



PLANNING BOARD

CITY OF NEW BEDFORD
 JONATHAN F. MITCHELL, MAYOR

CITY CLERKS OFFICE
 NEW BEDFORD, MA
 2015 OCT 29 P 1:
 CITY CLERK

NOTICE OF DECISION - AMENDED

This Decision was originally issued by the City of New Bedford Planning Board on September 9, 2015. It was recorded at the City Clerk's Office on September 21, 2015. All interested parties received notice of that decision and the twenty day appeal period has run. This Amended Decision dated October 29, 2015 makes a technical correction regarding the Plot and Lot numbers for the subject property. See Exhibit A.

Case Number: 18 -15				
Request Type: Site Plan and Special Permit Approval				
Address: 139 Hathaway Road				
Zoning: Mixed Use Business and Industrial B				
Recorded Owner: S.B. Realty Limited Partnership				
Applicant: Paul Bishins, S.B. Realty Limited Partnership				
Applicant Address: 100 North Street, P.O. Box H-3103, New Bedford, MA 02747				
Application Submittal Date		Public Hearing Date		Decision Date
August 13, 2015		September 9, 2015		September 9, 2015
Assessor's Plot Number	Lot Number(s)	Book Number	Page Number	Certificate Number
101	✓ Part 14, 16 & 17, Land Court Lot 11	79	461	✓ 14729

Application: Request for Site Plan Review for new construction of a 7250 SF retail building, and a Special Permit for reduction of parking spaces.

Action: GRANTED, WITH CONDITIONS:

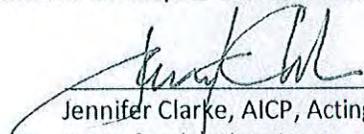
1. Applicant shall work with planning staff in the revision of plans and recommendations set forth under conditions of approval.
2. Applicant shall follow DPI recommendations to install a pedestrian crossing signal.
3. Applicant shall have a traffic study performed and to abide by any stipulations noted in the traffic study regarding pedestrian safety measures for improvement.
4. Applicant shall have a handicap accessible ramp, or curb cut, installed at the pedestrian safety crosswalk.
5. The application for Special Permit and revised Site Plan must accurately reflect the number of parking spaces that will serve the new business.

6. The applicant shall provide handicap parking area signage and pavement markings, and show on revised plans, three handicap parking spaces which will serve the business.
7. The landscaping shall provide trees true to Landscape Plan of 2-2.5 inch caliper diameter at the three-foot rise, or from the top of the burlap and ball.
8. The roof sheathing material shall be a Cool Roof of EPDM or PVC, in light or white color.
9. Hours of operation shall be corrected for agreement and consistency between applications for Site Plan approval and Special Permit, and no earlier than 8:00 a.m. and no later than 8:00 p.m.
10. Signage may be illuminated no later than one hour after closing time, but no later than 9:00 p.m.
11. Days of operation shall be six days per week, from Monday thru Saturday.
12. The applicant shall work with the abutter, McDonald's fast food restaurant, and planning staff to resolve access, parking, and egress issues.
13. All inconsistencies and typographical errors are to be corrected on plan sheets and applications.
14. The applicant shall clarify the party responsible for operation and maintenance associated with the storage of oil materials and provide documentation for the Planning division case file folder.

A copy of this Decision was filed with the City Clerk of the City of New Bedford on September 21th, 2015. Any person aggrieved by this decision for Site Plan Approval has twenty (20) days to appeal the decision in accordance with the procedures set forth in Section 8 of Chapter 40A of the General Laws of Massachusetts and Section 5490B of the City of New Bedford Site Plan Review Ordinance. Any person aggrieved by this decision for Special Permit has twenty (20) days to appeal the decision in accordance with the procedures set forth in Section 17 of Chapter 40A of the General Laws of Massachusetts.

09/21/2015

Date


Jennifer Clarke, AICP, Acting City Planner
Agent for the Planning Board

1) APPLICATION SUMMARY

Request by applicant, S. B. Realty Limited Partnership (100 North Street, New Bedford, MA 02740), for Site Plan Review for new construction of a 7250 SF retail building, and a Special Permit for reduction of parking spaces, located at 139 Hathaway Road (Map 104, Lot 14), in the Mixed Use Business/Industrial B zoning districts.

2) MATERIALS REVIEWED BY THE PLANNING BOARD

Plans Considered to be Part of the Application

The submittal was shown on a Plan Set for S.B. Realty Limited Partnership, 100 North Front Street, New Bedford, MA 02740, dated April 17, 2015, located at 139 Hathaway Road (Map 101, Lot 14), prepared by SITEC, Inc., 449 Faunce Corner Road, Dartmouth, MA 02747, and consisting of:

1. Cover Sheet
2. Site Layout
3. Locus Map
4. Site Grading & Utilities Plan
5. Landscape Plan
6. Lighting Plan

7. Demolition Plan
8. Erosion/Sedimentation Control Plan
9. Existing Conditions
10. Detail Sheet

Other Documents and Supporting Material

- o Certified Abutters List
- o Site Plan Review Application & Check List
- o Photographs
- o Transfer Certificate of Title (Book 79, Page 461, Certificate No. 14729)
- o Stormwater Management Report Stamped & Signed by Steven Gioiosa, P.E. on 08/03/2015
- o Staff Comments with Attachments:
 - Plan Set
 - Narrative
 - Application for Special Permit for Parking Reduction
 - Parking and Passenger Loading Zones 521 CMR
 - Memo from Department of Public Infrastructure Dated August 27, 2015
 - Lighting Tear Sheet
 - Elevation Plans
 - Sign Details

3) DISCUSSION

John Keegan of SITEC, Inc., presented the case for new construction of O'Reilly Auto Parts within an existing parking lot shared with other businesses and described the existing conditions and improvements to the site. Discussion ensued regarding on-site traffic circulation, parking and traffic circulation that conflicts with McDonald's fast food restaurant also located within the same site, delineation and number of parking spaces dedicated to the new business use, number of handicap parking spaces, pedestrian road crossing safety, need for traffic study, materials to be used for the roof, hours of operation, signage and a process for proper disposal of waste oil that the business will receive from its customer base.

Chair Dawicki asked for a motion to open the Public Hearing. Board Member Duff moved to open the hearing, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

No member of the public body spoke or requested to be recorded in favor nor in opposition to the case. Questions regarding the proposed parking plan which complicates the fast food restaurant's drive-thru pathway were directed to the Board by Lynn Simonello, who identified herself as owner of the adjoining 159 Hathaway Road McDonald's franchise. The information was taken under advisement, with the Board stipulating the applicant rework the site plan with planning staff to find a shared parking solution between parties.

Having no further questions from the Board, the motion was moved to close the public hearing by Board Member Duff, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

4) THE FOLLOWING CONDITIONS AND RESTRICTIONS SHALL APPLY

- o Applicant shall work with planning staff in the revision of plans and recommendations set forth under conditions of approval.

- Applicant shall follow DPI recommendations to install a pedestrian crossing signal.
- Applicant shall have a traffic study performed and to abide by any stipulations noted in the traffic study regarding pedestrian safety measures for improvement.
- Applicant shall have a handicap accessible ramp, or curb cut, installed at the pedestrian safety crosswalk.
- The application for Special Permit and revised Site Plan must accurately reflect the number of parking spaces that will serve the new business.
- The applicant shall provide handicap parking area signage and pavement markings, and show on revised plans, three handicap parking spaces which will serve the business.
- The landscaping shall provide trees true to Landscape Plan of 2-2.5 inch caliper diameter at the three-foot rise, or from the top of the of the burlap and ball.
- The roof sheathing material shall be a Cool Roof of EPDM or PVC, in light or white color.
- Hours of operation shall be corrected for agreement and consistency between applications for Site Plan approval and Special Permit, and no earlier than 8:00 a.m. and no later than 8:00 p.m.
- Signage may be illuminated no later than one hour after closing time, but no later than 9:00 p.m.
- Days of operation shall be six days per week, from Monday thru Saturday.
- The applicant shall work with the abutter, McDonald's fast food restaurant, and planning staff to resolve access, parking, and egress issues.
- All inconsistencies and typographical errors are to be corrected on plan sheets and applications.
- The applicant shall clarify the party responsible for operation and maintenance associated with the storage of oil materials and provide documentation for the Planning division case file folder.

5) DECISION

Board Member Duff made the motion to approve the Special Permit Application for **Case #18-15** for a reduction in parking by 36 spaces, seconded by Board Member Glassman.

A roll call vote was taken and unanimously approved Five (5) to Zero (0).

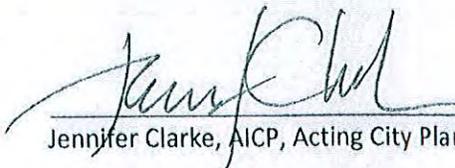
Board Member Kalife – Yes	Board Member Glassman – Yes	Board Member Cruz – Yes
Board Member Duff – Yes	Chair Person Dawicki - Yes	

Chair Dawicki then asked for a motion to grant Site Plan approval for **Case #18-15**, with conditions, for new construction of a 7250 SF retail building, located at 139 Hathaway Road (Map 104, Lot 14), in the Mixed Use Business/Industrial B zoning districts.

Board Member Duff made a motion to approve the Site Plan Application for **Case #18-15**, with conditions; seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

Filed with the City Clerk on:

09/21/2015
Date



Jennifer Clarke, AICP, Acting City Planner, Agent for the Planning Board

Hours of operation were proposed as 9:00 a.m. to 9:00 p.m. Monday thru Thursday and Friday operating hours between 8:00 a.m. - 5:00 p.m. Clients would be seen on weekends between the hours of 8:00 a.m. and 2:00 p.m. No additional signage is proposed, as the applicant will adapt the current Ashley Boulevard awning sign to meet the proposed business' needs. The applicant proposes to add one additional counselor and anticipates a patient load as being one patient each counselor per hour, with 15 minutes between appointments. The applicant indicated she currently turns away 8-30 people per week.

Chair Dawicki asked for a motion to open the Public Hearing. Board Member Duff moved to open the hearing, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

No member of the public spoke or requested to be recorded in favor of the case.

Speaking in opposition were Pete Gomes, Carol Cesolini, Wayne Kilanowich, Pat Sheridan, Beth Kilanowich, and Constance Yates, each of whom cited concerns around parking and traffic safety and business hours of operation. Several speaking in opposition expressed concern with the possibility of client service arrangements with the Stanly Street Addition Center [STAR]. Peter Cesolini asked to be recorded in opposition. Ward 1 Counselor James Oliveira and Counselor at Large Linda M. Morad asked the Planning Board to consider tabling the item until the ZBA has had an opportunity to consider the change of use from the current and proposed business use.

The public hearing was suspended and the applicant was invited back to the podium to offer further clarification. After duly considering the information presented, the Board concluded their findings by requesting the following documentation from the applicant in preparation of case continuance to October 7:

- Verification as to the availability of a handicap space that would be properly signed.
- Evidence that shared parking spaces with neighboring businesses has been secured.
- A plan for pedestrian crossing safety at Ashley Boulevard.

Chair Dawicki then asked for a motion to continue the case to the October 7, 2015 meeting of the City of New Bedford Planning Board. Board Member Duff moved to continue the hearing, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

6. Case #18-15: O'Reilly Auto Parts

Request by applicant, S. B. Realty Limited Partnership (100 North Street, New Bedford, MA 02740), for Site Plan Review for new construction of a 7250 SF retail building, and a Special Permit for reduction of parking spaces, located at 139 Hathaway Road (Map 104, Lot 14), in the Mixed Use Business/Industrial B zoning districts. Applicant's agent: SITEC, Inc., 449 Faunce Corner Road, Dartmouth, MA 02747.

John Keegan of SITEC, Inc., presented the case for new construction of O'Reilly Auto Parts within an existing parking lot shared with other businesses and described the existing conditions and improvements to the site. Discussion ensued regarding on-site traffic circulation, parking and traffic circulation that conflicts with McDonald's fast food restaurant also located within the same site, delineation and number of parking spaces dedicated to the new business use, number of handicap parking spaces, pedestrian road crossing safety, need for traffic study, materials to be used for the roof, hours of operation, signage and a process for proper disposal of waste oil that the business will receive from its customer base.

Chair Dawicki asked for a motion to open the Public Hearing. Board Member Duff moved to open the hearing, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

ATTACHMENT 2

*Note: These are minutes only. A complete copy of the meeting audio is available on the City of New Bedford website at:
<http://www.newbedford-ma.gov/cable-access/government-access-channel-18/program-schedule/>*

No member of the public body spoke or requested to be recorded in favor nor in opposition to the case. Questions regarding the proposed parking plan which complicates the fast food restaurant's drive-thru pathway were directed to the Board by Lynn Simonello, who identified herself as owner of the adjoining 159 Hathaway Road McDonald's franchise. The information was taken under advisement, with the Board stipulating the applicant rework the site plan with planning staff to find a shared parking solution between parties.

Having no further questions from the Board, the motion was moved to close the public hearing by Board Member Duff, seconded by Board Member Glassman. Motion carried unanimously Five (5) to Zero (0).

Board Member Duff made the motion to approve the Special Permit Application for **Case #18-15** for a reduction in parking by 36 spaces, seconded by Board Member Glassman.

A roll call vote was taken and unanimously approved Five (5) to Zero (0).

Board Member Kalife – Yes	Board Member Glassman – Yes	Board Member Cruz – Yes
Board Member Duff – Yes	Chair Person Dawicki - Yes	

Chair Dawicki then asked for a motion to grant Site Plan approval for **Case #18-15**, with conditions, for new construction of a 7250 SF retail building, located at 139 Hathaway Road (Map 104, Lot 14), in the Mixed Use Business/Industrial B zoning districts.

Board Member Duff made a motion to approve the Site Plan Application for **Case #18-15**, with the following conditions, seconded by Board Member Glassman:

- Applicant agrees to work with planning staff in the revision of plans and recommendations set forth under conditions of approval.
- Applicant agrees to follow DPI recommendations to install a pedestrian crossing signal.
- Applicant agrees have a traffic study performed and to abide by any stipulations noted in the traffic study regarding pedestrian safety measures for improvement.
- Applicant agrees to have a handicap accessible ramp, or curb cut, installed at the pedestrian safety crosswalk.
- The application for Special Permit and revised Site Plan must accurately reflect the number of parking spaces that will serve the new business.
- The applicant shall provide handicap parking area signage and pavement markings, and show on revised plans, three handicap parking spaces which will serve the business.
- The landscaping shall provide trees true to Landscape Plan of 2-2.5 inch caliper diameter at the three-foot rise, or top of burlap and ball.
- The roof sheathing material shall be a Cool Roof of EPDM or PVC, in light or white color.
- Hours of operation shall be corrected for agreement and consistency between applications for Site Plan approval and Special Permit, and no earlier than 8:00 a.m. and no later than 8:00 p.m.
- Signage may be illuminated no later than one hour after closing time, or no later than 9:00 p.m.
- Days of operation shall be six days per week, from Monday thru Saturday.
- The applicant shall work with the abutter, McDonald's fast food restaurant, and planning staff to resolve access, parking, and egress issues.
- All inconsistencies and typographical errors are to be corrected on plan sheets and applications.
- The applicant shall clarify the party responsible for operation and maintenance associated with the storage of oil materials and provide documentation for the Planning division case file folder.

Note: These are minutes only. A complete copy of the meeting audio is available on the City of New Bedford website at: <http://www.newbedford-ma.gov/cable-access/government-access-channel-18/program-schedule/>

Motion carried unanimously Five (5) to Zero (0).

7. Case #19-15: McDonald's USA

Request by applicant, McDonald's USA, LLC (Cedar-Kings, 44 South Bayles Avenue, Port Washington, NY 11050), for Site Plan Review for new construction of a 4600+/- SF fast-food restaurant, and a Special Permit for the reduction of parking spaces, located at 1080 Kings Highway (Map 125, Lot 29), in the Planned Business and Industrial - A zoning districts. Applicant's agent: Bohler Engineering, 352 Turnpike Road, Southborough, MA 01772.

Eric Dubrule of Bohler Engineering, Adam Gourmette, Area Construction Manager, and Lynn Simonello, Director of Operations for McDonald's described the proposed demolition of the existing fast food restaurant and subsequent reconstruction project that would include improvements to landscaping, drainage and storm water treatment with recharge going through a swale, lighting, and a parking reduction from 50 spaces to 40 spaces to Board members.

Illustrative plans were presented for consideration, with a motion for acceptance made by Board Member P. Cruz and seconded by Board Member A. Glassman.

It was noted that the applicant is expected to appear before the Zoning Board of Appeals to petition for a Variance for side and rear yard setbacks of the trash enclosure in deference to the adjacent wetlands and a Special Permit Application for a Fast Food Restaurant with Drive-thru.

Discussion ensued between applicant and Board members for further clarification of the case submittal. Chair Dawicki requested a motion from the Board to open the public hearing. No one spoke in favor, nor against, the project submittal.

With no other comments received, motion was made by Board Member K. Duff, with second by Board Member A. Glassman to close the hearing. Motion carried Five (5) to Zero (0).

Board Member Duff made the motion to approve the Special Permit Application for **Case #19-15** for a reduction in parking from 56 spaces to 40 spaces, seconded by Board Member Glassman.

A roll call vote was taken and resulted in the unanimous approval of the motion in a vote of Five (5) to Zero (0).

Board Member Kalife – Yes	Board Member Glassman – Yes	Board Member Cruz – Yes
Board Member Duff – Yes	Chair Person Dawicki - Yes	

Chair Dawicki then asked for a motion to grant Site Plan approval for **Case #19-15**, with conditions, for new construction of a 4600+/- SF fast-food restaurant, located at 1080 Kings Highway (Map 125, Lot 29), in the Planned Business and Industrial - A zoning districts.

Board Member Duff made a motion to approve the Site Plan Application for **Case #19-15**, with the following conditions, seconded by Board Member Glassman:

- Applicant agrees to donate ten street trees to the City of New Bedford to be planted at the City's discretion.
- Applicant agrees to propose a Landscape Plan to planning staff and work together with staff in creating an acceptable landscape design.
- The applicant will agree with the recommendations of DPI and take into accommodation all of DPI's suggested recommendations.

SITEC

Civil and Environmental Engineering
Land Use Planning

SITEC, Inc.
449 Faunce Corner Road
Dartmouth, MA 02747
Tel. (508) 998-2125 Fax (508) 998-7554

Unit C
769 Plain Street
Marshfield, MA. 02050
Tel. (781) 319-0100 Fax: (781) 834-4783

May 24, 2016

The City of New Bedford
Planning Board
133 William Street
New Bedford, MA 02740

HAND DELIVERED

Re: Proposed O'Reilly Auto Parts-Site Plan
139 Hathaway Road
Plat 101 Part Lot 14, 16 and 17 L.C. Lot 11
Case-Number 18-15 Site Plan Approval- Minor Amendment

Dear Planning Board Members;

Because of certain lease agreements that were overlooked during the approval of the above site plan, some minor changes to the approved site plan had to be made. The applicant would like approval for these changes so that construction can resume. The following minor changes that have been incorporated in the submitted plans are:

- The proposed building size has changed from a 7,225 sf box like shape to a more rectangular 7,125 sf building. The building has been shifted more west and south.
- Shifting the building location and changing the size, has created an additional 10 parking spaces, bringing the required overall site parking into conformance.

Case 19-16
Rev 05/25/2016

ATTACHMENT 3

SITEC

Civil and Environmental Engineering
Land Use Planning

SITEC, Inc.
449 Faunce Corner Road
Dartmouth, MA 02747
Tel. (508) 998-2125 Fax (508) 998-7554

Unit C
769 Plain Street
Marshfield, MA 02050
Tel. (781) 319-0100 Fax: (781) 834-4783

PROJECT DESCRIPTION

A. SITE DESCRIPTION

1. Owner: S.B. Realty Limited Partnership
2. Applicant: S.B. Realty Limited Partnership
100 North Street
New Bedford, MA 02740
3. Location: 139 Hathaway Road
New Bedford, MA 02740
Assessors Map 101-Part Lot 1416&17 L.C. Lot 11
Certificate 14729
4. Zoning: Mixed Use Business / Industrial B
5. Existing Site Conditions:

The subject property is a 10 acre, mixed use commercial property located on the northeast corner of Hathaway Road and Shawmut Avenue. At the present time, there are three separate buildings located on the site. These buildings include a McDonald's fast food restaurant located on the southwest corner of the site, a 25,000 sf retail/office building located along the easterly border of the site, and a mixed use retail building which is situated along the northerly border of the property.

The property is served by an off street parking lot and municipal water and sanitary sewer services.

ATTACHMENT 4

Case 19-16
Rev 05/25/2016



STAFF REPORT

FROM: Connie Brawders, Staff Planner

TO: Jennifer Clarke, AICP, Deputy Director, Department of Planning, Housing & Community Development

MEETING DATE: September 9, 2015

MASTER PLAN GOAL: Establish a sound foundation for future growth that builds upon its coastal location, preserves its historic legacy, and expands cultural and workforce opportunities.

MASTER PLAN ELEMENT: Jobs and Business

SUBJECT: **Case #18-15 – 139 Hathaway Road – O'Reilly Auto Parts**

Request to consider the following:

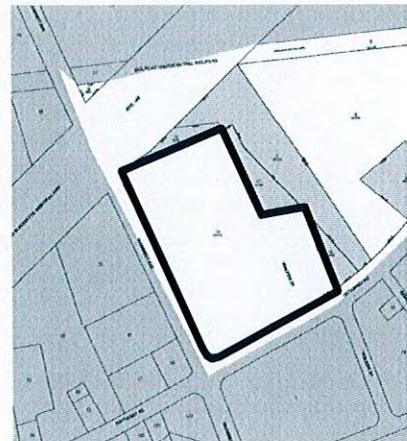
Request by applicant for **Site Plan** approval for new construction of a 7250 +/- SF retail building, with associated landscaping within the existing property, and **Special Permit** for reduction of parking spaces, located in the Mixed Use Business/Industrial B zoning districts (Attachment 1).

Applicant: S. B. Realty Limited Partnership, 100 North Street, New Bedford, MA 02740

Applicant's Agent: SITEC, Inc., 449 Faunce Corner Road, Dartmouth, MA 02747

Owner: Paul Bishins, S.B. Realty Limited Partnership, 100 North Street, P.O. Box H-3103, New Bedford, MA

Location: 139 Hathaway Road (Map 104, Lot 14)



Key Items for Consideration:

- Conformance to Site Plan & Zoning Criteria
- Traffic Impact & Interior Circulation
- Impact on Abutters
- Comments Received
- Provides Revitalization of Master Plan Development District POD

Case Overview:

The applicant's agent states in the Narrative the applicant was previously approved by the Planning Board in August 2010 for a Special Permit request as Case #19- 10. Applicant's agent states the previous building was larger and required more parking. No evidence was submitted with Case #18-15 regarding granting or extension of the Special Permit, therefore,

5370 Lapse. Special permits shall lapse if a substantial use there of or construction thereunder has not begun, except for good cause, within 12 months following the filing of the special permit approval (plus such time required to pursue or await the determination of an appeal referred to in G.L. c. 40A.s.17, from the grant thereof) with the City Clerk.

The applicant proposes in the Case #18-15 Narrative construction of a 7250 +/- SF free standing retail building adjacent to Hathaway Road between McDonald's fast food restaurant and a 25000SF retail/office building (Attachment 2). The existing parking facility will be reconstructed to improve site access and better define parking for the overall property. In addition to the new building construction, the specific site improvements include the following:

1. Redefined curb cuts and access aisles for the Hathaway Road driveways.
2. Improved land marking and islands for traffic control.
3. Construction of a sidewalk link from Hathaway Road to new building.
4. Screening the dumpster pad that will serve the new building.
5. Provide shared parking among tenants to reduce land necessary for paving and thereby increasing the amount of green space.

The applicant proposes to reduce storm water runoff by adding significant landscaped areas around the redeveloped portion of the site and provides stormwater calculations for the Board's review.

The applicant seeks a Special Permit under City of New Bedford Zoning Ordinance **Section 3120**, specifically **3121**, whereby the use of the common parking lot for separate uses has peak demands occurring at different times (Attachment 3). The tenants sharing parking at this site are: McDonald's, General Dentistry for Kids, Labor Ready, Red Apple Chinese Restaurant, Commonwealth of MA S.E. Housing Court, Price Rite, Family Dollar, and The Original Bob's Discount.

The case deliverables were received by the office of the New Bedford City Clerk on August 13, 2014.

The applicant has paid the fee for Site Plan Review, Special Permit Application for Parking Reduction, and legal notification in the amount of \$600.00.

Legal Notice has been prepared and publication dates in a newspaper of general circulation were August 26, 2015 and September 2, 2015.

Notice to the Abutter's were sent via USPS Certified Mail by Applicant's Agent and verified.

The owner of record is S.B. Realty Limited Partnership; a Massachusetts limited partnership having its usual place of business in New Bedford, as shown in Land Court Certificate 14729, Book 79, and Page 461.

There is no project time line for completion submitted for consideration by the Planning Board and no cost figure is provided by the applicant. (See **5452**. *The site plan shall be accompanied by a written statement indicating the estimated time required to complete the proposed project and any and all phases thereof. There shall be submitted a written estimate, showing in detail the costs of all site improvements planned.*)

Zoning:

The subject property is a 10-acre parcel in the Mixed Use Business/Industrial B zoning districts. The site is part of the Master Plan Development District POD. Goals of the District are to 1. Promote Mixed-use development, 2. Apply adaptive reuse of abandoned, vacant or underutilized buildings, and 3. Provide for flexibility in site and architectural design, restoration and building massing. Current uses on this mixed business parcel are retail, fast food restaurant, office and restaurant.

This type of activity requires site plan review under City of New Bedford Site Plan Review at **5420**.

Applicability. Section 5421. *whereby, any new industrial or commercial construction or expansion over two thousand (2,000) gross square feet, or any new industrial or commercial construction or expansion requiring more than five (5) additional parking spaces is to be reviewed by the Planning Board.*

The site is zoned Mixed Use Business/Industrial-B, which is intended to permit most types of industrial activities located in the zoning district. The City of New Bedford does not describe Retail Sales of Auto Parts in its table of definitions. In review of Appendix A. Table of Principal Use Regulations, C. Commercial, at line 12, *Retail Stores and services not elsewhere set forth* are permitted by-right in the I-B zoning district. This use may, therefore, be considered a by-right use in the MUB/Industrial Business zoning districts.

The zoning matrix is discussed under Technical Review of Plans.

Development Information:

The purpose of site plan review is to provide for detailed review of development proposals which have an impact on the natural or built environment of the City in order to promote the health, safety and general welfare of the community; to ensure adequate parking, safe and accessible pedestrian and vehicular circulation; and to minimize traffic impact on City streets.

Context:

The subject property is located on the northeast corner of Hathaway Road and Shawmut Avenue. Hathaway Road is a main arterial road running north-south through New Bedford. Route 140 exit 3 is approximately 0.2 miles from the site. The parcel is in close proximity to New Bedford Regional Airport. Penn Central Rail line easement is located northeast of the site.

Surrounding businesses include Cumberland Farms, McDonald's, General Dentistry for Kids, Labor Ready, Red Apple Chinese Restaurant, Commonwealth of MA S.E. Housing Court, Price Rite, Family Dollar, and The Original Bob's Discount.

Brickwood is a federally funded 300 unit housing development located on Hathaway Road within 300 feet of the proposed use.

Parking and Traffic:

Parking is discussed under Technical Review of Plans.

Driveway Permits are subject to Traffic Commission approval.

The proposed project with landscaping and parking lot redesign is an attractive land use and business improvement to this highly visible area.

Technical Review of Plans:

The plan submittal has been stamped and signed by Steven D. Gioiosa, PE.

1. Cover Sheet

- The Cover Sheet Zoning Requirements Matrix is incomplete. Applicant's agent must add a column heading for Industrial B noting the following from City of New Bedford Municipal Code Appendix B of the Table of Dimensions: Lot Area = 0, Lot Frontage = 0, Setbacks: Front = 25 FT, Side Setbacks = 25 FT (Also correct MUB to read 10 FT, not 0), Rear = 25 FT, Building Height in Stories = 7 (Also correct MUB to read 7, not 100), Lot Coverage = 50%, and Green Space = 20%.
- Grossmans is a 33420 SF business engaged in retail sale of building materials and meets the description under Appendix C – Table of Parking & Loading Requirements, whereby parking and loading requirements for this type of use is *One (1) space per each 400 SF of gross floor area*. A Google search shows Grossmans advertised as a "Home-improvement chain with supplies for kitchen, bath, floors, doors & windows, at discount prices." The parking summary reflects parking for businesses engaged in the warehousing and distribution of goods & materials including building and construction supplies and should be revised accordingly.
- Parking requirements total 484 spaces, less 50 shared spaces, provide the applicant with 434 parking spaces. According to the applicant's agent, there are 398 spaces. The applicant should seek to amend the Special Permit for parking Reduction in addition to the request for shared parking.
- The number of handicap parking spaces provided are not listed on the Cover Sheet.
- One Loading Zone is shown on the Site Plan, meeting the standards of *one loading space for each building containing more than 5000 SF and less than 10000 SF* and should be included in the Matrix.

2. Site Layout

The Site Plan meets City of New Bedford parking stipulations under **Section 3144**. *Where a drive or aisle, other than a street, is required to maneuver a vehicle into or out of a parking space, such drive or aisle shall be at least twenty-two (22) feet wide for parking spaces situated at right angles, or nearly right angles to the aisle. For parking spaces situated at an angle of thirty (30) to sixty (60) degrees to the aisle, the required width of the aisle shall be at least fifteen (15) feet.*

The Site Plan meets City of New Bedford parking space dimensions under Section 3150. **Size of Parking Space.** *A parking space shall be a rectangle at least nine (9) feet by twenty (20) feet exclusive of any required drive or aisle.*

The Site Plan illustrates two handicap parking spaces in proximity to the new structure. A perimeter count of the spaces totals 70. Parking and Passenger Loading Zones under 521 CMR stipulates the required number of spaces for 51-75 parking spaces in lot to be three. The applicant should provide evidence that the ADA parking requirements are met as suggested under the Cover Sheet technical review comments (Attachment 4).

The plan illustrates the loading zone and screened dumpster.

If the applicant intends to install a satellite dish, this should be included on a revised Site Plan.

3. Locus Map

The context aerial with the site highlighted and North arrow are shown on the locus map.

4. Site Grading & Utilities Plan

See Comments from DPI Commissioner Ronal Labelle (Attachment 3)

5. Landscape Plan

In compliance with **Section 3300** of the City of New Bedford Code of Ordinances, the applicant has presented a robust, colorful Landscape Plan designed by Stephanie L. Fuss of Stephanie Fuss Associates. A PowerPoint presentation with graphic images from a Google Search has been sent to the Planning Board in preparation of the meeting.

6. Lightning Plan

The Lighting Plan sheet Notes and lighting specification tear sheet included in the applicant's agent's bound report provide the board with following information: The product is Cree Edge ARE EDG, having an Optic 3M Type III Medium, with LED count of 60, in Series E, with UL Voltage of 120-277V, Drive Current of 700 mA. And FID Edg of 25". Options include 4000K Color Temperature. (There are typos in the Plan Notes and should be corrected for historical reference.) Directional mounting appears to be Direct Arm (Attachment 6).

This product is used for parking lots, walkways, campuses, car dealerships, office complexes and internal roadways.

7. Demolition Plan

This is new construction on an existing parking lot. The Demolition Plan meets the checklist requirements as applicable.

8. Erosion/Sedimentation Control Plan

See comments from Sarah Porter, Conservation Agent for the City of New Bedford.

9. Existing Conditions Plan

A site visit was performed on August 26, 2015. The plan meets the checklist for Existing Conditions as appropriate

10. Detail Sheet

Typical details are shown on this sheet.

Sign Details:

Sign specifications were illegible.

Site Visit:

A site visit was conducted on August 26, 2015. Findings include the following: This is an aging strip mall development that will benefit from the new construction and landscape plan proposal. Surrounding context has been described. This site abuts Case #20-15 Thomson Outdoor Flea Market.

Interdepartmental Review Comments:

Plans were sent for review to the following departments: City Solicitor, Health Department, Inspectional Services, Engineering Department, Public Infrastructure, Conservation Commission, Fire Department, and School Department.

The Planning Division has received these responses:

Ronald Labelle, Commissioner of Public Works, provided a Memorandum dated August 27, 2015 regarding the proposed O'Reilly Auto Parts –Site Plan on Hathaway Road at Map 101, Lot 14. Please see Attachment 4.

From: Shelley Hebert [<mailto:shebert@newbedfordschools.org>]

Sent: Wednesday, September 02, 2015 7:57 AM

To: Constance M. Brawdgers

Cc: Barry Rabinovitch

Subject: FW: Reminder: Review Comments for the September 9, 2015 Planning Board Meeting
We have no remarks on the below cases.

September 2, 2015

The Health Dept has No Comment on Case #20-15: Thomson Antique World

Brenda K. Weis, MSPH, PhD

Director of Public Health

City of New Bedford

New Bedford, MA 02740

Sarah Porter, Conservation Agent for the City of New Bedford responded via email on August 28, 2015
Case#20-15 Thompson Antique World - This project is not in or within 100' of a local or State regulated resource area. Therefore, no permit is required from the Conservation Commission.

Please let me know if you have any questions.

Staff Findings :

- The Zoning Matrix must be revised.
- The applicant should seek to amend the Special Permit for parking Reduction in addition to the request for shared parking.
- Confirm location of satellite dish, if applicable.
- The applicant should provide evidence that the ADA parking requirements are met as suggested under the Cover Sheet technical review comments.
- Typos in Lighting Plan Notes should be corrected, directional arm mounting clarified and application of use further discussed among the Board and applicant's agent to see that it meets with the Board's expectations and performance standards.
- Legible Elevation Plans were not presented with the case submittal. The font size made it difficult to review the information. Full-size plan sheets or 11" X 17" should be presented for review (Attachment 7).
- Sign Details were illegible and clear specifications should be presented for review (Attachment 8).

Respectfully submitted.

Attachments:

1. Plan Set
2. Narrative
3. Application for Special Permit for Parking Reduction
4. Parking and Passenger Loading Zones 521 CMR
5. Memorandum from DPI Commissioner Ronald Labelle Dated August 27, 2015
6. Lighting Tear Sheet
7. Elevation Plans
8. Sign Details



CITY OF NEW BEDFORD
Jonathan F. Mitchell, Mayor

Department of Public Infrastructure
Ronald H. Labelle
Commissioner

Water
Wastewater
Highways
Engineering
Cemeteries
Park Maintenance
Energy

November 30, 2015

Ms. Jennifer Clarke, Deputy Director
Dept. of Planning, Housing & Community Development
City of New Bedford
133 Williams St., Room 303
New Bedford, MA 02740

SUBJECT: Proposed O'Reilly Auto Parts
North Side Hathaway Rd. (Assessor's Map 101 Lot 14)
Mid-Block Pedestrian Signal

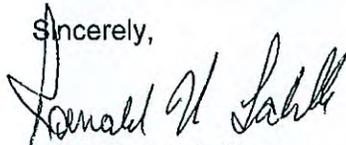
Dear Ms. Clarke:

The Department of Public Infrastructure reviewed and approved the site plan for the above project as submitted, with twelve conditions attached. One of those conditions (#6 on our Site Plan Review memorandum dated August 27, 2015) calls for the installation of a mid-block pedestrian signal to allow pedestrian traffic to cross Hathaway Road to address the problematic pedestrian crossing conditions at this location.

In response to our request, Mr. John Keegan from SITEC performed pedestrian counts at the location, and reported that the pedestrian counts do not trigger any of the Warrants for a pedestrian signal. The results of the Traffic Warrant performed for the installation of a mid-block crossing indicated that it did not meet the 100 pedestrians crossing for any 4 hour period of a normal day. However, after SITEC's evaluation of the pedestrian crossing conditions at the site, they concluded that if the mid-block crossing was updated and advanced signage was installed, it would increase the crosswalk's visibility and prompt motorists to slow down, rendering the crossing safer. Therefore, in light of the information in the report submitted by SITEC, the Department of Public Infrastructure has agreed to allow the installation of an updated mid-block crossing with advanced signage in lieu of the originally requested mid-block pedestrian signal.

If you should have any questions, please feel free to contact Manuel Silva, Supervising Civil Engineer, at 508-979-1550.

Sincerely,


Ronald H. Labelle
Commissioner

Cc: Manuel H. Silva, Supervising Civil Engineer



CITY OF NEW BEDFORD
Jonathan F. Mitchell, Mayor

Department of Public Infrastructure

Ronald H. Labelle
Commissioner

Water
Wastewater
Highways
Engineering
Cemeteries
Park Maintenance

MEMORANDUM

TO: City of New Bedford Planning Board
FROM: Ronald H. Labelle, Commissioner, D.P.I.
DATE: August 27, 2015
RE: Proposed O'Reilley Auto Parts- Site Plan
Hathaway Road
Plot 101 Lot 14

PLANNING

AUG 27 2015

DEPARTMENT

The Department of Public Infrastructure has reviewed the proposed site plan referenced above and recommends approval with the following conditions:

1. Driveway permits are subject to Traffic Commission approval.
2. Permits for sidewalk, driveways, drainage, sewer and water must be obtained from the Department of Public Infrastructure Engineering Division.
3. Driveways to be built in accordance with City of New Bedford regulations and with 4 foot transitions curb on both sides.
4. Developer to replace sidewalk in between both driveways on Hathaway Road, with a cement ribbon sidewalk. Developer to plant 5 trees within the new grass ribbon area.
5. Drainage design must comply with Phase II, Mass Department storm water management standards.
6. A mid block pedestrian signal installed to allow pedestrian traffic to cross Hathaway Road.
7. Developer to check condition of existing sewer service and lift station. Also, does the existing lift station have the capacity for the additional flow for the proposed building.
8. Develop to check condition of existing water service. Water trace to be installed on proposed water service.
9. All utilities to be installed in accordance with City of New Bedford standards.
10. The Department of Public Infrastructure requires a final set of approved plans to be submitted, that reflects all revisions made prior to the start of construction.

11. Developer and site contractor must schedule a pre-construction meeting with the Department of Public Infrastructure prior to the start on construction.
12. Upon completion, Engineer must submit "As Built Drawings" in CADD format prior to the certificate of occupancy being issued.

