AVENUE

TBM 8824H
MAG NAIL IN
CONC. LIGHT POLE BASE
ELEV.=22.48'

TBM 8824G
MAG NAIL SET UP 10"
IN POLE PSNH/271/4/4
ELEV.=23.38'

NO TEST DRIVERS
LOCAL TRAFFIC ONLY

30T/ES271/3Y

3191/5/NETT/271/5/8T
W/CABLE BOX & COND

RECONSTRUCT DMH TO CB
W/ TYPE B GRATE & FRAME
RIM=22.21
INV IN=18.70
INV IN=18.65
INV OUT=18.60

PROP. 20 LF 12" HDPE

PDMHx
RIM=22.65
INV IN=17.85
INV OUT=17.85

PDMHx
RIM=22.36
INV IN=16.99
INV IN=17.24
INV OUT=16.99

PROP. 5 LF 12" HDPE

DMH
RIM=21.93
INV IN=16.57
INV OUT=16.48

15" HDPE
INV.=16.5'

PCBx
RIM=22.13
INV OUT=17.39

DMH (RET.)
ADJUST TO GRADE
INV IN=17.60
INV OUT=17.35

PCBx
RIM=21.87
INV OUT=18.12

PDMHx
RIM=22.28
INV IN(EAST)=18.05
INV IN(WEST)=18.05
INV OUT=17.95

PCBx
RIM=21.90
INV IN=18.20
INV OUT=18.10

PROP. 9 LF 12" HDPE

PROP. 13 LF
12" HDPE

N62°30'47"E 212.00'

N62°30'47"E 273.87'

S47°52'34"E 242.26'

S69°31'16"W 226.12'

S66°58'05"W 449.00'

N24°09'47"W 234.98'

12+00

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

THE GRANITE GROUP
100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

CB 3237 (2750)
RIM ELEV.=21.4'
DEBRIS ELEV.=18.8'
(A) 4" PVC INV.=19.4'
(3236) 10" UNK INV.=19.0'*
*CRUSHED & BROKEN

CB 3236 (3639)
RIM ELEV.=21.2'
DEBRIS ELEV.=18.8'
(A) 6" PVC INV.=19.0'
(3237) UNK INV.=18.9'*
(B) 10" UNK INV.=18.9'
*CRUSHED & BROKEN

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

PROP. UTILITY POLE
STA. 1+85.2
15.1 LT
(BY OTHERS)

PROP. UTILITY POLE
STA. 2+83.6
89.9 RT
(BY OTHERS)

PROP. 147 LF 12" HDPE

PROP. 19 LF 12" HDPE

PROP. DITCH LINE

PROP. OVERHEAD
WIRE (TYP.)

PROP. GUY WIRE (TYP.)

PROP. UTILITY POLE
(TYP.)
PSNH3101X1/7/NETT

REMOVE 14' OF
CONCRETE RETAINING
WALL

CLEAR
VEGETATION
FROM BMP, WITH
MINOR
REGRADING TO
ENSURE POSITIVE
DRAINAGE AND
OUTLET OF
WATER

ACTIVE SEWER
LINE
APPROXIMATE
LOCATION

SEE GRANITE
PLUMBING
DELIVERY AREA
NOTE ON SHEET
G-102

TREES TO REMAIN,
PROTECT DURING
CONSTRUCTION

ADJUST SEWER
MANHOLE TO GRADE

REM. EXIST. UP, BRACE
POLE, AND GUY

TBM 8824B
MAG NAIL SET UP 6"
IN POLE ES3101X1/7
ELEV.=20.20'

TBM 8824C
CHISELED BOX IN
CORNER OF CONC. PAD
ELEV.=22.22'

ES3101X1/7Y
W/COAST BUS STOP SIGN

COAST BUS STOP

NOTES:
1. FINAL DITCH GRADING SHALL BE APPROVED BY RESIDENT. DITCH SHOULD GRADE TO DRAIN TOWARDS THE EXISTING 24' INLET PIPE.
2. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT EXACT. CONTRACTOR SHALL LOCATE ALL UTILITIES BEFORE WORKING IN THE RESPECTIVE AREAS.
3. ALL CONTOURS (EXISTING & PROPOSED) ARE SHOWN AT 1' INTERVALS OTHER THAN CONTOURS WITHIN THE AREAS OF REGRADING ON THE WEST SIDE OF THE GRANITE GROUP BUILDING. CONTOURS IN THIS ARE ARE DISPLAYED AT AN INTERVAL OF .2' (EXISTING & PROPOSED).

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
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PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: GRADING, DRAINAGE & UTILITIES PLAN

SHEET: C–301

COAKLEY ROAD

BORTHWICK AVENUE

~PAVED DRIVE~

3191/5/NETT/271/5/8T
W/CABLE BOX & COND

65T/4 1/2

NO TEST DRIVERS
LOCAL TRAFFIC ONLY

30T/ES271/3Y

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

28.1'

N62°30'47"E 26.85'

N62°30'47"E 22.54'

N62°30'47"E 273.87'

N62°30'47"E 212.00'

~GRASS~

~PAVED PARKING~

~PAVED~
PARKING

THE GRANITE GROUP

LOAM & SEED
DISTURBED AREA

LOAM &
SEED ISLAND

MULCH
LANDSCAPED AREA
TO MATCH EXISTING

AUTUMN BRILLIANCE
SERVICEBERRY (TYP.)

8' WOODEN
STOCKADE FENCE

100' WETLANDS SETBACK

SLIDING GATE

8' CHAIN LINK FENCE

~CONC. RAMP~

FF=22.6'

DUMPSTERS

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

260.5'
S24°11'41"E

189.82'
S24°11'41"E

263.67'
S24°11'41"E

LOAM & SEED
DISTURBED AREA

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

PROPOSED
LANDSCAPING

VINYL STOCKADE
FENCE

CONC. WALK

DUMPSTER ENCLOSURE
8' CHAIN LINK FENCE

BLUE CHIFFON ROSE
OF SHARON (2)

LOAM & SEED
ISLAND

EMERALD GREEN
ARBORVITAE (6)

CONC. BLOCK
RET. WALL

~POOL~
ENCLOSURE

METAL
PICKET
FENCE

100'
WETLANDS
BUFFER

ENTRANCE
SIGN

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

N24°09'47"W 234.98'

100'
WETLANDS
BUFFER

SEE PLANTING PLAN FOR
ADDITIONAL INFORMATION

LOAM & SEED
DISTURBED AREA

S69°37'16"W 212.22'

S69°31'16"W 26.41'

S69°31'16"W 22.55'

S69°31'16"W 226.12'

S66°58'05"W 449.00'

S47°52'54"E 242.26'

