

# NEW BEDFORD COMMUNITY PRESERVATION COMMITTEE

### STEP II

# COMMUNITY PRESERVATION ACT PROJECT APPLICATION FY24

Project Application Deadline:

### **NOVEMBER 17, 2023 by NOON**

No late submissions will be accepted.

Applicants must submit this application no later than Noon on Friday, November 17, 2023. *Please review the entire application packet before completing the application.* 

Applications will not be accepted--regardless of project eligibility—unless the STEP I Project Eligibility Determination Form was submitted and approved by the Community Preservation Committee.

COMMUNITY PRESERVATION COMMITTEE
Department of City Planning
City Hall Room 303 | 133 William Street
(508)979-1488 cpa@newbedford-ma.gov





## CITY OF NEW BEDFORD COMMUNITY PRESERVATION ACT FY24 PROJECT APPLICATION

PROJECT INFORMATION - Please complete	te all quest	ions					
PROJECT TITLE	Strand	Theate	Restora	ition		WARD	2
PROJECT LOCATION	1157 A	1157 Acushnet Ave, New Bedford, MA 02746					
LEGAL PROPERTY OWNER OF RECORD	Cape V	Cape Verdean Association in New Bedford					
CPA PROGRAM CATEGORY	OPEN	SPACE		HISTORIC F	RESOURCE		
(Select relevant categories for your project)	RECR	EATION		HOUSING			
ESTIMATED START DATE	Summ	ner 202	3 ESTIMA	ATED COMPLETI	ON DATE	-all 202	
ONE SENTENCE DESCRIPTION OF PROJECT	Adaptive r	e-use of S	trand Theat	er into Cape Ver	dean Cultura	al Communi	ity Center
APPLICANT INFORMATION							
APPLICANT ORGANIZATION NAME	Cape V	erdean	Associa	tion in New	Bedford		
APPLICANT IS (Check only one)	CITY D	EPARTMEN	T NON	-PROFIT	☐ PRIVATI	E GROUP/CI	TIZEN
CO-APPLICANT ORGANIZATION NAME (If applicable)							
CO-APPLICANT IS (Check only one)	☐ CITY DEPARTMENT     ☐ NON-PROFIT     ☐ PRIVATE GROUP/CITIZEN				TIZEN		
PROJECT CONTACT PERSON	Jan Baptist						
MAILING ADDRESS	128 Union St., Ste 100, New Bedford, MA 02740						
TELEPHONE NUMBER	508-982-2022 EMAIL: jbaptistcvanb@gmail.com						
BUDGET SUMMARY							
CPA FUNDING REQUEST  (must match CPA request-line 1 of Project Bu	udget on pa	ge 8)	\$235,0	000			
TOTAL BUDGET FOR PROJECT			\$3,700	,000			
SIGNATURES							
I/we attest that all information provided in the						_	
_	information has been excluded which might reasonably affect funding. I/we authorize the Community Preservation Committee and/or the City of New Bedford to obtain verification from any source provided. I/we acknowledge and agree that a permanent						
restriction may be placed on the property as a condition of funding.							
APPLICANT NAME (printed)	SIGNATURE Judge 11/15/23			1/15/23			
Jan Baptist	Candiplied DATE: 11/15/23						
CO-APPLICANT NAME (printed)	SIGNATURE						
	DATE:						
						1	

#### **Submission Checklist**

The following items should be organized on your submitted flash drive in folders named for each applicable section below (e.g., Application, Financial, etc.). Please check off each item on this list if it is included in your submission packet. **Note: not all items will apply to each project.** 

APPL	ICATION
<b>7</b>	Application Information (page 1)
	Submission Checklist (this page)
<u> </u>	Narrative/Project Management/Category Specific Section/Financial (pages 3-7)
<u> </u>	Project Schedule – Project Budget – Funding Sources Summary (page 8)
<u> </u>	Construction Budget Summary – to be complete for construction projects ONLY (page 9)
<b>/</b>	Certificate of Vote of Corporation and Tax Compliance Certification (page 10) must be completed by both applicant and co-applicant. Form must be completed by authorized board member. *Certificate of Vote named person must be different person from signer of the certificate.
FINA	NCIAL
<b>V</b>	1 written quote from a contractor and 1 cost estimate from an architect <b>OR</b> 2 written quotes from a contractor (Quotes must be submitted with application – late submissions will not be accepted)
<b>/</b>	Proof of secured funding (commitment letters or bank statements), if applicable. Please redact account numbers and any sensitive information.
OWN	ERSHIP/OPERATION (NON-CITY)
	If the applicant is not the owner, attach documentation of site control or written consent of owner to undertake the project. <i>Applications will not be reviewed without this documentation</i> .
	Certificate of Good Standing (if operating as a corporation)
<b>✓</b>	501(c)(3) certification (if operating as a non-profit)
<b>1</b>	Purchase & Sale agreement or copy of current recorded deed, if applicable.
сом	MUNITY SUPPORT
<b>✓</b>	Letters of support from residents, community groups, city departments, boards or commissions, etc.
PLAN	S & REPORTS
The fo	ollowing plans and reports, if available, will strength your application. <u>Submit in digital format only.</u>
	Renderings, site plans, engineering plans, design/bidding plans, specifications, and any MAAB variance requests.
<b>✓</b>	Applicable reports (21E, Historic Structure Report, appraisals, survey plan, feasibility studies, etc.)
VISU	AL .
<b>V</b>	Map of the property location (if applicable, show wetlands and wetland buffers, flood plain, water bodies, parks, open spaces, rails, and other features pertinent to the project). Applicants may use the City's interactive mapping website.
✓]	Photos of the project site (not more than four views per site) Digital copies only.
<b>✓</b>	Catalog cuts (i.e. recreation equipment) if applicable.
FOR I	HISTORIC RESOURCE PROJECTS ONLY
<b>✓</b>	Documentation stating the project is listed on the State Register of Historic Places or a written determination from the New Bedford Historical Commission that the resource is significant in the history, archeology, architecture, or culture of New Bedford.
<b>4</b>	Photos documenting the condition of the property. Digital copies only.
<b>✓</b>	Report or condition assessment by a qualified professional describing the current condition of the property, if available.
<b>✓</b>	I/We have read the <i>U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties</i> and understand that planning for and execution of this project must meet these standards.

#### **PROJECT NARRATIVE**

#### **1** GENERAL NARRATIVE (1000 Character Maximum)

- Describe the project's location, the property involved and its proposed use.
- Describe the proposed scope of work.

The former Strand Theater is located at 1157 Acushnet Avenue. The historic theater (constructed circa 1910) is a 9,000-square-foot blighted building and one of the only surviving early 1900s theaters in the entire city of New Bedford. CVANB is restoring and transforming the historic building into the Cape Verdean Cultural Community Center (CVCCC).

CVANB is requesting CPA funds for Phase II of the Strand Theater project to renovate the historic theater into the CVCCC install an ADA-accessible entrance on the south elevation and construct an ADA-qualified bathroom, thereby ensuring this historic resource is available to people with mobility issues. The access will also include shelter protection with a canvas awning to weather-protect the interior restoration work, and a sensor floodlight to illuminate the entrance for safety. In addition, with CVCCC and Island Park connecting, events and activities can begin at Island Park, thereby amplifying the impact of the FY24 funds.

#### 2 COMMUNITY NEED (1000 Character Maximum)

- What community need(s) listed in the FY24 CPA Plan will this project address? How does the project benefit the public and what populations(s) will it serve? If it serves a population currently underserved, please describe.
- How does the project preserve and enhance the character of New Bedford?

The City of New Bedford currently lacks a community space where residents can gather to enjoy live entertainment and art created by artists of color. Once completed, the Cape Verdean Community Cultural Center (CVCCC) will fill this gap, and also be preserving and enhancing the character of New Bedford by returning the building to its original historic use, as an entertainment venue. Additionally, located at the entrance to the City's International Marketplace, the building's active use will reflect the diversity and vibrancy of a neighborhood poised for a collective renaissance.

This project also fulfills goals outlined in city plans due to its location as the gateway to the International Marketplace. Plans that include this development are The 2020 City Master Plan and the Acushnet Avenue Economic Impact Study. The Strand Theater is one of the real estate and development projects of the MassDevelopment Transformative District Initiative and part of the New Bedford Creative Initiative.

#### **3** GOALS & OBJECTIVES (1000 Character Maximum)

- Describe the project's goals and objectives. The objectives must be specific, measurable, achievable and realistic.
- How does the project meet the general and category-specific priorities outlined in the Community Preservation Plan or other current relevant planning documents?

This request will benefit two historically funded CPA projects. The goals are to install a handicap-accessible entrance on the southern elevation and build ADA-compliant bathrooms inside the theater, accessible through the new egress. It supports both CPA's "Historic Resource" and "Recreational Land's" "Rehabilitation and Restoration" goals.

In addition, the restoration and adaptive re-use of the historic Strand Theater into the Cape Verdean Cultural Community Center will physically and metaphorically collect the community in celebration and support of Cape Verdeans and other island populations as part of our port city. When completed it will: preserve a historic landmark; transform the "International Marketplace" gateway; stand as a stable representation of an immigrant neighborhood; and create a home for CVANB's cultural programs, services, and resources.

#### 4 MEASURING SUCCESS (1000 Character Maximum)

How will the success of this project be measured?

Project success will be measured by the completion of the installation of doors that create ADA-compliant access to the building and two ADA-compliant public toilet rooms inside the theater will be accessible from this entrance.

#### **5** COMMUNITY SUPPORT (1000 Character Maximum)

• Explain the level of community support this project has received. If possible, please include letters of support from any groups or individuals who have endorsed this project.

WHALE, The CEDC, New Bedford's Economic Development Council, the Massachusetts Historic Commission, State Representatives Cabral and Hendricks, as well as several city councilors, are all strong supporters.

CVCCC is specifically referenced in NB Creative's 2018 Arts + Culture Plan "to advance culturally and ethnically specific programs." The City's Regeneration Committee also published a 2018 report calling for "Compelling architecture, pedestrian-friendly streetscapes, public art, and areas of our city that are popular gathering places can all be used as assets in the human decisions that lead to the investment of capital in our community" which this project creates.

CVANB has actively been engaged with Love the Ave and TDI during the development of this project. MassDevelopment's Transformative District Initiative has recognized the value of the adaptive reuse of the theater, regularly includes it in regional planning, and has financially supported the project.

#### **6** CRITICAL NEED (1000 Character Maximum)

- Is this project of an urgent nature?
- Is there a deadline or factors not controlled by the applicant (i.e. opportunity for immediate acquisition, opportunity to leverage available non-CPA grant or other financial opportunity)?
- For historic resource applications only, is the property at risk for irreparable loss? If so, please include a condition assessment from a qualified professional if available.

The Strand Theater needs investment to avoid further deterioration due to damage caused by environmental forces, including wind and rain, and to ensure the full restoration continues to move forward. Prior to CVANB purchasing the building and beginning restoration work, the building was long neglected; the project needs continued investment to ensure it can be fully restored.

Additionally, CPA funding also critically supports CVANB's additional grant applications, demonstrating and leveraging investment from the city and historical resources.

#### **PROJECT MANAGEMENT**

#### 1 APPLICANT INFORMATION (1000 Character Maximum)

- Describe applicant. Is applicant a public entity, private non-profit, private for-profit, an individual, a partnership, or another type of entity? What is their history and background?
- Identify and describe the roles of all participants (applicants, architects, contractors, etc.) including the project manager.
- Describe any past projects of similar type and scale, or experience that demonstrates the applicant's ability to carry out this project.

CVANB is a nonprofit founded in 1990 to preserve and promote Cape Verdean culture. CVANB fosters continued appreciation of Cape Verdean history and delivers culturally competent programs and services. CVANB's Vice President oversees the project through a team of skilled professionals.

The project manager is the Waterfront Historic Area LeaguE (WHALE). They have fostered historic preservation and architectural heritage in New Bedford since 1962, including developing more than 70 brick-and-mortar preservation projects for community purposes, including arts and cultural venues, housing, and mixed-use development.

Studio2Sustain is the project architect. It was founded by Kathryn Duff, RA, and is a professional practice focused on creating sustainable buildings and communities. The firm is committed to adaptive reuse solutions for historic structures in New Bedford.

Post Oak Preservation Solutions provides guidance and support to CVANB in the application and use of historic tax credits.

#### 2 PROJECT FEASIBILITY (1000 Character Maximum)

List and explain further actions or steps required for completion of the project, such as environmental
assessments, zoning or other permits and approvals, agreement on terms of any required conservation,
affordability or historic preservation agreements, subordination agreements, and any known or potential
barriers or impediments to project implementation.

The first step for this portion of the work will be an analysis of drain lines to make certain they can be extended for the toilet room. A City of New Bedford building permit is required, and CVANB is prepared to initiate it quickly after being approved for funding so as to keep to the included timeline. CVANB is already released official bid documents to CPA (and ARPA) qualified contractors in fall 2024.

The project will be in compliance with historic rehabilitation projects and the Secretary of Interior's Standards and feasibility studies have already been done. CVANB continues to work with experienced architect, Studio2Sustain, to identify and address any impediments that may arise but are unforeseeable.

#### 3 PROJECT MAINTENANCE (1000 Character Maximum)

Please explain the long-term maintenance plan for the completed project.

As the owner of the property, CVANB is committed to the long-term maintenance and stewardship of the Strand Theater throughout the restoration and once completed. Costs for annual maintenance will be built into CVANB's annual operating budget. WHALE will also continue to provide capital restoration technical assistance as a long-term partner.

Additionally, CVANB 's purchase of the adjacent lot and significant investments in Island Park's development, further illustrate commitment to the building and the development of this North End neighborhood.

Once the cultural center is completed, a director will be responsible for the building maintenance, property oversight, and management.

#### **COMPLETE FOR HISTORIC RESOURCE PROJECTS ONLY**

#### **CPA Compliance (1000 Character Maximum)**

- Describe how the proposed project complies with the <u>U.S. Secretary of the Interior's Standards for</u> Rehabilitation, as required by the CPA legislation under the definition of rehabilitation.
- Describe how the applicant will ensure compliance with these standards as the project is ongoing, including an identification of who will make historic preservation determinations.

CVANB's partners, WHALE and Studio Sustain, are in strict compliance with the U.S. Secretary of the Interior's Standards for Rehabilitation in all aspects of the design and restoration of the Strand Theater.

The project has already received five rounds of State Historic Tax Credits and will continue to apply as the work qualifies. Extensive research has occurred on the historic structure, its history, and design has been done in preparation, and CVANB continues to partner with WHALE, Studio2Sustain, and Post Oak Preservation to ensure meeting all standards for historic preservation of the Strand Theater.

#### COMPLETE FOR PROJECTS WITH ACCESSIBILITY REQUIREMENTS ONLY

#### **CPA Compliance (500 Character Maximum)**

Describe how the proposed project complies with the <u>ADA/MAAB Regulations</u>.

A code compliance study was completed by Studio2Sustain and has been incorporated into all restoration plans including egress measurements, the incline of ramps meeting door variances that arise, and appropriate space in handicapped bathrooms have been integrated into the plans. All work has been specifically designed by the architect to meet ADA/MAAB regulations and have the additional benefit of helping to bring the adjacent Island Park into compliance, as well.

#### COMPLETE FOR COMMUNITY HOUSING PROJECTS ONLY

#### **CPA Compliance (500 Character Maximum)**

- Describe how the proposed project complies with CPA affordability requirements (100% of AMI for New Bedford)
- Describe the number and types of units (e.g.: 1br, 2br).
- Provide a complete Development Budget and an Operating Budget (for rental properties).

n/a

#### PROJECT FINANCIAL INFORMATION

#### 1 FINANCIAL INFORMATION (2000 Character Maximum)

- Describe all successful and unsuccessful attempts to secure funding and/or in-kind contributions, donations, or volunteer labor for the project. A bullet point list is acceptable.
- Will the project require CPA funding over multiple years? If so, provide estimated annual funding requirements.
- What is the basis for the total CPA request?
- How will the project be affected if it does not receive CPA funds or receives a reduced amount?

The creation of the CVCCC is a top priority for CVANB. It has already been awarded \$1,630,000 from a diversity of sources who recognize the historical, cultural, and economic value this project brings to the North End of New Bedford.

Upon acquisition, CVANB immediately invested \$300,000 into the initial restoration, including a new roof and other repairs. This funding came from CVANB fundraising and CDBG funds. Many of CVANB's members volunteered their time to complete the repairs and had volunteers from YouthBuild, as well.

Since the architecture plans were completed, \$700,000 has been raised from ARPA funds supporting internal systems such as HVAC and fire suppression. CVANB has been awarded \$500,000, although we applied for \$1.2M. CVANB has applied for Historic Tax Credits and will continue until these credits are maxed out for the project. In 2023 MassDevelopment recognized the transformative economic value of the project and awarded \$50,000 for interior restoration.

CVANB has also applied for the Smith Foundation, the African Cultural Heritage Fund, James Arnold Fund, and actively seeking additional opportunities. CVANB also applied for \$250K in TDI Cultural Funds and did not receive them in 2023.

Two requests for FY24 are outstanding, including applications for \$25,000 from the Crapo Foundation for interior plasterwork and \$10,000 from Preservation Mass's 1772 to outfit the portico.

Additionally, The Island Foundation has granted CVANB \$12,000 in operating funds to support and execute a capital campaign plan with a goal of \$1.1M.

If this request is denied or significantly reduced, it would impact the use of already awarded funding, including tax credits, It will also delay occupancy and therefore planned programming for both the Community Center and adjacent Island Park.

#### PROJECT SCHEDULE - PROJECT BUDGET - FUNDING SOURCE SUMMARY

#### **PROJECT SCHEDULE**

Please provide a project timeline below, noting all project milestones. Please note the City Council must approve all appropriations of CPA funds. Grant funding will not be available for disbursement until July 1, 2024.

	ACTIVITY	ESTIMATED DATE
PROJECT START DATE:	Prep and release of IFB Documents	August 2023
PROJECT MILESTONE:	Phase II Begins	Spring 2024
50% COMPLETION STAGE:	Bids Awarded	Fall 2024
PROJECT MILESTONE:	Phase III Begins	Fall 2024
PROJECT COMPLETION DATE:	CO & City of NB Sign Off	Fall 2025

#### ANTICIPATED PROJECT BUDGET

Please include a **complete itemized budget** of all project expenses, including the proposed funding source for each expense, with your application. Note: CPA funds cannot be used for maintenance.

If the project received CPA funds in another fiscal year, please include this amount on a separate line, not on line 1.

FUNDING SOURCES		EXPENSES				
	FONDING SOURCES	STUDY	SOFT COSTS*	ACQUISITION	CONSTRUCTION**	TOTAL
1	NEW BEDFORD CPA FY24***	\$	\$	\$0	\$235,000	\$235,000
2	CPA FY19-FY23	\$	\$	\$0	\$690,000	\$690,000
3	Capital Campaigns/Foundations	\$	\$96,000	\$0	\$799,000	\$895,000
4	MCC Cultural Facilities Fund	\$	\$140,000	\$0	\$300,000	\$440,000
5	State Historic Tax Credits	\$	\$50,000	\$0	\$541,185	\$591,185
6	City & State ARPA	\$	\$	\$0	\$700,000	\$700,000
7	MassDevelopment	\$	\$	\$0	\$50,000	\$50,000
TO	TAL PROJECT COSTS	\$	\$286,000	\$0	\$3,315,185	\$3,601,185

<sup>\*</sup> Soft costs include design, professional services, permitting fees, closing costs, legal, etc.

#### **ANTICIPATED FUNDING SOURCE SUMMARY**

Please explain the current status of each funding source (i.e., submitting application on X date, applied on X date, received award notification on X date, funds on hand, etc.). For sources where funding has been awarded or funds are on hand, please include documentation from the funding source (e.g., commitment letter, bank statement) in application packet.

	FUNDING SOURCE	STATUS OF FUNDING
1	MassDevelopment Commonwealth Places	\$50,000 Awarded Sept 2023
2	Mass Historic Tax Credits	\$591,185 Expected - \$500,00 Already Awarded (2021-2023) and Applying
3	City of New Bedford ARPA	\$500,000 Awarded - In Process of doing Federal Review
4	State of MA ARPA Funds	\$200,000 Awarded, Secured
5	Mass Cultural Council - Facilities	\$430,000 Expected, \$230,000 Awarded, \$230,000 Contract Pending, and applying
6	CVANB Capital Campaign	\$1,100,000 - to Launch in 2024
7	City of New Bedford CPA Funds	\$925,000 Expected - \$690,000 Already Awarded

<sup>\*\*</sup> Construction refers to new construction, rehabilitation, preservation, restoration work, and/or accessibility related expenses.

<sup>\*\*\*</sup>New Bedford CPA (Line 1) amount should match the amount requested on the application cover page.

## CONSTRUCTION BUDGET To be completed for construction projects only

ACTIVITY	CPA FUNDS	OTHER FUNDS	TOTAL		
Acquisition Costs					
Land	\$	\$	\$		
Existing Structures	\$	\$	\$		
Other acquisition costs	\$	\$	\$		
Site Work (not in construction con	tract)				
Demolition/clearance	\$	\$	\$		
Other site costs	\$	\$	\$		
Construction/Project Improvemen	t Costs	<del>-</del>			
New Construction	\$	\$	\$		
Rehabilitation	\$235,000	\$	\$235,000		
Performance bond premium	\$	\$	\$		
Construction contingency (30%)	\$	\$	\$		
Other		\$	\$		
Architectural and Engineering (See <a href="https://www.mass.gov/files/design_fee_sc">https://www.mass.gov/files/design_fee_sc</a>	hedule- dsb 2015 20	<u>07.pdf</u>			
Architect fees	\$	\$	\$		
Engineering fees	\$	\$	\$		
Other A & E fees	\$	\$	\$		
Other Owner Costs					
Appraisal fees	\$	\$	\$		
Survey	\$	\$	\$		
Soil boring/environmental/LBP	\$	\$	\$		
Tap fees and impact fees	\$	\$	\$		
Permitting fees	\$	\$	\$		
Legal fees	\$	\$	\$		
Other	\$	\$	\$		
Miscellaneous Costs	-				
Developer fees	\$	\$	\$		
Project reserves	\$	\$	\$		
Relocation costs	\$	\$	\$		
Project Administration & Manager	Project Administration & Management Costs				
Marketing/management	\$	\$	\$		
Operating/Maintenance	\$	\$	\$		
Taxes	\$	\$	\$		
Insurance	\$	\$	\$		
Other	\$	\$	\$		
TOTAL	\$ 235,000	\$0	\$ 235,000		

## CERTIFICATE OF VOTE OF CORPORATION AUTHORIZING EXECUTION OF CORPORATE AGREEMENTS

At a meeting of the Board of Directors of Cape  November 8 . 20 23 at which a quorum	Verdean Association (organization) duly called and held on was present and acting throughout, the following vote was duly
adopted.	was present and acting amoughout, the following vote was daily
documents with the City of New Bedford, the about Proposals, Deeds, Purchase and Sales Agreements Indemnifications; and also to seal and execute, as	Vice President (title) of the corporation, be and ign and deliver in the name and on behalf of the corporation, contract ove mentioned documents to include but not be limited to Bids, s, Agreements, Contracts, Leases, Licenses, Releases and above, surety company bonds to secure bids and proposals and the por and materials, all in such form and on such terms and conditions as per.
A TRUE COPY, ATTEST:	
Darlene Spencer	
Name (printed)	
Och Sper	(Affix Corporate Seal)
Signature	
President	11/8/23
Title	Date
TAX CON	MPLIANCE CERTIFICATION
the below named contractor, do hereby certify ur	eneral Laws, Section 49A(b), I, the undersigned, authorized signatory for nder the pains and penalties of perjury that said contractor has Massachusetts relating to taxes, reporting of employees and support.
Garlyhist	Jan Baptist
Signature	Print Name
Cape Verdean Association in New Bedford	04-3105677
Organization name	Federal Tax ID #
11/14/23	
Date	

A Plus General Contracting Inc.

26 ONYX DR DARTMOUTH, MA 02747 US 5085097191

machadojoseph@comcast.net

#### **ADDRESS**

Cape Verdean Association in New Bedford, Inc. 1157 Acushnet Ave New Bedford, MA 02746

ESTIMATE #	DATE	
1003	11/14/2023	

SERVICE	DESCRIPTION	QTY	RATE	AMOUNT
General Construction	This estimate is for the construction of a new handicap entry double door with awning as described on design plans. Complete all labor and materials.	1	100,000.00	100,000.00
General Construction	This estimate is for the construction of a new handicap bathroom and a handicap ticket booth. Complete all labor and materials.	1	80,000.00	80,000.00
General Construction	Overhead, profit and general conditions. 15%	1	27,000.00	27,000.00
27 Contingency	Contingency 10%	1	18,000.00	18,000.00

 SUBTOTAL
 225,000.00

 TAX
 0.00

 TOTAL
 \$225,000.00

Accepted By Accepted Date

**Estimate** 



### City of New Bedford Community Preservation Committee

133 William Street. New Bedford, Massachusetts 027-40 (508) 979-1488 • CPA@newbedford-ma.gov

Jonathan F. Mitchell Mayor

#### SENT VIA EMAIL

May 21, 2019

RE:

2019 CPA PROJECT FUNDING FOR STRAND THEATRE RESTORATION AS CAPE VERDEAN CULTURAL CENTER

Dear Cape Verdean Association of New Bedford and WHALE, Inc.:

The Community Preservation Committee is pleased to confirm that on May 9, 2019, the New Bedford City Council approved the CPC recommendation to appropriate \$150,000 of Community Preservation Act (CPA) funds for your project — Strand Theatre Restoration as Cape Verdean Cultural Center. A copy of the City Council vote awarding the grant is attached.

Please note the award and acceptance of CPA funding is subject to project conditions set forth by the Community Preservation Committee as well as your organization entering into a Grant Agreement with the City, which will govern the use and disbursement of the funds. Projects that involve the acquisition of any interest in real property with CPA funds shall be bound by a permanent deed restriction that meets the requirements of M.G.L. c. 184, limiting the use of the interest to the purpose for which it was acquired.

Prior to project commencement, a project start-up meeting must be scheduled with Jessica Bailey, CPA Coordinator. Upon receipt of this letter, please contact Ms. Bailey to schedule a meeting by July 1, 2019. She may be reached either by email at <a href="Jessica.Bailey@newbedford-ma.gov">Jessica.Bailey@newbedford-ma.gov</a> or by phone at 508-979-1488. All necessary documentation and communication with the City regarding the project should be directed to Ms. Bailey.

At this meeting, your Grant Agreement, project phases, project budget, and other funding requirements will be reviewed and discussed. Included with this letter is a Disbursement Schedule to be completed prior to the meeting. This document will serve as a starting point to determine project milestones and phase dates and will be finalized upon entering into the Grant Agreement. The Grant Agreement and the Funding Disbursement Guidelines are attached for your review prior to the project start-up meeting.

Thank you for working in partnership with the Community Preservation Committee. We look forward to the positive contribution your project will make to the community.

Sincerely,

Janine da Silva Chair



JON MITCHELL

## City of New Bedford Department of City Planning

133 William Street · Room 303 · New Bedford, Massachusetts 02740 Telephone: (508) 979.1488 · Facsimile: (508) 979.1576

#### **COMMUNITY PRESERVATION COMMITTEE**

#### **SENT VIA EMAIL**

May 24, 2022

RE: FY22 CPA PROJECT FUNDING FOR STRAND THEATER RESTORATION

Dear Ms. Baptist:

The Community Preservation Committee is pleased to confirm that on May 12, 2022, the New Bedford City Council approved the CPC recommendation to appropriate \$300,000 of Community Preservation Act (CPA) funds for your project. A copy of the City Council vote awarding the grant is attached.

Please note the award and acceptance of CPA funding is subject to project conditions set forth by the Community Preservation Committee as well as your organization entering into a Grant Agreement with the City, which will govern the use and disbursement of the funds. The grant agreement will be sent to you via DocuSign.

Prior to project commencement, a *project start-up meeting* must be scheduled with Jessica Bailey, CPA Coordinator. Upon receipt of this letter, please contact Ms. Bailey by June 17<sup>th</sup> to schedule a meeting; meetings can be held via Zoom to accommodate multiple participants. She may be reached either by email at Jessica.Bailey@newbedford-ma.gov or by phone at 508-979-1488.

At this meeting, your grant agreement, project phases, budget, and other funding requirements will be reviewed and discussed. In addition, the Disbursement Schedule will be reviewed as this document serves as a starting point to determine project milestones and phase dates. An example of the Disbursement Guidelines is attached for your review prior to the project start-up meeting. All communication with the City regarding your CPA project should be directed to Ms. Bailey.

Thank you for working in partnership with the Community Preservation Committee. We look forward to the our project will make to the community.

Janine da Silva

Signerely, defelor

Chair



## City of New Bedford Department of City Planning

133 William Street · Room 303 · New Bedford, Massachusetts 02740 Telephone: (508) 979.1488 · Facsimile: (508) 979.1576

MAYOR JON MITCHELL

DIRECTOR OF CITY PLANNING
JENNIFER CARLONI

#### **COMMUNITY PRESERVATION COMMITTEE**

February 16, 2023

Jan Baptist Cape Verdean Association in New Bedford Via email

**RE: Strand Theater Restoration** 

Dear Ms. Baptist:

Congratulations! This letter is to inform you the Community Preservation Committee (CPC) has voted to recommend the above captioned project to the City Council for funding in the amount of \$240,000.

Please note the award and acceptance of CPA funding is subject to a City Council vote, with project conditions set forth by the CPC, and your organization will be required to enter into a Grant Agreement with the City which will govern the use and disbursement of the funds. For your project, the following terms and conditions will apply:

- 1. CPA funds are to be used for the structural reinforcement of the foyer framing and the installation of a fire suppression system and fire alarm at building located at 1157 Acushnet Avenue.
- 2. Grantee agrees to execute the project complying with the U.S. Secretary of the Interior Standards for Rehabilitation and secure contractors who have demonstrated experience successfully completing projects to these standards.
- 3. No disbursement of funds may occur until the project has received all necessary permits and approvals.
- 4. Other conditions as deemed necessary and defined within the Community Preservation Act Grant Agreement.

These terms and conditions will be submitted as part of the funding recommendation to City Council. Please confirm via email to <a href="mailto:Jessica.Bailey@NewBedford-ma.gov">Jessica.Bailey@NewBedford-ma.gov</a> your acceptance of these terms and conditions no later than February 27, 2023. If you have any questions or do not wish to accept a term or condition, please email or call Jessica Bailey at 508.979.1466 to discuss.

The CPC will present the recommended projects at an upcoming meeting of the New Bedford City Council for discussion and vote; we will inform you of the date of the meeting. City Council has the final authority to award the CPC's recommended funds from New Bedford's CPA Fund. The City Council can approve a CPC-recommended project, approve the project at a reduced funding level, or reject the project

recommendation. Should the City Council vote to reduce recommended funding for or reject a recommended project, the CPC will have an opportunity to respond and/or to adjust the scope or terms of the project prior to a final decision by the City Council.

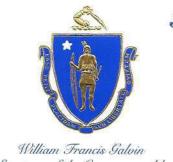
Should you have any questions, Jessica Bailey, Community Preservation Act Manager, is available to assist you.

Sincerely,

Janine da Silva

Januar V. da Selva

Chair



William Francis Galvin Secretary of the Commonwealth

August 18, 2021

Darlene Spencer Cape Verdean Association of New Bedford, Inc. P. O. Box 5532 New Bedford, MA 02742

RE:

Massachusetts Historic Rehabilitation Tax Credit Application,

Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

#### Dear Ms. Spencer:

As Chairman of the Massachusetts Historical Commission, I am pleased to inform you that the above referenced project has been selected to receive \$100,000.00 of state rehabilitation tax credit funds. You remain eligible to apply for additional funds in future rounds, not exceeding a total of 20% of the qualified rehabilitation costs for the project.

This allocation is contingent upon the successful completion of the project and the approval of part three of the state rehabilitation tax credit application in accordance with the regulations (830 CMR 63.38R.1).

Once your project is complete and put into service, you may apply for a Part 3 Certification for your project. Part 3 certification and issuance of a Project Certificate by the Massachusetts Historical Commission is the final step of the tax credit process for a single-phase project. See 830 CMR 63.38R.1(4)(c). After the Project Certificate is issued, no additional credits can be allocated.

Please contact Brona Simon, Executive Director of the Massachusetts Historical Commission, if you have any questions concerning the next steps in this process.

We look forward to working with you toward the successful completion of your project. We hope that this allocation will help you to achieve your preservation goals.

Sincerely,

William Francis Galvin Secretary of the Commonwealth Chairman, Massachusetts Historical Commission

xc:

Teri Bernert, WHALE



William Francis Galvin Secretary of the Commonwealth

August 24, 2023

Darlene Spencer Cape Verdean Association of New Bedford, Inc. PO Box 5532 New Bedford, MA 02742

RE: Massachusetts Historic Rehabilitation Tax Credit Application, Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

Dear Ms. Spencer:

As Chairman of the Massachusetts Historical Commission, I am pleased to inform you that the above referenced project has been selected to receive an additional \$100,000.00 of state rehabilitation tax credit funds.

This allocation is contingent upon the successful completion of the project and the approval of part three of the state rehabilitation tax credit application in accordance with the regulations (830 CMR 63.38R.1).

Once your project is complete and put into service, you may apply for a Part 3 Certification for your project. Part 3 certification and issuance of a Project Certificate by the Massachusetts Historical Commission is the final step of the tax credit process for a single-phase project. See 830 CMR 63.38R.1(4)(c). After the Project Certificate is issued, no additional credits can be allocated.

Please contact Brona Simon, Executive Director of the Massachusetts Historical Commission, if you have any questions concerning the next steps in this process.

We look forward to working with you toward the successful completion of your project. We hope that this allocation will help you to achieve your preservation goals.

