Parking Lot Reclamation Plans

GREENLEAF RECREATION CENTER 195 GREENLEAF AVENUE

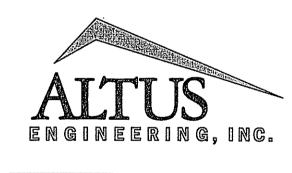
Owner/Applicant:



GREENLEAF RECREATION CENTER

1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

Civil Engineer:



133 COURT STREET PORTSMOUTH, NH 03 (603) 433-2335 www.ALTUS-ENG.

Landscape Architect:



Landscape Architecture, LLC

103 Kent Place Newmarket, NH 03857 Tel 603.659.5949 Fax: 603.659.5939

Surveyor:

James Verra and Associates, Inc.

LAND SURVEYORS

101 SHATTUCK WAY — SUITE 8 NEWINGTON, N.H. 03801— 7876 603—436—3557

Portsmouth, New Hampshire Assessor's Parcel 243-4

Issued:

April 29, 2016

Conditional Use Permit Submission

Sheet

1 of 1

Rev.

Date

04/15/16

04/29/16

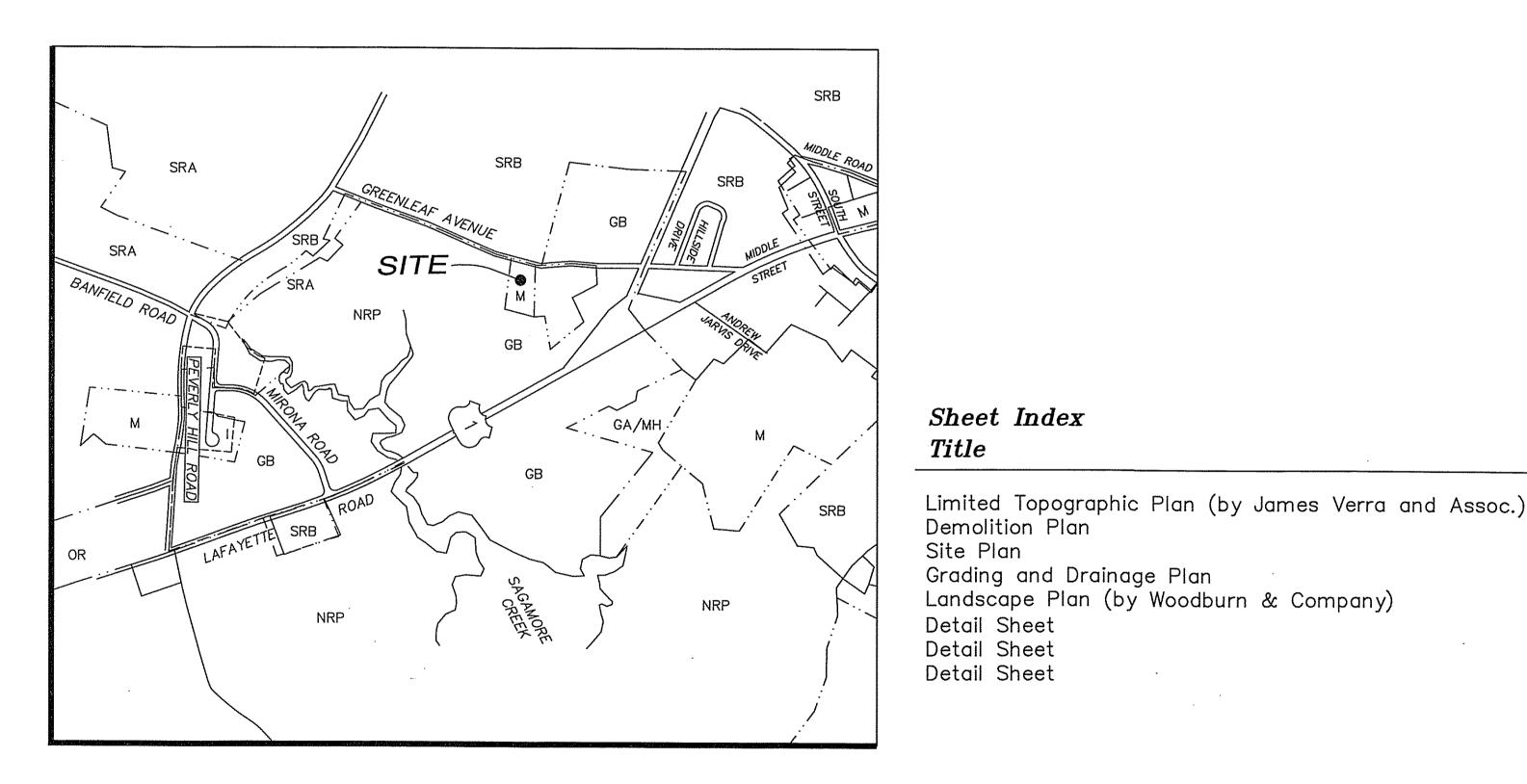
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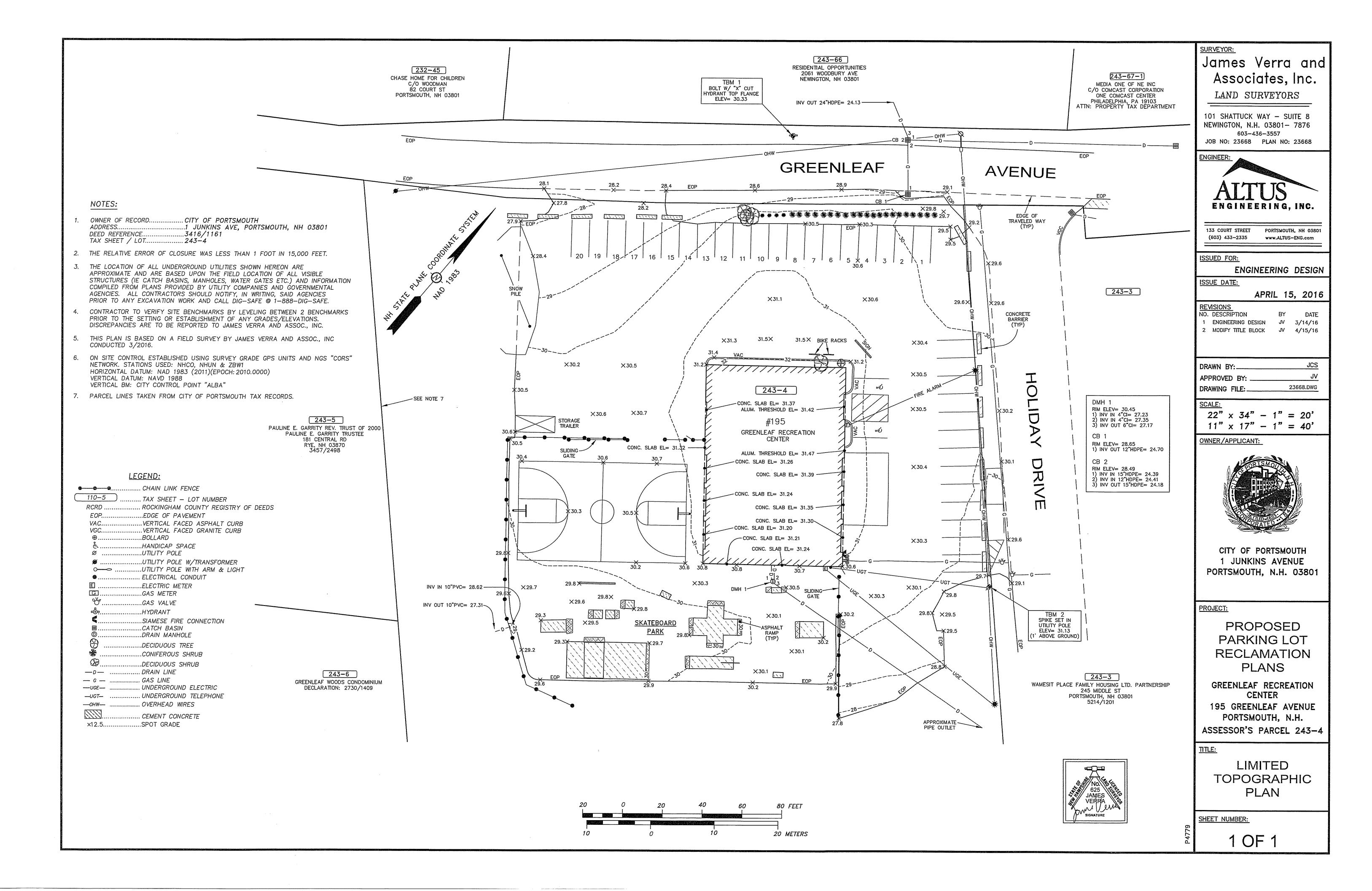
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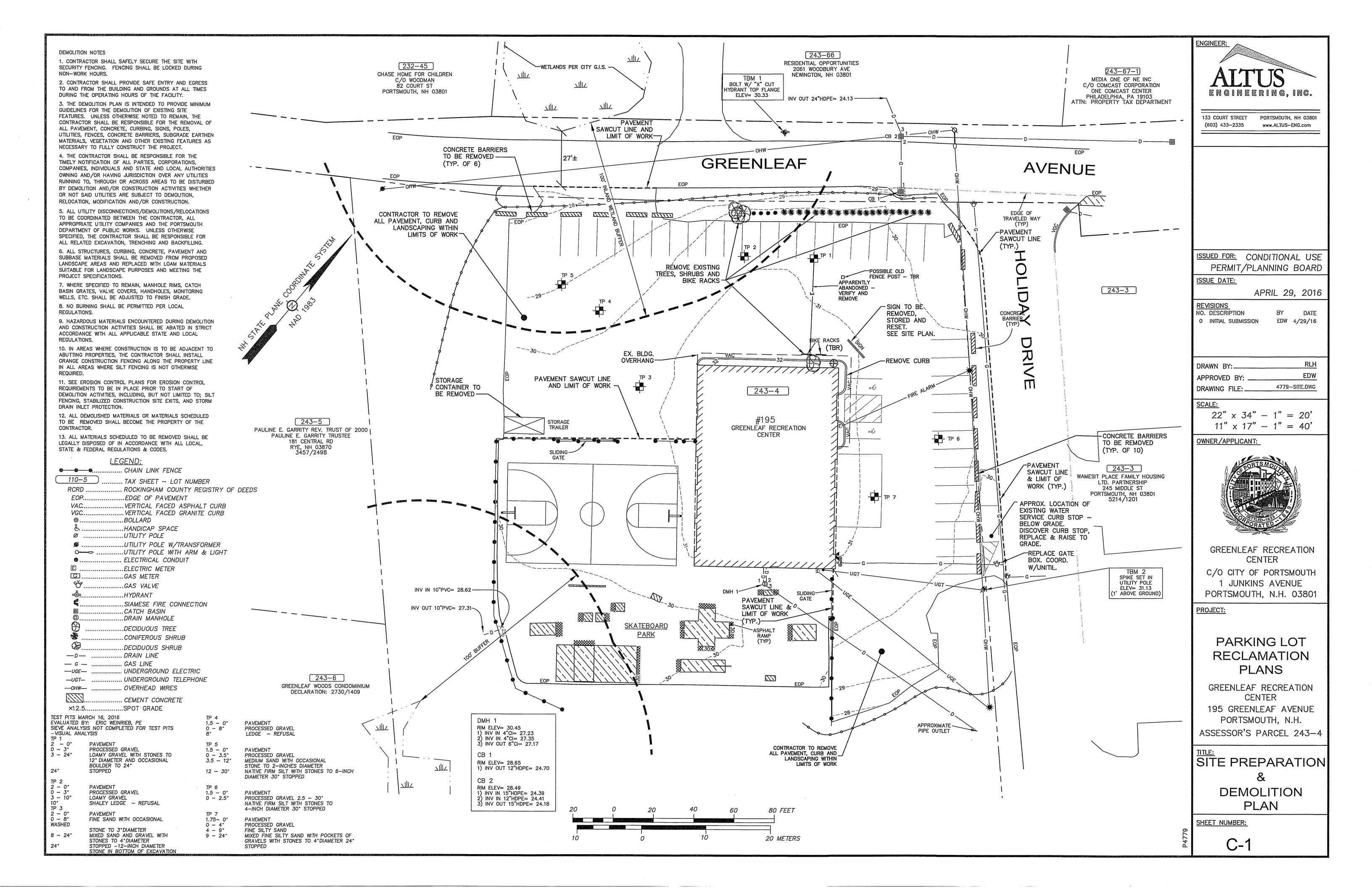


