

1. Legal Ad

Documents: [PB LGL AD 8-26-14.PDF](#)

2. Agenda

Documents: [PB AGENDA 8-26-14.PDF](#)

3. 195 Fore River Parkway

3.I. PB Memo

Documents: [FORE RIVER PARKWAY - 195 \(PB MEMO\).PDF](#)

3.II. Staff Review Comments

Documents: [FORE RIVER PARKWAY - 195 \(STAFF REVIEW COMMENTS\).PDF](#)

3.III. Applicants Submittal

Documents: [FORE RIVER PARKWAY - 195 \(APPLICANTS SUBMITTAL\).PDF](#)

3.IV. Plans

Documents: [FORE RIVER PARKWAY - 195 \(PLANS\).PDF](#)

4. 899 Riverside Street

4.I. PB Report

Documents: [RIVERSIDE ST. - 899 \(PB REPORT\).PDF](#)

4.II. Staff Attachments

Documents: [RIVERSIDE ST. - 899 \(STAFF ATTACHMENTS\).PDF](#)

4.III. Applicant's Submittal

Documents: [RIVERSIDE ST. - 899 \(APPLICANTS SUBMITTAL\).PDF](#)

5. 145 Washington Avenue

**LEGAL ADVERTISEMENT
PORTLAND PLANNING BOARD MEETING**

The Portland Planning Board will hold a meeting on August 26, 2014, Room 209, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken at both the workshop and public hearing.**
The agenda includes the following items:

Workshop – 4:30 p.m.

- i. 195 Fore River Parkway; Master Plan Update; Mercy Hospital, Applicant. The Board will consider an amendment to Mercy Hospital's contract zone agreement. The applicant has received State and federal approvals to fill the existing on-site pond to allow for further development. The proposed amendment to the contract is a revised master plan, which allows for the next phases of building and site development that includes an additional 322,00 sf of hospital space, a 72,000 sf Ambulatory Care Center, a 60,000 sf medical office building, structured and surface parking, and other site improvements.

Public Hearing – 7:00 p.m.

- ii. 899 Riverside Street; Text Amendment; Spurwink, Applicant. The Board will consider a zoning text amendment to the Industrial I-M zone to allow Intermediate Care facilities in existing structures provided that they were not designed or constructed for any amusement, industrial, warehouse, or manufacturing use by an effective date. Properties with such structures may reused and expanded to establish an intermediate care facility for no more than 30 persons plus staff. The proposal includes a revision to the zoning definition of intermediate care facilities to align with current state definitions.

Evening Workshop (immediately following the Public Hearing)

- iii. 145 Washington Avenue; Map Amendment; Ron Gan (Representing Munjoy Hill Homes), Applicant. The Board will consider a map amendment from Residential R-6 to B-2b for the property at 145 Washington Avenue. The site has roughly 20,274 sq. ft. and is currently developed with a garage and auto sales lot. The applicant seeks the map amendment in order to develop a mixed use project with residential and commercial uses.

STUART O'BRIEN, CHAIR - PORTLAND PLANNING BOARD

CITY OF PORTLAND, MAINE
PLANNING BOARD

Stuart G. O'Brien, Chair
Timothy Dean, Vice Chair
Elizabeth Boepple
Sean Dundon
Bill Hall
Carol Morrisette
Jack Soley

AGENDA
PORTLAND PLANNING BOARD

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PUBLIC HEARING – 7:00 p.m.

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATIONS AND REPORTS

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON AUGUST 12, 2014:

Workshop: O'Brien, Dean (4:45 – 5:30), Dundon, Hall, Morrisette, and Soley present.
Boepple absent.

Public Hearing: O'Brien, Dundon, Hall, Morrisette, and Soley present. Dean and Boepple absent.

4. REPORT OF DECISIONS AT THE MEETING HELD ON AUGUST 12, 2014:

- i. 671 Forest Avenue; Level III Site Plan/Subdivision Application; Saad Dahham, Applicant.
 - Morrisette moved and Hall seconded a waiver to allow for a monetary contribution for 4 street trees. The Board voted 5-0, Dean and Boepple absent.
 - Morrisette moved and Hall seconded a motion to approve the subdivision plan with two (2) conditions of approval. The Board voted 5-0, Dean and Boepple absent.
 - Morrisette moved and Hall seconded a motion to approve the site plan with four (4) conditions of approval. The Board voted 5-0, Dean and Boepple absent.
- ii. 94 West Commercial Street, Amended Level III Site Plan for New Yard Boat Yard, New Yard, LLC, and Canal Landing LLC, Applicant.
 - Morrisette moved and Hall seconded a waiver for the preservation of existing vegetation with the condition that a landscape plan for new material be submitted for review. The Board voted 5-0, Dean and Boepple absent.

- Morrisette moved and Hall seconded a motion to retain the waivers from the December 12, 2012 decision, except to rescind the waiver of curb and sidewalk since the site no longer has frontage on Commercial Street. The Board voted 5-0, Dean and Boepple absent.
- Morrisette moved and Hall seconded a motion to find the plan in conformance with the conditional use standards of the WPDZ zone and Section 14-474. The Board voted 5-0, Dean and Boepple absent.
- Morrisette moved and Hall seconded a motion to find the proposal in conformance with the Shoreland Zone regulations. The Board voted 5-0, Dean and Boepple absent.
- Morrisette moved and Hall seconded a motion to approve the site plan application with eight (8) conditions of approval. The Board voted: 5-0, Dean and Boepple absent.

5. NEW BUSINESS

- ii. 899 Riverside Street; Text Amendment; Spurwink, Applicant. The Board will consider a zoning text amendment to the Industrial I-M zone to allow Intermediate Care facilities in existing structures provided that they were not designed or constructed for any amusement, industrial, warehouse, or manufacturing use by an effective date. Properties with such structures may be used and expanded to establish an intermediate care facility for no more than 30 persons plus staff. The proposal includes a revision to the zoning definition of intermediate care facilities to align with current state definitions.

6. EVENING WORKSHOP (Immediately following the Public Hearing)

- iii. 145 Washington Avenue; Map Amendment; Ron Gan (Representing Munjoy Hill Homes), Applicant. The Board will consider a map amendment from Residential R-6 to B-2b for the property at 145 Washington Avenue. The site has roughly 20,274 sq. ft. and is currently developed with a garage and auto sales lot. The applicant seeks the map amendment in order to develop a mixed use project with residential and commercial uses.

STUART O'BRIEN, CHAIR - PORTLAND PLANNING BOARD



Memorandum
Department of Planning and Urban Development
Planning Division

TO: Stuart O'Brien, Chair and Members of the Portland Planning Board

FROM: Jean Fraser, Planner

DATE: August 22nd, 2014

RE: **Amendment to Conditional Zoning Agreement for Mercy (Hospital) at the Fore
175-195 Fore River Parkway**
Mercy Hospital, Applicant
Project #2014-124
CBL 073-A001001

MEETING DATE: August 26th, 2014

I. INTRODUCTION

Mercy Hospital has applied for an amendment to the 2001 Conditional Zoning Agreement (CZA) to allow for a revised and larger development program for the next phase of development on this 42 acre site on the Fore River. The applicant has not proposed any revised wording for the CZA and has submitted three plans (Plans P5-P7) as potential amended "Conceptual Master Plans" for attachment to the CZA.

The 2001 CZA (in Attachment D) allowed rezoning from I-H to a range of permitted uses that included medical and many other uses (eg restaurants and retail, dwellings, hotels) as long as they were functionally related to the medical uses. It contains one "Conceptual Master Plan" as an attachment (also attached in Plan P1). One of the conditions of the agreement was a requirement that Mercy Hospital prepare a Master Plan.

The Master Plan and the Phase 1 Mercy development for a hospital and medical office building (MOB) were approved in 2006 and construction was completed in 2008. The MOB is under separate ownership and recently the hospital has joined with Eastern Maine Healthcare Systems (EMHS). Mercy has re-evaluated their strategy for consolidating the hospital at the Fore River Site (leaving the State Street site) and the potential build-out of the site. Their need for a larger building program prompted the proposal to fill in the 3.5 acre wetland in the center of the site. This required MDEP permits, as at the time of the original CZA the MDEP required the pond to be preserved.

The MDEP issued a permit for the amended layout and filling of the pond in late 2013 (Attachment G) and Mercy would like to proceed in 2014/2015 with the hospital expansion (250,000 sq ft) and an Ambulatory Care Center (72,000 sq ft); two medical office buildings are indicated for future development. Structured parking, stormwater management systems and site amenities are proposed as part of the final build out, but the application does not clarify when these are intended to be constructed.

This Memorandum aims to:

- Clarify the current proposals in terms of comparison with what was previously permitted;
- Clarify the 2001 CZA provisions regarding the Planning Boards jurisdiction for reviewing the proposed amendments and whether an amended CZA is necessary (noting issues related to the framework for updating the Master Plan);
- Analyze the proposed amendments and identify issues to be addressed; and
- Clarify what further Workshops are needed.

Notices have been sent to 66 property owners and interested citizens in the vicinity of the project and a legal advertisement was published in the August 18 and 19, 2014 editions of the *Portland Press Herald*. No public comment has been received to date.

II. PREVIOUS APPROVALS AND BACKGROUND

The previous permitting for this site is outlined below (see [Attachment H](#) for details):

- 2001- City Council approved CZA with an attached Conceptual Master Plan (single plan)
- 2002-2005 - TMP and MDEP permits obtained by Mercy
- 2006- Planning Board approved the Phase 1 (Hospital and Medical Office building with associated parking and landscaping) and a Master Plan document (text and several plans complying with CZA requirements- plans included in [Plan P2](#));
- 2007-2010- Numerous amendments to the 2006 Site Plan approval relating to the maintenance building, trails and open space, and building/siting amendments
- 2010-2013- Veterans Bridge design necessitated reconfiguration of Fore River Parkway and southern open space (Reflected in the Existing conditions plans included at [Plan P3](#) and [Plan P4](#))
- 2012-2013 MDEP amendment to Site Location of Development Act (SLODA) permit obtained by Mercy

The proposed amendments do not alter the vehicular access, the northern open space, nor the northern part of the Phase 1 area, but include the following key changes from the 2001/2006 approved proposals:

- The 3.5 acre central wetland (currently with a public trail around it) is filled in and will accommodate a sunken 2-level parking structure;
- The anticipated “final build-out” building footprint increases from 183,335 sf to 219,980 sf and floor space increases from 433,000 sf to 714,902 sf;
- The southern public open space, already compromised by the new Veterans Bridge alignment, is not functionally integrated.

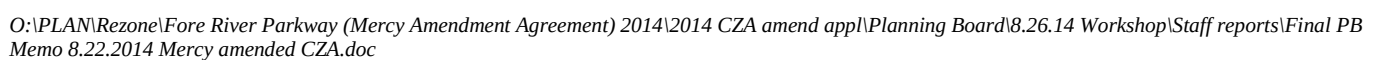
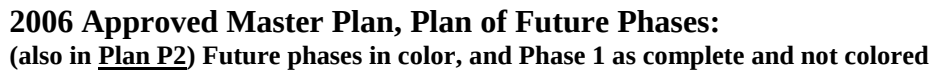
Required reviews: The proposal has been submitted as a request to amend the 2001 CZA as based on earlier staff advice. The detailed submission raises a number of questions regarding whether an amended CZA is required, or whether the applicant could proceed directly to a level III site plan application that includes an updated Master Plan and the next phase of development. This jurisdictional question will be discussed in more detail below and the planning staff are seeking the Board’s guidance.

III. PROPOSED AMENDED CONCEPTUAL MASTER PLAN

The proposals are described in [Attachment C](#), and focus on the conceptual “Overall Site Plan” ([Plan P5](#)), which is presented on page 3. The “Overall Site Plan” (and the other two submitted plans re drainage, grading and utilities in [Plans P6 and P7](#)) are proposed to replace the 2001 “Conceptual Master Plan” attached to the CZA. The conceptual plans are supported by the detailed plans (from the MDEP SLODA permitting package) showing the detail for the full build out ([Plan P8](#)). The detailed proposals have not been reviewed, and the phasing of the elements and parking are not clear (though described on page 4 of [Attachment C](#)).

The revised stormwater system was considered as part of the MDEP review and approval of the amended SLODA ([Attachment G](#)). The need for an amendment to the Traffic Movement Permit (TMP), which was reviewed and granted by the Maine Department of Transportation (MDOT) in 2002, would need to be assessed as part of an updated Master Plan and at the site plan stage for the next construction phase (see **Section V** below).

For comparison, the “Conceptual Master Plans” as approved in 2001 (CZA), as part of the 2006 (Master Plan as approved with Site Plan), and the proposed 2014 Overall Site Plan are inserted below:



A comparison of the underlying data for the three “Conceptual” plans for full build out (2001, 2006 and 2014) was submitted by the applicant (Attachment F) with key data extracted below in Table 1:

Table 1

Site Data	2001	2006	2014
Usable site (taking account loss for roads/bridges and adding in filled pond area in 2014)	25.46 acres	24.91 acres	28.32 acres
Building footprint	183,335 sf	128,000 sf	219,980 sf
Building floorspace	433,000 sf	544,902 sf	714,902 sf
Parking	1251 surface spaces	1467, some in garage	1760, more in garage
Impervious surface (acres)	Approx 22 acres	Approx 13 acres	Approx 18 acres

IV. THRESHOLD QUESTIONS REGARDING THE 2001 CZA PROVISIONS AND THE REVIEW FRAMEWORK FOR THE AMENDMENTS

A. 2001 CZA PROVISIONS

The 2001 CZA is included at Attachment D, and refers to a single “Conceptual Master Plan” (also in Plan P1). Staff understand that the text was drafted to provide flexibility as the development progressed, including the option to have sites developed by other parties for a wide range of uses if related to the medical uses on the site. Therefore the CZA was written with less specificity than more recent Agreements. The general headings included:

- Permitted uses (provision 2)
- Open Spaces, trails and associated easements/access (provision 6)
- Development standards including: design; landscaping; pedestrian orientation; vehicle access and circulation; preservation of natural features; signs; Master Plan (provision 10)
- Dimensional requirements (provision 11)

Board members are particularly recommended to review provisions 6 and 10 as the interpretation of these provisions will inform the following discussion of the review process for the proposed amendments. The requirements of these provisions were considered met at the time of the 2006 site plan and Master Plan approvals.

As is commonly included in Conditional Rezoning documents, there is a provision that the development would be developed substantially in accordance with the “Conceptual Master Plan” (Plan P1 and as above) as quoted below:

*After 9 The **PROPERTY** shall be developed substantially in accordance with the conceptual Master Plan shown on Attachment 2, provided, however, that each building, whether classified as a major or minor development, shall be subject to site plan review by the Planning Board, and if applicable, subdivision review by the Planning Board. Any site plan review applications shall fully comply with the detailed site plan application requirements contained in article V (site plan) of the Land Use Code. The Planning Board may permit deviations from the conceptual Master Plan, as long as the deviations are consistent with the purposes of this Agreement.*

In addition, the CZA includes a provision that the hospital must prepare a Master Plan for the hospital campus and the provision contemplates revisions to the Master Plan over time. It states:

10 i Master Plan: *Prior to development on the PROPERTY, MERCY shall provide a Master Plan of the campus. The Master Plan shall include the following: The location of the building(s) on the site; infrastructure of the site; identification of common areas; traffic circulation, architectural character and treatment of the building(s); proposed building envelopes; phasing and timing of the development; private development restrictions; and such other information necessary and sufficient to ensure compliance with the standards in this section. Master Plans are dynamic representations that assist in guiding projects through phased development. Master Plans are flexible and adaptable to changes that occur within the development process. The Master Plan shall be subject to periodic revision and update as needed and as phased development occurs over time.*

B. BOARD'S GUIDANCE ON REVIEW FRAMEWORK

The threshold questions for the Planning Board are whether or not the current proposals require an amendment to the 2001 CZA as being in “substantially in accordance” with the Conceptual Master Plan, and related to this is whether the revisions to the Master Plan could be reviewed through the development review process as they are contemplated within the Agreement. The Planning Board has considerable jurisdiction to permit “deviations” and are requested to make a decision as to whether an amended CZA is necessary.

As listed above and as evident in comparing the “full build out” plans above, it appears that the most significant changes from the 2001 Conceptual Master Plan are:

- The loss of the 3.5 acre central pond, which is described by the MDEP as having wildlife value (Attachment G) and currently is ringed by a public Portland Trail;
- An increase in building footprint and floorspace, though the usable site has increased because of the pond filling; and
- The impact on the southerly open space (subject of an easement to the City from Mercy which grants public access for recreational activities during daylight hours), which adjoins the southern development parcel fronting the Fore River. The parcel is now reduced in size due to the Veteran's Bridge construction and no longer suitable for development, so there is potential for enhanced public open space with improved integration into the site.

The features that are affected by the amendments are not identified specifically in the text of the CZA, although provisions 6 and 10 address the integration of site amenities (open space, trails, gardens); refer to the objective of a “campus-like setting”; and refer to (but not require) preservation of natural features.

Each of these modifications has implications which would need to be addressed in any case by an updated Master Plan, Site Plans and TMP assessment for each construction phase (see **Section V** below for staff analysis of these and other aspects of the amendments).

A Master Plan to address the CZA provision cited above was submitted for review and approval in 2006 in association with the site plan for Phase 1 hospital and MOB. The Master Plan was approved with 18 pages of text and seven “schematics” (see extracts in Plan P2) and included:

- Phase 1 and Future Phases;
- Access and Circulation Routes;
- Landscape and Open Spaces, including future phases concept planting plan;
- Utility Schematic;
- Architecture and Private development restrictions which included design guidelines.

Since then the Land Use Ordinance for Site Plans has been amended to include provision for Master Plans that allow phasing of development for up to 6 years. The new standards are similar to the “headings” in the Mercy 2001 CZA (and the approved Master Plan was very detailed), but includes additional requirements for a neighborhood meeting and more extensive modelling /graphic 3d analysis.

Upon the Board's guidance on whether or not the proposed amendments require an amended CZA, a second key question is whether the updating of the Master Plan should address the original CZA requirements (excerpted above, 10i of the CZA) or the new Site Plan ordinance requirements. Staff recommend that the updated Master Plan follow the format of the 2006 Master Plan since many of the issues anticipated in the recent Site Plan Ordinance Master Plan provision have already been addressed, though additional information should be provided to address the issues identified below. An updated Master Plan would most likely be submitted together with the Site Plan application for the first phase of new construction.

V. ANALYSIS OF AMENDMENTS

Staff have reviewed the amended development and suggest the following key issues (in Table 2 below) result from the amendments and need to be addressed in the updated Master Plan and future Site Plans for each construction phase (in addition to basic infrastructure issues eg stormwater and revised landscape).

Table 2

Amendment	Issues
Loss of the 3.5 acre central pond and associated public trail	The retention of the central pond was a key component of the original layout and its preservation was considered very important by the MDEP at that time. Portland Trails have a license for a publicly accessible trail around the pond that links to the Fore River trails. It is understood that the MDEP have recently approved the filling of this pond but require mitigation in the form of a large fee to the MDEP (specified in <u>Att.G</u>); it is not known whether the fee will be used for any wetland mitigation in Portland. Staff suggest that some compensatory amenity should be included on the Mercy site, eg the enhancement of the southern open space (see below).
Increase in building program Footprint inc. from 183,335 sf to 219,980 sf; floorspace inc. from 433,000 sf to 714,902 sf	The 2001 CZA included provisions (para 3 and 10a) that the development would be in a “campus-like setting” and have a “unified design” with features such as open spaces, jogging and walking trails, gardens and benches. The proposed larger and closer buildings potentially could erode this character and limit the amenities. The Master Plan should include illustrations etc to show how CZA objectives would be met with larger building program, including the way the development addresses the Fore River Parkway, and the current “Private Development Restrictions” may need updating.
Southern buildable site reduced, open space opportunity	The southern public open space was previously an area between a development parcel and the Fore River and was expected to be dedicated to public use and enjoyment. The development parcel was given interim approval for a snow dump pending building construction. The “land take” for the new Veterans Bridge alignment has left the triangle of Mercy land between the railroad and the new Veteran's Bridge undevelopable, and it is no longer shown for an office building and is indicated to continue as a snow dump in winter. The area would make an attractive public open space and the new Veterans Bridge layout would allow for it to be connected to the trail system along the Fore River as well as link to the interior Mercy pedestrian system. This provision would offset the loss of the pond and trail. The Master Plan update should consider what recreational uses might be appropriate and confirm the functional integration of the southern triangle site.
Increase in trip generation	The 2002 TMP allowed for a level of trip generation as associated with the 2001 anticipated (lower) floorspace development. The 2006 (now constructed) phase 1 development was well below that level, but the next phase of the amended development may trigger a TMP amendment. Tom Errico, Traffic reviewer, has advised that from the City’s perspective the updated Master Plan should include estimates of traffic generation and capacity analyses of the two drive entrances to the site (<u>Att. 1</u>). The increased scale of development will be taking place in the context of likely traffic changes in the vicinity (eg Thompson Point), and the Master Plan needs to confirm that the proposed build out is feasible in terms of the existing traffic infrastructure.
Increase in parking provision with 2/3 in structured parking garage	The submitted Master Plan data summary (<u>Attachment F</u>) suggests that the final build out would require 1760 parking spaces, with 1200 of these in structured parking. The proposals do not confirm whether the structured parking would be part of the next construction phase. During the review of the phase 1(now constructed) staff were concerned that the parking provision (all surface) would not meet the total demand: TDM proposals were identified to help reduce parking demand and a monitoring condition was included. Mr Errico has identified the need for a preliminary analysis of parking demand as part of the updated Master Plan (<u>Att. 1</u>). The phasing of the amended build-out and associated parking (with screening planting) and TDM measures should be clarified.
Retention of the maintenance building (Building H on <u>Plan P5</u>)	In 2008 Mercy converted an existing metal framed building on the site to a maintenance building. The building did not conform to the overall “development restrictions” and the site plan approval included the following condition: <i>That the applicant shall submit a Site Plan application for its proposals for providing a permanent maintenance facility (ie one that meets Contract Zone Agreement design standards and allows for the removal or alteration of the maintenance facility to be in compliance with the CZA design standards) either in conjunction with the next Site Plan application for development on the Mercy Fore River site which would be reviewed by the Planning Board, or by April 1, 2018, whichever is the sooner;</i> The amended proposals show the retention of this maintenance building although it was considered in 2008 to be an “interim accessory structure” and not reviewed as a permanent building. Its retention will need further consideration and it should at least be included in the next site plan application.

Once the process for the review is agreed, the following subjects (linked to the analysis above) are suggested for further Workshop discussion based on additional information from the applicant:

- Phasing of the new “phase 2”
- Traffic analysis including traffic, pedestrians/bicyclists, public transit, TDM
- Amenities, open space, trails, landscape etc in the “campus-like” setting including the southern open space and screening of surface parking areas
- Stormwater systems
- Architecture and design issues including the maintenance building

VI. NEXT STEPS

Suggested next steps include:

- Planning Board provide guidance on whether the amended “Conceptual Master Plan” requires an amended CZA that must be approved by the City Council;
- Planning Board to clarify the framework for updating the Master Plan (CZA provisions or Site Plan ordinance or CZA provisions with some additional items requested);
- Determine subjects and sequence/timing for future PB workshops.

ATTACHMENTS:

Staff Review comments

1. Traffic Engineering Review (Tom Errico) comments 8.20.2014

Public comments (none at the time PB Memo completed)

Applicant’s Submittal

- A. FST Cover letter 7.7.2014
- B. CZA Application
- C. Development Description
- D. Copy of 2001 Contract Zoning Agreement
- E. FST Cover letter re Comparison Table 8.18.2014
- F. Master Plan Data Comparison Table (2001/2006/2014)
- G. State Permits 2013
- H. History of Permitting

Plans

- P1. 2001 Conceptual Master plan (part of CZA)
- P2. 2006 Master Plan- Extract of Plans
- P3. 2014 Existing Conditions
- P4. 2014 Existing areas and associated data
- P5. Proposed Overall Site Plan
- P6. Proposed Overall Grading and Drainage Plan
- P7. Proposed Overall Utility Plan
- P8. (Supporting info) 2012 MDEP submitted amended detailed site development plans

From: Tom Errico <thomas.errico@tylin.com>
To: Jean Fraser <JF@portlandmaine.gov>
Date: 8/20/2014 1:43 PM
Subject: RE: 2002 TMP for Mercy

Jean - The applicant shall conduct the following traffic analysis in conjunction with the revised Master Plan.

* The applicant shall provide an estimate of traffic generation during the AM and PM peak hours and how this estimate compares to the Traffic Movement Permit trip budget.

* The applicant shall conduct a capacity analysis of the two Mercy site driveways on Fore River Parkway under the full Master Plan traffic level with other projects either permitted or pending (e.g. Thompson's Point, State/High Street Two-Way Conversion Study, etc.) included in the analysis. This analysis should document the level of service conclusions under existing geometry and traffic control and what level of mitigation will be required with the added traffic, if any.

* The applicant should provide a preliminary analysis of parking demand and supply for the revised Master Plan.

Please contact me if you have any questions.
Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International] T.Y. Lin International
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Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Wednesday, August 20, 2014 12:04 PM
To: Tom Errico
Subject: 2002 TMP for Mercy

Tom

Just in case this is not immediately to hand, I attach the TMP and alter memo if Understanding as from my files...

Jean

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.



July 7, 2014

Ms. Barbara Barhydt
Development Review Services Manager
Planning and Development Department
City of Portland, Maine
389 Congress Street
Portland, Maine 04101-3509

Subject: Mercy at the Fore
195 Fore River Parkway
Applicant: Mercy Hospital
Contract Zoning Agreement Amendment

Dear Barbara:

On behalf of Mercy Hospital (Mercy), we are pleased to provide the accompanying Amended Contract Zoning Agreement application for their proposed activities at the Fore River campus. The completed form is contained in Attachment A to this submission. Mercy is proposing an Amended Master Plan that will allow them to move forward with the next phases of expansion at the Fore River property. The Master Plan is a part of the Contract Zoning Agreement that Mercy and the City agreed upon on December 3, 2001. The Master Plan now reflects Mercy's most recent development intentions that include the next phases of building and site development activity as Mercy and their new partner, Eastern Maine Healthcare Systems (EMHS), remain committed to the relocation and expansion at the Fore River campus.

As we have discussed, in the fall 2012 Mercy completed permitting with the Maine Department of Environmental Protection and the U.S. Army Corps of Engineers related to the proposal to basically fill in the existing onsite pond. As is outlined in the Development Description contained in Attachment B to this submission, Mercy's team completed an intensive analysis of future site programming and planning that ultimately places much of the future onsite expansion within the central part of the site, thus resulting in elimination of the existing pond. The regulatory agencies have issued permits supporting these findings, thus Mercy is now looking ahead towards completing more detailed Site Plans and permitting with the City. To initiate the process with the City, we have completed the accompanying Contract Zoning Application form and assembled supporting materials including plans and narrative that provide an overview of Mercy's future phase proposals.

The current Master Plan reflects numerous site development modifications when compared to the original Master Plans and approvals. The current Master Plan actually includes a series of drawings outlining current conditions and proposed measures for various site development

Ms. Barbara Barhydt
July 7, 2014
Page 2

elements, including, but not limited to, site layout, grading and drainage, utilities and stormwater management. These current drawings will require additional detailing as part of the Level III Site Plan review process. We believe these plans convey more than ample information as it relates to the Master Plan review. The plans continue to show development activities that comply with the CZA with respect to Land Use, Development Standards, and dimensional standards. On that basis, we foresee no changes to the approved CZA terms and conditions, but rather simply an update to the Master Plan development program and supporting graphics. Once accepted by the City, we foresee additional Level III Site Plan submissions occurring in advance of building permitting and construction commencement over the upcoming months. This City acceptance of the Amended Master Plan will trigger Mercy to fulfill their MeDEP Condition of Approval related to their participation in the In Lieu Fee Program that requires Mercy pay an amount of \$834,156.00 for resource impacts related to the Phase II development program.

Since the original 2001 Contract Zoning Agreement, Mercy has undergone multiple reviews and changes, some of which are highlighted as follows:

- December 3, 2001 – Original Contract Zoning Agreement with City of Portland
- June 26, 2002 – Original Maine Department of Environmental Protection Site Location of Development Permit Order issued (L-20775-19-A-N)
- August 8, 2006 – Portland Planning Authority approves revised Master Plan and Phase 1 Site Plan
- September 2006 – September 2008 – Phase 1 Hospital and Medical Office Building are constructed and Occupancy begins in 2008
- Fall 2012 – Mercy completes programming update for Future Phase II activities related to Hospital relocation and expansion to the Fore River Campus
- March 2013 – MeDEP issues Amended Permit Order related to Phase II Hospital relocation and expansion at Fore River Campus
- April 2013 – U.S. Army Corp of Engineers issues Permit Authorization related to Phase II Hospital relocation and expansion at Fore River Campus
- July 2013 – New Veterans Memorial Bridge is completed, impacting nearly 2 acres of Mercy land at south end of site
- October 2013 – Mercy Hospital and Eastern Maine Healthcare complete merger resulting from year-long due diligence by EMHS

To aid with the understanding of the process completed by Mercy's team for the Phase II activities, we have included in this submission various parts of the DEP/USACOE permitting materials. We have also included a copy of the original Contract Zoning Agreement and copies of the Master Plans as contained in the original 2001 documents and 2006 documents (see Attachment C). Finally, the current Master Plan, as depicted in a series of development drawings, is contained in Attachment D to this submission.

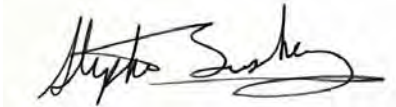
Ms. Barbara Barhydt
July 7, 2014
Page 3

We appreciate the Planning Authority's consideration on these matters and look forward to meeting with the Planning Board once again. We look forward to presenting to the Planning Board at their next available meeting.

If you have any questions or require any additional information, please contact our office.

Sincerely,

FAY, SPOFFORD & THORNDIKE, LLC

A handwritten signature in black ink, appearing to read "Stephen Bushey", is written over a light gray rectangular background.

Stephen Bushey, P.E., C.P.E.S.C.
Senior Principal Engineer

SRB/smk

Enclosures: Attachment A – Application Form
Attachment B – Development Description
Attachment C – Contract Zone Agreement and Previous Master Plans
Current Master Plan Drawing Set

c: Bob Nutter, Vice President and Chief Operating Officer
Mike Connolly, Facilities Manager

ATTACHMENT A

APPLICATION FORM



Zoning Map/Text Amendment/Contract or Conditional Rezoning Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the review of requests for zoning map amendments, zoning text amendments and contract or conditional re-zoning. The Division also coordinates site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Zone Change.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division

Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours

Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Mercy Hospital - Fore River Campus - Master Plan Update

PROPOSED DEVELOPMENT ADDRESS:

175 & 195 Fore River Parkway

PROJECT DESCRIPTION:

Update to Master Plan to include Phase II Hospital relocation and expansion

CHART/BLOCK/LOT: See Plan Set Cover Sheet for List

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Mercy Hospital, Attn: Mike Connolly Business Name, if applicable: Address: 144 State Street City/State : Portland, ME Zip Code: 04101	Applicant Contact Information Work # 207-879-3000 Home# Cell # Fax# e-mail: connollym@mercyme.com
Owner – (if different from Applicant) Name: SAME AS APPLICANT Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Stephen Bushey, P.E. Name: Fay, Spofford & Thorndike Address: 778 Main Street, Suite 8 City/State : South Portland, ME Zip Code:	Agent/Representative Contact information Work # 207-775-1121 Cell # 207-756-9359 e-mail: sbushey@fstinc.com
Billing Information Name: Mercy Hospital, Attn: Mike Connolly Address: 144 State Street City/State : Portland, ME Zip Code: 04101	Billing Information Work # 207-879-3000 Cell # Fax# e-mail: connollym@mercyme.com

Engineer Stephen Bushey, P.E. Name: Fay, Spofford & Thorndike Address: 778 Main Street, Suite 8 City/State : South Portland, ME Zip Code: 04106	Engineer Contact Information Work # 207-775-1121 Cell # 207-756-9359 Fax# e-mail: sbushey@fstinc.com
Surveyor John Swan Name: Owen Haskell, Inc. Address: 390 US Route 1, Unit 10 City/State : Falmouth, ME Zip Code: 04105	Surveyor Contact Information Work # 207-774-0424 Cell # Fax# e-mail: jswan@owenhaskell.com
Architect Ellen Belknap Name: SMRT, Inc. Address: 144 Fore Street City/State : Portland, ME Zip Code: 04101	Architect Contact Information Work # 207-772-3846 Cell # Fax# e-mail: ebelknap@smrtinc.com
Attorney Matthew Manahan Name: Pierce Atwood LLP Address: Merrill's Wharf 254 Commercial Street City/State : Portland, ME Zip Code: 04101	Attorney Contact Information Work # 207-791-1189 Cell # Fax# e-mail: mmanahan@pierceatwood.com

Right, Title, or Interest: Please identify the status of the applicant's right, title, or interest in the subject property:

Copies of deeds were previously submitted and are on file with the City.

Provide documentary evidence, attached to this application, of applicant's right, title, or interest in the subject property.
(For example, a deed, option or contract to purchase or lease the subject property.)

Vicinity Map: Attach a map showing the subject parcel and abutting parcels, labeled as to ownership and/or current use.
(Applicant may utilize the City Zoning Map or Parcel Map as a source.) See Attachment A

Existing Use: Describe the existing use of the subject property:

Medical Campus

Current Zoning Designation(s): Contract Zone

Proposed Use of Property: Please describe the proposed use of the subject property. If construction or development is proposed, please describe any changes to the physical condition of the property.

Medical/Hospital relocation and expansion

Site Plan: On a separate sheet, please provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries. This may be a professionally drawn plan, or a carefully drawn plan, to scale, by the applicant. (Scale to suit, range from 1" = 10' to 1' = 50'.) Contract and conditional rezoning applications may require additional site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood.

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

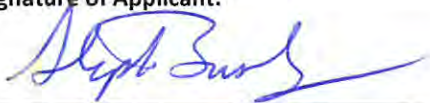
Zoning Map Amendment ___ \$2,000.00 (from ___ zone to ___ zone) Zoning Text Amendment ___ \$2,000,000 (to Section 14-___) Combination Zoning Text Amendment and Zoning Map Amendment ___ \$3,000.00 Conditional or Contract Zone ___ \$3,000.00 (A conditional or contract rezoning map be requested by an applicant in cases where limitations, conditions, or special assurances related to the physical development and operation of the property are needed to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Please refer to Division 1.5, Sections 14-60 to 62.)	The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) • Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.
---	--

APPLICATION SUBMISSION:

1. All plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file names which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. **The submission shall include the following materials:**
 - a. One (1) paper set of the zoning amendment application, concept plan and written narrative.
 - b. Contract and conditional rezoning applications must include site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations and compatible with the surrounding neighborhood.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of Applicant:**Date:**

July 7, 2014

ATTACHMENT B

DEVELOPMENT DESCRIPTION

ATTACHMENT B
DEVELOPMENT DESCRIPTION

1.0 Project Overview – Mercy Hospital Phase 2 Relocation

Background and Purpose of the Move to the Fore River Campus

In the early 2000s, Mercy Hospital's strategic plan identified important objectives that could not be achieved at the 3.5-acre State Street site, given its age, size, location and Portland's Historic District constraints. Four priority objectives of the strategic plan are listed below. They represent the purpose for which the Fore River project was conceived and implemented:

- **Mercy must assure “state of the art” technological infrastructure** consistent with industry norms and standards of care;
- **Mercy must assure short-term and long-term excellence** in program plans and facilities to support them;
- **Mercy must assure strong physician relationships** enhanced by improved facilities; and
- **Mercy must solidify itself as a health care employer of choice** by providing safe, comfortable, and technologically advanced facilities.

When it became apparent that the State Street facility could not meet important strategic goals, Mercy engaged a technical team to work with the Hospital's management and Board to find a new home. The team developed six criteria for evaluating prospective sites:

- A 50-acre parcel was the goal for siting a new facility with 25 acres being the minimum;
- Easy accessibility from interstate highways and major roadways;
- Easy accessibility to public transportation;
- Convenient to doctor's offices, many of which are located on the Portland peninsula;
- Proximity to Maine Medical Center to avoid duplication of highly specialized equipment; and
- A site where Mercy would be welcomed by the neighborhood and the community at large.

Selection of the Fore River Site

Finding a location that satisfied all criteria was difficult. Three dozen potential locations were identified and reviewed. Of those, only the Fore River site met all six criteria while also minimizing natural resource impacts. The City of Portland Planning and Economic Development Department endorsed the Fore River site, as did the Maine Department of Environmental Protection (MeDEP) as evidenced by the granting of Permit Approvals L-20775-A-A-N & L-20775-TG-B-N and subsequent amendments.

The Fore River site was formerly owned by Merrill Industries and the Portland Terminal Co. and contained multiple sets of railroad tracks that were used to store railcars. The combined 85.5-acre parcel consisted of 43.5 acres of tidal mudflats and 42 acres of undeveloped land above the mudflats. Four wetland areas totaling over four acres were present in the upland area. Three small linear wetland areas were located within former drainage ditches along old railroad track paths. The fourth and largest wetland was a 3.6-acre former gravel pit that had been excavated to provide gravel for the original Veterans Memorial Bridge and for railroad operations.

Mercy retained a team of hospital planning architects and consultants to develop an initial Master Plan for the Fore River parcel. Numerous development layouts were refined over time as Mercy's understanding of the site's natural resources became known. During the initial planning phase in 2001/2002, the most desirable site layout was identified; however, it would have resulted in over three acres of wetland filling. In order to minimize natural resource impacts, the selected design layout in 2002 reduced the proposed wetland impacts to 0.92 acres, which involved the filling of the three former rail line drainage ditches.

Phase 1 design plans were developed from 2004 through 2006, and in September 2006 the Phase 1 construction commenced. The Phase 1 program maintained resource impacts to the originally permitted 0.92 acres, thus avoiding any significant impacts to the former gravel pit wetland located in the middle of the site. The Phase 1 program, consisting of the 137,832 SF Hospital and 80,000 Medical Office Building, was completed and opened in September 2008.

Status of the Two-Phase Move to the Fore River Campus

Mercy chose to abandon their State Street site and move to the Fore River campus in order to meet important strategic obligations and maintain appropriate standards of care that were in jeopardy if the Hospital were to remain at State Street. A two-phase move was planned, with the intent of fully completing the relocation in time for Mercy's 100-year anniversary in 2018. The first phase of the move to the Fore River campus was completed in 2008 with the construction of the Phase 1 hospital facility and an adjoining medical office building (MOB). Ancillary facilities including surface parking for 783 vehicles, utilities, snow storage and a maintenance building were also constructed. The Phase 2 planning effort has also continued since that time.

In the five-year period that the hospital has been maintaining both the State Street campus and the Fore River campus, Mercy has become acutely aware of the operational and financial problems of maintaining two interdependent campuses. Mercy ramped up the Phase 2 planning process with the intent of developing applications and seeking the appropriate State and Federal permits in late 2012. The initial planning and preliminary design of the Phase 2 campus has revealed new and unexpected challenges. Phase 2 opportunities previously considered during the 2004-2006 design phase are now considered problematic and constrained due to changing programs and space needs associated with current and anticipated healthcare delivery.

As it stands today, Mercy finds the Phase I hospital at the Fore River campus to be highly constrained in terms of its expansion options. The Phase 2 hospital was always intended to be to the east of Phase 1, and that has not changed. However, Mercy has

undergone substantial growth over the past decade and continues to need to expand its role as a community hospital. The current Phase 2 hospital build-out is projected to incorporate 200,000 to 250,000 square feet of hospital space along with approximately 72,000 square feet for an Ambulatory Care Center (ACC) to be directly connected to the hospital. These projections represent an increase in programming and space needs over what was contemplated in 2006.

The useable portion of the 42-acre Fore River campus has shrunk over time. The Fore River Parkway and the final grading of the Phase 1 property have constricted expansion opportunities toward the river on the west. Construction of the new Veterans Memorial Bridge has further constrained the south end of the site. All major utility entries, hospital gases and emergency generators are optimally located immediately south of the Phase 1 hospital, so as to service the intended Phase 2 expansion, but they restrict development in the southwest portion of the site. The Mercy Team has determined that there is approximately less than 20 acres of developable land remaining at the Mercy Fore River site, as shown on Figure 1 following this section.

The Mercy staff, working with architects specializing in hospital planning, has now discovered that there is insufficient space to the north of the Phase 1 Hospital to accommodate the current needs and, especially, future expansion beyond the planned Phase 2 Hospital. The presence of the 3.5 acre wetland adjacent to the existing Hospital poses a significant constraint and, therefore, an enormous challenge for the Phase 2 expansion. Building Phase 2 of the Hospital to the south of the wetland is not an option. Whether there is separation of facilities by a mile or by 200 yards, the operational, safety and logistical problems are similar. These issues are summarized below:

- **There are safety issues** associated with medical staff, patients and visitors walking or otherwise being transported through parking lots and across access and egress points on the campus. Safety is also a concern when patients looking for the emergency room come to the wrong Hospital location.
- **There are serious health care risks** for patients being wheel-chaired or bussed between Hospital facilities for testing, evaluation, etc. When time is of the essence, the need to transport a patient between buildings can be life-threatening.
- **There are important issues of attraction and retention of staff** in a competitive market when facilities are less than top-notch and physician insurability is vulnerable to non-routine patient logistic practices associated with moving patients between buildings.
- **The inefficiency and inconvenience of a dual-facility campus costs Mercy \$9.5M per year** to maintain and results in on-going yearly financial loss. Similar losses would be sustained in a divided Fore River campus because of busing requirements and duplication of operations such as imaging, laboratories, food services, cafeteria, security, plant engineering, and environmental services.

The Present Purpose and Need

Mercy's project purpose is to construct a Phase 2 Hospital build-out with 250,000 square feet of hospital space and approximately 72,000 square feet for an Ambulatory Care Center (ACC) to be directly connected to the existing Phase 1 Fore River Hospital, while

maximizing site safety and allowing for a future Phase 3 expansion that would be in close proximity to the ACC. Future medical offices and structured parking also are part of the Phase 2 planning and each plays a vital role in Mercy's long term viability. The need to complete the move to the Fore River campus is now front and center on Mercy's agenda, and the Hospital finds itself in an untenable situation. The Hospital has struggled to maintain appropriate standards of care in a temporary two-site facility. This has resulted in issues with the patient and staff safety; patient, visitor and staff frustration; physician dissatisfaction; and substantial financial losses. Dual facilities and divided services result in less than best-practice medical delivery. A team of experienced hospital architects and engineers have assessed the combination of physical constraints and present and future Hospital growth requirements at the Fore River campus. They have concluded that a fully integrated and connected campus – the desire of all parties – is impossible without impacting the three-acre wetland. Mercy has considered the available alternatives to create a campus that will allow appropriate standards of care and has found that filling the wetland has become a necessity for the current and future viability of the Hospital.

1.1 Development Proposal

Mercy Hospital is proposing to develop their Phase 2 Hospital campus on the Fore River development site over the next 2-6 year period. The current development master plan includes the following uses:

- a. The Phase 2 Hospital expansion wherein all State Street hospital functions are relocated to the Fore River campus. This will include an additional 322,000 SF of Hospital program area over a 116,980 SF building footprint;
- b. A 72,000 SF Acute Care Center (ACC) will be established within the 322,000 SF Hospital program area;
- c. A medical office building of 60,000 SF within a 15,000 SF footprint;
- d. A medical office building of 108,000 SF within a 40,000 SF footprint;
- e. Accessory uses, including but not limited to, parking facilities and structures (for 1,800-2,000 parking spaces), utility services, stormwater management systems, and site amenities. The parking garages include a 51,800 SF structure containing 750 parking spaces and 33,800 SF structure containing 450 spaces;
- f. Continued use of public open space along the waterfront at the north and south ends of the campus; and
- g. Continued use of the south end of the campus for snow storage and/or remote parking.

All of the above facilities will be developed primarily to support the main use of the site as a hospital campus, although it is anticipated that some use of support facilities by others in the neighboring community may occur.

Future development on the site is anticipated to include some of the aforementioned possible uses.

Other ancillary development features will include parking facilities, utility service relocations, advanced stormwater management systems, and site amenities. Parking for the campus will include both surface and structural parking facilities. The parking needs for the project will likely exceed 1,800 spaces to meet local zoning requirements and facility needs.

The Phase 2 development is expected to include multiple buildings, some owned by the applicant and some potentially owned by others. The new structures may be a mix of single and multi-level buildings developed in a campus-like setting. The anticipated building footprint(s) will exceed 229,560 SF. The buildings may be freestanding or linked, depending upon the phasing and ultimate development program proposed. The buildings will be constructed on conventional spread footing foundations or end bearing piles.

The Maine Department of Transportation has previously used a portion of the property for the construction of the Fore River Parkway (FRP) and most recently the new Veteran's Memorial Bridge (VMB). The MDOT has previously completed natural resources permitting associated with the FRP and VMB separately from the proposed Hospital development.

Two separate access drives will continue to provide access to the Hospital campus off the FRP. These access locations remain fixed due to geometric and sight line constraints along the Fore River Parkway. These fixed locations also contribute to the planning and layout challenges. Access off County Way is limited to emergency vehicles only, as it requires crossing of Pan Am Railway's tracks.

The Hospital campus will continue to be served by public water, sewer, natural gas, and nearby communication, cable, and electric utilities. Onsite water service consists of a 12" water main. A 42" sanitary sewer interceptor borders the site along its easterly border. The Hospital will continue to manage its wastewater flow stream in a similar fashion to the existing facilities at both Fore River and State Street. Communications, cable, and electric utilities are located on the project site. Some relocation of Phase 1 utilities is likely during Phase 2 construction.

The Phase 2 project's proposed stormwater management systems will provide water quality treatment measures to treat the new structure area developed as part of the Phase 2 expansion. The intent is to meet the current MeDEP Chapter 500 Standards and City of Portland Standards including treatment of at least 95% of new structure area and 80% of the Phase 2 developed area. Stormwater quantity control is not required since the site will be discharging to tidal waters.

Extensive landscaping including perimeter tree plantings will continue to be provided for buffering and aesthetic benefits. The site design includes substantial open space necessary to satisfy local requirements associated with the Contract Zone Agreement negotiated between Mercy Hospital and the City of Portland.

1.2 Existing Conditions

The Mercy Campus currently contains the 137,832 SF Phase 1 Hospital and an approximately 80,000 SF medical office building both of which are located north of the

former gravel pit wetland located in the middle of the site. Site access is from two primary driveways. The northerly, unsignalized driveway allows left and right turn entering off the Fore River Parkway, but only right turn exiting onto the Parkway. The southerly signalized driveway allows entering and exiting movements in each direction. The south end of the site currently contains a surface parking lot for 324 vehicles. A small maintenance building remains at the site's south end also. A snow storage area at the far south end of the site will remain.

The site's parking is spread out over five surface parking lots. The northerly lots contain over 400 spaces used by the medical office building staff and visitors as well as by the Phase 1 Hospital patients, visitors and some staff. The southerly parking lot is used by Phase 1 Hospital staff as well as for remote parking for State Street Hospital staff. Mercy currently runs a shuttle bus between the parking lot and the State Street facility. Drainage systems within these parking lots capture and convey stormwater runoff to the Fore River.

Mercy maintains the entire site and those areas not covered by building or parking are well landscaped and managed with manicured lawn and planting beds. A generous amount of trees and shrubs compliment the site's appearance.

1.3 Natural Resources

In 2012 Normandeau Associates completed an onsite investigation to delineate wetlands and to identify resources that may be subject to regulatory review as part of the proposed amended development process. A copy of their wetlands report can be provided upon request. The wetlands were delineated according to the 1987 Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) as clarified in Performance Standard and Supplemental Definitions for use with the 1987 Corps Manual (August 1, 1995). This multi-parameter approach uses the characteristics of vegetation, soils and hydrology in determining wetland boundaries.

The largest area identified as a wetland lies within the former gravel pit area centrally located within the site. The entire gravel pit area is approximately 3.8 acres, of which approximately 3.49 acres have been delineated as wetland. The wetland's predominant features are a shallow pond created by the excavation of the pit to near or below the groundwater table. The water levels in the pit are controlled by a 15" outfall pipe and the seasonal groundwater levels in the area. The bottom of the pit is at approximately elevation 8, whereas original historic elevations varied between elevations 20 to 30 feet. Most resource maps including the USDA-SCS Medium Intensity soils map for Cumberland County and the USGS topographic map identify the area as a gravel pit. These maps confirm that the pit and the resultant pond are manmade features.

The pit wetland area was improved during the Phase 1 construction. These improvements include a substantial cleanup of solid waste including tires, white goods, garbage and related debris that had been deposited or collected in the pit area. The work also included a reclamation effort involving surface stabilization of the former pit side slopes and ground surfaces above standing water. Terra-seeding was used to place a mix of mulch and vegetative seeding in order to establish permanent vegetation on the pit's perimeter slopes. This effort has been highly successful in stopping erosion into the pit wetland.

1.4 **Construction Schedule**

The Phase 2 project is currently under design with a targeted construction start date for 2014/2015 following a successful Certificate of Need Finding from the State of Maine. Project completion is forecast by 2018.

The project will be phased beginning with the placement of fill in the borrow pit to create temporary parking facilities. The temporary facilities will allow subsequent construction of the parking garage followed by the main Phase 2 Hospital expansion. The Hospital expansion effort involves a coordinated effort that maintains ongoing Hospital functions and service throughout the Phase 2 duration.

1.6 **Figures, Plates, Photos, and Drawings**

Figures showing the proposed Mercy Hospital site are appended to this section and include:

Figure	Title
1	DeLorme Location Map
2	USGS Topographic Map
3	Property Tax Map
4	Zoning Map (Contract zone agreement applies)
5	Aerial Photography
6	Abutting Land Use Map
7	FEMA Flood Map
8	USDA SCS Soils Map
9	MGS Sand and Gravel Aquifer Map
10	Surficial Geology Map
11	NWI Map – Not Available
12	Fresh-Water Wetlands Map – Not Published

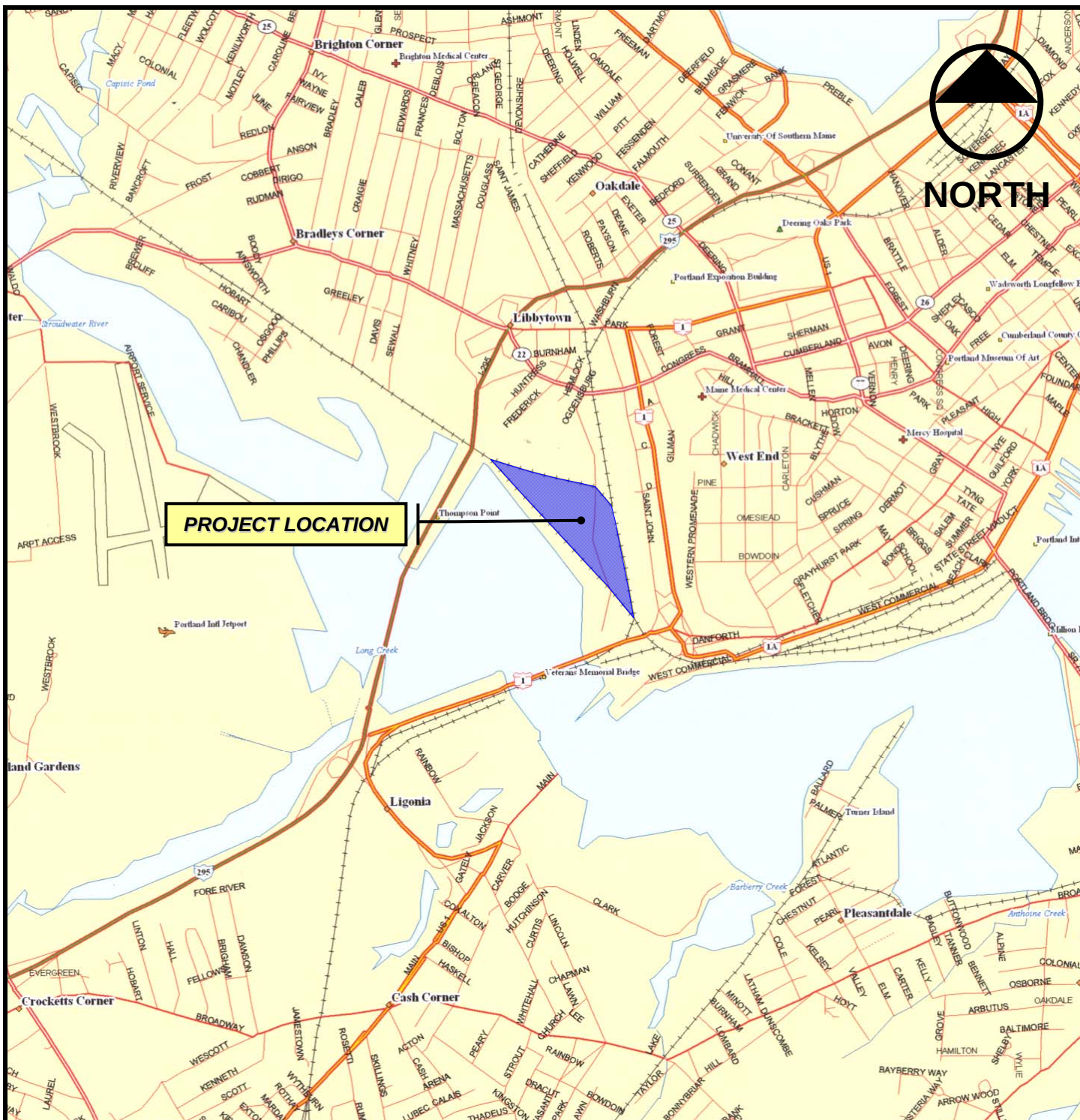
Colored plates follow the figures and include:

Plate Number	Description
1	Existing Conditions
2	Overall Layout Plan
3	Grading Plan
4	Utility Plan

Drawings provided in support of the MeDEP application include:

Sheet Number	Description
C-1.0	Cover Sheet
C-1.1	General Notes and Legend
C-2.0A	Boundary Survey – 1 of 2
C-2.0B	Boundary Survey – 2 of 2
C-2.1	Overall Existing Conditions Plan
C-2.2	Demolition and Removals Plan
C-3.0	Overall Site Plan

Sheet Number	Description
C-3.1	Site Layout Plan (North)
C-3.2	Site Layout Plan (South)
C-4.0	Overall Grading and Drainage Plan
C-4.1	Grading Plan (North)
C-4.2	Grading Plan (South)
C-4.3	Site Layout and Grading Plan of Elevated Parking Deck Level 1
C-4.4	Stormwater Management Plan (North)
C-4.5	Stormwater Management Plan (South)
C-5.0	Erosion and Sediment Control Plan (North)
C-5.1	Erosion and Sediment Control Plan (South)
C-5.2	Interim Phase 2A Plan
C-6.0	Overall Utility Plan
C-6.1	Utility Plan (North)
C-6.2	Utility Plan (South)
C-7.0	Stormwater Details Subsurface Sand Filter
C-7.1	Stormwater Details StormTech® Chamber Storage Details
C-7.2	Stormwater Details Underdrained Grassed Soil Filter
C-7.3	Stormwater Details Underdrained Bioretention Cell
C-7.4	Stormwater Details Filterra® Units
C-7.5	Stormwater Details StormFilter® Treatment Units
C-8.0	Erosion and Sediment Control Details
C-8.1	Erosion and Sediment Control Details
C-8.2	Erosion and Sediment Control Details
C-9.0	Current Conditions Watershed Map
C-9.1	Post-Development Watershed Map
C-10.0	Site Sections



DeLORME LOCATION MAP
Mercy Health System of Maine – Portland, Maine
 SOURCE: DeLORME MAPEXPERT; DATED: 1993

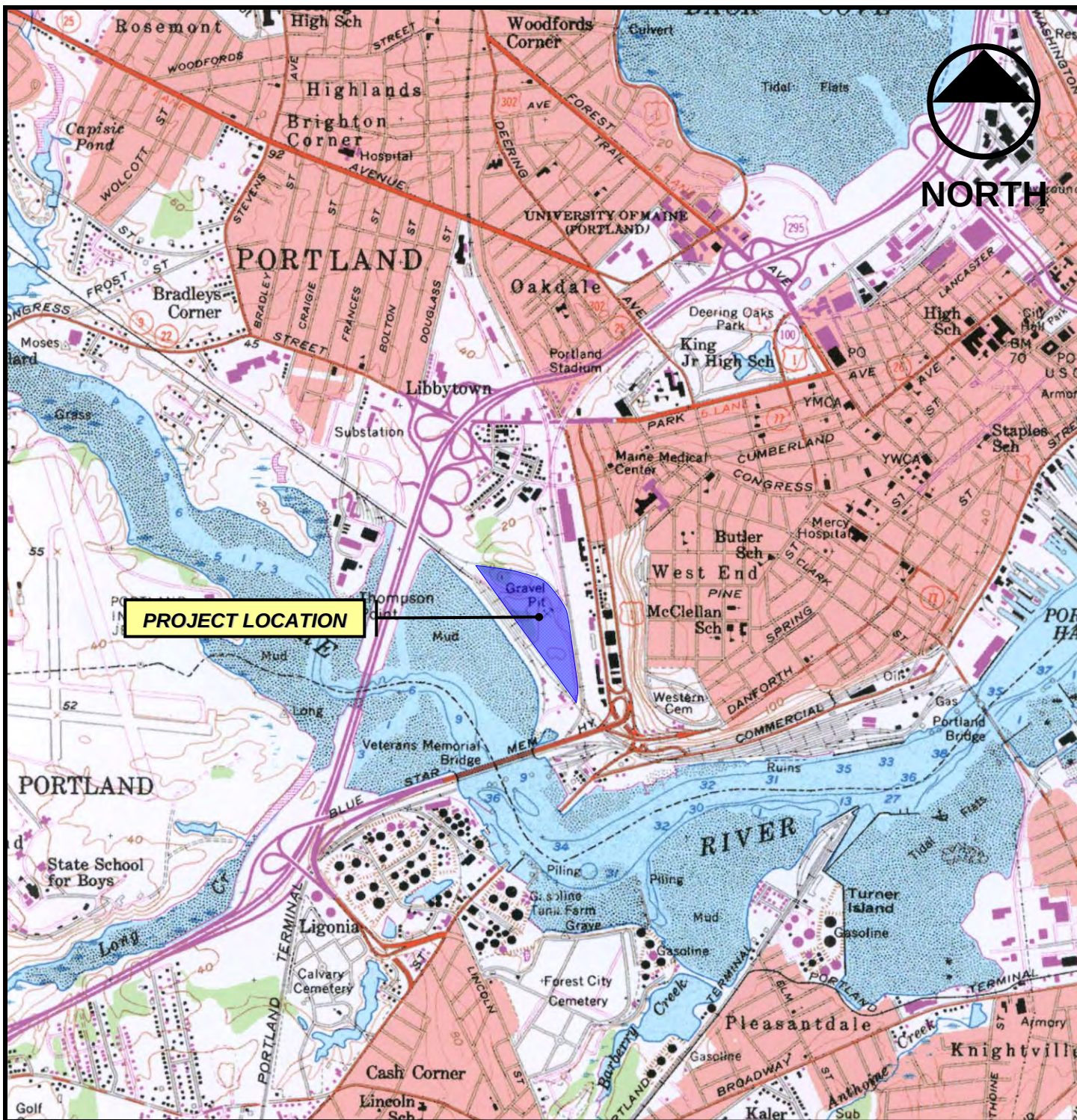


DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207-775-1121
 FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 2000'+-
CHECKED	SRB	JOB NO.	2149

FIGURE

1



USGS TOPOGRAPHIC MAP

Mercy Health System of Maine – Portland, Maine

SOURCE: TOPOSCOUT; Coastal Maine CD-ROM, USGS Portland West Quadrangle, 7.5 Minute Series (Topographic)

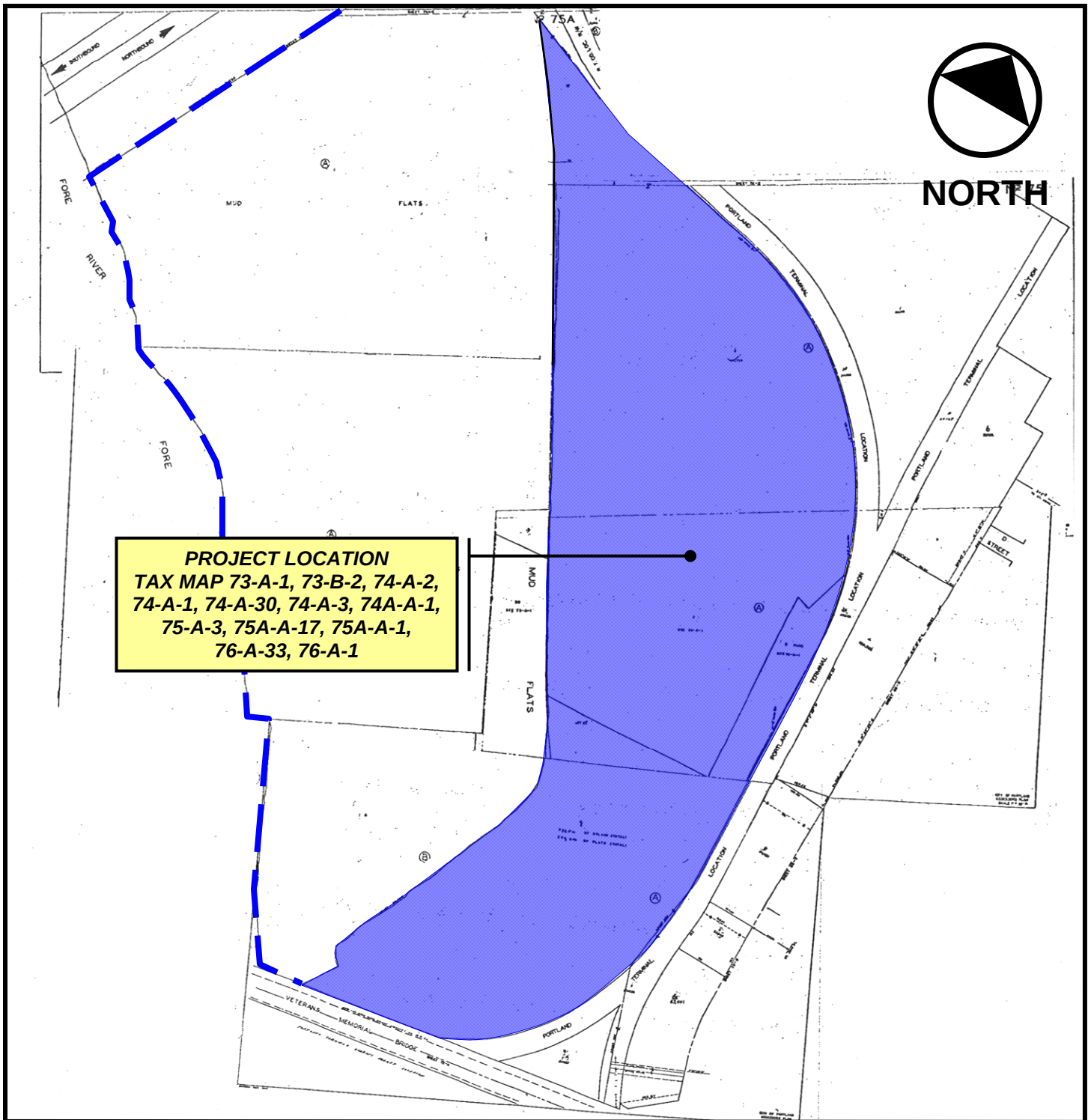
DH

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FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 2000'+-
CHECKED	SRB	JOB NO.	2149

FIGURE

2



PROPERTY TAX MAP

Mercy Health System of Maine – Portland, Maine

SOURCE: CITY OF PORTLAND ASSESSORS PLAN, MAP NUMBERS: 73, 74, 74A, 75 & 75A

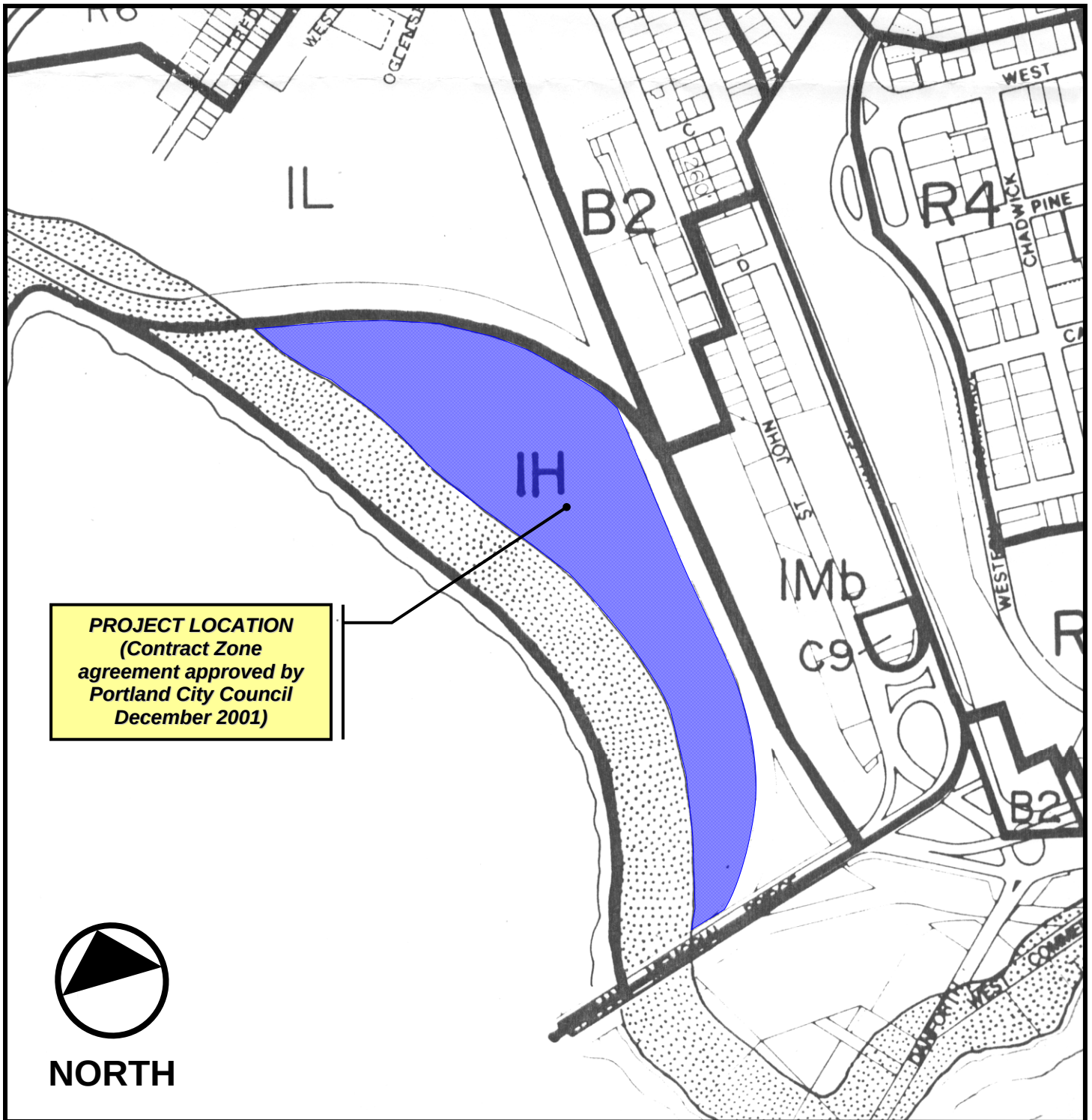


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DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	N.T.S.
CHECKED	SRB	JOB NO.	2149

FIGURE

3



ZONING MAP

Mercy Health System of Maine – Portland, Maine

SOURCE: GPCOG, Cartographic Division; DATED: 1991

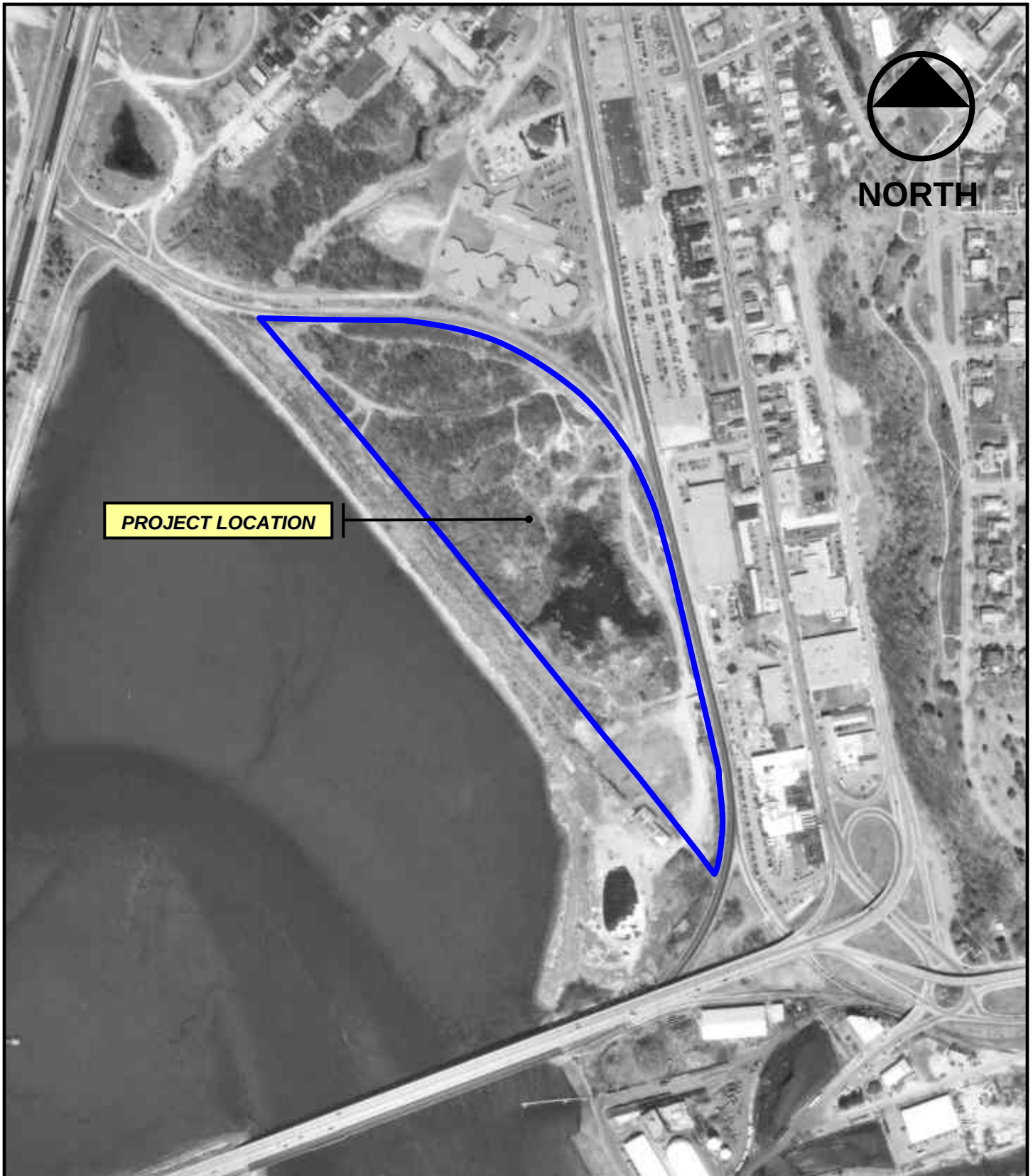


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 FAX 207-879-0896

DESIGNED	SRB	DATE	JUNE 2001
DRAWN	JDL	SCALE	N.T.S.
CHECKED	SRB	JOB NO.	2149

FIGURE

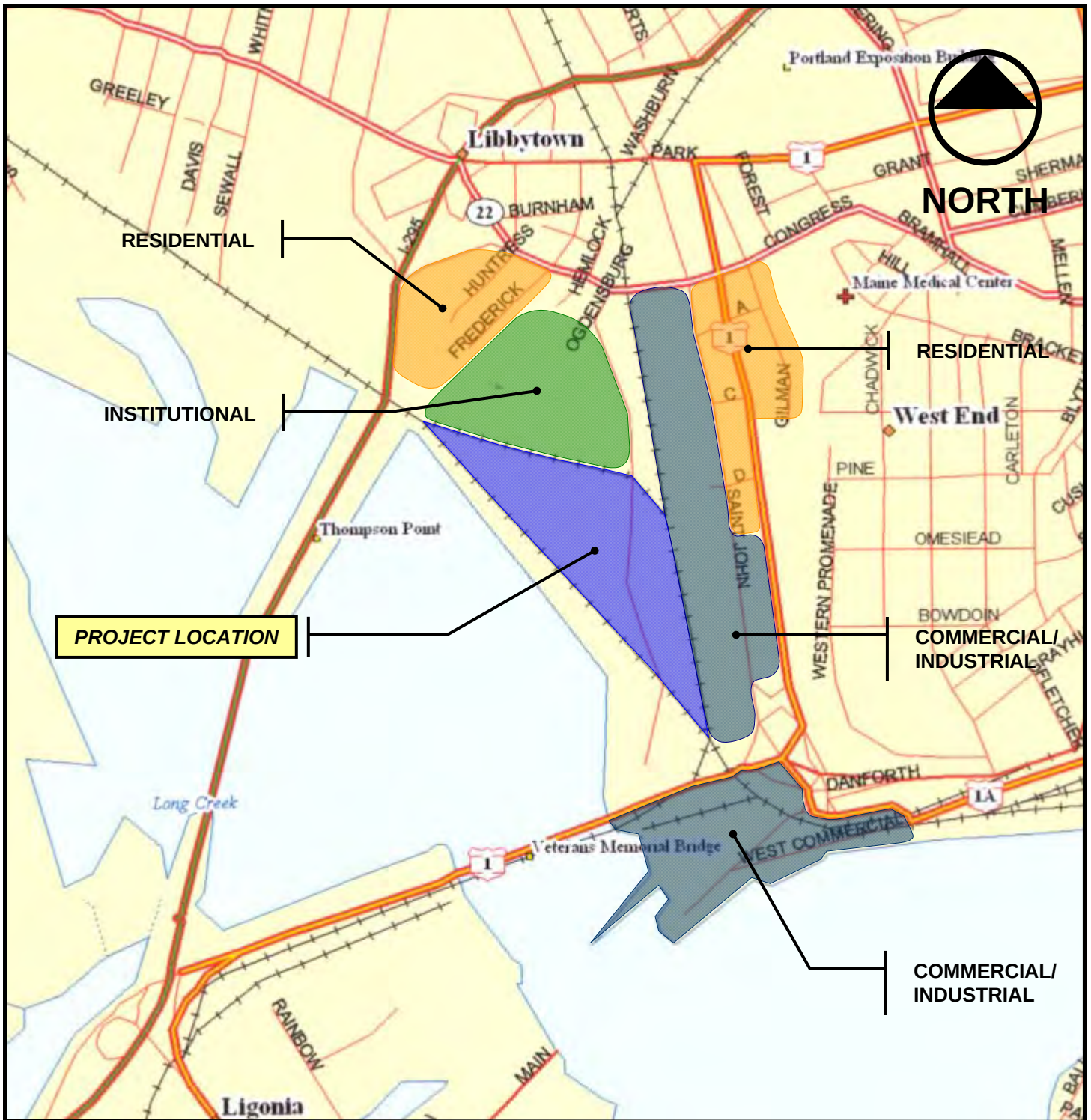
4



AERIAL PHOTOGRAPH
Mercy Health System of Maine – Portland, Maine
SOURCE: GPCOG; Greater Portland Council of Governments;
DATED: 4-25-95; SCALE: 1" = 500'+-

FIGURE

5



DeLORME ABUTTING LAND USE MAP
 Mercy Health System of Maine – Portland, Maine
 SOURCE: DeLORME MAPEXPERT; DATED: 1993

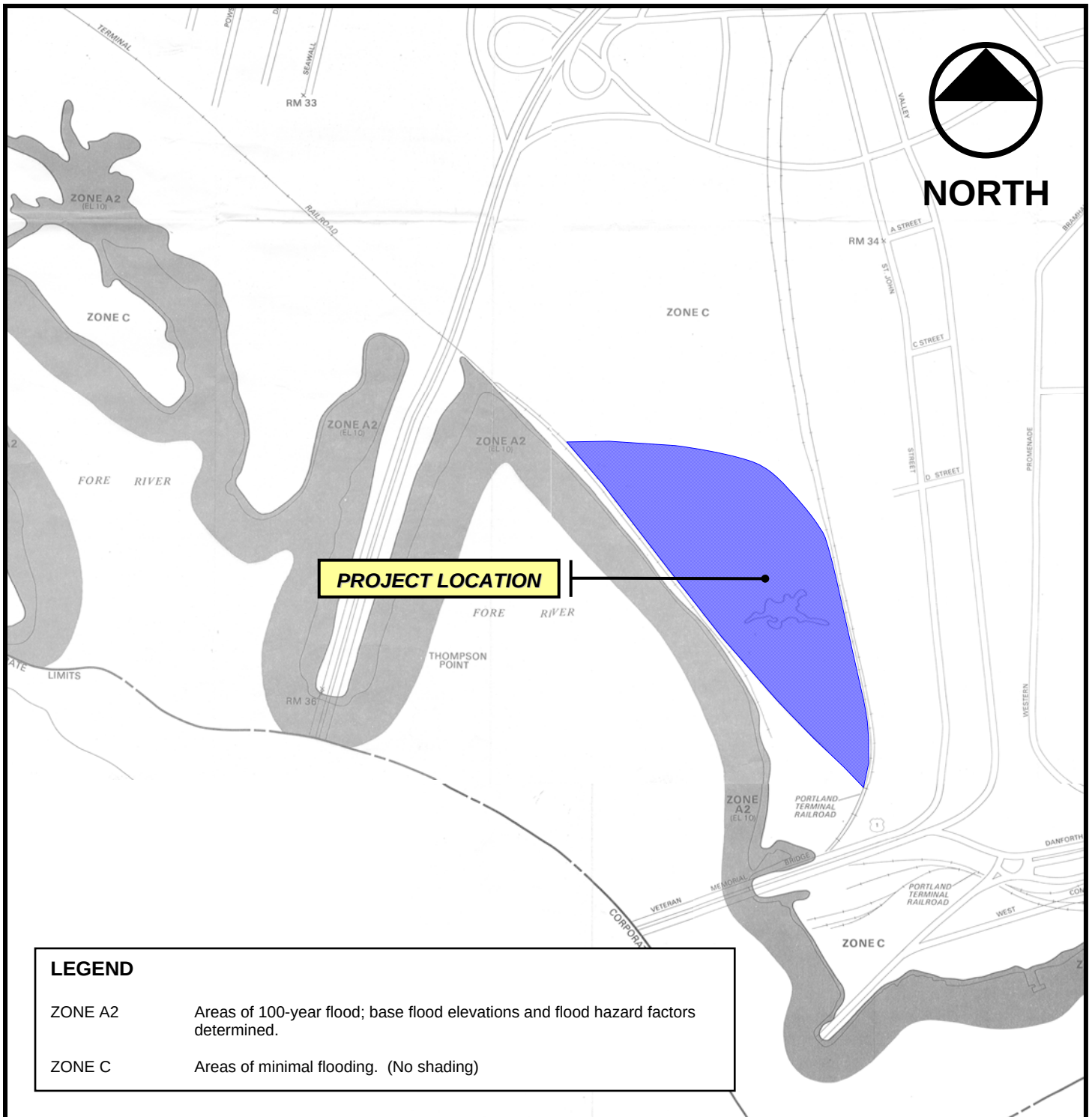


DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207-775-1121
 FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 1000'+-
CHECKED	SRB	JOB NO.	2149

FIGURE

6



FLOOD MAP

Mercy Health System of Maine – Portland, Maine

SOURCE: FIRM; FLOOD INSURANCE RATE MAP, CITY OF PORTLAND, MAINE CUMBERLAND COUNTY;
COMMUNITY-PANEL NUMBERS: 230051 0013 B AND 230051 0016 B; **EFFECTIVE DATE:** JULY 17, 1986

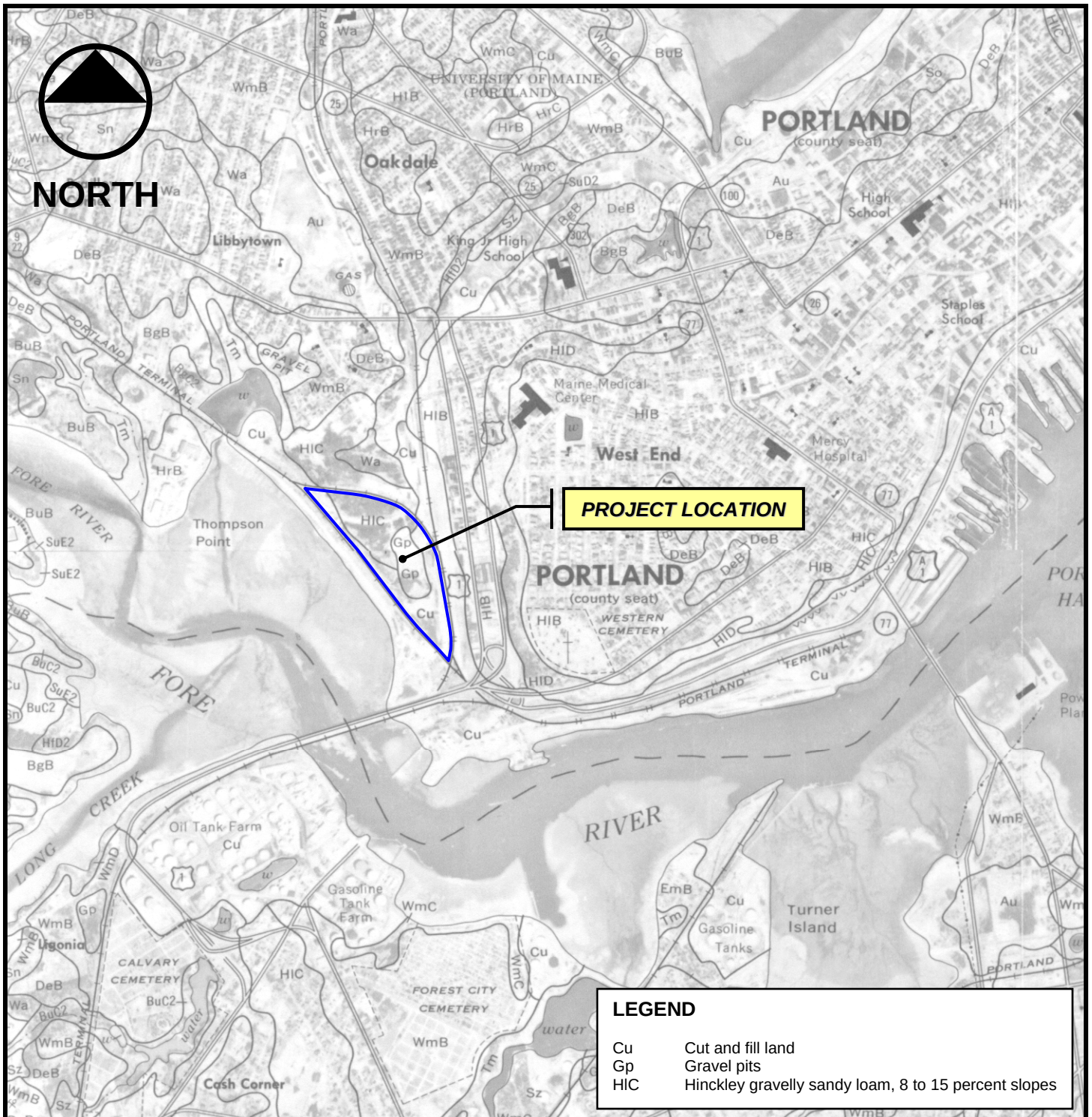
DH

DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207-775-1121
 FAX 207-879-0896

DESIGNED	SRB	DATE	OCT. 2001
DRAWN	JDL	SCALE	1" = 800'+-
CHECKED	SRB	JOB NO.	2149

FIGURE

7



USDA SOILS MAP **Mercy Health System of Maine – Portland, Maine** **SOURCE: SOIL SURVEY OF CUMBERLAND COUNTY, MAINE; SHEET NUMBERS: 82 & 86**

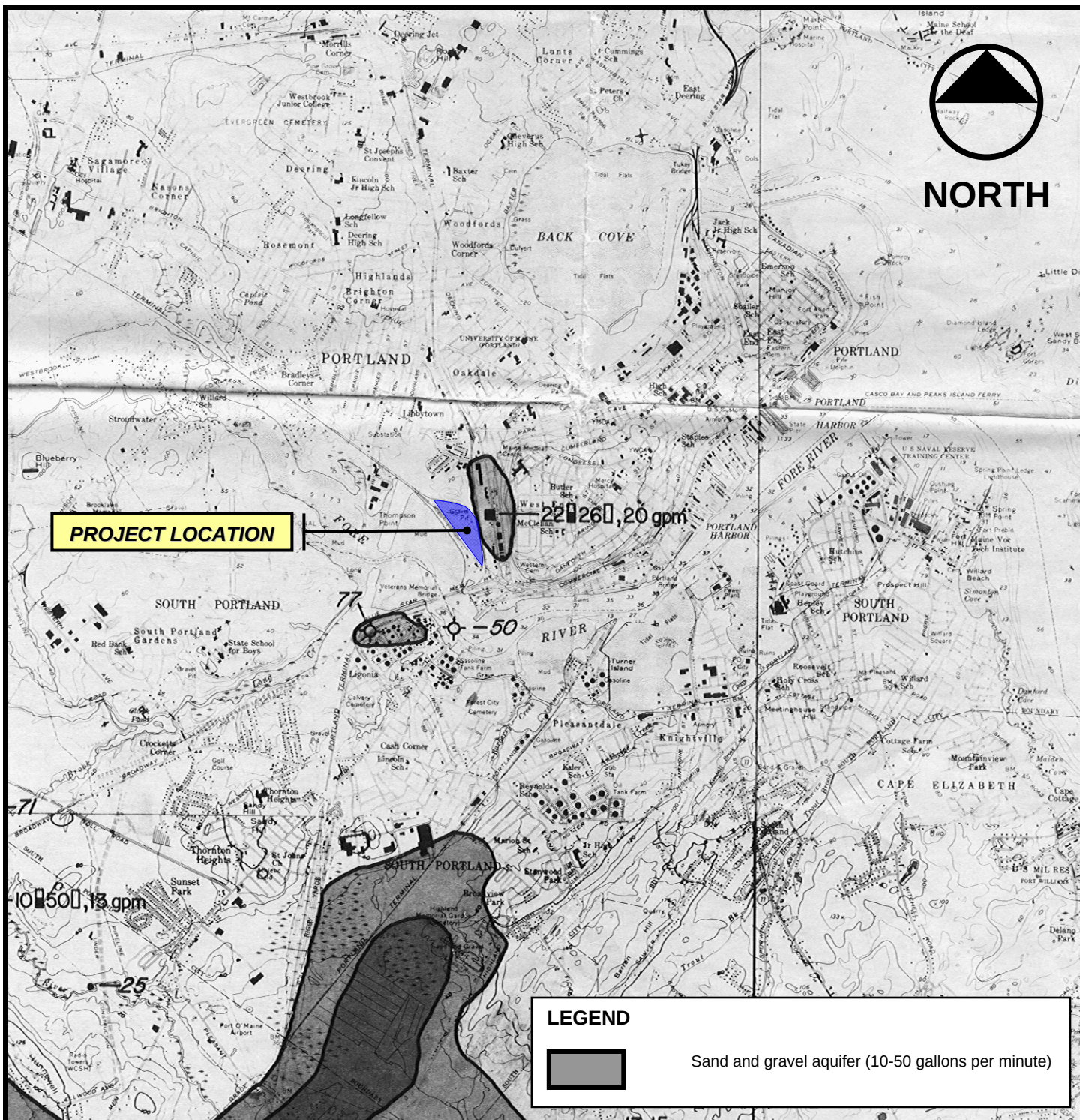


DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207-775-1121
 FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 1667'+-
CHECKED	SRB	JOB NO.	2149

FIGURE

8



MGS SAND AND GRAVEL AQUIFER MAP

Mercy Health System of Maine – Portland, Maine

SOURCE: SAND AND GRAVEL AQUIFERS, MAP 5, CUMBERLAND AND YORK COUNTIES, MAINE; DATED: 1979

DH

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CONSULTING ENGINEERS
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207-775-1121
FAX 207-879-0896

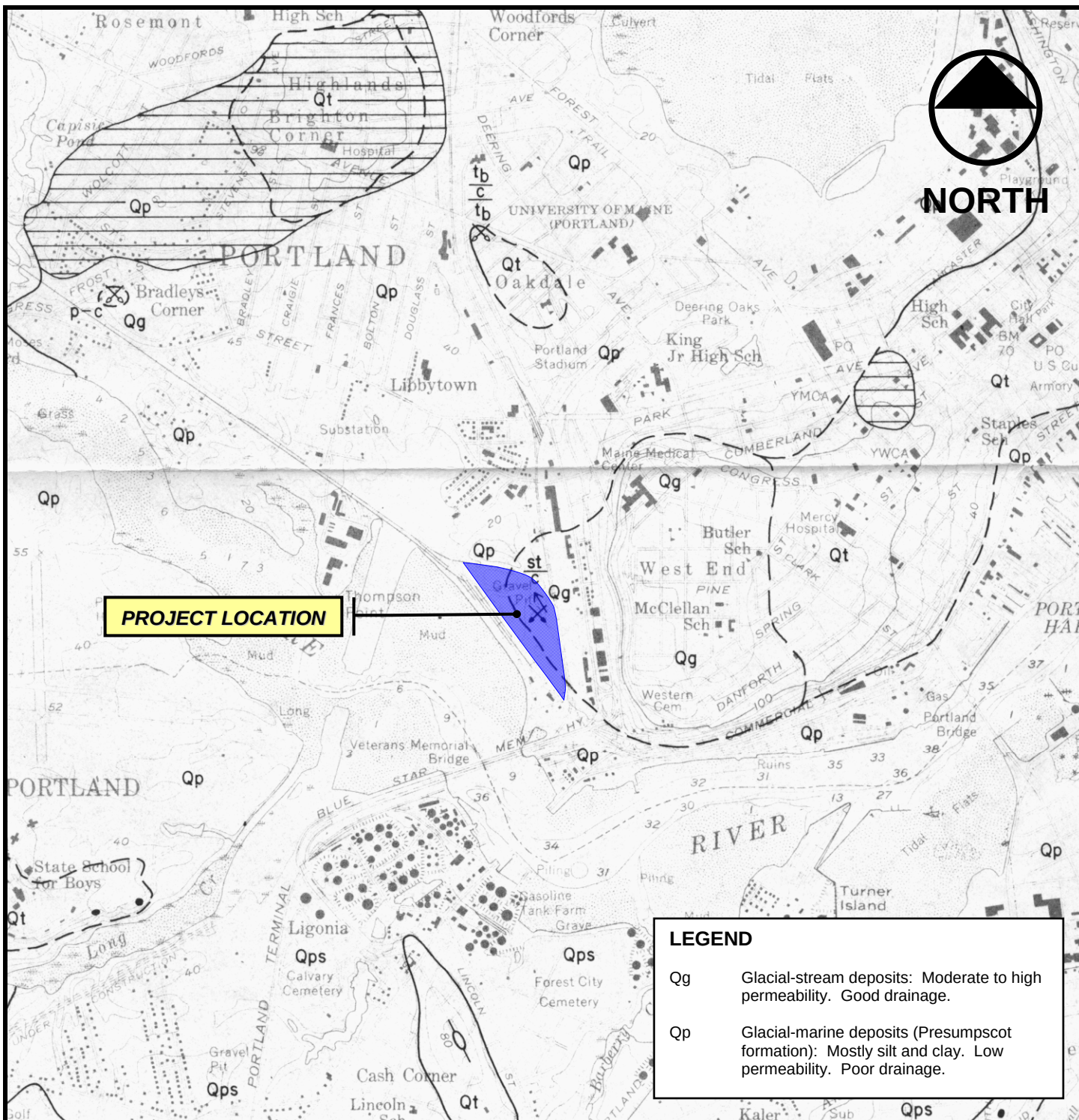
DESIGNED SRB DATE MARCH 2001

DRAWN JDL SCALE 1" = 4167'+-

CHECKED SRB JOB NO. 2149

FIGURE

9



MGS SURFICIAL GEOLOGY

Mercy Health System of Maine – Portland, Maine

SOURCE: RECONNAISSANCE SURFICIAL GEOLOGY OF THE PORTLAND WEST QUADRANGLE, MAINE;
OPEN-FILE NO. 76-47; DATED: 1976

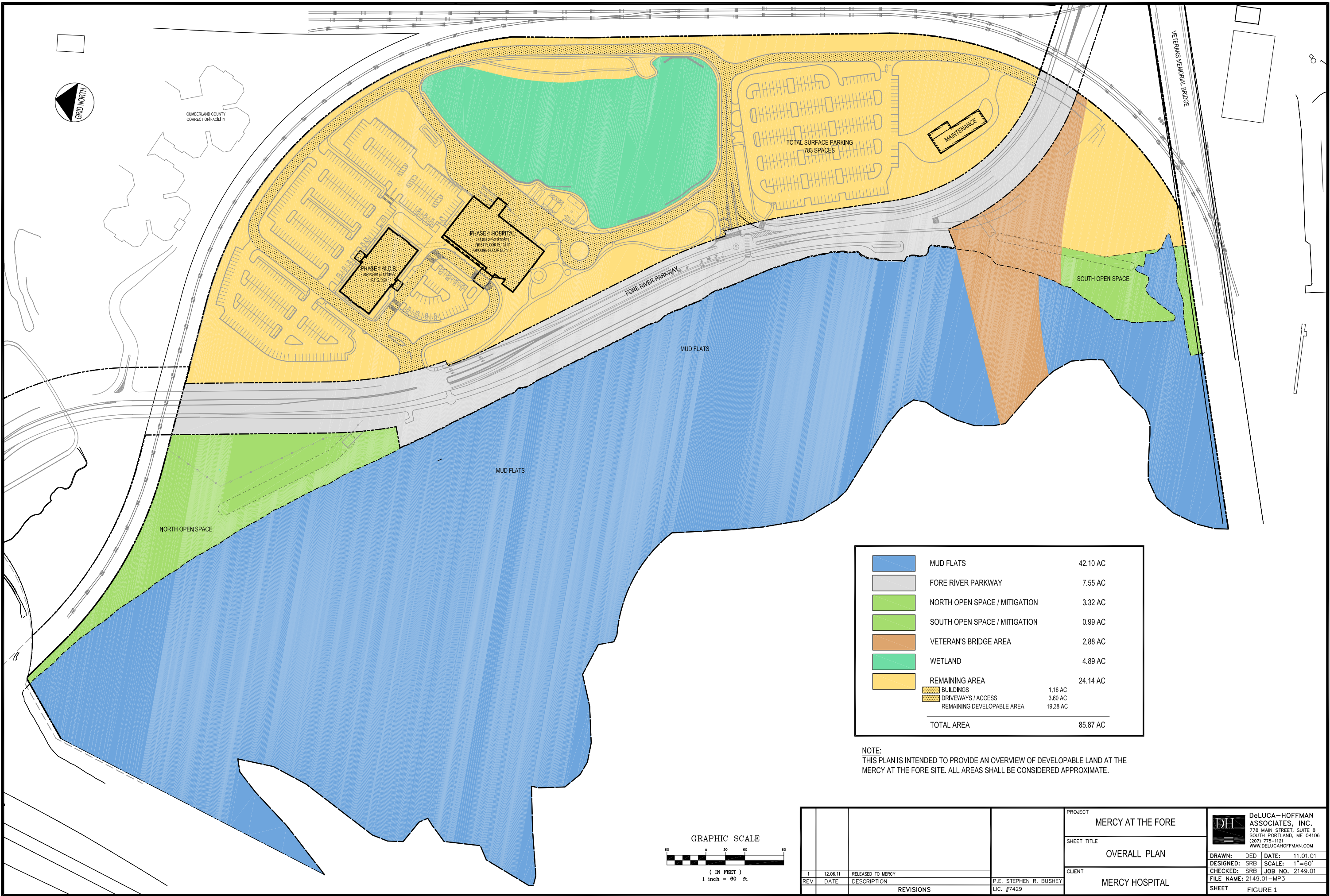
DH

DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207-775-1121
FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 2000'+-
CHECKED	SRB	JOB NO.	2149

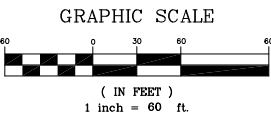
FIGURE

10



	MUD FLATS	42.10 AC
	FORE RIVER PARKWAY	7.55 AC
	NORTH OPEN SPACE / MITIGATION	3.32 AC
	SOUTH OPEN SPACE / MITIGATION	0.99 AC
	VETERAN'S BRIDGE AREA	2.88 AC
	WETLAND	4.89 AC
	REMAINING AREA	24.14 AC
	BUILDINGS	1.16 AC
	DRIVEWAYS / ACCESS	3.60 AC
	REMAINING DEVELOPABLE AREA	19.38 AC
TOTAL AREA		85.87 AC

NOTE:
THIS PLAN IS INTENDED TO PROVIDE AN OVERVIEW OF DEVELOPABLE LAND AT THE
MERCY AT THE FORE SITE. ALL AREAS SHALL BE CONSIDERED APPROXIMATE.