Sincerely,

William Francis Galvin

Secretary of the Commonwealth

Chairman, Massachusetts Historical Commission

xc: Rebecca Barnes, WHALE



A Second Commence of the Comme

91'illiam Francis Galvin Secretary of the Gommonwealth

April 29, 2021

Raquel Dias Cape Verdean Association of New Bedford, Inc. P. O. Box 5532 New Bedford, MA 02742

RE:

Massachusetts Historic Rehabilitation Tax Credit Application, Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

Dear Ms. Dias:

As Chairman of the Massachusetts Historical Commission, I am pleased to inform you that the above referenced project has been selected to receive \$100,000.00 of state rehabilitation tax credit funds. You remain eligible to apply for additional funds in future rounds, not exceeding a total of 20% of the qualified rehabilitation costs for the project.

This allocation is contingent upon the successful completion of the project and the approval of part three of the state rehabilitation tax credit application in accordance with the regulations (830 CMR 63.38R.1).

Once your project is complete and put into service, you may apply for a Part 3 Certification for your project. Part 3 certification and issuance of a Project Certificate by the Massachusetts Historical Commission is the final step of the tax credit process for a single-phase project. See 830 CMR 63.38R.1(4)(c). After the Project Certificate is issued, no additional credits can be allocated.

Please contact Brona Simon, Executive Director of the Massachusetts Historical Commission, if you have any questions concerning the next steps in this process.

We look forward to working with you toward the successful completion of your project. We hope that this allocation will help you to achieve your preservation goals.

Sincerely,

William Francis Galvin

Secretary of the Commonwealth

Chairman, Massachusetts Historical Commission

xc: Teri Bernert, WHALE



William Francis Galvin Secretary of the Commonwealth

December 28, 2021

Darlene Spencer Cape Verdean Association of New Bedford, Inc. 128 Union Street, Suite 100 New Bedford, MA 02740

RE:

Massachusetts Historic Rehabilitation Tax Credit Application,

Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

Dear Ms. Dias:

As Chairman of the Massachusetts Historical Commission, I am pleased to inform you that the above referenced project has been selected to receive an additional \$100,000.00 of state rehabilitation tax credit funds.

This allocation is contingent upon the successful completion of the project and the approval of part three of the state rehabilitation tax credit application in accordance with the regulations (830 CMR 63.38R.1).

Once your project is complete and put into service, you may apply for a Part 3 Certification for your project. Part 3 certification and issuance of a Project Certificate by the Massachusetts Historical Commission is the final step of the tax credit process for a single-phase project. See 830 CMR 63.38R.1(4)(c). After the Project Certificate is issued, no additional credits can be allocated.

Please contact Brona Simon, Executive Director of the Massachusetts Historical Commission, if you have any questions concerning the next steps in this process.

We look forward to working with you toward the successful completion of your project. We hope that this allocation will help you to achieve your preservation goals.

Sincerely,

William Francis Galvin

Secretary of the Commonwealth

Chairman, Massachusetts Historical Commission

xc: Teri Bernert, WHALE



William Francis Galvin Secretary of the Commonwealth December 30, 2022

> Darlene Spencer Cape Verdean Association of New Bedford, Inc. 128 Union Street, Suite 100 New Bedford, MA 02740

RE:

Massachusetts Historic Rehabilitation Tax Credit Application,

Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

Dear Ms. Spencer:

As Chairman of the Massachusetts Historical Commission, I am pleased to inform you that the above referenced project has been selected to receive an additional \$100,000.00 of state rehabilitation tax credit funds.

This allocation is contingent upon the successful completion of the project and the approval of part three of the state rehabilitation tax credit application in accordance with the regulations (830 CMR 63.38R.1).

Once your project is complete and put into service, you may apply for a Part 3 Certification for your project. Part 3 certification and issuance of a Project Certificate by the Massachusetts Historical Commission is the final step of the tax credit process for a single-phase project. See 830 CMR 63.38R.1(4)(c). After the Project Certificate is issued, no additional credits can be allocated.

Please contact Brona Simon, Executive Director of the Massachusetts Historical Commission, if you have any questions concerning the next steps in this process.

We look forward to working with you toward the successful completion of your project. We hope that this allocation will help you to achieve your preservation goals.

Sincerely,

William Francis Galvin

Secretary of the Commonwealth

Chairman, Massachusetts Historical Commission

xc: Teri Bernert, WHALE

### COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM

THE PERSON NAMED IN COLUMN 1 AND THE PERSON NAMED IN COLUMN 1 AND

This form is jointly issued and published by the Office of the Comptroller (CTR), the Executive Office for Administration and Finance (ANF), and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. The Commonwealth deems void any changes made on or by attachment (in the form of addendum, engagement letters, contract forms or invoice terms) to the terms in this published form or to the <u>Standard Contract Form Instructions and Contractor Certifications</u>, the <u>Commonwealth Terms and Conditions for Human and Social Services</u> or the <u>Commonwealth IT Terms and Conditions</u> which are incorporated by reference herein. Additional non-conflicting terms may be added by Attachment. Contractors are required to access published forms at CTR Forms: <a href="https://www.macomptroller.org/forms">https://www.macomptroller.org/forms</a>. Forms are also posted at OSD Forms: <a href="https://www.mass.gov/lists/osd-forms">https://www.mass.gov/lists/osd-forms</a>.

	osted at COD I dillis. Intps://www	w.mass.gov/iisis/osg-torms.			
CONTRACTOR LEGAL NAME: Cape Verdean Association in New Bedford (and d/b/a):		COMMONWEALTH DEPARTMENT NAME: Executive Office of Housing and Economic Development			
Local Address (NO NO N		MMARS Department Code: EED			
Legal Address: (W-9, W-4): 128 Union Street Suite		Business Mailing Address: 1 Ashburton Pl. Room 2101, Boston, MA 02108			
Contract Manager: Jan Baptist	Phone: 508-982-2022	Billing Address (if different):			
E-Mail: jbaptistcvanb@gmail.com	Fax:	Contract Manager: Joseph Harrington	Phone: 617-352-2555		
Contractor Vendor Code: VC0001352729		E-Mail: Joseph.D.Harrington@mass.gov	Fax:		
Vendor Code Address ID (e.g. "AD001"): AD		MMARS Doc ID(s):			
(Note: The Address ID must be set up for EFT payments.)		RFR/Procurement or Other ID Number:			
X NEW CONTRAC	T		MENT		
PROCUREMENT OR EXCEPTION TYPE: (Check or		CONTRACT AMENDMENT Enter Current Contract End Date <u>Prior</u> to Amendment:, 20			
Statewide Contract (OSD or an OSD-designated	Department)	Enter Amendment Amount: \$ (or "no change")			
Collective Purchase (Attach OSD approval, scope	e. budget)	AMENDMENT TYPE: (Check one option only. Attach d	etails of amendment changes )		
Department Procurement (includes all Grants - 8 Notice or RFR, and Response or other procureme	15 CMR 2.00) (Solicitation	Amendment to Date, Scope or Budget (Attach update	ed scope and budget)		
Emergency Contract (Attach justification for emer	gency, scope, budget)	Interim Contract (Attach justification for Interim Contra	ict and updated scope/budget)		
Contract Employee (Attach Employment Status F.	orm, scope, budget)	<ul> <li>Contract Employee (Attach any updates to scope or b</li> </ul>	udget)		
X Other Procurement Exception (Attach authorizing specific exemption or earmark, and exception justified	language, legislation with	Other Procurement Exception (Attach authorizing lan	guage/justification and updated		
		scope and budget)			
reference into this contract and are regally binding	I: (Check ONE option): X Comm	ollowing Commonwealth Terms and Conditions document onwealth Terms and ConditionsCommonwealth Terms and	d Conditions For Human and		
Commonwealth I Terms and Con	ditions				
COMPENSATION: (Check ONE option): The Departm	ent certifies that payments for a	uthorized performance accepted in accordance with the terms	of this Contract will be		
Supported in the state accounting system by sunicient	appropriations or other non-annr	Onrigied funds subject to intercent for Commonwealth award.	deble weder OUT OUD O OO		
X Maximum Obligation Contract. Enter total maximum	im obligation for total duration of	ons, conditions or terms and any changes if rates or terms are this contract (or <b>new</b> total if Contract is being amended). \$ 20	e being amended.)		
identify a PPD as follows: Payment issued within 10 da	PROMPT PAYMENT DISCOUNTS (PPD): Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting accelerated payments must dentify a PPD as follows: Payment issued within 10 days% PPD; Payment issued within 15 days% PPD; Payment issued within 20 days% PPD; Payment issued within 30				
	illy reason. A auree to standard 4	45 day cycle statutory/legal or Ready Payments (M.C.L. o. 1	6 PPD; Payment issued within 30		
(edbeeddent payments scheduled to support standard	Er i 45 day payment cycle. See	Prompt Pay Discounts Policy.)			
of performance or what is being amended for a Control	ICE or REASON FOR AMENDN	IENT: (Enter the Contract title, purpose, fiscal year(s) and a d	letailed description of the scope		
H.4269 An Act relative to immediate COVID-19 recove	ry needs: Account # 1599-2043	rting documentation and justifications.) This contract is to fund - "provided further, that not less than \$200,000 shall be expe	the project designated in		
Association in Ivew Decitor			30		
ANTICIPATED START DATE: (Complete ONE option	only) The Department and Cont	ractor certify for this Contract, or Contract Amendment, that C	Contract obligations:		
A. I may be incurred as of the Effective Date (latest sig	inature date below) and <u>no</u> oblig	ations have been incurred <b>prior</b> to the Effective Date.			
3 were incurred as of 20 a date DDIC	P to the Effective Date below	v and <u>no</u> obligations have been incurred <u>prior</u> to the Effective	Date.		
authorized to be made either as settlement payme	ents or as authorized reimbursem	nd the parties agree that payments for any obligations incurre ient payments, and that the details and circumstances of all o	d prior to the Effective Date are		
are attached and incorporated into this Contract.	Acceptance of payments forever	releases the Commonwealth from further claims related to the	ese obligations.		
CONTRACT END DATE: Contract performance shall t	erminate as of June 30 , 2024, v	with no new obligations being incurred after this date unless th	e Contract is proporty amonded		
provided that the terms of this Contract and performance	e expectations and obligations si	hall survive its termination for the purpose of recoluing any old	m or dianuta for normalation and		
		ting, invoicing or final payments, or during any lapse between			
CERTIFICATIONS: Notwithstanding verbal or other re	presentations by the parties, the	"Effective Date" of this Contract or Amendment shall be the	e latest date that this Contract or		
Amendment has been executed by an authorized signs	story of the Contractor, the Dena	rtment, or a later Contract or Amendment Start Date specified ments incorporated by reference as electronically published	d above aubicat to any required		
certifications required under the Standard Contract For	n instructions and Contractor Ce	fillications under the nains and penalties of perion, and further	or agreed to provide any required		
documentation upon request to support compliance, and	i agrees that all terms governing r	Derformance of this Contract and doing business in Massachus	atte are attached or incorporated		
by reference netering according to the following nierarchy of document precedence, the annual precedence in according to the following nierarchy of document precedence, the annual precedence in the following nierarchy of document precedence, the annual precedence in the following nierarchy of document precedence in the following nierarchy of the following nierarchy nierarchy of the following nierarchy of the following nierarchy n		applicable Commonwealth Terms and Conditions this Stands	and Contract Come the Chandend		
Contract Form Instructions and Contractor Certifications, the Request for Response (RF Department as unacceptable, and additional negotiated terms, provided that additional negotiated terms, provided that additional nego		KFK) or other solicitation, the Contractor's Response (excludence over the relevant terms	ding any language stricken by a		
response only it made using the process outlined in 80	response only if made using the process outlined in 801 CMR 21.07, incorporated herein, provided that any amended RFR or Response terms result in hest value, lower costs, or a				
more cost enective contract.		and was to the second and the second	2001 (2000), 61 (2		
AUTHORIZING SIGNATURE FOR THE CONTRACTOR:		AUTHORIZING SIGNATURE FOR THE COMMONWEAL			
X. January Captes 1. Date: 5/1/2023		X: Date:			
(Signature and Date Must Be Captured At Time of Signature)		X: Date: (Signature and Date Must Be Captured At Time of Signature)			
AUTHORIZING SIGNATURE FOR THE CONTRACTOR:  X. January Captus T. Date: 5/1/2023  (Signature and Date Must Be Captured At Time of Signature)  Print Name: SAN (CE BAPTS)  Print Title: Vice Resident / Project MANAGED		Print Name:			
Print Title: VICE KRES : alent / Project MANAGED		Print Title:			



99 High Street

Boston, MA 02110

VIA Electronic Mail

September 26, 2023

Main: 617-330-2000

Fax: 617-330-2001

Ms. Darlene Spencer, President Cape Verdean Association in New Bedford 128 Union St., Suite 100 New Bedford, MA 02740

massdevelopment.com

RE: Application: FY24-Cape Verede-00524

Dear Ms. Spencer:

Maura Healey

Governor

Kim Driscoll

Lieutenant Governor

Yvonne Hao, Chair

Secretary of Economic Development

Dan Rivera

President and CEO

Thank you for submitting this application to the FY24 Round of the Community One Stop for Growth. The Executive Office of Economic Development (EOED), Executive Office of Housing and Livable Communities (EOHLC), and Massachusetts Development Finance Agency (MassDevelopment) worked together to evaluate all eligible applications and recommended the most ready and highest-impact projects for a grant. This application, submitted by Cape Verdean Association in New Bedford was reviewed by the program(s) that could best serve the project's funding needs.

On behalf of the Healey-Driscoll Administration, I am pleased to inform you that a grant in the amount of \$50,000.00 from the Underutilized Properties Program (UPP) has been approved to support the renovation of a 9,000 sq ft vacant, blighted, historic theater into the Cape Verdean Cultural Center (your project).

In order to obtain the grant funds, you must enter into an Underutilized Properties Program Grant Agreement with MassDevelopment. Enclosed please find the form Grant Agreement (the "Grant Agreement") which will be used for all Underutilized Properties Program grants. Please read the sample Grant Agreement carefully so as to understand the terms of your agreement with MassDevelopment.

For the Grant Agreement, you must provide MassDevelopment with the following:

- 1) A scope of work, detailing all the work that will be completed using grant funds.
- 2) A detailed budget providing costs for all the items outlined in the scope of work (please use the template provided with the Grant Agreement).
- 3) Proof of all funding necessary to make the project viable due by June 7, 2024, at 5:00pm.

Once we have received this documentation, MassDevelopment will prepare a grant agreement specific to your project and send it to you for signature.

After you have signed the grant agreement and returned it to MassDevelopment, a fully executed copy will be sent to you for your records. At that point, you may begin submitting requests for payment using the Invoice Submission Form located at Exhibit B of the enclosed sample Grant Agreement. Requests for payment with attached invoices should be sent by email to Shayvonne Plummer at splummer@massdevelopment.com. Funds will not be paid for invoices for work done prior to execution of the Grant Agreement.

Finally, please note that public announcement of this award is embargoed until the Administration has had the opportunity to formally announce it through a local event and/or media release. Please refrain from sharing or publicizing news about this award outside of your organization until it is officially announced.

Sincerely,

Daniel Rivera

President & CEO

Enclosure – FY24 Form UPP Grant Agreement

cc: Mayor Jon Mitchell
Senator Mark C. Montigny
Representative Antonio F. D. Cabral



99 High Street

Boston, MA 02110

June 22, 2022

Main: 617-330-2000

Darlene Spencer

President

Fax: 617-330-2001

Cape Verdean Association in New Bedford, Inc.

128 Union Street Suite #100

massdevelopment.com

New Bedford, MA 02740-6391

Dear Ms. Spencer:

Congratulations! I am pleased to inform you that the Cape Verdean Association in New Bedford, Inc. request for a Capital Grant ("Grant") from the Cultural Facilities Fund ("Fund") has been approved in the amount of \$200,000 subject to the requirements in the attached Process Memorandum and Grant Agreement. The project for which the Grant has been approved is for repairs to the plaster ceiling, install a new HVAC system, and to update plumbing in the historic Strand Theater in New Bedford.

Charles D. Baker Governor

Karyn E. Polito

Lieutenant Governor

Mike Kennealy

Secretary of Housing & Economic Development

Chairman

Dan Rivera

President and CEO

MassDevelopment and our partner in this program, Mass Cultural Council, recognize the significant contributions that cultural facilities such as yours provide to the Massachusetts economy. We are confident that this grant will benefit not only your organization, but the Commonwealth as a whole. Thank you for your commitment and perseverance.

MassDevelopment helps to build the communities of the Commonwealth by stimulating economic development. We recognize the importance of working closely with cultural institutions and municipalities throughout the Commonwealth and are delighted that the Cultural Facilities Fund expands our opportunities to provide financial assistance to worthwhile projects such as yours.

If you have any questions, comments, or concerns, please contact Lillian Muñoz, by phone at 617-330-2066 or email at LMuñoz@MassDevelopment.com.

Sincerely,

Daniel Rivera President & CEO MassDevelopment

Enclosures: Process Memorandum

Sample Capital Grant Agreement

cc: Jay Paget, Program Director, Mass Cultural Council Lillian Muñoz, Cultural Facilities Fund Portfolio Manager, MassDevelopment



### CITY OF NEW BEDFORD JONATHAN F. MITCHELL, MAYOR

September 14, 2023

Jan Baptist Vice President CVA in NB 128 Union Street #100 New Beford MA 02740

RE: AMERICAN RESCUE PLAN ACT FUNDING FOR STRAND THEATER 1157 ACUSHNET AVENUE

Dear Ms. Baptist:

I am pleased to inform you that, based on your response to RFR #22130143 Vacant or Abandoned Property Rehabilitation, the City of New Bedford is awarding Cape Verdean Association in New Bedford, Inc. up to \$500,000 for eligible project costs, subject to your compliance with the funding's terms and conditions and the execution of a Grant Agreement.

These terms and conditions are partly set out by the American Rescue Plan Act (ARPA) and the Coronavirus State and Local Fiscal Recovery Funds (SLFRF) rules and regulations, including but not limited to, the Department of the Treasury's SLFRF Final Rule and 2 C.F.R. 200. Importantly, as a subrecipient of ARPA funds, Cape Verdean Association in New Bedford, Inc. must comply with federal procurement regulations and maintain a conflict-of-interest policy consistent with state and federal rules. The terms and conditions are also contained in the Agreement between your organization and the City, which will govern the use and disbursement of the funds.

Prior to Agreement execution, Cape Verdean Association in New Bedford, Inc. must complete a **subrecipient risk assessment**. Following submission of the subrecipient risk assessment, a **subrecipient intake meeting** must be scheduled with Jennifer Maxwell, ARPA Procurement Officer. At this meeting, the results of the subrecipient risk assessment, and federal regulations governing ethics, administrative requirements, and use of ARPA funds will be reviewed. All communication with the City regarding the specifics of your ARPA project should be sent to Emily Arpke (Emily.arpke@newbedford-ma.gov) and Jennifer Maxwell (jennifer.maxwell@newbedford-ma.gov).

Congratulations! We look forward to the positive contribution your project will make to the City.

Sincerely

Jon Mittenell

May

Coynt, Jan

847 8 0 2 PGD 2 6 3

#### QUITCLAIM DEED

John Kalife of Fairhaven, Bristol County, Massachusetts, for consideration paid, and in full consideration of Seventy-nine Thousand Four Hundred (\$79,400.00) Dollars grants to Cape Verdean Association In New Bedford, Inc. of 1437 Acushnet Avenue, P.O. Box 50754, New Bedford, Bristol County, Massachusetts, with quitclaim covenants, the land with any buildings thereon in New Bedford, Bristol County, Massachusetts, bounded and described as follows:

BEGINNING at the northeast corner of the land herein described at a point formed by the intersection of the southerly line of Beetle Street with the westerly line of Acushnet Avenue;

thence SOUTHERLY in line of said Acushnet Avenue, sixty and DB/100 (60.08) feet to land now or formerly of one Hadley, et ali:

thence WESTERLY in line of last-named land, eighty-six and 10/100 (86.10) feet to land now or formerly of Cordelia Vien;

thence NORTHERLY in line of last-named land, sixty (60) feet to the said line of Bestle Street; and

thence EASTERLY in line of said Beetle Street, eighty-nine and 75/100 (69.75) feet to the said line of Acushnet Avenue and the point of beginning.

CONTAINING mineteen and 37/100 (19.37) Equare rods, more or less.

TOGETHER WITH a right of way as set forth in a deed from E. M. Loew's Theaters, Inc. to Jose Simons, dated October 29, 1975 and recorded in Bristol County (S.D.) Registry of Deeds in Book 1708, Page 637.

SUBJECT to real estate taxes for fiscal 1992 which the grantee assumes and agrees to pay.

FOR TITLE see deed of National Bank of Fairhaven, Mortgages, dated March 18, 1992, recorded with the Bristol County (8.D.) Registry of Deeds in Book 2789, Page 28.

WITHESS my hand and seal this 17th day of April, 1992.

Witness - Scott E. Sylvia

John Kalife

BRISTON, SECURITY SEC

1X2802 PGD 264

#### THE COMMONWEALTH OF MASSACHUSETTS

Bristol:

April 17, 1992

Then personally appeared the above named John Kalife and acknowledged the foregoing instrument to be him free act and deed, before me.

Notary Public - Scott E. Sylvia My Commission Expires: 2/14/97

Received & Recorded (CPULI), 19 Lat Hora & Frain. I M

Attest: She Sheet Register.

### Transfer Certificate of Title.

Certificate No. 15251

, Originally Registered April 16,

Registration Book 82

Page 425

for the South

April 16, 1987, in New Marks of Ownersey corporation

B.82

DOC. 4950

No.15252

April 16, 1987, in New Wars of New Wars of New Wars of Ownersey Corporation

Persey corporation

April 16, 1987 in New Wars of Ownersey of Ow This is to Certify that The Salvation Army, a New Jersey corporation with principal offices in

wfx Newark

State in the KXXXXX of

XXXXXXXXXXXX

New Jersey

Easterly

is the owner

in fee simple.

November 22, 2019

CANCELLED See Ctf 25091 B.146 P.12

that of/certain parcel of land situate in New Bedford

in the County of Bristol

of Massachusetts and \*\*\* Commonwealth/ bounded and described as follows:

the westerly line of Acushnet Avenue, one

hundred thirty-eight and 74/100 (138.74) feet;

Southerly the northerly line of Bentley Street, one

hundred and 30/100 (100.30) feet;

Westerly lands now or formerly of Edna Marchand, et al.,

and of Wilfred Vien, et al., one hundred eighteen and 75/100 (118.75) feet; and

Northerly land now or formerly of E.M. Loew Theatres, Inc., one hundred twenty-one and 62/100

(121.62) feet.

All of said boundaries are determined by the Court to be located as shown on plan 17477A, the same being compiled from a plan drawn by Winebaum & Wexler, Engineers, dated March 8, 1940, and additional data on file in the Land Registration Office at Boston, all as modified and approved by the Court and filed in the Land Registration Office at Boston, a copy of a portion of which is filed in Bristol County (S.D.) Registry of Deeds, in Land Registration Book 13, Page 477, with Certificate of Title No.2992.

The above described land is subject to and has the benefit of the terms of a stipulation between the New Bedford Realty Corp. and E.M. Loew Theatres, Inc., filed with the papers in this case on May 20, 1940, a copy of which is filed in Bristol County (S.D.) Registry of Deeds and registered as Document No. 7865.

The above described land is subject to an agreement between Cordelia Vien and Abram Mendelson, dated July 21, 1913, duly recorded in Book 393, Page 64.

Purported Address of Property: 1131-1145 Acushnet Avenue New Bedford, MA

### SANCELLED

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

The Salvation Army

to said land is registered under said Chapter, subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may be subsisting, and subject also tax as aforesaid.

WITNESS, MARILYN M. SULLIVAN, Chief Justice of the Land Court, at

New Bedford

in said County of

Bristol

sixteenth

day of April

eighty-seven in the year nineteen hundred and at

12 o'clock and

minutes in the after noon.

Attest, with the Seal of said Court,

Land Court Case No.17477

Mary ODouglas Acting

CERTIFICATE.	Discharge.	
LAND DESCRIBED IN THIS CERT	SIGNATURE OF ASSISTANT RECORDER.	P.M. May Cabe flathery
LAND DESCI	DATE OF REGISTRATION.	16 12 9 2 2 00
ON THE	DATE OF INSTRUMENT	•
MEMORANDA OF ENCUMBRANCES ON THE	Terms.	குக்கர்ந்த ல <b>யாகாக்</b> கள்bed Landar . 10–87 See certificate No. ஆத் <i>டி.21.21</i> Book(ஆ. கூ
MEMORANDA OF	RUNNING IN FAVOR OF.	Erank Moniz, Jr., et al. Salvation ARNY Capa Verstenn Was Scoling Inc.
	Kind.	Certificate of Municipal Liens Liens Fr
	DOCUMENT NUMBER.	136.797
	To the control of the	

(SEE OVER)



Cert: 25091 Doc: DEED BS Registered: 11/22/2019 02:00 PM

MASSACHUSETTS EXCISE TAX
Bristol ROD South 001
Date: 11/22/2019 02:00 PM
Ctri# 029509 05936 Doc# 00126797
Fee: \$228.00 Cops: \$50,000.00

#### **QUITCLAIM DEED**

THE SALVATION ARMY, a New York Corporation, a religious and charitable organization, with an address of 440 West Nyack Road, West Nyack, NY 10954,

for the consideration of Fifty Thousand and XX/100 Dollars (\$50,000.00), grants to CAPE VERDEAN ASSOCIATION IN NEW BEDFORD INC., with an address of 59 Sycamore Street, New Bedford, Massachusetts, with quitclaim covenants the land in said New Bedford with building thereon, bounded and described as follows:

EASTERLY by the westerly line of Acushnet Avenue, one hundred thirty-eight and 74/100 (138.74) feet;
SOUTHERLY by the northerly line of Bentley Street, one hundred and 30/100 (100.30) feet;
by lands now or formerly of Edna Marchand, et al, and of Wilfred Vien, et al, one hundred eighteen and 75/100 (118.75) feet; and
NORTHERLY by land now or formerly of E.M. Loew Theatres, Inc. one hundred twenty-one and 62/100 (121.62) feet.

All of said boundaries are determined by the Court to be located as shown on plan 17477A, the same being compiled from a plan drawn by Winebaum & Wexler, Engineers, dated March 8, 1940, and additional data on file in the Land Registration Office at Boston, all as modified and approved by the Court and filed in the Land Registration Office at Boston, a copy of a portion of which is filed in Bristol County (S.D.) Registry of Deeds in Land Registration Book 13, Page 477, with Certificate of Title No. 2992. Current Ctf. 15252

BEING the same premises conveyed to The Salvation Army, a New Jersey corporation by deed from the American National Red Cross, a corporation duly established under an Act of Congress dated January 5, 1905, recorded in Land Registration Book 82, Page 429.

Subject to taxes for Fiscal Year 2020 and water charges for Fiscal Year 2020, which the Grantee by its acceptance of this Deed assumes and agrees to pay.

The above described land is subject to and has the benefit of the terms of stipulation between the New Bedford Realty Corp. and E.M. Loew Theatres, Inc., filed with the papers in this case on May 20, 1940, a copy of which is filed in Bristol County (S.D.) Registry of Deeds and registered as Document No. 7865.

The above described land is subject to an agreement between Cordelia Vien and Abram Mendelson, dated July 21, 1913, duly recoded in Book 393, Page 64.

IN WITNESS WHEREOF, the said The Salvation Army has caused its corporate seal to be hereto affixed and these presents to be signed, acknowledged and delivered in its name and behalf by its duly authorized officer this \_\_\_\_\_\_ day of \_\_\_\_\_\_ in the year Two Thousand Nineteen.

Signed and sealed in presence of:

THE SALVATION ARMY

Witness

By:

Adolph M. Orlando

Second Assistant Secretary - Property

STATE OF NEW YORK COUNTY OF ROCKLAND

On this, the <u>2th</u> day of <u>May</u>, 2019, before me, the undersigned officer, personally appeared though M. Orlando, who acknowledged himself to be the <u>Second fesistant Secretary</u>, Purperty of The Salvation Army, a corporation, and that he as such officer, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing as the voluntary act of the corporation.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My commission expires:

JEAN M RONDON Notary Public, State of New York NO. 01R06262275 Qualified in Rockland County Commission Expires 5/21/2/20

RATION

10-25-19

Colon Colon

APPROVED FOR

BY THE

together with certified copy of order of ct. (amended) and resolution (attached hereto)

and conficate of merger re: salvation

Page 3 of 3 of Quitclaim Deed from The Salvation Army to Cape Verdean Association In New Bedford Inc.

Attested to and sealed in presence of:

Michael J. Southwick, Secretary

Witness

NYSCEF DOC. NO. 18

At an IAS Part of the Supreme Court of the State of New York, held in and for the County of Rockland, at the Supreme (County) Court House, in the Town of Clarkstown, New City, New York, on August, 19, 2019

PRESENT:

HON. <u>ROBERT M. BERLINER</u> JUSTICE

SALVATION ARMY APPLICATION FOR JUDICIAL APPROVAL TO SELL ITS UNIMPROVED REAL PROPERTY LOCATED AT 1145 ACUSHNET AVENUE, NEW BEDFORD, MASSACHUSETTS

Index No. 031261/2019

AMENDED
Order Granting Leave To Sell
Real Property

UPON reading and filing the Petition of The Salvation Army, a corporation duly incorporated under the provisions of Chapter 468 of the Laws of 1899 of the State of New York, entitled "An Act to provide for the incorporation of The Salvation Army," having its principal offices at 440 West Nyack Road, Hamlet of West Nyack, in the County of Rockland and State of New York, being duly verified on the 21<sup>st</sup> day of February, 2019 by Adolph M. Orlando, Second Assistant Secretary, Property, of The Salvation Army, praying for leave of the Court to sell its unimproved real property commonly known as 1145 Acushnet Avenue, New Bedford, Massachusetts and the Affirmation of Mark F. Uzzo, Esq. dated the 15<sup>th</sup> day of August 2019 and all other papers and proceeding had herein, and it appearing to the satisfaction of the Court that the interests of The Salvation Army will be promoted by such sale, and notice to the Attorney General having previously been made pursuant to Not-For-Profit Corporation Law, Sections 511 (a) and (b); and this application for the approval of this sale is further being made in accordance with the terms of Chapter 468 of the Laws of 1899 of the State of New York which incorporated

RECEIVED NYSCEF: 08/22/2019

NYSCEF TOC. NO. 18

The Salvation Army and on the motion of Scancarelli, Jacobson & Uzzo, L.L.P., attorneys for The Salvation Army; it is hereby:

ADJUDGED that the Petitioner has complied with the Not-For-Profit Corporation Law of the State of New York; it is further

ADJUDGED that the consideration and terms of the transaction are fair and reasonable, and that the purposes of the Petitioner will be promoted by the sale; and it is hereby

ORDERED that The Salvation Army be, and it is hereby granted leave and authority to sell its unimproved real property commonly known as 1145 Acushnet Avenue, New Bedford, Massachusetts, hereby ratifying the sale of the same to Cape Verdean Association in New Bedford, Inc., which property is described in the Resolution attached hereto and made a part of the Petition, for the total sum of FIFTY THOUSAND DOLLARS, (\$50,000.00) cash, which is fair and reasonable market value, the net proceeds from said sale to be used in furtherance of the religious and charitable purposes of The Salvation Army; and it is further

ORDERED that a copy of this Amended Order shall be served on the office of the Attorney General; and it is further

ORDERED that the office of the Attorney General shall receive written notice that this transaction has been completed or abandoned, or if the same is still pending ninety (90) days after the date of this Amended Order.  $E \sim T = Q$ 

HON. ROBERT M. BERLINER, J.S.C

THE ATTORNEY GENERAL HEREBY APPEARS HEREIN,
HAS NO OBJECTION TO THE GRANTING OF
JUDICIAL APPROVAL HEREON, ACKNOWLEDGES
RECEIPT OF STATUTORY NOTICE AND DEMANDS
SERVICE OF ALL PAPERS SUBMITTED HEREIN
INCLUDING ALL ORDERS, JUDGMENTS AND
ENDORSEMENTS OF THE COURT. SAID NO OBJECTION
IS CONDITIONED ON SUBMISSION OF THE MATTER
TO THE COURT WITHIN 30 DAYS HEREAFTER.

ASSISTANIZATIONNEY GENERAL DATE

State of New York (County or riscounted) SS.
I, PAUL PIPERATO, County Clerk and Clerk of the Supreme and County Courts, Rockland County, DO HEREBY CERTIFY that I have compared this copy with the original \$-22-19 hereof filed or recorded in my office on and the same is a correct transcript thereof, IN WITNESS WHERE I have be received, set my band and activate my office to be a control of the same in the same and and activate my office to be a control of the same in the same and activate my office to be a control of the same in the same in the same and activate my office the same in the same in the same and activate my office the same in the same i

1 have hereunio set my hand and affixed my chicked seal.

Paul Piperate County Clerk & Cker of the Supreme County Co. rts Rockland County

### STATE OF NEW YORK

### COUNTY OF ROCKLAND)

I, Michael J. Southwick, do hereby certify that I am the Secretary of The Salvation Army, a religious and charitable corporation, duly incorporated under and by virtue of the Laws of the State of New York; that I am the keeper of the records and of the corporate seal of said corporation; and that the following is a true and correct copy of a resolution adopted at a meeting of the Board of Trustees of said corporation, with reference to the sale of unimproved real property situated at 1145 Acushnet Avenue, New Bedford, Massachusetts, duly called and held on the 13<sup>th</sup> Day of August, 2019, with eight of the ten Trustees in attendance, including the President at the principal offices of The Salvation Army, 440 West Nyack Road, West Nyack, in the County of Rockland and State of New York:

"WHEREAS The Salvation Army is the owner by purchase of unimproved real property located in the City of New Bedford, Bristol County, Massachusetts, and commonly known as 1145 Acushnet Avenue, New Bedford, Massachusetts,

WHEREAS IT IS IN THE BEST INTERESTS of this corporation to sell said property for the reason, The Salvation Army has no further use for said property. An offer to acquire the property for FIFTY THOUSAND DOLLARS, (\$50,000.00) has been received from Cape Verdean Association in New Bedford, Inc. which is fair and reasonable market value.