35MPH

MB#650

PSNH3101X1/7/NETT

COAST BUS STOP

NETT/7809/10

ES3101X1/7Y
W/COAST BUS STOP SIGN

GRAPHIC SCALE
20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
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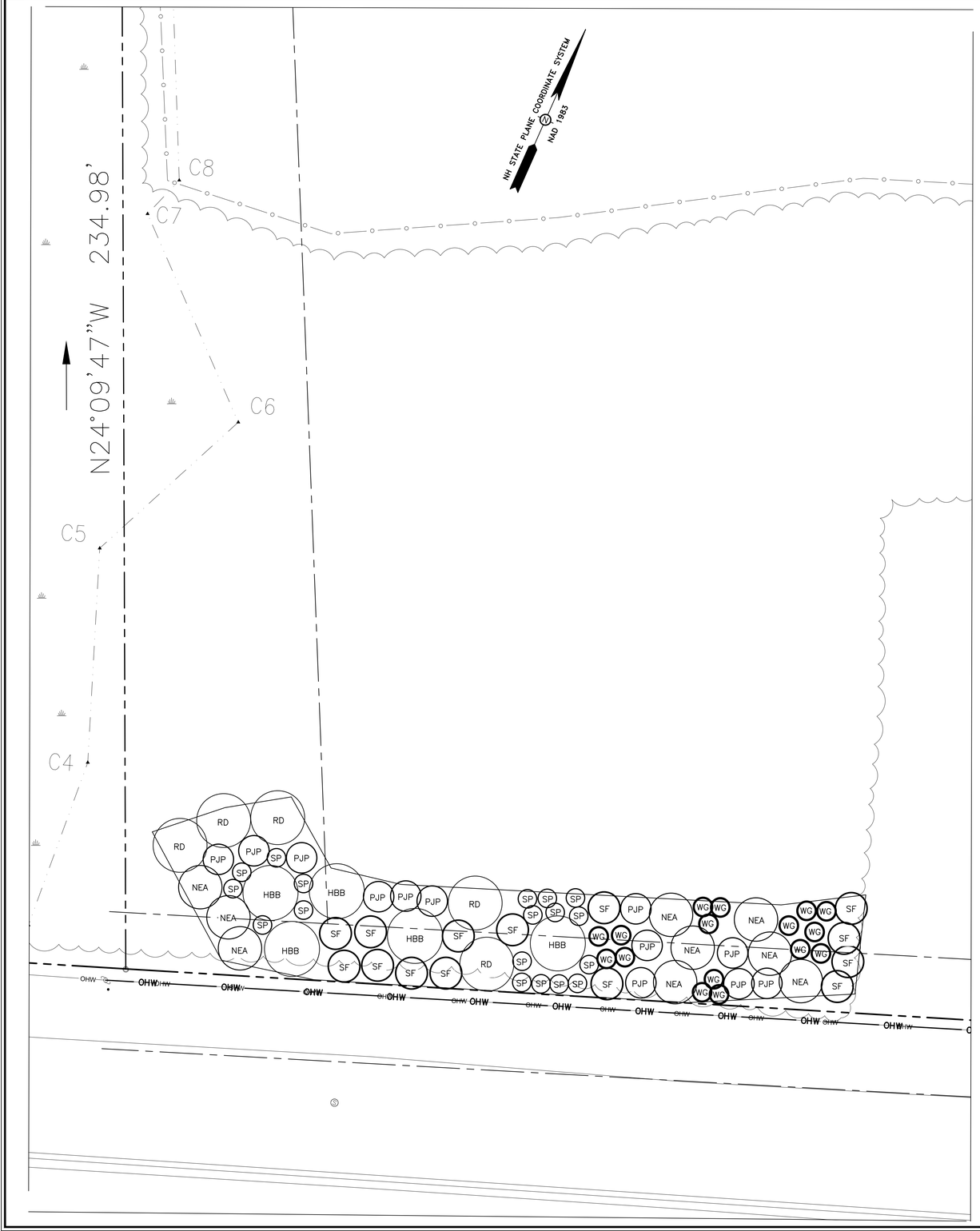
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150 Dow Street • Manchester, NH 03101
(603) 669-5555 • www.hoyletanner.com

DRAWN JCM
CHECKED EPR
QC'D WCA
DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: LANDSCAPING PLAN

SHEET: C–501




NOTES:

1. WETLAND BUFFER ENHANCEMENT AREA: WITHIN THE 580 SQUARE-FOOT WETLAND BUFFER ENHANCEMENT AREA, REMOVE ORIENTAL BITTERSWEET, MULTIFLORA ROSE, AND MORROW'S HONEYSUCKLE BY HAND. REVEGETATE THE PROPOSED DITCH AND TRANSITION SLOPES WITH NATIVE SHRUBS, GRASSES, FERNS, AND HERBACEOUS PERENNIALS IN ACCORDANCE WITH THE APPROVED PLANTING PLAN. THE ENHANCEMENT AREA SHALL NOT BE ROUTINELY MOWED.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
3. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY "THE AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, LATEST EDITION.
4. ALL PLANT MATERIAL SHALL BE WARRANTIED FOR 1 YEAR AFTER SUBSTANTIAL COMPLETION.
5. ALL PLANTS SHALL BE BALLED AND BURLAP UNLESS OTHERWISE NOTED ON THE PLANT LIST/SCHEDULE.
6. ALL PLANTS SHALL BE APPROVED BY ENGINEER PRIOR TO THEIR INSTALLATION AT THE SITE.
7. CONTRACTOR SHALL STAKE ALL PLANT LOCATIONS IN THE FIELD. OBTAIN APPROVAL OF ENGINEER BEFORE STARTING PLANT INSTALLATIONS.
8. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO A PRE-CONSTRUCTION STATE UNLESS OTHERWISE NOTED BY ENGINEER OR PLANS.

**PLANTING SCHEDULE**

| ID | Qty | Latin Name | Common Name | Scheduled Size | Notes |
|---|---|---|---|---|---|
| **BORTHWICK AVE** | | | | | |
| **SHRUBS** | | | | | |
| RD | 5 | *Swida sericea* | Red-Osier Dogwood | #3 cont. | Bare-Root Stock; 5' O.C. |
| HBB | 5 | *Vaccinium corymbosum* | High Bush Blueberry | #3 cont. | 5' O.C. |
| **PERENNIALS** | | | | | |
| SP | 18 | *Panicum virgatum* | Switch Panicgrass | #1 cont. | 24" O.C. |
| WG | 16 | *Solidago rugosa* | Wrinkleleaf Goldenrod | #1 cont. | 24" O.C. |
| PJP | 12 | *Eutrochium purpureum* | Purple Joe Pye-Weed | #1 cont. | 36" O.C. |
| SF | 14 | *Onoclea sensibilis* | Sensitive Fern | #1 cont. | 36" O.C. |
| NEA | 9 | *Symphyotrichum novae-angliae* | New England Aster | #1 cont. | 48" O.C. |

GRAPHIC SCALE

5 2.5 0 5 10 15 20 FEET
5 0 5 10 15 20 25 METERS

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
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QC'D WCA
DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: PLANTING PLAN

SHEET: C-502

## PROJECT NAME AND LOCATION:

COAKLEY – CONNECTOR ROAD
PORTSMOUTH, NEW HAMPSHIRE

## DESCRIPTION:

CONSTRUCTION OF A NEW ROADWAY CONNECTING COAKLEY RD TO BORTHWICK AVE, INCLUDING STREETSCAPING (SIDEWALKS, CURBING, AND LANDSCAPING). ADDITIONALLY INSTALLATION OF DRAINAGE ALONG THE SOUTH SIDE OF COAKLEY ROAD AND RELOCATED OVERHEAD UTILITIES ON THE NORTH SIDE OF BORTHWICK AVE.

## CONSTRUCTION SEQUENCE:

1. INSTALL ALL EROSION CONTROL MEASURES.
2. COORDINATE WITH UTILITY COMPANIES FOR RELOCATION OF POLES AND OVERHEAD UTILITIES.
3. REMOVE EXISTING PAVEMENT, SIDEWALKS AND LANDSCAPING AND INSTALL DRAINAGE.
4. GRADE AND COMPACT BASE MATERIALS.
5. PLACE BASE COURSE OF ROADWAY PAVEMENT.
6. PLACE CURBING AND CONSTRUCT NEW SIDEWALKS.
7. FINISH GRADE BEHIND SIDEWALKS.
8. PLACE SEED AND MULCH ON LOAMED AREAS.
9. PLACE WEARING COURSE OF PAVEMENT.
10. INSTALL ALL ROADWAY STRIPING AND SIGNS.
11. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE EROSION CONTROL MEASURES.

## EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES:

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM OF 0.5" OR GREATER. ALL DAMAGED SILT FENCES SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS. CONSTRUCT SILT FENCE AROUND TOPSOIL STOCKPILE.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

DISTURBED AREAS SHALL BE SEEDED WITHIN 72 HOURS FOLLOWING FINISHED GRADING.

AT NO TIME SHALL ANY DISTURBED AREA REMAIN UNSTABILIZED FOR LONGER THAN 72 HOURS. ALL AREAS WHERE CONSTRUCTION IS NOT COMPLETE WITHIN THIRTY DAYS OF THE INITIAL DISTURBANCE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

## INSTALLATION PROCEDURES OF EROSION AND SEDIMENT CONTROLS:

A. VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS FROM EARLY SPRING TO SEPTEMBER 30:

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10–20–20 FERTILIZER.

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

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

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

| GENERAL COVER | SEEDING RATE |
|---|---|
| CREEPING RED FESCUE | 100 LBS/ACRE |
| KENTUCKY BLUEGRASS | 100 LBS/ACRE |

SLOPE SEED (ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

| | |
|---|---|
| CREEPING RED FESCUE | 20 LBS/ACRE |
| TALL FESCUE | 20 LBS/ACRE |
| BIRDSFOOT TREFOIL | 2 LBS/ACRE |

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

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

PERENNIAL RYE: 0.7 LBS/1,000 S.F.
MULCH: 1.5 TONS/ACRE

B. MULCHING

IN ORDER TO BE EFFECTIVE, MULCHING MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO TYPES OF STANDARDS:

APPLY MULCH PRIOR TO ANY STORM EVENT:
THIS IS APPLICABLE WHEN WORKING WITHIN 100 FEET OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER FORECASTS FOR ADEQUATE WARNING TO SIGNIFICANT STORMS.

REQUIRED MULCHING WITHIN SPECIFIED TIME PERIOD:
THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY IN AN AREA, THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS AND THE POTENTIAL FOR IMPACT ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.

WHEN MULCH IS TO BE APPLIED TO PROVIDE PROTECTION OVER WINTER MONTHS, IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER SHALL BE ADDED TO THE MULCH.

C. WINTER NOTES

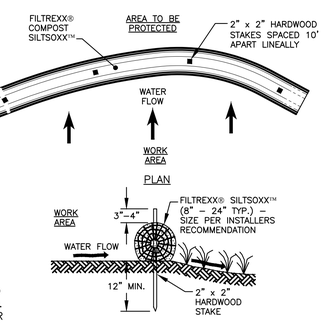
ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED STONE PER NHDOT ITEM 304.4.

## MAINTENANCE AND PROTECTION:

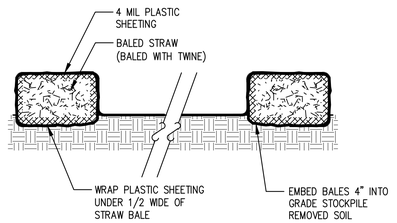
1. THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN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




NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

## SEDIMENTATION FENCE / LOG

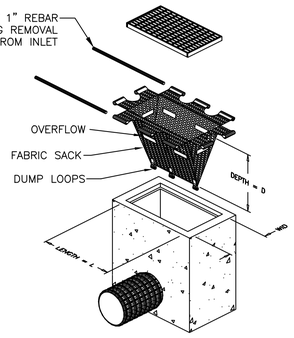
SCALE: N.T.S




NOTES:
1. CONTRACTOR MUST PROVIDE A CONCRETE CLEAN–OUT STATION. NO TRUCK CLEAN–OUT WILL BE ALLOWED WITHOUT CONTAINMENT.
2. PLASTIC WRAP SHALL BE FREE OF TEARS OR HOLES.
3. AFTER BASIN IS USED, WASHWATER FROM WASHOUT BASIN SHALL BE ALLOWED TO EVAPORATE OR BE VACUUMED OUT.
4. REMOVE REMAINING HARDENED SOLIDS.
5. REPLACE PLASTIC SHEETING AND STRAWBALES AS REQUIRED.

## CONCRETE CLEAN–OUT

SCALE: N.T.S




NOTES:
1. SILT SACK SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS AND INLETS WITHIN THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS.
2. INSTALL AND MAINTAIN PER MANUFACTURERS REQUIREMENTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT SIZE DEVICE FOR EACH INLET.
4. THE INLET SEDIMENT CONTROL DEVICE SHALL BE OF HIGH FLOW DESIGN (200 GAL/MIN/FT), AS PER THE MANUFACTURER'S SPECS.
5. THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED A MINIMUM ONCE PER MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
6. SUBSTITUTION OF A SHEET OF FILTER FABRIC PLACED OVER THE OPENING OF THE INLET IS NOT APPROVED.
7. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL WITH SEDIMENT OR OTHER DEBRIS.

## DRAINAGE INLET PROTECTION

SCALE: N.T.S

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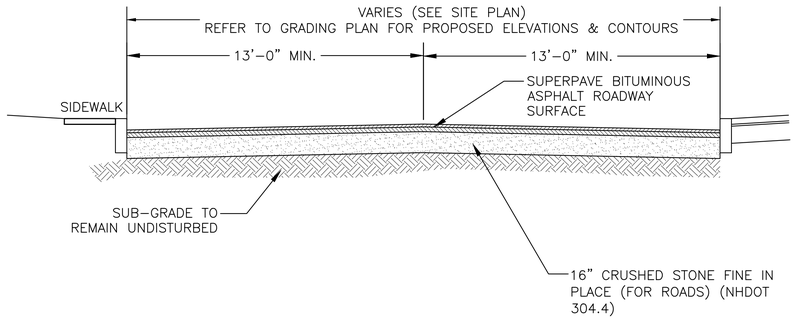
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DRAWN JCM | CHECKED EPR | QC'D WCA | DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DETAIL SHEETS NOTES & EROSION CONTROL

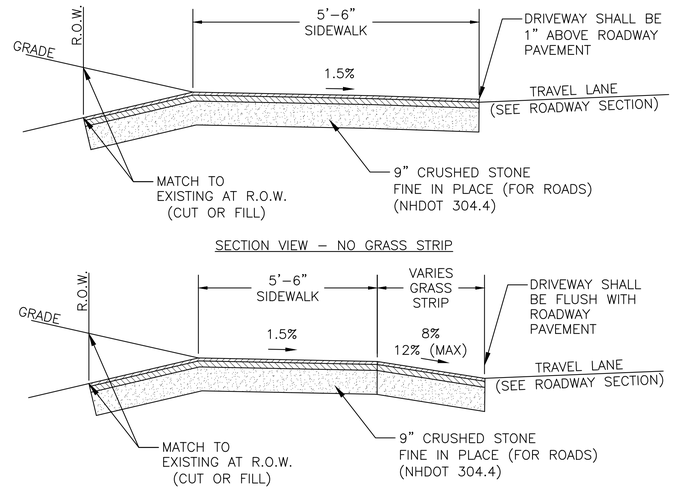
SHEET: C–601




NOTES:
1. SUB–GRADE SHALL BE PROOF–ROLLED AND ACCEPTED BY THE ENGINEER PRIOR TO PLACEMENT OF SELECT STONE BASE MATERIALS.