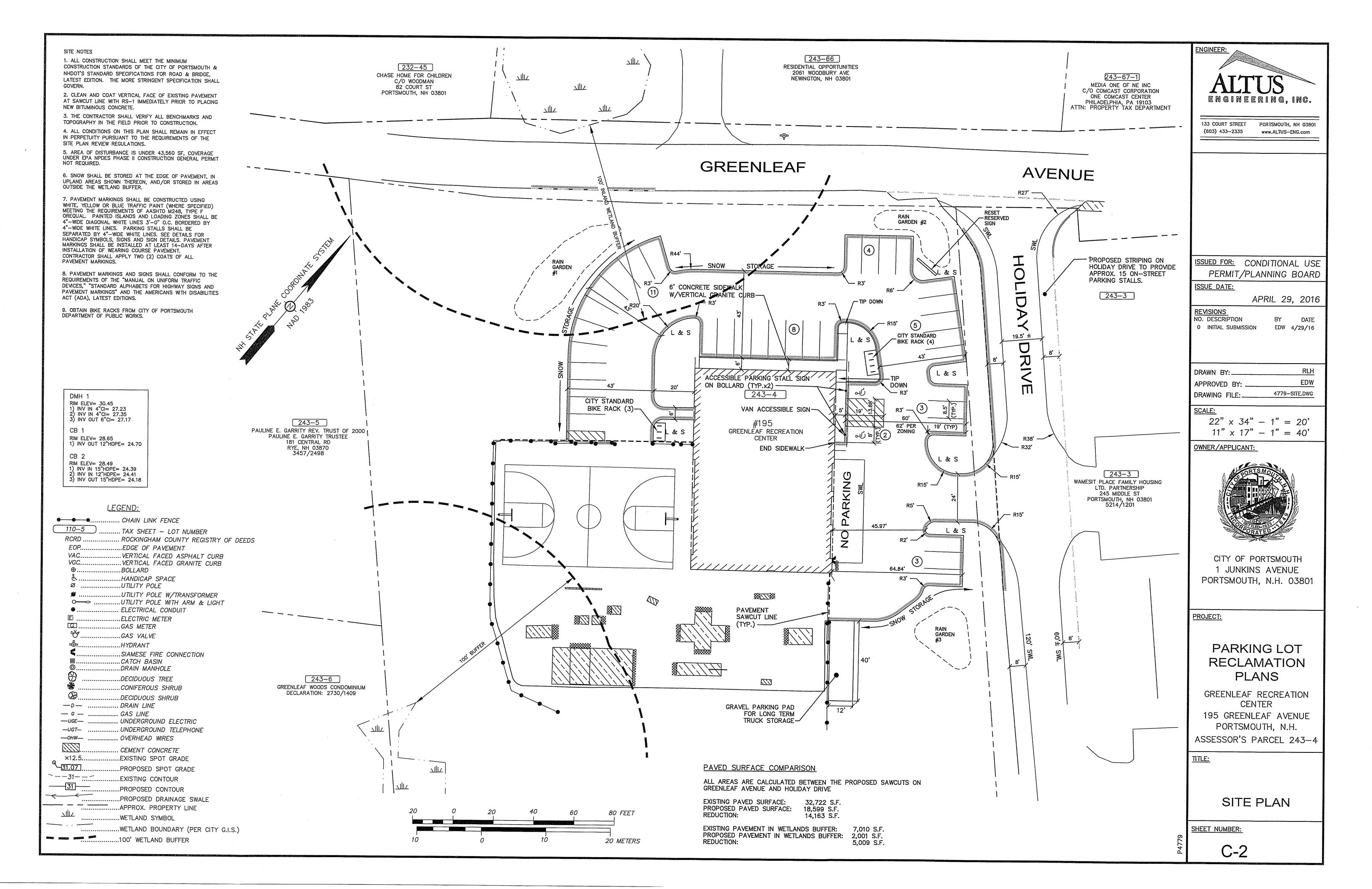
Locus Map Scale: 1"=1000' (±)