NOW THEREFORE BE IT RESOLVED: that The Salvation Army present a petition to the Supreme Court of the State of New York for an Order granting leave to sell the said property at and for consideration of FIFTY THOUSAND DOLLARS, (\$50,000.00), the net proceeds from said sale to be used in furtherance of the religious and charitable purposes of The Salvation Army.

AND WE, the Board of Trustees of The Salvation Army, hereby unanimously agree to the sale of said property, and authorize William A. Bamford III, President, Kenneth O. Johnson Jr., Vice-President, Michael J. Southwick, Secretary, Charles S. Foster, Assistant

Secretary, Property, or Adolph M. Orlando, Second Assistant Secretary, Property, of the corporation, or their successor in office, to execute and deliver, for and on behalf of this corporation, a deed and other relevant documents for said property to Cape Verdean Association in New Bedford, Inc., attested by the Secretary or Assistant Secretary, with the seal of the corporation affixed." This resolution supersedes a resolution adopted by the Board of Trustees on February 9, 2019, regarding the sale of this property.

IN WITNESS WHEREOF, I have hereunto set my hand and the official seal of said Corporation, this 14<sup>th</sup> Day of August, 2019.

MICHAEL J. SOUTHWICK, Secretary

Subscribed and sworn to before me,

this 14th Day of August, 2019.

NOTARY PUBLIC

JEAN M RONDON
Notary Public, State of New York
NO. 01R06262275
Qualified in Rockland County
Commission Expires 5/21/2020

# STATE OF NEW JERSEY DEPARTMENT OF TREASURY FILING CERTIFICATION (CERTIFIED COPY) 0022786900

### THE SALVATION ARMY

I, the Treasurer of the State of New Jersey, do hereby certify, that the above named business did file and record in this department the below listed document(s) and that the foregoing is a true copy of the Certificate of Merger filed in this office February 13, 2018 as the same is taken from and compared with the original(s) filed in this office on the date set forth on each instrument and now remaining on file and of record in my office.



Certificate Number: 140281710

Verify this certificate online at

https://www1.state.nj.us/TYTR\_StandingCert/JSP/Verify\_Cert.jsp

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal at Trenton, this 14th day of February, 2018

Supor New

Elizabeth Maher Muoio Acting State Treasurer

FILED

FEB 192018

TATE THE A CURE

UMC-3 11/03

### New Jersey Division of Revenue Certificate of Merger/Consolidation

(Non-Frafit Corporations)

This form may be used to record the merger or crossolidation of a corporation with or into mother business entity or entities, pursuant to NJSA 15A. Applicants must insure strict compliance with the requirements of State law and insure that all filling requirements are met. This form is intended to simplify filling with the State Treasurer, Applicants are advised to suck out private.

00 63812800

legal advice before submitting filings to the Treasurer's office. Consolidation 1. Type of Filing (check one): X Merger 2. Name of Surviving Corporation: The Salvation Army (the NY corporation) Name(s)/Jurisdiction(s) of All Participating Corporations: Identification # Assigned By Jurisdiction Treasurer (if applicable) 0900055171 The Salvation Army 0022786900 NŶ The Salvation Army 4. Date MergerrConsolidation approved: 6/27/17 3. Voting: (all corporations involved; anach additional about if necessary) teleck unor [X 1las | Hors not Have Members Eligible to Vote. Curp. Name The Salvation Army (the NJ corp) If the corporation has any class of members entitled to vote as a class, specify the class and the number of votes the each class; 0 Members Voting For 9 Members Voting Against Total number of Trustees at the meeting 6 Plan of presentansolidation was adopted by the ananimous written consent of the monthers without a meeting (check) If there are no voting members: Plan of merger/consolidation was adopted by the meanimous written consent of the Trustees without a meeting (check) Total number of Trustoes at the meeting (check one) | This X Does not Have Members Hilgible to Vote. Curp. Name The Salvation Army (the NY corp) If the corporation has any class of members antitled to vate us a class, specify the class and the number of votes for each class: Plan of merger/consolidation was adopted by the ununinnous written consum of the members without a meeting (check). If there are no voting members: . 0 Total number of Trustees at the meeting Trustees Voting Against Plan of mengar/consolidation was adopted by the manimost written consent of the Trustees without a meeting (check) ? a. Service of Process Address (For use if the surviving business entity is not authorized or registered by the State Treasurer): 440 West Nyack Road, West Nyack, New York 10994-6035 The surviving rusiness entity agrees that it may be served with process in this State in any axion, said or proceeding for the enforcement of any obligation of a merging or consolidating domestic or foreign business entity. The Treasurer is burely appointed as agent to accept service of process in any such action, suit, or proceeding which shall be forwarded to the surviving business entity at the Service of Process address stated above. 7. The applicable provisions of the New York Not-For-Profit Corporation law have been, or upon compliance with filing and recording with have been, complied with, Effective Date (see inst.): 2/15/18 2/7/18 William A. Bamford III President 2/7/18 William A. Bamford III President

<sup>\*\*</sup>Remember to attach the plan of merger or consolidation.

### PLAN OF MERGER

OF

### THE SALVATION ARMY, A NEW JERSEY CORPORATION

#### WITH AND INTO

### THE SALVATION ARMY, A NEW YORK CORPORATION

### ARTICLE I

- 1.01. The Salvation Army, a New Jersey corporation (the "Nonsurviving Corporation") and The Salvation Army, a New York corporation (the "Surviving Corporation," and together with the Nonsurviving Corporation, the "Merging Corporations") shall effect a merger pursuant to the terms of this Plan of Merger.
- 1.02. Upon the Effective Date, as defined in Section 1.11 hereof, the Nonsurviving Corporation shall be merged into the Surviving Corporation (herein referred to as the "Merger"), which latter corporation shall be, and is hereinafter referred to as, the Surviving Corporation.
- 1.03. On and after the Effective Date, the Certificate of Incorporation of the Surviving Corporation, as then in effect, shall be and remain the Certificate of Incorporation of the Surviving Corporation until thereafter amended in accordance with the provisions thereof and applicable New York law.
- 1.04. On and after the Effective Date, the Bylaws of the Surviving Corporation shall consist of the Bylaws of the Surviving Corporation in effect immediately prior to the Effective Date.

- 1.05. The officers and the Board of Trustees of the Surviving Corporation as of the Effective Date shall remain the officers and the Board of Trustees of the Surviving Corporation on and after the Effective Date. Any individuals serving on the Board of Trustees of the Nonsurviving Corporation who are not on the Board of Trustees of the Surviving Corporation as of the Effective Date shall be deemed to have resigned from the Board of Trustees upon the Effective Date.
- 1.06. The members of the Nonsurviving Corporation are listed in Exhibit A hereto. There are no members of the Surviving Corporation. Upon the Effective Date, all of the members of the Nonsurviving Corporation listed on Exhibit A shall be deemed to have resigned; on and after the Effective Date the Surviving Corporation shall continue to have no members. Neither the Nonsurviving Corporation nor the Surviving Corporation has issued any certificates evidencing capital contributions or subventions and the members of the Nonsurviving Corporation do not have any financial interest in the Nonsurviving Corporation.
- 1.07. Upon the Effective Date, the separate existence of the Nonsurviving Corporation shall cease and such corporation shall be merged into the Surviving Corporation with the effect specified in Sections 901 and 905(b) of the New York Not-for-Profit Corporation Law (the "NPCL") and N.J.S.A. § 15A:10-7.
- 1.08. The Nonsurviving Corporation shall at any time, or from time to time, as and when requested by the Surviving Corporation, or by its successors and assigns, execute and deliver, or cause to be executed and delivered in its name by its last acting officers, or by the corresponding officers of the Surviving Corporation, all such conveyances, assignments, transfers, deeds or other instruments, and shall take or cause to be taken such further or other action as the Surviving Corporation, or its successors or assigns, may deem necessary or

desirable in order to evidence the transfer, vesting or devolution of any property, right, privilege or franchise or to vest or perfect in or confirm to the Surviving Corporation, or its successors and assigns, title to and possession of all the property, rights, privileges, powers, immunities, franchises and interests now vested in the Nonsurviving Corporation or to which such corporation would have hereafter become entitled if it had not become a party to the merger and otherwise to carry out the intent and purposes hereof.

- 1.09. On and after the Effective Date, the Surviving Corporation shall be responsible and liable for all liabilities and obligations of the Nonsurviving Corporation and the Surviving Corporation, and any claim existing, or action or proceeding pending, by or against the Nonsurviving Corporation or the Surviving Corporation may be prosecuted as if the Merger had not taken place and the Surviving Corporation may be substituted in the place of the Nonsurviving Corporation.
  - (a) The Nonsurviving Corporation has no liabilities or obligations.
  - (b) There are no claims, actions or proceedings pending against the Nonsurviving Corporation.
- 1.10. All assets of the Nonsurviving Corporation shall be transferred and conveyed to the Surviving Corporation subject to the same uses and trusts as heretofore impressed thereon.
  - (a) Attached as Exhibit B is a list of the real property of the Nonsurviving Corporation that will be merged into the Surviving Corporation. The Nonsurviving Corporation owns no other property.
- 1.11. The Merger shall become effective at the close of business on the day (which time is herein called the "Effective Date") on which a Certificate of Merger embodying this Plan of Merger is filed with (i) the Secretary of State of the State of New York in accordance with the

requirements of NPCL § 904, and (ii) the Division of Revenue and Enterprise Services of the State of New Jersey in accordance with the requirements of the New Jersey Nonprofit Corporation Act, N.J.S.A. § 15A:10-7.

### **ARTICLE II**

2.01. Notwithstanding the authorization of this Plan of Merger by the members of the Nonsurviving Corporation, at any time prior to filing a Certificate of Merger by the Department of State, this Plan of Merger may be abandoned either (a) by mutual consent of the Board of Trustees of the Merging Corporations, or (b) by separate action of the Board of Trustees of the Nonsurviving or the Surviving Corporation, if such Board shall, in its exclusive discretion, determine that to proceed with the merger would adversely affect the corporation or its members, if applicable.

IN WITNESS WHEREOF, the Merging Corporations have caused this Plan of Merger to be executed in their corporate names by their duly authorized officers this  $\frac{7}{2}$  day of \_\_\_, 2017.

> THE SALVATION ARMY, A NEW JERSEY CORPORATION

THE SALVATION ARMY, A NEW YORK CORPORATION

SandlAAT

Secretary

STATE OF NEW YORK )
COUNTY OF ROCKLAND )
Subscribed and sworn to before me this Th day of Tuly 2017, by Michael
J. Southwick as Secretary of The Salvation Army, a New Jersey corporation.
Witness my hand and official seal.  Witness my hand and official seal.  Notary Public, State of New York No. 01LE334383  Outlied in Rockland County
My commission expires: Commission Expires June 27, 2020
Notaty Public
STATE OF NEW YORK ) ss.
COUNTY OF ROCKLAND )
Subscribed and sworn to before me this 1th day of JULY, 2017, by Michael
J. Southwick as Secretary of The Salvation Army, a New York corporation.
Witness my hand and official seal.  Witness my hand and official seal.
My commission expires:
Notary Public

### Exhibit A

### Members of the Nonsurviving Corporation

David E. Jeffrey

William A. Bamford III

Kenneth O. Johnson, Jr.

Steven M. Howard

Donald W. Lance

G. Lorraine Bamford

D. Sue Foley

Panla S. Johnson

James B. LaBossiere

### Exhibit B

Real Property of the Nonsurviving Corporation

CORP.		Loc_Add1	Loc_Add2	Loc Add:
LN	Asbury Park, NJ	821 Main Street	Commence and Service Service Commence	Section Section 2
NJ	Asbury Park, NJ	803 Emory Street	<del> </del>	***********
NJ	Asbury Park, NJ	1400 Webb Street		
		207 Sunset Avenue (1)		
		209 Sunset Avenue (2)		
NJ	Asbury Park, NJ	208 6TH Avenue		
NJ	Asbury Park, NJ	605 Asbury Avenue	601-606 Asbury Avenue (NY Com)	
700020		Emory Street & First Avenue (1)		
NJ	Ashtabula, OH	4631 Main Avenue		
		4631-4633 Main Street (1)		
NJ	Ashtabula, OH	3527 Lake Avenue		
NJ	Atlantic City, NJ	650 North Albany Avenue		
NJ	Atlantic City, NJ	22 South Texas Avenue		
NJ	Batavia, NY	98 Jackson Street		بقطاعة ومستوسسة الكالمهوية الكر
NJ	Beliaire, OH	315 37th Street (1)		******
		NY - 3706-37061/2 Taliman Ave. (2)		
NJ	Bennington, VT	511 South Street		
NJ	Bioomfield, NJ	957 Broad Street	***************************************	
NJ	Bloomfield, NJ	36 Carol Place		
NJ	Bloomfield, NJ	18 Este Place		
NJ	Bloomfield, NJ	19 Emerson Terrace		
NJ	Bloomfield, NJ	58 Morley Lane		
NJ	Bloomfield, NJ	17 Skyview Road	*********	*****
NJ	Bloomfield, NJ	88 Mountain Avenue		
NJ	Bloomfield, NJ	326 Essex Avenue		

•

CORP.	Loc_City	Loc_Add1	Loc_Add2	Loc_Add3
NJ	Bloomfield, NJ	92 Mountain Avenue	The second secon	M. P. C.
NJ	Bloomfield, NJ	42 Meadow Lane	Cart	
NJ	Bloomfield, NJ	71 Mountain Avenue		and the second second
NJ	Bloomingdale, NJ	Star Lake Camp	268 Macopin Road	
		3 tracts of land, w/ 2 buildings & 2 lakes, 9/29/24 (Deed -transfer of original purchase of land by TSA NY to TSA NJ of land)		
		1 treet of land of 43,075 acros 7/15/54 [Sisco] (1)		mp , 114 drill in
		Star Lake Camp, Lot 27 & Lot 28, Glevwild Avenue 7/17/68 (Boffe & Guabello) (2) (3)		
<u> </u>	14, principal 4 446 and 31 and	Star Lake Comp, Let 26 7/17/68 [Lombardi] (4)		
		Cold Spring Lake, 63 acres 12/20/73 [Cold Spring Lake Corporation] (5)		pas s. c. accis his sa Codomber hav
		Star Lake Camp, Lot 26A, Block 5, 30.53 acres 11/25/80 [9isco] (6)		
NJ	Bound Brook, NJ	214 West High Street		*************
NJ	Bridgeton, NJ	15 Twin Oaks Drive		
ИJ	Bridgeton, NJ	29 West Commerce Street		a part opposite the state of the
		19 West Commerce Street (1)		
	\$1.718 May 1478 1971 7, 100 may 1971 1971	1-15 West Commerce Street (2)		
NJ	Butler, PA	1623 North Main Street		
		Route 8, North Center Township (1)		
NJ	Camden, NJ	2804 Tyler Avenue		- Marie San S Hall Statement Street Sell 4 & 10
ŊJ	Camden, NJ	915 Haddon Avenue		*************************
NJ	Cherry Hill, NJ	1120 York Road		
NJ	Cherry Hill, NJ	314 Elma Avenue		

......

CORP	Loc_City	Loc_Add1	Loc Add2	Loc_Add3
NJ	Cincinnati, OH	8393 Summit Ridge Drive		
NJ	Cincinnati, OH	12th & Main Street		
ŊJ	Clearfield, PA	125 West 6TH Street		
NJ	Cleveland, OH	1317 East 90th Street		
NJ	Clifton, NJ	83 Grove Street		
LN	Clifton, NJ	Cresthaven Memorial Park		Cemetery Plots
LN	Columbus, OH	4242 Macsway Avenue		
NJ	Covington, KY	1806 Scott Boulevard		****
LN	Covington, KY	1814 Scott Boulevard		
ΓN	Danbury, CT	5 Abbot Avenue		
NJ	Dover, DE	611 Forest Street		
NJ	Dover, NJ	24 Basset Highway		
NJ	Eagleswood Township, NJ	Route 9 & Cedar Lane	9 Cedar Lane	(Camden)
NJ	East Hanover, NJ	Restland Memorial Park	77 Deforest Avenue	
NJ	East Orange, NJ	430 Main Street	Martin Luther King Blvd	
NJ	Edison, NJ	10 Agetha Drive	† • •	
ŊĴ	Egg Harbor Township, NJ	5 Tyler Drive		(Atlantic City)
NJ	Elizabeth, NJ	1005 East Jersey Street		
NJ	Elizabeth, NJ	1041 Gallopinghili Road		
NJ	Elyria, OH	728-730 West Broad Street (4)	(1-3) [NY Corp]	
NJ	Englewood, NJ	380 South Van Brunt Street		
NJ	Erie, PA	5410 Bondy Drive		(Millcreak Township)
NJ	Essex Felis, NJ	26 Park Lane		
NJ	Fair Lawn, NJ	Fair Lawn Memorial Cemetery	7 Maple Avenue	
NJ	Fair Lawn, NJ	37-02 Northern Drive		

ė

CORP.	Loc_City	Loc_Add1.f	Loc_Add2	Loc_Add
NAME	The state of the second state of the second	A CONTRACTOR OF THE PROPERTY O		A STANTON
NJ	Fanwood, NJ	400 North Avenue		<u> </u>
Ŋ	Findlay, OH	509 North Main Street		<u> </u>
LN	Flemington, NJ	60 Wellington Drive	1	
ŊJ	Flemington, NJ	40 East Main Street		
NJ	Florence, KY	29 Aquilla Drive		
NJ	Glen Ridge, NJ	7 Astor Place		
NJ	Glen Ridge, NJ	68 Oxford Street		
LN	Guyanabo, PR	Urb. Torremolinos,	C-12 Azalea Calle	
NJ	Hackensack, NJ	89 State Street [State & Myers] (1)	85 State & 68 Myer Street	
هندها که که شه بود سر پند بسیسی.		68 Myers Street (2)		
NJ	Hackensack, NJ	441 Blanchard Terrace		
NJ	Hamilton, NJ	16 Marion Pond Road		
NJ	Hazleton, PA	115 West Broad Street		
NJ	Highland Park, NJ	428 Graham Street		
NJ	Hookset, NH	1143 Hookset Road		<u> </u>
NJ	Jersey City, NJ	242 Martin Luther King Blvd		
NJ	Jersey City, NJ	562 Bergen Avenue (3)	43 Emroy Street (NY Corp)	
*****	, , , , , , , , , , , , , , , , , , ,	566 Bergen Avenue (1)		
		568 Bergen Avenue (2)		
NJ	Keamy, NJ	443 Chestnut Street	30-32 Beech Street	
		443-445 Chestnut Street (1)		
		447-449 Chestriut Street; 30-32 Beech Street (2)		
NJ	Keamy, NJ	26-28 Beech Street		Parking Lot
NJ	Lancaster, OH	123 East Hubert Street	115 East Hubert Street	
NJ	Lancaster, PA	1833 Glenbrook Avenue		
NJ	Leonia, NJ	417 Hazlett Road		
LN	Lexington, KY	228 New Circle Road 683 Union Avenue		

.

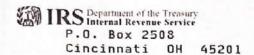
CORP.	Loc City	Loc Add1	Loc Add2	Loc_Add3
NAME	はまするかられていませるかの	2 March 1985 September 1985	The state of the state of the	S. Absentagester State (Sept. 5)
ГИ	Mechanicsville, NJ	Arlington Cemetery	1620 Cove Road	(Pennsauken)
NJ	Milford, MA	29 Congress Street		
NJ	Montclair, NJ	13-17 Trinity Place		<u> </u>
		9-13 Trinity Place (1)		
		7 Trinity Place (2)		
		88 Church Street (3)		
		15 Trinity Place (4)		
		17 Trinity Place (5)		
			property property and the production and in each	
NJ	Montelair, NJ	22 Park Terrace		
LN	Montclair, NJ	25 Myrtle Street		(Comingany)
ĹN	Morris Plains, NJ	12 Rita Drive	a, pre per per consultation and resistance and re-	(Pareippany)
NJ	Morristown, NJ	95 Spring Street		(Pittsburgh)
<u>NJ</u>	Mount Lebanon, PA	108 Piper Drive		VI ICOODI SILV
NJ	Mountainside, NJ	1145 Acushnet Avenue		
NJ	New Bedford, MA	1 140 Accidenter recince		
NJ	New Brunswick, NJ	95-101 Joyce Kilmer Avenue (1)		
		287 Handy Street (2)		
	· · · · · · · · · · · · · · · · · · ·	289 Handy Street (3)		
		291 Handy Street (4)		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	New Brunswick, NJ	295 Handy Street (1)		
NJ	MARK DIMISMICK, MG	294 Seamen Street (2)	, , , , , , , , , , , , , , , , , , ,	
		291 Handy Street (1)		
NJ	Newark, NJ	291-297 New Jersey Railroad Avenue		
and an expensive spectrum (Fig. ). I	H (1869) ( 1969) and have been do report to the construction and 1 (1 of the district	299-301 New Jersey Railroad Avenue (1)		
n e de la composição de l		291-297 New Jersey Rallroad Avenue (2)		
		74 Pennington Street (3)		
NJ	Newark, NJ	526 Broadway		
NJ	Newark, NJ	168-170 Brookdale Avenue	<del></del>	
NJ `	Newark, NJ	68-70 Richelieu Place		
NJ	Newark, NJ	45 Central Avenue	21 <del>11111111111111111111111111111111111</del>	
NJ	Newark, NJ	699 Springfield Avenue	***************************************	
NJ	Newark, NJ	11 Providence Street	** *	
NJ	Newark, NJ	138 Clifford Street	age 124 of 1865 and decrease and decrease and decrease and	(Irwin)
NJ	North Huntington, PA	12751 Route 30 West		7.2 20111
NJ	North Randall, OH	4633 Northfield Road		(Toleda)
NJ	Northwood, OH	1946 Terri Rue		1)

CORP.	Loc_City	Loc Add1	Loc Add2	Loc_Add3
LN	Passaic, NJ	417 Broadway		
NJ	Passalc, NJ	550 Main Avenue		
		15 River Drive (1)		
	ية جوه و هو و هو و هو المرافق ا	Parts of Lots 29,30 & 35, Block 135 (2)		
NJ	Paterson, NJ	31 Van Houten Street		
		Van Houten Street & Curtis Place (1)		
NJ	Perth Amboy, NJ	433 State Street		
NJ	Philadelphia, PA	6427 Torresdale Avenue	6429 Torresdale Avenue	
NJ	Philadelphia, PA	4555 Pechin Street	430 Krams Avenue [NY Corp] (1)	
		422 Krams Avenue (2)		******************
NJ	Piscataway, NJ	1847 Hughes Terrace		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
NJ	Pittsburgh, PA	6017 Broad Street		
NJ	Plusburgh, PA	201 Valley Park Drive		
NJ	Plttstown, NJ	Camp Tecumseh	445 Mechlin Corner	Route 625
		Camp Alexandria Township, Hunterdon County 6/1/64 [Gaybar] (1)		
		Camp Alexandria Township, Hunterdon County 5/22/64 [Braun] (2)		
<u> </u>	angung gang ngandidi bi di A. Ng bi di ding di di di di ding min dipan di bi di	Camp Alexandria Township, Hunterdon County 9/9/64 [Butler] (3)		
446 ابطر في جي پوري ۾ پي پ	3 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Nature Lodge, Alexandria Township, Hunterdon County 7/27/66 [Biolterspiel] (4)		조 (1) 소년 19 대 국무의 국무의 소리 (1) 10 10 10 10 10 10 10 10 10 10 10 10 10
166 o a u p a 4 F-		Land & 2 Bidgs, Estate of Elizabeth Lebitz 12/14/72 [Matyas] (5)		
		Pittstown, NJ 12/19/74 [Wilkinson] (6)		
	1900 N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Alexandria Township, Hunterdon County, Block 10, Lot 59 12/11/79 [Steinke] (7)		an al de li al al approximation in in in in in the lift by 100