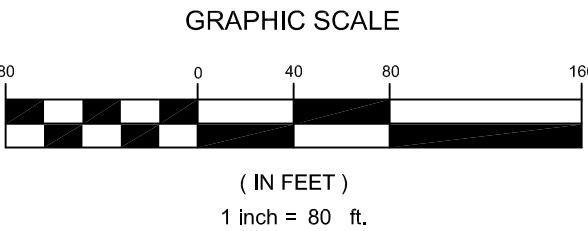


			PROJECT MERCY AT THE FORE
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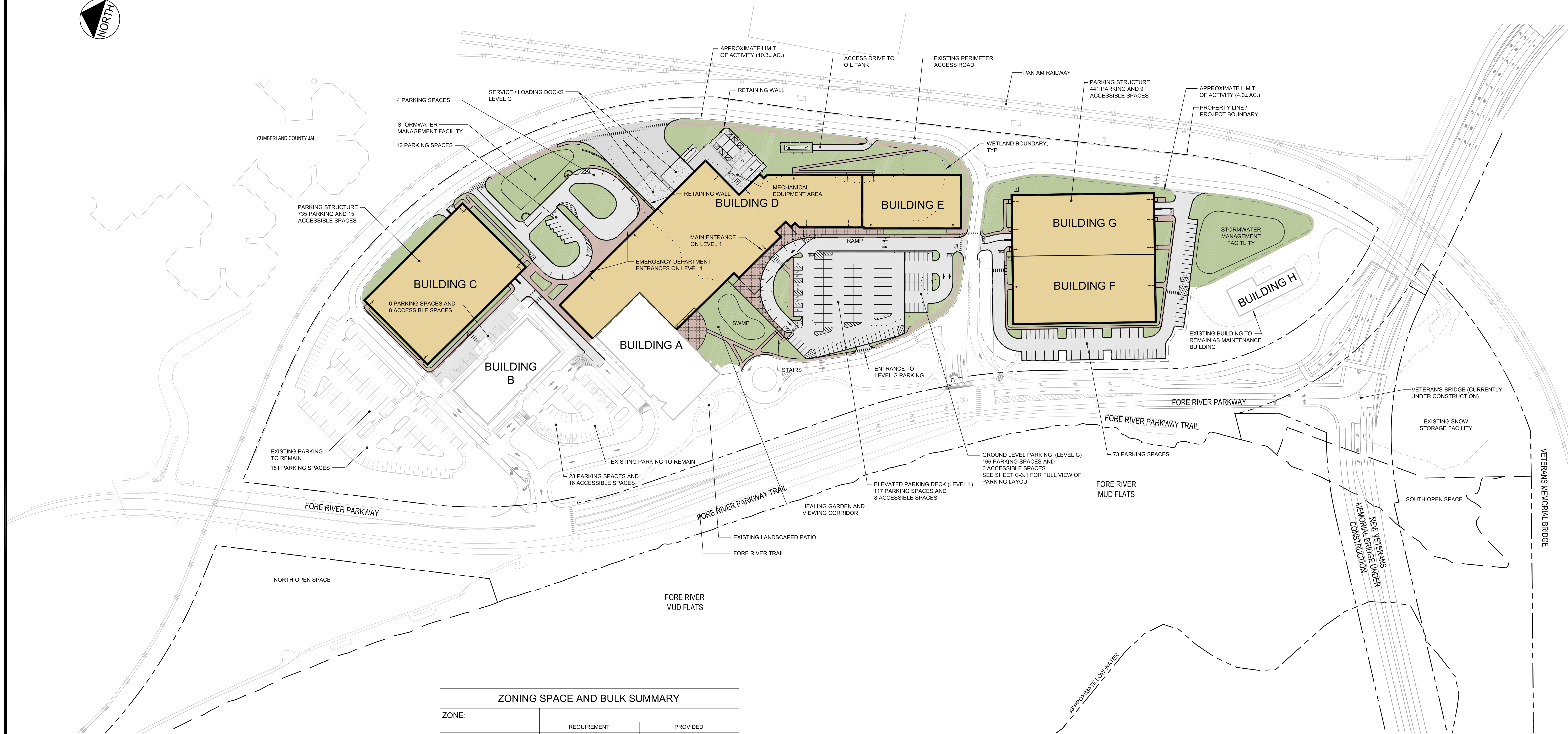


NOTE
INFORMATION ON THIS PLAN WAS COMPILED OF SEVERAL DOCUMENTS.
AS-BUILT PLANS BY SHAW BROS. DATED 2008, SURVEY PLAN PREPARED BY
OWEN HASKELL DATED 2001, CONSTRUCTION PLANS PREPARED BY
DELUCA-HOFFMAN ASSOCIATES DATED SEPTEMBER 2006. EXACT LOCATION
OF UTILITIES SHALL BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION



			PROJECT MERCY AT THE FORE MASTER PLAN		DH DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELOUCHAHOFFMAN.COM DRAWN: DEB DESIGNED: BEK CHECKED: SRB FILE NAME: 2149.08-EX SHEET DATE: MAY 2012 SCALE: 1" = 80' JOB NO. 2149.08 PLATE 1
			SHEET TITLE EXISTING CONDITIONS		
			CLIENT MERCY HOSPITAL		
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P.E. STEPHEN R. BUSHEY LIC. # 7429		
REV	DATE	DESCRIPTION	REVISIONS		



ZONE:	REQUIREMENT	PROVIDED
YARD DIMENSIONS		
FRONT SETBACK	20 Ft	-- FT
SIDE SETBACK	10 Ft	10 Ft
REAR SETBACK	10 Ft	10 Ft
MAXIMUM IMPERVIOUS LOT COVERAGE	80%	66.40%
MAXIMUM BUILDING HEIGHT	90 Ft	TBD

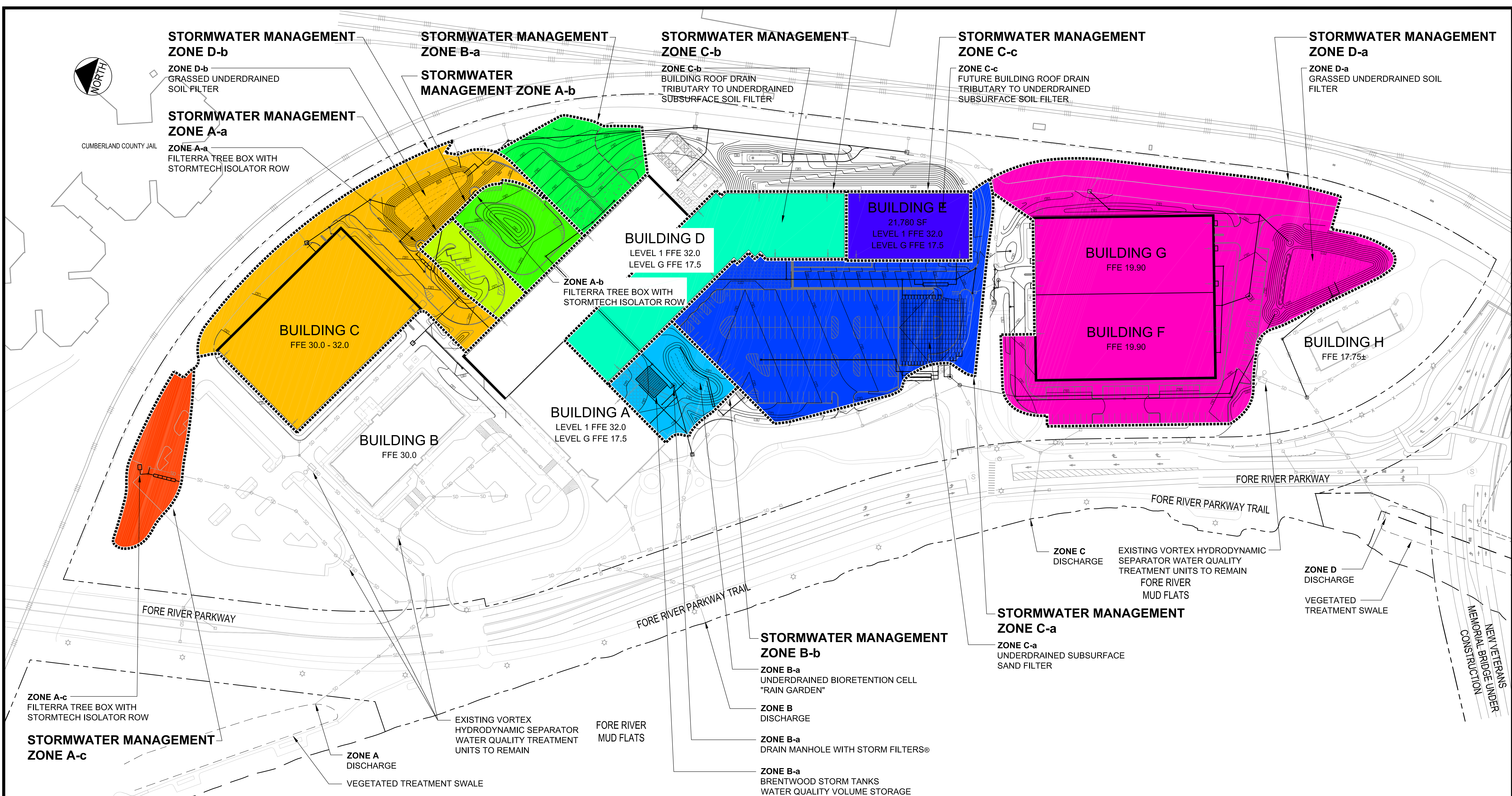
PARKING REQUIREMENTS		
HOSPITAL - 1 SPACE / 500 S.F. MEDICAL - 1 SPACE / 400 S.F.		
	GROSS AREA	REQUIRED SPACES
HOSPITAL	387,832	776
MEDICAL	320,000	800
TOTAL	707,832	1576
PROVIDED SPACES		
AREA	EXISTING	PROPOSED MASTER PLAN
NORTH	443	1267
SOUTH	310	523
TOTAL	753	1790

BUILDING	USE	GROSS S.F.	FOOTPRINT S.F.
A	EXISTING HOSPITAL	137,832	37,566
B	EXISTING MEDICAL OFFICE BUILDING	80,000	20,014
C	FUTURE PARKING GARAGE	N/A	N/A
D	FUTURE HOSPITAL / AMBULATORY CARE CENTER EXPANSION	322,000	116,980
E	FUTURE MEDICAL OFFICE BUILDING	60,000	15,000
F	FUTURE MEDICAL OFFICE BUILDING	108,000	40,000
G	FUTURE PARKING GARAGE	N/A	N/A
H	EXISTING MAINTENANCE FACILITY	7,016	7,016

GRAPHIC SCALE

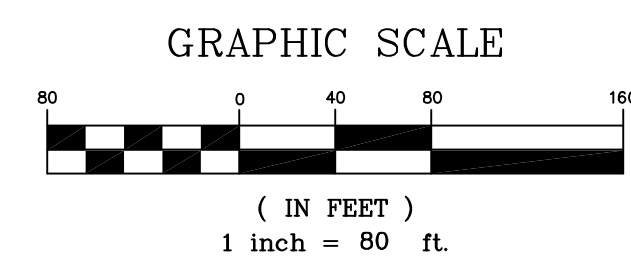
(IN FEET)
1 inch = 80 ft.

				PROJECT	MERCY AT THE FORE MASTER PLAN	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.776.1121 WWW.DELUCAHOFFMAN.COM
				SHEET TITLE	OVERALL SITE PLAN	
				CIENT	MERCY HOSPITAL	
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P.E. STEPHEN R. BUSHEY			DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 80' CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-SITE LAYOUT SHEET PLATE 2
REV	DATE	DESCRIPTION				
		REVISIONS	LIC. # 7429			



Summary of Water Quality Treatment															
Storm Water Management Zone	Inlet Subcatchment	Treatment Approach	Total Treated Area (ac)	Impervious Area (ac)			Pervious Area (ac)	Required Water Quality Volume (cf)	Required Water Quality Filter Surface Area (sf) (When applicable)	1 Yr 24-hr Storm Event Peak Flow Rate (cfs)	Stormtech Isolator Row Chambers Required (EA)	StormFilter Cartridges (EA) (Where Applicable)	Stormtech Isolator Row Chambers (SC-740) Provided (EA)	Provided Water Quality Volume (cf)	Provided Filter Surface Area (sf) or Size of Proprietary Unit
				Roof (ac)	Pavement, Gravel, etc (ac)	Total Impervious Area (ac)									
A-a	A13	Filterra Tree Box	0.25	0.00	0.17	0.17	0.08	N/A	N/A	0.46	2.30	N/A	3	N/A	4'x6' Tree Box
A-b	A10	Filterra Tree Box	0.47	0.00	0.35	0.35	0.11	N/A	N/A	0.90	4.50	N/A	5	N/A	6'x6' Tree Box
A-c	A4	Filterra Tree Box	0.51	0.00	0.35	0.35	0.16	N/A	N/A	0.90	4.50	N/A	5	N/A	6'x8' Tree Box
	Total Treatment Area Discharge A		1.23	0.00	0.88	0.88	0.35	0	0						
B-a	Inlet B6 through B7	StormFilter Cartridges by Contech	0.62	0.00	0.55	0.55	0.08	2,091	N/A	1.34	N/A	10.35	—	N/A	(11) 12" High Stormfilter Cartridges by Contech
B-b	Surface runoff and Inlet B13	Bio Retention Cell	0.51	0.00	0.09	0.09	0.42	931	819	0.43	N/A	N/A	N/A	1,145	2,000
	Total Treatment Area Discharge B		1.13	0.00	0.64	0.64	0.49	3022	819						
C-a	Parking Platform - Inlet C6	Subsurface Sand Filter	2.18	0.00	2.04	2.04	0.14	7,603	4,562	4.87	24.4	N/A	28	13,476	9900
C-b	Portion of Building D Roof Drain	Subsurface Sand Filter	1.10	1.10	0.00	1.10	0.00	4,000	2,400	2.59	13.0	N/A	14		
C-c	Building E Roof Drain	Subsurface Sand Filter	0.50	0.50	0.00	0.50	0.00	1,817	1,090	1.18	5.9	N/A	14		
	Total Treatment Area Discharge C		3.78	1.60	2.04	3.64	0.14	13,420	8,052						
D-a	Inlet D4 through D7 and D9 - CB 40 (Building G and F)	Water Quality Filter	4.37	0.91	2.05	2.96	1.41	12,790	7,674	7.66	N/A	N/A	N/A	12,875	7,676
D-b	Inlet D28 through D33 (Building C)	Water Quality Filter	2.43	0.00	1.75	1.75	0.68	7,333	4,400	4.46	N/A	N/A	N/A	7,626	4,428
	Total Treatment Area Discharge D		6.80	0.91	3.80	4.71	2.09	20,123	12,074						
TOTAL TREATED AREA			12.94	2.51	7.35	9.86	3.07								
NOTES AND ASSUMPTIONS:															
Percent of Treated Area which is Impervious			Required	Provided	1. All areas are based on the Deluca Hoffman Associates Permit drawings dated July 2012.										
			N/A	76%	2. The required water quality volumes have been computed based on Sections 7.1, 7.2, 7.3 and Interim Guidance for the Storm Filter System Dated November 12, 2009 of the Maine DEP Volume III BMP's Technical Design Manual. The volume is computed to be 1" times the subcatchments impervious area and 0.4" times the subcatchments landscaped area.										
Percent of Treated Impervious Area which is Rooftop			N/A	25%	3. The required filter surface area has been computed based on Sections 7.1, and 7.2 of the Maine DEP Volume III BMP's Technical Design Manual. The Underdrained Grassed filter and Subsurface Sand Filter areas are computed to be 5% of the subcatchments impervious area and 2% times the subcatchments vegetated area. The Underdrained Bioretention Cell filter area is computed to be 7% of the subcatchments impervious area and 3% times the subcatchments vegetated area.										
Percent of Total Redeveloped Area Treated (13.44 AC Redeveloped Area See Figure A-2)			80%	96%	4. The 1 year peak flow rates have been computed using HydroCad a computer Hydrologic Modeling software. The rainfall intensities are derived from the Tri-55 Manual for Cumberland County SE.										
Percent of Redeveloped Impervious Area Treated (10.43 AC Redeveloped Impervious Area See Figure A-2)			95%	95%	5. Subsurface storage system sizing is based on a Stormtech SC-740 chamber system. All isolator rows have been computed per section 7.3.3 Pretreatment Isolator Row of the Maine DEP Volume III BMP's Technical Manual. One chamber is required for each 0.2 cfs of the computed tributary 1 year peak flow rate.										
					7. The required number of StormFilter Cartridges by Contech is computed to be one 12" cartridges per 202 Cubic feet of Water quality volume.										
					8. The owner reserves the right to use an alternate tree box filter device provided it has been approved by the Maine DEP Chapter 500 and the City of Portland.										

PRELIMINARY - NOT FOR CONSTRUCTION



PROJECT MERCY AT THE FORE MASTER PLAN			DRAWN: DED DATE: MAY 2012	
SHEET TITLE OVERALL GRADING AND DRAINAGE PLAN			DESIGNED: BEK SCALE: 1" = 80'	
CLIENT MERCY HOSPITAL			CHECKED: SRB JOB NO. 2149.08	
			FILE NAME: 2149.08-GRADING	
			SHEET PLATE 3	

1

07/28/12

SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION

REV

DATE

DESCRIPTION

REVISIONS

P. E. STEPHEN R. BUSHEY

LIC. # 7429

DH

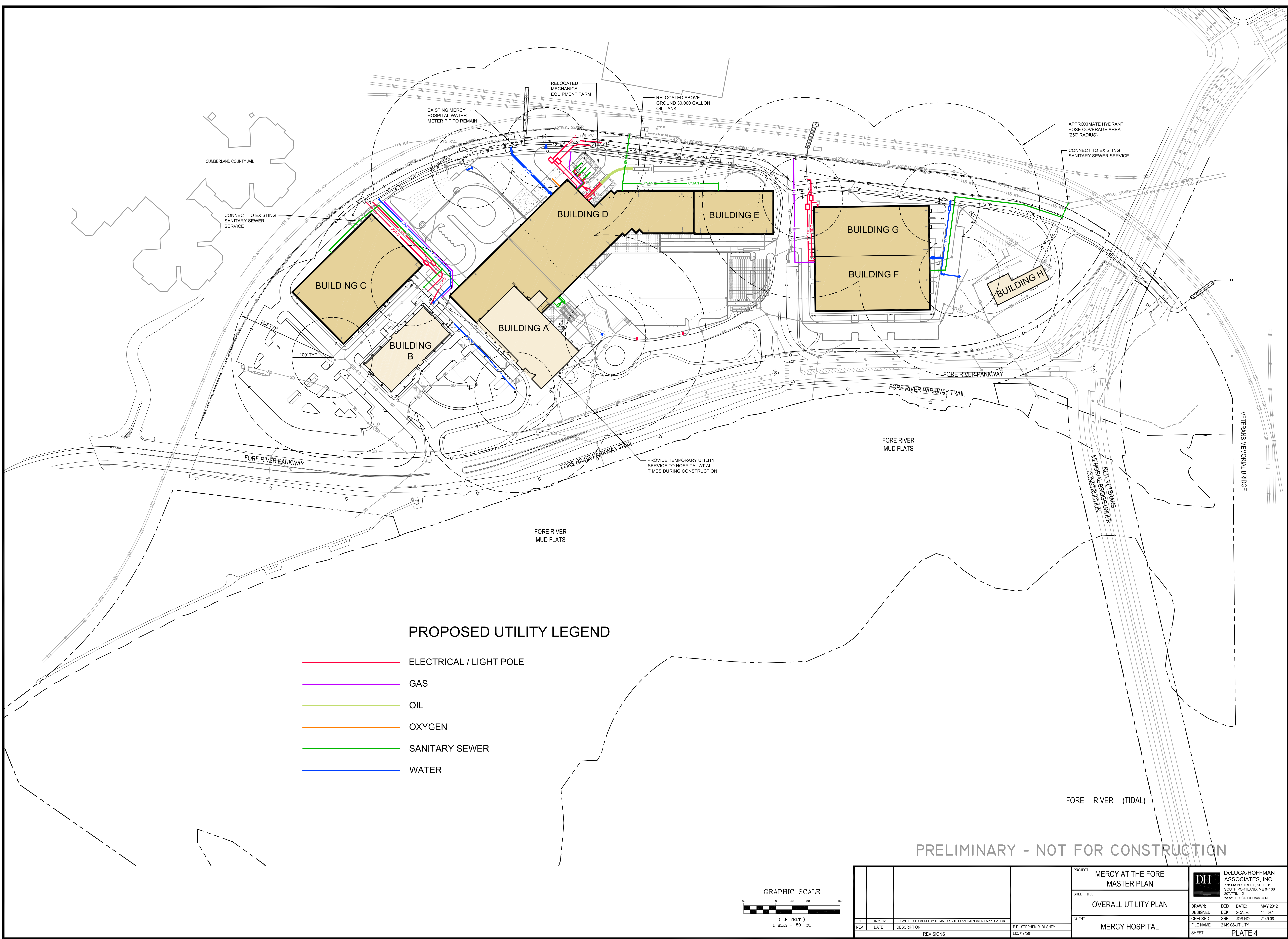
DeLUCA-HOFFMAN ASSOCIATES, INC.

778 MAIN STREET, SUITE 6

SOUTH PORTLAND, ME 04106

207.775.1121

WWW.DELUCA-HOFFMAN.COM



			PROJECT	MERCY AT THE FORE MASTER PLAN	DH DeLUCA-HOFFMAN ASSOCIATES, INC. 775 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM
			SHEET TITLE	OVERALL UTILITY PLAN	
			CLIENT	MERCY HOSPITAL	
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P. E. STEPHEN R. BUSHEY LIC. # 7429	DRAWN: DED DESIGNED: BEK CHECKED: SRB	DATE: MAY 2012 SCALE: 1" = 80' JOB NO. 2149.08
REV	DATE	DESCRIPTION	REVISIONS	FILE NAME: 2149.08-UTILITY	SHEET PLATE 4

ATTACHMENT C

**CONTRACT ZONE AGREEMENT AND
PREVIOUS MASTER PLANS**



2149/47

(G)

January 11, 2002

MATTHEW D.
MANAHAN

DIRECT
207.791.1189

E-MAIL
MManahan@
PierceAtwood.com

Penny A. Littell, Esq.
City of Portland
One City Center
P.O. Box 9546
Portland, Maine 05112-9546

RE: Mercy Hospital

Dear Penny:

Enclosed please find an original of the Contract Zone Agreement between the City of Portland and Mercy Hospital, executed by Howard Buckley on behalf of Mercy.

Penny, thanks very much for all your assistance and hard work on this project. Also, thanks to Alex, Sarah, and Jonathan for their hard work and creative thinking.

Sincerely,

Matthew D. Manahan

One Monument Square
Portland, ME 04101-1100
207.791.1100 v
207.791.1350 f

77 Winthrop Street
Augusta, ME 04330-5552
207.622.6311 v
207.623.9367 f

115 Court Street
P.O. Box 1009
Portsmouth, NH 03802-1009
603.433.6300 v
603.433.6372 f

Six Harris Street
Newburyport, MA 01950
978.465.9599 v
978.465.9945 f

EMAIL
info@pierceatwood.com

WEB SITE
www.pierceatwood.com

MDM/dcu
Enclosure

cc: Alex Jaegerman (w/enclosure)
Sarah Hopkins (w/enclosure)
Jonathan Spence (w/enclosure)

**CONTRACT ZONE AGREEMENT
BETWEEN
CITY OF PORTLAND
AND
MERCY HOSPITAL and MERCY HEALTH SYSTEM OF MAINE**

AGREEMENT made this 3rd day of December, 2001 by and between the **CITY OF PORTLAND**, a body corporate and politic, located in Cumberland County and State of Maine (hereinafter the "**CITY**") and **MERCY HOSPITAL**, a nonprofit corporation located in the City of Portland and **MERCY HEALTH SYSTEM OF MAINE**, a nonprofit corporation located in the City of Portland, and each of their successors and assigns (hereinafter collectively "**MERCY**").

W I T N E S S E T H

WHEREAS, MERCY has determined that it can no longer meet the long term needs of the community from its 144 State Street location; and

WHEREAS, MERCY has located a Portland site, a contiguous tract of land (called the Fore River Site) large enough to meet **MERCY'S** long term needs (including a mix of uses both taxable and tax-exempt) while being easily accessible and convenient to doctors, public transportation, and the Maine Medical Center; and

WHEREAS, MERCY requested a rezoning of the Fore River Site (also referred to herein as the "**PROPERTY**"), which is located in Portland at Map 73, Block A, Lot 1; Map 73, Block B, Lot 2; Map 74, Block A, Lot 1; Map 75, Block A, Lot 3; and Map 75, Block A, Lot 33, in order to permit the establishment and operation of a hospital campus on up to 42 acres of land; and

WHEREAS, the Planning Board of the City of Portland, pursuant to 30-A M.R.S.A. § 4352(8) and Portland City Code §§ 14-60 to 14-62 and 14-264, and after notice and hearing and due deliberation thereon, recommended the rezoning of the **PROPERTY** as aforesaid, subject, however, to certain conditions; and

WHEREAS, the **CITY** by and through its City Council has determined that said rezoning would be and is pursuant to and consistent with the **CITY'S** comprehensive land use plan and consistent with the purposes of the I-H zone and its existing and permitted uses; and

WHEREAS, the **CITY** has determined that the proposed development will be designed and operated so that it will prevent undue adverse environmental impacts, substantial diminution of the value or utility of neighboring structures, or significant hazards to the health or safety of neighboring residents by controlling noise levels, emissions, traffic, lighting, odors, and any other potential negative impacts of the proposal; and

WHEREAS, the **CITY** has determined that because of the unusual nature and unique location of the proposed development it is necessary and appropriate to impose by agreement the following conditions and restrictions in order to ensure that the rezoning is consistent with the **CITY'S** comprehensive land use plan; and

WHEREAS, the **CITY** authorized the execution of this Agreement on December 3, 2001;

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. Effective upon the recording of deeds transferring title ownership from Merrill Industries, Inc. and Portland Terminal Company to **MERCY** and receipt by the

CITY of a statement from **MERCY** that **MERCY** has so recorded said deeds, the **CITY** hereby amends the Zoning Map of the City of Portland, dated December 2000, as amended and on file in the Department of Planning and Urban Development, and incorporated by reference into the Zoning Ordinance by § 14-49 of the Portland City Code, by adopting the map change amendment shown on Attachment 1, and by designating the **PROPERTY** a Helistop Overlay Zone limited to a single helistop; provided however, that this contract rezoning shall become null and void, and the **PROPERTY** shall revert to the I-H zone, in the event that **MERCY** fails to acquire said **PROPERTY** before August 1, 2003. The **CITY** shall not issue **MERCY** any building permits until **MERCY** has purchased the **PROPERTY**.

2. *Permitted Uses.* **MERCY** shall be authorized to establish and maintain the following uses on the **PROPERTY**:

- a. Hospitals, clinics, and medical research facilities.
- b. Community living arrangements, congregate care facilities, intermediate care facilities, long term or extended care facilities, and sheltered care group homes.
- c. Office complexes and professional offices.
- d. Day care facilities and adult day care facilities.
- e. Exercise and fitness centers and health clubs.
- f. Personal services, restaurants, and retail establishments of no more than 50,000 square feet, except that there shall be no drive through facilities.
- g. Dwellings, hotels, motels, inns, and rooming units; and lodging houses for hospital or clinic employees or volunteers and patients' family members.
- h. Teaching centers.
- i. Accessory uses, including, but not limited to, parking facilities and structures, utility services, stormwater management systems, and site amenities.

The uses listed in subparagraphs e, f, and g shall be functionally related, physically oriented, and complementary to the medical uses of the site.

3. The uses on the **PROPERTY** will be within multiple buildings to be constructed in phases, some owned by **MERCY** and some owned by others. The new structures will be a mix of single and multi-level buildings developed in a campus-like setting. The buildings may be freestanding or linked, depending upon the phasing and ultimate development program proposed.

4. The first phase of construction will include a medical office building, which may be built concurrently with an ambulatory care facility. The medical office building, its associated land, and its personal property shall be taxed based on a market value of, at minimum, \$7.5 million dollars. The hospital shall be built in either the first or second phase of construction.
5. A portion of the **PROPERTY** will be transferred to the Maine Department of Transportation ("MDOT") without a fee for its construction of the proposed Commercial Street Connector roadway (hereinafter referred to as the "**CONNECTOR**").
6. Upon its purchase of the **PROPERTY**, **MERCY** shall record in the Cumberland County Registry of Deeds a deed granting to the **CITY** an easement in perpetuity over the portion of the **PROPERTY** identified as "Open Space" on Attachment 2, which easement shall grant to the public access to such Open Space for recreational activities during daylight hours.

Such open space may be used in the calculation of the impervious surface requirements contained in paragraph 11 of this Agreement.

In addition, **MERCY** shall cooperate with the City in the creation of a pedestrian trail and bike path at least along the perimeter of the **PROPERTY** as shown, generally, on Attachment 2. Once the location of the pedestrian trail and bike path is determined, **MERCY** shall record in the Cumberland County Registry of Deeds a deed granting to the **CITY** an easement in perpetuity for the benefit of the public, which easement shall grant access along and over such path and trail for recreational activities during daylight hours and when trails are customarily available to the public for such use, covering all portions of such path and trail located on land not owned by MDOT.

These easements shall be subject to the review and approval of the Corporation Counsel's Office.

7. For purposes of calculating impervious surface required in paragraph 11 below, land separated by the MDOT **CONNECTOR** may be included, but any intertidal lands shall not be included in said calculation.
8. Access to the **PROPERTY** via County Way shall be permitted for service vehicles only provided that **MERCY** demonstrates to the **CITY'S** Traffic Engineer that County Way provides an adequate level of service to the **PROPERTY** and **MERCY** provides evidence of its right, title or interest to access said street.
9. For purposes of front yard setbacks, the front yard for each building developed on the **PROPERTY** shall have as the front yard the area between the building and the **CONNECTOR**.

The **PROPERTY** shall be developed substantially in accordance with the conceptual master plan shown on Attachment 2, provided, however, that each building, whether classified as a major or minor development, shall be subject to site plan review by the Planning Board, and if applicable, subdivision review by the Planning Board. Any site plan review applications shall fully comply with the detailed site plan application requirements contained in article V (site plan) of the Land Use Code. The Planning Board may permit deviations from the conceptual master plan, as long as the deviations are consistent with the purposes of this Agreement.

10. *Development Standards.* All site plans may be approved by the Planning Board only if, in addition to the dimensional requirements of paragraph 11 and the applicable provisions of article IV (subdivisions) and article V (site plan), the development meets the following development standards:
 - a. *Design relationship to site:* Development proposals shall demonstrate a reasonably unified design of the site in a campus-like setting, including the architecture, the layout of the buildings, pedestrian and vehicular circulation plan, open space, drainage, and the topography, soil conditions, vegetation, and other natural features of the site. Integration of open spaces and natural features shall be achieved by incorporation of outdoor amenities for the benefit of users of the site, such as jogging and walking trails, gardens, and benches. The proposed layout of buildings and uses shall demonstrate compatibility between the buildings and other site features within the site. Consideration shall be given to compatibility of proposed perimeter on-site development with the existing and future uses off-site but adjacent to the **PROPERTY**.
 - b. *Landscaping:* Development proposals shall include a landscape program. All land areas not covered by structures, parking areas, or circulation facilities shall be landscaped and maintained. In order to soften the visual impact of large expanses of pavement in parking lots, vegetation shall be planted or retained in islands or planting strips where required by article IV (subdivisions) and article V (site plan) of the Land Use Code.
 - c. *Pedestrian Orientation:* Development proposals shall include an integrated pedestrian circulation system, including internal sidewalks, to take advantage of the topography and natural features of the site and providing for safe pedestrian access to all buildings and parking areas with the ability to conveniently access all developed portions of the site without additional driving. The pedestrian circulation system shall link with the shoreline trail feature of the site.
 - d. *Vehicular Access and Circulation:* The primary access to serve the entire development will be from two access points or two access points and a slip lane from the **CONNECTOR** as may be further developed or modified by joint agreement of the City, MDOT and the applicant.

- Vehicular circulation through internal driveways and roadways will provide safe and orderly access to all developed portions of the site.
- e. *Buffers and screens:* Development proposals shall include appropriate measures of a dense and continuous nature (for example, a double staggered row of white pine twenty-five (25) feet on center, etc.) in order to buffer parking lot visibility from public roads.
 - f. *Preservation of natural features:* Development proposals shall identify the extent to which the developer will preserve natural features including, but not limited to, existing vegetation, flood plains, rock outcroppings, surface water bodies, drainage swales and courses, and wetlands; provided any such program shall consider and be sensitive to the need to preserve such natural features.
 - g. *Architectural design:* All buildings shall be designed or approved by a registered architect in the State of Maine. The scale, texture, colors, and massing of the buildings shall be coordinated. The full range of high-quality, permanent, and traditional or contemporary building materials and technology may be incorporated in a manner so that the development as a whole embodies distinguishing attributes that achieve the developer's desired degree of excellence and are in conformance with the architectural guidelines provided in any private development restrictions. Particular emphasis shall be placed on the appearance of building facades from public streets and highways including the **CONNECTOR**, from driveway and parking areas, and from other nearby buildings. Building elevation drawings shall be submitted which indicate architectural style, exterior finishes and color, building height and scale, and location and scale of window and door openings. Samples of exterior building materials shall also be submitted.
 - h. *Signs:* Signage shall be focused internally to the site or to the **CONNECTOR** and shall not be oriented or scaled to address Route 1 or Interstate 295, with the exception of the hospital and major office buildings. Development proposals shall identify all proposed signage. Signs shall be designed in proportion and character with the building facades. All signs shall be constructed of permanent materials and shall be coordinated with the building and landscaping design through the use of appropriate materials and finishes.
 - i. *Master plan:* Prior to development on the **PROPERTY, MERCY** shall provide a master plan of the campus. The master plan shall include the following: The location of the building(s) on the site; infrastructure of the site; identification of common areas; traffic circulation, architectural character and treatment of the building(s); proposed building envelopes; phasing and timing of the development; private development restrictions;

and such other information necessary and sufficient to ensure compliance with the standards in this section. Master plans are dynamic representations that assist in guiding projects through phased development. Master plans are flexible and adaptable to changes that occur within the development process. The master plan shall be subject to periodic revision and update as needed and as phased development occurs over time.

11. *Dimensional Requirements.* The following dimensional requirements shall apply to the **PROPERTY** as a whole, and not additionally to individual lots (if any) within the **PROPERTY**:

- a. Maximum impervious surface ratio: Eighty (80) percent;
- b. Maximum building height: Ninety (90) feet;
- c. Minimum front yard landscaped buffer: Twenty (20) feet from the edge of the **CONNECTOR** right-of-way shall be in the form of a landscaped buffer provided, however, that the area within such buffer may include a retaining wall, walkway, trail, or pathway but no buildings, roadways, parking areas, or other expanses of pavement;
- d. Minimum side yards: Ten (10) feet;
- e. Minimum rear yard: Ten (10) feet;
- f. Pavement setback from lot boundaries: Fifteen (15) feet.

12. The provisions of this Agreement, including the permitted uses listed in paragraph 2, are intended to replace the uses and requirements of the underlying I-H zone.

13. Pursuant to Code § 14-264(d), all development plans shall include complete information of processes, materials, or methods of storage to be used by the development and shall specify how hazardous impacts to neighboring properties will be prevented.

The above stated restrictions, provisions, and conditions are an essential part of the rezoning, shall run with the **PROPERTY**, shall bind and benefit **MERCY**, any entity affiliated with **MERCY** that takes title to the **PROPERTY**, their successors and assigns, and any party in possession or occupancy of said **PROPERTY** or any part thereof, and shall inure to the benefit of and be enforceable by the **CITY**, by and through its duly authorized representatives. **MERCY** shall file a copy of this Agreement in the Cumberland County Registry of Deeds, along with a reference to the Book and Page locations of the deeds for the **PROPERTY**.

If any of the restrictions, provisions, conditions, or portions thereof set forth herein is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision and such determination shall not affect the validity of the remaining portions hereof.

MERCY agrees not to challenge the legality of the provisions contained within paragraph 4 of this contract.

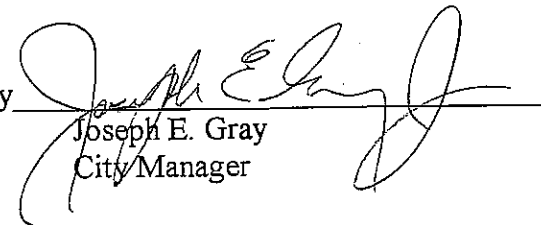
Except as expressly modified herein, the development, use, and occupancy of the subject premises shall be governed by and comply with the provisions of the Land Use Code of the City of Portland and any applicable amendments thereto or replacement thereof.

In the event that **MERCY** or any successor fails to continue to utilize the **PROPERTY** in accordance with this Agreement, or in the event of a breach of any condition(s) set forth in this Agreement, the Planning Board shall have the authority, after hearing, to resolve the issue resulting in the breach. The resolution may include a recommendation to the City Council that the site be rezoned to only I-H or any successor zone and that the Agreement be terminated, requiring a cessation of the hospital campus use.

WITNESS:



CITY OF PORTLAND

By 
Joseph E. Gray
City Manager

WITNESS:

MERCY HOSPITAL

Joseph E. Gray

By Howard Buckley
Howard Buckley
President and CEO

WITNESS:

MERCY HEALTH SYSTEM OF
MAINE

Joseph E. Gray

By Howard Buckley
Howard Buckley
President and CEO

STATE OF MAINE
CUMBERLAND, ss.

Date: 12/17/01, 2001

Personally appeared before me the above-named Joseph E. Gray, in his capacity as City Manager, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of the City of Portland.

Before me,

Sonia T. Bean
Notary Public/Attorney at Law
SONIA T. BEAN
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES JANUARY 10, 2002

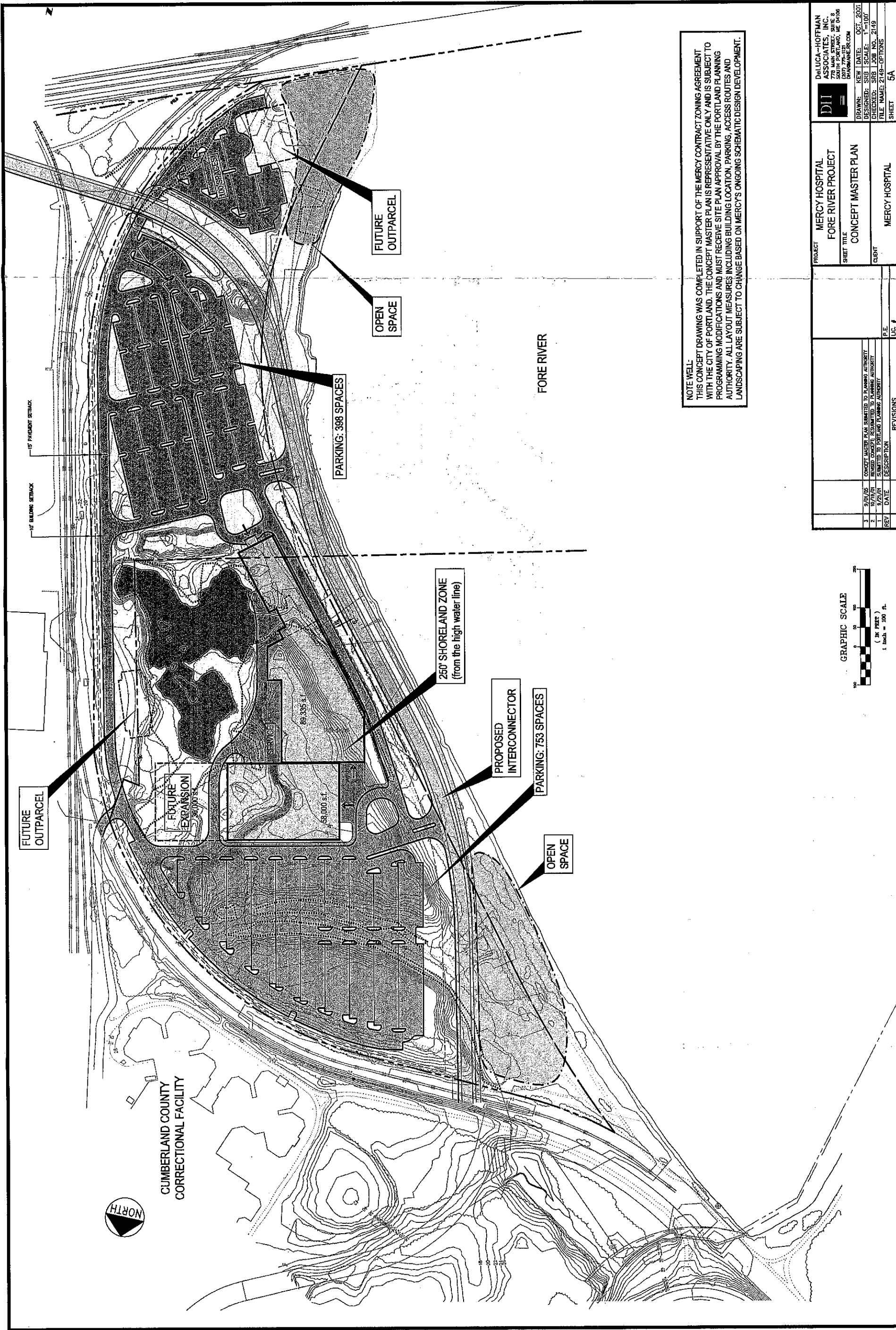
STATE OF MAINE
CUMBERLAND, ss.

Date: January 10, 2002

Personally appeared before me the above-named Howard Buckley, in his capacity as President and CEO, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of Mercy Hospital and Mercy Health System of Maine, Inc.

Before me,

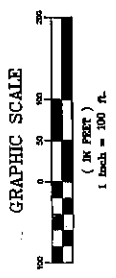
Daniel M. Snow
Notary Public/Attorney at Law
DANIEL M. SNOW



NOTE WELL:
THIS CONCEPT DRAWING WAS COMPLETED IN SUPPORT OF THE MERCY CONTRACT ZONING AGREEMENT WITH THE CITY OF PORTLAND. THE CONCEPT MASTER PLAN IS REPRESENTATIVE ONLY AND IS SUBJECT TO PROGRAMMING MODIFICATIONS AND MUST RECEIVE SITE PLAN APPROVAL BY THE PORTLAND PLANNING AUTHORITY. ALL LAYOUT MEASURES INCLUDING BUILDING LOCATION, PARKING, ACCESS ROUTES AND LANDSCAPING ARE SUBJECT TO CHANGE BASED ON MERCY'S ONGOING SCHEMATIC DESIGN DEVELOPMENT.

PROJECT		MERCY HOSPITAL
SHEET TITLE		FORE RIVER PROJECT
CLIENT		MERCY HOSPITAL
SHEET		5A
DRAWN:		NEW DATE: OCT. 2001
DESIGNED:		SRB SCALE: 1"=100'
CHECKED:		SRB JOB NO. 2149
FILE NAME:		2149-OPTIONS
SHEET		5A

REVISIONS		P.E.	LOC. #
REV	DATE	DESCRIPTION	
3	9/10/05	CONCEPT MASTER PLAN SUBMITTED TO PLANNING AUTHORITY	
2	10/13/01	REVISED CONCEPT SUBMITTED TO PLANNING AUTHORITY	
1	9/21/01	SUBMITTED TO PORTLAND PLANNING AUTHORITY	



Corporation Counsel

Gary C. Wood



CITY OF PORTLAND

Associate Counsel

Charles A. Lane
Elizabeth L. Boynton
Donna M. Katsiaficas
Penny Littell

RECEIVED

JUN 12 2002

June 11, 2002

Matthew D. Manahan

Matthew D. Manahan, Esq.
Pierce Atwood
One Monument Square
Portland, ME 04101-4033

Dear Matt:

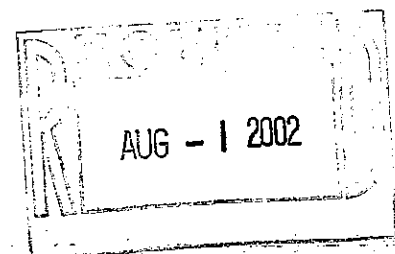
Enclosed please find an executed duplicate original Amendment to Mercy's Contract Zone. Please feel free to contact me should you have any questions.

Sincerely,

Penny Littell
Associate Corporation Counsel

PL:hs
Enclosure

O:\OFFICE\PENNY\LTRS\2002\Manahan061102.doc



**AMENDMENT TO
CONTRACT ZONE AGREEMENT
BETWEEN
CITY OF PORTLAND
AND
MERCY HOSPITAL and MERCY HEALTH SYSTEM OF MAINE**

WHEREAS, the **CITY OF PORTLAND**, a body corporate and politic, located in Cumberland County and State of Maine (hereinafter the "**CITY**") and **MERCY HOSPITAL**, a nonprofit corporation located in the City of Portland, and **MERCY HEALTH SYSTEM OF MAINE**, a nonprofit corporation located in the City of Portland, and each of their successors and assigns (hereinafter collectively "**MERCY**"), are parties to the Contract Zone Agreement Between City of Portland and Mercy Hospital and Mercy Health System of Maine (hereinafter "**AGREEMENT**"), which is attached hereto and incorporated herein; and

WHEREAS, at the time of execution of the **AGREEMENT**, and as stated in Paragraph 5 of the **AGREEMENT**, **MERCY** anticipated that it would transfer a portion of the so-called Fore River Site to the Maine Department of Transportation (hereinafter "**MDOT**") without a fee for the construction of the Commercial Street Connector roadway, and that **MDOT** would pay for the necessary improvements; and

WHEREAS, the funding available to **MDOT** for this project instead requires that **MDOT** exercise its power of eminent domain and pay just compensation for that portion of the Fore River Site designated for the Commercial Street Connector roadway, and therefore **MERCY** will assist with funding of the necessary improvements; and

WHEREAS, this change in funding for the project remains consistent with the intent of the **CITY OF PORTLAND** and **MERCY** in signing the **AGREEMENT**;

June 2002
NOW, THEREFORE, on this 10 day of ~~May~~ 2002, in consideration of the mutual promises made by each party to the other, the parties covenant and agree to amend the AGREEMENT by deleting the phrase "without a fee" from Paragraph 5 so that it states as follows:

"A portion of the **PROPERTY** will be transferred to the Maine Department of Transportation ("MDOT") for its construction of the proposed Commercial Street Connector roadway (hereinafter referred to as the "**CONNECTOR**")."

WITNESS

Sonia Bear

CITY OF PORTLAND

By Joseph E. Gray
Joseph E. Gray
City Manager

WITNESS

Kelley J. Sony

MERCY HOSPITAL

By Howard Buckley
Howard Buckley
President and CEO

WITNESS

Kelley J. Sony

MERCY HEALTH SYSTEM OF
MAINE

By Howard Buckley
Howard Buckley
President and CEO

STATE OF MAINE
CUMBERLAND, ss.

Date: 6/10/, 2002

Personally appeared before me the above-named Joseph E. Gray, in his capacity as City Manager, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of the City of Portland.

Before me,

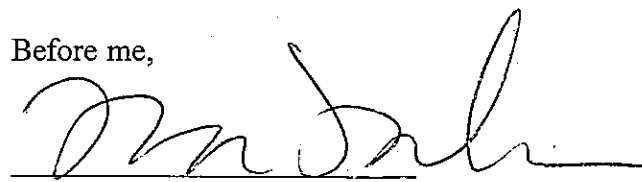

Notary Public/Attorney at Law
SONIA T. BEVAN
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES JANUARY 10, 2003

STATE OF MAINE
CUMBERLAND, ss.

Date: June 5, 2002

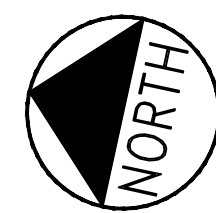
Personally appeared before me the above-named Howard Buckley, in his capacity as President and CEO, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of Mercy Hospital and Mercy Health System of Maine, Inc.

Before me,


Notary Public/Attorney at Law

FREDERICA JACKSON
Notary Public, Maine
My Commission Expires May 1, 2008

2001 ORIGINAL MASTER PLAN



CUMBERLAND COUNTY
CORRECTIONAL FACILITY

FUTURE
OUTPARCEL

FUTURE
EXPANSION
36,000 s.f.

SERVICE

58,000 s.f.

89,335 s.f.

PARKING: 398 SPACES

OPEN
SPACE

FUTURE
OUTPARCEL

250' SHORELAND ZONE
(from the high water line)

PROPOSED
INTERCONNECTOR

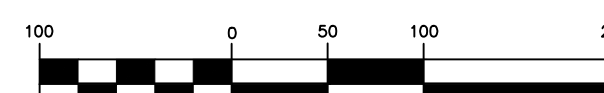
PARKING: 753 SPACES

OPEN
SPACE

FORE RIVER

NOTE WELL:
THIS CONCEPT DRAWING WAS COMPLETED IN SUPPORT OF THE MERCY CONTRACT ZONING AGREEMENT WITH THE CITY OF PORTLAND. THE CONCEPT MASTER PLAN IS REPRESENTATIVE ONLY AND IS SUBJECT TO PROGRAMMING MODIFICATIONS AND MUST RECEIVE SITE PLAN APPROVAL BY THE PORTLAND PLANNING AUTHORITY. ALL LAYOUT MEASURES INCLUDING BUILDING LOCATION, PARKING, ACCESS ROUTES AND LANDSCAPING ARE SUBJECT TO CHANGE BASED ON MERCY'S ONGOING SCHEMATIC DESIGN DEVELOPMENT.

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

				PROJECT MERCY HOSPITAL FORE RIVER PROJECT	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 (207) 775-1121 DHA@MAINE.RR.COM
				SHEET TITLE CONCEPT MASTER PLAN	
				CLIENT MERCY HOSPITAL	
3	9/01/05	CONCEPT MASTER PLAN SUBMITTED TO PLANNING AUTHORITY			DRAWN: KEW DATE: OCT, 2001
2	10/19/01	REVISED CONCEPT; RESUBMITTED TO PLANNING AUTHORITY			DESIGNED: SRB SCALE: 1"=100'
1	9/21/01	SUBMITTED TO PORTLAND PLANNING AUTHORITY			CHECKED: SRB JOB NO. 2149
REV	DATE	DESCRIPTION	P.E.		FILE NAME: 2149-OPTIONS
		REVISIONS	LIC. #		SHEET 5A



August 18, 2014

Ms. Jean Fraser, Planner
Planning and Development Department
City of Portland, Maine
389 Congress Street
Portland, Maine 04101-3509

Subject: Mercy at the Fore
195 Fore River Parkway
Applicant: Mercy Hospital
Contract Zoning Agreement Amendment

Dear Jean:

We have received your July 31, 2014 email with preliminary review comments regarding Mercy Hospital's request for an Amended Contract Zone Agreement. For ease of reference, we have repeated your comment (*italics*) followed by our response and Supplemental information.

Comment 1:

A Master Plan (similar to the 2001 Concept Plan) that includes and identifies the already completed phases as well as future phases so one can see the overall final build out; and

Response:

As part of the July 7, 2014 submission we had included Plate 2, the Overall Site Plan, which depicts the full build out scenario currently contemplated by Mercy Hospital. This plan, in its current form or modified, as to be determined through this current review process, will serve as the Amended Master Plan moving forward. We are open to working with you on the best means of presenting the Master Plan, given the complexity and size of the Mercy at the Fore development. As you know, the Mercy Master Plan has evolved from a single sheet drawing in 2001 to a multiple sheet series of plans (2006) covering various aspects of the site. As discussed further below, it is worthwhile to present a summary comparison of the Mercy's development plans as it existed and was approved in 2001, subsequently amended in 2006 and as is now proposed. A tabular presentation of this information has been prepared and accompanies this letter.

Comment 2:

The data as related to what was approved in 2001 Master Plan (all phases); what was approved in the 2006 Master Plan (all phases) and what is proposed now in the amended Master Plan (all

Ms. Jean Fraser
August 18, 2014
Page 2

phases, including already completed Phase 1). We would like to understand whether any of the associated data (e.g. floor area, parking requirements; trip generation, etc.) are now increased in the latest Master Plan as compared to the 2001 Plan attached to the CZA. For example, does the TMP in place cover all of the proposed traffic from the amended Master Plan (all phases)?

So we are requesting a single "master plan" that is comparable to the 2001 and 2006 plans showing all phases on one plan; and a data table that sets out the following information (what was permitted, consistent with what was represented on the master plans) for each of the three Master Plans (2001 Master Plan as attached to the approved CZA; 2006 Master Plan all phases; proposed amended Master Plan - all phases):

- *Trip Generation*
- *Parking space numbers*
- *Impervious surface and ratios*
- *Building Floorspace*
- *Building footprint*
- *Open Space areas (identify north and south separately)*
- *Wetland/pond area*
- *Areas lost or dedicated to the Fore River Parkway and Veterans Bridge (as these have changed since 2006) (or revise total site area available to Mercy to reflect these)*

Once we have received this information in a table form, we can better understand the scale and nature of the proposed amendments and determine if and what wording (in the original 2001 CZA) might be reconsidered.

I would note that the 2001 Master Plan was a one page plan ("Concept Master Plan" attached to the CZA, where as the 2006 "Master Plans" (of which you submitted the plans but not the text) was a requirement of the 2001 CZA but were not a part of it. So further discussion is suggested on whether the amended CZA just has a single "Concept Master Plan" or also an updated version of the 2006 Master Plan including text. If you are proposing to add a detailed series of plans as an update to the 2006 Master Plan (with phasing) to the Agreement, then the wording of the CZA may need to be reconsidered. In any case that wording may need to relate to the more recent Site Plan ordinance wording regarding master plans.

Response:

The accompanying table (*Table 1 Master Plan Comparison Data*) has been prepared as a summary of the information outlined above. We trust this informational form helps simplify the overall history of the site and the planning path that Mercy has followed over time. Clearly there are some aspects of the project moving forward that will require updated permitting, including the Traffic Movement Permit with the DOT and the Site Plan review with the City. However, despite the increased development program, we are confident that Mercy's current plans remain well within the land use and development intensity contemplated by the original CZA and Master Plan. Based on the site conditions in place we believe that Mercy's plans continue to

Ms. Jean Fraser
August 18, 2014
Page 3

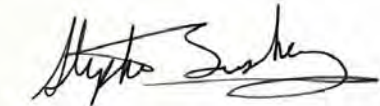
provide ample open space, parking, access, and utilities infrastructure among other things, to satisfy the provisions within the CZA.

In addition to *Table 1* we are preparing a brief permitting summary listing the various permits and timelines that have been involved with the project. This will be provided to you under separate cover by Tuesday afternoon.

We look forward to presenting to the Planning Board at the August 26, 2014 workshop meeting. As we discussed, since the Board consists of entirely new membership since the 2006 review period, we suggest a Powerpoint presentation of the site, the development activity, permitting history, and related information will be worthwhile. We will prepare this material and share with you prior to the meeting so that we can be on the same page for the presentation. As always, your assistance is appreciated. If you require additional information, please contact this office.

Sincerely,

FAY, SPOFFORD & THORNDIKE, LLC

A handwritten signature in black ink, appearing to read "Stephen Bushey", with a stylized flourish at the end.

Stephen Bushey, P.E., C.P.E.S.C.
Senior Principal Engineer

SRB/smk

Attachment : Table 1

C: Mike Connolly, Mercy Hospital
Bob Nutter, Mercy Hospital

Ms. Jean Fraser
August 18, 2014
Page 4

Attachments:

c: Bob Nutter, Vice President and Chief Operating Officer
Mike Connolly, Facilities Manager

R:\2149.08\Admin\Level III Site Plan Application -City of Portland\Contract Zoning Amendment\LOR #2\2149.08 2014.08.04-Barhydt-Amended CZA Application LOR#2.doc

ATTACHMENT A



Table 1 Master Plan Comparison Data

Site Data	2001	2006	2014
Site Size (not including mudflats)	Original 42 acres above high tide	42 acres less the following: Fore River Parkway = 7.55 Ac Total Site size = 34.45 Ac	42 acres less the following: - Fore River Parkway = 7.55 Ac - Veterans Bridge = 1.48 Ac - Veterans Bridge easement =0.34 Ac Total Site size = 32.63 Ac
Available Development area	As part of original CZA and DEP permitting the following developable area reductions occurred: - North Open Space = 3.32 Ac - South Open Space = 1.33 Ac - Preserved Wetland (pond area) = 4.89 Ac - Estimated Fore River Parkway ROW = 7 Ac Actual Available for development = 25.46 Ac	Following completion of the Fore River Parkway in 2004 the available land area was revised to be 24.91 Ac	Following completion of the Veterans Memorial Bridge in 2012 the available land area was revised based on the following: - North Open Space = 3.32 Ac - South Open Space 0.99 Ac - Fore River Parkway ROW = 7.55 Ac - Veterans Bridge ROW and Easement = 1.82 Ac - Preserved Wetland (Pond Area) = 4.89 Ac Available for Development = 23.43 Ac Per the DEP/ACOE approval of filling in the pond then available land increases to 28.32 Ac
Building Program	Hospital Space = 300,000 SF Medical Office Building = 75,000 SF Ambulatory Care Center = 58,000 SF Total Building area = 433,000 SF	Phase 1 Hospital = 137,832 SF Phase 1 MOB = 80,054 SF Future Hospital Expansion = 200,000 SF Future MOB = 75,000 SF Future Office Building = 45,000 SF Existing Maintenance Building = 7,016 SF Total Building Area = 544,902 SF	Phase 1 Hospital = 137,832 SF Phase 1 MOB = 80,054 SF Future Hospital Expansion = 322,000 SF Future MOB = 60,000 SF Future MOB = 108,000 SF Existing Maintenance Building = 7,016 SF Total Building area = 714,902 SF
Trip generation	Original TMP 784 Trips a.m. peak hour adjacent street 687 trips p.m. peak hour adjacent street 990 trips p.m. peak hour generator	No update completed for TMP since only Phase 1 was completed.	No update completed for TMP. Due to VMB reconstruction an updated TMP is required.
Parking	1,251 Surface Parking spaces	Phase 1 Surface parking 783 Spaces Future with Parking Garage = 1,267 to 1,467 Spaces	Surface Spaces = 560 Parking Garage = 1,200 Total = 1,760
Parking per Code	Hospital at 1 space per 500 SF = 600 Spaces Medical Office at 1 space per 400 SF = 333 Spaces Total Required = 933 Spaces	Hospital Spaces = 675 Spaces Office Spaces = 500 Spaces Total Required = 1,175 Spaces	Hospital Spaces = 920 Spaces Office Spaces = 620 Spaces Total Required = 1,540 Spaces
Impervious Surface and Ratio (Max allowable per CZA = 80%)	Approximately 22 ac or 65%	Phase 1 = 13.31 Ac or 38.6 % Master Plan would be less than 50%	18.18 Ac or 55%



Table 1 Master Plan Comparison Data (con't)			
Building footprint (excluding parking garage(s))	183,335 SF	Phase 1 Hospital = 28,000 SF (approx.) Phase 1 MOB = 20,000 SF (approx.) Future Hospital = 45,000 SF (approx.) Future MOB = 35,000 SF (approx.) Total = 128,000 SF	Phase 1 Hospital = 28,000 SF (approx.) Phase 1 MOB = 20,000 SF (approx.) Future Hospital = 116,980 SF Future MOB = 55,000 SF Total = 219,980 SF
Open Space	35%	61.4%	45%



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

March 2013

Mercy Hospital
144 State Street
Portland, Maine 04101
ATTN: Bill Connolly

RE: Site Location of Development Act and Natural Resources Protect Act Applications
Portland, DEP #L-20775-19-T-A/L-20775-TG-U-N

Dear Mr. Connolly:

Enclosed is a signed copy of your Department of Environmental Protection land use permit. Please note that the permit includes a description of your project, findings of fact that relate to the approval criteria the Department used in evaluating your project, and conditions that are based on those findings and the particulars of your project. Please take several moments to read your permit carefully, paying particular attention to the conditions of the approval. The Department reviews every application thoroughly and strives to formulate reasonable conditions of approval within the context of the Department's environmental laws. Also attached are some materials that describe the Department's appeal procedures for your information.

If you have any questions about the permit please contact me at (207) 615-6426 or at christine.woodruff@maine.gov.

Sincerely,

Christine Woodruff, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-3143

WEB SITE: WWW.MAINE.GOV/DEP



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

MERCY HOSPITAL	) SITE LOCATION OF DEVELOPMENT ACT
Portland, Cumberland County	) NATURAL RESOURCES PROTECTION ACT
PHASE II RELOCATION PROJECT	) TIER 3 WETLAND ALTERATION
L-20775-19-T-A (approval)	) WATER QUALITY CERTIFICATION
L-20775-TG-U-N (approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq. and 480-A et seq., 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of MERCY HOSPITAL with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

I. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-20775-19-A-N/L-20775-TG-B-N, dated June 26, 2002, the Department approved the development of a new Mercy Hospital Campus on 85.5 acres off Congress Street, adjacent to the Fore River in Portland. In Department Orders #L-20775-19-C-T, #L-20775-19-D-M, and #L-20775-TG-E-M, the Department approved the partial transfer and modification of the original Orders by the Maine Department of Transportation for the construction of a connector road, the Fore River Parkway, across the property. Approximately three acres of land was transferred to the Maine Department of Transportation for the construction of the new Veteran's Bridge to South Portland. Subsequent Department Orders approved several minor modifications.

B. Summary: The applicant proposes to construct Phase II of the Mercy Hospital relocation project that consists of a 116,980-square foot hospital building expansion, a 15,000-square foot medical office building, a detached 40,000-square foot medical office building, a 51,800-square foot parking garage, a 33,800-square foot parking garage, an elevated parking deck and associated on-site traffic circulation renovations. The project includes utility service relocations and new stormwater management systems. The two existing site entrances will remain the same. The project is shown on a set of plans, the

first of which is titled "Site Development Plans for Mercy Hospital Fore River Hospital Relocation Project Amended Master Plan / Phase II Expansion," prepared by DeLuca-Hoffman Associates, and dated May 2012, with a last revision date of October 23, 2012. The project is located on the remaining approximately 33 acres of the parcel on the east side of the Fore River Parkway in the City of Portland.

The applicant is also seeking approval under the Natural Resources Protection Act to fill a 3.49-acre freshwater wetland.

C. Current Use of Site: The portion of the site that is east of the Fore River Parkway is completely developed except for the central portion of the site that is occupied by a pond and wetlands. The existing development includes a hospital building, a medical office building, a maintenance building, parking, utilities, and access roads.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$5,378,880.00. The applicant submitted a letter from Eastern Maine Healthcare System, dated February 21, 2013, stating that Eastern Maine Healthcare System and Mercy Health System of Maine executed an affiliation agreement on January 14, 2013, pursuant to which Eastern Maine Healthcare System will become the sole corporate member of Mercy Health System of Maine. Pursuant to terms of the affiliation agreement and subject to the regulatory approval and closure of the transaction, as well as other contractual restrictions, Eastern Maine Healthcare System has committed to spending \$115 million in support of Mercy Health System of Maine. This financial support includes expanding the Fore River campus of Mercy Hospital to consolidate Mercy Hospital's State Street facility onto the Fore River campus. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the Bureau of Land and Water Quality (BLWQ) for review and approval as a condition of compliance.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards provided that the applicant submits evidence of financial capacity to the BLWQ for review and approval prior to the start of construction.

3. TECHNICAL ABILITY:

The applicant provided resume information for key consultants involved with the project and a list of projects successfully constructed by the applicant and the consultants. The applicant retained the services of DeLuca-Hoffman Associates, a professional engineering firm, to provide site design and engineering of the project. Haley and Aldrich provided geotechnical engineering, Normandeau Associates was the wetland consultant, Hoffman Engineering provided environmental engineering, Owen Haskell

provided land surveying services, SMRT provided architectural services and Tewhey Associates was the project manager.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The proposed project is primarily the expansion of an existing hospital campus. A hospital is classified as a development producing a minor noise impact. The Department finds that no regulated sources of noise have been identified.

5. SCENIC CHARACTER:

The Mercy Hospital Fore River Campus is located between the Fore River Parkway and an active railroad line. The Cumberland County Jail is across the railroad tracks to the north, commercial development on Saint John Street is across the railroad tracks to the east, the Veterans' Memorial Bridge is to the south and a mud flat and Interstate Route 295 is across the Fore River Parkway to the west. The areas of the proposed project that are not to be covered with structures, parking areas or vehicle circulation facilities will be landscaped and maintained consistent with the current landscaping features including providing landscaped strips within parking lots. The project will be in keeping with the existing buildings, grounds and surrounding scenic character.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed Phase 1 of the Mercy Hospital project at the Fore River site in 2002 and stated that it found no records of any Essential or Significant Wildlife Habitats, or other wildlife habitats of special concern associated with this site. But MDIFW noted that the wetlands on the site, particularly the pond, was used by several species of waterfowl and wading birds and recommended that impacts to the birds be minimized by maximizing the retention of the existing buffer around the pond and maintaining or elevating the water level of the pond. The 2002 project was constructed to eliminate direct impact to the pond by directing stormwater runoff to other locations and placing a buffer around the pond. Subsequent monitoring of the site since 2006 has documented use by waterfowl (mallards, black ducks), wading birds (green heron, great blue heron), a variety of passerine species (red-winged blackbird, mocking birds, common yellow throat, song sparrow), gulls and painted turtles. Fish have been observed in the pond and mammal signs include grey fox, chipmunks and woodchucks.

As part of the review for the currently proposed expansion project that includes filling of the pond and wetland used by the above noted wildlife, MDIFW visited the site to determine if additional buffering could be added on land owned by Mercy Hospital adjacent to the Fore River on the northwest portion of the site to compensate for the loss of habitat in the pond area. Due to several issues on the land adjacent to the Fore River, it was determined that a buffer that would provide roosting habitat along the Fore River was not feasible. The loss of wetlands as a result of the proposed Phase II will be compensated for through a contribution into the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Fund (MNRCF), discussed further in Finding 13. It was determined that the loss of wildlife habitat from the wetland impacts could be compensated for by emphasizing on the ILF Project Data Worksheet that the habitat losses include waterfowl habitat so that the funds could be used towards replacement of the habitat. It was also determined that the resident turtle population in the pond should be relocated. The applicant has developed a Turtle Trapping and Removal plan that followed the recommendations made by MDIFW. The applicant must implement the relocation plan prior to the start of construction and release the turtles to Capisic Pond Park in Portland and/or Evergreen Cemetery on Stevens Avenue in Portland, or to another location with prior approval from MDIFW.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries provided the wildlife habitats are noted on the In Lieu Fee (ILF) Project Data Worksheet and that prior to the start of construction, the Turtle Trapping and Removal plan is implemented as recommended by MDIFW.

7. SOILS:

There are several locations on the site that have lead-contaminated ash from the former railroad operations that have been covered with clean soil or bituminous pavement to prevent direct exposure. The proposed project was reviewed by an Oil and Hazardous Materials Specialist in the Bureau of Remediation and Waste Management (BRWM) in regards to the existing Voluntary Response Action Plan for the site. BRWM concluded that they have no issues with the planned expansion provided that the appropriate precautions are followed during the project to insure that the contaminated ash is handled, placed on site and/or disposed as appropriate and that the necessary cover systems are in place once the project is completed. The current deed restrictions on the property that were placed during Phase 1 work are consistent with and adequate as future restrictions for the property, and will continue to be subject to the operation and maintenance program with annual inspections.

The applicant has previously submitted a geotechnical report based on the soils found at the project site which was previously reviewed by the Division of Environmental Assessment (DEA).

The Department finds that, based on the comments from the BRWM and DEA's previous review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices.

8. STORMWATER MANAGEMENT:

The proposed project includes approximately 4.12 acres of new impervious area for a total of 19.80 acres of impervious area, and 4.89 acres of new developed area for a total of approximately 29.03 acres of developed area. It lies within the watershed of the tidal waters of the Fore River. The applicant submitted a stormwater management plan based on the Basic, General, and Flooding standards contained in Department Rules, Chapter 500. The proposed stormwater management system consists of an underdrained soil filter, an underdrained bioretention cell, an underdrained subsurface sand filter, and proprietary filters (Filtterra® and StormFilter®).

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices (BMPs) outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Division of Land Resource Regulation (DLRR) of the BLWQ.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of, DLRR. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

Prior to occupancy of the new buildings, the applicant must submit a copy of an executed long-term maintenance contract (minimum of 5 years and renewable) for the on-going maintenance of the Filtterra®, the underdrained subsurface sand filter, and the StormFilter® to the BLWQ. Storm sewer grit and sediment materials removed from any parts of the stormwater management system, including conveyance structures, during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on DLRR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(A).

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from 95% of the impervious area and 96% of the developed area.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, DLRR. After a final review, DLRR commented that the proposed stormwater management system is designed in accordance with the General Standards contained in Chapter 500(4)(B) and recommended that the applicant retain the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures according to the details and notes specified on the approved plans. Within thirty days of completion of each stormwater management structure, the applicant must submit a log of inspection reports detailing the items inspected, photos taken, and the dates of each inspection to the BLWQ for review.

Based on the stormwater system's design and DLRR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500(4)(B).

C. Flooding Standard:

The applicant is not proposing a formal stormwater management system to detain stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. Instead, since the project site is located adjacent to a tidal section of the Fore River, the applicant requested a waiver from the flooding standard pursuant to Department Rules, Chapter 500(4)(E)(2)(a). DLRR reviewed the request for a waiver of the flooding standard and recommended that the waiver be granted.

The Department finds that the proposed project will meet the Chapter 500 standards for management of stormwater discharges and discharges to coastal wetlands.

9. WATER SUPPLY:

When completed, the proposed expanded project is anticipated to use 63,919 gallons of water per day. Water will be supplied by the Portland Water District. The applicant submitted a letter from the Portland Water District, dated January 2, 2013, indicating that it will be capable of servicing this project.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

10. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge up to 63,919 gallons of wastewater per day to the Portland Water District's East End wastewater treatment facility. This project was reviewed and approved by the Division of Water Quality Management (DWQM) of the BLWQ, which commented that the East End wastewater treatment facility has the capacity to treat these flows but has some non-compliance issues that are being addressed by the Portland Water District and scrutinized by the Department.

Based on DWQM's comments, the Department finds that the applicant has made adequate provision for wastewater disposal at a facility that has the capacity to ensure satisfactory treatment.

11. SOLID WASTE:

All municipal solid wastes from the proposed project will be disposed of at Ecomaine, which is currently in substantial compliance with the Maine Solid Waste Management Rules. All wood waste generated from site clearing, such as stumps and grubblings, will be ground and used on site. Any treated wood and mixed construction and demolition debris will be transported to Juniper Ridge Landfill in Old Town or Waste Management in Norridgewock. Untreated wood waste from construction will be sent to KTE Biofuels in Lewiston or to the City of Portland Riverside Recycling Facility. Any petroleum-contaminated soils will be transported to CPRC Group in Scarborough. Biomedical waste will be disposed of at Stericycle in Massachusetts. Any chemical waste will be sent to Clean Harbors Waste Disposal Services. Scrap metal will be sent to One Steel located in Arundel and Oakland, or to Schnitzer Steel in Portland. Any coal ash encountered will be handled in accordance with the Voluntary Response Action Plan. The BRWM reviewed this section of the application and found these facilities are in substantial compliance with the Maine Solid Waste Management Rules.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

12. FLOODING:

The project is adjacent to tidal mudflats of the Fore River. The one hundred year flood elevation of the Fore River and Atlantic Ocean is elevation 10.0 (NGVD 29). The pond and the surrounding wetlands in the old excavated gravel pit portion of the site are below elevation 10.0 and could possibly flood from backflow from the Fore River through the storm drain system. After the pond and surrounding wetlands are filled for the proposed project, all the elevations of the site east of the Fore River Parkway will be above the one hundred year flood elevation. This loss of flood plain area in the Fore River watershed is unlikely to cause an increase in the flood elevation of the Fore River and the surrounding areas because the amount of flood plain area loss from the proposed project is very small in comparison to the flood plain area of the Fore River and surrounding tidal areas.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

13. WETLAND IMPACTS:

The applicant proposes to alter 151,924 square feet (3.49 acres) of wetlands to construct the proposed project. The types of wetland proposed to be impacted are 63,446 square feet of open water, 51,236 square feet of emergent/open water wetland, 17,298 square feet of forested wetland, 10,895 square feet of shrub/emergent wetland, 6,458 square feet of shrub wetland, and 2,591 square feet of emergent wetland. These wetlands are the existing pond and the surrounding wetlands in the central part of the site that were originally created from gravel extraction below the groundwater table. The pond is considered artificial and is not considered a wetland of special significance. The purpose and need of the wetland impact is to consolidate the operations of the hospital from the existing two campuses, one on State Street and one on the Fore River Parkway, to a single hospital campus on the Fore River Parkway site, which will allow Mercy Hospital to increase the capacity of the hospital for outpatient care and to provide a facility that meets current hospital standards.

In Department Order #L-20775-19-A-N/L-20775-TG-B-N, dated June 26, 2002, the Department approved 39,835 square feet (0.91 acre) of mostly scrub shrub wetland impact for the initial development of the site by the applicant. The cumulative wetland impact for the existing project plus the proposed project is 191,301 square feet (4.40 acres).

The Wetland Protection Rules interpret and elaborate on the NRPA criteria for obtaining a permit. The rules guide the Department in its determination of whether a project's impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it would cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a Natural Resources Protection Act permit that involves a freshwater

wetland alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternative analysis for the proposed project completed by Normandeau Associates and dated July 2012.

The applicant evaluated using single and dual campus alternatives to bring the hospital up to appropriate standards of care, safety, efficiency, convenience, and cost effectiveness. The applicant examined moving all operations back to the State Street campus; however the existing facility on State Street has the deficiencies of an aging facility including: an internal power distribution system that is antiquated, at-load capacity and in need of replacement; piping systems that need replacement; the two primary chillers of the heating, ventilating and air conditioning system need replacement; and the lack of space for parking is a major issue that includes high costs and inconvenience for patients and employees. Therefore, moving back to a single campus on State Street is not a feasible alternative because it will not meet the project purpose based on the expense and the inability to create a state-of-the-art healthcare facility.

The applicant evaluated moving all operation to a third site. A search was conducted for alternative sites in 2001 and 2002 that found no other local site was feasible or appropriate. The relocation of all operations to a third location is considered not practicable because it would not meet the project purpose of having a facility in Portland and the \$90 million invested in the Fore River location could not be recouped which would jeopardize the long-term sustainability of the hospital.

The applicant evaluated maintaining a dual campus, but has found that two campuses perpetuates unfavorable conditions that would render the hospital unsustainable in the long term because of safety issues, operational difficulties, inconvenience, the expenses of duplicated services, bussing between facilities and renovating the State Street facility, and does not meet the project purpose of having a cost-effective, safe, and state-of-the-art healthcare facility.

The applicant evaluated consolidating operations onto the Fore River Campus with the proposed expansion. This would result in a state-of-the-art facility that would be best for healthcare delivery logistics, staff and patient access, reduction in operating costs, increases in staff efficiency, eliminating the need for duplicated services, and could lead to higher employee retention rates. This alternative meets the project purpose, is practicable in terms of cost effectiveness, and provides a state-of-the-art facility.

The applicant evaluated five alternative site layouts for the expanded Fore River campus, which included layouts that partially or completely filled the central wetland. Alternative ONS-3 shown in the project application avoided impacts to the wetland but did not

address current and anticipated future changes in the U.S. healthcare delivery system, including large increases in the amount of outpatient and ambulatory services provided by hospital campuses which would create a need for increased hospital size and more adjacent parking. Therefore, alternative ONS-3 was rejected.

Alternatives ONS-4 thru ONS-7 represented site layouts that minimize impacts to the central wetland, however they result in an unacceptable facility design that significantly limits the hospital's clinical operations. These unacceptable facility designs include congested and unsafe traffic circulation conditions where the Ambulatory Care Center and Emergency Department entrances are immediately adjacent to one another and other traffic circulation problems that result in confusion and congestion problems for incoming patients and visitors. These designs do not provide parking structures that are located in the critically essential location immediately adjacent to the ambulatory care center. These alternatives would also encroach on the wetland. One of the primary functions and values of the wetland is wildlife habitat, and it was recognized that direct encroachment on the wetland, shading of the wetland, and human activities associated with the building in closer proximity to the wetland would likely have a detrimental effect on this wetland function and value. Although these alternatives would have less direct wetland impact than the proposed project, these alternatives were deemed impracticable for the delivery of patient care services and would likely have detrimental effect on the wetland's wildlife functions and values.

Alternative ONS-8 is the basis of the proposed project. This alternative fills the entire central wetland and raises the grades of the site up such that the emergency department entrance and the building expansion entrance are at the same elevation as the entrance of the Phase I hospital. This feature is an important design element to the hospital because it reduces patient and visitor navigation issues inside the building. This alternative meets the current standards for hospital design with appropriate adjacencies and colocation of key services; allows physician and staff efficiency because it has inpatient and outpatient services at one facility; it provides parking for both patients and staff adjacent to the hospital; and, provides enough floor space to meet current program objectives. It is the connectedness of the existing and proposed facility and the future expansion potential that makes this alternative the preferred alternative and the applicant stated that this is the only practicable alternative of meeting the project purpose of a state-of-the-art facility.

B. Minimal Alteration. The amount of freshwater wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant examined alternative site layouts for the project and the only site layout that met the overall purpose of the project proposes to fill 3.49 acres of wetland. Other alternative site layouts that had less direct impact to the wetland were reviewed, but they did not meet the project purpose and need and the wetland alterations, although smaller, would most likely compromise the higher functions and values of the wetland. Given the chosen alternative described in Finding 13 A, the amount of alteration cannot be further minimized.

C. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values because the project alters greater than 15,000 square feet of freshwater wetland, which is the threshold over which compensation is generally required. The applicant conducted a wetland mitigation site search and concluded that on-site mitigation was not possible due to space constraints. Although off-site parcels represented viable options for wetland compensation, none of the parcels meet the objectives of compensating for the lost wetland acreage and functions and values within the watershed. The applicant proposes to mitigate for the lost wetland functions and values by making a payment to the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Fund (MNRCF).

The wetland that is proposed to be filled was originally formed as a gravel extraction area that was excavated below the groundwater table. This wetland was used as a wetland preservation area to partially compensate for the 0.91 acre of wetland losses approved in Department Order #L-20775-19-A-N/L-20775-TG-B-N. As part of the wetland compensation package for that permit and to enhance the wildlife habitat at the site, the pond and surrounding wetland was enhanced by the removal of solid wastes (such as trash, white goods, tires, metal, etc.), the water quality of the pond was protected by designing the stormwater management system such that only limited amounts of stormwater were directed to the wetland, and a narrow buffer around the wetland was maintained. The remaining wetland compensation for the 0.91 acre of impact from the initial project was 0.21 acre wetland creation in swales on the west side of the Fore River Parkway. The 0.21 acre of wetlands created as compensation for the initial project will not be affected by the proposed project.

The wetland proposed to be impacted is classified as a palustrine (freshwater) system with the following cover type classes: emergent (PEM1), open water (PUB3/4), forested (PFO1), and shrub wetland (PSS1). The pond is fed by a groundwater discharge that appears to flow year-round; therefore, groundwater recharge/discharge is considered a principle function of the wetland. Small fish have been observed in the pond in the past; this population is likely the remnant from birds or the previous hydrological connections to the Fore River and is supported by the groundwater flows; hence, fish and shellfish habitat is a principle function of the wetland. Sediment/toxicant retention is expected to be one of the principle functions of the wetland because any toxicants and sediments flowing into the wetland from the surrounding uplands would become trapped in the organic rich substrate observed in many areas around the pond. Nutrient removal/retention/transformation is expected to be another principle function of the wetland based on the observation of the density and type of vegetation thriving in the wetland and the presence of organic deposits in the wetland. Floodflow alteration is not a principle function of the wetland. Production export is not considered a principal function either. The wetland does provide food for wildlife. The wetland provides habitat for small fish, invertebrates and amphibian populations, which provides a forage base for secondary and tertiary consumers. Reptiles (turtles) have been observed basking

around the pond. Piscivorous birds, including herons, were observed foraging in and along the pond habitat. Migratory waterfowl, including mallard ducks and black ducks, were observed using the wetland. Although the wetland provides food for the wildlife utilizing the wetland, it does not provide nutrients that are transported out of the wetland. Wildlife habitat is considered to be a principle function of the wetland because of the variety of resident and migratory species present. As noted above, the pond has populations of invertebrates, fish and amphibians that provide a forage base for higher trophic level consumers. The wetlands and adjacent forested upland also support small mammals such as voles, shrews, field mice, and potentially larger mammals such as fox and woodchucks. Uniqueness/heritage value is believed to be present because the central wetland is somewhat unique as the surrounding land is developed and freshwater wetlands are rare on the Portland peninsula.

The wetland compensation required in Department Order #L-20775-19-A-N/L-20775-TG-B-N for 0.70 acre of wetland impacts will be eliminated by the proposed project, plus an additional 3.49 acres of wetland impact requires compensation, therefore the total amount of wetland impact requiring compensation for the project is 4.19 acres. The applicant proposes to make a contribution into the ILF program of the MNRCF in the amount of \$834,156.00. Prior to the start of construction, a cashier's check or bank draft, payable to "Treasurer, State of Maine", with the permit number noted on the check, must be mailed to: ME DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that prior to project construction, the applicant submits the ILF payment as described above.

14. AIR QUALITY:

The applicant has obtained an air emissions license from the Bureau of Air Quality, #A-912-71-A-N, for Phase I of the project. The applicant must amend its air emissions license from the Bureau of Air Quality prior to using any new equipment that requires an air emissions license.

15. ALL OTHER:

All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-20775-19-A-N and #L-20775-TG-B-N, and subsequent orders.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant makes a contribution to the In-Lieu Fee (ILF) program, the wildlife habitat losses are noted on the In Lieu Fee (ILF) Project Data Worksheet as described in Findings 6 and 13, and the Turtle Trapping and Removal plan is implemented prior to construction as described in Finding 6.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that the applicant submits evidence of financial capacity to the BLWQ for review and approval prior to the start of construction as described in Finding 2.

- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.
- D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that the applicant retains the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures; submits a log of inspection reports to the BLWQ for review; submits a copy of an executed long-term maintenance contract for the on-going maintenance of the Filterra®, the underdrained subsurface sand filter, and the StormFilter®; and, disposes of materials removed from the stormwater management systems in compliance with the Maine Solid Waste Management Rules as described in Finding 8.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services.
- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of MERCY HOSPITAL to construct Phase II of the Mercy Hospital Relocation project as described above, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This

License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. The applicant or other responsible party shall, within three months of the expiration of each five-year interval from the date of this Order, submit a report certifying that the items listed in Department Rules, Chapter 500, Appendix B(4) have been completed in accordance with the approved plans.
5. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the BLWQ for review and approval.
6. Prior to occupancy of the new buildings, the applicant shall submit a copy of an executed long-term maintenance contract (minimum of 5 years and renewable) to the BLWQ for the on-going maintenance of the Filterra®, the underdrained subsurface sand filter, and the StormFilter®.
7. Storm sewer grit and sediment materials removed from any parts of the stormwater management system, including conveyance structures, during maintenance activities shall be disposed of in compliance with the Maine Solid Waste Management Rules.
8. The applicant shall retain the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures according to the details and notes specified on the approved plans. Within thirty days of completion of each stormwater management structure, the applicant shall submit a log of inspection reports detailing the items inspected, photos taken, and the dates of each inspection to the BLWQ for review.
9. Prior to the start of construction, the applicant shall mail or deliver a cashier's check or bank draft in the amount of \$834,156.00, payable to "Treasurer, State of Maine", with the permit number noted on the check, to: ME DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333.
10. Prior to the start of construction, the applicant shall implement the Turtle Trapping and Removal plan.

11. All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-20775-19-A-N and #L-20775-TG-B-N, and subsequent orders, and are incorporated herein.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 22 DAY OF March, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns for
Patricia W. Aho, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

CGW/L20775TA&UN/ATS#74936&74937

Department of Environmental Protection**SITE LOCATION OF DEVELOPMENT (SITE)****STANDARD CONDITIONS**

- A. Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.
- B. Compliance with All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Compliance with All Terms and Conditions of Approval.** The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- D. Advertising.** Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- E. Transfer of Development.** Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
- F. Time frame for approvals.** If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- G. Approval Included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.
- H. Approval Shown to Contractors.** Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised December 27, 2011



Natural Resource Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S.A. §420-D(8) and is subject to penalties under 38 M.R.S.A. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this

approval with the conditions by the developer, and the owner and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the department.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
 - (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.
 - (c) The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.
- (9) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

November 16, 2005 (revised December 27, 2011)



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

Regulatory Division
CENAE-R-51
Permit Number: NAE-2012-00084

Robert F. Nutter
Mercy Hospital
144 State Street
Portland, Maine 04101

Dear Mr. Nutter:

Attached are two copies of a Department of the Army permit authorizing your project. **Please sign both copies of the permit and return one signed copy to this office at the address above.** A fee of \$100.00 is required. Please enclose a check made payable to "FAO New England District", and return it with the signed permit copy. Please ensure your address and social security number, or tax identification number for businesses, are on the check. The authorized work cannot start until we receive a complete, signed copy of the permit.

You are required to complete and return the attached forms to this office:

1. Preliminary Jurisdictional Determination Form to be submitted along with your signed copy of the permit.
2. Work Start Notification Form at least two weeks before the anticipated work start date.
3. Compliance Certification Form within one month following the completion of the authorized work.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions, **including any conditions contained on the attached state water quality certification.** If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

Our verification of this project's wetland delineation under the Corps of Engineers Wetlands Delineation Manual, and its applicable supplement, is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

A combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form, and flow chart explaining the appeals process and your options, are attached to this letter. If you desire to appeal this proffered permit, you must submit a completed RFA form along with any supporting or clarifying information to Michael G.

Engineers; North Atlantic Fort Hamilton Military Community, Bldg. 301; General Lee Avenue; Brooklyn, NY 11252-6700. Contact info: (347) 370-4663 or michael.g.vissichelli@usace.army.mil.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

You may not appeal conditions contained in the State water quality certification under this program as they are automatically included in the federal permit. Also note that the Department of the Army permit process does not supersede any other agency's jurisdiction.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <http://per2.nwp.usace.army.mil/survey.html>

If you have any questions regarding this correspondence, please contact Jay Clement at 207-623-8367 at our Manchester, Maine Project Office.

Sincerely,


Frank J. Del Giudice
Chief, Permits and Enforcement Branch
Regulatory Division

Attachments
Copy Furnished:
Tewey & Associates
P.O. Box 238
Gorham, Maine 04038

DEPARTMENT OF THE ARMY PERMIT

Permittee Mercy Hospital, 144 State Street, Portland, Maine 04101

Permit No. NAE-2012-00084

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Fill approximately 3.49 acres of freshwater wetland in order to expand an existing hospital complex. The expansion will include the addition of 250,000 square feet of space to house the Emergency Department, an expanded Acute Care Center, hospital support services, and medical office space. The expansion will allow the applicant to consolidate the two separate facilities into one single campus.

This work is shown on the attached plans entitled, "MERCY AT THE FORE MASTER PLAN", on seven sheets, and dated "March 2001" and "07.10.12".

Project Location:

In freshwater wetlands adjacent to the Fore River at Portland, Maine

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2017. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

(Special conditions continued on Page 4)

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

☒ Section 404 of the Clean Water Act (33 U.S.C. 1344).

☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

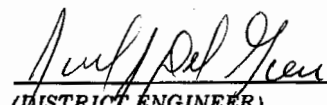
6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE)

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.



(DISTRICT ENGINEER)
Chief, Permits & Enforcement Branch
Regulatory Division
For District Engineer

4-10-2013

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree)

(DATE)

(Special conditions continued from Page 2)

If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The permittee shall complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.
3. Adequate sedimentation and erosion control devices, such as geo-textile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
4. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2012-00084" and shall be addressed to "Inspection Section, CENAE-R, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751." Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit.
5. Mitigation shall consist of payment of \$834,156.00 to the Natural Resource Mitigation Fund. The completed ILF Project Data Worksheet which must be mailed with a cashier's check or bank draft, made out to "Treasurer, State of Maine", with the permit number noted on the check. The check and worksheet should be mailed to: ME DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333. No project construction may begin until the permittee provides the Corps with a copy of the check, with the permit number noted on the check. The ILF amount is only valid for a period of one year from the date on the authorization letter. After that time, the project would need to be reevaluated and a new amount determined.
6. The introduction, spread, or the increased risk of invasion of non-native invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work is prohibited. Prior to being on the construction site,

Special Conditions Continued on Page 5

Special Conditions Continued from Page 4

the contractor shall thoroughly inspect and remove seeds, plant material, soil, mud, insects, and other invertebrates on all equipment, including construction mats, to be used on the project site to prohibit introduction of invasive organisms. At a minimum, the following shall be inspected and cleaned on terrestrial vehicles where applicable:

- ***Rubber Tired Vehicles*** - Crevices in upper surface and panels, tires, rims, and fender wells, spare tire mounting area, bumpers, front and rear quarter panels, around and behind grills, bottom of radiator vent openings, brake mechanisms, transmission, stabilizer bar, shock absorbers, front and rear axles, beds, suspension units, exhaust systems, light casings, and mirrors.
- ***Tracked Land Vehicles*** - Crevices in upper surface and panels, top of axles and tensioners, support rollers, between rubber or gridded areas, beneath fenders, hatches, under casings, and grills.
- ***Interiors of All Vehicles*** - Beneath seats, beneath floor mats, upholstery, beneath foot pedals, inside folds of gear shift cover.

IN-LIEU-FEE (ILF) PROJECT DATA WORKSHEET

DEP Invoice # _____

[Note: Will be filled in by ILF Administrator at DEP]

Project name: Mercy Hospital Expansion

Applicant (s): Mercy Hospital

DEP Permit #: L-20775-TG-U-N; L-20775-19-T-A

Corps Permit #: NAE-2012-00084

ILF Contribution Amount \$834,156.00

[Note: Please attach a copy of the check]

Project address: 192 Fore River Parkway; Portland, Maine

Biophysical region: Gulf of Maine Coastal Lowland Subsection

Size of total impact subject to compensation: 191,759 s.f. (4.41 acres)

Resources Impacted: Refer to attached table

DEP Project manager: Woodruff

Corps Project manager: Clement

Corps ILF Processing Procedure:

Within 3 days of final permit approval the Corps project manager MUST send via e-mail to the ILF Administrator at DEP with the following attachments:

1. A Microsoft word version of this completed ILF project worksheet including the resource impact table. Please make sure that you double check the information to make sure that the worksheet is accurate and reflects the actual impacts that are stated in the permit and the correct biophysical region.

[Note: The DEP Invoice # section of the worksheet should be left blank and will be filled in by the ILF Program Administrator.]

2. A copy of a location map for the project site. The map MUST be made in GIS and saved as a pdf and MUST include a call out box to physically locate the project site and enough reference information so that project site can be geo-located on the MNRCP GIS data layer.
3. A pdf copy of the Corps permit for the project.

Corps permittees MUST be instructed to send all required ILF payments to the attention of the ILF Administrator Maine Department of Environmental Protection, State House Station 17, Augusta, Maine 04333. All checks must have the ILF program routing # 014.06A.1776.14 on the memo line.

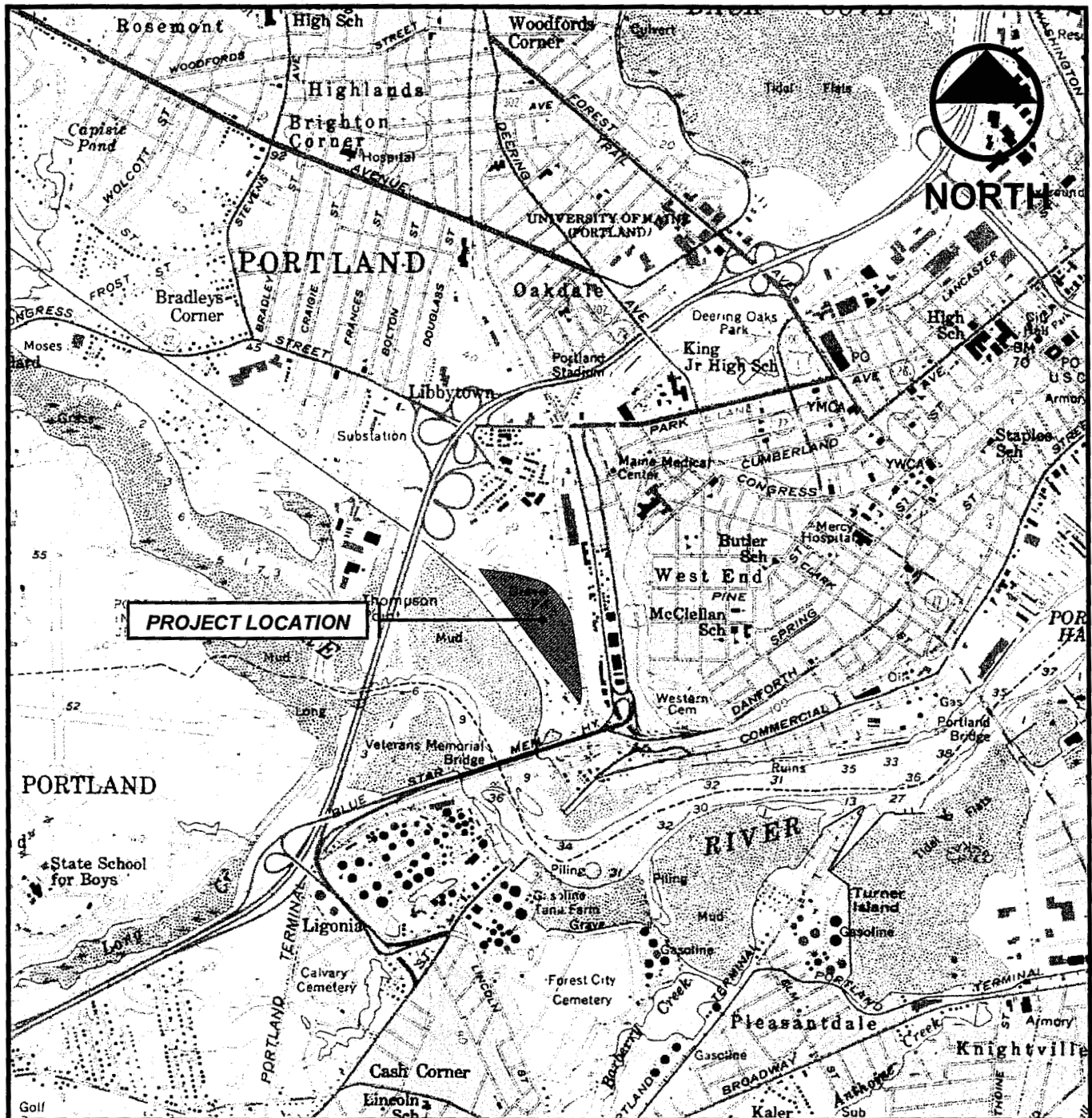
Resource(s) Impacted:

Resource Type: (Wetlands by NWI Type (PFO, PSS, M1, M2, E1, E2, etc), significant vernal pool (SVP), shorebird feeding & staging habitat (Shorebird), inland waterfowl & wading bird habitat (IWWH), tidal waterfowl & wading habitat (TWWH), and river, stream, or brook (RSB).

Wetland Functions & Values: Groundwater recharge/discharge (GWR); floodflow alterations (FF); fish & shellfish habitat (FSH); sediment toxicant retention (STR); nutrient removal (NR); production export (PE); sediment/shoreline stabilization (SS); wildlife habitat (WH); recreation (R); education/scientific value (ESV); uniqueness/heritage (UH); and visual quality/aesthetics (VQ).

Types of impacts: may include filling, dredging, vegetation conversion (e.g. forested to shrub/scrub), others.

Resource type (list all that apply)	Functions (for wetland impacts) (list all that apply, by resource type)	Type of Impact (by resource type)	Sq Feet Impacted (by resource type)
PUB3/4	WH, R, FSH	Filling	63,446
PFO1	GWR, NR, STR, WH, R	Filling	17,298
PSS1	GWR, NR, STR, WH, R	Filling	6,458
PEM1	GWR, NR, STR, WH, R	Filling	2,591
PSS1/PEM1	GWR, NR, STR, WH, R	Filling	10,895
PEM1/PUB3/4	WH, IWWH, SS, NR, STR	Filling	51,236
PEM1/PUB3/4	WH, IWWH, SS, NR, STR	Filling	39,835*
	*Previously authorized/mitigated. Included because its mitigation will be compromised as a result of the current proposal.		
Total square feet impacted			191,759 s.f.