Permit Summary

City of Portsmouth Wetlands Conditional Use Permit — Received ______

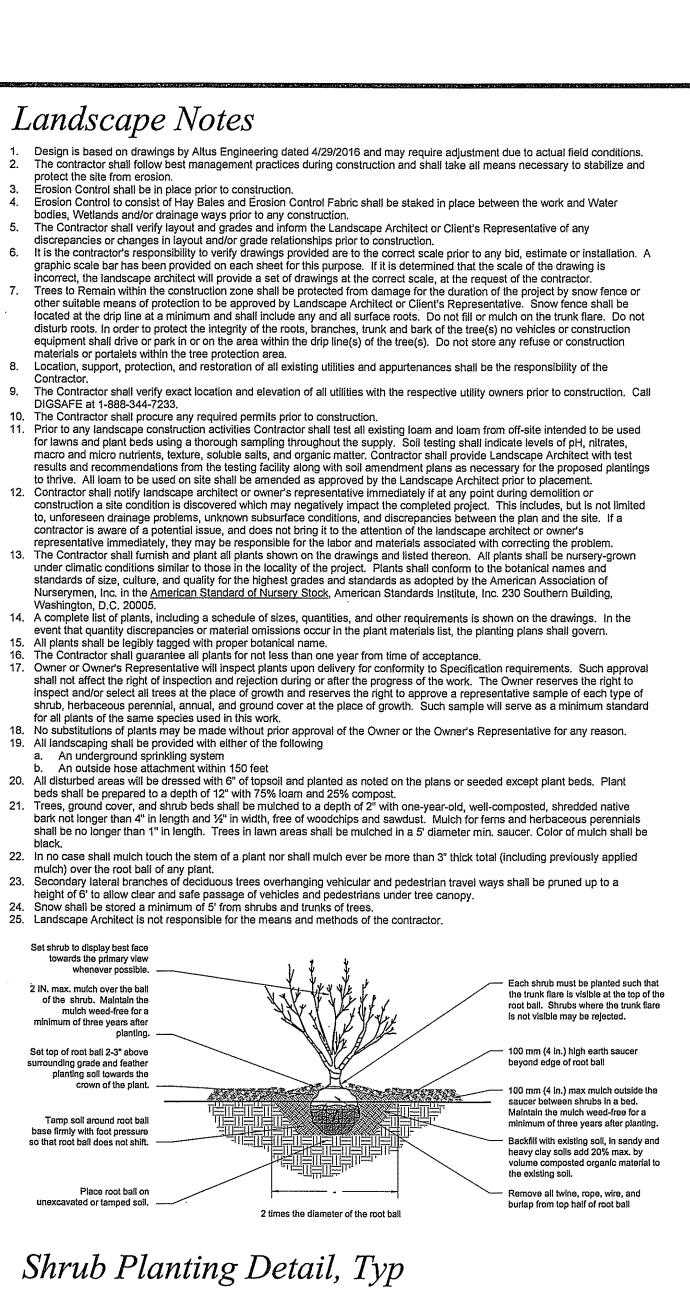


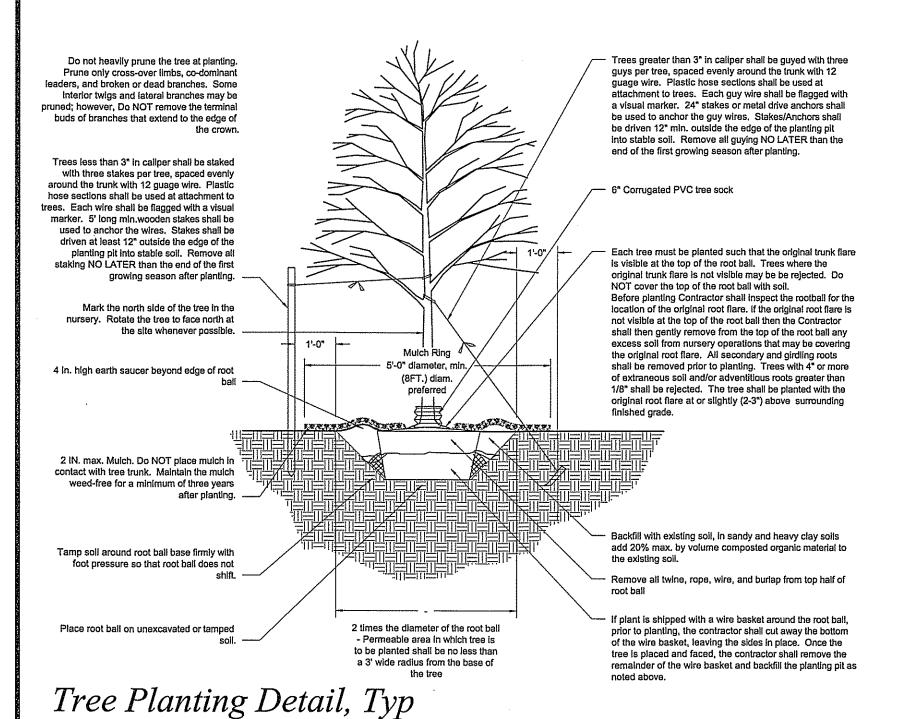


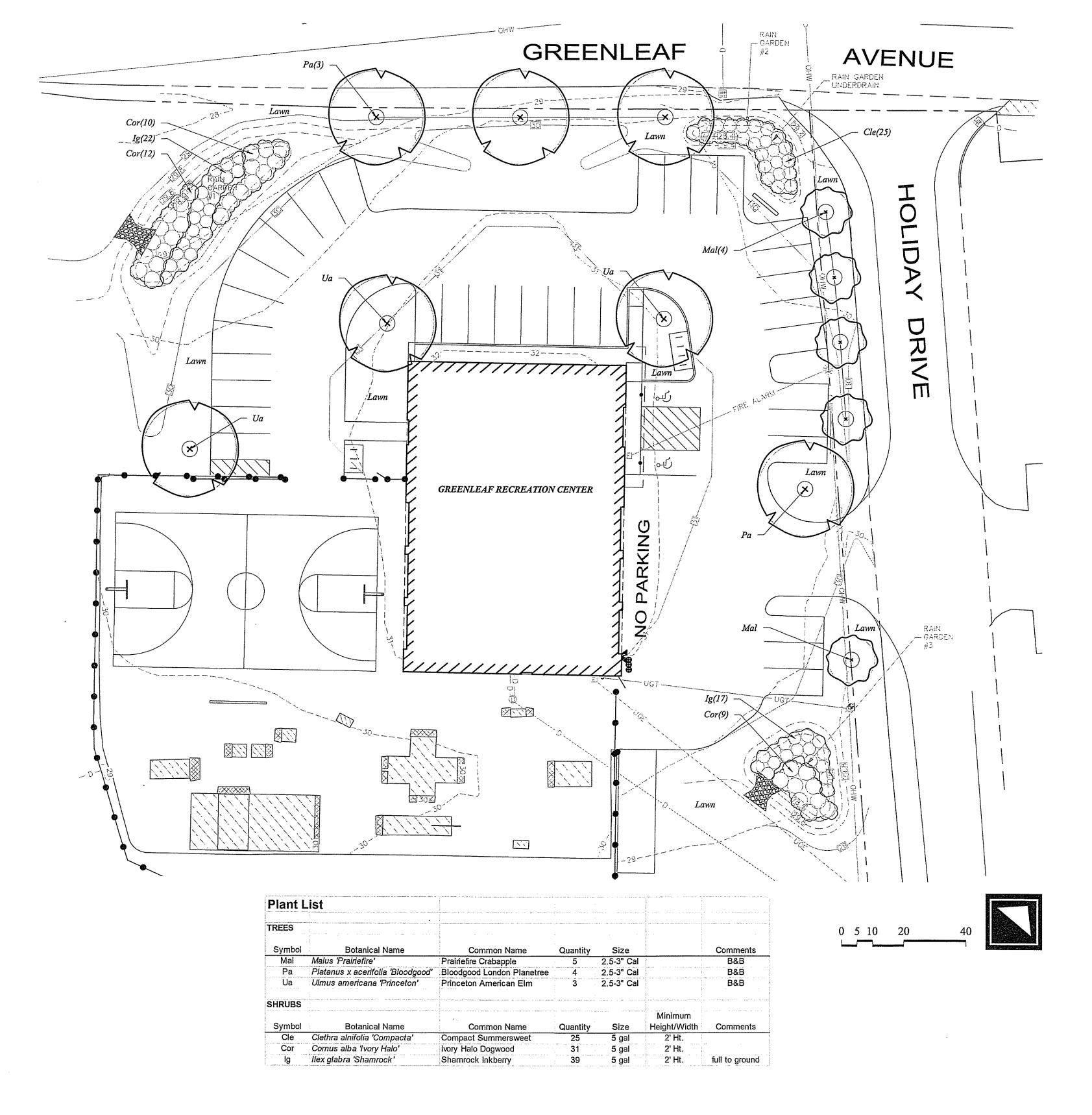


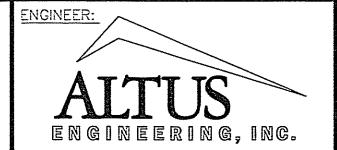
orking\Shared Files\Altus Documents\4750-4799\4779 Greeleaf Recreation Center\recd\TEST-SECOND-DOWNLOAD\4779-site-2010-TEST.dwg, GRADING, 4/28/2016 1:26:26 F











133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com



Landscape Architecture, LLC 103 Kent Place Newmarket, NH 03857

Tel 603.659.5949

Fax: 603.659.5939

ISSUED FOR: Conditional Use Permit/ Planning Board

ISSUE DATE:

APRIL 29, 2016

REVISIONS NO. DESCRIPTION

DATE O INITIAL SUBMISSION VM 4/29/16

DRAWN BY: .. RW APPROVED BY: 4779-CO-7.DWG

 $22" \times 34" - 1" = 20"$ $11" \times 17" - 1" = 40"$

OWNER/APPLICANT:

DRAWING FILE: _



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

PARKING LOT RECLAMATION **PLANS**

GREENLEAF RECREATION CENTER 195 GREENLEAF AVENUE PORTSMOUTH, N.H. ASSESSOR'S PARCEL 243-4

TITLE:

LANDSCAPE **PLAN**

SHEET NUMBER:

LATITUDE: 043' 03' 19" N LONGITUDE: 070° 46' 27" W

PORTSMOUTH, NEW HAMPSHIRE

OWNER / APPLICANT: CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of reconfiguration & reclamation of the existing parking area and associated improvements, including storm water management treatment enhancements.

DISTURBED AREA

The total area to be disturbed for the development improvements is approximately ±36,000 SF (±0.83 acres) including off-site improvements.

PROJECT PHASING

The proposed project will be completed in a single phase.

NAME OF RECEIVING WATER

The site drains to the closed municipal drainage system in Greenleaf Avenue or overland and eventually to Sagmore Creek.