CORP NAME	THE STATE OF THE S	Loc Add1	Loc_Add2	Loc Add3
~~~~~~~~~		Alexandria Township, Hunterdo County, Block 10, Lot 60 [Kaned (8)	n chi	
		Alexandria Township, Hunterdo County, Block 10, Lot 20-1 12/1, [Helser] (9)	98	***************************************
		Alexandria Township, Hunterdor County, Block 10, Lot 96 10/30/ [Cline] (10)	95	TO SEE SEE SEE SEE SEE SEE SEE SEE SEE SE
NJ	Pittstown, NJ	437 Mechlin Corner Road		***************************************
NJ	Plainfield, NJ	615 Watchung Avenue	************	
LN	Portland, ME	30 Warren Avenue		· .
NJ	Potisville, PA	2317 Mahanlongo Street		··
NJ	Punxsutawney, PA	Charles Street Road #7	Box 99	
NJ	Red Benk, NJ	172-180 Newman Springs Ro		
NJ	Rockaway, NJ	2 Ridge Road	A	(Wharton, NJ)
NJ	Rumson, NJ	3 Center Street		Tranditori' (47)
ŊJ	San Juan, PR	D-15 Calle 3-A	Urb. Hillside	(Rio Piedras)
<u> </u>	Scott Township, PA	2015 Sunnydale Drive		(Pittsburgh)
נא	Sharon, PA	660 Fisher Hill		
NJ	Smyrna, DE	16 East Mount Vernon Street		i
NJ	Southampton, NJ	246 Huntington Drive		(Camden)
NJ	Springfield, OH	15 South Plum Street	130 West Main Street	315 West Main & Plum Street
NJ	Strongsville, OH	20410 White Bark Drive		
ИJ	Tinton Falls, NJ	Monmouth Memorial Park	4201 State Route 33	
NJ	Toms River, NJ	152 Mapietree Road		
NJ	Toms River, NJ	1754 Route 37 East		
NJ	Toms River, NJ	1738 Route 37 East	***********	
NJ	Trenton, NJ	436 Mulberry Street		
NJ	Trenton, NJ	575 East State Street		
		557-583 East State Street (1)		****
		567-581 East State Street (2)		********
I, INC.	Trenton, NJ	3 Enterprise Avenue	103 Enterprise Avenue	
NJ	Union City, NJ	515 43rd Street		

CORP.	Log_City	Loc Add1	Loc_Add2	Lon Add3
		519 43rd Street (2)		
NJ	Union, NJ	1630 Vauxhall Road		
LN.	Union, NJ	4 Gery Road		
NJ	Ventnor, NJ	6203 Fremont Avenue		
NJ	Vernona, NJ	17 Hamlock Drive		
NJ	Vineland, NJ	2279 South Delsea Drive		
NJ	Vineland, NJ	733 East Chestnut Avenue		
NJ	Vineland, NJ	1115 McMehan Drive		
NJ	Wadsworth, OH	527 College Street (1)		
	K -10 2166 8 416 8 416 116 -117 - 1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	517 College Street (2)		
NJ	Wall, NJ	1811 Meadow Road		
NJ	Walthem, MA	15 Flagg Circle		
LN	Warren, OH	2650 Youngstown Road		*************
NJ	Washington, PA	160 Hazelwood Drive		
NJ	Wilkes-Barre, PA	739 Sans Souci Parkway		(Hanover Township)
NJ	Williamsport, PA	500 Harding Avenue		
NJ	Wilmington, DE	107 South Market Street (1)		
' <del></del>		117-121 South Market Street (2)		
<u>, a, a, abena a e e a e e e</u>		125 South Market Street (3)		
NJ	Wilmington, DE	202 Dupont Circle		(VIIIa Monterey)
NJ	Wooster, OH	2013 Robinhood Drive		
NJ	Wooster, OH	437 South Market Street		
NJ	Wooster, OH	469 South Market Street		

TSA, INC. 'The Salvation Army, Inc. No principal office nor mailing address provided with TSA, Inc.



In reply refer to: 0248344558 Nov. 12, 2010 LTR 4168C E0 04-3105677 000000 00

00014398 BODC: TE



CAPE VERDEAN ASSOCIATION IN NEW BEDFORD INC % EMANUEL DIAS 59 SYCAMORE STREET 1FLR NEW BEDFORD MA 02740-6541

006808

Employer Identification Number: 04-3105677
Person to Contact: Mr. Burns
Toll Free Telephone Number: 1-877-829-5500

Dear Taxpayer:

This is in response to your Nov. 02, 2010, request for information regarding your tax-exempt status.

Our records indicate that you were recognized as exempt under section 501(c)(3) of the Internal Revenue Code in a determination letter issued in August 1995.

Our records also indicate that you are not a private foundation within the meaning of section 509(a) of the Code because you are described in section(s) 509(a)(1) and 170(b)(1)(A)(vi).

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Please refer to our website www.irs.gov/eo for information regarding filing requirements. Specifically, section 6033(j) of the Code provides that failure to file an annual information return for three consecutive years results in revocation of tax-exempt status as of the filing due date of the third return for organizations required to file. We will publish a list of organizations whose tax-exempt status was revoked under section 6033(j) of the Code on our website beginning in early 2011.

0248344558 Nov. 12, 2010 LTR 4168C E0 04-3105677 000000 00 00014399

CAPE VERDEAN ASSOCIATION IN NEW BEDFORD INC % EMANUEL DIAS 59 SYCAMORE STREET 1FLR NEW BEDFORD MA 02740-6541

If you have any questions, please call us at the telephone number shown in the heading of this letter.

Sincerely yours,

michele M. Sullivas

Michele M. Sullivan, Oper. Mgr. Accounts Management Operations I MASSACHUSETTS DISCHARGE OF MORTGAGE REAL ESTATE (CORPORATION)

# LUZO COMMUNITY BANK, HOLDER of a mortgage from CAPE VERDEAN ASSOCIATION

to said LUZO COMMUNITY BANK, dated April 17, 1992 and recorded with the Bristol County Registry of Deeds Book 2802, Page 0265, acknowledge satisfaction of same.

Prop: 1157 Acushnet Avenue, New Bedford, Massachusetts 02745

IN WITNESS WHEREOF, THE SAID LUZO COMMUNITY BANK has caused its corporate seal to be hereto affixed and these presents to be signed in its name and behalf by: Pradaporn S. Payongsith, its, Treasurer, this 19<sup>th</sup> day of July, 2005.

LUZO COMMUNITY BANK

By

THE COMMONWEALTH OF MASSACHUSETTS

Bristol, SS.

On this 19<sup>th</sup> day of July, 2005 before me, the undersigned notary public, personally appeared Pradaporn S. Payongsith, who is personally known by the undersigned notary public, to be the person whose name is signed on this document, and acknowledged to me that she signed it voluntarily for its stated purpose as Treasure of Lending for Luzo Community Bank of New Bedford, Mass., a corporation.

Before men

Notary Public

John J.A. Sousa

My Commission Expires: 2/19/2010



# COMMONWEALTH OF MASSACHUSETTS HOUSE OF REPRESENTATIVES STATE HOUSE, BOSTON 02133-1054

CHARMAN
JOINT COMMITTEE ON STATE ADMINISTRATION
AND REQULATORY OVERSIGHT

E-Mail:
Antonio Cabralie/MAhouse gov

November 15, 2023

Community Preservation Committee City Hall, Room 303 133 William Street New Bedford, MA 02740

Re: CPA Application for Strand Theater Restoration Project

Dear Community Preservation Committee Members:

I support the Cape Verdean Association in New Bedford's (CVANB) application for CPA funds in FY24 to continue and support the restoration of the historic, former Strand Theater.

This long-vacant theater will be transformed into the Cape Verdean Cultural Community Center where residents and visitors can learn about the different cultures and people that continue to contribute to New Bedford's sense of place. The restoration of this gateway space in the Near North End, will preserve New Bedford's history and increase investment in the region, building a stronger and more equitable economy.

CPA funding in 2024 will spark an important transformative milestone for New Bedford by physically connecting Island Park and the Cape Verdean Cultural Community Center. This will allow programming to commence at Island Park. Once fully completed, the Cape Verdean Cultural Community Center and Island Park will further anchor the near north end, celebrate the neighborhood's diversity, and be an anchor for surrounding businesses. This is the type of meaningful impact the CPA was designed to foster.

Please do not hesitate to reach out with questions. I hope you will look favorably on this project. Sincerely,

ANTONIO F. D. CABRAL

Vory abral

State Representative, 13<sup>th</sup> Bristol District House Chair, Joint Committee on State Administration & Regulatory Oversight



Community Preservation Committee
City Hall, Room 303
133 William Street
New Bedford, MA 02740

November 8, 2023

Community Preservation Committee Members,

As Executive Director of the Community Economic Development Center of Southeastern MA, Inc. (CEDC), I am writing to support the Cape Verdean Association in New Bedford's (CVANB) application for FY24 CPA funds to support the Strand Theater restoration project.

Located at the gateway to the International Marketplace in the heart of the City's Near North End, this long-vacant theater will be transformed into the Cape Verdean Cultural Community Center. Programming will highlight Cape Verdean culture as well as the many cultures and people that continue to contribute to New Bedford's sense of place today. This is in alignment with many of the CEDC's efforts as well. We believe this project can spur increased investment in the region, building a stronger and more equitable economy.

FY24 CPA funds will help establish the physical connection between Island Park and the Cape Verdean Cultural Community Center, making the park functional for community use in the near future. The CEDC is eager to have another cultural and community center in the neighborhood, driving engagement among residents and visitors, and inspiring patronage at many local small businesses. This is the very kind of CPA-leveraged investment that has such a meaningful impact on everyone in New Bedford.

Please do not hesitate to reach out if you have any further questions. I hope you join us in supporting this important project.

Sincerely,

Corinn Williams

**Executive Director** 

Community Economic Development Center of Southeastern MA, Inc.

corinn@cedcnewbedford.org

cedcnewbedford.org 508.979.4684 P.O. Box 63005 1501 Acushnet Avenue New Bedford, MA 02746



# City of New Bedford

### Office of City Council

133 William Street • New Bedford, Massachusetts 02740

Tel: (508) 979-1455 • Fax: (508) 979-1451

Shane A. Burgo
Councillor At Large

November 1, 2023

Janine da Silva, Chair Community Preservation Committee City of New Bedford 133 William Street New Bedford, MA 02740

Dear Chair DaSilva and Honorable Members of the Community Preservation Committee:

I am writing this letter to express my strong support for the Cape Verdean Association in New Bedford (CVANB) and their initiative to restore the former Strand Theater. This project holds immense significance for our community and aligns with the values and goals of the Community Preservation Act (CPA).

The Strand Theater, with its rich history and cultural importance, has the potential to become a focal point for the Cape Verdean community and the wider New Bedford area. Restoring this iconic venue will not only preserve a part of our heritage but also create a vibrant space for cultural events, performances, and community gatherings.

As a member of this community, I have witnessed the dedication and hard work that CVANB has put into preserving and celebrating Cape Verdean culture. Their commitment to cultural enrichment and education is commendable; and I believe that the restoration of the Strand Theater will serve as a catalyst for even greater outreach and engagement. CPA funding in 2024 will help create an important transformative milestone for New Bedford when Island Park and the Cape Verdean Cultural Community Center are physically connected, thereby allowing programming to commence at Island Park.

This is the kind of CPA-leveraged investment that has such a meaningful impact on everyone in New Bedford. The restoration of this historic venue will undoubtedly contribute to the cultural, social, and economic vitality of New Bedford and I am confident that it aligns with the CPA's objectives.

In conclusion, I wholeheartedly support CVANB's efforts to restore the former Strand Theater with the aid of CPA funds. I believe this project will have a lasting, positive impact on our community, and am excited about the potential it holds for preserving our cultural heritage and fostering community engagement.

Thank you for your time and consideration to this matter.

Sincerely,

City Councillor At Large
City of New Bedford

SAB: as

cc: File



# City of New Bedford

### Office of City Council

133 William Street • New Bedford, Massachusetts 02740 979-1455 • Fax: 508-979-1451

Maria E. Giesta Councillor Ward Two

November 3, 2023

Community Preservation Committee City Hall, Room 303 133 William Street New Bedford, MA 02740

Dear Community Preservation Committee Members:

As the Ward 2 New Bedford City Councillor, I am writing to support the Cape Verdean Association in New Bedford's (CVANB) application for CPA funds in FY24 to continue and support the restoration of the former Strand Theater.

This long-vacant theater will be transformed into the Cape Verdean Cultural Community Center where residents and visitors can learn about the different cultures and people that continue to contribute to New Bedford's sense of place. The restoration of this gateway space at the front of the Near North End preserves New Bedford's history and increases investment in the region, building a stronger and more equitable economy.

CPA funding in 2024 will help create an important transformative milestone for New Bedford when Island Park and the Cape Verdean Cultural Community Center are physically connected, thereby allowing programming to commence at Island Park. Once fully completed, the Cape Verdean Cultural Community Center and Island Park will further anchor the Near North End, celebrate the neighborhood's diversity, and be a driver for visitation to surrounding businesses. This is the very kind of CPA-leveraged investment that has such a meaningful impact on everyone in New Bedford.

Should you require any additional information at this time, please do not hesitate to reach out. We hope you join us in supporting this important project.

Sincerely,

Maria E. Giesta,

Councillor Ward Two

Maria L. Diesta

MEG: rrr

cc: File

### Rae R. Rose

From:

Maria Giesta <azores1962@gmail.com>

Sent:

Friday, November 3, 2023 10:46 AM

To:

Susan Henriques; Rae R. Rose; Angelic Taylor; Ana Sousa

Cc:

Maria Giesta; Maria Giesta

Subject:

[EXTERNAL] Letter

Attachments:

Draft LOS CPA FY24 for CVANB[93].docx

Attached is a letter I need put on my letterhead and emailed to Diana.marie.painter@gmail.com

Please put a copy of the letter in my mailbox.

Thank you.

Maria



# City of New Bedford

### Office of City Council

133 William Street • New Bedford, Massachusetts 02740 (508) 979-1455 • Fax: (508) 979-1451

Naomi R.A. Carney Councillor at Large

November 2, 2023

Community Preservation Committee City Hall, Room 303 133 William Street New Bedford, MA 02740

Dear Community Preservation Committee Members:

I am writing to support the Cape Verdean Association in New Bedford's (CVANB) application for CPA funds in FY24 to continue and support the restoration of the former Strand Theater.

This long-vacant theater will be transformed into the Cape Verdean Cultural Community Center where residents and visitors can learn about the different cultures and people that continue to contribute to New Bedford's sense of place. The restoration of this gateway space at the front of the Near North End preserves New Bedford's history and increases investment in the region, building a stronger and more equitable economy.

CPA funding in 2024 will help create an important transformative milestone for New Bedford when Island Park and the Cape Verdean Cultural Community Center are physically connected, thereby allowing for programming to commence at Island Park. Once fully completed, the Cape Verdean Cultural Community Center and Island Park will further anchor the near north end, celebrate the neighborhood's diversity, and be a driver for visitation to surrounding businesses. This is the very kind of CPA-leveraged investment that has such a meaningful impact on everyone in New Bedford.

Should you require any additional information at this time, please do not hesitate to reach out. I hope you join me in supporting this important project.

Sincerely,

Maamu R. A. Carney

Naomi R. A. Carney

Councillor at Large



November 2, 2023

Community Preservation Committee 133 William Street Room 303 New Bedford, Massachusetts 02740

### RE: CPA Application for Strand Theater Restoration Project

Dear Community Preservation Committee Members:

On behalf of the New Bedford Economic Development Council (NBEDC), I would like to once again, offer our full support of the Cape Verdean Association in New Bedford's (CVANB) in their submission of their FY24 CPA application to continue the restoration of the former Strand Theater located in the entrance of the Acushnet Avenue International Marketplace.

This project not only restores an important historical asset within the city, but also greatly enhances the Acushnet Avenue corridor and complements the work of the partnership-based Love the Ave. campaign. Located at a major north end gateway, this former theater stands stripped of its former glory. Through this project, the street-facing, front of the building will be restored to its original intricate and beautiful Italianate façade, significantly enhancing the character of the Acushnet Avenue and the surrounding neighborhood.

This long vacant theater will be transformed into the Cape Verdean Cultural Community Center where residents and visitors can learn about the different cultures and people that continue to contribute to New Bedford's sense of place. Our rich culture and heritage have been greatly influenced by the diverse populations that have immigrated to the area, including those from Cape Verde who often served as the backbone to many crews when the city was the whaling capitol of the country.

CPA funding in FY24 will help create an important transformative milestone for New Bedford when Island Park and the Cape Verdean Cultural Community Center are physically connected, thereby allowing for programming to commence at Island Park. Once completed, the Cape Verdean Cultural Community Center will further anchor the near north end, celebrate the neighborhood's diversity, and be a driver for visitation to surrounding business.

This is the very kind of CPA leveraged investment that has such meaningful impact for everyone in New Bedford.

The NBEDC urges the CPC to give this application its thoughtful consideration and wants to thank you for the opportunity to support historic preservation throughout New Bedford.

Sincerely,

Derek Santos Executive Director dsantos@nbedc.org



# The Commonwealth of Massachusetts House of Representatives

### **Representative Christopher Hendricks**

### **Committee Memberships**

Eleventh Bristol District 24 Beacon St., Room 237 Boston, MA 02133 (617) 722-2305 Chris.Hendricks@mahouse.gov Vice Chair, Federal Stimulus and Census Oversight
Judiciary
Housing

November 3, 2023

Community Preservation Committee City Hall, Room 303 133 William Street New Bedford, MA 02740

Dear Community Preservation Committee Members:

My name is Christopher Hendricks, and I am the State Representative for the 11<sup>th</sup> Bristol District. I am writing to support the Cape Verdean Association in New Bedford's (CVANB) application for CPA funds in FY24 to continue the restoration of the former Strand Theater.

When restoration is completed, the long-vacant Strand Theater will be transformed into the Cape Verdean Cultural Community Center, a spot where both residents and visitors can learn about the different people and cultures that have long contributed to New Bedford's community. The restoration of this gateway space at the front of the Near North End will assist in preserving New Bedford's history and increase investment in the region, helping the city as it continues to build a stronger and more equitable economy.

CPA funding in 2024 will create an important, transformative milestone for New Bedford. When Island Park and the Cape Verdean Cultural Community Center are physically connected, the CVANB's scheduled programming may finally commence at Island Park. Once fully completed, the Cape Verdean Cultural Community Center and Island Park will further anchor the Near North End, celebrate the neighborhood's diversity, and be a driving force for visitation to surrounding businesses. This is the exact kind of CPA-leveraged investment that has such a meaningful impact on everyone in New Bedford.

Should you require any additional information at this time, please do not hesitate to reach out to me at chris.hendricks@mahouse.gov, or my aide, Steve Tedeschi, at steven.tedeschi@mahouse.gov. We appreciate your time and consideration, and we hope you join us in supporting this important project.

Sincerely,

Christopher Hendricks, State Representative

### WHALE Board of Directors

*President* Diana Henry

Vice President Jeremy Dagold

2<sup>nd</sup> Vice President Lee Blake

Treasurer Colleen Trahan

Assistant Treasurer
Danielle Poyant

Secretary & Clerk
June Goguen

Asst. Secretary & Clerk Peter J. Hawes

Andrew Burnes Melissa Costa Michael J. Murray Laura Parrish Carl Silva Ramon Silva Patricia Thornton David Wyzenbeek

### WHALE Presidents' Council

Chair Tony Souza

Arthur Bennett John Bullard Paul Downey Peter Hawes Peter Kavanaugh Lyn Keith Tenney Lantz Thomas Lyons Michael J. Murray Daniel Perry Anthony Sapienza David Slutz November 6, 2023

Community Preservation Committee
City Hall, Room 303
133 William Street
New Bedford, MA 02740

Dear Community Preservation Committee Members:

On behalf of the Waterfront Historic Area LeaguE, Inc. (WHALE), I write this letter in support of the Cape Verdean Association in New Bedford's (CVANB) application to the Community Preservation Act 2024 funding cycle. These funds will continue the restoration work of the restoration of the former Strand Theater located on Acushnet Avenue in New Bedford's diverse near north end neighborhood.

WHALE has been collaboraing with CVANB on this project for several years to restore this once stunning building that featured intricate and well-crafted architectural details. Today, after several insensitive renovations, the building's exterior is a blank space that does not enhance the character of the neighborhood. With CPA funds, CVANB will be able to undertake the necessary rehabilitation work to restore the historic front façade and enhance the Acushnet Avenue streetscape and surrounding neighborhood.

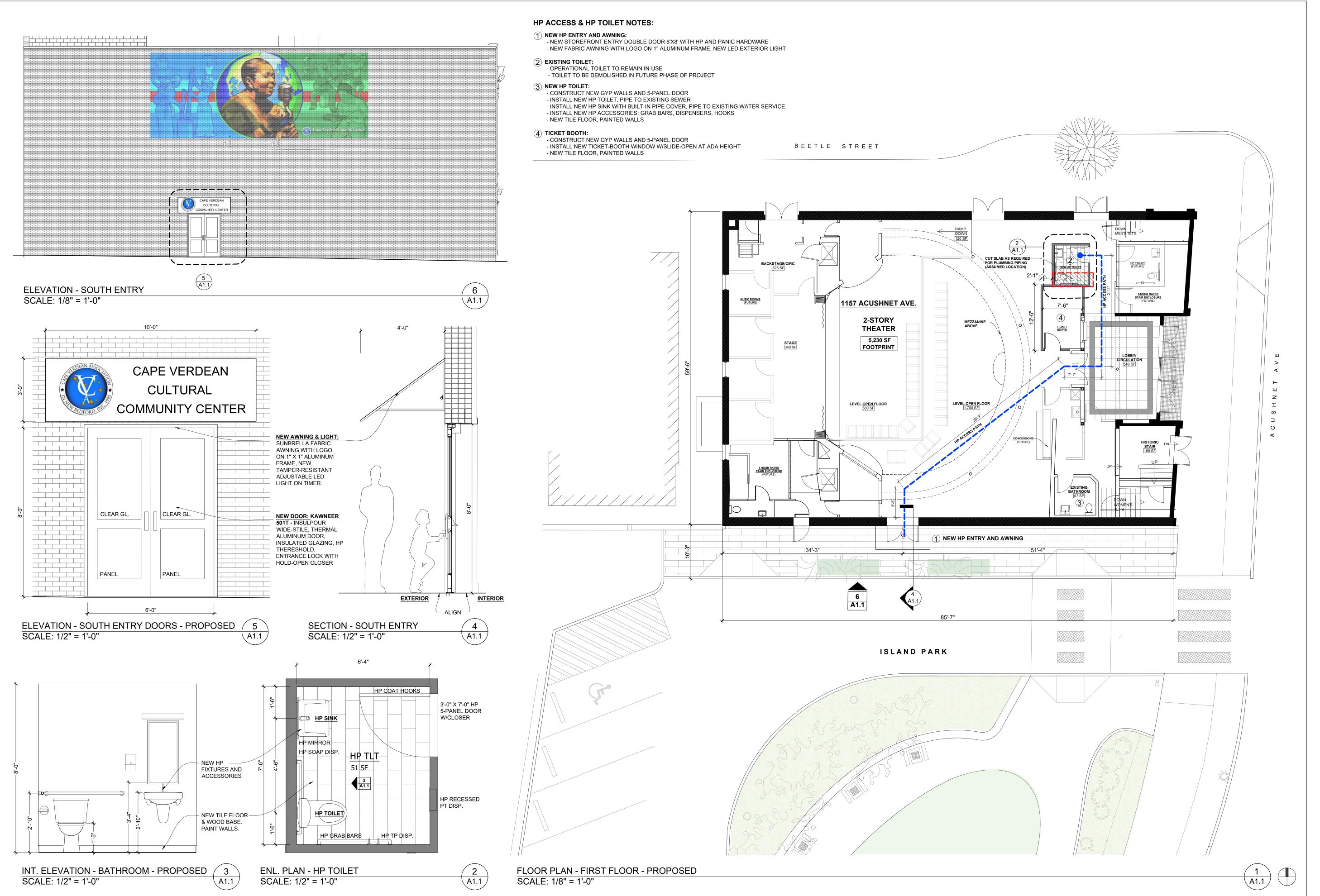
Once fully restored, this building will serve as the Cape Verdean Cultural Community Center, a space open to the public to celebrate and learn about the City's Cape Verdean community and other diverse immigrant communities.

This project fits within the priorities as identified in the Historic Resources category of the FY24 CPA Plan. It protects, preserves, enhances, and restores a historic resource of significance while also supporting the adaptive reuse of a historic property.

I thank you for considering this important project, and for continuing to invest in the preservation of New Bedford's cultural and historical assets.

Sincerely,

Erin D. A. Miranda Executive Director





# studio2sustain

A12 County Street

New Bedford, MA 02740

info@studio2sustain.com

508 999 5145

OWNER
CVANB
128 UNION STREET, SUITE 100
NEW BEDFORD, MA 02740

NEW BEDFORD, MA 02740

COMMUNITY DEVELOPMENT CORP.
WHALE
1 JOHNNY CAKE HILL
NEW BEDFORD, MA 02740
508.997.1776

# DESIGN DEVELOPMENT

- NOT FOR CONSTRUCTION -

# CAPE VERDEAN CULTURAL COMMUNITY CENTER

STRAND THEATER RECONSTRUCTION

1157 ACUSHNET AVE.

NEW BEDFORD, MA 02746

### COMMUNITY ACCESS AT ISLAND PARK: HP ACCESS AND HP TOILET

DATE: **11.08.2023**REVISED:

PLAN, ELEVATION, SECTION

PROPOSED

A 1.1



# City of New Bedford Department of City Planning

133 William Street · Room 303 · New Bedford, Massachusetts 02740

Telephone: (508) 979.1488 · Facsimile: (508) 979.1576

MAYOR
JON MITCHELL
PLANNING DIRECTOR
JENNIFER CARLONI

### **PLANNING BOARD**

### **STAFF REPORT**

REPORT DATE
February 2, 2022
February 9, 2022

Case #22-04 & Site Plan Review & 22-05: Special Permit

1131 - 1145 Acushnet

Avenue

Map: 92 Lot: 106

Owner/ Cape Verdean Association

**Applicant:** in New Bedford

59 Sycamore Street

New Bedford, MA 02746

**Zoning District:** Mixed-use Business

(MUB) in the Acushnet

Avenue Corridor

Site Area: 14,353± square feet

**Overview:** Construction of a pocket

park and parking area

within the Acushnet Avenue corridor.



Site of the future Cape Verdean Cultural Center.

Looking west from pocket park on Acushnet Ave and Beetle Street.

### **Existing Conditions**

The project site is located on an undeveloped corner lot at Bentley Street and Acushnet Avenue. The future site of the Cape Verdean Association (CVA) Cultural Center abuts to the north. A mural on the brick exterior of the cultural center overlooks the project site. Multifamily homes abut to the west and northwest. Commercial and mixed-use buildings abut to the south across Bentley Street and to the east across Acushnet Avenue. A pocket park abuts directly east across Acushnet Avenue. An International Marketplace public parking lot is further east. The surrounding neighborhood is a similar mix of business and multifamily housing.

The site has 138± feet of frontage on Acushnet Avenue. This portion of Acushnet Avenue is a one-way running north from Coggeshall Street to Sawyer Street. On-street parking is allowed on Acushnet Avenue to the east and southeast of the site. No parking is permitted along the site's frontage or between the existing pocket park and the intersection at Sawyer Street.

The site has 100± feet of frontage on Bentley Street, a two-way road at the southerly extent of the project site. Parking is permitted on both sides of the street. There is an existing NO PARKING LOADING ZONE sign on the north side of Bentley Street near the Acushnet Avenue intersection. The westerly border of the project site is abutted by a private driveway for a multifamily residence on Bentley Street.

An ADA accessible crosswalk is located south of the intersection of Acushnet Avenue and Beetle Street, in front of the project site. Sidewalk aprons are paved with permeable pavers and landscaped with street trees on the Bentley Street sidewalk bump outs at the Acushnet Avenue intersection. This segment of Acushnet Avenue including in front of the project site is landscaped the same. The Avenue is lined with public benches, ample bicycle parking, and waste bins.

### **Decision Criteria**

The applicant is requesting a Site Plan Review and a Special Permit for a parking reduction. The ordinance provides the Board the following criteria for reaching a decision.

### Site Plan Review Criteria

In considering Site Plan Approval for the proposed project, the Board must find that the plan meets the objectives identified in Section 5470 of the City's Zoning Ordinance (c.9) including:

- Adequate access to each structure for fire and service equipment
- Adequate provision for utilities and stormwater drainage
- Site alteration shall be designed after considering the qualities of the specific location, proposed land use, the design of building form, grading, egress points and other aspects of the development so as to:
  - Minimize cut/fill volumes, removal of 6" caliper trees and larger, removal of stone walls, displacement of wetland vegetation, extent of stormwater flow increase from the site, soil erosion and the threat of air/water pollution;
  - o Maximize pedestrian/vehicular safety to/from the site
  - o Minimize the obstruction of scenic views from publicly accessible locations
  - Minimize visual intrusion by controlling layout/visibility of parking, storage and outdoor service areas viewed from public ways and residential areas
  - o Minimize glare from vehicle headlights and lighting fixtures