/ct

Cc: Department of Inspectional Services
Environmental Stewardship
Sitec
S.B. Realty Limited Partnership

**MINOR MODIFICATION
SITE PLAN REVIEW**

FOR

**S.B. REALTY LIMITED PARTNERSHIP
139 HATHAWAY ROAD
NEW BEDFORD, MA 02740**

SITEC

Civil and Environmental Engineering,
Land Use Planning

SITEC, Inc.
449 Faunce Corner Road
Dartmouth, MA 02747
Tel. (508) 998-2125 FAX (508) 998-7554

769 Plain Street, Unit C
Marshfield, MA 02050
Tel. (781) 319-0100 FAX (781) 834-4783

MAY 13 2016

DEPARTMENT

SITEC

Civil and Environmental Engineering
Land Use Planning

SITEC, Inc.
449 Faunce Corner Road
Dartmouth, MA 02747
Tel. (508) 998-2125 Fax (508) 998-7554

Unit C
769 Plain Street
Marshfield, MA 02050
Tel. (781) 319-0100 Fax: (781) 834-4783

DRAINAGE SUMMARY

PROJECT: Retail Development
139 Hathaway Road
New Bedford, MA

Date: MAY 20, 2016



EXISTING CONDITIONS

A new re-development of approximately 0.8 acre is proposed for this 10 acre site. The area of development will be midway on the property along Hathaway Road. All of the area to be developed is 100 % impervious bituminous pavement. Currently stormwater sheet flows northeasterly across this pavement into an on-site drainage system. The system consists of catch basins, piping and drainage manholes and discharges off site near the embankment of Route 140 north.

PROPOSED CONDITONS

A new 7,150 sf freestanding retail building is now proposed in this area. The existing facility entrances on Hathaway Road will be improved. Parking will be better defined. A significant amount of the existing pavement will be replaced with landscaping. Stormwater from the development will be treated with a new Stormceptor 450-l stormwater unit and the roof top run off will be directed into an underground infiltration/detention system. Both the Stormceptor and the roof top infiltration system will be connected to existing drainage system.

ANALYSIS

Existing and proposed conditions were analyzed using a computer version of TR-20 (attached). Soils on site are listed as urban land (excavated or filled). Normally this type of soil is considered to be in Hydrological Class C. A summary of the analysis is shown below. As can be seen there is a decrease in not only Peak Flows but in volume of run off leaving the site.

ESCP

5.0 CERTIFICATION AND NOTIFICATION

I certify under the penalty of law that I have read and understand The National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges for Construction Activities and terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: John Keegan

Title: Project Engineer

Signature: 

Date: May 20, 2016

IV. Project/Site Information

Project/Site Name: O'Reilly's Auto Store

Project/Site Address:

Street/Location:

City: New Bedford

State: MA

Zip: 02740

County or similar government subdivision: Bristol

For the project/site for which you are seeking permit coverage, provide the following information:

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude 1. 41.39.37 N(degrees, minutes, seconds) Longitude 1. 70.56.46 W(degrees, minutes, seconds)
 2. _____ N(degrees, minutes, decimal) 2. _____ W(degrees, minutes, decimal)
 3. _____ N(degrees, decimals) 3. _____ W(degrees, decimals)

Latitude/Longitude Data Source: U.S.G.S topographical map EPA Web Site GPS Other: Google

If you used a U.S.G.S. topographic map, what was the scale?

Horizontal Reference Datum: NAD 27 NAD 83 or WGS 84 Unknown

Is your project located in Indian Country lands? Yes No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property:

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? Yes No

Estimated Project Start Date: 12/23/2015

Estimated Project Completion Date: 9/14/2016

Estimated Area to be Disturbed (to the nearest quarter acre): 1.3

Have earth-disturbing activities commenced on your project/site? Yes No

If yes, is your project an emergency-related project? Yes No

Have stormwater discharges from your project/site been covered previously under an NPDES permit? Yes No

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes No

Are there any surface waters within 50 feet of your project's earth disturbances? Yes No

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Surface water(s) to which discharge	Impaired Water	Listed Water Pollutant(s)	Tier 2, 2.5 or 3	Source	TMDL Name and Pollutant
Drainage ditch	No		No	Site Survey	

Describe the methods you used to complete the above table: Please refer to the Source(s) in the above table.

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? Yes No

If yes, will you use cationic treatment chemicals* at your construction site? Yes No

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? Yes No

S.B. REALTY LIMITED PARTNERSHIP
 139 HATHAWAY ROAD
 NEW BEDFORD, MA

Summary of TR-20 Analysis

StormEvent	<u>2-Year</u>		<u>10-Year</u>		<u>100-Year</u>	
	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>
	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>
Existing	2.53	1.193	3.79	0.292	6.75	0.525
Proposed	2.11	1.145	3.33	0.243	6.15	0.478
Decrease	0.42		0.825		0.6	
Decrease		0.048		0.049		0.047

Recharge

Existing Impervious

35256 sf

Proposed Impervious

26951 sf

Decrease in Impervious

8305 sf

This project is a redevelopment.
 As noted above, no increase in peak rate or volume has occurred
 No increase in impervious area has occurred. No Recharge volume is required.
 All roof top run off will be infiltrated via a sub surface chamber system.
 Infiltration requirements are the maximum extent practicable.

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.027	74	>75% Grass cover, Good, HSG C (PC)
1.551	98	Paved parking, HSG C (ACB, Exist, PC)
0.164	98	Roofs, HSG D (Building)
0.326	70	Woods, Good, HSG C (ACB, PC)
2.067	93	TOTAL AREA

S&B New Bedford2016REV

Prepared by SITEC, INC

HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Printed 5/20/2016

Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.027	0.000	0.000	0.027	>75% Grass cover, Good	PC
0.000	0.000	1.551	0.000	0.000	1.551	Paved parking	ACB, Exist, PC
0.000	0.000	0.000	0.164	0.000	0.164	Roofs	Building
0.000	0.000	0.326	0.000	0.000	0.326	Woods, Good	ACB, PC
0.000	0.000	1.903	0.164	0.000	2.067	TOTAL AREA	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ACB: Area to CB Runoff Area=19,540 sf 63.97% Impervious Runoff Depth>1.96"
Tc=6.0 min CN=88 Runoff=1.07 cfs 0.073 af

Subcatchment Building: Proposed Runoff Area=7,150 sf 100.00% Impervious Runoff Depth>2.87"
Tc=6.0 min CN=98 Runoff=0.51 cfs 0.039 af

Subcatchment Exist: Existing Conditions Runoff Area=35,256 sf 100.00% Impervious Runoff Depth>2.87"
Tc=6.0 min CN=98 Runoff=2.53 cfs 0.193 af

Subcatchment PC: Proposed Conditions Runoff Area=28,106 sf 70.45% Impervious Runoff Depth>2.13"
Tc=6.0 min CN=90 Runoff=1.65 cfs 0.114 af

Reach TAA: Total Area Analysed Inflow=2.11 cfs 0.145 af
Outflow=2.11 cfs 0.145 af

Pond ST: Retention/Detention System Peak Elev=97.04' Storage=426 cf Inflow=0.51 cfs 0.039 af
Discarded=0.00 cfs 0.001 af Primary=0.47 cfs 0.031 af Outflow=0.47 cfs 0.031 af

Total Runoff Area = 2.067 ac Runoff Volume = 0.420 af Average Runoff Depth = 2.44"
17.04% Pervious = 0.352 ac 82.96% Impervious = 1.715 ac

Summary for Subcatchment Building: Proposed Building

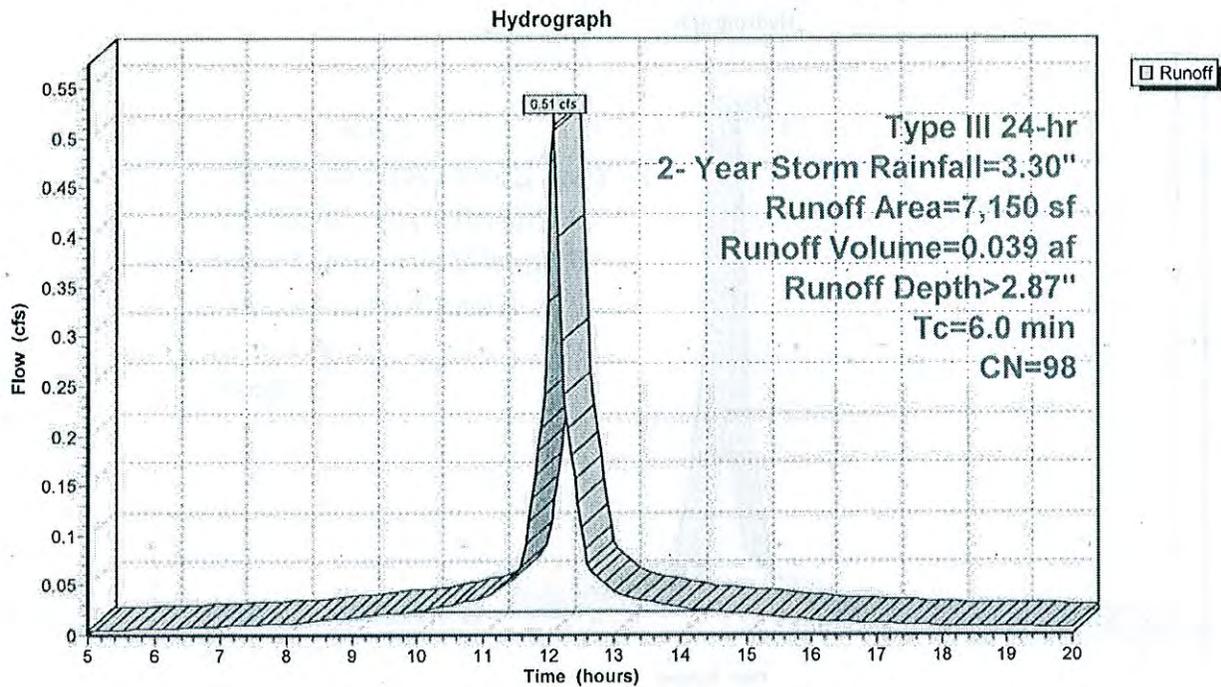
Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.039 af, Depth> 2.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2- Year Storm Rainfall=3.30"

Area (sf)	CN	Description
7,150	98	Roofs, HSG D
7,150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Building: Proposed Building



Summary for Subcatchment PC: Proposed Conditions

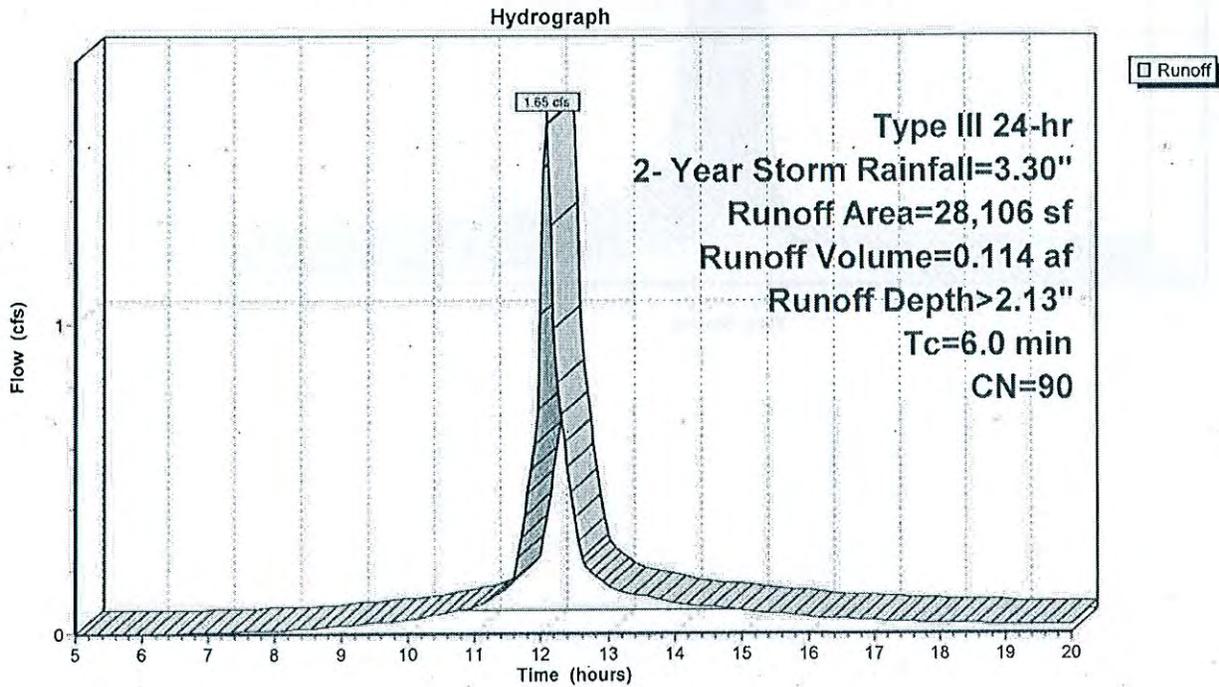
Runoff = 1.65 cfs @ 12.09 hrs, Volume= 0.114 af, Depth> 2.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2- Year Storm Rainfall=3.30"

Area (sf)	CN	Description
19,801	98	Paved parking, HSG C
7,140	70	Woods, Good, HSG C
1,165	74	>75% Grass cover, Good, HSG C
28,106	90	Weighted Average
8,305		29.55% Pervious Area
19,801		70.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 minute minimum

Subcatchment PC: Proposed Conditions



Summary for Pond ST: Retention/Detention System

Inflow Area = 0.164 ac, 100.00% Impervious, Inflow Depth > 2.87" for 2- Year Storm event
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.039 af
 Outflow = 0.47 cfs @ 12.12 hrs, Volume= 0.031 af, Atten= 9%, Lag= 2.2 min
 Discarded = 0.00 cfs @ 12.12 hrs, Volume= 0.001 af
 Primary = 0.47 cfs @ 12.12 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.04' @ 12.12 hrs Surf.Area= 510 sf Storage= 426 cf

Plug-Flow detention time= 106.4 min calculated for 0.031 af (80% of inflow)
 Center-of-Mass det. time= 51.5 min (789.8 - 738.3)

Volume	Invert	Avail.Storage	Storage Description
#1	94.25'	664 cf	17.00'W x 17.00'L x 4.50'H Prismaoid Z=1.0 2,111 cf Overall - 98 cf Embedded = 2,013 cf x 33.0% Voids
#2	94.95'	98 cf	ADS_StormTech SC-740 x 2 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		762 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	96.55'	6.0" Round Culvert L= 114.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.55' / 90.10' S= 0.0566 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	94.25'	0.050 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.00 cfs @ 12.12 hrs HW=97.03' (Free Discharge)
 ↑ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.46 cfs @ 12.12 hrs HW=97.03' (Free Discharge)
 ↑ **1=Culvert** (Inlet Controls 0.46 cfs @ 2.36 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ACB: Area to CB Runoff Area=19,540 sf 63.97% Impervious Runoff Depth>3.37"
Tc=6.0 min CN=88 Runoff=1.80 cfs 0.126 af

Subcatchment Building: Proposed Runoff Area=7,150 sf 100.00% Impervious Runoff Depth>4.33"
Tc=6.0 min CN=98 Runoff=0.77 cfs 0.059 af

Subcatchment Exist: Existing Conditions Runoff Area=35,256 sf 100.00% Impervious Runoff Depth>4.33"
Tc=6.0 min CN=98 Runoff=3.79 cfs 0.292 af

Subcatchment PC: Proposed Conditions Runoff Area=28,106 sf 70.45% Impervious Runoff Depth>3.57"
Tc=6.0 min CN=90 Runoff=2.70 cfs 0.192 af

Reach TAA: Total Area Analysed Inflow=3.33 cfs 0.243 af
Outflow=3.33 cfs 0.243 af

Pond ST: Retention/Detention System Peak Elev=97.30' Storage=472 cf Inflow=0.77 cfs 0.059 af
Discarded=0.00 cfs 0.001 af Primary=0.67 cfs 0.051 af Outflow=0.67 cfs 0.051 af

Total Runoff Area = 2.067 ac Runoff Volume = 0.669 af Average Runoff Depth = 3.88"
17.04% Pervious = 0.352 ac 82.96% Impervious = 1.715 ac

Summary for Subcatchment Building: Proposed Building

Runoff = 0.77 cfs @ 12.09 hrs, Volume= 0.059 af, Depth> 4.33"

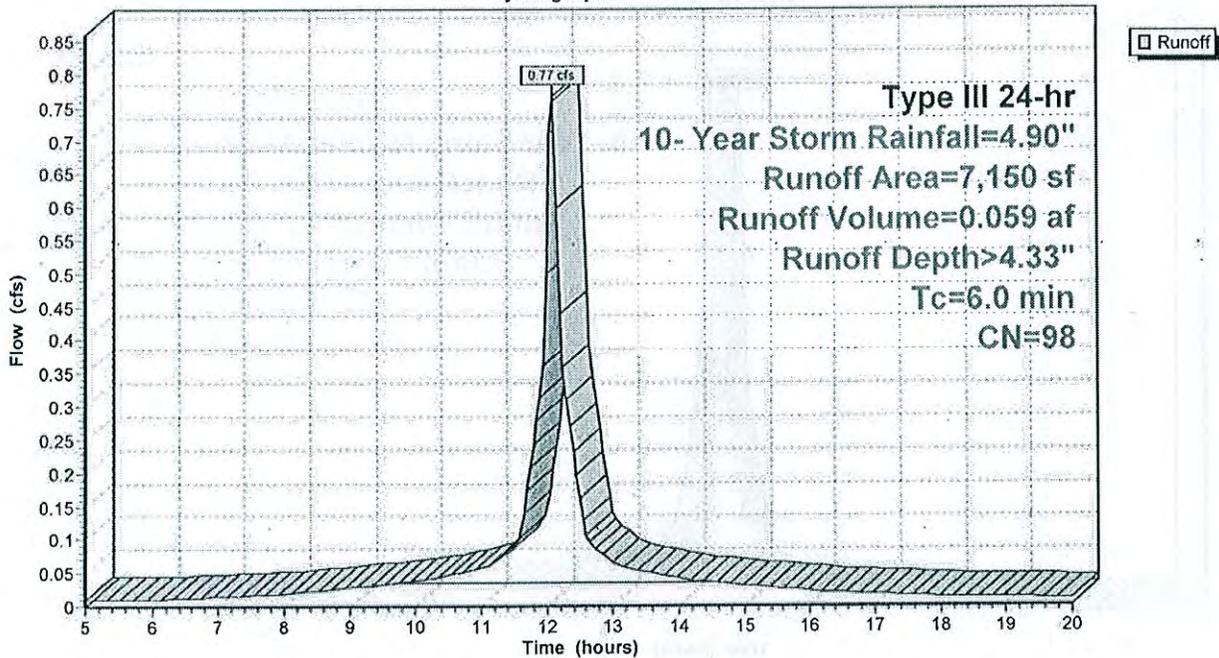
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10- Year Storm Rainfall=4.90"

Area (sf)	CN	Description
7,150	98	Roofs, HSG D
7,150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Building: Proposed Building

Hydrograph



Summary for Subcatchment PC: Proposed Conditions

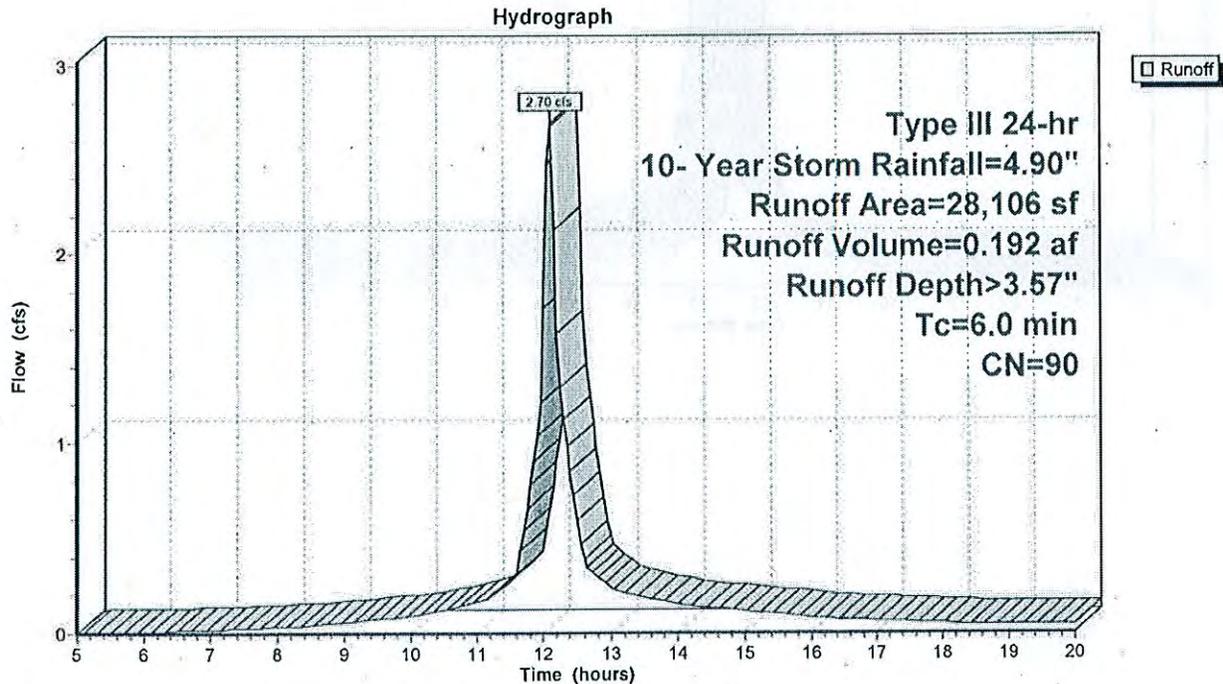
Runoff = 2.70 cfs @ 12.09 hrs, Volume= 0.192 af, Depth> 3.57"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10- Year Storm Rainfall=4.90"

Area (sf)	CN	Description
19,801	98	Paved parking, HSG C
7,140	70	Woods, Good, HSG C
1,165	74	>75% Grass cover, Good, HSG C
28,106	90	Weighted Average
8,305		29.55% Pervious Area
19,801		70.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 minute minimum

Subcatchment PC: Proposed Conditions



Summary for Pond ST: Retention/Detention System

Inflow Area = 0.164 ac, 100.00% Impervious, Inflow Depth > 4.33" for 10- Year Storm event
 Inflow = 0.77 cfs @ 12.09 hrs, Volume= 0.059 af
 Outflow = 0.67 cfs @ 12.13 hrs, Volume= 0.051 af, Atten= 13%, Lag= 2.9 min
 Discarded = 0.00 cfs @ 12.13 hrs, Volume= 0.001 af
 Primary = 0.67 cfs @ 12.13 hrs, Volume= 0.051 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.30' @ 12.13 hrs Surf.Area= 533 sf Storage= 472 cf

Plug-Flow detention time= 83.2 min calculated for 0.051 af (86% of inflow)
 Center-of-Mass det. time= 41.5 min (776.7 - 735.2)

Volume	Invert	Avail.Storage	Storage Description
#1	94.25'	664 cf	17.00'W x 17.00'L x 4.50'H Prismaoid Z=1.0 2,111 cf Overall - 98 cf Embedded = 2,013 cf x 33.0% Voids
#2	94.95'	98 cf	ADS StormTech SC-740 x 2 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		762 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	96.55'	6.0" Round Culvert L= 114.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.55' / 90.10' S= 0.0566 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	94.25'	0.050 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.00 cfs @ 12.13 hrs HW=97.28' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.66 cfs @ 12.13 hrs HW=97.28' (Free Discharge)
 ↳1=Culvert (Inlet Controls 0.66 cfs @ 3.34 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ACB: Area to CB Runoff Area=19,540 sf 63.97% Impervious Runoff Depth>4.46"
Tc=6.0 min CN=88 Runoff=2.34 cfs 0.167 af

Subcatchment Building: Proposed Runoff Area=7,150 sf 100.00% Impervious Runoff Depth>5.42"
Tc=6.0 min CN=98 Runoff=0.96 cfs 0.074 af

Subcatchment Exist: Existing Conditions Runoff Area=35,256 sf 100.00% Impervious Runoff Depth>5.42"
Tc=6.0 min CN=98 Runoff=4.73 cfs 0.366 af

Subcatchment PC: Proposed Conditions Runoff Area=28,106 sf 70.45% Impervious Runoff Depth>4.67"
Tc=6.0 min CN=90 Runoff=3.48 cfs 0.251 af

Reach TAA: Total Area Analysed Inflow=4.24 cfs 0.317 af
Outflow=4.24 cfs 0.317 af

Pond ST: Retention/Detention System Peak Elev=97.53' Storage=514 cf Inflow=0.96 cfs 0.074 af
Discarded=0.00 cfs 0.001 af Primary=0.81 cfs 0.066 af Outflow=0.81 cfs 0.066 af

Total Runoff Area = 2.067 ac Runoff Volume = 0.858 af Average Runoff Depth = 4.98"
17.04% Pervious = 0.352 ac 82.96% Impervious = 1.715 ac

Summary for Subcatchment Building: Proposed Building

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 0.074 af, Depth> 5.42"

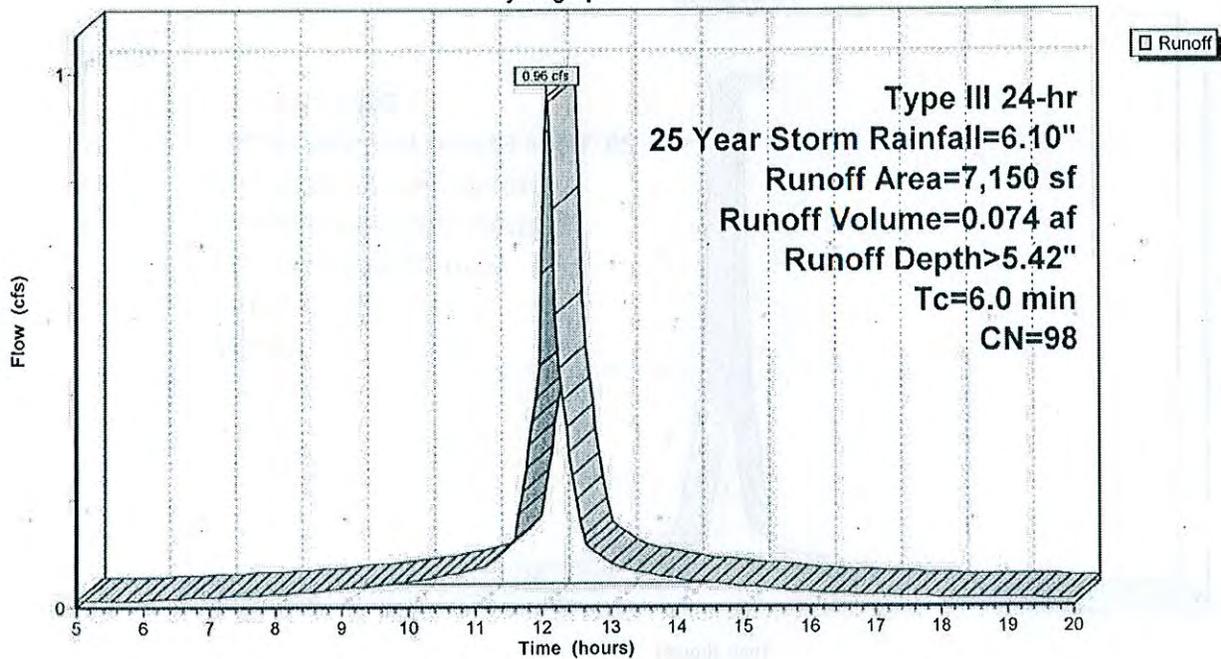
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 Year Storm Rainfall=6.10"

Area (sf)	CN	Description
7,150	98	Roofs, HSG D
7,150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Building: Proposed Building

Hydrograph



Summary for Subcatchment PC: Proposed Conditions

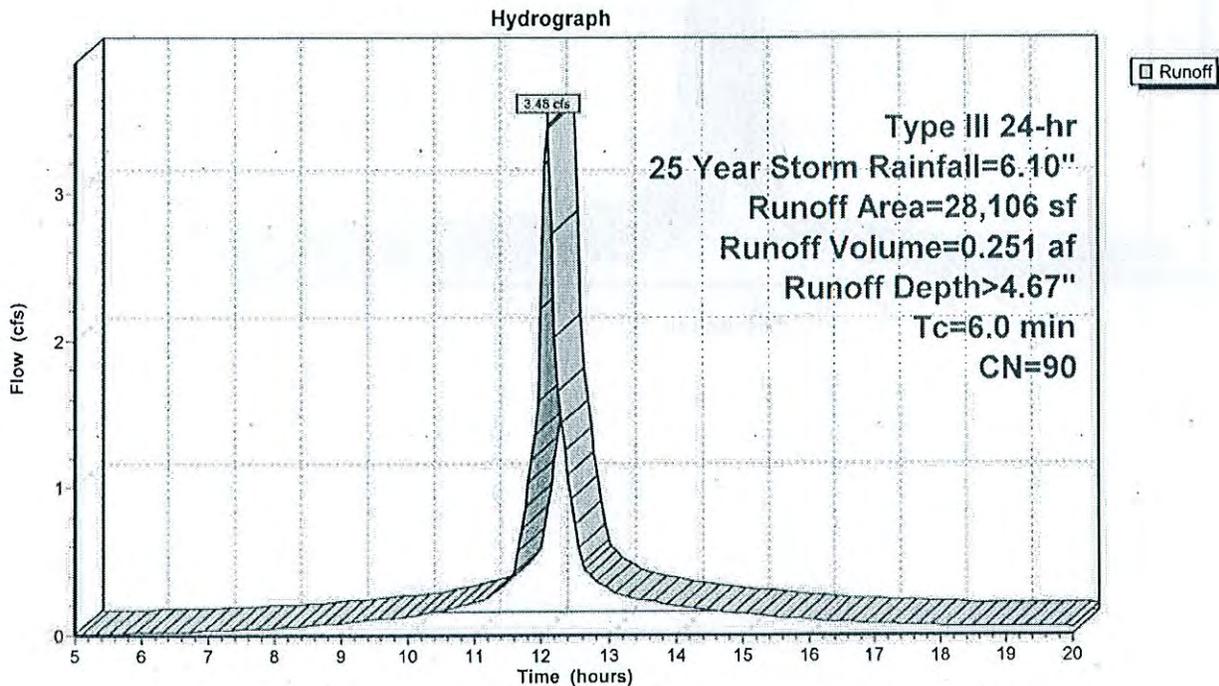
Runoff = 3.48 cfs @ 12.09 hrs, Volume= 0.251 af, Depth> 4.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 Year Storm Rainfall=6.10"

Area (sf)	CN	Description
19,801	98	Paved parking, HSG C
7,140	70	Woods, Good, HSG C
1,165	74	>75% Grass cover, Good, HSG C
28,106	90	Weighted Average
8,305		29.55% Pervious Area
19,801		70.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 minute minimum

Subcatchment PC: Proposed Conditions



Summary for Pond ST: Retention/Detention System

Inflow Area = 0.164 ac, 100.00% Impervious, Inflow Depth > 5.42" for 25 Year Storm event
 Inflow = 0.96 cfs @ 12.09 hrs, Volume= 0.074 af
 Outflow = 0.81 cfs @ 12.14 hrs, Volume= 0.066 af, Atten= 16%, Lag= 3.3 min
 Discarded = 0.00 cfs @ 12.14 hrs, Volume= 0.001 af
 Primary = 0.81 cfs @ 12.14 hrs, Volume= 0.066 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.53' @ 12.14 hrs Surf.Area= 555 sf Storage= 514 cf

Plug-Flow detention time= 71.8 min calculated for 0.066 af (89% of inflow)
 Center-of-Mass det. time= 36.1 min (770.2 - 734.1)

Volume	Invert	Avail.Storage	Storage Description
#1	94.25'	664 cf	17.00'W x 17.00'L x 4.50'H Prismatoid Z=1.0 2,111 cf Overall - 98 cf Embedded = 2,013 cf x 33.0% Voids
#2	94.95'	98 cf	ADS_StormTech SC-740 x 2 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		762 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	96.55'	6.0" Round Culvert L= 114.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.55' / 90.10' S= 0.0566 ' /' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	94.25'	0.050 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.00 cfs @ 12.14 hrs HW=97.52' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.80 cfs @ 12.14 hrs HW=97.52' (Free Discharge)
 ↳1=Culvert (Inlet Controls 0.80 cfs @ 4.07 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ACB: Area to CB Runoff Area=19,540 sf 63.97% Impervious Runoff Depth>6.85"
Tc=6.0 min CN=88 Runoff=3.51 cfs 0.256 af

Subcatchment Building: Proposed Runoff Area=7,150 sf 100.00% Impervious Runoff Depth>7.78"
Tc=6.0 min CN=98 Runoff=1.37 cfs 0.106 af

Subcatchment Exist: Existing Conditions Runoff Area=35,256 sf 100.00% Impervious Runoff Depth>7.78"
Tc=6.0 min CN=98 Runoff=6.75 cfs 0.525 af

Subcatchment PC: Proposed Conditions Runoff Area=28,106 sf 70.45% Impervious Runoff Depth>7.07"
Tc=6.0 min CN=90 Runoff=5.15 cfs 0.380 af

Reach TAA: Total Area Analysed Inflow=6.15 cfs 0.478 af
Outflow=6.15 cfs 0.478 af

Pond ST: Retention/Detention System Peak Elev=98.11' Storage=626 cf Inflow=1.37 cfs 0.106 af
Discarded=0.00 cfs 0.001 af Primary=1.08 cfs 0.098 af Outflow=1.08 cfs 0.098 af

Total Runoff Area = 2.067 ac Runoff Volume = 1.267 af Average Runoff Depth = 7.36"
17.04% Pervious = 0.352 ac 82.96% Impervious = 1.715 ac

Summary for Subcatchment Building: Proposed Building

Runoff = 1.37 cfs @ 12.09 hrs, Volume= 0.106 af, Depth> 7.78"

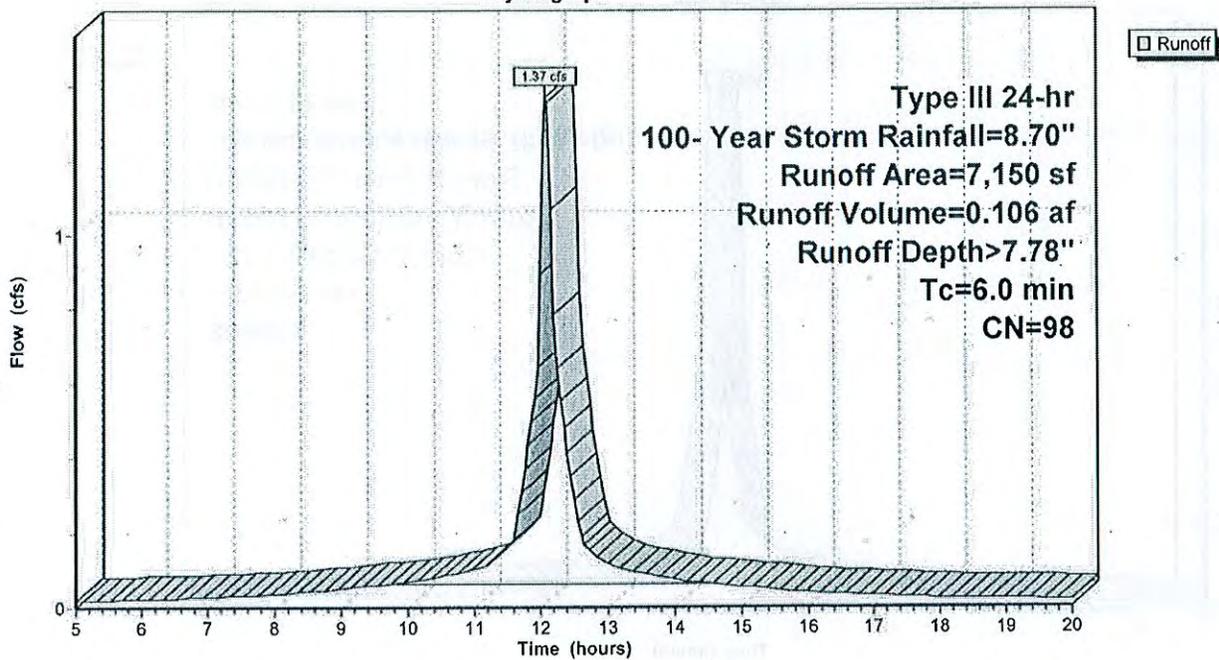
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100- Year Storm Rainfall=8.70"

Area (sf)	CN	Description
7,150	98	Roofs, HSG D
7,150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Building: Proposed Building

Hydrograph



Summary for Subcatchment PC: Proposed Conditions

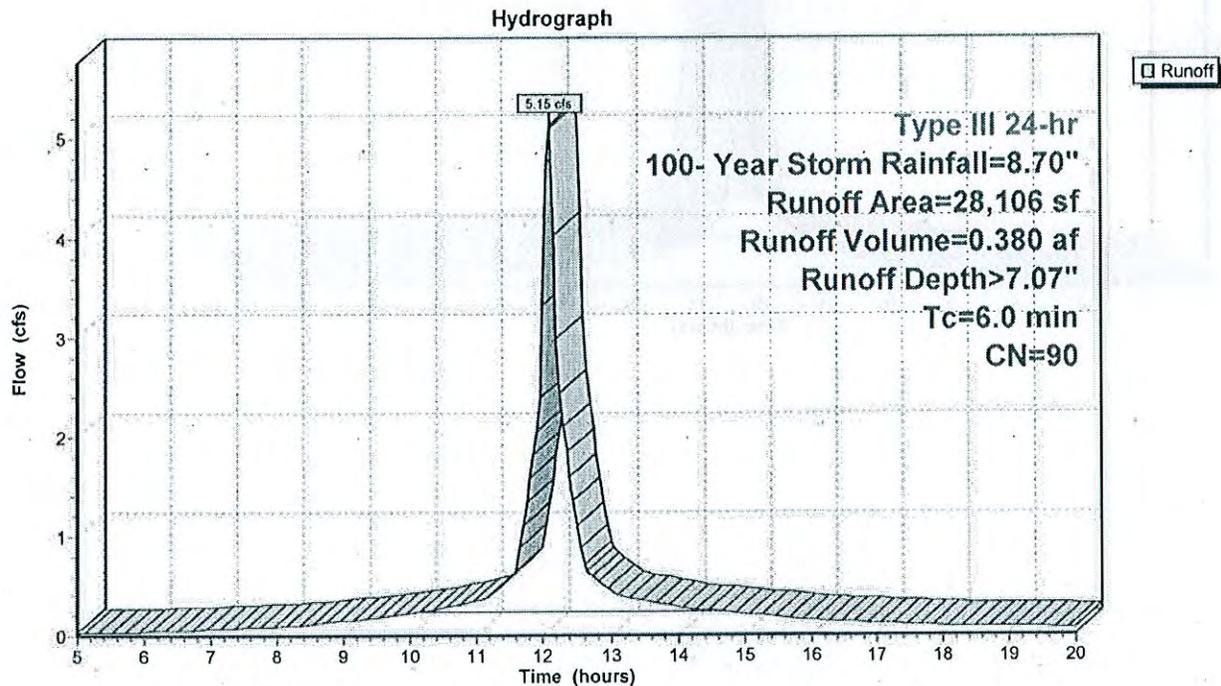
Runoff = 5.15 cfs @ 12.09 hrs, Volume= 0.380 af, Depth> 7.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100- Year Storm Rainfall=8.70"

Area (sf)	CN	Description
19,801	98	Paved parking, HSG C
7,140	70	Woods, Good, HSG C
1,165	74	>75% Grass cover, Good, HSG C
28,106	90	Weighted Average
8,305		29.55% Pervious Area
19,801		70.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 minute minimum

Subcatchment PC: Proposed Conditions



Summary for Pond ST: Retention/Detention System

Inflow Area = 0.164 ac, 100.00% Impervious, Inflow Depth > 7.78" for 100- Year Storm event
 Inflow = 1.37 cfs @ 12.09 hrs, Volume= 0.106 af
 Outflow = 1.08 cfs @ 12.15 hrs, Volume= 0.098 af, Atten= 21%, Lag= 4.0 min
 Discarded = 0.00 cfs @ 12.15 hrs, Volume= 0.001 af
 Primary = 1.08 cfs @ 12.15 hrs, Volume= 0.098 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 98.11' @ 12.15 hrs Surf.Area= 611 sf Storage= 626 cf

Plug-Flow detention time= 55.9 min calculated for 0.098 af (92% of inflow)
 Center-of-Mass det. time= 28.6 min (761.4 - 732.8)

Volume	Invert	Avail.Storage	Storage Description
#1	94.25'	664 cf	17.00'W x 17.00'L x 4.50'H Prismaoid Z=1.0 2,111 cf Overall - 98 cf Embedded = 2,013 cf x 33.0% Voids
#2	94.95'	98 cf	ADS_StormTech SC-740 x 2 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		762 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	96.55'	6.0" Round Culvert L= 114.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.55' / 90.10' S= 0.0566 ' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	94.25'	0.050 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.00 cfs @ 12.15 hrs HW=98.11' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=1.08 cfs @ 12.15 hrs HW=98.11' (Free Discharge)
 ↳1=Culvert (Inlet Controls 1.08 cfs @ 5.50 fps)

Summary of TR-20 Analysis

StormEvent	<u>2-Year</u>	<u>2-Year</u>	<u>10-Year</u>	<u>10-Year</u>	<u>100-Year</u>	<u>100-Year</u>
	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>
	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>
Existing	3.16	0.241	4.72	0.364	8.41	0.654
Proposed	2.08	0.143	3.45	0.244	6.66	0.489
Decrease	1.08		0.825		1.75	
Decrease		0.098		0.120		0.165

Recharge

Existing Impervious

43912 sf

Proposed Impervious

32320 sf

Decrease in Impervious

11592 sf

This project is a redevelopment.