USGS TOPOGRAPHIC MAP

Mercy Health System of Maine – Portland, Maine

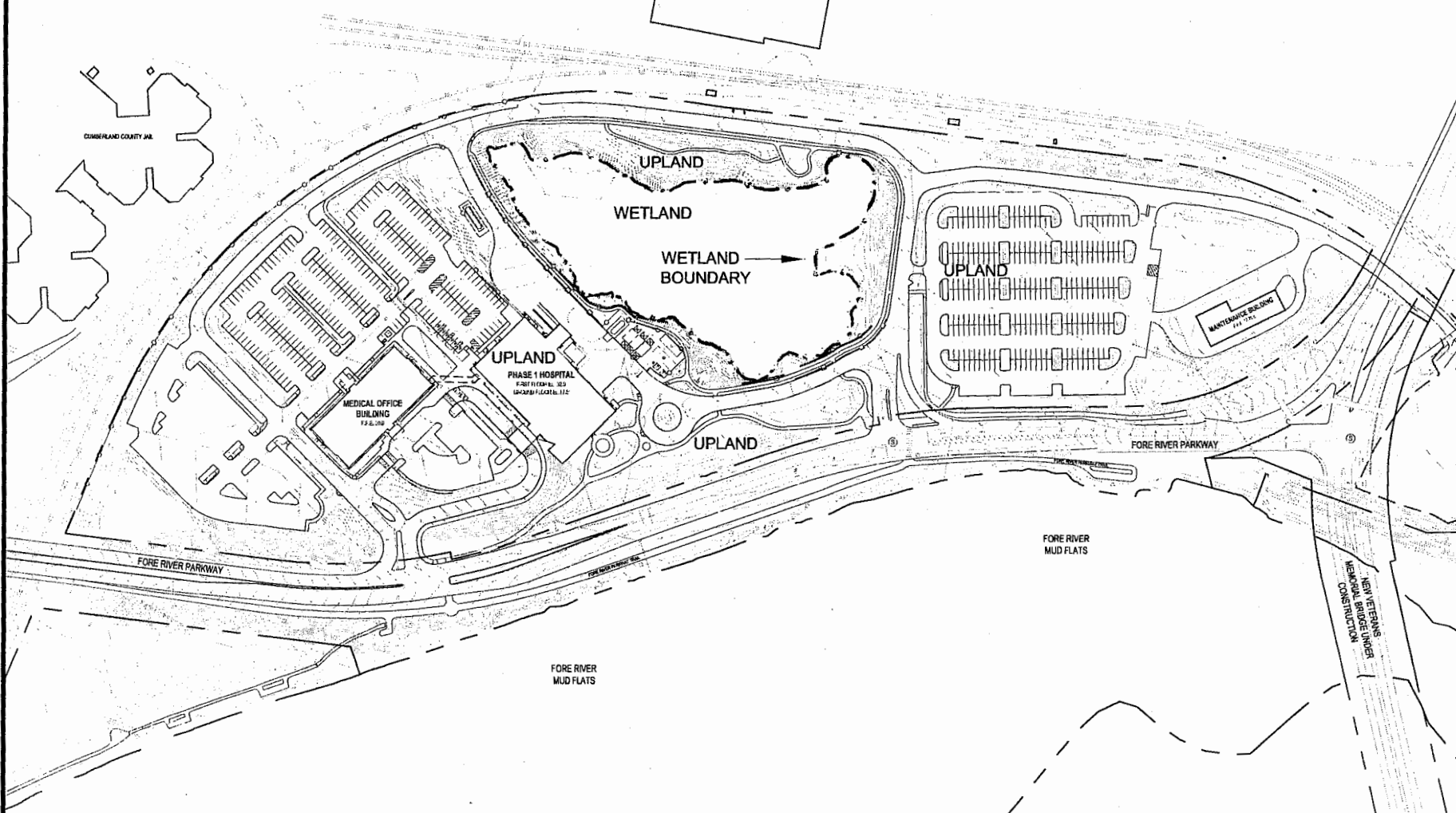
SOURCE: TOPOSCOUT; Coastal Maine CD-ROM, USGS Portland West Quadrangle, 7.5 Minute Series (Topographic)

DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207-775-1121
FAX 207-879-0896

DESIGNED	SRB	DATE	MARCH 2001
DRAWN	JDL	SCALE	1" = 2000'±
CHECKED	SRB	JOB NO.	2149

FIGURE

2



DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
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207.775.1121
WWW.DELUCAHOFFMAN.COM

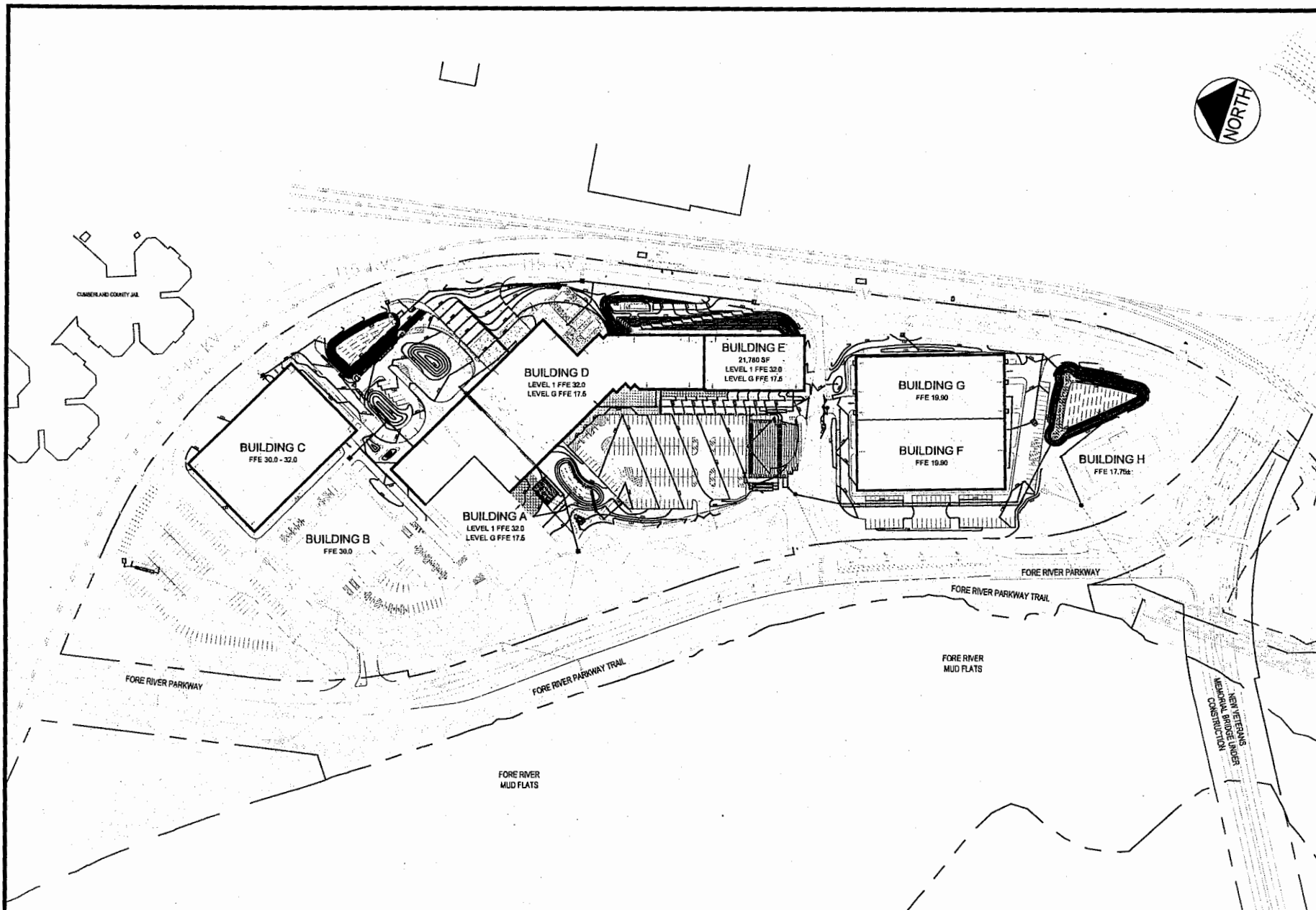
MERCY AT THE FORE MASTER PLAN

EXISTING CONDITIONS

DRAWN:	DED	DATE:	07.10.12
DESIGNED:	BEK	SCALE:	1" = 250'
CHECKED:	SRB	JOB NO.	2149.08
FILE NAME:	2149.08-GRADING		

FIGURE

2



DH



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778 MAIN STREET, SUITE 8
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207.775.1121
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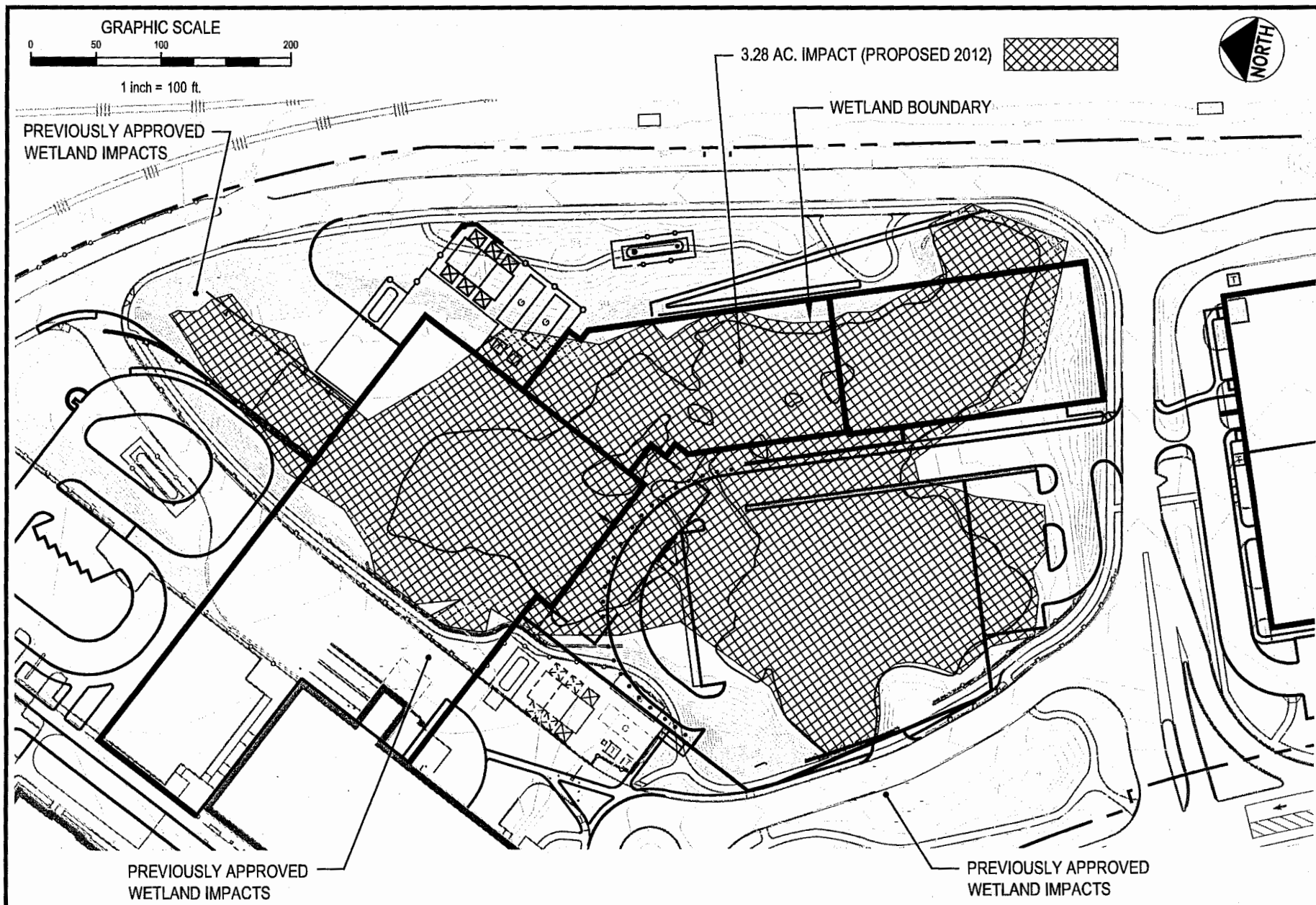
MERCY AT THE FORE MASTER PLAN

PROPOSED CONDITIONS

DRAWN:	DED	DATE:	07.10.12
DESIGNED:	BEK	SCALE:	1" = 250'
CHECKED:	SRB	JOB NO.	2149.08
FILE NAME:	2149.08-GRADING		

FIGURE

3



DH

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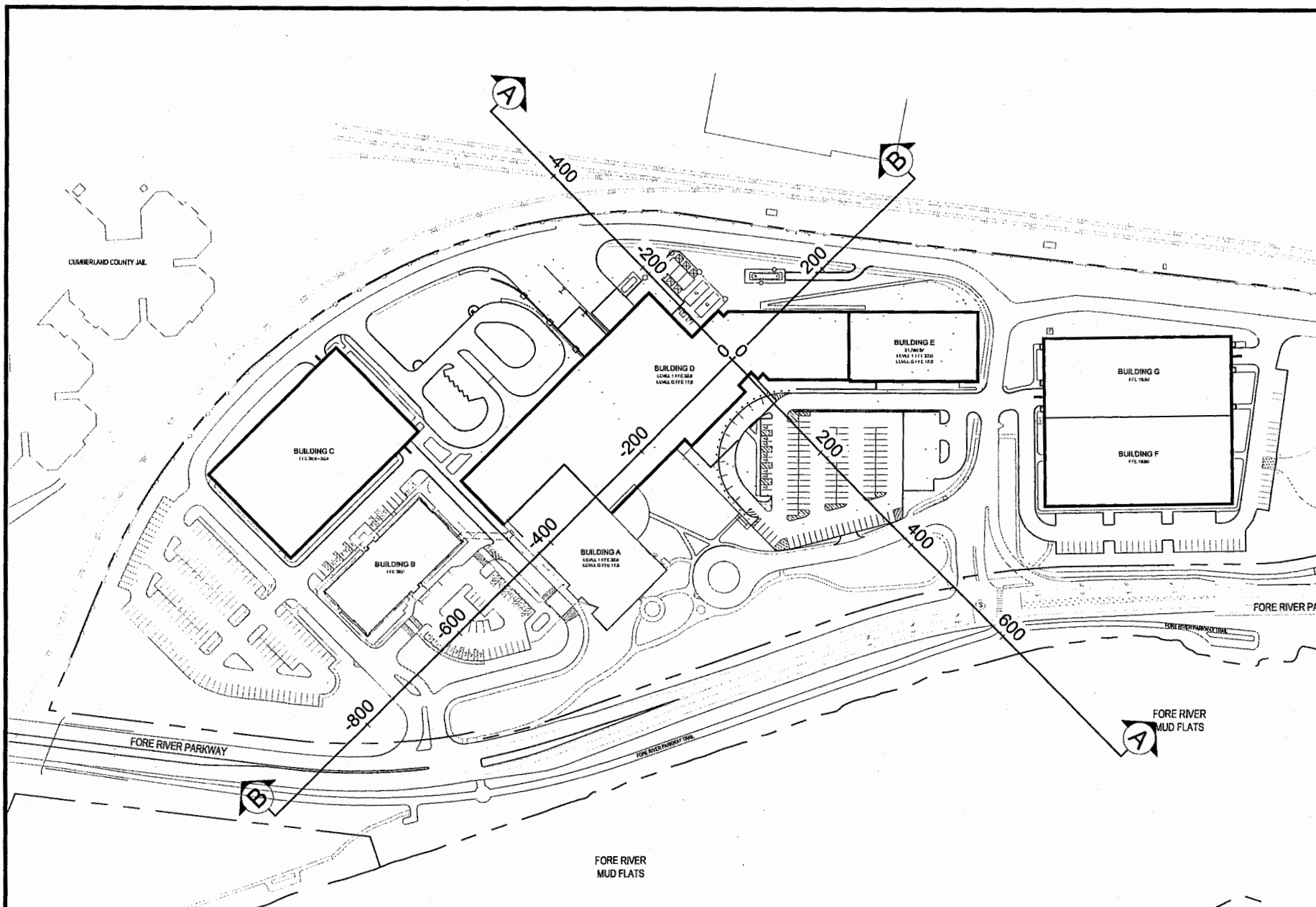
MERCY AT THE FORE MASTER PLAN

100 SCALE FIGURE OF WETLAND FILL AREA

DRAWN: DED	DATE: 07.10.12
DESIGNED: BEK	SCALE: 1" = 100'
CHECKED: SRB	JOB NO. 2149.08
FILE NAME: 2149.08-FIG 9	

FIGURE

4



DeLuca-Hoffman Associates, Inc.
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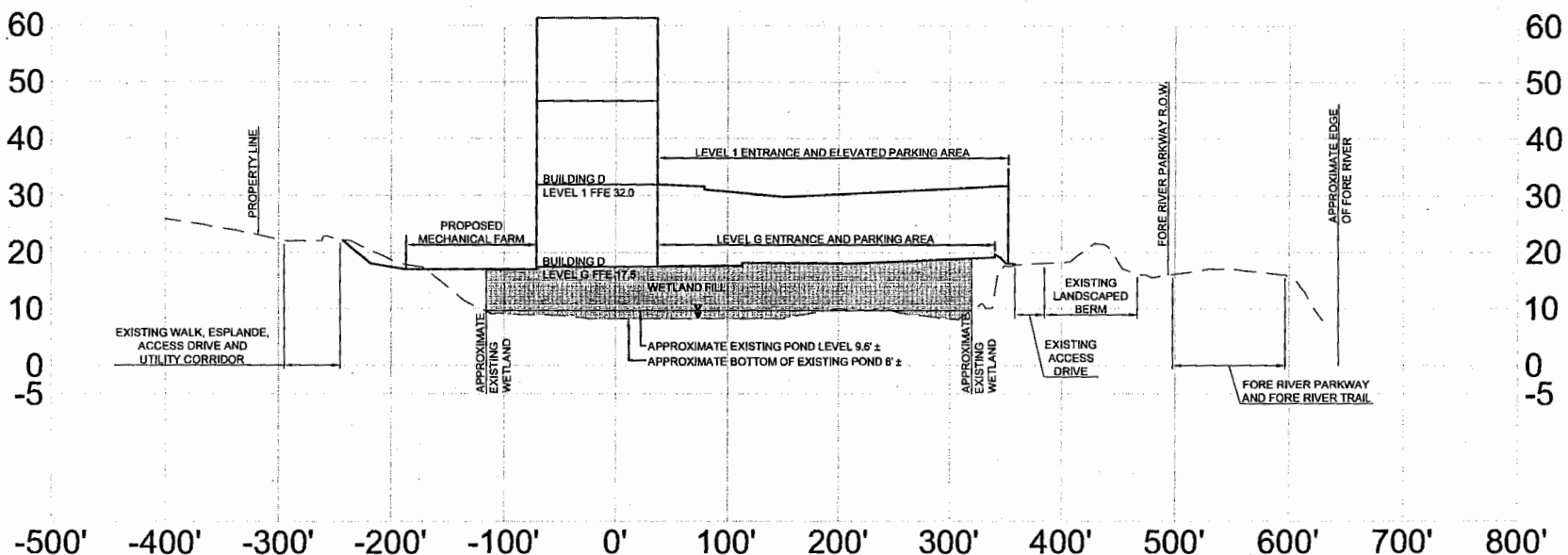
MERCY AT THE FORE MASTER PLAN

SITE SECTION KEY MAP

DRAWN:	DED	DATE:	07.10.12
DESIGNED:	BEK	SCALE:	1" = 200'
CHECKED:	SRB	JOB NO.	2149.08
FILE NAME:	2149.08-GRADING		

FIGURE

5A



SECTION A-A

SCALE: HORZ 1" = 50'

VERT 1" = 10'



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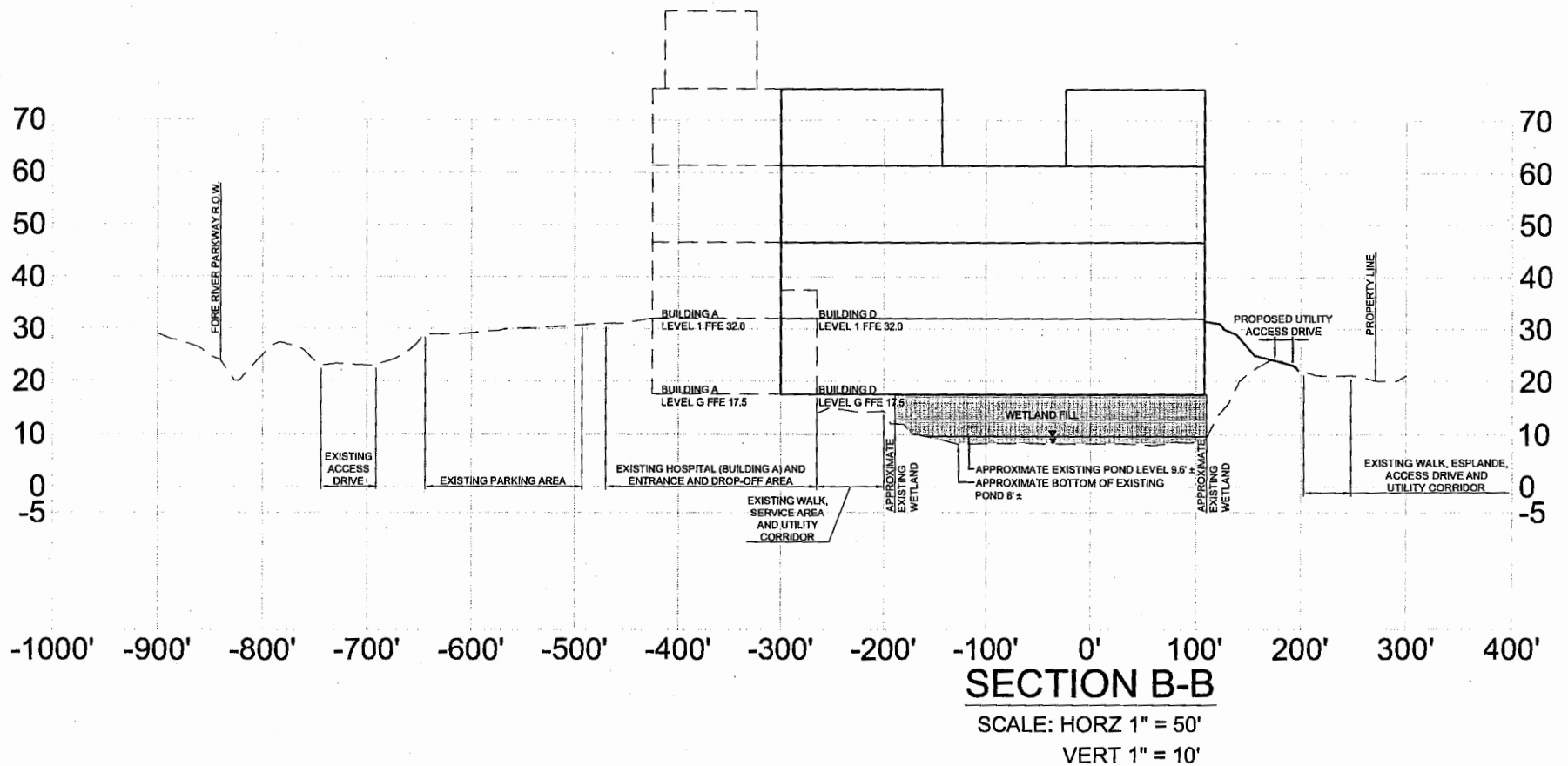
MERCY AT THE FORE MASTER PLAN

SITE SECTION A-A

DRAWN: DED	DATE: 07.10.12
DESIGNED: BEK	SCALE: AS NOTED
CHECKED: SRB	JOB NO. 2149.08
FILE NAME: 2149.08-GRADING	

FIGURE

5B



DeLuca-Hoffman Associates, Inc.
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MERCY AT THE FORE MASTER PLAN

SITE SECTION B-B

DRAWN: DED	DATE: 07.10.12
DESIGNED: BEK	SCALE: AS NOTED
CHECKED: SRB	JOB NO. 2149.08
FILE NAME: 2149.08-GRADING	

FIGURE

5C



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PATRICIA W. AHO
COMMISSIONER

March 2013

Mercy Hospital
144 State Street
Portland, Maine 04101
ATTN: Bill Connolly

RE: Site Location of Development Act and Natural Resources Protect Act Applications
Portland, DEP #L-20775-19-T-A/L-20775-TG-U-N

Dear Mr. Connolly:

Enclosed is a signed copy of your Department of Environmental Protection land use permit. Please note that the permit includes a description of your project, findings of fact that relate to the approval criteria the Department used in evaluating your project, and conditions that are based on those findings and the particulars of your project. Please take several moments to read your permit carefully, paying particular attention to the conditions of the approval. The Department reviews every application thoroughly and strives to formulate reasonable conditions of approval within the context of the Department's environmental laws. Also attached are some materials that describe the Department's appeal procedures for your information.

If you have any questions about the permit please contact me at (207) 615-6426 or at christine.woodruff@maine.gov.

Sincerely,

Christine Woodruff, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7633 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-3143

WEB SITE: WWW.MAINE.GOV/DEP



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

MERCY HOSPITAL	) SITE LOCATION OF DEVELOPMENT ACT
Portland, Cumberland County	) NATURAL RESOURCES PROTECTION ACT
PHASE II RELOCATION PROJECT	) TIER 3 WETLAND ALTERATION
L-20775-19-T-A (approval)	) WATER QUALITY CERTIFICATION
L-20775-TG-U-N (approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq. and 480-A et seq., 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of MERCY HOSPITAL with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

I. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-20775-19-A-N/L-20775-TG-B-N, dated June 26, 2002, the Department approved the development of a new Mercy Hospital Campus on 85.5 acres off Congress Street, adjacent to the Fore River in Portland. In Department Orders #L-20775-19-C-T, #L-20775-19-D-M, and #L-20775-TG-E-M, the Department approved the partial transfer and modification of the original Orders by the Maine Department of Transportation for the construction of a connector road, the Fore River Parkway, across the property. Approximately three acres of land was transferred to the Maine Department of Transportation for the construction of the new Veteran's Bridge to South Portland. Subsequent Department Orders approved several minor modifications.

B. Summary: The applicant proposes to construct Phase II of the Mercy Hospital relocation project that consists of a 116,980-square foot hospital building expansion, a 15,000-square foot medical office building, a detached 40,000-square foot medical office building, a 51,800-square foot parking garage, a 33,800-square foot parking garage, an elevated parking deck and associated on-site traffic circulation renovations. The project includes utility service relocations and new stormwater management systems. The two existing site entrances will remain the same. The project is shown on a set of plans, the

first of which is titled "Site Development Plans for Mercy Hospital Fore River Hospital Relocation Project Amended Master Plan / Phase II Expansion," prepared by DeLuca-Hoffman Associates, and dated May 2012, with a last revision date of October 23, 2012. The project is located on the remaining approximately 33 acres of the parcel on the east side of the Fore River Parkway in the City of Portland.

The applicant is also seeking approval under the Natural Resources Protection Act to fill a 3.49-acre freshwater wetland.

C. Current Use of Site: The portion of the site that is east of the Fore River Parkway is completely developed except for the central portion of the site that is occupied by a pond and wetlands. The existing development includes a hospital building, a medical office building, a maintenance building, parking, utilities, and access roads.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$5,378,880.00. The applicant submitted a letter from Eastern Maine Healthcare System, dated February 21, 2013, stating that Eastern Maine Healthcare System and Mercy Health System of Maine executed an affiliation agreement on January 14, 2013, pursuant to which Eastern Maine Healthcare System will become the sole corporate member of Mercy Health System of Maine. Pursuant to terms of the affiliation agreement and subject to the regulatory approval and closure of the transaction, as well as other contractual restrictions, Eastern Maine Healthcare System has committed to spending \$115 million in support of Mercy Health System of Maine. This financial support includes expanding the Fore River campus of Mercy Hospital to consolidate Mercy Hospital's State Street facility onto the Fore River campus. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the Bureau of Land and Water Quality (BLWQ) for review and approval as a condition of compliance.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards provided that the applicant submits evidence of financial capacity to the BLWQ for review and approval prior to the start of construction.

3. TECHNICAL ABILITY:

The applicant provided resume information for key consultants involved with the project and a list of projects successfully constructed by the applicant and the consultants. The applicant retained the services of DeLuca-Hoffman Associates, a professional engineering firm, to provide site design and engineering of the project. Haley and Aldrich provided geotechnical engineering, Normandeau Associates was the wetland consultant, Hoffman Engineering provided environmental engineering, Owen Haskell

provided land surveying services, SMRT provided architectural services and Tewhey Associates was the project manager.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The proposed project is primarily the expansion of an existing hospital campus. A hospital is classified as a development producing a minor noise impact. The Department finds that no regulated sources of noise have been identified.

5. SCENIC CHARACTER:

The Mercy Hospital Fore River Campus is located between the Fore River Parkway and an active railroad line. The Cumberland County Jail is across the railroad tracks to the north, commercial development on Saint John Street is across the railroad tracks to the east, the Veterans' Memorial Bridge is to the south and a mud flat and Interstate Route 295 is across the Fore River Parkway to the west. The areas of the proposed project that are not to be covered with structures, parking areas or vehicle circulation facilities will be landscaped and maintained consistent with the current landscaping features including providing landscaped strips within parking lots. The project will be in keeping with the existing buildings, grounds and surrounding scenic character.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed Phase I of the Mercy Hospital project at the Fore River site in 2002 and stated that it found no records of any Essential or Significant Wildlife Habitats, or other wildlife habitats of special concern associated with this site. But MDIFW noted that the wetlands on the site, particularly the pond, was used by several species of waterfowl and wading birds and recommended that impacts to the birds be minimized by maximizing the retention of the existing buffer around the pond and maintaining or elevating the water level of the pond. The 2002 project was constructed to eliminate direct impact to the pond by directing stormwater runoff to other locations and placing a buffer around the pond. Subsequent monitoring of the site since 2006 has documented use by waterfowl (mallards, black ducks), wading birds (green heron, great blue heron), a variety of passerine species (red-winged blackbird, mocking birds, common yellow throat, song sparrow), gulls and painted turtles. Fish have been observed in the pond and mammal signs include grey fox, chipmunks and woodchucks.

As part of the review for the currently proposed expansion project that includes filling of the pond and wetland used by the above noted wildlife, MDIFW visited the site to determine if additional buffering could be added on land owned by Mercy Hospital adjacent to the Fore River on the northwest portion of the site to compensate for the loss of habitat in the pond area. Due to several issues on the land adjacent to the Fore River, it was determined that a buffer that would provide roosting habitat along the Fore River was not feasible. The loss of wetlands as a result of the proposed Phase II will be compensated for through a contribution into the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Fund (MNRCF), discussed further in Finding 13. It was determined that the loss of wildlife habitat from the wetland impacts could be compensated for by emphasizing on the ILF Project Data Worksheet that the habitat losses include waterfowl habitat so that the funds could be used towards replacement of the habitat. It was also determined that the resident turtle population in the pond should be relocated. The applicant has developed a Turtle Trapping and Removal plan that followed the recommendations made by MDIFW. The applicant must implement the relocation plan prior to the start of construction and release the turtles to Capisic Pond Park in Portland and/or Evergreen Cemetery on Stevens Avenue in Portland, or to another location with prior approval from MDIFW.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries provided the wildlife habitats are noted on the In Lieu Fee (ILF) Project Data Worksheet and that prior to the start of construction, the Turtle Trapping and Removal plan is implemented as recommended by MDIFW.

7. SOILS:

There are several locations on the site that have lead-contaminated ash from the former railroad operations that have been covered with clean soil or bituminous pavement to prevent direct exposure. The proposed project was reviewed by an Oil and Hazardous Materials Specialist in the Bureau of Remediation and Waste Management (BRWM) in regards to the existing Voluntary Response Action Plan for the site. BRWM concluded that they have no issues with the planned expansion provided that the appropriate precautions are followed during the project to insure that the contaminated ash is handled, placed on site and/or disposed as appropriate and that the necessary cover systems are in place once the project is completed. The current deed restrictions on the property that were placed during Phase I work are consistent with and adequate as future restrictions for the property, and will continue to be subject to the operation and maintenance program with annual inspections.

The applicant has previously submitted a geotechnical report based on the soils found at the project site which was previously reviewed by the Division of Environmental Assessment (DEA).

The Department finds that, based on the comments from the BRWM and DEA's previous review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices.

8. STORMWATER MANAGEMENT:

The proposed project includes approximately 4.12 acres of new impervious area for a total of 19.80 acres of impervious area, and 4.89 acres of new developed area for a total of approximately 29.03 acres of developed area. It lies within the watershed of the tidal waters of the Fore River. The applicant submitted a stormwater management plan based on the Basic, General, and Flooding standards contained in Department Rules, Chapter 500. The proposed stormwater management system consists of an underdrained soil filter, an underdrained bioretention cell, an underdrained subsurface sand filter, and proprietary filters (Filterra® and StormFilter®).

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices (BMPs) outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Division of Land Resource Regulation (DLRR) of the BLWQ.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of, DLRR. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

Prior to occupancy of the new buildings, the applicant must submit a copy of an executed long-term maintenance contract (minimum of 5 years and renewable) for the on-going maintenance of the Filterra®, the underdrained subsurface sand filter, and the StormFilter® to the BLWQ. Storm sewer grit and sediment materials removed from any parts of the stormwater management system, including conveyance structures, during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on DLRR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(A).

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from 95% of the impervious area and 96% of the developed area.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, DLRR. After a final review, DLRR commented that the proposed stormwater management system is designed in accordance with the General Standards contained in Chapter 500(4)(B) and recommended that the applicant retain the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures according to the details and notes specified on the approved plans. Within thirty days of completion of each stormwater management structure, the applicant must submit a log of inspection reports detailing the items inspected, photos taken, and the dates of each inspection to the BLWQ for review.

Based on the stormwater system's design and DLRR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500(4)(B).

C. Flooding Standard:

The applicant is not proposing a formal stormwater management system to detain stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. Instead, since the project site is located adjacent to a tidal section of the Fore River, the applicant requested a waiver from the flooding standard pursuant to Department Rules, Chapter 500(4)(E)(2)(a). DLRR reviewed the request for a waiver of the flooding standard and recommended that the waiver be granted.

The Department finds that the proposed project will meet the Chapter 500 standards for management of stormwater discharges and discharges to coastal wetlands.

9. WATER SUPPLY:

When completed, the proposed expanded project is anticipated to use 63,919 gallons of water per day. Water will be supplied by the Portland Water District. The applicant submitted a letter from the Portland Water District, dated January 2, 2013, indicating that it will be capable of servicing this project.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

10. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge up to 63,919 gallons of wastewater per day to the Portland Water District's East End wastewater treatment facility. This project was reviewed and approved by the Division of Water Quality Management (DWQM) of the BLWQ, which commented that the East End wastewater treatment facility has the capacity to treat these flows but has some non-compliance issues that are being addressed by the Portland Water District and scrutinized by the Department.

Based on DWQM's comments, the Department finds that the applicant has made adequate provision for wastewater disposal at a facility that has the capacity to ensure satisfactory treatment.

11. SOLID WASTE:

All municipal solid wastes from the proposed project will be disposed of at Ecomaine, which is currently in substantial compliance with the Maine Solid Waste Management Rules. All wood waste generated from site clearing, such as stumps and grubblings, will be ground and used on site. Any treated wood and mixed construction and demolition debris will be transported to Juniper Ridge Landfill in Old Town or Waste Management in Norridgewock. Untreated wood waste from construction will be sent to KTE Biofuels in Lewiston or to the City of Portland Riverside Recycling Facility. Any petroleum-contaminated soils will be transported to CPRC Group in Scarborough. Biomedical waste will be disposed of at Stericycle in Massachusetts. Any chemical waste will be sent to Clean Harbors Waste Disposal Services. Scrap metal will be sent to One Steel located in Arundel and Oakland, or to Schnitzer Steel in Portland. Any coal ash encountered will be handled in accordance with the Voluntary Response Action Plan. The BRWM reviewed this section of the application and found these facilities are in substantial compliance with the Maine Solid Waste Management Rules.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

12. FLOODING:

The project is adjacent to tidal mudflats of the Fore River. The one hundred year flood elevation of the Fore River and Atlantic Ocean is elevation 10.0 (NGVD 29). The pond and the surrounding wetlands in the old excavated gravel pit portion of the site are below elevation 10.0 and could possibly flood from backflow from the Fore River through the storm drain system. After the pond and surrounding wetlands are filled for the proposed project, all the elevations of the site east of the Fore River Parkway will be above the one hundred year flood elevation. This loss of flood plain area in the Fore River watershed is unlikely to cause an increase in the flood elevation of the Fore River and the surrounding areas because the amount of flood plain area loss from the proposed project is very small in comparison to the flood plain area of the Fore River and surrounding tidal areas.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

13. WETLAND IMPACTS:

The applicant proposes to alter 151,924 square feet (3.49 acres) of wetlands to construct the proposed project. The types of wetland proposed to be impacted are 63,446 square feet of open water, 51,236 square feet of emergent/open water wetland, 17,298 square feet of forested wetland, 10,895 square feet of shrub/emergent wetland, 6,458 square feet of shrub wetland, and 2,591 square feet of emergent wetland. These wetlands are the existing pond and the surrounding wetlands in the central part of the site that were originally created from gravel extraction below the groundwater table. The pond is considered artificial and is not considered a wetland of special significance. The purpose and need of the wetland impact is to consolidate the operations of the hospital from the existing two campuses, one on State Street and one on the Fore River Parkway, to a single hospital campus on the Fore River Parkway site, which will allow Mercy Hospital to increase the capacity of the hospital for outpatient care and to provide a facility that meets current hospital standards.

In Department Order #L-20775-19-A-N/L-20775-TG-B-N, dated June 26, 2002, the Department approved 39,835 square feet (0.91 acre) of mostly scrub shrub wetland impact for the initial development of the site by the applicant. The cumulative wetland impact for the existing project plus the proposed project is 191,301 square feet (4.40 acres).

The Wetland Protection Rules interpret and elaborate on the NRPA criteria for obtaining a permit. The rules guide the Department in its determination of whether a project's impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it would cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a Natural Resources Protection Act permit that involves a freshwater

wetland alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternative analysis for the proposed project completed by Normandeau Associates and dated July 2012.

The applicant evaluated using single and dual campus alternatives to bring the hospital up to appropriate standards of care, safety, efficiency, convenience, and cost effectiveness. The applicant examined moving all operations back to the State Street campus; however the existing facility on State Street has the deficiencies of an aging facility including: an internal power distribution system that is antiquated, at-load capacity and in need of replacement; piping systems that need replacement; the two primary chillers of the heating, ventilating and air conditioning system need replacement; and the lack of space for parking is a major issue that includes high costs and inconvenience for patients and employees. Therefore, moving back to a single campus on State Street is not a feasible alternative because it will not meet the project purpose based on the expense and the inability to create a state-of-the-art healthcare facility.

The applicant evaluated moving all operation to a third site. A search was conducted for alternative sites in 2001 and 2002 that found no other local site was feasible or appropriate. The relocation of all operations to a third location is considered not practicable because it would not meet the project purpose of having a facility in Portland and the \$90 million invested in the Fore River location could not be recouped which would jeopardize the long-term sustainability of the hospital.

The applicant evaluated maintaining a dual campus, but has found that two campuses perpetuates unfavorable conditions that would render the hospital unsustainable in the long term because of safety issues, operational difficulties, inconvenience, the expenses of duplicated services, bussing between facilities and renovating the State Street facility, and does not meet the project purpose of having a cost-effective, safe, and state-of-the-art healthcare facility.

The applicant evaluated consolidating operations onto the Fore River Campus with the proposed expansion. This would result in a state-of-the-art facility that would be best for healthcare delivery logistics, staff and patient access, reduction in operating costs, increases in staff efficiency, eliminating the need for duplicated services, and could lead to higher employee retention rates. This alternative meets the project purpose, is practicable in terms of cost effectiveness, and provides a state-of-the-art facility.

The applicant evaluated five alternative site layouts for the expanded Fore River campus, which included layouts that partially or completely filled the central wetland. Alternative ONS-3 shown in the project application avoided impacts to the wetland but did not

address current and anticipated future changes in the U.S. healthcare delivery system, including large increases in the amount of outpatient and ambulatory services provided by hospital campuses which would create a need for increased hospital size and more adjacent parking. Therefore, alternative ONS-3 was rejected.

Alternatives ONS-4 thru ONS-7 represented site layouts that minimize impacts to the central wetland, however they result in an unacceptable facility design that significantly limits the hospital's clinical operations. These unacceptable facility designs include congested and unsafe traffic circulation conditions where the Ambulatory Care Center and Emergency Department entrances are immediately adjacent to one another and other traffic circulation problems that result in confusion and congestion problems for incoming patients and visitors. These designs do not provide parking structures that are located in the critically essential location immediately adjacent to the ambulatory care center. These alternatives would also encroach on the wetland. One of the primary functions and values of the wetland is wildlife habitat, and it was recognized that direct encroachment on the wetland, shading of the wetland, and human activities associated with the building in closer proximity to the wetland would likely have a detrimental effect on this wetland function and value. Although these alternatives would have less direct wetland impact than the proposed project, these alternatives were deemed impracticable for the delivery of patient care services and would likely have detrimental effect on the wetland's wildlife functions and values.

Alternative ONS-8 is the basis of the proposed project. This alternative fills the entire central wetland and raises the grades of the site up such that the emergency department entrance and the building expansion entrance are at the same elevation as the entrance of the Phase 1 hospital. This feature is an important design element to the hospital because it reduces patient and visitor navigation issues inside the building. This alternative meets the current standards for hospital design with appropriate adjacencies and colocation of key services; allows physician and staff efficiency because it has inpatient and outpatient services at one facility; it provides parking for both patients and staff adjacent to the hospital; and, provides enough floor space to meet current program objectives. It is the connectedness of the existing and proposed facility and the future expansion potential that makes this alternative the preferred alternative and the applicant stated that this is the only practicable alternative of meeting the project purpose of a state-of-the-art facility.

B. Minimal Alteration. The amount of freshwater wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant examined alternative site layouts for the project and the only site layout that met the overall purpose of the project proposes to fill 3.49 acres of wetland. Other alternative site layouts that had less direct impact to the wetland were reviewed, but they did not meet the project purpose and need and the wetland alterations, although smaller, would most likely compromise the higher functions and values of the wetland. Given the chosen alternative described in Finding 13 A, the amount of alteration cannot be further minimized.

C. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values because the project alters greater than 15,000 square feet of freshwater wetland, which is the threshold over which compensation is generally required. The applicant conducted a wetland mitigation site search and concluded that on-site mitigation was not possible due to space constraints. Although off-site parcels represented viable options for wetland compensation, none of the parcels meet the objectives of compensating for the lost wetland acreage and functions and values within the watershed. The applicant proposes to mitigate for the lost wetland functions and values by making a payment to the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Fund (MNRCF).

The wetland that is proposed to be filled was originally formed as a gravel extraction area that was excavated below the groundwater table. This wetland was used as a wetland preservation area to partially compensate for the 0.91 acre of wetland losses approved in Department Order #L-20775-19-A-N/L-20775-TG-B-N. As part of the wetland compensation package for that permit and to enhance the wildlife habitat at the site, the pond and surrounding wetland was enhanced by the removal of solid wastes (such as trash, white goods, tires, metal, etc.), the water quality of the pond was protected by designing the stormwater management system such that only limited amounts of stormwater were directed to the wetland, and a narrow buffer around the wetland was maintained. The remaining wetland compensation for the 0.91 acre of impact from the initial project was 0.21 acre wetland creation in swales on the west side of the Fore River Parkway. The 0.21 acre of wetlands created as compensation for the initial project will not be affected by the proposed project.

The wetland proposed to be impacted is classified as a palustrine (freshwater) system with the following cover type classes: emergent (PEM1), open water (PUB3/4), forested (PFO1), and shrub wetland (PSS1). The pond is fed by a groundwater discharge that appears to flow year-round; therefore, groundwater recharge/discharge is considered a principle function of the wetland. Small fish have been observed in the pond in the past; this population is likely the remnant from birds or the previous hydrological connections to the Fore River and is supported by the groundwater flows; hence, fish and shellfish habitat is a principle function of the wetland. Sediment/toxicant retention is expected to be one of the principle functions of the wetland because any toxicants and sediments flowing into the wetland from the surrounding uplands would become trapped in the organic rich substrate observed in many areas around the pond. Nutrient removal/retention/transformation is expected to be another principle function of the wetland based on the observation of the density and type of vegetation thriving in the wetland and the presence of organic deposits in the wetland. Floodflow alteration is not a principle function of the wetland. Production export is not considered a principal function either. The wetland does provide food for wildlife. The wetland provides habitat for small fish, invertebrates and amphibian populations, which provides a forage base for secondary and tertiary consumers. Reptiles (turtles) have been observed basking

around the pond. Piscivorous birds, including herons, were observed foraging in and along the pond habitat. Migratory waterfowl, including mallard ducks and black ducks, were observed using the wetland. Although the wetland provides food for the wildlife utilizing the wetland, it does not provide nutrients that are transported out of the wetland. Wildlife habitat is considered to be a principle function of the wetland because of the variety of resident and migratory species present. As noted above, the pond has populations of invertebrates, fish and amphibians that provide a forage base for higher trophic level consumers. The wetlands and adjacent forested upland also support small mammals such as voles, shrews, field mice, and potentially larger mammals such as fox and woodchucks. Uniqueness/heritage value is believed to be present because the central wetland is somewhat unique as the surrounding land is developed and freshwater wetlands are rare on the Portland peninsula.

The wetland compensation required in Department Order #L-20775-19-A-N/L-20775-TG-B-N for 0.70 acre of wetland impacts will be eliminated by the proposed project, plus an additional 3.49 acres of wetland impact requires compensation, therefore the total amount of wetland impact requiring compensation for the project is 4.19 acres. The applicant proposes to make a contribution into the ILF program of the MNRCF in the amount of \$834,156.00. Prior to the start of construction, a cashier's check or bank draft, payable to "Treasurer, State of Maine", with the permit number noted on the check, must be mailed to: ME DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that prior to project construction, the applicant submits the ILF payment as described above.

14. AIR QUALITY:

The applicant has obtained an air emissions license from the Bureau of Air Quality, #A-912-71-A-N, for Phase I of the project. The applicant must amend its air emissions license from the Bureau of Air Quality prior to using any new equipment that requires an air emissions license.

15. ALL OTHER:

All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-20775-19-A-N and #L-20775-TG-B-N, and subsequent orders.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant makes a contribution to the In-Lieu Fee (ILF) program, the wildlife habitat losses are noted on the In Lieu Fee (ILF) Project Data Worksheet as described in Findings 6 and 13, and the Turtle Trapping and Removal plan is implemented prior to construction as described in Finding 6.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that the applicant submits evidence of financial capacity to the BLWQ for review and approval prior to the start of construction as described in Finding 2.

- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.
- D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that the applicant retains the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures; submits a log of inspection reports to the BLWQ for review; submits a copy of an executed long-term maintenance contract for the on-going maintenance of the Filterra®, the underdrained subsurface sand filter, and the StormFilter®; and, disposes of materials removed from the stormwater management systems in compliance with the Maine Solid Waste Management Rules as described in Finding 8.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services.
- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of MERCY HOSPITAL to construct Phase II of the Mercy Hospital Relocation project as described above, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This

License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. The applicant or other responsible party shall, within three months of the expiration of each five-year interval from the date of this Order, submit a report certifying that the items listed in Department Rules, Chapter 500, Appendix B(4) have been completed in accordance with the approved plans.
5. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the BLWQ for review and approval.
6. Prior to occupancy of the new buildings, the applicant shall submit a copy of an executed long-term maintenance contract (minimum of 5 years and renewable) to the BLWQ for the on-going maintenance of the Filterra®, the underdrained subsurface sand filter, and the StormFilter®.
7. Storm sewer grit and sediment materials removed from any parts of the stormwater management system, including conveyance structures, during maintenance activities shall be disposed of in compliance with the Maine Solid Waste Management Rules.
8. The applicant shall retain the design engineer, or another qualified engineer, to oversee the construction of the stormwater management structures according to the details and notes specified on the approved plans. Within thirty days of completion of each stormwater management structure, the applicant shall submit a log of inspection reports detailing the items inspected, photos taken, and the dates of each inspection to the BLWQ for review.
9. Prior to the start of construction, the applicant shall mail or deliver a cashier's check or bank draft in the amount of \$834,156.00, payable to "Treasurer, State of Maine", with the permit number noted on the check; to: ME DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333.
10. Prior to the start of construction, the applicant shall implement the Turtle Trapping and Removal plan.

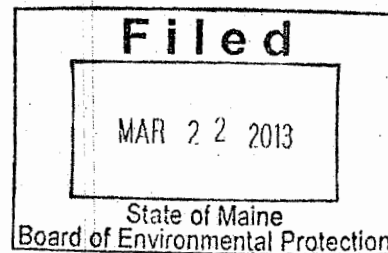
11. All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-20775-19-A-N and #L-20775-TG-B-N, and subsequent orders, and are incorporated herein.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 22 DAY OF March, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kubo for
Patricia W. Aho, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

CGW/L20775TA&UN/ATS#74936&74937

Department of Environmental Protection**SITE LOCATION OF DEVELOPMENT (SITE)****STANDARD CONDITIONS**

- A. **Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.
- B. **Compliance with All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. **Compliance with All Terms and Conditions of Approval.** The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- D. **Advertising.** Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- E. **Transfer of Development.** Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
- F. **Time frame for approvals.** If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- G. **Approval Included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.
- H. **Approval Shown to Contractors.** Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised December 27, 2011



Natural Resource Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S.A. §420-D(8) and is subject to penalties under 38 M.R.S.A. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted **WITH CONDITIONS**, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this

approval with the conditions by the developer, and the owner and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the department.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
 - (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.
 - (c) The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.
- (9) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

November 16, 2005 (revised December 27, 2011)



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P. 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

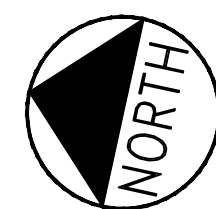
PERMIT LIST FOR MERCY HOSPITAL

AGENCY	PERMIT	DATE
ACOE	Army Corps of Engineers Permit General Permit #200200262 – Approved	04/25/2002
MaineDOT	Traffic Movement Permit – Mercy Health Systems of Maine	05/13/2002
Boston & Maine Corporation Railroad	Engineering Requirements – Proposed Fencing and Drainage – Approved	05/26/2002
City of Portland	Mercy Hospital – Amendment to Contract Zone Agreement Between City of Portland and Mercy Hospital	06/10/2002
Boston & Maine Corporation Railroad	Proposed Utilities and Private Grade Crossing Relocation – Approved	06/24/2002
MaineDEP	Site Location of Development & Natural Resources Protection Act Permit #L-20775-19-A-N & L-20775-TG-B-N – Water Quality Water Quality Certification Mercy Health System of Maine`	06/26/2002
MaineDEP	Site Location of Development Permit #L-20775-19-F-T Transfer Findings of Fact & Order Mercy Hospital Campus	06/27/2003
MaineDEP	Site Location of Development Permit #L-20775-19-G-M – Modification Findings of Fact & Order – Mercy Hospital Campus	06/30/2003
MaineDEP	Site Location of Development Permit & Natural Resources Protection Act Permit # L-20775-19-H-M & L-20775-TG-I-M – Water Quality Certification Modification Mercy Hospital New Hospital Campus	07/22/2004
MaineDEP	Site Location of Development Permit #L-20775-19-J-M Minor Revision/Modification – Mercy Hospital	07/13/2005
MaineDEP	Commissioner’s Certification of Completion of Remedial Actions under a VRAP I-295 Connector Road	12/15/2005
ACOE	Army Corps of Engineers #NAE-2005-3927 Transfer Request to Mercy Hospital	03/07/2006
MaineDOT	Traffic Movement Permit #06-00035-A- M Mercy Hospital Ambulatory Care Unit, Hospital and Medical Offices	03/13/2006
City of Portland	Mercy Hospital Master Plan – Mercy Hospital Development Project – Phase 1 Vicinity of Fore River	08/08/2006
City of Portland	Mercy Hospital – Amendment to Plan (Elevations of Proposed Short Stay Hospital Building)	02/2/2007
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: Modification to Parking Lot Layout (Mercy Hospital south part of site) – Vicinity of Fore River	10/15/2007

AGENCY	PERMIT	DATE
City of Portland	Mercy Hospital – Medical Office Building – Certificate of Occupancy	10/21/2007
MaineDEP	Site Location of Development Act Minor Amendment Permit #L-20775-19-V-M Snow Storage Area	12/18/2007
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: Amendment to Northern Open Space and Realignment of “Marsh Trail” (trail section east of the pond) – Vicinity of Fore River	02/26/2008
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: Reuse of Existing Building for Maintenance and Storage Facility – Vicinity of Fore River	03/25/2008
MaineDEP	Site Location of Development Permit & Natural Resources Protection Act Permit #L-20775-19-P-M & L-20775-2F-Q-N – Activity Adjacent to a Protected Natural Resource Water Quality Certification	05/13/2008
City of Portland	Mercy Hospital Phase 1 – Amendment to Approve Site Plan: Drainage Modifications and Relocation of Marsh Trail (trail section east of pond) – Vicinity of Fore River (201 Fore River Parkway)	08/12/2008
City of Portland	Mercy Hospital Phase 1 – Amendment to Approve Site Plan: Bus Shelter Installation – Vicinity of Fore River (201 Fore River Parkway)	08/13/2008
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: Service Area Gate and Access Area – Vicinity of Fore River (201 Fore River Parkway)	11/21/2008
MaineDEP	Site Location of Development Act Minor Revision Permit #L-20778-19-R-M Contaminated Soil Berms Mercy Hospital	01/12/2009
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: “Berms” and Regrading Activity Near Maintenance Building (south part of site) – Vicinity of Fore River (201 Fore River Parkway)	01/30/2009
City of Portland	Mercy Hospital – Amendment to Approved Site Plan: Southerly Driveway Modifications to Allow Left Turn – Vicinity of 175 Fore River Parkway	8/3/2010
MaineDEP	Commissioner’s Certification of Completion of Remedial Actions under a VRAP Mercy Hospital Fore River Campus	12/12/2011
MaineDEP	Site Location of Development Act & Natural Resources Protection Act Permit #L-20775-18-T-A & L-20775-TG-U-N Tier 3 Wetland Alteration Water Quality Certification Phase II Relocation Project	03/22/2013
ACOE	Army Corps of Engineers Permit #NAE-2012-00084	04/10/2013

AGENCY	PERMIT	DATE
MaineDEP	Site Location of Development Act Minor Revision Permit #L-20775-19-V-M Snow Storage Area	12/20/2013

R:\2149.01\Permit List.docx



CUMBERLAND COUNTY
CORRECTIONAL FACILITY

FUTURE
OUTPARCEL

FUTURE
EXPANSION
36,000 s.f.

SERVICE

58,000 s.f.

89,335 s.f.

PARKING: 398 SPACES

OPEN
SPACE

FUTURE
OUTPARCEL

250' SHORELAND ZONE
(from the high water line)

PROPOSED
INTERCONNECTOR

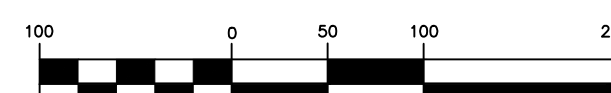
PARKING: 753 SPACES

OPEN
SPACE

FORE RIVER

NOTE WELL:
THIS CONCEPT DRAWING WAS COMPLETED IN SUPPORT OF THE MERCY CONTRACT ZONING AGREEMENT WITH THE CITY OF PORTLAND. THE CONCEPT MASTER PLAN IS REPRESENTATIVE ONLY AND IS SUBJECT TO PROGRAMMING MODIFICATIONS AND MUST RECEIVE SITE PLAN APPROVAL BY THE PORTLAND PLANNING AUTHORITY. ALL LAYOUT MEASURES INCLUDING BUILDING LOCATION, PARKING, ACCESS ROUTES AND LANDSCAPING ARE SUBJECT TO CHANGE BASED ON MERCY'S ONGOING SCHEMATIC DESIGN DEVELOPMENT.

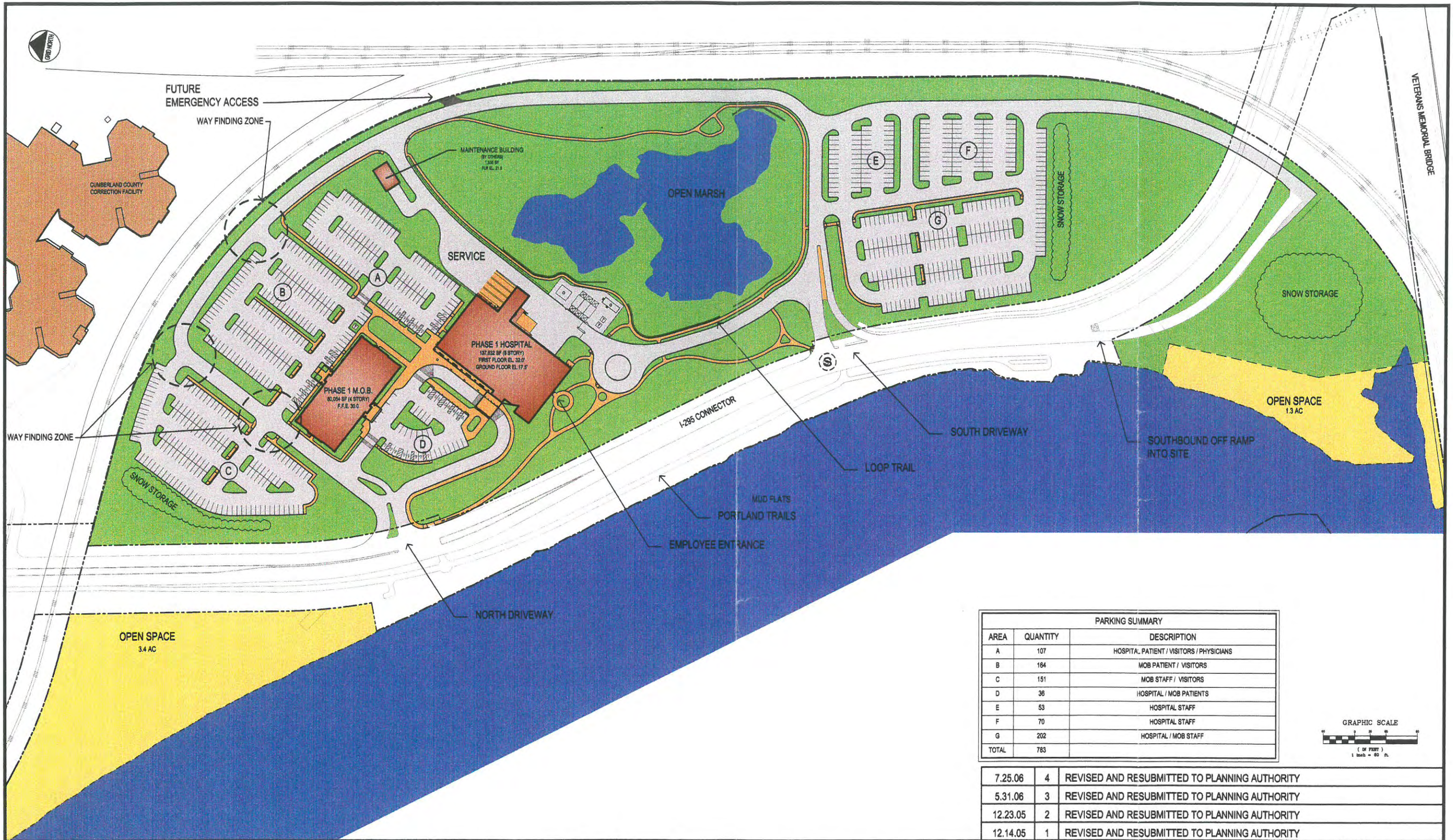
GRAPHIC SCALE



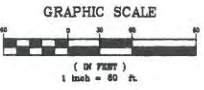
(IN FEET)
1 inch = 100 ft.

				PROJECT	MERCY HOSPITAL FORE RIVER PROJECT	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 (207) 775-1121 DHA@MAINE.RR.COM
				SHEET TITLE	CONCEPT MASTER PLAN	
				CLIENT	MERCY HOSPITAL	
3	9/01/05	CONCEPT MASTER PLAN SUBMITTED TO PLANNING AUTHORITY				DRAWN: KEW DATE: OCT, 2001
2	10/19/01	REVISED CONCEPT; RESUBMITTED TO PLANNING AUTHORITY				DESIGNED: SRB SCALE: 1"=100'
1	9/21/01	SUBMITTED TO PORTLAND PLANNING AUTHORITY				CHECKED: SRB JOB NO. 2149
REV	DATE	DESCRIPTION	P.E.			FILE NAME: 2149-OPTIONS
		REVISIONS	LIC. #			SHEET 5A

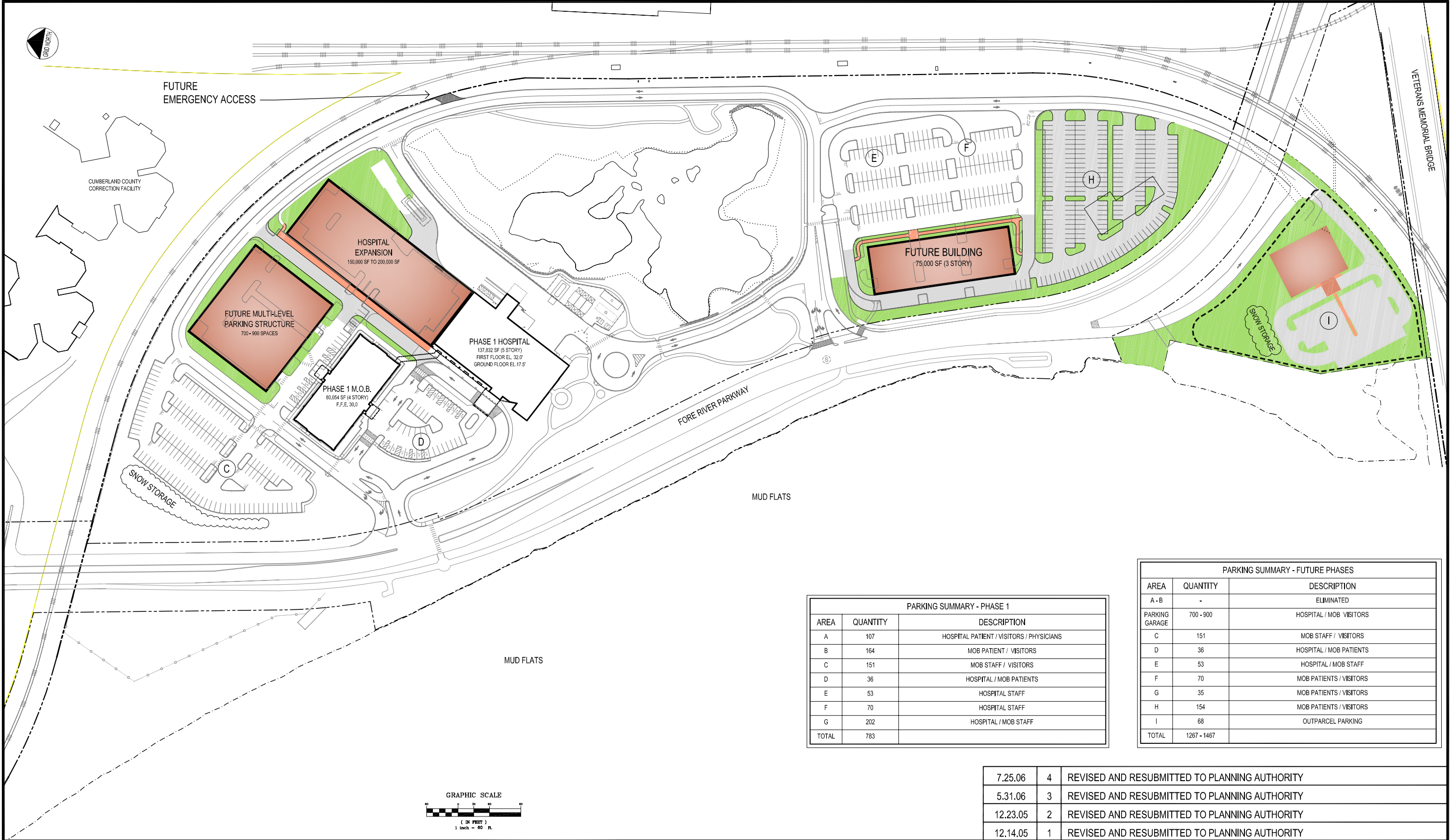
2006 MASTER PLAN



PARKING SUMMARY		
AREA	QUANTITY	DESCRIPTION
A	107	HOSPITAL PATIENT / VISITORS / PHYSICIANS
B	164	MOB PATIENT / VISITORS
C	151	MOB STAFF / VISITORS
D	36	HOSPITAL / MOB PATIENTS
E	53	HOSPITAL STAFF
F	70	HOSPITAL STAFF
G	202	HOSPITAL / MOB STAFF
TOTAL	783	



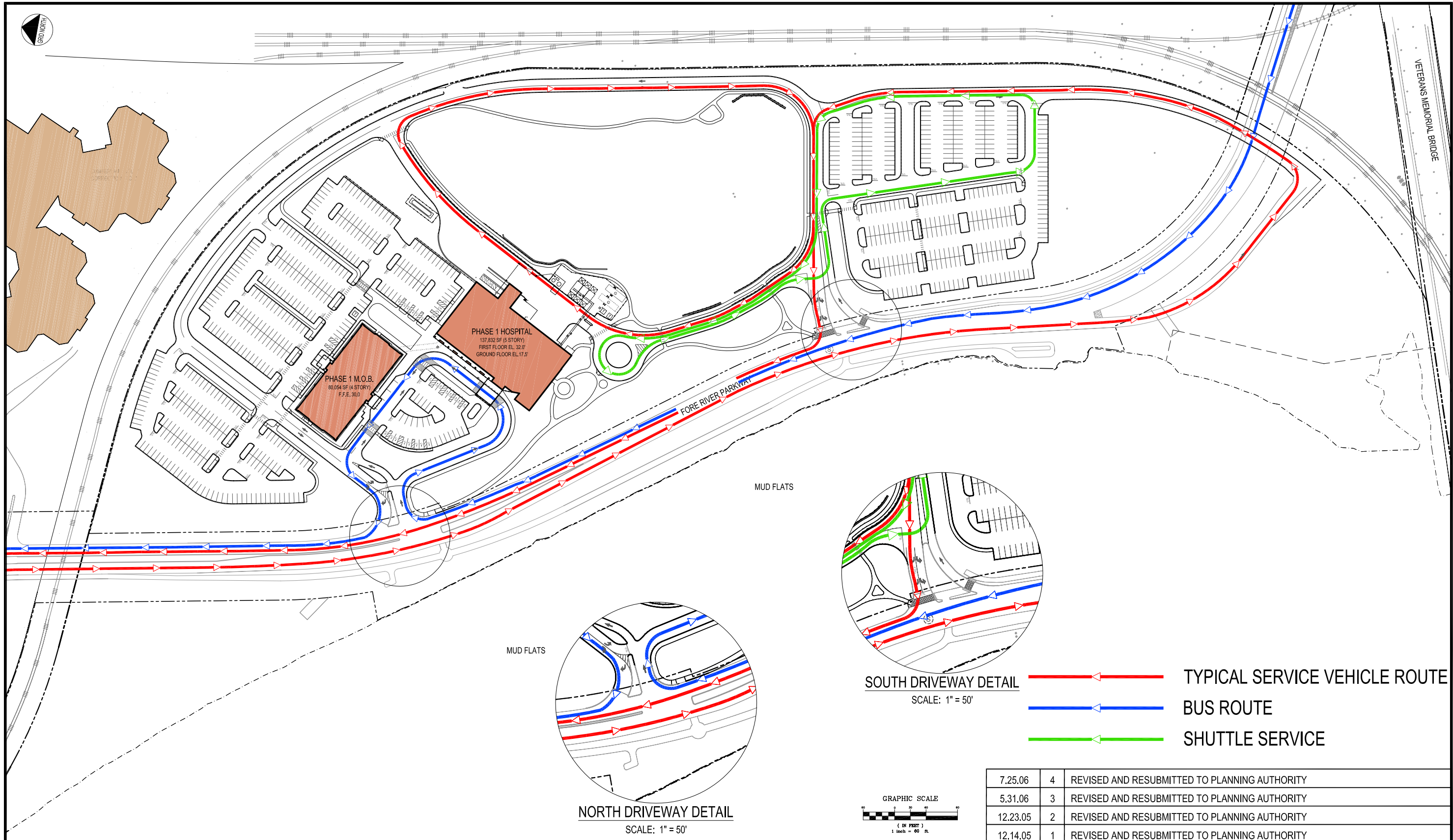
7.25.06	4	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
5.31.06	3	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.23.05	2	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.14.05	1	REVISED AND RESUBMITTED TO PLANNING AUTHORITY

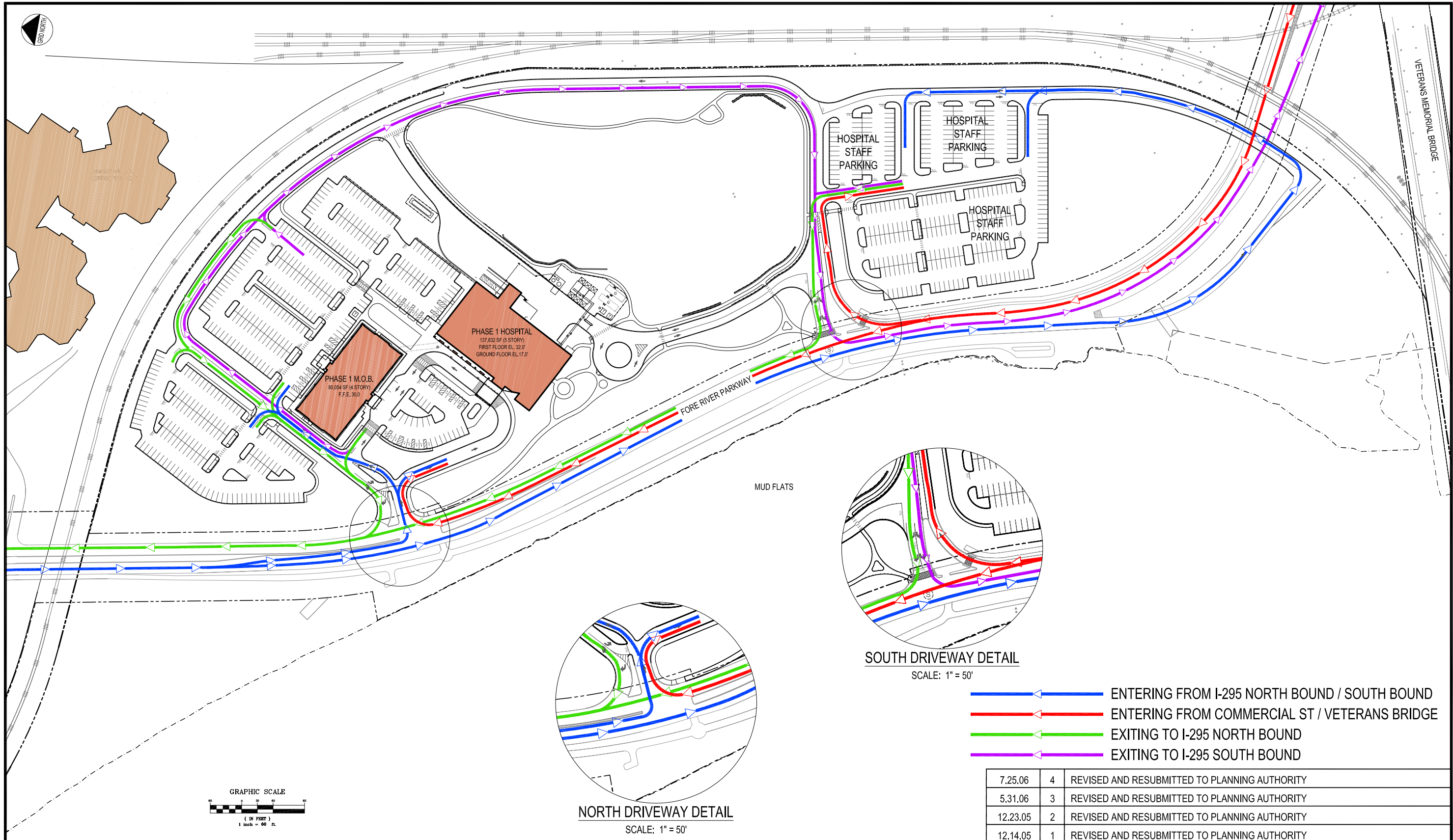


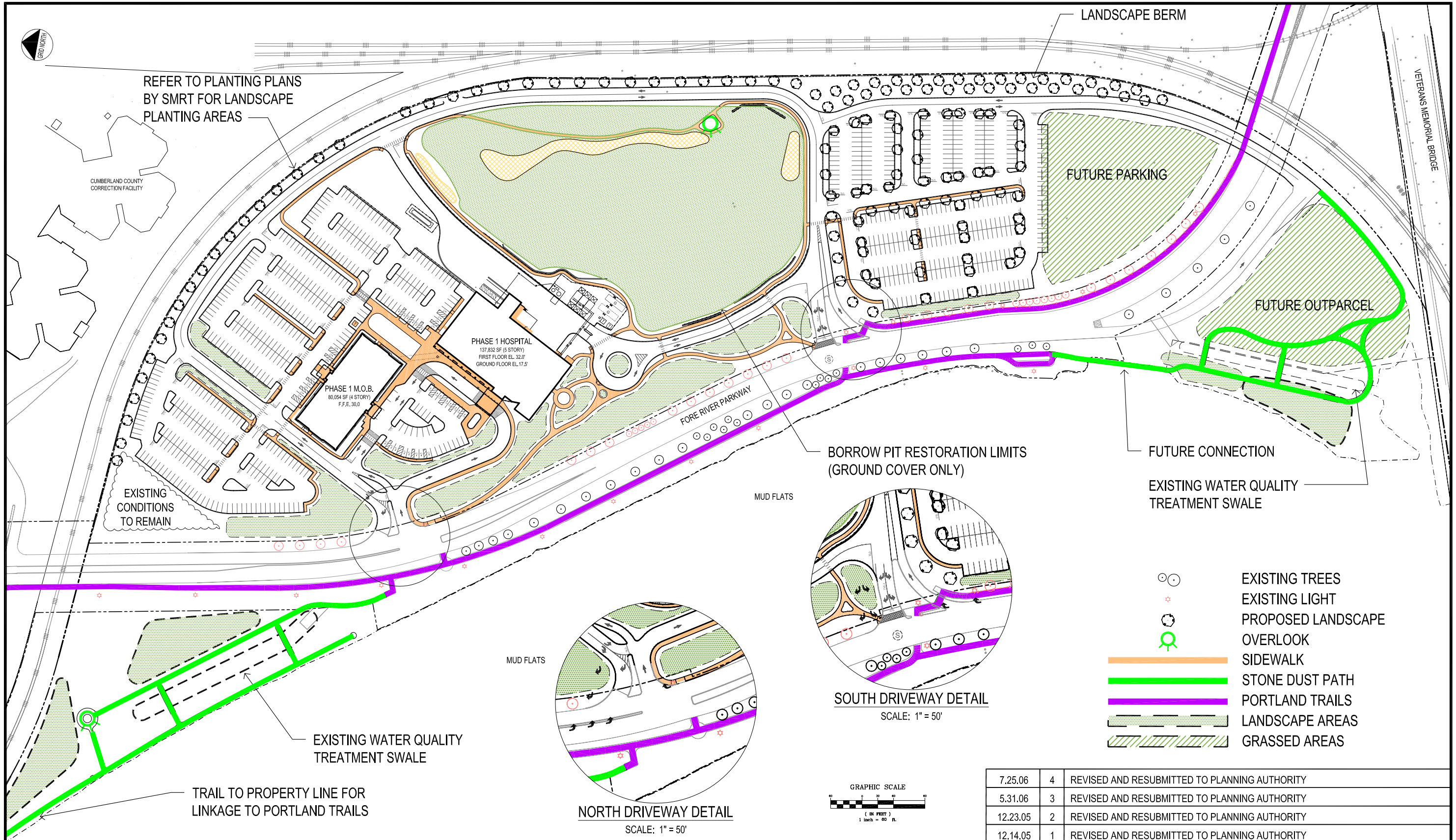
PARKING SUMMARY - PHASE 1		
AREA	QUANTITY	DESCRIPTION
A	107	HOSPITAL PATIENT / VISITORS / PHYSICIANS
B	164	MOB PATIENT / VISITORS
C	151	MOB STAFF / VISITORS
D	36	HOSPITAL / MOB PATIENTS
E	53	HOSPITAL STAFF
F	70	HOSPITAL STAFF
G	202	HOSPITAL / MOB STAFF
TOTAL	783	

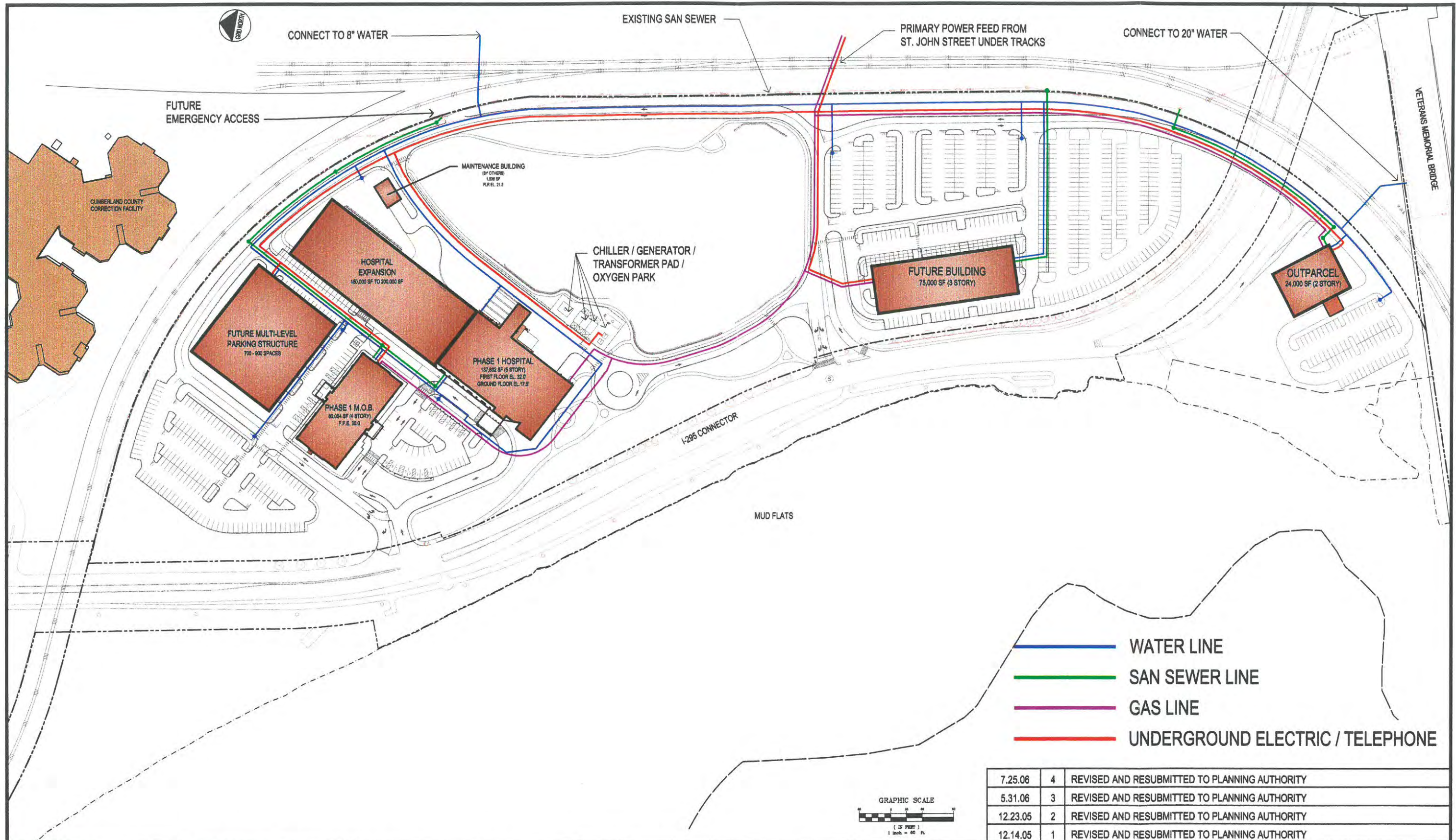
PARKING SUMMARY - FUTURE PHASES		
AREA	QUANTITY	DESCRIPTION
A - B	-	ELIMINATED
PARKING GARAGE	700 - 900	HOSPITAL / MOB VISITORS
C	151	MOB STAFF / VISITORS
D	36	HOSPITAL / MOB PATIENTS
E	53	HOSPITAL / MOB STAFF
F	70	MOB PATIENTS / VISITORS
G	35	MOB PATIENTS / VISITORS
H	154	MOB PATIENTS / VISITORS
I	68	OUTPARCEL PARKING
TOTAL	1267 - 1467	

7.25.06	4	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
5.31.06	3	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.23.05	2	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.14.05	1	REVISED AND RESUBMITTED TO PLANNING AUTHORITY







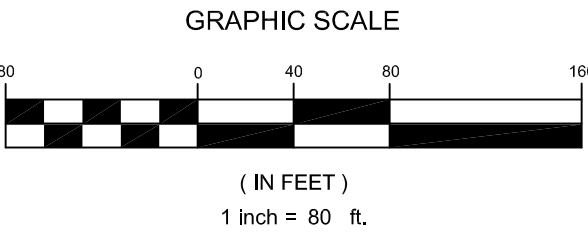


7.25.06	4	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
5.31.06	3	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.23.05	2	REVISED AND RESUBMITTED TO PLANNING AUTHORITY
12.14.05	1	REVISED AND RESUBMITTED TO PLANNING AUTHORITY

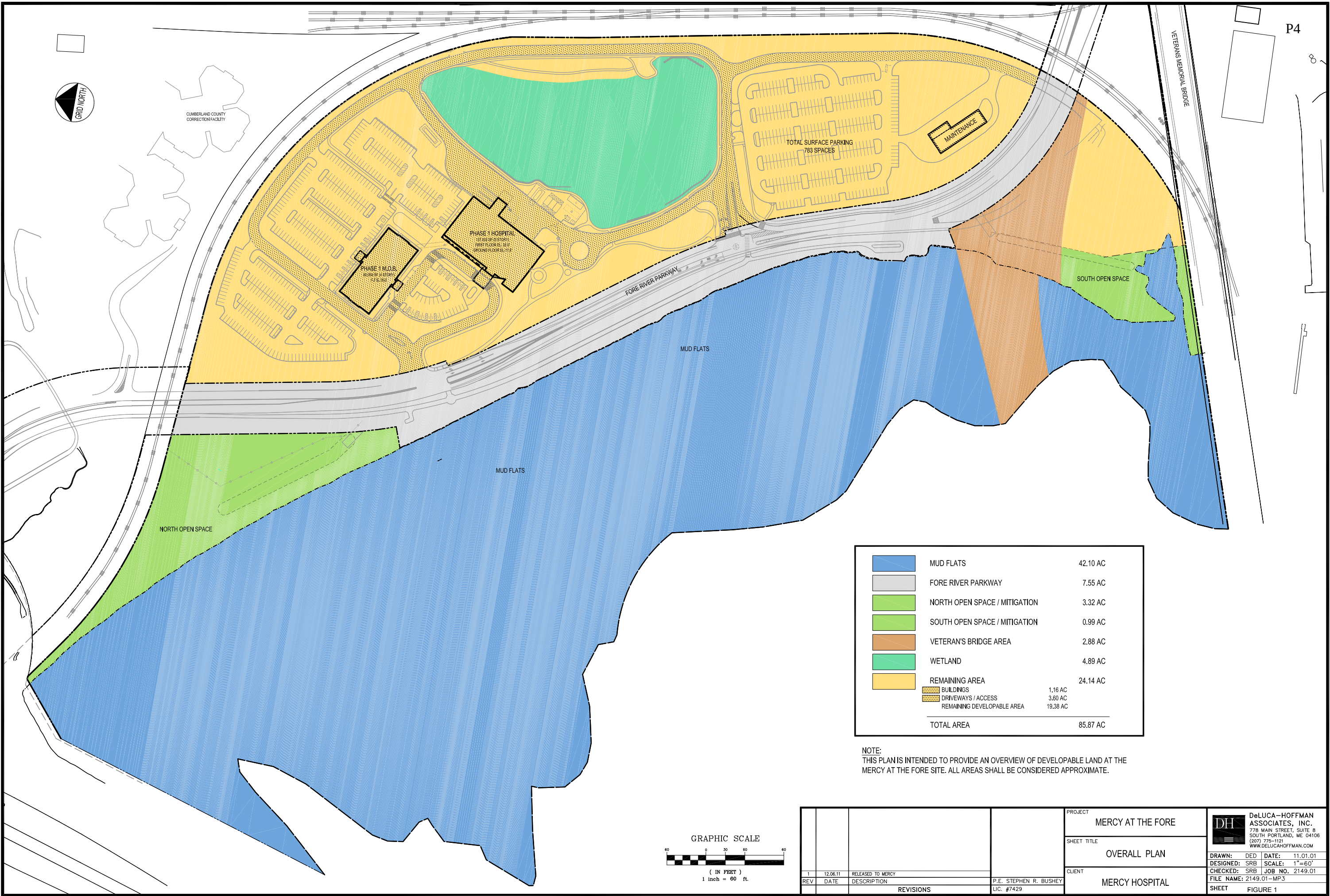


NOTE
INFORMATION ON THIS PLAN WAS COMPILED OF SEVERAL DOCUMENTS.
AS-BUILT PLANS BY SHAW BROS. DATED 2008, SURVEY PLAN PREPARED BY
OWEN HASKELL DATED 2001, CONSTRUCTION PLANS PREPARED BY
DELUCA-HOFFMAN ASSOCIATES DATED SEPTEMBER 2006. EXACT LOCATION
OF UTILITIES SHALL BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION

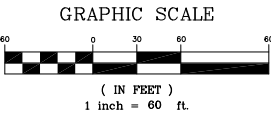


				PROJECT		MERCY AT THE FORE MASTER PLAN		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELOUCHAHOFFMAN.COM		
				SHEET TITLE		EXISTING CONDITIONS				
				CLIENT		MERCY HOSPITAL				
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		P.E. STEPHEN R. BUSHEY		LIC. # 7429		DRAWN: DED	DED	DATE: MAY 2012
REV	DATE	DESCRIPTION						DESIGNED: BEK	BEK	SCALE: 1" = 80'
								CHECKED: SRB	SRB	JOB NO. 2149.08
		REVISIONS						FILE NAME: 2149.08-EX		
								SHEET	PLATE 1	

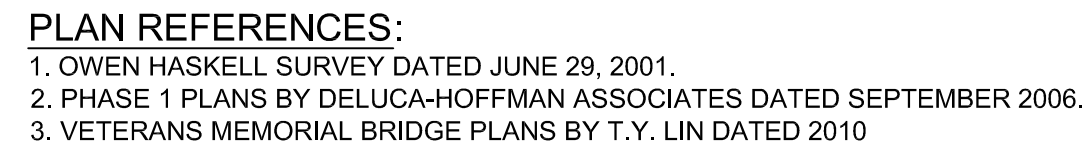


	MUD FLATS	42.10 AC
	FORE RIVER PARKWAY	7.55 AC
	NORTH OPEN SPACE / MITIGATION	3.32 AC
	SOUTH OPEN SPACE / MITIGATION	0.99 AC
	VETERAN'S BRIDGE AREA	2.88 AC
	WETLAND	4.89 AC
	REMAINING AREA	24.14 AC
	BUILDINGS	1.16 AC
	DRIVEWAYS / ACCESS	3.60 AC
	REMAINING DEVELOPABLE AREA	19.38 AC
TOTAL AREA		85.87 AC

NOTE:
THIS PLAN IS INTENDED TO PROVIDE AN OVERVIEW OF DEVELOPABLE LAND AT THE
MERCY AT THE FORE SITE. ALL AREAS SHALL BE CONSIDERED APPROXIMATE.

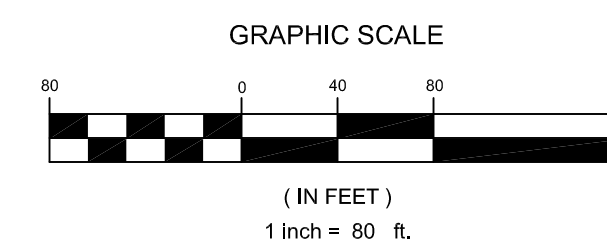


			PROJECT MERCY AT THE FORE SHEET TITLE OVERALL PLAN CLIENT MERCY HOSPITAL	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 (207) 775-1121 WWW.DELUCAHOFFMAN.COM <table><tr><td>DRAWN:</td><td>DED</td><td>DATE:</td><td>11.01.01</td></tr><tr><td>DESIGNED:</td><td>SRB</td><td>SCALE:</td><td>1"=60'</td></tr><tr><td>CHECKED:</td><td>SRB</td><td>JOB NO.</td><td>2149.01</td></tr><tr><td colspan="4">FILE NAME: 2149.01-MP3</td></tr><tr><td colspan="2">SHEET</td><td colspan="2">FIGURE 1</td></tr></table>	DRAWN:	DED	DATE:	11.01.01	DESIGNED:	SRB	SCALE:	1"=60'	CHECKED:	SRB	JOB NO.	2149.01	FILE NAME: 2149.01-MP3				SHEET		FIGURE 1	
DRAWN:	DED	DATE:			11.01.01																			
DESIGNED:	SRB	SCALE:			1"=60'																			
CHECKED:	SRB	JOB NO.			2149.01																			
FILE NAME: 2149.01-MP3																								
SHEET		FIGURE 1																						
1	12.06.11	RELEASED TO MERCY																						
REV	DATE	DESCRIPTION																						
		REVISIONS																						
		P.E. STEPHEN R. BUSHEY LIC. #7429																						



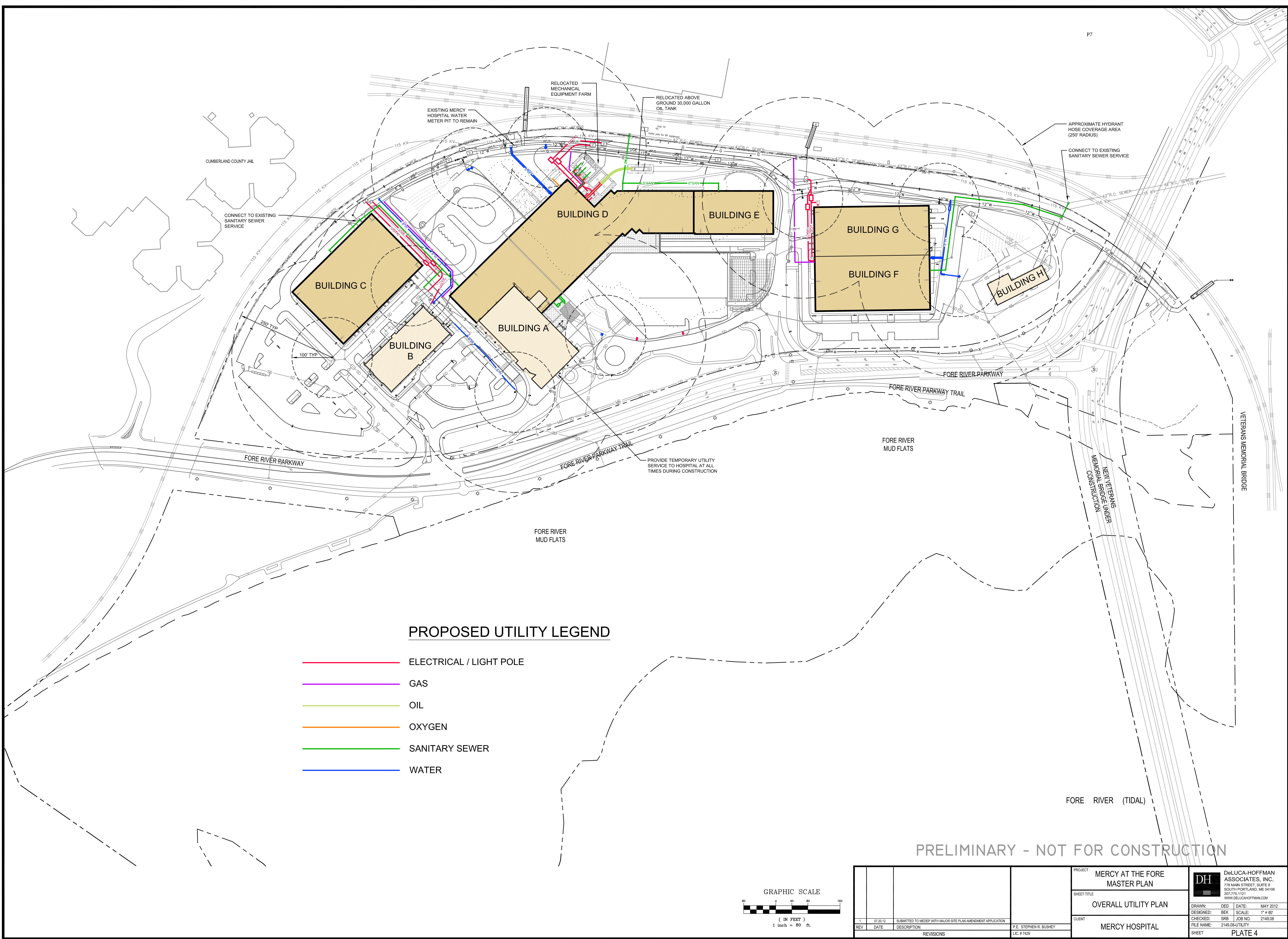
PARKING SUMMARY		
PARKING REQUIREMENTS		
HOSPITAL - 1 SPACE / 500 S.F.		
MEDICAL - 1 SPACE / 400 S.F.		
	GROSS AREA	REQUIRED SPACES
HOSPITAL	387,632	776
MEDICAL	320,000	800
TOTAL	707,832	1576
PROVIDED SPACES		
AREA	EXISTING	PROPOSED MASTER PLAN
NORTH	443	1267
SOUTH	310	523
TOTAL	753	1790

BUILDING SUMMARY			
BUILDING	USE	GROSS S.F.	FOOTPRINT S.F.
A	EXISTING HOSPITAL	137,832	37,566
B	EXISTING MEDICAL OFFICE BUILDING	80,000	20,014
C	FUTURE PARKING GARAGE	N/A	N/A
D	FUTURE HOSPITAL / AMBULATORY CARE CENTER EXPANSION	322,000	116,980
E	FUTURE MEDICAL OFFICE BUILDING	60,000	15,000
F	FUTURE MEDICAL OFFICE BUILDING	108,000	40,000
G	FUTURE PARKING GARAGE	N/A	N/A
H	EXISTING MAINTENANCE FACILITY	7,016	7,016



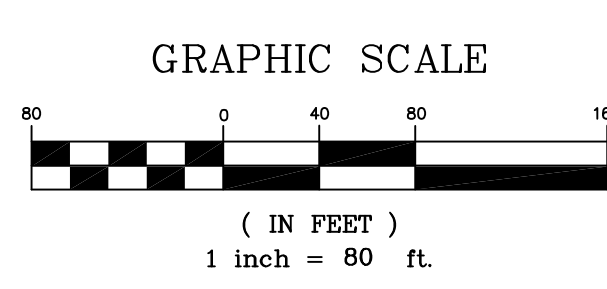
PRELIMINARY - NOT FOR CONSTRUCTION

			PROJECT		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MARK STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM	
			SHEET TITLE		MERCY AT THE FORE MASTER PLAN OVERALL SITE PLAN	
			CLIENT		MERCY HOSPITAL	
1 07.20.12 SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION			P.E. STEPHEN R. BUSHEY		DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 80' CHECKED: SRB JOB NO. 2149.08	
REV DATE DESCRIPTION			REVISIONS		FILE NAME: 2149.08-SITE LAYOUT SHEET	
			LIC. # 7429		PLATE 2	



PROPOSED UTILITY LEGEND

- ELECTRICAL / LIGHT POLE
- GAS
- OIL
- OXYGEN
- SANITARY SEWER
- WATER



PRELIMINARY - NOT FOR CONSTRUCTION

			PROJECT MERCY AT THE FORE MASTER PLAN		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 HARRIS STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1112 WWW.DELUCAHOFFMAN.COM
			SHEET TITLE OVERALL UTILITY PLAN		
			CLIENT MERCY HOSPITAL		
REVISIONS			P.E. STEPHEN R. BUSHEY LIC. # 7429		
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION			
REV	DATE	DESCRIPTION			

SITE DEVELOPMENT PLANS

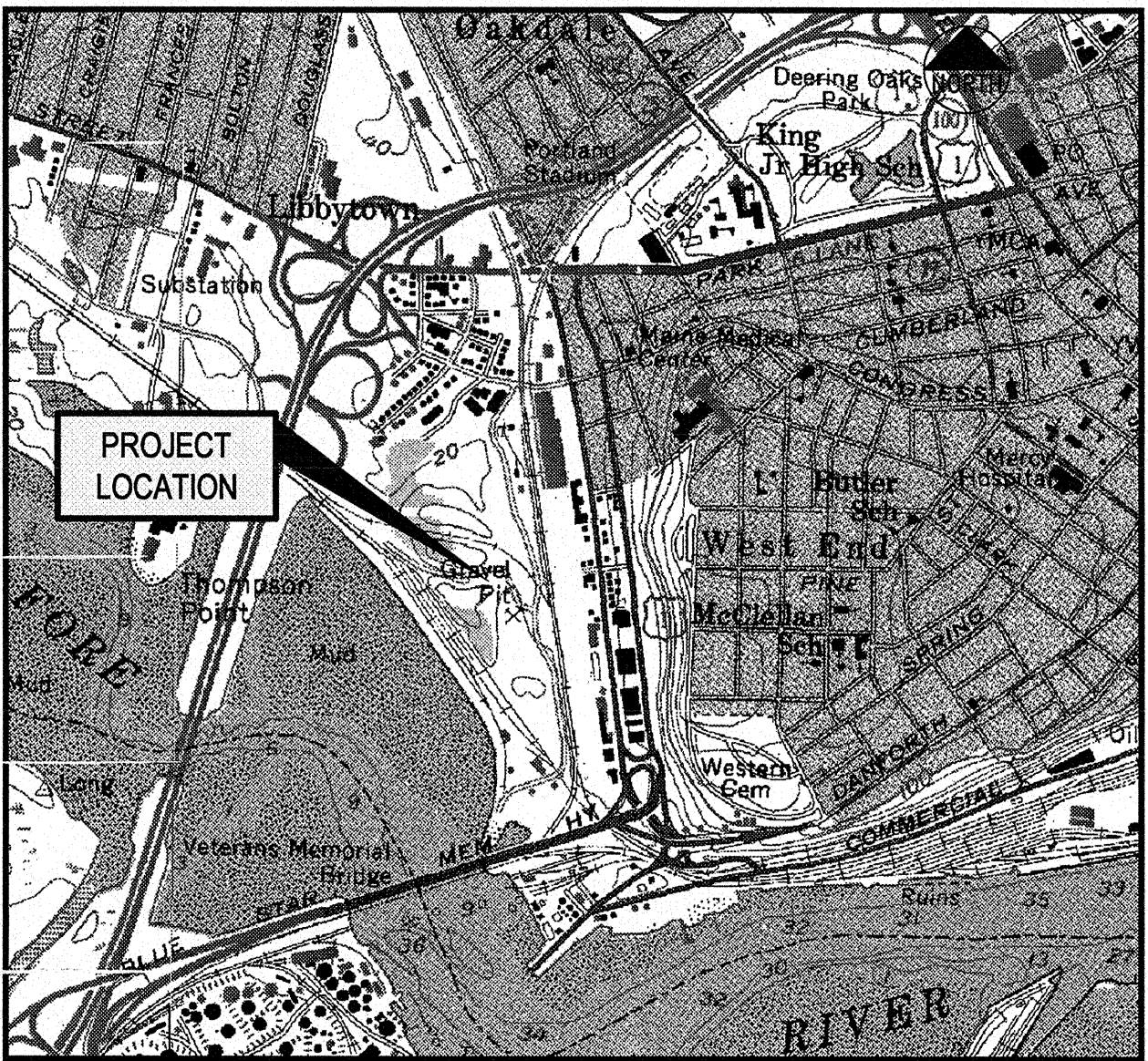
FOR

MERCY HOSPITAL

FORE RIVER HOSPITAL RELOCATION PROJECT

AMENDED MASTER PLAN / PHASE II EXPANSION

PORTLAND, MAINE



LOCATION MAP
N.T.S.

OWNER	TAX MAP-BLOCK-LOT NUMBER
MERCY HOSPITAL	73-A-1
MERCY HOSPITAL	73-B-2 (MUD FLATS)
MERCY HOSPITAL	73-B-7
MERCY HOSPITAL	74-A-1
MERCY HOSPITAL	74-A-2
MERCY HOSPITAL	74-B-3 (MUD FLATS)
MERCY HOSPITAL	74-B-11
MERCY HOSPITAL	74-B-12
MERCY HOSPITAL	75-B-30 (MUD FLATS)
MERCY HOSPITAL	74A-A-1 (MUD FLATS)
MERCY HOSPITAL	74A-A-2 (MUD FLATS)
MERCY HOSPITAL	75-A-3
MERCY HOSPITAL	75-B-4
MERCY HOSPITAL	75A-A-1 (MUD FLATS)
MERCY HOSPITAL	75A-A-17
MERCY HOSPITAL	76-B-33
MERCY HOSPITAL	76A-B-1 (MUD FLATS)
MERCY HOSPITAL	76A-B-2

CURRENT OWNER / APPLICANT

MERCY HOSPITAL
144 STATE STREET
PORTLAND, MAINE 04101
CONTACT: ROBERT NUTTER
V.P. HUMAN RESOURCES AND SUPPORT SERVICES
(207) 879-3000

JULY 2012

PERMITTING DOCUMENTS - MEDEP MAJOR PROJECT AMENDMENT

INDEX

C-1.0	COVER SHEET
C-1.1	GENERAL NOTES AND LEGEND
C-2.0A	BOUNDARY SURVEY - 1 OF 2
C-2.0B	BOUNDARY SURVEY - 2 OF 2
C-2.1	OVERALL EXISTING CONDITIONS PLAN
C-2.2	DEMOLITION AND REMOVALS PLAN
C-3.0	OVERALL SITE PLAN
C-3.1	SITE LAYOUT PLAN NORTH
C-3.2	SITE LAYOUT PLAN SOUTH
C-4.0	OVERALL GRADING AND DRAINAGE PLAN
C-4.1	GRADING PLAN NORTH
C-4.2	GRADING PLAN SOUTH
C-4.3	SITE LAYOUT AND GRADING PLAN OF ELEVATED PARKING DECK LEVEL 1
C-4.4	STORMWATER MANAGEMENT PLAN NORTH
C-4.5	STORMWATER MANAGEMENT PLAN SOUTH
C-4.6	STORMWATER MANAGEMENT PLAN - SUBSURFACE SAND FILTER
C-5.0	EROSION AND SEDIMENT CONTROL PLAN NORTH
C-5.1	EROSION AND SEDIMENT CONTROL PLAN SOUTH
C-5.2	INTERIM PHASE 2A PLAN
C-6.0	OVERALL UTILITY PLAN
C-6.1	UTILITY PLAN NORTH
C-6.2	UTILITY PLAN SOUTH
C-7.0	STORMWATER DETAILS SUBSURFACE SAND FILTER
C-7.1	STORMWATER DETAILS STORMTECH CHAMBER STORAGE DETAILS
C-7.2	STORMWATER DETAILS UNDERDRAINED GRASSED SOIL FILTER
C-7.3	STORMWATER DETAILS UNDERDRAINED BIORETENTION CELL
C-7.4	STORMWATER DETAILS FILTERRA UNITS
C-7.5	STORMWATER DETAILS STORM FILTER TREATMENT UNITS
C-8.0	EROSION AND SEDIMENT CONTROL DETAILS
C-8.1	EROSION AND SEDIMENT CONTROL DETAILS
C-8.2	EROSION AND SEDIMENT CONTROL DETAILS
C-9.0	CURRENT CONDITIONS WATERSHED MAP
C-9.1	POST DEVELOPMENT WATERSHED MAP
C-10.0	SITE SECTIONS

UTILITIES

WATER:
PORTLAND WATER DISTRICT
22 DOUGLAS STREET
P.O. BOX 3553
PORTLAND, MAINE 04104
207.761.8310
CONTACT: RICO SPUGNARDI

SEWER:
CITY OF PORTLAND
PUBLIC SERVICES DIVISION
55 PORTLAND STREET
PORTLAND, MAINE 04102
207.874.8850
CONTACT: DAVID MARGOLIS-PINEO, DEPUTY CITY ENGINEER

ELECTRIC:
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
207.842.2367
CONTACT: JAMIE COUGH

TELEPHONE:
FAIRPOINT COMMUNICATIONS
5 DAVIS HILL FARM ROAD
PORTLAND, MAINE 04103
207.797.1119
CONTACT: SUE SERRETTE

NATURAL GAS:
NORTHERN UTILITIES / UNITIL
1075 FOREST AVENUE
PORTLAND, MAINE 04103
207.797.8002, EXT. 6220
CONTACT: MIKE SMITH
OR
BRAD BUZZELL
252.0907 (CELL)

DIG SAFE:
CALL BEFORE YOU DIG
888.344.7233

PERMITS / APPROVALS

TYPE:
LOCAL
SITE PLAN PERMIT:

GOVERNING BODY:

CITY OF PORTLAND PLANNING AUTHORITY
CITY HALL, CONGRESS STREET
PORTLAND, MAINE 04103
207.874.8689
CONTACT: BARBARA BARHYDT

CITY OF PORTLAND CODE ENFORCEMENT OFFICE
CITY HALL, CONGRESS STREET
PORTLAND, MAINE 04103
207.874.8900

STATUS/DATE ISSUED:

MASTER PLAN / CONTRACT ZONE AMENDMENT
TO BE COMPLETED SUMMER /FALL 2012

BUILDING PERMIT:

STATE
MAINE DEP SITE LOCATION OF
DEVELOPMENT ACT PERMIT:

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
312 CANCO ROAD
PORTLAND, MAINE 04103
207.822.6300
CONTACT: CHRISTINE WOODRUFF

PERMIT ORDER
L-20775-19-AN
L-20775-TG-B-N
THRU L-20775-19-O-A

MAINE DEP NATURAL RESOURCE
PROTECTION ACT (NRPA) PERMIT:

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
312 CANCO ROAD
PORTLAND, MAINE 04103
207.822.6300
CONTACT: CHRISTINE WOODRUFF

L-20775-TG-B-N

UTILITY OPENING PERMITS:

CITY OF PORTLAND PUBLIC SERVICES DIVISION
55 PORTLAND STREET
PORTLAND, ME 04102

TO BE DETERMINED

MAINE DOT TRAFFIC PERMIT:

MAINE DEPARTMENT OF TRANSPORTATION
DIVISION 6 OFFICE
PLEASANT HILL ROAD
SCARBOROUGH, MAINE 04074
P.O. BOX 1904
PORTLAND, MAINE 04104
CONTACT: BRIAN KEEZER

TO BE FILED AT A LATER DATE

MAINE VOLUNTARY RESPONSE
ACTION PLAN (VRAP):

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF REMEDIATION AND WASTE MANAGEMENT
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
ATTN: NICHOLAS HODGKINS
207.623.8367

CERTIFICATE OF COMPLETION FILED
AND RECORDED

FEDERAL
NPDES PERMIT:

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JFK FEDERAL BUILDING, ROOM 2209
BOSTON, MASSACHUSETTS 02203-2211

ARMY CORPS OF ENGINEERS
SECTION 404 PERMIT

U.S.ARMY CORPS OF ENGINEERS
RR2 BOX 1855
MANCHESTER, MAINE 04351
207.623.8367
ATTENTION: JAY CLEMENT

CORPS PGPID #02-046

CONSULTANT LIST

CIVIL ENGINEER:
DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
207.775.1121
CONTACT: STEPHEN BUSHEY
www.delucahoffman.com

ARCHITECT:
SMRT
144 FORE STREET
P.O. BOX 618
PORTLAND, MAINE 04104
207.772.3846
CONTACT: ELLEN BELKNAP
www.smrtinc.com

SURVEYOR:
Owen Haskell, Inc.
390 U.S. ROUTE 1, SUITE 10
FALMOUTH, MAINE 04105
207.774.0424
CONTACT: JOHN SWAN
www.owenhaskell.com

WETLAND CONSULTANT:
Normandeau Associates
8 FUNDY ROAD
FALMOUTH, MAINE 04105
207.797.7717
CONTACT: MARCIA BOWEN / IAN BROADWATER
www.normandeau.com

GEOTECHNICAL ENGINEER:
Haley and Aldrich, Inc.
75 WASHINGTON AVENUE, SUITE 203
PORTLAND, MAINE 04101
207.482.4600
CONTACT: WAYNE CHADBOURNE
www.haleyaldrich.com

ENVIRONMENTAL ENGINEER:
Hoffman Engineering, Inc.
640 TEN ROD ROAD
NORTH KINGSTOWN, RHODE ISLAND 02852
401.294.9032
CONTACT: BOB HOFFMAN

PROJECT CONSULTANT:
Tewhey Associates
P.O. BOX 238
GORHAM, MAINE 04038-0238
207.839.4261
CONTACT: JOHN TEWHEY

PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

						PROJECT MERCY AT THE FORE MASTER PLAN	DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM
						SHEET TITLE COVER SHEET	
2	10.23.12	REVISED SUBSURFACE SAND FILTER LAYOUT AND RESUBMITTED TO MEDEP				CLIENT MERCY HOSPITAL	DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: N.T.S. CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-COV SHEET C-1.0
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION					
REV	DATE	DESCRIPTION			P.E. STEPHEN R. BUSHEY LIC. # 7429		
REVISIONS							

GENERAL NOTES:

1.