  - Minimize unreasonable departure from the character, materials and scale of buildings in the vicinity
  - Minimize contamination of groundwater from on-site wastewater disposal systems or operations on the premises involving the use, storage, handling or containment of solid/liquid wastes and hazardous substances
  - o Ensure compliance with the Zoning Ordinance
  - Minimize damage to existing adjacent public ways
  - o Promote orderly and reasonable internal circulation within the site so as to protect public safety

### **Alternative Parking Surface Criteria**

In considering Site Plan Approval for the proposed project, the Board must find that the plan meets the objectives identified in Section 3147 of the City's Zoning Ordinance (c.9) including:

- That the alternate surface material is suitable based on the scope, use, character and nature of the property served by the subject parking or loading area, and;
- That the proposed surface is appropriate based upon its' relationship to the character and nature of the area and neighborhood in which the particular property is located.
- The Planning Board may allow a suitable alternative surface for parking areas provided such areas are:
  - o graded and surfaced with a suitably stable material to prevent excessive dust, erosion, odor, unsightly conditions, or;
  - o inflow into the City's wastewater system or wetlands, and;
  - o provided the perimeter of such parking areas shall be defined by bricks, stones, railroad ties or other similar material
- Curbing shall be placed at the edges of surfaced areas, except driveways, in order to protect landscaped areas and to prevent the parking of vehicles within required setback areas.
- Entrance and exit driveways shall be clearly defined by curb cuts, signs, striping.
- If an alternative surface is used, a written agreement and maintenance plan of City right-of-way adjacent to property shall be provided to the planning board for approval.
- Storm Water Management systems within private property need to be constructed and maintained in accordance with the City's Stormwater Management Rules and Regulations.

### **Special Permit Criteria for Parking Reduction**

When deciding on the Special Permit for a parking reduction, the Board must consider the requirements outlined in Section 3120 of the City's Zoning Ordinance (c.9):

- Any parking or loading requirement set forth herein may be reduced upon the issuance of a special permit by the Planning Board if the Board finds that the reduction is not inconsistent with public health and safety, or that the reduction promotes a public benefit. Such cases might include:
  - o Use of a common parking lot for separate uses having peak demands occurring at different times
  - Age or other characteristics of occupants of the facility requiring parking which reduces auto usage
  - o Peculiarities of the use which make usual measures of demand invalid
  - Availability of on-street parking or parking at nearby municipally owned facilities.
  - Where a special permit is granted, a reserve area, to be maintained indefinitely as landscaped open space, may be required sufficient to accommodate the difference between the spaces otherwise required and the spaces reduced by special permit. The parking/site plan shall show (in dotted outline) how the reserve area would be laid out in to provide the otherwise required number of spaces

### **Proposed Conditions**

The applicant proposes a pocket park with one-way vehicle circulation and eight (8) parking spaces at the site. The rejection packet cites twenty-nine (29) spaces are required for relief for a place of assembly based on square footage.

The proposed pocket park will take up most of the project site's area, with the remainder devoted to parking and circulation. The park will have 107± feet of frontage on Acushnet Avenue and 68± feet of frontage on Bentley Street. The park will be bordered along the site's southerly and easterly borders with 3.5-foot-high black aluminum fencing.

Crushed shell is proposed for the parking lot and driveway. Plans indicate locking dual swing gates at the driveway aprons. An accessible walkway connecting the project site to the CVA building abutting north is proposed. A proposed egress point on the south side of the building (not included in this Site Plan Review) is identified in the plan set. Bus offloading is proposed along this walkway.

The park will have a lawn bordered by gardens to the south and east along the sidewalk. seat wall benches are proposed along most of the south garden border and along the southern half of the east garden border. A rain garden with gaming tables is proposed at the north and west of the park.

### **Staff Review**

The table below outlines the proposed site changes and highlights items for discussion and the Board's consideration.

# Seven parking spaces and one handicap space with offloading area are proposed along the westerly portion of the site. The applicant is seeking a Special Permit for relief of twentynine (29) spaces. The applicant is seeking approval for the use of crushed shells as a parking surface. Per the Zoning Ordinance, the Board may approve "alternative surfaces" based on the criteria above. The Board may wish to discuss these criteria with the applicant, and if approved, condition that the applicant submit a written agreement and maintenance plan of the City Right of Way adjacent to the property for approval. Wheel stops are proposed for each parking spot.

Plans indicate a concrete pad beneath the ADA space, aisle, and accessible route. No bicycle parking is proposed. Bicycle parking exists across Bentley Street to the south and across Acushnet Avenue to the east of the project site. The Board may wish to discuss bicycling racks with the applicant and determine if they should be included. Plans show the pocket park will consist of a no-mow lawn area surrounded by ADA compliant permeable pavers and bordered by gardens. Four game tables and concrete radius seat wall benches are proposed within the park. Native perennial gardens will border the park to the east and south along the sidewalk. A rain garden is proposed for the northwest area of the park along the parking area and drive aisle. Trees are proposed at the southeast, west, and north edges of the park. The Board may wish to discuss tree species with the applicant, as no specifics are proposed in the plans. Additional landscaped areas with trees are proposed at the southwest and northwest corners at either end of the parking area. Landscaping & **Site Features** A proposed side entrance to the cultural center is identified along the south-facing side of the building. Plans indicate an accessible walkway with two small, landscaped areas along the side of the building. ADA compliant permeable pavers are also proposed here. Concrete paved aprons are proposed at the vehicle entrance and exit. The concrete apron at the Acushnet Avenue entrance will extend 27 + feet into the driveway from the sidewalk. The concrete apron at the Bentley Street exit will extend 16 + feet into the driveway from the sidewalk. Granite curbing is proposed along edges of concrete entrance/exit aprons. Pre-cast concrete curbing is proposed along edges of shell parking area. Chain link fencing is to be removed and replaced with 3.5-foot-high, black-coated aluminum fencing. Gates are to be installed at the driveway openings. Vehicular circulation within the site is one way from the entrance on Acushnet Avenue. Vehicles will enter at the northeast corner from Acushnet Avenue (a one-way north) and circulate around the park west then south and exit at the southwest corner on to Bentley Street (a two-way road running east-west). The Board may wish to discuss the potential loss of on-street parking due to the construction of the entrance and exist with the Circulation applicant. A stop sign and ground marking are proposed at the exit. The Board may wish to inquire how the applicant intends to paint markings on the crushed shell surface. Plans indicate locking dual swing gates at the vehicle entrance and exit. The site is accessible by public transportation, with several bus stops two blocks from the site. Plans indicate the proposed street opening on Acushnet Avenue will require moving an existing crosswalk. The plans propose moving the crosswalk further north, in front of the Traffic/Transit cultural center. Planning staff defers to the Department of Public Infrastructure regarding relocation of this crosswalk. Plans recommend the relocation of two existing sidewalk benches on Acushnet Avenue to accommodate the proposed crosswalk.

	<ul> <li>Plans indicate the removal of a NO PARKING LOADING ZONE sign and razing of a grass strip for the proposed street opening on Bentley Street.</li> </ul>
	• The traffic circulation plan indicates turning movements for a large school bus. It is within the Board's purview to request a traffic impact assessment be submitted.
	• It is within the Board's purview to request a peer review of the traffic report.
	Until the Cultural Center is operational the gates will stay closed except for events.
Operations	Once normal operations commence the gates will be open during regular hours and during events.
	Plans indicate 90% of the site is to remain pervious surface.
	<ul> <li>Plans indicate roof drainage from the adjacent cultural center building will feed into the park's rain garden via proposed downspout.</li> </ul>
Stormwater	<ul> <li>A trench grate is proposed across the exit apron on Bentley Street, which will feed into a drainage manhole in the garden at the south of the park which will then feed to the proposed drywell in the center of the park.</li> </ul>
	<ul> <li>Planning staff defers to the Department of Public Infrastructure regarding compliance with the City's Stormwater Rules and Regulations.</li> </ul>
Snow Storage	Snow will be stored in the rain/drainage garden.
Waste Receptables	<ul> <li>No waste receptacles are proposed. The Board may wish to discuss the applicant's plan for site maintenance.</li> </ul>
Lighting	<ul> <li>Two 14-watt solar lights with 10-foot lampposts are proposed at the northwest edge of the park, along the driveway. The application indicates hours of operation are sunrise to sunset. The Board may wish to condition that lampposts shall be illuminated no earlier than one hour prior to sunrise and no later than one hour after sunset.</li> </ul>
	An additional streetlight is proposed on Acushnet Avenue east of the perennial gardens.
	Construction entrance to the project site is proposed along Bentley Street.
	A staked haybale dam shall be installed down gradient of all drainage outfalls.
Demolition and	<ul> <li>Catch basins on-site and off-site within 100 feet will be protected with hay bales and silt bags.</li> </ul>
<b>Erosion Control</b>	<ul> <li>Areas to be left bare for over one month prior to finished grading will be mulched or receive temporary stabilization.</li> </ul>
	Slopes will be stabilized and haybale check or filter fabric will be installed.
	Stockpiles of soil shall be surrounded by a sediment barrier.
Master Plan	• The proposal is consistent with the Master Plan's goals to enhance the quality and appeal of New Bedford's streetscapes and promote the cultural assets of New Bedford to transform the city's image for both tourists and residents.

## **Interdepartmental Review Comments**

As required under city ordinance, the case submittal documents were distributed to City Clerk, City Solicitor, Health Department, Inspectional Services, Engineering, Public Infrastructure, Conservation Commission, Fire Department and School Department.

At the time of writing this report, no departmental memos have been received.

## **Site Photos**



Looking southwest from the park across Acushnet Avenue.

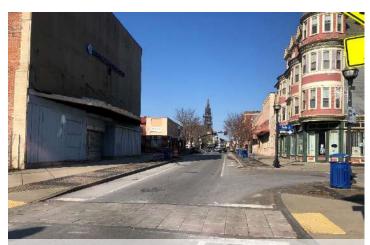








Mixed-use buildings on Acushnet Avenue Looking southeast from project site.



**CVA Cultural Center along Acushnet Avenue Corridor.**Looking north from in front of project site.



Pocket park on corner of Acushnet Avenue & Beetle Street. Looking east from project site.

## **Materials for Consideration**

The engineered plan submission is shown as "Island Park on 'The Ave'" dated 12/10/21, and prepared by River Hawk Environmental of Marshfield, MA. The plans are stamped by Robert S. Rego, P.E. The plan set consists of the following sheets:

■ CS 1.1 COVER SHEET

SP 1.1 EXISTING CONDITIONS & SITE LAYOUT PLAN

SP 1.2 GRADING & DRAINAGE PLAN AND TRAFFIC CIRCULATION PLAN

■ EC 1.3 EROSION CONTROL PLAN

■ D 1.1 DETAILS 1

■ D 1.2 DETAILS 2

The site design schematic submission is shown as "Island Park" dated 11/10/21, and prepared by Studio2Sustain, Inc. of New Bedford, MA. The set consists of the following sheets:

SK 1.1 SITE DESIGN

SK 1.2 DESIGN INSPIRATION

SK 1.3 DESIGN INSPIRATION

SK 1.4 DESIGN INSPIRATION

## **Recommended Conditions**



**Special Permit.** Having reviewed the submitted materials, planning staff offers the following recommendations for conditions to the Planning Board should it act favorably on the requested Special Permit approval for the project:

That the following **specific conditions** be applied to this decision:

1. The number of required parking spaces is to be reduced to eight (8) from thirty-seven (37) for a reduction of twenty-nine (29) spaces.



**Site Plan Approval.** Having reviewed the submitted materials, planning staff offers the following recommendations for conditions to the Planning Board should it act favorably on the requested site plan approval for the project:

That the following **specific conditions** be applied to this decision:

- 2. The applicant shall utilize crush shells for a parking surface as noted in the approved plans and shall submit a written agreement and maintenance plan for the parking area to the Department of City Planning for review prior to the issuance of a certificate of occupancy.
- 3. Lighting shall be illuminated no earlier than one hour prior to sunrise and no later than one hour after sunset.
- 4. The applicant will coordinate with the Department of Public Infrastructure to address all comments in their memos related to this project.

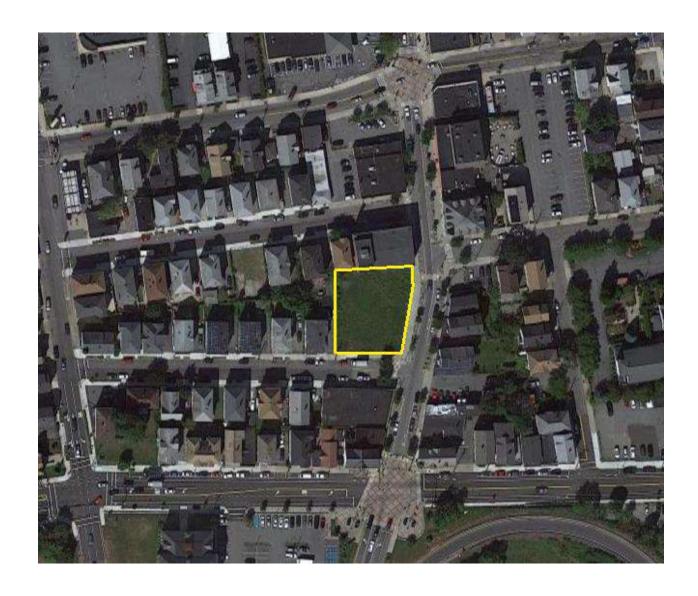
That the following **general conditions** also be applied to both decisions:

- 5. The project shall be completed according to the plans, notes, reports, and specifications submitted for consideration and final approval by the Planning Board.
- 6. The project shall be undertaken in a manner consistent with the Memorandum from the Department of Public Infrastructure (DPI) received in relation to plan and placed on file for Planning Board consideration. The conditions of the DPI memorandum shall be considered to be part of these conditions.
- 7. The applicant shall submit final plan revisions to the Department of City Planning in the following formats: one (1) -11" x 17" Plan Set and one (1) CD or USB with Plan Set in PDF format and shall ensure that these same plans are properly submitted to the Department of Inspectional Services.
- 8. The applicant shall ensure that a copy of the Notice of Decision, bearing the certification of the New Bedford City Clerk signifying no appeal has been made against the project's approval, be recorded at the Registry of Deeds and that a copy of the recorded decision is provided for the Planning Department Case file folder.
- 9. The applicant shall present any proposed modification from the approved plans for consideration to the Director of City Planning for determination as to whether the modified plan must return before this Board for further review.
- 10. The rights authorized by the granted approval must be exercised by issuance of a Building Permit by the Department of Inspectional Services and acted upon within one year from the date the decision was granted, or they will lapse.
- 11. The developer and site contractor must schedule a pre-construction meeting with the Department of Public Infrastructure prior to the start of construction.

Materials Provided by the Applicant are available at: <a href="https://www.newbedford-ma.gov/planning/planning-board-agenda-info-2022/">https://www.newbedford-ma.gov/planning/planning-board-agenda-info-2022/</a>

Staff Report prepared by: Rachel Mulroy Staff Planner

Reviewed by: Jennifer Carloni, City Planner



## 1131 - 1145 Acushnet Avenue Map: 92 Lot: 106

NOTE: Property line is approximate; for discussion purposes, only. Aerial image is oriented north.



## STORMWATER MANAGEMENT & EROSION CONTROL PLAN

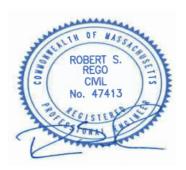
Island Park on the "Ave" 1131-1145 Acushnet Avenue New Bedford, MA 02746

## **PREPARED FOR:**

Cape Verdean Association in New Bedford, Inc. 59 Sycamore Street New Bedford, MA 02746

## **PREPARED BY:**

River Hawk Environmental, LLC 2183 Ocean Street Marshfield, MA 02050



January 6, 2022

## **Table of Contents**

1.0	INTRO	DDUCTION	1
	1.1	Existing Conditions	1
		1.1.1 Topography	1
		1.1.2 Local Geology:	
		1.1.3 Wetland Resource Areas:	
		1.1.4 Existing Stormwater Management:	
	1.2	Proposed Development	
2.0	COM	PLIANCE WITH MASSDEP STORMWATER MANAGEMENT STANDARDS	3
	2.1	Standard 1 - No Untreated Discharges	3
	2.2	Standard 2 - Peak Rate Attenuation	3
	2.3	Standard 3 - Stormwater Recharge	4
	2.4	Standard 4 - Water Quality	4
	2.5	Standard 5 - Land And Uses With Higher Pollution Loads	4
	2.6	Standard 6 - Critical Areas	4
	2.7	Standard 7 - Redevelopment Project	5
	2.8	Standard 8 - Construction Period Controls	
	2.9	Standard 9 - Long Term Operation and Maintenance Program	5
	2.10	Standard 10 - Prohibition of Illicit Discharges	

#### 1.0 INTRODUCTION

River Hawk Environmental, LLC (RHE) has prepared this Stormwater Management and Erosion Control (SWMEC) Plan to describe stormwater and erosion control measures to be implemented prior to, during and after construction of the proposed park located at 1131-1145 Acushnet Avenue, New Bedford, MA (Subject Property). This SWMEC Plan has been prepared to meet the requirements of the MassDEP Stormwater Management Standards and the City of New Bedford Stormwater By-Law.

### 1.1 Existing Conditions

The Subject Property is a 0.3295 +/- acre parcel located west of Acushnet Avenue and north of Bentley Street in an area of New Bedford, MA used for commercial and residential purposes. The Property is covered with a gravely soil overgrown with vegetation. The Subject Property is currently unimproved.

#### 1.1.1 Topography:

Topography at the Subject Property is relatively flat. The property slopes from a high point on the northwest corner down at a slope of 2.5% to a low point on the southeast side of the Subject Property.

#### 1.1.2 Local Geology:

Based on a review of the Bristol County Soil Survey published by the National Soil Conservation Service (NSCS), the soil at the Subject Property is primarily "Urban Land". Urban land is generally considered excavated and filled land and is generally classified as Hydrologic Soil Group C. A copy of NRCS Soil Report is included in Appendix A.

#### 1.1.3 Wetland Resource Areas:

Based upon a review of the MassDEP Wetland Layer obtained from MassGIS and field reconnaissance, no wetlands or other surface water bodies are present on, or within 100 feet of, the Subject Property.

#### 1.1.4 Existing Stormwater Management:

Currently stormwater sheet flows off the property to the adjacent roadway network to the southeast. Stormwater from areas adjacent to the site (i.e., within Acushnet Avenue and Bentley Street) is collected in a series of catch basins and manholes (i.e. the City Drainage system).

#### 1.2 Proposed Development

The proposed project includes the redevelopment of the Subject Property with a park. The park will include a central green with a walking path and benches along the sides. Parking will be

provided along the westerly property line. The following Low Impact Development (LID) features have been proposed: the use of permeable pavers for all of the walkways; the use of crushed sea shells for the parking lot surface; the use of a "rain garden" to manage stormwater; and the use of a subsurface infiltration area to infiltrate stormwater where it is generated.

Stormwater Runoff from the proposed driveway and parking lot will be collected in a trench drain and passed through a deep-sump catchbasin to a subsurface infiltration gallery (dry-well). Runoff from a the existing building on the adjacent property will be discharged to a bio-retention area ("Rain Garden") on the central portion of the site.

Runoff from the permeable paver walkway and the grassed areas on the eastern portion of the property will be allowed to infiltrate where its generated or sheet flow off-site towards Acushnet Avenue. This is consistent with the current drainage pattern for that area of the Property.

#### 2.0 COMPLIANCE WITH MASSDEP STORMWATER MANAGEMENT STANDARDS

This section of the report provides the requisite documentation that each of the Stormwater Management Standards are being met in accordance with Volume 3 of the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Manual. A copy of the MassDEP Stormwater Management Standards Checklist is included as Appendix B.

### 2.1 Standard 1 - No Untreated Discharges:

Standard 1 requires that there be no untreated storm discharges and that there be no erosion to wetlands. As shown on the site plans, there will be no direct discharges to wetlands from the Subject Property and none of the outfalls will be subject to erosion; therefore, Standard 1 will be met.

#### 2.2 Standard 2 - Peak Rate Attenuation:

Standard 2 requires stormwater management systems to be designed so that the post-development peak discharge rates do not exceed pre-development peak discharge rates for the 2- or 10-year, 24-hour storm events . Standard 2 also requires that the impact of peak discharges from the 100-year, 24-hour storm be evaluated.

The results of the storm water modeling are presented in the following Table:

## **Stormwater Summary**

	PRE-DEVELOPMENT	POST-DEVELOPMENT
2-Year Design Storm (3.38 inches, Type III storm, 24-hour)		
Summary Point 1 (cfs)	1.13	0.79
10-Year Design Storm (5.01 inc	hes, Type III storm, 24-hour)	
Summary Point 1 (cfs)	2.09	1.60
10-Year Design Storm (7.59 inches, Type III storm, 24-hour)		
Summary Point 1 (cfs)	3.74	5.16

As documented by the computer modeling (i.e., HydroCAD calculations), there will be no increase in the rate of flow for the 2- or 10-year storm events (Appendix C). In addition, there will be no increased down stream flooding during the 100-year design storm.

## 2.3 Standard 3 - Stormwater Recharge:

The loss of annual recharge to groundwater will be eliminated at the Subject Property through the use of infiltration measures, low impact development techniques, stormwater best management practices, and good operation and maintenance.

Standard 3 requires at a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume ( $R_e$ ) as determined in accordance with the Massachusetts Stormwater Handbook (MSH). The  $R_e$  associated with the redevelopment of the Subject Property was determined using the method prescribed in the MSH.

The soils at the Subject Property are classified as Hydrologic Soil Group C. The recharge volume for Hydrologic Soil Group C is 0.25 inches x the total impervious area. The recharge volume ( $R_e$ ) is as follows: 6,578 s.f. x 0.25 inches = 137 cubic feet. The proposed stormwater retention areas have the capacity to store approximately 963 c.f. Therefore, there is more than enough capacity to store and infiltrate the required recharge volume. Therefore, Standard 3 will be met.

## 2.4 Standard 4 - Water Quality:

Standard 4 requires removal of 80% of total suspended solids (TSS) from the stormwater runoff. Under post-development conditions, all of the runoff from the driveway and parking areas will be collected and treated. The runoff will be passed through a deep-sump catch basins and discharged to an infiltration "dry-well".

ВМР	TSS Removal Rate	Initial Pollution Load	Amount Removed	Remaining Load
Deep Sump Catch Basin	0.25	1.00	0.25	0.75
Infiltration Basin	0.80	0.75	0.60	0.15
Total Removal			85%	

The proposed stormwater BMPs will result in the removal of a minimum of 85% of the TSS from stormwater runoff generated at the Site. Standard 4 will, therefore, be met.

#### 2.5 Standard 5 - Land And Uses With Higher Pollution Loads:

The proposed development is not considered a land use with a higher pollution load; therefore, Standard 5 will be met.

#### 2.6 Standard 6 - Critical Areas:

The Subject Property does not discharge stormwater to Critical Areas; therefore, Standard 6 will be met.

## 2.7 Standard 7 - Redevelopment Project:

Qualified redevelopment projects are allowed to only meet standards 1 through 6 to the "maximum extent practicable". The subject property was formerly developed with a building that covered 100% of the Site. The proposed development would qualify as a redevelopment project since it will result in a net decrease in impervious area over historical conditions. However, the historic building has been razed and the site is currently vacant. Although it could be argued that it is not required, the Project has been designed to meet all of the Stormwater Management Standards.

#### 2.8 Standard 8 - Construction Period Controls:

Standard 8 requires the preparation and implementation of an erosion and sediment control program for the site construction phase. Appendix D includes an Erosion and Sediment Control Plan for the Project which is in full compliance with Standard 8.

## 2.9 Standard 9 - Long Term Operation and Maintenance Program:

Standard 9 requires the preparation of an ongoing program to maintain the stormwater quality and quantity controls in optimal operating condition. A Long Term Operation and Maintenance Program which is in full compliance with Standard 9 is outlined in Appendix E.

### 2.10 Standard 10 - Prohibition of Illicit Discharges:

Standard 10 prohibits illicit discharges to Stormwater Management Systems. A final illicit discharge statement shall be provided when construction is complete.



**NRCS Soil Resource Report** 



**NRCS** 

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Bristol County, Massachusetts, Southern Part



## **Preface**

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# **Contents**

Preface	2
How Soil Surveys Are Made	
Soil Map	
Soil Map	9
Legend	10
Map Unit Legend	11
Map Unit Descriptions	11
Bristol County, Massachusetts, Southern Part	13
602—Urban land	13
References	14

# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

#### Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



#### MAP LEGEND

### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

-

Soil Map Unit Lines

Soil Map Unit Points

#### **Special Point Features**

(0)

Blowout

 $\boxtimes$ 

Borrow Pit

Ж

Clay Spot

 $\Diamond$ 

Closed Depression

Š

.....

۰

Gravelly Spot

0

Landfill Lava Flow

٨

Marsh or swamp

@

Mine or Quarry

0

Miscellaneous Water

0

Perennial Water
Rock Outcrop

.

Saline Spot

. .

Sandy Spot

...

Severely Eroded Spot

Λ

Sinkhole

Ø

Sodic Spot

Slide or Slip

## =

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### Water Features

\_