SEQUENCE OF MAJOR ACTIVITIES

- 1. Install temporary erosion control measures including silt fences, Silt-Soxx and inlet sediment filters as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
- 2. Reclaim/remove existing paved surfaces. 3. Perform all required demolition activities.
- 4. Rough grade site including placement of borrow materials.
- 5. Construct drainage structures, raingardens & pavement base course materials.
- 6. Install base course paving, sidewalks & curbing.
- 7. Loam (6" min) and seed all disturbed areas not paved or otherwise stabilized
- 8. Install top course paving. 9. When all construction activity is complete and site is stabilized, remove all temporary erosion
- control measures and any sediment that has been trapped by these devices.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 - 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible Sheet runoff from the site shall be filtered through hav bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, stormwater ponds, level spreaders and their contributing areas prior to directing flow to them.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY FROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the

- 1. The smallest practical portion of the site shall be denuded at one time. 2. All control measures shall be inspected at least once each week and following any storm event
- of 0.5 inches or greater. 3. All measures shall be maintained in good working order; if a repair is necessary, it will be
- initiated within 24 hours. 4. Built-up sediment shall be removed from silt fence or other barriers when it has reached
- one-third the height of the fence or bale, or when "bulges" occur. All diversion dikes shall be inspected and any breaches promptly repaired.
- 6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy
- 7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance
- with the Plans. 8. An area shall be considered stable if one of the following has occurred:
- a. Base coarse gravels have been installed in areas to be paved;
- b. A minimum of 85% vegetated growth as been established; c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed;
- d. Erosion control blankets have been properly installed.
- 9. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

- Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.
- 1. Timing in order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this: a. 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 predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of
- b. Required Mulching within a specified time period. The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

2. Guidelines for Winter Mulch Application -

Type Hay or Straw	Rate per 1.000 s.f. 70 to 90 lbs.	Use and Comments Must be dry and free from mold. May be used with plantings. Used mostly with trees and shrub plantings.		
Wood Chips or Bark Mulch	460 to 920 lbs.			
Jute and Fibrous Matting (Erosion Blanket	As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.		

Spread more than

1/2" thick

2" thick (min)

Effective in controlling wind and water erosion. * The organic matter content is between 80 and 100%, dry weight basis.

* Particle size by weight is 100% passing a 6*screen and a minimum of 70 % maximum of 85%, passing a 0.75" screen. * The organic portion needs to be fibrous and elongated. * Large portions of silts, clays or fine sands are not acceptable in the mix. * Soluble saits content is less than 4.0 mmhos/cm.

* The pH should fall between 5.0 and 8.0.

3. Maintenance — All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. TEMPORARY GRASS COVER

1. Seedbed Preparation -

Crushed Stone

1/4" to 1-1/2" dia.

Erosion Control Mix

Apply fertilizer at the rate of 600 pounds per acre of 10-10-10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.

2. Seeding -

- a. Utilize annual rye grass at a rate of 40 lbs/acre.
- b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
- c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent. repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

D. FILTERS

a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property Filtering Efficiency	<u>Test</u> VTM−51	Requirements 75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM-52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)

* Requirements reduced by 50 percent after six (6) months of installation

Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

0.3 gal/sf/min (min)

- b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16
- c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.
- d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.
- e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
- f. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.
- a. The trench shall be backfilled and the soil compacted over the filter fabric.
- h. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.

3. Maintenance -

- a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.
- b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
- c. Sediment deposits must be removed when deposits reach approximately one—third (1/3) the height of the barrier.
- d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.
- e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

E. PERMANENT SEEDING -

- 1. Bedding stones larger than $1\frac{1}{2}$, trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
- 2. Fertilizer lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

Agricultural Limestone @ 100 lbs. per 1,000 s.f. 10-20-20 fertilizer @ 12 lbs. per 1.000 s.f.

3. Seed Mixture (recommended):

SEE LANDSCAPE PLANS

4. Sodding - sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

WINTER CONSTRUCTION NOTES

- 1. 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 elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen around and shall be completed in advance of thaw or spring melt events;
- 2. 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; and

--- 2" x 2" WOODEN

STAKE (TYP.):

REBAR W/ORANGE SAFETY

AREA TO BE

CAP MAY BE USED IN

PAVED SURFACE ONLY

3. After November 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT

STAKE ON 10' LINEAR SPACING

AREA TO BE

-FILTREXX®

COMPOST SILT-SOXXTM

4. ALL SEDIMENT TRAPPED BY BARRIER SHALL BE DISPOSED OF PROPERLY.

2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.

REQUIREMENTS OF THE SPECIFIC APPLICATION.

1. SILTSOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS.

COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE

TUBULAR SEDIMENT BARRIER DETAIL NOT TO SCALE

PROTECTED

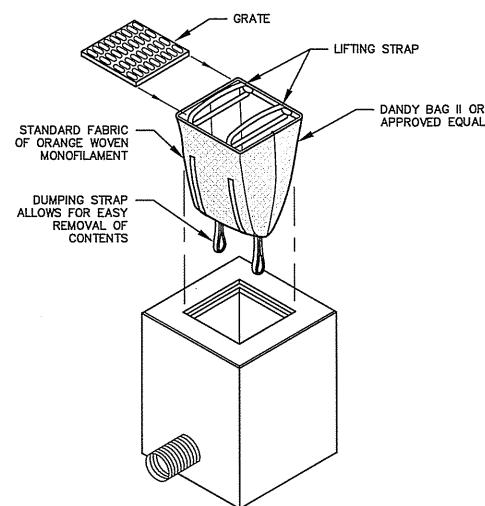
WATER FLOW

WORK AREA

PLAN VIEW

 \Rightarrow

TUBULAR FILTER



INSTALLATION AND MAINTENANCE:

INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE

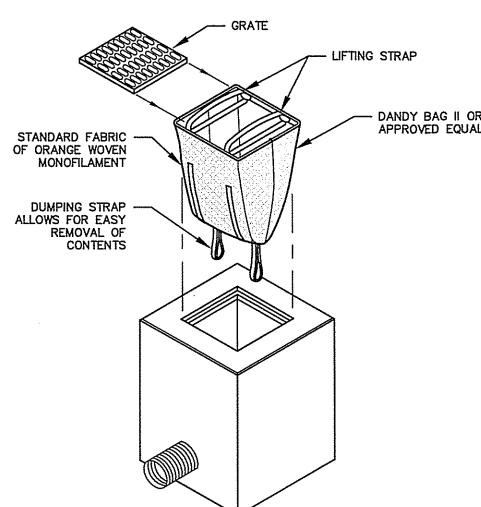
MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS. LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE

STORM DRAIN INLET PROTECTION

NOT TO SCALE



ISSUED FOR: CONDITIONAL USE PERMIT/PLANNING BOARD

ISSUE DATE:

133 COURT STREET

(603) 433-2335

APRIL 29, 2016

NOT TO SCALE

DATE

EDW 04/29/16

PORTSMOUTH, NH 03801

www.ALTUS-ENG.com

REVISIONS NO. DESCRIPTION

O INITIAL SUBMISSION

RLH DRAWN BY:.