THE CONTRACTOR SHALL REFER TO THE PROJECT MANUAL FOR CONSTRUCTION SPECIFICATIONS AND BIDDING PROCEDURES.
2.

THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE U.S. DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, LOCAL UTILITY COMPANIES AND THE CITY OF PORTLAND.
3.

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCE, PAVING, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS. ENTRANCES IN MOST LOCATIONS REQUIRE STRUCTURAL SLABS. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR INFORMATION ON THE STRUCTURAL SLAB ENTRANCES.
4.

ALL REQUIRED AND NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSIONS AND THE FINAL SERVICE CONNECTIONS.
5.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
6.

MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE APPLICANT AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER, THEIR REPRESENTATIVES, OR THE CITY, AT NO ADDITIONAL COST TO THE OWNER.
7.

ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
8.

ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE PROJECT SPECIFICATIONS, THE CITY OF PORTLAND AND SERVING UTILITY REQUIREMENTS, IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SHALL APPLY AT NO EXTRA COST TO THE OWNER.
9.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS THROUGHOUT THE PROJECT AND PROVIDING THE OWNER WITH A SET OF THE FINAL RECORD DRAWINGS WHEN THE PROJECT IS COMPLETE.
10.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS, SIGNAGE AND INCIDENTALS TO MAINTAIN SAFE VEHICLE AND PEDESTRIAN ACCESS THROUGH OUT THE LIFE OF THE PROJECT.

SITE LAYOUT NOTES:

1.

ALL HANDICAP PARKING SPACES ARE TO RECEIVE HANDICAP SIGNS AND PAVEMENT MARKINGS AS ILLUSTRATED ON THE DETAIL SHEETS.
2.

BITUMINOUS CONCRETE CURB AND GRANITE CURB SHALL MEET THE REQUIREMENTS OF MDOT 702.01, 703.07, AND 609.04.
3.

ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR THE FACE OF THE BUILDING.
4.

EXCEPT WHERE INDICATED OTHERWISE, THE PAVEMENT IS TO BE STANDARD DUTY PAVEMENT. SEE DRAWINGS C-3.1 AND C-3.2 FOR PAVEMENT TYPE.
5.

ALL TRAFFIC CONTROL SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS AND STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITIONS AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.
6.

STRIPE PARKING AREAS, DRIVES AND ROADWAY AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, CROSSWALKS, HANDICAP SYMBOLS, PAINTED ISLANDS AND FIRE LANES, (ALL MARKINGS EXCEPT MEDIAN ISLANDS AND CENTERLINES TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT.) ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE 'F'. MEDIAN ISLANDS AND CENTERLINES TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT.
7.

SEE DETAILS FOR PARKING STALL DIMENSIONS, HANDICAP SYMBOLS, SIGNS AND SIGN POSTS.
8.

STOP BARS SHALL BE 12" WIDE.
9.

PAINTED ISLANDS SHALL BE 4" WIDE DIAGONAL LINES @ 3'-0" O.C. BORDERED BY 4" WIDE LINES.

GRADING & DRAINAGE NOTES:

1.

ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n = 0.013 OR LESS.
2.

PROVIDE TURF REINFORCEMENT IN AREAS INDICATED ON THE PLANS.
3.

AN "AS-BUILT" CERTIFICATION OF THE STORMWATER DRAINAGE SYSTEM BY A REGISTERED ENGINEER IS REQUIRED PRIOR TO THE OWNER ACCEPTING THE BUILDING AND PROPERTY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ANY DEVIATION FROM THE PLANS MAY DELAY THE ACCEPTANCE OF THE PROJECT.
4.

A DETAILED O&M MANUAL FOR STORMWATER MANAGEMENT SYSTEMS IS (WILL BE) FILED WITH THE CITY OF PORTLAND AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DURING THE PERMIT REVIEW PROCESS. A SPECIFIC MANUAL HAS BEEN PREPARED FOR O&M OF THE DRAINAGE SYSTEM. REFER TO SECTION 12 OF THE MEDEP SITE LOCATION OF DEVELOPMENT PERMIT APPLICATION.
5.

SEE EXISTING CONDITIONS FOR BENCHMARK INFORMATION.
6.

SEE GRADING, DRAINAGE AND EROSION/SEDIMENT CONTROL FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
7.

ALL DISTURBED AREAS NOT TO BE PAVED, SODDED OR OTHERWISE TREATED SHALL RECEIVE 4" LOAM, SEED, FERTILIZER AND MULCH.
8.

COMPACTION REQUIREMENTS:

LOCATION	MINIMUM COMPACTION
SUBBASE AND BASE GRAVEL BELOW PAVED OR CONCRETE AREAS	95%
SUBGRADE FILL BELOW PAVED AREAS	90%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%
STRUCTURAL FILL WITHIN PROPOSED BUILDING AREA	95%
SELECT FILL ADJACENT BUILDING FOUNDATIONS, EXTERIOR FOUNDATIONS, AND WITHIN 8 INCHES OF THE SLAB-ON-GRADE	95%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557.

8.

ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
9.

CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND EXIT RAMPS ADJACENT TO THE BUILDING AND ALONG NEW CURBED AREAS.
10.

PROVIDE STABILIZATION OR SEPARATION GEOTEXTILE FABRIC OVER WETLAND AREAS TO BE FILLED OR OVER UNSTABLE SOILS AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH THE FINAL GEOTECHNICAL RECOMMENDATIONS.
11.

NATIVE SOILS RANGE FROM GRANULAR TO CLAYEY AND SILTY. CARE MUST BE EXERCISED TO LIMIT DISTURBANCE OF THE BEARING SOILS. THE NATIVE CLAYEY OR SILTY SOILS SHOULD NOT BE PROOF-ROLLED. SHOULD THE SUBGRADE BECOME YIELDING OR DIFFICULT TO WORK, DISTURBED AREAS SHOULD BE EXCAVATED AND BACKFILLED WITH COMPACTED SELECT FILL OR CRUSHED STONE AT NO EXTRA EXPENSE TO THE OWNER.
12.

FIVE (5.0) FEET OF CLEAN GRANULAR SOIL MEETING THE SELECT FILL GRADATION SPECIFICATIONS SHALL BE PROVIDED BELOW THE ENTRANCE SLABS AND ADJACENT SIDEWALKS. GRADUAL TRANSITION (3 HORIZONTAL TO 1 VERTICAL) OF SELECT FILL THICKNESS SHALL BE PROVIDED FROM THE 5.0 FOOT DEPTH TO THE GRAVEL BASE THICKNESS AT THE SIDEWALKS AND PAVED AREAS AWAY FROM THE BUILDINGS.

LOCAL APPROVALS, WAIVERS, AND VARIANCES

THE CONSTRUCTION PLANS ARE TO BE SUBMITTED TO THE CITY OF PORTLAND FOR THEIR REVIEW AND APPROVAL.

UTILITY NOTES:

1.

ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED AND CONSTRUCTED BY THE DIVISION 2 CONTRACTOR TO WITHIN 5 FEET OF THE BUILDINGS, AT A LOCATION COORDINATED WITH THE DIVISION 15 OR 16 CONTRACTOR AND THE BUILDING PLANS. DIVISION 2 WORK WITHIN 5 FEET OF UNDERSLAB UTILITIES SHALL CONSIST OF TRENCHING AND BACKFILLING. ACTUAL UTILITY INSTALLATION SHALL BE BY THE DIVISION 15/16 CONTRACTOR. ALL REQUIRED CONNECTION FEES SHALL BE PAID BY THE GENERAL CONTRACTOR.
2.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH VERIZON. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.
3.

ALL SANITARY SEWER WORK SHALL MEET THE STANDARDS OF THE MAINE STATE PLUMBING CODE AND CITY OF PORTLAND PUBLIC WORKS DEPARTMENT.
4.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER.
5.

COORDINATE ALL UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY. ALL UTILITY WORK SHALL CONFORM TO THE STANDARDS OF THE UTILITY COMPANY AND PROJECT SPECIFICATIONS.
6.

THE LOCATIONS OF THE NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE SERVING UTILITY COMPANY.
7.

UNDERGROUND ELECTRICAL, CONDUIT MATERIAL AND INSTALLATION SHALL CONFORM TO UTILITY COMPANY STANDARDS AND PROJECT SPECIFICATIONS, WHICH EVER IS MORE STRINGENT.
8.

ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
9.

ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
10.

THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
11.

THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.
12.

A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.
13.

THE CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION AND PROVIDE TEMPORARY SERVICES AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE JOBSITE. TEMPORARY SERVICES SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. COORDINATE ALL TEMPORARY SERVICES WITH UTILITY COMPANY, OWNER AND AFFECTED BUSINESSES.

LANDSCAPE NOTES:

(SUBJECT TO COORDINATION WITH LANDSCAPE DRAWINGS. IN CASE OF CONFLICT, THE LANDSCAPING DRAWINGS SHALL GOVERN.)

1.

ALL PLANTS SHALL BE NURSERY GROWN AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, STANDARDS AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNERS REPRESENTATIVE BEFORE AND AFTER PLANTING.
2.

PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER INSPECTION AND ACCEPTANCE, AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.
3.

ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" LOAM AND SEED.
4.

THREE (3) INCH BARK MULCH IS TO BE USED AROUND THE TREE AND SHRUB PLANTING AS SPECIFIED IN THE DETAILS. WHERE BARK MULCH IS USED IN A CURBED ISLAND, THE BARK SHALL MEET THE TOP INSIDE EDGE OF THE CURB. ALL OTHER AREAS SHALL RECEIVE 4" LOAM AND SEED.
5.

THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN.
6.

PARKING AREA PLANTED ISLANDS TO HAVE A MINIMUM OF 4" TOPSOIL. REMOVE ALL CONSTRUCTION DEBRIS BEFORE TOPSOILING. TOPSOIL SHALL BE PLACED TO TOP OF CURB.
7.

ALL PLANT MATERIAL SHALL BE APPROVED BY THE OWNER OR THE OWNERS REPRESENTATIVE PRIOR TO ARRIVAL ON THE SITE.
8.

PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
9.

THE CONTRACTOR SHALL LOCATE, VERIFY, AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTINGS AND UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
10.

NO SUBSTITUTION OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER.
11.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE PLANTINGS.
12.

SEE PLANTING DETAILS FOR WEED BARRIER INFORMATION.
13.

ALL PLANTING LOCATED AT THE ENTRANCE TO THE PROJECT OR AT INTERSECTIONS WITHIN THE SITE WILL BE MAINTAINED AND WILL NOT EXCEED 3 FEET IN HEIGHT WITHIN A TRIANGLE FORMED 25' INTO THE DRIVEWAY AND 25' ALONG THE TRAVEL WAY.

EROSION CONTROL NOTES:

1.

PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, CLEARING AND GRADING LIMITS SHALL BE STAKED BY THE CONTRACTOR BASED ON THE LIMITS OF GRADING SHOWN ON THE DRAWINGS AND ACCEPTED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. AFTER THE CLEARING AND GRADING LIMITS HAVE BEEN ACCEPTED, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCES ASSOCIATED WITH THE PROJECT.
2.

ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE. TEMPORARY/PERMANENT SEED MIXTURES SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL PROJECT PREPARED FOR THIS PROJECT.
3.

PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM LINES.
4.

ALL STORM DRAIN INLETS AND OUTLETS NOT IN PAVED AREAS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.
5.

SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.
6.

THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCE AS IT BECOMES SATURATED WITH MUD TO ENSURE THAT IT FUNCTIONS TO CAPTURE MUD FROM THE TIRES OF CONSTRUCTION VEHICLES DURING CONSTRUCTION. THE PURPOSE OF THE CONSTRUCTION ENTRANCE IS TO KEEP ADJACENT STREETS CLEAR OF DIRT AND MUD. SWEEPING OF THE ROADWAYS SHALL BE PERFORMED BY THE CONTRACTOR.
7.

SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO TOPSOIL FOR USE IN LANDSCAPING OPERATIONS.
8.

LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE WHICH CAUSE THE LEAST PRACTICAL UNPROTECTED DENUDED AREAS ON THE SITE DURING CONSTRUCTION.
9.

THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION / SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS MAY RESULT IN MONETARY PENALTIES AS ENFORCED BY THE MEDEP OR LOCAL AGENCIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.
10.

A FULL EROSION/SEDIMENTATION CONTROL PLAN ACCOMPANIES THIS DRAWING SET AND IS ALSO CONTAINED IN THE DIV 2 SPECIFICATIONS.
11.

PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS AS SHOWN AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED.
12.

INSPECT EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS $\frac{1}{3}$ THE STRUCTURE HEIGHT.
13.

INSTALL CURLEX EROSION CONTROL MAT OR EQUAL ON ALL SLOPES STEEPER THAN 3:1.
14.

THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "MAINE EROSION & SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION; BEST MANAGEMENT PRACTICES, CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991"

CITY OF PORTLAND
SPACE AND BULK REQUIREMENTS

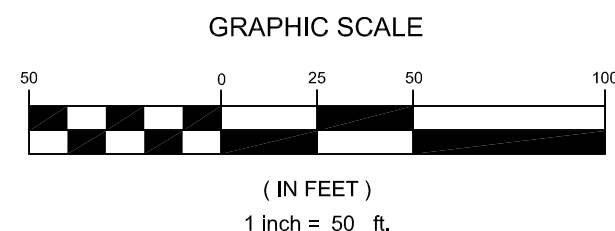
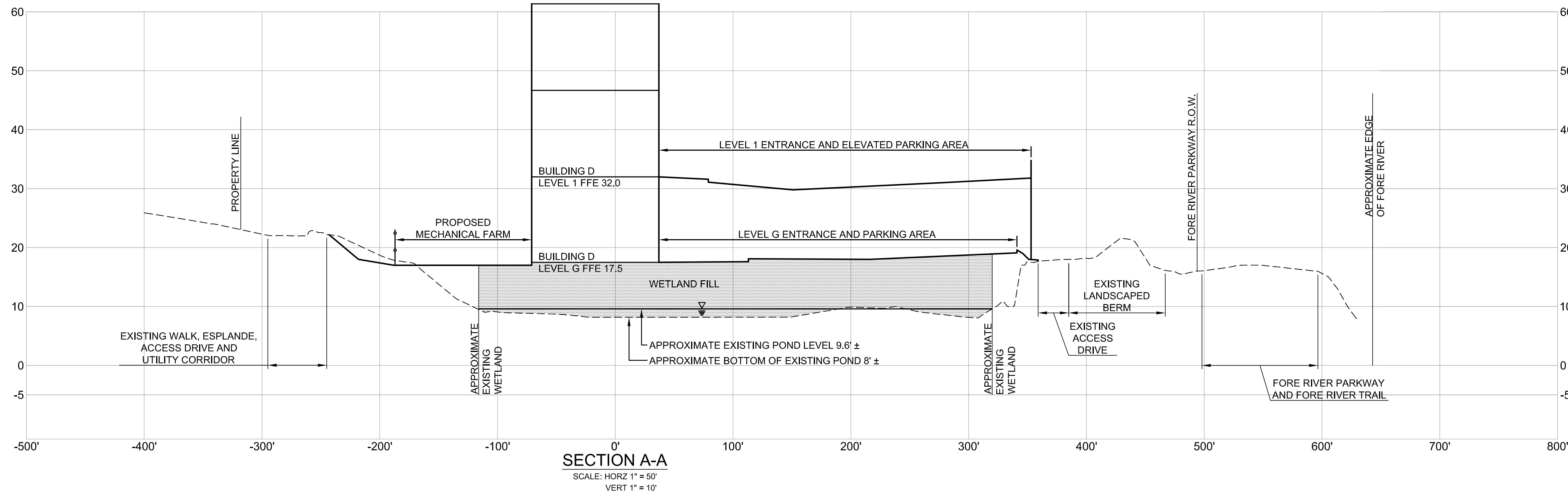
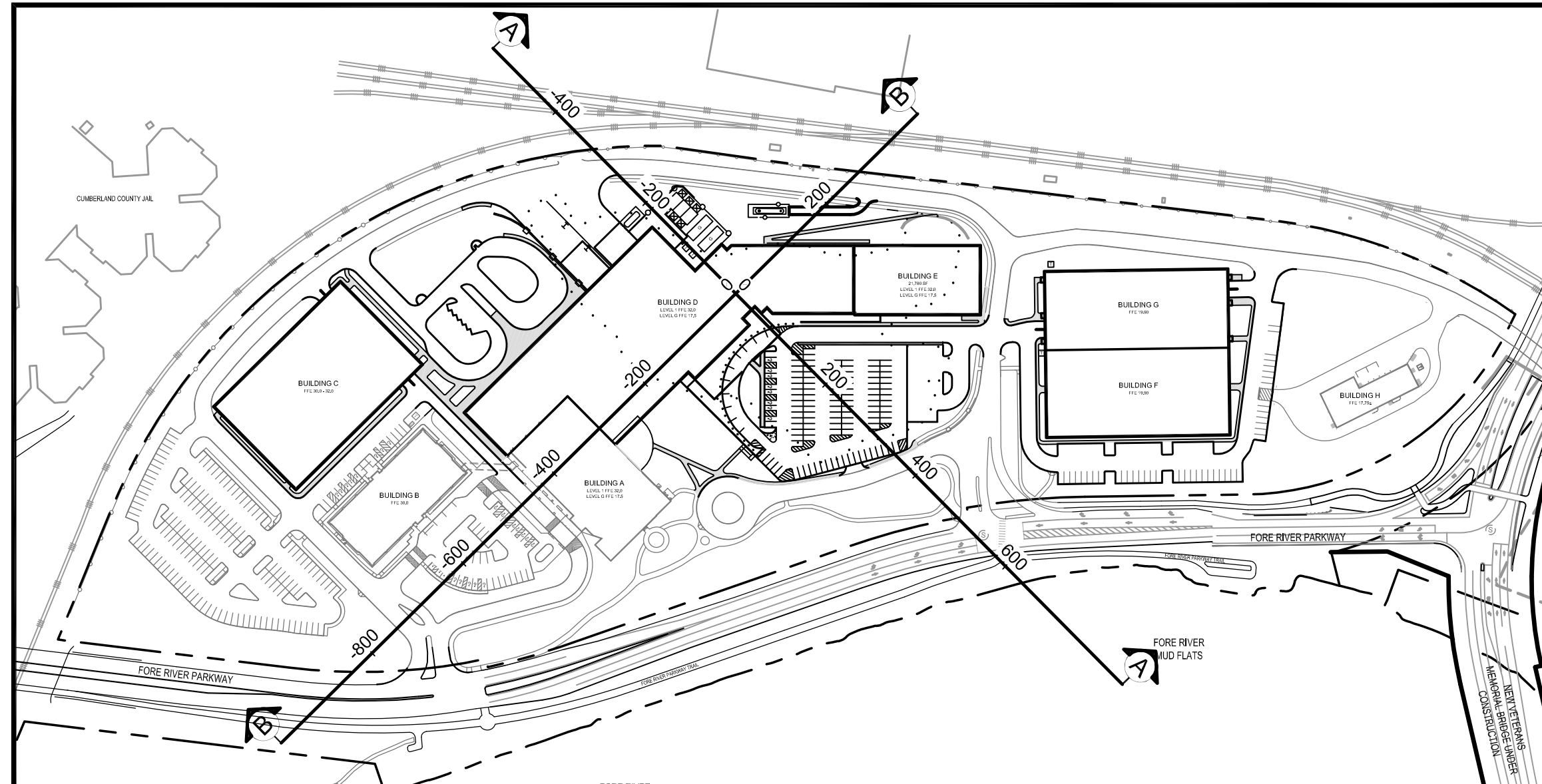
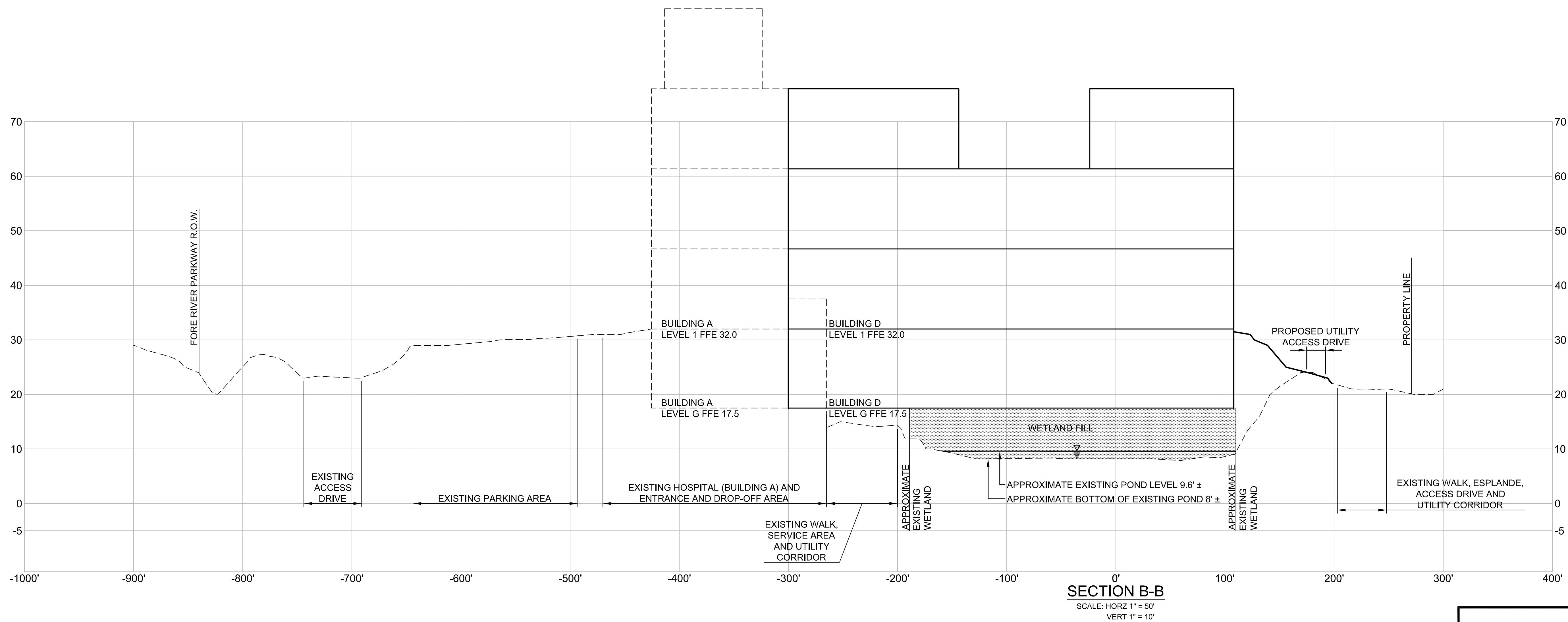
1. EXISTING ZONE:	CONTRACT ZONE AGREEMENT	
2. PARCEL SIZE:	35 ACRES±	
3. SPACE AND BULK:		
MAXIMUM IMPERVIOUS SURFACE RATIO		
	REQUIRED	PROVIDED
	80%	66%±
MAXIMUM BUILDING HEIGHT		
	90 FT.	TBD
MAXIMUM FRONT YARD LANDSCAPE BUFFER		
	20 FT.	-- FT.
MINIMUM SIDE YARD		
	10 FT.	10 FT.
MINIMUM REAR YARD		
	10 FT.	10 FT.
PAVEMENT SETBACK FROM LOT BOUNDARIES		
	15 FT.	15 FT.
4. PARKING REQUIREMENT:		
HOSPITAL - 1 SPACE/500SF	776 SPACES	805 SPACES
MEDICAL OFFICE - 1 SPACE/400SF	800 SPACES	985 SPACES

LEGEND

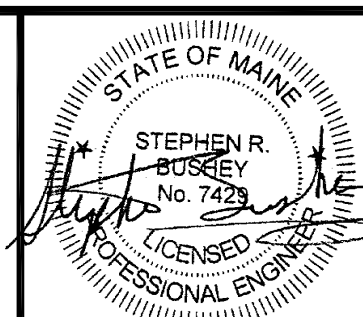
EXISTING		PROPOSED
	EXISTING STRUCTURE	BUILDING
	EDGE OF TRAVEL WAY, PAVEMENT, ROADS, DRIVES	
	CURBING	RETAINING WALL
	PROPERTY LINE	CURBING
	OVERHEAD ELECTRIC LINES	VERTICAL GRANITE
	UNDERGROUND ELECTRIC LINE	SLOPED GRANITE
	UNDERGROUND TELEPHONE LINE	EDGE OF PAVEMENT
	WATER LINE	GRADING CONTOUR LINE
	STORM DRAIN LINE	SPOT ELEVATION
	SANITARY SEWER LINE	GUARD POST/BOLLARD
	OXYGEN	POLE WITH LIGHT FIXTURE(S)
	GAS	FREESTANDING SIGN
	FENCE	PYLON SIGN
	EXISTING CONTOUR LINE	BARRIER FREE PARKING SYMBOL
	EXISTING WETLANDS	PEDESTRIAN CROSSWALK
	RAILROAD TRACKS	PAINTED DIRECTIONAL TRAFFIC ARROW
	UTILITY POLE	UNDERGROUND TELEPHONE / CABLE
	SIGN	UNDERGROUND ELECTRIC/TELEPHONE
	LIGHT POLE	WATER LINE
	CATCH BASIN	SEWER LINE
	SEWER MANHOLE	SANITARY
	ELECTRICAL/COMMUNICATIONS VAULT	GAS LINE
	ELECTRICAL/COMMUNICATIONS PULL BOX	STORM DRAIN LINE
	HYDRANT	HYDRANT
	TREE	WATER GATE VALVE
	TELEPHONE MANHOLE	WATER SHUT OFF VALVE
	WELL	MANHOLE
		CATCH BASIN
		EXISTING CATCH BASIN TO BE ALTERED
		RIPRAP
		SILT FENCE
		CHAIN LINK OR SAFETY FENCE
		WOOD FENCE
		GUIDE RAIL
		LIMIT OF WORK
		EXISTING UTILITY LINE TO BE REMOVED
		STONE SEDIMENT BARRIER
		TRANSFORMER PAD

PRELIMINARY - NOT FOR CONSTRUCTION

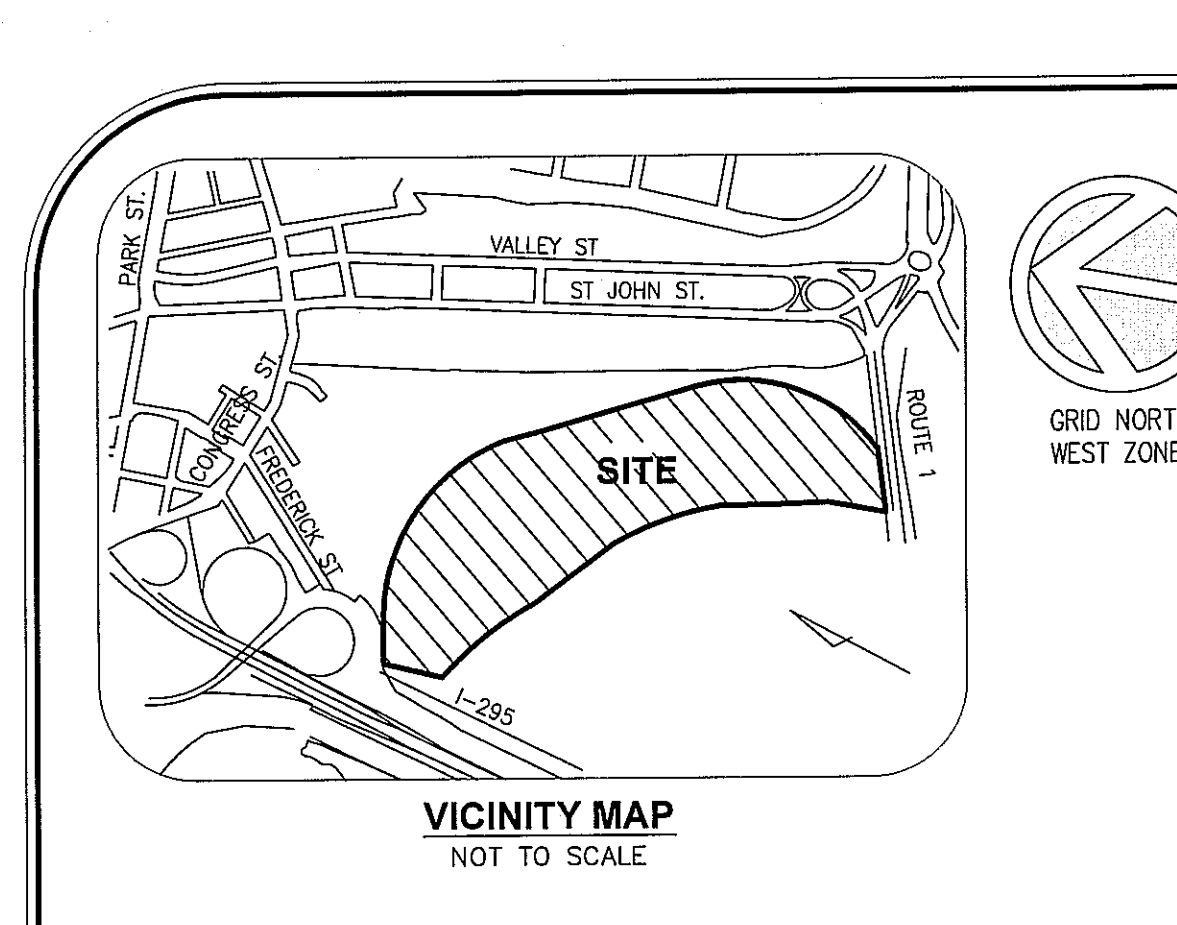
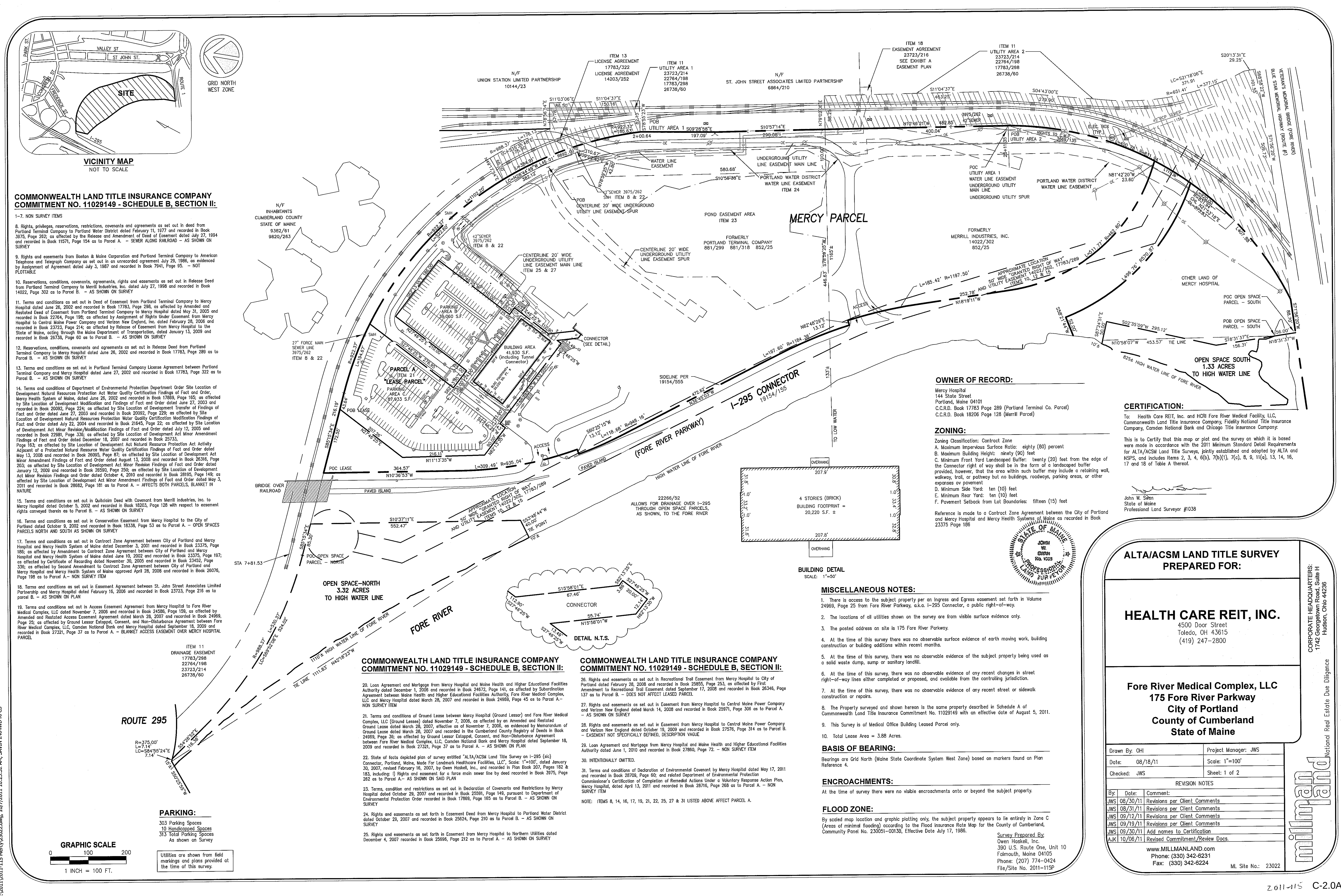
1	07.28.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		PROJECT	MERCY AT THE FORE MASTER PLAN	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 WWW.DELUCAHOFFMAN.COM
				SHEET TITLE	GENERAL NOTES AND LEGEND	
REV	DATE	DESCRIPTION	REVISIONS	CLIENT	MERCY HOSPITAL	DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: N.T.S. CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08 GEN NOTES SHEET C-1.1



PRELIMINARY - NOT FOR CONSTRUCTION

			PROJECT	MERCY AT THE FORE MASTER PLAN	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELOUCHOFFMAN.COM
			SHEET TITLE	SITE SECTIONS	
			CLIENT	MERCY HOSPITAL	
				SHEET	
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		DRAWN: DED	DATE: MAY 2012
REV	DATE	DESCRIPTION	P.E. STEPHEN R. BUSSEY	DESIGNED: BEK	SCALE: AS NOTED
		REVISIONS	LIC. # 7429	CHECKED: SRB	JOB NO. 2149.08
				FILE NAME:	2149.08-SECTIONS SITE
				SHEET	C-10.0

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**COMMONWEALTH LAND TITLE INSURANCE COMPANY
COMMITMENT NO. 11029149 - SCHEDULE B, SECTION II:**

1-7. NON SURVEY ITEMS

8. Rights, privileges, reservations, restrictions, covenants and agreements as set out in deed from Portland Terminal Company to Portland Water District dated February 11, 1977 and recorded in Book 3976, Page 282; as affected by the Release and Amendment of Deed of Easement dated July 27, 1994 and recorded in Book 11571, Page 154 as to Parcel A. -- SEWER ALONG RAILROAD -- AS SHOWN ON SURVEY

9. Rights and easements from Boston & Maine Corporation and Portland Terminal Company to American Telephone and Telegraph Company as set out in an unrecorded agreement, July 29, 1986, as evidenced by Assignment of Agreement dated July 3, 1987 and recorded in Book 7941, Page 95. -- NOT PLOTTABLE

10. Reservations, conditions, covenants, agreements, rights and easements as set out in Release Deed from Portland Terminal Company to Merrill Industries, Inc. dated July 27, 1998 and recorded in Book 14022, Page 302 as to Parcel B. -- AS SHOWN ON SURVEY

11. Terms and conditions as set out in Deed of Easement from Portland Terminal Company to Mercy Hospital dated June 26, 2002 and recorded in Book 17783, Page 298, as affected by Amended and Restated Deed of Easement from Portland Terminal Company to Mercy Hospital dated May 31, 2005 and recorded in Book 22764, Page 198; as affected by Assignment of Rights Under Easement from Mercy Hospital to Central Maine Power Company and Verizon New England, Inc. dated February 28, 2008 and recorded in Book 23723, Page 214; as affected by Release of Easement from Mercy Hospital to the State of Maine, acting through the Maine Department of Transportation, dated January 13, 2009 and recorded in Book 26738, Page 60 as to Parcel B. -- AS SHOWN ON SURVEY

12. Reservations, conditions, covenants and agreements as set out in Release Deed from Portland Terminal Company to Mercy Hospital dated June 26, 2002 and recorded in Book 17783, Page 289 as to Parcel B. -- AS SHOWN ON SURVEY

13. Terms and conditions as set out in Portland Terminal Company License Agreement between Portland Terminal Company and Mercy Hospital dated June 27, 2002 and recorded in Book 17783, Page 322 as to Parcel B. -- AS SHOWN ON SURVEY

14. Terms and conditions of Department of Environmental Protection Department Order Site Location of Development Natural Resources Protection Act Water Quality Certification Findings of Fact and Order. Mercy Health System of Maine, dated June 26, 2002 and recorded in Book 17689, Page 165; as affected by Site Location of Development Modification and Findings of Fact and Order dated June 27, 2003 and recorded in Book 20092, Page 224; as affected by Site Location of Development Transfer of Findings of Fact and Order dated June 27, 2003 and recorded in Book 20092, Page 224; as affected by Site Location of Development Act Minor Revision/Modification Findings of Fact and Order dated July 12, 2005 and recorded in Book 22981, Page 336; as affected by Site Location of Development Act Minor Amendment Findings of Fact and Order dated December 18, 2007 and recorded in Book 25733, Page 163; as affected by Site Location of Development Act Natural Resource Protection Act Activity Adjacent of a Protected Natural Resource Water Quality Certification Findings of Fact and Order dated May 13, 2008 and recorded in Book 26065, Page 87; as affected by Site Location of Development Act Minor Amendment Findings of Fact and Order dated August 13, 2008 and recorded in Book 26316, Page 203; as affected by Site Location of Development Act Minor Revision Findings of Fact and Order dated January 12, 2009 and recorded in Book 26580, Page 250; as affected by Site Location of Development Act Minor Revision Findings and Order dated October 4, 2010 and recorded in Book 28195, Page 149; as affected by Site Location of Development Act Minor Amendment Findings of Fact and Order dated May 3, 2011 and recorded in Book 28682, Page 181 as to Parcel A. -- AFFECTS BOTH PARCELS, BLANKET IN NATURE

15. Terms and conditions as set out in Quitclaim Deed with Covenant from Merrill Industries, Inc. to Mercy Hospital dated October 5, 2002 and recorded in Book 18203, Page 128 with respect to easement rights conveyed therein as to Parcel B. -- AS SHOWN ON SURVEY

16. Terms and conditions as set out in Conservation Easement from Mercy Hospital to the City of Portland dated October 9, 2002 and recorded in Book 18339, Page 53 as to Parcel A. -- OPEN SPACES PARCELS NORTH AND SOUTH AS SHOWN ON SURVEY

17. Terms and conditions as set out in Contract Zone Agreement between City of Portland and Mercy Hospital and Mercy Health System of Maine dated December 3, 2001 and recorded in Book 23375, Page 186; as affected by Amendment to Contract Zone Agreement between City of Portland and Mercy Hospital and Mercy Health System of Maine dated June 10, 2002 and recorded in Book 23375, Page 197; as affected by Certificate of Recording dated November 30, 2005 and recorded in Book 23452, Page 336; as affected by Second Amendment to Contract Zone Agreement between City of Portland and Mercy Hospital and Mercy Health System of Maine approved April 28, 2008 and recorded in Book 26076, Page 199 as to Parcel A. -- NON SURVEY ITEM

18. Terms and conditions as set out in Easement Agreement between St. John Street Associates Limited Partnership and Mercy Hospital dated February 16, 2006 and recorded in Book 23723, Page 216 as to parcel B. -- AS SHOWN ON PLAN

19. Terms and conditions set out in Access Easement Agreement from Mercy Hospital to Fore River Medical Complex, LLC dated November 7, 2008 and recorded in Book 24586, Page 159, as affected by Amended and Restated Access Easement Agreement dated March 28, 2007 and recorded in Book 24669, Page 25; as affected by Ground Lessor Estoppel, Consent, and Non-Disturbance Agreement between Fore River Medical Complex, LLC, Camden National Bank and Mercy Hospital dated September 18, 2009 and recorded in Book 27321, Page 37 as to Parcel A. -- BLANKET ACCESS EASEMENT OVER MERCY HOSPITAL PARCEL

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ITEM 13
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LICENSE AGREEMENT
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ITEM 18
EASEMENT AGREEMENT
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EASEMENT PLAN

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"LEASE PARCEL"

PARCEL A

A certain parcel of land, together with any improvements thereon, situated easterly of the I-295 Connector as shown on a plan entitled "Plan of Proposed Lease Parcels off I-295 Connector, Portland, Maine for Mercy Hospital" dated September 20, 2006 by Owen Haskell, Inc., in the City of Portland, County of Cumberland, State of Maine being bounded and described as follows:

Commencing on the easterly sideline of the I-295 Connector and the southerly sideline of land now or formerly of the Portland Terminal Company;

Thence S 85° 15' 34" E along said land of the Portland Terminal Company a distance of 172.55 feet to the Point of Beginning;

Thence continuing S 85° 15' 34" E along said land a distance of 43.64 feet;

Thence easterly along said land and along a curve concave to the right having a radius of 922.37 feet on arc distance of 194.67 feet, said curve having a chord which bears S 79° 12' 42" E a distance of 194.31 feet;

Thence S 27° 46' 25" W a distance of 276.95 feet;

Thence S 62° 13' 35" E a distance of 33.00 feet;

Thence continuing S 62° 13' 35" E a distance of 24.00 feet;

Thence N 27° 46' 25" E a distance of 25.00 feet;

Thence continuing N 27° 46' 25" E a distance of 210.00 feet;

Thence S 62° 13' 35" E a distance of 186.00 feet;

Thence S 27° 46' 25" W a distance of 210.00 feet;

Thence continuing S 27° 46' 25" W a distance of 25.00 feet;

Thence S 62° 13' 35" E a distance of 22.00 feet;

Thence S 27° 46' 25" W a distance of 112.90 feet;

Thence S 15° 58' 01" E a distance of 67.46 feet;

Thence S 62° 13' 35" E a distance of 3.86 feet;

Thence S 27° 46' 25" W a distance of 20.00 feet;

Thence N 62° 13' 35" W a distance of 12.14 feet;

Thence N 15° 58' 01" W a distance of 55.74 feet;

Thence S 27° 46' 25" W a distance of 13.49 feet;

Thence N 62° 13' 35" W a distance of 232.00 feet;

Thence continuing N 62° 13' 35" W a distance of 33.00 feet;

Thence S 27° 46' 25" W a distance of 17.43 feet;

Thence N 62° 13' 35" W a distance of 90.00 feet;

Thence N 11° 13' 35" W a distance of 216.11 feet;

Thence N 27° 46' 25" E a distance of 207.26 feet to the point of beginning.

PARCEL B

Together with nonexclusive easement rights as set out in Access Easement Agreement from Mercy Hospital to Fore River Medical Complex, LLC dated November 7, 2006 and recorded in the Cumberland County Registry of Deeds in Book 24589, Page 159, as affected by Amended and Restated Access Easement Agreement dated March 28, 2007 and recorded in Book 24969, Page 25.

UTILITY AREA 1 OVER LAND OF THE PORTLAND TERMINAL COMPANY

A CERTAIN LOT OR PARCEL OF LAND WITH THE BUILDINGS THEREON SITUATED NORTHERLY OF THE BLUE STAR MEMORIAL HIGHWAY (ROUTE #1) AT THE VETERAN'S MEMORIAL BRIDGE ON THE FORE RIVER IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE AS SHOWN ON A PLAN ENTITLED "LAND IN PORTLAND ME. PORTLAND TERMINAL COMPANY TO MERCY HOSPITAL SCALE: 1:100" DATED JUNE 29, 2001" BY OWEN HASKELL, INC., BEING BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A ROD MARKING A POINT 50.00 FEET WESTERLY OF AND AT RIGHT ANGLES TO THE CENTER LINE OF THE MAIN TRACK MARKING A P.C. STATION OF 23 + 11.35 FEET AS SHOWN ON RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 REVISED MARCH 1938 FILED IN THE PORTLAND TERMINAL COMPANY IN VI-D OVER 1-A; SAID ROD BEING APPROXIMATELY 675' NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF SAID ROUTE #1;

THENCE NORTHERLY ALONG LAND OF PORTLAND TERMINAL COMPANY AND BEING 50.00 FEET WESTERLY OF THE CENTERLINE OF SAID MAIN TRACK, N 10° 46' 21" W A DISTANCE OF 482.85 FEET TO A ROD OPPOSITE STATION 18 + 28.50;

THENCE CONTINUING ALONG LAND OF PORTLAND TERMINAL COMPANY AND BEING 50.00 FEET WESTERLY OF THE CENTERLINE OF SAID MAIN TRACK N 10° 57' 14" W A DISTANCE OF 290.08 FEET TO A ROD OPPOSITE STATION 15 + 38.42;

THENCE CONTINUING ALONG LAND OF PORTLAND TERMINAL COMPANY N 9° 28' 58" W A DISTANCE OF 197.09 FEET TO A ROD MARKING THE WESTERLY RIGHT OF WAY LINE FOR THE EXISTING SPUR TRACK AND BEING 33.00 FEET WESTERLY AND OPPOSITE P.C. STATION 2 + 00.64 AS SHOWN ON SAID RAILROAD PLAN AND THE POINT OF BEGINNING;

THENCE CONTINUING ALONG LAND OF PORTLAND TERMINAL COMPANY AND BEING ALONG SAID RIGHT OF WAY LINE OF SAID SPUR TRACK ALONG A CURVE TO THE LEFT WHOSE RADIUS IS 922.37 FEET AN ARC DISTANCE OF 384.91 FEET, SAID CURVE HAVING A CHORD OF N 28° 44' 49" W AND 382.12 FEET;

THENCE N 49° 17' 54" E ON A RADIAL LINE CROSSING SAID LAND OF PORTLAND TERMINAL COMPANY 66.00 FEET TO LAND NOW OR FORMERLY OF THE INHABITANTS OF CUMBERLAND COUNTY, STATE OF MAINE, REFERENCE BOOK 9382 PAGE 61;

THENCE SOUTHEASTERLY ALONG SAID LAND AND ALONG A CURVE CONCAVE TO THE RIGHT HAVING A RADIUS OF 988.37 FEET AN ARC DISTANCE OF 176.13 FEET, SAID CURVE HAVING A CHORD OF S 35° 35' 48" E AND 175.90 FEET;

THENCE N 78° 56' 54" E CROSSING SAID LAND OF PORTLAND TERMINAL COMPANY 67.78 FEET TO LAND NOW OR FORMERLY OF UNION STATION LIMITED PARTNERSHIP, REFERENCE BOOK 10144 PAGE 23;

THENCE S 11° 03' 06" E IN A LINE AND ALWAYS PARALLEL TO AND LYING TWENTY (20) FEET EASTERLY FROM AS MEASURED NORMAL TO THE CENTERLINE OF THE MOST EASTERLY RAILROAD TRACK 86.50 FEET TO LAND NOW OR FORMERLY OF ST. JOHN STREET REALTY, REFERENCE BOOK 6864 PAGE 210;

THENCE S 11° 04' 37" E ALONG SAID LAND AND ON A LINE PARALLEL WITH AND ALWAYS LYING TWENTY (20) FEET FROM AND EASTERLY OF THE CENTERLINE OF THE PRESENT MAINE CENTRAL RAILROAD TRACK 150.16 FEET;

THENCE S 78° 55' 23" W CROSSING LAND OF PORTLAND TERMINAL COMPANY 82.13 FEET TO THE POINT OF BEGINNING.

UTILITY AREA 2 OVER LAND OF THE PORTLAND TERMINAL COMPANY

A CERTAIN LOT OR PARCEL OF LAND WITH THE BUILDINGS THEREON SITUATED NORTHERLY OF THE BLUE STAR MEMORIAL HIGHWAY (ROUTE #1) AT THE VETERAN'S MEMORIAL BRIDGE ON THE FORE RIVER IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE AS SHOWN ON A PLAN ENTITLED "LAND IN PORTLAND ME. PORTLAND TERMINAL COMPANY TO MERCY HOSPITAL SCALE: 1:100" DATED JUNE 29, 2001" BY OWEN HASKELL, INC., BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A ROD MARKING A POINT 50.00 FEET WESTERLY OF AND AT RIGHT ANGLES TO THE CENTER LINE OF THE MAIN TRACK MARKING A P.C. STATION OF 23 + 11.35 FEET AS SHOWN ON RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 REVISED MARCH 1938 FILED IN THE PORTLAND TERMINAL COMPANY IN VI-D OVER 1-A; SAID ROD BEING APPROXIMATELY 675' NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF SAID ROUTE #1;

THENCE N 10° 46' 21" W 482.85 FEET;

THENCE N 79° 02' 06" E CROSSING LAND OF THE GRANTOR 88.25 FEET TO LAND NOW OR FORMERLY OF ST. JOHN STREET REALTY, REFERENCE BOOK 6864 PAGE 210;

THENCE S 11° 04' 37" E ALONG SAID LAND AND ON A LINE PARALLEL WITH AND ALWAYS LYING TWENTY (20) FEET FROM AND EASTERLY OF THE CENTERLINE OF THE PRESENT MAINE CENTRAL RAILROAD TRACK 463.25 FEET;

THENCE S 4° 43' 00" E ON A LINE PARALLEL WITH AND ALWAYS LYING TWENTY (20) FEET FROM AND EASTERLY OF THE CENTERLINE OF THE PRESENT MAINE CENTRAL RAILROAD TRACK A DISTANCE OF 279.90 FEET;

THENCE SOUTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 651.41 FEET ON A LINE PARALLEL WITH AND ALWAYS LYING TWENTY (20) FEET FROM AND EASTERLY OF THE CENTERLINE OF THE PRESENT MAINE CENTRAL RAILROAD TRACK AN ARC DISTANCE OF 377.15 FEET TO LAND NOW OR FORMERLY OF THE STATE OF MAINE, SAID CURVE HAVING A CHORD OF S 21° 18' 06" E AND 371.91 FEET;

THENCE S 20° 13' 31" E ALONG SAID LAND 29.25 FEET;

THENCE S 68° 58' 22" W ALONG SAID LAND 101.55 FEET;

THENCE S 71° 56' 20" W ALONG SAID LAND 509.73 FEET;

THENCE NORTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 831.94 FEET AN ARC DISTANCE OF 920.00 FEET TO THE POINT OF BEGINNING, SAID CURVE HAVING A CHORD OF N 21° 53' 18" E AND 873.83 FEET.

WATER LINE EASEMENT

A CERTAIN LOT OR PARCEL OF LAND SITUATED NORTHERLY OF THE BLUE STAR MEMORIAL HIGHWAY (ROUTE #1) AT THE VETERAN'S MEMORIAL BRIDGE ON THE FORE RIVER IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE AS SHOWN ON A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY ON I-295 CONNECTOR, PORTLAND, MAINE MADE FOR LANDMARK HEALTHCARE FACILITIES, LLC" DATED JANUARY 16, 2007 BY OWEN HASKELL, INC., BEING BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A ROD MARKING A POINT 50.00 FEET WESTERLY OF AND AT RIGHT ANGLES TO THE CENTER LINE OF THE MAIN TRACK MARKING A P.C. STATION OF 23 + 11.35 FEET AS SHOWN ON RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 REVISED MARCH 1938 FILED IN THE PORTLAND TERMINAL COMPANY IN VI-D OVER 1-A; SAID ROD BEING APPROXIMATELY 675' NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF SAID ROUTE #1;

THENCE S 7° 14' 40" W A DISTANCE OF 143.52 FEET TO THE POINT OF BEGINNING;

THENCE N 10° 49' 14" W A DISTANCE OF 458.60 FEET;

THENCE N 24° 19' 14" W A DISTANCE OF 92.96 FEET;

THENCE N 20° 40' 48" E A DISTANCE OF 91.30 FEET;

THENCE N 10° 49' 14" W A DISTANCE OF 452.68 FEET;

THENCE NORTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 692.00 FEET AN ARC DISTANCE OF 142.60 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 16° 43' 26" W A DISTANCE OF 142.35 FEET;

THENCE N 65° 42' 54" E A DISTANCE OF 17.63 FEET TO LAND NOW OR FORMERLY OF THE PORTLAND TERMINAL COMPANY;

THENCE NORTHWESTERLY ALONG SAID LAND AND ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 922.37 FEET AN ARC DISTANCE OF 31.24 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 25° 15' 20" W A DISTANCE OF 31.24 FEET;

THENCE S 63° 46' 28" W A DISTANCE OF 16.90 FEET;

THENCE NORTHWESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 692.00 FEET AN ARC DISTANCE OF 27.86 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 26° 19' 10" W A DISTANCE OF 27.85 FEET;

THENCE S 62° 31' 39" W A DISTANCE OF 30.00 FEET;

THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE RIGHT HAVING A RADIUS OF 662.00 FEET AN ARC DISTANCE OF 192.40 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 19° 08' 47" E A DISTANCE OF 191.72 FEET;

THENCE S 10° 49' 14" E A DISTANCE OF 444.22 FEET;

THENCE S 20° 40' 48" W A DISTANCE OF 95.26 FEET;

THENCE S 24° 19' 14" E A DISTANCE OF 101.84 FEET;

THENCE S 10° 49' 14" E A DISTANCE OF 452.17 FEET;

THENCE S 00° 10' 13" W A DISTANCE OF 113.60 FEET;

THENCE S 10° 04' 51" W A DISTANCE OF 116.44 FEET;

THENCE S 18° 11' 27" W A DISTANCE OF 16.03 FEET TO THE NORTHERLY SIDELINE OF THE I-295 CONNECTOR;

THENCE EASTERLY ALONG SAID SIDELINE AND ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 462.60 FEET AN ARC DISTANCE OF 23.07 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 80° 16' 38" E A DISTANCE OF 23.07 FEET;

THENCE S 81° 42' 20" E ALONG SAID SIDELINE A DISTANCE OF 7.30 FEET;

THENCE N 18° 11' 27" E A DISTANCE OF 13.51 FEET;

THENCE N 10° 04' 51" E A DISTANCE OF 121.16 FEET;

THENCE N 00° 10' 13" E A DISTANCE OF 119.09 FEET TO THE POINT OF BEGINNING.

UNDERGROUND UTILITY LINE EASEMENT — MAIN LINE

A CERTAIN LOT OR PARCEL OF LAND, BEING TWENTY (20') FEET WIDE, SITUATED NORTHERLY OF THE BLUE STAR MEMORIAL HIGHWAY (ROUTE #1) AT THE VETERAN'S MEMORIAL BRIDGE ON THE FORE RIVER IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE AS SHOWN ON A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY ON I-295 CONNECTOR, PORTLAND, MAINE MADE FOR LANDMARK HEALTHCARE FACILITIES, LLC" DATED JANUARY 16, 2007 BY OWEN HASKELL, INC., THE CENTERLINE OF WHICH IS BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A ROD MARKING A POINT 50.00 FEET WESTERLY OF AND AT RIGHT ANGLES TO THE CENTER LINE OF THE MAIN TRACK MARKING A P.C. STATION OF 23 + 11.35 FEET AS SHOWN ON RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 REVISED MARCH 1938 FILED IN THE PORTLAND TERMINAL COMPANY IN VI-D OVER 1-A; SAID ROD BEING APPROXIMATELY 675' NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF SAID ROUTE #1;

THENCE N 10° 46' 21" E A DISTANCE OF 400.04 FEET TO THE POINT OF BEGINNING;

THENCE N 84° 13' 14" W A DISTANCE OF 32.20 FEET;

THENCE N 10° 49' 14" W A DISTANCE OF 533.84 FEET;

THENCE NORTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 675.00 FEET AN ARC DISTANCE OF 243.79 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 21° 05' 25" W A DISTANCE OF 242.47 FEET;

THENCE NORTHWESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 884.50 FEET AN ARC DISTANCE OF 286.56 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 40° 38' 29" W A DISTANCE OF 285.31 FEET;

THENCE WESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 60.00 FEET AN ARC DISTANCE OF 107.13 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 78° 55' 31" W A DISTANCE OF 93.46 FEET;

THENCE S 27° 46' 24" W A DISTANCE OF 161.19 FEET;

THENCE WESTERLY ALONG A CURVE CONCAVE TO THE RIGHT HAVING A RADIUS OF 30.00 FEET AN ARC DISTANCE OF 47.12 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 72° 46' 25" W A DISTANCE OF 42.43 FEET;

THENCE N 62° 13' 56" W A DISTANCE OF 6.58 FEET TO A PROPOSED TRANSFORMER.

UNDERGROUND UTILITY LINE EASEMENT — SPUR

A CERTAIN LOT OR PARCEL OF LAND, BEING TWENTY (20') FEET WIDE, SITUATED NORTHERLY OF THE BLUE STAR MEMORIAL HIGHWAY (ROUTE #1) AT THE VETERAN'S MEMORIAL BRIDGE ON THE FORE RIVER IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE AS SHOWN ON A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY ON I-295 CONNECTOR, PORTLAND, MAINE MADE FOR LANDMARK HEALTHCARE FACILITIES, LLC" DATED JANUARY 16, 2007 BY OWEN HASKELL, INC., THE CENTERLINE OF WHICH IS BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A ROD MARKING A POINT 50.00 FEET WESTERLY OF AND AT RIGHT ANGLES TO THE CENTER LINE OF THE MAIN TRACK MARKING A P.C. STATION OF 23 + 11.35 FEET AS SHOWN ON RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 REVISED MARCH 1938 FILED IN THE PORTLAND TERMINAL COMPANY IN VI-D OVER 1-A; SAID ROD BEING APPROXIMATELY 675' NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF SAID ROUTE #1;

THENCE N 10° 46' 21" E A DISTANCE OF 400.04 FEET;

THENCE N 84° 13' 14" W A DISTANCE OF 32.20 FEET;

THENCE N 10° 49' 14" W A DISTANCE OF 533.84 FEET;

THENCE NORTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 675.00 FEET AN ARC DISTANCE OF 243.79 FEET, SAID CURVE HAVING A CHORD WHICH BEARS N 21° 05' 25" W A DISTANCE OF 242.47 FEET;

THENCE NORTHWESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 884.50 FEET AN ARC DISTANCE OF 23.00 FEET TO THE POINT OF BEGINNING, SAID CURVE HAVING A CHORD WHICH BEARS N 32° 06' 17" W A DISTANCE OF 23.00 FEET;

THENCE N 88° 12' 21" W A DISTANCE OF 27.68 FEET;

THENCE WESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 60.00 FEET AN ARC DISTANCE OF 46.32 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 69° 40' 35" W A DISTANCE OF 45.18 FEET;

THENCE WESTERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 584.00 FEET AN ARC DISTANCE OF 172.39 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 39° 06' 07" W A DISTANCE OF 171.76 FEET;

THENCE S 27° 54' 48" W A DISTANCE OF 300.50 FEET;

THENCE SOUTHERLY ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 10.00 FEET AN ARC DISTANCE OF 12.21 FEET, SAID CURVE HAVING A CHORD WHICH BEARS S 7° 11' 17" E A DISTANCE OF 11.46 FEET;

THENCE S 42° 09' 19" E A DISTANCE OF 4.10 FEET TO A PROPOSED TRANSFORMER.

OPEN SPACE PARCEL — SOUTH

A CERTAIN PARCEL OF LAND SITUATED ON THE NORTHERLY SIDE OF U.S. ROUTE ONE ALSO KNOWN AS THE "VETERAN'S MEMORIAL BRIDGE" AS SHOWN ON A PLAN ENTITLED "EXISTING CONDITIONS PLAN OFF CONGRESS STREET, PORTLAND, MAINE MADE FOR MERCY HOSPITAL" DATED SEPT. 19, 2001 BY OWEN HASKELL, INC., IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND, STATE OF MAINE BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING ON THE NORTHERLY SIDELINE OF SAID U.S. ROUTE ONE AT LAND NOW OR FORMERLY OF PORTLAND TERMINAL COMPANY;

THENCE S 71° 56' 20" W ALONG SAID SIDELINE 88.70 FEET;

THENCE N 18° 31' 37" W 56.00 FEET TO THE POINT OF BEGINNING;

THENCE NORTHERLY, NORTHWESTERLY, SOUTHWESTERLY AND NORTHERLY ALONG SAID HIGH WATER LINE 825 FEET, MORE OR LESS;

THENCE S 87° 24' 51" E 10 FEET, MORE OR LESS TO A TIE POINT, SAID TIE POINT BEING N 10° 58' 07" W 453.57 FEET FROM THE POINT OF BEGINNING;

THENCE CONTINUING S 87° 24' 51" E 50.00 FEET;

THENCE S 2° 35' 09" W 295.12 FEET;

THENCE S 18° 31' 37" E 156.31 FEET TO THE POINT OF BEGINNING CONTAINING 1.33 ACRES, MORE OR LESS.

OPEN SPACE PARCEL — NORTH

A CERTAIN PARCEL OF LAND SITUATED OF, BUT NOT ADJACENT TO, CONGRESS STREET, AS SHOWN ON A PLAN ENTITLED "EXISTING CONDITIONS PLAN OFF CONGRESS STREET, PORTLAND, MAINE MADE FOR MERCY HOSPITAL" DATED SEPT. 19, 2001 BY OWEN HASKELL, INC., IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND, STATE OF MAINE BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING ON THE SOUTHERLY SIDELINE OF LAND NOW OR FORMERLY OF PORTLAND TERMINAL COMPANY AT A POINT OPPOSITE OF AND NORMAL TO STATION 7+81.53;

THENCE S 85° 15' 34" E ALONG SAID SIDELINE 85.30 FEET;

THENCE S 10° 37' 11" E 552.47 FEET;

THENCE S 53° 48' 44" W 40.00 FEET TO A TIE POINT;

THENCE CONTINUING S 53° 48' 44" W 10 FEET, MORE OR LESS, TO THE HIGH WATER LINE OF THE FORE RIVER;

THENCE NORTHWESTERLY, ALONG SAID HIGH WATER LINE, 1110 FEET, MORE OR LESS, TO LAND NOW OR FORMERLY OF THE STATE OF MAINE, KNOWN AS "ROUTE 295";

THENCE N 50° 25' 55" E ALONG SAID LAND 15 FEET, MORE OR LESS, TO A POINT TO WHICH A TIE FROM THE PREVIOUSLY STATED TIE POINT BEARS N 42° 18' 23" W 1111.83 FEET;

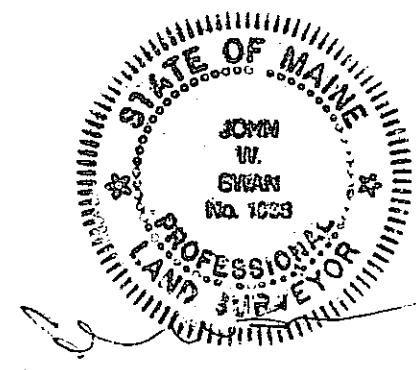
THENCE EASTERLY, ALONG SAID LAND AND ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 375.00 FEET, AN ARC DISTANCE OF 7.14 FEET, WHICH CURVE HAS A CHORD OF S 84° 55' 24" E 7.14 FEET, TO LAND OF SAID PORTLAND TERMINAL COMPANY;

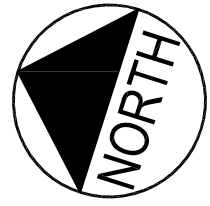
THENCE S 54° 28' 52" E ALONG SAID LAND 116.36 FEET;

THENCE EASTERLY ALONG SAID LAND AND ALONG A CURVE CONCAVE TO THE LEFT HAVING A RADIUS OF 988.37 FEET AN ARC DISTANCE OF 530.37 FEET, WHICH CURVE HAS A CHORD OF S 69° 52' 08" E 524.02 FEET TO THE POINT OF BEGINNING CONTAINING 3.32 ACRES, MORE OR LESS.

PLAN REFERENCES

- STANDARD BOUNDARY SURVEY ROUTE 1 BLUE STAR MEMORIAL HIGHWAY PORTLAND, MAINE PORTLAND TERMINAL COMPANY TO MERRILL INDUSTRIES, INC." DATED MAY 19, 1998 BY OWEN HASKELL, INC.
- TOPOGRAPHIC AND SITE CONDITIONS PLAN PORTLAND; RAIL UNDERPASS; VETERANS MEMORIAL BRIDGE" DATED FEB. 28, 1996 BY OWEN HASKELL, INC.
- RECORDING PLAT FOR CUMBERLAND COUNTY COMMISSIONERS . . . CUMBERLAND COUNTY JAIL" DATED 11-08-90 BY SMRT RECORDED IN PLAN BOOK 131 PAGE 200.
- PLAN OF PROPERTY IN PORTLAND MAINE MADE FOR PORTLAND CARGO ASSOCIATES" DATED 4-26-88 BY HI & EC JORDAN.
- PLAN OF PROPERTY IN PORTLAND MAINE MADE FOR MERRILL INDUSTRIES, INC. DATED FEB. 11, 1987 BY HI & EC JORDAN.
- MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP STATE HIGH 295" SHC FILE NO. 3-185 DATED MAY 1967.
- RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY OPERATED BY THE PORTLAND TERMINAL COMPANY" DATED JUNE 30, 1916 DWG V-1-D/1.
- PLAN OF PROPERTY IN PORTLAND AND DEERING MAINE AT LIBBY'S CORNER SURVEYED FOR JAMES H. SMITH" DATED SEPT 1886 BY HI & EC JORDAN.
- PLAN OF AREA CLAIMED BY J.F. PROCTOR ON FILE AT OWEN HASKELL, INC. (ECJ FILE # 331).
- THE PORTLAND AND OGDENSBURG RAILWAY PLAN OF LOCATION OF BRANCH RAILROAD TRACK TO PORTLAND UNION RAILWAY STATION PORTLAND MAINE DATED JULY 16, 1906.
- PLAN OF PART OF CITY FARM AND ADJACENT STREETS DATED AUGUST 1878 BY WILLIAM A. GOODWIN C.C.E. RECORDED IN PLAN BOOK 4 PAGE 16.
- PLAN OF PROPERTY BOUGHT OF J.B. BROWN BY THE BOSTON & MAINE RAILROAD PORTLAND DATED MARCH 15, 1873 RECORDED IN PLAN BOOK 3 PAGES 38 & 39.
- PLAN OF PROPERTY IN PORTLAND MAINE MADE FOR PORTLAND WATER DISTRICT — EASEMENT PLAN FORE RIVER FORCE MAIN" DATED 5-4-1976 BY HI & EC JORDAN.
- RIGHT OF WAY MAP STATE HIGHWAY 10, CITY OF PORTLAND DATED SEPTEMBER 2002 DOT FILE NO. 3-483
- LAND TITLE SURVEY OFF CONGRESS STREET, PORTLAND, MAINE MADE FOR MERCY HOSPITAL DATED JUNE 29, 2002 BY OWEN HASKELL, INC.
- RIGHT OF WAY AND TRACK MAP THE PORTLAND AND OGDENSBURG RY. OWNED AND OPERATED BY THE PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 DWG V-2/2
- RIGHT OF WAY AND TRACK MAP THE PORTLAND AND OGDENSBURG RY. OWNED AND OPERATED BY THE PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 DWG V-2/1
- RIGHT OF WAY AND TRACK MAP THE PORTLAND AND OGDENSBURG RY. OWNED AND OPERATED BY THE PORTLAND TERMINAL COMPANY DATED JUNE 30, 1916 DWG V-1-D/1-A
- AS-BUILT ACSM LAND TITLE SURVEY ON I-295 CONNECTOR, PORTLAND, MAINE MADE FOR LANDMARK HEALTHCARE FACILITIES, LLC DATED SEPTEMBER 8, 2009 BY OWEN HASKELL, INC.





N/F
UNION STREET ASSOCIATES LIMITED PARTNERSHIP
10144/23

N/F
ST. JOHN STREET ASSOCIATES LIMITED PARTNERSHIP
6864/210

N/F
INHABITANTS CUMBERLAND COUNTY
STATE OF MAINE
9382/61
9820/263

CUMBERLAND COUNTY JAIL

MEDICAL OFFICE BUILDING
F.F.E. 90.0

PHASE 1 HOSPITAL
FIRST FLOOR EL. 92.0
GROUND FLOOR EL. 17.5

MAINTENANCE BUILDING
F.F.E. 109.5

I-295 CONNECTOR
19154/155

FORE RIVER PARKWAY

LAND OF
MERCY HOSPITAL

VETERANS MEMORIAL BRIDGE

MERCY HOSPITAL
SOUTH OPEN SPACE

NEW VETERANS
MEMORIAL BRIDGE UNDER
CONSTRUCTION

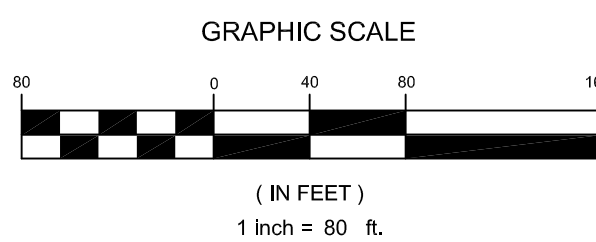
MERCY HOSPITAL
NORTH OPEN SPACE

FORE RIVER
MUD FLATS

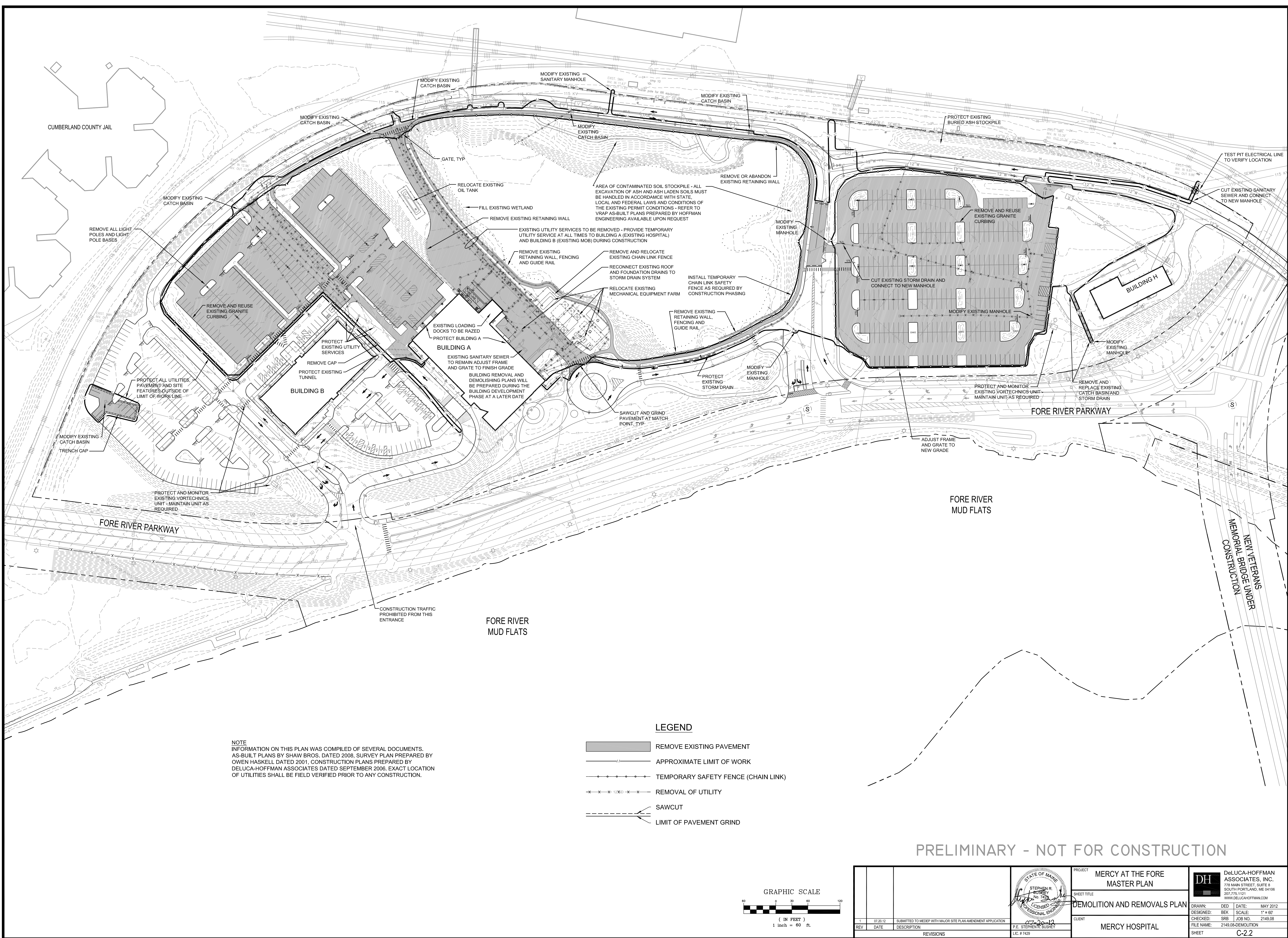
FORE RIVER
MUD FLATS

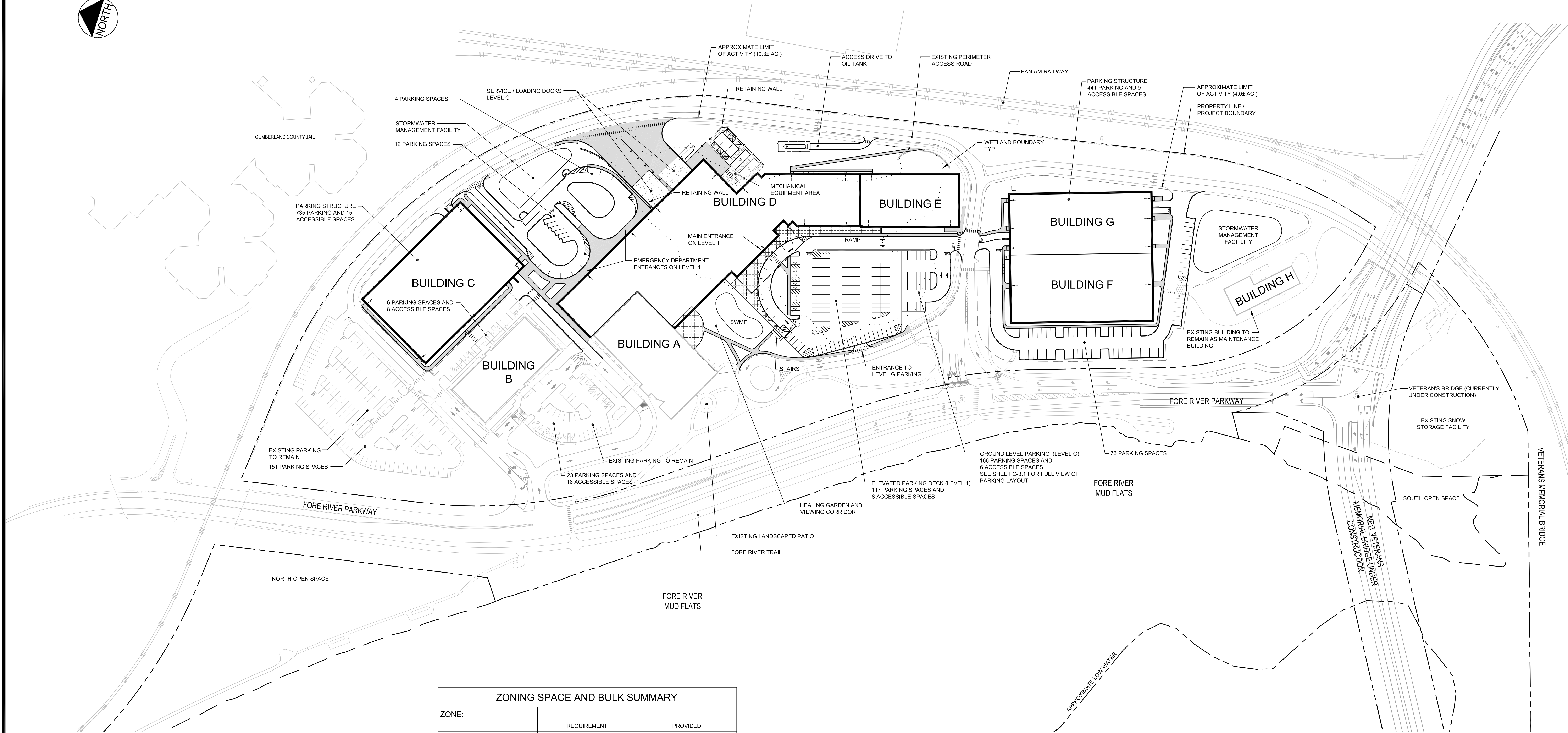
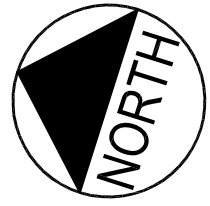
NOTE
INFORMATION ON THIS PLAN WAS COMPILED OF SEVERAL DOCUMENTS.
AS-BUILT PLANS BY SHAW BROS. DATED 2008, SURVEY PLAN PREPARED BY
OWEN HASKELL DATED 2001, CONSTRUCTION PLANS PREPARED BY
DELUCA-HOFFMAN ASSOCIATES DATED SEPTEMBER 2006. EXACT LOCATION
OF UTILITIES SHALL BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION



1		07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	REVISIONS	STATE OF MAINE STEPHEN R. SUSHEY P.E. LIC. # 7429	PROJECT MERCY AT THE FORE MASTER PLAN	SHEET TITLE OVERALL EXISTING CONDITIONS PLAN	CLIENT MERCY HOSPITAL	DRAWN: DEB DESIGNED: BEK CHECKED: SRB FILE NAME: 2149.08-EX SHEET C-2.1
									DATE: MAY 2012 SCALE: 1" = 80' JOB NO. 2149.08



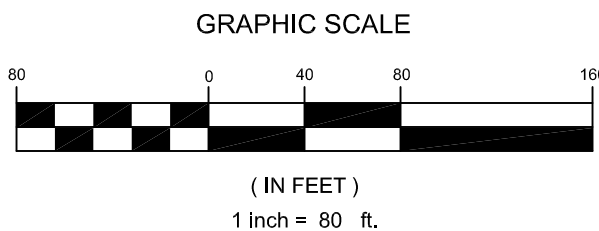


PLAN REFERENCES:
1. OWEN HASKELL SURVEY DATED JUNE 29, 2001.
2. PHASE 1 PLANS BY DELUCA-HOFFMAN ASSOCIATES DATED SEPTEMBER 2006.
3. VETERANS MEMORIAL BRIDGE PLANS BY T.Y. LIN DATED 2010

ZONING SPACE AND BULK SUMMARY		
ZONE:	REQUIREMENT	PROVIDED
YARD DIMENSIONS		
FRONT SETBACK	20 Ft	-- FT
SIDE SETBACK	10 Ft	10 Ft
REAR SETBACK	10 Ft	10 Ft
MAXIMUM IMPERVIOUS LOT COVERAGE	80%	66.40%
MAXIMUM BUILDING HEIGHT	90 Ft	TBD

PARKING SUMMARY		
PARKING REQUIREMENTS		
HOSPITAL - 1 SPACE / 500 S.F. MEDICAL - 1 SPACE / 400 S.F.		
	GROSS AREA	REQUIRED SPACES
HOSPITAL	387,832	776
MEDICAL	320,000	800
TOTAL	707,832	1576
PROVIDED SPACES		
AREA	EXISTING	PROPOSED MASTER PLAN
NORTH	443	1267
SOUTH	310	523
TOTAL	753	1790

BUILDING SUMMARY			
BUILDING	USE	GROSS S.F.	FOOTPRINT S.F.
A	EXISTING HOSPITAL	137,832	37,566
B	EXISTING MEDICAL OFFICE BUILDING	80,000	20,014
C	FUTURE PARKING GARAGE	N/A	N/A
D	FUTURE HOSPITAL / AMBULATORY CARE CENTER EXPANSION	322,000	116,980
E	FUTURE MEDICAL OFFICE BUILDING	60,000	15,000
F	FUTURE MEDICAL OFFICE BUILDING	108,000	40,000
G	FUTURE PARKING GARAGE	N/A	N/A
H	EXISTING MAINTENANCE FACILITY	7,016	7,016



PRELIMINARY - NOT FOR CONSTRUCTION

						PROJECT MERCY AT THE FORE MASTER PLAN				DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.776.1121 WWW.DELUCAHOFFMAN.COM	
						SHEET TITLE OVERALL SITE PLAN				DRAWN: _____ DED _____ DATE: _____ MAY 2012	
						CLIENT MERCY HOSPITAL				DESIGNED: BEK SCALE: 1" = 80'	
										CHECKED: SRB JOB NO. 2149.08	
										FILE NAME: 2149.08-SITE LAYOUT	
										SHEET C-3.0	



100 / 8 PARKING SPACE - STANDARD / ACCESSIBLE

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**STORMWATER MANAGEMENT
ZONE D-b**

ZONE D-b
GRASSED UNDERDRAINED
SOIL FILTER

**STORMWATER MANAGEMENT
ZONE A-a**

ZONE A-a
FILTERRA TREE BOX WITH
STORMTECH ISOLATOR ROW

**STORMWATER MANAGEMENT
ZONE B-a**

**STORMWATER
MANAGEMENT ZONE A-b**

**STORMWATER MANAGEMENT
ZONE C-b**

ZONE C-b
BUILDING ROOF DRAIN
TRIBUTARY TO UNDERDRAINED
SUBSURFACE SOIL FILTER

**STORMWATER MANAGEMENT
ZONE C-c**

ZONE C-c
FUTURE BUILDING ROOF DRAIN
TRIBUTARY TO UNDERDRAINED
SUBSURFACE SOIL FILTER

**STORMWATER MANAGEMENT
ZONE D-a**

ZONE D-a
GRASSED UNDERDRAINED SOIL
FILTER

BUILDING E
21,780 SF
LEVEL 1 FFE 32.0
LEVEL G FFE 17.5

BUILDING D
LEVEL 1 FFE 32.0
LEVEL G FFE 17.5

BUILDING G
FFE 19.90

BUILDING F
FFE 19.90

BUILDING H
FFE 17.75

BUILDING C
FFE 30.0 - 32.0

BUILDING B
FFE 30.0

BUILDING A
LEVEL 1 FFE 32.0
LEVEL G FFE 17.5

ZONE A-b
FILTERRA TREE BOX WITH
STORMTECH ISOLATOR ROW

FORE RIVER PARKWAY

FORE RIVER PARKWAY TRAIL

ZONE C
DISCHARGE

EXISTING VORTEX HYDRODYNAMIC
SEPARATOR WATER QUALITY
TREATMENT UNITS TO REMAIN
FORE RIVER
MUD FLATS

ZONE D
DISCHARGE

VEGETATED
TREATMENT SWALE

**STORMWATER MANAGEMENT
ZONE C-a**

ZONE C-a
UNDERDRAINED SUBSURFACE
SAND FILTER

**STORMWATER MANAGEMENT
ZONE B-b**

ZONE B-a
UNDERDRAINED BIORETENTION CELL
"RAIN GARDEN"

ZONE B
DISCHARGE

ZONE B-a
DRAIN MANHOLE WITH STORM FILTERS®

ZONE B-a
BRENTWOOD STORM TANKS
WATER QUALITY VOLUME STORAGE

EXISTING VORTEX
HYDRODYNAMIC SEPARATOR
WATER QUALITY
TREATMENT
UNITS TO REMAIN

FORE RIVER
MUD FLATS

ZONE A
DISCHARGE

VEGETATED TREATMENT SWALE

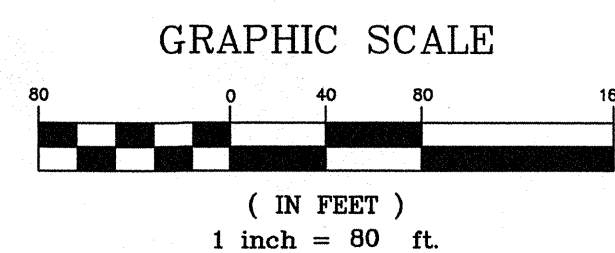
ZONE A-c
FILTERRA TREE BOX WITH
STORMTECH ISOLATOR ROW

**STORMWATER MANAGEMENT
ZONE A-c**

Summary of Water Quality Treatment

Storm Water Management Zone	Inlet Subcatchment	Treatment Approach	Total Treated Area (ac)	Impervious Area (ac)				Required Water Quality Filter Surface Area (sf) (When Applicable)	1 Yr 24-hr Storm Event Peak Flow Rate (cfs)	Stormtech Isolator Row Chambers Required (EA)	Stormtech Isolator Row Chambers Provided (EA)	Provided Water Quality Volume (c)	Provided Filter Surface Area (sf) or Size of Proprietary Unit
				Roof (ac)	Pavement, Gravel, etc (ac)	Total Impervious Area (ac)	Pervious Area (ac)						
A-a	A13	Filtterra Tree Box®	0.25	0.00	0.17	0.17	0.08	N/A	0.46	2.30	N/A	3	4"x8" Tree Box
A-b	A10	Filtterra Tree Box®	0.47	0.00	0.35	0.35	0.11	N/A	0.90	4.50	N/A	5	6"x8" Tree Box
A-c	A4	Filtterra Tree Box®	0.51	0.00	0.35	0.35	0.16	N/A	0.90	4.50	N/A	5	6"x8" Tree Box
Total Treatment Area Discharge A			1.23	0.00	0.88	0.88	0.35	0	0				
B-a	Inlet B6 through B7	Stormtech Isolator Row Chambers by Contech	0.62	0.00	0.55	0.55	0.08	2,091	1.34	N/A	10.35	2,268	(11) 12" High Stormtech Isolator Chambers by Contech
B-b	Surface runoff and Inlet B13	Bio Retention Cell	0.51	0.00	0.09	0.09	0.42	931	0.43	N/A	N/A	1,145	2,000
Total Treatment Area Discharge B			1.13	0.00	0.64	0.64	0.49	3022	819				
C-a	Parking Platform - Inlet C6	Subsurface Sand Filter	2.18	0.00	2.04	2.04	0.14	7,603	4.87	24.4	N/A	28	
C-b	Portion of Building D Roof Drain	Subsurface Sand Filter	1.10	1.10	0.00	1.10	0.00	4,000	2.59	13.0	N/A	14	
C-c	Building E Roof Drain	Subsurface Sand Filter	0.50	0.50	0.00	0.50	0.00	1,817	1.18	5.9	N/A	14	
Total Treatment Area Discharge C			3.78	1.60	2.04	3.64	0.14	13,420	8,652				
D-a	Inlet D4 through D7 and D9 - CB 40 (Building G and F)	Water Quality Filter	4.37	0.91	2.05	2.96	1.41	12,790	7.66	N/A	N/A	12,875	7,676
D-b	Inlet D28 through D33 (Building C)	Water Quality Filter	2.43	0.00	1.75	1.75	0.68	7,333	4.46	N/A	N/A	7,626	4,428
Total Treatment Area Discharge D			6.80	0.91	3.80	4.71	2.09	20,123	12,074				
TOTAL TREATED AREA			12.94	2.51	7.35	9.86	3.07						
NOTES AND ASSUMPTIONS:													
1. All areas are based on the Deluca Hoffman Associates Permit drawings dated July 2012.													
2. The required water quality volumes have been computed based on Sections 7.1, 7.2, 7.3 and Interim Guidance for the Storm Filter System Dated November 12, 2009 of the Maine DEP Volume III BMP's Technical Design Manual. The volume is computed to be 1" times the subcatchment impervious area and 0.4" times the subcatchment landscaped area.													
3. The required filter surface area has been computed based on Sections 7.1, and 7.2 of the Maine DEP Volume III BMP's Technical Design Manual. The Undersurface Graded Filter and Subsurface Sand Filter areas are computed to be 5% of the subcatchment impervious area and 2% times the subcatchment vegetated area. The Undersurface Bio Retention Cell filter area is computed to be 7% of the subcatchment impervious area and 5% times the subcatchment vegetated area.													
4. The 1 year peak flow rates have been computed using HydroCAD a computer Hydrologic Modeling software. The rainfall intensities are derived from the 7-55 Manual for Cumberland County SE.													
5. Subsurface storage system sizing is based on a Stormtech SC-740 chamber system. All Isolator rows have been computed per section 7.3.3 Pretreatment Isolator Row of the Maine DEP Volume III BMP's Technical Manual. One chamber is required for each 0.2 cfs of the computed tributary 1 year peak flow rate.													
7. The required number of Stormtech Isolator Chambers by Contech is computed to be one 12" Isolator Chambers per 202 Cubic feet of Water quality volume.													
8. The owner reserves the right to use an alternate tree box filter device provided it has been approved by the Maine DEP Chapter 500 and the City of Portland.													
Percent of Treated Area which is Impervious			N/A	76%									
Percent of Treated Impervious Area which is Rooftop			N/A	25%									
Percent of Total Redeveloped Area Treated (13.44 AC Redeveloped Area See Figure A-2)			80%	96%									
Percent of Redeveloped Impervious Area Treated (10.43 AC Redeveloped Impervious Area See Figure A-2)			95%	95%									

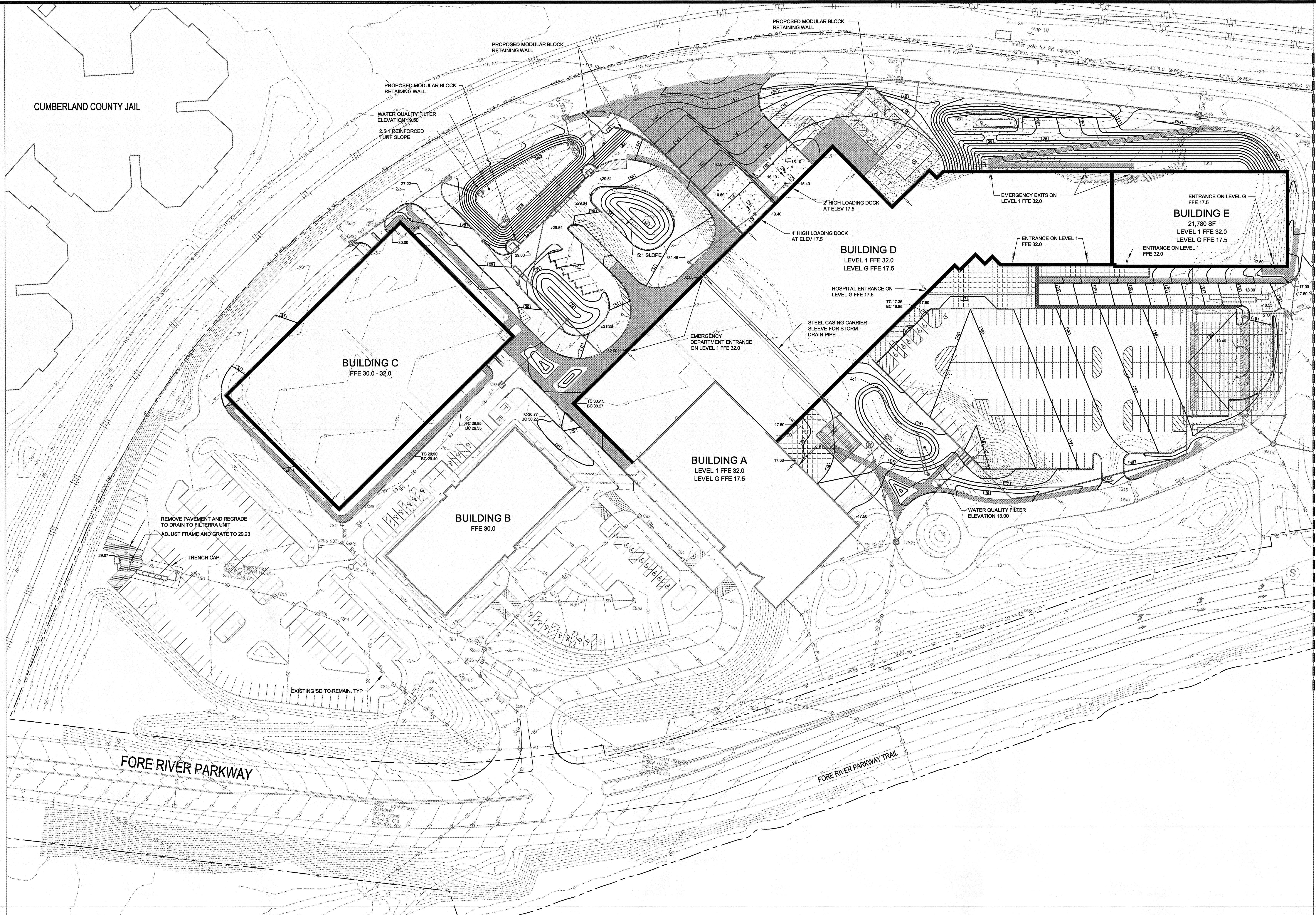
PRELIMINARY - NOT FOR CONSTRUCTION



2		10/23/12	REVISED AND RESUBMITTED TO MEDEP PER COMMENTS DATED 10/18/12
1		07/20/12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION
REV	DATE	DESCRIPTION	REVISIONS
P.E. STEPHEN R. BUSHEY LIC. # 12573			
PROJECT		MERCY AT THE FORE MASTER PLAN	
SHEET TITLE		OVERALL GRADING AND DRAINAGE PLAN	
CLIENT		MERCY HOSPITAL	
DRAWN:		DED	DATE: MAY 2012
CHECKED:		BEK	SCALE: 1" = 80'
FILE NAME:		2149.08-GRADING	JOB NO. 2149.08
SHEET		C-4.0	

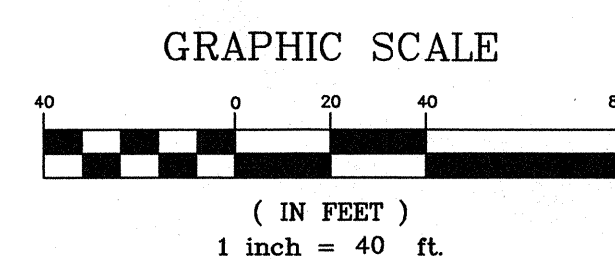


CUMBERLAND COUNTY JAIL

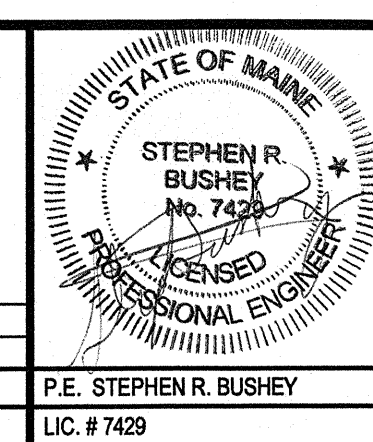


MATCH LINE - SEE SHEET C-4.2

PRELIMINARY - NOT FOR CONSTRUCTION

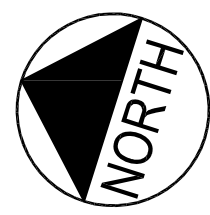


REV	DATE	DESCRIPTION
2	10/23/12	REVISED AND RESUBMITTED TO MEHP PER COMMENTS DATED 10/12/12
1	07/23/12	SUBMITTED TO MEHP WITH MAJOR SITE PLAN AMENDMENT APPLICATION

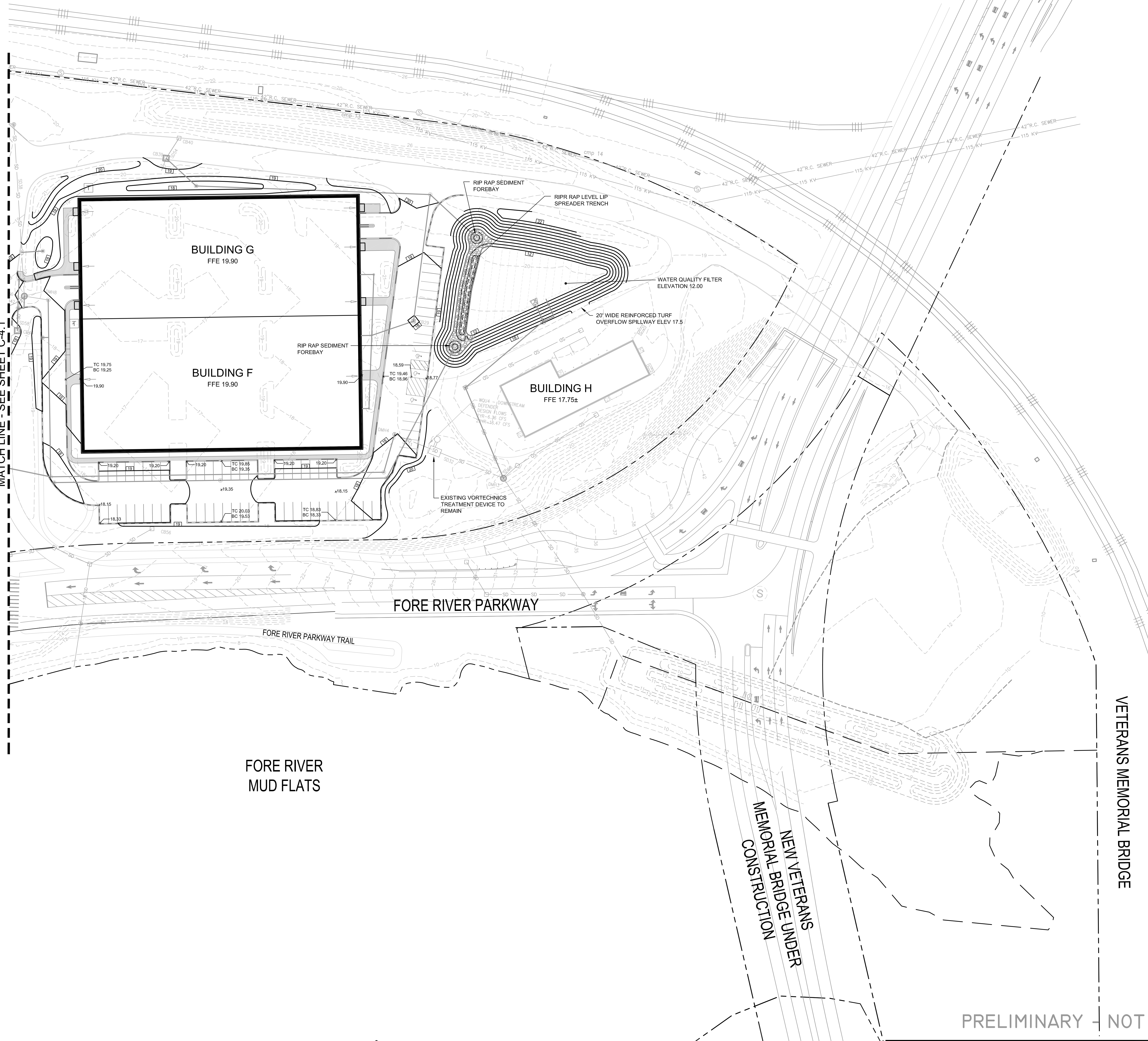


PROJECT	MERCY AT THE FORE MASTER PLAN
SHEET TITLE	GRADING PLAN NORTH
CLIENT	MERCY HOSPITAL

DRAWN:	DED	DATE:	MAY 2012
DESIGNED:	BEK	SCALE:	1" = 40'
CHECKED:	SRB	JOB NO.	2149.08
FILE NAME:	2149.08-GRADING		
SHEET	C-4.1		



MATCH LINE - SEE SHEET C-4.1



FORE RIVER PARKWAY

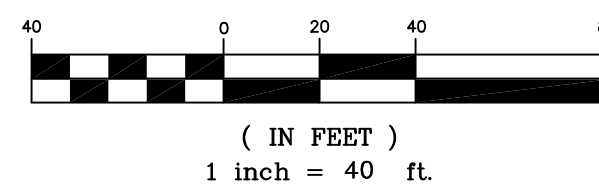
FORE RIVER
MUD FLATS

VETERANS MEMORIAL BRIDGE

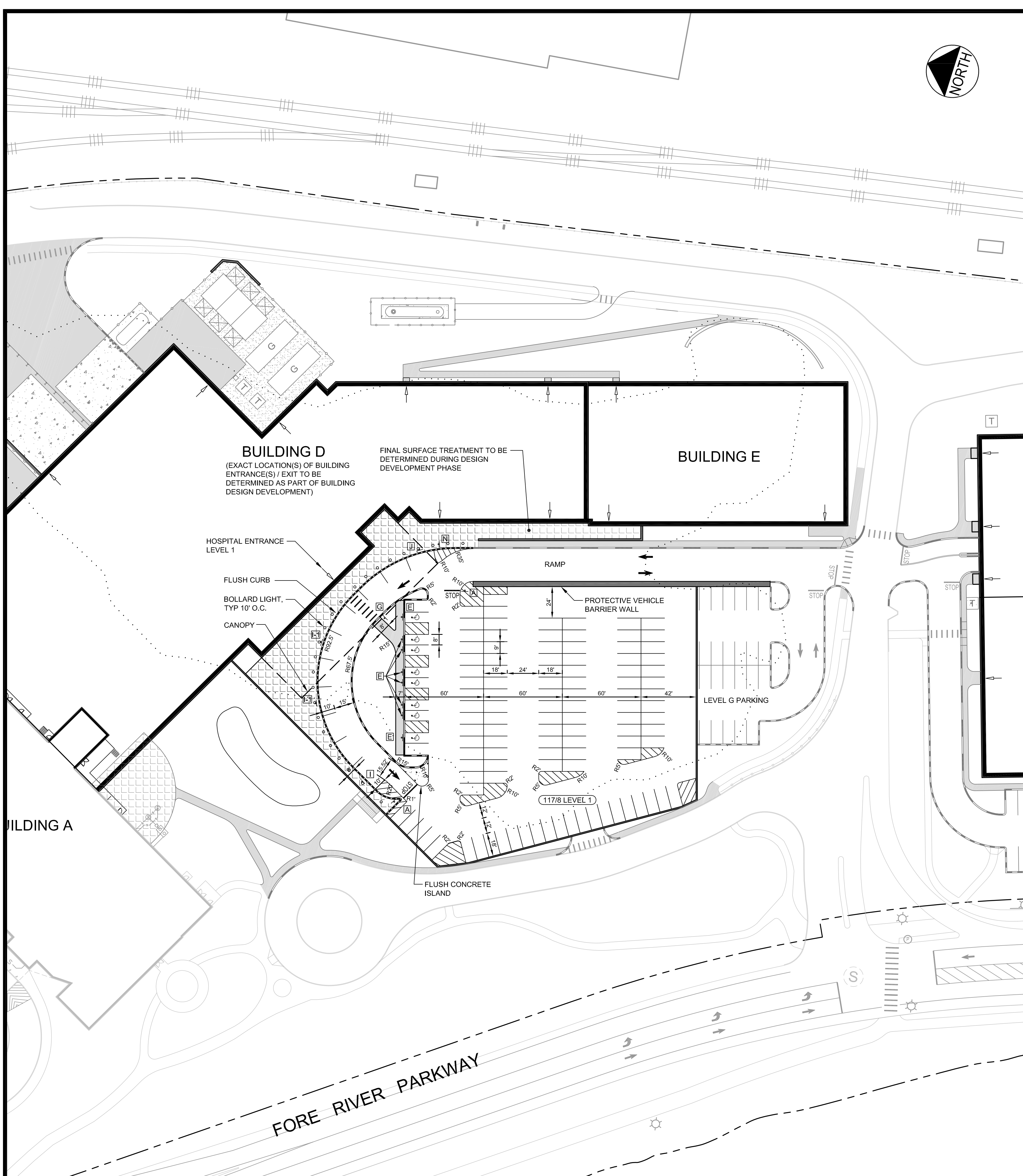
NEW VETERANS
MEMORIAL BRIDGE UNDER
CONSTRUCTION

PRELIMINARY - NOT FOR CONSTRUCTION

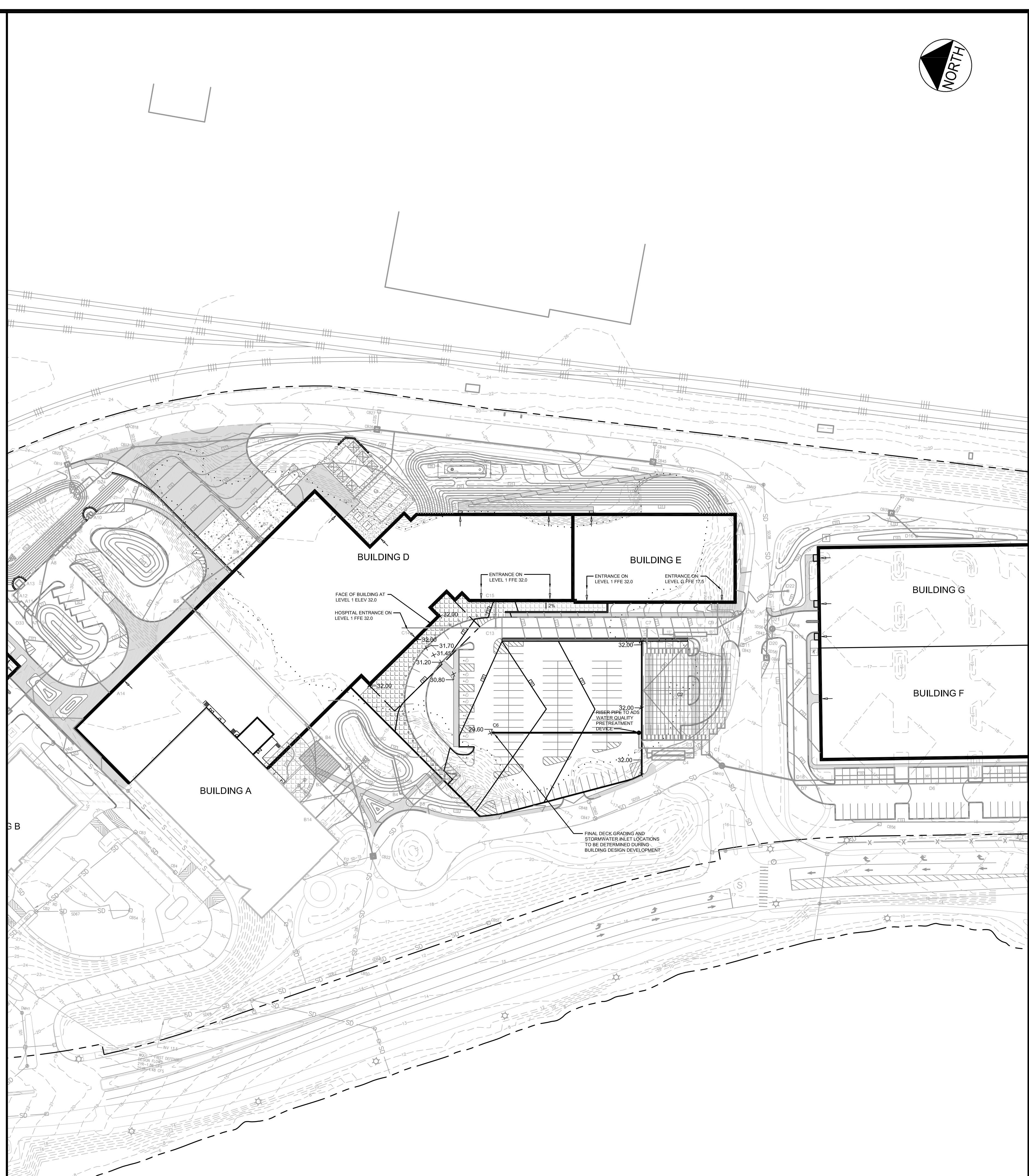
GRAPHIC SCALE



			STATE OF MAINE STEPHEN R. SUSHET Professional Engineer 07-20-12 P.E. STEPHEN R. SUSHET LIC. # 7429	PROJECT MERCY AT THE FORE MASTER PLAN		DH DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELOUCHOFFMAN.COM				
				SHEET TITLE GRADING PLAN SOUTH						
CLIENT MERCY HOSPITAL		DRAWN: DEB DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 40' CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-GRADING SHEET C-4.2								
REVISIONS										
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION								
REV	DATE	DESCRIPTION								



SITE LAYOUT PLAN - LEVEL 1



GRADING AND DRAINAGE PLAN - LEVEL 1

SIGN LEGEND

R1-1 24"x24"	R5-1 30"x30"	R7-8 12"x18"	R7-8P 12"x18"	W11-2 24"x24" W16-7P 12"x18"	W11-2 24"x24" W16-7P 12"x18"	18"x18"	12"x18"	12"x18"	12"x18"	12"x18"	12"x18"	12"x18"	12"x18"	12"x18"

CURB LEGEND

	VERTICAL CURB
	SLOPED CURB
	TIP DOWN
	TRANSITION STONE (VERTICAL TO SLOPED)

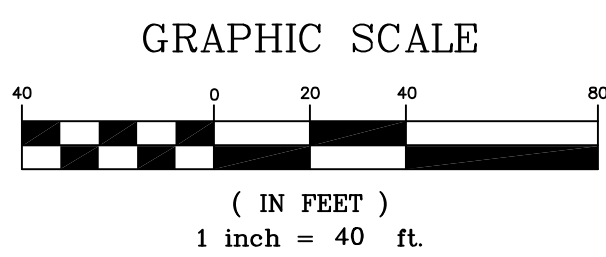
SITE LAYOUT NOTES

- ALL BARRIER FREE PARKING SPACES ARE TO RECEIVE BARRIER FREE SIGNS AND PAVEMENT MARKINGS AS ILLUSTRATED ON THE DETAIL SHEETS.
- ALL CURBING MATERIALS WILL BE SELECTED BY THE OWNER. THE DIMENSIONS PROVIDED ON THE PLAN ARE TO FACE OF CURB. ALL CURBING TYPES ARE DETAILED IN THE PROJECT DETAIL SHEETS.
- ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB, THE EDGE OF PAVEMENT OR THE FACE OF THE BUILDING.
- EXCEPT WHERE INDICATED OTHERWISE, THE PAVEMENT IS TO BE STANDARD DUTY PAVEMENT.