As noted above, no increase in peak rate or volume has occurred

No increase in impervious area has occurred. No Recharge volume is required.

All roof top run off will be infiltrated via a sub surface chamber system.

Infiltration requirements are the maximum extent practicable.

CMB 18-15

08-13-2015

O'REILLY AUTO PARTS

139 HATHAWAY ROAD (ASSESSORS MAP 101 LOT 14) NEW BEDFORD, MASSACHUSETTS

ZONING REQUIREMENTS TABLE

DISTRICT	MIXED USE BUSINESS / INDUSTRIAL B (SPLIT USE)		I/B	
	REQUIRED	MUB PROVIDED	REQUIRED	PROVIDED
LOT AREA (A)	0	10 ACRES	0	N/A
LOT FRONTAGE (LF)	0	627±	0	N/A
SETBACKS (FEET)				
FRONT	0	710	25	N/A
SIDE	0	198	25	N/A
REAR	10-(1 STORY)	N/A	25	N/A
BUILDING HEIGHT (FEET) / STORIES	100 / 7	17.5' / 1	7	N/A
LOT COVERAGE	0	N/A	50%	N/A
GREEN SPACE	0	N/A	20%	N/A

ASSESSORS MAP 101 - LOT 14

ZONING DISTRICT - MIXED USE BUSINESS/INDUSTRIAL B

PARCEL AREA - 10 ACRES

EXISTING USE - MIXED USE - RETAIL, FAST FOOD, OFFICE

PROPOSED USE - MIXED USE - RETAIL, FAST FOOD, OFFICE

BUILDING / PARKING SUMMARY

- McDONALDS - 3,800 SF x 1 SPACE/100 SF = 38 SPACES
1 SPACE/EMPLOYEE/SHIFT x 10 = 10 SPACES

- RETAIL USE - EXISTING - 88,200 SF
PROPOSED - 7,150 SF
TOTAL = 95,350 SF

20,000 SF x 1 SPACE/200 SF = 100 SPACES
75,350 SF x 1 SPACE/400 SF = 189 SPACES

- RED APPLE RESTAURANT
1200 SF x 1 SPACE/200 SF = 6 SPACES

- CONSTRUCTION SUPPLIES (GROSSMANS) - 33,420 SF
15,000 SF x 1 SPACE/1500 SF = 10 SPACES
18,400 SF x 1 SPACE/5000 SF = 4 SPACES

- OFFICE USE - 17,007 SF
10,000 SF x 1 SPACE/200 SF = 50 SPACES
7,007 SF x 1 SPACE/1000 SF = 7 SPACES

PARKING SUBTOTAL = 414 SPACES
PARKING REDUCTION PER SP = 36 SPACES
PARKING REQUIRED = 378 SPACES
PARKING PROVIDED = 424 SPACES

O'REILLY AUTO = 7,150/200 SF = 36 SPACES REQUIRED
TOTAL PARKING PROVIDED = 36 SPACES

HANDICAPPED PARKING SPACES REQUIRED

O'REILLY AUTO PARTS
36 SPACES = 2

McDONALD'S
51 SPACES = 3

SHOPPING CENTER
293 SPACES = 7
TOTAL = 12

HANDICAPPED SPACES PROVIDED = 13

DEED REFERENCE: LAND COURT CERTIFICATE TITLE #14729 (L.C.Plan 28344E Lots 11 & 12)



LOCUS MAP

SCALE: 1"=100'±

DATE: APRIL 17, 2015

PLAN INDEX

SHEET NO.	TITLE	DATE	REVISED
—	COVER SHEET	APRIL 17, 2015	MAY 9, 2016
1 OF 9	SITE LAYOUT	APRIL 17, 2015	MAY 9, 2016
2 OF 9	LOCUS MAP	APRIL 17, 2015	MAY 9, 2016
3 OF 9	SITE GRADING & UTILITIES PLAN	APRIL 17, 2015	MAY 9, 2016
4 OF 9	LANDSCAPING PLAN	APRIL 17, 2015	MAY 9, 2016
5 OF 9	LIGHTING PLAN	APRIL 17, 2015	MAY 9, 2016
6 OF 9	DEMOLITION PLAN	APRIL 17, 2015	MAY 9, 2016
7 OF 9	EROSION/SEDIMENTATION CONTROL PLAN	APRIL 17, 2015	MAY 9, 2016
8 OF 9	EXISTING CONDITIONS	APRIL 17, 2015	MAY 9, 2016
9 OF 9	DETAIL SHEET	APRIL 17, 2015	MAY 9, 2016

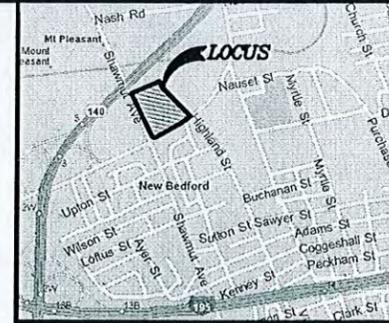
OWNER/APPLICANT

S.B. REALTY LIMITED PARTNERSHIP
100 NORTH FRONT STREET
NEW BEDFORD, MA 02740

SITEC
Civil and Environmental Engineering
Land Use Planning

449 Finance Corner Road
Dorchester, MA 02747
(508) 998-2125
FAX (508) 998-7554
WWW.SITEC-ENGINEERING.COM
ACSD NO. 08 07-3077 CONEX

ATTACHMENT 8



LEGEND

- 101 — PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - EXISTING CHAIN LINK FENCE
- 3/4" — EXISTING SOLID WHITE LINE
- 1" — EXISTING SOLID YELLOW LINE
- 2" — EXISTING DOUBLE YELLOW LINE
- UP — EXISTING UTILITY POLE
- ⊕ — EXISTING HANDICAP PARKING SPACE
- ⊕ — EXISTING HANDICAP RAMP
- ⊕ — EXISTING TREE
- ⊕ — EXISTING BUILDING ENTRANCE
- UP — EXISTING LIGHT POLE
- ⊕ — NUMBER OF PARKING SPACES
- ⊕ — PROPOSED HANDICAP PARKING SPACE
- ⊕ — PROPOSED BUILDING ENTRANCE
- 2" — PROPOSED DOUBLE YELLOW LINE
- UP — PROPOSED NEW OR RESET LIGHT POLE

MAP 101 - LOT 8
 N/F LISA ANN BORETTI, TRUSTEE
 19 HATHAWAY ROAD TRUST E
 319 LINCOLN STREET
 HINGHAM, MA 02043

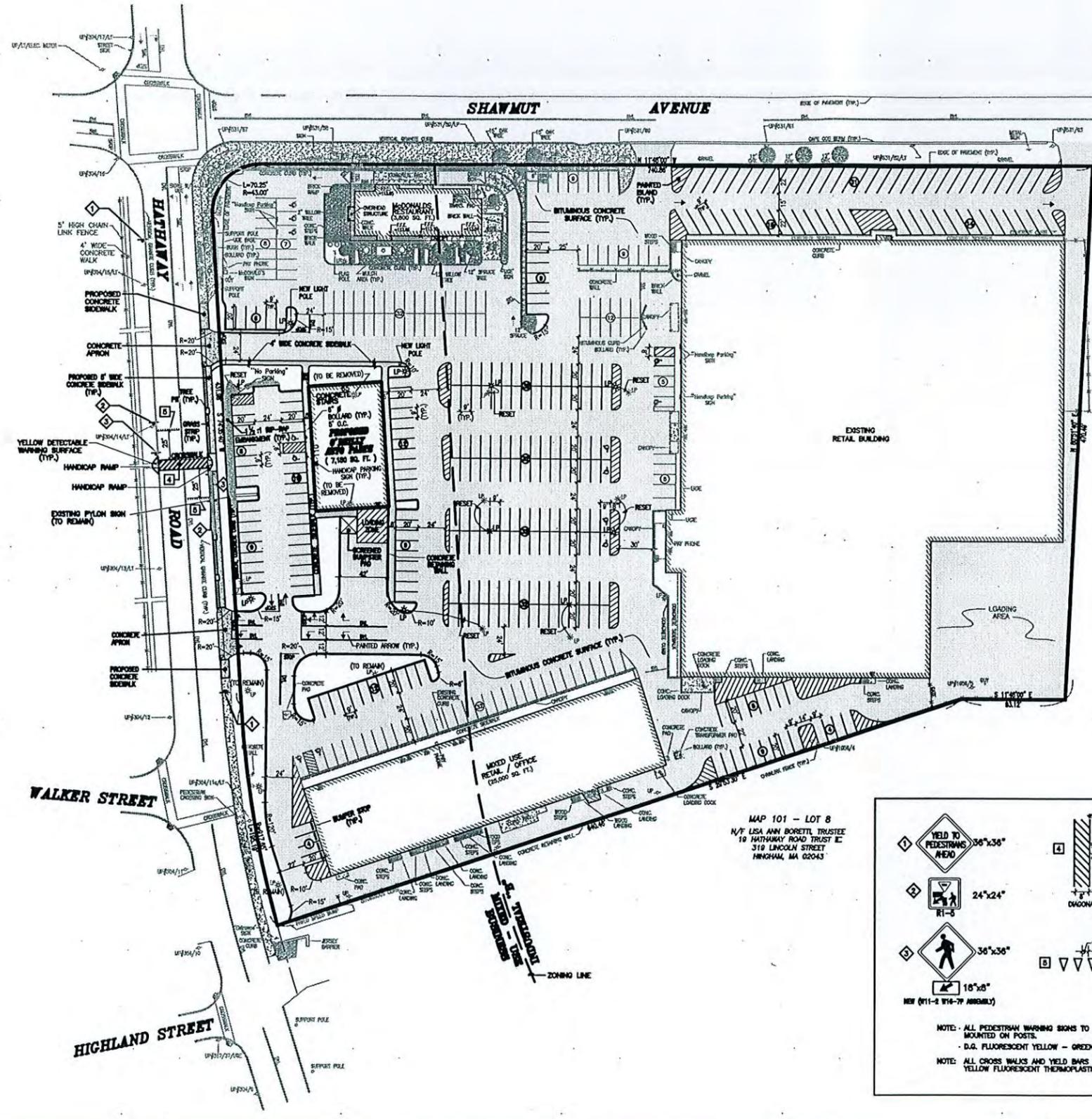
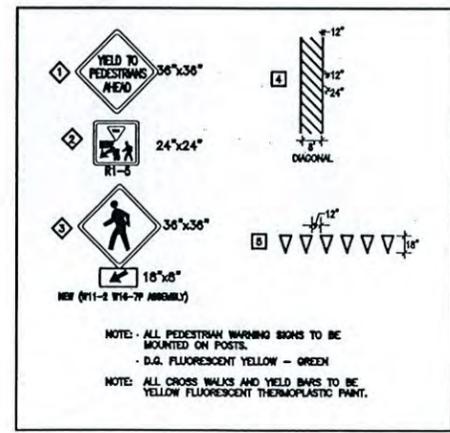
NOTES:

1. ALL HANDICAP PARKING, RAMPS AND ACCESS, SIDEWALK & NEW DRIVEWAY BROW, SHALL CONFORM TO AAS AND MAAS REQUIREMENTS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE DEPARTMENT OF INFRASTRUCTURE PRIOR TO THE START OF CONSTRUCTION.
3. CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 24 HOURS IN ADVANCE OF POURING CONCRETE TO INSURE THAT THE SIDEWALK & DRIVEWAY BROW WILL MEET A.D.A. AND CITY OF NEW BEDFORD STANDARDS.
4. ANY MINOR MODIFICATIONS (AS DETERMINED BY THE CITY ENGINEER) TO THE INFORMATION SHOWN ON THE APPROVED SITE PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER AS A MINOR PLAN REVISION FOR APPROVAL PRIOR TO THE WORK BEING PERFORMED.
5. ALL PAVEMENT MARKINGS SHALL CONFORM TO MUTCD REQUIREMENTS.
6. SEE DEMOLITION / EROSION CONTROL PLAN SHEETS 6 OF 9 AND 7 OF 9 FOR MEASURES TO BE TAKEN PRIOR TO CONSTRUCTION.
7. I HEREBY CERTIFY THAT THE PROJECT AS DESIGNED MEETS THE APPLICABLE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD.

DATE _____

8. DRIVEWAY PERMIT SUBJECT TO TRAFFIC COMMISSION APPROVAL.
9. THE BUILDING ROOF SHEATHING SHALL BE COOL ROOF EPDM OR PVC, IN LIGHT OR WHITE COLOR.
10. HOURS OF OPERATION SHALL BE NO EARLIER THEN 8:00 A.M. AND NO LATER THAN 8:00 P.M.
11. SIGNAGE MAY BE ILLUMINATED NO LATER THAN ONE HOUR AFTER CLOSING TIME, BUT NO LATER THAN 6:00 P.M.
12. O'REILLY AUTO PARTS WILL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS TO STORE OIL PRODUCTS AND ANTIFREEZE IN THE BUILDING. ALL PROCEDURES FOR OPERATION AND MAINTENANCE ASSOCIATED WITH THE STORAGE OF OIL MATERIALS WILL BE IN COMPLIANCE WITH ALL FEDERAL, STATE (310 CMR 30.200 & MGL CHAPTER 94 SECTION 295B AS MOST RECENTLY AMENDED) AND LOCAL (CITY OF NEW BEDFORD FIRE PREVENTION) REGULATIONS.

OWNER/APPLICANT
 S.B. REALTY LIMITED PARTNERSHIP
 100 NORTH FRONT STREET
 NEW BEDFORD, MA 02740



MAP 101 - LOT 8
 N/F LISA ANN BORETTI, TRUSTEE
 19 HATHAWAY ROAD TRUST E
 319 LINCOLN STREET
 HINGHAM, MA 02043

No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT

author	1"=40'	date	APRIL 17, 2015
drawn	NAD	checked	SDG
approved	SDG	approved	SDG

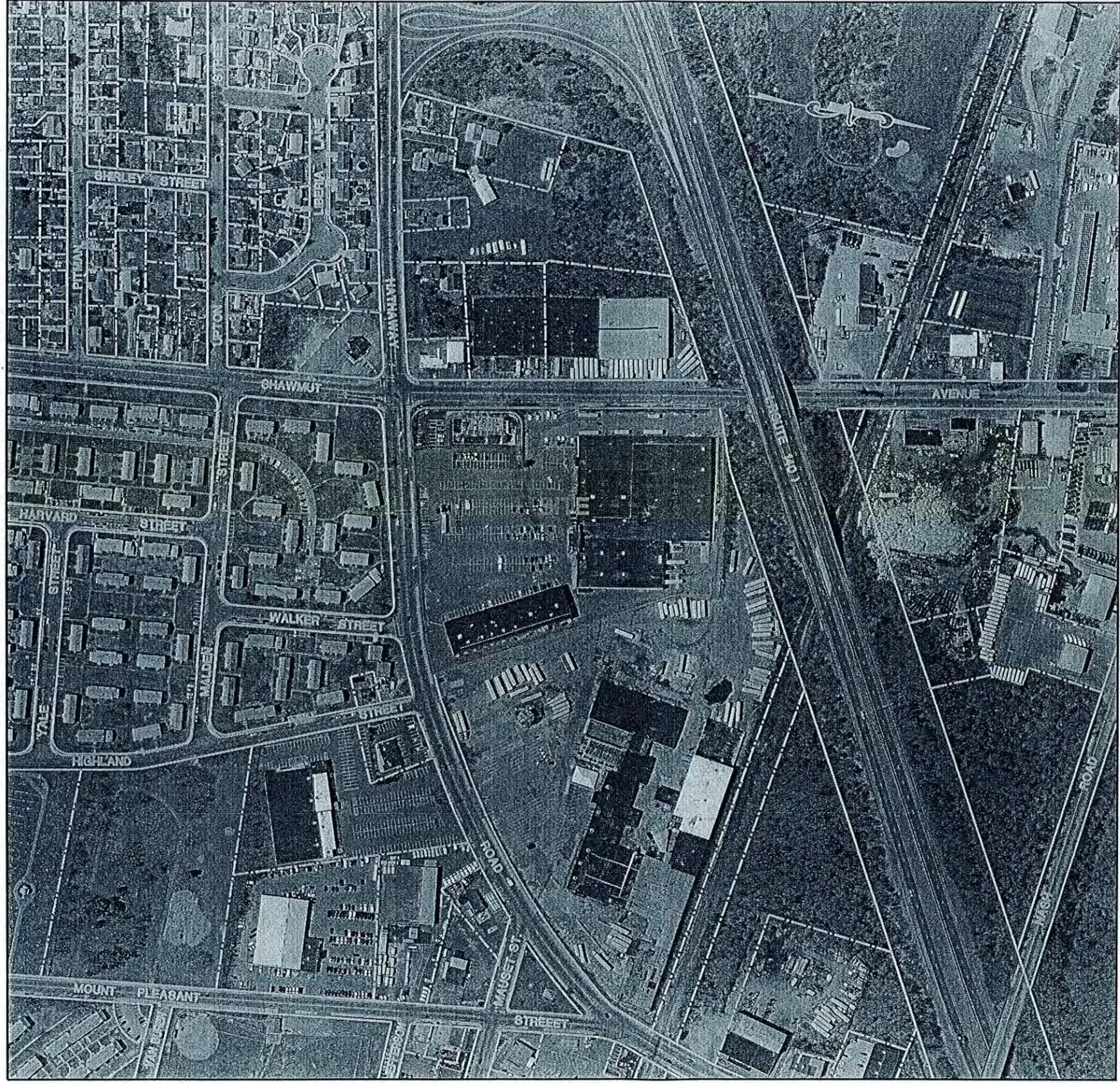
PROJECT	PROPOSED O'REILLY AUTO PARTS 139 HATHAWAY ROAD NEW BEDFORD, MASSACHUSETTS
CLIENT	S.B. REALTY LIMITED PARTNERSHIP
DESIGNER	SITEC, Inc. 100 North Front Street New Bedford, MA 02740 (508) 948-2125 Fax: (508) 948-7904 WWW.SITEC-ENGINEERING.COM

SITEC
 Civil and Mechanical Engineering
 Light Use Planning

SITE LAYOUT

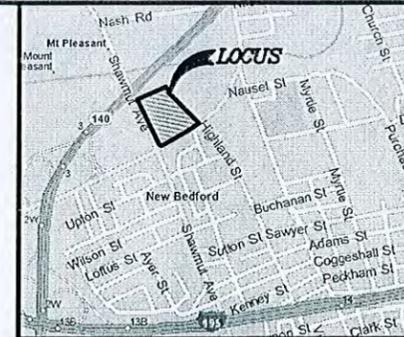
PLANNING
 MAY 13 2016
 DEPARTMENT

Acad No. NB 07-3077 SLDWG
 File No. 07-3077



SITEC Civil and Environmental Engineering Land Use Planning 448 South Street DORCHESTER, MA 02147 (617) 267-1234 WWW.SITEC-ENGINEERING.COM	PROJECT: PROPOSED O'REILLY AUTO PARTS 139 HATHAWAY ROAD NEW BEDFORD, MASSACHUSETTS DATE: APRIL 17, 2015 DRAWN BY: NAD CHECKED BY: SDG APPROVED BY: SDG SHEET NUMBER: 9 OF: 9 DRAWING NUMBER: LM-1		No. 1 Date: MAY 9, 2016 Revision Description: REVISE SITE LAYOUT Drawn by: SDG Check by: SDG Appr. by: SDG
	S.B. REALTY LIMITED PARTNERSHIP LOCUS MAP		

PLANNING
MAY 13 2015
DEPARTMENT



LEGEND

---	PROPERTY LINE
- - -	EXISTING CONTOUR
X X X	EXISTING CHAIN LINK FENCE
---X---	EXISTING OVERHEAD WIRES
- - - T - - -	EXISTING UNDERGROUND TELEPHONE LINE
- - - G - - -	EXISTING GAS MAIN
- - - W - - -	EXISTING WATER MAIN
- - - S - - -	EXISTING SEWER LINE
- - - D - - -	EXISTING DRAINAGE LINE
- - - U - - -	EXISTING UNDERGROUND ELECTRIC
CB	EXISTING CATCH BASIN
DMH	EXISTING DRAIN MANHOLE
SMH	EXISTING SEWER MANHOLE
ME	EXISTING MANHOLE
EMH	EXISTING ELECTRIC MANHOLE
TMH	EXISTING TELEPHONE MANHOLE
HY	EXISTING FIRE HYDRANT
WS	EXISTING WATER GATE VALVE
WS	EXISTING WATER SERVICE
CG	EXISTING GAS GATE VALVE
DS	EXISTING LIGHT POLE
DS	EXISTING DOWN SPOUT
ICV	EXISTING IRRIGATION CONTROL VALVE
UH	EXISTING UTILITY HAND HOLE
UP	EXISTING UTILITY POLE
ME	EXISTING MONITORING WELL
AR	EXISTING HANDICAP RAMP
TR	EXISTING TREE
▲	EXISTING BUILDING ENTRANCE
▲	PROPOSED BUILDING ENTRANCE
---	PROPOSED CONTOUR
- - -	PROPOSED DRAINAGE LINE
DMH	PROPOSED DRAIN MANHOLE
CB	PROPOSED CATCH BASIN
RD	PROPOSED ROOF DRAIN
W	PROPOSED WATER SERVICE
S	PROPOSED SEWER SERVICE
SMH	PROPOSED SEWER MANHOLE
SP	PROPOSED SPOT GRADE

No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT

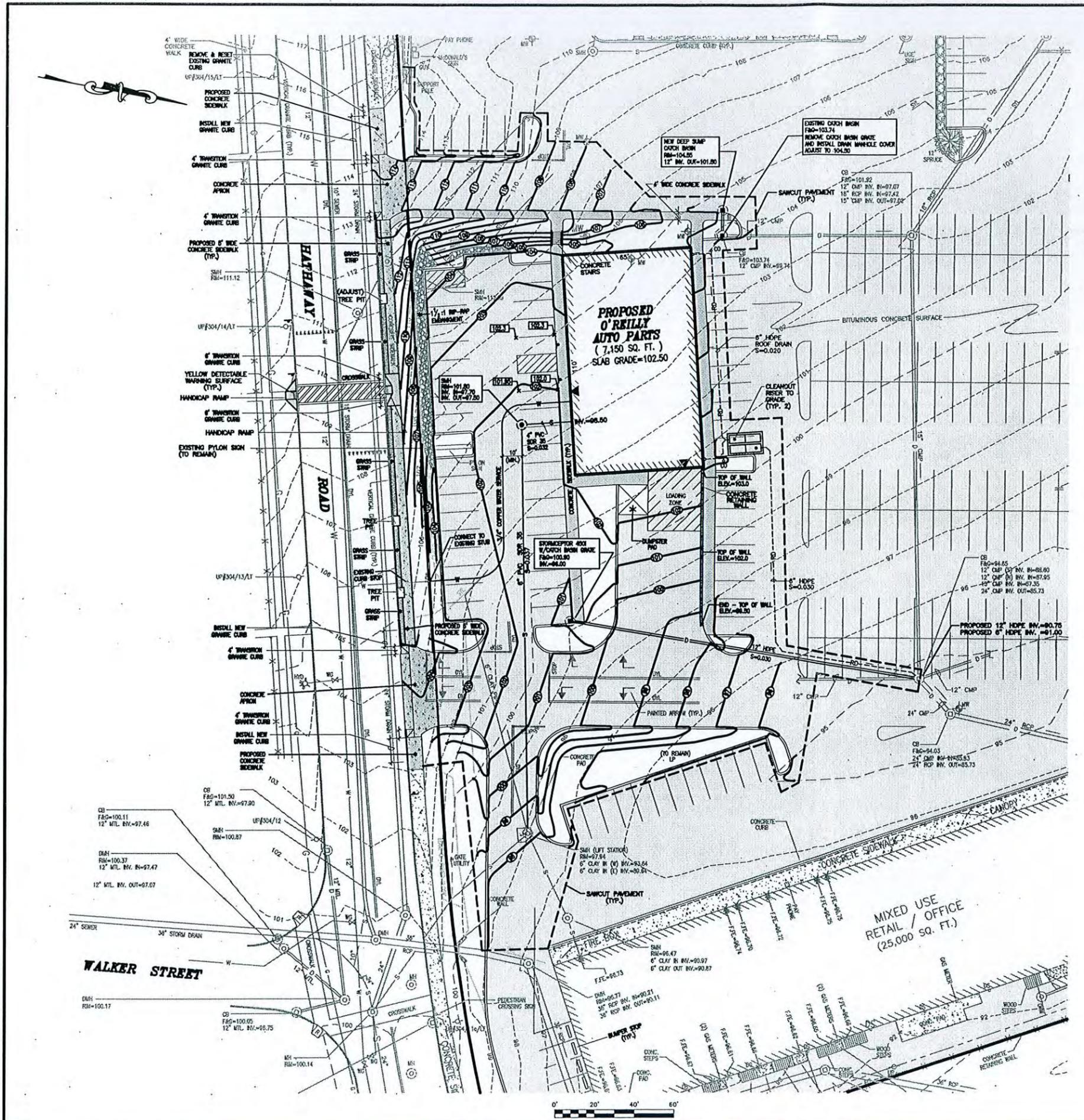
Scale:	1" = 20'
Project:	PROPOSED O'REILLY AUTO PARTS
Address:	139 HATHAWAY ROAD
City:	NEW BEDFORD, MASSACHUSETTS
Client:	S.B. REALTY LIMITED PARTNERSHIP
Contract No.:	G&U-1

Project:	PROPOSED O'REILLY AUTO PARTS
Address:	139 HATHAWAY ROAD
City:	NEW BEDFORD, MASSACHUSETTS
Client:	S.B. REALTY LIMITED PARTNERSHIP
Contract No.:	G&U-1

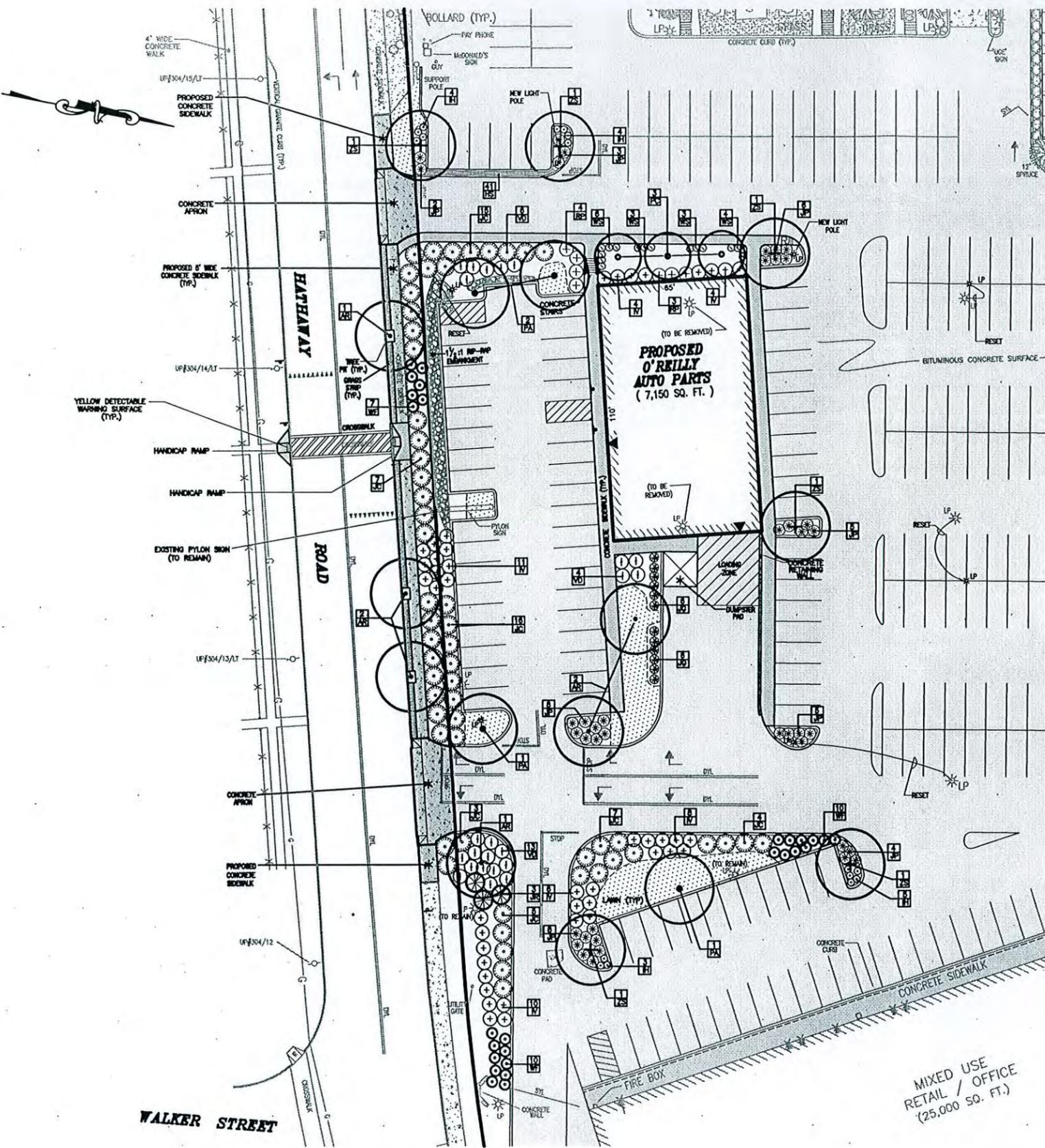
SITEC, Inc.
 449 Francis Corner Road
 Duxbury, MA 02747
 TEL: (508) 968-7554
 FAX: (508) 968-7554
 WWW.SITEC-ENGINEERING.COM

PLANNING
 MAY 11, 2016
DEPARTMENT

- NOTES:**
1. THE CONTRACTOR SHALL OBTAIN A STREET DISTURBANCE & OBSTRUCTION PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE RIGHT-OF-WAY.
 2. ALL WATER AND SEWER MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY OF NEW BEDFORD REQUIREMENTS.
 3. ALL WATER AND SEWER CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF NEW BEDFORD BEFORE BEING BACK FILLED.
 4. THE CITY SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE REQUIRED INSPECTIONS.



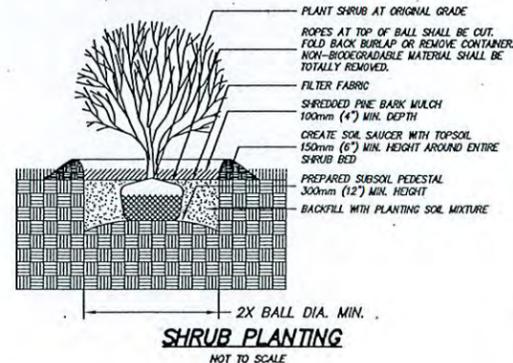
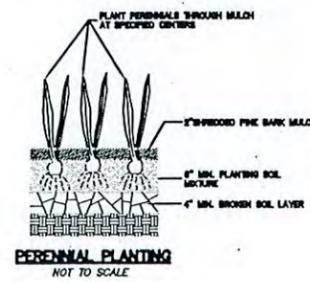
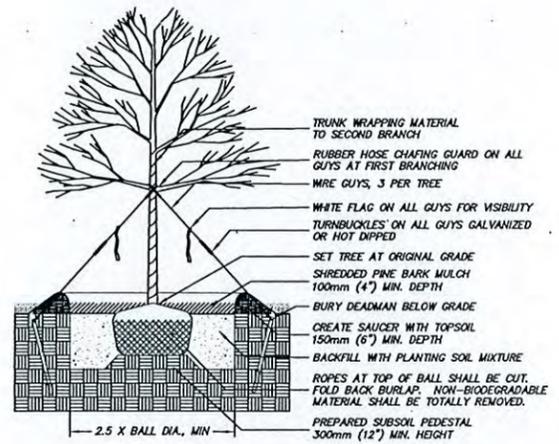
CITY CLERKS OFFICE
 NEW BEDFORD, MA



- ### PLANTING NOTES
- All new lawn areas shall receive a minimum of 6 inches topsoil of the proper pH and organic content suitable for the healthy growth of lawn. These areas shall be seeded with a fine blade lawn grass seed.
 - All tree and shrub pits shall be at least 2 feet wider and 1 foot deeper than the tree or shrub root ball to be planted in it. Backfill shall be high quality loam of the proper pH and organic content suitable for the healthy growth of plant materials.
 - All areas to be mulched shall receive 4 inches minimum 100% shredded bark mulch within 48 hours of planting. Unless otherwise noted in planting details.
 - All plants shall be nursery grown and conform to the latest edition of "ANSI Z60.1, American Standard for Nursery Stock."
 - Plants shall conform to the botanical name as indicated in the latest edition of "American Joint Committee of Horticultural Nomenclature, Standardized Plant Names."
 - Plants shall be handled at all times in accordance with the best horticultural practices. Plants in-leaf shall be sprayed with anti-desiccant before digging. Plants shall be dug with firm natural balls and shall conform to the notes and sizes specified in ANSI Z60.1. If plants shall be wrapped in burlap and tied firmly. Plant materials shall be delivered immediately prior to placement, shall be kept moist and shall be protected from sun and wind. Plants having broken or cracked balls prior to or during planting will not be accepted.
 - All trunks of deciduous trees shall be wrapped immediately after planting with tree wrap. Wrap shall be wound spirally, from the bottom of the trunk to the second branches. All trees shall be staked or guyed immediately after planting in accordance with best horticultural practices.
 - The periods for planting shall be from March 15 to May 15 and from September 15 to November 15, weather permitting.
 - All disturbed areas shall be loamed and seeded as directed in note #1 above.
 - All locations of existing utilities may not be shown on this plan. See other plan sheets for utility locations. Contractor shall be solely responsible for determining actual locations of existing utilities. Utility conflicts may require adjustments to proposed construction. Contractor shall be responsible for repair of any utilities damaged during construction.
 - Planting beds adjacent to the building shall contain a mix of perennials.