EDW 4779-DETAILS.DWG DRAWING FILE: _

SCALE:

OWNER/APPLICANT:



GREENLEAF RECREATION CENTER

C/O CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

PARKING LOT RECLAMATION **PLANS**

GREENLEAF RECREATION CENTER

195 GREENLEAF AVENUE PORTSMOUTH, N.H. ASSESSOR'S PARCEL 243-4

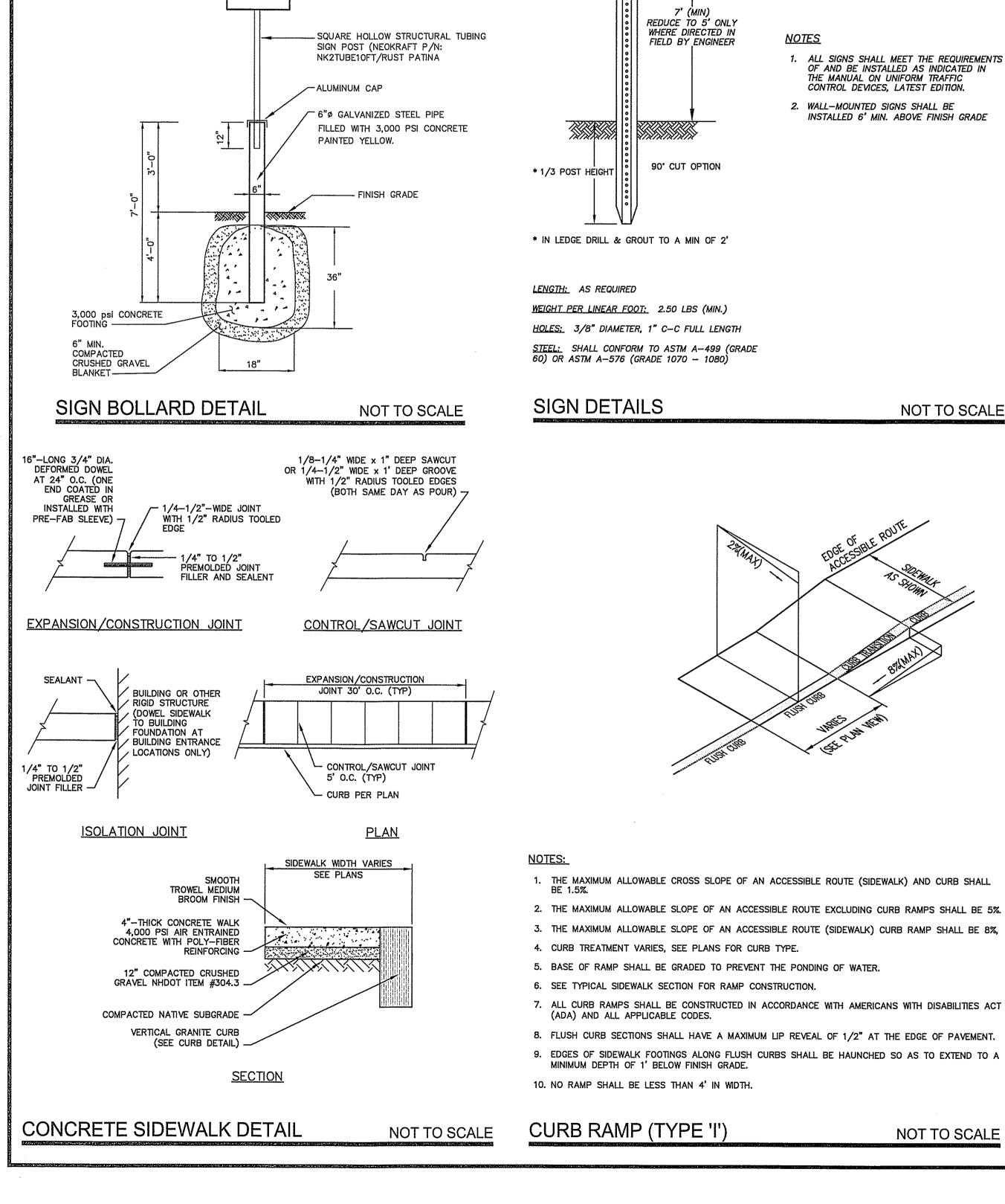
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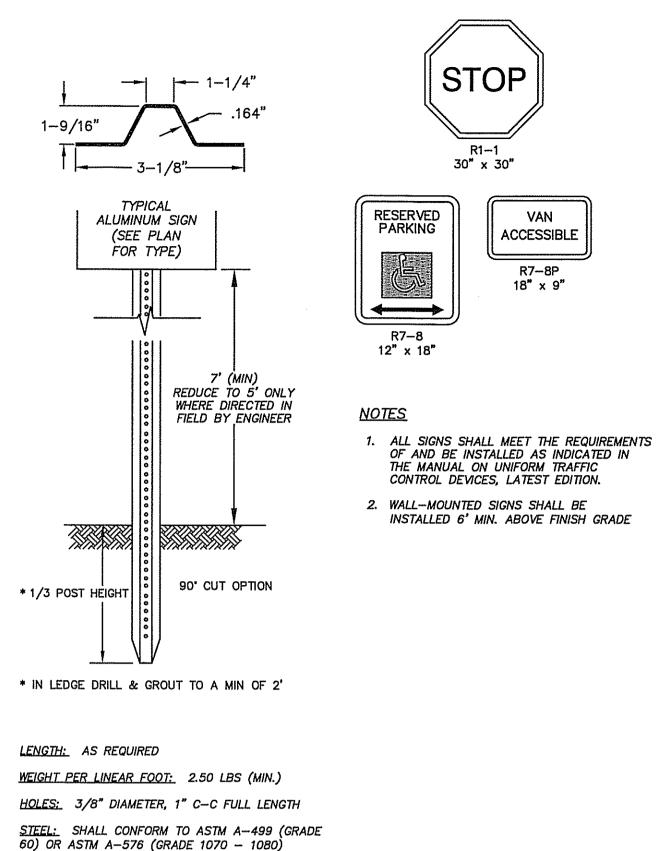
DETAIL SHEET

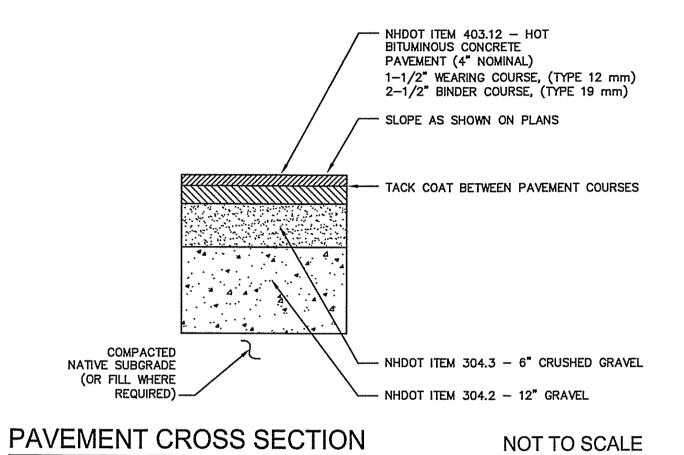
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C-4