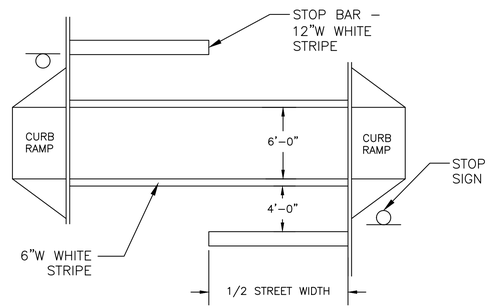
PAVEMENT THICKNESS:
5" TOTAL THICKNESS:
1.5" WEARING (3/8" 75 GYRATION)
3.5" BINDER (3/4" 50 GYRATION)
(TO BE PLACED IN 2" AND 1.5" LIFTS)

TYPICAL ROADWAY SECTION
SCALE: N.T.S




NOTES:
1. DRIVEWAY PAVEMENT SHALL BE:
   1.0" WEARING (3/8" 50 GYRATION)
   2.0" BINDER (1/2" 50 GYRATION)
2. ENGINEER TO DETERMINE IF EXISTING BASE MATERIALS ARE ACCEPTABLE.
3. SUB–GRADE SHALL BE COMPACTED PRIOR TO PLACEMENT OF STONE BASE. STONE BASE SHALL BE COMPACTED TO 95% PROCTOR.

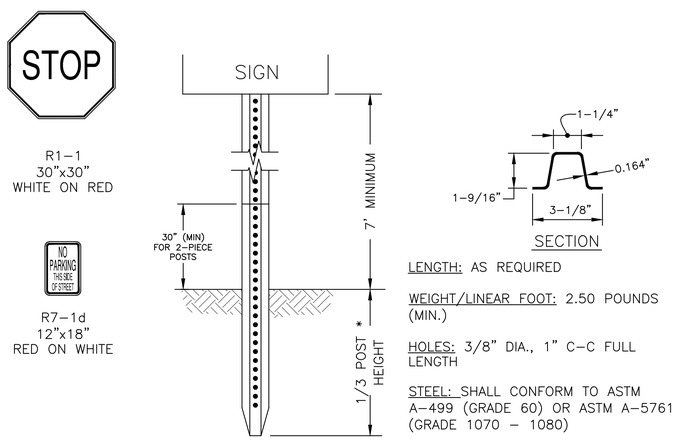
TYPICAL DRIVEWAY SECTION
SCALE: N.T.S




STANDARD CROSSWALK

NOTES:
1. CROSSWALK SLOPES SHALL MATCH ROADWAY SLOPES.
2. STRIPING SHALL BE THERMO PLASTIC RETROREFLECTIVE PAVEMENT MARKING PER ASTM D 4505.
3. STANDARD CROSSWALKS SHALL BE AT CONTROLLED STOP (SIGNS OR SIGNALS) CROSSINGS WITH STOP SIGNS AND/OR LOW TRAFFIC LOCATIONS AS DIRECTED BY THE ENGINEER.

PEDESTRIAN CROSSING DETAILS
SCALE: N.T.S




LENGTH: AS REQUIRED

WEIGHT/LINEAR FOOT: 2.50 POUNDS (MIN.)

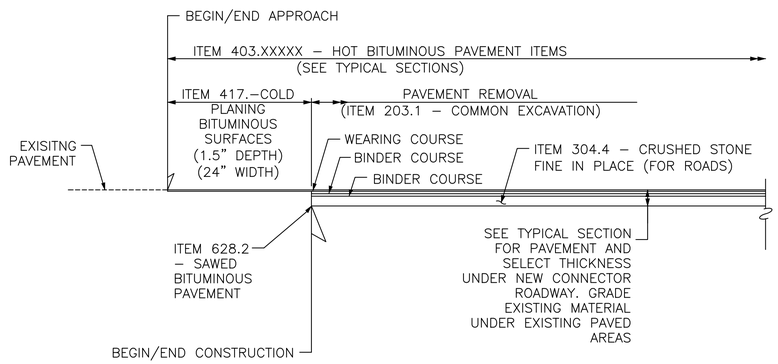
HOLES: 3/8" DIA., 1" C–C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A–499 (GRADE 60) OR ASTM A–5761 (GRADE 1070 – 1080)

FINISH: SHALL BE HOT DIPPED GALVANIZED.

NOTES:
1. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH; AFTER INSERTING POSTS, THE HOLES SHALL BE BACK FILLED WITH SUITABLE MATERIAL IN LAYERS NOT TO EXCEED 6" IN DEPTH AND THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS–SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. WHEN SIGN IS IN PLACE, NO PART OF THE POST SHALL EXTEND ABOVE THE SIGN.
6. WHEN POST IS TO BE INSTALLED IN A CONCRETE SIDEWALK, A 4" DIA. PVC SLEEVE SHALL BE CAST INTO THE CONCRETE AGAINST THE BACK SIDE OF THE CURB.

SIGNS AND POST
SCALE: N.T.S




PAVEMENT MATCH DETAIL
SCALE: N.T.S

NOTES:
1. PAVEMENT MATCH DETAIL APPLIES IN PARKING AREAS ADJACENT TO FULL DEPTH CONSTRUCTION.
2. PAVEMENT MATCH DETAIL IS NOT TO BE USED IN AREAS WHERE WORK IS LIMITED TO SAWCUT AND CURB INSTALLATION.

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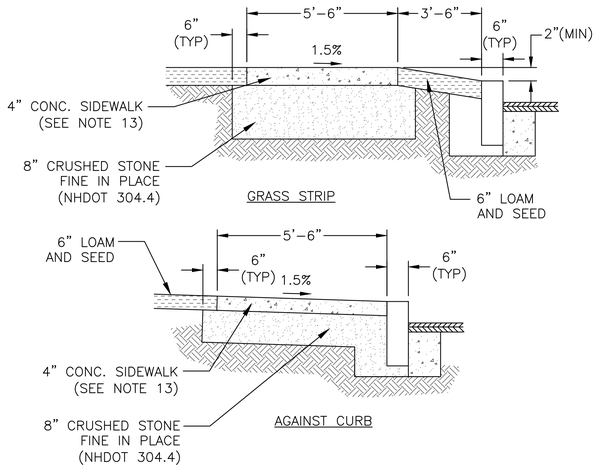
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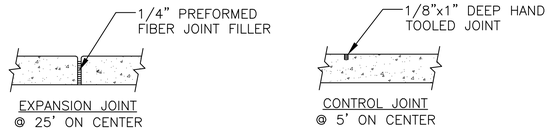
PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DETAIL SHEETS ROADWAY