Streams and Canals

#### Transportation

Transp

Rails

~

Interstate Highways

\_\_

US Routes



Major Roads



Local Roads

## Background

900

Aerial Photography

#### 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:

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 14, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jul 3, 2017

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
602	Urban land	6.5	100.0%
Totals for Area of Interest		6.5	100.0%

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

#### Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## **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 Hydric soil rating: Unranked

## References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

#### Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_052290.pdf

**MassDEP Stormwater Checklist** 



# **Checklist for Stormwater Report**

## A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.<sup>1</sup> This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8<sup>2</sup>
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

<sup>&</sup>lt;sup>1</sup> The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

<sup>&</sup>lt;sup>2</sup> For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the Issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



## Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

# **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 1/6 2622

## Checklist

	<b>ject Type:</b> Is the application for new development, redevelopment, or a mix of new and evelopment?
	New development
Ø	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:

Ø	No disturbance to any Wetland Resource Areas
	Site Design Practices (e.g. clustered development, reduced frontage setbacks)
X	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
Ø	Bioretention Cells (includes Rain Gardens)
	Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
	Treebox Filter
	Water Quality Swale
	Grass Channel
	Green Roof
	Other (describe):
Sta	ndard 1: No New Untreated Discharges
X	No new untreated discharges
Z.	Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
<b>X</b>	Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



# **Checklist for Stormwater Report**

G	necklist (continued)
Sta	andard 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.
Ø	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.
Sta	andard 3: Recharge
	Soil Analysis provided.
K	Required Recharge Volume calculation provided.
	Required Recharge volume reduced through use of the LID site Design Credits.
KĮ	Sizing the infiltration, BMPs is based on the following method: Check the method used.
	Static
Ø	Runoff from all impervious areas at the site discharging to the infiltration BMP.
	Runoff from all impervious areas at the site is <i>not</i> 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.
図	Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
	Recharge BMPs have been sized to infiltrate the Required Recharge Volume <i>only</i> 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.
M	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.

<sup>180%</sup> TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



# **Checklist for Stormwater Report**

Checklist (continued)		
Sta	andard 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.	
X,	Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.	
Sta	indard 4: Water Quality	
The •	E 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.	
X	Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.	



## Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Program

## **Checklist for Stormwater Report**

CI	necklist (continued)
Sta	indard 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 propriety 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.
Sta	ndard 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 <i>prio</i> to the discharge of stormwater to the post-construction stormwater BMPs.
Ø.	The NPDES Multi-Sector General Permit does <i>not</i> 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.
Sta	ndard 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.



#### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands Program

## **Checklist for Stormwater Report**

### Checklist (continued)

ext	ent The	ard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum practicable project is subject to the Stormwater Management Standards only to the maximum Extent acticable 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
	图	Redevelopment Project
		Redevelopment portion of mix of new and redevelopment.
	exp The imp in \ the and	tain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an planation 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 prove existing conditions is provided in the Stormwater Report. The redevelopment checklist found follows 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment is structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) proves 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.



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands Program

## **Checklist for Stormwater Report**

C	hecklist (continued)
	andard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control ontinued)
	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 <i>not</i> been included in the Stormwater Report but will be submitted <i>before</i> land disturbance begins.
X	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.
Sta	andard 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 <i>not</i> 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.
Sta	ndard 10: Prohlbition of Illicit Discharges
Ø	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
	An Illicit Discharge Compliance Statement is attached;
X	NO Illicit Discharge Compliance Statement is attached but will be submitted <i>prior to</i> the discharge of any stormwater to post-construction BMPs.

**Drainage Calculations** 

**NOAA Precipitation Data** 



#### NOAA Atlas 14, Volume 10, Version 3 Location name: New Bedford, Massachusetts, USA\*

Latitude: 41.657°, Longitude: -70.9273° Elevation: 29.04 ft\*\*



\* source: ESRI Maps
\*\* source: USGS

#### POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

#### PF tabular

Duration	Average recurrence interval (years)											
Duration	1	2	5	10	25	50	100	200	500	1000		
5-min	<b>0.293</b> (0.240-0.358)	<b>0.364</b> (0.297-0.445)	<b>0.480</b> (0.390-0.589)	<b>0.576</b> (0.465-0.710)	<b>0.709</b> (0.553-0.915)	<b>0.807</b> (0.617-1.06)	<b>0.914</b> (0.678-1.25)	<b>1.05</b> (0.718-1.44)	<b>1.25</b> (0.823-1.77)	<b>1.43</b> (0.916-2.05		
10-min	<b>0.415</b> (0.339-0.507)	<b>0.516</b> (0.421-0.631)	<b>0.681</b> (0.554-0.836)	<b>0.817</b> (0.660-1.01)	<b>1.00</b> (0.784-1.30)	<b>1.14</b> (0.873-1.51)	<b>1.30</b> (0.960-1.77)	<b>1.48</b> (1.02-2.04)	<b>1.77</b> (1.17-2.51)	<b>2.03</b> (1.30-2.91)		
15-min	<b>0.489</b> (0.399-0.597)	<b>0.607</b> (0.495-0.742)	<b>0.800</b> (0.650-0.981)	<b>0.961</b> (0.776-1.18)	<b>1.18</b> (0.922-1.53)	<b>1.35</b> (1.03-1.77)	<b>1.52</b> (1.13-2.09)	<b>1.74</b> (1.20-2.39)	<b>2.09</b> (1.37-2.95)	<b>2.38</b> (1.53-3.42)		
30-min	<b>0.699</b> (0.571-0.853)	<b>0.868</b> (0.708-1.06)	<b>1.15</b> (0.931-1.41)	<b>1.38</b> (1.11-1.70)	<b>1.69</b> (1.32-2.18)	<b>1.93</b> (1.47-2.54)	<b>2.18</b> (1.62-2.99)	<b>2.50</b> (1.72-3.43)	<b>2.98</b> (1.96-4.22)	<b>3.41</b> (2.18-4.90)		
60-min	<b>0.909</b> (0.742-1.11)	<b>1.13</b> (0.922-1.38)	<b>1.49</b> (1.21-1.83)	<b>1.79</b> (1.45-2.21)	<b>2.20</b> (1.72-2.84)	<b>2.50</b> (1.91-3.30)	<b>2.84</b> (2.10-3.89)	<b>3.25</b> (2.23-4.46)	<b>3.88</b> (2.55-5.49)	<b>4.43</b> (2.84-6.37)		
2-hr	<b>1.24</b> (1.02-1.51)	<b>1.54</b> (1.27-1.88)	<b>2.04</b> (1.67-2.48)	<b>2.44</b> (1.99-2.99)	<b>3.01</b> (2.37-3.85)	<b>3.42</b> (2.64-4.47)	<b>3.88</b> (2.90-5.26)	<b>4.43</b> (3.08-6.02)	<b>5.30</b> (3.53-7.40)	<b>6.05</b> (3.93-8.58)		
3-hr	<b>1.47</b> (1.21-1.78)	<b>1.82</b> (1.50-2.20)	<b>2.39</b> (1.96-2.90)	<b>2.87</b> (2.34-3.49)	<b>3.52</b> (2.78-4.47)	<b>4.00</b> (3.09-5.19)	<b>4.52</b> (3.40-6.09)	<b>5.17</b> (3.62-6.97)	<b>6.16</b> (4.13-8.55)	<b>7.02</b> (4.59-9.90)		
6-hr	<b>1.91</b> (1.59-2.29)	<b>2.33</b> (1.93-2.80)	<b>3.02</b> (2.50-3.64)	<b>3.60</b> (2.95-4.35)	<b>4.38</b> (3.49-5.53)	<b>4.97</b> (3.87-6.38)	<b>5.60</b> (4.25-7.45)	<b>6.37</b> (4.51-8.49)	<b>7.55</b> (5.12-10.3)	<b>8.56</b> (5.67-11.9)		
12-hr	<b>2.39</b> (1.99-2.85)	<b>2.87</b> (2.39-3.42)	<b>3.65</b> (3.04-4.37)	<b>4.30</b> (3.56-5.17)	<b>5.20</b> (4.16-6.48)	<b>5.86</b> (4.60-7.44)	<b>6.58</b> (5.02-8.62)	<b>7.43</b> (5.32-9.79)	<b>8.71</b> (5.99-11.8)	<b>9.79</b> (6.58-13.4)		
24-hr	<b>2.84</b> (2.39-3.36)	<b>3.38</b> (2.84-4.01)	<b>4.27</b> (3.58-5.08)	<b>5.01</b> (4.17-5.98)	<b>6.02</b> (4.86-7.44)	<b>6.78</b> (5.36-8.51)	<b>7.59</b> (5.83-9.80)	<b>8.52</b> (6.18-11.1)	<b>9.87</b> (6.89-13.2)	<b>11.0</b> (7.49-14.9)		
2-day	<b>3.25</b> (2.76-3.83)	<b>3.88</b> (3.28-4.57)	<b>4.89</b> (4.13-5.78)	<b>5.74</b> (4.81-6.81)	<b>6.90</b> (5.61-8.43)	<b>7.78</b> (6.19-9.64)	<b>8.70</b> (6.72-11.1)	<b>9.71</b> (7.13-12.5)	<b>11.2</b> (7.89-14.7)	<b>12.3</b> (8.51-16.5)		
3-day	<b>3.57</b> (3.04-4.19)	<b>4.22</b> (3.58-4.95)	<b>5.28</b> (4.47-6.21)	<b>6.16</b> (5.19-7.28)	<b>7.37</b> (6.01-8.96)	<b>8.29</b> (6.63-10.2)	<b>9.24</b> (7.18-11.7)	<b>10.3</b> (7.61-13.2)	<b>11.8</b> (8.38-15.4)	<b>12.9</b> (9.01-17.2)		
4-day	<b>3.85</b> (3.28-4.50)	<b>4.51</b> (3.84-5.28)	<b>5.59</b> (4.75-6.56)	<b>6.49</b> (5.48-7.64)	<b>7.73</b> (6.32-9.35)	<b>8.66</b> (6.95-10.6)	<b>9.63</b> (7.50-12.1)	<b>10.7</b> (7.94-13.6)	<b>12.2</b> (8.71-15.8)	<b>13.3</b> (9.33-17.6)		
7-day	<b>4.57</b> (3.91-5.32)	<b>5.26</b> (4.50-6.12)	<b>6.39</b> (5.45-7.45)	<b>7.33</b> (6.22-8.58)	<b>8.62</b> (7.09-10.3)	<b>9.60</b> (7.74-11.6)	<b>10.6</b> (8.30-13.1)	<b>11.6</b> (8.75-14.7)	<b>13.0</b> (9.46-16.8)	<b>14.1</b> (10.0-18.4)		
10-day	<b>5.24</b> (4.50-6.08)	<b>5.95</b> (5.11-6.91)	<b>7.12</b> (6.10-8.28)	<b>8.09</b> (6.89-9.44)	<b>9.43</b> (7.78-11.2)	<b>10.5</b> (8.46-12.6)	<b>11.5</b> (9.01-14.1)	<b>12.5</b> (9.46-15.7)	<b>13.9</b> (10.1-17.7)	<b>14.9</b> (10.6-19.3)		
20-day	<b>7.26</b> (6.28-8.36)	<b>8.04</b> (6.95-9.26)	<b>9.31</b> (8.03-10.8)	<b>10.4</b> (8.90-12.0)	<b>11.8</b> (9.84-13.9)	<b>13.0</b> (10.6-15.4)	<b>14.1</b> (11.1-17.0)	<b>15.1</b> (11.6-18.7)	<b>16.4</b> (12.1-20.7)	<b>17.3</b> (12.5-22.1)		
30-day	<b>8.95</b> (7.77-10.3)	<b>9.79</b> (8.49-11.2)	<b>11.2</b> (9.66-12.8)	<b>12.3</b> (10.6-14.2)	<b>13.9</b> (11.6-16.2)	<b>15.1</b> (12.4-17.8)	<b>16.3</b> (12.9-19.5)	<b>17.3</b> (13.4-21.3)	<b>18.6</b> (13.9-23.3)	<b>19.5</b> (14.2-24.7)		
45-day	11.0 (9.64-12.6)	<b>12.0</b> (10.4-13.7)	<b>13.5</b> (11.7-15.5)	<b>14.8</b> (12.8-16.9)	<b>16.5</b> (13.8-19.2)	<b>17.9</b> (14.7-21.0)	<b>19.2</b> (15.3-22.7)	<b>20.3</b> (15.8-24.7)	<b>21.6</b> (16.3-26.8)	<b>22.4</b> (16.5-28.2)		
60-day	<b>12.8</b> (11.2-14.6)	<b>13.8</b> (12.1-15.8)	<b>15.5</b> (13.5-17.7)	<b>16.8</b> (14.6-19.3)	<b>18.7</b> (15.8-21.7)	<b>20.2</b> (16.7-23.6)	21.6	<b>22.8</b> (17.9-27.7)	<b>24.2</b> (18.3-29.9)	<b>25.0</b> (18.6-31.3)		

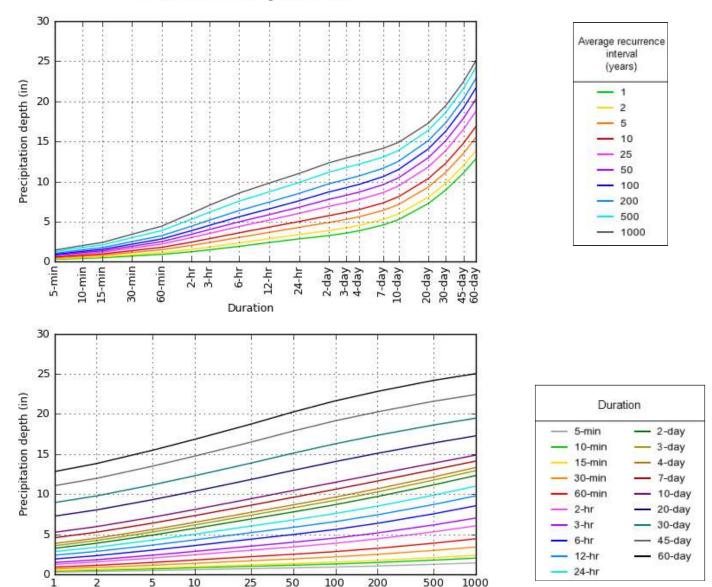
<sup>&</sup>lt;sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

Back to Top

#### PF graphical

#### PDS-based depth-duration-frequency (DDF) curves Latitude: 41.6570°, Longitude: -70.9273°



NOAA Atlas 14, Volume 10, Version 3

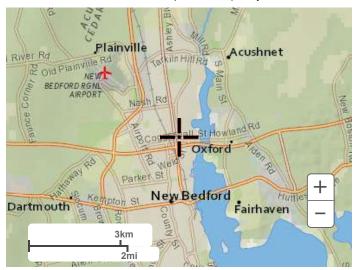
Created (GMT): Wed Jan 5 22:40:14 2022

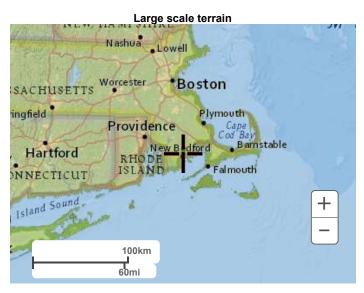
Back to Top

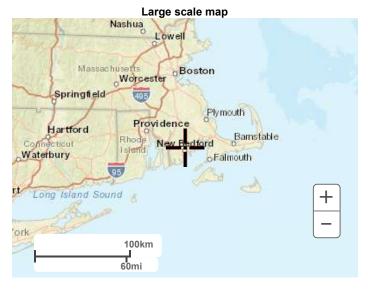
#### Maps & aerials

Small scale terrain

Average recurrence interval (years)







Large scale aerial



Back to Top

US Department of Commerce

National Oceanic and Atmospheric Administration

National Weather Service

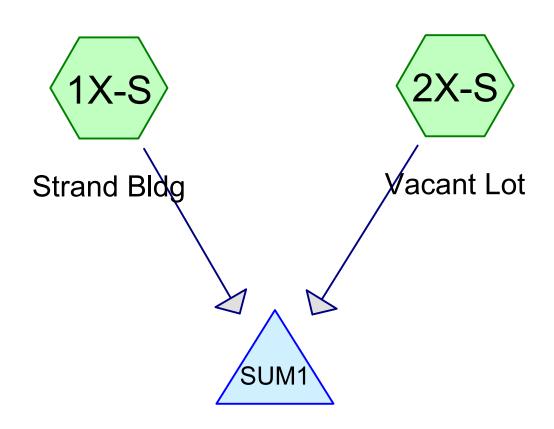
National Water Center

1325 East West Highway
Silver Spring, MD 20910

Questions?: HDSC.Questions@noaa.gov

**Disclaimer** 

**Pre- Development** 













Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022 Page 2

## **Project Notes**

Rainfall events imported from "109 Hilman St - Existing Conditions.hcp"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 3

## **Area Listing (all nodes)**

Area	CN	Description
(acres)		(subcatchment-numbers)
0.330	71	Meadow, non-grazed, HSG C (2X-S)
0.118	98	Roofs, HSG C (1X-S)
0.448	78	TOTAL AREA

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 4

## Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
0.000	HSG B	
0.448	HSG C	1X-S, 2X-S
0.000	HSG D	
0.000	Other	
0.448		TOTAL AREA

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 5

## **Ground Covers (all nodes)**

HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
 0.000	0.000	0.330	0.000	0.000	0.330	Meadow, non-grazed	2X-S
0.000	0.000	0.118	0.000	0.000	0.118	Roofs	1X-S
0.000	0.000	0.448	0.000	0.000	0.448	TOTAL AREA	

Type II 24-hr 2-YR (24h) Rainfall=3.38"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 6

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1X-S: Strand Bldg Runoff Area=5,155 sf 100.00% Impervious Runoff Depth=3.15"

Tc=6.0 min CN=98 Runoff=0.56 cfs 0.031 af

Subcatchment 2X-S: Vacant Lot Runoff Area=14,378 sf 0.00% Impervious Runoff Depth=0.99"

Flow Length=144' Slope=0.0200 '/' Tc=6.0 min CN=71 Runoff=0.57 cfs 0.027 af

Pond SUM1: Summary Pt. - Off-Site Inflow=1.13 cfs 0.058 af Primary=1.13 cfs 0.058 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.058 af Average Runoff Depth = 1.56" 73.61% Pervious = 0.330 ac 26.39% Impervious = 0.118 ac

Printed 1/6/2022

Page 7

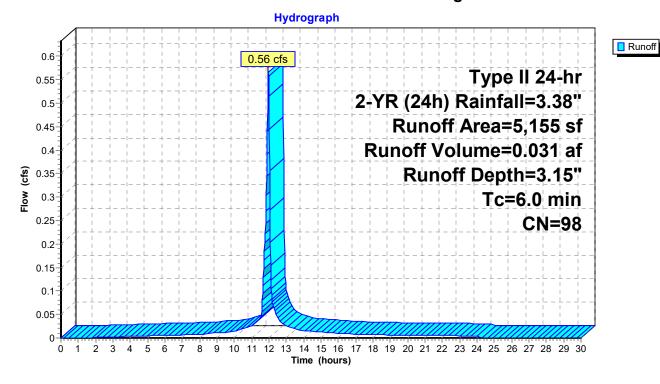
## Summary for Subcatchment 1X-S: Strand Bldg

Runoff = 0.56 cfs @ 11.97 hrs, Volume= 0.031 af, Depth= 3.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 2-YR (24h) Rainfall=3.38"

	rea (sf)	CN [	Description					
	5,155	98 F	Roofs, HSG	G C				
	5,155	•	100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry, Minimum			

#### Subcatchment 1X-S: Strand Bldg



Printed 1/6/2022

Page 8

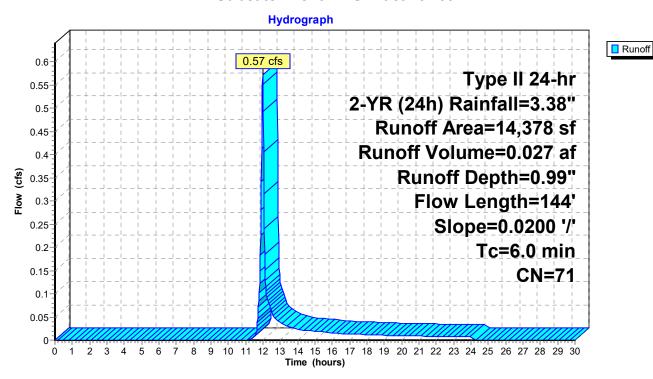
### **Summary for Subcatchment 2X-S: Vacant Lot**

Runoff = 0.57 cfs @ 11.98 hrs, Volume= 0.027 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 2-YR (24h) Rainfall=3.38"

_	Α	rea (sf)	CN D	escription						
	14,378 71 Meadow, non-grazed, HSG C									
		14,378	1	00.00% Pe	ervious Are	a				
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
_	0.7	50	0.0200	1.21	, ,	Sheet Flow,				
	1.6	94	0.0200	0.99		Smooth surfaces n= 0.011 P2= 3.27" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps				
	3.7					Direct Entry, Min. Tc				
_	6.0	144	Total							

#### Subcatchment 2X-S: Vacant Lot



Printed 1/6/2022

Page 9

## Summary for Pond SUM1: Summary Pt. - Off-Site

[40] Hint: Not Described (Outflow=Inflow)

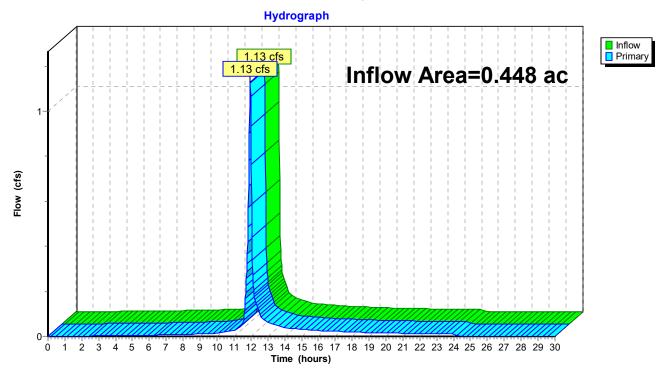
Inflow Area = 0.448 ac, 26.39% Impervious, Inflow Depth = 1.56" for 2-YR (24h) event

Inflow = 1.13 cfs @ 11.97 hrs, Volume= 0.058 af

Primary = 1.13 cfs @ 11.97 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

#### Pond SUM1: Summary Pt. - Off-Site



Type II 24-hr 10-YR (24h) Rainfall=5.01"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 10

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1X-S: Strand Bldg Runoff Area=5,155 sf 100.00% Impervious Runoff Depth=4.77"

Tc=6.0 min CN=98 Runoff=0.84 cfs 0.047 af

Subcatchment 2X-S: Vacant Lot Runoff Area=14,378 sf 0.00% Impervious Runoff Depth=2.12"

Flow Length=144' Slope=0.0200 '/' Tc=6.0 min CN=71 Runoff=1.25 cfs 0.058 af

Pond SUM1: Summary Pt. - Off-Site Inflow=2.09 cfs 0.105 af Primary=2.09 cfs 0.105 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.105 af Average Runoff Depth = 2.82" 73.61% Pervious = 0.330 ac 26.39% Impervious = 0.118 ac

Printed 1/6/2022

Page 11

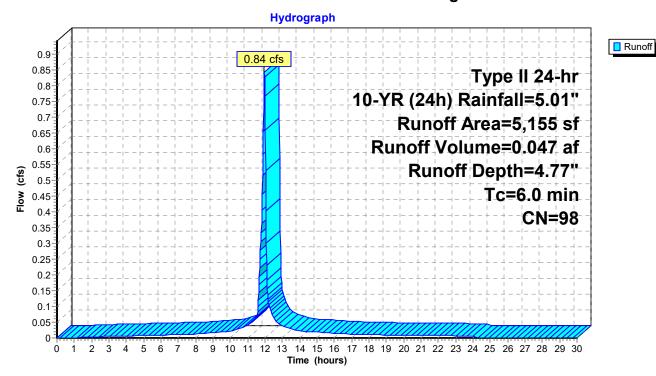
## Summary for Subcatchment 1X-S: Strand Bldg

Runoff = 0.84 cfs @ 11.97 hrs, Volume= 0.047 af, Depth= 4.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 10-YR (24h) Rainfall=5.01"

	rea (sf)	CN [	Description					
	5,155	98 F	Roofs, HSG	G C				
	5,155	•	100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry, Minimum			

#### Subcatchment 1X-S: Strand Bldg



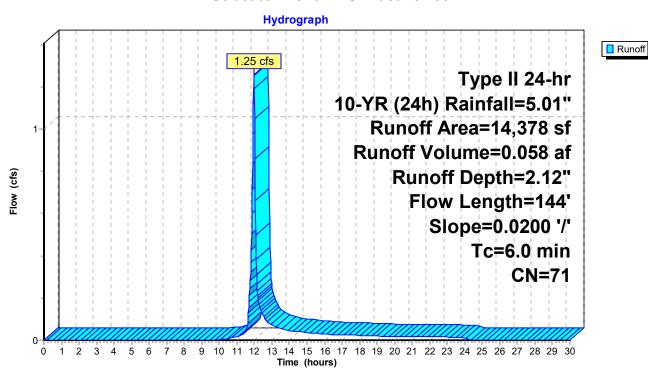
### **Summary for Subcatchment 2X-S: Vacant Lot**

Runoff = 1.25 cfs @ 11.98 hrs, Volume= 0.058 af, Depth= 2.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 10-YR (24h) Rainfall=5.01"

_	Α	rea (sf)	CN D	escription						
	14,378 71 Meadow, non-grazed, HSG C									
		14,378	1	00.00% Pe	ervious Are	a				
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
_	0.7	50	0.0200	1.21	, ,	Sheet Flow,				
	1.6	94	0.0200	0.99		Smooth surfaces n= 0.011 P2= 3.27" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps				
	3.7					Direct Entry, Min. Tc				
_	6.0	144	Total							

#### Subcatchment 2X-S: Vacant Lot



Prepared by {enter your company name here}

Printed 1/6/2022

Page 13

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

## Summary for Pond SUM1: Summary Pt. - Off-Site

[40] Hint: Not Described (Outflow=Inflow)

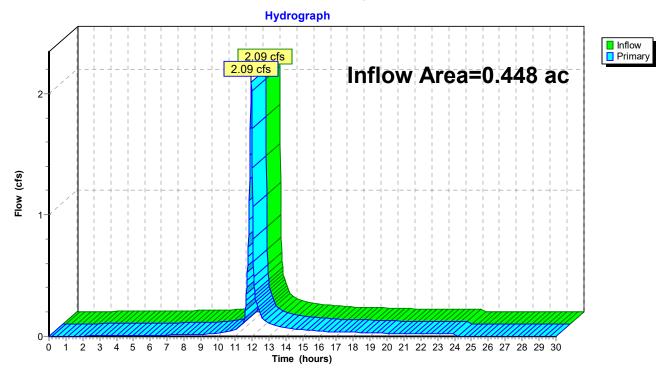
Inflow Area = 0.448 ac, 26.39% Impervious, Inflow Depth = 2.82" for 10-YR (24h) event

Inflow = 2.09 cfs @ 11.97 hrs, Volume= 0.105 af

Primary = 2.09 cfs @ 11.97 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

#### Pond SUM1: Summary Pt. - Off-Site



Type II 24-hr 100-YR (24h) Rainfall=7.59"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 14

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1X-S: Strand Bldg Runoff Area=5,155 sf 100.00% Impervious Runoff Depth=7.35"

Tc=6.0 min CN=98 Runoff=1.28 cfs 0.072 af

Subcatchment 2X-S: Vacant Lot Runoff Area=14,378 sf 0.00% Impervious Runoff Depth=4.23"

Flow Length=144' Slope=0.0200 '/' Tc=6.0 min CN=71 Runoff=2.47 cfs 0.116 af

Pond SUM1: Summary Pt. - Off-Site Inflow=3.74 cfs 0.189 af Primary=3.74 cfs 0.189 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.189 af Average Runoff Depth = 5.05" 73.61% Pervious = 0.330 ac 26.39% Impervious = 0.118 ac

Printed 1/6/2022

Page 15

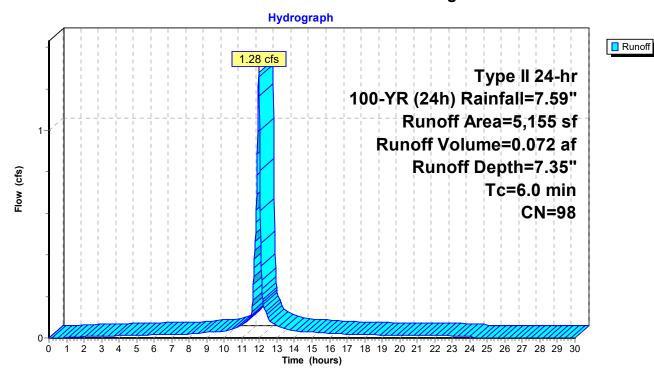
## Summary for Subcatchment 1X-S: Strand Bldg

Runoff = 1.28 cfs @ 11.97 hrs, Volume= 0.072 af, Depth= 7.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 100-YR (24h) Rainfall=7.59"

A	rea (sf)	CN [	Description						
	5,155	98 F	98 Roofs, HSG C						
	5,155	,	100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry, Minimum				

#### Subcatchment 1X-S: Strand Bldg



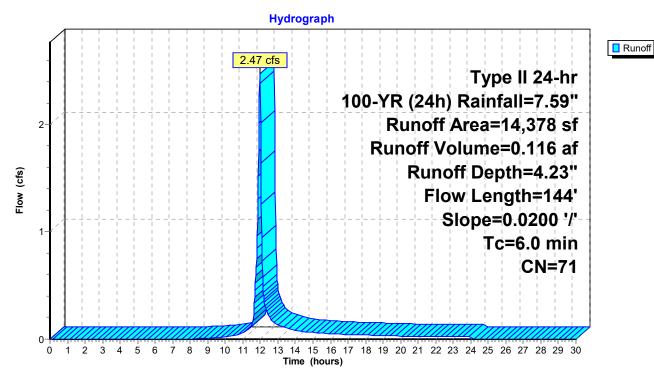
### **Summary for Subcatchment 2X-S: Vacant Lot**

Runoff = 2.47 cfs @ 11.97 hrs, Volume= 0.116 af, Depth= 4.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 100-YR (24h) Rainfall=7.59"

_	Α	rea (sf)	CN D	escription		
	14,378 71 Meadow, non-grazed, HSG C					
	14,378 100.00% Pervious Area				ervious Are	a
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
_	0.7	50	0.0200	1.21	, ,	Sheet Flow,
	1.6	94	0.0200	0.99		Smooth surfaces n= 0.011 P2= 3.27" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
	3.7					Direct Entry, Min. Tc
_	6.0	144	Total			

#### **Subcatchment 2X-S: Vacant Lot**



Printed 1/6/2022

Page 17

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.448 ac, 26.39% Impervious, Inflow Depth = 5.05" for 100-YR (24h) event

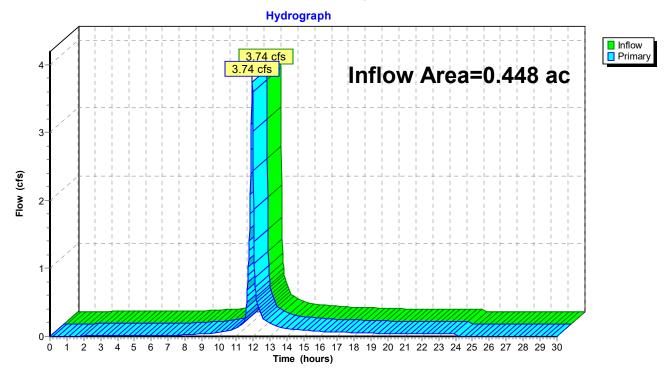
Inflow = 3.74 cfs @ 11.97 hrs, Volume= 0.189 af

Primary = 3.74 cfs @ 11.97 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

#### Pond SUM1: Summary Pt. - Off-Site

Summary for Pond SUM1: Summary Pt. - Off-Site



Type II 24-hr Custom Rainfall=3.38"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 18

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1X-S: Strand Bldg Runoff Area=5,155 sf 100.00% Impervious Runoff Depth=3.15"

Tc=6.0 min CN=98 Runoff=0.56 cfs 0.031 af

Subcatchment 2X-S: Vacant Lot Runoff Area=14,378 sf 0.00% Impervious Runoff Depth=0.99"

Flow Length=144' Slope=0.0200'/' Tc=6.0 min CN=71 Runoff=0.57 cfs 0.027 af

Pond SUM1: Summary Pt. - Off-Site Inflow=1.13 cfs 0.058 af Primary=1.13 cfs 0.058 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.058 af Average Runoff Depth = 1.56" 73.61% Pervious = 0.330 ac 26.39% Impervious = 0.118 ac

Printed 1/6/2022

Page 19

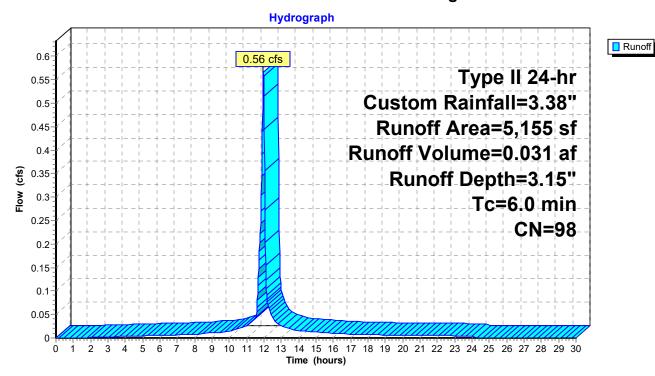
## Summary for Subcatchment 1X-S: Strand Bldg

Runoff = 0.56 cfs @ 11.97 hrs, Volume= 0.031 af, Depth= 3.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr Custom Rainfall=3.38"

	rea (sf)	CN [	Description			
	5,155	98 F	Roofs, HSC	G C		
	5,155	100.00% Impervious Area				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
6.0					Direct Entry, Minimum	

#### Subcatchment 1X-S: Strand Bldg



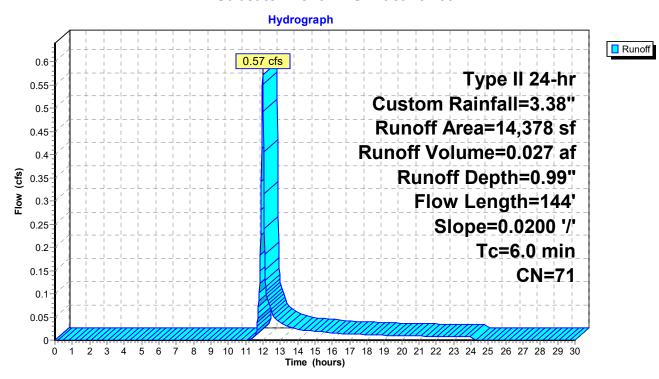
### **Summary for Subcatchment 2X-S: Vacant Lot**

Runoff = 0.57 cfs @ 11.98 hrs, Volume= 0.027 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr Custom Rainfall=3.38"

_	Α	rea (sf)	CN D	escription		
	14,378 71 Meadow, non-grazed, HSG C					
	14,378 100.00% Pervious Area				ervious Are	a
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
_	0.7	50	0.0200	1.21	, ,	Sheet Flow,
	1.6	94	0.0200	0.99		Smooth surfaces n= 0.011 P2= 3.27" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
	3.7					Direct Entry, Min. Tc
_	6.0	144	Total			

#### Subcatchment 2X-S: Vacant Lot



Prepared by {enter your company name here}

Printed 1/6/2022

Page 21

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

## Summary for Pond SUM1: Summary Pt. - Off-Site

[40] Hint: Not Described (Outflow=Inflow)

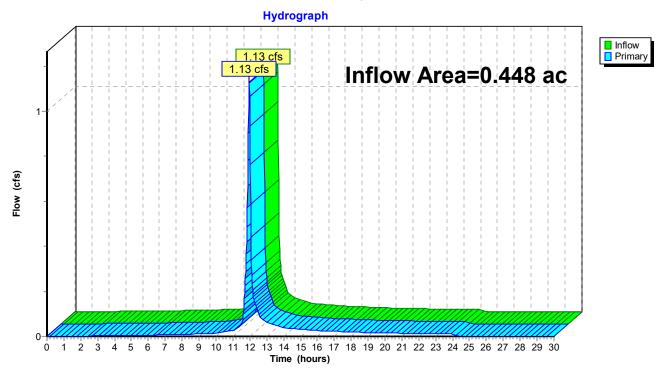
Inflow Area = 0.448 ac, 26.39% Impervious, Inflow Depth = 1.56" for Custom event

Inflow = 1.13 cfs @ 11.97 hrs, Volume= 0.058 af

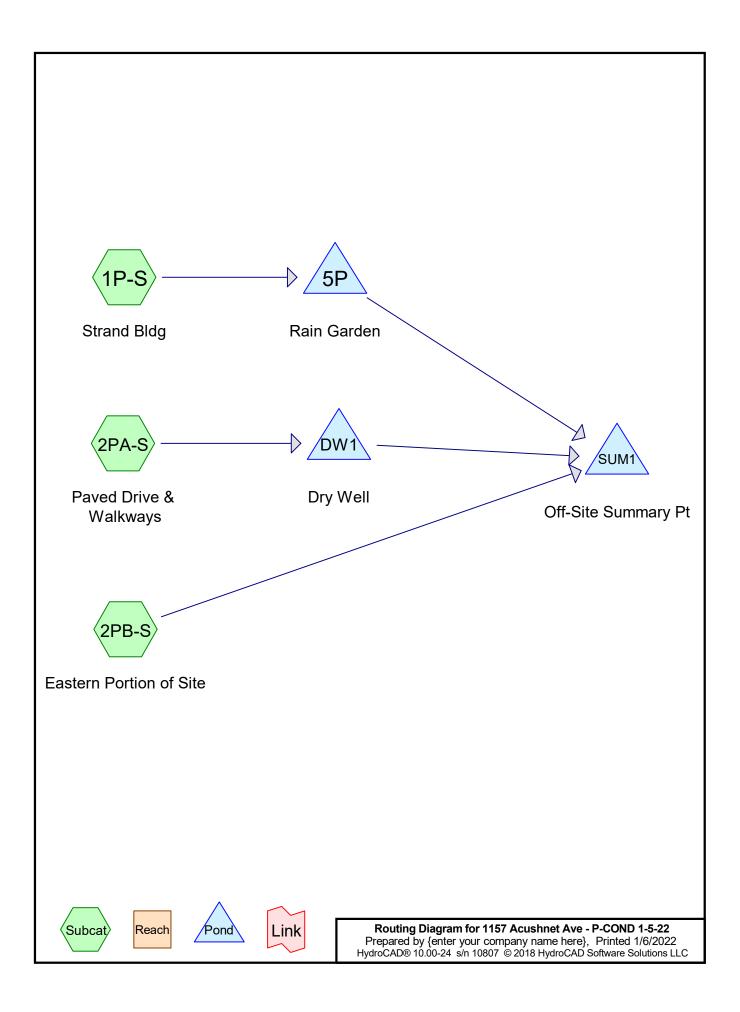
Primary = 1.13 cfs @ 11.97 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

### Pond SUM1: Summary Pt. - Off-Site



**Post-Development** 



Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022 Page 2

## **Project Notes**

Rainfall events imported from "1157 Acushnet Ave - X-COND 1-5-22.hcp" Rainfall events imported from "1157 Acushnet Ave - X-COND 1-5-22.hcp"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 3

## **Area Listing (all nodes)**

Area	CN	Description
(acres)		(subcatchment-numbers)
0.093	74	>75% Grass cover, Good, HSG C (2PB-S)
0.005	65	Brush, Good, HSG C-Rain Garden (1P-S)
0.033	98	Concrete Drive, HSG C (2PA-S)
0.079	87	Permeable Pavers, HSG C (2PA-S, 2PB-S)
0.118	98	Roofs, HSG C (1P-S)
0.121	87	Shell road, HSG C (2PA-S)
0.448	88	TOTAL AREA

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 4

## Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.448	HSG C	1P-S, 2PA-S, 2PB-S
0.000	HSG D	
0.000	Other	
0.448		TOTAL AREA

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 5

## **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	0.093	0.000	0.000	0.093	>75% Grass cover, Good	2PB-S
0.000	0.000	0.005	0.000	0.000	0.005	Brush, Good	1P-S
0.000	0.000	0.033	0.000	0.000	0.033	Concrete Drive	2PA-S
0.000	0.000	0.079	0.000	0.000	0.079	Permeable Pavers	2PA-S, 2PB-S
0.000	0.000	0.118	0.000	0.000	0.118	Roofs	1P-S
0.000	0.000	0.121	0.000	0.000	0.121	Shell road	2PA-S
0.000	0.000	0.448	0.000	0.000	0.448	TOTAL AREA	

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 6

## Land-Use Listing (all nodes)

Area	Land	Subcatchment
(acres)	Use	Numbers
0.154	(undefined)	2PA-S, 2PB-S
0.005	Brush	1P-S
0.079	Commercial	2PA-S, 2PB-S
0.093	Open Space	2PA-S, 2PB-S
0.118	Roofs	1P-S
0.448	TOTAL	

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 7

## **Pollutant Concentrations**

Line#	Land
	Use
1	(undefined)
2	Brush
3	Commercial
4	Open Space
5	Roofs

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022 Page 8

## **Subcatchment Loading**

Line#	Subcat Number
1	1P-S
2	2PA-S
3	2PB-S
	TOTAL

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022 Page 9

## Pollutant Loading for 42.00" Rainfall, Pj=1.000, Project 33.79% Impervious (all nodes)

Area	Land	lmp.	Rv	Runoff
(acres)	Use	(%)		(inches)
0.154	(undefined)	33.79	0.354	14.87
0.005	Brush	33.79	0.354	14.87
0.079	Commercial	33.79	0.354	14.87
0.093	Open Space	33.79	0.354	14.87
0.118	Roofs	33.79	0.354	14.87
0.448	TOTAL			

Type II 24-hr 2-YR (24h) Rainfall=3.38"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 10

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P-S: Strand Bldg Runoff Area=5,363 sf 96.12% Impervious Runoff Depth=3.04"

Tc=6.0 min CN=97 Runoff=0.58 cfs 0.031 af

Subcatchment 2PA-S: Paved Drive & Walkways Runoff Area=7,436 sf 19.43% Impervious Runoff Depth=2.25"

Tc=6.0 min CN=89 Runoff=0.66 cfs 0.032 af

Subcatchment 2PB-S: Eastern Portion of Site Runoff Area=6,734 sf 0.00% Impervious Runoff Depth=1.47"

Tc=6.0 min CN=79 Runoff=0.41 cfs 0.019 af

Pond 5P: Rain Garden Peak Elev=98.81' Storage=464 cf Inflow=0.58 cfs 0.031 af

Discarded=0.03 cfs 0.026 af Primary=0.45 cfs 0.005 af Outflow=0.48 cfs 0.031 af

Pond DW1: Dry Well Peak Elev=96.86' Storage=632 cf Inflow=0.66 cfs 0.032 af

Discarded=0.03 cfs 0.032 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.032 af

Pond SUM1: Off-Site Summary Pt Inflow=0.79 cfs 0.024 af

Primary=0.79 cfs 0.024 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.082 af Average Runoff Depth = 2.20" 66.21% Pervious = 0.297 ac 33.79% Impervious = 0.152 ac

Printed 1/6/2022

Page 11

#### Summary for Subcatchment 1P-S: Strand Bldg

Runoff = 0.58 cfs @ 11.97 hrs, Volume= 0.031 af, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 2-YR (24h) Rainfall=3.38"

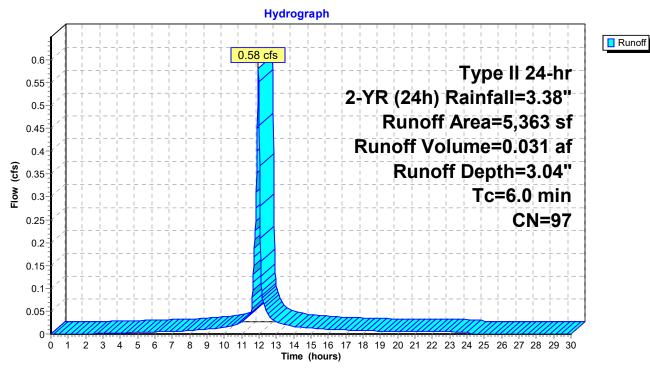
	Aı	rea (sf)	CN	Description			Land Use
		5,155	98	Roofs, HSG	G C		Roofs
•	k	208	65	Brush, Goo	d, HSG C-F	Rain Garden	Brush
		5,363 208 5,155	97	Weighted A 3.88% Perv 96.12% Imp	ious Area	ea	
	Tc (min)	Length (feet)	Slop (ft/f	,	Capacity (cfs)	Description	
	6.0					Direct Entry	Minimum

6.0 Direct Entry, Minimum

Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
208	Brush
5,155	Roofs
5,363	Total

## Subcatchment 1P-S: Strand Bldg



Printed 1/6/2022

Page 12

## Summary for Subcatchment 2PA-S: Paved Drive & Walkways

Runoff = 0.66 cfs @ 11.97 hrs, Volume= 0.032 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 2-YR (24h) Rainfall=3.38"

	Area (sf)	CN	Description			Land Use
	0	74	>75% Gras	s cover, Go	od, HSG C	Open Space
*	5,258	87	Shell road,	HSG C		•
*	1,445	98	Concrete Drive, HSG C			
*	733	87	Permeable Pavers, HSG C			Commercial
	7,436	89	Weighted A	verage		
	5,991		80.57% Per	vious Area		
	1,445		19.43% Imp	pervious Are	ea	
T	c Length	Slop	e Velocity	Capacity	Description	
(mir	n) (feet)	(ft/	t) (ft/sec)	(cfs)		
6	0				Direct Entry	y, Minimum

Pollutant Loading for 42.00" Rainfall, Pj=1.000

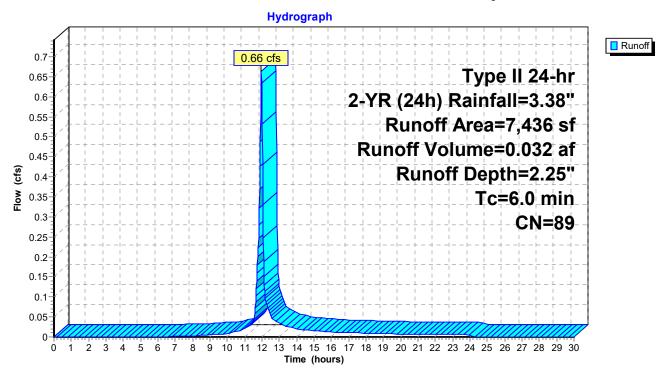
Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
6,703	(undefined)
733	Commercial
0	Open Space
7 436	Total

Printed 1/6/2022

Page 13

## Subcatchment 2PA-S: Paved Drive & Walkways



Printed 1/6/2022

Page 14

## Summary for Subcatchment 2PB-S: Eastern Portion of Site

Runoff = 0.41 cfs @ 11.98 hrs, Volume= 0.019 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 2-YR (24h) Rainfall=3.38"

	Area (sf)	CN	Description			Land Use
	4,039	74	>75% Grass	s cover, Go	od, HSG C	Open Space
*	0	87	Shell road,	HSG C		·
*	0	98	Concrete D	rive, HSG (		
*	2,695	87	Permeable Pavers, HSG C			Commercial
	6,734 6,734	79	Weighted A 100.00% Pe		a	
To (min	9	Slop (ft/f	,	Capacity (cfs)	Description	
6.0	0				Direct Entry	y, Minimum

Pollutant Loading for 42.00" Rainfall, Pj=1.000