Symbol	Quantity	Plant Name	Size
AR	8	ACER RUBRUM 'RED SUNSET'	2'-2.5" cal.#
HS	41	HEMEROCALLIS 'GOING BANANAS'	1 gallon container
IV	43	ITEA VIRGINICA 'HENRY'S GARNET'	3 gallon container
HI	18	ITEA VIRGINICA 'SPRUCH'	3 gallon container
JP	41	JUNIPERUS CHINENSIS 'PRITZERIANA COMPACTA'	3 gallon container
JR	3	JUNIPERUS CHINENSIS 'ROBUSTA GREEN'	8 gallon container
JO	57	JUNIPERUS CHINENSIS VAR. 'SARGENTI VIREOS'	3 gallon container
JG	12	JUNIPERUS COMMUNIS 'GROW'	8 gallon container
PA	4	PLATANUS ACERIFOLIUM x 'BLOODGOOD'	2'-2.5" cal.#
PG	3	PYRUS CALLERYANA 'ARISTOCRAT'	2'-2.5" cal.#
RP	7	RHODODENDRON 'P. JI'	3 gallon container
VD	23	VERBENA OFFICINALIS	3 gallon container
WF	27	WEIGELA FLORIDA 'ALEXANDRA'	3 gallon container
WS	16	WEIGELA FLORIDA 'BORRASPIR'	3 gallon container
ZS	8	ZELKONA SERPATA 'GREEN VASE'	2'-2.5" cal.#

* CALIPER IS THE DIAMETER OF THE TREE MEASURED AT THE THREE-FOOT RISE, OR FROM THE TOP OF THE BURLAP AND BALL.



No.	Date	Revision Description
1	MAY 8, 2016	REVISION SITE LAYOUT

PROJECT: PROPOSED O'REILLY AUTO PARTS
139 HATHAWAY ROAD
NEW BEDFORD, MASSACHUSETTS

DATE: APRIL 17, 2015

DRAWN BY: NAD

CHECKED BY: SDG

APPROVED BY: SDG

PROJECT NO.: 07-3677

DRAWING NO.: 07-3677-1

SITEC, Inc.
449 Francis Avenue, Room 100
New Bedford, MA 01945
Tel: (508) 998-2125
Fax: (508) 998-7954
WWW.SITEC-ENGINEERING.COM

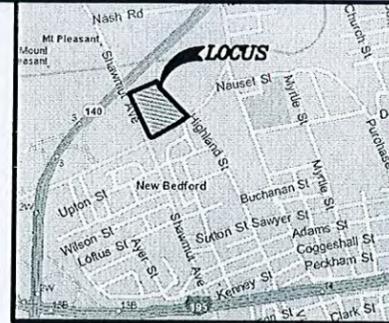
LANDSCAPING DEPARTMENT

MAY 13 2016

Acad No. 07-3677
LANDSCAPING PLAN
File No. 07-3677

CITY CLERKS OFFICE
NEW BEDFORD, MA

Case 19-16
05/13/2016



LEGEND

- PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - EXISTING CHAIN LINK FENCE
- EXISTING SOLID WHITE LINE
- EXISTING SOLID YELLOW LINE
- EXISTING DOUBLE YELLOW LINE
- UP- EXISTING UTILITY POLE
- △ EXISTING HANDICAP PARKING SPACE
- △ EXISTING HANDICAP RAMP
- EXISTING TREE
- ▲ EXISTING BUILDING ENTRANCE
- LP* EXISTING LIGHT POLE
- △ PROPOSED HANDICAP PARKING SPACE
- ▲ PROPOSED BUILDING ENTRANCE
- PROPOSED DOUBLE YELLOW LINE
- LP* PROPOSED NEW OR RESET LIGHT POLE

MAP 101 - LOT 8
 N/P LISA ANN BORETTI, TRUSTEE
 19 HATHAWAY ROAD TRUST II
 319 LINCOLN STREET
 HINGHAM, MA 02043

NOTES:

1. ALL ILLUMINAIRES TO BE CREE EDGE AREA, TYPE III MEDIUM, 80 LEDS, 700MA, 400K. CATALOG NUMBER: ARE-EDG-3M-XX-06-E-UL-XX 700-40K-XXXX-BXALX380E-U07) MOUNTING HEIGHT = (EXISTING) 25'-28'.
2. THIS PLAN IS TO BE USED FOR LIGHTING PURPOSES ONLY.
3. CONTRACTOR WILL LOCATE ALL ELECTRICAL CONDUITS PRIOR TO CONSTRUCTION.

No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT

scale: 1"=40'	date: APRIL 17, 2015
drawn: NAD	checked: SDG
designed: SDG	approved: SDG
project: 101-1	sheet: 5 of 9
LIGHT-1	

PROPOSED O'REILLY AUTO PARTS
 139 HATHAWAY ROAD
 NEW BEDFORD, MASSACHUSETTS
S.B. REALTY LIMITED PARTNERSHIP
 LIGHTING PLAN

SITEC
 SITEC, Inc.
 448 Fenwick Corner Road
 New Bedford, MA 02747
 (508) 899-1000
 FAX (508) 899-7554
 www.SITEC-ENGINEERING.COM
 CIVIL and Environmental Engineering
 Land Use Planning

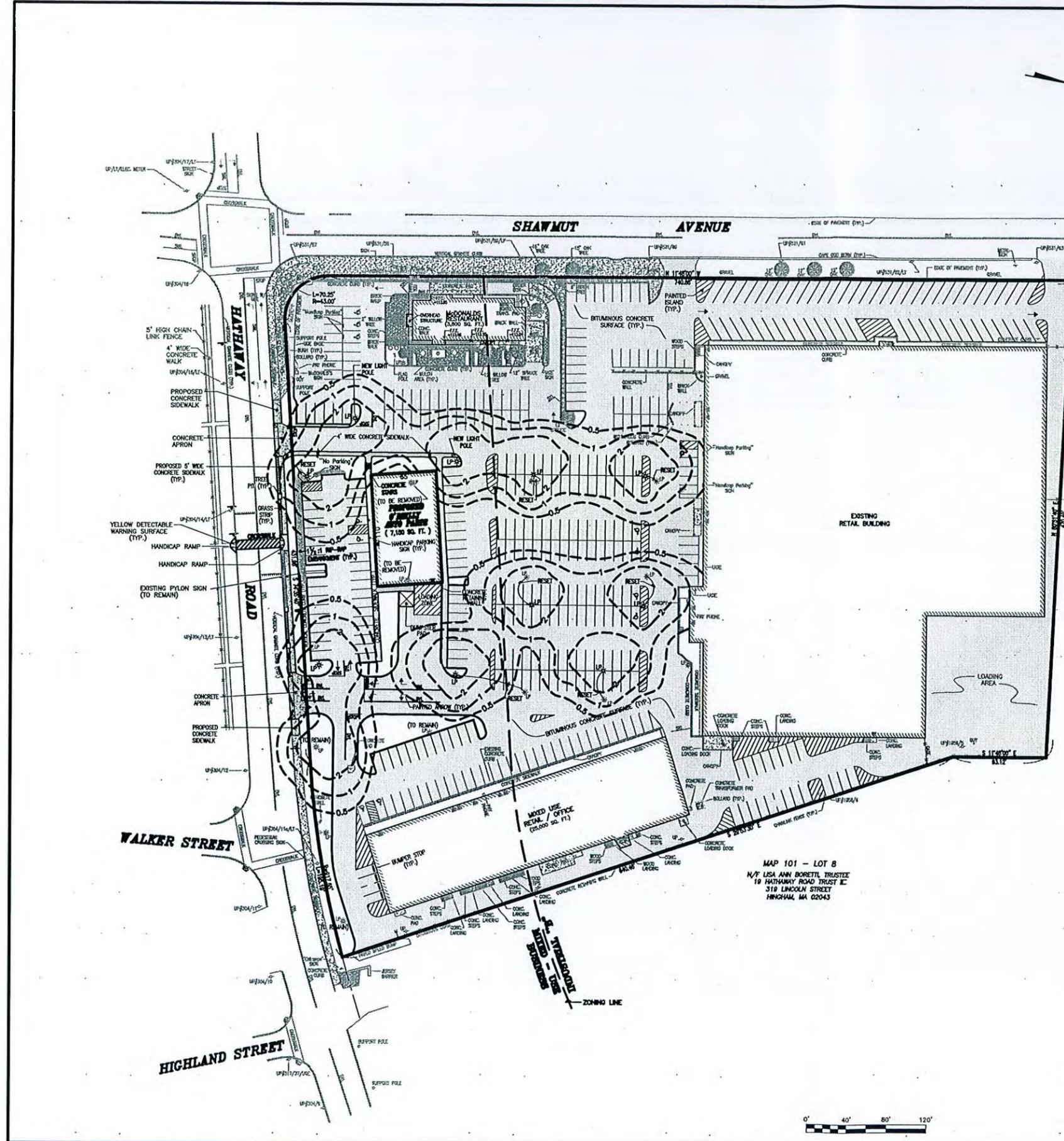
Acad No. 16 07-3077
 LIGHTING PLAN DWG
 File No. 07-3077

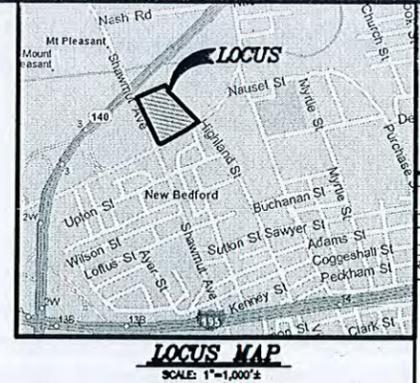
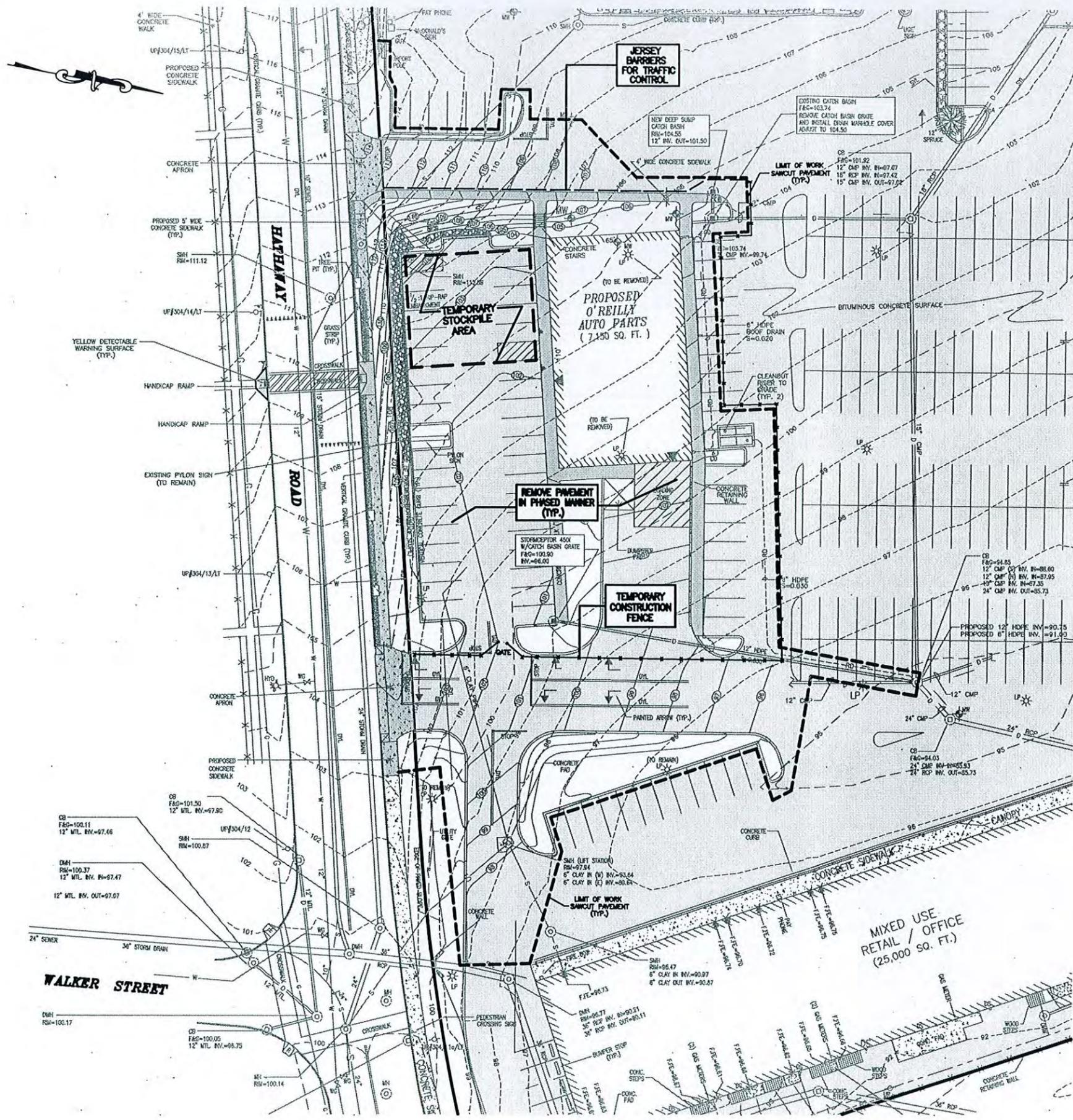
2015 MAY 13 A 10:15

CITY CLERKS OFFICE
 NEW BEDFORD, MA

PLANNING
 MAY 13 2016
 DEPARTMENT

Case 19-16
 05/13/2016





LEGEND

---	PROPERTY LINE
- - -	EXISTING CONTOUR
X - X - X	EXISTING CHAIN LINK FENCE
OH	EXISTING OVERHEAD WIRES
- - - T - - -	EXISTING UNDERGROUND TELEPHONE LINE
G	EXISTING GAS MAIN
W	EXISTING WATER MAIN
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
USE	EXISTING UNDERGROUND ELECTRIC
CB (1)	EXISTING CATCH BASIN
DMH	EXISTING DRAIN MANHOLE
SMH	EXISTING SEWER MANHOLE
MH	EXISTING MANHOLE
TMH	EXISTING TELEPHONE MANHOLE
HYD	EXISTING FIRE HYDRANT
WG	EXISTING WATER GATE VALVE
WS	EXISTING WATER SERVICE
GG	EXISTING GAS GATE VALVE
LP	EXISTING LIGHT POLE
DS	EXISTING DOWN SPOUT
ICV	EXISTING IRRIGATION CONTROL VALVE
UHH	EXISTING UTILITY HAND HOLE
UP	EXISTING UTILITY POLE
UMW	EXISTING MONITORING WELL
HR	EXISTING HANDICAP RAMP
TR	EXISTING TREE
▲	EXISTING BUILDING ENTRANCE
▲	PROPOSED BUILDING ENTRANCE
○	PROPOSED CONTOUR
- - -	PROPOSED DRAINAGE LINE
CB (1)	PROPOSED CATCH BASIN
RD	PROPOSED ROOF DRAIN

- NOTES:**
- DEMOLITION SHALL BE LIMITED TO THE AREA OUTLINED.
 - CONTRACTOR SHALL PROTECT ADJACENT AREAS FROM DAMAGE. DAMAGE OF ADJACENT AREAS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - ALL DEMOLITION MATERIALS SHALL BE LEGALLY DISPOSED OF OFFSITE.
 - ALL BMP EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO INITIAL DEMOLITION.
 - CONTRACTOR SHALL HAVE WATER AVAILABLE FOR DUST CONTROL OR AN APPROVED DUST CONTROL AGENT.

No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT

Scale	1"=20'
Date	APRIL 17, 2015
Drawn	NAD
Checked	SDG
Approved	SDG
Sheet Number	6 of 9
Drawing Number	DEMO-1

PROJECT: PROPOSED O'REILLY AUTO PARTS
139 HATHAWAY ROAD
NEW BEDFORD, MASSACHUSETTS

CLIENT: S.B. REALTY LIMITED PARTNERSHIP

DESIGNER: DEMOLITION PLAN

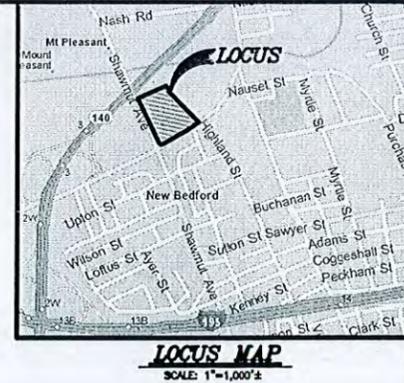
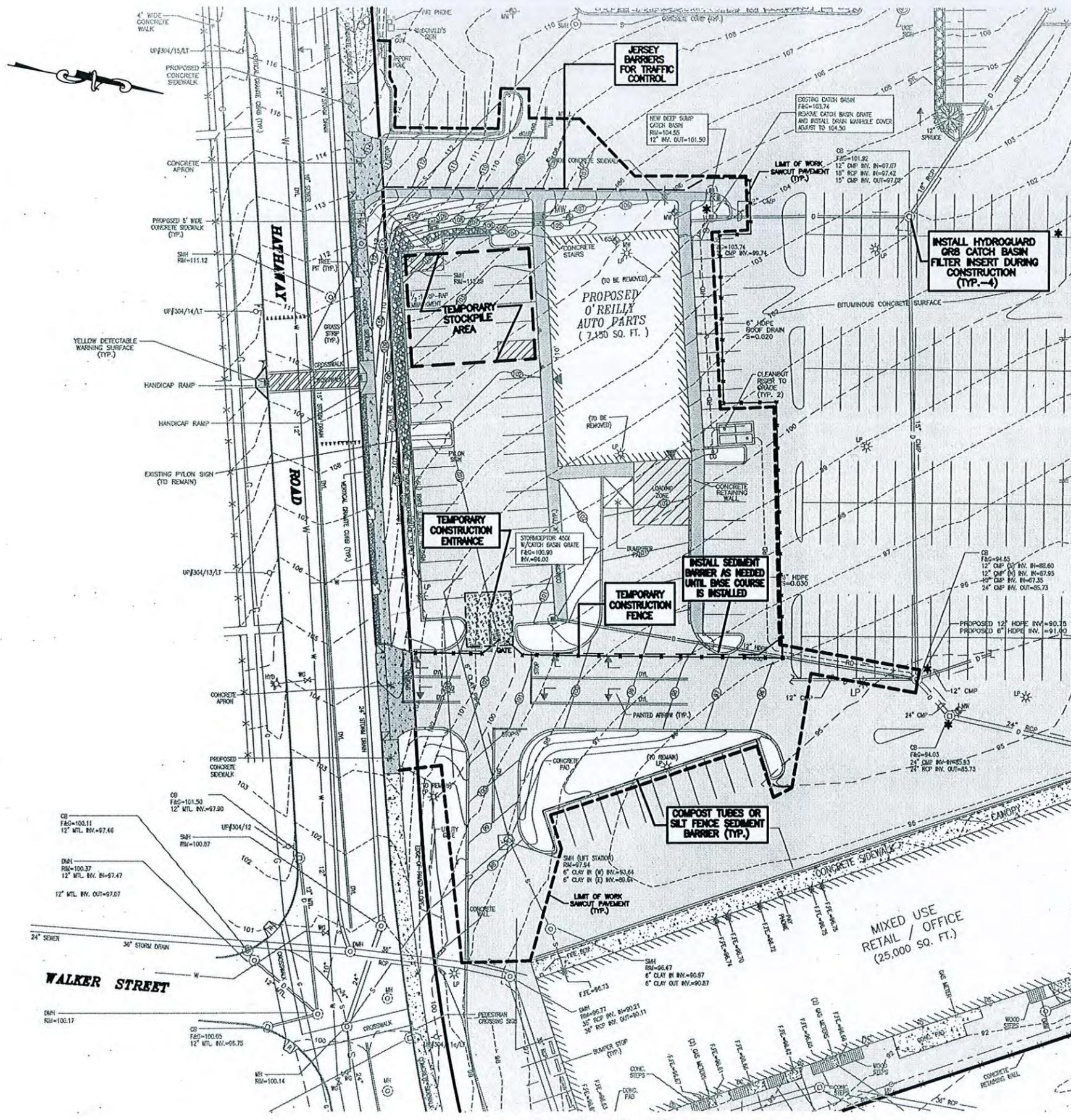
SITEC
Site Environmental Engineering
Land Use Planning

449 Truroe Road
New Bedford, MA 01905
(508) 998-2125
FAX (508) 998-7054
WWW.SITEC-ENGINEERING.COM

Acad No. NB 07-3077
DEMOLITION PLAN.DWG
File No. 07-3077

CITY CLERKS OFFICE
NEW BEDFORD, MA

PLANNING
MAY 18 2016
DEPARTMENT



LEGEND

---	PROPERTY LINE
- - -	EXISTING CONTOUR
- X - X -	EXISTING CHAIN LINK FENCE
OH/E	EXISTING OVERHEAD WIRES
- T -	EXISTING UNDERGROUND TELEPHONE LINE
G	EXISTING GAS MAIN
W	EXISTING WATER MAIN
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
U/E	EXISTING UNDERGROUND ELECTRIC
CB	EXISTING CATCH BASIN
DM	EXISTING DRAIN MANHOLE
SM	EXISTING SEWER MANHOLE
MH	EXISTING MANHOLE
EMH	EXISTING ELECTRIC MANHOLE
TMH	EXISTING TELEPHONE MANHOLE
FMH	EXISTING FIRE HYDRANT
WG	EXISTING WATER GATE VALVE
WS	EXISTING WATER SERVICE
GG	EXISTING GAS GATE VALVE
LP	EXISTING LIGHT POLE
DS	EXISTING DOWN SPOUT
ICV	EXISTING IRRIGATION CONTROL VALVE
UH	EXISTING UTILITY HAND HOLE
UP	EXISTING UTILITY POLE
MW	EXISTING MONITORING WELL
HR	EXISTING HANDICAP RAMP
TR	EXISTING TREE
BE	EXISTING BUILDING ENTRANCE
PE	PROPOSED BUILDING ENTRANCE
CO	PROPOSED CONTOUR
DL	PROPOSED DRAINAGE LINE
CB	PROPOSED CATCH BASIN
RD	PROPOSED ROOF DRAIN

NOTES:

1. REMOVE AND RESET ALL LIGHT POLES. (SEE LIGHTING PLAN SHEET 5 OF 8)
2. MATERIAL STOCKPILE AREA SHALL HAVE SAFETY FENCING INSTALLED AROUND STOCKPILE THAT EXCEED 10' IN HEIGHT.
3. SILT FENCE OR COMPOST TUBES SHALL BE SET ON DOWNGRADIENT.
4. CONTRACTOR MAY INSTALL RECYCLED BITUMINOUS PAVEMENT, AFTER GRADING, FOR EROSION CONTROL.
5. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO DEMOLITION OR ANY SITE WORK.
6. EROSION CONTROL BMP'S SHALL CONFORM TO US EPA, NPDES, MA DEP AND MASSACHUSETTS EROSION AND SEDIMENTATION CONTROL GUIDELINES FOR URBAN AREAS.
7. SEE STORMWATER POLLUTION PREVENTION AND CONSTRUCTION CONTROL PLAN DOCUMENT.

No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT
2	APRIL 17, 2015	

PROJECT: PROPOSED O'REILLY AUTO PARTS
 139 HATHAWAY ROAD
 NEW BEDFORD, MASSACHUSETTS

DATE: APRIL 17, 2015
 DRAWN: NAD
 CHECKED: SDG
 APPROVED: SDG
 DRAWING NUMBER: ESC-1

S.B. REALTY LIMITED PARTNERSHIP
 EROSION/SEDIMENTATION CONTROL PLAN

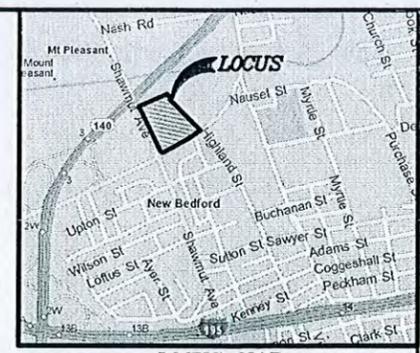
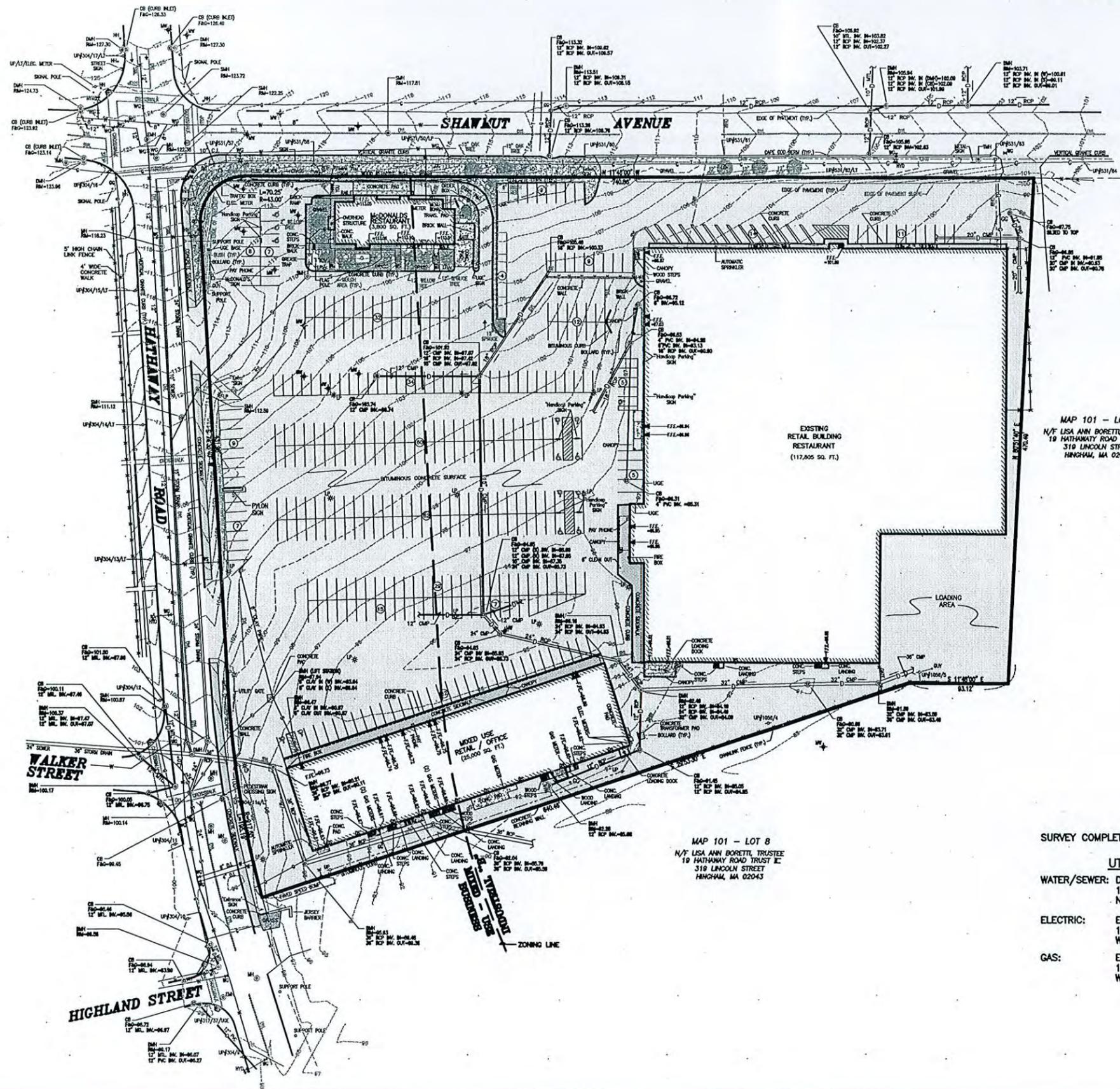
SITEC, Inc.
 449 Fenwick Corner Road
 Southport, MA 02747
 (508) 885-7524
 (508) 885-7524
 www.sitec-engineering.com

Acad No. MB 07-3977
 DEMOLITION PLANDWG
 File No. 07-3977

CITY CLERKS OFFICE
 NEW BEDFORD, MA

PLANNING
 MAY 13 2016
 DEPARTMENT

Case 19-16
 05/13/2016



LOCUS MAP
SCALE: 1"=1,000'

LEGEND

- PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - CHAIN LINK FENCE
- OVERHEAD WIRES
- - - - - UNDERGROUND TELEPHONE LINE
- - - - - GAS MAIN
- - - - - WATER MAIN
- - - - - SEWER LINE
- - - - - DRAINAGE LINE
- - - - - UNDERGROUND ELECTRIC
- - - - - SOLID WHITE LINE
- - - - - SOLID YELLOW LINE
- - - - - DOUBLE YELLOW LINE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- WATER GATE VALVE
- WATER SERVICE
- GAS GATE VALVE
- LIGHT POLE
- DOWN SPOUT
- IRRIGATION CONTROL VALVE
- UTILITY HAND HOLE
- UTILITY POLE
- MONITORING WELL
- HANDICAP RAMP
- TREE
- BUILDING ENTRANCE

MAP 101 - LOT 8
N/F LISA ANN BORETTI, TRUSTEE
19 HATHAWAY ROAD TRUST II
319 LINCOLN STREET
HINGHAM, MA 02043

MAP 101 - LOT 8
N/F LISA ANN BORETTI, TRUSTEE
19 HATHAWAY ROAD TRUST II
319 LINCOLN STREET
HINGHAM, MA 02043

SURVEY COMPLETED: JUNE 2010, UPDATED MAY 2014

UTILITY COMPANIES
WATER/SEWER: DEPARTMENT OF INFRASTRUCTURE
1105 SHAWMUT AVENUE
NEW BEDFORD, MA 02740
ELECTRIC: EVERSOURCE
1 NSTAR WAY
WESTWOOD, MA 02090
GAS: EVERSOURCE
1 NSTAR WAY
WESTWOOD, MA 02090

LOT AREA
421,781 SQ. FT.
9.68 ACRES



No.	Date	Revision Description
1	MAY 9, 2016	REVISE SITE LAYOUT

Scale:	1"=40'
Drawn:	NAD
Checked:	SDG
Approved:	SDG
Sheet:	8 of 9
Drawing Number:	EC-1

Project:	PROPOSED O'REILLY AUTO PARTS 139 HATHAWAY ROAD NEW BEDFORD, MASSACHUSETTS
Client:	S.B. REALTY LIMITED PARTNERSHIP
Contract:	EXISTING CONDITIONS

SITEC ENGINEERING
449 Francis Corner Road
Dorchester, MA 02124
Tel: (508) 285-7554
Fax: (508) 285-7554
www.sitec-engineering.com

PLANNING
116
DEPARTMENT

Acad No. NB 07-3077 EC.DWG
File No. 07-3077

Case 19-16
05/13/2016



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature




Signature and Date

8.3.15

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to Infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the proprietary BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted *prior* to the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does *not* cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has *not* been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has *not* been included in the Stormwater Report but will be submitted *before* land disturbance begins.
- The project is *not* covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is *not* the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted *prior to* the discharge of any stormwater to post-construction BMPs.

SITEC

Civil and Environmental Engineering
Land Use Planning

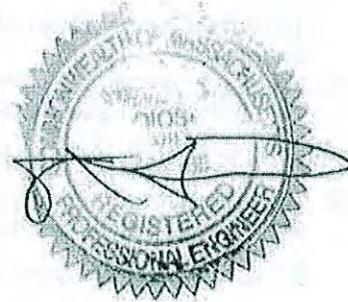
SITEC, Inc.
449 Faunce Corner Road
Dartmouth, MA 02747
Tel. (508) 998-2125 Fax (508) 998-7554

Unit C
769 Plain Street
Marshfield, MA 02050
Tel. (781) 319-0100 Fax: (781) 834-4783

DRAINAGE SUMMARY

PROJECT: Retail Development
139 Hathaway Road
New Bedford, MA

Date: July 29, 2015



EXISTING CONDITIONS

A new re-development of approximately 1 acre is proposed for this 10 acre site. The area of development will be midway on the property along Hathaway Road. All of the area to be developed is 100 % impervious bituminous pavement. Currently stormwater sheet flows northeasterly across this pavement into an on-site drainage system. The system consists of catch basins, piping and drainage manholes and discharges off site near the embankment of Route 140 north.

PROPOSED CONDITIONS

A new 7,250 sf freestanding retail building is proposed in this area. The existing facility entrances on Hathaway Road will be improved. Parking will be better defined. A significant amount of the existing pavement will be replaced with landscaping. Stormwater from the development will be treated with a new Stormceptor 450-1 stormwater unit and the roof top run off will be directed into an underground infiltration/detention system. Both the Stormceptor and the roof top infiltration system will be connected to existing drainage system.

ANALYSIS

Existing and proposed conditions were analyzed using a computer version of TR-20 (attached). Soils on site are listed as urban undorths. Normally this type of soil is considered to be in Hydrological Class C. A summary of this analysis is shown below. As can be seen there is a decrease in not only Peak Flows but in volume of run off leaving the site.

S.B. REALTY LIMITED PARTNERSHIP
 139 HATHAWAY ROAD
 NEW BEDFORD, MA

Summary of TR-20 Analysis

StormEvent	<u>2-Year</u>		<u>10-Year</u>		<u>100-Year</u>	
	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>	<u>Peak</u>	<u>Volume</u>
	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>	<u>CFS</u>	<u>AF</u>
Existing	3.16	0.241	4.72	0.364	8.41	0.654
Proposed	2.08	0.143	3.45	0.244	6.66	0.489
Decrease	1.08		0.825		1.75	
Decrease		0.098		0.120		0.165

Recharge

Existing Impervious

43912 sf

Proposed Impervious

32320 sf

Decrease In Impervious

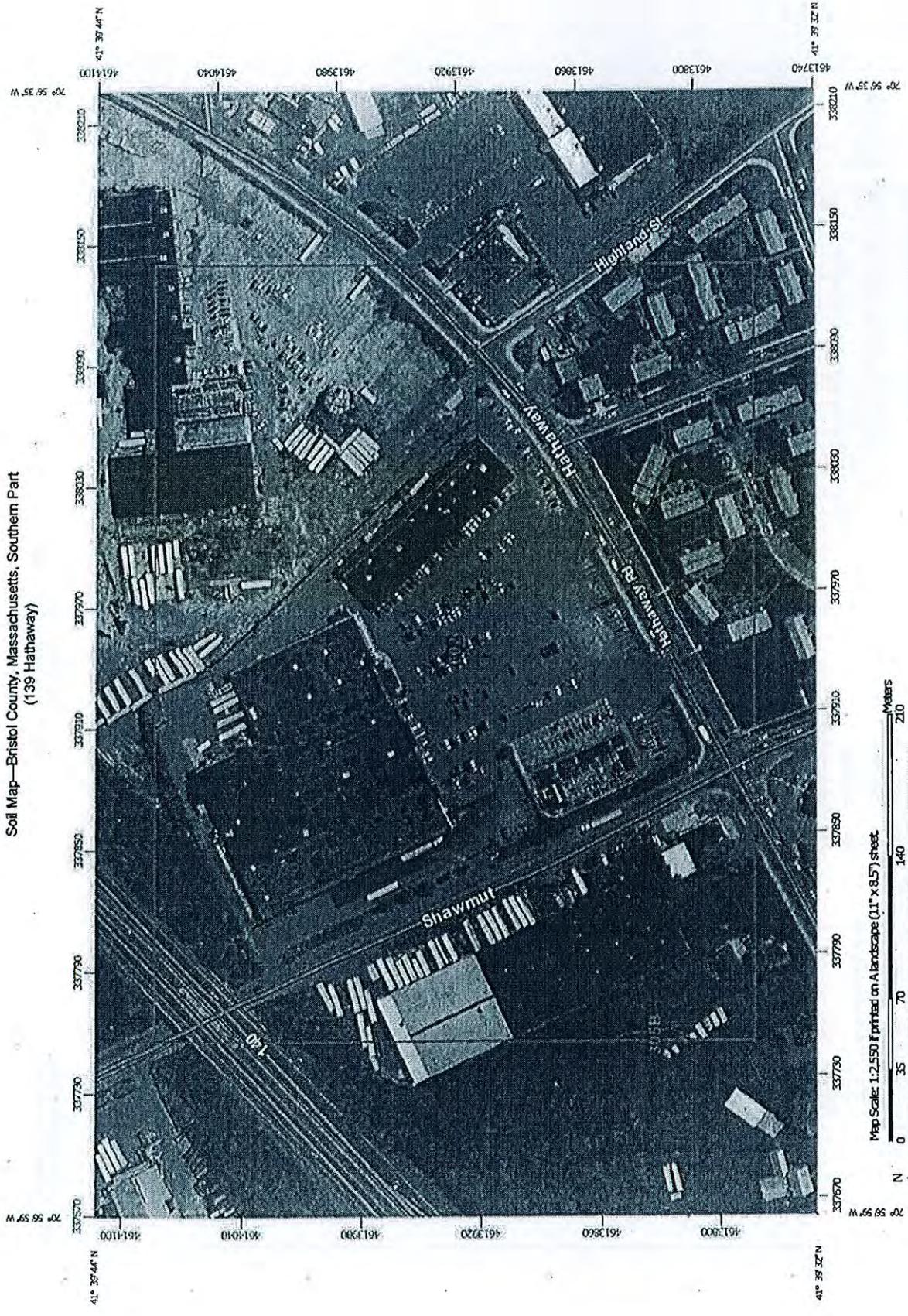
11592 sf

This project is a redevelopment.
 As noted above, no increase in peak rate or volume has occurred
 No increase in Impervious area has occurred. No Recharge volume is required.
 All roof top run off will be infiltrated via a sub surface chamber system.
 Infiltration requirements are the maximum extent practicable.

CONCLUSION

As noted in the above Summary, no increase in runoff Peak Flow or Volume has occurred. This has been accomplished by reducing the impervious area and adding substantial landscaping as well as directing the roof top run off into an underground chamber system where stormwater will be detained and infiltrated. Since the project is re-development, stormwater standards only have to be to the maximum extent practicable. The stormwater quality has been improved and the stormwater volume and peak flows have been reduced.