PAVEMENT MARKING LEGEND

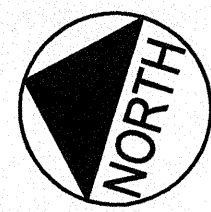
- | | |
|---------|-----------------------------------|
| 4" DYCL | 4" WIDTH DOUBLE YELLOW CENTERLINE |
| 4" SYLL | 4" WIDTH SOLID YELLOW LANE LINE |
| 4" SWLL | 4" WIDTH SOLID WHITE LANE LINE |
| 12" SL | 12" WIDTH SOLID WHITE STOP LINE |
- ALL PARKING STALLS TO BE 4" WIDTH SINGLE SOLID WHITE LINE EXCEPT AS SHOWN ON SITE LAYOUT PLAN.
- ALL SIGNAGE AND STRIPING SHALL CONFORM TO THE STANDARDS FOR SIZE, HEIGHT, LOCATION, COLOR, INSTALLATION AND REFLECTIVITY SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

100 / 8 PARKING SPACE - STANDARD / ACCESSIBLE

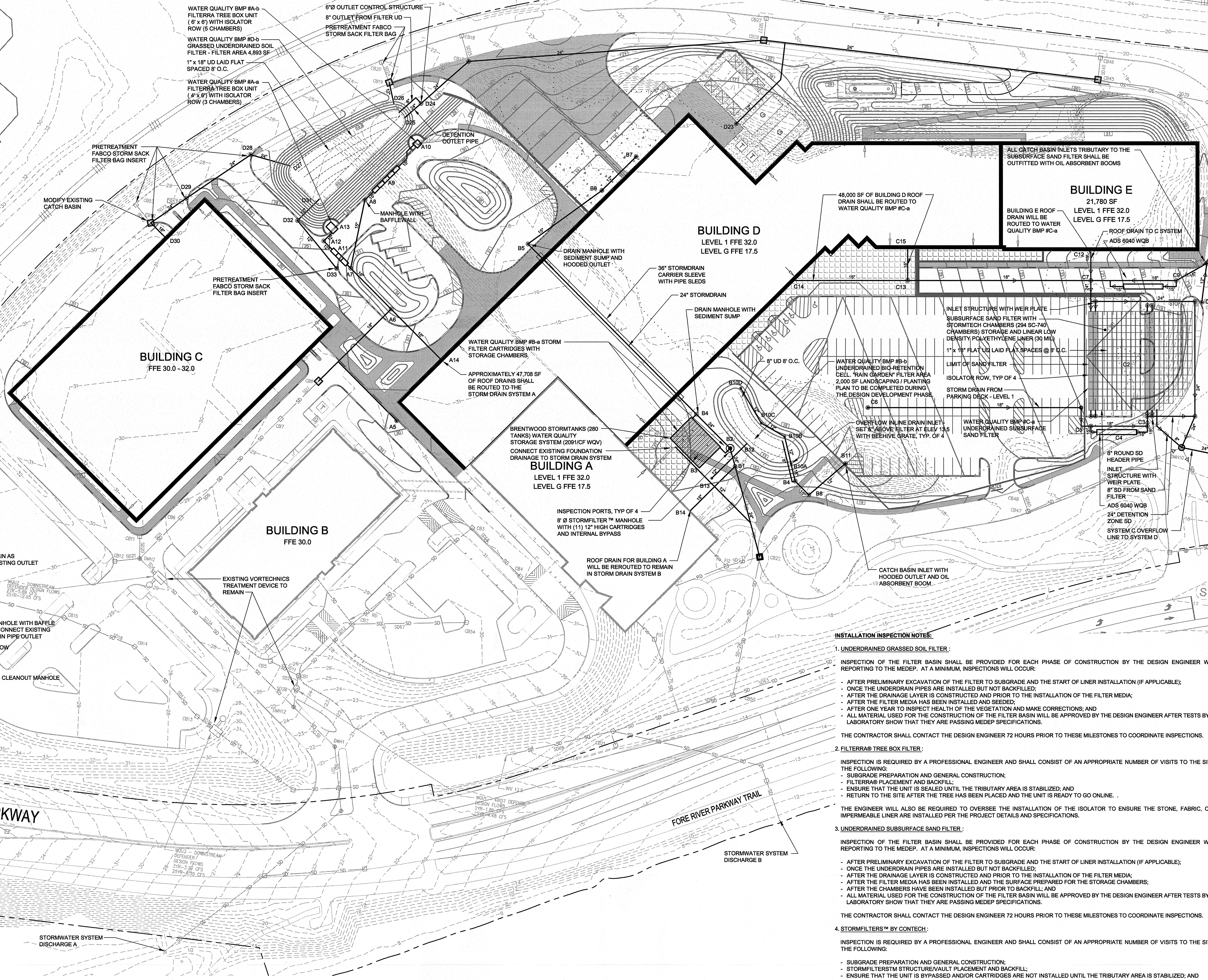


PRELIMINARY - NOT FOR CONSTRUCTION

	PROJECT	MERCY AT THE FORE MASTER PLAN
	SHEET TITLE	SITE LAYOUT AND GRADING PLAN LEVEL 1
	CLIENT	MERCY HOSPITAL
	DATE	07-26-12
1	07/26/12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION
REV	DATE	DESCRIPTION
REVISIONS		
LIC. # 7429		
DRAWN:	DEB	DATE: MAY 2012
DESIGNED:	BEK	SCALE: 1" = 40'
CHECKED:	SRB	JOB NO. 2149.08
FILE NAME:	2149.08-LEVEL 1	
SHEET	C-4.3	



CUMBERLAND COUNTY JAIL



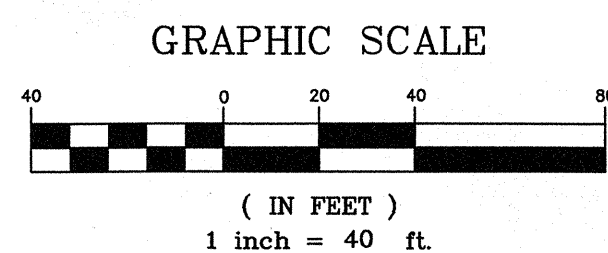
MATCH LINE - SEE SHEET C-4.5

NOTES

- INSTALL FABCO STORM SACK FILTER BAGS IN ALL CATCH BASIN INLETS TRIBUTARY TO WATER QUALITY BMP D-b. FILTER BAGS WILL SERVE AS SEDIMENT ACCUMULATION PRETREATMENT FOR THE GRASSED UNDERDRAIN SOIL FILTER D-b.

LEGEND

- STORM DRAIN MANHOLE
- CATCH BASIN INLET
- MODIFY EXISTING CATCH BASIN

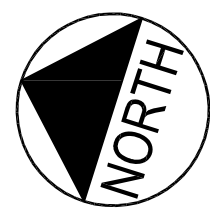


INSTALLATION INSPECTION NOTES:

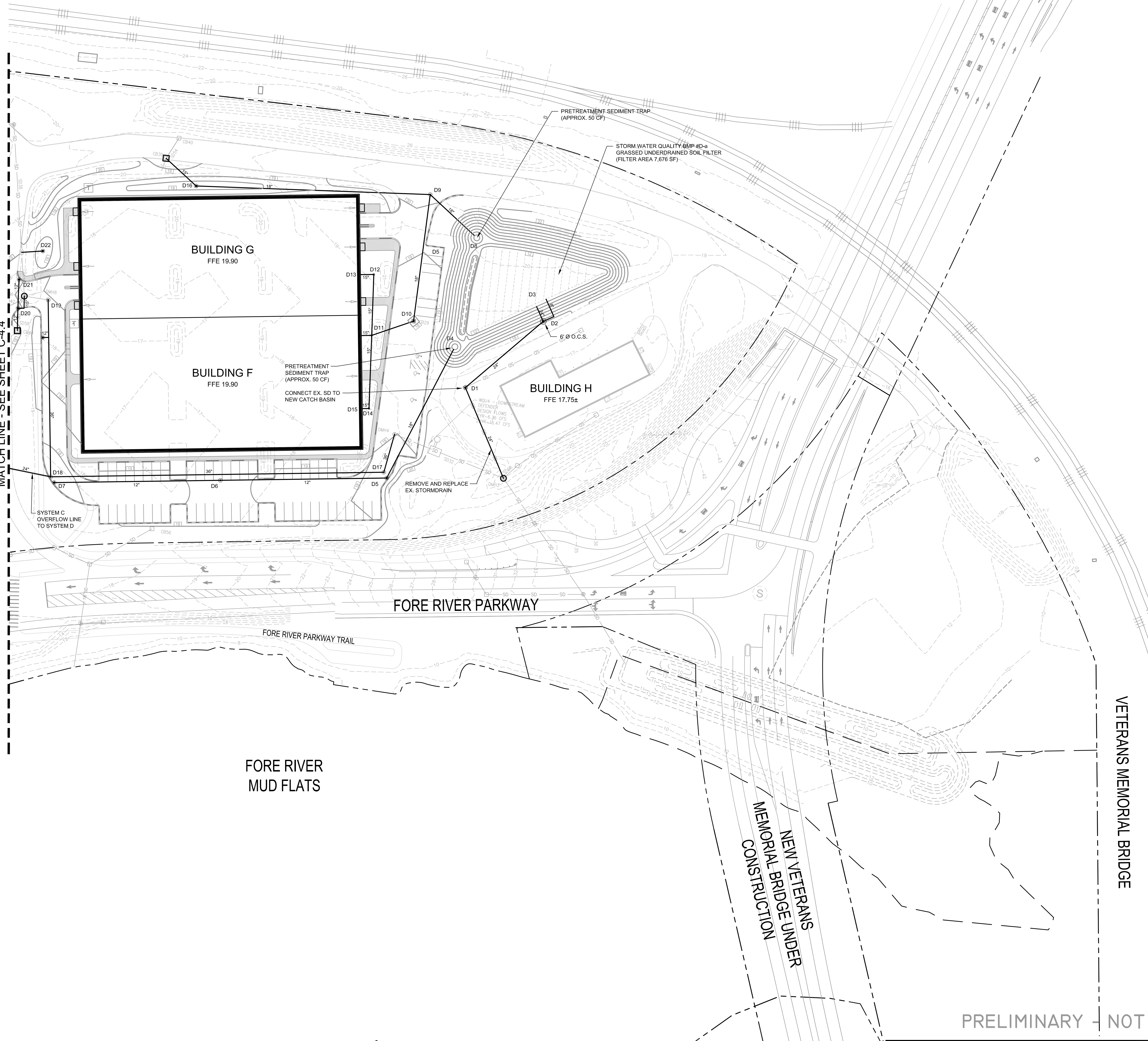
- UNDERDRAINED GRASSED SOIL FILTER:**
INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE MEDEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 - AFTER PRELIMINARY EXCAVATION OF THE FILTER TO SUBGRADE AND THE START OF LINER INSTALLATION (IF APPLICABLE);
 - ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
 - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA;
 - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDING;
 - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 - ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING MEDEP SPECIFICATIONS.THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER 72 HOURS PRIOR TO THESE MILESTONES TO COORDINATE INSPECTIONS.
- FILTERRA® TREE BOX FILTER:**
INSPECTION IS REQUIRED BY A PROFESSIONAL ENGINEER AND SHALL CONSIST OF AN APPROPRIATE NUMBER OF VISITS TO THE SITE TO INSPECT THE FOLLOWING:
 - SUBGRADE PREPARATION AND GENERAL CONSTRUCTION;
 - FILTERRA® PLACEMENT AND BACKFILL;
 - ENSURE THAT THE UNIT IS SEALED UNTIL THE TRIBUTARY AREA IS STABILIZED; AND
 - RETURN TO THE SITE AFTER THE TREE HAS BEEN PLACED AND THE UNIT IS READY TO GO ONLINE.THE ENGINEER WILL ALSO BE REQUIRED TO OVERSEE THE INSTALLATION OF THE ISOLATOR TO ENSURE THE STONE, FABRIC, CHAMBERS AND IMPERMEABLE LINER ARE INSTALLED PER THE PROJECT DETAILS AND SPECIFICATIONS.
- UNDERDRAINED SUBSURFACE SAND FILTER:**
INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE MEDEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 - AFTER PRELIMINARY EXCAVATION OF THE FILTER TO SUBGRADE AND THE START OF LINER INSTALLATION (IF APPLICABLE);
 - ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
 - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA;
 - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND THE SURFACE PREPARED FOR THE STORAGE CHAMBERS;
 - AFTER THE CHAMBERS HAVE BEEN INSTALLED BUT PRIOR TO BACKFILL; AND
 - ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING MEDEP SPECIFICATIONS.THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER 72 HOURS PRIOR TO THESE MILESTONES TO COORDINATE INSPECTIONS.
- STORMFILTERS™ BY CONTECH:**
INSPECTION IS REQUIRED BY A PROFESSIONAL ENGINEER AND SHALL CONSIST OF AN APPROPRIATE NUMBER OF VISITS TO THE SITE TO INSPECT THE FOLLOWING:
 - SUBGRADE PREPARATION AND GENERAL CONSTRUCTION;
 - STORMFILTERS™ STRUCTURE/VAULT PLACEMENT AND BACKFILL;
 - ENSURE THAT THE UNIT IS BYPASSED AND/OR CARTRIDGES ARE NOT INSTALLED UNTIL THE TRIBUTARY AREA IS STABILIZED; AND
 - RETURN TO THE SITE AFTER THE CARTRIDGE INSTALLATION AND VAULT HAS BEEN PLACED ONLINE.THE ENGINEER WILL ALSO BE REQUIRED TO OVERSEE THE INSTALLATION OF THE SUBSURFACE WATER QUALITY STORAGE CHAMBERS TO ENSURE THE STONE, FABRIC, CHAMBERS AND IMPERMEABLE LINER (IF APPLICABLE) ARE INSTALLED PER THE PROJECT DETAILS AND SPECIFICATIONS.

PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT MERCY AT THE FORE MASTER PLAN		DESIGNED: BEK CHECKED: SRB FILE NAME: 2148-08-GRADING SHEET: C-4.4	
SHEET TITLE STORMWATER MANAGEMENT PLAN NORTH		CLIENT MERCY HOSPITAL	
DRAWN: DED DATE: MAY 2012 SCALE: 1" = 40'		DELUCA-HOFFMAN ASSOCIATES, INC. 178 MAIN STREET, SUITE 9 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM	
REV 2 10.23.12 02.28.12 SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		REVISIONS P.E. STEPHEN R. BUSHEY LIC. # 7429	



MATCH LINE - SEE SHEET C-4.4



FORE RIVER
MUD FLATS

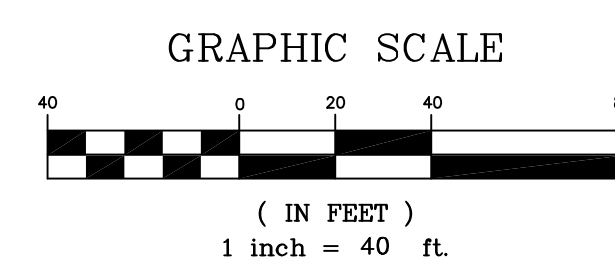
FORE RIVER PARKWAY

FORE RIVER PARKWAY TRAIL

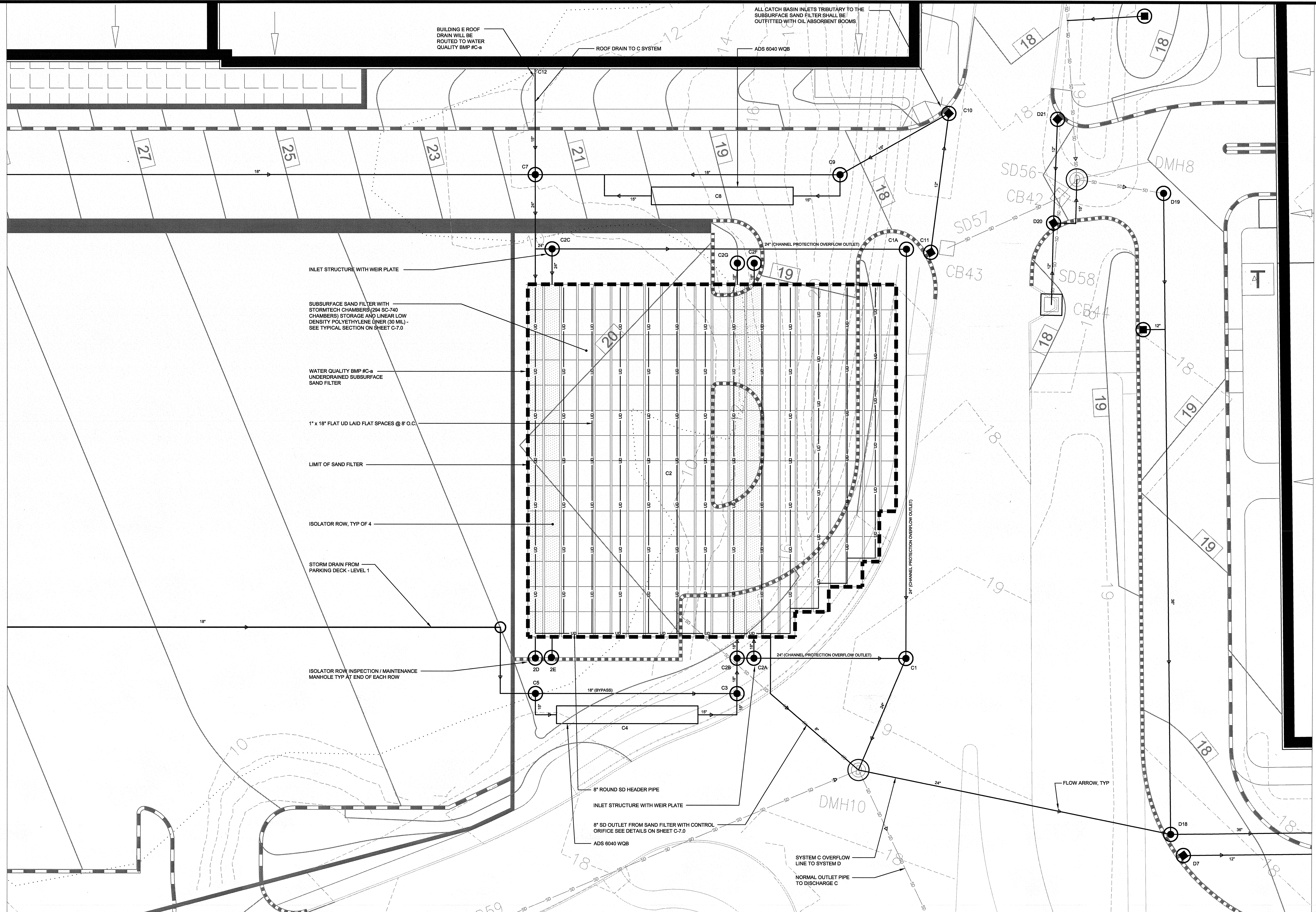
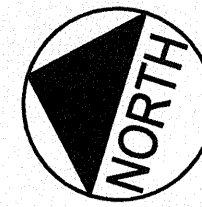
VETERANS MEMORIAL BRIDGE

NEW VETERANS
MEMORIAL BRIDGE UNDER
CONSTRUCTION

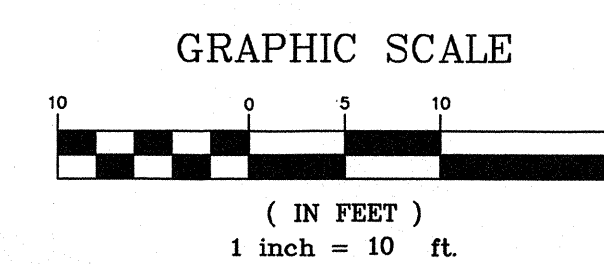
PRELIMINARY - NOT FOR CONSTRUCTION



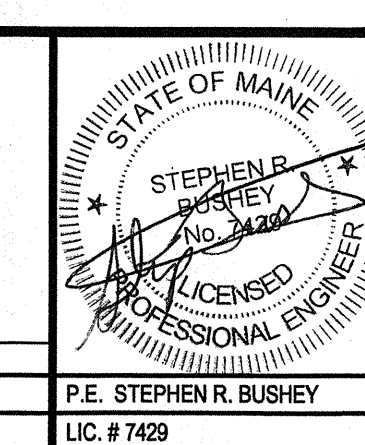
				PROJECT MERCY AT THE FORE MASTER PLAN		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM
				SHEET TITLE STORMWATER MANAGEMENT PLAN SOUTH		
				CLIENT MERCY HOSPITAL		
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P.E. STEPHEN R. BUSHEY LIC. # 7429			DRAWN: DEB DATE: MAY 2012
REV	DATE	DESCRIPTION				DESIGNED: BEK SCALE: 1" = 40'
REVISIONS						CHECKED: SRB JOB NO. 2149.08
				MERCY HOSPITAL		FILE NAME: 2149.08-GRADING
						SHEET C-4.5



PRELIMINARY - NOT FOR CONSTRUCTION

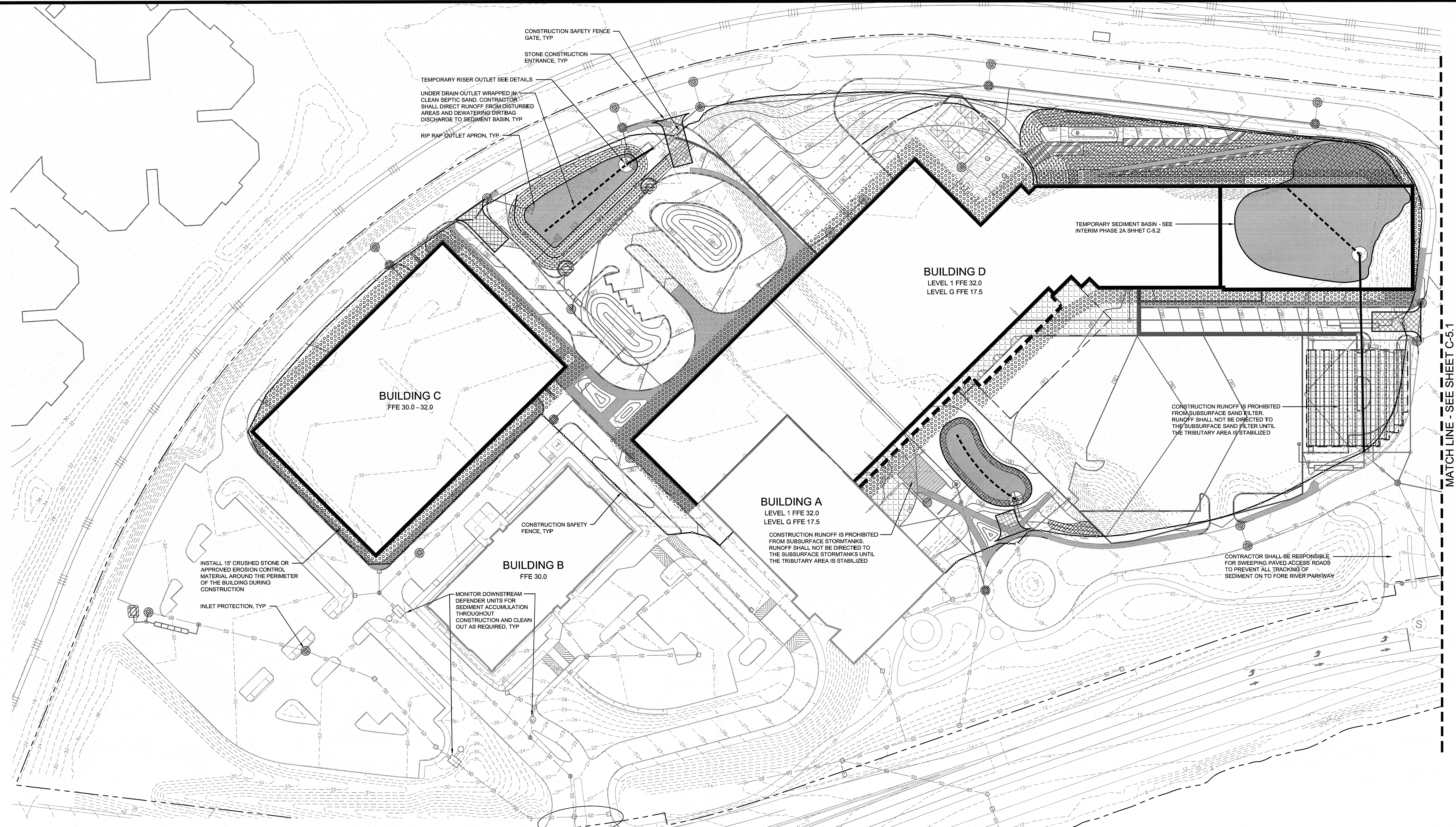


REV	DATE	DESCRIPTION
1	09.14.12	ADDED SHEET IN RESPONSE TO COMMENTS BY MEDEP
2		



PROJECT	MERCY AT THE FORE MASTER PLAN
SHEET TITLE	STORMWATER MANAGEMENT PLAN SUBSURFACE SAND FILTER
CLIENT	MERCY HOSPITAL
DRAWN:	DEB
DESIGNED:	BEK
CHECKED:	SRB
FILE NAME:	2149.08-GRADING SUBSURF SAND
DATE:	MAY 2012
SCALE:	1" = 10'
JOB NO.	2149.08
SHEET	C-4.6

DeLuca-Hoffman Associates, Inc.
773 MAIN STREET, SUITE C
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCA-HOFFMAN.COM



MATCH LINE - SEE SHEET C-5.1

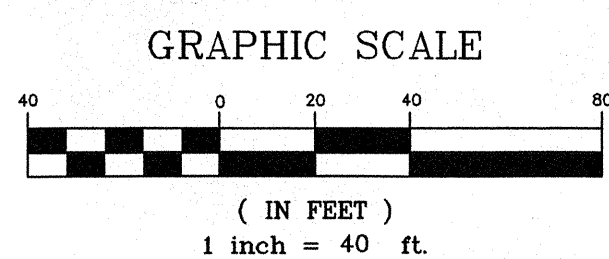
LEGEND

- INLET PROTECTION (STONE OR HAY SEDIMENT BARRIER)
- FILTERRA INLET PROTECTION (PER MANUFACTURERS REQUIREMENTS)
- RIPRAP OUTLET PROTECTION
- CURLEX BLANKET
- REINFORCED TURF
- EROSION CONTROL MESH
- POTENTIAL BUILDING LAYDOWN PAD
- CRUSHED STONE OR APPROVED EROSION CONTROL MATERIAL
- SEDIMENT BASIN
- WASH DOWN AREA
- STONE CONSTRUCTION ENTRANCE
- MATERIAL STOCKPILE

SCHEDULE OF SILT FENCE REQUIREMENTS

SILT FENCE	TYPE PURPOSE	TIME OF INSTALLATION
SF1 - CONDITION 1 SILT FENCE	TO TRAP SEDIMENT ALONG THE GRADING EDGE WHERE THE NEW CONTOURS NEARLY PARALLEL THE EXISTING CONTOURS	AT INITIAL SITE PREPARATION; PRIOR TO OTHER WORK
SF2 - CONDITION 2 SILT FENCE	TO TRAP SEDIMENT FROM THE WORK AREA; INSTALL IN SHORT SECTIONS PARALLEL TO EXISTING CONTOUR; TYPICALLY OCCURS WHERE PROPOSED AND EXISTING CONTOURS FORM A 'V' SHAPE	AT INITIAL SITE PREPARATION; PRIOR TO OTHER WORK
SF3 - CONDITION 3 SILT FENCE	TO TRAP SEDIMENT ALONG THE BASE OF PROPOSED CONTOURS; TYPICALLY IN CUT AREAS	DURING CONSTRUCTION AFTER NEW GRADE IS SHAPED; TIME SHALL BE MINIMIZED BETWEEN WORK IN AREA AND SHAPING NEW GRADE TO ALLOW SILT FENCE TO BE INSTALLED

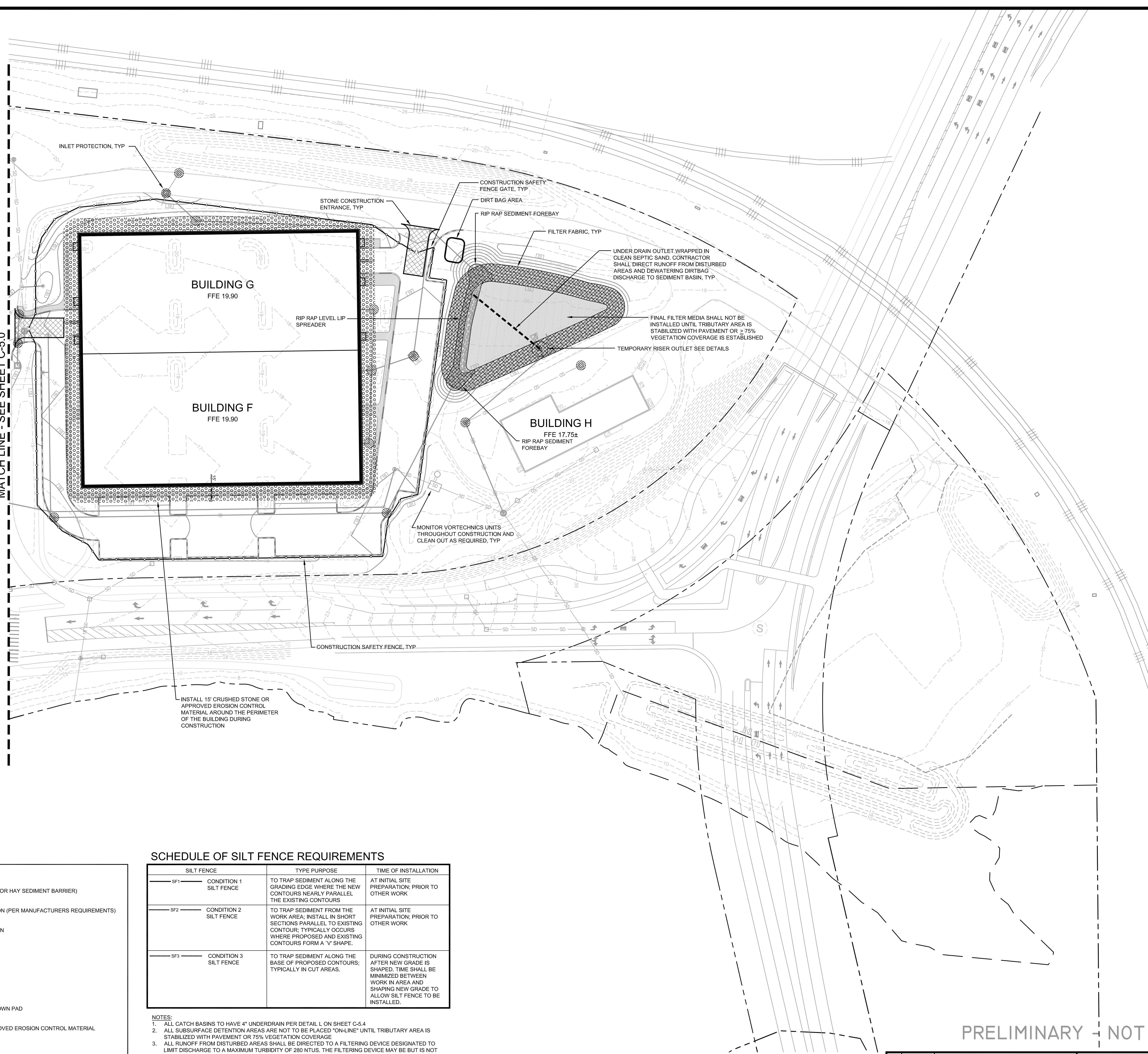
- NOTES:
- ALL CATCH BASINS TO HAVE 4" UNDERDRAIN PER DETAIL L ON SHEET C-5.4
 - ALL SUBSURFACE DETENTION AREAS ARE NOT TO BE PLACED 'ON-LINE' UNTIL TRIBUTARY AREA IS STABILIZED WITH PAVEMENT OR 75% VEGETATION COVERAGE
 - ALL RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED TO A FILTERING DEVICE DESIGNATED TO LIMIT DISCHARGE TO A MAXIMUM TURBIDITY OF 280 NTUS. THE FILTERING DEVICE MAY BE BUT IS NOT LIMITED TO SAND FILTERS, EROSION CONTROL MIX, STRAW WATTLES, FLOCCULATION CHEMICALS, DIRT GLUE AND SILT FENCE
 - STOCKPILES TO BE TEMPORARILY SEEDED AND MULCHED AS REQUIRED BY THE PROJECT SPECIFICATIONS
 - THE CONTRACTOR SHALL TREAT DISTURBED AREAS AND CONSTRUCTION HAUL PATH WITH DUST CONTROL BMPs TO LIMIT ALL FUGITIVE DUST



PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS			PROJECT MERCY AT THE FORE MASTER PLAN	 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04108 207.775.1121 WWW.DELOCAHOFFMAN.COM	
2	10.23.12		REVISED SUBSURFACE SAND FILTER LAYOUT AND RESUBMITTED TO MEDEP		SHEET TITLE EROSION PLAN AND SEDIMENT CONTROL PLAN NORTH
1	07.20.12		SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		CLIENT MERCY HOSPITAL
REV	DATE		DESCRIPTION		DRAWN: DED DESIGNED: BEK CHECKED: SRB FILE NAME: 2149.08-EROSION SHEET: C-5.0

MATCH LINE - SEE SHEET C-5.0



LEGEND

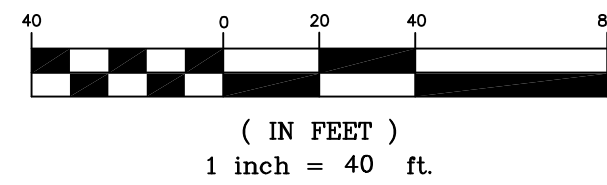
- INLET PROTECTION (STONE OR HAY SEDIMENT BARRIER)
- FILTERRA INLET PROTECTION (PER MANUFACTURERS REQUIREMENTS)
- RIPRAP OUTLET PROTECTION
- CURLEX BLANKET
- REINFORCED TURF
- EROSION CONTROL MESH
- POTENTIAL BUILDING LAYDOWN PAD
- CRUSHED STONE OR APPROVED EROSION CONTROL MATERIAL
- SEDIMENT BASIN
- WASH DOWN AREA
- STONE CONSTRUCTION ENTRANCE
- MATERIAL STOCKPILE

SCHEDULE OF SILT FENCE REQUIREMENTS

SILT FENCE	TYPE PURPOSE	TIME OF INSTALLATION
SF1 CONDITION 1 SILT FENCE	TO TRAP SEDIMENT ALONG THE GRADING EDGE WHERE THE NEW CONTOURS NEARLY PARALLEL THE EXISTING CONTOURS	AT INITIAL SITE PREPARATION; PRIOR TO OTHER WORK
SF2 CONDITION 2 SILT FENCE	TO TRAP SEDIMENT FROM THE WORK AREA; INSTALL IN SHORT SECTIONS PARALLEL TO EXISTING CONTOUR; TYPICALLY OCCURS WHERE PROPOSED AND EXISTING CONTOURS FORM A 'V' SHAPE.	AT INITIAL SITE PREPARATION; PRIOR TO OTHER WORK
SF3 CONDITION 3 SILT FENCE	TO TRAP SEDIMENT ALONG THE BASE OF PROPOSED CONTOURS; TYPICALLY IN CUT AREAS.	DURING CONSTRUCTION AFTER NEW GRADE IS SHAPED; TIME SHALL BE MINIMIZED BETWEEN WORK IN AREA AND SHAPING NEW GRADE TO ALLOW SILT FENCE TO BE INSTALLED.

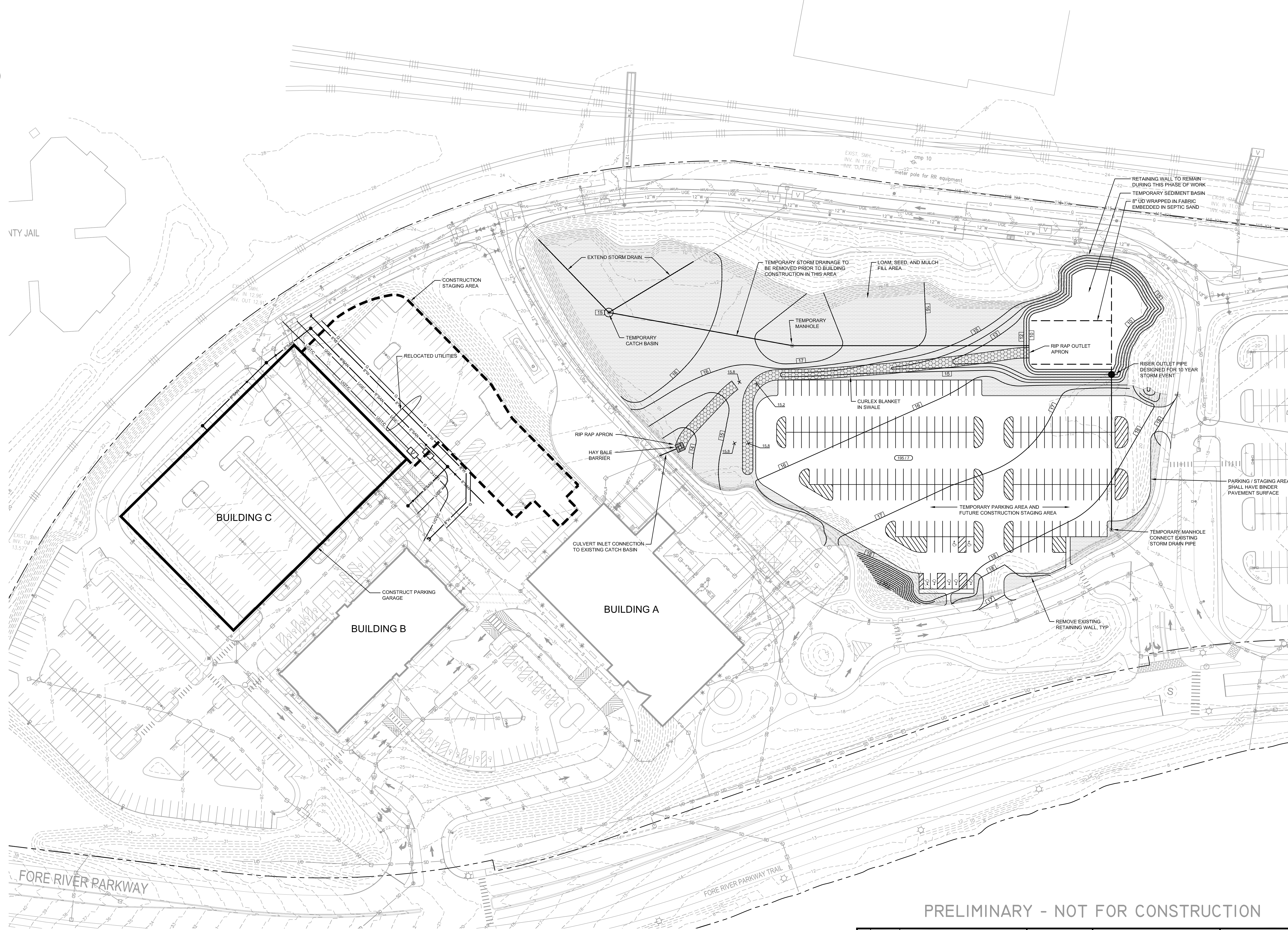
- NOTES:
- ALL CATCH BASINS TO HAVE 4" UNDERDRAIN PER DETAIL L ON SHEET C-5.4
 - ALL SUBSURFACE DETENTION AREAS ARE NOT TO BE PLACED "ON-LINE" UNTIL TRIBUTARY AREA IS STABILIZED WITH PAVEMENT OR 75% VEGETATION COVERAGE
 - ALL RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED TO A FILTERING DEVICE DESIGNATED TO LIMIT DISCHARGE TO A MAXIMUM TURBIDITY OF 280 NTUS. THE FILTERING DEVICE MAY BE BUT IS NOT LIMITED TO SAND FILTERS, EROSION CONTROL MIX, STRAW WATTLES, FLOCCULATION CHEMICALS, DIRT GLUE AND SILT FENCE
 - STOCKPILES TO BE TEMPORARILY SEEDED AND MULCHED AS REQUIRED BY THE PROJECT SPECIFICATIONS
 - THE CONTRACTOR SHALL TREAT DISTURBED AREAS AND CONSTRUCTION HAUL PATH WITH DUST CONTROL BMPs TO LIMIT ALL FUGITIVE DUST

GRAPHIC SCALE



PRELIMINARY - NOT FOR CONSTRUCTION

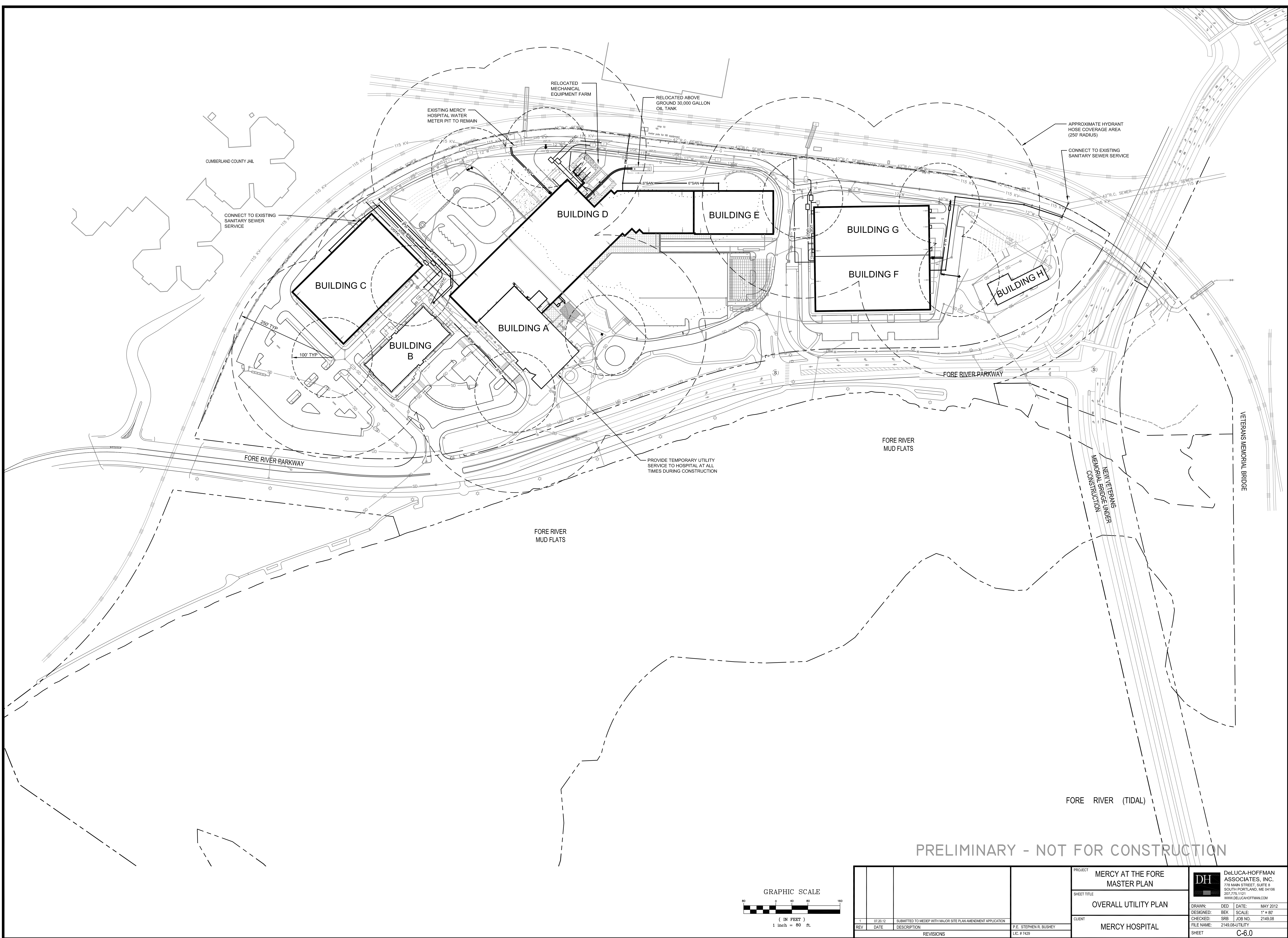
PROJECT MERCY AT THE FORE MASTER PLAN			CLIENT MERCY HOSPITAL
SHEET TITLE EROSION AND SEDIMENT CONTROL PLAN SOUTH			
DRAWN: DEB DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 40' CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-EROSION		SHEET C-5.1	



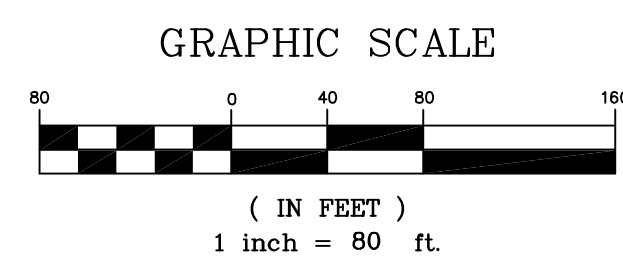
GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

R:\2149.08\Cadd\Permit Set\dwg\2149.08-PHASING.dwg Dean Davis 7/19/2012 4:21 PM



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			PROJECT MERCY AT THE FORE MASTER PLAN			 DeLUCA-HOFFMAN ASSOCIATES, INC. 775 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.715.1121 WWW.DELOUCHOFFMAN.COM
			SHEET TITLE OVERALL UTILITY PLAN			
			CLIENT MERCY HOSPITAL			
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P. E. STEPHEN R. BUSHEY LIC. # 7429			
REV	DATE	DESCRIPTION	REVISIONS			
			DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 80' CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-UTILITY SHEET C-6.0			

CUMBERLAND COUNTY JAIL

CONNECT NEW SEWER
MANHOLE TO EXISTING SERVICE

CONNECT TO EX. WATERMAIN.
INSTALL 8" x 8" TEE

CONNECT TO EX. GAS MAIN.
INSTALL BEND AND DISCONTINUE
GAS TO THE NORTH

EXISTING WATER
METER PIT
INSTALL 8" TAPPING
SLEEVE AND VALVE
INSTALL 8" TAPPING
SLEEVE AND VALVE
RELOCATE HYDRANT
ASSEMBLY

CUT AND CAP
12" WATER MAIN

GATE VALVE
SHUT OFF

BUILDING D

BUILDING E

BUILDING C

CONNECT EX. SEWER
SERVICE TO NEW MANHOLE

CUT AND CAP 8" WATER MAIN
AT EXISTING TEE

BUILDING B

CONNECT TO
EX. UG/C

CONNECT TO EX. 8"
WATERMAIN

CONNECT TO EX. 8" WATERMAIN

DEFLECT PIPE

BUILDING A

FORCE MAIN BACK
THROUGH BUILDING
TO SANITARY SEWER
OUTLET

SANITARY SEWER
SERVICE

PUMP STATION

GREASE TRAP

EXISTING GREASE TRAP,
SEWER SERVICE AND
FORCE MAIN TO REMAIN

CUT AND CAP EX. WATER MAIN
WITH HYDRANT ASSEMBLY

RELOCATE

RELOCATE

FORE RIVER PARKWAY

FORE RIVER PARKWAY TRAIL

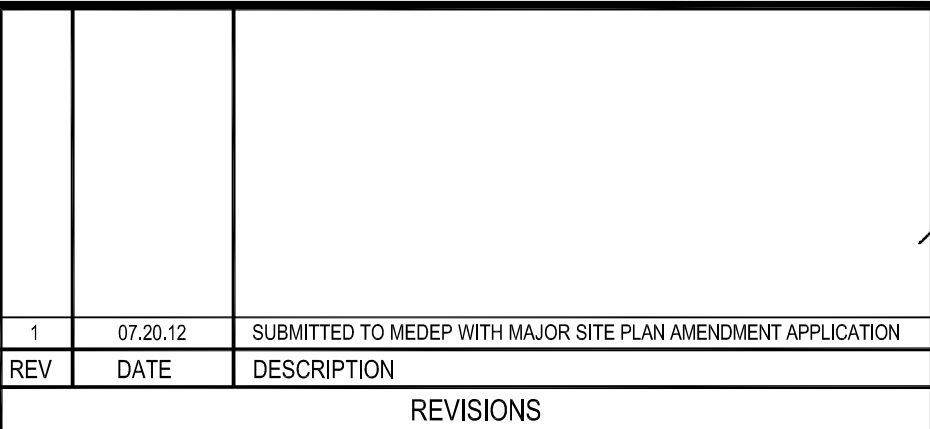
FORE RIVER
MUD FLATS

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

PRELIMINARY - NOT FOR CONSTRUCTION

1 REV DATE DESCRIPTION REVISIONS	07/26/12 SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	07-30-12 P.E. STEPHEN R. SUSHET LIC. # 7429	PROJECT MERCY AT THE FORE MASTER PLAN SHEET TITLE UTILITY PLAN NORTH CLIENT MERCY HOSPITAL	STATE OF MAINE STEPHEN R. SUSHET REGISTERED PROFESSIONAL ENGINEER NO. 7429	PROJECT MERCY AT THE FORE MASTER PLAN SHEET TITLE UTILITY PLAN NORTH CLIENT MERCY HOSPITAL	DE DESIGNED CHECKED FILE NAME SHEET BEK SRB 2149.08-UTILITY C-6.1



PROJECT	MERCY AT THE FORE MASTER PLAN
SHEET TITLE	UTILITY PLAN SOUTH
CLIENT	MERCY HOSPITAL

**DeLUCA-HOFFMAN
ASSOCIATES, INC.**

778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

PROJECT: 2010-08-01

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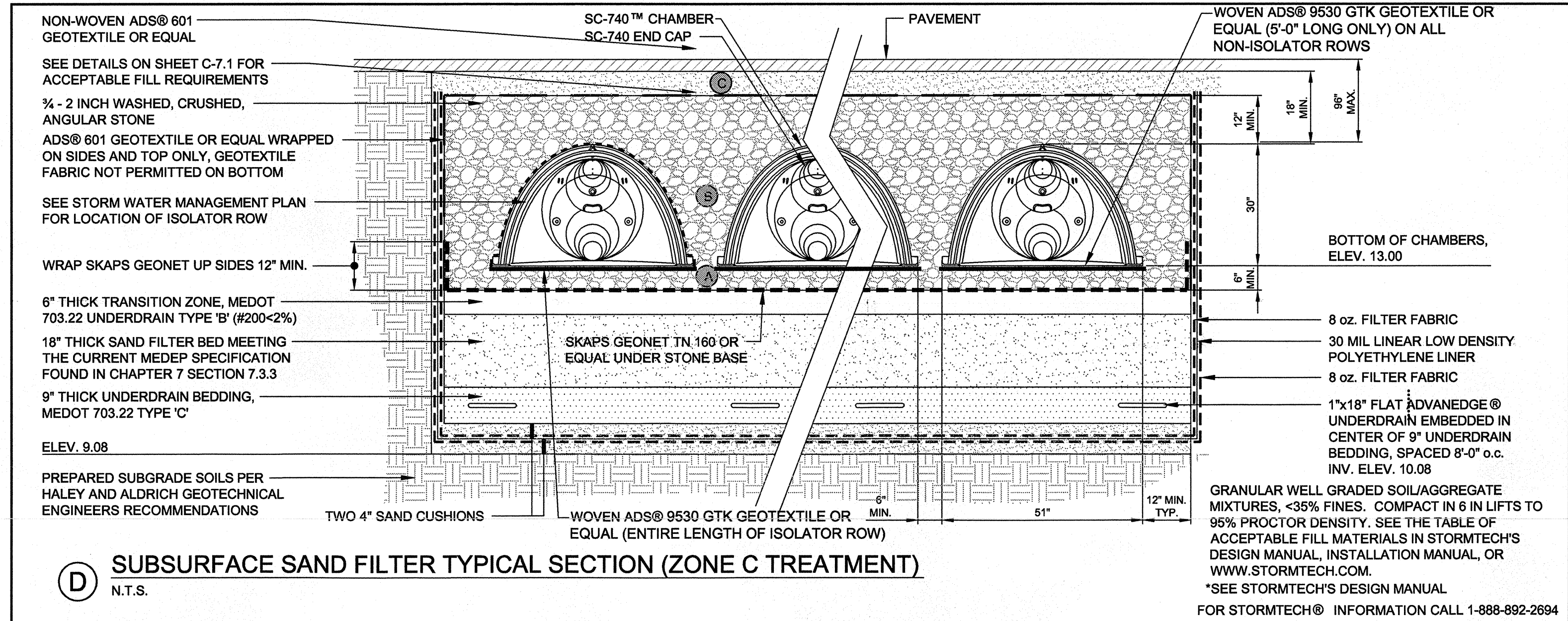
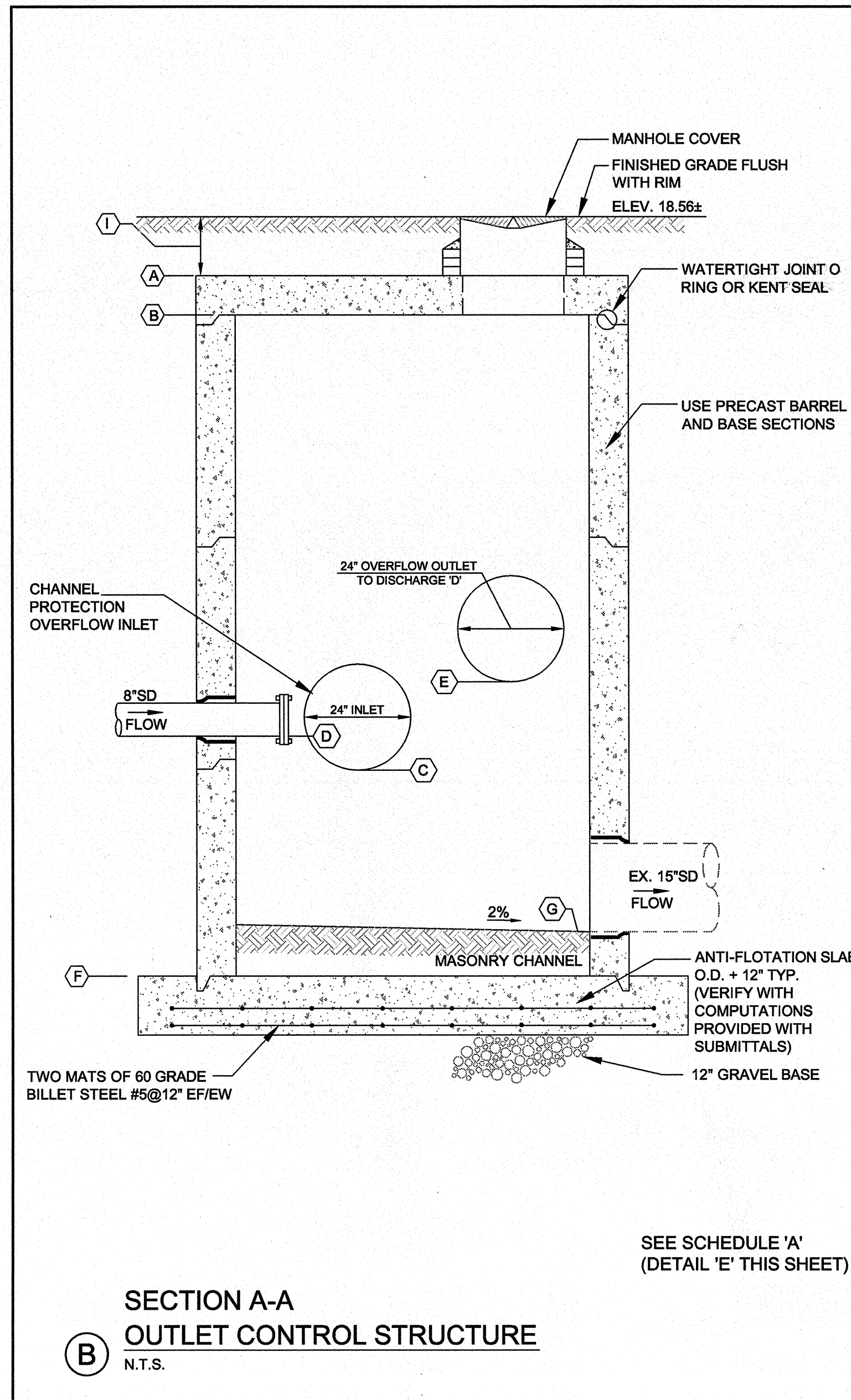
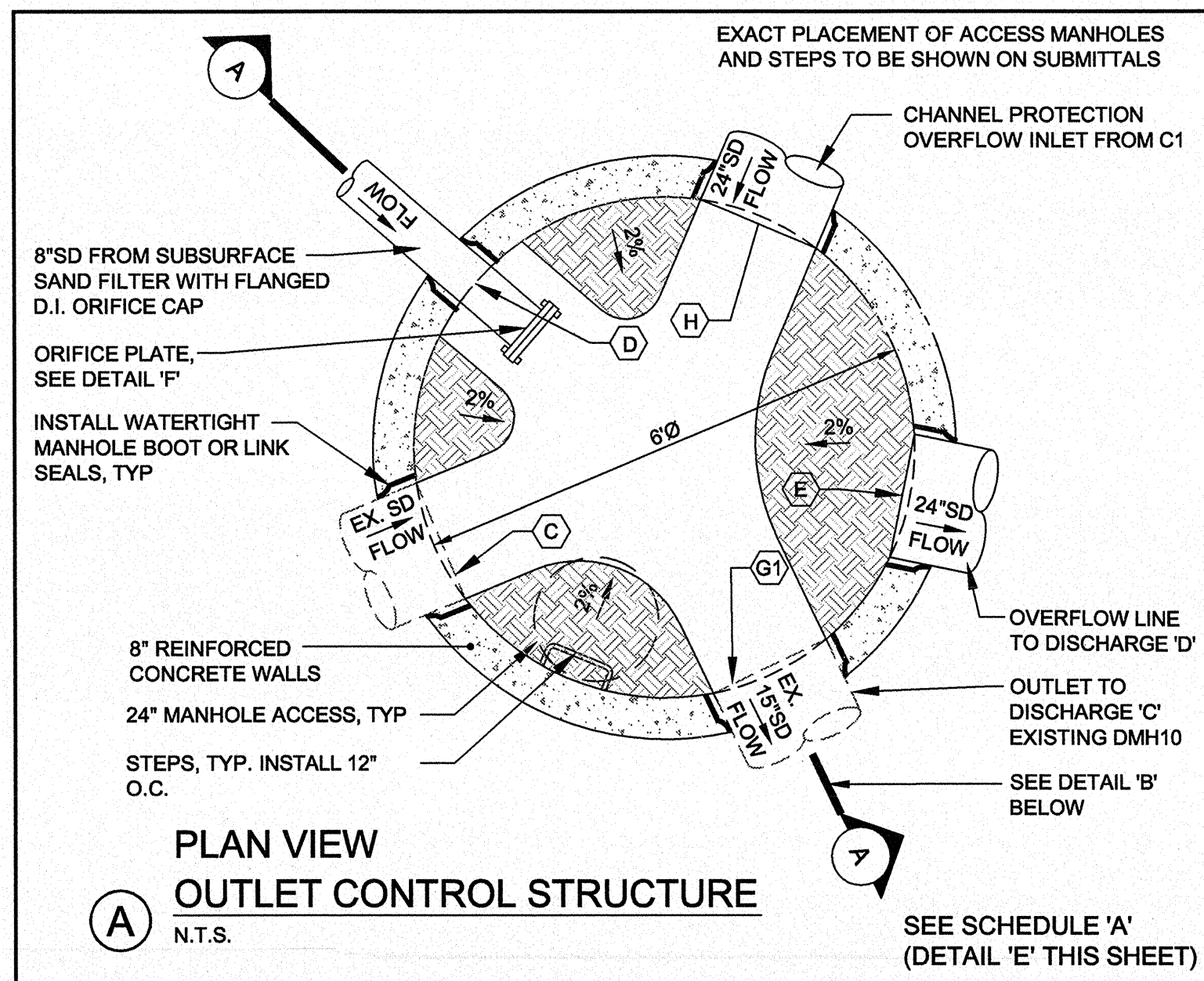
DRAWN: DEB DATE: MAY 2012

DESIGNED: BEK SCALE: 1" = 40'

CHECKED: SRB JOB NO. 2149.08

FILE NAME: 2149.08-UTILITY

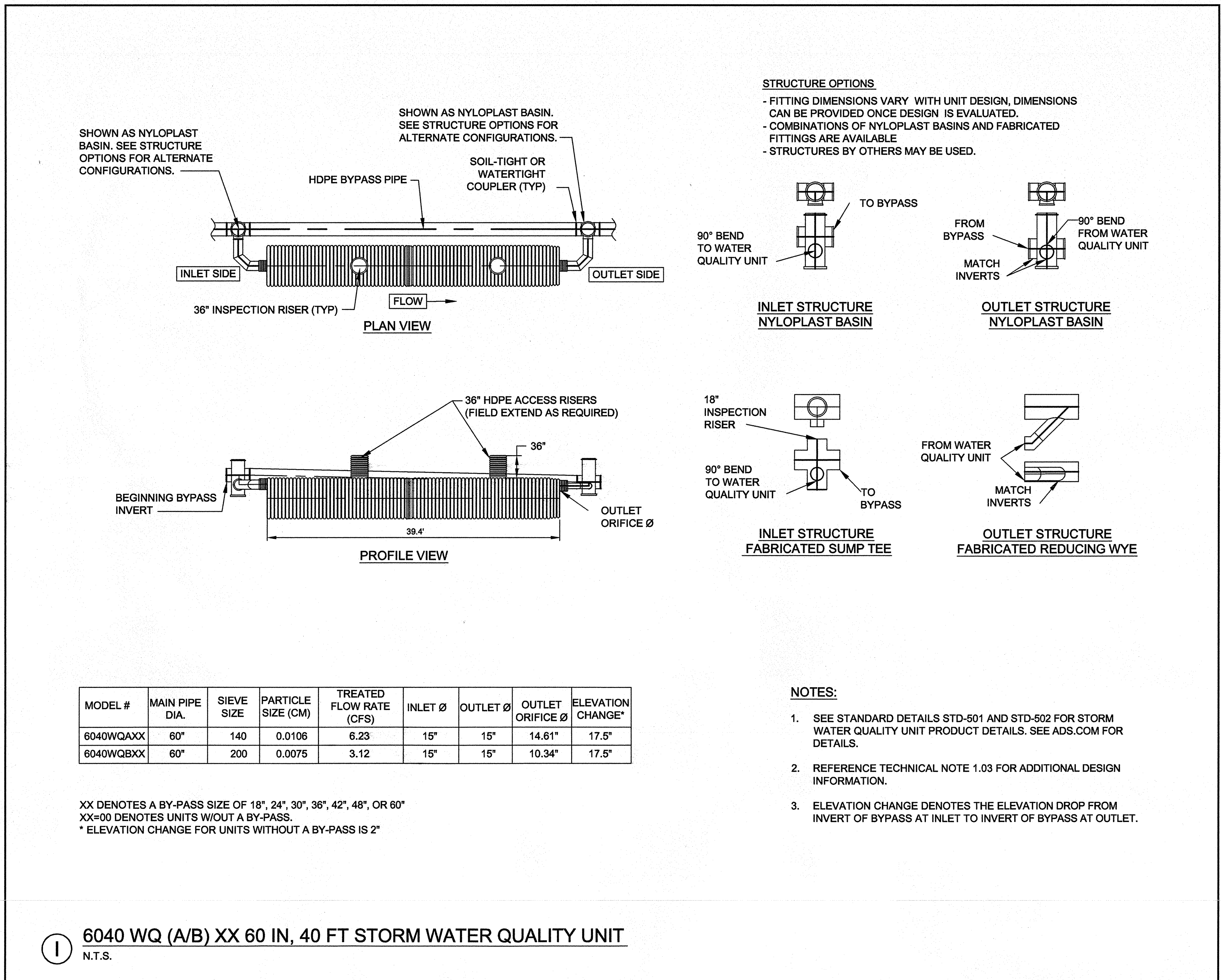
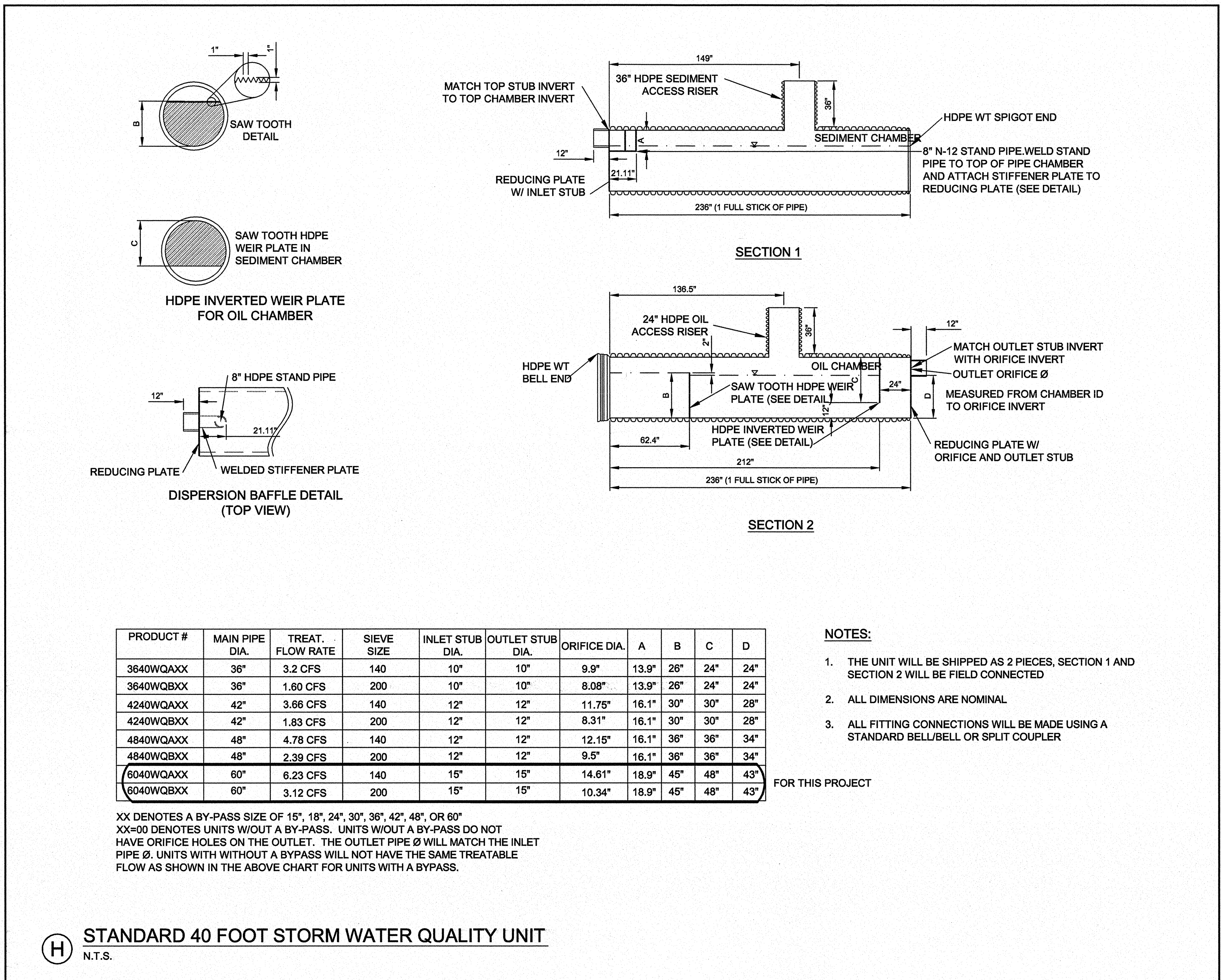
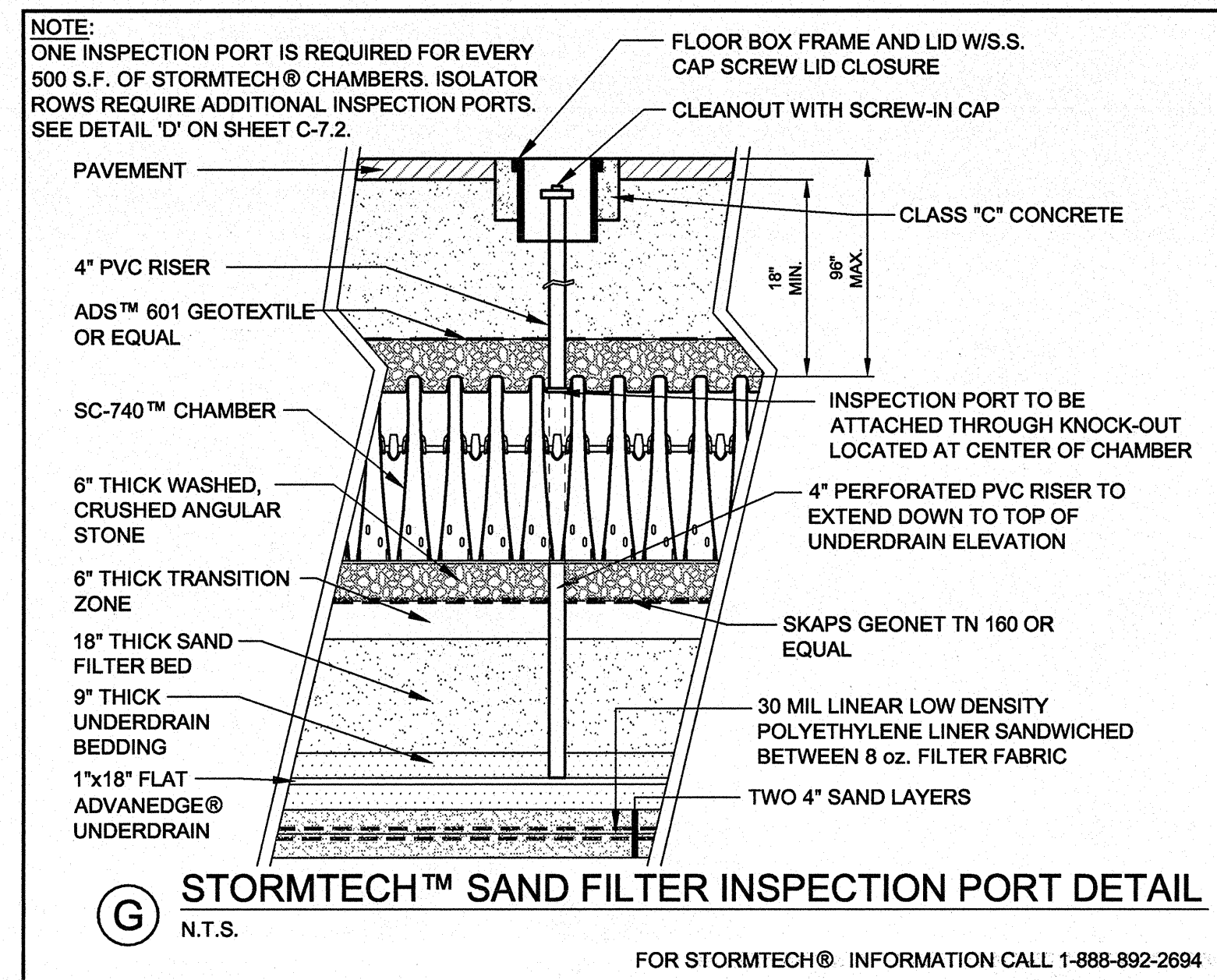
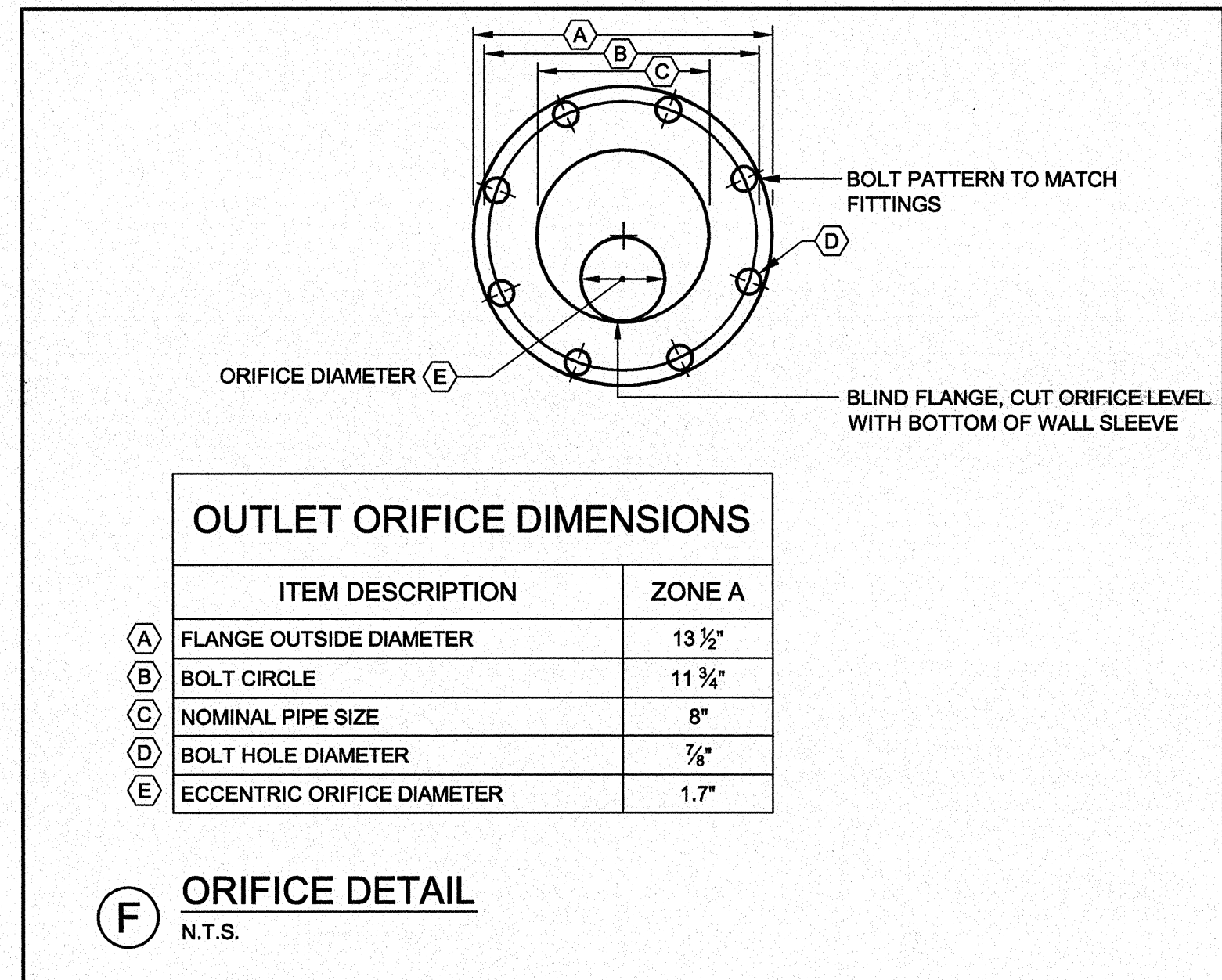
SHEET C-6.2



SCHEDULE A	
ITEM DESCRIPTION	ZONE A
(A) TOP OF STRUCTURE	17.56
(B) UNDERSIDE OF SLAB	16.89
(C) EXISTING SD INLET INVERT	9.59
(D) CHANNEL PROTECTION ORIFICE INVERT	10.08
(E) OVERFLOW OUTLET INVERT	11.50
(F) BOTTOM OF STRUCTURE	6.00
(G) EXISTING SD OUTLET INVERT	6.76
(H) CHANNEL PROTECTION OVERFLOW INLET INVERT	9.50
(I) RIM TO TOP OF STRUCTURE DISTANCE	1'-0"

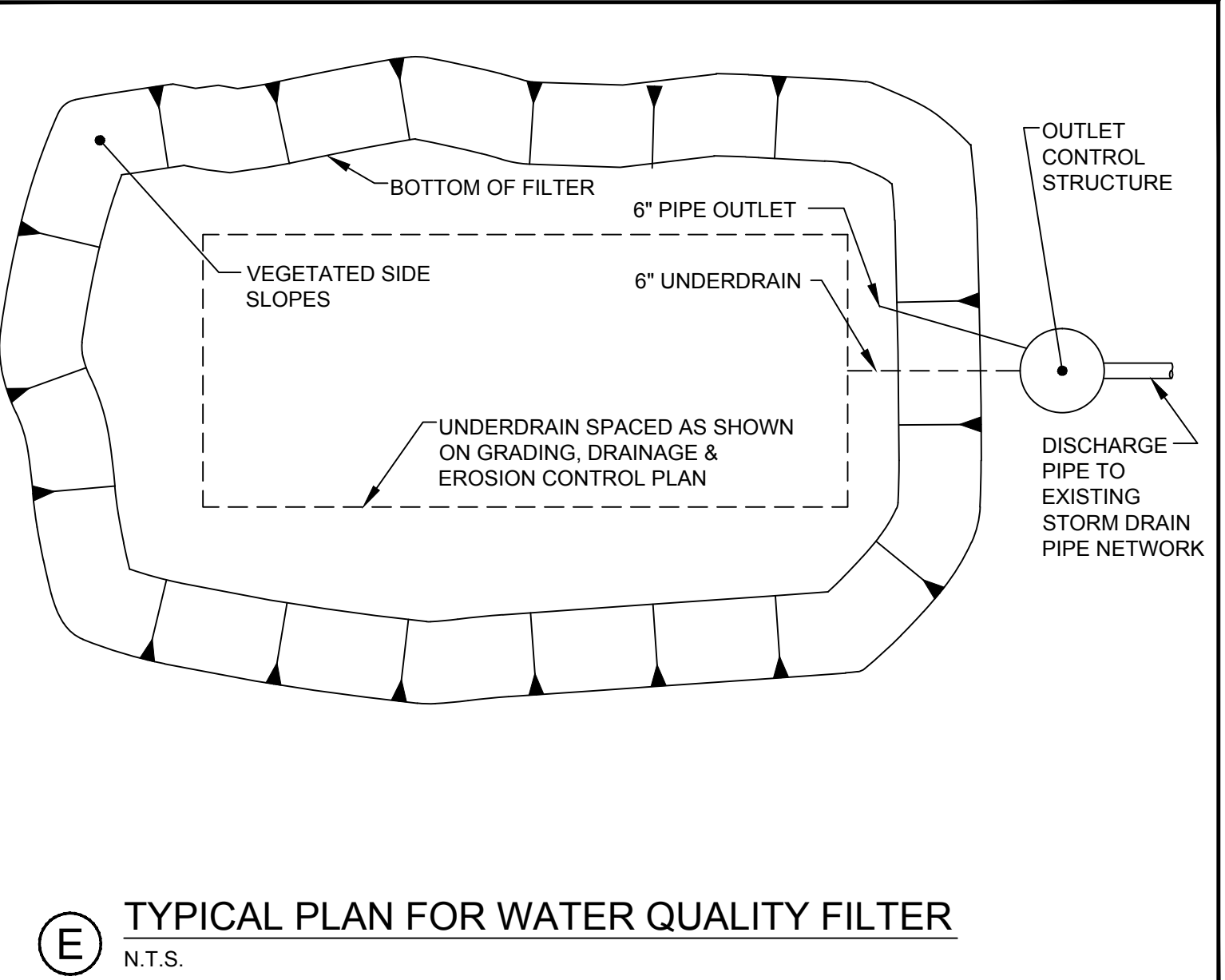
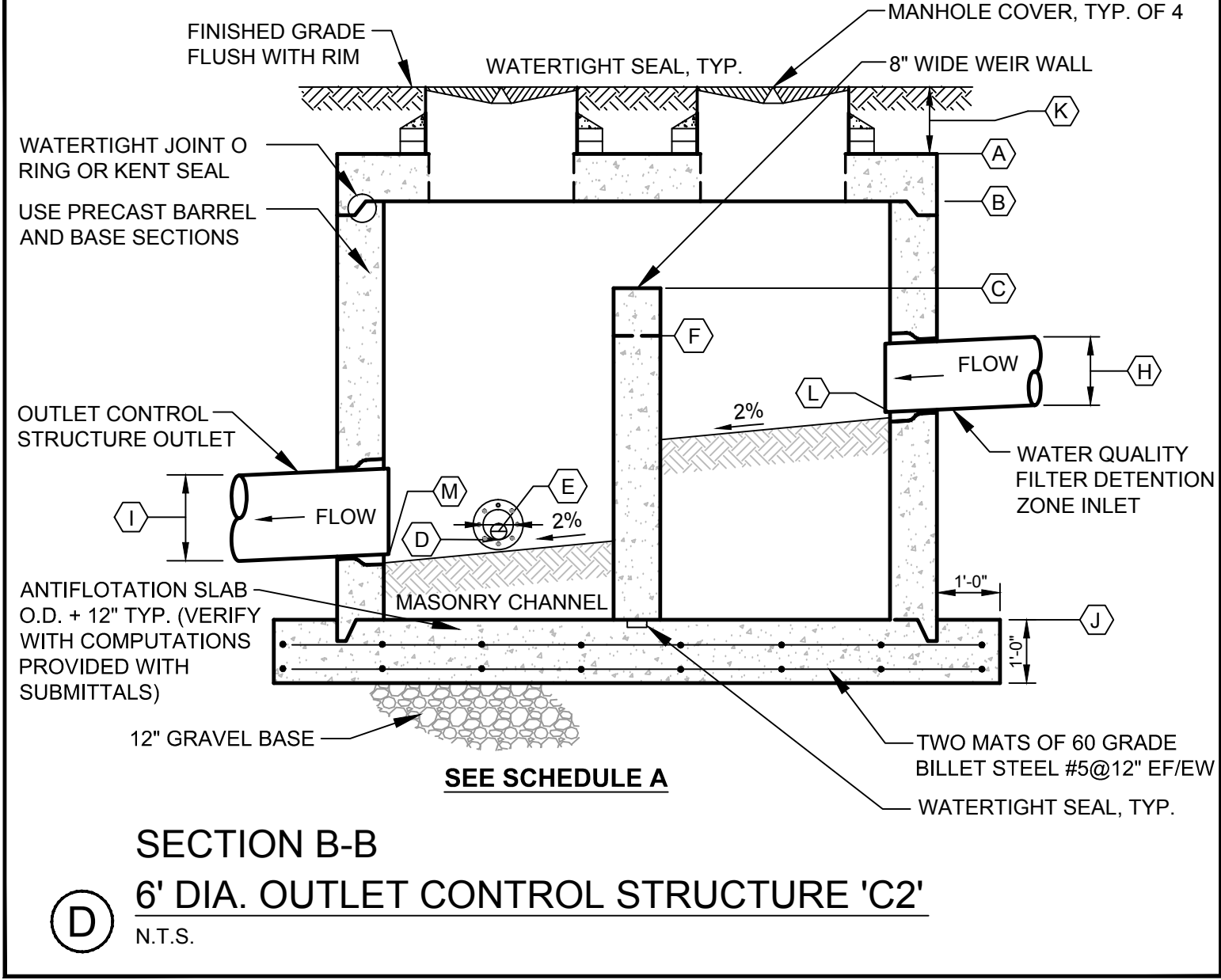
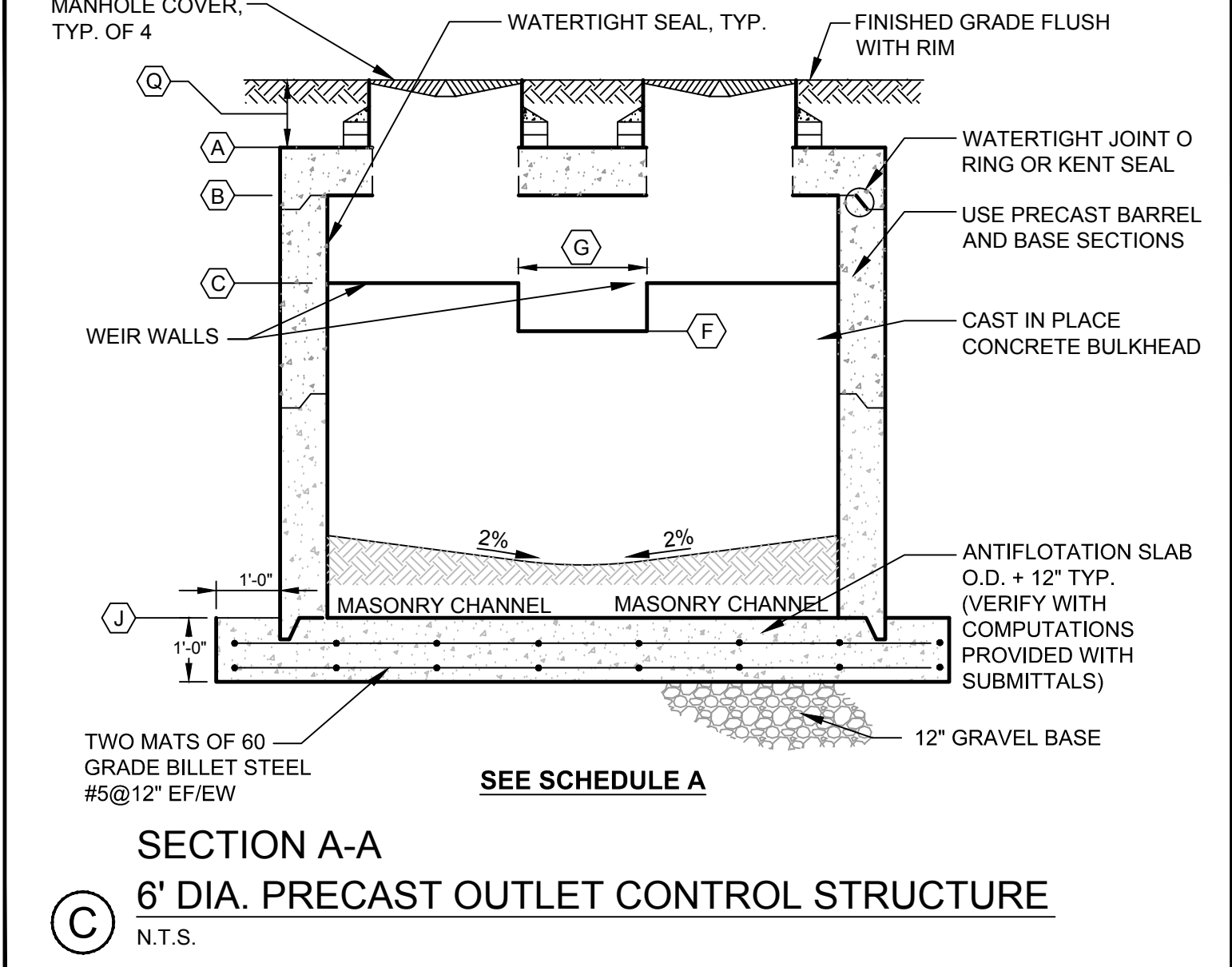
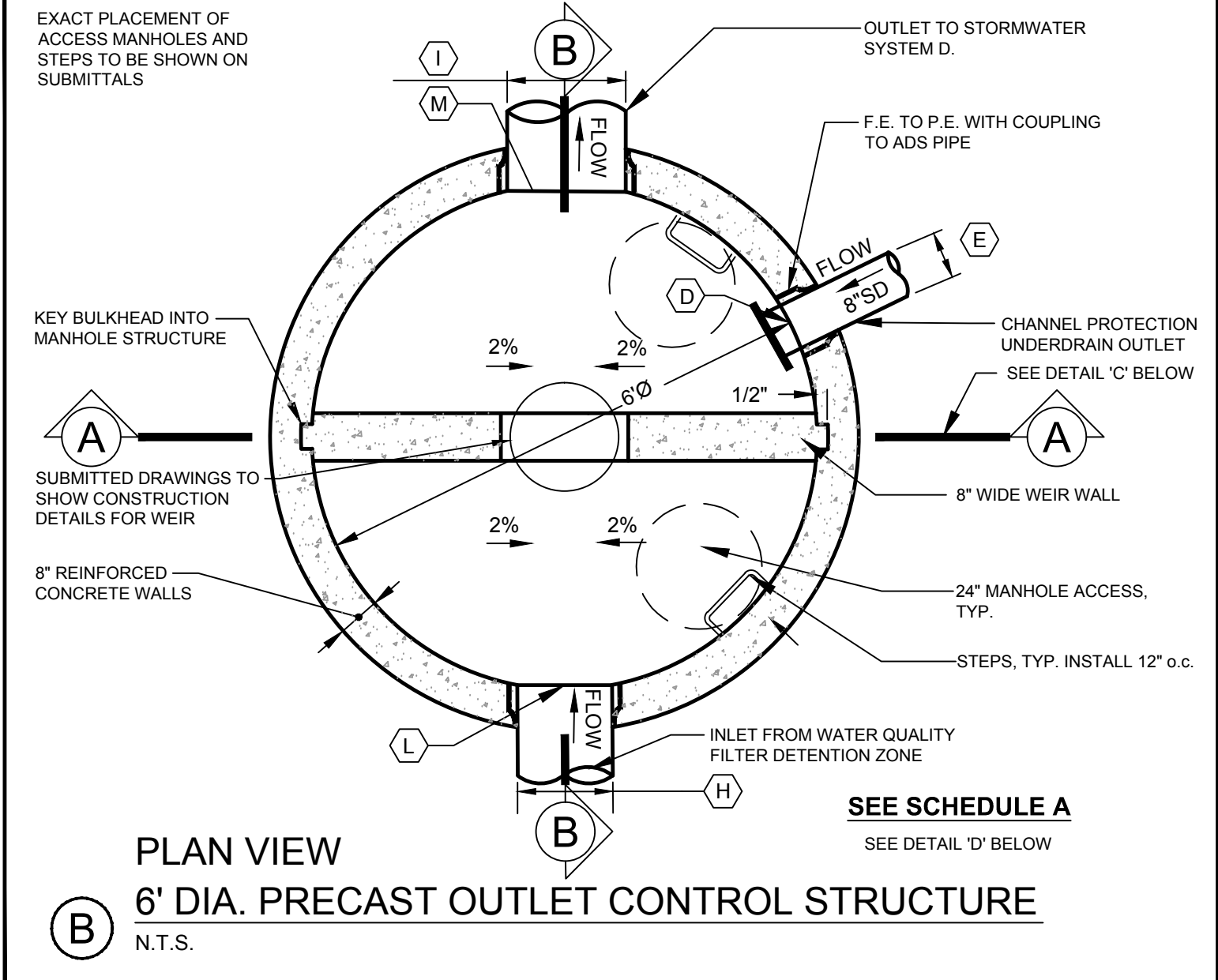
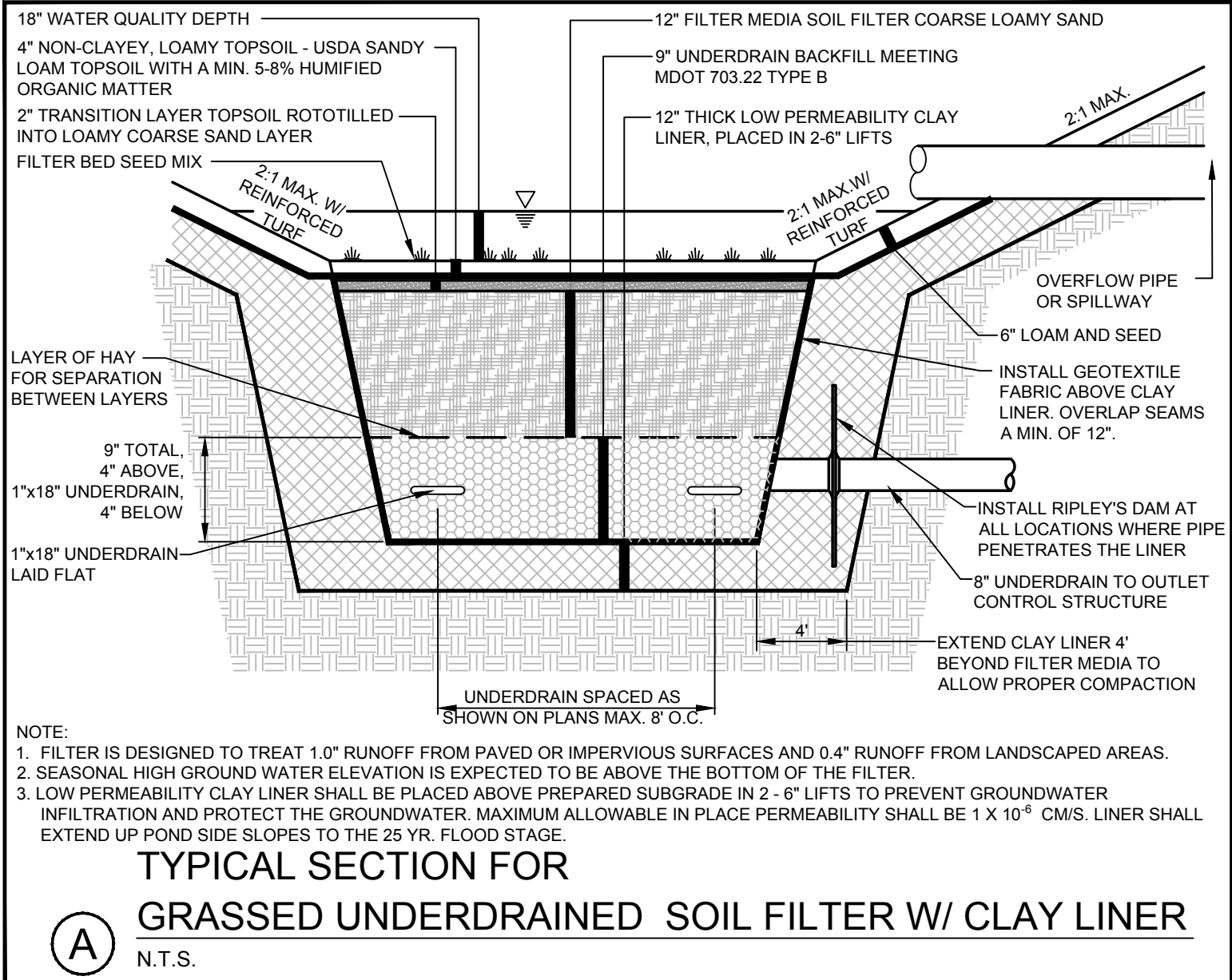
OUTLET CONTROL STRUCTURE IS A 6'-0" I.D. MANHOLE.