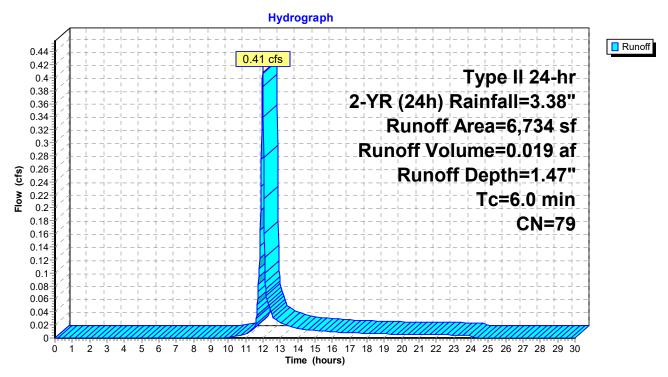
Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
0	(undefined)
2,695	Commercial
4,039	Open Space
6,734	Total

Printed 1/6/2022

Page 15

#### Subcatchment 2PB-S: Eastern Portion of Site



Prepared by {enter your company name here}

Printed 1/6/2022

Page 16

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

## **Summary for Pond 5P: Rain Garden**

Inflow Area = 0.123 ac, 96.12% Impervious, Inflow Depth = 3.04" for 2-YR (24h) event Inflow = 0.58 cfs @ 11.97 hrs, Volume= 0.031 af

Outflow = 0.48 cfs @ 12.02 hrs, Volume= 0.031 af, Atten= 18%, Lag= 3.3 min

Discarded = 0.45 cfs @ 12.02 hrs, Volume= 0.026 af

Primary = 0.45 cfs @ 12.02 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.81' @ 12.02 hrs Surf.Area= 522 sf Storage= 464 cf

Plug-Flow detention time= 122.5 min calculated for 0.031 af (100% of inflow)

Center-of-Mass det. time= 122.4 min (883.4 - 761.0)

Volume	Invert			Description	
#1	97.50'	56	35 cf <b>Custom</b>	Stage Data (Pr	ismatic) Listed below (Recalc)
Elevation	on Su	ırf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
97.5	50	190	0	0	
98.0	00	310	125	125	
98.5	50	440	188	313	
99.0	00	570	253	565	
Device	Routing	Invert	Outlet Device	es	
#1	Discarded	97.50'	2.410 in/hr Ex	xfiltration over	Surface area
#2 Primary		98.75'	10.0' long x	1.0' breadth Bro	oad-Crested Rectangular Weir
	-		Head (feet) (	0.20 0.40 0.60	0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00		
			Coef. (Englis 3.31 3.32	h) 2.69 2.72 2	.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30

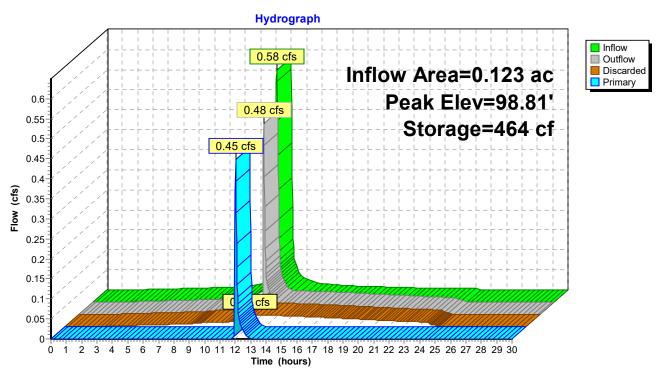
**Discarded OutFlow** Max=0.03 cfs @ 12.02 hrs HW=98.81' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.44 cfs @ 12.02 hrs HW=98.81' (Free Discharge) **2=Broad-Crested Rectangular Weir** (Weir Controls 0.44 cfs @ 0.68 fps)

Printed 1/6/2022

Page 17

#### Pond 5P: Rain Garden



Printed 1/6/2022

<u>Page 18</u>

#### **Summary for Pond DW1: Dry Well**

[92] Warning: Device #2 is above defined storage

Inflow Area = 0.171 ac, 19.43% Impervious, Inflow Depth = 2.25" for 2-YR (24h) event Inflow = 0.66 cfs @ 11.97 hrs, Volume= 0.032 af Outflow = 0.03 cfs @ 11.48 hrs, Volume= 0.032 af, Atten= 95%, Lag= 0.0 min Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 96.86' @ 13.01 hrs Surf.Area= 598 sf Storage= 632 cf

Plug-Flow detention time= 161.6 min calculated for 0.032 af (100% of inflow) Center-of-Mass det. time= 161.6 min ( 967.4 - 805.8 )

Volume	Invert	Avail.Storage	Storage Description
#1A	95.00'	467 cf	14.35'W x 41.67'L x 3.00'H Field A
			1,794 cf Overall - 627 cf Embedded = 1,166 cf x 40.0% Voids
#2A	95.33'	496 cf	<b>ADS N-12 24"</b> x 8 Inside #1
			Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf
			Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf
			8 Chambers in 4 Rows
		963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	95.00'	2.410 in/hr Exfiltration over Surface area
#2	Primary	98.67'	<b>0.7" x 240.0" Horiz. Orifice/Grate</b> C= 0.600
	•		Limited to weir flow at low heads

**Discarded OutFlow** Max=0.03 cfs @ 11.48 hrs HW=95.04' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=95.00' (Free Discharge) **2=Orifice/Grate** ( Controls 0.00 cfs)

Printed 1/6/2022

Page 19

#### Pond DW1: Dry Well - Chamber Wizard Field A

#### Chamber Model = ADS N-12 24" (ADS N-12® Pipe)

Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf

28.0" Wide + 13.4" Spacing = 41.4" C-C Row Spacing

2 Chambers/Row x 20.00' Long = 40.00' Row Length +10.0" End Stone x 2 = 41.67' Base Length

4 Rows x 28.0" Wide + 13.4" Spacing x 3 + 10.0" Side Stone x 2 = 14.35' Base Width

4.0" Base + 28.0" Chamber Height + 4.0" Cover = 3.00' Field Height

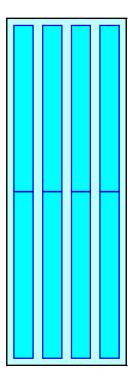
8 Chambers x 62.0 cf = 496.0 cf Chamber Storage

8 Chambers x 78.4 cf = 627.1 cf Displacement

1,793.8 cf Field - 627.1 cf Chambers = 1,166.7 cf Stone x 40.0% Voids = 466.7 cf Stone Storage

Chamber Storage + Stone Storage = 962.7 cf = 0.022 af Overall Storage Efficiency = 53.7% Overall System Size = 41.67' x 14.35' x 3.00'

8 Chambers 66.4 cy Field 43.2 cy Stone

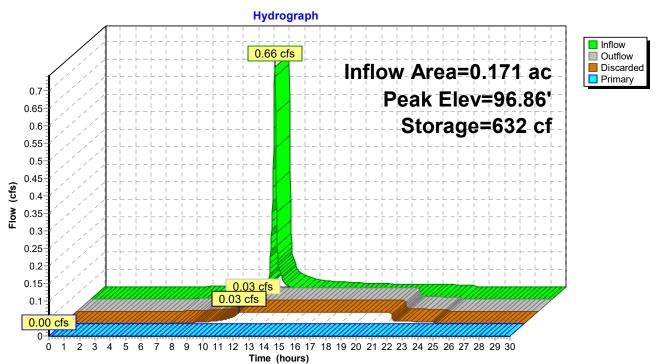




Printed 1/6/2022

Page 20

## Pond DW1: Dry Well



Printed 1/6/2022

Page 21

## Summary for Pond SUM1: Off-Site Summary Pt

[40] Hint: Not Described (Outflow=Inflow)

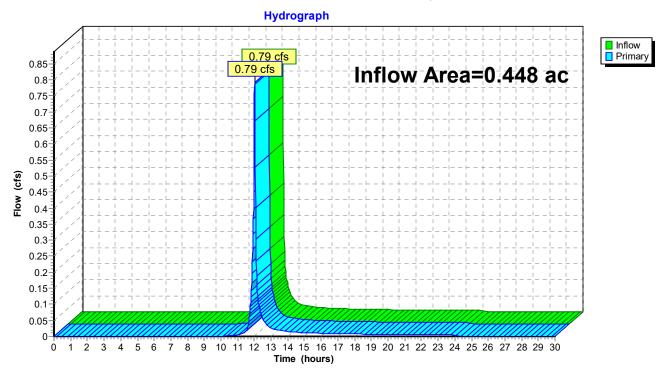
Inflow Area = 0.448 ac, 33.79% Impervious, Inflow Depth = 0.65" for 2-YR (24h) event

Inflow = 0.79 cfs @ 12.01 hrs, Volume= 0.024 af

Primary = 0.79 cfs @ 12.01 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

#### Pond SUM1: Off-Site Summary Pt



Type II 24-hr 10-YR (24h) Rainfall=5.01"

Prepared by {enter your company name here} HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC Printed 1/6/2022

Page 22

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P-S: Strand Bldg Runoff Area=5,363 sf 96.12% Impervious Runoff Depth=4.66"

Tc=6.0 min CN=97 Runoff=0.87 cfs 0.048 af

Subcatchment 2PA-S: Paved Drive & Walkways Runoff Area=7,436 sf 19.43% Impervious Runoff Depth=3.78"

Tc=6.0 min CN=89 Runoff=1.08 cfs 0.054 af

Subcatchment 2PB-S: Eastern Portion of Site Runoff Area=6,734 sf 0.00% Impervious Runoff Depth=2.81"

Tc=6.0 min CN=79 Runoff=0.77 cfs 0.036 af

Pond 5P: Rain Garden Peak Elev=98.85' Storage=482 cf Inflow=0.87 cfs 0.048 af

Discarded=0.03 cfs 0.032 af Primary=0.83 cfs 0.016 af Outflow=0.86 cfs 0.048 af

Pond DW1: Dry Well Peak Elev=98.69' Storage=963 cf Inflow=1.08 cfs 0.054 af

Discarded=0.03 cfs 0.048 af Primary=0.62 cfs 0.006 af Outflow=0.65 cfs 0.054 af

Pond SUM1: Off-Site Summary Pt Inflow=1.60 cfs 0.058 af

Primary=1.60 cfs 0.058 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.138 af Average Runoff Depth = 3.69" 66.21% Pervious = 0.297 ac 33.79% Impervious = 0.152 ac

Printed 1/6/2022

Page 23

## Summary for Subcatchment 1P-S: Strand Bldg

Runoff = 0.87 cfs @ 11.97 hrs, Volume= 0.048 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 10-YR (24h) Rainfall=5.01"

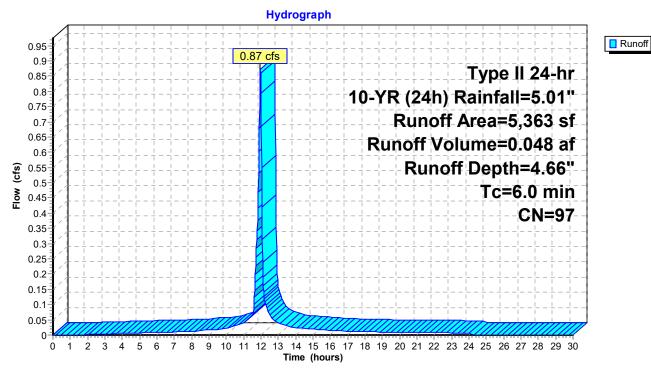
	Aı	rea (sf)	CN	Description			Land Use
		5,155	98	Roofs, HSG	G C		Roofs
•	k	208	65	Brush, Goo	d, HSG C-F	Rain Garden	Brush
		5,363 208 5,155	97	Weighted Average 3.88% Pervious Area 96.12% Impervious Area			
	Tc (min)	Length (feet)	Slop (ft/f	,	Capacity (cfs)	Description	
	6.0					Direct Entry	Minimum

6.0 **Direct Entry, Minimum** 

Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
208	Brush
5,155	Roofs
5,363	Total

## Subcatchment 1P-S: Strand Bldg



Printed 1/6/2022

Page 24

## Summary for Subcatchment 2PA-S: Paved Drive & Walkways

Runoff = 1.08 cfs @ 11.97 hrs, Volume= 0.054 af, Depth= 3.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 10-YR (24h) Rainfall=5.01"

	Area (sf)	CN	Description			Land Use
	0	74	>75% Gras	s cover, Go	od, HSG C	Open Space
*	5,258	87	Shell road,	HSG C		•
*	1,445	98	Concrete D	rive, HSG (	C	
*	733	87	Permeable	Pavers, HS	SG C	Commercial
	7,436	89	Weighted A	verage		
	5,991		80.57% Per	vious Area		
	1,445		19.43% Imp	pervious Are	ea	
T	c Length	Slop	e Velocity	Capacity	Description	
(mir	n) (feet)	(ft/	t) (ft/sec)	(cfs)		
6	0				Direct Entry	y, Minimum

Pollutant Loading for 42.00" Rainfall, Pj=1.000
Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area Land
(sq-ft) Use

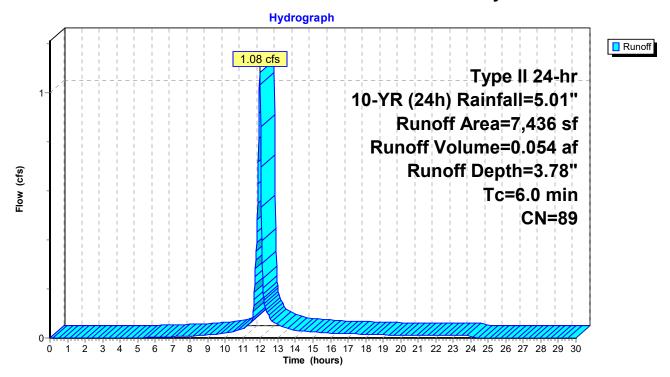
6,703 (undefined)
733 Commercial
0 Open Space

7,436 Total

Printed 1/6/2022

Page 25

## Subcatchment 2PA-S: Paved Drive & Walkways



Printed 1/6/2022

Page 26

# Summary for Subcatchment 2PB-S: Eastern Portion of Site

Runoff = 0.77 cfs @ 11.97 hrs, Volume= 0.036 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 10-YR (24h) Rainfall=5.01"

	Area (sf)	CN	Description			Land Use
	4,039	74	>75% Grass	s cover, Go	od, HSG C	Open Space
*	0	87	Shell road,	HSG C		·
*	0	98	Concrete D	rive, HSG (		
*	2,695	87	Permeable	Pavers, HS	SG C	Commercial
	6,734 6,734	79	Weighted Average 100.00% Pervious Area			
To (min	9	Slop (ft/f	,	Capacity (cfs)	Description	
6.0	0				Direct Entry	y, Minimum

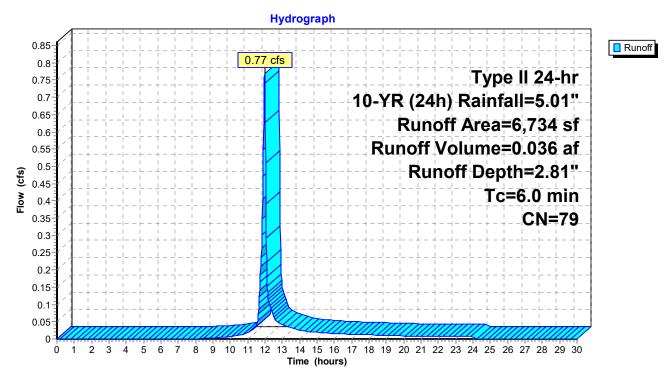
Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
0	(undefined)
2,695	Commercial
4,039	Open Space
6,734	Total

Printed 1/6/2022

Page 27

#### Subcatchment 2PB-S: Eastern Portion of Site



Prepared by {enter your company name here}

Printed 1/6/2022

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Page 28

#### **Summary for Pond 5P: Rain Garden**

Inflow Area = 0.123 ac, 96.12% Impervious, Inflow Depth = 4.66" for 10-YR (24h) event Inflow 0.87 cfs @ 11.97 hrs, Volume= 0.048 af 0.86 cfs @ 11.98 hrs, Volume= Outflow 0.048 af, Atten= 1%, Lag= 0.7 min 0.03 cfs @ 11.98 hrs, Volume= Discarded = 0.032 af 0.83 cfs @ 11.98 hrs, Volume= 0.016 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.85' @ 11.98 hrs Surf.Area= 531 sf Storage= 482 cf

Plug-Flow detention time= 104.8 min calculated for 0.048 af (100% of inflow)

Center-of-Mass det. time= 104.8 min (856.6 - 751.8)

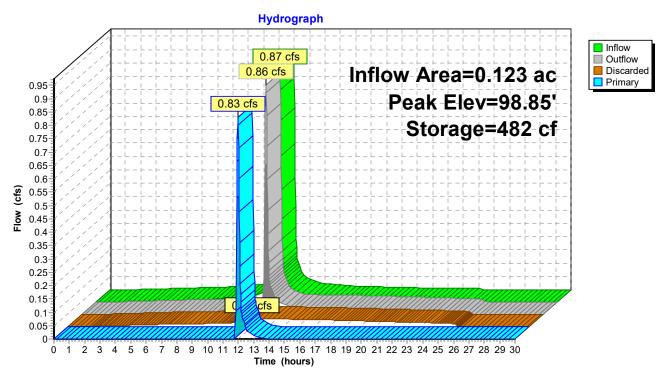
Volume	Inver	t Avail.Sto	rage Storage	Description	
#1 97.50'		' 56	65 cf Custom	Stage Data (Pri	smatic) Listed below (Recalc)
Elevation Surf.Area (feet) (sq-ft)		urf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
97.5		190	0	0	
98.0	-	310	125	125	
98.5	50	440	188	313	
99.0	00	570	253	565	
Device	Routing	Invert	Outlet Device	S	
#1	Discarded	97.50'	2.410 in/hr Ex	filtration over S	Surface area
#2	Primary	98.75'	10.0' long x 1	I.0' breadth Bro	ad-Crested Rectangular Weir
			Head (feet) 0	.20 0.40 0.60	0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00		
			Coef. (English 3.31 3.32	n) 2.69 2.72 2.	75 2.85 2.98 3.08 3.20 3.28 3.31 3.30

**Discarded OutFlow** Max=0.03 cfs @ 11.98 hrs HW=98.85' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.83 cfs @ 11.98 hrs HW=98.85' (Free Discharge) **2=Broad-Crested Rectangular Weir** (Weir Controls 0.83 cfs @ 0.84 fps)

Printed 1/6/2022 Page 29

#### Pond 5P: Rain Garden



Prepared by {enter your company name here}

Printed 1/6/2022

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

<u>Page 30</u>

#### **Summary for Pond DW1: Dry Well**

[92] Warning: Device #2 is above defined storage [93] Warning: Storage range exceeded by 0.69'

[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=40)

Inflow Area = 0.171 ac, 19.43% Impervious, Inflow Depth = 3.78" for 10-YR (24h) event

Inflow = 1.08 cfs @ 11.97 hrs, Volume= 0.054 af

Outflow = 0.65 cfs @ 12.10 hrs, Volume= 0.054 af, Atten= 40%, Lag= 7.9 min

Discarded = 0.03 cfs @ 10.88 hrs, Volume= 0.048 af Primary = 0.62 cfs @ 12.10 hrs, Volume= 0.006 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.69' @ 12.10 hrs Surf.Area= 598 sf Storage= 963 cf

Plug-Flow detention time= 238.7 min calculated for 0.054 af (100% of inflow)

Center-of-Mass det. time= 238.7 min ( 1,029.9 - 791.1 )

Volume	Invert	Avail.Storage	Storage Description
#1A	95.00'	467 cf	14.35'W x 41.67'L x 3.00'H Field A
			1,794 cf Overall - 627 cf Embedded = 1,166 cf x 40.0% Voids
#2A	95.33'	496 cf	<b>ADS N-12 24"</b> x 8 Inside #1
			Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf
			Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf
			8 Chambers in 4 Rows
		963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	95.00'	2.410 in/hr Exfiltration over Surface area
#2	Primary	98.67'	<b>0.7" x 240.0" Horiz. Orifice/Grate</b> C= 0.600
			Limited to weir flow at low heads

**Discarded OutFlow** Max=0.03 cfs @ 10.88 hrs HW=95.04' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.50 cfs @ 12.10 hrs HW=98.69' (Free Discharge) **2=Orifice/Grate** (Weir Controls 0.50 cfs @ 0.51 fps)

Printed 1/6/2022

Page 31

#### Pond DW1: Dry Well - Chamber Wizard Field A

#### Chamber Model = ADS N-12 24" (ADS N-12® Pipe)

Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf

28.0" Wide + 13.4" Spacing = 41.4" C-C Row Spacing

2 Chambers/Row x 20.00' Long = 40.00' Row Length +10.0" End Stone x 2 = 41.67' Base Length

4 Rows x 28.0" Wide + 13.4" Spacing x 3 + 10.0" Side Stone x 2 = 14.35' Base Width

4.0" Base + 28.0" Chamber Height + 4.0" Cover = 3.00' Field Height

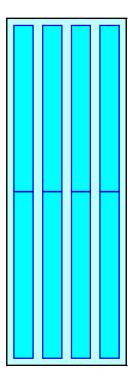
8 Chambers x 62.0 cf = 496.0 cf Chamber Storage

8 Chambers x 78.4 cf = 627.1 cf Displacement

1,793.8 cf Field - 627.1 cf Chambers = 1,166.7 cf Stone x 40.0% Voids = 466.7 cf Stone Storage

Chamber Storage + Stone Storage = 962.7 cf = 0.022 af Overall Storage Efficiency = 53.7% Overall System Size = 41.67' x 14.35' x 3.00'

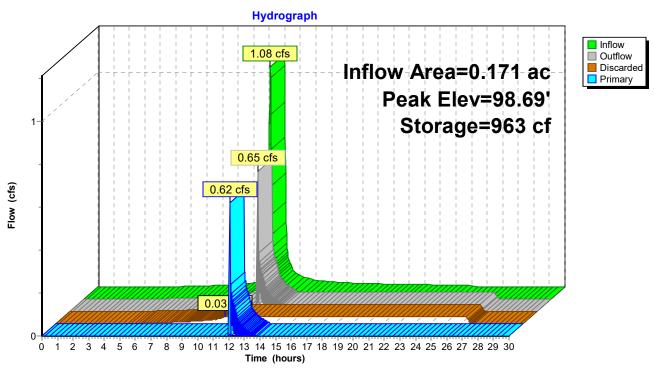
8 Chambers 66.4 cy Field 43.2 cy Stone





Printed 1/6/2022 Page 32

Pond DW1: Dry Well



Prepared by {enter your company name here}

Printed 1/6/2022

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Page 33

## Summary for Pond SUM1: Off-Site Summary Pt

[40] Hint: Not Described (Outflow=Inflow)

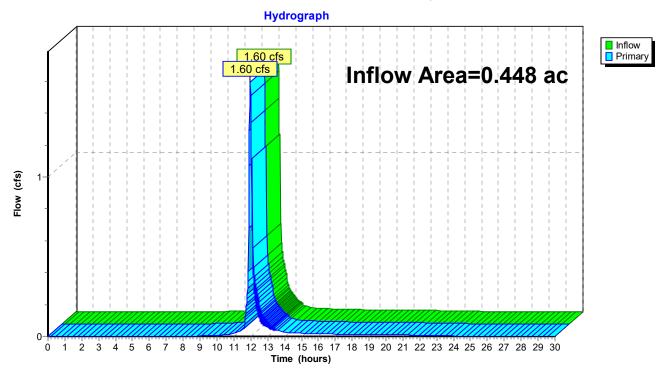
Inflow Area = 0.448 ac, 33.79% Impervious, Inflow Depth = 1.55" for 10-YR (24h) event

Inflow = 1.60 cfs @ 11.98 hrs, Volume= 0.058 af

Primary = 1.60 cfs @ 11.98 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

#### Pond SUM1: Off-Site Summary Pt



Type II 24-hr 100-YR (24h) Rainfall=7.59"

Prepared by {enter your company name here}
HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022

Page 34

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P-S: Strand Bldg Runoff Area=5,363 sf 96.12% Impervious Runoff Depth=7.23"

Tc=6.0 min CN=97 Runoff=1.33 cfs 0.074 af

Subcatchment 2PA-S: Paved Drive & Walkways Runoff Area=7,436 sf 19.43% Impervious Runoff Depth=6.28"

Tc=6.0 min CN=89 Runoff=1.74 cfs 0.089 af

Subcatchment 2PB-S: Eastern Portion of Site Runoff Area=6,734 sf 0.00% Impervious Runoff Depth=5.13"

Tc=6.0 min CN=79 Runoff=1.36 cfs 0.066 af

Pond 5P: Rain Garden Peak Elev=98.88' Storage=499 cf Inflow=1.33 cfs 0.074 af

Discarded=0.03 cfs 0.040 af Primary=1.29 cfs 0.034 af Outflow=1.32 cfs 0.074 af

Pond DW1: Dry Well Peak Elev=98.92' Storage=963 cf Inflow=1.74 cfs 0.089 af

Discarded=0.03 cfs 0.059 af Primary=2.81 cfs 0.031 af Outflow=2.85 cfs 0.089 af

Pond SUM1: Off-Site Summary Pt Inflow=5.45 cfs 0.131 af

Primary=5.45 cfs 0.131 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.230 af Average Runoff Depth = 6.15" 66.21% Pervious = 0.297 ac 33.79% Impervious = 0.152 ac

Printed 1/6/2022

Page 35

#### Summary for Subcatchment 1P-S: Strand Bldg

Runoff = 1.33 cfs @ 11.97 hrs, Volume= 0.074 af, Depth= 7.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 100-YR (24h) Rainfall=7.59"

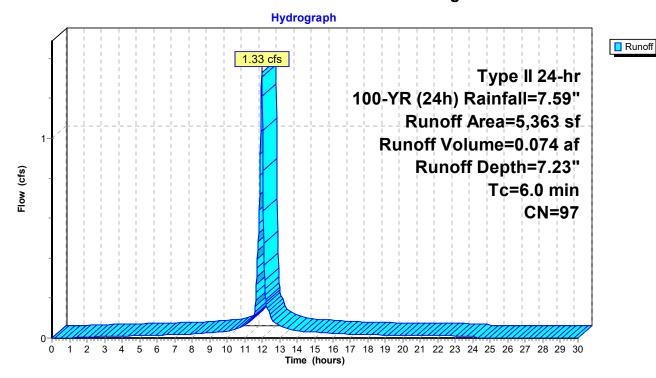
Aı	rea (sf)	CN	Description			Land Use
	5,155	98	Roofs, HSG	G C		Roofs
*	208	65	Brush, Goo	d, HSG C-F	Rain Garden	Brush
	5,363 208 5,155	97	Weighted A 3.88% Perv 96.12% Imp	ious Area	ea	
Tc (min)	Length (feet)	Slop (ft/f	,	Capacity (cfs)	Description	
0.0					Discot Fotos	. Naire irea cree

6.0 **Direct Entry, Minimum** 

Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
208	Brush
5,155	Roofs
5 363	Total

## Subcatchment 1P-S: Strand Bldg



Printed 1/6/2022

Page 36

## Summary for Subcatchment 2PA-S: Paved Drive & Walkways

Runoff = 1.74 cfs @ 11.97 hrs, Volume= 0.089 af, Depth= 6.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 100-YR (24h) Rainfall=7.59"

	Area (sf)	CN	Description			Land Use
	0	74	>75% Grass cover, Good, HSG C			Open Space
*	5,258	87	Shell road, HSG C			•
*	1,445	98	Concrete Drive, HSG C			
*	733	87	Permeable Pavers, HSG C			Commercial
	7,436	89	39 Weighted Average			
	5,991					
	1,445	19.43% Impervious Area				
7	c Length	Slop	e Velocity	Capacity	Description	
(mii	n) (feet)	(ft/	t) (ft/sec)	(cfs)		
6	.0				Direct Entry	y, Minimum

Pollutant Loading for 42.00" Rainfall, Pj=1.000

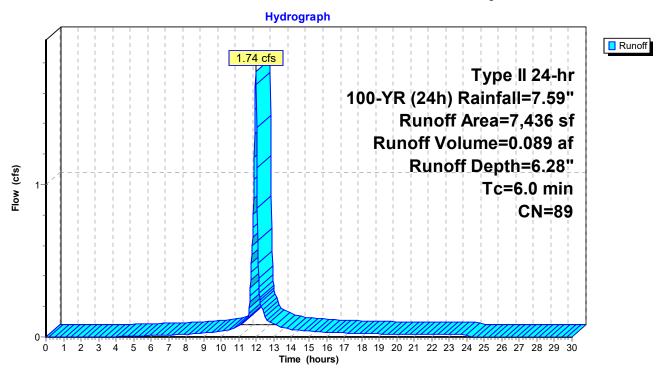
Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
6,703	(undefined)
733	Commercial
0	Open Space
7,436	Total

Printed 1/6/2022

Page 37

## Subcatchment 2PA-S: Paved Drive & Walkways



Printed 1/6/2022

Page 38

#### TO THE TOTAL CONTROL OF THE CONTROL CO

Summary for Subcatchment 2PB-S: Eastern Portion of Site

Runoff = 1.36 cfs @ 11.97 hrs, Volume= 0.066 af, Depth= 5.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr 100-YR (24h) Rainfall=7.59"

	Area (sf)	CN	Description			Land Use
	4,039	74	>75% Grass cover, Good, HSG C			Open Space
*	0	87	Shell road, HSG C			
*	0	98	Concrete Drive, HSG C			
*	2,695	87	Permeable Pavers, HSG C			Commercial
	6,734	79	Weighted A	verage		
	6,734		100.00% Pervious Area			
	c Length	Slop	,	Capacity	Description	
(mir	า) (feet)	(ft/1	ft) (ft/sec)	(cfs)		
6.	.0				Direct Entry	y, Minimum

Pollutant Loading for 42 00" Dainfall Di=4 000

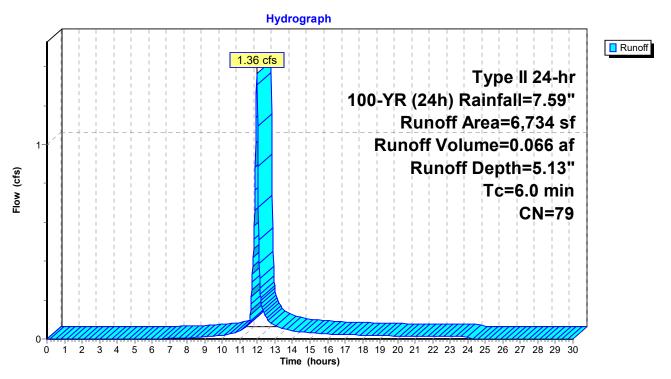
Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
0	(undefined)
2,695	Commercial
4,039	Open Space
6 734	Total

Printed 1/6/2022

Page 39

#### **Subcatchment 2PB-S: Eastern Portion of Site**



Prepared by {enter your company name here}

Printed 1/6/2022

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Page 40

#### **Summary for Pond 5P: Rain Garden**

Inflow Area = 0.123 ac, 96.12% Impervious, Inflow Depth = 7.23" for 100-YR (24h) event Inflow = 1.33 cfs @ 11.97 hrs, Volume= 0.074 af Outflow = 1.32 cfs @ 11.98 hrs, Volume= 0.074 af, Atten= 1%, Lag= 0.6 min Discarded = 0.03 cfs @ 11.98 hrs, Volume= 0.040 af Primary = 1.29 cfs @ 11.98 hrs, Volume= 0.034 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.88' @ 11.98 hrs Surf.Area= 539 sf Storage= 499 cf

Plug-Flow detention time= 93.1 min calculated for 0.074 af (100% of inflow) Center-of-Mass det. time= 93.1 min (837.0 - 743.9)

Volume	Inver	t Avail.Sto	rage Storage	e Description		
#1	97.50	)' 56	65 cf <b>Custon</b>	Custom Stage Data (Prismatic) Listed below (Recalc)		
Elevatio	et)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)		
97.5	50	190	0	0		
98.0	00	310	125	125		
98.5	50	440	188	313		
99.0	00	570	253	565		
Device	Routing	Invert	Outlet Device	es		
#1	Discarded	97.50'	2.410 in/hr E	xfiltration over S	Surface area	
#2	Primary	98.75'	10.0' long x	1.0' breadth Bro	ad-Crested Rectangular Weir	
	,		Head (feet)	0.20 0.40 0.60	0.80 1.00 1.20 1.40 1.60 1.80 2.00	
			2.50 3.00			
			Coef. (Englis 3.31 3.32	sh) 2.69 2.72 2.	75 2.85 2.98 3.08 3.20 3.28 3.31 3.30	

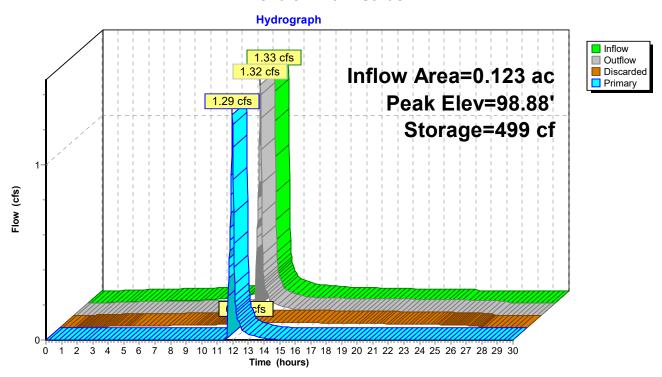
**Discarded OutFlow** Max=0.03 cfs @ 11.98 hrs HW=98.88' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.28 cfs @ 11.98 hrs HW=98.88' (Free Discharge) 2=Broad-Crested Rectangular Weir (Weir Controls 1.28 cfs @ 0.97 fps)

Printed 1/6/2022

Page 41

## Pond 5P: Rain Garden



Prepared by {enter your company name here}

Printed 1/6/2022

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Page 42

## **Summary for Pond DW1: Dry Well**

[92] Warning: Device #2 is above defined storage [93] Warning: Storage range exceeded by 0.92'

[88] Warning: Qout>Qin may require smaller dt or Finer Routing

[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=70)

Inflow Area = 0.171 ac, 19.43% Impervious, Inflow Depth = 6.28" for 100-YR (24h) event Inflow = 1.74 cfs @ 11.97 hrs, Volume= 0.089 af Outflow = 2.85 cfs @ 11.98 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.7 min

Discarded = 0.03 cfs @ 9.92 hrs, Volume= 0.059 af Primary = 2.81 cfs @ 11.98 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.92' @ 11.98 hrs Surf.Area= 598 sf Storage= 963 cf

Plug-Flow detention time= 183.0 min calculated for 0.089 af (100% of inflow) Center-of-Mass det. time= 183.1 min ( 960.4 - 777.3 )

Volume	Invert	Avail.Storage	Storage Description
#1A	95.00'	467 cf	14.35'W x 41.67'L x 3.00'H Field A
			1,794 cf Overall - 627 cf Embedded = 1,166 cf x 40.0% Voids
#2A	95.33'	496 cf	<b>ADS N-12 24"</b> x 8 Inside #1
			Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf
			Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf
			8 Chambers in 4 Rows
		963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices	
#1	Discarded	95.00'	2.410 in/hr Exfiltration over Surface	ce area
#2	Primary	98.67'	0.7" x 240.0" Horiz. Orifice/Grate	C= 0.600
			Limited to weir flow at low heads	

**Discarded OutFlow** Max=0.03 cfs @ 9.92 hrs HW=95.04' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=2.79 cfs @ 11.98 hrs HW=98.92' (Free Discharge)

—2=Orifice/Grate (Orifice Controls 2.79 cfs @ 2.40 fps)

Page 43

### 10.00-24 3/11 10007 @ 2010 FlydrooAD Gottware Goldtons ELC

### Chamber Model = ADS N-12 24" (ADS N-12® Pipe)

Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf

28.0" Wide + 13.4" Spacing = 41.4" C-C Row Spacing

2 Chambers/Row x 20.00' Long = 40.00' Row Length +10.0" End Stone x 2 = 41.67' Base Length

Pond DW1: Dry Well - Chamber Wizard Field A

4 Rows x 28.0" Wide + 13.4" Spacing x 3 + 10.0" Side Stone x 2 = 14.35' Base Width

4.0" Base + 28.0" Chamber Height + 4.0" Cover = 3.00' Field Height

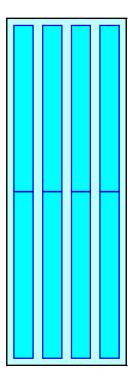
8 Chambers x 62.0 cf = 496.0 cf Chamber Storage

8 Chambers x 78.4 cf = 627.1 cf Displacement

1,793.8 cf Field - 627.1 cf Chambers = 1,166.7 cf Stone x 40.0% Voids = 466.7 cf Stone Storage

Chamber Storage + Stone Storage = 962.7 cf = 0.022 af Overall Storage Efficiency = 53.7% Overall System Size = 41.67' x 14.35' x 3.00'

8 Chambers 66.4 cy Field 43.2 cy Stone

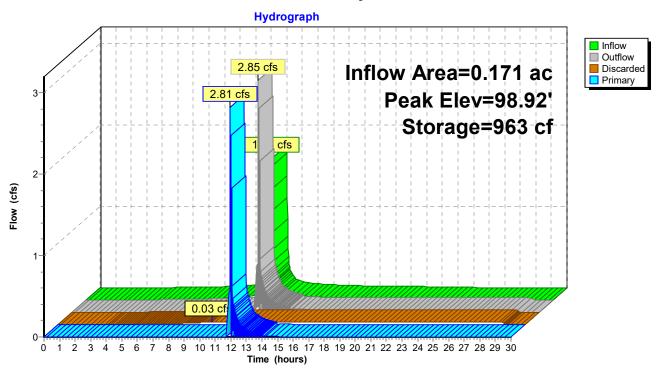




Printed 1/6/2022

Page 44

## Pond DW1: Dry Well



Prepared by {enter your company name here}

Printed 1/6/2022

Page 45

HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

## Summary for Pond SUM1: Off-Site Summary Pt

[40] Hint: Not Described (Outflow=Inflow)

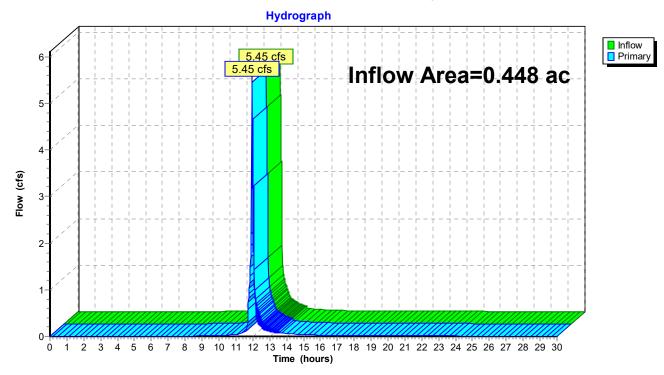
Inflow Area = 0.448 ac, 33.79% Impervious, Inflow Depth = 3.51" for 100-YR (24h) event

Inflow = 5.45 cfs @ 11.98 hrs, Volume= 0.131 af

Primary = 5.45 cfs @ 11.98 hrs, Volume= 0.131 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

## Pond SUM1: Off-Site Summary Pt



## 1157 Acushnet Ave - P-COND 1-5-22

Type II 24-hr Custom Rainfall=3.38"

Prepared by {enter your company name here}
HydroCAD® 10.00-24 s/n 10807 © 2018 HydroCAD Software Solutions LLC

Printed 1/6/2022

Page 46

Time span=0.00-30.00 hrs, dt=0.02 hrs, 1501 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P-S: Strand Bldg Runoff Area=5,363 sf 96.12% Impervious Runoff Depth=3.04"

Tc=6.0 min CN=97 Runoff=0.58 cfs 0.031 af

Subcatchment 2PA-S: Paved Drive & Walkways Runoff Area=7,436 sf 19.43% Impervious Runoff Depth=2.25"

Tc=6.0 min CN=89 Runoff=0.66 cfs 0.032 af

Subcatchment 2PB-S: Eastern Portion of Site Runoff Area=6,734 sf 0.00% Impervious Runoff Depth=1.47"

Tc=6.0 min CN=79 Runoff=0.41 cfs 0.019 af

Pond 5P: Rain Garden Peak Elev=98.81' Storage=464 cf Inflow=0.58 cfs 0.031 af

Discarded=0.03 cfs 0.026 af Primary=0.45 cfs 0.005 af Outflow=0.48 cfs 0.031 af

Pond DW1: Dry Well Peak Elev=96.86' Storage=632 cf Inflow=0.66 cfs 0.032 af

Discarded=0.03 cfs 0.032 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.032 af

Pond SUM1: Off-Site Summary Pt Inflow=0.79 cfs 0.024 af

Primary=0.79 cfs 0.024 af

Total Runoff Area = 0.448 ac Runoff Volume = 0.082 af Average Runoff Depth = 2.20" 66.21% Pervious = 0.297 ac 33.79% Impervious = 0.152 ac

Printed 1/6/2022

Page 47

## Summary for Subcatchment 1P-S: Strand Bldg

Runoff = 0.58 cfs @ 11.97 hrs, Volume= 0.031 af, Depth= 3.04"

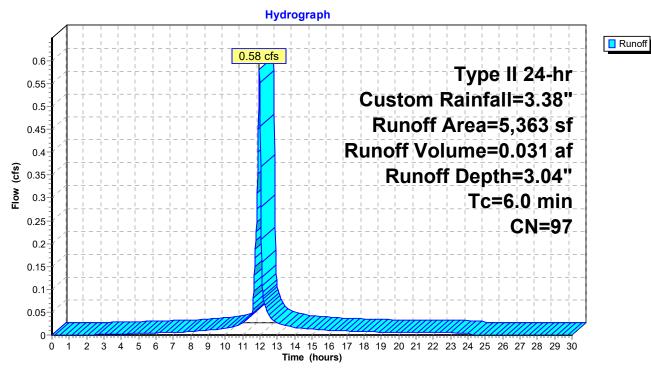
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr Custom Rainfall=3.38"

	Α	rea (sf)	CN	Description			Land Use	
		5,155	98	Roofs, HSC	G C		Roofs	
*		208	65	Brush, Goo	d, HSG C-F	Rain Garden	Brush	
		5,363 208 5,155	97	Weighted A 3.88% Perv 96.12% Imp	ious Area	ea		
(	Tc (min)	Length (feet)	Slop (ft/f	,	Capacity (cfs)	Description		
	6.0					Direct Entry	, Minimum	

Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
208	Brush
5,155	Roofs
5,363	Total

## Subcatchment 1P-S: Strand Bldg



Printed 1/6/2022

Page 48

## Summary for Subcatchment 2PA-S: Paved Drive & Walkways

Runoff = 0.66 cfs @ 11.97 hrs, Volume= 0.032 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr Custom Rainfall=3.38"

_	Aı	rea (sf)	CN	Description			Land Use
		0	74	>75% Grass cover, Good, HSG C			Open Space
4	•	5,258	87	Shell road,	HSG C		·
4	•	1,445	98	Concrete D	rive, HSG (	C	
4	•	733	87	Permeable	Pavers, HS	SG C	Commercial
		7,436	89	Weighted A	verage		
		5,991		80.57% Per	vious Area		
		1,445		19.43% lmp	pervious Ar	ea	
	Tc	Length	Slop	e Velocity	Capacity	Description	
_	(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)		
	6.0					Direct Entry	, Minimum

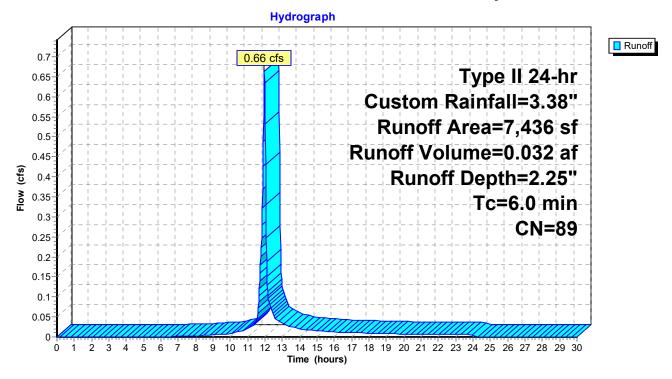
Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
6,703	(undefined)
733	Commercial
0	Open Space
7,436	Total

Printed 1/6/2022

Page 49

## Subcatchment 2PA-S: Paved Drive & Walkways



Printed 1/6/2022

Page 50

## Summary for Subcatchment 2PB-S: Eastern Portion of Site

Runoff = 0.41 cfs @ 11.98 hrs, Volume= 0.019 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Type II 24-hr Custom Rainfall=3.38"

	Area (sf)	CN	Description			Land Use	
	4,039	74	>75% Grass	s cover, Go	ood, HSG C	Open Space	
*	0	87	Shell road,	HSG C			
*	0	98	Concrete D	rive, HSG (	C		
*	2,695	87	Permeable	Pavers, HS	SG C	Commercial	
	6,734	79	Weighted A	verage			
	6,734		100.00% Pe	ervious Are	а		
•	Tc Length	Slop	e Velocity	Capacity	Description		
(mi	n) (feet)	(ft/f	t) (ft/sec)	(cfs)			
6	5.0				Direct Entry	, Minimum	

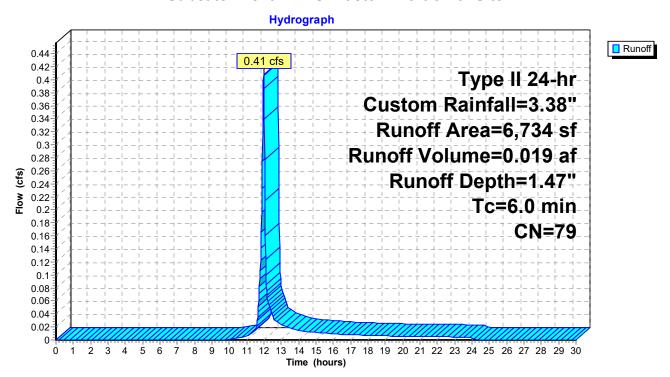
Pollutant Loading for 42.00" Rainfall, Pj=1.000 Project 33.79% Impervious, Rv= 0.354, Runoff= 14.87"

Area	Land
(sq-ft)	Use
0	(undefined)
2,695	Commercial
4,039	Open Space
6,734	Total

Printed 1/6/2022

Page 51

## Subcatchment 2PB-S: Eastern Portion of Site



Printed 1/6/2022

Page 52

### Summary for Pond 5P: Rain Garden

Inflow Area = 0.123 ac, 96.12% Impervious, Inflow Depth = 3.04" for Custom event
Inflow = 0.58 cfs @ 11.97 hrs, Volume= 0.031 af
Outflow = 0.48 cfs @ 12.02 hrs, Volume= 0.031 af, Atten= 18%, Lag= 3.3 min

Discarded = 0.03 cfs @ 12.02 hrs, Volume= 0.026 af Primary = 0.45 cfs @ 12.02 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 98.81' @ 12.02 hrs Surf.Area= 522 sf Storage= 464 cf

Plug-Flow detention time= 122.5 min calculated for 0.031 af (100% of inflow)

Center-of-Mass det. time= 122.4 min (883.4 - 761.0)

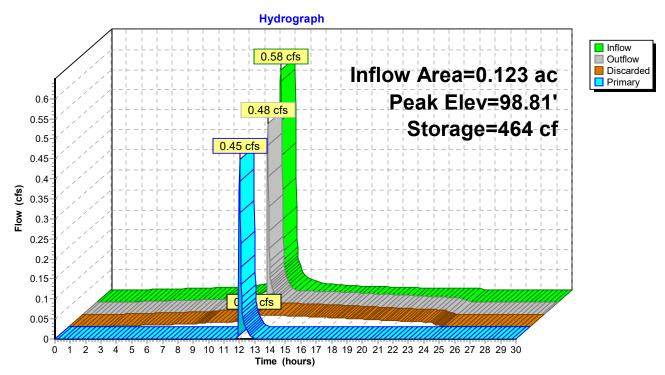
Volume	Inver	t Avail.Stor	rage Storage	Description	
#1	97.50	' 56	55 cf Custon	n Stage Data (Pri	smatic) Listed below (Recalc)
Elevatio	et)	urf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
97.5	50	190	0	0	
98.0	00	310	125	125	
98.5	50	440	188	313	
99.0	00	570	253	565	
Device	Routing	Invert	Outlet Device	es	
#1	Discarded	97.50'	2.410 in/hr E	xfiltration over S	Surface area
#2	Primary	98.75'	10.0' long x	1.0' breadth Bro	ad-Crested Rectangular Weir
	,		_		0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00		
				sh) 2.69 2.72 2.	75 2.85 2.98 3.08 3.20 3.28 3.31 3.30

**Discarded OutFlow** Max=0.03 cfs @ 12.02 hrs HW=98.81' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.44 cfs @ 12.02 hrs HW=98.81' (Free Discharge) **2=Broad-Crested Rectangular Weir** (Weir Controls 0.44 cfs @ 0.68 fps)

Page 53

## Pond 5P: Rain Garden



Printed 1/6/2022

Page 54

## **Summary for Pond DW1: Dry Well**

[92] Warning: Device #2 is above defined storage

Inflow Area = 0.171 ac, 19.43% Impervious, Inflow Depth = 2.25" for Custom event
Inflow = 0.66 cfs @ 11.97 hrs, Volume= 0.032 af
Outflow = 0.03 cfs @ 11.48 hrs, Volume= 0.032 af, Atten= 95%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs Peak Elev= 96.86' @ 13.01 hrs Surf.Area= 598 sf Storage= 632 cf