Soil Map—Bristol County, Massachusetts, Southern Part
(138 Hathaway)



MAP LEGEND

- | | |
|------------------------|-----------------------|
| Area of Interest (AOI) | Spoil Area |
| Soils | Stony Spot |
| Soil Map Unit Polygons | Very Stony Spot |
| Soil Map Unit Lines | Wet Spot |
| Soil Map Unit Points | Other |
| Special Point Features | Special Line Features |
| Blowout | Water Features |
| Borrow Pit | Streams and Canals |
| Clay Spot | Transportation |
| Closed Depression | Rails |
| Gravel Pit | Interstate Highways |
| Gravelly Spot | US Routes |
| Landfill | Major Roads |
| Lava Flow | Local Roads |
| Marsh or swamp | Background |
| Mine or Quarry | Aerial Photography |
| Miscellaneous Water | |
| Perennial Water | |
| Rock Outcrop | |
| Saline Spot | |
| Sandy Spot | |
| Severely Eroded Spot | |
| Sinkhole | |
| Slide or Slip | |
| Sodic Spot | |

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bristol County, Massachusetts, Southern Part
Survey Area Data: Version 8, Sep 19, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 30, 2011—Oct 8, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Bristol County, Massachusetts, Southern Part (MA603)			
Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
305B	Paxton fine sandy loam, 3 to 8 percent slopes	0.0	0.1%
602	Urban land	28.7	99.9%
Totals for Area of Interest		28.7	100.0%

Bristol County, Massachusetts, Southern Part

305B—Paxton fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t2qp
Elevation: 0 to 1,570 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Paxton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, crest, nose slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: C

Minor Components

Woodbridge

Percent of map unit: 9 percent

Landform: Hills, drumlins, ground moraines

Landform position (two-dimensional): Backslope, footslope, summit

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Linear

Ridgebury

Percent of map unit: 6 percent

Landform: Depressions, ground moraines, drainageways, hills

Landform position (two-dimensional): Toeslope, backslope, footslope

Landform position (three-dimensional): Base slope, head slope, dip

Down-slope shape: Concave

Across-slope shape: Concave

Charlton

Percent of map unit: 5 percent

Landform: Hills

Down-slope shape: Linear

Across-slope shape: Linear

Data Source Information

Soil Survey Area: Bristol County, Massachusetts, Southern Part

Survey Area Data: Version 8, Sep 19, 2014

Bristol County, Massachusetts, Southern Part

602—Urban land

Map Unit Setting

National map unit symbol: v5ry
Frost-free period: 120 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Parent material: Excavated and filled land

Minor Components

Udorthents

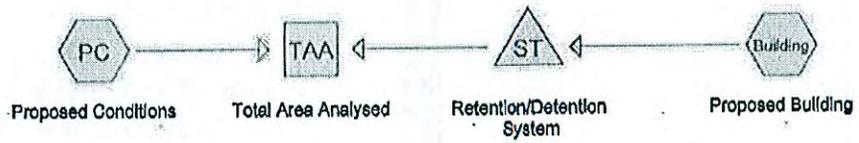
Percent of map unit: 15 percent

Data Source Information

Soil Survey Area: Bristol County, Massachusetts, Southern Part
Survey Area Data: Version 8, Sep 19, 2014



Existing Conditions
Analysed



Routing Diagram for S&B New Bedford
Prepared by (enter your company name here), Printed 7/16/2015
HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Summary for Subcatchment Building: Proposed Building

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af, Depth> 2.31"

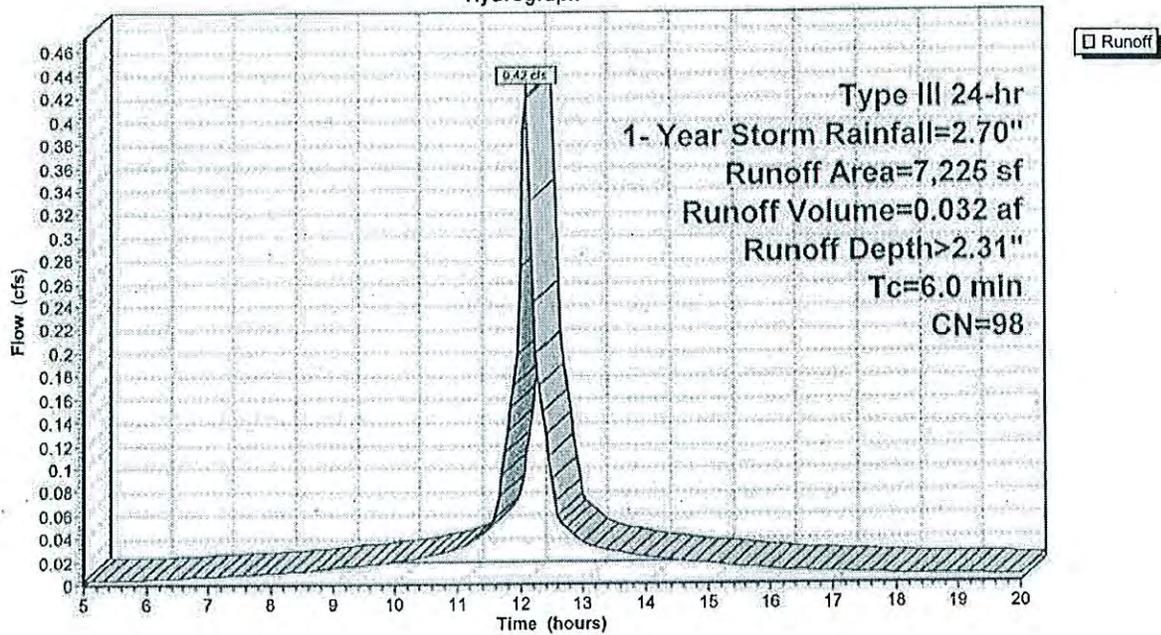
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 1- Year Storm Rainfall=2.70"

Area (sf)	CN	Description
7,225	98	Roofs, HSG D
7,225		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Building: Proposed Building

Hydrograph



Summary for Subcatchment Exist: Existing Conditions Analysed

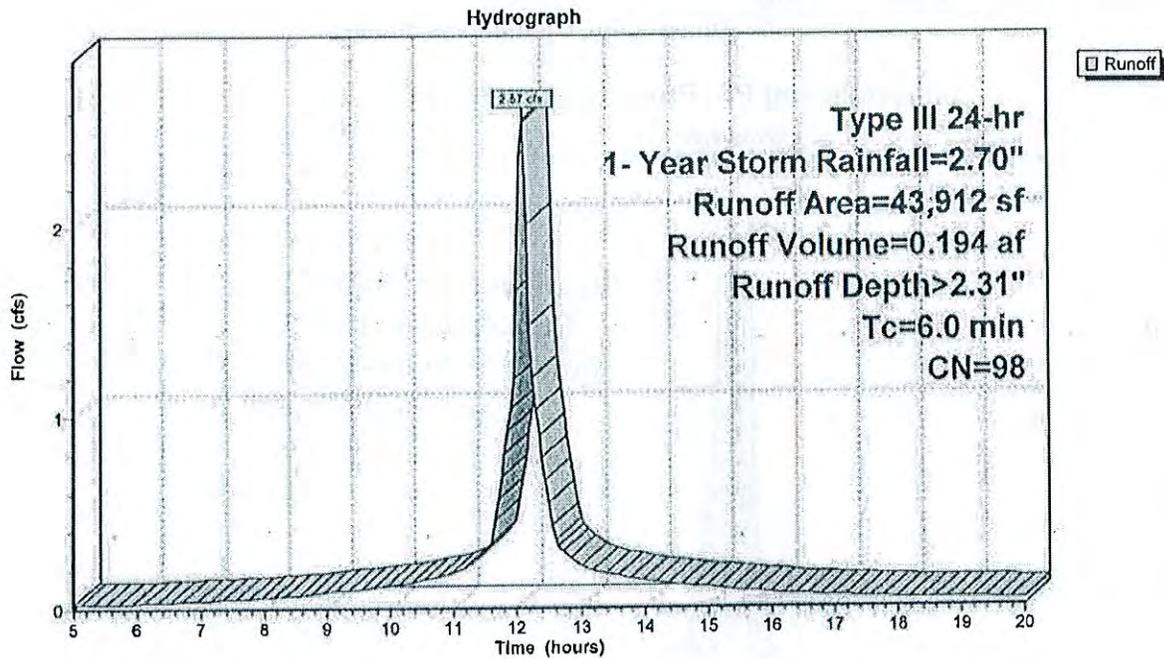
Runoff = 2.57 cfs @ 12.09 hrs, Volume= 0.194 af, Depth> 2.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 1- Year Storm Rainfall=2.70"

Area (sf)	CN	Description
43,912	98	Paved parking, HSG C
43,912		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum

Subcatchment Exist: Existing Conditions Analysed



Summary for Subcatchment PC: Proposed Conditions

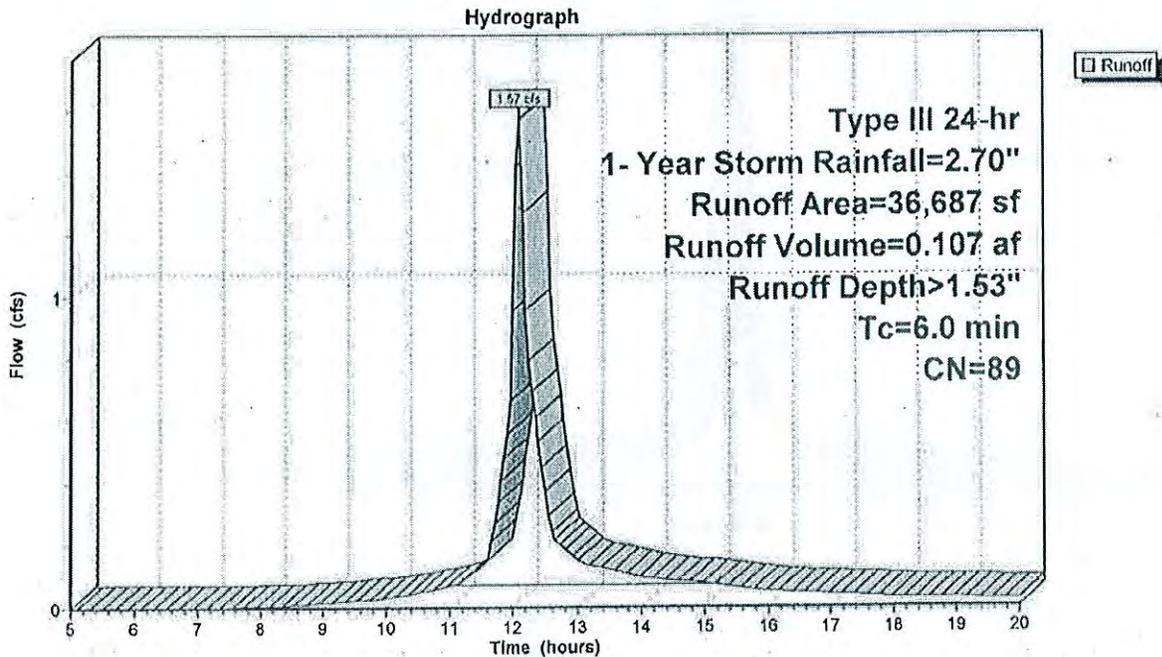
Runoff = 1.57 cfs @ 12.09 hrs, Volume= 0.107 af, Depth> 1.53"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 1- Year Storm Rainfall=2.70"

Area (sf)	CN	Description
25,095	98	Paved parking, HSG C
9,960	70	Woods, Good, HSG C
1,632	74	>75% Grass cover, Good, HSG C
36,687	89	Weighted Average
11,592		31.60% Pervious Area
25,095		68.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 minute minimum

Subcatchment PC: Proposed Conditions

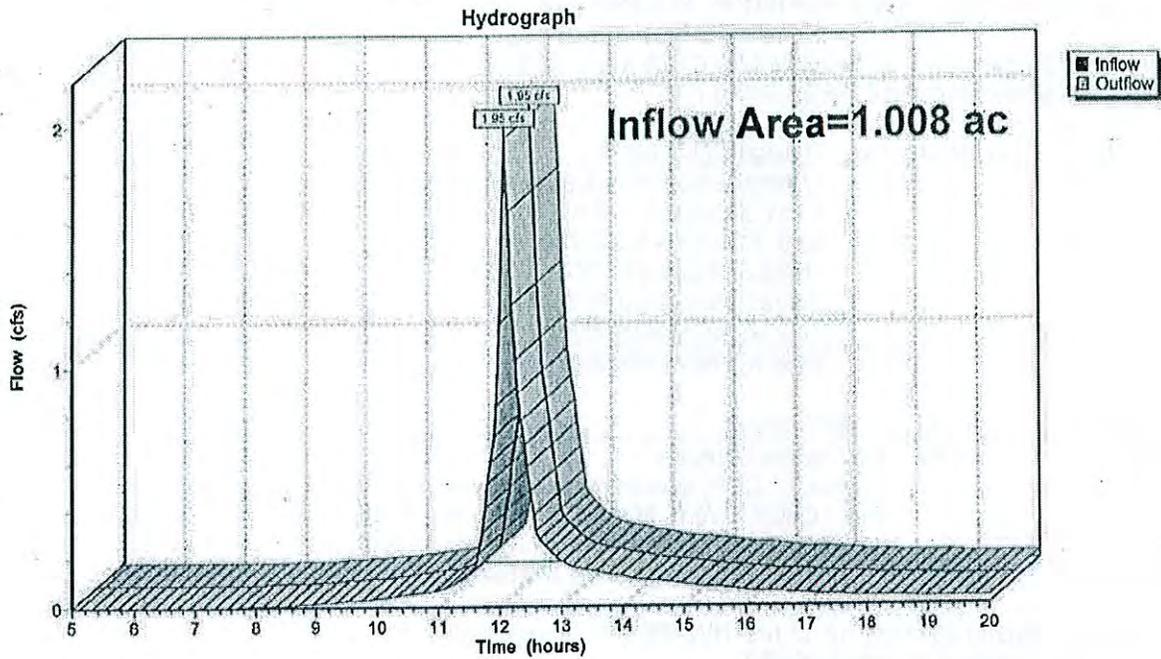


Summary for Reach TAA: Total Area Analysed

Inflow Area = 1.008 ac, 73.60% Impervious, Inflow Depth > 1.55" for 1- Year Storm event
Inflow = 1.95 cfs @ 12.10 hrs, Volume= 0.131 af
Outflow = 1.95 cfs @ 12.10 hrs, Volume= 0.131 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach TAA: Total Area Analysed



Summary for Pond ST: Retention/Detention System

Inflow Area = 0.166 ac, 100.00% Impervious, Inflow Depth > 2.31" for 1- Year Storm event
 Inflow = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af
 Outflow = 0.39 cfs @ 12.12 hrs, Volume= 0.024 af, Atten= 7%, Lag= 2.0 min
 Discarded = 0.00 cfs @ 12.12 hrs, Volume= 0.001 af
 Primary = 0.39 cfs @ 12.12 hrs, Volume= 0.023 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 96.97' @ 12.12 hrs Surf.Area= 504 sf Storage= 413 cf

Plug-Flow detention time= 117.7 min calculated for 0.024 af (75% of inflow)
 Center-of-Mass det. time= 56.4 min (796.8 - 740.4)

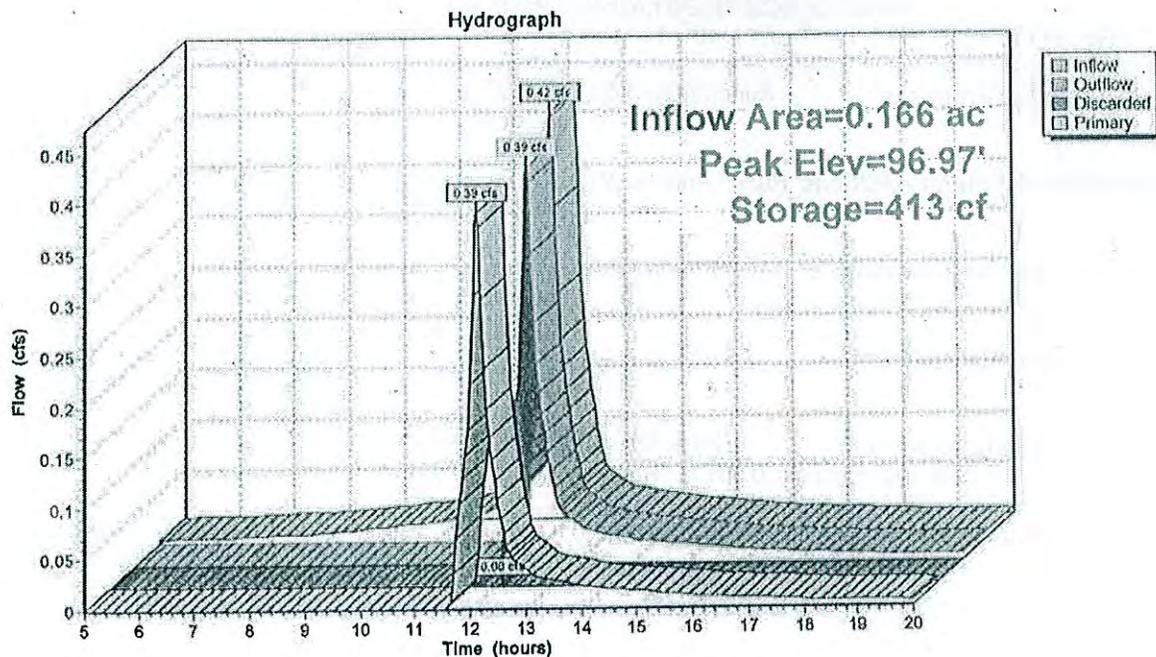
Volume	Invert	Avail.Storage	Storage Description
#1	94.25'	664 cf	17.00'W x 17.00'L x 4.50'H Prismatoid Z=1.0 2,111 cf Overall - 98 cf Embedded = 2,013 cf x 33.0% Voids
#2	94.95'	98 cf	ADS_StormTech SC-740 x 2 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		762 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	96.55'	6.0" Round Culvert L= 114.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.55' / 90.10' S= 0.0566 1' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	94.25'	0.050 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.00 cfs @ 12.12 hrs HW=96.96' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.38 cfs @ 12.12 hrs HW=96.96' (Free Discharge)
 ↳1=Culvert (Inlet Controls 0.38 cfs @ 2.19 fps)

Pond ST: Retention/Detention System



S&B New Bedford

Type III 24-hr 2- Year Storm Rainfall=3.30"

Prepared by {enter your company name here}

Printed 7/16/2015

HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Page 2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Building: Proposed

Runoff Area=7,225 sf 100.00% Impervious Runoff Depth>2.87"
Tc=6.0 min CN=98 Runoff=0.52 cfs 0.040 af

Subcatchment Exist: Existing Conditions

Runoff Area=43,912 sf 100.00% Impervious Runoff Depth>2.87"
Tc=6.0 min CN=98 Runoff=3.16 cfs 0.241 af

Subcatchment PC: Proposed Conditions

Runoff Area=36,687 sf 68.40% Impervious Runoff Depth>2.04"
Tc=6.0 min CN=89 Runoff=2.08 cfs 0.143 af

Reach TAA: Total Area Analysed

Inflow=2.54 cfs 0.174 af
Outflow=2.54 cfs 0.174 af

Pond ST: Retention/Detention System

Peak Elev=97.05' Storage=427 cf Inflow=0.52 cfs 0.040 af
Discarded=0.00 cfs 0.001 af Primary=0.47 cfs 0.031 af Outflow=0.47 cfs 0.032 af

Total Runoff Area = 2.016 ac Runoff Volume = 0.424 af Average Runoff Depth = 2.52"
13.20% Pervious = 0.266 ac 86.80% Impervious = 1.750 ac

S&B New Bedford

Type III 24-hr 10- Year Storm Rainfall=4.90"

Prepared by {enter your company name here}

Printed 7/16/2015

HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Building: Proposed

Runoff Area=7,225 sf 100.00% Impervious Runoff Depth>4.33"
Tc=6.0 min CN=98 Runoff=0.78 cfs 0.060 af

Subcatchment Exist: Existing Conditions

Runoff Area=43,912 sf 100.00% Impervious Runoff Depth>4.33"
Tc=6.0 min CN=98 Runoff=4.72 cfs 0.364 af

Subcatchment PC: Proposed Conditions

Runoff Area=36,687 sf 68.40% Impervious Runoff Depth>3.47"
Tc=6.0 min CN=89 Runoff=3.45 cfs 0.244 af

Reach TAA: Total Area Analysed

Inflow=4.09 cfs 0.295 af
Outflow=4.09 cfs 0.295 af

Pond ST: Retention/Detention System

Peak Elev=97.31' Storage=474 cf Inflow=0.78 cfs 0.060 af
Discarded=0.00 cfs 0.001 af Primary=0.67 cfs 0.051 af Outflow=0.67 cfs 0.052 af

Total Runoff Area = 2.016 ac Runoff Volume = 0.667 af Average Runoff Depth = 3.97"
13.20% Pervious = 0.266 ac 86.80% Impervious = 1.750 ac

S&B New Bedford

Type III 24-hr 100- Year Storm Rainfall=8.70"

Prepared by {enter your company name here}

Printed 7/16/2015

HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Page 4

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Building: Proposed Runoff Area=7,225 sf 100.00% Impervious Runoff Depth>7.78"
Tc=6.0 min CN=98 Runoff=1.38 cfs 0.108 af

Subcatchment Exist: Existing Conditions Runoff Area=43,912 sf 100.00% Impervious Runoff Depth>7.78"
Tc=6.0 min CN=98 Runoff=8.41 cfs 0.654 af

Subcatchment PC: Proposed Conditions Runoff Area=36,687 sf 68.40% Impervious Runoff Depth>6.96"
Tc=6.0 min CN=89 Runoff=6.66 cfs 0.489 af

Reach TAA: Total Area Analysed Inflow=7.66 cfs 0.587 af
Outflow=7.66 cfs 0.587 af

Pond ST: Retention/Detention System Peak Elev=98.13' Storage=631 cf Inflow=1.38 cfs 0.108 af
Discarded=0.00 cfs 0.001 af Primary=1.09 cfs 0.099 af Outflow=1.09 cfs 0.099 af

Total Runoff Area = 2.016 ac Runoff Volume = 1.250 af Average Runoff Depth = 7.44"
13.20% Pervious = 0.266 ac 86.80% Impervious = 1.750 ac

S&B New Bedford

Type III 24-hr 25 Year Storm Rainfall=6.10"

Prepared by {enter your company name here}

Printed 7/17/2015

HydroCAD® 10.00 s/n 01164 © 2012 HydroCAD Software Solutions LLC

Summary for Subcatchment ACB: Area to CB

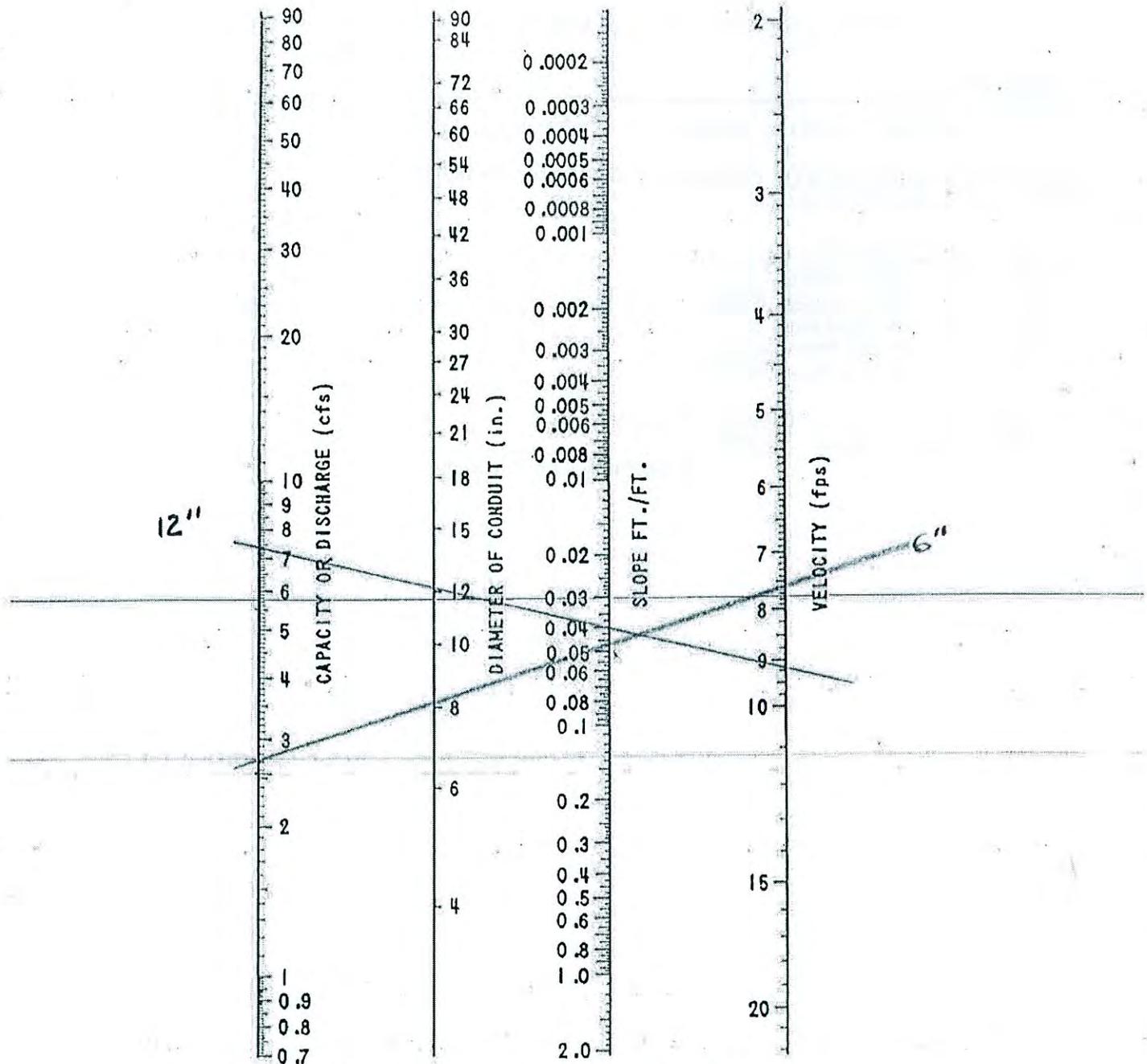
For catch basin sizing.

Runoff = 3.04 cfs @ 12.09 hrs, Volume= 0.220 af, Depth> 4.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Storm Rainfall=6.10"

Area (sf)	CN	Description
17,424	98	Paved parking, HSG C
7,170	70	Woods, Good, HSG C
24,594	90	Weighted Average
7,170		29.15% Pervious Area
17,424		70.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Use Minimum



Nomograph based on Manning's formula for circular pipes flowing full in which $n=0.013$.

Reference: Hydraulics Manual, Oregon Department of Transportation.

Figure 10-31. Concrete Pipe Flowing Full



Stormceptor Design Summary

PCSWMM for Stormceptor

Project Information

Date	7/13/2015
Project Name	S.B.Realty Limite Partnership
Project Number	N/A
Location	139 Hathatway Road, New Bedford, MA

Rainfall

Name	HYANNIS
State	MA
ID	3821
Years of Records	1984 to 1997
Latitude	41°24'0"N
Longitude	70°10'47"W

Designer Information

Company	SITEC, INC>
Contact	John Keegan

Notes

N/A

Water Quality Objective

TSS Removal (%)	80
-----------------	----

Drainage Area

Total Area (ac)	0.4
Imperviousness (%)	100

Upstream Storage

Storage (ac-ft)	Discharge (cfs)
0	0

The Stormceptor System model STC 450i achieves the water quality objective removing 84% TSS for a Fine (organics, silts and sand) particle size distribution.

Stormceptor Sizing Summary

Stormceptor Model	TSS Removal
	%
STC 450i	84
STC 900	90
STC 1200	90
STC 1800	90
STC 2400	93
STC 3600	93
STC 4800	95
STC 6000	95
STC 7200	96
STC 11000	97
STC 13000	97
STC 16000	98



Particle Size Distribution

Removing silt particles from runoff ensures that the majority of the pollutants, such as hydrocarbons and heavy metals that adhere to fine particles, are not discharged into our natural water courses. The table below lists the particle size distribution used to define the annual TSS removal.

Fine (organics, silts and sand)							
Particle Size	Distribution	Specific Gravity	Settling Velocity	Particle Size	Distribution	Specific Gravity	Settling Velocity
μm	%		ft/s	μm	%		ft/s
20	20	1.3	0.0013				
60	20	1.8	0.0051				
150	20	2.2	0.0354				
400	20	2.65	0.2123				
2000	20	2.65	0.9417				

Stormceptor Design Notes

- Stormceptor performance estimates are based on simulations using PCSWMM for Stormceptor.
- Design estimates listed are only representative of specific project requirements based on total suspended solids (TSS) removal.
- Only the STC 450i is adaptable to function with a catch basin inlet and/or inline pipes.
- Only the Stormceptor models STC 450i to STC 7200 may accommodate multiple inlet pipes.
- Inlet and outlet invert elevation differences are as follows:

Inlet and Outlet Pipe Invert Elevations Differences

Inlet Pipe Configuration	STC 450i	STC 900 to STC 7200	STC 11000 to STC 16000
Single inlet pipe	3 in.	1 in.	3 in.
Multiple inlet pipes	3 in.	3 in.	Only one inlet pipe.

- Design estimates are based on stable site conditions only, after construction is completed.
- Design estimates assume that the storm drain is not submerged during zero flows. For submerged applications, please contact your local Stormceptor representative.
- Design estimates may be modified for specific spills controls. Please contact your local Stormceptor representative for further assistance.
- For pricing inquiries or assistance, please contact Rinker Materials 1 (800) 909-7763 www.rinkerstormceptor.com

**OPERATION/MAINTENANCE PLAN
STORMWATER MANAGEMENT SYSTEM**

**S.B. Realty Limited Partnership
139 Hathaway Road
Proposed Family Dollar Store Parking Area
Map 101 – Lot 14
New Bedford, MA
June 17, 2015**

1. Storm Water Management System Owner:

**Owner: S.B. Realty Limited Partnership
100 North Front Street
New Bedford, Massachusetts 02745**

2. Responsible Parties:

During the construction period, the owner's contractor will be responsible for the Operation/Maintenance of the system. When the construction is accepted, the responsibility for the maintenance will shift to the System Owner (S.B. Realty Limited Partnership).

3. Schedule for Inspection/Maintenance:

- A.** The Stormwater Management System shall be inspected annually and cleared of debris, sediment and vegetation when they affect the functioning and/or design capacity of the system. The inspection should be made during wet weather conditions. **All Stormwater BMP's will be maintained according the recommendations in Volume 2: Technical Guidance for Compliance.MSWS, Chapter 2-Structural BMP Specifications for the Massachusetts Stormwater Handbook.**

- B. The Stormceptor 450-i Unit will be maintained according to the manufacturer's recommendations. Upon initial installation the unit will be inspected and any debris removed before being put in service. Every six months for the first year the unit will be inspected to determine the sediment and oil accumulation rate. Further inspections can be based on data collected in the first year. Cleaning is required once the sediment depth reaches 15% of storage capacity. Inspect the unit immediately after any spill. Use a licensed waste management company to remove accumulated sediments or oil.
- C. The StormTech units will be inspected yearly for any sediment build up. Proper maintenance of the Stormceptor will provide limited maintenance. If sediment build up is found, jet wash and jetvac the system until clean.
- D. Where lack of maintenance is causing or contributing to a water quality problem, immediate action shall be taken by the owner to correct the problem within 14 days.
- E. All remedial actions required to maintain the stormwater management system for the purpose it was designed and constructed must be performed within 30 days following the maintenance inspection.
- F. During construction, the contractor shall inspect all sediment barriers and drainage structures after every rainfall event. The sedimentation barriers shall be repaired as needed and accumulated silt and debris shall not be allowed to wash into the adjacent resource area. After all construction is completed, the catch basins of debris.

4. Funding for O/M

The cost of the maintenance shall be the responsibility of the owner. The cost of the annual inspection and maintenance is minimal and should average less than \$1,500/year.

5. Access

Access to the BMP's will be available from the edge of the parking lot.

6. Public Safety

Traffic control will be implemented during the maintenance of the Stormceptor Unit and Stormtech Units.

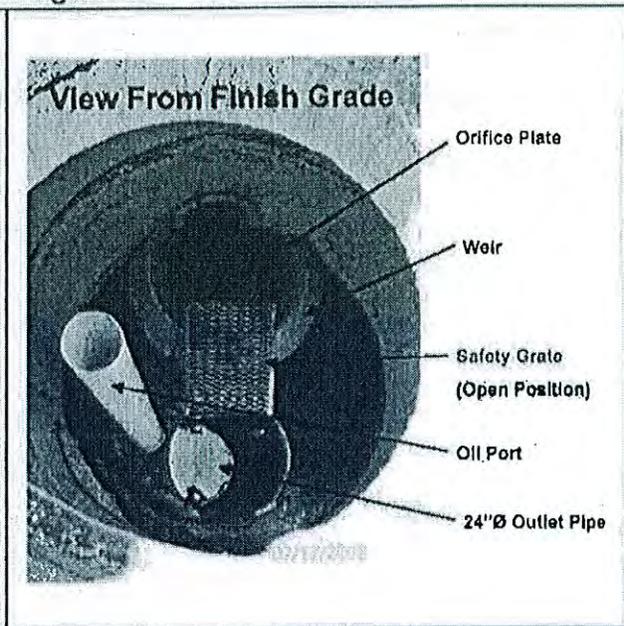
Recommended Stormceptor Inspection Procedure:

- Stormceptor is to be inspected from grade through a standard surface manhole access cover.
- Sediment and oil depth inspections are performed with a sediment probe and oil dipstick.
- Oil depth is measured through the oil inspection port, either a 4-inch (100 mm) or 6-inch (150 mm) diameter port.
- Sediment depth can be measured through the oil inspection port or the 24-inch (610 mm) diameter outlet riser pipe.
- Inspections also involve a visual inspection of the internal components of the system.

Figure 3.



Figure 4.



What equipment is typically required for maintenance?

- Vacuum truck equipped with water hose and jet nozzle
- Small pump and tubing for oil removal
- Manhole access cover lifting tool
- Oil dipstick / Sediment probe with ball valve (typically 3/4-inch to 1-inch diameter)
- Flashlight
- Camera
- Data log / Inspection Report
- Safety cones
- Hard hats, safety shoes, safety glasses, chemical-resistant gloves, and hearing protection for service providers
- Gas analyzer, respiratory gear, and safety harness for specially trained personnel if confined space entry is required

Recommended Stormceptor Maintenance Procedure

Maintenance of Stormceptor is performed using a vacuum truck.

No entry into the unit is required for maintenance. **DO NOT ENTER THE STORMCEPTOR CHAMBER** unless you have the proper personal safety equipment, have been trained and are qualified to enter a confined space, as identified by local Occupational Safety and Health Regulations (e.g. 29 CFR 1910.146 or Canada Occupational Safety and Health Regulations – SOR/86-304). Without the proper equipment, training and permit, entry into confined spaces can result in serious bodily harm and potentially death. Consult local, provincial, and/or state regulations to determine the requirements for confined space entry. Be aware, and take precaution that the Stormceptor fiberglass insert may be slippery. In addition, be aware that some units do not have a safety grate to cover the outlet riser pipe that leads to the submerged, lower chamber.

- Ideally maintenance should be conducted during dry weather conditions when no flow is entering the unit.
- Stormceptor is to be maintained through a standard surface manhole access cover.
- Insert the oil dipstick into the oil inspection port. If oil is present, pump off the oil layer into separate containment using a small pump and tubing.
- Maintenance cleaning of accumulated sediment is performed with a vacuum truck.
 - For 6-ft (1800 mm) diameter models and larger, the vacuum hose is inserted into the lower chamber via the 24-inch (610 mm) outlet riser pipe.
 - For 4-ft (1200 mm) diameter model, the removable drop tee is lifted out, and the vacuum hose is inserted into the lower chamber via the 12-inch (305 mm) drop tee hole.

Figure 5.

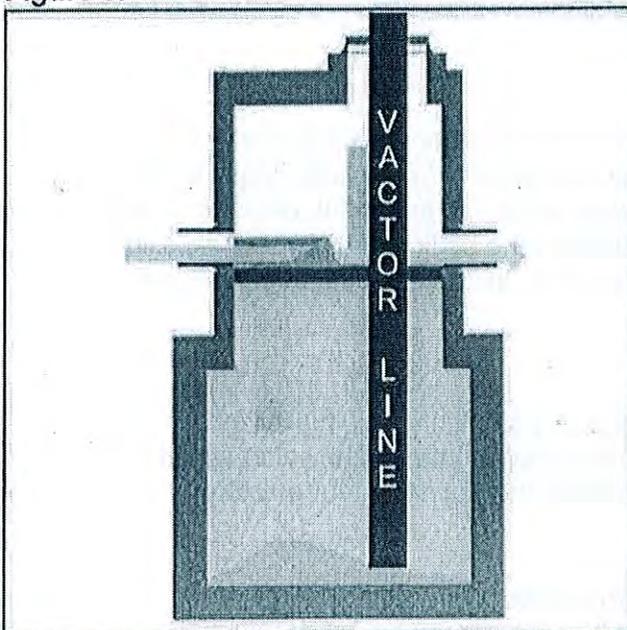
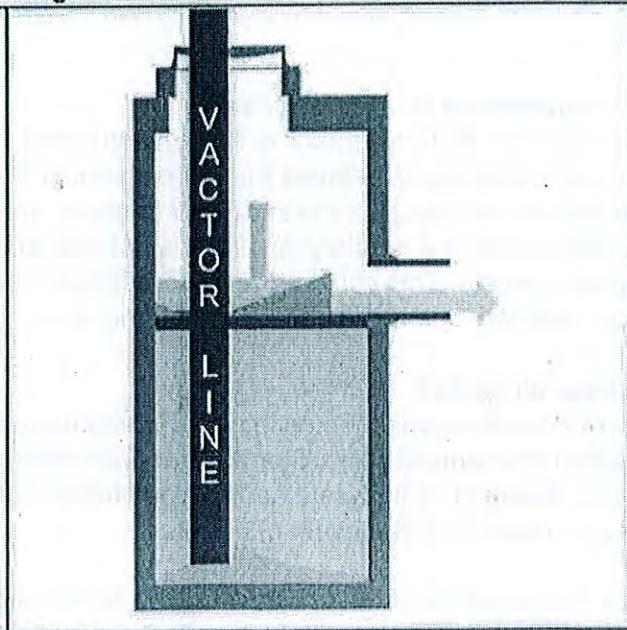


Figure 6.