E OUTLET CONTROL STRUCTURE SCHEDULE A
N.T.S.

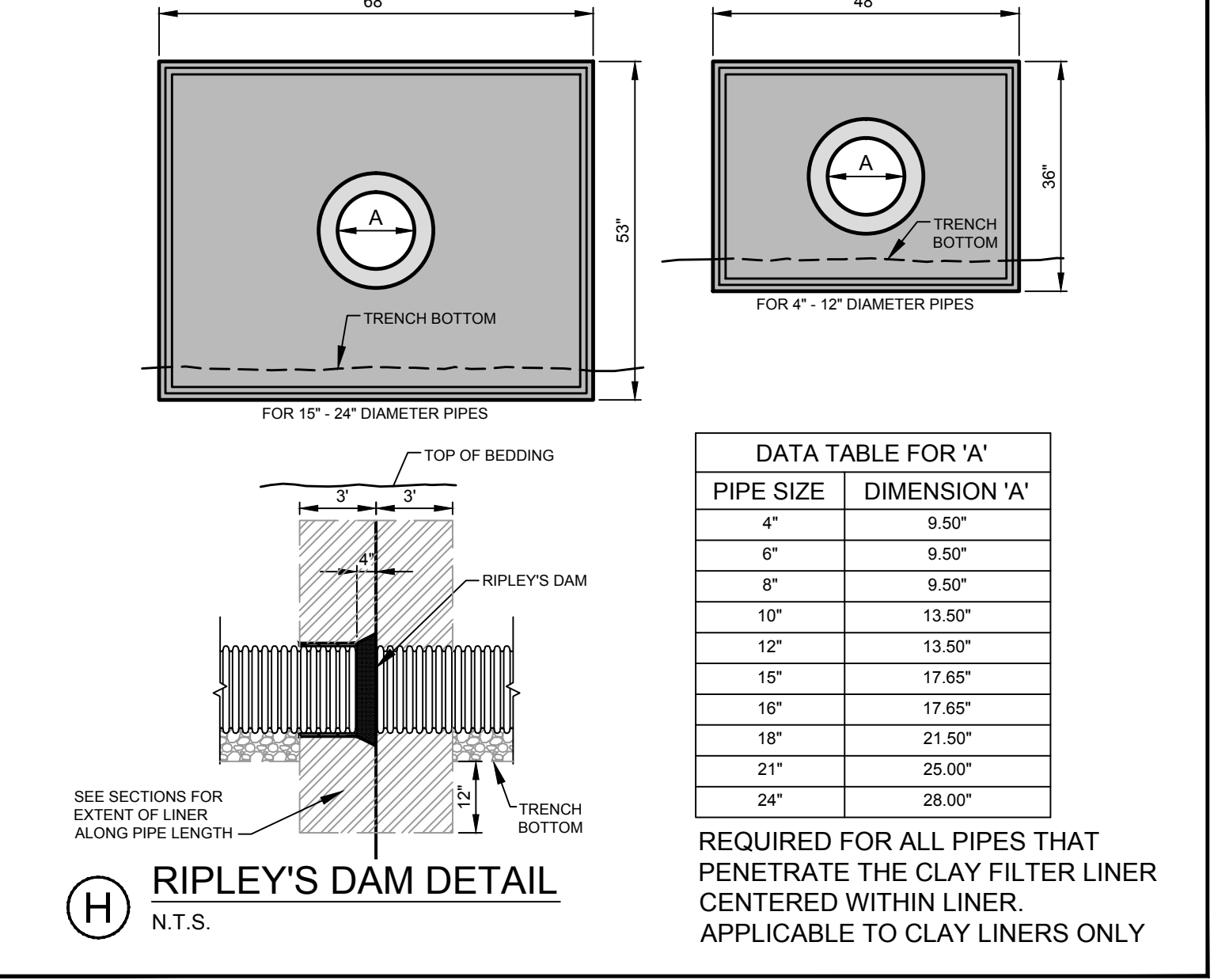
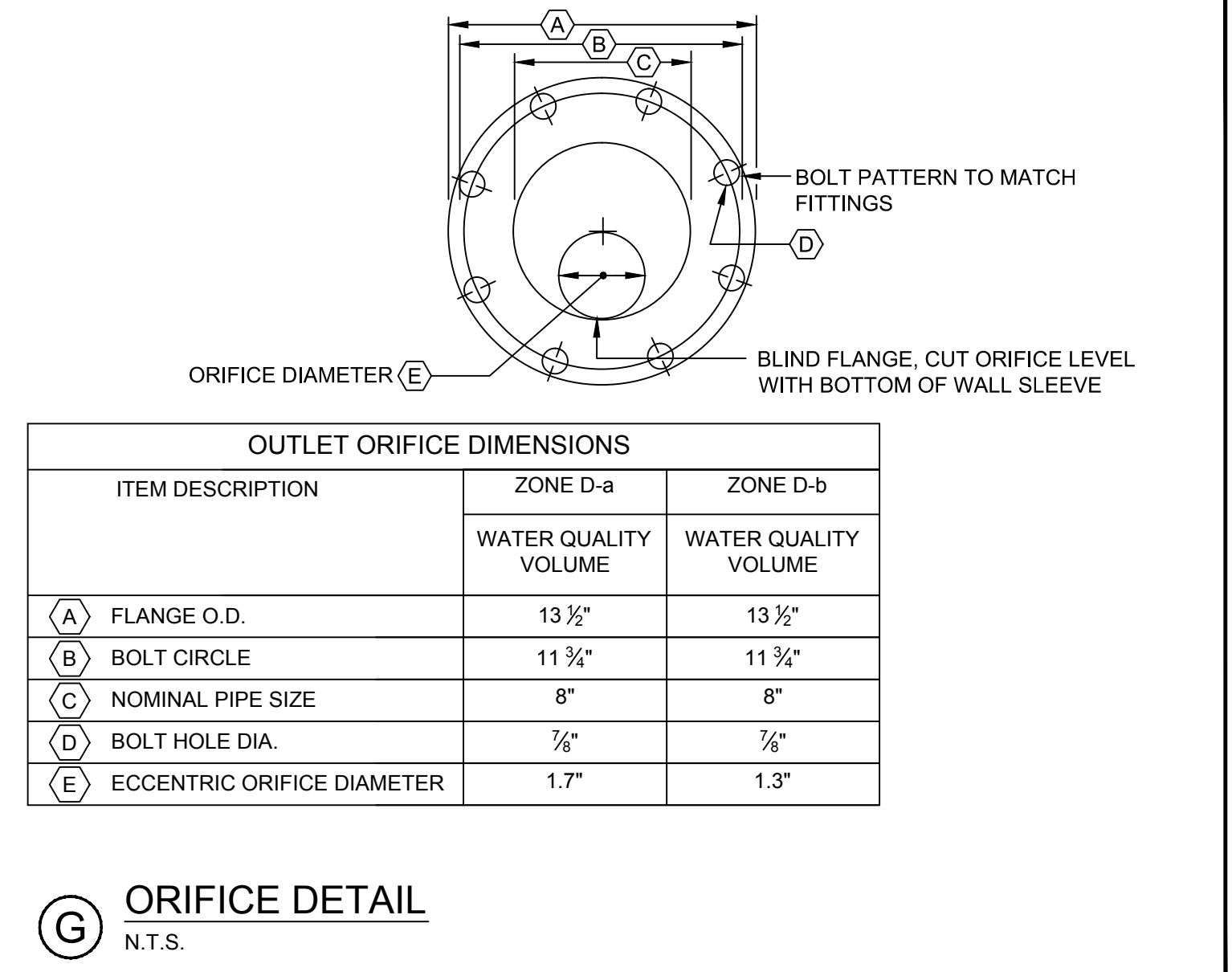


PRELIMINARY - NOT FOR CONSTRUCTION

		PROJECT MERCY AT THE FORE MASTER PLAN SHEET TITLE STORMWATER DETAILS SUBSURFACE SAND FILTER CLIENT MERCY HOSPITAL	DESIGNED: BEK CHECKED: SRB FILE NAME: 2149.08-DET SHEET	DATE: MAY 2012 SCALE: N.T.S. JOB NO.: 2149.08 C-7.0
REV 2 1	DATE 08.14.12 07.20.12	DESCRIPTION REVISED CDS DETAILS FOR DEP COMMENT SUBMITTED TO MEDP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	REVISIONS	



SCHEDULE A OUTLET CONTROL STRUCTURE		
ITEM DESCRIPTION	DIMENSION/ ELEVATION ZONE D-a	DIMENSION/ ELEVATION ZONE D-b
(A) TOP OF STRUCTURE	17.83	22.83
(B) UNDERSIDE TOP SLAB	17.16	22.16
(C) TOP CONCRETE WEIR WALL	14.41	21.94
(D) WATER QUALITY VOLUME PIPE INVERT	10.17	17.5
(E) WATER QUALITY VOLUME PIPE DIAMETER *	8"	8"
(F) DETENTION WEIR INVERT	13.5	21.0
(G) DETENTION WEIR WIDTH	2'-0"	4'-0"
(H) DIAMETER OF INLET PIPE FROM DET. ZONE	24"	24"
(I) DIAMETER OF OUTLET PIPE	24"	24"
(J) BOTTOM OF STRUCTURE	9.0	16.4
(K) RIM TO TOP OF STRUCTURE	0.67	0.67
(L) DETENTION ZONE INLET INVERT	12.0	19.5
(M) OUTLET CONTROL STRUCTURE OUTLET INVERT	10.0	17.48



1. SPECIFIC DESIGN CRITERIA

A. UNDERDRAIN PIPE: PROPER LAYOUT OF THE PIPE UNDERDRAIN SYSTEM IS NECESSARY TO EFFECTIVELY DRAIN THE ENTIRE FILTER AREA. THERE MUST BE AT LEAST ONE LINE OF UNDERDRAIN PIPE FOR EVERY EIGHT FEET OF FILTER AREA'S WIDTH. THE SLOPE OF THE INSTALLED UNDERDRAIN PIPE MUST BE POSITIVE. THE UNDERDRAIN PIPING SHOULD BE 4" TO 6" SLOTTED, RIGID SCHEDULE 40 PVC OR SDR35. STRUCTURE JOINTS SHALL BE SEALED SO THAT THEY ARE WATERTIGHT. *THIS PROJECT REQUIRES THE USE OF 1" x 18" FLAT UNDERDRAIN (ADVANCE OR EQUAL) IN LIEU OF ROUND UNDERDRAIN PIPE. THE INSTALLATION AND BEDDING REQUIREMENTS ARE THE SAME.

B. PIPE BEDDING AND TRANSITION ZONE: THE 4 TO 6 INCH DIAMETER PERFORATED UNDERDRAIN PIPE(S) MUST BE BEDDED IN 12 TO 14 INCHES OF UNDERDRAIN MATERIAL WITH AT LEAST 4 INCHES OF MATERIAL BENEATH THE PIPE AND 4 INCHES ABOVE. TWO OPTIONS FOR PIPE BEDDING ARE PROVIDED BELOW, HOWEVER OPTION 1 IS PREFERRED:

THE UNDERDRAIN MATERIAL CONSISTS OF WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL. THE MATERIAL MUST CONTAIN LESS THAN 5% FINES PASSING THE #200 SIEVE, NO TRANSITION ZONE IS NECESSARY SINCE THE DRAINAGE PIPE IS BEDDED IN LESS PERVIOUS GRAVEL AND THIS DESIGN IS ACCEPTABLE FOR AREAS WHERE THE HEAD OR DEPTH TO SEASONAL HIGH GROUNDWATER IS CLOSE TO THE BOTTOM OF THE DRAINAGE LAYER. UNDERDRAIN PIPES MUST BE PLACED NO FURTHER THAN 8 FEET APART.

C. SOIL FILTER BED: THE SOIL FILTER MUST BE AT LEAST 18 INCHES DEEP ON TOP OF THE GRAVEL UNDERDRAIN PIPE BEDDING AND MUST EXTEND ACROSS THE BOTTOM OF THE ENTIRE FILTER AREA. THIS SOIL MIXTURE SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS CAN BE MIXED WITHIN THE FILTER.

D. SOIL FILTER MEDIA: SOIL MEDIA MUST CONSIST OF A LOAMY COARSE SAND SOIL ORGANIC SOURCES MUST BE APPROVED BY THE DEPARTMENT; HOWEVER AN AGRICULTURAL SOURCE IS NOT ACCEPTABLE FOR THE ORGANIC COMPONENT OF THE MEDIA.

THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE 200 SIEVE AND SHALL HAVE A CLAY CONTENT OF LESS THAN 2%. THE SYSTEM MUST BE DESIGNED TO DRAIN THE SURFACE STORAGE VOLUME IN NO LESS THAN 24 HOURS AND NO MORE THAN 48 HOURS.

AS AN EXAMPLE, THE MIXTURE MAY CONTAIN BY VOLUME THE FOLLOWING:
65% OF SANDY (MDOT #703.01 CONTAINS INSUFFICIENT FINE FOR THE MEDIA)
35% OF LOAMY TOPSOIL

E. CLAY CONTENT: USE OF SOILS WITH MORE THAN 2% CLAY CONTENT COULD CAUSE FAILURE OF THE SYSTEM AND CARE SHOULD BE TAKEN, ESPECIALLY IN AREAS WHERE THE PREDOMINANT SOIL CONTAINS MARINE CLAY, THAT THE SAND AND TOPSOIL USED IN THE MIXTURE HAVE VERY LITTLE OR NO CLAY CONTENT.

F. FILTER PERMEABILITY: THE FILTER MUST BE PERMEABLE ENOUGH TO INSURE DRAINAGE WITHIN 48 HOURS MAXIMUM, YET HAVE SUFFICIENT FINES TO INSURE FILTRATION OF FINE PARTICLES AND REMOVAL OF DISSOLVED POLLUTANTS. THE DESIGN MAY EITHER RELY ON THE SOIL PERMEABILITY, IF KNOWN, TO PROVIDE THE WATER TREATMENT VOLUME OVER A MINIMUM OF 24 HOURS, OR MAY INSURE THIS RATE BY INSTALLING A CONSTRUCTIVE ORIFICE OR VALVE ON THE UNDERDRAIN OUTLET. IN DETERMINING THE PERMEABILITY OF THE MEDIA, THE PERCENT FINES OF THE MIXTURE AND THE LEVEL OF COMPACTION SHOULD BE CONSIDERED. GENERALLY, THE SOIL MEDIA SHOULD BE ONLY LIGHTLY COMPACTED BETWEEN 80 AND 92% STANDARD PROCTOR (ASTM D698) AND SHALL HAVE A PERMEABILITY OF 2.4 INHR TO 4 INHR.

G. GRADATION TESTING: GRADATION TESTS, INCLUDING HYDROMETER TESTING FOR CLAY CONTENT, AND PERMEABILITY TESTING OF THE SOIL FILTER MATERIAL, SHALL BE PERFORMED BY A QUALIFIED SOIL TESTING LABORATORY AND SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW BEFORE PLACEMENT AND COMPACTION.

H. GEOTEXTILE FABRIC: A GEOTEXTILE FABRIC WITH SUITABLE CHARACTERISTICS MAY BE PLACED BETWEEN THE SIDES OF THE FILTER LAYER AND ADJACENT SOIL. THE FABRIC WILL PREVENT THE SURROUNDING SOIL FROM MIGRATING INTO AND CLOGGING THE FILTER AND CLOGGING THE OUTLET. OVERLAP SEAMS MUST BE A MINIMUM OF 12 INCHES. DO NOT WRAP FABRIC OVER THE TOP OF THE PIPE BEDDING AS IT WILL CAUSE CLOGGING AND WILL PREVENT FLOWS OUT OF THE FILTER. THE GEOTEXTILE FABRIC SHALL BE MIRAFI 170N OR EQUIVALENT.

I. VEGETATION: THE SOIL FILTER SURFACE MUST BE PLANTED WITH A CONSERVATION MIX OF GRASS SPECIES THAT IS TOLERANT OF FREQUENT INUNDATION AND WELL DRAINED SOILS. UPON SEEDING, THE SOIL FILTER SHALL BE MULCHED WITH HAY OR AN EROSION CONTROL BLANKET. ANNUAL RYE HAS BEEN ADDED TO RAPIDLY ESTABLISH VEGETATION. AN APPROPRIATE SEED MIXTURE SHOULD CONTAIN THE FOLLOWING OR BE AN APPROVED EQUIVALENT CONSERVATION TYPE MIXTURE:

ANNUAL RYE	4.0	LBS/M. SQ. FT.
TALL RED FESCUE	1.6	LBS/M. SQ. FT.
BIRDSFOOT TREFOIL	0.8	LBS/M. SQ. FT.
TOTAL	6.4	LBS/M. SQ. FT.

J. ROCK FOREBAY: A ROCK FOREBAY IS RECOMMENDED TO REDUCE FLOW VELOCITY INTO THE VOLUME III BMP'S TECHNICAL DESIGN MANUAL CHAPTER 7.1. FILTRATION BMP. GRASSED FILTER BASIN BASIN. IT SHALL REMAIN CLEAR OF SEDIMENT UNTIL THE UPGRADIENT TRIBUTARY AREA IS FULLY VEGETATED.

2. CONSTRUCTION CRITERIA

A. BASIN EXCAVATION: THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND CAN BE USED FOR A SEDIMENT TRAP FROM THE SITE DURING CONSTRUCTION. AFTER EXCAVATION OF THE BASIN, THE OUTLET STRUCTURE AND PIPING SYSTEM MUST BE INSTALLED AT THE APPROPRIATE ELEVATION AND PROTECTED WITH A SEDIMENT BARRIER. IF THE BASIN IS TO BE USED AS A SEDIMENT TRAP, THE SIDES OF THE EMBANKMENTS MUST BE MULCHED AND MAINTAINED TO PREVENT EROSION.

B. COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 80 AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.

C. OUTLET DISCHARGE: OUTFLOW OF THE FILTER BASIN UNDERDRAIN WILL BE CONTROLLED BY A CONSTRUCTIVE ORIFICE.

NOTES

N.T.S.

D. CONSTRUCTION SEQUENCE: EROSION AND SEDIMENTATION FROM UNSTABLE SUBCATCHMENTS IS THE MOST COMMON REASON FOR FILTER FAILURE. NOT HEEDING THE CONSTRUCTION SEQUENCING CRITERIA IS LIKELY TO RESULT IN THE NEED TO REPLACE THE SOIL FILTER. THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE. 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION, OTHERWISE, THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA MUST BE DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED UNLESS THE DEPARTMENT HAS DETERMINED, ON A CASE-BY-CASE BASIS, THAT SUFFICIENT MEASURES ARE BEING TAKEN TO PREVENT EROSION OF MATERIAL FROM THE UNSTABLE CATCHMENT AREA AND DEPOSITION ON THE FILTER.

E. REMEDIAL LOAM COVER: TO RAPIDLY ESTABLISH VEGETATION IN THE FILTER AREA, THE CONTRACTOR WILL INSTALL A 2-3 INCH LAYER OF SANDY LOAM TOPSOIL (WITH LESS THAN 2% CLAY AS TESTED VIA HYDROMETER TEST) ABOVE THE GRASS FILTER PRIOR TO SEEDING, MULCHING, AND ANCHORING EROSION CONTROL MESH.

F. CONSTRUCTION OVERSIGHT: INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE CITY OF PORTLAND. AT A MINIMUM, INSPECTIONS WILL OCCUR:
-AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
-AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA;
-AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDING;
-PRIOR TO SUBSTANTIAL COMPLETION, LABOR DAY AND COLUMBUS DAY. THE HEALTH OF THE VEGETATION SHALL BE INSPECTED AND THE CONTRACTOR SHALL DEVELOP A PLAN TO ESTABLISH TURF IN THE FILTER, AND
-ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

G. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
SUBMIT SAMPLES OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY. PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES, 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER. PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

3. MAINTENANCE CRITERIA

DURING THE FIRST YEAR, THE BASIN WILL BE INSPECTED SEMI-ANNUALLY AND FOLLOWING MAJOR STORM EVENTS.

DEBRIS AND SEDIMENT BUILDUP SHALL BE REMOVED FROM THE FOREBAY AND BASIN AS NEEDED.

MOVING OF A GRASSED BASIN CAN OCCUR SEMIANNUALLY TO A HEIGHT NO LESS THAN 6 INCHES.

ANY BARE AREA OR EROSION RILLS SHALL BE REPAIRED WITH NEW FILTER MEDIA OR SANDY LOAM THEN SEEDED AND MULCHED.

MAINTAINING GOOD GRASS COVER WILL MINIMIZE CLOGGING WITH FINE SEDIMENTS AND IF PONDING EXCEEDS 48 HOURS, THE TOP OF THE FILTER BED MUST BE ROTOTILLED TO REESTABLISH THE SOIL'S FILTRATION CAPACITY IF EXTENDED PONDING IS OBSERVED.

A. MAINTENANCE AGREEMENT: AN AGENT OF MERCY HOSPITAL IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ANY UNDERDRAINED FILTER. OTHER STORMWATER O&M REQUIREMENTS ARE INCLUDED WITH PERMIT APPLICATION.

B. SOIL FILTER INSPECTION: THE SOIL FILTER SHOULD BE INSPECTED AFTER EVERY MAJOR STORM IN THE FIRST YEAR TO BE SURE IT IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ONCE EVERY SIX MONTHS TO ENSURE THAT IT IS DRAINING WITHIN 48 HOURS FOLLOWING A ONE INCH STORM OR GREATER, AND THAT FOLLOWING A STORMS THAT FILL THE SYSTEM TO OVERFLOW, IT DRAINS IN NO LESS THAN 36 TO 60 HOURS. IF THE SYSTEM DRAINS TOO FAST, AN ORIFICE MAY NEED TO BE ADDED ON THE UNDERDRAIN OUTLET OR, IF ALREADY PRESENT, MAY NEED TO BE MODIFIED.

C. SOIL FILTER REPLACEMENT: THE TOP SEVERAL INCHES OF THE FILTER SHALL BE REPLACED WITH FRESH MATERIAL WHEN WATER PONDS ON THE SURFACE OF THE BED FOR MORE THAN 72 HOURS. THE REMOVED SEDIMENTS SHOULD BE DISPOSED OF IN AN ACCEPTABLE MANNER.

D. SEDIMENT REMOVAL: SEDIMENT AND PLANT DEBRIS SHOULD BE REMOVED FROM THE PRETREATMENT STRUCTURE AT LEAST ANNUALLY.

E. MOWING: IF MOWING IS DESIRED, ONLY HANDHELD STRING TRIMMERS OR PUSH-MOWERS ARE ALLOWED ON THE FILTER (NO TRACTOR) AND THE GRASS BED SHOULD BE MOVED NO MORE THAN 2 TIMES PER GROWING SEASON TO MAINTAIN GRASS HEIGHTS OF NO LESS THAN 6 INCHES.

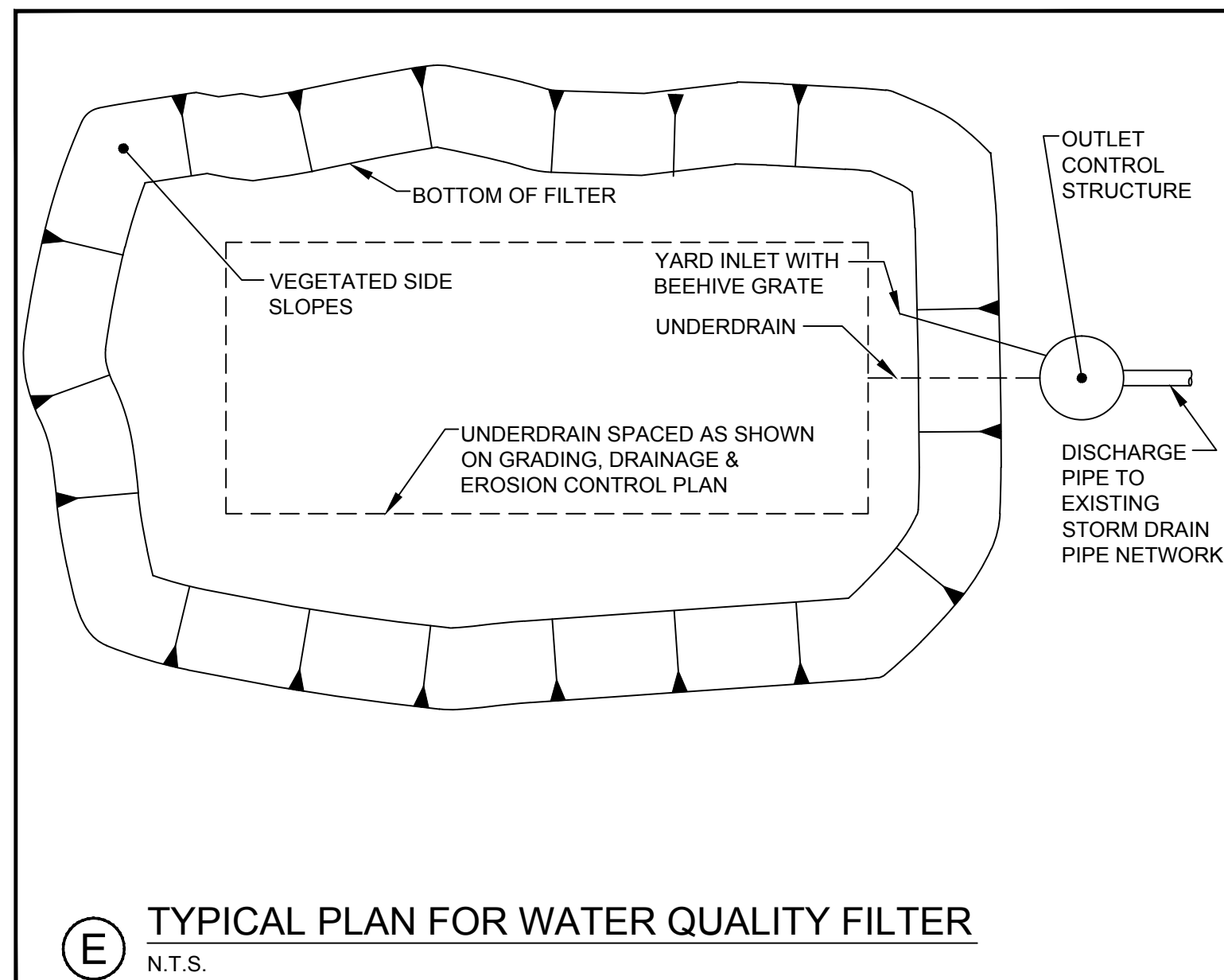
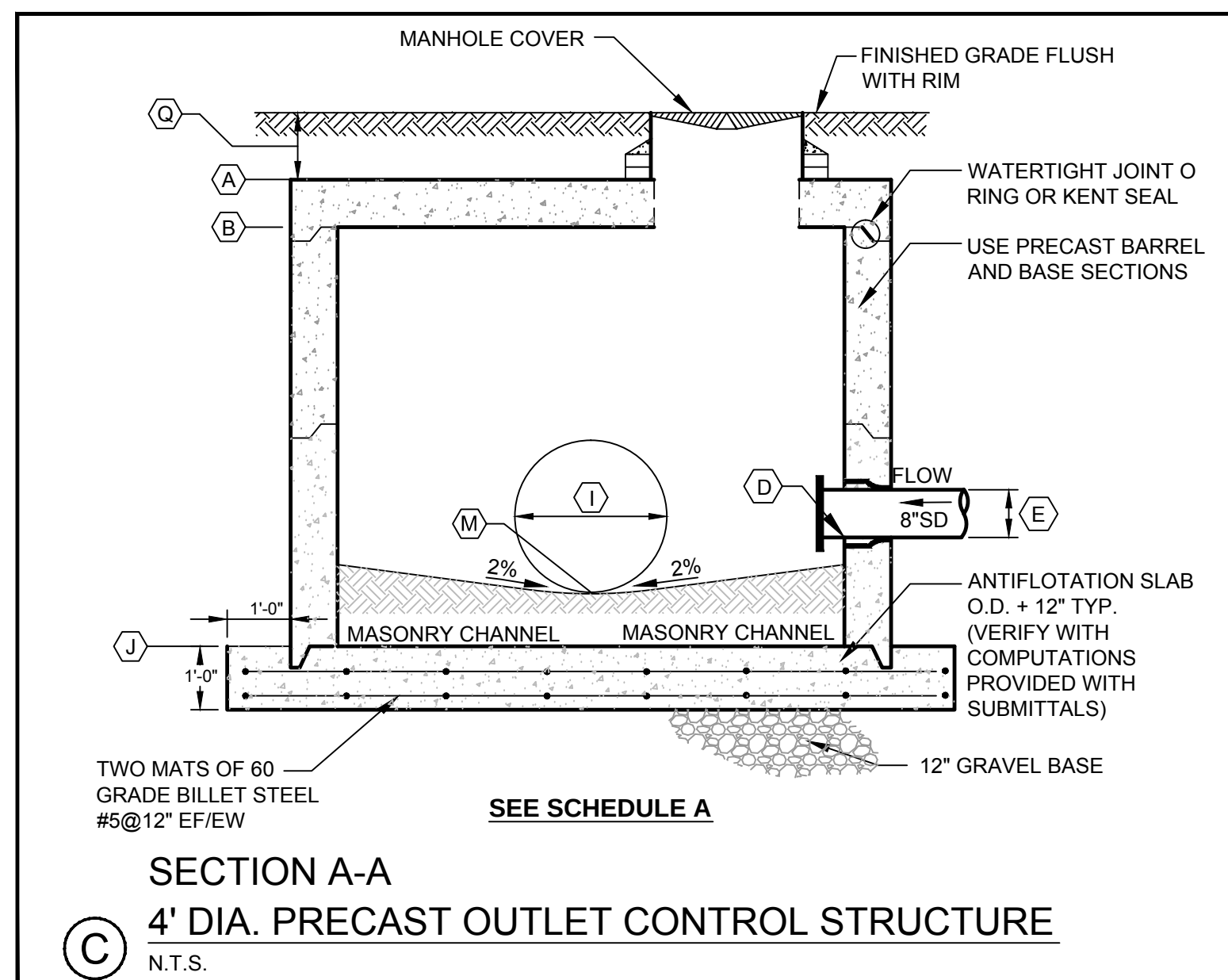
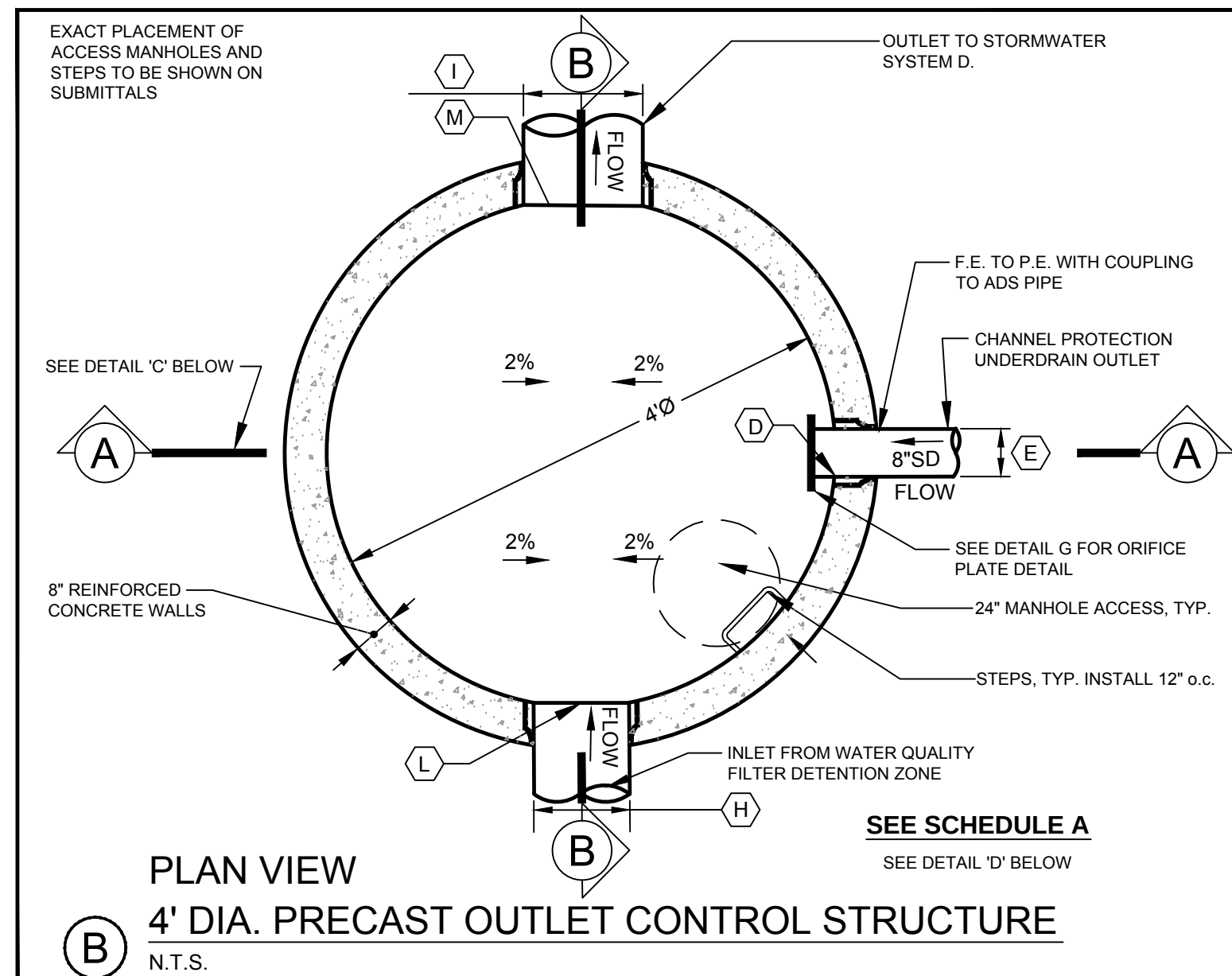
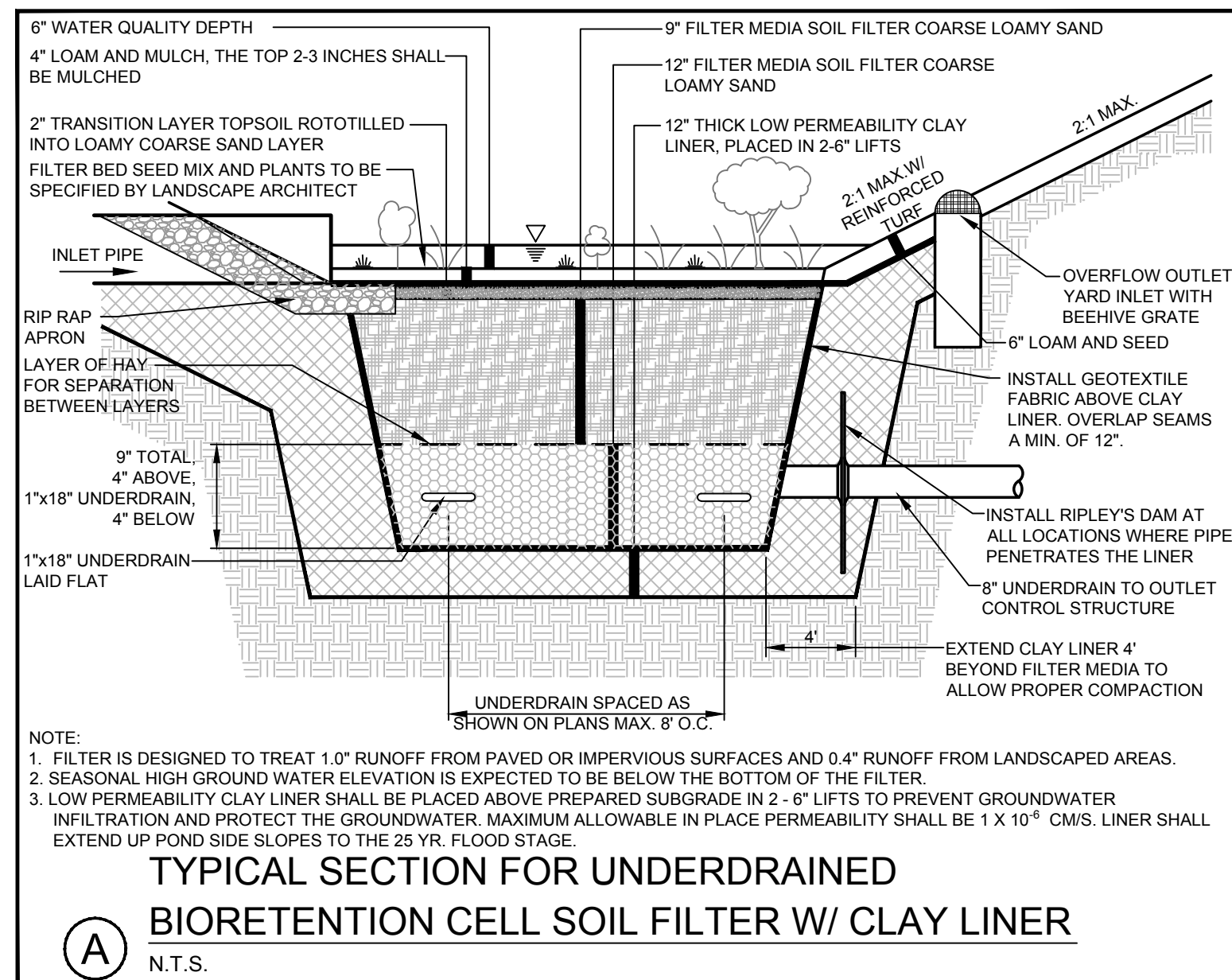
F. FERTILIZATION: FERTILIZATION OF THE UNDERDRAINED FILTER AREA SHOULD BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.

G. HARVESTING AND WEEDING: HARVESTING AND PRUNING OF EXCESSIVE GROWTH WILL NEED TO BE DONE OCCASIONALLY. WEEDING TO CONTROL UNWANTED OR INVASIVE PLANTS MAY ALSO BE NECESSARY. ADD NEW MULCH ONLY AS NECESSARY FOR BIORETENTION CELL.

A DETAILED O & M SCHEDULE ACCOMPANIES THIS APPLICATION. THE O & M IS TO BE COMPLETED BY CCSWCD AND IS SUBJECT TO PERIODIC REVISIONS.

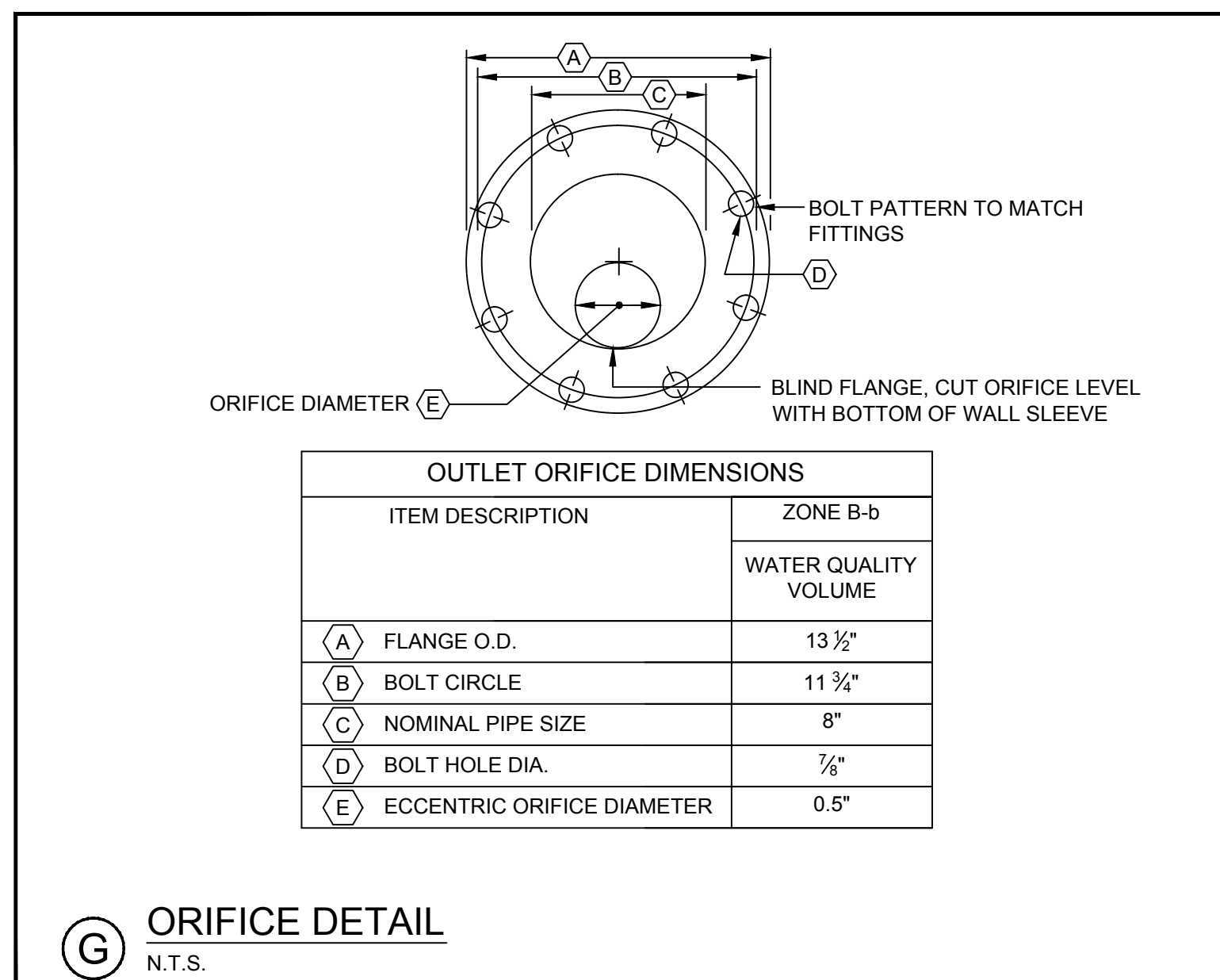
PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT MERCY AT THE FORE MASTER PLAN		STATE OF MAINE SEMPER PARATI NOTARIAL PUBLIC JULY 2012 P.E. STEPHEN R. BUSNEY LIC # 7429	SHEET TITLE STORMWATER DETAILS UNDERDRAINED GRASSED SOIL FILTER	CLIENT MERCY HOSPITAL	DRAWN: LA DESIGNED: BEK CHECKED: SRB FILE NAME: 2149-08-DET SHEET C-7.2
1 REV	07.20.12 DATE SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION				



SCHEDULE A OUTLET CONTROL STRUCTURE	
ITEM DESCRIPTION	DIMENSION/ ELEVATION ZONE B-b
(A) TOP OF STRUCTURE	16.5
(B) UNDERSIDE TOP SLAB	15.83
(D) WATER QUALITY VOLUME PIPE INVERT	11.08
(E) WATER QUALITY VOLUME PIPE DIAMETER *	8"
(H) DIAMETER OF INLET PIPE FROM DET. ZONE	15"
(I) DIAMETER OF OUTLET PIPE	15"
(J) BOTTOM OF STRUCTURE	9.0
(K) RIM TO TOP OF STRUCTURE	1'-0"
(L) DETENTION ZONE INLET INVERT	9.5
(M) OUTLET CONTROL STRUCTURE OUTLET INVERT	9.4

* SEE DETAIL 'G' ON THIS SHEET FOR ECCENTRIC ORIFICE SIZE REQUIRED.
OUTLET CONTROL STRUCTURE IS AN IID MANHOLE.



- 1. SPECIFIC DESIGN CRITERIA**
- A. UNDERDRAIN PIPES:** PROPER LAYOUT OF THE PIPE UNDERDRAIN SYSTEM IS NECESSARY TO EFFECTIVELY DRAIN THE ENTIRE FILTER AREA. THERE MUST BE AT LEAST ONE LINE OF UNDERDRAIN PIPE FOR EVERY EIGHT FEET OF FILTER AREA'S WIDTH. THE SLOPE OF THE INSTALLED UNDERDRAIN PIPE MUST BE POSITIVE. THE UNDERDRAIN PIPING SHOULD BE 4" TO 6" SLOTTED, RIGID SCHEDULE 40 PVC OR SD8X3. STRUCTURE JOINTS SHALL BE SEALED SO THAT THEY ARE WATER TIGHT. THIS PIPEWORK REQUIREMENT IS FOR 1" x 18" FLAT UNDERDRAIN (ADVANCEMENT OR EQUAL) IN LIEU OF ROUND UNDERDRAIN PIPE. THE INSTALLATION AND BEDDING REQUIREMENTS ARE THE SAME.
- B. PIPE BEDDING AND TRANSITION ZONE:** THE 1 TO 18 INCH DIAMETER PERFORATED UNDERDRAIN PIPE(S) MUST BE BEDDED IN 9 INCHES OF UNDERDRAIN MATERIAL WITH AT LEAST 4 INCHES OF MATERIAL BENEATH THE PIPE AND 4 INCHES ABOVE. TWO OPTIONS FOR PIPE BEDDING ARE PROVIDED BELOW. HOWEVER OPTION 1 IS PREFERRED:
- THE UNDERDRAIN MATERIAL CONSISTS OF WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL. THE MATERIAL MUST CONTAIN LESS THAN 5% FINES PASSING THE #20 SIEVE. NO TRANSITION ZONE IS NECESSARY. SINCE THE DRAINAGE PIPE IS BEDDED IN LESS PERVIOUS GRAVEL AND THIS DESIGN IS ACCEPTABLE FOR AREAS WHERE THE HEAD OR DEPTH TO SEASONAL HIGH GROUNDWATER IS CLOSE TO THE BOTTOM OF THE DRAINAGE LAYER, UNDERDRAIN PIPES MUST BE PLACED NO FURTHER THAN 8 FEET APART.
- C. SOIL FILTER BED:** THE SOIL FILTER MUST BE AT LEAST 18 INCHES DEEP ON TOP OF THE GRAVEL UNDERDRAIN PIPE BEDDING AND MUST EXTEND ACROSS THE BOTTOM OF THE ENTIRE FILTER AREA. THIS SOIL MIXTURE SHALL BE A UNIFORM MIX. FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES THAT MAY BECOME A HAZARD TO PLANT OR AN OBSTACLE TO THE PLANTING OR MAINTENANCE OPERATIONS CAN BE MIXED WITH THE FILTER.
- D. SOIL FILTER MEDIA:** SOIL MEDIA MUST CONSIST OF A LOAMY COARSE SAND SOIL ORGANIC SOURCES MUST BE APPROVED BY THE DEPARTMENT. HOWEVER AN AGRICULTURAL SOURCE IS NOT ACCEPTABLE FOR THE ORGANIC COMPONENT OF THE MEDIA.
- THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE 200 SIEVE AND SHALL HAVE A CLAY CONTENT OF LESS THAN 2%. THE SYSTEM MUST BE DESIGNED TO DRAIN THE SURFACE STORAGE VOLUME IN NO LESS THAN 24 HOURS AND NO MORE THAN 48 HOURS.

AS AN EXAMPLE, THE MIXTURE MAY CONTAIN BY VOLUME THE FOLLOWING:
65% OF SANDY (MEDOT #703.01 CONTAINS INSUFFICIENT FINE FOR THE MEDIA)
35% OF LOAMY TOPSOIL

- D. CLAY CONTENT:** USE OF SOILS WITH MORE THAN 2% CLAY CONTENT COULD CAUSE FAILURE OF THE SYSTEM AND CARE SHOULD BE TAKEN, ESPECIALLY IN AREAS WHERE THE PREDOMINANT SOIL CONTAINS MARINE CLAY, THAT THE SAND AND TOPSOIL USED IN THE MIXTURE HAVE VERY LITTLE OR NO CLAY CONTENT.
- E. FILTER PERMEABILITY:** THE FILTER MUST BE PERMEABLE ENOUGH TO INSURE DRAINAGE WITHIN 48 HOURS. MAXIMUMLY, YET HAVE SUFFICIENT FINES TO INSURE FILTRATION OF FINE PARTICLES AND REMOVAL OF DISSOLVED POLLUTANTS. THE DESIGN MAY EITHER RELY ON THE SOIL PERMEABILITY, IF KNOWN, TO PROVIDE THE SLOW RELEASE OF THE WATER TREATMENT VOLUME OVER A MINIMUM OF 24 HOURS, OR MAY INSURE THIS RATE BY INSTALLING A CONSTRUCTIVE ORIFICE OR VALVE ON THE UNDERDRAIN OUTLET, IN DETERMINING THE PERMEABILITY OF THE MEDIA, THE PERCENT FINES OF THE MIXTURE AND THE LEVEL OF COMPACTION SHOULD BE CONSIDERED. GENERALLY, THE SOIL MEDIA SHOULD BE ONLY LIGHTLY COMPACTED BETWEEN 90 AND 92% STANDARD PROCTOR (ASTM D698) AND SHALL HAVE A PERMEABILITY OF 2.4 INHR TO 4 INHR.
- G. GRADATION TESTING:** GRADATION TESTS, INCLUDING HYDROMETER TESTING FOR CLAY CONTENT, AND PERMEABILITY TESTING OF THE SOIL, FILTER MATERIAL, SHALL BE PERFORMED BY A QUALIFIED SOIL TESTING LABORATORY AND SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW BEFORE PLACEMENT AND COMPACTION.
- H. GEOTEXTILE FABRIC:** A GEOTEXTILE FABRIC WITH SUITABLE CHARACTERISTICS MAY BE PLACED BETWEEN THE SIDES OF THE FILTER LAYER AND ADJACENT SOIL. THE FABRIC MAY PREVENT SURROUNDING SOIL FROM MIGRATING INTO AND CLOGGING THE FILTER AND CLOGGING THE OUTLET. OVERLAP SEAMS MUST BE A MINIMUM OF 12 INCHES. DO NOT WRAP FABRIC OVER THE TOP OF THE PIPE BEDDING AS IT WILL CAUSE CLOGGING AND WILL PREVENT FLOWS OUT OF THE FILTER. THE GEOTEXTILE FABRIC SHALL BE MIRAFI 170N OR EQUIVALENT.
- I. VEGETATION:** THE SOIL, FILTER SURFACE MUST BE PLANTED WITH NATIVE LANDSCAPE PLANTS TO PREVENT EROSION OF THE FILTER SURFACE. DRAINAGE SOILS, UPON PLANTING, THE SOIL FILTER SHALL BE MULCHED WITH A WELL AGED, UNIFORM IN COLOR AND FEE OF FOREIGN MATERIAL, INCLUDING FLEAY RACK MATERIAL BARK MULCH.
- J. ROCK FOREBAY:** A ROCK FOREBAY IS RECOMMENDED TO REDUCE FLOW VELOCITY INTO THE VOLUME III: BMP'S TECHNICAL DESIGN MANUAL CHAPTER 7.1, FILTRATION BMP- GRASSED FILTER BASIN BASIN. IT SHALL REMAIN CLEAR OF SEDIMENT UNTIL THE UPGRADED TRIBUTARY AREA IS FULLY VEGETATED.
- 2. CONSTRUCTION CRITERIA**
- A. BASIN EXCAVATION:** THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND CAN BE USED FOR A SEDIMENT TRAP FROM THE SITE DURING CONSTRUCTION. AFTER EXCAVATION OF THE BASIN, THE OUTLET STRUCTURE AND PIPING SYSTEM MUST BE INSTALLED AT THE APPROPRIATE ELEVATION AND PROTECTED WITH A SEDIMENT BARRIER. IF THE BASIN IS USED AS A SEDIMENT TRAP, THE SIDES OF THE EMBANKMENTS MUST BE MULCHED AND MAINTAINED TO PREVENT EROSION.
- B. COMPACTION OF SOIL, FILTER:** FILTER SOIL, MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90 AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.
- C. OUTLET DISCHARGE:** OUTFLOW OF THE FILTER BASIN UNDERDRAIN WILL BE CONTROLLED BY A CONSTRUCTIVE ORIFICE.

- D. CONSTRUCTION SEQUENCE:** EROSION AND SEDIMENTATION FROM UNSTABLE SUBCATCHMENTS IS THE MOST COMMON REASON FOR FILTER FAILURE. NOT HEEDING THE CONSTRUCTION SEQUENCING CRITERIA IS LIKELY TO RESULT IN THE NEED TO REPLACE THE SOIL FILTER. THE SOIL FILTER MEDIA OR CATCHMENT MATERIAL MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION. OTHERWISE, THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA WILL BE DESTRUCTIVE TO THE SOIL FILTER. THE AREA THAT DRAINS TO THE FILTER MUST BE PERMANENTLY STABILIZED PRIOR TO THE INSTALLATION OF THE FILTER. THE DEPARTMENT HAS DETERMINED, ON A CASE-BY-CASE BASIS, THAT SUFFICIENT MEASURES ARE BEING TAKEN TO PREVENT EROSION OF MATERIAL FROM THE UNSTABLE CATCHMENT AREA AND DEPOSITION ON THE FILTER.
- E. REMEDIAL LOAM COVER:** TO RAPIDLY ESTABLISH VEGETATION IN THE FILTER AREA, THE CONTRACTOR WILL REPLACE A 2-3 INCH LAYER OF MULCH ABOVE THE TOPSOIL. IF EVIDENCE OF CLOGGING IS OBSERVED IN THE FILTER AREA, THE CONTRACTOR SHALL REMOVE THE MULCH AND THE CONTRACTOR SHALL NOT OVER COMPACT THE SOIL MEDIA BELOW DURING ANY REMEDIAL MEASURES.
- F. CONSTRUCTION OVERSIGHT:** INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WHO IS REQUIRED REPORTING TO THE CITY OF PORTLAND AT A MINIMUM, INSPECTIONS WILL OCCUR:
- AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT BEFORE BACKFILLED.
 - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
 - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDING.
- PRICE:** THE BUREAU OF PUBLIC WORKS LABOR DATA AND COLUMBUS DAY THE HEALTH OF THE VEGETATION SHALL BE INSPECTED AND THE CONTRACTOR SHALL DEVELOP A PLAN TO ESTABLISH TURF IN THE FILTER, AND
- ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER. AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THE ARE PASSING DRAIN SPECIFICATIONS.**

G. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL SUBMIT SAMPLES OF THE FILTER MEDIA TO THE TESTING LABORATORY. THE FILTER MEDIA AND SAMPLES OF THE UNDERDRIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY. PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM D4218 STANDARD METHOD OF TESTS FOR SIEVE ANALYSIS OF FINE PARTICLES IN SOILS. FROM EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SLO FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE. A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER. SUBMIT A PERMITS TO THE LOCAL HEALTH DEPARTMENT AND THE STATE OF TEXAS DSD-2436 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

3. MAINTENANCE CRITERIA

DURING THE FIRST YEAR, THE BASIN WILL BE INSPECTED SEMI-ANNUALLY AND FOLLOWING MAJOR STORM EVENTS.

DEBRIS AND SEDIMENT BUILDUP SHALL BE REMOVED FROM THE FOREBAY AND BASIN AS NEEDED.

ANY BARE AREA OR EROSION RILLS SHALL BE REPAIRED WITH NEW FILTER MEDIA OR SANDY LOAM THEN SEEDED AND MULCHED.

MAINTAINING GOOD PLANTING GROWTH WILL MINIMIZE CLOGGING WITH FINE SEDIMENTS AND IF PONDING EXCEEDS 48 HOURS, THE TOP OF THE FILTER BED MUST BE ROTOTILLED TO REESTABLISH THE SOIL'S FILTRATION CAPACITY IF EXTENDED PONDING IS OBSERVED.

A. MAINTENANCE AGREEMENT: AN AGENT OF MERCY HOSPITAL IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ANY UNDERDRAINED FILTER. OTHER STORMWATER O&M REQUIREMENTS ARE INCLUDED WITH PERMIT APPLICATION.

B. SOIL FILTER INSPECTION: THE SOIL FILTER SHOULD BE INSPECTED AFTER EVERY MAJOR STORM IN THE FIRST YEAR TO BE SURE IT IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ONCE EVERY SIX MONTHS TO ENSURE THAT IT IS DRAINING WITHIN 48 HOURS FOLLOWING A ONE INCH STORM OR GREATER, AND THAT FOLLOWING A STORMS THAT FILL THE SYSTEM TO OVERFLOW, IT DRAINS IN NO LESS THAN 36 TO 60 HOURS. IF THE SYSTEM DRAINS TOO FAST, AN ORIFICE MAY NEED TO BE ADDED ON THE UNDERDRAIN OUTLET OR, IF ALREADY PRESENT, MAY NEED TO BE MODIFIED.

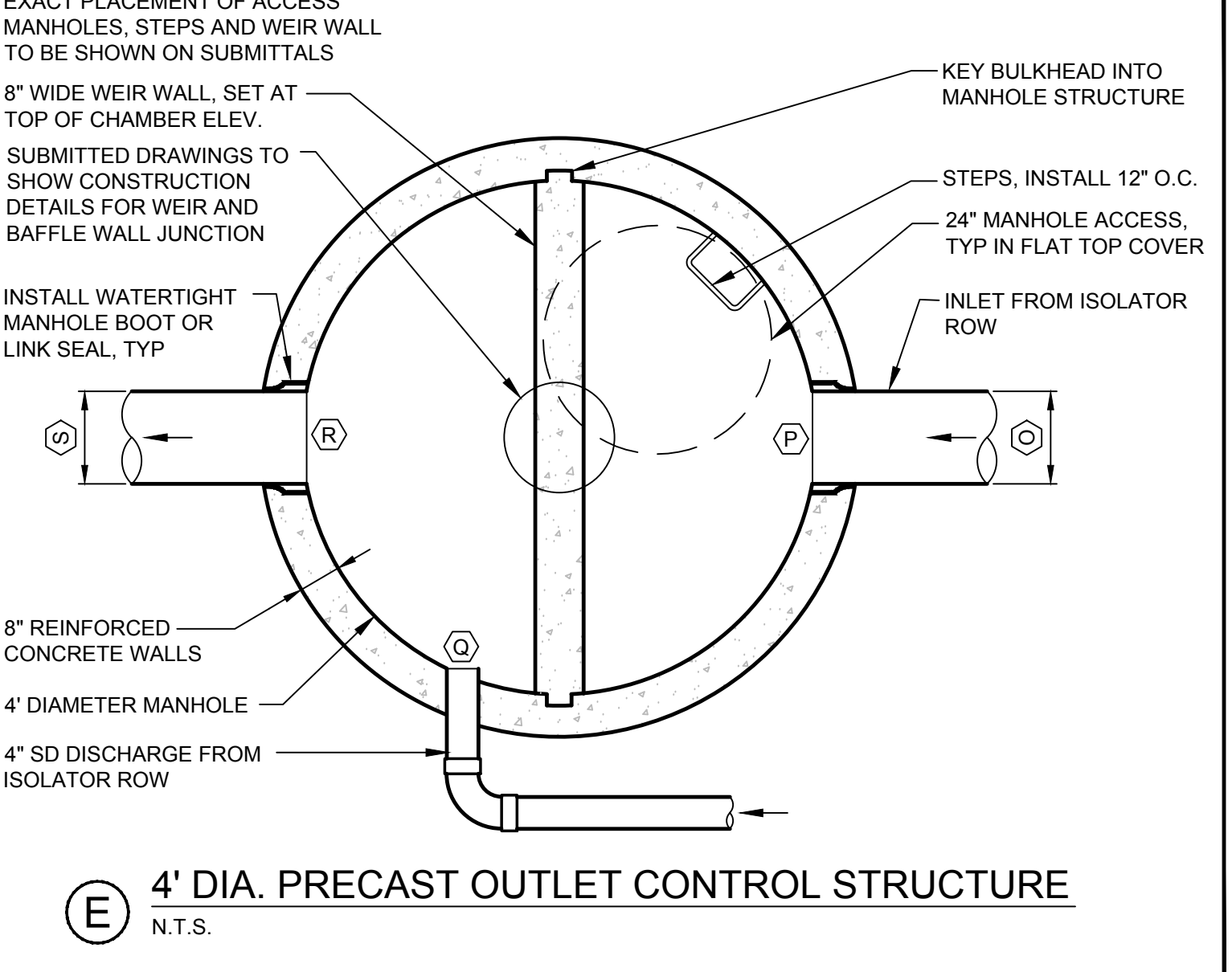
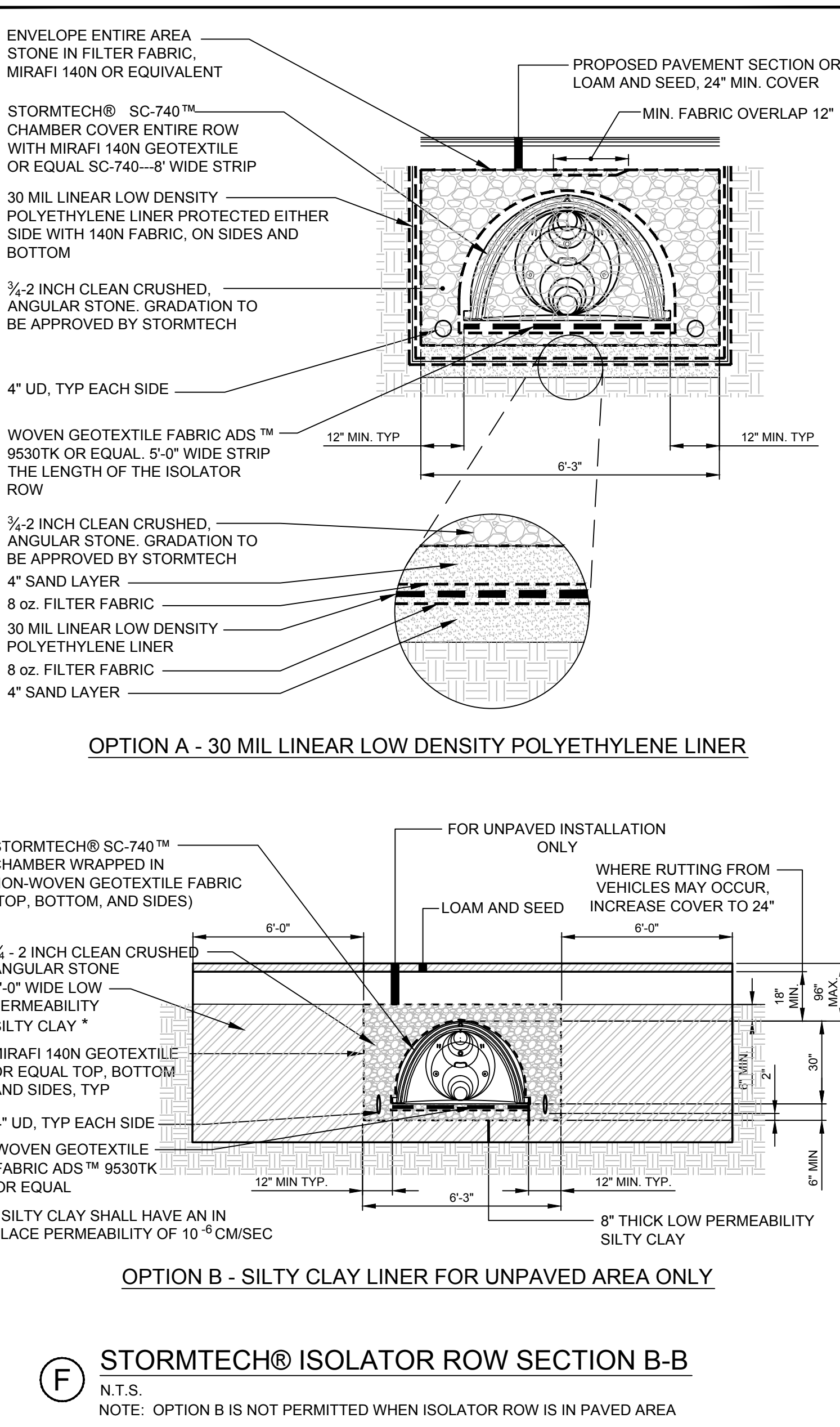
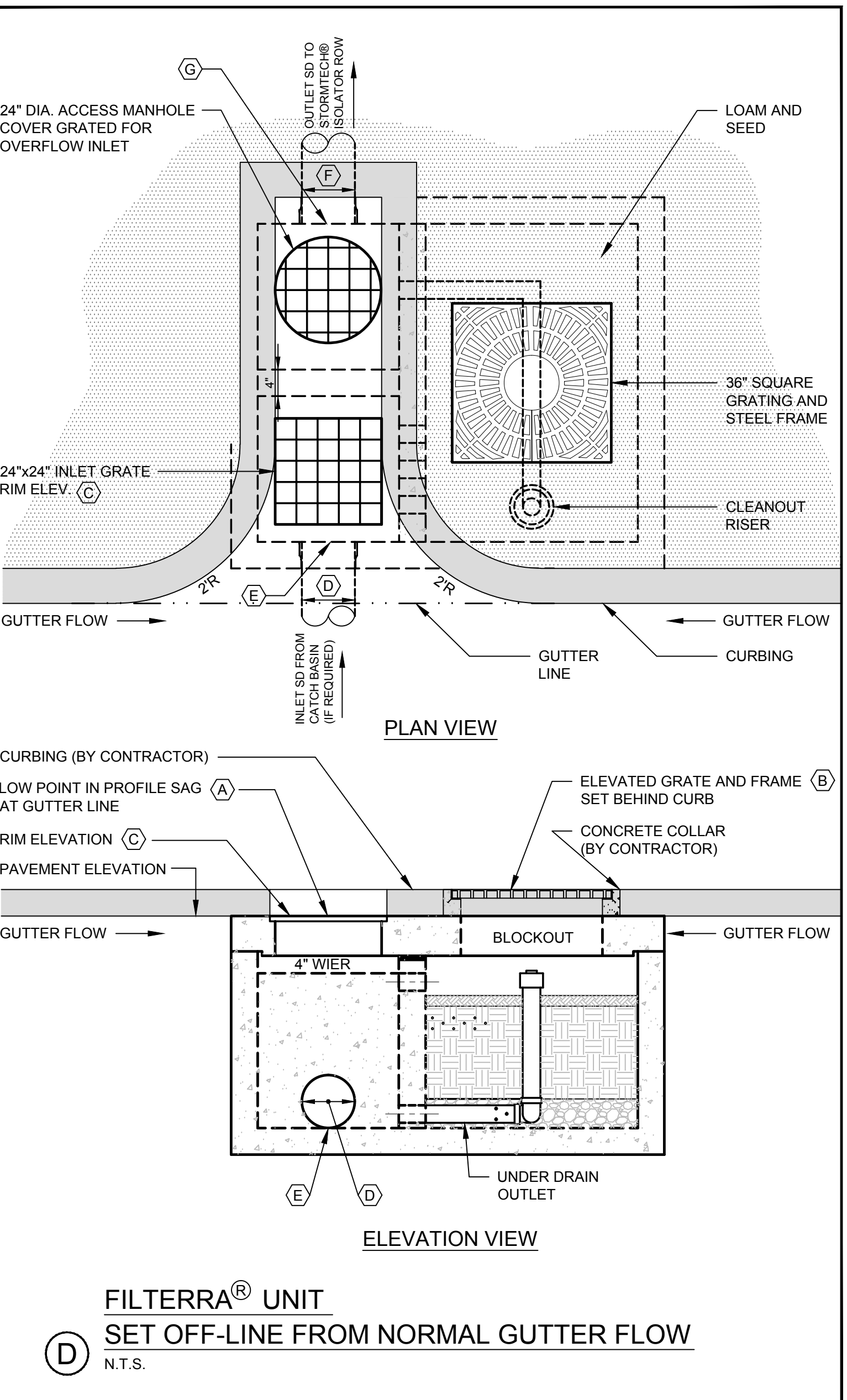
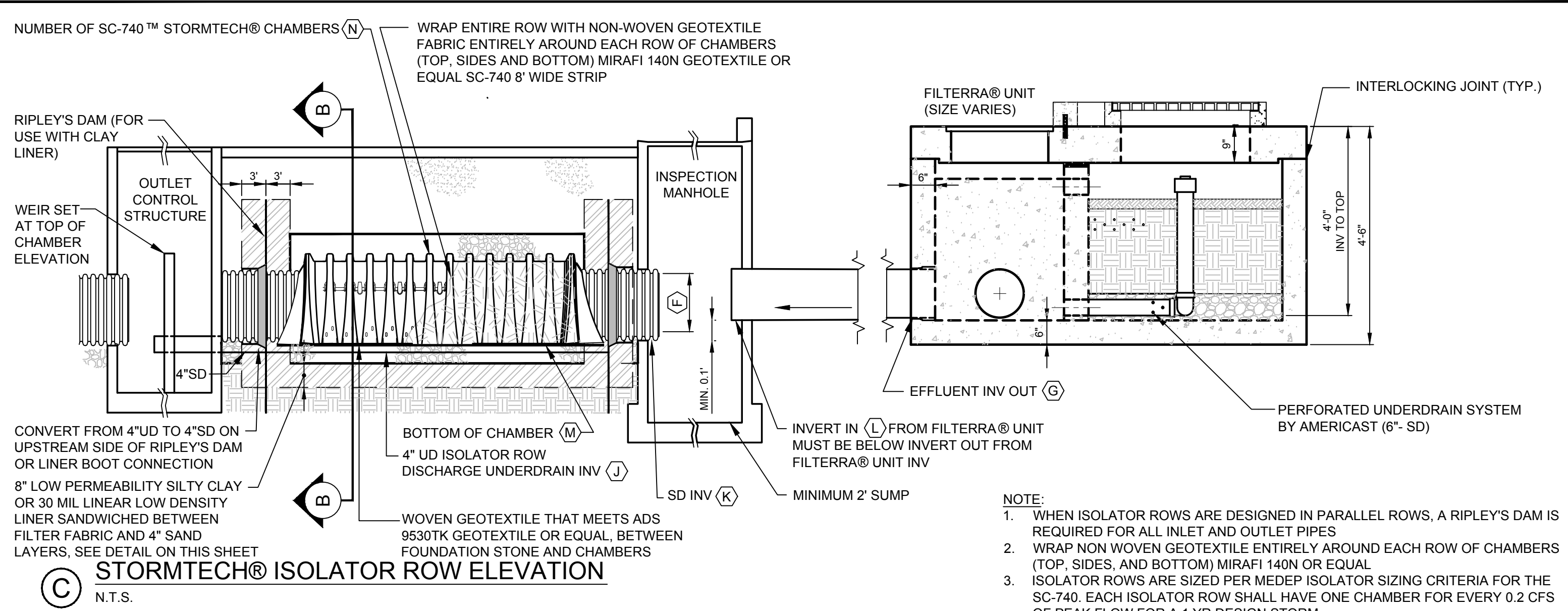
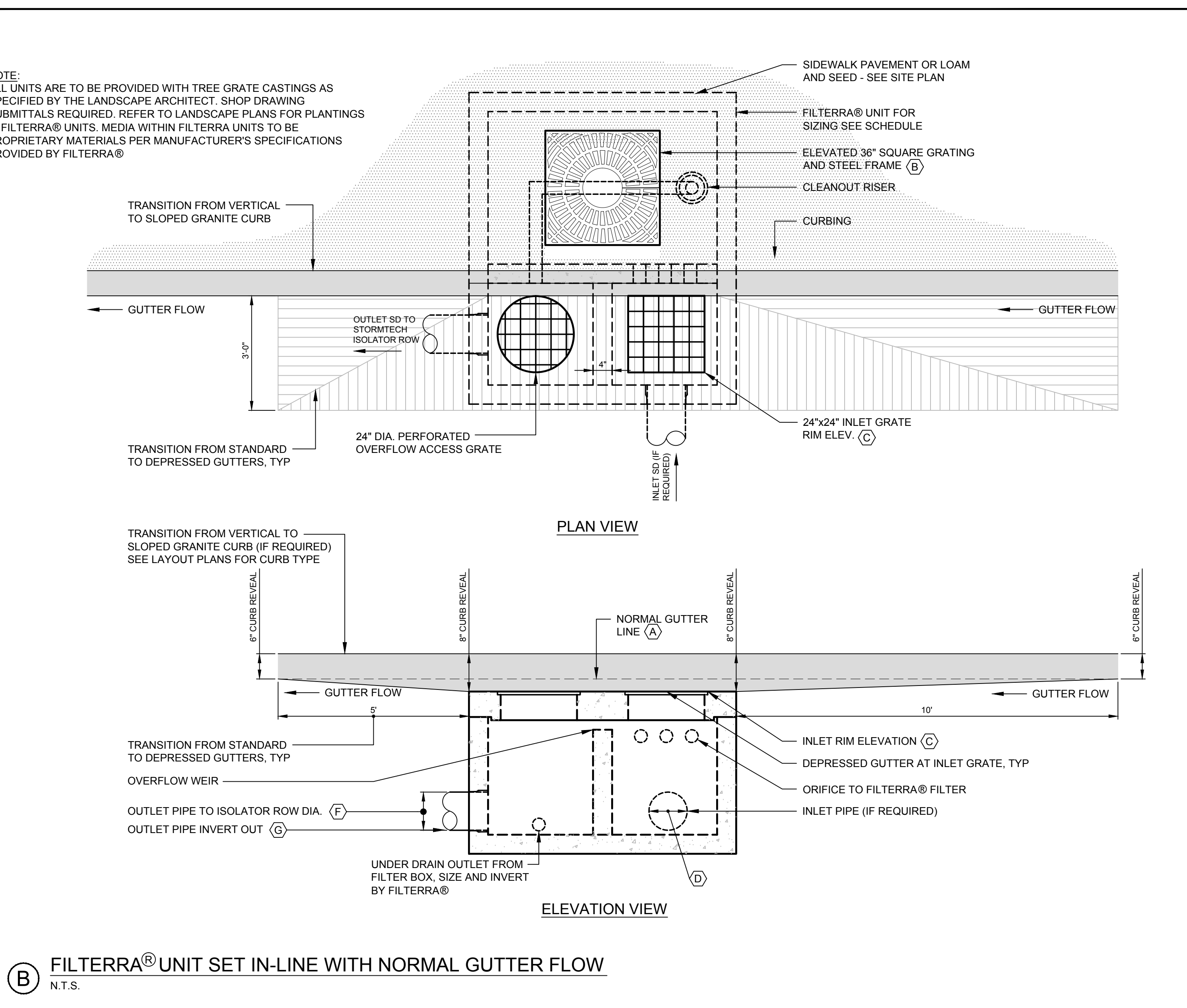
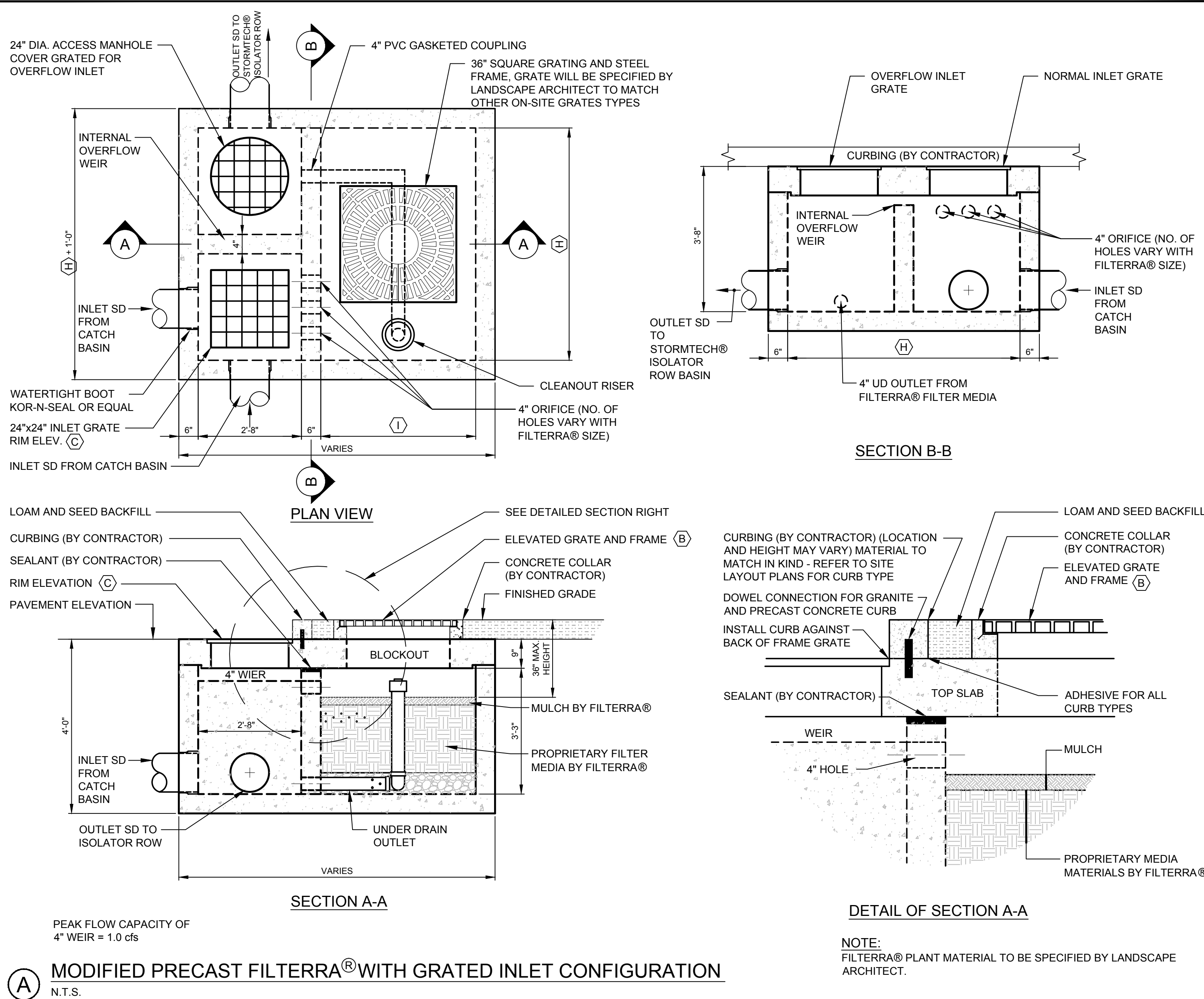
C. SOIL FILTER REPLACEMENT: THE TOP SEVERAL INCHES OF THE FILTER SHALL BE REPLACED WITH FRESH MATERIAL WHEN WATER PONDS ON THE SURFACE OF THE BED FOR MORE THAN 72 HOURS. THE REMOVED SEDIMENTS SHOULD BE DISPOSED OF IN AN ACCEPTABLE MANNER.

D. SEDIMENT REMOVAL: SEDIMENT AND PLANT DEBRIS SHOULD BE REMOVED FROM THE PRETREATMENT STRUCTURE AT LEAST ANNUALLY.

E. FERTILIZATION: FERTILIZATION OF THE UNDERDRAINED FILTER AREA SHOULD BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.

F. HARVESTING AND WEEDING: HARVESTING AND PRUNING OF EXCESSIVE GROWTH WILL NEED TO BE DONE OCCASIONALLY. WEEDING TO CONTROL UNWANTED OR INVASIVE PLANTS MAY ALSO BE NECESSARY. ADD NEW MULCH ONLY AS NECESSARY FOR BIORETENTION CELL.