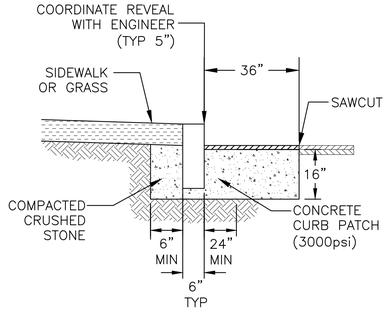
SHEET: C–602




NOTES:
1. MEDIUM BROOM FINISH.
2. JOINTS SHALL BE HAND TOOLED WITH 1/8" RADII.
3. EXPANSION JOINT FIBER FILLER SHALL BE TRIMMED TO 1/4" BELOW SIDEWALK SURFACE FOR SEALANT.
4. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK GREATER THAN 1/4".
5. SIDEWALK CONCRETE SHALL BE TREATED WITH SILOXANE SEALER NO SOONER THAN 14 DAYS AND NO MORE THAN 45 DAYS AFTER PLACEMENT. REFER TO MANUFACTURERS SPECIFICATIONS FOR REQUIRED TEMPERATURES FOR APPLICATION. SIDEWALKS SHALL BE CLEANED PRIOR TO APPLICATION OF SEALANT.
6. EXPANSION JOINT FIBER SHALL BE USED AT ALL LOCATIONS WHERE CONCRETE ABUTS STRUCTURES (BUILDINGS, RET. WALLS, POLES, ETC.).
7. CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT SIDEWALKS WITH SLOPES COMPLIANT WITH ADA CODES.
8. GRAVEL BASE MATERIALS SHALL BE COMPACTED WITH JUMPING JACK ALONG BACK SIDE OF CURB PRIOR TO PLACEMENT OF CONCRETE.
9. SUB-GRADE SHALL BE COMPACTED PRIOR TO PLACEMENT OF GRAVEL BASE. GRAVEL BASE SHALL BE COMPACTED TO 95% PROCTOR.
10. CONTRACTOR SHALL WORK WITH CITY ENGINEER TO DETERMINE CONC. GRADES PRIOR TO PLACEMENT OF CONCRETE.
11. CONCRETE SHALL HAVE A STRENGTH OF 4,000psi CLASS AA w/FIBER MESH, AIR ENTRAINMENT (5%-7%) WITH A SLUMP OF 4"-6".
12. BASE MATERIAL SHALL BE NHDOT 304.4.
13. CONCRETE SHALL BE 6" THICK AT ADA CURB RAMPS.

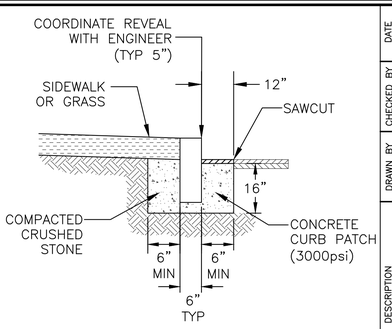



## CONCRETE SIDEWALK
SCALE: N.T.S




| RADIUS | MAX. LENGTH |
|---|---|
| <20' | USE CURVED CURB |
| 21'-25' | 3' |
| 26'-30' | 4' |
| 31'-35' | 5' |
| 36'-40' | 6' |
| 41'-50' | 7' |
| 51'-56' | 8' |
| 56'-60' | 9' |
| OVER 60' | 10' |

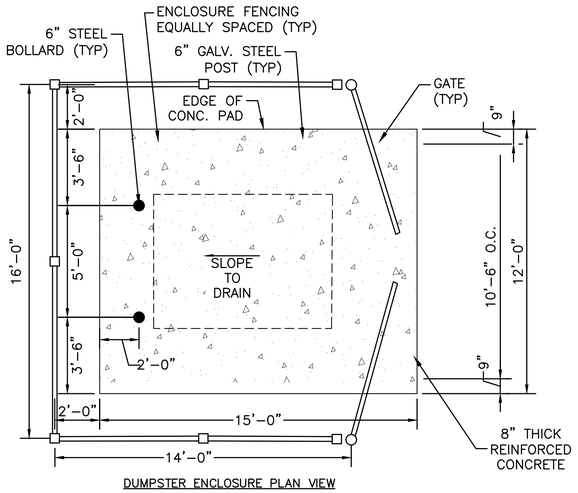
## VERTICAL GRANITE CURB FOR ROADWAYS
SCALE: N.T.S




| RADIUS | MAX. LENGTH |
|---|---|
| <20' | USE CURVED CURB |
| 21'-25' | 3' |
| 26'-30' | 4' |
| 31'-35' | 5' |
| 36'-40' | 6' |
| 41'-50' | 7' |
| 51'-56' | 8' |
| 56'-60' | 9' |
| OVER 60' | 10' |

## VERTICAL GRANITE CURB FOR DRIVEWAYS
SCALE: N.T.S

NOTES:
1. CURB TO BE SET TO LINE AND GRADE SPECIFIED.
2. IN AREAS OF SHOULDER RECONSTRUCTION, THE PROPOSED ROADWAY SHOULDER SLOPE SHALL MATCH THE ADJACENT TRAVELWAY SLOPE.
3. ALL RADII 20 FEET AND SMALLER SHALL USE CURVED SECTIONS.
4. CURB AT FLUSH SECTION OF SIDEWALK SHALL BE SET TO 1.5% CROSS SLOPE. CURB AT RAMPS SHALL BE SET TO 7.5% RUNNING SLOPE. IT IS THE CURB CONTRACTORS RESPONSIBILITY TO VERIFY SLOPES WITH A SMART LEVEL.
5. VERTICAL GRANITE JOINTS SHALL BE MORTARED.
6. SEE CHART FOR MAX / MIN STONE LENGTHS.
7. RESET EXISTING CURB. ANY MISSING OR DAMAGED CURB SHALL BE REPLACED WITH MATCHING CURB SIZE (NEW).
8. NO CURB LESS THAN 3' IN LENGTH WILL BE ALLOWED.
9. CURB MATERIAL SHALL BE FROM THE SAME LOT OF GRANITE. VARIANCES IN COLOR AND TYPE WILL NOT BE ACCEPTED.
10. TYPICAL CURB REVEAL SHALL BE 5". VERIFY WITH CITY ENGINEER PRIOR TO CURB INSTALLATION.
11. COMPACTED SELECT BASE MATERIALS MAY BE AS CURB PATCH INSTEAD OF CONCRETE WHEN APPROVED BY THE ENGINEER. GRAVEL CURB PATCH SHALL BE COMPACTED TO THE TOP OF THE BASE MATERIAL LEVEL AND SHALL HAVE BASE ASPHALT PLACED FLUSH WITH ROADWAY BASE.
12. CONTRACTOR SHALL USE JUMPING JACK TO COMPACT ALONG CURB AT LOCATIONS WHERE CONC. BACKFILL IS NOT USED. SELECT BASE MATERIALS FOR SIDEWALK SHALL BE COMPACTED WITH JUMPING JACK ALONG BACK SIDE OF CURB PRIOR TO PLACEMENT OF CONCRETE.



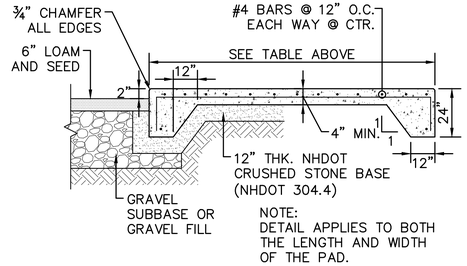

DUMPSTER ENCLOSURE PLAN VIEW

DUMPSTER ENCLOSURE NOTES:

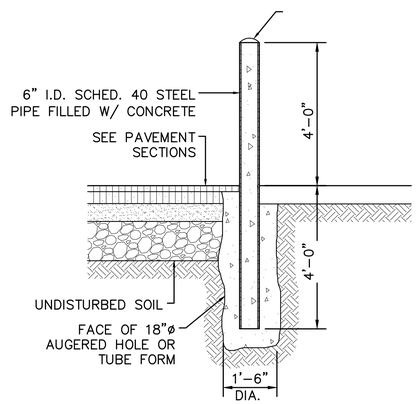
1. THE CONTRACTOR SHALL SUBMIT A FENCING & GATE DETAIL FOR OWNER APPROVAL PRIOR TO ENCLOSURE CONSTRUCTION.
2. FENCING MATERIAL SHALL BE CHAIN LINK. COLOR TO BE GALVANIZED OR MATCH BUILDING ACCENT COLORS
3. REFER TO NHDOT STANDARD PLAN FN-2 FOR CHAIN LINK FENCE DETAILS.
4. DUMPSTER GATES SHALL MATCH FENCING MATERIAL.
5. ALL ENCLOSURE HARDWARE INCLUDING HINGES, LATCHES, DROP PINS & FASTENERS SHALL BE HEAVY DUTY COMMERCIAL GRADE. HARDWARE COLOR SHALL BE GALVANIZED OR MATCH BUILDING ACCENT COLORS.
6. PRIVACY SLATS ARE REQUIRED ALONG ALL 4 SIDES OF THE FENCING, INCLUDING THE GATES.