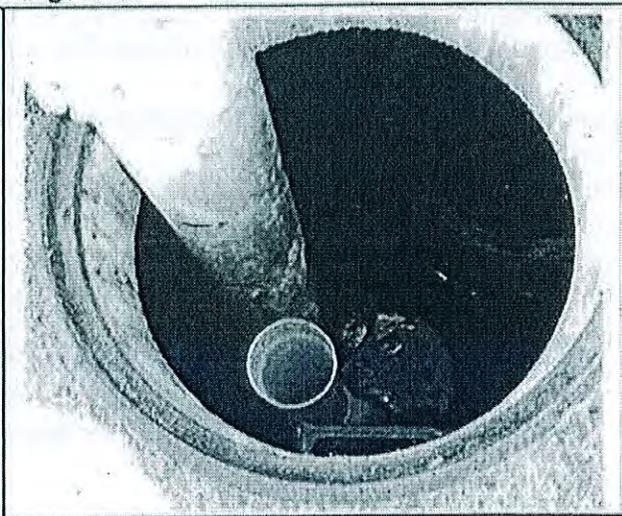


- Using the vacuum hose, decant the water from the lower chamber into a separate containment tank or to the sanitary sewer, if permitted by the local regulating authority.
- Remove the sediment sludge from the bottom of the unit using the vacuum hose. For large Stormceptor units, a flexible hose is often connected to the primary vacuum line for ease of movement in the lower chamber.
- Units that have not been maintained regularly, have surpassed the maximum recommended sediment capacity, or contain damaged components may require manned entry by trained personnel using safe and proper confined space entry procedures.

Figure 7.



Figure 8.



A maintenance worker stationed at the above ground surface uses a vacuum hose to evacuate water, sediment, and debris from the system.

What is required for proper disposal?

The requirements for the disposal of material removed from Stormceptor units are similar to that of any other stormwater treatment Best Management Practices (BMP). Local guidelines should be consulted prior to disposal of the separator contents. In most areas the sediment, once dewatered, can be disposed of in a sanitary landfill. It is not anticipated that the sediment would be classified as hazardous waste. This could be site and pollutant dependent. In some cases, approval from the disposal facility operator/agency may be required.

What about oil spills?

Stormceptor is often implemented in areas where there is high potential for oil, fuel or other hydrocarbon or chemical spills. Stormceptor units should be cleaned immediately after a spill occurs by a licensed liquid waste hauler. You should also notify the appropriate regulatory agencies as required in the event of a spill.

What if I see an oil rainbow or sheen at the Stormceptor outlet?

With a steady influx of water with high concentrations of oil, a sheen may be noticeable at the Stormceptor outlet. This may occur because a hydrocarbon rainbow or sheen can be seen at

very small oil concentrations (< 10 ppm). Stormceptor is effective at removing 95% of free oil, and the appearance of a sheen at the outlet with high influent oil concentrations does not mean that the unit is not working to this level of removal. In addition, if the influent oil is emulsified, the Stormceptor will not be able to remove it. The Stormceptor is designed for free oil removal and not emulsified or dissolved oil conditions.

What factors affect the costs involved with inspection/maintenance?

The Vacuum Service Industry for stormwater drainage and sewer systems is a well-established sector of the service industry that cleans underground tanks, sewers and catch basins. Costs to clean Stormceptor units will vary. Inspection and maintenance costs are most often based on unit size, the number of units on a site, sediment/oil/hazardous material loads, transportation distances, tipping fees, disposal requirements and other local regulations.

What factors predict maintenance frequency?

Maintenance frequency will vary with the amount of pollution on your site (number of hydrocarbon spills, amount of sediment, site activity and use, etc.). It is recommended that the frequency of maintenance be increased or reduced based on local conditions. If the sediment load is high from an unstable site or sediment loads transported from upstream catchments, maintenance may be required semi-annually. Conversely once a site has stabilized, maintenance may be required less frequently (for example: two to seven year, site and situation dependent). Maintenance should be performed immediately after an oil spill or once the sediment depth in Stormceptor reaches the value specified in **Table 3** based on the unit size.

Table 3A. (US) Recommended Sediment Depths Indicating Maintenance

STC Model	Maintenance Sediment depth (in)	EOS Model	Maintenance Sediment depth (in)	Oil Storage Depth (in)	OSR Model	Maintenance Sediment depth (in)
450	8	4-175	9	24	065	8
900	8	9-365	9	24	140	8
1200	10	12-590	11	39		
1800	15					
2400	12	24-1400	14	68	250	12
3600	17	36-1700	19	79		
4800	15	48-2000	16	68	390	17
6000	18	60-2500	20	79		
7200	15	72-3400	17	79	560	17
11000*	17	110-5000*	16	68	780*	17
13000*	20	130-6000*	20	79		
16000*	17	160-7800*	17	79	1125*	17

Note:

1. The values above are for typical standard units.

*Per structure.

Table 3B. (CA & Int'l) Recommended Sediment Depths Indicating Maintenance

STC Model	Maintenance Sediment depth (mm)	EOS Model	Maintenance Sediment depth (mm)	Oil Storage Depth (mm)	OSR Model	Maintenance Sediment depth (mm)
300	225	300	225	610	300	200
750	230	750	230	610	750	200
1000	275	1000	275	990		
1500	400					
2000	350	2000	350	1727	2000	300
3000	475	3000	475	2006		
4000	400	4000	400	1727	4000	375
5000	500	5000	500	2006		
6000	425	6000	425	2006	6000	375
9000*	400	9000*	400	1727	9000*	425
11000*	500	10000*	500	2006		
14000*	425	14000*	425	2006	14000*	425

Note:

1. The values above are for typical standard units.

*Per structure.

Replacement parts

Since there are no moving parts during operation in a Stormceptor, broken, damaged, or worn parts are not typically encountered. Therefore, inspection and maintenance activities are generally focused on pollutant removal. However, if replacements parts are necessary, they may be purchased by contacting your local Stormceptor Representative, or Imbrium Systems.

The benefits of regular inspection and maintenance are many – from ensuring maximum operation efficiency, to keeping maintenance costs low, to the continued protection of natural waterways – and provide the key to Stormceptor's long and effective service life.

Stormceptor Inspection and Maintenance Log

Stormceptor Model No: _____

Allowable Sediment Depth: _____

Serial Number: _____

Installation Date: _____

Location Description of Unit: _____

Other Comments: _____

Contact Information

Questions regarding the Stormceptor can be addressed by contacting your area Stormceptor Licensee, Imbrium Systems, or visit our website at www.stormceptor.com.

Stormceptor Licensees:

CANADA

Lafarge Canada Inc.
www.lafargeplpe.com
403-292-9502 / 1-888-422-4022
780-468-5910
204-958-6348

Calgary, AB
Edmonton, AB
Winnipeg, MB, NW, ON, SK

Langley Concrete Group
www.langleyconcretegroup.com
604-502-5236

BC

Hanson Pipe & Precast Inc.
www.hansonpipeandprecast.com
519-622-7574 / 1-888-888-3222

ON

Lécuyer et Fils Ltée.
www.lecuyerbeton.com
450-454-3928 / 1-800-561-0970

QC

Strescon Limited
www.strescon.com
902-494-7400
506-633-8877

NS, NF
NB, PE

UNITED STATES

Rinker Materials
www.rinkerstormceptor.com
1-800-909-7763

AUSTRALIA & SOUTHEAST ASIA, Including New Zealand & Japan

Humes Water Solutions
www.humes.com.au
+61 7 3364 2894

Imbrium Systems Inc. & Imbrium Systems LLC

Canada	1-416-960-9900 / 1-800-565-4801
United States	1-301-279-8827 / 1-888-279-8826
International	+1-416-960-9900 / +1-301-279-8827
Email	info@imbriumsystems.com

www.imbriumsystems.com
www.stormceptor.com

Stormwater Pollution Prevention and Construction Erosion and Sediment Control Plan
S.B. Realty Limited Partnership
139 Hathaway Road
New Bedford, MA 02740
July 7, 2015
Page 1

STORMWATER POLLUTION PREVENTION PLAN

AND

CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN

For:
S.B. Realty Limited Partnership
139 Hathaway Road
Map 101 Lot 14
New Bedford, MA 02740
508-990-8883

July 7, 2015

Estimated Project Dates:

Project Start: 11/1/2015
Project Completion: 07/14/2016

1.0 Project/ Site Information

Project Name: Retail Store
139 Hathaway Road
New Bedford, MA 02740

Latitude: 41° 39' 37.1" N **Longitude:** 70° 56' 46.6" W

This project is not located in Indian Country.

This project is not a Federal Facility.

NPDES Permit Number : To be determined.

1.1 Contact Information/ Responsible Parties

Operator:

S.B. Realty Limited Partnership
100 North Street
New Bedford, MA 02740

Total control of site Same

Project Manger/StormWater Pollution Prevention Plan (SWPP) Contact:

S.B. Realty Limited Partnership
100 North Street
New Bedford, MA 02740

508-990-8883

This SWPPP was Prepared By:

SITEC, INC.
449 Faunce Corner Road
Dartmouth, MA 02747
Telephone: 508-998-2125
Fax: 508-998-7554
Email: jkeegan@sitec-engineering.com

1.2 Nature and Sequence of Construction Activity

This is a commercial enterprise for the construction of additional parking area between two abutting lots. Low impact techniques, such as porous paver sidewalks, crushed Stone Diaphragm, Grass Swales with Fore Bays and Wet Shallow Raingardens for stormwater controls have been incorporated into the design. Additionally, soil amendments will be used to increase on site infiltration. Wetlands replication is proposed to replace any historically filled areas and erosion controls will be in place to help mitigate any impacts to resource areas.

1.3 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil Type: Urban Land and Ridgebury fine sandy loam.

Slopes: This site slopes northerly from Hathaway Road and easterly from Shawmut avenue. Slopes vary from 1% to 4%.

Drainage Pattern:

The drainage pattern of 139 Hathaway Road sheets flows northerly and easterly across the paved parking area into existing catch basins. The catch basins are piped to culvert that empties.

Vegetation:

There are grassed areas on the perimeter of the property adjacent to Hathaway road and Shawmut Avenue. More formal landscaping including small bushes and trees are located around the McDonalds building. Most of the lot is covered with buildings and paved parking areas.

1.4 Construction Site Estimates

Total project area: 10 acres

Construction site area to be disturbed: 1.3+- acres

Percent impervious area before construction: 96%

Percent impervious after construction: 96%

Runoff coefficient before construction: CN 95

Runoff coefficient after construction: CN 95

1.5 Receiving Waters:

Description of receiving waters:

Overland flow from outfall into drainage ditches along the bottom of slope of Route 140.

Description of storm sewer system:

The existing drainage pattern will be maintained. The new building will have a new catch basin type stormwater treatment unit. This unit will treat all of the new parking area. More landscaping is proposed at the new building and in traffic and parking islands throughout the parking lot. The total impervious area will decrease with the addition of this new landscaping. Additionally, the roof top run off will be directed into a underground retention/detention system that will infiltrate stormwater.

There are no impaired waters subject to TMDLs associated with this project.

1.6 Site Features and Sensitive Areas to be Protected

Description of unique features that are to be preserved:

The entire site is developed with buildings and paved parking areas. There are no unique feature's to preserve.

Description of measures to protect these features:

Erosion and Sediment controls will be in place before and during construction to insure that site run off is clean.

1.7 Potential Sources of Pollution

Petroleum products: Refueling vehicles will be DOT Certified and have SPCC Plans and contain emergency equipment to contain and clean up small spills. All on site construction vehicles will be inspected for leaks and receive regular preventative maintenance to reduce

the chance of leaks. Petroleum products will be stored in tightly sealed containers, which are clearly marked.

Fertilizers: All fertilizers will be stored in a dry protected area and only used according to manufactures recommendations.

Paints: All containers will be tightly sealed and stored when not required for use. All procedures will be followed to minimize spills and to keep products in the original containers.

Concrete Trucks: The site contractor is responsible for designating a safe area, away from abutting property and resource areas, for excess concrete disposal if required.

1.8 Endangered Species Certification

There are no endangered or threatened species and critical habitats on or near the project area. The on-line Massachusetts Endangered Species and Habitat maps were consulted.

1.9 Historic Preservation

There are no historic sites on or near the construction site. The site has been developed for many years and is not listed on the Massachusetts Historical Register. The project has received an in depth review during the permitting process through the Planning Board.

Plans

Project plans are enclosed

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

DESCRIPTION: (Purpose and Types of Soil Disturbing Activities)

This project will involve the re-development of two lots totaling 8.73 acres. Additional paved parking will be added along the southerly property line. Some of the parking will be shared with the adjacent lot. Soil disturbing activities will include: installing perimeter and other sediment controls; construction of wetlands replication, installing fill, temporary and permanent Stormwater controls.

2.1 SEQUENCE OF MAJOR ACTIVITIES

1. Install all erosion and sediment control measures and construction entrance per the enclosed approved plans. The Contractor will implement the use of widely accepted principles for erosion and sediment control during construction (see appendix).
2. Remove any vegetation and trees in the fill area. Use any excess wood chips for erosion controls. If tracking of sediment occurs, a crushed stone entrance will be constructed to control the tracking.
3. Begin excavation for building foundation and footing.
4. Install utility connections.
5. Construct and install new catch basin stormwater treatment unit. Do not go on line until all areas disturbed have been stabilized. Clean system prior to activation.
6. Construct parking area to gravel base course.
7. Install curbing, pavers and pavement.
8. Install all landscaping and plantings.
9. Finalize stabilization of parking areas.
10. Clean all permanent Stormwater BMP's.
11. Construction sequence may vary to minimize disturbance on site.

2.2 EROSION AND SEDIMENT CONTROLS

Temporary Stabilization: Where practical the construction will proceed in a phased fashion to minimize exposing large areas at one time. In addition to the perimeter controls, erosion control may be accomplished using temporary measures (see enclosed Plan) such as tracking, seeding or mulching, spraying of liquid stabilizers or any combination of these measures. Seeds should be applied at a rate of 2 lbs/ 1000 square feet at a depth of ½ inch. Soil netting or covering should be used in extreme conditions. If necessary, temporary Stormwater basins or diversion dikes and swales will be constructed to improve water quality. The volume of any temporary basin or trap will contain run off from at least the 2-year, 24-hour storm (or 3,600 cubic feet of storage per acre drained) or enough to contain 1 inch of run off from the disturbed area. The length will be at least 2 times the width of the BMP chosen.

Only minor stockpiling of soils will be allowed on site. Soil stockpiles will be ringed with double-staked hay bales or covered in extreme conditions. Seed if left exposed for over 20 days.

Maintenance / Inspection Procedures for Erosion and Sediment Controls

- Construction to commence in a phased manner.
- All control measures will be inspected at least once each week and following any storm event of 0.25 inches of precipitation or greater.
- All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of report.
- Built up sediment will be removed from erosion control when it has reached one-third the height of the fence or bale.
- Silt fence will be inspected for depth of sediment, tears and to see if fabric is securely attached to the fence posts, are firmly in the ground.
- Any temporary sediment basin used will be inspected for depth of sediment. Any build up of sediment will be removed when it reaches 10% of the design capacity or at the end of project completion.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts and healthy growth.
- A maintenance and inspection report will be made after each inspection. A copy of the report form to be completed by the inspector and kept on site.

- o Construction site supervisor will be responsible for training workers in all inspection and maintenance practices necessary for keeping erosion and sediment controls in good working order.

3.0 OTHER CONTROLS

3.1 Waste Disposal

All waste materials will be collected and stored in a securely lidded metal dumpster from a licensed contractor. The dumpster will be emptied a minimum of once per week or more often if necessary. No construction waste to be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal. The individual, who manages the day-to-day site operations, will be responsible for seeing that these procedures are followed.

3.2 Hazardous Waste

All hazardous waste materials will be disposed of in a manner specified by local, State, Federal regulations and in accordance with any manufactures recommendations.

3.3 Sanitary Waste

All sanitary waste will be collected in portable units installed on site. The portable units will be cleaned and emptied by a qualified licensed contractor.

3.4 Concrete Waste

All concrete washings will be disposed on in a designated area away from wetlands and any property line. When the concrete hardens it will be removed from the site. (see appendix)

4.0 POLLUTION AND SPILL PREVENTION

4.1 INVENTORY FOR POLLUTION PREVENTION PLAN

The following substances listed below are expected to be present onsite during construction:

- Concrete
- Wood
- Masonry Block
- Metal studs and steel
- Paints
- Petroleum based products
- Cleaning solvents.

4.2 MATERIAL MANAGEMENT PRACTICES

Good Housekeeping Practices

- Store only enough products on site to do the job.
- All materials stored outside will be stored in a neat, orderly manner in the original containers.
- Products will be kept in their original containers with the original manufacturer's label.
- Whenever possible, all products will be used up before disposing of the container.
- The site contractor will inspect daily to ensure products are properly stored and insure the proper disposal of materials.

4.3 PRODUCT SPECIFIC PRACTICES

Petroleum Products:

- Refueling vehicles will be DOT Certified and have SPCC Plans in place and contain emergency equipment to contain and clean up small spills.
- All on site construction vehicles will be inspected for leaks and receive regular preventative maintenance to reduce the chance of leakage.

- Petroleum products will be stored in tightly sealed containers, which are properly marked.

Fertilizers:

- All fertilizers will be stored in a dry protected area and only used according to manufacturers recommendations.

Paints:

- All containers will be tightly sealed and stored when not required for use.
- All procedures will be followed to minimize spills and to keep products in the original containers.

Concrete Trucks:

- The site contractor is responsible for designating a safe area, away from abutting property and resource areas, for excess concrete disposal.

4.4 SPILL CONTROL PRACTICES

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for Spill Prevention and clean up during construction:

- Manufacturers recommended methods for spill clean up will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- All spills will be cleaned up immediately after discovery.
- If any threat of explosion or life threatening condition, all personnel will evacuate the area to safety and then contact the local fire department for assistance.
- The spill area will be ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- The site contractor responsible for day to day operations will be the spill prevention and clean up

Stormwater Pollution Prevention and Construction Erosion and Sediment Control Plan
S.B. Realty Limited Partnership
139 Hathaway Road
New Bedford, MA 02740
July 7, 2015
Page 11

coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of the responsible personnel will be posted in the material storage area in the office trailer onsite.

5.0 CERTIFICATION AND NOTIFICATION

I certify under the penalty of law that I have read and understand The National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges for Construction Activities and terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

SWPPP APPENDICES (To be completed upon approval)

Appendix A – General Location Map

Appendix B – Site Maps

Appendix C – Construction General Permit

Appendix D – NOI

Appendix E – Inspection Reports

Appendix F – Corrective Action Log

Appendix G – SWPPP Amendment Log

Appendix H – Subcontractor Certifications/Agreements

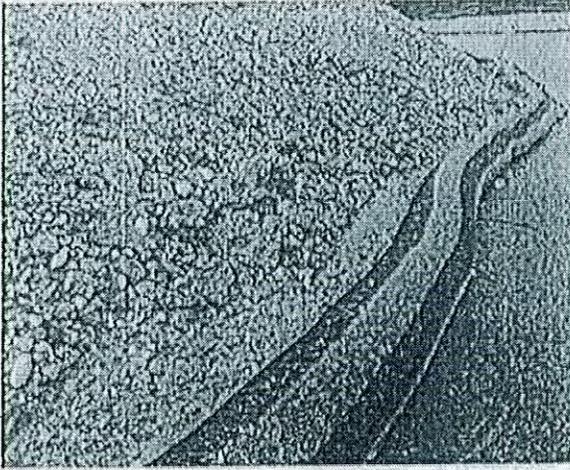
Appendix I – Grading and Stabilization Activities Log

Appendix J – Training Log – includes Guidance for Best Management Practices and training materials

Appendix K – Delegation of Authority

Appendix L – Planning Board Approval.

Sediment Barrier – Compost Filter Sock



DEFINITION

Compost filter socks are a three-dimensional tubular sediment control and storm water runoff filtration device typically used for perimeter control of sediment and soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities. Compost filter socks trap sediment and soluble pollutants by filtering runoff water as it passes through the matrix of the compost filter socks and by allowing water to temporarily pond behind the compost filter socks, allowing deposition of suspended solids. Compost filter socks are also used to reduce runoff flow velocities on sloped surfaces.

PURPOSE

Compost filter socks are to be installed down slope of any disturbed area requiring erosion and sediment control and filtration of soluble pollutants from runoff. Compost filter socks are effective when installed perpendicular to sheet or low concentrated flow, and in areas that silt fence is normally considered appropriate. Acceptable applications include:

- Site perimeters
- Above and below disturbed areas subject to sheet runoff, interrill and rill erosion
- Above and below exposed and erodable slopes
- Along the toe of stream and channel banks
- Around area drains or inlets located in a 'sump'
- On compacted soils where trenching of silt fence is difficult or impossible
- Around sensitive trees where trenching of silt fence is not beneficial for tree survival or may unnecessarily disturb established vegetation.
- On frozen ground where trenching of silt fence is impossible.
- On paved surfaces where trenching of silt fence is impossible.

CONDITIONS

Compost filter socks should be installed where runoff can be filtered without damaging the compost filter sock or the area behind the sock.

DESIGN CRITERIA

Compost filter socks are designed to retain sediment transported in sheet flow from disturbed areas. Compost filter socks perform the same function as silt fence, allow a higher flow rate, and are usually faster and cheaper to install. Where all runoff is to be treated by the compost filter sock the maximum slope length behind the compost filter sock shall not exceed those shown in Table 1. The drainage area shall not exceed $\frac{1}{4}$ acre for every 100 ft of compost filter sock.

The sediment and pollutant removal process characteristic to compost filter socks combines both filtering and deposition from settling solids. This is different than methods that rely on ponding for deposition of solids for sediment control, such as silt fence. Ponding occurs when water flowing to the compost filter sock accumulates faster than the hydraulic flow through rate of the compost filter sock. Hydraulic flow-through rates for compost filter socks are 50% greater than silt fence filter fabric. Greater hydraulic flow-through rates reduce ponding. Compost filter sock mesh netting shall meet the netting specification in Table 2. Compost filter socks shall meet the specifications in Table 3. Compost used in compost filter socks shall meet the specification described under Compost Filter Media Specifications.

CRITERIA FOR COMPOST FILTER SOCK PLACEMENT

Land Slope	Maximum Slope Length Above Compost Filter Sock
Percent	Feet
<2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20*	15

*In areas where the slope is greater than 20%, a flat area length of 10 ft between the toe of the slope to the compost filter sock should be provided.

Table 1

A 12 inch diameter compost filter sock shall be used on developments where the life of the project is greater than or equal to six months. A 12 inch diameter compost filter sock may also be used on minor projects, such as residential home sites or small commercial developments.

COMPOST FILTER MEDIA SPECIFICATIONS

Compost used for compost filter sock filler material (filter media) shall be weed free and derived from a well-decomposed source of organic matter. The compost shall be produced using an aerobic composting process meeting CFR 503 regulations including time and temperature data. The compost shall be free of any refuse, contaminants or other materials toxic to plant growth. Non-composted products will not be accepted. Test methods for the items below should follow US Composting Council Test Methods for the Examination of Composting and Compost guidelines for laboratory procedures:

- A. PH – 5.0-8.0 in accordance with TMECC 04.11-A, "Electrometric pH Determinations for Compost"
- B. Particle size – 99% passing a 2 in (50mm) sieve and a maximum of 40% passing a 3/8 in (9.5mm) sieve, in accordance with TMECC 02.02-B, "Sample Sieving for Aggregate Size Classification". (Note- In the field, product commonly is between $\frac{1}{2}$ in [12.5mm] and 2 in [50mm] particle size.)

- C. Moisture content of less than 60% in accordance with standardized test methods for moisture determination.
- D. Material shall be relatively free (<1% by dry weight) of inert or foreign man made materials.
- E. A sample shall be submitted to the Engineer for approval prior to being used and must comply with all local, state and federal regulations.

CONSTRUCTION SPECIFICATIONS

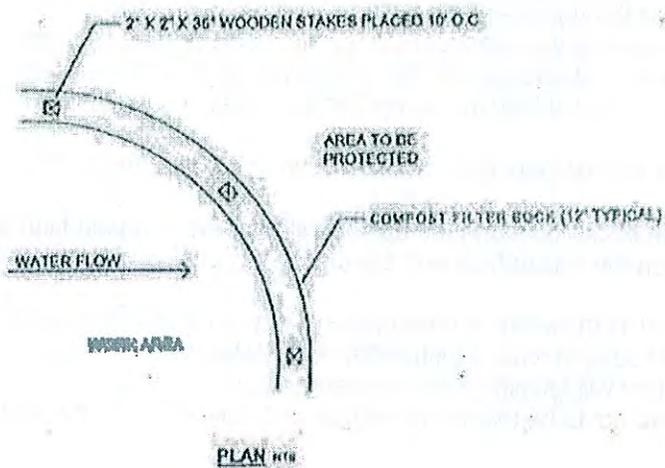
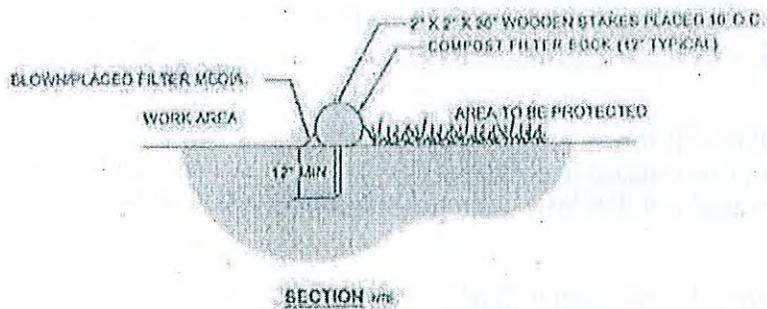
The compost filter sock shall be installed according to this specification, as shown on the plans or as directed by the engineer. For installation of the compost filter sock see Figure 1.

1. Compost filter socks should be installed parallel to the base of the slope or other disturbed area. In extreme conditions (i.e., 2:1 slopes), a second compost filter sock shall be constructed at the top of the slope.
2. Stakes shall be installed through the middle of the compost filter sock on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes. In the event staking is not possible, i.e., when compost filter socks are used on pavement, heavy concrete blocks shall be used behind the compost filter socks to help stabilize during rainfall/runoff events.
3. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
4. Loose compost may be backfilled along the upslope side of the compost filter sock, filling the seam between the soil surface and the device, improving filtration and sediment retention.
5. If the compost filter sock is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The engineer will specify seed requirements.
6. Compost filter socks are not to be used in perennial, ephemeral, or intermittent streams.

MAINTENANCE

Sediment shall be removed once it has accumulated to one-half the original height of the barrier. Compost filter socks shall be replaced whenever it has deteriorated to such an extent that the effectiveness of compost filter sock is reduced. Compost filter socks shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulation at the compost filter sock shall be removed and properly disposed of before the compost filter sock is removed.

FIGURE 1



COMPOST FILTER SOCK
NTS

Table 2.

Material Type	Multi-Filament Polypropylene	Multi-Filament Polypropylene
Material Characteristic	Photodegradable	Photodegradable
Mesh Opening	3/8 in (10mm)	1/8 in (3mm)
Tensile Strength (ASTM 5035-95)	44 psi (3.09 kg/cm ²)	202 psi (14.2 kg/cm ²)*
% Original Strength from Ultraviolet Exposure (ASTM G-155)	100% at 1000 hr	100% at 1000 hr

Table 3.

	12 in (300mm) Diameter
Effective Circumference	38 in (960mm)
Density (when filled)	32 lbs/ft (50 kg/m)
Air Space	20%
Hydraulic Flow Through Rate	11.3 gpm/ft (141 L/min/m)
P Factor (RUSLE)	0.1-0.32

SITE HOUSEKEEPING AND MATERIALS MANAGEMENT

WASTE MANAGEMENT - Building materials and other construction site wastes must be properly managed and disposed of to reduce potential for pollution to surface and ground waters as per 25 Pa. Code § 102.4(b)(5)(xi). Proper trash disposal, recycling of materials, proper materials handling, and spill prevention and clean-up reduce the potential for construction site wastes to be mobilized by stormwater runoff and conveyed to surface waters.

Under no circumstances may erosion control BMPs be used for temporary storage of demolition materials or construction wastes.

Wherever heavy equipment will be used during construction of the cuts and fills or proposed buildings, a Pollution Prevention and Contingency (PPC) plan must be available on site. This plan does not have to be included in the permit application package submitted for an NPDES construction permit in Pennsylvania but should be available on the project site. The applicant must prepare and implement a PPC plan when storing, using or transporting materials including: fuels, chemicals, solvents, pesticides, fertilizers, lime, petrochemicals, wastewater, wash water, core drilling wastewater, cement, sanitary wastes, solid wastes, or hazardous materials onto, on, or from the project site during earth disturbance activities. The PPC plan must be available upon request by the Department or conservation district. Guidance for development of a PPC plan can be found in "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (Document #400-2200-001), which can be found in the Department's eLibrary at www.depweb.state.pa.us.

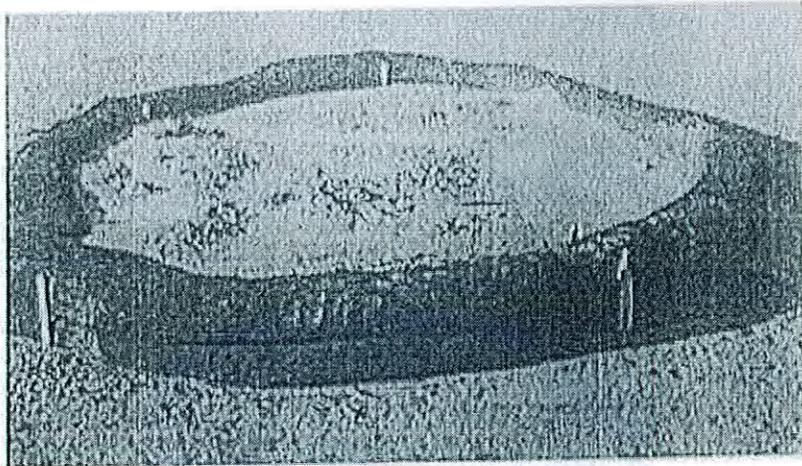
All applicable federal, state, and local laws and regulations must be followed in the use, handling, and disposal of potentially hazardous materials.

CONCRETE WASHOUT - For any project on which concrete will be poured or otherwise formed on site, a suitable washout facility must be provided for the cleaning of chutes, mixers, and hoppers of the delivery vehicles unless such a facility will be used at the source of the concrete. Under no circumstances may wash water from these vehicles be allowed to enter any surface waters. Make sure that proper signage is provided to drivers so that they are aware of the presence of washout facilities.

Washout facilities should not be placed within 50 feet of storm drains, open ditches or surface waters. They should be in a convenient location for the trucks, preferably near the place where the concrete is being poured, but far enough from other vehicular traffic to minimize the potential for accidental damage or spills. Wherever possible, they should be located on slopes not exceeding a 2% grade. Additional information on washouts may be obtained from EPA's stormwater website at: <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=17&minmeasure=4>.

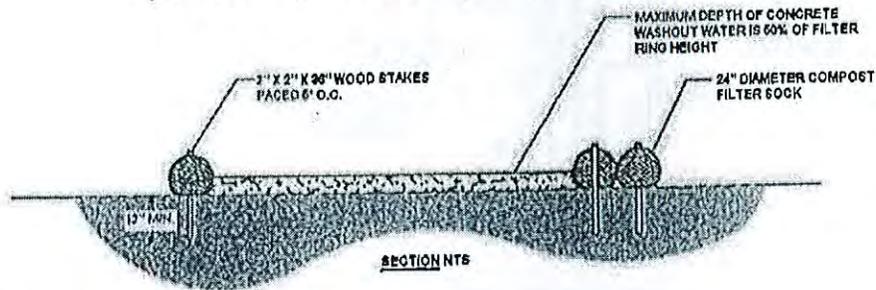
Compost Sock Washout

Wherever compost sock washouts are used, a suitable impervious geomembrane should be placed at the location of the washout. Compost socks should be staked in the manner recommended by the manufacturer around perimeter of the geomembrane so as to form a ring with the ends of the sock located at the upslope corner (Figure 3.18). Care should be taken to ensure continuous contact of the sock with the geomembrane at all locations. Where necessary, socks may be stacked and staked so as to form a triangular cross-section.

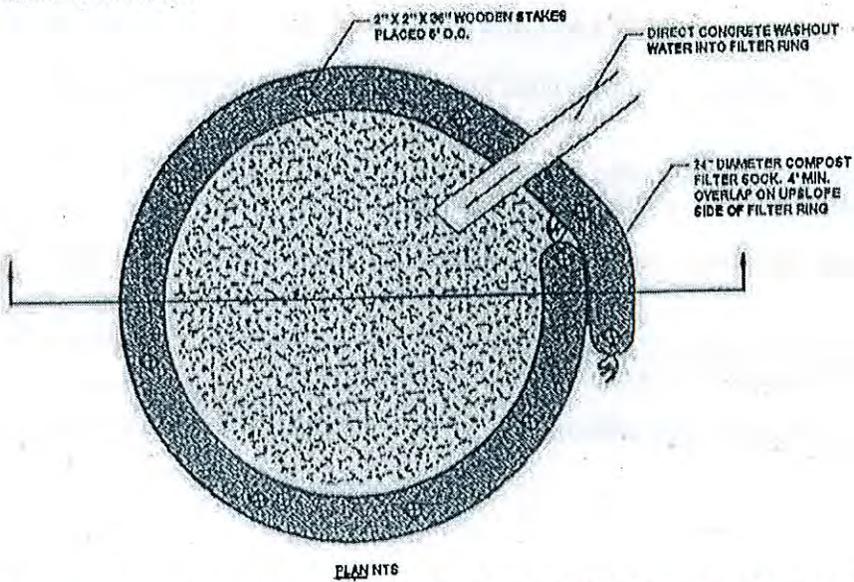


Filtrex

FIGURE 3.18
Typical Compost Sock Washout Installation



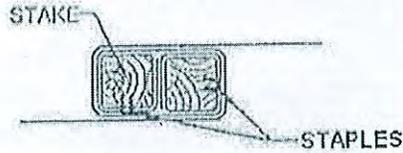
- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



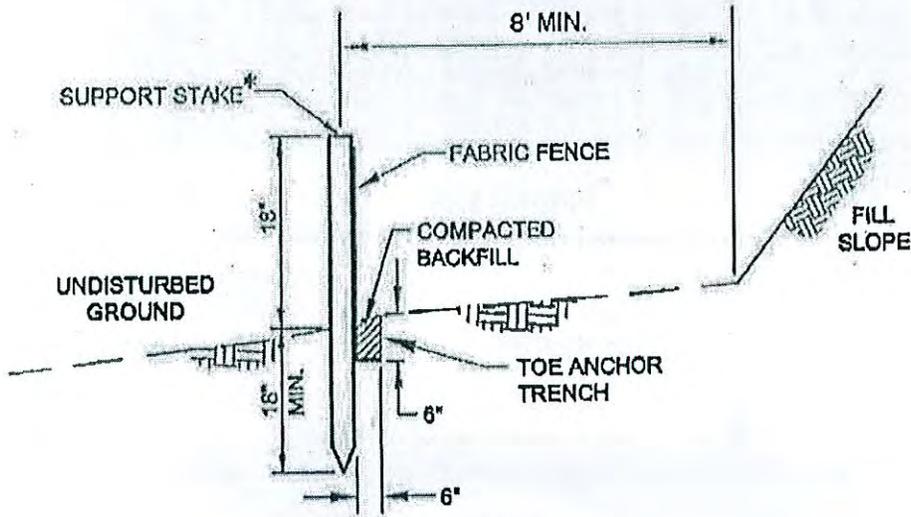
A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
 Adapted from Filtrex

STANDARD CONSTRUCTION DETAIL # 4-7
Standard Silt Fence (18" High)

*STAKES SPACED @ 8' MAX.
USE 2" x 2" (± 3/8") WOOD
OR EQUIVALENT STEEL
(U OR T) STAKES



JOINING FENCE SECTIONS



ELEVATION VIEW

PA DEP

Fabric shall have the minimum properties as shown in Table 4.3.

Fabric width shall be 30" minimum. Stakes shall be hardwood or equivalent steel (U or T) stakes.

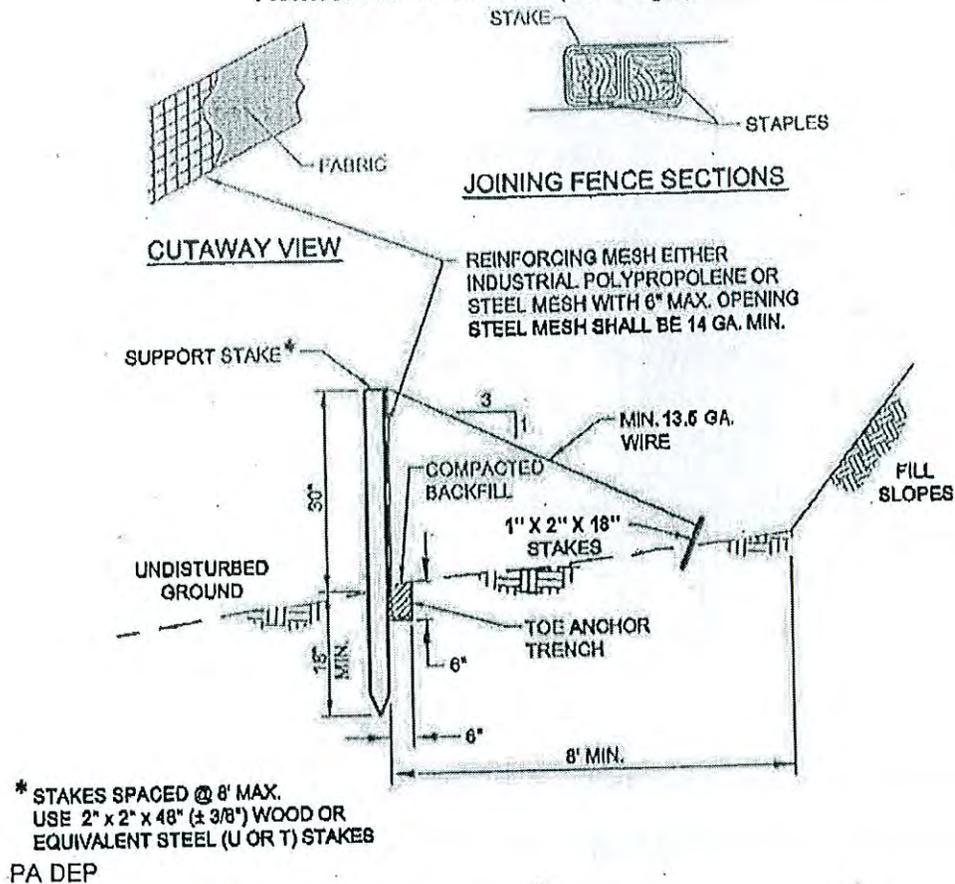
Silt fence shall be placed at level existing grade. Both ends of the fence shall be extended at least 8 feet up slope at 45 degrees to the main fence alignment (see Figure 4.1).