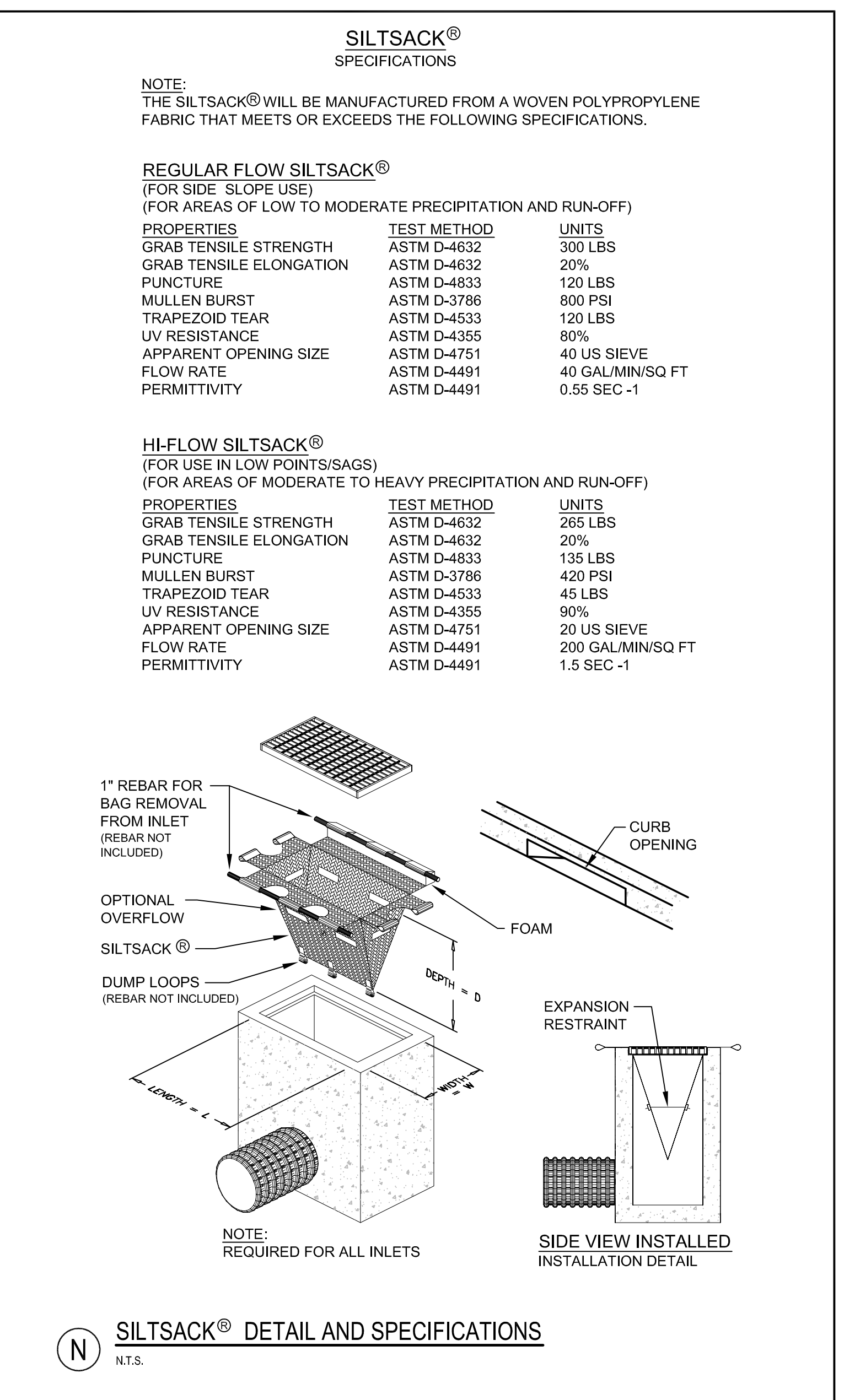
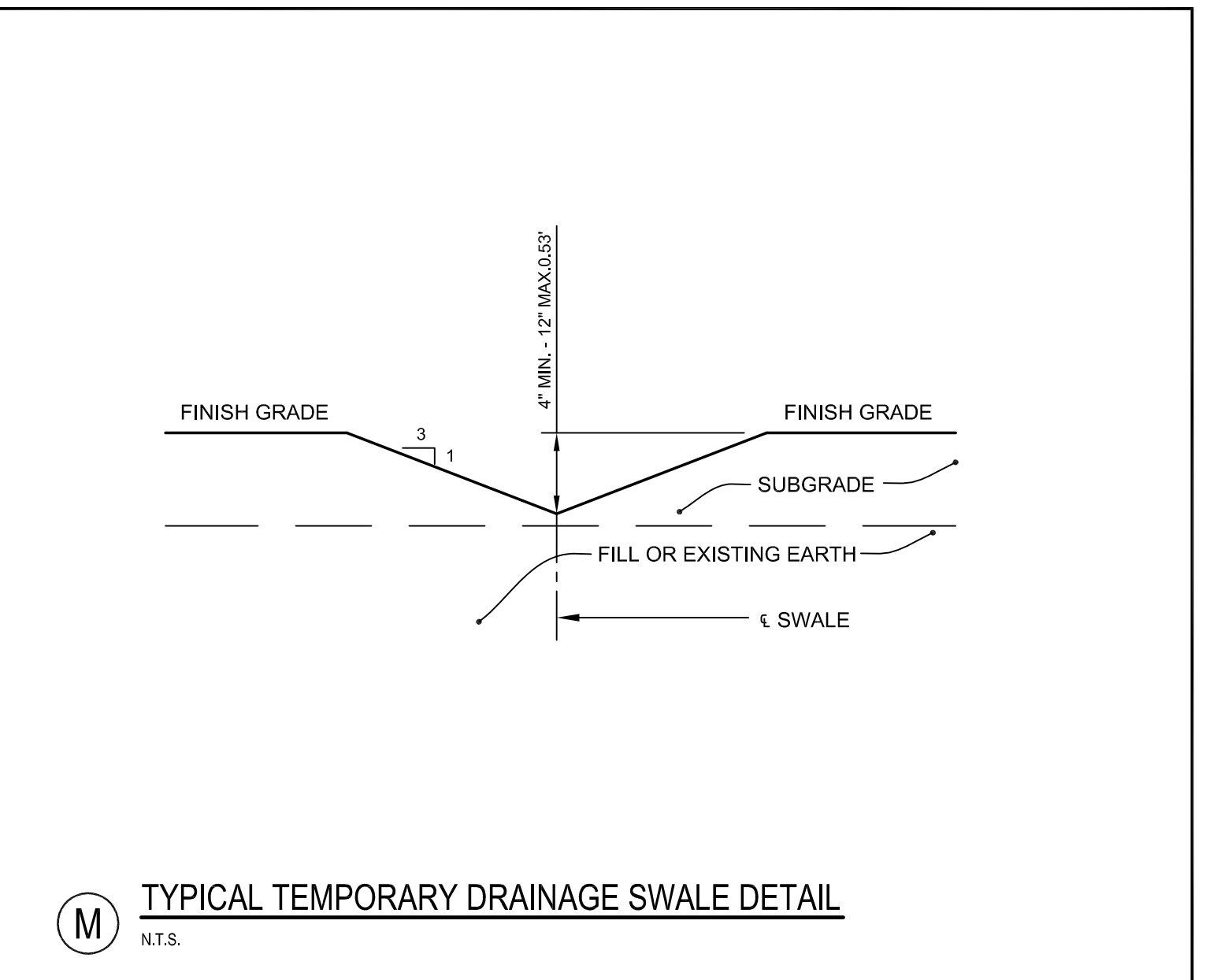
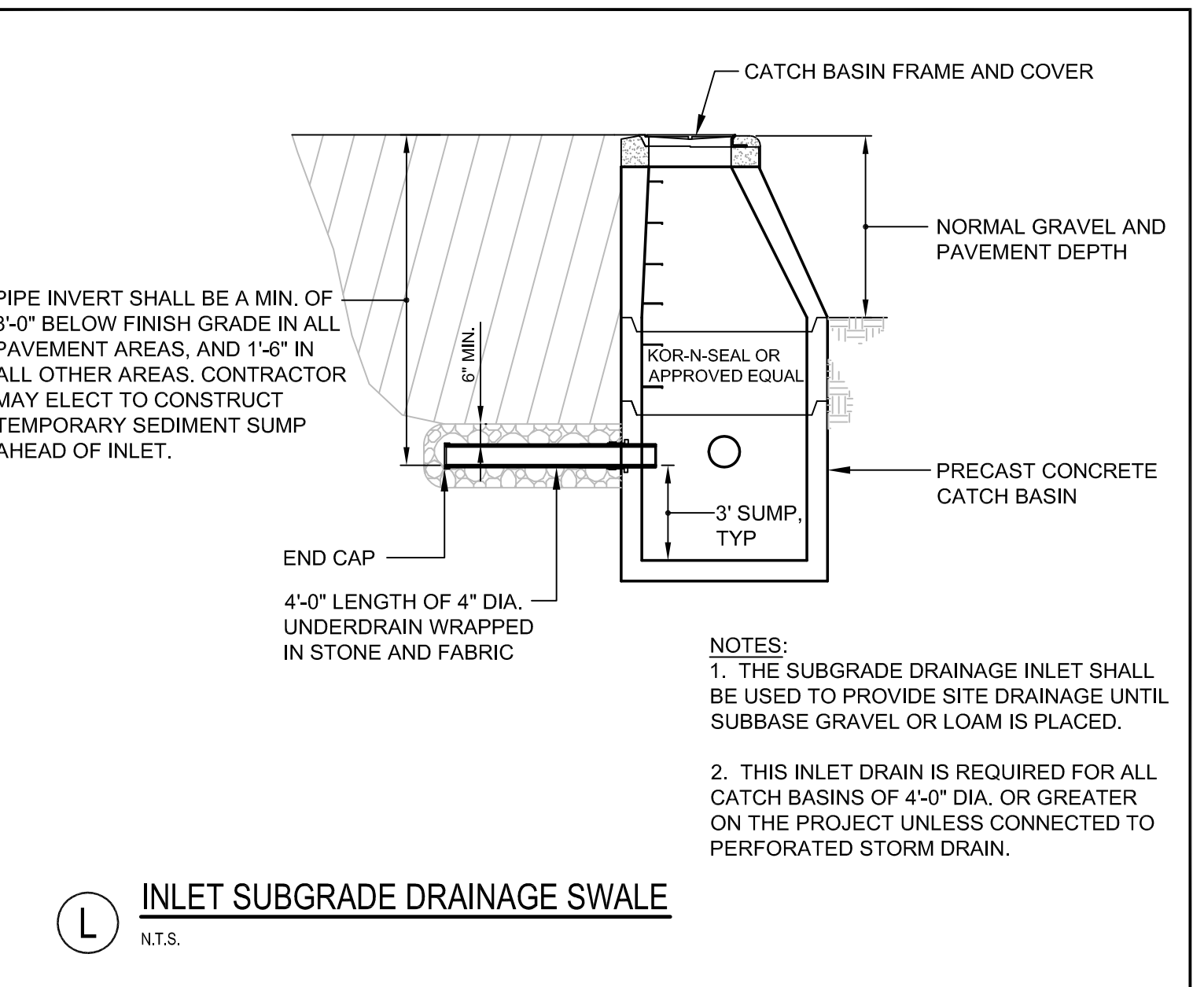
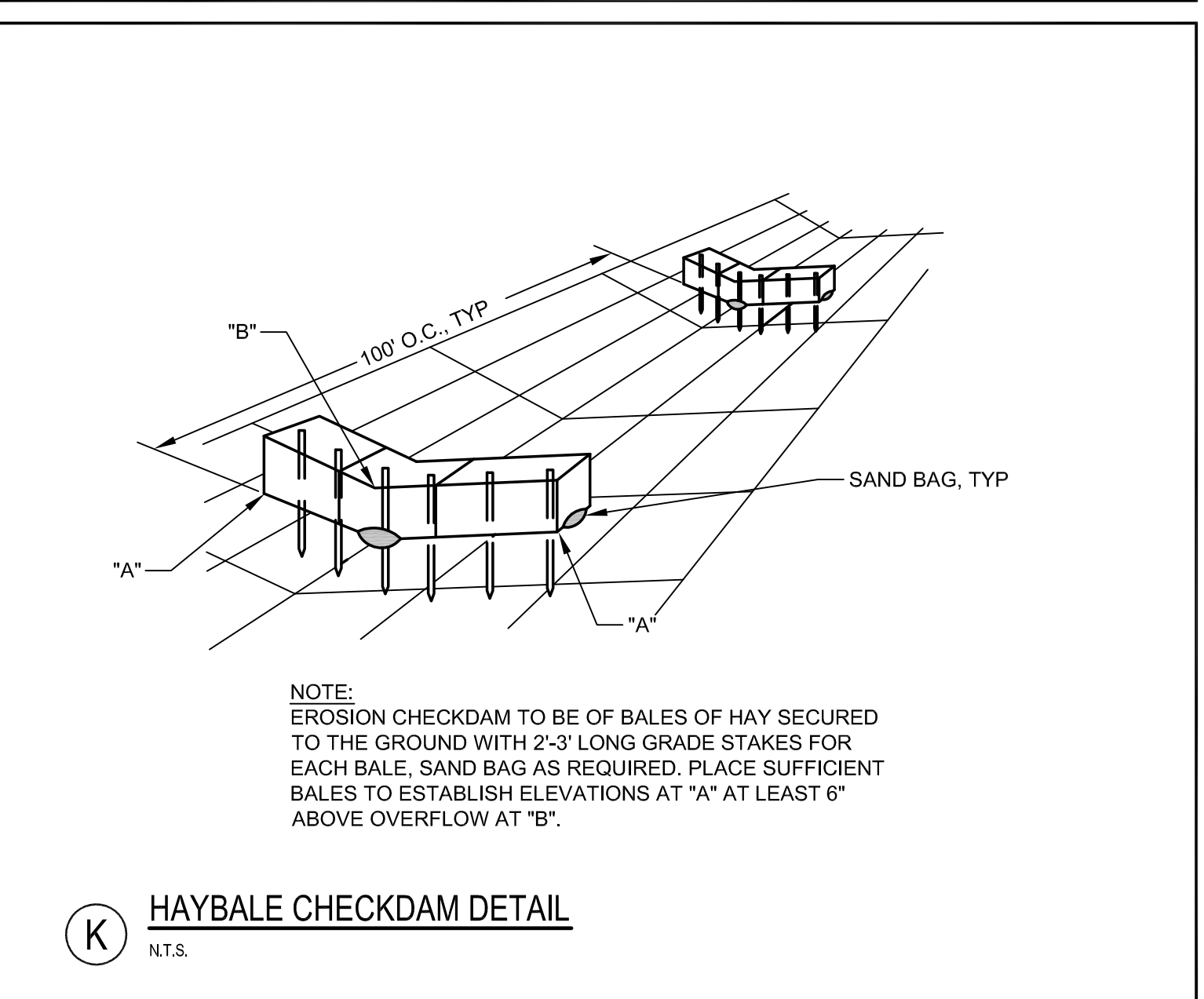
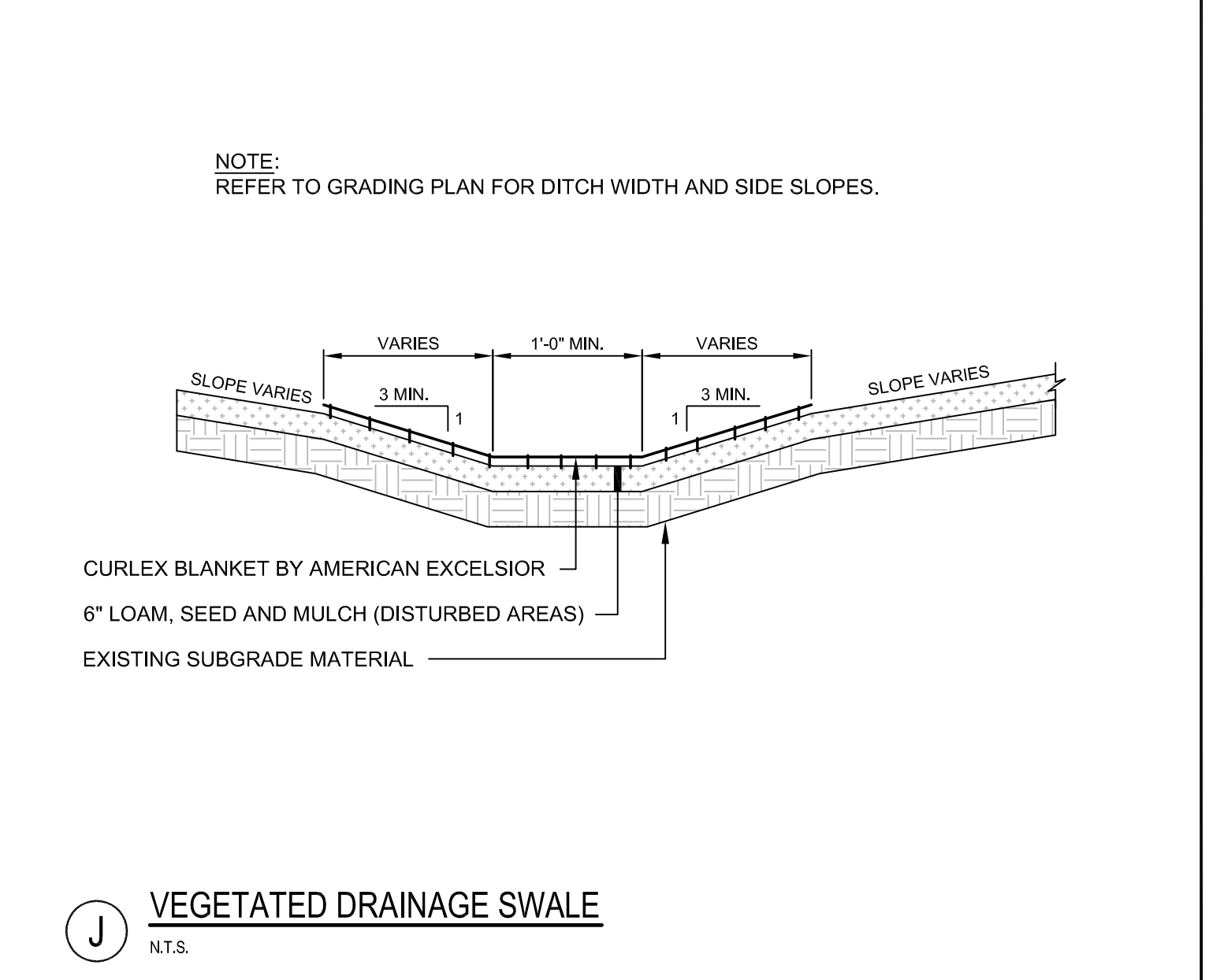
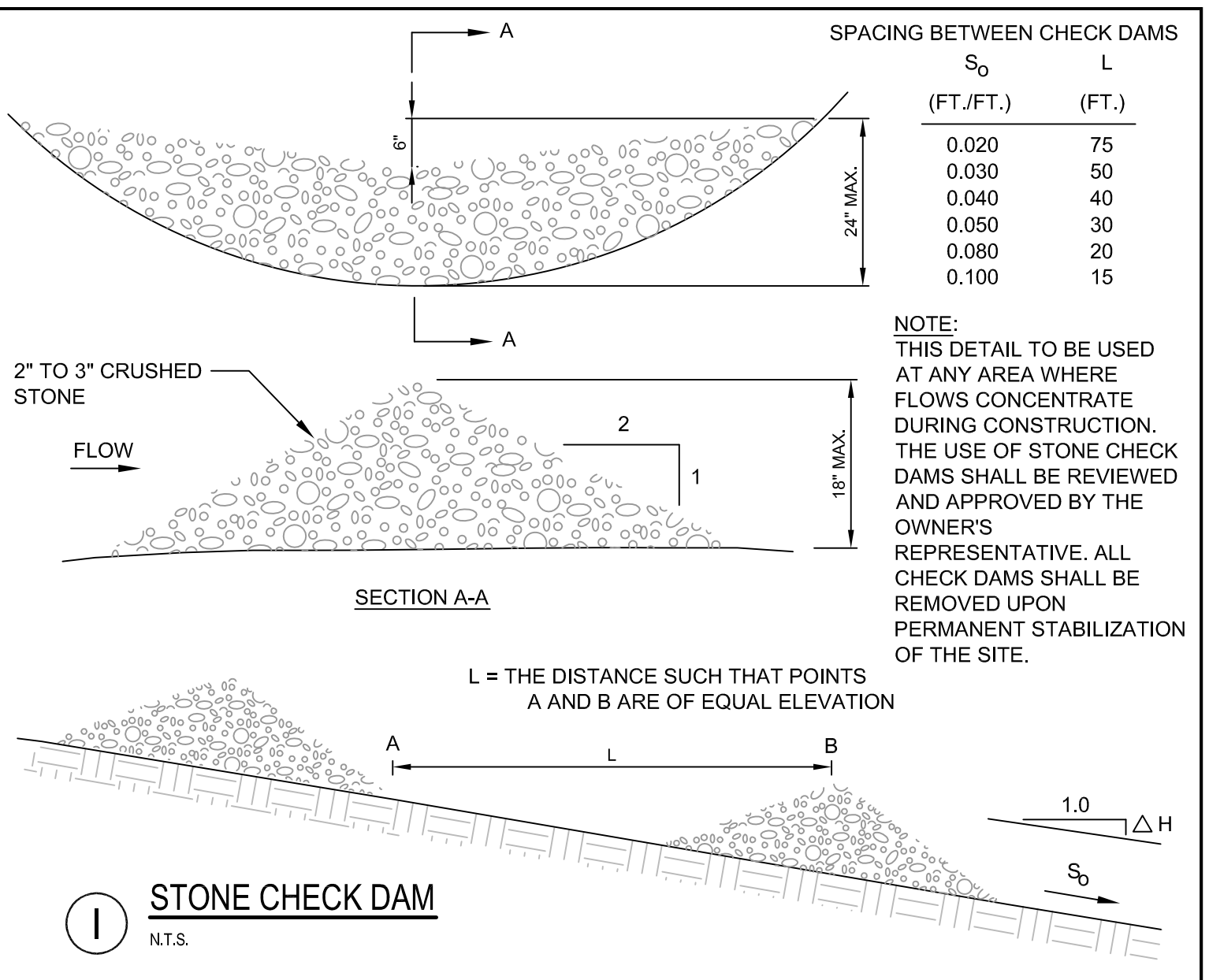
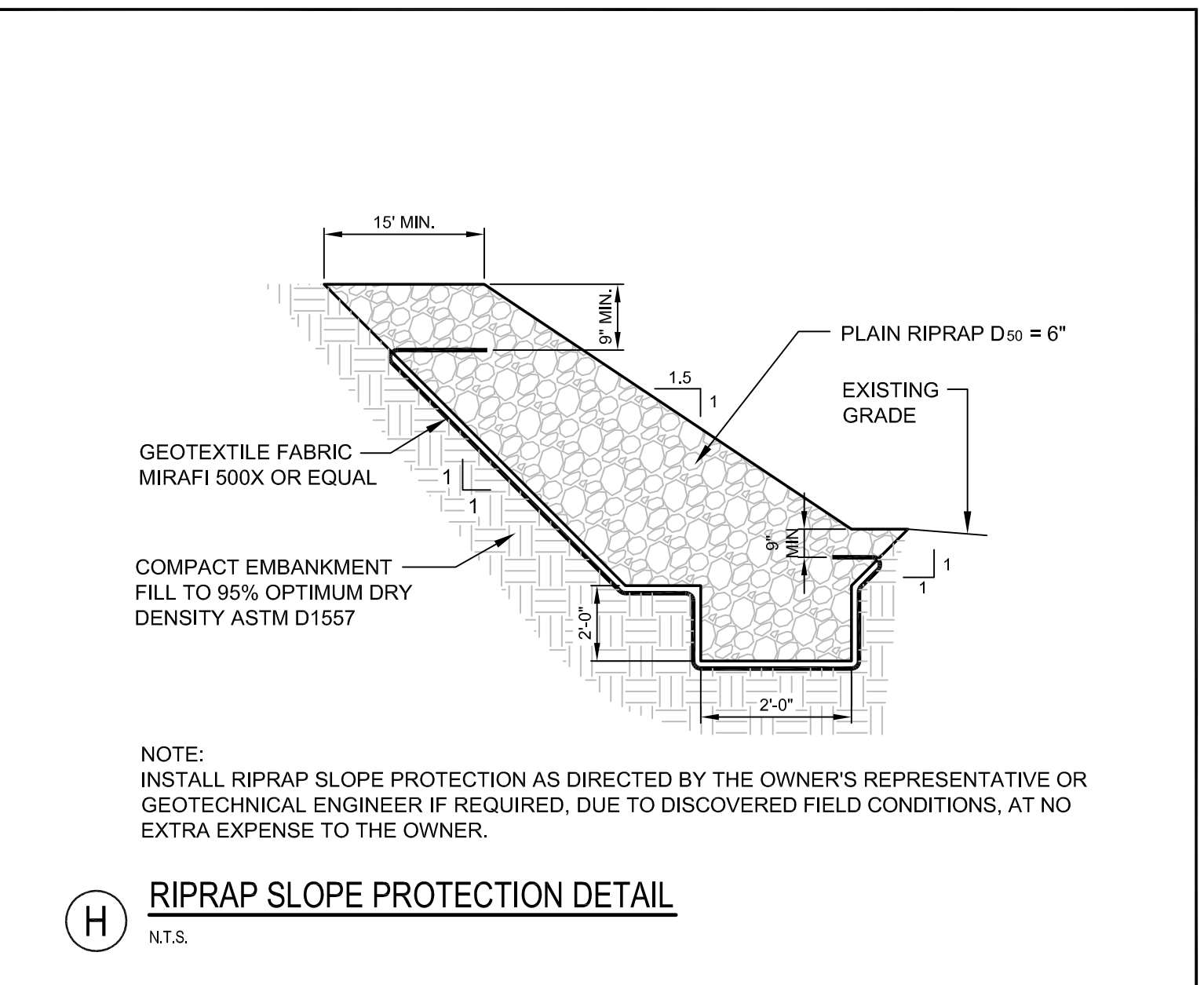
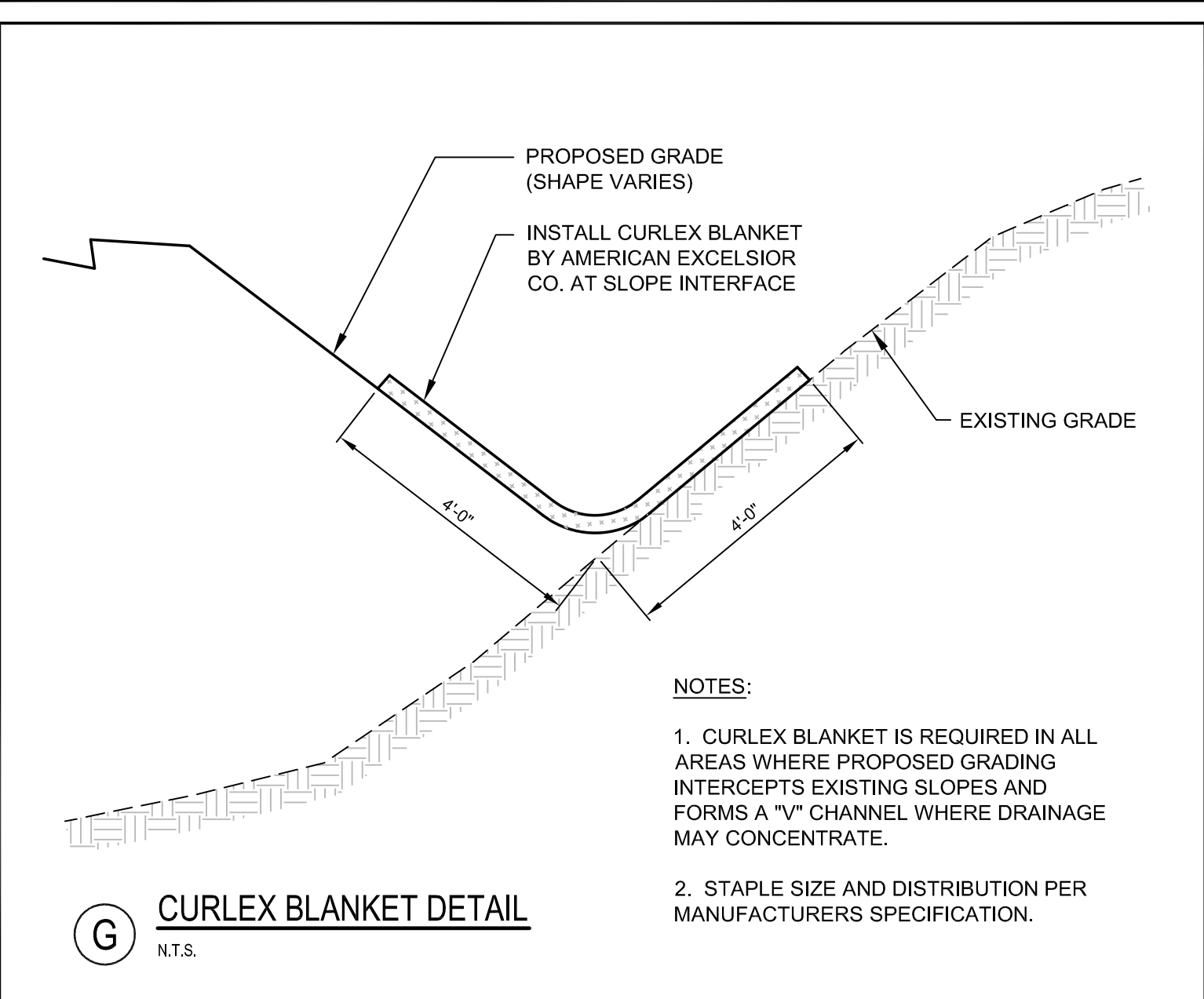
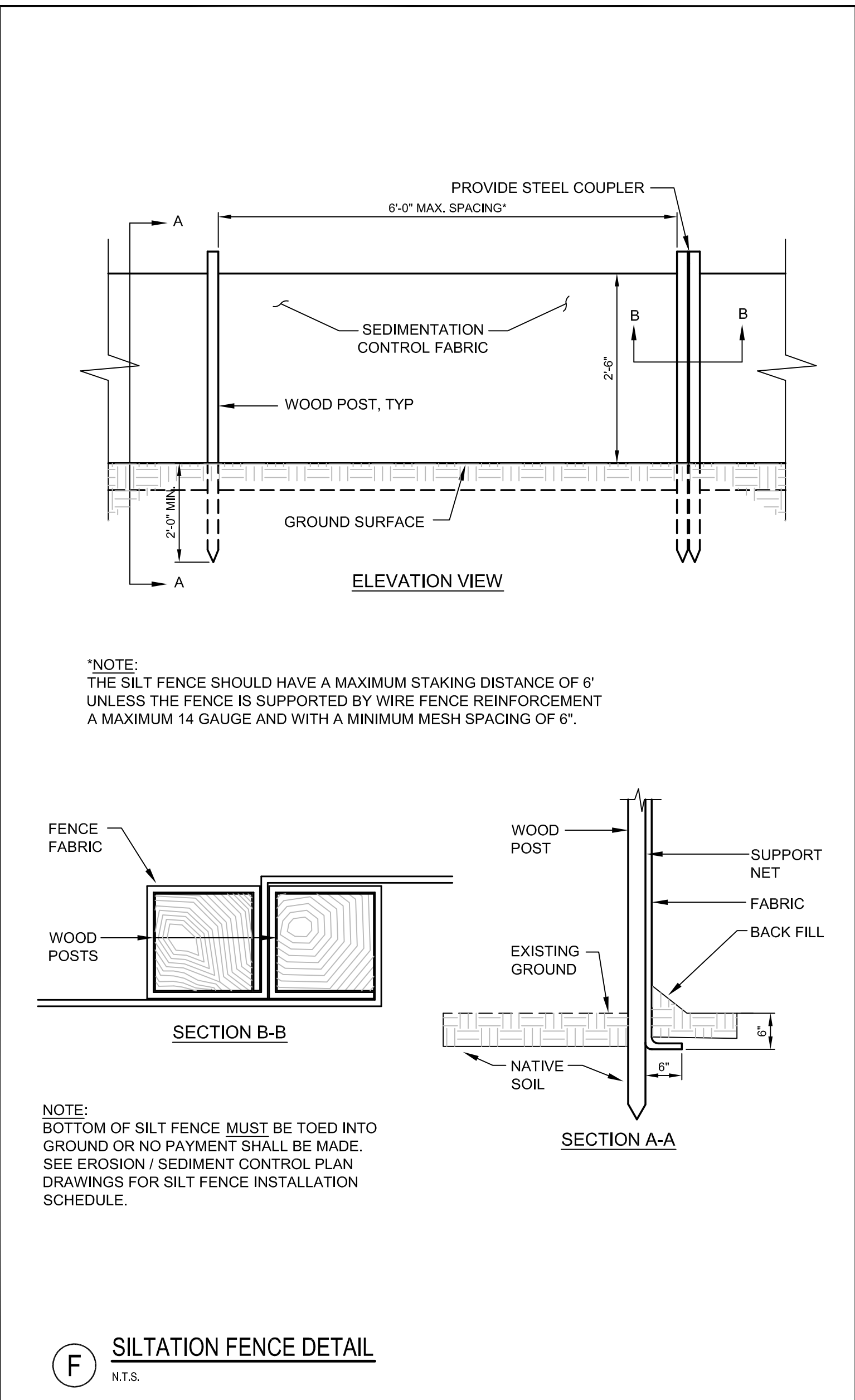
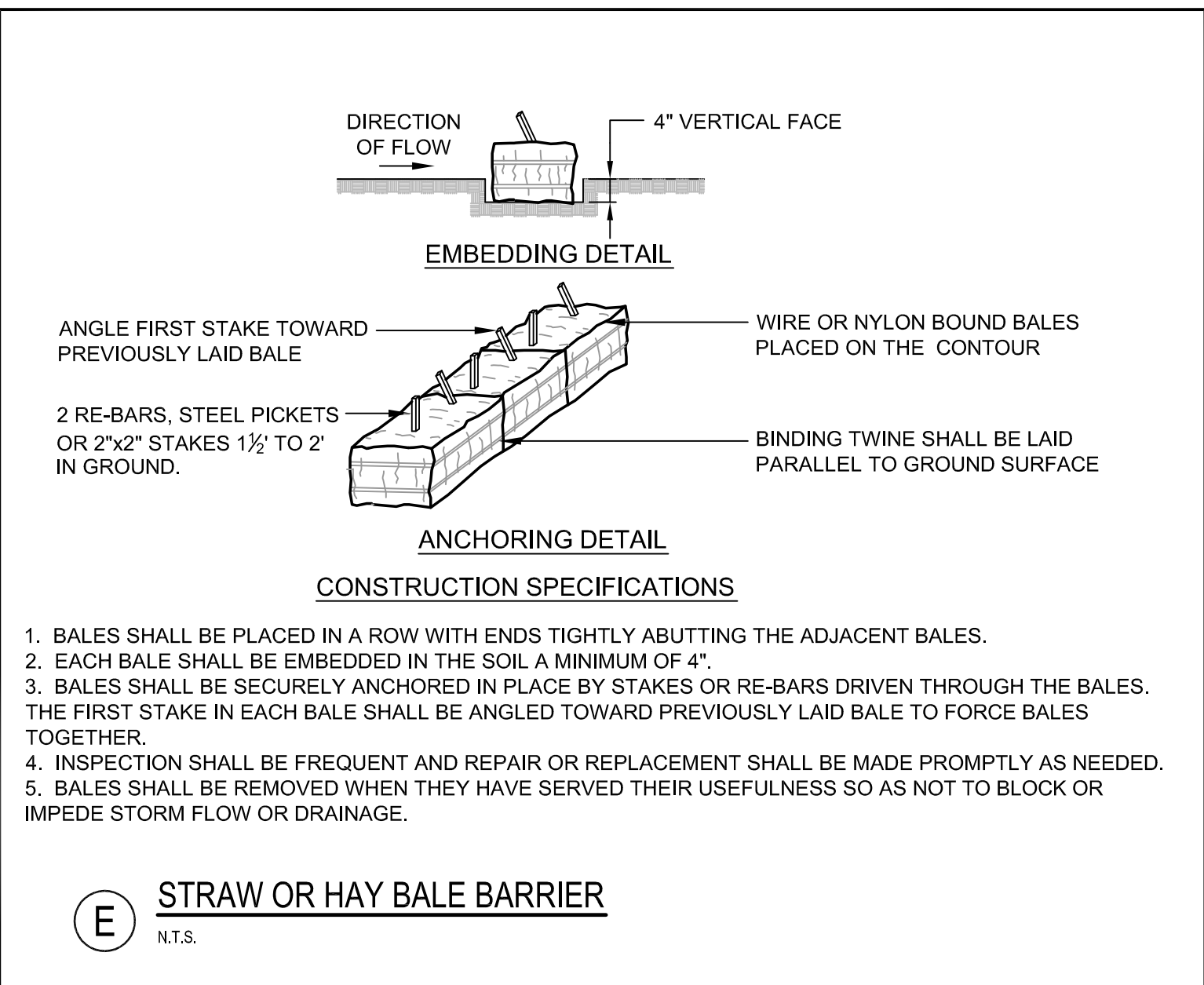
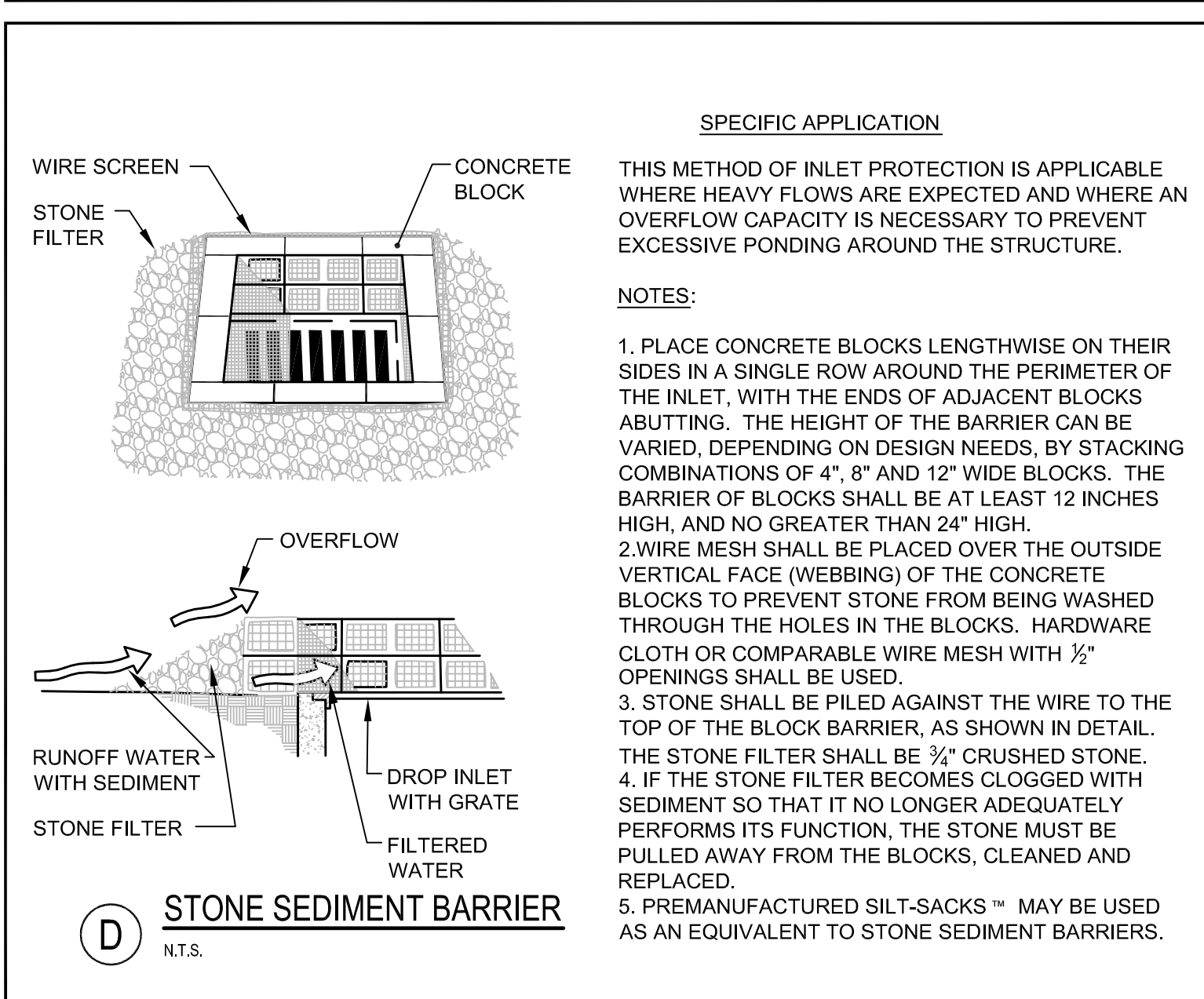
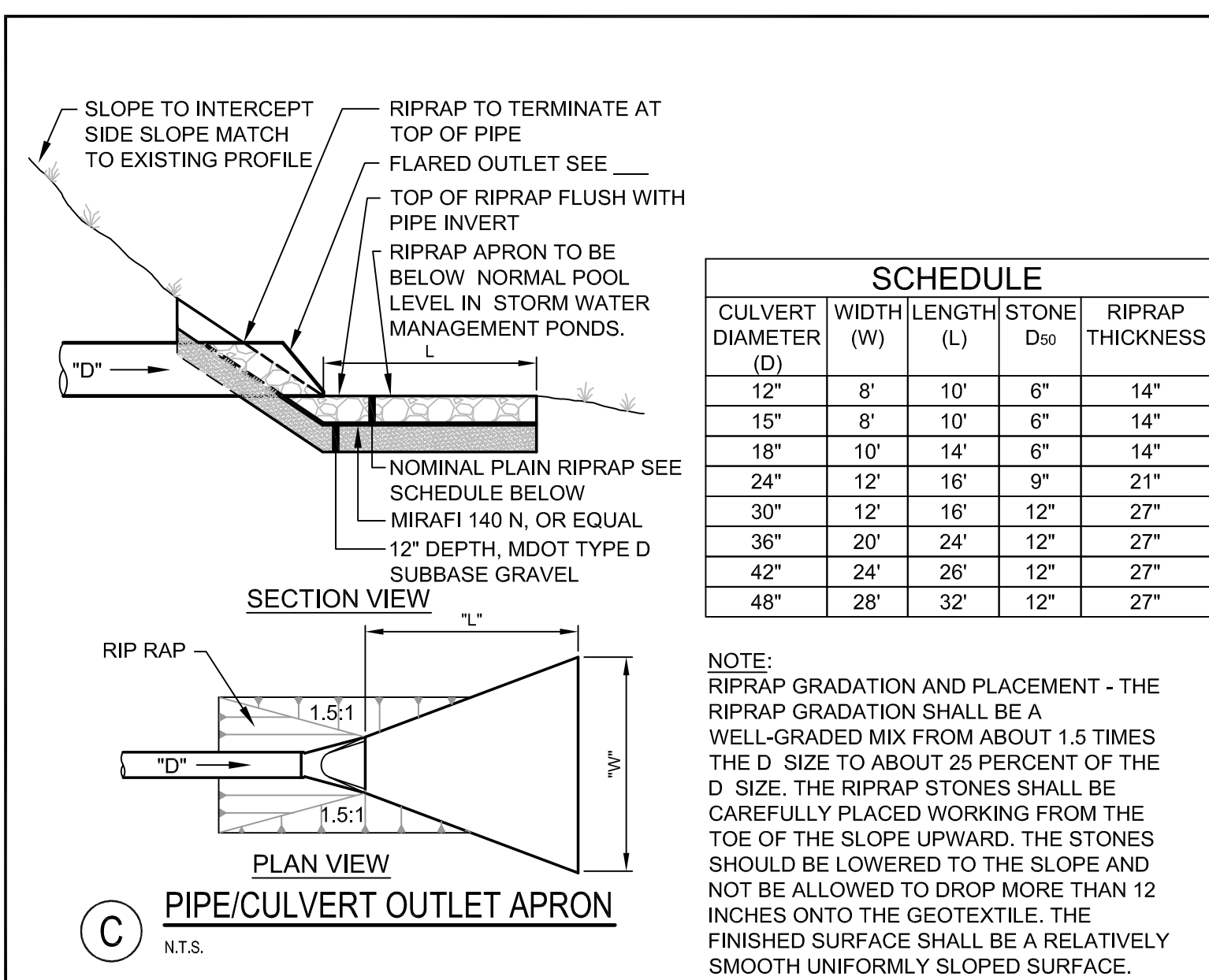
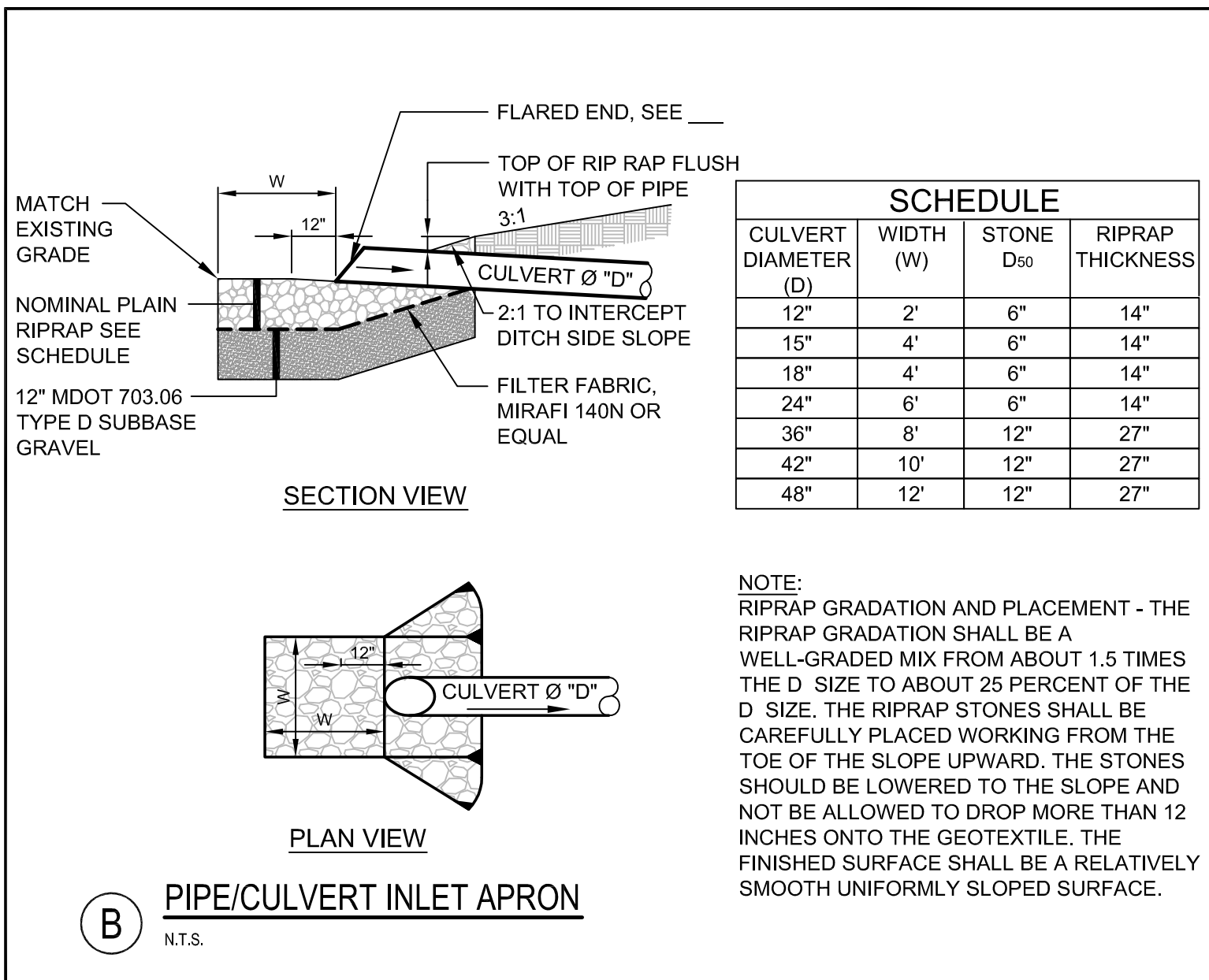
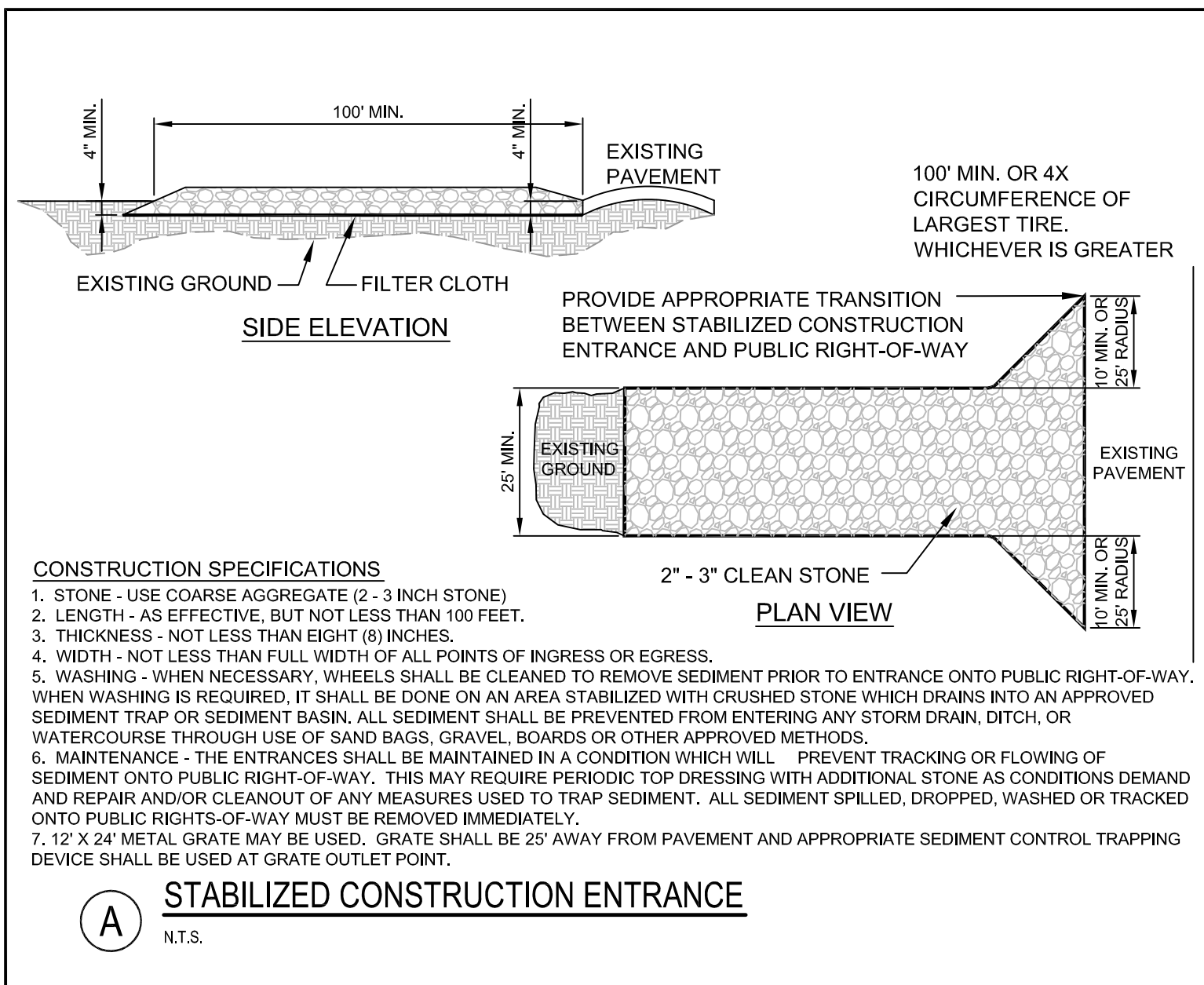
A DETAILED O & M SCHEDULE ACCOMPANIES THIS APPLICATION. THE O & M IS TO BE COMPLETED BY CCSWCD AND IS SUBJECT TO PERIODIC REVISIONS.



FILTERRA® UNIT AND STORMTECH® ISOLATOR ROW SCHEDULE			
ITEM DESCRIPTION	ZONE		
	FILTERRA A-a	FILTERRA A-b	FILTERRA A-c
(A) NORMAL GUTTER LINE ELEV.	29.1	29.5	29.07
(B) TREE GRATE ELEV.	29.6	30.0	29.57
(C) INLET GRATE ELEV.	28.94	29.84	29.41
(D) INLET SD DIA.	N/A	N/A	N/A
(E) INLET SD INV.	N/A	N/A	N/A
(F) OUTLET SD DIA.	12"	15"	15"
(G) OUTLET SD INV.	25.27	26.17	25.74
(H) FILTERRA WIDTH	6'	6'	6'
(I) FILTERRA DEPTH	4'	6'	8'
(J) ISOLATOR ROW UD INV.	24.64	25.54	25.02
(K) ISOLATOR ROW INLET PIPE INV.	24.97	25.87	25.35
(L) INLET INSPECTION MANHOLE INV. IN	25.07	25.97	25.45
(M) BOTTOM OF CHAMBER ELEV.	24.97	25.87	25.35
(N) NUMBER OF CHAMBERS IN ROW	3	5	5
(O) OCS INLET DIA.	12"	15"	15"
(P) OCS INLET INV.	24.97	25.87	25.35
(Q) OCS UD INLET INV.	24.80	25.50	24.95
(R) OCS OULET INV.	24.50	25.40	24.80
(S) OCS OUTLET DIA.	18"	15"	15"

PRELIMINARY - NOT FOR CONSTRUCTION

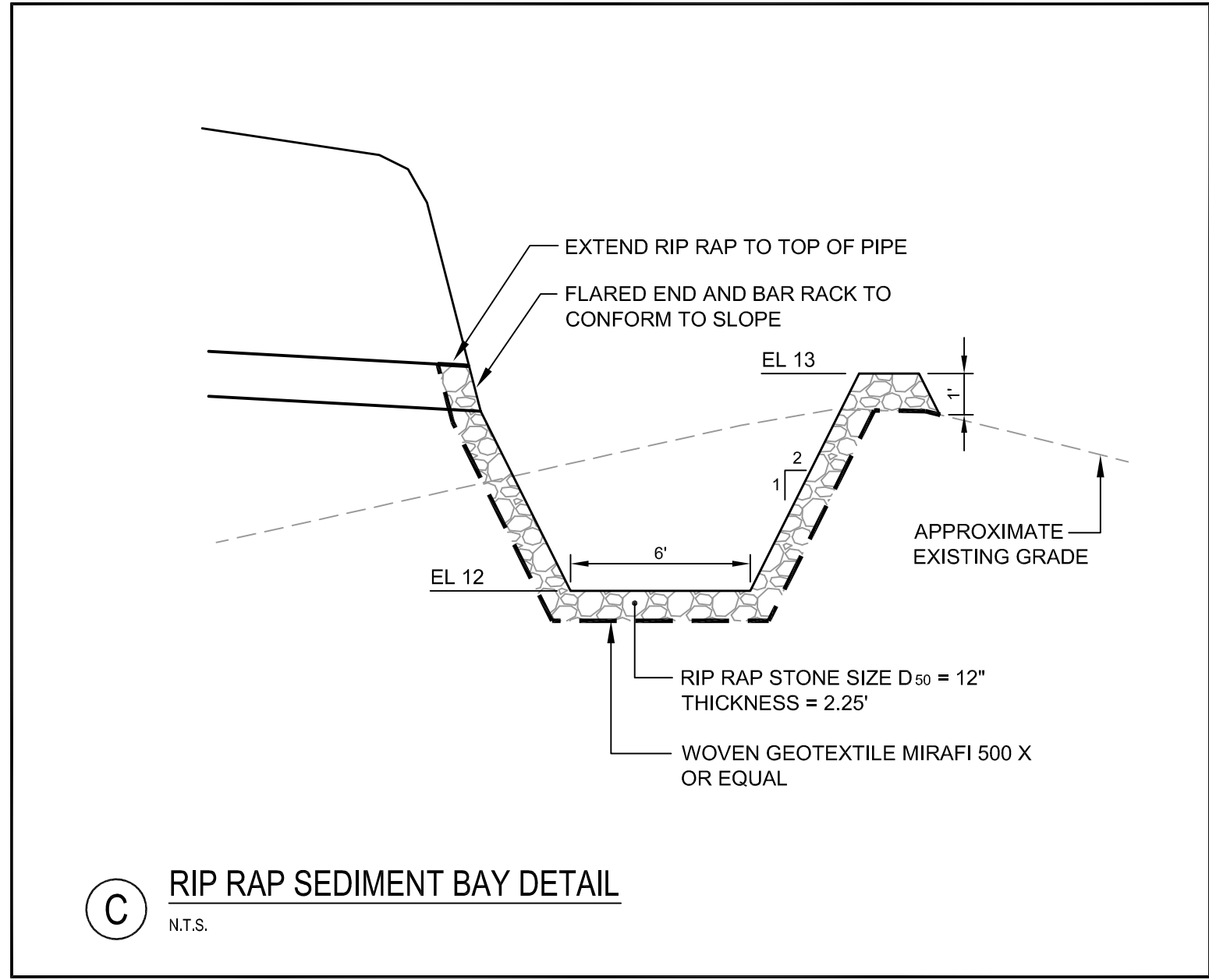
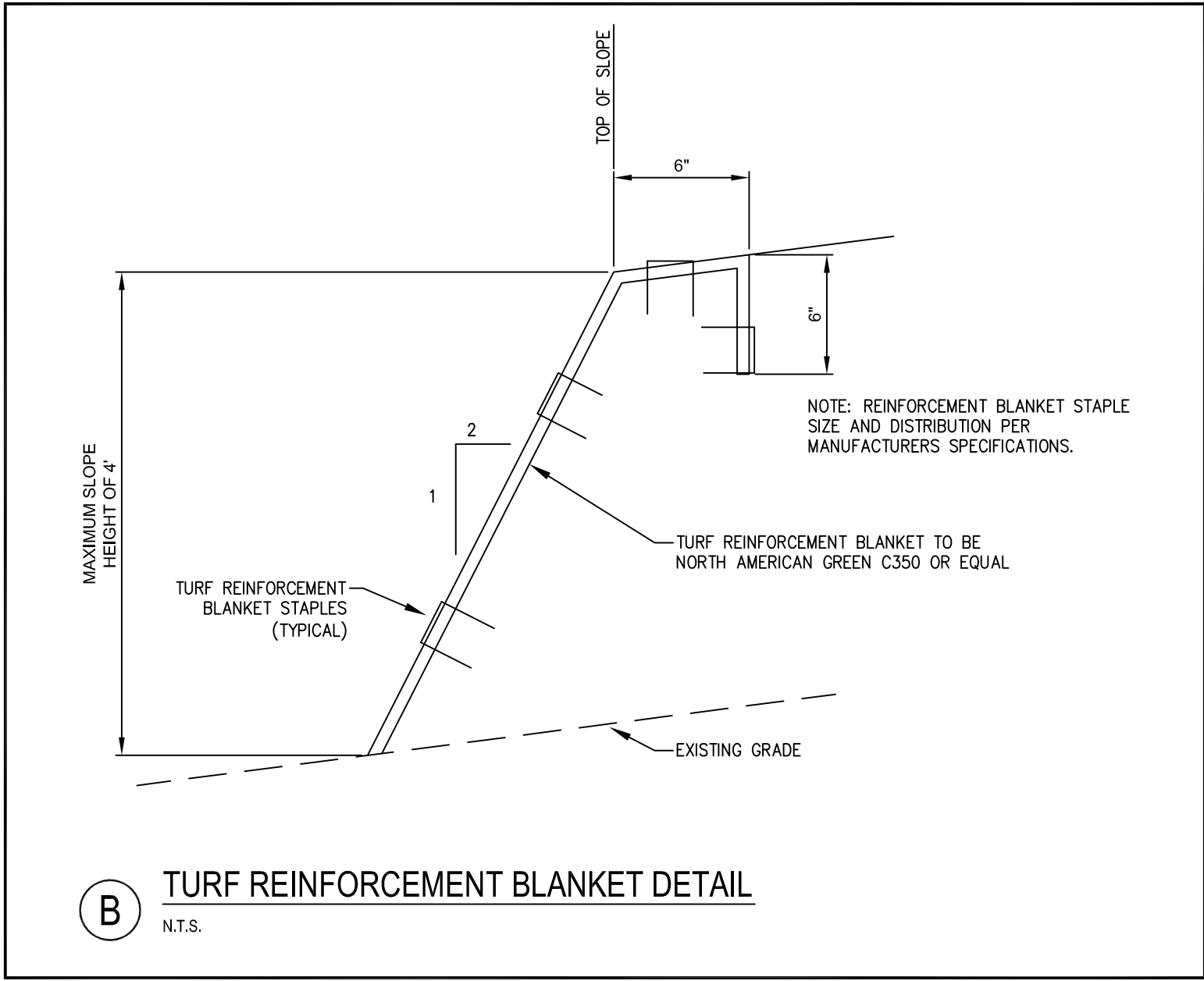
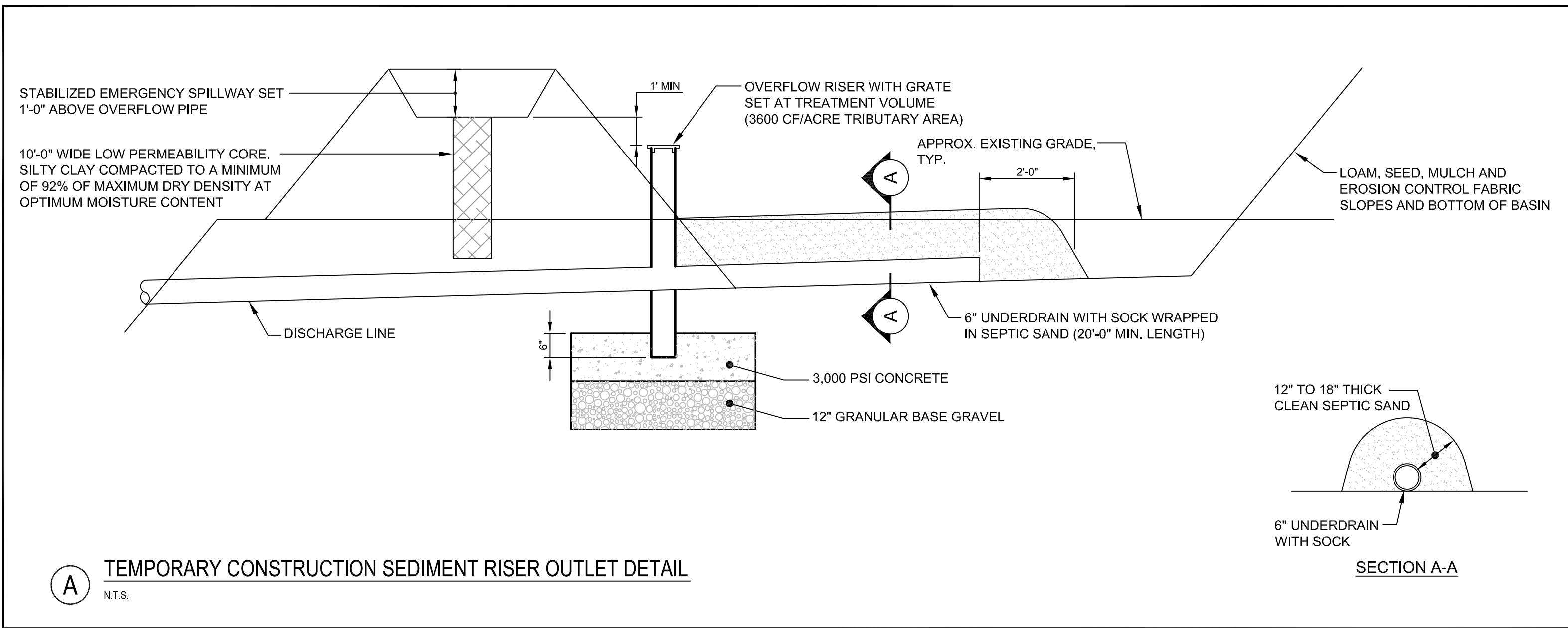
PROJECT MERCY AT THE FORE MASTER PLAN		SHEET TITLE STORMWATER DETAILS FILTERRA® UNITS	CLIENT MERCY HOSPITAL
DESIGNED: BEK CHECKED: SRB FILE NAME: 2149-08-DET			
DATE: MAY 2012 SCALE: N.T.S.		DRAWN: DED DATE: MAY 2012 SCALE: N.T.S.	
LIC # 7429		C-74	



PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT MERCY AT THE FORE MASTER PLAN		SHEET TITLE EROSION AND SEDIMENT CONTROL DETAILS	CLIENT MERCY HOSPITAL
SHEET 07-20-12			
1 REV DATE DESCRIPTION	07.20.12 SUBMITTED TO MECP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	REVISIONS	PROJECT MERCY AT THE FORE MASTER PLAN
DRAWN: BEK DESIGNED: SRB CHECKED: SRB SHEET		DATE: MAY 2012 SCALE: N.T.S. JOB NO: 2149.08 FILE NAME: 2149.08-DET SHEET	PROJECT MERCY AT THE FORE MASTER PLAN

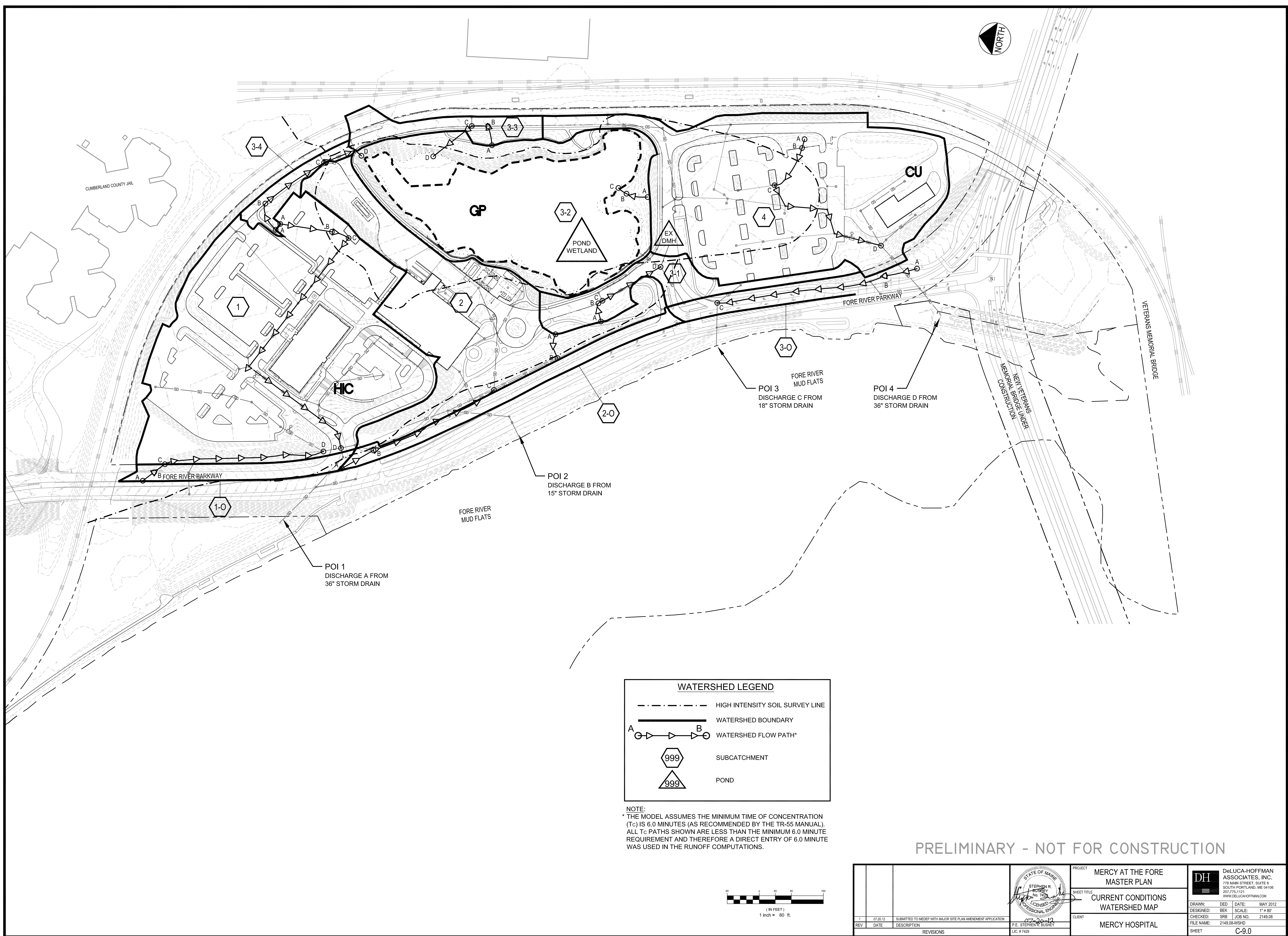




PRELIMINARY - NOT FOR CONSTRUCTION

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				PROJECT MERCY AT THE FORE MASTER PLAN	DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 WWW.DELOUCHOFFMAN.COM
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		SHEET TITLE EROSION AND SEDIMENT CONTROL DETAILS	
REV	DATE	DESCRIPTION	P.E. STEPHEN R. BUSHEY LIC. # 7429	CLIENT MERCY HOSPITAL	DRAWN: KEW DATE: MAY 2012 DESIGNED: BEK SCALE: N.T.S. CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-DET SHEET C-8.2



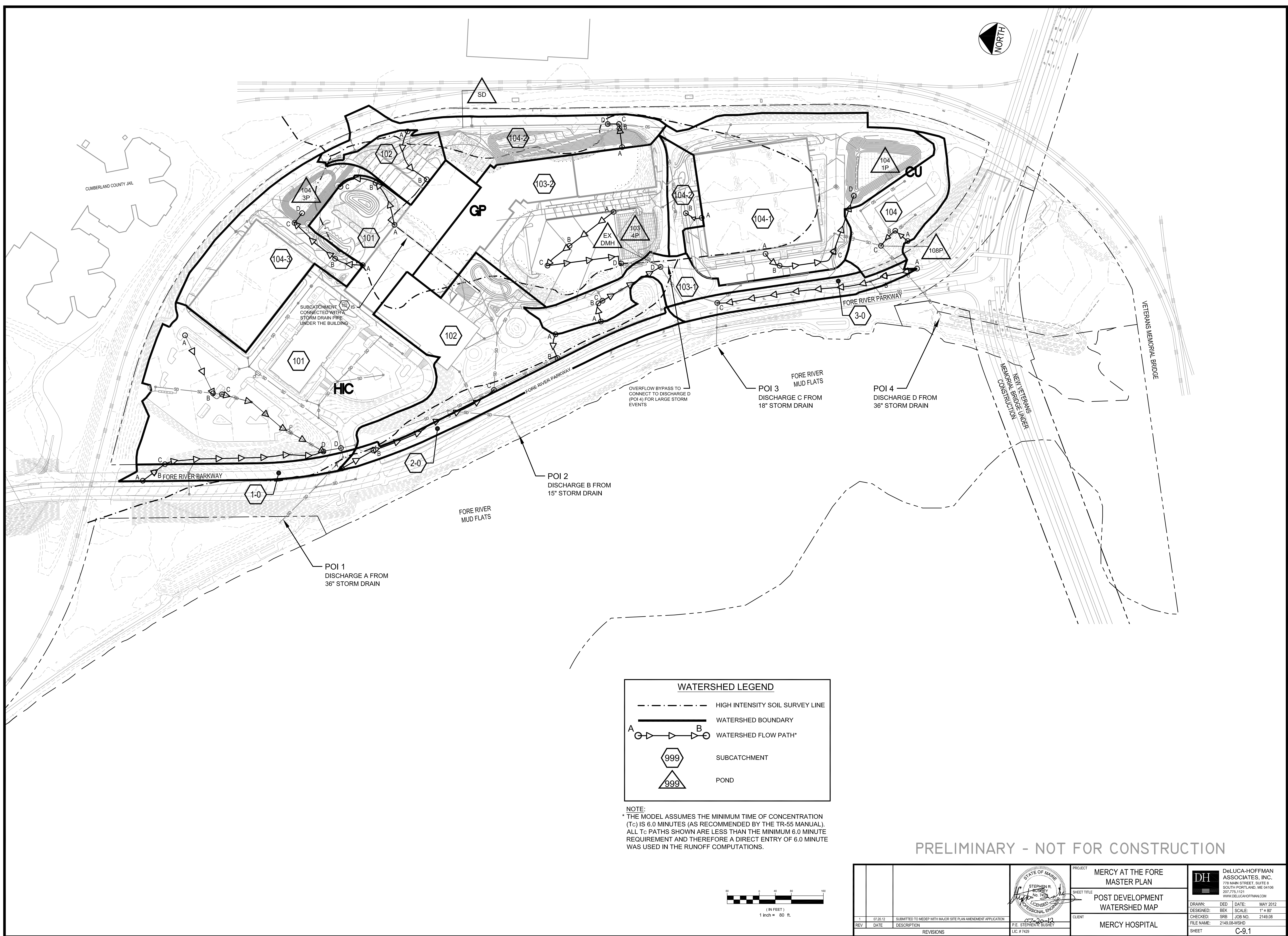
WATERSHED LEGEND

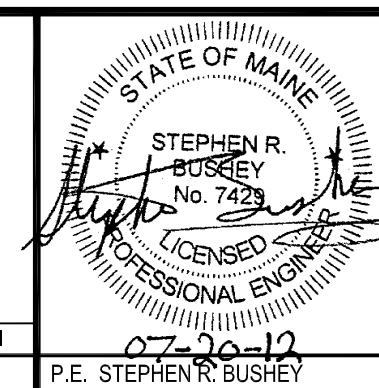
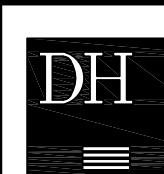
- HIGH INTENSITY SOIL SURVEY LINE
- WATERSHED BOUNDARY
- A → B WATERSHED FLOW PATH*
- 999 SUBCATCHMENT
- 999 POND

NOTE:
* THE MODEL ASSUMES THE MINIMUM TIME OF CONCENTRATION (T_c) IS 6.0 MINUTES (AS RECOMMENDED BY THE TR-55 MANUAL). ALL T_c PATHS SHOWN ARE LESS THAN THE MINIMUM 6.0 MINUTE REQUIREMENT AND THEREFORE A DIRECT ENTRY OF 6.0 MINUTE WAS USED IN THE RUNOFF COMPUTATIONS.

PRELIMINARY - NOT FOR CONSTRUCTION

					PROJECT MERCY AT THE FORE MASTER PLAN		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.775.1121 WWW.DELUCAHOFFMAN.COM
					SHEET TITLE CURRENT CONDITIONS WATERSHED MAP		
					CLIENT MERCY HOSPITAL		
					DRAWN: DED DATE: MAY 2012 DESIGNED: BEK SCALE: 1" = 80' CHECKED: SRB JOB NO. 2149.08 FILE NAME: 2149.08-WSHD SHEET C-9.0		
1	07.26.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION	P.E. STEPHEN R. SUSHET LIC. # 7429				
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				PROJECT MERCY AT THE FORE MASTER PLAN		 DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 6 SOUTH PORTLAND, ME 04106 207.776.1121 WWW.DELOUCHOFFMAN.COM
				SHEET TITLE POST DEVELOPMENT WATERSHED MAP		
				CLIENT MERCY HOSPITAL		
1	07.20.12	SUBMITTED TO MEDEP WITH MAJOR SITE PLAN AMENDMENT APPLICATION		P.E. STEPHEN R. BOSKEY LIC. # 7429		DRAWN: DED DATE: MAY 2012
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PLANNING BOARD REPORT PORTLAND, MAINE

Text Amendments for Spurwink Services
899 Riverside Street
Text Amendment Application
Application #2012-108
Spurwink Services, Applicant
CBL 326 B004002

Submitted to: Portland Planning Board Public Hearing Date: August 26, 2014	Prepared by: Shukria Wiar, Planner Date: Thursday, August 22, 2014
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I. INTRODUCTION

Spurwink Services has requested a text change to the City Ordinance to allow intermediate care facility as a permitted use in the moderate impact Industrial Zones (IM, I-Ma and I-Mb) in order to establish such a facility at their campus at 899 Riverside Street. The proposed amendment revises *Section 14-247 Permitted Uses* (IM, I-Ma and I-Mb Zones) to add the following as a permitted use:

y. Intermediate care facilities on any property with existing structures provided they were not designed constructed or used for any amusement, industrial, warehouse or manufacturing use on [date of enactment] or thereafter. Properties with such structures may be reused and expanded to establish an intermediate care facility for no more than 30 persons plus staff.

The applicant is also proposing a text amendment to *Section 14-47 Definitions* to clarify the definition of intermediate care facility in the City Ordinance:

Intermediate care facility: A facility which provides, on a regular basis, health-related care and services to individuals who do not require the degree of care and treatment which a hospital or extended care facility is designed to provide but who, because of their mental or physical condition, require such care and services above the level of room and board. Said facility must be licensed as a board care, Residential Care facility or equivalent pursuant to the regulations promulgated by the State of Maine Department of Health and Human Services.

The applicant requests the text amendment to



Intermediate care facilities are not permitted in the industrial zones. They are permitted uses in the B-2, B2-b and B-2c zones and conditional use in R-1, R-2, R-3, R-5 and R-6 zones.

An aerial photograph of a residential property. A yellow polygon outlines a central area containing several buildings and a swimming pool. Three yellow arrows point from text labels to specific locations: 'Smith House' points to a building on the left, 'Kaufmann' points to a building on the right, and 'Sue Wright House' points to a building at the bottom. The property is surrounded by trees and a parking lot. In the background, there is a large, cleared area with construction equipment and materials.

Current Zoning:	Moderate Impact Industrial (I-M)
Current Uses:	There are three separate structures on the property: one is used as eight-bed residence and two are originally built as residences currently used for Spurwink office spaces.
Proposed Uses:	To permit the conversion of a formerly residential building, now used as administrative offices, to a residential accommodation meeting the definition of intermediate care facility with a larger number of clients (up to 30 clients plus staff) for the site.
Land Area:	3.28 acres

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staff including senior management, finance, and development functions. The third building on the campus, Sue Wright House, is currently used as an eight-bed residence for students (plus staff) attending the Baxter School for the Deaf. This is a lawful, non-conforming use of the building.

Spurwink Services is a social service agency that serves the needs of children and adults with mental health concerns. They provide day-to-day services, education, as well as residential treatment in many locations and settings. Following is a brief history of the facility provided by the applicant:

Spurwink Services purchased the 899 Riverside Street property in the late 1950's after the town of Scarborough rejected an effort to establish a therapeutic home for boys along the Spurwink River. Reiser House, what is today called the Sue Wright House finally opened in the fall of 1960. It was licensed for eight latency aged boys. The property now housed what would be the first therapeutic home for boys in Maine. Five years later, Kaufman House was built across the driveway and 8 boys arrived soon after it was completed.

During that time in the late 1960's, Dick Smith, founder of Spurwink Services and his wife also took up residence on the property. They lived in the third structure that would later, after Mr. Smith's retirement, become affectionately known as Smith House. In about 1982 under continued growth Smith House was converted to office use and would become to executive staff including Harvey Berman and Jack Rosser who helped guide Spurwink's growth from a local agency to one with a presence in southern, mid-coast and central Maine. In about 1994 Kaufmann House was also converted to office space and expanded to house a growing staff. These structures are still used as management office spaces today, while Sue Wright House is used as a residential facility, today housing 8 kids from Baxter School treatment.

The adjacent bowling alley property was also part of the original parcel before it was sold for redevelopment. This property was a recreation field for the properties early residents.

The offices that are housed on campus will be relocating to office space within the former Rainbow Mall building on Washington Avenue. The applicant intends to convert the Kaufmann House, which is used for office space, to the proposed intermediate care facility use; thus the applicant is requesting the text amendment.

According to the applicant, this site is the prime location for the intermediate care facility

Because Spurwink Services supports families from the larger Cumberland County community, this location, its proximity to primary arterials and connector streets will provide greater accessibility to families, caregivers and State agency representatives that will travel to see clients cared for at the facility.

Please refer to the applicant's cover letter (Attachment A) for the reasons they are seeking to convert this site for an intermediate care facility for their clients.

IV. EXISTING ZONING

A zoning chart that contains the purpose statement and permitted uses of the I-M Zone is included as Attachment 4. The residential zones and the B-2 zone, which allow intermediate care facilities as either a permitted or conditional use under the institutional use category are listed in the chart as well (Attachment 4). Please note that the intermediate care facilities provision in the residential zones allows intermediate care facilities as a conditional use with 13 or more persons.

V. ZONING TEXT AMENDMENT PROPOSAL

a. Policy Background

An article from the APA Journal, *Making Room for Manufacturing: Understanding Industrial Land Conversion in Cities* is included with this report (Attachment 1) that assesses the vulnerability of urban industrial land to conversion by higher value uses, and the need to balance land use policy to strategically reserve appropriate industrial land for future enterprises based on the economic development priorities and plans for the community. Further, a recent report by The Dunham Group, *Greater Portland: Industrial Market Review & 2014 Forecast* (Attachment 2) reveals a relatively low regional and local vacancy rate for industrial buildings (5.3% region, 8.2% Portland). Conversations with our Economic Development Department reinforce that the absorption rate for industrial properties is slow in Portland, that our existing building stock is in need of upgrade investment to bring it to modern standards, and that one or two large and difficult to reuse vacant structures has skewed the local vacancy rate upward. The recommendation of the Economic Development Department is in support of the Spurwink reuse proposal with the caveat that any amendment to the IM zone be crafted to avoid a large scale conversion of industrially suitable land and buildings to institutional or other non-industrial use. Greg Mitchell, Economic Development, has submitted a memo presenting the department's position, which is included as Attachment 3.

b. Adding Intermediate Care Facility in the I-M Zone

Due to the above considerations and Planning Board concerns expressed in the first workshop, a more narrow provision for a permitted use is recommended by staff that is specific to the property and limits the impact of the proposed use amendment on the availability of industrial property in the IM zone. The applicant and planning staff have worked together to draft this amendment language that supports the expansion of this service that has been located at this site since the 1950's. It can also be applied for the reuse of existing structures in other locations within the I-M zone where the sites are developed with non-industrial buildings. The proposed draft language is to amend the paragraph Section 14-247 Permitted Uses of the IM zone to add subparagraph y, intermediate care facility as follows:

(y) Intermediate care facilities on any property with existing structures provided they were not designed constructed or used for any amusement, industrial, warehouse or manufacturing use on [date of enactment] or thereafter. Properties with such structures may be reused and expanded to establish an intermediate care facility for no more than 30 persons plus staff.

This version could apply to properties other than Spurwink's, but is still carefully limited to avoid significant loss of usable industrial properties to institutional uses.

Intermediate care facilities are currently not permitted in the industrial zones. They are permitted uses in the B-2, B2-b and B-2c zones and conditional uses in R-1, R-2, R-3, R-5 and R-6 zones. In the business zones, there is no number of clients stated and in the residential zones it states that the intermediate care facilities are for 13 or more persons. The proposal for IM suggests capping the clients at thirty (30) plus staff. At the first workshop, the Board did explore whether a numerical cap is needed. The applicant has indicated that they would not exceed the proposed number and again it is retained to avoid a significant loss of industrial properties.

c. Definition of Intermediate Care Facility

The applicant is also proposing to clarify the definition of intermediate care facility in Section 14-47 Definitions to be consistent with State's definition. The underline text is the language that the applicant is adding to the existing definition and it includes the staff recommendation to add the phrase or equivalent in order to adapt to possible future changes in terminology at the state level:

Intermediate care facility: A facility which provides, on a regular basis, health-related care and services to individuals who do not require the degree of care and treatment which a hospital or

extended care facility is designed to provide but who, because of their mental or physical condition, require such care and services above the level of room and board. Said facility must be licensed as a board care, Residential Care facility or equivalent pursuant to the regulations promulgated by the State of Maine Department of Health and Human Services.

VI. ZONING POLICY ANALYSIS

The purpose of the I-M modest impact industrial zone (Section 14-26) is as follows:

The moderate impact industrial zones are intended to provide zones in areas of the city in which light and moderate impact industries and transportation-related uses will coexist.

The moderate impact industrial (I-M and I-Ma) zones are located on arterials or collectors. The I-Mb zones are similarly located on the peninsula. These locations provide for direct access onto arterials, thereby protecting residential neighborhoods from drive-through traffic.

The I-M, I-Ma and I-Mb industrial zones are intended to provide for larger industrial buildings and for the limited or controlled use of areas outside of structures for storage of materials and machinery. These facilities often require large volumes of imported materials and products which result in large volumes of shipping and receiving. Often uses may be highway-oriented and transportation-related, thus relying on citywide and regional transportation infrastructure.

Some of the permitted uses in the moderate industrial zones that are similar to the proposed use are day care facilities, correctional prerelease facilities, and general, business and professional offices. The moderate impact industrial zones are located on or near arterial ways where the traffic and noise impacts will have minimal effect on nearby residential. According the applicant, one of the reasons that the intermediate care facility will work in these zones, is that such facilities require staffing for 24-hour care for the resident population who for various reasons require continuous oversight and supervision. Due to the operational characteristics of this type of facility there are potential traffic and lighting impacts due to the shift changes, lighting for security reasons, client volatility, and the consistent volume of traffic from the families, friends, medical professionals and state agency staff. The placement of the facility on an arterial is important due to these frequent visitations and the fact that the facility serves the larger region. Existing residential neighborhoods will not be impacted significantly by siting this facility in this IM location.

The Planning Board considered whether this text amendment should also be applied to the I-L zones. After research, there are very limited areas of I-L zones in the City, which are located along arterials and have large lots.

The proposed text amendment for the definition of intermediate care facility aligns the City's definition with the State definition.

VII. COMPREHENSIVE PLAN ANALYSIS

Matthew Winch, Principal Architect with Garrison Consulting, provided the applicant's assessment of the proposed text amendments and consistency with Portland's Comprehensive Plan (Attachment C). Mr. Winch cites relevant goals and policies from the following components of Portland Comprehensive Plan:

Housing: Sustaining Portland's Future; and
Portland Industry and Commerce Plan

In addition to the analysis provided by the applicant, the staff cites additional applicable policies below and the Economic Development Department has submitted comments that are contained in Attachment 3.

Volume 1 of the Portland Comprehensive Plan includes references to all Portland strategic plans compiled as components of the comprehensive plan and how each addresses the state Growth Management Goals. Goals and policies of both the state and the city, as described in the strategic plans that comprise the Portland Comprehensive Plan, which are relevant to the proposed map amendment have been included below:

STATE GOAL C. To promote an economic climate that increases job opportunities and overall economic well-being;

The introduction to this goal cites the *Portland Neighborhood Economic Development Study*, among other plans. Specific strategies to achieve the above goal that pertain to this text amendment proposal include the following:

PORTLAND INDUSTRIAL AND COMMERCE PLAN - 1944

Goals

- *Strengthen and Diversify the Economic Base*
 - *create a variety of job opportunities for the full spectrum of the labor pool which:*
 - *are appropriate to our current and potential skills*
 - *provide good pay and benefits- a living wage*
 - *are rewarding/ satisfying*
 - *create a strong industrial base which is beneficial to the community*
- *Revise Zoning*
 - *protect neighboring residential zones*
 - *adopt clear, predictable, and enforceable regulations*
 - *promote compatible development within industrial districts*
 - *create thoughtful flexibility for emerging industries*

STATE GOAL D. To encourage and promote affordable, decent housing opportunities for all Maine citizens:

The introduction to this goal cites the *Housing, Sustaining Portland's Future*, among other plans. Specific strategies to achieve the above goal that may pertain to this text amendment proposal include the following:

Goals

- *Ensure that an adequate supply of housing is available to meet the needs, preferences, and financial capabilities of all Portland households, now and in the future.*
- *Maintain and enhance the livability of Portland's neighborhoods as the City grows and evolves through careful land use regulation, design and public participation that respects neighborhood integrity.*

Policies

- *While accommodating needed services and facilities, protect the stability of Portland residential neighborhoods from excessive encroachment by inappropriately scaled and obtrusive commercial, institutional, governmental, and other non-residential uses.*

The introduction to this goal cites the *Regulation of Institutional Uses in the Residential Zones - 1983*, among other plans. Specific strategies to achieve the above goal that may pertain to this text amendment proposal include the following:

Goals

- *Reasonable expansion of existing institutions should be accommodated, but effective use of existing lot area should be required.*

- *For both new development and expansion of existing institutions, the displacement or conversion of existing dwelling should be avoided, and an institutional development proposal that causes significant residential displacement should be cause for denial of conditional use approval.*

This text amendment will allow an intermediate care facility limited to thirty (30) persons plus staff that will encourage job creation for medical and social work personnel and offer diverse services in the social services sector.

VIII. PUBLIC COMMENT

The applicant was not required to hold a Neighborhood Meeting in respect of the text amendment. No public comment has been submitted to the Planning Authority concerning this proposal.

IX. PROPOSED MOTION

On the basis of plans and materials submitted by the applicant, the policies of the Industrial IM zone, Portland's Comprehensive Plan, public comment, the information provided in public hearing on August 26, 2014 for project #2014-108, and/or other findings the Planning Board finds:

1. That the proposed Text Amendments to add the intermediate care facility as a permitted use in the I-M zone and update the definition of intermediate care facilities in the Zoning Code as described in this Report **[are or are not]** consistent with the Comprehensive Plan of the City of Portland; and
2. That the Planning Board **therefore [recommends or does not recommend]** to the City Council approval of the Text Amendments to add the intermediate care facility as a permitted use in the I-M and update the definition as follows:

Section 14-247 Permitted Uses (IM, I-Ma and I-Mb Zones)

Intermediate care facilities on any property with existing structures provided they were not designed constructed or used for any amusement, industrial, warehouse or manufacturing use on [date of enactment] or thereafter. Properties with such structures may be reused and expanded to establish an intermediate care facility for no more than 30 persons plus staff.

Section 14-47 Definitions:

Intermediate Care Facility : A facility which provides, on a regular basis, health-related care and services to individuals who do not require the degree of care and treatment which a hospital or extended care facility is designed to provide but who, because of their mental or physical condition, require such care and services above the level of room and board. Said facility must be licensed as a board care, Residential Care facility or equivalent pursuant to the regulations promulgated by the State of Maine Department of Health and Human Services.

ATTACHMENTS:

1. *Making Room for Manufacturing: Understanding Industrial Land Conversion in Cities*; Journal of the American Planning Association; Volume 79, Number 4, Autumn 2013;
2. *Greater Portland: Industrial Market Review & 2014 Forecast*; Lamontagne, Justin; NAI The Dunham Group; Presentation Outline (not dated)
3. Greg Mitchell, Economic Development Director, dated 08.07.2014
4. Zoning Chart

Public comments (none at the time PB Memo completed)

Applicant's Submittal

- A. Planning Board Narrative/ Coverletter
- B. Application
- C. Text Amendment Narrative/ Comprehensive Plan Assessment
- D. Right, Title and Interest
- E. Zoning Map

Journal of the American Planning Association

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Making Room for Manufacturing

Understanding Industrial Land Conversion in Cities

Thomas W. Lester, Nikhil Kaza, and Sarah Kirk

Problem, research strategy, and findings: Planners face tension when dealing with the stock of urban industrial land: Should they enact industrial land preservation policies to protect viable manufacturers that provide good jobs even if it exacerbates the problem of affordable housing and causes cities to forgo growth in other sectors? Planners need better information on the underlying forces that lead to conversion of industrial land and an assessment of the effectiveness of preservation policies. We develop here an index of vulnerability of industrial land that is based on location factors, neighborhood dynamics, detailed industrial trends, environmental hazards, and local regulations. We show how these factors can explain the probability of the conversion of industrial land to other uses in Cook County (IL) and Mecklenburg County (NC) and describe how various industrial preservation policies are effective in limiting conversion.

Takeaway for practice: Cities can use this index to strategically plan for industries to target and sites to preserve as industrial uses. Traditional planning and regulatory tools such as industrial zone designations do reduce conversion risk, while factors such as transit accessibility increase the probability of conversion. We argue that local governments should be strategic about which manufacturing industries can be preserved at what locations using these tools. We also develop and demonstrate an open source, interactive, web-based tool that demonstrates some of the key concepts that can be replicated in other places.

Keywords: industrial land preservation, manufacturing, land use policy, economic development

The restructuring of urban economies away from manufacturing and toward services results in highly bifurcated labor markets that generate few moderate-income jobs for blue-collar workers. In addition, the growth of high technology and skilled service sector jobs in cities has generated new demand for urban living, driving up housing prices. Thus there is pressure to convert scarce urban land from industrial uses for either new housing or commercial uses. In some cities, planners have attempted to slow this transition by promoting industrial preservation policies that aim to retain a small but vital stock of blue-collar jobs in manufacturing. However, industrial preservation generates clear tradeoffs for local jurisdictions in the form of potentially forgone taxes and less space for housing. As the dual problems of labor market inequality and rising housing prices grow—especially in strong market cities like San Francisco, Portland (OR), and New York—the question of how much industrial land should be preserved will continue to vex planners. While the zoning tools for industrial preservation have been used since the late 1980s, we still know little about their effectiveness, nor much about the factors that drive conversion of industrial land in the first place.

We developed a model to predict the probability of land use change away from industrial uses. We find that industrial zone designations in plans and regulations do reduce the probability of conversion. We also offer an example of how such a model can be used to develop smart industrial preservation policies that target only the land that is most competitive for current industry needs.

Motivation and Research Questions

While the debate about industrial land preservation has waxed and waned over the past 30 years, several recent trends have put the issue back on planners' agendas. First, there is growing discussion nationally of the return of

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manufacturing as higher labor costs abroad, a weak dollar, and strong demand have improved the competitiveness of the United States as a production location. Indeed, manufacturing employment has grown by 729,000 jobs since the start of the recovery and exports of manufactured products have increased by 47% since 2009.¹ What is also surprising is the geographic imprint of this growth, with former Rust Belt states such as Michigan, Illinois, and Wisconsin taking part in this recovery along with growing states like North Carolina. While researchers continue to debate the magnitude and potential of the resurgence of U.S. manufacturing (Florida, 2013), some economic development planners are placing renewed emphasis on manufacturing and wondering if urban areas have enough available industrial land to gain from this turnaround (e.g., City of San Francisco Planning Commission, 2014).

The second trend that makes industrial land preservation a controversial issue is the increased demand for urban living. During the 1990s and 2000s, many large central cities experienced a resurgence of population and jobs based primarily on the growth of high technology and skilled service sector jobs that in turn generated a high number of entertainment and consumption-based jobs in and around industrial neighborhoods (Wyly & Hammel, 1999). The gentrification of urban neighborhoods that began in the 1980s and continued during the 2000s created pressure to convert industrial land to residential or commercial uses (Zukin, 1982).

One example from practice illustrates the tension cities face in attempting to preserve industrial land while also attempting to encourage expansion of space for growing sectors of the economy such as the high technology office. San Francisco's planning commission is currently debating a proposal to modify the strict zoning requirements for production, distribution, and repair (PDR) activities established in the Eastern Neighborhoods Plan in 2008. Originally, all office and retail developments were banned in core PDR districts to protect manufacturing and related enterprises from rapidly rising rents. In March of 2014, the commission considered a proposal to allow vacant and marginally occupied buildings in PDR districts to be redeveloped into properties that contained up to 66% non-PDR commercial space. This change would explicitly create an internal cross-subsidy between higher-rent office and retail spaces and lower-rent PDR space meant to house existing PDR companies. Specifically, according to the planning staff:

The need for the legislation is based on the strong growth witnessed in the PDR sector over the last few years, and the desire to see this sector continue to expand and thrive. This growth is due, in part, to the demand created by our strong technology and tourism economies, which drive

the need for services provided by businesses involved in distribution and repair. This growth is also due to the growth of our local manufacturing sector, which has increased in size over the past two years, after decades of decline. This growth has been spurred by the rise in artisanal manufacturing—a phenomenon being witnessed across the country, and which shows no signs of slowing down. The result of this growth is that PDR space is in high demand, vacancy is exceedingly low, and we are now seeing PDR companies leaving San Francisco because they cannot find space to expand. (City of San Francisco Planning Commission, 2014)

This brief example illustrates the choices that planners must balance when considering policies to protect industrial land. On the one hand, the potential for growth in manufacturing nationally is attractive. However, it is possible that cities may be at a disadvantage in attracting these relatively high-paying jobs since available industrial land has been shrinking in cities. Despite declines in manufacturing employment in North Carolina, the Charlotte Chamber of Commerce explicitly lists manufacturing as one of its targeted industries along with new economic engines such as energy and life sciences (Charlotte Chamber of Commerce, n.d.). The state of Oregon explicitly claims vested interest in discouraging conversion of prime industrial land because some of these sites have location characteristics that are not easily replicable (Industrial Conversion Study Committee & Department of Land Conservation and Development, 2004). In this case, planners seeking to make room for manufacturing might seek to enact land use policies aimed at preserving industrial land and promoting manufacturing.

On the other hand, it is important to remember that urban areas have been losing manufacturing jobs for decades and that some land may not be suitable for the specific industrial sectors that are projected to grow. As Howland's (2010) careful cost-benefit analysis shows, some cities may already have enough industrial land, so redevelopment to other uses may be highly beneficial from a fiscal point of view. Before enacting policies that preserve industrial land homogeneously, it is critical that planners better understand the factors that lead to conversion and the effectiveness of policies to preserve industrial land.

Therefore, we address the following two broad research questions. First, what factors drive the conversion of existing industrial land to other uses? Second, are industrial land preservation policies, such as restrictive zoning in industrial corridors, effective in limiting conversion? Specifically, we analyze the process of industrial land conversion at the parcel level and develop a method for planners to assess the vulnerability of existing industrial areas. We conduct our analysis

on two central urban counties: Mecklenburg County (NC) and Cook County (IL). Unlike previous studies of industrial displacement, we have developed a multifactor model that takes into account each parcel's location characteristics and neighborhood real estate dynamics as well as the regional competitiveness of manufacturing firms located within each parcel. Although our findings differ across the cases, we can conclude that real estate speculation in areas surrounding industrial land increases the risk of conversion and that industrial preservation policies, such as Chicago's Industrial Corridor (IC) program, are effective in stemming the loss of industrial land.

Background and Literature Review

The State of Urban Manufacturing

As planners weigh the potential costs and benefits of preserving industrial land, it is important to understand the current role that the manufacturing sector plays within urban economies. Despite the long-term deindustrialization of urban areas, central cities still maintain a large number of manufacturing firms and a large inventory of industrial land. Although large-scale heavy manufacturing declined significantly in the 1980s and 1990s, central cities remain competitive locations for small and midsized manufacturing companies. Mistry and Byron (2011) estimate that approximately one-third of the nation's small manufacturing establishments (fewer than 20 employees) are located in the 10 largest cities. Urban areas remain competitive locations for goods-producing firms for many of the same reasons that first brought industry to the city, including traditional location factors such as access to large markets, key transportation infrastructure, and pools of skilled labor and specialized suppliers (Alonso, 1995; Losch, 1995).

However, changes in the nature of competition in goods-producing sectors may also favor urban areas that can offer dense networks of competing and complementary firms. Research on the competitiveness of regional industrial systems (Piore & Sabel, 1984; Scott, 1988) suggests that as transportation costs fell rapidly and global markets opened in the late 20th century, firm competitiveness was increasingly dependent on flexibility. For goods-producing firms, this meant an emphasis on just-in-time (JIT) production methods, which are, in turn, reliant on access to modern transportation nodes. Thus, while globalization and falling transportation costs have freed some large manufacturing plants from central cities, location factors such as the distance to rail, multimodal depots, highway interchanges, and airports and ports—and, more important, competitive clusters of complementary

establishments—are still important factors that affect the competitiveness of land for industrial use. In addition, dense networks of small firms are also associated with greater innovation, as research indicates that knowledge spillovers play an increasingly important role in regional competitiveness (Cooke & Morgan, 1998; Saxenian, 1994).

Other scholars have emphasized the indirect role of manufacturing firms and the industrial land they occupy in enhancing the health of the overall urban economy. Chapple (in press) analyzes employment dynamics and job creation in four Bay Area cities and finds that the availability of affordable industrial space is essential in business expansions, which are a key component of overall job growth. Scholars have also pointed out that manufacturers and other users of industrial land—broadly defined as PDR—produce key goods and services that are critical inputs to other sectors of the urban economy, including the construction and commercial sectors (Chapple, in press; Howland, 2010).

Attracting and retaining manufacturing firms in cities is also attractive from the standpoint of job quality and equity. Despite recent accounts of the reshoring of manufacturing amid significant wage reductions and two-tier union contracting, manufacturing continues to offer average annual wages that are 22.9% higher than the average private sector job.² Furthermore, jobs in manufacturing typically offer such wages without requiring an advanced degree, making these jobs an attractive match for urban areas with high unemployment among lower-skilled workers. In addition, as Howland (2010) points out, there may be other important reasons for industrial preservation, including protecting healthy manufacturing firms from encroachment and preventing housing redevelopment on environmentally degraded land.

Industrial Land Conversion

Despite the factors that make urban areas attractive locations for manufacturing and planning efforts to preserve industrial land, the amount of land zoned for industrial uses continues to shrink. For example, industrial land shrank in San Francisco from 14% of total land area in 1948 to 4.5% in 2012 (Chapple, in press). Although much of this decline is understandable given the long-term sectoral decline of manufacturing, even viable industrial firms are sometimes threatened by displacement due to real estate pressures. The literature on industrial displacement dates back to the late 1980s and finds strong links between the conversion of industrial land—especially older multi-story loft buildings—and residential gentrification. Giloth and Betancur (1988) document the displacement of viable manufacturing firms in the River North area in Chicago, which is immediately adjacent to the central business

district and high-end residential communities. They highlight the role of selective rezoning of individual properties by local aldermen. Curran (2007) documents a similar process of industrial displacement caused by residential gentrification in the Williamsburg area of Brooklyn. Also, Lester and Hartley (2014) conduct a quantitative analysis of 20 large cities and find that residential gentrification plays a catalytic role in speeding up the loss of manufacturing jobs relative to nongentrifying areas. As such, we expect that land price appreciation in the neighborhoods surrounding industrial parcels, as well as the distance of each parcel from the central business district (CBD), will be key drivers of conversion (Dingle & O'Hanlon, 2009).

Planning Responses and Industrial Preservation Policy

The issue of industrial displacement has spawned a variety of planning responses to preserve industrial land. Debate over the extent to which land use policies can alter the economic structure of a given place has waxed and waned over the past several decades. Rast (1999) makes perhaps the strongest causal argument in his analysis of the anti-industry biases in Mayor Richard J. Daley's Central Area Plan of 1955, which he argues led to the displacement of thousands of viable jobs in light manufacturing in and around the Loop. Paralleling this research was a policy agenda that began in the 1980s to save healthy manufacturing firms from displacement by real estate speculation and conversion to residential or commercial uses.

The Center for Community Innovation at the University of California, Berkeley, cataloged more than 30 cities and states that have conducted industrial land use studies in recent years, suggesting that matching the supply and the demand for industrial land uses is a concern in practice.³ Some cities, such as Chicago, developed planned manufacturing districts (passed in 1988), which entirely outlawed residential conversions and sought to buffer heavier manufacturing uses from residential with large-scale commercial development (Fitzgerald & Leigh, 2002; Leigh & Hoelzel, 2012). Chicago also created a set of designated ICs in 1992 that covered a larger portion of the city. IC designation requires that a developer seeking a zoning variance for a nonindustrial use must secure approval from the plan commission instead of gaining simple aldermanic support. This is quite similar to the "industrial sanctuaries" policy adopted by the City of Portland (OR). The Bloomberg administration in New York created industrial business zones (IBZs), where residential uses are prohibited and relocation incentives for manufacturing firms are given. Hillsborough (OR) uses lot size minimums to protect large industrial sites while

creating flex zones that allow for nonindustrial uses such as call centers in industrial zones.

However, not all efforts by cities are conducive to preserving manufacturing in the city. Some of the dominant paradigms of regenerative city building such as attracting the creative class or smart growth see little need for industrial uses within cities (e.g. Bronstein, 2009; Florida, 2013). It is also unclear if these industrial preservation policies and regulations within cities are entirely beneficial and efficacious. Howland (2010) finds that there is a regulatory oversupply of parcels zoned for industrial use in Prince George's County in Maryland; in many cases, the demand does not spatially match the supply. Howland argues for a more surgical approach to identifying and targeting those areas that merit preservation as well as those that should be left to undergo their natural transformations. In some cases, these preservation policies are met with skepticism by local stakeholders aiming to reshape the waterfronts and downtowns into commercial, residential, and recreational hubs (e.g., CBRE Consulting, 2007).

Research Strategy, Methods, and Data

Based on our review of the literature on urban manufacturing, industrial displacement, and land use policies, we use the following conceptual framework to guide our empirical analysis of industrial land conversion. This framework includes five factors (parcel location characteristics, neighborhood real estate dynamics, industry trends, location-specific protection policies, and environmental hazards) that are either theoretically or empirically linked in the literature on industrial land conversion.

- *Location characteristics* includes a set of variables that capture the accessibility and spatial competitiveness of each parcel, such as the distance to various transportation infrastructure including airports, highway ramps, rail, and multimodal transfer sites (Miron, 2010). We also include a measure of the distance of each parcel from the CBD to capture a parcel's centrality vis-à-vis the region, and also because so much of the literature links industrial displacement with the expansion of downtowns for residential and commercial uses. We expect that industrial parcels with good accessibility to transportation nodes will be less likely to convert, while parcels located near the CBD are more likely. We also include the distance to the nearest transit station; the siting of these stations has accelerated the industrial displacement in the cities in favor of mixed-use commercial and residential developments nearby.
- *Neighborhood real estate dynamics* refers to the degree of land value increases in the areas surrounding each

parcel as well as subdivision activity. We expect that higher neighboring price increases, especially of residential parcels, will exacerbate the risk of conversion (Curran, 2007; Walks, 2001).

- *Establishment and industry dynamics* captures a set of variables that measures the economic competitiveness of the companies located within industrial parcels. We expect that parcels that are home to firms that operate in relatively high-growth industries nationally would be able to withstand industrial displacement. Also, manufacturing firms that are expanding and adding employment are more likely to be profitable and are likely to keep the properties in industrial use (Koritz, 1991; Troske, 1996).
- *Industrial protection policies* is an indicator of local land use policies that have been enacted to encourage industrial development in certain areas, or to slow the pace of industrial land conversion with special zoning requirements. Thus, if a parcel falls within a designated industrial zone, such as Chicago's IC or Mecklenburg's designation as a future industrial zone, we expect that the parcel is likely to stay on as an industrial parcel (Leigh & Hoelzel, 2012).
- *Environmental hazards*, such as nearby brownfield sites or abandoned environmentally compromised parcels, are expected to dampen the risk of conversion to residential uses (Howland, 2004; McGrath, 2000).

Although all these factors have been identified separately in the literature, to our knowledge, no other study has used them together empirically at a parcel level.

Explaining Industrial Land Conversions: Empirical Analysis

In selecting our proposed cases, we took into account two distinct factors. First, we wanted to vary our cases based on their relationship to the traditional U.S. manufacturing Rust Belt. We argue that having one case within this traditional core and one case in a newly industrializing region in the southern United States would ensure that our method was valid across multiple contexts. Second, we wanted to choose regions that were large enough and diverse enough that our proposed datasets would offer sufficient sample sizes. Ultimately, we chose Mecklenburg County (NC)—which is home to Charlotte—and Cook County (IL), where Chicago is located. Both counties are at the center of their respective metropolitan regions and are home to most regional manufacturing jobs.

The primary task in both counties was to identify parcels that had been converted from industrial uses. We defined a converted parcel as one which had formerly had an industrial business, and for which current land use was not

industrial. We modeled the risk of conversion as a logit model at the parcel level. The explanatory variables include locational factors that are specific to the parcel such as distances to multimodal facilities and ports, and real estate dynamics factors that include neighborhood changes in prices for the parcel: variables that provide indicators of the health of the firm and the industry in the region. To model the effect of public policies, we included an indicator variable that specifies whether or not a parcel is in a designated industrial corridor or empowerment zone. For a more detailed discussion of individual explanatory variables, data sources, and construction steps, see the Technical Appendix.

The Extent and Geography of Conversion

The resulting datasets used for the analysis contained 6,702 and 2,698 industrial or formerly industrial parcels with fully available values for all the independent variables that we use to predict conversion for Cook and Mecklenburg counties, respectively. In the Technical Appendix, we provide a detailed description of all the variables in the dataset and visually describe their distribution for converted and nonconverted parcels separately. Correlations between independent variables are practically nonexistent in the case of Cook County and pose some concerns in the case of Mecklenburg County. We also discuss the caveats to interpretations.

Before turning to our main results, it is important to describe the context and extent of industrial land conversion in each case. As Figure 1 shows, in Mecklenburg County, approximately 3,650 acres of industrial land have been converted into nonindustrial uses since 1990. Of this area, about 30% of the land area converted to residential uses; however, more than 54% of the converted parcels converted to residential. In Mecklenburg County, 45% of the parcels that housed apparel-manufacturing firms experienced conversion. Between 1990 and 2010, the number of jobs in this sector fell by more than half. Similarly, computer and electronic equipment manufacturing also decreased by more than half, and one-third of the parcels that housed firms in that industry converted to other uses. Although chemical manufacturing increased between 1990 and 2000, the industry suffered a dramatic decline between 2000 and 2010. Nevertheless, only 24% of the parcels with those firms experienced conversion, suggesting that cleanup costs associated with these industries have an impact on conversion rates.

In Cook County, the extent of industrial conversion was much greater, given the relative size of the county. Approximately 4,750 acres of land that was previously industrial is no longer in such use. This represents 11.4% of the total stock of industrial land in Cook County in

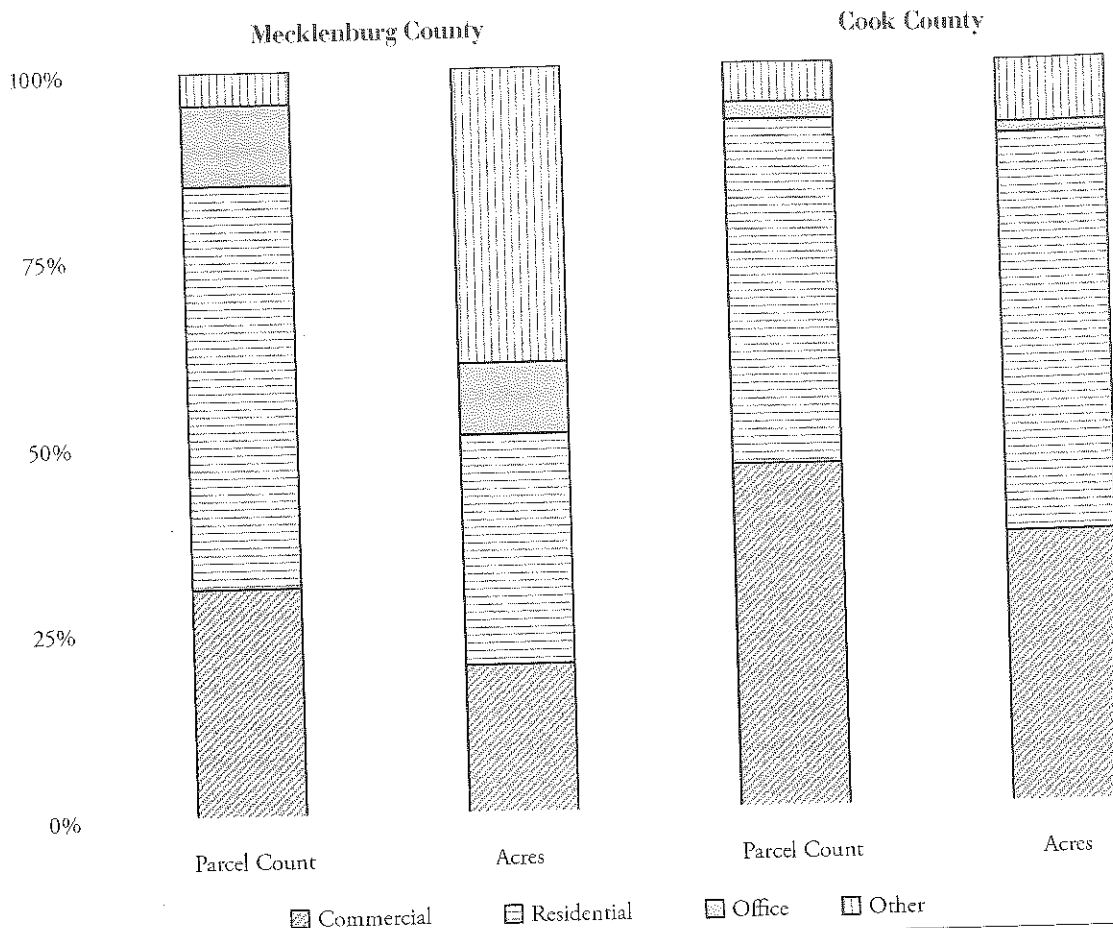


Figure 1. Proportion of current uses of converted industrial parcels by parcel count and acreage in Mecklenburg County (NC) and Cook County (IL). Source: Authors' analysis of Mecklenburg County parcel data and National Establishment Time Series (NETS).

(Color figure available online.)

2011 (approximately 41,000 acres). A large number of these conversions were for residential use (46.2%) and accounted for 53.6% of the area. Parcels with firms in printing and fabricated metal products were more likely to convert into nonindustrial uses. These industries are consistently declining both regionally and nationally, and the statistics are consistent with the literature on industrial displacement (Giloith & Betancur, 1988).

Along with the extent of conversion, what is also striking is the geography of conversion. In Cook County, most of the conversion is centered around areas just north of the Loop and following big transportation corridors such as I-94 and east of I-294 (i.e., in areas that are relatively affluent and in more central locations). On the other hand, conversion in Mecklenburg County is seen inside the business district (bounded by I-277) as well as in areas that are relatively far from the center. While the conversion to residential is more geographically even, construction of the new LYNX light-rail line is likely to contribute to the significant conversions into office and commercial uses along the South Boulevard corridor.

Substantive Findings

Factors Affecting the Probability of Industrial Conversion

We examine the impact of two land use and economic development policies on the probability of industrial land conversion (see the full set of results in Technical Appendix Table A-2). For Cook County, parcels located within a designated IC (City of Chicago, 2011) were significantly less likely to convert. In fact, this variable was the single most important factor in our model of conversion risk. This is a strong indicator that such industrial preservation policies are in fact effective land use tools. Because the program was enacted in 1992, we are confident in concluding that the policy is effective, as our window of conversions begins at approximately the same time (1990–2010). There were 12,368 parcels located within Chicago's industrial districts, of which only 79 were converted over the sample period (0.6%). Location inside a federal empowerment zone was also negatively associated with industrial conversion. This makes sense because empowerment zone incentives consist

mainly of employment tax credits to business owners rather than redevelopment subsidies to developers. The Chicago Empowerment Zone is located in two nonadjacent areas on the south and west sides that have not generally participated in the residential gentrification processes that are prevalent in the north and northwest sides of the city.

In Mecklenburg County, the Centers and Corridors framework was introduced in 1994 and refined and adopted in 2010 to guide the development in the region (Charlotte-Mecklenburg Planning Department, 2010). We used the “industrial centers” designation from this framework as a proxy for where the county is targeting industrial activity. While this policy is not as strong as Chicago’s IC program, it is significantly associated with a reduction in conversion risk. This framework is responsible for aligning the subarea plans and zoning designation and changes such as the “urban industrial” designation in the zoning code. This suggests that careful land use planning can affect the probability of industrial land conversion. Of the 253 parcels in the industrial center designation in Mecklenburg County, only 13 converted into nonindustrial uses, whereas more than 3,000 parcels are not under this designation, suggesting a much larger scale of potential conversions.

In Cook County, the location factors generally behave as theory predicts. Parcels that are farther away from the CBD are less likely to convert because they become unattractive to other kinds of redevelopment. The further the parcel is from rail depots, the more likely it is to convert. A similar relationship is observed for distance to freeway ramps, although the coefficient is not significant for Mecklenburg County. For Mecklenburg, the proximity to an airport has no effect on conversion even when it is likely to increase the likelihood of commercial conversion and decrease that of residential conversion. This is partly offset by the protection of industrial land close to the airport. In Chicago, proximity to an airport seems to weakly (yet significantly) induce conversion of industrial parcels. Access to multimodal transfer points are predicted to be critical for manufacturing firms in Chicago, and we find that parcels closer to them are less likely to convert.

While the location factors generally behave as predicted by theory, two factors expected to be critical were not significant in Mecklenburg County. Interestingly, we find no statistically significant relationship between the relative performance of a parcel occupant’s industry sector nationally (i.e., the industry mix) and conversion. Likewise, neighborhood real estate values largely have no effect. It is possible that real estate dynamics may simply be different in Charlotte, which does not have a long legacy of gentrification of areas near the CBD. While distance to transit station is an important predictor of conversion in

Cook County, it is not in Mecklenburg County, despite the cluster of conversion activity near the newly developed LYNX line.

The results for Cook County are similar in some ways to those of Mecklenburg County, yet differ in key ways as well. In general, all of the five factors that we use in our conceptual model of industrial conversion risk are significant, and all but one have the impact we expected. There are several potential reasons why the models estimated for Cook County are more robust. First, since Cook County is much larger and contains a larger number of conversions, there is simply more statistical power. Second, Cook County—and Chicago in particular—is in many ways an archetypical case of industrial restructuring. The parcels that are closer to key logistical access points such as rail depots, highway interchanges, and multimodal transfer points seem to be competitive in terms of remaining industrial, while parcels closer to airports (O’Hare and Midway) are more likely to convert. Consistent with the literature and with anecdotal evidence, we find a statistically significant negative effect for the distance to the CBD, indicating that parcels located closer to downtown are more likely to convert.