## CONCRETE PAD FOR DUMPSTER
SCALE: N.T.S

| STRUCTURE | LENGTH | WIDTH |
|---|---|---|
| DUMPSTER | 15' | 12' |




## TYPICAL DUMPSTER PAD DETAIL
SCALE: N.T.S




## STEEL PIPE BOLLARD DETAIL
SCALE: N.T.S

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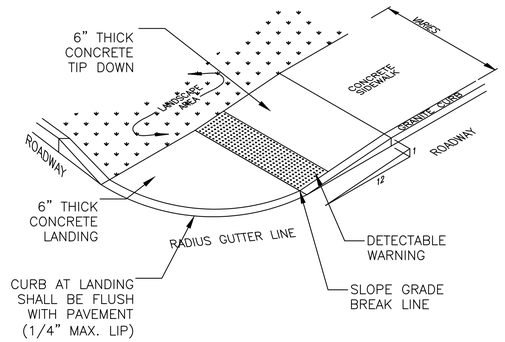
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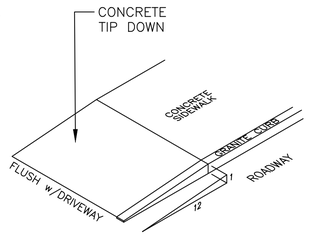
PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DETAIL SHEETS SIDEWALKS & CONCRETE PAD

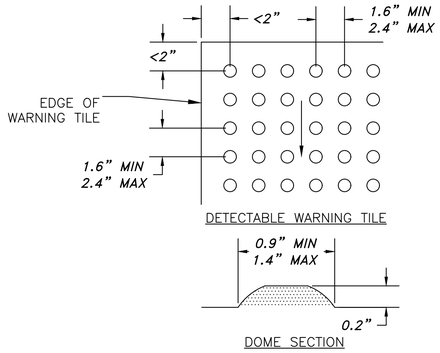
SHEET: C-603




CURB RAMPS AT STREETS

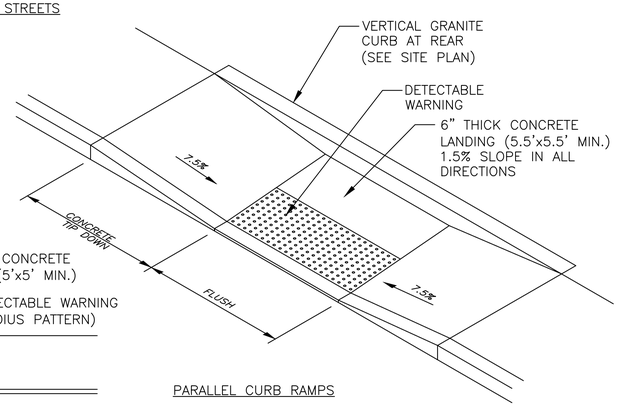



RAMPS AT DRIVEWAYS

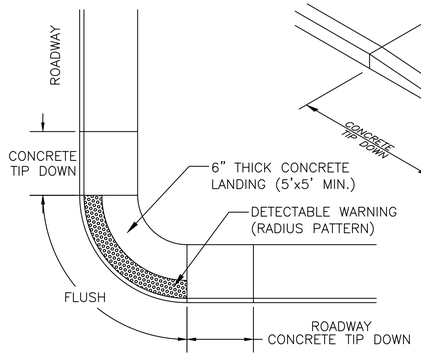



NOTES:

1. ALL CURB RAMPS AND SIDEWALKS SHALL COMPLY WITH ADA (AMERICANS WITH DISABILITIES ACT).
2. TIP DOWNS SHALL HAVE A RUNNING SLOPE OF 7.5% (8.3% MAX.) AND CROSS SLOPE OF 1.5% (2.0% MAX.).
3. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK RAMPS GREATER THAN 1/4".
4. LANDINGS AND AREAS OF CHANGE IN DIRECTION SHALL HAVE A SLOPE OF 1.5% (2.0% MAX.) IN ALL DIRECTIONS.
5. DETECTABLE WARNINGS SHALL BE INSTALLED SO THAT PATTERN IS IN LINE WITH DIRECTION OF TRAVEL TO THE EXTENT POSSIBLE.
6. DETECTABLE WARNING TILES SHALL BE PLACED SO THAT THE EDGE CLOSEST TO THE CURB IS BETWEEN 6"–8" FROM CURB LINE.
7. DETECTABLE WARNING TILE SHALL SPAN THE FULL WIDTH OF THE RAMP AND A MINIMUM OF 24" DEEP.
8. DETECTABLE WARNING TILE SHALL BE CAST IRON, NEENAH FOUNDRY OR APPROVED EQUAL. RADIUS ADA CURB RAMPS SHALL HAVE DETECTABLE WARNING TILES IN A RADIUS PATTERN USING TUFTILE OR APPROVED EQUAL.
9. CONCRETE AT DETECTABLE WARNING RAMPS SHALL BE FIBER REINFORCED WITH A MEDIUM BROOM FINISH.
10. BASE MATERIAL FOR CONCRETE SECTIONS SHALL BE 8" THICK CRUSHED STONE BASE (NHDOT 304.4).
11. NOT ALL FACILITIES CAN BE CONSTRUCTED TO MEET THE DESIGN STANDARDS. FACILITIES THAT CANNOT BE CONSTRUCTED TO MEET THE DESIGN STANDARDS SHALL BE CONSTRUCTED TO MEET THE STANDARDS TO THE GREATEST EXTENT PRACTICABLE. NONSTANDARD FEATURES SHALL BE DOCUMENTED ON TECHNICAL INFEASABILITY FORM AND SUBMITTED TO NHDOT ADA COORDINATOR FOR APPROVAL.
12. TO CHECK FIELD LAYOUT ALL SLOPES AND GRADES SHALL BE MEASURED WITH A DIGITAL LEVEL USING AT LEAST TWO READINGS. WHERE THE READINGS VARY, THE MEASUREMENTS SHALL BE AVERAGED. GRADE (RUNNING SLOPE) SHALL BE MEASURED ALONG THE CENTERLINE AND OFFSET 1.00' TO 1.50' FROM THE CENTERLINE. CROSS SLOPES SHALL BE MEASURED PERPENDICULAR TO CENTERLINE AT 5.00' TO 10.00' INTERVALS.
13. GRADES (RUNNING SLOPES) ARE MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL. CROSS SLOPES ARE MEASURED PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.