CONTOUR LINES 600' MAXIMUM SUPPORT POLE AS SPECIFIED BY MANUFACTURER PROPEX OR EQUAL INSTALL ORANGE CONSTRUCTION FENCING WITH SILT FENCING OR USE ORANGE SILT FENCE WHERE CONSTRUCTION ACTIVITIES ARE WITHIN 20 FEET OF WETLANDS. OR ANY DISTURBED AREA TO BE 8" MIN. COVER PROPEX - SILT STOP SEDIMENT CONTROL FABRIC OR APPROVED -INSTALL SILT FENCE WHERE SHOWN 6" MIN. ON PLAN AND REQUIRED FOR SWPPP -FLARE ENDS UP TO FRONT VIEW SIDE VIEW PROVIDE STORAGE CAPACITY SILT AND ORANGE CONSTRUCTION FENCE LAYOUT DETAIL NOT TO SCALE





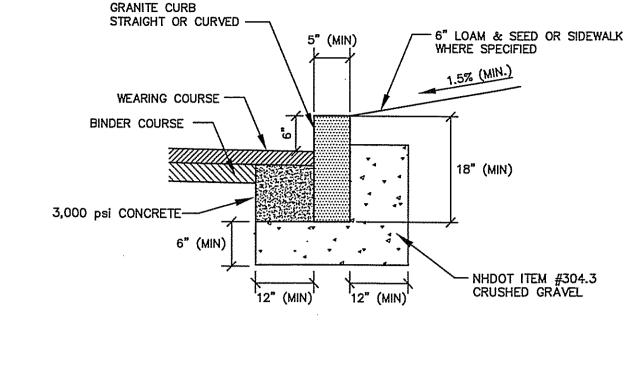


- SLOPE AS SHOWN ON PLANS

- NHDOT ITEM 304.3 - 10" CRUSHED GRAVEL

NOT TO SCALE

- NHDOT ITEM 304.2 - 12" GRAVEL



NOTES

- 1. SEE PLANS FOR CURB LOCATION.
- SEE PLANS FOR PAVEMENT CROSS SECTION.
- 3. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
- 4. MINIMUM LENGTH OF CURB STONES = 4'.
- 5. MAXIMUM LENGTH OF CURB STONES = 10'.
- CURVES SEE CHART.
- 7. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE CUT WHEN CALL FOR ON THE PLANS.
- 8. CURB SHALL BE INSTALLED PRIOR TO PLACEMENT OF TOP PAVEMENT COURSE.

9. JOINTS BETWEEN CURB STONES SHALL BE MORTARED.

22'-28' 29'-35' 6. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON 36'-42' 43'--49' 50'--56' 57'–60' OVER 60'

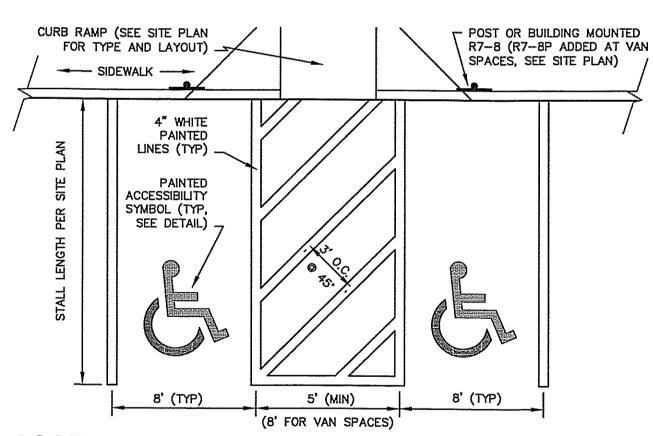
21'

RADIUS

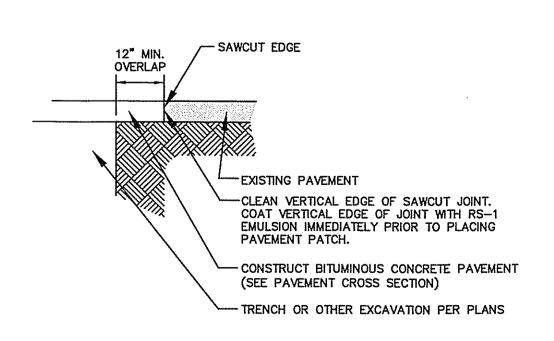
VERTICAL GRANITE CURB

NOT TO SCALE

MAX. LENGTH



ACCESSIBLE PARKING STALL LAYOUT NOT TO SCALE



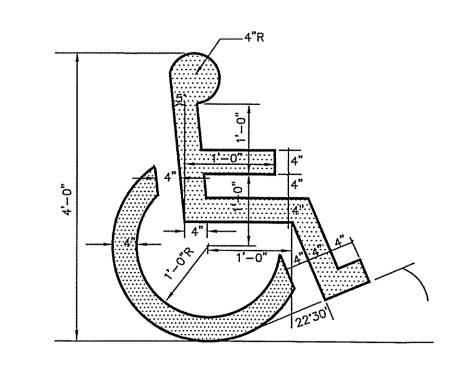
TYPICAL PAVEMENT SAWCUT

COMPACTED

GRAVEL PARKING AREA DETAIL

NATIVE SUBGRADE (OR FILL WHERE

NOT TO SCALE



1. SYMBOL TO BE PAINTED IN ALL HANDICAPPED ACCESSIBLE SPACES IN WHITE PAINT (BLUE-PAINTED SQUARE BACKGROUND OPTIONAL).

PAINTED ACCESSIBILITY SYMBOL

ENGINEER: ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com

ISSUED FOR: CONDITIONAL USE PERMIT/PLANNING BOARD

ISSUE DATE:

APRIL 29, 2016

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NOT TO SCALE

REVISIONS NO. DESCRIPTION DATE EDW 04/29/16 O INITIAL SUBMISSION

DRAWN BY: EDW APPROVED BY:

SCALE:

OWNER/APPLICANT:

DRAWING FILE:



GREENLEAF RECREATION CENTER

C/O CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

PARKING LOT RECLAMATION **PLANS**

GREENLEAF RECREATION CENTER 195 GREENLEAF AVENUE PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 243-4

TITLE:

DETAIL SHEET

SHEET NUMBER:

C-5

CURB RAMP (TYPE 'I')

(ADA) AND ALL APPLICABLE CODES.

MINIMUM DEPTH OF 1' BELOW FINISH GRADE.