In Cook County, our measures of industry and firm competitiveness are negative and significant. We find a negative and significant relationship between the net change in employment at the establishment level and conversion risk. This indicates that relatively healthy manufacturing companies that are adding jobs are able to meet potentially rising rents and withstand pressure to convert. Similarly, the impact of the industry mix is negative and significant, indicating that conversion is more common among parcels that are home to establishments in declining industries. Although the estimates were insignificant for Mecklenburg County, we interpret these findings as providing support for the argument that industrial trends are an important factor in the conversion risk calculus.

Unlike the findings for Mecklenburg County, we find that neighborhood real estate dynamics do play a role in the conversion of industrial land. Specifically, we find a positive and significant effect of nearby home price appreciation on conversion risk. This indicates that parcels located in tracts that experience a greater change in average sales price are more likely to convert. This is consistent with the scenario described in the literature on industrial displacement, whereby land owners seek zoning variances to redevelop their industrial properties as condominiums or loft properties to take advantage of rising residential land prices.

Interestingly, our findings on the impact of environmental hazards are the opposite of what theory predicts.

Specifically, we find that parcels closer to brownfield sites were *more* likely to convert. Rather than evidence of residential developers seeking out contaminated properties, we interpret this finding as indicative of the relative concentration of conversions near the CBD, which is also home to more of the older industrial properties that may contain more environmental hazards. It may very well be that this finding is driven by inadequate capture of environmental hazard by brownfield location in the U.S. Environmental Protection Agency databases (which is an indication of existing redevelopment interest). There are better and more localized sources of environmental hazards, but they are difficult to obtain and cannot really be generalized to a method that can be replicated at a national scale. Other reasons for brownfield development or lack thereof, such as inadequate infrastructure, are detailed in the literature (De Sousa, 2008; Howland, 2004).

Visualizing Industrial Land Conversion Risk

One of the key outputs of this analysis is the development of an index of industrial land vulnerability. We use the predicted values that result from the regression analysis as the index since they represent the estimated probability of conversion based on the independent variables included in the regression. In Figures 2 and 3, we present the spatially aggregated index of industrial vulnerability, even though the index is calculated at a parcel level. We use an area-weighted index for block group for display purposes.

Areas closer to the higher-income neighborhoods in Charlotte have a high risk of conversion (darker colors). In general, while the probability of conversion is low for parcels in the outskirts of the county, they appear as higher-risk areas because of the small number problem and larger block group size (i.e., an artifact of choropleth maps). The geography of conversion and risk in Cook County is broadly consistent with the results of the regression analysis (Figure 3). Industrial conversions are concentrated on the north side of Chicago and in the suburban areas just north of the city. A significant number of conversions have taken place in the areas immediately surrounding the Loop area, and there are some individual parcels that remain and are under a high risk of conversion. Throughout the county, there are concentrations of higher-risk parcels around both O'Hare and Midway airports.

To demonstrate the use of this index of vulnerability, we created a prototype interactive web-based tool (available at <http://www.makingroomformanufacturing.org>) that can help planners identify vulnerable parcels. Using open source software, the website displays parcels that have been converted between 1990 and 2010 along with the vulnerability index of the current industrial parcels. The user also has the

ability to display information about specific parcel and neighborhood characteristics, including the distribution of the vulnerability index, the number of people in different occupations within a five-mile radius, and the proportion of population in different racial categories. These characteristics are chosen only for demonstration purposes.

We argue that planning tools such as the prototype demonstrated here could be a crucial tool for planners who are attempting to craft a smart industrial preservation policy that accounts for broader industrial trends as well as neighborhood and location characteristics. For example, an economic development planner can select all the parcels of a target sector and examine the conversion probability while examining the national and regional trends in the industry. A land use planner can examine the clusters of high conversion probability parcels in a neighborhood and can propose to enact preservation policies or think proactively about alternative uses in relation to other infrastructure investments and regulatory changes. A real estate developer might use the vulnerability assessment to identify parcel assemblage possibilities for different kinds of redevelopment activities. A community group might use the tool to understand the potential changes in their neighborhood based on broad economic trends as well as to identify environmental justice implications of vulnerable parcels. Because the index accounts for multiple factors, different groups can use it for different purposes in their own planning.

Conclusion

Economic developers and political leaders are excited by the potential for a manufacturing renaissance in the United States. After facing decades of declining industrial jobs and large inventories of industrial land, many cities are now at a critical juncture point. On the one hand, vacant industrial properties are an economic drag in that they do not generate revenue and may limit the potential for the type of high-density residential and commercial development that creates vibrant urban places. On the other hand, if cities do not maintain their industrial lands, they may be overlooked by manufacturing companies seeking to relocate to the United States. In addition, if cities do not maintain viable clusters of manufacturing firms and related industrial businesses, critical agglomerative forces may be eroded, further undermining the chances of manufacturing's return.

Recognizing this tension, this study is the first multifactor analysis of industrial land conversion. The purpose of this analysis is to provide a tool that can help planners better understand the trends that influence the conversion of industrial land within their jurisdictions.

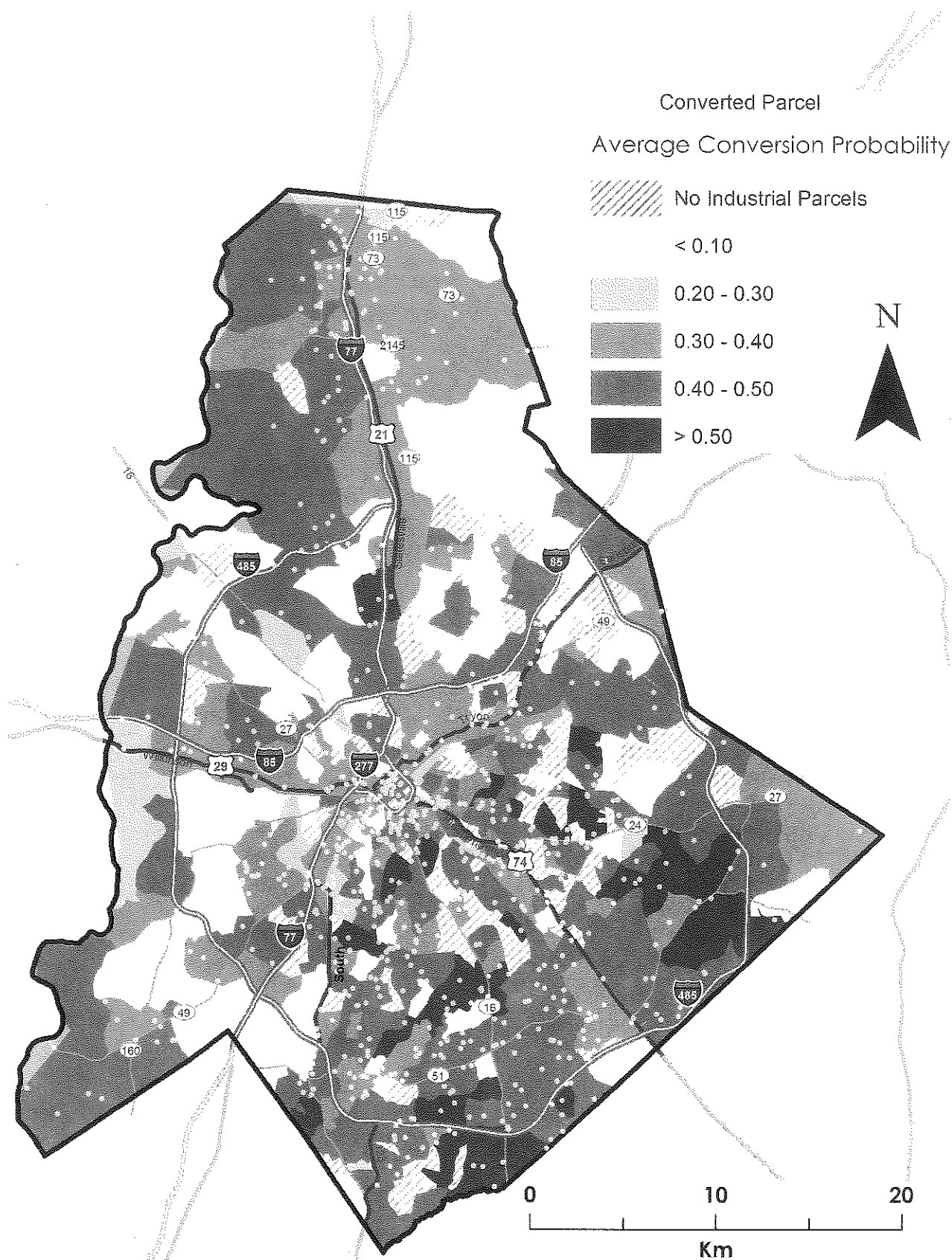


Figure 2. Industrial conversion and parcel vulnerability index in Mecklenburg County.

Note: Although the vulnerability index is calculated at the parcel level, we display only the area-weighted average of the index for each census block group for visual clarity.

(Color figure available online.)

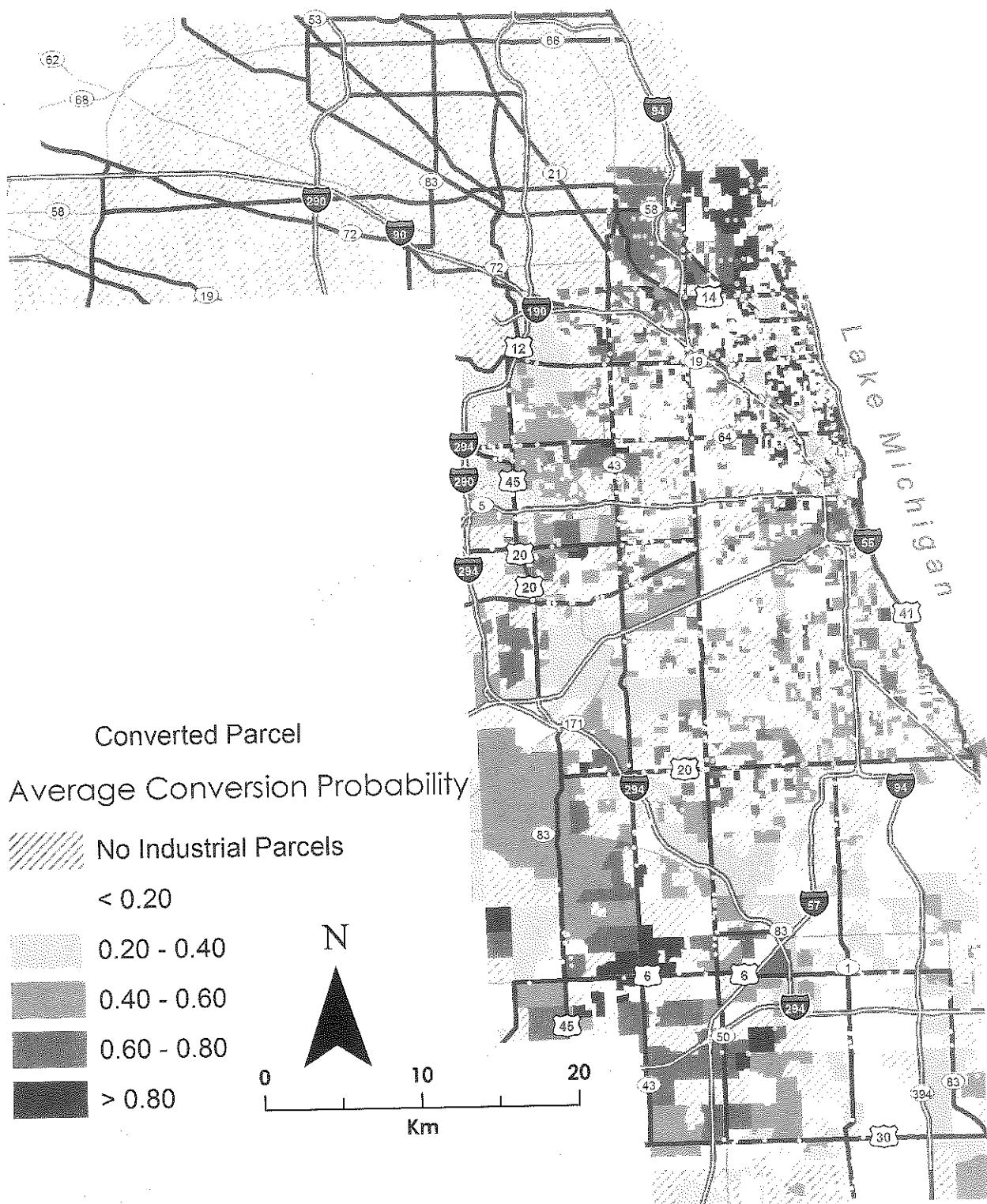


Figure 3. Industrial conversion and parcel vulnerability index in Cook County.

Figure 3. Industrial conversion and parcel vulnerability index in Cook County.
Note: Although the vulnerability index is calculated at the parcel level, we display only the area-weighted average of the index for each census block group for visual clarity.

(Color figure available online.)

While many of our findings are consistent across our two illustrative cases—including the importance of freight accessibility, parcel size, and proximity to the CBD—the differences between the cases suggests that the dynamics of industrial land conversion are also driven by factors that are unique to each area. For example, we found that industrial conversion in Cook County was much more sensitive to neighboring residential real estate appreciation compared with Mecklenburg County. This could indicate a fundamental difference in the nature of residential real estate markets, whereby Charlotte does not face the same pressure to gentrify inner-city neighborhoods that Chicago does. In addition, we found that national industry trends seemed to matter more for Chicago than for Charlotte. This is likely due to the fact that the overall industrial structure is different across the cases. Ultimately, this finding suggests that differential industrial trends and the historical competitive advantages of each region's industrial legacy are important for planners to consider.

Ultimately, this analysis suggests that planners need a more nuanced approach to industrial land preservation. Cities need to be strategic about their industrial land inventory and match the supply of industrial land to the strategic economic goals of the region. To do so, plans and planners have to identify strategic industries for the region, craft land use policies that take into account the needs of each industry, and look for ways to meld alternative uses together with industrial ones. Furthermore, any provisioning of public infrastructure such as multimodal facilities and transportation investments should be strategically coordinated with industry locations. To that end, our index of conversion probability would be useful in this analysis. This tool helps identify which parcels are likely to convert based on multiple factors. However, in the end, planners need to use this tool to strategically assess whether such conversions are in the best interest of the region and craft housing, commercial, and industrial land policies and plans accordingly.

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Notes

1. Total U.S. manufacturing employment grew by 729,668 from 11.3 million in January 2010 to 12.1 million in June 2013 based on data from the Quarterly Census of Employment and Wages (QCEW; U.S. Department of Labor, Bureau of Labor Statistics, 2012). Manufacturing exports grew by \$429 billion from \$918 billion in 2009 to \$1.35 trillion in 2012, according to data from the International Trade Administration, U.S. Department of Commerce (n.d.).

2. Average annual earnings per worker in manufacturing was 22.9% higher than the overall average earnings across all private sector industries (\$60,496 versus \$49,200) in 2012. Source: QCEW (U.S. Department of Labor, Bureau of Labor Statistics, 2012).

3. Various industrial land reports can be found at <http://communityinnovation.berkeley.edu/industrial-land-report.html>

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For more information, readers are referred to www.makingroomformanufacturing.org.

Measuring Conversion

To define the dependent variable in our analysis (i.e., industrial conversion at the parcel level), we combined two distinct data sources using ESRI ArcGIS software. First, we gathered parcel boundaries from the County Tax Assessor's offices in Mecklenburg and Cook counties, which comprised approximately 1.44 million records for Cook County and 0.37 million records for Mecklenburg County for years 2000, 2005, and 2010. Second, we used establishment-level data from the National Establishment Time Series (NETS), which provided information about the location and annual employment for all former and current manufacturing business establishments. The NETS database is a privately produced establishment-level longitudinal database (1990–2010) built from the Dun and Bradstreet (D&B) business credit rating service. The database is a near universe of private-sector businesses in the United States; one of its chief benefits for economic development researchers is the ability to track establishment-level births, deaths, and relocations over time at a detailed geographic scale. The NETS datasets include 35,557 and 6,339 records for Cook and Mecklenburg counties, respectively. The universe of records includes any establishment that was located within the county—alive or dead—between 1990 and 2010 and had a primary NAICS classification within the 31–33 NAICS supersector.

For each county, we geocoded all NETS records that ever had a NAICS classification with manufacturing (31–33) using the latitude and longitude listed by year from 1990 to 2010. The NETS was joined to the parcels to identify the universe of parcels with manufacturing land uses. Of these, converted parcels are identified by absence of establishment in 2010 and if the land use is nonindustrial. Based on this definition of conversion, we identified 989 parcels that converted in Mecklenburg County and 3,748 parcels that converted in Cook County.

Data Construction/Sources for Key Independent Variables

We measured location characteristics by calculating each parcel's proximity to various amenities in the county that affect the accessibility and ultimately the suitability of the land for competing uses. For each location factor, the "near" tool in ArcGIS was used to calculate the distance from each parcel to the nearest location factor. Location factors were the central business district (CBD), airports, multimodal freight transfer facilities, highway on-ramps and interchanges, transit stations, and rail facilities. For

Technical Appendix

In this appendix, we present more details about the data preparation and the full set of statistical results.

Mecklenburg County, the CBD polygon was defined as the area inside the I-277 loop in Charlotte. For Cook County, the CBD polygon was downloaded from data.cityofchicago.org. Freight facility shapefiles were accessed using the National Transportation Atlas Database 2011 from the Bureau of Transportation Statistics. Public use airports, multimodal terminal facilities, railway network (nodes only), and highway on-ramps were extracted from the "U.S. Major Roads 2008" file from the ESRI Data & Maps 9.3 dataset. Specifically, we used the feature class codes A60 (Special road feature, Name = "ramp") and A63 (Access ramp or limited access interchange). Transit station locations are from the Center for Transit Oriented Development's TOD database of existing stations.

To capture the real estate dynamics in the neighborhoods surrounding each parcel, we attempted to assess changing property values over a 10-year period, from approximately 2000 to 2010. For Mecklenburg County, since tax assessor's data was available, we could measure the changes in value of all parcels (not just sales) between 2001 and 2011. We calculated the change in value over this period as our primary measure of land price appreciation for all parcels within a quarter-mile buffer zone of each parcel. For Cook County, we used data from Record Information Services, a private data provider that gathered all public residential sales from 2000 through 2010 at the address level. We calculated the change in average sales price at the census tract level and applied this value to each parcel based on which tract contained the centroid of the parcel. To calculate buffers around each parcel for Cook County would have exhausted our computational power. As an additional measure of real estate activity, we identified parcels that were subdivided between 2000 and 2011 (2001 and 2011 for Mecklenburg) by comparing two sets of parcel boundary maps, because identifying information (such as parcel identification numbers) changes over time.

To assess the establishment and industry competitiveness at the parcel level, we constructed two different variables. First, we conducted a shift-share analysis for each county's manufacturing industries relative to the United States for the broad period from 1990 to 2008 (pre-recession) using data from the Quarterly Census of Employment and Wages (QCEW) from the U.S. Bureau of Labor Statistics. The shift-share analysis was conducted only for all four-digit NAICS industries within the manufacturing supersector. The purpose of shift-share analysis is to identify sectors that are competitive locally, accounting for broad national trends in manufacturing overall ("national shift") and the relative performance of each industry nationally (i.e., the "industry mix"). We used the industry mix variable as a measure for the industry's expected performance

nationally. We then matched the industry mix variable to the parcel level based on the NAICS code of the last industrial establishment listed in the NETS. While we expect parcels that are home to industries outpacing the national average to be less likely to convert, there may be some individual establishments that are growing or declining for idiosyncratic reasons. For this reason, we also calculated the net change in jobs at the establishment level.

To assess the impact of land use policies and regulations, we generated a simple dummy variable that indicates whether a parcel is included in a designated industrial area. For Cook County, we used a shapefile of the City of Chicago's Industrial Corridors obtained from the City's GIS portal (see <https://data.cityofchicago.org/Community-Economic-Development/Boundaries-Industrial-Corridors/vdsr-p25b>). These areas were designated beginning in 1992 and offer strong protection against speculative conversions by requiring that any zoning change obtain approval from a full vote of the Plan Commission. For Mecklenburg County, we used information obtained from the 2008 Comprehensive Plan and coded the areas where industrial development was encouraged. Thus, the variable for Mecklenburg County represents a weaker policy compared with Chicago's Industrial Corridor program. As an additional policy variable, we also created an indicator for whether a parcel fell within one of Chicago's Federal Empowerment Zones (none were found in Mecklenburg County).

The primary variable that proxies for our environmental hazard factor is the location of each parcel in relation to officially designated brownfield sites. Location data on brownfields was derived from the U.S. Environmental Protection Agency's Facility Registration System. We limited our analysis to sites that were coded specifically as brownfields rather than every entry in the registry (see http://www.epa.gov/enviro/html/frs_demo/geospatial_data/geo_data_state_single.html). For descriptive statistics, see Table A-1.

Data Limitations and Caveats

Data preparation required significant effort because of changes to parcel boundaries over time and changing definitions of land uses and errors in data. While care has been taken to assure data quality, systematic but undiagnosed errors might still remain (especially with regards to geocoding, NAICS codes, etc.). Furthermore, we only consider manufacturing uses, whereas industrial land uses might include a more expansive definition of production, distribution, and repair. These ancillary uses are complementary to manufacturing, and any comprehensive examination of industrial land should include these uses. Furthermore, because of agglomerative effects and spatial spillovers, industrial parcels are also usually clustered; the spatial

Table A-1. Descriptive statistics.

Variable	Cook County		Mecklenburg County	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Distance to airport	11,226.10	5,436.40	44,014.33	18,347.70
Distance to multimodal facility	13,627.70	12,498.40	17,191.97	14,585.80
Distance to rail	3,296.10	3,413.30	8,119.09	7,076.03
Distance to highway ramp	2,877.00	2,137.80	3,239.43	2,856.88
Distance to CBD	61,568.00	39,091.10	33,261.53	22,862.26
Change in neighborhood residential price (2000–2010) ^a	–6,524.40	211,574.90	–29,294.03	125,418.40
Net employment change in industry (jobs)	–6,550.40	7,201.00	–5,342.57	13,330.75
Industry mix	0.04	0.2	0.016	0.218
Parcel size (acres)	1.4	2.3	4.038	22.17
Distance to nearest subdivided parcel	8,476.80	39,832.10	19,438.02	46,329.63
Distance to nearest transit station	6,224.40	5,295.20	26,793.74	23,909.75
Distance to nearest brownfield	7,211.10	6,501.50	3,410.38	3,413.34
<i>N</i>		6,702		2,698
Parcels in empowerment zone		4.80%		—
Parcels in industrial corridor/center		10.98%		8.33%

Notes: All distances are in feet.

a. Calculated differently for Cook and Mecklenburg counties due to data limitations. In Mecklenburg County, a quarter-mile is used as a neighborhood; in Cook County, the census tract is used as a neighborhood.

clustering is not taken into account in the statistical model.

Although this research focuses on industrial parcels that are likely to convert, we did not focus on the implications of such conversion on the socioeconomic landscape of the city. For lack of space and time, we did not exhaustively explore the environmental as well as environmental justice aspects of industrial conversion. Another caveat is the endogeneity issue that might potentially bias the importance of certain variables in predicting the vulnerability index. The methodology described here should be considered an input into deliberating what areas of the city need to be preserved as industrial land and what are the opportunity costs of such preservation.

Another potential limitation of the study is the lack of depth of the real estate processes such as parcel assembly and subdivisions included in the analyses. Large industrial sites in the central cities should be more competitive for residential and mixed-use redevelopment than assembling parcels from fragmented commercial owners. Such parcel assembly might suffer from holdout problems and make industrial parcels more appealing for redevelopment. However, our analyses suggest that size of the lot is not associated with the risk of conversion, suggesting other mitigating factors or inadequate specification of the model. All these areas are ripe for further research and can only help make our index more robust.

Statistical Analysis

Correlations between categorical variables and real variables are not statistically correct; therefore, we show the distributional similarities and differences of various explanatory variables between converted and nonconverted parcels. In Cook County, although airport distance variable has similar distribution between converted and nonconverted parcels, there is a significant difference in the distance to the CBD variable (Figure A-1). Furthermore, the transit distance is also skewed to the left (although with a long right tail) for converted parcels, suggesting that parcels closer to the transit stations are likely to convert. On the other hand, transit distance variable has roughly the same distribution between converted and nonconverted parcels in Mecklenburg County (Figure A-2). The correlation matrices suggest that multicollinearity is not a major issue in Cook county (Figure A-3), whereas there is worrisome correlation between CBD and transit distance variables mostly because the proximity of transit stations to CBD (Figure A-4). However, we included these variables in the model for cross-case comparison and because the purpose of the model is to have predictive power to construct the index rather than isolating the effect of individual variables.

Once the variables are constructed, we scaled the variables based on their standard deviation; a logit model is used to predict the risk of conversion. The results of the model are documented in Table A-2.

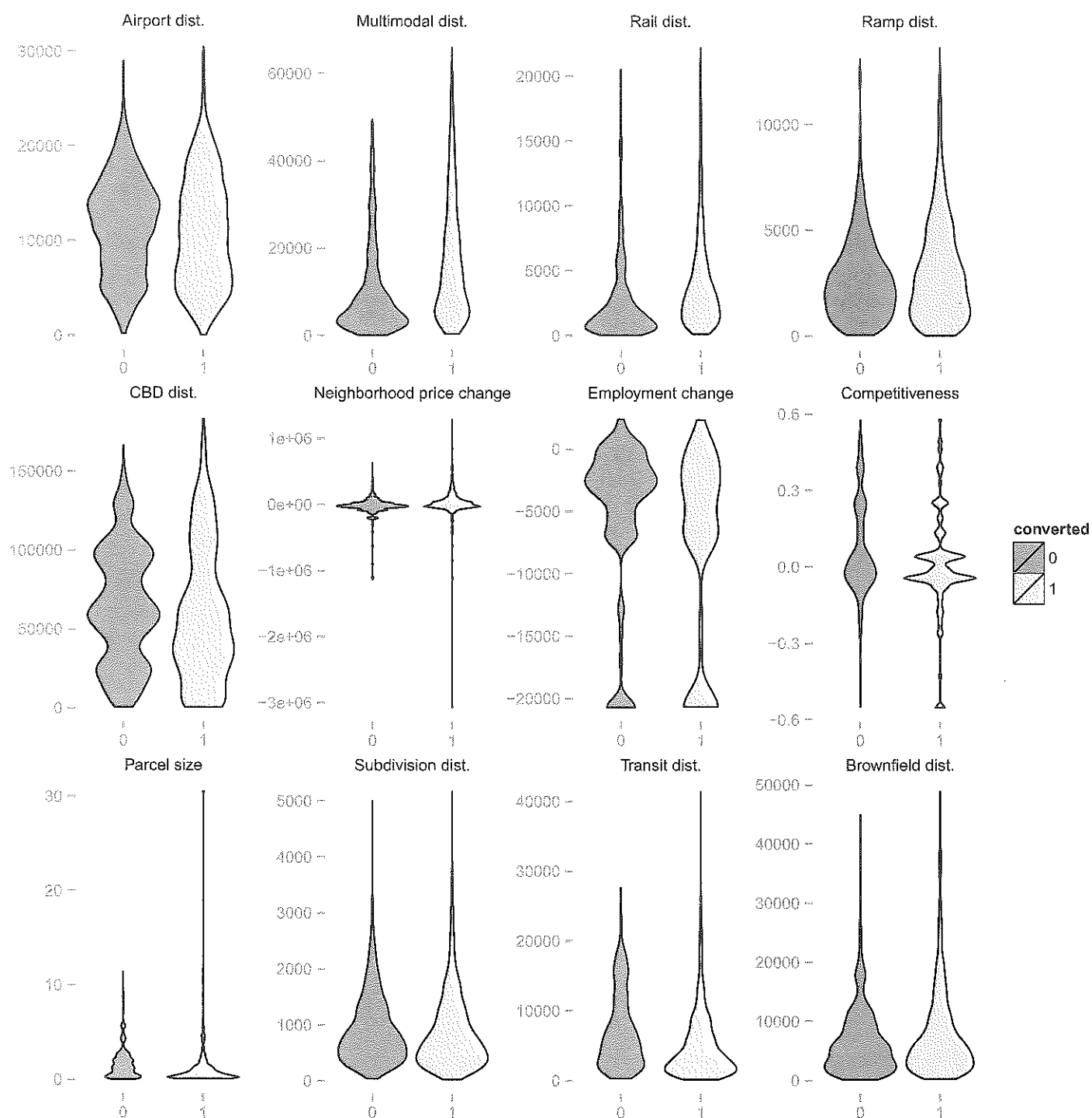


Figure A-1. Distributional differences of explanatory variables in Cook County based on the conversion status.

(Color figure available online.)

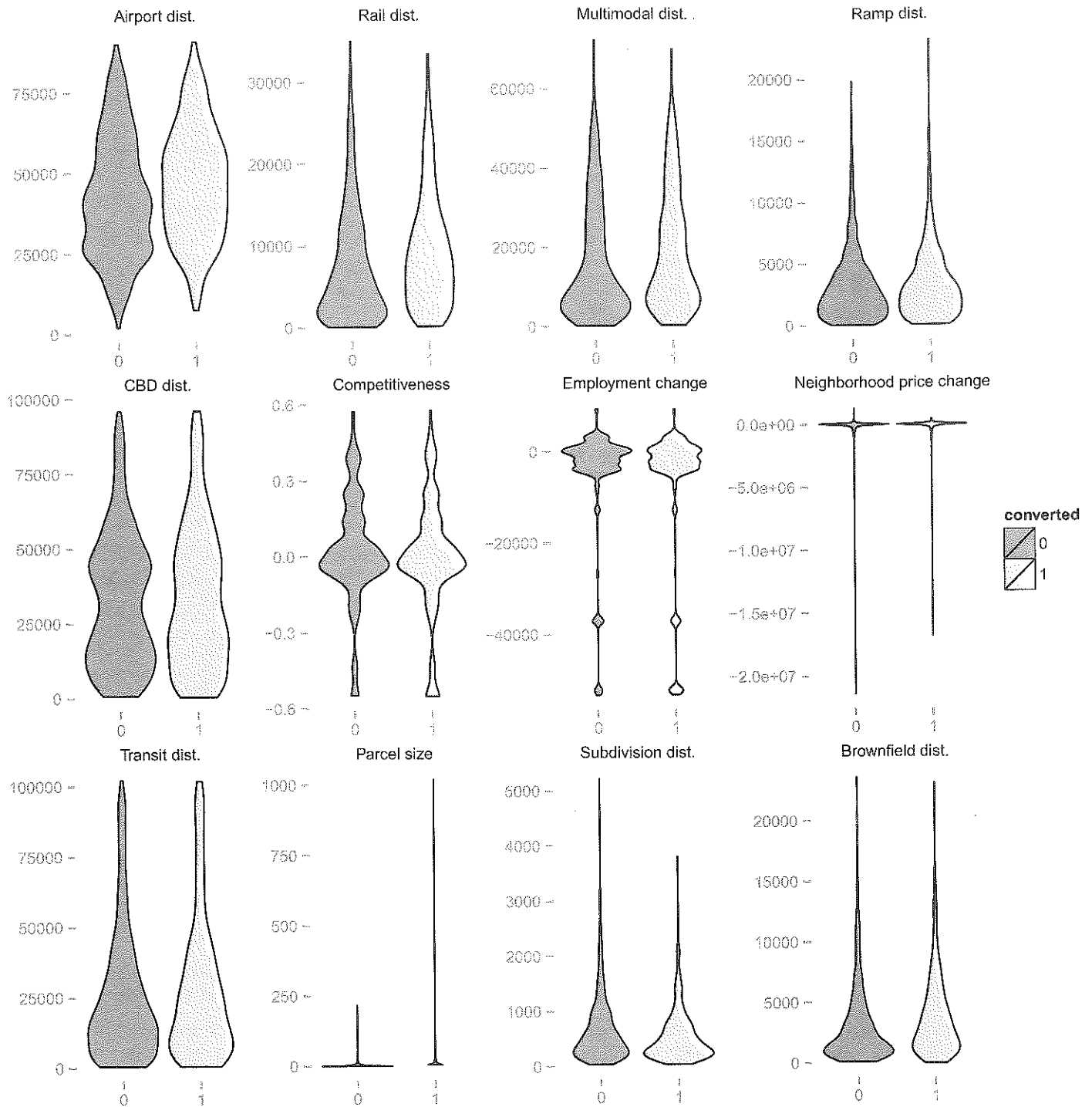


Figure A-2. Distributional differences in the explanatory variables based in Mecklenburg County based on the conversion status.

(Color figure available online.)

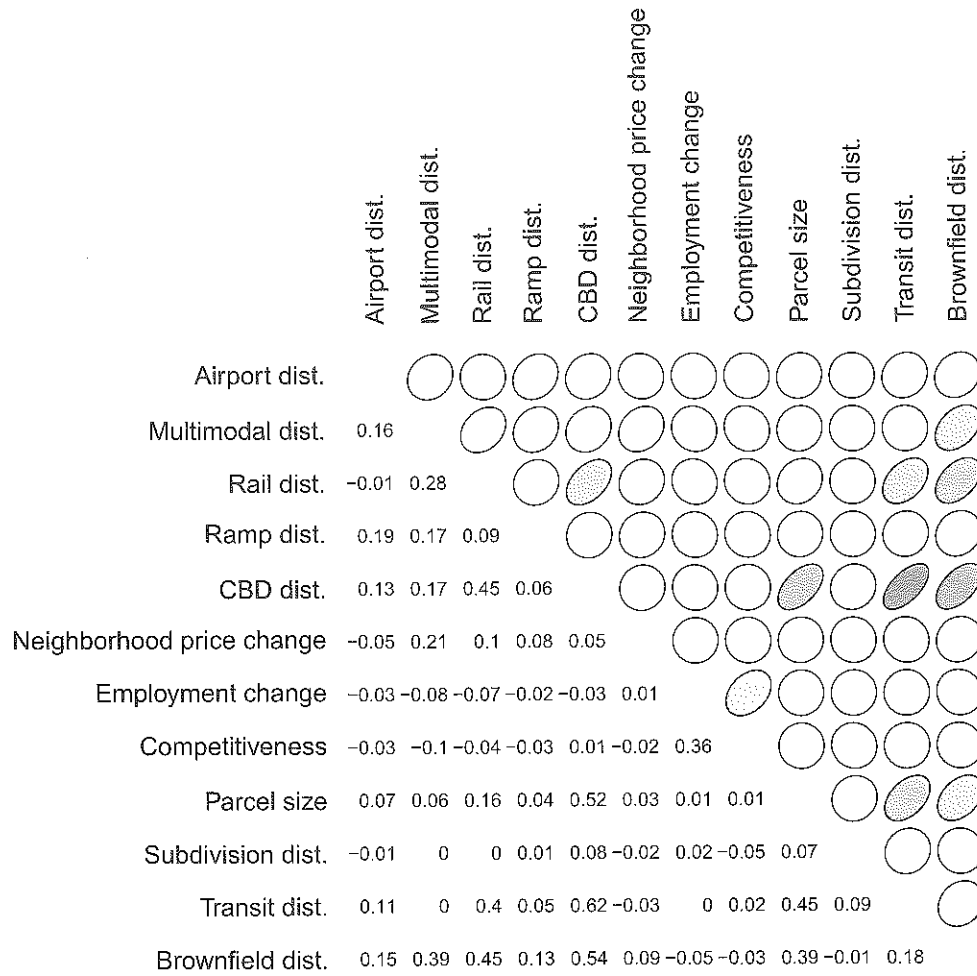


Figure A-3. Correlation matrix among explanatory variables in Cook County.

(Color figure available online.)

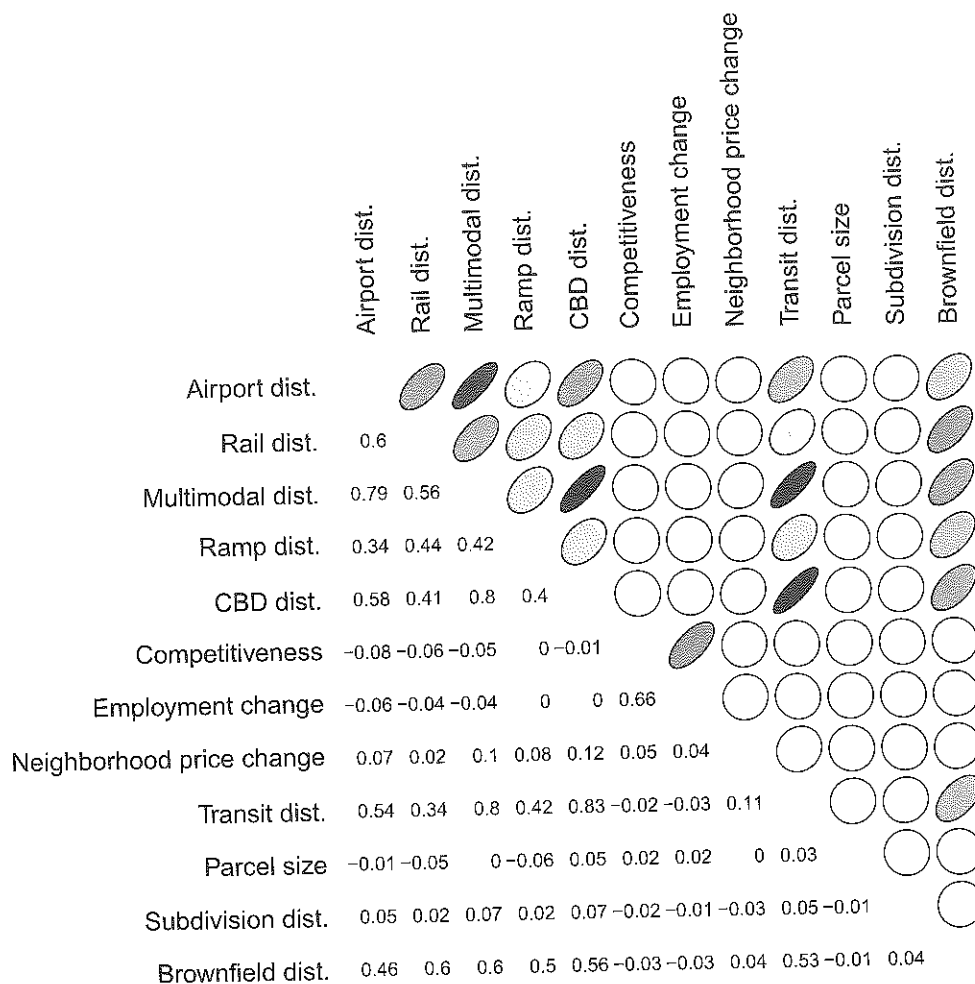


Figure A-4. Correlation matrix among explanatory variables in Mecklenburg County.

(Color figure available online.)

Table A-2. Full set of logistical regression model results of industrial land conversions in Mecklenburg County (NC) and Cook County (IL) 1990–2010.

	Cook County	Mecklenburg County
Location factors		
Distance to airport	–0.152*** (0.031)	0.059 (0.074)
Distance to multimodal facility	0.452*** (0.029)	0.037 (0.112)
Distance to rail	0.576*** (0.031)	0.152* (0.060)
Distance to highway ramp	0.182*** (0.030)	–0.020 (0.055)
Distance to CBD	–0.413*** (0.045)	–0.242** (0.093)
Distance to Transit station	–0.743*** (0.045)	0.136 (0.089)
Industry/firm competitiveness		
Net employment change	–0.333*** (0.032)	–0.072 (0.055)
Competitiveness of industry	–0.121*** (0.034)	–0.055 (0.058)
Neighborhood price dynamics		
Change in neighborhood residential price	0.079*** (0.026)	–0.008 (0.041)
Distance to nearest subdivision	0.079* (0.041)	–0.035 (0.044)
Environmental hazards		
Distance to brownfield	–0.105*** (0.034)	0.068 (0.060)
Policy variables		
Empowerment zone (yes)	–0.739*** (0.177)	—
Industrial corridor/center (yes)	–2.969*** (0.162)	–1.864*** (0.324)
Controls		
Parcel size	–0.016 (0.030)	0.045 (0.046)

Notes: All estimates are standardized based on the standard deviation of each variable. Standard errors are in parentheses. The number of observations (*N*) was 6,702 for Cook County and 2,698 for Mecklenburg County. Intercepts were negative and significant for both models but are not listed. McFadden R^2 was 0.67 for Cook County and 0.22 for Mecklenburg County.

* $p < .10$; ** $p < .05$; *** $p < .01$.



GREATER PORTLAND : INDUSTRIAL MARKET REVIEW & 2014 FORECAST



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Welcome & Thanks

Presentation Outline

- **A Look Back at 2013**
 - Trends & Anecdotes
 - Significant Transactions
- **Current Conditions**
 - 2014 Industrial Market Survey
 - National & Regional Report
 - Report Card: 2013 Forecast
- **Forecast 2014**
 - Significant Vacancies
 - Predictions & Analysis of Data



A Look Back at 2013

A Look Back at 2013...

Local Trends & Anecdotes

- **Owner/User's Thrive**

- The Blake Group
- Tallus Corporation
- Coffee By Design
- Maine Historical Society/Portland Public Library



- **Increased motivation lead to smooth negotiations**

- **Growing Industries – Brewing & Medical Marijuana**

- Allagash Brewing, Bissell Bros., Banded Horn, New England Distillery, Austin Street Brewing, Foundation Brewing, Baxter Brewing

ALLAGASH
BREWING COMPANY

**BISSELL**
BROTHERS
BREWING CO.



foundation
brewing company



AUSTIN STREET
BREWERY


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A Look Back at 2013...

Local Trends & Anecdotes

- **Owner/User's Thrive**
 - The Blake Group
 - Tallus Corporation
 - Coffee By Design
 - Maine Historical Society/Portland Public Library
- **Increased motivation lead to smooth negotiations**
- **Growing Industries – Brewing & Medical Marijuana**
 - Allagash Brewing, Bissell Bros., Banded Horn, New England Distillery, Austin Street Brewing, Foundation Brewing, Baxter Brewing
 - Medical Marijuana cultivation centers: Yarmouth, Gorham, Biddeford, Saco, Windham, Westbrook



A Look Back at 2013...

Local Trends & Anecdotes

- **Increased interest in smaller properties**
 - 5 Laurence Drive, Gorham – 4,200 SF
 - 412 Route One, Yarmouth – 7,000 SF
 - 160 Pleasant Hill Road, Scarborough – 11,800 SF
 - 15 Washington Avenue, Scarborough – 6,400 SF
 - 1025 Ocean Avenue, Portland – 8,800 SF
- **Investment market is strong**
 - 97 Pine Tree Industrial, Portland
 - 28 Sanford Drive, Gorham
 - 167 Rumery Road, South Portland
 - 190 Rand Road, Portland

A Look Back at 2013...

Significant Transactions

SALES



167 Rumery Road, South Portland – \$2,640,000
105,600 SF - Purchased by 167 Rumery Road, LLC
Investor



130 Breakwater & 1 Madison Street, South Portland – \$2,300,000
62,000 SF – Purchased by HHH1, LLC
Investor



410 Riverside Street, Portland – \$2,225,000
60,000 SF - Purchased by McCuda, LLC
Owner/User

A Look Back at 2013...

Significant Transactions

SALES (continued)



28 Sanford Drive, Gorham – \$2,000,000
36,950 SF - Purchased by 28 Sanford Drive, LLC
Investor



2112 Broadway, South Portland – \$1,515,000
21,875 SF - Purchased by 2112 Broadway, LLC
Owner/User



1000 Riverside Street, Portland – \$1,500,000
35,500 SF - Purchased by Maine Historical & Portland Public Library
Owner/User

A Look Back at 2013...

Significant Transactions

SALES (continued)



299 Presumpscot Street, Portland – \$1,490,000
39,614 SF - Purchased by Topspin, LLC
Owner/User



1 Diamond Street, Portland – \$1,400,000
44,722 SF - Purchased by Bartlett Island, LLC
Owner/User



25 Rice Street, Portland – \$1,075,000
26,474 SF - Purchased by REDE, LLC
Owner/User

A Look Back at 2013...

Significant Transactions

LEASES



765 Warren Avenue, Portland – 70,132 SF
Leased by Allagash Brewing



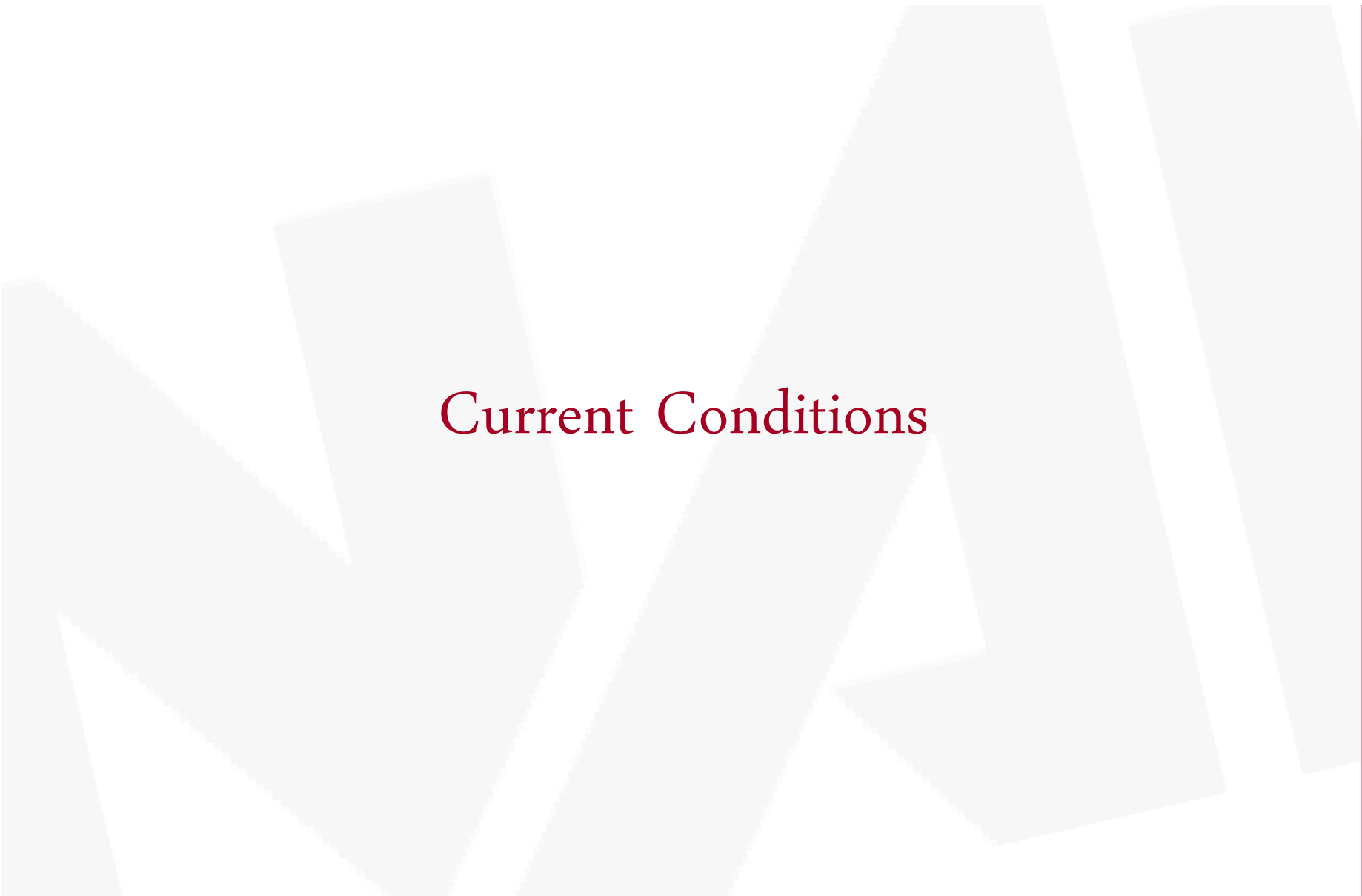
371 Marginal Way, Portland – 25,580 SF
Leased by Wesco Distribution, Inc.



167 Rumery Road, South Portland – 21,600 SF
Leased by Bedderrest



111 Pine Tree Industrial Parkway, Portland – 20,000 SF
Leased by Carrier Enterprise Northeast , LLC



Current Conditions

The 2014 Industrial Market Survey

Report Logistics

- Geographic Locations
 - Portland, South Portland, Westbrook, Gorham, Scarborough & Saco
- Qualifying Properties
 - 496 properties were inventoried
 - 50% or more industrial to office ratio
 - All properties in defined Industrial/Business Parks
 - All properties over 5,000 SF in non-parks (clusters or misc.)
 - Owner/occupied = 100% full (unless marketed for lease)
 - No retail/industrial buildings (Advance Auto, BJ's, Home Depot, etc.)
- Industrial Parks / Clusters / Miscellaneous Properties

The 2014 Industrial Market Survey

- Vacancy Rate & Asking Lease Rate Calculations
 - All vacancy totals as of December 2013 per NECPE
 - All lease rates based solely on listed properties per NECPE
 - Broke down all lease rates to a Triple Net number
(Gross/MG rate less \$1.75/SF for CAM's)
 - All square footages based solely on Town Tax Assessor cards

Greater Portland Industrial Market Summary

(see Appendix for detailed breakdown)

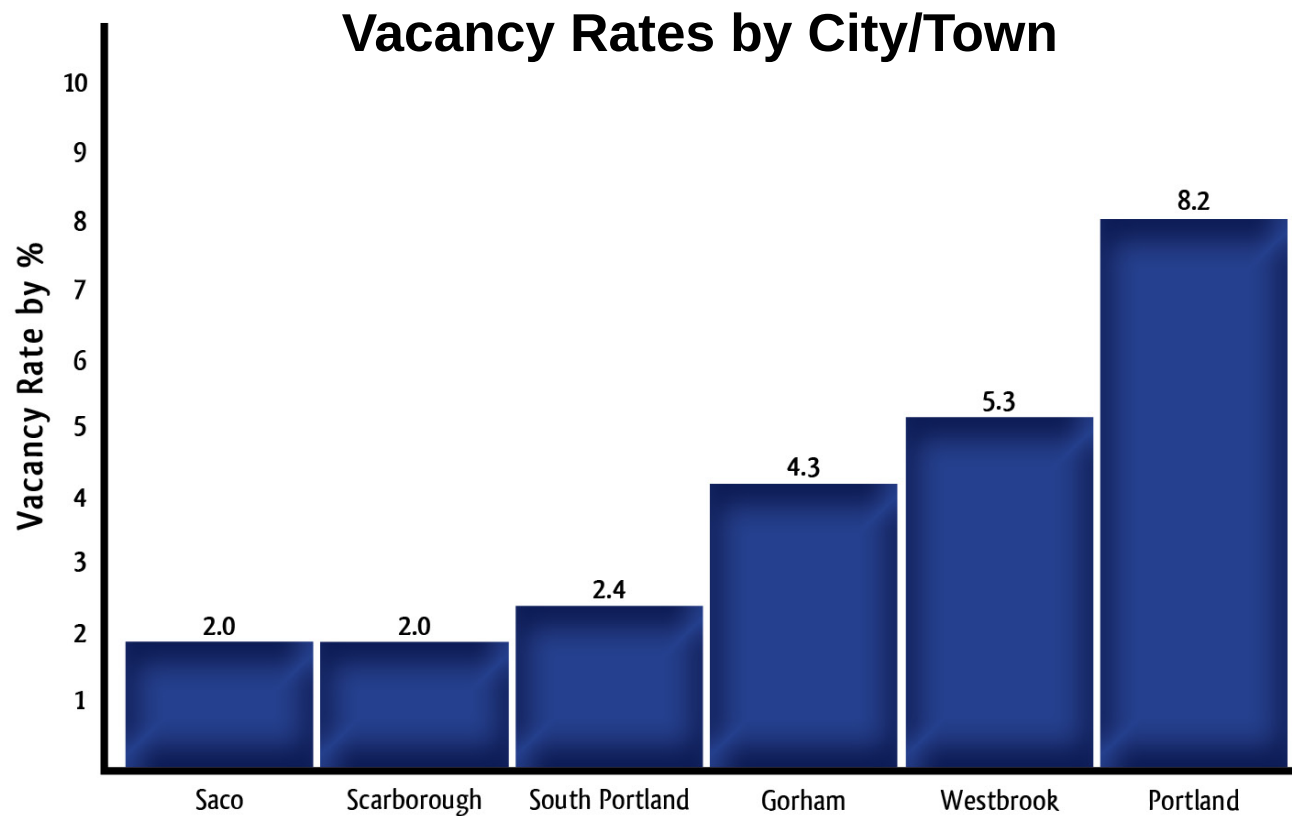
Total Number of Buildings:	496
Total Market Size:	15,970,454± SF¹
Direct Vacancy:	842,887± SF²
Total Vacancy Rate:	5.27%

¹ Totals as of December 2013 per NAI The Dunham Group Industrial Market Survey

² Totals as of December 2013 per New England Commercial Property Exchange

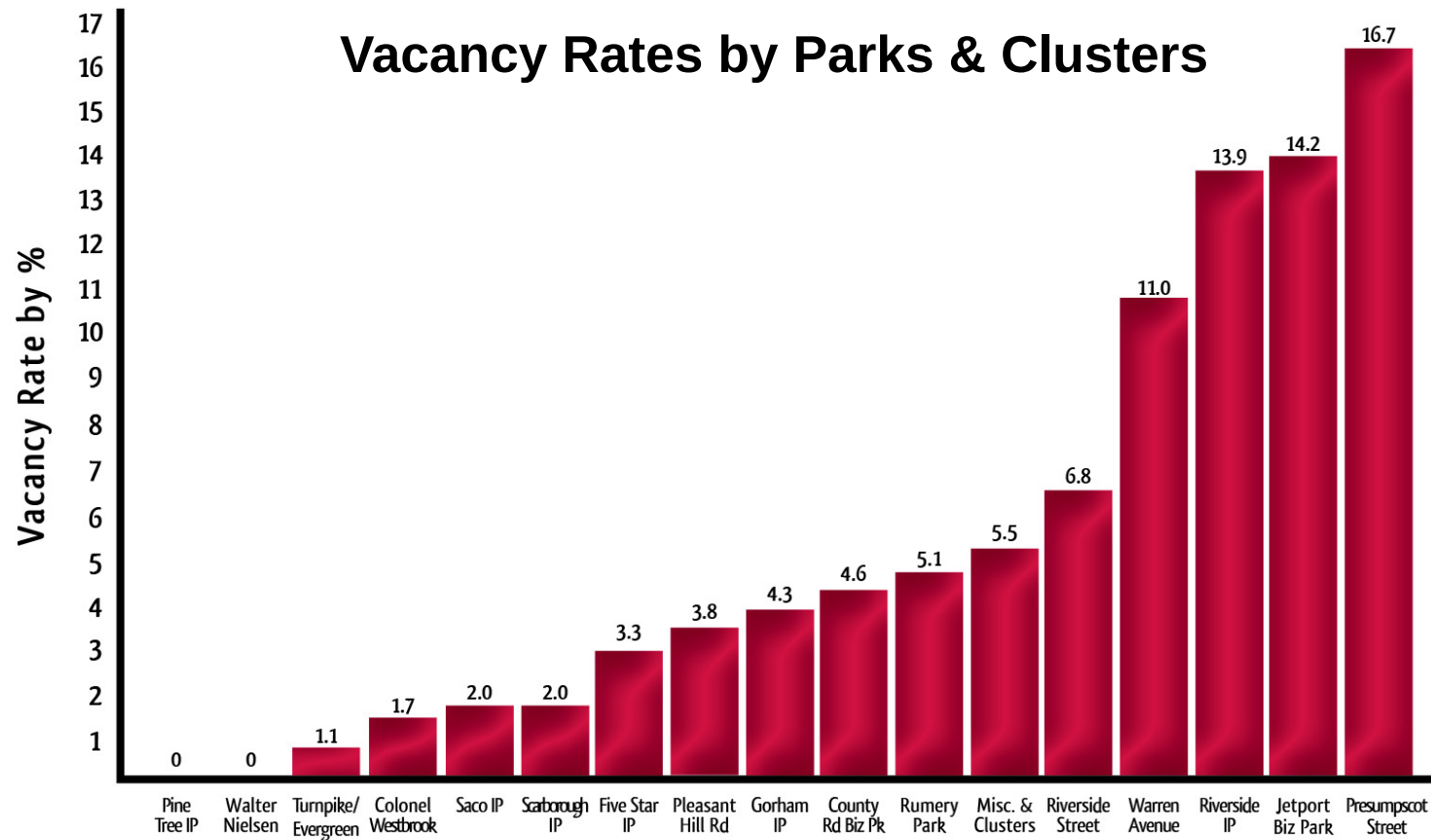
The 2014 Industrial Market Survey

Greater Portland



The 2014 Industrial Market Survey

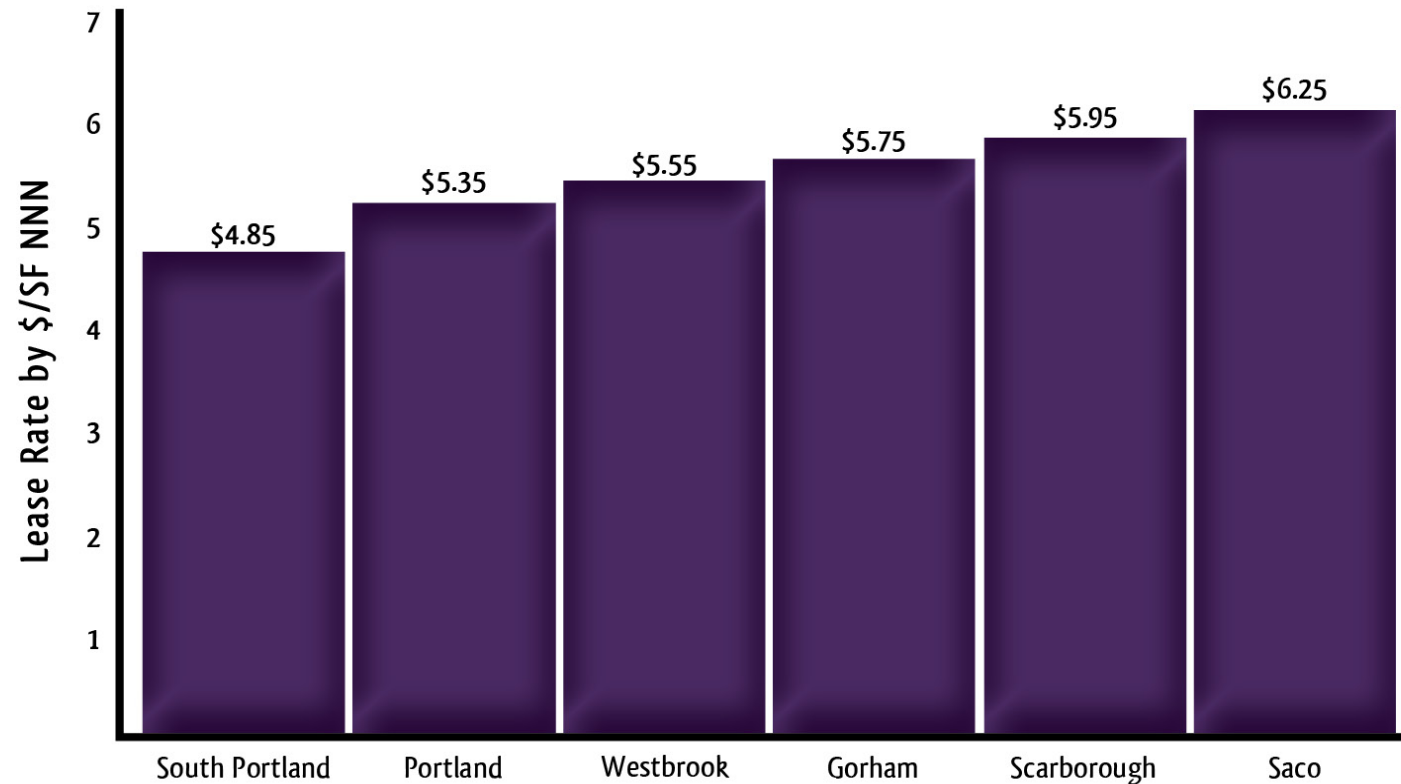
Greater Portland



The 2014 Industrial Market Survey

Greater Portland

Average NNN Lease Rate by City/Town



Market Trajectory

2011 - 2013

	VACANCY RATE	LEASE RATE	CAP RATE*
2011	7.86%	\$5.47/SF	10 - 11%
2012	6.97% ↓	\$5.22/SF ↓	9 - 10% ↓
2013	5.27% ↓	\$5.56/SF ↑	8.5 - 9.5% ↓

*Estimate based on available data/anecdotal evidence

National & Regional Data

	NATIONAL	NORTHEAST	BOSTON	GREATER PORTLAND
Cap Rates	7.75%	7.32%	7.1%	9.0±%
Vacancy Rates	8.0%	8.8%	9.2%	5.27%
Lease Rates	\$5.79/SF	\$5.66/SF	\$5.31/SF	\$5.56/SF

*Per data collected from NAI Global, Jones Lang LaSalle, NREI, Realtor.com and CoStar

Report Card: 2013

Grading My Forecast Predictions from January 2013 Conference

- “Vacancy rates plateau and tick-up” – **Grade F**
- “Economic concerns slow momentum from 2012” – **Grade F**
- “1031-tax deferred exchanges increase in popularity” – **Grade B**
- “Owner/users continue to thrive in 2013” – **Grade A**



Forecast 2014



Commercial Real Estate Services, Worldwide.

Forecast 2014

Significant Vacancies



**765 Warren Avenue,
Portland
89,974 SF**



**400 Riverside Industrial
Parkway, Portland
60,000 SF**



**216 Riverside Industrial
Parkway, Portland
34,904 SF**



**167 Rumery Road,
South Portland
33,400 SF**



**921 Riverside Street,
Portland
25,000 SF**

Forecast 2014

Predictions & Analysis

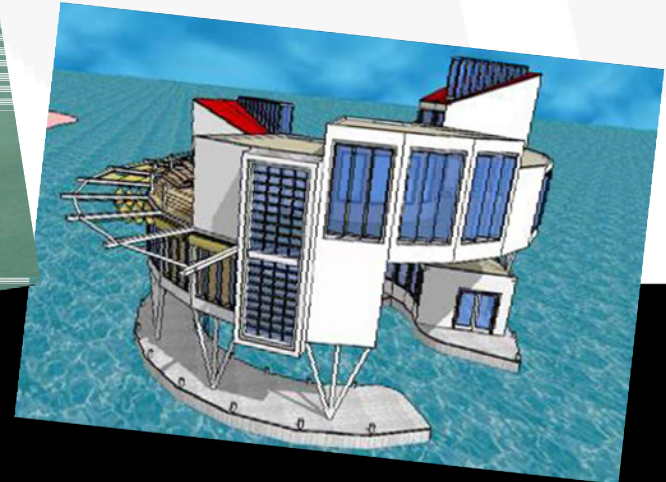
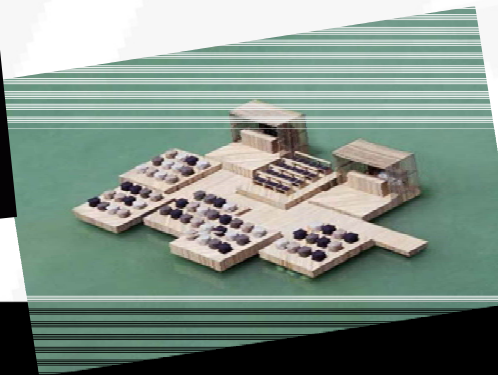
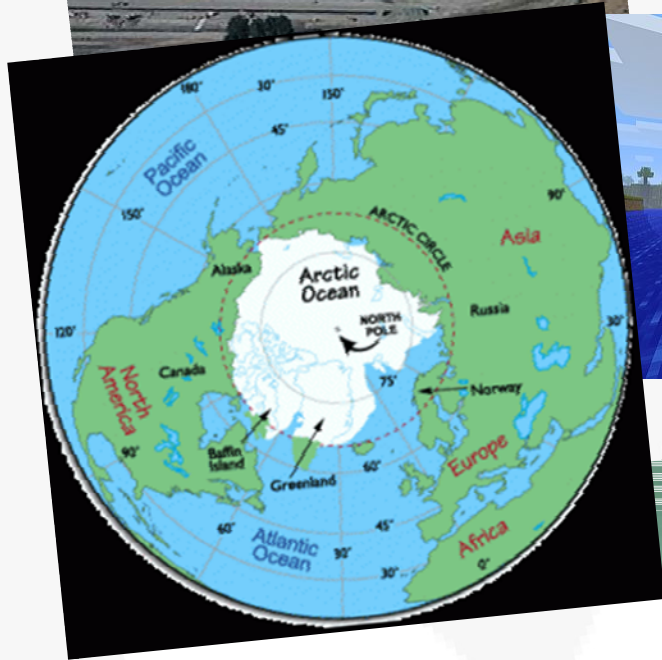
- Landlord's regain leverage
- Interest in land increases
- Speculative building likely
- Reasonable expectations lead to smooth negotiations

Forecast 2014

Predictions & Analysis

- Lease rates continue to rise
- Vacancy rates stabilize and will increase
- Owner/users continue to thrive
- Secondary markets take advantage

Predictions for 2034



Predictions for 2034

- Online sales drive the need for more distribution space?
- Floating warehouses?
- Direct trade with Asia?
- More likely... a very familiar industrial landscape.

Conclusion

- Transactions were up and negotiations went smoothly
- Stunning drop in vacancy drives up lease rates
- Inventory poised to grow
- Bullish owner/users continue to benefit from historically rare opportunities



THANK YOU



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APPENDIX : INVENTORY RESULTS

Parks/Clusters	Total Bldgs.	Building SF	Available SF	Vacancy Rate	Avg. Lease Rate
Colonel Westbrook	17	558,902	9,787	1.7	\$7.50
County Road business Park	8	216,578	10,000	4.6	\$5.75
Five Star Industrial Park	27	1,312,297	43,467	3.3	\$5.25
Gorham Industrial Park	38	937,906	40,737	4.3	\$5.75
Jetport Business Park	3	56,266	8,000	14.2	\$6.75
Miscellaneous Clusters	90	4,325,476	238,932	5.5	\$4.85
Pinetree Industrial Park	7	238,948	0	0	N/A
Pleasant Hill	51	1,248,940	47,330	3.8	\$5.43
Presumpscot Street	21	426,449	71,488	16.7	\$3.95
Riverside Industrial Park	27	801,886	111,572	13.9	\$4.20
Riverside Street	38	880,357	59,959	6.8	\$5.25
Rumery Park	18	1,074,994	55,200	5.1	\$3.75
Saco Industrial Park	52	1,328,025	27,125	2.0	\$6.25
Scarborough Industrial Park	35	811,119	16,942	2.0	\$5.95
Turnpike Industrial/Evergreen	23	403,655	4,500	1.1	\$5.00
Walter Neilsen	7	538,920	0	0	N/A
Warren Avenue	34	885,376	97,848	11.0	\$5.65

City/Town	Total Bldgs.	Building SF	Available SF	Vacancy Rate	Avg. Lease Rate
Gorham	38	937,906	40,737	4.3	\$5.75
Portland	210	6,188,620	509,908	8.2	\$5.35
Saco	52	1,328,025	27,125	2.0	\$6.25
Scarborough	87	2,209,720	62,672	2.0	\$5.95
South Portland	43	2,720,572	64,704	2.4	\$4.85
Westbrook	66	2,585,611	137,741	5.3	\$5.55

GRAND TOTAL:	Total Bldgs.	Total Market Size	Total Available SF	Greater Portland Vacancy Rate	Average Lease Rate
	496	15,970,454	842,887	5.27%	\$5.56

Portland, Maine



Yes. Life's good here.

Economic Development Department
Gregory A. Mitchell, Director

MEMORANDUM

To: Alex Jaegerman, Planning Division Director
From: Greg Mitchell, Economic Development Director
Date: August 7, 2014
RE: Importance of Retaining Portland's Industrial-Zoned Real Estate

OVERVIEW

The purpose of this memo is to discuss the importance of retaining industrial-zoned property in the City of Portland. This resource is finite as the majority of developable real estate in the City has been built out, and it will be difficult to rezone property to expand Portland's industrial base.

Over time, Portland has seen its total industrial property reduced. Pressure from market forces and societal needs, particularly on the Peninsula, have driven the reduction and replacement of industrial zones with business zones to accommodate mixed use neighborhoods. Certainly, these neighborhoods are filling a vital need, providing increased housing as well as businesses that serve the City's residents and its burgeoning tourism markets.

In this current environment, retaining Portland's remaining industrial-zoned real estate for industrial uses is crucial to continue to grow and strengthen the City's economy. As you know, industrial-zoned property supports a variety of businesses, many of which are manufacturers that are a vital source of quality jobs that pay good wages. Their employee base often represents a range of educational levels, providing jobs for those with limited education as well as those with advanced degrees.

INDUSTRIAL SPACE CHALLENGES

Over the past few years, the City's Economic Development Department has been receiving increasing requests from companies seeking vacant industrial space or undeveloped industrial acreage for new construction. Some of these requests simply cannot be accommodated given the City's finite industrial property. When the expansion needs of existing Portland-based industrial companies cannot be accommodated locally and/or new industrial opportunities cannot be accommodated, this represents a loss to Portland's tax base and associated employment.

Justin Lamontagne, a real estate broker in Portland with NAI The Dunham Group, has experienced similar challenges, along with his colleagues, in searching for manufacturing space for companies wanting to expand in the Portland area. He explained that the Dunham Group is currently representing two successful manufacturers in the Greater Portland area. They each require 30,000-

40,000 SF of space and there are no options for them at this time. Both are now considering other markets in southern Maine.

TRENDS IN INDUSTRIAL SPACE DEMAND

Portland's industrial-zoned areas include Riverside Street, Riverside Industrial Parkway, Warren Avenue, Presumpscot Street, Bishop Street, Pine Tree Industrial Parkway, Canco Road, Outer Congress, sections of East Bayside and a few others. It is important to maintain the acreage in these zones.

The 2013 Greater Portland Maine Region Industrial Market Survey, presented at the January 2013 Maine Real Estate Developers Association Conference reported a decrease in industrial vacancies in Greater Portland, with a vacancy rates of 5.2%, substantially lower relative to Boston (9.2%), the Northeast (8.8%) and Nationally (8.0%). While inventory in the Portland area has essentially remained the same, demand has been increasing. Some of the conditions contributing to this trend include a strengthening national economy and a growing movement of product manufacturing back to the United States from overseas.

Eimskip has established its U.S. port presence in the City of Portland at the International Marine Terminal on Commercial Street. The access to international markets that this is generating is expected to attract cold storage and other investment opportunities.

Portland recently received federal designation to be part of the Investing in Manufacturing Communities Partnership. Specifically, Portland is one of 12 areas in the country to receive a 2-year federal assistance preference intended to support the growth of Portland's food production sector. This has the potential to expand food manufacturing in the City and, therefore, contribute further to the demand for industrial space.

Additional information from the 2013 Greater Portland Market Survey indicates that the overall industrial vacancy rate in the City of Portland is higher than in other neighboring communities. However, Portland's rate is skewed due to areas like Presumpscot Street and Warren Avenue where the building stock is older, making it more costly to renovate and thereby more challenging to attract tenants. It is worth noting that Riverside Street has among the lowest industrial vacancy rates in the City, per the Market Survey.

RECOMMENDATIONS

To summarize, Portland's industrial space is limited and should be preserved to the maximum extent possible.

Regarding the request from Spurwink to add Intermediate Care Facilities in the I-M zone, this seems to represent a unique set of circumstances that will not be displacing industrial uses. However, allowing for this use should be addressed in a site specific fashion.

In conclusion, I would not recommend amendments to permitted uses throughout the City's industrial zones that would reduce the opportunity for industrial business attraction and growth on Portland's remaining industrial real estate.

Table 1: Purposes

Zone		Purpose
IM (Industrial – Moderate Impact)		To provide zones in areas of the city in which light and moderate impact industries and transportation-related uses will coexist. The moderate impact industrial (I-M and I-Ma) zones are located on arterials or collectors. The I-Mb zones are similarly located on the peninsula. These locations provide for direct access onto arterials, thereby protecting residential neighborhoods from drive-through traffic. The I-M, I-Ma and I-Mb industrial zones are intended to provide for larger industrial buildings and for the limited or controlled use of areas outside of structures for storage of materials and machinery. These facilities often require large volumes of imported materials and products which result in large volumes of shipping and receiving. Often uses may be highway-oriented and transportation-related, thus relying on citywide and regional transportation infrastructure. Industrial uses in the moderate impact industrial zones may require separation from higher impact uses, which should be directed to the high impact industrial zone.
R-1 and R-2		To provide for lower density residential development characterized by single-family homes on individual lots in outlying areas of the city and along traffic corridors with limited additional traffic capacity.
R-3		To provide for medium-density residential development characterized by single-family homes on individual lots and also to provide for planned residential unit developments on substantially sized parcels. Such development shall respond to the physical qualities of a site and complement the scale, character and style of the surrounding neighborhood.
R-5		To provide appropriate areas of the city for medium-density residential development characterized by single-family and low-intensity multifamily dwellings on individual lots; to ensure the stability of established medium-density neighborhoods by controlling residential conversions; and to provide for planned residential unit development on substantially sized parcels. Such PRUD development shall respond to the physical qualities of a site and complement the scale, character and style of the surrounding neighborhood.
R-6		To set aside areas on the peninsula for housing characterized primarily by multifamily dwellings at a high density providing a wide range of housing for differing types of households; and to conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses. In cases of qualifying small, vacant, underutilized lots located in the urban residential and business zone, to encourage new housing development consistent with the compact lot development pattern typically found on the peninsula.
B-2 (Community Business)		To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community. The variety, sites and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1 neighborhood business zone. The B-2 zone will provide a broad range of goods and services and general businesses with a mixture of large and small buildings such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should relate to the surrounding neighborhoods by design, orientation, and circulation patterns. The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials.

Uses			I-M	R-1	R-2	R-3	R-5	R-6	B-2/B-2b/B-2c
Permitted	Residential	Single-family and two-family dwellings		•	•	•	•	•	•
		Multi-family dwellings						•	•
		Handicapped family units		•	•	•	•	•	•
		Single-family single- or multiple-component manufactured housing		•	•	•	•	•	
		Combined living/working spaces							•
		Lodging houses						•	•
		PRUDs				•	•		
		Multiplex development					•		
	Institutional	Schools							•
		Clinics							•
		Places of assembly							•
		Long term, extended and intermediate care facilities							•
		Governmental buildings and uses/municipal uses				•	•	•	•
		College, university or trade schools							•
		Nursery schools, kindergartens							
		Day care facilities	•						•
	Business	General, business, & professional offices	•						•
		Personal services							•
		Business services							
		Offices of building tradespeople							•
		Retail establishments							•
		Restaurants							•
		Drinking establishments							• ⁴
		Billiard parlors							•
		Mortuaries or funeral homes							•
		Miscellaneous repair services	•						• ⁵
		Communication studios or broadcast and receiving facilities							•
		Health clubs and gymnasiums							•
		Veterinary hospitals							• ⁶
		Theaters							•
		Hotels							• ⁷
		Dairies and bakeries	•						•
		Drive-throughs when accessory to a principal use on the same lot							• ⁸
		Registered medical marijuana dispensaries							•
		Indoor recreation and family amusement establishments	•						
		Intermodal transportation facilities	•						
	Accessory	Accessory uses	•	•	•	•	•	•	•

		Agricultural uses, as defined		•	•				
		Cemeteries						•	
		Parks		•	•	•	•	•	
		Home occupation		•	•	•	•	•	
		Studios for artists and craftspeople							•
		Special needs independent living units					•	•	
		Bed and breakfasts							•
		Conversion into bed and breakfast						•	
		Hostels						•	•
		Wind energy systems	•	•	•	•	•	•	•
		Utility substations	•						•
		Warehousing and wholesaling	•						
		Low impact industrial uses	•						
		R&D and back office uses	•						
		Building contractors and construction/engineering services	•						
		Nurseries	•						
		Lumber yards	•						
		Commercial kitchens or other food preparation	•						
		Recycling & solid waste disposal facilities	•						
		Food processing	•						
		Correctional pre-release facilities	•						
		Tow lots	•						
		Beverage dealers							
Conditional	Residential	Municipal Uses		•	•				
		Sheltered care group homes		•	•	•	•	•	
		Additional accessory dwelling units		•	•	•	•		
		Alteration of non-residential structure to 3+ dwelling units					•		
	Institutional	Conversion of multi-family structure to lodging house					•		
		Schools		•	•	•	•	•	
		Long-term and extended care facilities		•	•	•	•	•	
		Intermediate care facility for 13 or more persons		•	•	•	•	•	
		Places of assembly		•	•	•	•	•	
		Hospitals				•	•	•	
		Nursery schools and kindergartens						•	
		Day care facilities				•	•	•	
		College, university, trade schools			•		•	•	
	Business	Major and minor auto service stations existing as of 1999							• ⁹
		Car washes							•
		Drive-throughs adjacent to residential uses or zones							• ¹⁰

Other	Automobile dealerships							•
	Restaurants							
	Conversion into bed and breakfast (over 5 rooms)						•	
	Utility substations		•	•	•	•	•	
	Professional offices						•	
	Chancellery						•	
	Off-street parking				•	•	• ²	
	Temporary wind anemometer towers	•	•	•	•	•	•	•
	Hostels						•	
	Wind energy systems	•	•	•	•	•	•	•
	Printing and publishing establishments							•
	Wholesale distribution establishments							•
	Research and development and related production establishments							•
	Cemeteries		•	•				
	Raising of domestic animals		•					
	Day Care facilities		•	•				

1 Permitted on ground floor of B-1b; above ground floor, residential uses of 14-162(a), bed and breakfasts, hostels permitted

2 For passenger cars for uses permitted in the R-6 zone.

3 Restaurants conditionally permitted, provided they have a max. floor area for use by public of 1,000 SF; hours limited to 6 am to 11 pm; food service and consumption is primary function; no drive-throughs

4 Except in B-2c

5 Excluding motor vehicle repair

6 Excluding outdoor kennels

7 Of less than 150 rooms

8 Permitted in B-2 or B-2b if not adjacent to residential use or zone

9 Permitted in B-2, & permitted in the B-2b if in existence since 1999

10 Permitted in B-2, & permitted in the B-2b if accessory



Transmittal

To: Barbara Barhydt
Date: 06/15/2014
Re: Planning Bd. Submission

Project: Spurwink Services – Land Use
Code Amendments
GC#2014-006
From: Matthew Winch
cc: Dan Bonner, file

Item:	Date	Quantity	Title
1	06/13/2014	1	Land Use Code Amendment Submission
2	06/15/2014	1	Digital Copy of Submission (DVD)

Remarks:



June 13, 2014

Portland Planning Board
389 Congress Street
Portland Maine, 04101

Re: Zoning Text Amendment
IM Zone – Allowable Uses

Dear Chair O'Brien and Members of the Planning Board,

Spurwink Services a Portland based 501-c3 charitable organization with a long-standing history of service to Portland area children and their families is requesting approval for text amendments to the Portland Land Use Code. Specifically those changes are:

- 1 To make an Intermediate care facility an allowable use in the IM Zone.
- 2 Clarify the definition of Intermediate care facility.

Spurwink Services is requesting these amendments ultimately to open the door to allowing them to convert a portion of their 899 Riverside Street campus to an Intermediate care facility.

Spurwink is a 60-year-old social service agency serving the needs of children and adults with mental health concerns and related trauma. Spurwink Services provides, among other services, both day treatment and residential treatment in a variety of locations and settings.

Spurwink Services 899 Riverside St campus is not only the location of their first residential program house (Sue Wright House), which is still currently used as a residence for up to 8 clients, but the campus is also currently home to senior leadership, finance, marketing and development offices for the entire agency. Some of these functions will soon be relocated to the converted office space within the old Rainbow Mall building on Washington Avenue. This move will open up a portion of the 899 Riverside St campus to re-use. The intent would be to renovate one building to house the proposed Intermediate care facility use.

Spurwink Services has targeted their Riverside Street campus for this use and as a result this text amendment because of a number of important factors.

- 1 Spurwink Services had a number of smaller 3-5 client residential treatment facilities throughout the area that were closed because they were no longer economically sustainable under current State and Federal funding models.
- 2 An analysis of funding and staffing models has shown that a residential treatment facility serving between 12 and 16 clients (plus appropriate staff) is an economically viable alternative to the smaller facilities. This larger facility and expanded client base will provide a more consistent funding stream and a higher quality of care to their clients.
- 3 Because Spurwink Services supports families from the larger Cumberland County community, this location, its proximity to primary arterials and connector streets will provide greater accessibility to families, caregivers and State agency representatives that will travel to see clients being cared for at the facility.

- 4 There is a desire to keep the clients Spurwink serves more closely connected to the communities in which they were raised. With referrals for residential treatment coming from Juvenile corrections as well as mental health hospitals, the IM Zone may serve as a very good intermediate step before fully integrating clients back more fully into the communities that they are returning to.

In this application for text amendment Spurwink Services proposed changes to the Land Use Ordinance are:

- 1 Add the following allowable use to Division 14 . I-M, I-Ma AND I-Mb INDUSTRIAL ZONES* Section 14-247. Permitted uses:

(y) Intermediate care facility for not more than (26) persons plus staff.

- 2 Clarify the following definition in Section 14-47 Definitions by adding the underlined text:

Intermediate care facility: A facility which provides, on a regular basis, health-related care and services to individuals who do not require the degree of care and treatment which a hospital or extended care facility is designed to provide but who, because of their mental or physical condition, require such care and services above the level of room and board. Said facility must be licensed as a board care or Residential Care Facility pursuant to the regulations promulgated by the State of Maine Department of Health and Human Services.

By recommending the City council approve these changes to the Land Use Ordinance a new use will be allowable in the IM Zone that is similar to two other currently approved uses, Day Care Facility and a Correctional prerelease facility. We have attached a supporting letter that analyzes the conformance to the Purpose statement of the IM Zone and conformance to the City's Comprehensive Plan

Sincerely,



Matthew G Winch
Principal



Zoning Map/Text Amendment/Contract or Conditional Rezoning Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the review of requests for zoning map amendments, zoning text amendments and contract or conditional re-zoning. The Division also coordinates site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Zone Change.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division

Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours

Monday thru Friday
8:00 a.m. – 4:30 p.m.

Engineer Name: Address: City/State : Zip Code:	Engineer Contact Information Work # Cell # Fax# e-mail:
Surveyor Name: To Be Determined Address: City/State : Zip Code:	Surveyor Contact Information Work # Cell # Fax# e-mail:
Architect Name: Garrison Consulting (c/o Matthew Winch) Address: 41 Edgewood Ave City/State : Portland, Maine Zip Code: 04103	Architect Contact Information Work # (207) 450-0750 Cell # (207) 450-0750 Fax# e-mail: matthewwinch@earthlink.net
Attorney Name: To Be Determined Address: City/State : Zip Code:	Attorney Contact Information Work # Cell # Fax# e-mail:

Right, Title, or Interest: Please identify the status of the applicant's right, title, or interest in the subject property:

Applicant is the current property Owner. See attached for proof of right, title and interest in the property

Provide documentary evidence, attached to this application, of applicant's right, title, or interest in the subject property.
(For example, a deed, option or contract to purchase or lease the subject property.)

Vicinity Map: Attach a map showing the subject parcel and abutting parcels, labeled as to ownership and/or current use.
(Applicant may utilize the City Zoning Map or Parcel Map as a source.)

Existing Use: Describe the existing use of the subject property:

There are 3 separate structures on the property. The Applicant currently uses two of the buildings, Smith House and Kaufmann House, to house offices for professional staff including but not limited to senior management, finance, facilities HR and development functions. The third building on the property, Sue Wright House, is used as an 8-bed residence (plus house parents) for students at Baxter School for the Deaf. This residence is not used for "treatment" purposes.

Current Zoning Designation(s): IM - Moderate Impact Industrial

Proposed Use of Property: Please describe the proposed use of the subject property. If construction or development is proposed, please describe any changes to the physical condition of the property.

The applicant will maintain the 8-bed residential use at Sue Wright House and maintain one of the buildings, Smith House, as office space for some staff functions which will remain on site. The applicant proposes to use Kaufmann House as (up to) a 16-person (plus staff) Intermediate care facility. The proposal at this time would not require any increase in volume or footprint. All construction associated with this conversion would take place within the existing connected structure of Kaufmann House.

Site Plan: On a separate sheet, please provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries. This may be a professionally drawn plan, or a carefully drawn plan, to scale, by the applicant. (Scale to suit, range from 1" = 10' to 1' = 50'.) Contract and conditional rezoning applications may require additional site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood.

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Zoning Map Amendment ___ \$2,000.00 (from ___ zone to ___ zone) Zoning Text Amendment <u>X</u> \$2,000,000 (to Section 14- <u>246 &</u> 14-47) Combination Zoning Text Amendment and Zoning Map Amendment ___ \$3,000.00 Conditional or Contract Zone ___ \$3,000.00 (A conditional or contract rezoning map be requested by an applicant in cases where limitations, conditions, or special assurances related to the physical development and operation of the property are needed to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Please refer to Division 1.5, Sections 14-60 to 62.)	The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) • Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.
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APPLICATION SUBMISSION:

1. All plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file names which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. **The submission shall include the following materials:**
 - a. One (1) paper set of the zoning amendment application, concept plan and written narrative.
 - b. Contract and conditional rezoning applications must include site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations and compatible with the surrounding neighborhood.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of Applicant:  CEO	Date: 6/15/14
---	-------------------------



June 13, 2014

Portland Planning Board
389 Congress Street
Portland Maine, 04101

Re: Land Use Code Text Amendment
IM Zone – Allowable Uses

Dear Chair O'Brien and Members of the Planning Board,

In support of Spurwink Services (Applicant) application for a Land Use Code Text Amendment to the IM Zone please accept this supplemental letter in support of the request now before you. As you are aware, the Portland Land Use Code authorizes the Planning Board to recommend Land Use Code text amendments to the City Council for final approval. These amendments must be determined to be consistent with nature and purpose of the zone and they must in basic harmony with and thereby consistent with the City's comprehensive plan. The Applicant provides the following analysis.

The Applicant is proposing to add the following allowable use to Division 14 . I-M, I-Ma AND I-Mb INDUSTRIAL ZONES* Section 14-247. Permitted uses:

(y) Intermediate care facility for not more than (26) persons plus staff.

1 - The Proposed ICF Use is Consistent with the Purpose of the IM Zone, as well as the Permitted Uses in the Zone.

The Purpose of the IM Zone: The moderate impact industrial zones are intended to provide zones in areas of the city in which light and moderate impact industries and transportation-related uses will coexist.

The moderate impact industrial (I-M and I-Ma) zones are located on arterials or collectors. The I-Mb zones are similarly located on the peninsula. These locations provide for direct access onto arterials, thereby protecting residential neighborhoods from drive-through traffic.

The I-M, I-Ma and I-Mb industrial zones are intended to provide for larger industrial buildings and for the limited or controlled use of areas outside of structures for storage of materials and machinery. These facilities often require large volumes of imported materials and products which result in large volumes of shipping and receiving. Often uses may be highway-oriented and transportation-related, thus relying on citywide and regional transportation infrastructure.

Industrial uses in the moderate impact industrial zones may require separation from higher impact uses, which should be directed to the high impact industrial zone.

Some of the directly relevant and permitted uses in the zone include but are not limited to:

- (o) Day care facilities
- (r) Correctional prerelease facilities
- (t) General, business and professional offices

The inclusion an Intermediate care facility as an allowable use is consistent with the purpose and the permitted uses for the zone. The purpose of the IM Zone is to an area for light to moderate industries and transportations related uses to coexist. Further and as stated above,

41 Edgewood Avenue Portland, ME 04103
(207) 450-0750
matthewwinch@earthlink.net

the zones are located on or near arterials, thereby protecting residential neighborhoods from drive through traffic.

Providing proper around the clock care to young children dealing with mental health related traumas requires a staffing set-up that demands 24-hour care. Staff is awake, active and alert during the nighttime hours, the facility is brightly lit at the exterior for security and nighttime shift changes to rotate staff are required. This type and level of activity is not ideal for a residential neighborhood where overnight activities are expected to be minimal if not non-existent.

Given that a facility of this type serves a group of people that are not living at their primary residence, a much higher and constant volume of traffic to and from the facility can be expected. Family, friends, medical professionals and staff from state agencies can all be expected visitors through the daytime and evening hours. Placing an Intermediate care facility close to arterials and collector streets protects residential neighborhoods from the impacts of associated traffic.

Finally, the use is consistent with other approved uses in the Zone. A daycare facility and correctional pre-release facility both anticipate a level and scope of care and security to maintain the well being of the population served. Daycare facilities are no longer an 8-5 business and the correctional pre-release facility includes overnight accommodation for the clients it is serving.

2 -The Proposed Use is in Basic Harmony with and Therefore Consistent with the City's Comprehensive Plan.

The proposed Zone text amendment will meet the stated goals of the comprehensive plan. Three primary and directly relevant goals are noted and analyzed.

Stated Goal A: To encourage orderly growth and development in appropriate areas of each community, while protecting the State's rural character, making efficient use of public services and preventing developmental sprawl.

Allowing an Intermediate care facility limited to (26) persons plus staff in the IM Zone encourages modest development of an institutional use that is similar in nature and scope to other allowable uses in the zone. As an allowable use it would be provided advantage of the necessary transportation infrastructure required to serve and support the zone and thereby the use. It will also allow the use to be placed in an area(s) of the city that has been defined for higher levels of traffic and around the clock activities and needs such as modest increases in noise and light pollution, which are less desirable in other areas of the city.

Stated Goal C: To promote an economic climate which increases job opportunities and overall economic well-being.

Portland's Industry and Commerce Plan includes 6 primary goals:

- Create a variety of job opportunities for the full spectrum of the labor pool.
- Recognize that jobs and prosperity improve the standard of living for residents.
- Preserve, protect and strengthen neighborhoods.
- Reduce tax burden on residential property owners.
- Make Portland attractive to new residents and businesses.
- Be creative, responsive and work hard to retain existing business.

Allowing an Intermediate care facility limited to (26) persons plus staff in the IM Zone encourages the development of a small to mid sized institutional facility that has a more favorable economic success model than the smaller uses (limited to under 12 clients) that are typically allowable in residential zones throughout the city. Allowing up to (26) clients allows for a greater staffing to client ratio and creates a better service and salary ratio to staff based on available State and Federally funded support programs (Maine Care, Medi Care/Medi Cade) and the like. By making this mid range type facility allowable for development in the IM Zone, it encourages and attracts development of a more economically viable sized facility in a zone intended to handle the increased demands on the infrastructure.

Stated Goal D: To encourage and promote affordable, decent housing opportunities for all Maine citizens.

Further the Goal states the need to maintain and enhance the livability of Portland's neighborhoods as the city grows and evolves through careful land use regulation, design and public participation that respects neighborhood integrity.

Policies to that Goal include:

- While accommodating needed services and facilities, protect the stability of Portland's residential neighborhoods from excessive encroachment by inappropriately scaled and obtrusive commercial, institutional, governmental and other non-residential uses.
- Ensure the integrity and economic value of Portland's neighborhoods.

Adding Intermediate care facility as an approved use in the IM Zone will preserve the quality and vitality of Portland's neighborhoods by allowing a larger scale and more economically viable institutional use to be located in a zone more suitable to handle the demands of the use.

Some residential zones do allow for very small Intermediate care facilities (limited to under 12 clients) that while fitting in with the scale and size of a traditional neighborhood environment, is not economically viable. Funding mechanisms do not adequately support the demands of a smaller facility, leading to a drop in service to clients as well as the ability to maintain and secure the property. This would have a negative affect on the city's policy goal to ensure the integrity and economic value of Portland's neighborhoods.

Allowing the use in the IM Zone enhances the economic vitality of the services associated with and intermediate care facility by allowing client levels to be raised to a higher and more appropriate staffing ratio.

As demonstrated above the proposed text amendment to the IM Zone and the clarification of the definition of the Intermediate care facility is consistent wit the City's Comprehensive Plan from land use, economic and neighborhood protection perspectives. Thank you for considering our proposal, we look forward to working with the Planning Board during this review process.

Sincerely,

A handwritten signature in dark ink, appearing to read 'm.g. winch', with a stylized flourish at the end.

Matthew G Winch
Principal

EDGEFIELD LODGE, CASCO
10 CANDLEWYCK ROAD, PORTLAND
98 RACKLEFF STREET, PORTLAND
899 RIVERSIDE STREET, PORTLAND
18 SONNET LANE, PORTLAND
342 WOODFORDS STREET, PORTLAND

WARRANTY DEED
Maine Statutory Short Form

No 82135 Bk 11161 Pg 333

KNOW ALL PERSONS BY THESE PRESENTS, that **SPURWINK ASSOCIATES LIMITED PARTNERSHIP (f/k/a SPURWINK ASSOCIATES)**, a Maine limited partnership with a place of business in Portland, in the County of Cumberland and State of Maine, for consideration paid, **GRANTS** with **WARRANTY COVENANTS TO:**

THE SPURWINK SCHOOL, a not-for-profit corporation with a place of business in Portland, County of Cumberland, State of Maine, whose mailing address is 899 Riverside Street, Portland, Maine:

Parcel One - Edgefield Lodge, Casco: Two (2) certain lots or parcels of land with the buildings thereon, situated on the easterly side of the highway leading through Casco Village to Spurr's Corner, so-called, in the Town of Casco, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit A annexed hereto and made a part hereof.

Being a portion of the premises conveyed to Spurwink Associates by warranty deed of Richard M. Smith and Harvey J. Berman dated December 5, 1983 and recorded in the Cumberland County Registry of Deeds in Book 6342, Page 331.

Parcel Two - 10 Candlewyck Road, Portland: A certain lot or parcel of land with the buildings thereon, situated on Candlewyck Road, in the City of Portland, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit B annexed hereto and made a part hereof.

Being a portion of the premises conveyed to Spurwink Associates by warranty deed of Harvey J. Berman, et al. dated December 5, 1983 and recorded in said Registry of Deeds in Book 6342, Page 329.

Parcel Three - 98 Rackleff Street, Portland: A certain lot or parcel of land with the buildings thereon, situated on the southerly side of Rackleff Street, in the City of Portland, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit C annexed hereto and made a part hereof.

Being a portion of the premises conveyed to Spurwink Associates by warranty deed of Harvey J. Berman, et al. dated December 5, 1983 and recorded in said Registry of Deeds in Book 6342, Page 329.

Parcel Four - 899 Riverside Street, Portland: Two (2) certain lots or parcels of land with the buildings thereon, situated on the southeasterly side of Riverside Street, in the City of Portland, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit D annexed hereto and made a part hereof.

MAINE REAL ESTATE TAX PAID

82135 B

Being a portion of the premises conveyed to Spurwink Associates by warranty deed of The Spurwink Riverside Corporation dated December 5, 1983 and recorded in said Registry of Deeds in Book 6342, Page 336.

Parcel Five - 18 Sonnet Lane, Portland: A certain lot or parcel of land with the buildings thereon, situated on the southerly side of Sonnet Lane, in the City of Portland, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit E annexed hereto and made a part hereof.

Being the same premises conveyed to Spurwink Associates by warranty deed of Janice M. Hawkins-Donovan dated February 20, 1990 and recorded in said Registry of Deeds in Book 9092, Page 15.

Parcel Six - 342 Woodfords Street, Portland: A certain lot or parcel of land with the buildings thereon, situated on Woodfords Street, in the City of Portland, County of Cumberland and State of Maine, being more particularly bounded and described on Exhibit F annexed hereto and made a part hereof.

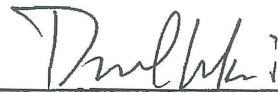
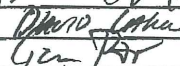
Being a portion of the premises conveyed to Spurwink Associates by warranty deed of Harvey J. Berman, et al. dated December 5, 1983 and recorded in said Registry of Deeds in Book 6342, Page 329.

IN WITNESS WHEREOF, the said SPURWINK ASSOCIATES LIMITED PARTNERSHIP has caused this instrument to be signed this 13th day of December, 1993.

SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF



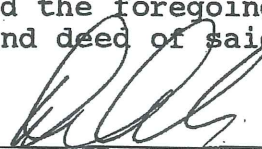
SPURWINK ASSOCIATES LIMITED
PARTNERSHIP

By 
Its 

STATE OF MAINE
COUNTY OF CUMBERLAND

December 13, 1993

Personally appeared the above-named David Lakavi, in his said capacity, and acknowledged the foregoing to be his free act and deed, and the free act and deed of said corporation, before me.


Notary Public/Attorney at Law

David A. Anderson
Printed Name

EXHIBIT D899 Riverside Street, Portland, Maine

A certain lot or parcel of land located in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at a stone monument in the southeasterly side of Riverside Street, which monument marks the southwesterly corner of land conveyed by Jefferson H. Hodges, et al. to Richard M. Smith by deed dated July 12, 1960, and recorded in the Cumberland County Registry of Deeds, Book 2553, Page 229; THENCE, southeasterly along line of land formerly of said Smith and now of Spurwink Associates 417.8 feet to the southeasterly corner thereof; THENCE, continuing southeasterly along line of land conveyed by Jefferson H. Hodges, et al. to Riverside Industrial Park, Inc. by deed dated February 24, 1964 and recorded in said Registry in Book 2806, Page 441, 138.06 feet, more or less, to a fence which marked the line of land formerly of Lydia J. Stevens; THENCE, southwesterly 404.13 feet to an angle in said fence; THENCE, northwesterly 551.63 feet by line of said fence and over a stone monument to the southeasterly side of Riverside Street; THENCE, northeasterly by said Riverside Street 408.84 feet, more or less, to the stone monument at the point of beginning. Containing 5.16 acres, more or less.

Also, a certain lot or parcel of land with the buildings thereon situated on the southeasterly side of Riverside Street in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at a stone monument in the southeasterly side of Riverside Street, said stone monument being distant 408.84 feet, northeasterly from the northwesterly corner of the land conveyed to Jefferson H. Hodges and Edith G. Hodges by Arthur H. Jones by deed dated January 22, 1942, and recorded in Book 1667, Page 123; THENCE, North 36° 23' East along the southeasterly sideline of Riverside Street, a distance of 414.43 feet, to an iron; THENCE, South 42° 32' East, a distance of 425.4 feet to a point; THENCE, South 36° 18' West a distance of 353.3 feet to a point; THENCE, North 51° 03' West a distance of 417.8 feet, more or less, to the monument in the southeasterly sideline of Riverside Street and the point of beginning.

Together with the benefit of the rights reserved as set forth in the deed to Corley Family Realty Limited Partnership dated September 30, 1988, and recorded in Book 8467, Page 86, that no building or paving shall be constructed or placed within 30 feet of the southwesterly sideline of Spurwink Associates' remaining land and landscaping shall substantially adhere to the plans of Corley Family Realty Limited Partnership, approved by Spurwink Associates. This condition shall run with the land and shall bind Spurwink Associates and Corley Family Realty Limited Partnership herein, their respective successors and assigns, and all parties claiming by, through, or under them, so long as Spurwink Associates maintains the same buffer in which no building or paving shall be constructed or placed within 30 feet of Corley Family Realty Limited Partnership's northeasterly sideline.

excepting that certain lot or parcel of land conveyed to Corley Realty Limited Partnership by deed dated September 30, 1988, recorded in Book 8497, Page 86, and bounded and described as follows:

A certain lot or parcel of land situated on the southeast side of Riverside Street, in the City of Portland, County of Cumberland and State of Maine:

Beginning at a point on the southeast sideline of Riverside Street marking the westerly corner of land herein described and the northerly corner of land now or formerly of Eve Mitchell, said point being North 50° 22' 1.2" West 11.47 feet from a granite monument; THENCE, North 38° 26' 30" East along the southeasterly side of said Riverside Street 408.84 feet to an angle point; THENCE, North 36° 47' 33.6" East along the southeasterly side of said Riverside Street 14.12 feet to a point marking the northerly corner of land herein described and land of Spurwink Associates; THENCE, South 51° 33' 30" East 421 feet along land of Spurwink Associates to a point marking and easterly corner of land herein described and land now or formerly of the City of Portland; THENCE, South 36° 18' West 29.17 feet along land now or formerly of the City of Portland to an iron pipe marking a corner of land herein described; THENCE, South 51° 03' East 138.06 feet along land of the City of Portland to an iron pipe marking the easterly corner of land herein described and land now or formerly of Riverside Industrial Park; THENCE, South 39° 36' 30" West 404.13 feet along land of Riverside Industrial Park to an iron pipe marking the southerly corner of land herein described and land now or formerly of Mount Holyoke College; THENCE, North 50° 22' 1.2" West 540.16 feet along land now or formerly of Mount Holyoke College and Eve Mitchell to a granite monument; THENCE, North 50° 22' 1.2" West 11.47 feet along land now or formerly of Eve Mitchell to the southeast sideline of Riverside Street and the point of beginning, containing 5.377 acres.