PARALLEL CURB RAMPS




RADII CURB RAMPS

## CURB RAMP DETAILS

SCALE: N.T.S

TYPICAL CURB TRANSITION LENGTH TABLE

| CURB REVEAL (INCHES) | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|
| | ROADWAY PROFILE GRADE (%) | MINIMUM TRANSITION LENGTH REQUIRED (FT) | | | | | | |
| LOW SIDE TRANSITION LENGTH | −10% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −9% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −8% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −7% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −6% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −5% | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −4% | 5.1 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −3% | 5.6 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −2% | 6.1 | 5.3 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | −1% | 6.9 | 5.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | 0% | 7.8 | 6.7 | 5.6 | 5.0 | 5.0 | 5.0 | 5.0 |
| HIGH SIDE TRANSITION LENGTH | 1% | 9.0 | 7.7 | 6.4 | 5.1 | 5.0 | 5.0 | 5.0 |
| | 2% | 10.6 | 9.1 | 7.6 | 6.1 | 5.0 | 5.0 | 5.0 |
| | 3% | 13.0 | 11.1 | 9.3 | 7.4 | 5.6 | 5.0 | 5.0 |
| | 4% | 15.0 | 14.3 | 11.9 | 9.5 | 7.1 | 5.0 | 5.0 |
| | 5% | 15.0 | 15.0 | 15.0 | 13.3 | 10.0 | 6.8 | 5.0 |
| | 6% | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 11.3 | 5.3 |
| | 7% | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| | 8% | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| | 9% | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| | 10% | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |

NOTES:

1. SEE NHDOT CURB RAMP DETAILS FOR ADDITIONAL INFORMATION REGARDING HIGH SIDE AND LOW SIDE TRANSITIONS AS WELL AS CURB RAMP TYPE CONFIGURATIONS.
2. THIS TABLE REPRESENTS THE MINIMUM LENGTH OF CURB RAMP TRANSITIONS BASED ON THE EXISTING ROADWAY PROFILE GRADE AND THE CURB REVEAL AT FULL HEIGHT ALONG THE SIDEWALK. THE MINIMUM TRANSITION LENGTH REQUIRED IS BASED ON 7.5% SLOPE AND INDICATED CURB REVEAL.

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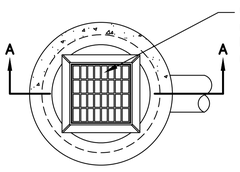
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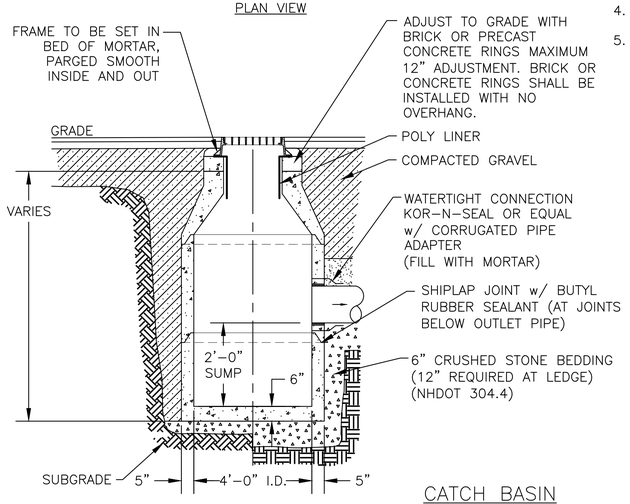
PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DETAIL SHEETS CURB RAMPS

SHEET: C–604




PLAN VIEW



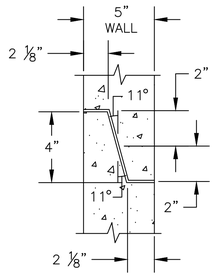

SECTION A–A

CATCH BASIN

SCALE: N.T.S

NOTES:

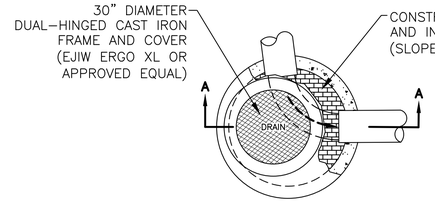
1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS & SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5. ALL CATCHBASINS OUTLETS SHALL HAVE 'ELIMINATOR' OIL AND FLOATING DEBRIS TRAP BY KLEANSTREAM (NO EQUAL). FOR EXIT ONLY CBs, NOT FOR PASS THROUGH CBs.



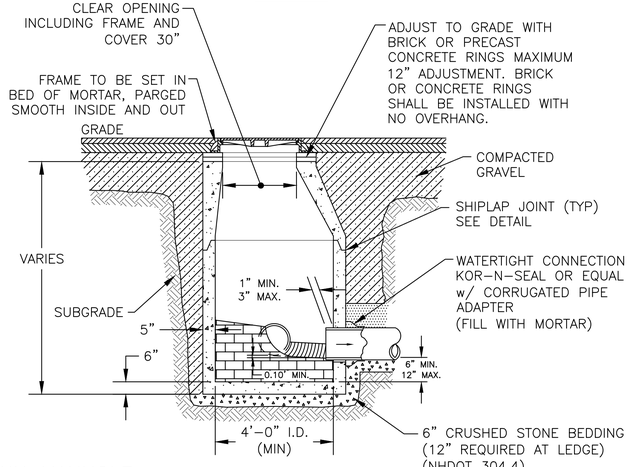

SHIPLAP DETAIL

NOTES:

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




PLAN VIEW



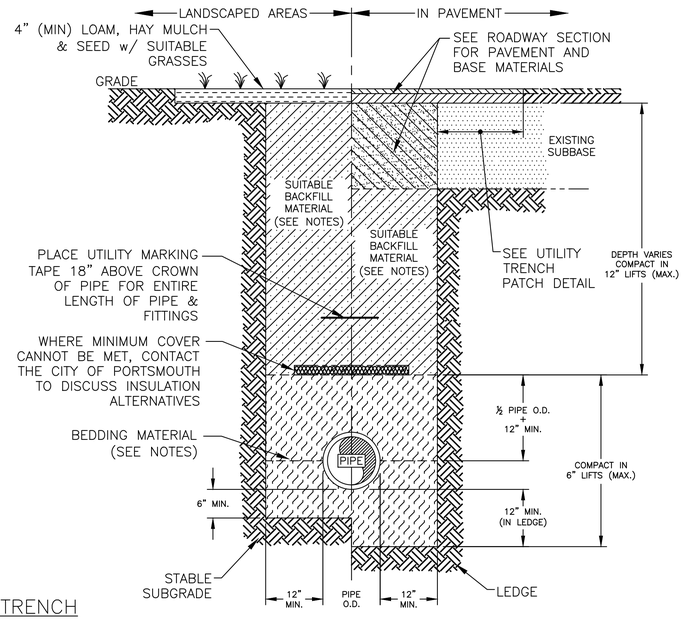

DRAIN MANHOLE

SCALE: N.T.S

SECTION A–A

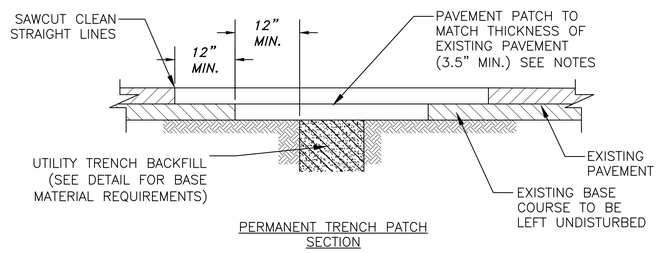
NOTES:

1. SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.
2. BEDDING MATERIAL SHALL BE THE FULL WIDTH OF THE TRENCH UP TO 12" ABOVE TOP OF PIPE:
   WATER – COURSE SAND
   SEWER – CRUSHED STONE (NHDOT 304.4)
   DRAIN – CRUSHED STONE (NHDOT 304.4)
3. SAND SHALL NOT BE DIRECTLY PLACED ON CRUSHED STONE. IN THE EVENT FINELY GRADED BACKFILL OR SAND IS USED ABOVE STONE, GEOTEXTILE FABRIC SHALL BE PLACED TO SEPARATE.
4. DEPTH OF COVER SHALL BE:
   WATER – 5' MIN. & 7' MAX. (<5' REQ. RIGID INS.)
   SEWER – AS INDICATED ON PLANS (<6' REQ. RIGID INS.)
   DRAIN – AS INDICATED ON PLANS (<3' REQ. RIGID INS.)
5. WATER MAIN SHALL BE POLY WRAPPED AND HAVE THREE BRASS WEDGES AT ALL NON MECHANICAL CONNECTIONS.
6. ALL PIPES GREATER THAN 12" DIA. WITH STONE BEDDING, BEDDING SHALL BE WRAPPED IN GEOTEXTILE FABRIC. GEOTEXTILE FABRIC SHALL BE MIRAFI 140N OR APPROVED EQUAL. FABRIC SHALL BE WRAPPED COMPLETELY AROUND STONE w/12" (MIN) OVERLAP AT SEAMS.
7. UPON APPROVAL FROM THE ENGINEER, 2" RIGID FOAM INSULATION SHALL BE PLACED ON TOP OF BEDDING MATERIAL. BEDDING MATERIAL SHALL BE MADE SMOOTH TO ALLOW FOAM BOARD TO SIT WITHOUT VOIDS BENEATH. THE ENGINEER SHALL DETERMINE THE WIDTH REQUIREMENT OF THE FOAM BOARD.
8. RIGID INSULATION, GEOTEXTILE FABRIC, MARKING TAPE ARE INCIDENTAL TO THE PIPE PAY ITEM.

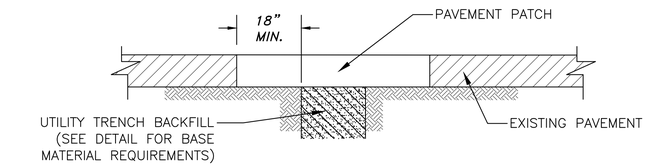



DRAINAGE TRENCH

SCALE: N.T.S




PERMANENT TRENCH PATCH SECTION




TEMPORARY TRENCH PATCH SECTION

DRAINAGE TRENCH PATCH

SCALE: N.T.S

NOTES:

1. TEMPORARY ASPHALT PLACED FOR UTILITY TRENCHES ARE SUBSIDIARY TO THE PIPE INSTALLATION PAY ITEM.
2. TEMPORARY PAVEMENT PATCH SHALL BE 3/4" BINDER (2" THICK MIN.). PERMANENT PAVEMENT PATCH SHALL MATCH EXISTING THICKNESS, OR 3.5", WHICH EVER IS GREATER.
3. TEMPORARY PAVEMENT PATCHES SHALL BE MAINTAINED REGULARLY. CONTRACTOR SHALL REPLACE TEMPORARY PAVEMENT PATCHES AT THE DISCRETION OF THE ENGINEER.
4. TRENCHES MAY REMAIN GRAVEL DURING THE WORK WEEK. NO TRENCHES SHALL REMAIN GRAVEL OVER THE WEEKEND, TEMPORARY PAVEMENT IS REQUIRED.

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
| | | | | |

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HOYLE TANNER
150 Dow Street • Manchester, NH 03101
(603) 669-5555 • www.hoyletanner.com

DRAWN JCM | CHECKED EPR | QC'D WCA | DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: DETAIL SHEETS DRAINAGE & UTILITY

SHEET: C–605

COAKLEY ROAD

BORTHWICK AVENUE

EXISTING RIGHT OF WAY LINE

NO TEST DRIVERS
LOCAL TRAFFIC ONLY

3191/5/NETT/271/5/8T
W/CABLE BOX & COND

65T/4 1/2

30T/ES271/3Y

100'
WETLANDS
BUFFER

5/8" REBAR FND.
DOWN 3" NO CAP

N62°30'47"E 212.00'

N62°30'47"E 273.87'

~PAVED DRIVE~

~PAVED PARKING~

~GRASS~

~PAVED WALK~

~CONC. RAMP~

~POOL ENCLOSURE~

5/8" REBAR FND.
DOWN 7" W/ID CAP
TRITECH ENGINEERING

8' WOODEN
STOCKADE FENCE

100' WETLANDS SETBACK

SLIDING GATE

8' CHAIN LINK FENCE

DUMPSTERS

CONC. RET. WALL

CONC. BLOCK
RET. WALL

METAL
PICKET
FENCE

DUMPSTER ENCLOSURE
8' CHAIN LINK FENCE

CONC. WALK

VINYL STOCKADE
FENCE

5/8" REBAR FND.
UP 2" NO CAP

5/8" REBAR FND.
FLUSH W/ID CAP ILLEGIBLE

COAST BUS STOP

ENTRANCE
SIGN

PSNH3101X1/7/NETT

ES3101X1/7Y
W/COAST BUS STOP SIGN

NETT/7809/10

S69°31'16"W 212.22'

S69°31'16"W 226.12'

S47°52'34"E 242.26'

N24°09'47"W 234.98'

100 COAKLEY ROAD
TAX MAP 234, LOT 6
GPP PROPERTIES 1995 1 LLC
PO BOX 2004
CONCORD, NH 03302
R.C.R.D. BOOK 3102, PAGE 284

TAX MAP 234, LOT 6
52,494 Sq. Ft.
1.21 Acres

650 BORTHWICK AVENUE
TAX MAP 234, LOT 7-6
NAVEESHA HOSPITALITY LLC
110 HARTWELL AVE SUITE 300
LEXINGTON, MA 02421
R.C.R.D. BOOK 6434, PAGE 696

TAX MAP 234, LOT 7-6
125,801 Sq. Ft.
2.89 Acres

TAX MAP 234, LOT 5
GIRI PORTSMOUTH 505 INC
2300 CROWN COLONY DR STE 203
QUINCY, MA 02169
R.C.R.D. BOOK 6015, PAGE 2242

THE GRANITE GROUP

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

LEGEND:

TEMPORARY INLAND WETLAND BUFFER IMPACTS (18,433 SF)

PERMANENT INLAND WETLAND BUFFER IMPACTS (12,922 SF)

| LOCATION | PERMANENT INLAND WETLAND BUFFER IMPACTS (SF) | TEMPORARY INLAND WETLAND BUFFER IMPACTS (SF) |
|---|---|---|
| COAKLEY ROAD | 4,249 | 6,179 |
| BORTHWICK AVENUE | 8,673 | 5,245 |
| GRANITE GROUP | 0 | 7,009 |
| Total: | 12,922 | 18,433 |

GRAPHIC SCALE

20 10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

| REV. | DESCRIPTION | DRAWN BY | CHECKED BY | DATE |
|---|---|---|---|---|
| | | | | |

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DRAWN JCM
CHECKED EPR
QC'D WCA
DATE October 2026

PROJECT: BORTHWICK – COAKLEY CONNECTOR ROAD

TITLE: WETLAND IMPACT PLAN

SHEET: W–001