Sediment shall be removed when accumulations reach half the aboveground height of the fence.

Any section of silt fence which has been undermined or topped shall be immediately replaced with a rock filter outlet (Standard Construction Detail # 4-6).

Fence shall be removed and properly disposed of when tributary area is permanently stabilized.

STANDARD CONSTRUCTION DETAIL # 4-8
Reinforced Silt Fence (30" High)



Fabric shall have the minimum properties as shown in Table 4.3.

Fabric width shall be 42" minimum. Stakes shall be hardwood or equivalent steel (U or T) stakes. An 18" support stake shall be driven 12" minimum into undisturbed ground.

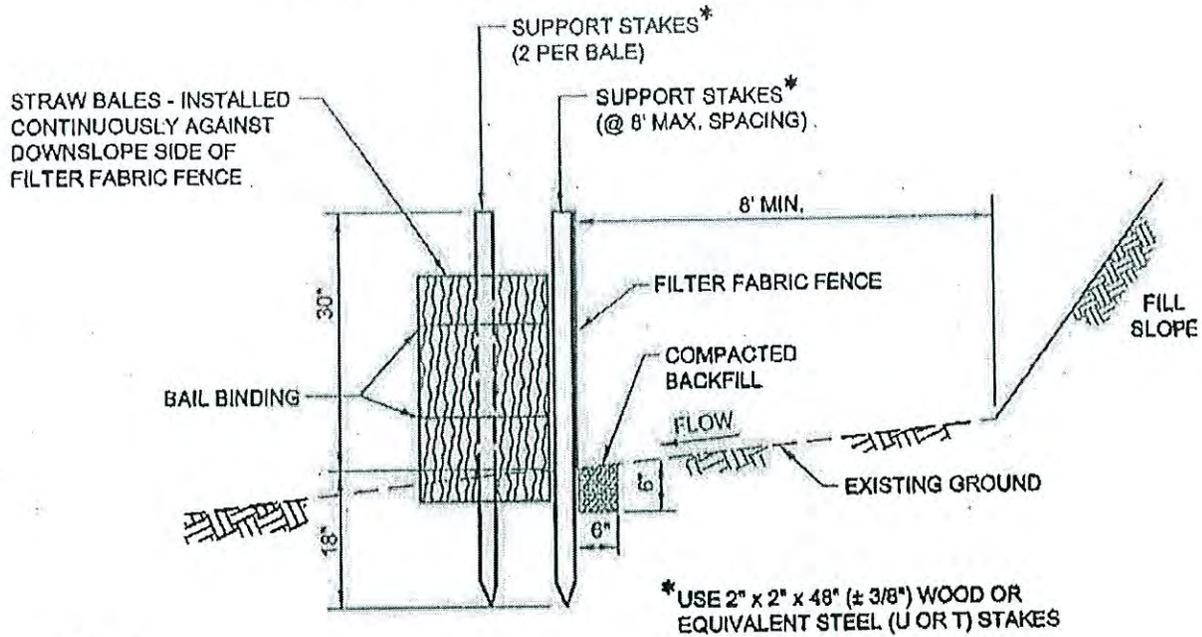
Silt fence shall be installed at existing level grade. Both ends of each fence section shall be extended at least 8 feet upslope at 45 degrees to the main fence alignment (Figure 4.1).

Sediment shall be removed where accumulations reach half the aboveground height of the fence.

Any section of silt fence which has been undermined or topped shall be immediately replaced with a rock filter outlet (Standard Construction Detail # 4-6).

Fence shall be removed and properly disposed of when tributary area is permanently stabilized.

**STANDARD CONSTRUCTION DETAIL # 4-9
Silt Fence Reinforced by Staked Straw Bales**



PA DEP

Fabric shall have the minimum properties as shown in Table 4.3.

This BMP is not suitable for projects lasting longer than 3 months unless bales are replaced quarterly.

Fabric width shall be 42" minimum. Stakes shall be hardwood or equivalent steel (U or T) stakes.

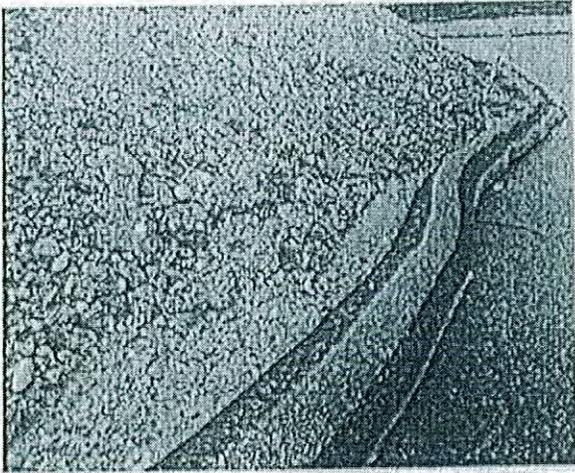
Silt fence shall be installed at existing level grade. Both ends of each fence section shall be extended at least 8 feet upslope at 45 degrees to the main fence alignment (Figure 4.1).

Sediment shall be removed where accumulations reach half the aboveground height of the fence.

Any fence section which has been undermined or topped shall be immediately replaced with a rock filter outlet (Standard Construction Detail # 4-6).

Fence shall be removed and properly disposed of when tributary area is permanently stabilized.

Sediment Barrier – Compost Filter Sock



DEFINITION

Compost filter socks are a three-dimensional tubular sediment control and storm water runoff filtration device typically used for perimeter control of sediment and soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities. Compost filter socks trap sediment and soluble pollutants by *filtering* runoff water as it passes through the matrix of the compost filter socks and by allowing water to temporarily pond behind the compost filter socks, allowing *deposition* of suspended solids. Compost filter socks are also used to reduce runoff flow velocities on sloped surfaces.

PURPOSE

Compost filter socks are to be installed down slope of any disturbed area requiring erosion and sediment control and filtration of soluble pollutants from runoff. Compost filter socks are effective when installed perpendicular to sheet or low concentrated flow, and in areas that silt fence is normally considered appropriate. Acceptable applications include:

- Site perimeters
- Above and below disturbed areas subject to sheet runoff, interrill and rill erosion
- Above and below exposed and erodable slopes
- Along the toe of stream and channel banks
- Around area drains or inlets located in a 'sump'
- On compacted soils where trenching of silt fence is difficult or impossible
- Around sensitive trees where trenching of silt fence is not beneficial for tree survival or may unnecessarily disturb established vegetation.
- On frozen ground where trenching of silt fence is impossible.
- On paved surfaces where trenching of silt fence is impossible.

CONDITIONS

Compost filter socks should be installed where runoff can be filtered without damaging the compost filter sock or the area behind the sock.

DESIGN CRITERIA

Compost filter socks are designed to retain sediment transported in sheet flow from disturbed areas. Compost filter socks perform the same function as silt fence, allow a higher flow rate, and are usually faster and cheaper to install. Where all runoff is to be treated by the compost filter sock the maximum slope length behind the compost filter sock shall not exceed those shown in Table 1. The drainage area shall not exceed $\frac{1}{4}$ acre for every 100 ft of compost filter sock.

The sediment and pollutant removal process characteristic to compost filter socks combines both filtering and deposition from settling solids. This is different than methods that rely on ponding for deposition of solids for sediment control, such as silt fence. Ponding occurs when water flowing to the compost filter sock accumulates faster than the hydraulic flow through rate of the compost filter sock. Hydraulic flow-through rates for compost filter socks are 50% greater than silt fence filter fabric. Greater hydraulic flow-through rates reduce ponding. Compost filter sock mesh netting shall meet the netting specification in Table 2. Compost filter socks shall meet the specifications in Table 3. Compost used in compost filter socks shall meet the specification described under Compost Filter Media Specifications.

CRITERIA FOR COMPOST FILTER SOCK PLACEMENT

Land Slope	Maximum Slope Length Above Compost Filter Sock
Percent	Feet
<2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20*	15

*In areas where the slope is greater than 20%, a flat area length of 10 ft between the toe of the slope to the compost filter sock should be provided.

Table 1

A 12 inch diameter compost filter sock shall be used on developments where the life of the project is greater than or equal to six months. A 12 inch diameter compost filter sock may also be used on minor projects, such as residential home sites or small commercial developments.

COMPOST FILTER MEDIA SPECIFICATIONS

Compost used for compost filter sock filler material (filter media) shall be weed free and derived from a well-decomposed source of organic matter. The compost shall be produced using an aerobic composting process meeting CFR 503 regulations including time and temperature data. The compost shall be free of any refuse, contaminants or other materials toxic to plant growth. Non-composted products will not be accepted. Test methods for the items below should follow US Composting Council Test Methods for the Examination of Composting and Compost guidelines for laboratory procedures:

- A. PH – 5.0-8.0 in accordance with TMECC 04.11-A, "Electrometric pH Determinations for Compost"
- B. Particle size – 99% passing a 2 in (50mm) sieve and a maximum of 40% passing a 3/8 in (9.5mm) sieve, in accordance with TMECC 02.02-B, "Sample Sieving for Aggregate Size Classification". (Note- In the field, product commonly is between $\frac{1}{2}$ in [12.5mm] and 2 in [50mm] particle size.)

- C. Moisture content of less than 60% in accordance with standardized test methods for moisture determination.
- D. Material shall be relatively free (<1% by dry weight) of inert or foreign man made materials.
- E. A sample shall be submitted to the Engineer for approval prior to being used and must comply with all local, state and federal regulations.

CONSTRUCTION SPECIFICATIONS

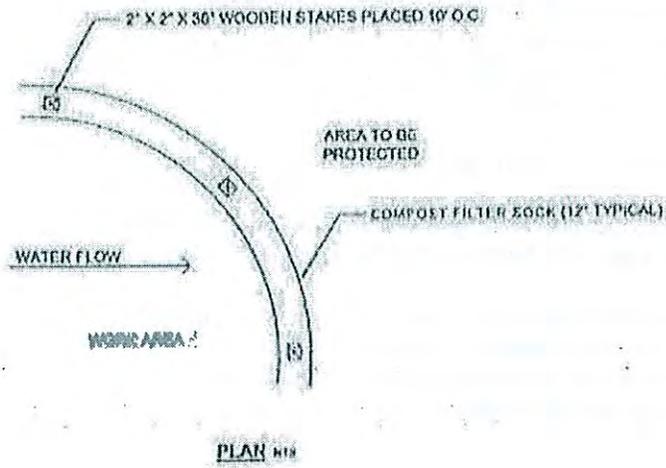
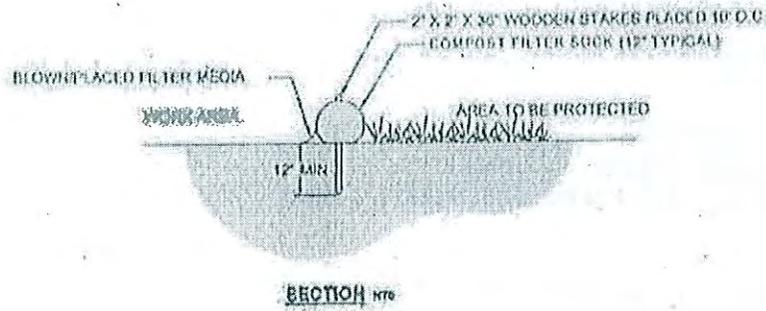
The compost filter sock shall be installed according to this specification, as shown on the plans or as directed by the engineer. For installation of the compost filter sock see Figure 1.

1. Compost filter socks should be installed parallel to the base of the slope or other disturbed area. In extreme conditions (i.e., 2:1 slopes), a second compost filter sock shall be constructed at the top of the slope.
2. Stakes shall be installed through the middle of the compost filter sock on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes. In the event staking is not possible, i.e., when compost filter socks are used on pavement, heavy concrete blocks shall be used behind the compost filter socks to help stabilize during rainfall/runoff events.
3. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
4. Loose compost may be backfilled along the upslope side of the compost filter sock, filling the seam between the soil surface and the device, improving filtration and sediment retention.
5. If the compost filter sock is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The engineer will specify seed requirements.
6. Compost filter socks are not to be used in perennial, ephemeral, or intermittent streams.

MAINTENANCE

Sediment shall be removed once it has accumulated to one-half the original height of the barrier. Compost filter socks shall be replaced whenever it has deteriorated to such an extent that the effectiveness of compost filter sock is reduced. Compost filter socks shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulation at the compost filter sock shall be removed and properly disposed of before the compost filter sock is removed.

FIGURE 1



COMPOST FILTER SOCK
NTS

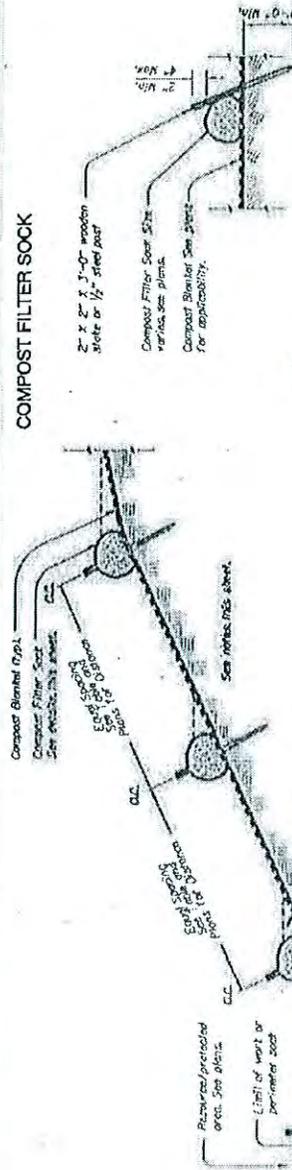
Table 2.

Material Type	Multi-Filament Polypropylene	Multi-Filament Polypropylene
Material Characteristic	Photodegradable	Photodegradable
Mesh Opening	3/8 in (10mm)	1/8 in (3mm)
Tensile Strength (ASTM 5035-95)	44 psi (3.09 kg/cm ²)	202 psi (14.2 kg/cm ²)*
% Original Strength from Ultraviolet Exposure (ASTM G-155)	100% at 1000 hr	100% at 1000 hr

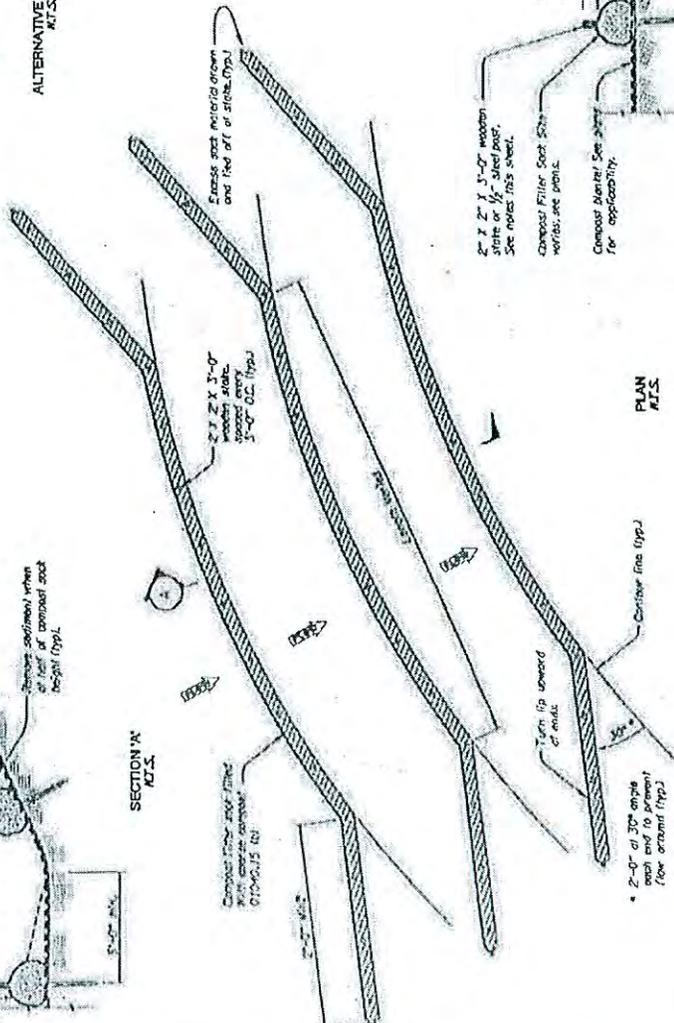
Table 3.

	12 in (300mm) Diameter
Effective Circumference	38 in (960mm)
Density (when filled)	32 lbs/ft (50 kg/m)
Air Space	20%
Hydraulic Flow Through Rate	11.3 gpm/ft (141 L/min/m)
P Factor (RUSLE)	0.1-0.32

COMPOST FILTER SOCK



ALTERNATIVE 1 (Staking)
M.T.S.



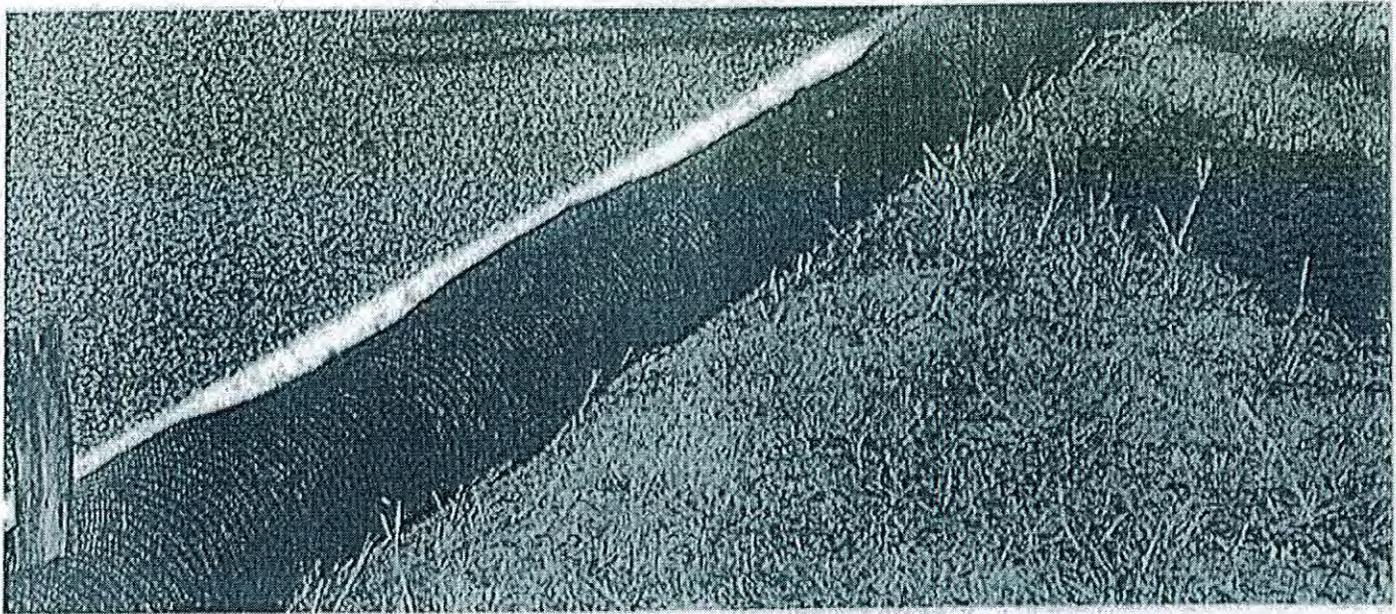
ALTERNATIVE 2 (Staking)
M.T.S.

- Compost Filter Sock General Notes
1. Filter socks can be placed at the top, the rear, and at the toe of slopes as sediment-trapping devices for sheet flow runoff and sediment per these notes and Compost Filter Sock details, plans and specifications. See Special Provision 01040.15(1) for exact specifications.
 2. Place filter socks on slopes above or on the opposite shoulder. Filter socks installed at toe of a slope should be placed at minimum 5 feet from toe to provide sediment storage. The maximum drainage area is 1/4 acre per 100 L.F. of 12 inch diameter filter sock.
 3. For ditch applications, minimum drainage area shall be 1/2 acre. All sites which are not suitable for filter socks shall be staked or staked in stream, ponds, or other natural water resources unless directed by Agency, Compost Filter Sock. Socks shall not be used in ditches with continuous flows.
 4. For ditch applications, minimum installed height of single sock shall be 12 inches. For applications in stream, ponds, or other natural water resources, filter socks shall remain in place until disconnection of sock from stream is directed and noted in Agency description.
 5. Filter socks are typically staked and installed in 8, 12, 18, or 24 inch diameters. Diameter tolerance is 2 inches. Filter socks tend to fabricate when a sock is installed.
 6. Steel socks may be used and shall be rolled from high carbon steel and have a minimum of 1.25 (12.71) points shall be hot-dipped galvanized or painted with high-grade weather resistant brown or black steel paint. Steel socks shall be equipped with a minimum of 14 square inches of 1/4 inch diameter holes per 100 L.F. of sock. Holes shall be punched, drilled, or punched, drilled and another punch sock system to the requirements of ASTM A 102.
 7. The stakes can be used in addition to wooden stakes and shall be in accordance with project specifications and plans. See plans for applicability and spacing.
 8. Filter socks are 1/2 inch at 1/2 inch site and may be up to 250 feet long. What used on long slopes, filter socks may be joined or staggered as shown in details.
 9. Remove sediment from behind the filter sock once it accumulates to one-half of the original height of the filter sock.
 10. Inspect filter socks after each storm event. Remove and replace if signs of deteriorating or decomposing fill are observed.
 11. Filter socks should be removed from slopes after stabilization is complete, unless directed to leave in place by Agency.
 12. Removal shall be accomplished by cutting sock area and removing the filter sock. The filter sock shall be removed and replaced with a new sock. The filter sock shall be replaced in ditches shall be completely removed upon application is established or as directed otherwise by Agency.

<p>The sections and any of the detail, while prepared in accordance with generally accepted engineering practice and procedures, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</p>	<p>OREGON DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES</p>	<p>DETAIL NO. DET6013</p>
	<p>COMPOST FILTER SOCK PLAN AND STAKING</p>	

tSoxx™ for

PERIMETER CONTROL

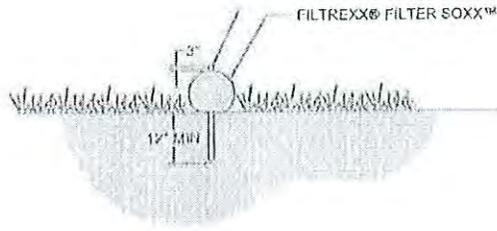


Filtrexx® Sediment control is a three-dimensional tubular sediment control and storm water filtration device typically used as a Silt Fence Replacement (perimeter control device) for sediment and soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities. Filtrexx® Sediment control traps sediment and soluble pollutants by filtering runoff water as it passes through the organic structure, and by allowing water to temporarily pond behind the device, allowing deposition of suspended solids. Sediment control is also used to reduce runoff flow velocities on sloped surfaces.

☆ ADVANTAGES

☑ USES

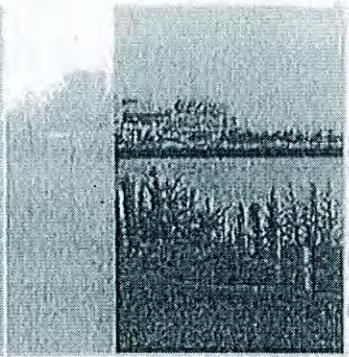
than silt fence
NO Trenching, NO Soil Disturbance
Easy removal and minimal disposal costs
8x less maintenance than silt fence (USEPA)
Exceeds federal standards
Available on pallets or blown in on site



DOWNLOAD SPECS & PAGES



ABOUT PRODUCTS FILTREXX UNIVERSITY

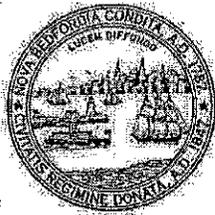


your keywords and

TOGETHER WITH

APPLICATIONS/CHECKLIST

2016 MAY 13 A 10:27



CITY OF NEW BEDFORD
JONATHAN F. MITCHELL, MAYOR

PLANNING BOARD

CITY CLERK

SUBMIT TO:
Planning Department
133 William Street
Room 303
New Bedford, MA 0274

MODIFICATION OF CASE 16-16

SITE PLAN REVIEW APPLICATION

The undersigned, being the Applicant, seeks Site Plan Approval for property depicted on a plan entitled: Site Plan Set 1-9 by: Sitec, Inc., 449 Faunce Corner Rd., Dartmouth dated: May 11, 2016

1. Application Information

Street Address: 139 Hathaway Road

Assessor's Map(s): 101 Lot(s) Part 14, 16&17, L.C. Lot 11

Registry of Deeds Book: Certificate 14729/ Bk.No. 79 Page: 461

Zoning District: Mixed Use Business/Industrial B

Applicant's Name (printed): S.B. Realty Limited Partnership

Mailing Address: 100 North street New Bedford MA 02740
(Street) (City) (State) (Zip)

Contact Information: 508-990-8883

Applicant's Relationship to Property: Telephone Number Email Address
 Owner Contract Vendee Other

List all submitted materials (include document titles & volume numbers where applicable) below:

- SITE PLANS SHEETS 1-9
- DEED
- NARRATIVE
- BUILDING ELEVATIONS
- LIGHTING SPECIFICATIONS
- STORMWATER CHECKLIST/REPORTS

By signing below, I/we acknowledge that all information presented herein is true to the best of my/our knowledge. I/we further understand that any false information intentionally provided or omitted is grounds for the revocation of the approval (s). I/we also give Planning Department staff and Planning Board Members the right to access the premises (both interior and exterior) at reasonable times and upon reasonable notice for the purpose of taking photographs and conducting other visual inspections.

5-11-16

Date

Paul Bedard

Signature of Applicant

2. Review Applicability (Check All That Apply to Your Proposal)

Category

- Residential
 Commercial
 Industrial
 Mixed (Check all categories that apply)

Construction

- New Construction
 Expansion of Existing
 Conversion
 Rehabilitation

Scale

- < 2,000 gross sq feet
 > 2,000 gross sq feet
 3 or more new residential units
 1 or more new units in existing res. multi-unit
 Drive Thru Proposed
 Ground Sign Proposed
 Residential Driveway With > 1 curbcut

3. Zoning Classifications

Present Use of Premises: RETAIL, FAST FOOD, OFFICE, RESTAURANT

Proposed Use of Premises: RETAIL, FAST FOOD, OFFICE, RESTAURANT

Zoning Relief Previously Granted (Variances, Special Permits, with Dates Granted):

Case #19-10 Special Permit August 24, 2010; Case # 18-15 Special Permit September 9, 2015

4. Briefly Describe the Proposed Project:

CONSTRUCT A 7,150 SF RETAIL BUILDING WITH ASSOCIATED PARKING/LANDSCAPING WITHIN THE EXISTING PROPERTY.

5. Please complete the following:

	<u>Existing</u>	<u>Allowed/Required</u>	<u>Proposed</u>
Lot Area (sq ft)	10A	0	10A
Lot Width (ft)	470+-	0	470+-
Number of Dwelling Units	N/A	N/A	N/A
Total Gross Floor Area (sq ft)	N/A	N/A	N/A
Residential Gross Floor Area (sq ft)	N/A	N/A	N/A
Non-Residential Gross Floor Area (sq ft)	0	N/A	7,125
Building Height (ft)	0	110'	17.5'
Front Setback (ft)	N/A	0	76'
Side Setback (ft)	N/A	0	335'
Side Setback (ft)	N/A	0	188'

Rear Setback (ft)	N/A	10' 1 Story	N/A
Lot Coverage by Buildings (% of Lot Area)	33	0	35
Permeable Open Space (% of Lot Area)	4	0	6
Green Space (% of Lot Area)	4	0	6
Off-Street Parking Spaces	371	414	424
Long-Term Bicycle Parking Spaces	0	0	0
Short-Term Bicycle Parking Spaces	0	0	0
Loading Bays	0	1	1

6. Please complete the following:

	Existing	Proposed
a) Number of customers per day:	N/A	150+-
b) Number of employees:	N/A	5
c) Hours of operation:	N/A	8AM-8PM
d) Days of operation:	N/A	6
e) Hours of deliveries:	N/A	8AM-8PM
f) Frequency of deliveries:	<input type="checkbox"/> Daily <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Other: _____	

7. Planning Board Special Permits:

The applicant is also requesting a Special Permit from the Planning Board.
 Specify the requested Special Permit(s) below, and set forth within attached Development Impact Statement how the request meets approval criteria listed in §5320 of the zoning code.

8. ZBA Variances and Special Permits:

NOTICE: Checking below does not constitute application for a special permit or a variance. The applicant must also file the proper application form and fee with the Zoning Board of Appeals.

The applicant is also requesting a special permit from the ZBA:
 Specify zoning code section & title

The applicant is also requesting a variance from the ZBA:
 Specify zoning code section & title

9. OWNERSHIP VERIFICATION

This section is to be completed & signed by the property owner:

I hereby authorize the following Applicant: _____

at the following address: _____

to apply for: _____

on premises located at: 139 HATHAWAY ROAD

in current ownership since: OCTOBER 7, 1985

whose address is: 100 NORTH STREET, N.B.

for which the record title stands in the name of: S.B.REALTY LIMITED PARTNERSHIP

whose address is: 100 NORTH STREET, N. B.

by a deed duly recorded in the:

Registry of Deeds of County: _____ Book: _____ Page: _____

OR Registry District of the Land Court, Certificate No.: 14729 Book: 79 Page: 461

I/we acknowledge that all information presented herein is true to the best of my/our knowledge. I/we further understand that any false information intentionally provided or omitted is grounds for the revocation of the approval(s). I/we also give Planning Department staff and Planning Board Members the right to access the premises (both interior and exterior) at reasonable times and upon reasonable notice for the purpose of taking photographs and conducting other visual inspections.

5-11-16

Date



Signature of Land Owner (If authorized Trustee, Officer or Agent, so identify)



Site Plan Review Application Checklist

In order for the City of New Bedford Planning Board to accurately review your project in a timely manner, plan sets submitted with applications must be complete and thorough. A comprehensive understanding of this handout and submittal of all required documents and plans ensures an efficient review of your project.

Unless otherwise noted or determined by Planning Division Staff to not be required, the following information and drawings must be included in the submittal package for your application. For an application to be accepted, each and every item is required at the time of application submittal.

In certain instances, plans, or portions of plans, may be waived when not applicable for the review of a particular type of development, at the discretion of the City Planner. Requests for any such waiver(s) must be submitted, in writing, to Planning Division for consideration prior to application submittal.

All submitted materials must be legible, organized & bound (where appropriate) in a manner that allows for distribution of all proposal materials as 1 package. Please utilize double-sided printing for submitted reports, studies and statements when possible.

Initials Indicate
Item Submitted.

For subparts of the required plans, please mark as follows:

= Shown on Plans = Waiver Requested = Not Applicable

Staff Applicant

X

1. **Completed Application Form** (with all required signatures; 1 Original & 15 Copies)

X

2. **Completed Site Plan Review Application Checklist** (1 original & 15 copies)

X

3. **Plans**

- Four (4) stapled and folded sets of full-sized plans (24" x 36") and Twelve (12) sets of reduced plans (11" x 17") are required for all applications. Staff reserves the right to require additional copies.
- One (1) electronic copy (PDF & CAD) of all proposed activity plans (See Section 10 of Checklist for Requirements)
- All plans oriented so that north arrow points to top of sheet
- Plans shall be drawn at a minimum scale of 1" = 40' or less
- All plans shall be stamped by Commonwealth of Massachusetts-registered Professional Engineer, Professional Land Surveyor, and/or Professional Landscape Architect, as appropriate
- Plan sets shall be comprised of separate sheets as listed below unless otherwise approved by the City Planner
- All plans shall have a title block comprised of the following: Project Title, Sheet Title, Sheet Number; Registrant Stamp (i.e. PE, PLS, LA); Registrant's name and address; Street addresses of the project area parcels; Scale at which the plan is drawn; Plan Issue Date; and all plan revision dates (with corresponding revision descriptions).

Staff Applicant

3a. Cover Sheet, to include the following information:

- Title Block**
 - Project name/title
 - Assessor's map and parcel number(s)
 - Registry Book and Page
 - Name and address of property owner
 - Name and address of Engineer / Architect / Landscape Architect
 - Name and address of developer
 - Revision Date Block
 - Street Number and/or Lot Number
- Zoning Requirements Table (Indicate Required vs. Provided)**
 - Zoning District
 - Lot Area
 - Lot Frontage
 - Front, Side & Rear Setbacks of Buildings and Parking Areas
 - Building Height
 - Lot Coverage
 - Green Space
 - Off-Street Parking Spaces
 - Compact Parking Spaces
 - Accessible Parking Spaces
 - Van Accessible Parking Spaces
 - Screening Buffers
 - Percentage of Lot that is Upland
 - Total Square Footage of Upland
- Locus Map** (At a scale of 1 inch = 100 feet, showing the entire project and its relation to existing areas, buildings and roads within a distance of 1,000 feet from the project boundaries or such other distances as may be approved or required by the Planning Board.)
- Plan Index** with latest revision date of each individual plan

X 3b. Existing Conditions Plan

- Name of Surveyor or Surveyor Firm
- Date of survey
- Property lines with bearings and distances
- Monuments set/found at all lot corners
- Easements with bearings and distances suitable for registry filing
- Names of all abutters
- Street names
- Benchmark locations (Based on USGS NGVD – show year)
- NHESP mapped areas (Areas of Estimated and Priority Habitats)
- Existing 21E Contaminated Site Information
- Existing Buildings and Structures
 - Area of building
 - Number of stories
 - Principal use
 - Setbacks from property lines
 - Floor elevations
 - Door locations with sill elevations

Staff Applicant

- Existing Topography:
 - Contours at 2' intervals (1' contours or additional spot grades if site is flat)
 - Overhead and underground utilities including but not limited to water, sewer, drainage, electric, telephone, cable TV, gas, septic systems, detention structures, wells
 - Existing parking/paved areas including pavement type (parking, walkways, etc.)
 - All Existing Curbcuts
 - Listing of all existing utility owners and contact info located within the project limits
 - Adequate utility information outside the site to verify proposed utility connections
 - All utility pipe types, sizes, lengths, and slopes
 - All utility structure information including rim and invert elevations
 - All existing easements within 50 feet of property line-Identify any utility within the easement
 - All existing utility easements with bearings and distances
 - Existing pavement markings within site and on connecting roads
 - Existing features such as walls, curbing, landscaping, trees, walks, fences, trees over 12" caliper, lighting, poles, guys, signs, loading areas, fire hydrants, dumpster locations, known buried slabs, etc...
 - Wetlands, floodplain, water protection district delineation including offsets and buffer zones
 - Streams, water courses, swales and all flood hazard areas
 - Rock Outcroppings
 - Test pit locations including groundwater depths when encountered
 - Historic buildings within 250 feet of the subject property

X 3c. Demolition Plan

- Existing Conditions Plan plus:
 - Existing Buildings and Structures to be removed/demolished
 - Existing parking/paved areas to be removed/demolished
 - Existing utilities to be removed/demolished
 - Existing hydrants to be removed
 - Existing features to be removed/ demolished such as walls, curbing, landscaping trees, walks, fences, trees over 6" caliper, lighting, poles, guys, signs, etc.
- Dust Control Measures
- Proposed construction phase drainage infrastructure plan including (but not limited to) piping and natural watercourse profiles & cross-sections, retention/detention structures, drain manholes, catch basins, gutter inlets, headwalls, water quality BMPs, and erosion & sedimentation control features, etc.

X 3d. Construction/Layout Plan

- Proposed Buildings and Structures

Staff Applicant

- Area of building or additions
- Number of stories
- Principal use
- Floor elevations
- Door locations with sill elevations
- Proposed Topography, including but not limited to:
 - Proposed contours at 2' intervals
 - Parking lot setbacks to property line
 - Parking lot grades (not to exceed 5% or be less than 0.5%)
 - Walls
 - Parking spaces (delineated and dimensioned)
 - Accessible parking spaces & aisles
 - Wheelchair ramps
 - Sidewalks
 - Pavement type(s)
 - Curb type(s) and limits
 - Lighting / Poles / Guys
 - Signs (include sign schedule)
 - Pavement markings
 - Loading areas / Loading Docks / Platforms
 - Fences
 - Landscape areas
 - Dumpster(s), Compactor(s) & Pads
 - Spot Grades at 4 Building Corners
 - Overall Plan Showing Areas of Cut & Fill
- Critical dimensions including aisle widths, parking stall dimensions, curb radius, driveway openings, etc.
- Grading at entrance-show spot grades if required
- Emergency Vehicle Access
- Truck Access (WB-50 unless otherwise approved by City Engineer)
- Snow Storage Areas, with limits of any fence protection (if applicable)
- Construction notes, including the following notes:
 - Any minor modifications (as determined by the City Engineer) to the information shown on the approved site plans shall be submitted to the City Engineer as a Minor Plan Revision for approval prior to the work being performed.
 - Any work and material within the City right-of-way shall conform to the City of New Bedford requirements
 - All handicap parking, ramps, and access shall conform to AAB & MAAB requirements
 - All erosion control measures shall be in place prior to construction. Erosion Control shall conform to the City of New Bedford Conservation Commission requirements as stated in the Order of Conditions. (Refer to Erosion Control Plan if part of submission)
 - All pavement markings and signs shall conform to MUTCD requirements

X 3e. Grading and Drainage Plan

- Existing Conditions Plan and Construction/ Layout Plan plus:
- Existing and proposed site grading/ topography-Contours at 2' intervals (1' contours or additional spot grades if site is flat)

Staff Applicant

- Proposed parking lots, sidewalks, islands, etc.
 - Parking lot grades shall not exceed 5% or be less than 0.5 %
- Floor elevations & door locations
- Proposed drainage infrastructure plan including but not limited to piping and natural watercourse profiles & cross-sections, infiltration/ retention / detention structures, drain manholes, headwalls, roof recharge systems, flow direction, water quality BMPs, etc.
- Adequate information off site to verify proposed drain connections
- Drainage system profiles including rim and invert elevations, material, types, sizes, lengths, utility crossings and slopes
- Utility easements with bearings and distances suitable for registry filing
- Delineation of all stockpile areas
- Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access
- For applications associated with residential or commercial/industrial subdivisions, include an overall development plan showing all construction activity and proposed grading for all project phases, and show the proposed building envelope within each house lot and the proposed grading, drainage, and storm water disposal for each lot.
- A design for the stormwater drainage systems prepared by a Registered Professional Engineer demonstrating that proposed development rates of runoff do not exceed pre-development rates, as required under Massachusetts Stormwater Management Standards.