NOT TO SCALE

NOT TO SCALE

NOT TO SCALE

- 1. CONSTRUCT EMERGENCY OVERFLOW WEIR TO THE WIDTHS AND LENGTHS SHOWN ON THE PLAN. 2. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIPRAP SHALL BE PREPARED TO LINES
- AND GRADES SHOWN ON THE PLANS. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE EROSION STONE. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 18 INCHES.
- 4. THE EROSION STONE MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

EMERGENCY OVERFLOW WEIR

NOT TO SCALE

INV.=29.20 GRATE PIPE SIZE - WATERTIGHT SIZE ADAPTOR FOR PVC PIPE. Α В 12" 8" ELBOW OR TEE BELOW ----6" HDPE (TYP) 12" SUMP___ 6" 3/4" CRUSHED STONE BEDDING -

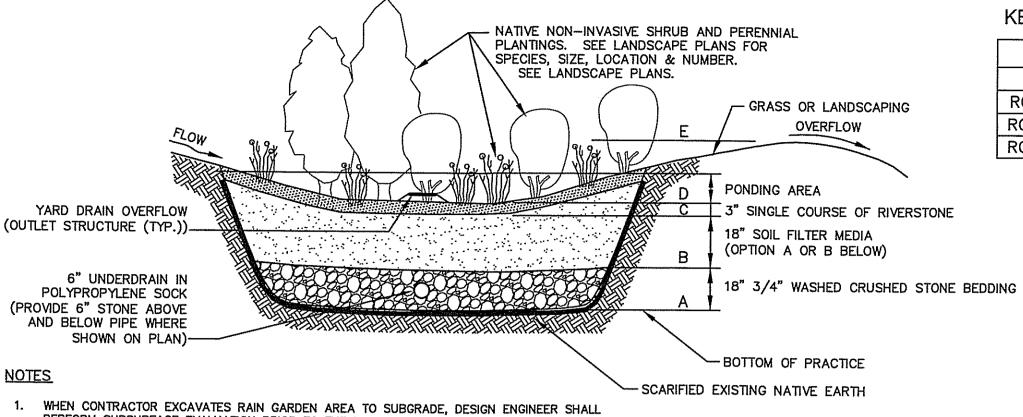
FLUSH GRATE

YARD DRAIN NOTES:

- 1. INLINE DRAIN TO BE PVC DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS 1-800-821-6710 OR APPROVED EQUAL.
- 2. THE CONTRACTOR SHALL INSTALL THE INLINE DRAIN AS PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.

YARD DRAIN AND GRATE

NOT TO SCALE



KEY ELEVATIONS

RA	INGARI	DEN EL	EVATI	ONS T	ABLE
	Α	В	С	D	E
RG1	25.5	27.0	28.5	29.2	29.8
RG2	25.4	26.9	28.4	29.2	29.4
RG3	25.5	27.0	28.5	29.2	29.8

CRUSHED STONE BEDDING % PASSING BY WEIGHT 100 90 - 100 20 - 55 0 -10 0 - 5

EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT NHDOT STANDARD SPECIFICATIONS

FILTER MEDIA MIXTURES Gradation of material Percent of Component Material Mixture by Percent by Weight Sieve Volume No. Passing Standard Sieve Filter Media Option A ASTM C-33 concrete sand 50 to 55 Loamy sand topsoil, with 20 to 30 200 15 to 25 Moderately fine shredded bark or wood fiber mulch, 20 to 30 200 < 5 with fines as indicated Filter Media Option B 20 to 30 200 < 5

Moderately fine shredded bark or wood fiber mulch, with fines as indicated 10 85 to 100 20 70 to 100 Loamy coarse sand 70 to 80 60 15 to 40 200 8 to 15

NON-PAVED AREA | PAVED AREA

(WHICHEVER IS GREATER)

TYPICAL RAINGARDEN

REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

• EPA (1999A)

UNH STORMWATER CENTER

MAINTENANCE REQUIREMENTS

AS A WARRANTED BY SUCH INSPECTION.

RECONSTRUCTION OF THE FILTER MEDIA.

NOT TO SCALE

SEE PAVEMENT SECTION

- SEE PAVEMENT SECTION

SCREENED GRAVEL OR

- ROCK SUBGRADE

(TEMPLATE)

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

SIEVE SIZE

3/4"

3/8"

#4

CRUSHED STONE BEDDING

TRENCH UP TO SPRINGLINE OF

PIPE, 6" BELOW PIPE IN EARTH

AND 12" BELOW PIPE IN ROCK

% PASSING BY WEIGHT

90 - 100

20 - 55

0 - 10

0 - 5

FOR FULL WIDTH OF THE

SEE PAVEMENT SECTION

12" + D/2 MIN.

-SEE SITE PLAN— — 1/4" CHAMFER OR ROUNDED 3,000 PSI CONCRETE PAD (SEE CROSS SECTION) * PITCH TO DRAIN — 6" × 6" W.W.F. (1.4 x 1.4) <u>PLAN</u>

PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR

SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL

QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE

MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS

APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR

EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED

• PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF

ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A

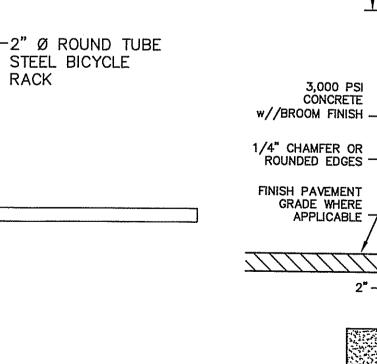
VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION,

INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND

• NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

2. SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.

AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF



1. INSTALL BICYCLE RACK IN

2. DETAIL DEPICTS IN-GROUND MOUNT.

USE SURFACE MOUNT BICYCLE RACK

FOR INSTALLATIONS ON CONCRETE

ACCORDANCE WITH MANUFACTURER'S

RECOMMENDATIONS.

NOT TO SCALE

− 6" x 6" W.W.F. (1.4×1.4) T 6" (MIN.) LOAM AND SEED AT VEGETATED ROUNDED EDGES -12" 12" CONCRETE HAUNCH (TYP ALL SIDES) -**SECTION** NHDOT ITEM #304.3 CRUSHED GRAVEL -COMPACTED NATIVE SUBGRADE

BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C. SAND BLANKET/BARRIER % FINER BY WEIGHT 1/2" 90 - 100 200 0 - 15 * EQUIVALENT TO STANDARD STONE SIZE #67 -SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

fines as indicated

LOAM AND SEED OR OTHER SURFACE TREATMENT PER PLANS -

CLEAN GRANULAR

SPECIFIED

SURFACE .

BELOW

SAND BLANKET AS SPECIFIED

UNDISTURBED

NON-WOVEN

GEOTEXTILE A.O.S.=70 OR LESS

BACKFILL MATERIAL COMPACTED AS

CAUTION - WARNING TAPE 18" BELOW

DRAIN AND UTILITY TRENCH SECTION NOT TO SCALE

ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com

CONDITIONAL USE PERMIT/PLANNING BOARD

ISSUE DATE:

APRIL 29, 2016

NO. DESCRIPTION DATE O INITIAL SUBMISSION EDW 04/29/16

DRAWN BY: EDW APPROVED BY: 4779-DETAILS.DWG DRAWING FILE: _

SCALE:

NOT TO SCALE

OWNER/APPLICANT:



GREENLEAF RECREATION CENTER

C/O CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

PARKING LOT RECLAMATION **PLANS**

GREENLEAF RECREATION CENTER 195 GREENLEAF AVENUE PORTSMOUTH, N.H. ASSESSOR'S PARCEL 243-4

DETAIL SHEET

SHEET NUMBER:

C-6

RACK

BICYCLE RACK PAD

NOT TO SCALE

BICYCLE RACK DETAIL