X

3f. Utility and Grading Plan (Show appropriate info from Existing Conditions & Construction/Layout Plan)

- Include all proposed utilities, including, but not limited to, Water, Sewer, Drainage, Electric, Telephone, Cable TV, Gas, Lighting, Title V Septic Systems & Detention and Retention Structures
 - Adequate utility information outside the site to verify proposed utility connections
 - All utility pipe types, sizes, lengths, and slopes
 - All utility structure information including rim and invert elevations
 - Any utility access vaults
 - All utility access handholes
 - All water services, hydrants, gates, shutoffs, tees
 - Utilities shall be underground if possible
 - All transformer locations
 - Required utility easements with dimensional bearings and distances
- Force main, if required, conforming to City of New Bedford requirements
- Water main loop
- Sewer profile showing all utility crossings
- Sections through detention basin(s)
- Include the following notes:
 - The contractor shall obtain a Street Disturbance & Obstruction Permit prior to any construction within the right-of-way
 - All water and sewer material and construction shall conform to the City of New Bedford requirements

Staff Applicant

- All water and sewer construction shall be inspected by the City Of New Bedford before being backfilled
- The City shall be notified at least 24 hours prior to the required inspections
- Detention basin, retention basin or other stormwater mechanisms (such as infiltration devices), if proposed.

X 3g. Landscape Plan

- Location, species & size of all proposed plantings
- All existing landscaping to be removed or retained
- Plant and tree legend
- Delineate & label all existing and proposed groundcovers, lawn areas, driveways, walkways, patios and other surface treatments
- Snow storage areas
- Proposed irrigation methods (on-site wells to be used unless otherwise approved)
- Verify sight distances at entrances

X 3h. Erosion Control Plan (show appropriate information from Existing Conditions and Construction/Layout Plans)

- Straw bales or straw bale/silt fence combination and compost filter tubes
- Anti-tracking BMP area at all construction entrances
- Dust Control (Methods of)
- Protection of existing and proposed drainage structures with straw bales and/or silt sacks
- Delineation of all temporary stockpile areas
- Safety fencing around stockpiles over 10' in height or otherwise restricted site access
- Straw bales or straw bale/silt fence combination around all stockpiles
- Include the following notes:
 - All BMP erosion control measures shall be in place prior to demolition or any site work.
 - Erosion Control BMPs shall conform to US EPA, NPDES, MA DEP and Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas.
 - Maintenance specifications for all proposed erosion and sedimentation controls.

X 3i. Floor Plan

- Include complete floor plan of all floors (entire building), including existing & proposed work
- Label all rooms (e.g., bedroom, kitchen, bathroom), and include dimensions of room sizes
- Show the location of all existing and proposed doors, windows, and walls
- For non-residential projects: show all existing and proposed seating areas, mechanical/kitchen equipment, backup generators and/or other major functional components of the proposed project

Staff Applicant

- Identify waste storage and disposal area(s), including detail(s) for dumpster(s) and dumpster pick-up and trash & garbage compaction areas (if any)

X 3j. Building Elevations

- Show all structural building elevations (front, sides and rear façades) that will be affected by the proposed project
- For additions/alterations: label existing and new construction, as well as items to be removed
- Identify all existing and proposed exterior materials, treatments and colors- including roofing, roof eaves, eave brackets, siding, doors, trim, sills, windows, fences, and railings. Show details of proposed new exterior elements
- Show any exterior mechanical, duct work, and/or utility boxes
- Include dimensions for building height, wall length and identify existing and proposed floor elevations

X 3k. Sign Plan

- Fully-dimensioned color elevations for all proposed signs
- Total square footage of existing signs and total square footage of proposed signs
- Existing and proposed sign locations on site plan
- Existing and proposed materials and methods of lighting for all signs

X 3l. Lighting Plan

- Location and orientation of all existing and proposed exterior lighting, including building and ground lighting and emergency spot lighting (if any)
- Height and initial foot-candle readings on the ground and the types of fixtures to be used
- Plan Must Show Illumination Patterns On-Site and Areas Off-Site
- New Bedford Washingtonian Type Fixtures Should Be Used, Where Applicable
- Provide Cut Sheet for All Lighting Fixtures

X 3m. Detail Sheets (Typical Details)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Pavement Section Detail | <input checked="" type="checkbox"/> Sewer Manhole Detail (26" cover) |
| <input checked="" type="checkbox"/> Sidewalk Detail | <input checked="" type="checkbox"/> Detention / Retention Basin Sections (from plan) |
| <input checked="" type="checkbox"/> Curb Detail | <input checked="" type="checkbox"/> Detention Basin Outlet Structure Detail |
| <input checked="" type="checkbox"/> Driveway Detail | <input checked="" type="checkbox"/> Miscellaneous Detention / Retention Basin Details |
| <input checked="" type="checkbox"/> Wheel Chair Ramp Detail | <input checked="" type="checkbox"/> Infiltration Device Details |
| <input type="checkbox"/> Concrete Pad Detail | <input checked="" type="checkbox"/> Stormwater BMPs (Water Quality Structure Details, etc.) |
| <input checked="" type="checkbox"/> Catch Basin Detail | <input type="checkbox"/> Bollards |
| <input type="checkbox"/> Drainage Manhole Detail | |
| <input checked="" type="checkbox"/> Water/Sewer Trench Details (12" envelope) | |

Staff Applicant

- | | |
|---|--|
| <input checked="" type="checkbox"/> Water and Sewer Trench Sections | <input checked="" type="checkbox"/> Sign Detail |
| <input type="checkbox"/> Anti-Seepage Collar Detail | <input checked="" type="checkbox"/> Fence Detail |
| <input type="checkbox"/> Flared End Detail | <input type="checkbox"/> Flowable Fill Trench |
| <input type="checkbox"/> Rip Rap Detail | <input checked="" type="checkbox"/> Pavement Marking Details |
| <input type="checkbox"/> Straw bales/Silt Fence Detail | <input type="checkbox"/> Handicap Parking/Compact Parking Signs |
| <input type="checkbox"/> Silt Sac Detail | <input type="checkbox"/> Hydrant Detail (American -Darling B-62-B (Open Right) or Mueller Super Centurion Hydrant (Open Right) |
| <input checked="" type="checkbox"/> Compost Filter Tube Detail | <input type="checkbox"/> Thrust Block Detail |
| <input type="checkbox"/> Light Pole Foundation Detail | |
| <input checked="" type="checkbox"/> Retaining Wall Details | |
| <input checked="" type="checkbox"/> Tree/Shrub Planting Detail | |

X 4. Project Narrative (16 Copies), to include adequate summary & description of the proposed project and indicating, where appropriate:

- If submitting a Development Impact Statement (DIS), this Narrative shall be submitted as part of that document
- The number of dwelling units to be built and the acreage in residential use
- Evidence of compliance with parking and off-street loading requirements
- The forms of ownership contemplated for the property and a summary of the provisions of any ownership or maintenance thereof
- Identification of all land that will become common or public land
- Any other evidence necessary to indicate compliance with the zoning ordinance
- A written statement indicating the estimated time required to complete the proposed project and any and all phases thereof
- A written estimate showing, in detail, the projected costs of all site improvements (and off-site improvement) planned
- Drainage calculations by a registered professional engineer, with storm drainage design conforming to City of New Bedford subdivision regulations, as well as wetland delineations determined by a certified wetland scientist if applicable, for 1, 10, 25 & 100 year storm events

X 5. Certified Abutters List (4 copies)

X 6. Proof of Ownership (Copy of Deed(s) for All Involved Parcels; 4 Copies)

7. Development Impact Statement (DIS), completed per §5350 of Zoning Code, (16 Copies), if required by Board

8. Traffic Impact & Access Study (TIAS) (16 Copies), if required by Board

X 9. Stormwater Management Report (9 Copies), if required, comprised of the following:

- MADEP Stormwater Standards Compliance Checklist (signed & stamped)

Staff Applicant

- Overall Project Description
- Existing Conditions
- Proposed Improvements
- Proposed Conditions
- Hydrologic Analysis for Existing & Proposed Conditions for Milestone Storm Event Intensities
- Stormwater Management Regulations
- Summary
- Appendix - Existing/Proposed Conditions Plans showing the following:
 - Overall Existing Subcatchment Area Table
 - Subcatchment Labeled, Design Point, Area, Curve number, Tc (min.)
 - Soil Classifications Table (Existing Soils)
 - Map Unit Symbol, Map Unit Name, Hydrologic Soil Code
 - Overall Proposed Subcatchment Area Table
 - Subcatchment Labeled, Design Point, Area, Curve number, Tc (min.)
 - Soil Classifications Table (Including Proposed Boron Soils, Etc., if applicable)
 - Map Unit Symbol, Map Unit Name, Hydrologic Soil Code
- Appendix - Hydrologic Analyses
 - HydroCAD Software Analyses (or equivalent software) Analyses (Existing & Proposed Conditions)
- Appendix - Illicit Discharge Certification (signed & dated)

X 10. Electronic PDF and AutoCAD Files

- Shall consist of a CD with a printed CD Label in a CD case
- CAD files shall be 2010 format or the latest revision of AutoCAD Civil 3D
- All project submissions shall include the following file types. All project related Drawing Files shall be provided in all 2 supported formats, listed below.
 - AutoCAD Drawing format (.dwg)
 - Adobe Portable Document Format (.pdf)
- PDF files shall be created from within the AutoCAD environment and contain Layer information.
- It is a requirement that each project drawing/sheet created for a project shall be published/plotted to DWG and PDF, and placed in the appropriate folder in the CD submission. All external references (DWG, DWF, DGN, PDF, TIFF, MrSID, JPG, etc.) which are used in support of the creation of these project sheets shall be stored within the XREF folder only (Subfolder of DWG) on the CD. Also the AutoCAD support files (fonts, plot style, etc.) should be supplied on the CD.
- File Naming:**

Staff Applicant

The following file naming standard for all CAD related files created, used, or submitted to the Planning Department shall be followed. This applies to all CAD drawings, DWF's, PDF's used in support of, or used in conjunction with this CAD Standard.

File names shall begin with their project Planning Board Case number assigned (available through the Planning Department), followed by an underscore and the appropriate discipline code. In the instance where there is more than one file, assign an appropriate sequential number to the end (ex. 1,2,3). Special characters are not permitted except for the following; hyphens [-], underscores [_], and/or parenthesis [()].

Example 1.

A set of engineering design plans and documents were prepared for project file number 12-34; acceptable filenames would be as follows:

- 12-34_Existing Conditions1.dwg
- 12-34_Existing Conditions2.dwg
- 12-34_General1.dwg
- 12-34_Generale.dwg

- 11. **Photos Depicting Existing Conditions** (Minimum of 3, In Color, 1 Aerial + 2 Other Views; 16 Copies)
- 12. **Completed Department Sign-Off Sheet** (1 original copy)
- 13. **Application Fee** (All fees are due at time of application submission)

Official Use Only:

For the Planning Board, this application has been received by the Planning Division of the Department of Planning, Housing & Community Development on the date specified below:

Review date: _____ All materials submitted: Yes No

Signature: _____ Fee: _____

PROPERTY DEEDS

The fee is \$344.00 plus a fee of \$147.00 x .79 = \$116.13 for taxes 11-12.

Book 79 Page 461
DOC. 461
No. 14721

Transfer Certificate of Title.

From Transfer Certificate No. 14728 , Originally Registered October 7, 1985 , in
Registration Book 79 Page 457 for the South Registry District of Bristol County

This is to Certify that S. B. Realty Limited Partnership, a Massachusetts
limited partnership having its usual place of business in

at New Bedford in the County of Bristol and Commonwealth of Massachusetts,
~~XXXXXXXXXX~~

is
the owner in fee simple

as set forth above

of that certain parcel of land situate in New Bedford
in the County of Bristol and said Commonwealth, bounded and described as follows:

- Southeasterly by the northwesterly line of Hathaway Road, six hundred twenty-seven and 14/100 (627.14) feet;
- Southerly by the northerly line forming the junction of said Hathaway Road and Shawmut Avenue, seventy and 25/100 (70.25) feet;
- Southwesterly by the northeasterly line of Shawmut Avenue, seven hundred forty and 86/100 (740.86) feet;
- Northerly by Lots 4 and 7 on plan hereinafter mentioned, four hundred seventy and 49/100 (470.49) feet;
- Easterly ninety-three and 12/100 (93.12) feet, and
- Northeasterly six hundred thirty-eight and 97/100 (638.97) feet, by Lot 7 on said plan.

Said land is shown as Lots 3, 5 and 6 on subdivision plan 28344C, drawn by Raymond L. Viereck, Surveyor, dated May 15, 1963, and filed in the Land Registration Office at Boston, a copy of which is filed in Bristol County (S.D.) Registry of Deeds, in Land Registration Book 42, Page 465, with Certificate of Title No. 8275.

The above described land is subject to and with the benefit of easements and encumbrances as set forth in deed from Arlana Dept. Stores, Inc. to Continental Screw Company, dated June 7, 1963 and registered as Document. No. 22833.

Address of Owner:
P. O. Box H-3103
New Bedford, Mass.

Purported Address of Property:
139 Hathaway Road
New Bedford, Mass.

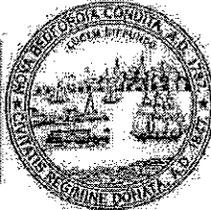
CERTIFIED ABUTTERS LIST

1. Name of the abutter
2. Address of the abutter
3. Date of certification
4. Signature of the abutter
5. Signature of the owner
6. Signature of the surveyor
7. Signature of the assessor
8. Signature of the collector
9. Signature of the treasurer
10. Signature of the clerk
11. Signature of the auditor
12. Signature of the assessor
13. Signature of the collector
14. Signature of the treasurer
15. Signature of the clerk
16. Signature of the auditor

NOTICE BY PUBLICATION & ABUTTERS NOTIFICATION

(Follow Massachusetts General Laws, Chapter 40A, Section 5)

- 1) The applicant shall be responsible for paying for the legal advertisements in the New Bedford Standard-Times once in each of two (2) successive weeks, the first publication to be not less than fourteen (14) days prior to the date of said hearing. This cost is included in the Application Fee. The City of New Bedford Planning Division shall be responsible for placing the legal ad in the New Bedford Standard-Times.
- 2) The applicant shall be responsible for certifying the abutters list and mailing, by Certified Mail, with Return Receipt Requested, a copy of the notice to each affected abutter.
- 3) A Legal Advertisement will be drafted by Planning Staff, including the date, time and location of the public hearing, and provided to the Applicant upon submittal of a complete application. This Legal Advertisement may not be altered or amended by the Applicant prior to use in notifying Abutters.



City of New Bedford
REQUEST for a CERTIFIED ABUTTERS LIST

CITY CLERK

This information is needed so that an official abutters list as required by MA General Law may be created and used in notifying abutters. You, as applicant, are responsible for picking up and paying for the certified abutters list from the assessor's office (city hall, room #109).

SUBJECT PROPERTY			
MAP #	101	LOT(S)#	14
ADDRESS: 139 Hathaway Road New Bedford, MA 02740			
OWNER INFORMATION			
NAME: S. B. Realty Limited Partnership			
MAILING ADDRESS: 92 Kilburn Street New Bedford, MA 02740			
APPLICANT/CONTACT PERSON INFORMATION			
NAME (IF DIFFERENT): Alison Cesar, Project Engineer			
MAILING ADDRESS (IF DIFFERENT): SITEC, Inc. 449 Faunce Corner Road Dartmouth, MA 02747			
TELEPHONE #	(508) 998-2125, Extension 28		
EMAIL ADDRESS:	acesar@sitec-engineering.com		
REASON FOR THIS REQUEST: Check appropriate			
<input type="checkbox"/>	ZONING BOARD OF APPEALS APPLICATION		
<input checked="" type="checkbox"/>	PLANNING BOARD APPLICATION		
<input type="checkbox"/>	CONSERVATION COMMISSION APPLICATION		
<input type="checkbox"/>	LICENSING BOARD APPLICATION		
<input type="checkbox"/>	OTHER (Please explain):		

**PLANNING
MAY 05 2015
DEPARTMENT**

Once obtained, the Certified List of Abutters must be attached to this Certification Letter.

Submit this form to the Planning Division Room 303 in City Hall, 133 William Street. You, as applicant, are responsible for picking up and paying for the certified abutters list from the assessor's office (city hall, room #109).

Official Use Only:

By _____, City Clerk, I hereby certify that the above information is true and correct to the best of my knowledge and belief.

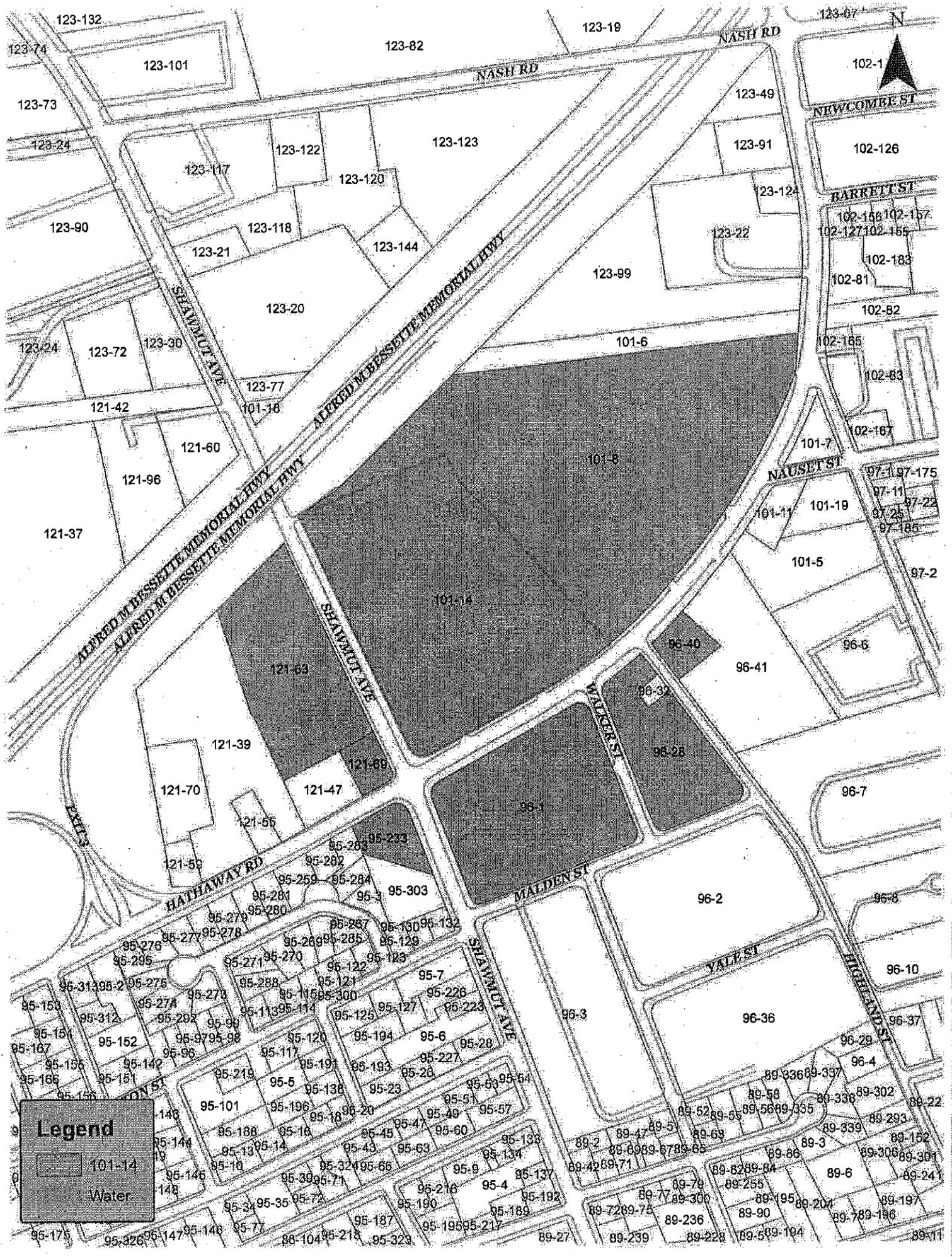
City Clerk

May 6, 2016
Dear Applicant,

Please find below the List of Abutters within 300 feet of the property known as 139 Hathaway Road (101-14). The current ownership listed herein must be checked and verified by the City of New Bedford Assessor's Office. Following said verification, the list shall be considered a Certified List of Abutters.

Please note that multiple listed properties with identical owner name and mailing address shall be considered duplicates, and shall require only 1 mailing. Additionally, City of New Bedford-Owned properties shall not require mailed notice.

Parcel	Location	Owner and Mailing Address
95-233	923 SHAWMUT AVE	CUMBERLAND FARMS INC, 100 CROSSING BLVD FRAMINGHAM, MA 01702
96-28	413 HIGHLAND ST -419	N B HOUSING AUTHORITY TR, BRICKENWOOD 134 SO SECOND ST NEW BEDFORD, MA 02740
96-40	78 HATHAWAY RD	78 HATHAWAY LLC, 133 FAUNCE CORNER ROAD DARTMOUTH, MA 02747
121-69	953 SHAWMUT AVE	RODNEY STREET REAL ESTATE LLC, 32 PIERCE STREET ROCHESTER, MA 02770
96-1	37 WALKER ST -43	N B HOUSING AUTHORITY TR, BRICKENWOOD 134 SO SECOND ST NEW BEDFORD, MA 02740
101-14	139 HATHAWAY RD 133-151	S B REALTY LIMITED PARTNERSHIP, 92 KILBURN STREET NEW BEDFORD, MA 02740
101-8	19 HATHAWAY RD	BORETTI LISA ANN 'TRS', 19 HATHAWAY ROAD TRUST II 319 LINCOLN STREET HINGHAM, MA 02043
121-63	969 SHAWMUT AVE	969 SHAWMUT AVENUE LLC, 969 SHAWMUT AVENUE NEW BEDFORD, MA 02746



Legend

101-14
Water

123-132

123-82

123-19

123-67

123-74

123-101

NASH RD

NASH RD

NEWCOMBE ST

123-73

123-117

123-122

123-123

123-49

102-1

123-24

123-120

123-91

102-126

123-90

123-21

123-118

123-144

123-124

BARRETT ST

123-24

123-72

123-30

123-77

123-144

123-99

123-22

102-158 102-157

121-42

101-18

101-6

102-127 102-165

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

102-81

121-37

121-96

121-60

101-8

102-82

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

102-165

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

102-83

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

102-167

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

101-7

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

101-19

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

97-1 97-175

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

97-11 97-22

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

97-25 97-186

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

101-5

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

97-2

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

101-5

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-6

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-6

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-42

101-18

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

121-96

121-60

ALFRED M. BESSETTE MEMORIAL HWY

101-8

96-41

LIGHTING SPECIFICATIONS

Cree Edge™ Series

LED Area/Flood Luminaire

Product Description

The Cree Edge Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, Spider, or Side Arm (details on page 2). Includes a leaf/debris guard.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

- Utilizes BetaLED® Technology
- Patented NanoOptic® Product Technology
- Made in the U.S.A. of U.S. and imported parts
- CRI: Minimum 70 CRI
- CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard
- Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

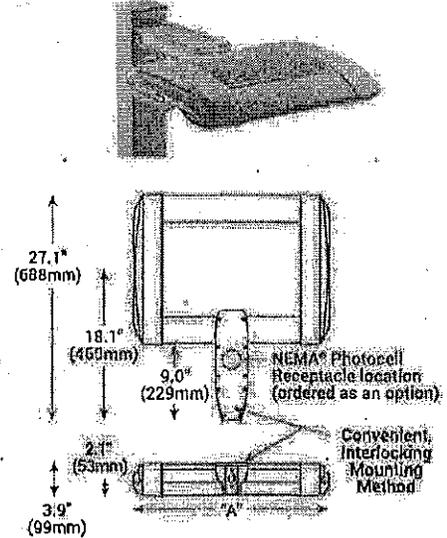
*See www.cree.com/lighting/products/warranty for warranty terms

Accessories

Field-Installed	
Bird Spikes XA-BRDSPK	Backlight Control Shields XA-20BLS-4
Hand-Held Remote XA-SENSREM	Four-pack Unpainted stainless steel

For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

DA Mount



LED Count (x10)	Dim. A*	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (16kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)
20	28.1" (713mm)	43 lbs. (20kg)
24	32.1" (814mm)	48 lbs. (22kg)

Ordering Information

Example: ARE EDG 2M AA 12 E UL SV 350

Product	Optic	Mounting*	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options	
ARE EDG	1S Type I Short 2M Type II Medium 2MB Type II Medium w/BLS 2MP Type II Medium w/Parial BLS	2SB Type II Short w/BLS 2SP Type II Short w/BLS 3M Type III Medium w/BLS 3MP Type III Medium w/Parial BLS	4M Type IV Medium 4MD Type IV Medium w/BLS 4MP Type IV Medium w/Parial BLS 5M Type V Medium 5MP Type V Short	AA Adjustable Arm DA Direct Arm DL Direct Arm Long R3 Spider Center Tenon, 2-3/8" to 3" OD R4 Spider Center Direct, 4" Square - Available with 40-240 LEDs SA Side Arm - Available with 20-60 LEDs	02 04 06 08 10 12 14 16 20 24	UL Universal UH Universal 347-480V 34 347V	DK Black BZ Bronze PB Platinum SV Silver WH White	350 350mA 625 525mA - Available with 20- 160 LEDs 1000mA - Available with 20- 60 LEDs	<p>4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire</p> <p>0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current</p> <p>Fuse - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - When code dictates fusing, use time delay fuse</p> <p>HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included</p> <p>ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt</p> <p>P Photocell - Refer to ML spec sheet for availability with ML options - Must specify UL or 34 voltage</p> <p>PML Programmable Multi-Level, 30-40° Mounting Height - Designed for applications where mounting height is 30-40' A.F.G. - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt</p> <p>PML2 Programmable Multi-Level, 20° Mounting Height - Designed for applications where mounting height is 20' A.F.G. - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt</p> <p>R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others - Refer to ML spec sheet for availability with ML options</p>
FLD EDG	15 15° Flood 21 21° Flood 23 23° Flood	40 40° Flood 70 70° Flood 70° Flood	SN Sign N6 NEMA® 6						

*Reference CPA and pole configuration suitability data beginning on page 24



Rev. Date: V1 05/06/2015

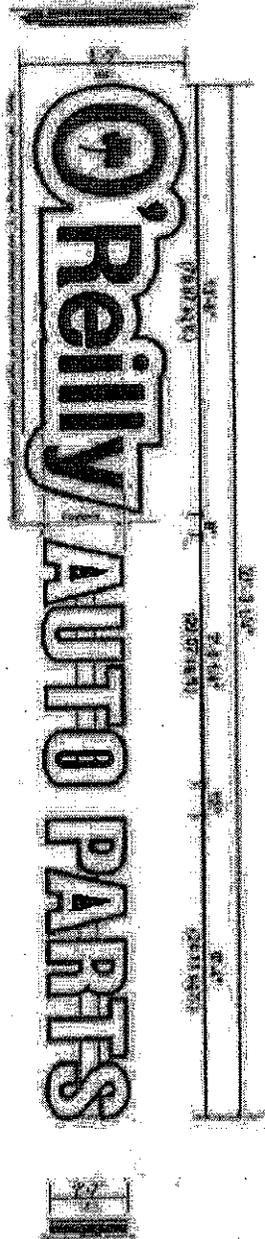


US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

**ELEVATION
SIGN DETAILS
FLOOR PLAN**

EXHIBIT C-1



Site: Erie
County

Tool: Van
Kearney # 130

11801 W. 2nd Avenue, Commerce, PA 15389

Part: Van
AUTO PARTS

Property: O'Reilly Auto Parts, 11801 W. 2nd Avenue, Commerce, PA 15389. The property is currently owned by O'Reilly Auto Parts, Inc. (OAP) and is used for the operation of an O'Reilly Auto Parts store. The property is located in the Township of Commerce, Erie County, Pennsylvania. The property is zoned R-1. The property is currently occupied by O'Reilly Auto Parts, Inc. (OAP) and is used for the operation of an O'Reilly Auto Parts store. The property is located in the Township of Commerce, Erie County, Pennsylvania. The property is zoned R-1. The property is currently occupied by O'Reilly Auto Parts, Inc. (OAP) and is used for the operation of an O'Reilly Auto Parts store.

Frontal Impact Logo with "O'Reilly Auto Parts" and "Commercial Vehicles" text.

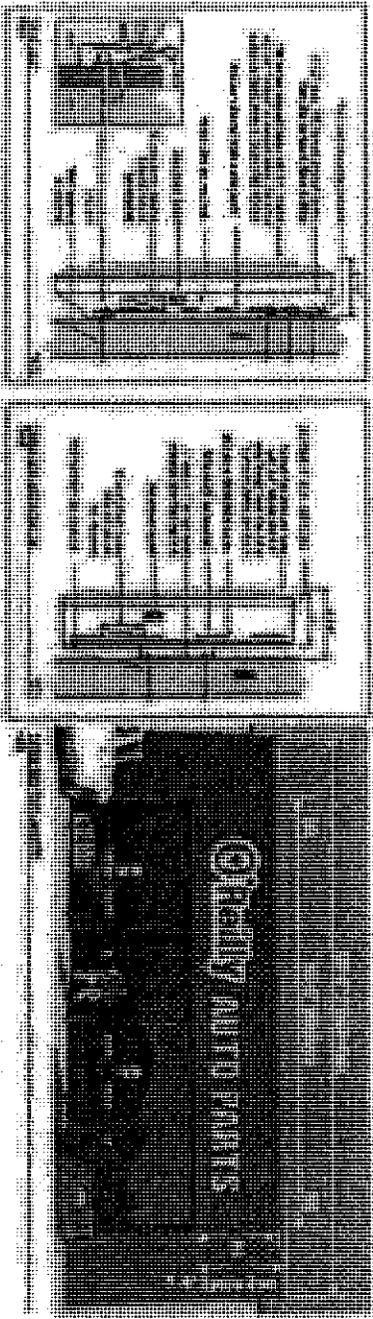


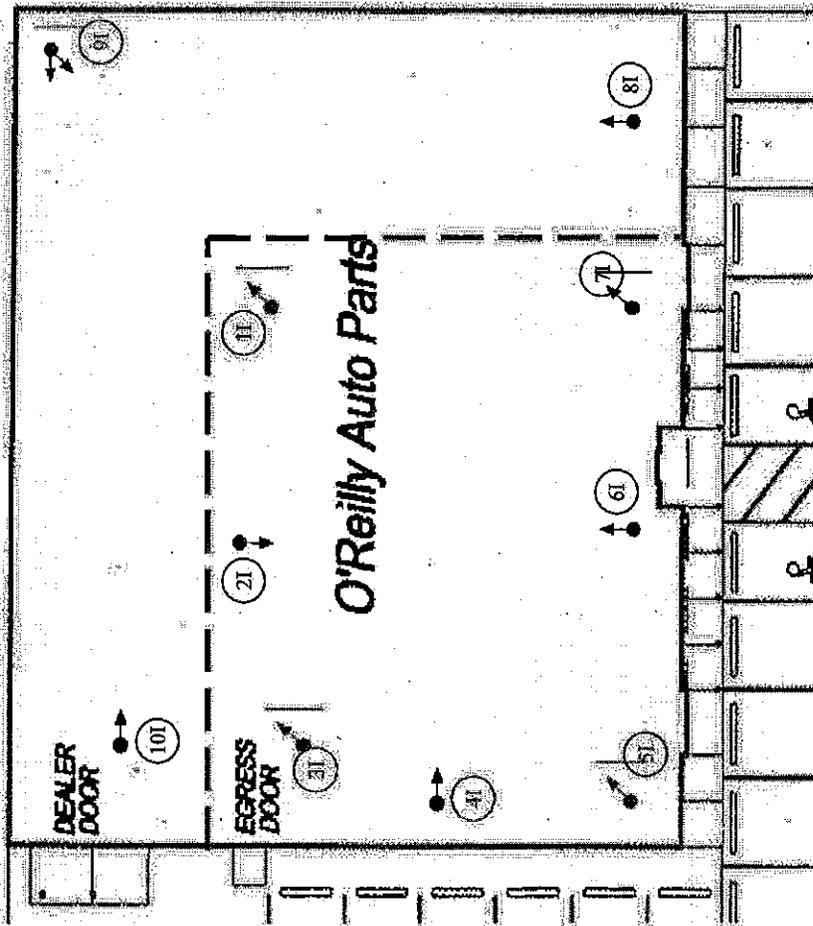
EXHIBIT C-2
RED BACKGROUND



Sample Store Front Layout
*NTS

O'Reilly Auto Parts – Interior Photo Documentation Points

WORK LETTER EXHIBIT B-2



Date: 11/03/2007

SITE PHOTOGRAPHS



BARSAAM OUTLET

508-927-0882
TOP NAILS

PRICE/RITE
Paints & More

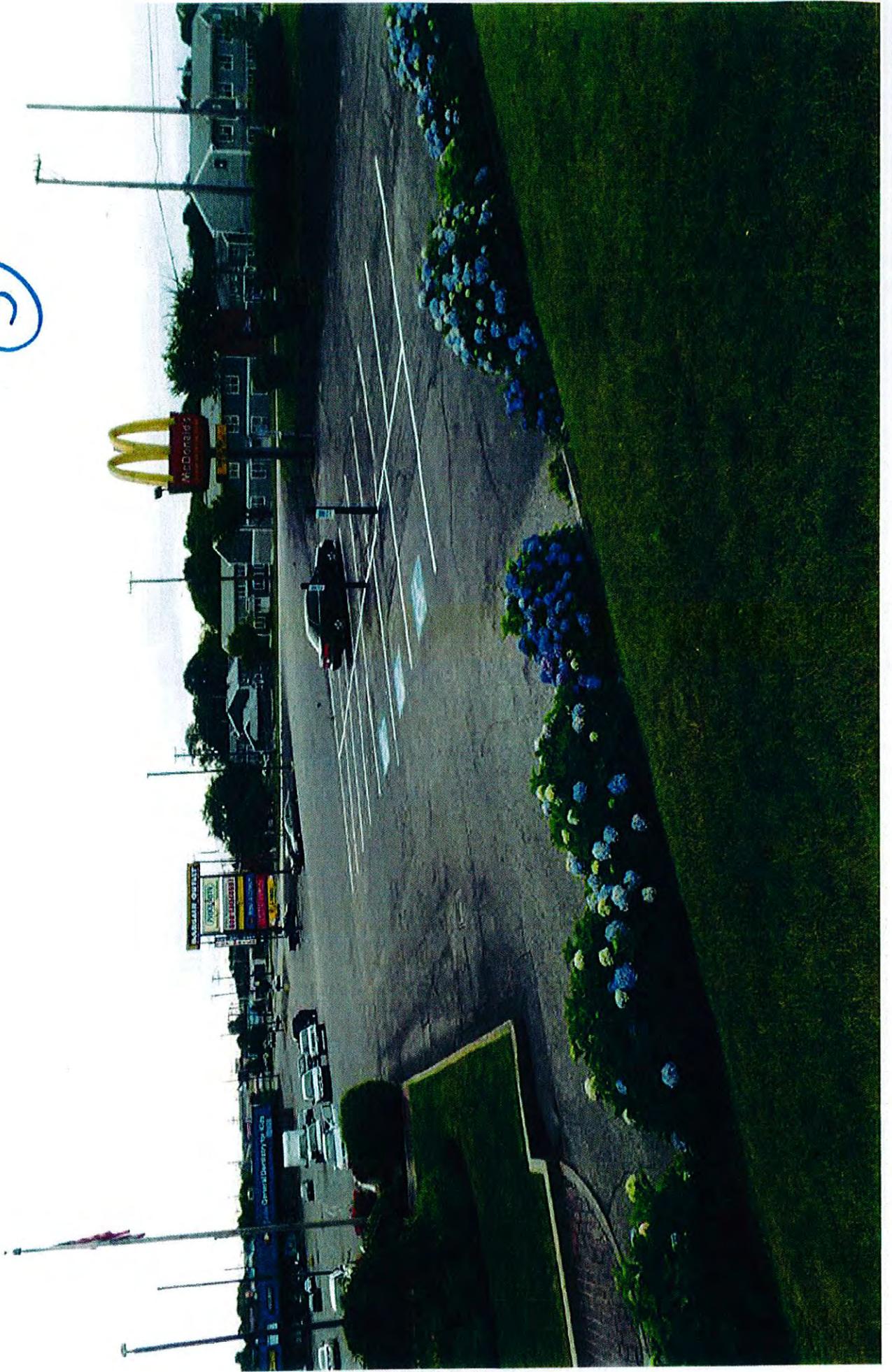
JOB'S DISCOUNT
The One-Stop Store for
Home Improvement

Rent-A-Center
Rent Your Way

FAMILY DRY CLEAN
K-1 Laundry



3













Dentistry for Kids

STORMWATER MANAGEMENT REPORT