Plug-Flow detention time= 161.6 min calculated for 0.032 af (100% of inflow) Center-of-Mass det. time= 161.6 min ( 967.4 - 805.8 )

Volume	Invert	Avail.Storage	Storage Description
#1A	95.00'	467 cf	14.35'W x 41.67'L x 3.00'H Field A
			1,794 cf Overall - 627 cf Embedded = 1,166 cf x 40.0% Voids
#2A	95.33'	496 cf	<b>ADS N-12 24"</b> x 8 Inside #1
			Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf
			Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf
			8 Chambers in 4 Rows
		963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	95.00'	2.410 in/hr Exfiltration over Surface area
#2	Primary	98.67'	<b>0.7" x 240.0" Horiz. Orifice/Grate</b> C= 0.600
	·		Limited to weir flow at low heads

**Discarded OutFlow** Max=0.03 cfs @ 11.48 hrs HW=95.04' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=95.00' (Free Discharge) **2=Orifice/Grate** ( Controls 0.00 cfs)

Printed 1/6/2022

Page 55

## Pond DW1: Dry Well - Chamber Wizard Field A

### Chamber Model = ADS N-12 24" (ADS N-12® Pipe)

Inside= 23.8"W x 23.8"H => 3.10 sf x 20.00'L = 62.0 cf Outside= 28.0"W x 28.0"H => 3.92 sf x 20.00'L = 78.4 cf

28.0" Wide + 13.4" Spacing = 41.4" C-C Row Spacing

2 Chambers/Row x 20.00' Long = 40.00' Row Length +10.0" End Stone x 2 = 41.67' Base Length

4 Rows x 28.0" Wide + 13.4" Spacing x 3 + 10.0" Side Stone x 2 = 14.35' Base Width

4.0" Base + 28.0" Chamber Height + 4.0" Cover = 3.00' Field Height

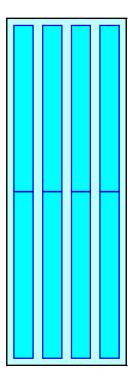
8 Chambers x 62.0 cf = 496.0 cf Chamber Storage

8 Chambers x 78.4 cf = 627.1 cf Displacement

1,793.8 cf Field - 627.1 cf Chambers = 1,166.7 cf Stone x 40.0% Voids = 466.7 cf Stone Storage

Chamber Storage + Stone Storage = 962.7 cf = 0.022 af Overall Storage Efficiency = 53.7% Overall System Size = 41.67' x 14.35' x 3.00'

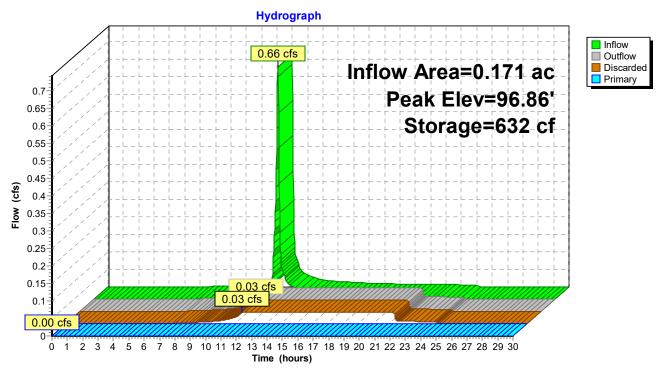
8 Chambers 66.4 cy Field 43.2 cy Stone





Page 56

## Pond DW1: Dry Well



Printed 1/6/2022

Page 57

## Summary for Pond SUM1: Off-Site Summary Pt

[40] Hint: Not Described (Outflow=Inflow)

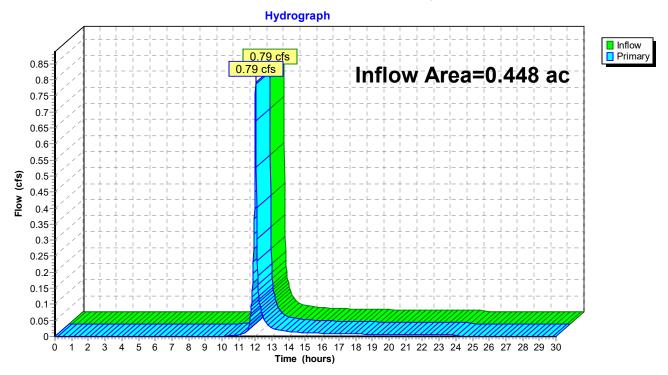
Inflow Area = 0.448 ac, 33.79% Impervious, Inflow Depth = 0.65" for Custom event

Inflow = 0.79 cfs @ 12.01 hrs, Volume= 0.024 af

Primary = 0.79 cfs @ 12.01 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs

## Pond SUM1: Off-Site Summary Pt





**Construction Period Erosion and Sedimentation Control Plan** 

# CONSTRUCTION PERIOD EROSION AND SEDIMENTATION CONTROL PLAN

The following measures shall be maintained throughout the site construction phase of the project.

#### 1.0 CONSTRUCTION PERIOD CONTROLS

Erosion and sedimentation control Best Management Practices (Erosion Control BMPs) shall be implemented to minimize erosion and transport of sediment into off-site and adjacent resource areas during the earthwork and construction phases of the Project. The following subsections present Stormwater Pollution Prevention controls to be implemented and maintained during the course of the Project.

#### 1.1 Minimize Disturbed Area and Protect Natural Features and Soil

Natural vegetation shall be preserved on site where possible. This will prevent erosion by providing continuous anchoring of the soil.

### 1.2 Construction Activity Phases

During construction, the Operator is directed to conduct construction activities in such a manner as to prevent damage or impairment to the environment. It shall be the Operator and Contractors' responsibility not to undertake at any time, in any particular area, more than that magnitude of work which can be safely and adequately controlled by the forces at their disposal. An emphasis will be made to control erosion before it occurs.

Erosion control BMPs, a consolidated Project entrance/exit, and construction period drainage controls shall be installed prior to the onset of full-scale tree removal and earth moving activities.

#### 1.3 Control Stormwater Flowing Onto and Through the Project Area

Erosion Control BMPs shall be placed across construction ditches during construction to limit the transport of sediment into permanent drainage systems and waterways.

#### 1.4 Natural Vegetation Preservation

Natural vegetation shall be preserved wherever possible. This measure will prevent erosion by providing continuous anchoring of soil.

#### 1.5 Establish Perimeter Controls and Sediment Barriers

Erosion Control BMPs shall be employed to minimize erosion and transport of sediment to on-site and adjacent resource areas during the earthwork and construction phases of the Project. The major erosion control techniques proposed include one or more of the following: compost fiber

rolls, straw wattles, silt fence barriers, hay bale barriers, inlet sediment traps, a stabilized construction entrance, and/or erosion control matting. A detailed description of each technique is discussed below.

#### 1.5.1 Perimeter Erosion Control BMPs

Erosion Control BMPs (i.e., compost fiber rolls, straw wattles, silt fences, hay bales, or a combination of each), shall be installed in topographically low-lying areas at the perimeter of the Project during the construction period. Erosion Control BMPs shall be placed in a sturdy, upright position and supported/anchored to withstand the forces of the elements and the circumstances of construction activities. The BMPs shall be installed in a manner that will prevent stormwater runoff from passing over, under or around the sedimentation barrier (i.e. all of the runoff will pass through the sedimentation barrier). They shall be attached to posts (either steel or wood) or staked in sufficient number to support the BMP. The posts will typically be placed 5 to 10 feet apart. It shall be the Contractor's responsibility to maintain the sedimentation barriers in a functional condition throughout the duration of construction activities. The Contractor shall also remove any large accumulations of sediment in a timely manner and dispose of the material appropriately.

#### 1.5.2 Erosion Control BMP Maintenance

The Contractor shall have primary responsibility for implementing temporary and permanent controls described in the plan and will be responsible for assuring compliance with erosion and sediment control measures.

- The Contractor shall inspect all sediment and erosion control structures on a weekly basis.
- Silt shall be removed from behind barriers if greater than 1/3 of the fence height, or as needed to ensure the stability of the control device.
- Damaged or deteriorated items shall be repaired or replaced immediately after identification.
- The underside of perimeter erosion controls shall be kept in close contact with the earth and reset as necessary.

Once construction in a particular area has been completed, and the areas have been stabilized, these temporary devices shall be removed.

#### 1.6 Stockpile Management

The following materials, when stored temporarily or permanently, shall be considered stockpiles that must be managed to prevent erosion of sediments or contamination of resource areas: soil, sand, earthen material or mixtures of such materials; construction debris, concrete rubble; asphalt

rubble; or any other materials subject to movement during a rainfall event. Staging/storage/stockpile areas shall, be located further than 100 feet from any wetland resource area. The length of time materials intended for reuse are stockpiled should be minimized to the extent practicable.

Stockpiles not in active use must be stabilized as soon as practicable, but not more than 14-days after use of the stockpile ceases temporarily or permanently unless:

- Stabilization by the 14<sup>th</sup> day is precluded by snow cover or frozen ground, in which case stabilization measures must be initiated as soon as practicable, or
- Use of the stockpile will resume by the 14<sup>th</sup> day after activities ceased.

Stockpiles requiring stabilization shall be stabilized by one of the following methods: 1) covered; 2) ringed with erosion controls at their base; 3) sprayed with a tackifier; or 4) seeded/hydro-seeded. If covering is elected for stockpile stabilization, it shall consist of a durable material. Plastic sheeting, which is at least 6-mil thick, or equivalent, is considered durable.

Stockpiles shall be placed so that they do not drain toward resource areas, existing catch basin inlets, or other drainage conveyances (e.g. swales or ditches) that discharge to wetland resources or water bodies. Where they cannot, the side of the stockpile facing the resource area or drainage inlet shall be temporarily stabilized as set forth above.

Any storm drain with potential to receive discharge from stockpiled materials or construction operations shall be managed to inhibit the inflow of sediment while not increasing the likelihood of street flooding during periods of precipitation.

#### 1.7 Materials Management Practices

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff during the course of construction. The Contractor's Superintendent shall be responsible for ensuring that these procedures are followed:

#### 1.7.1 Good Housekeeping

The following good housekeeping practices shall be followed on-site during construction:

- An effort shall be made to store only enough products required to do the job.
- All materials stored on-site shall be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers shall be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
- Products shall be kept in their original containers with the original manufacturer's label in legible condition.

- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The Contractor's Superintendent shall be responsible for daily inspections to ensure proper use and disposal of materials.

#### 1.7.2 Product Specific Practices

The following product specific practices shall be followed on the job site:

#### **Petroleum Products:**

All on-site vehicles shall be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products shall not be stored at the Subject Property.

#### **Fertilizers:**

Fertilizers shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked in the soil to limit exposure to stormwater. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

#### **Cleaning Solvents:**

All containers shall be tightly sealed and stored when not in use. Excess solvents shall not be discharged to the storm sewer system, but shall be properly disposed of according to manufacturer's instructions or state and federal regulations.

#### **Concrete Wastes:**

Concrete trucks shall be allowed to wash out or discharge surplus concrete or drum wash water on the Subject Property, but only in specifically designated diked and impervious washouts which have been prepared to prevent contact between the concrete wash and stormwater. Waste generated from concrete wash water shall not be allowed to flow into drainage ways, inlets, receiving waters or any location other than the designated concrete washout. Waste concrete may be poured into forms to make rip-rap or other useful concrete products. Concrete washouts shall be located at minimum 100 linear feet from drainage ways, inlets, surface waters and wetland resource areas.

The hardened residue from the concrete washout diked areas shall be disposed in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the Contractor. Maintenance of the washout is to include removal of hardened concrete. The Contractor's Superintendent shall be responsible for seeing that these procedures are followed.

Saw-cut Portland Cement Concrete (PCC) slurry shall not be allowed to enter storm drains or watercourses. Saw-cut residue should not be left on the surface of pavement or be allowed to

flow over and off pavement. Residue from saw-cutting and grinding shall be collected by vacuum and disposed in the same manner as excess concrete.

#### 1.7.3 Solid and Construction Wastes

All waste materials shall be collected and disposed at an appropriate solid waste disposal area.

## 1.7.4 Sanitary Wastes

A minimum of one portable sanitary unit shall be provided for every ten (10) workers present during the construction period. All sanitary waste shall be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.

All portable sanitary units shall be located in an area where the likelihood of the unit contributing to stormwater discharges is negligible. Additional containment BMPs must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to stormwater discharges.

**Operation and Maintenance Plan** 

#### 1.0 LONG TERM OPERATION AND MAINTENANCE PROGRAM

The proposed stormwater controls have been designed to ensure stormwater quality. In order for this to continue in the long term, it is necessary to implement the following long term Operation and Maintenance Program.

#### 1.1 Responsible Party

#### Owner:

Cape Verdean Association in New Bedford, Inc. 59 Sycamore Street New Bedford, MA 02746

Responsible for Operation, Maintenance and Emergency Repairs:

Cape Verdean Association in New Bedford, Inc. 59 Sycamore Street New Bedford, MA 02746

Notification of Future Property Owners:

Prior to any sale of the property in the future, the prospective buyer would be made aware of the presence of stormwater management systems and the requirement for proper operation and maintenance.

#### 1.2 Maintenance of Stormwater Management Facilities

The following areas, system components, and measures will be inspected and the identified deficiencies will be corrected. Plans and details of the stormwater management system components are presented on the Project Plans. Maintenance of the system components may include the removal and legal disposal of any accumulated sediments and debris. The following standards will be met after construction is complete:

#### **Catch Basins:**

Inspect catch basins at least four (4) times per year and at the end of the foliage and snow removal seasons, to ensure that the catch basins are working in their intended fashion and they are free of debris. Catch basin shall be cleaned when sediment depths reach 12-inches from the invert of the outlet. If the catch basin outlet is designed with a hood to trap floatable materials (i.e., a snout), check to ensure that the watertight seal is working properly. At a minimum, remove floating debris and hydrocarbons at the time of the inspection.

#### Infiltration Gallery (Dry-Well):

Inspect the infiltration system at least four (4) times per year and at the end of the foliage and snow removal seasons, to ensure that there is no sediment or debris entering the infiltration system. The infiltration system shall be cleaned when sediment is observed at depths of 2-inches.

#### **Vegetated Areas:**

Inspect vegetated areas early in the growing season to identify active or potential erosion problems. Re-plant bare areas, or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

#### Rain Garden

A series of activities must be conducted in order to maintain the rain garden's effectiveness.

- During it's initial construction: water to maintain plant growth during the first two years and during any dry periods; and remove & replace eroded and dead vegetation as needed.
- On a monthly basis: prune and weed the plant bed to maintain its appearance; clear accumulated trash and debris; and replace mulch as needed.
- On a yearly basis: inspect and remove accumulated sediment and debris; inspect site for any erosion and dead vegetation, removing and replacing vegetation as needed; test the pH level of the plant bed, adding limestone if pH is below 5.2 and adding iron sulfate and sulfur if pH is above 8.0.

#### **Crushed Shell Driveways & Parking Areas:**

Evaluate at least once per year to determine if the shells should be replenished, preferably in the spring after snow removal season. Replenish the shells as necessary.

#### 1.3 Non-Routine Maintenance

All water quality inlets, grates and pipes should be inspected once every four (4) years for proper function, clogging, signs of deterioration and structural inadequacy. Any adverse situations are to be repaired as needed.

#### 1.4 Non-Periodic Inspection

The storm water management system shall be inspected after two years of full operation by a Registered Professional Civil Engineer to confirm its adequacy. The inspection shall include an examination of all components of the system.

#### 1.5 Record keeping

A maintenance inspection report will be made after each inspection. Maintenance inspection reports shall be maintained by the Owner for a period of no less than 5-years.

## 2.0 PUBLIC SAFETY FEATURES

The stormwater management facilities were designed to be inherently safe.

#### 3.0 ESTIMATED O&M BUDGET

The estimated annual budget to conduct the specified operation and maintenance is approximately two thousand dollars per year (\$2,000/year).



**INSPECTION LOG** 



# Redefining Thermal Entrances with IsoPour™ Technology



Ask more from your door, and get it all with Kawneer's new Insulpour<sup>®</sup> Thermal Entrances, featuring IsoPour<sup>™</sup> technology. This innovative product offering gives architects, developers, owners, and glazing contractors the ability to create a true thermally broken entrance system. It's an ideal solution for high-end commercial and multifamily facilities looking to improve thermal control in common areas with moderate to high traffic.

By merging industry-proven pour and debridge and polymer isolator technologies, Kawneer's IsoPour™ Thermal Break technology creates thermally broken assemblies for enhanced building energy efficiencies with higher structural performance. Insulpour® Thermal Entrances simultaneously provide additional design flexibility through multiple door cross-rail and bottom rail choices along with dual finish capabilities for the door and door frame.

#### PERFORMANCE, STRENGTH & SECURITY

The door and frame both leverage IsoPour™ Thermal Break technology, enabling high thermal performance. Specifically aimed at quelling concerns about cold spots and thermal bridging from architects and specifiers, Insulpour® Thermal Entrances feature a true thermally broken door header, which significantly mitigates the formation of condensation when used with a concealed overhead closer. Insulating glass unit options of double pane 1" (25.4 mm) or triple pane 1-1/2" (38.1 mm) improve thermal and sound reduction performance.

For added strength, the 2-1/4" (57.2 mm) deep door has a stout 1/8" (3.2 mm) wall thickness, and the dual-welded corner construction of Insulpour® Thermal Entrances adds long-term performance. Each door corner comes with a limited lifetime warranty, good for the life of the door under normal use operation. It is transferable from building owner to owner and is provided in addition to the standard two-year warranty covering material and workmanship of each Kawneer door.

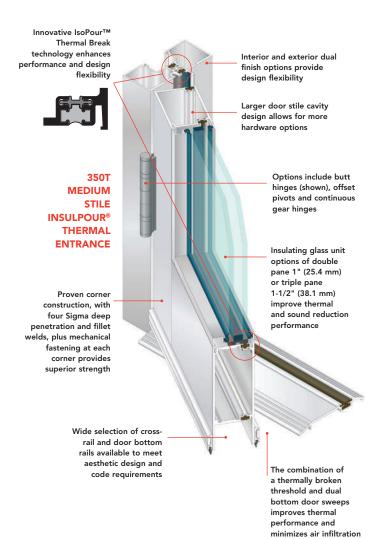
Insulpour® Thermal Entrances meet ASTM E1996 hurricane impact resistant requirements up to Zone 4 and Level D, and have undergone shock tube testing for blast mitigation. Contact your local Kawneer sales representative for limitations and specific application requirements.

#### **AESTHETICS & DESIGN FLEXIBILITY**

With sightlines that match standard, non-thermally broken entrances, Insulpour® Thermal Entrances offer 250T narrow, 350T medium and 500T wide stile options.

	VERTICAL STILE	TOP	BOTTOM RAIL
250T Narrow Stile	2-1/2"	2-15/16"	3-7/8"
	(63.5 mm)	(74.6 mm)	(98.4 mm)
350T Medium Stile	3-1/2"	3-1/2"	6-1/2"
	(88.9 mm)	(88.9 mm)	(165.1 mm)
500T Wide Stile	5"	5"	6-1/2"
	(127 mm)	(127 mm)	(165.1 mm)

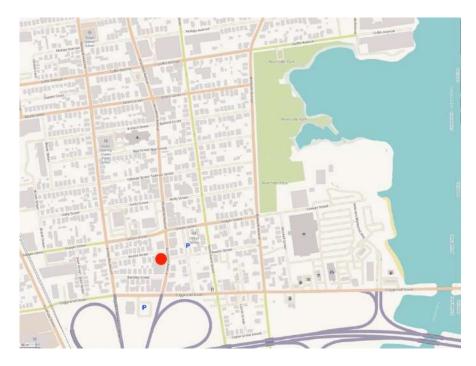
The unique thermal break design allows for a wider choice of locking option hardware than previous thermal entrance designs. Coupled with various cross-rail sizes and multiple bottom rail heights of 7-1/2" (190.5 mm), 10" (254 mm) and 12" (304.8 mm), Insulpour® Thermal Entrances give architects, designers and building owners more opportunities to bring their vision to life.



© Kawneer Company Inc. 2018–2020

# studio<sup>2</sup>sustain

## architects consultants environmental evangelists



CVANB - 1157 Acushnet Ave



# **CVANB Site Photos - Strand Theater CPA FY24**

Image of current men's room

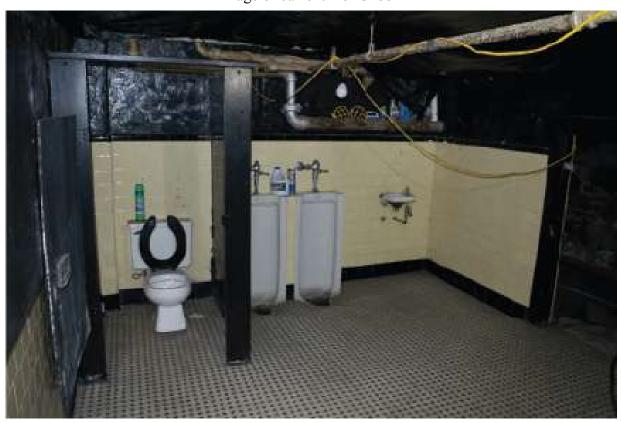


Image of current women's room



# **CVANB Site Photos - Strand Theater CPA FY24**

Southern elevation with overlay approximation of proposed egress.



Southern Elevation from inside the theater with overlay of proposed egress.



# Historic Building Detail: NBE.2798

# **Strand Theater**

MHC ID	NBE.2798 MACRIS Maps for NBE.2798   Inventory:
Historic Name	Strand Theater
Common Name	Vien Theater - Lowes Center Theater
Street Address	1157 Acushnet Ave
	-
City/Town	New Bedford
Village/Neighborhood	North End;
Local Number	-
Year Constructed	1910
Architects	Fuller and Delano;
Architectural Styles	No style;
Uses	Abandoned or Vacant; Theater;
Significance	Architecture; Commerce; Performing Arts; Recreation;
Areas	NBE.AS Inventory:
Designations	-
<b>Building Materials Roof</b>	Asphalt Shingle;
<b>Building Materials Wall</b>	Brick; Metal, Undetermined; Plaster; Stucco; Wood;
Building Materials Foundation	Poured Concrete;
Demolished	No





# The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth Massachusetts Historical Commission

August 12, 2019

Raquel Dias Cape Verdean Association of New Bedford, Inc. P. O. Box 5532 New Bedford, MA 02742

RE: Massachusetts Historic Rehabilitation Tax Credit Application, Strand Theater, 1157 Acushnet Avenue, New Bedford, MA; MHC# HRC.914

Dear Ms. Dias:

The Massachusetts Historical Commission (MHC) has reviewed your application for the Massachusetts Rehabilitation Tax Credit for the above referenced property.

The Massachusetts Historical Commission (MHC) has reviewed your application for the Massachusetts Rehabilitation Tax Credit. The information that you have submitted with your Part 1 application is complete in accordance with the regulations (830 CMR 63.38R.1). This letter constitutes the "initial certification" (830 CMR 63.38R.1(4)(a)). The MHC has determined that the subject property meets the definition of a "qualified historic structure" for the purposes of the Massachusetts Rehabilitation Tax Credit program.

The MHC understands sections of the existing stucco on the front façade were removed to determine if historic materials, such as original clapboards or trim, were extant under the stucco. The MHC understands that no visible extant original clapboards or trim were found within the exploratory window; the only original material appears to be the original sheathing.

Based on the documentation submitted to MHC, very little original exterior materials remain. These materials include the southern set of fire doors (the doors themselves, not the trim) and molding located directly overhead the recessed front entry. The interior of the building does retain many of the original spaces and materials. The stage, proscenium arch, loges, balcony, and ornamental plaster ceiling are still extant, and the open volume of the auditorium remains open.

Please do not hesitate to contact Elizabeth Sherva of my staff, should you have any questions.

Sincerely,

Brona Simon Executive Director

State Historic Preservation Officer

Massachusetts Historical Commission

xc: Teri Bernert, WHALE

Anne Louro, New Bedford Historical Commission

## —Photo Book

Strand Theater 1157 Acushnet Avenue New Bedford, MA 02746



17. Exterior original east façade trim above entrance, facing W.



18. Exterior original east façade trim above entrance, facing E.



31. Exterior west elevation windows, facing SE.



32. (← up) Interior west elevation window, facing W.



37. (← up) Interior east façade window opening, facing E.



38. (← up) Interior east façade window opening, facing E.



39. (nteuripo) leatesti da gezade farquade cerido o ros, ofacini go F, facing E.





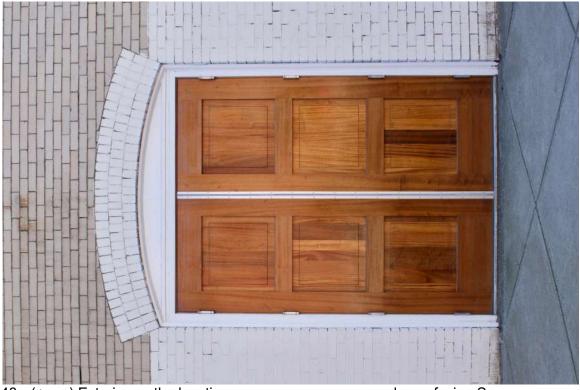
45. Interior location of removed original east façade emergency egress doors, facing E.



46. (← up) Exterior north elevation newer emergency egress doors, facing S.



47. (← up) Interior north elevation newer emergency egress doors, facing N.



48. (← up) Exterior north elevation new emergency egress doors, facing S.



49. (← up) Interior north elevation new emergency egress doors, facing N.



50. (← up) Exterior north elevation original emergency egress doors, facing S.



51. Exterior fire escape, facing SW.



52. Exterior fire escape, facing SE.



53. (← up) Interior fire escape, facing NE.



54. Lobby area, facing SE.



55. Lobby area, facing NW.



56. (← up) Lobby area, facing S.



57. (← up) Lobby area, facing S.



58. (← up) Lobby area, facing N.



59. (← up) Lobby area, facing N.



60. Concessions area, facing NE.



61. Concessions area, facing SE.



62. Door to basement men's room, facing NE.



63. Door to basement women's room, facing SE.



64. Interior auditorium-level restroom, facing SW.



65. (← up) Interior auditorium-level restroom, facing SE.





67. Auditorium from stage, facing E.



68. Auditorium from stage, facing SE.



69. Auditorium, facing NW.



70. Auditorium, facing W.



71. Auditorium, facing SW.



72. Auditorium from balcony, facing NW.



73. Auditorium from balcony, facing W.





75. Auditorium balcony, facing E.



76. Auditorium balcony, facing NE.



77. Auditorium balcony, facing SE.



78. Auditorium balcony, facing E.



79. (← up) Backstage, facing SW.



80. (← up) Backstage, facing N.



81. (← up) Backstage, facing NE.



82. (← up) Backstage, facing S.



83. (← up) Backstage, facing S.



84. (← up) Backstage, facing SE.



85. (← up) Stairs to basement men's room, facing E.



86. Basement men's room, facing SW.



87. Basement men's room, facing N.



88. (← up) Stairs to basement women's room, facing E.



89. Basement women's room, facing N.



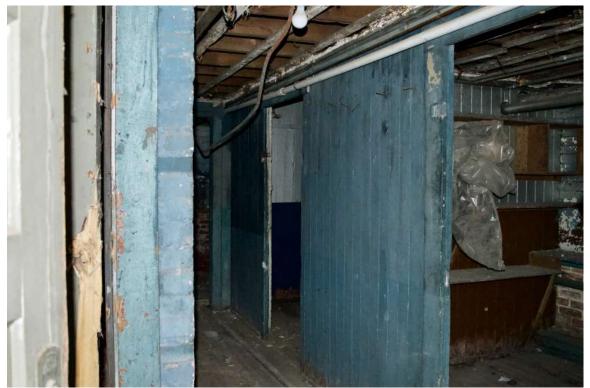
90. Basement women's room, facing S.



91. Basement, facing S.



92. (← up) Stairs to backstage basement, facing N.



93. Backstage basement, facing NE.



94. (← up) Backstage basement, facing S.



95. (← up) Backstage basement, facing NE.



96. Archway at southeast corner stair, facing W.



97. (← up) Southeast corner stair to balcony, facing SW.



98. Ceiling above southeast corner stair to balcony, facing E.



99. (← up) Southeast corner stair to balcony, facing E.



100.(← up) Box seat, facing SW.



101.(← up) Box seat, facing NW.



102.(← up) Second floor box seat, facing NW.



103. (← up) Auditorium from second floor box seat, facing N.



104. Second floor box seat, facing SW.



105. Box seat detail, facing SW.



106. Box seat detail, facing NW.



107.(← up) Box seat detail, facing NW.



108. Box seat detail, facing NE.



109. Balcony railing detail, facing NE.



110. Balcony railing detail, facing NW.



111. Auditorium ceiling, facing E.



112. Auditorium ceiling, facing NE.



123. Proscenium, facing W.



124. Proscenium ornamental plaster, facing W.



127. Ornamental plaster cartouche above proscenium, facing W.



128. Lobby area floors, facing W.



ROBERT M. DESROSIERS, P.E.

Consulting Engineer 508-946-3561 Fax 508-946-1653

December 3, 2018

Project No. 2018-299

Kathryn Duff, RA studio2sustain, inc. 412 County Street New Bedford, MA 02740

Re: Preliminary Inspection and Evaluation of the Strand Theater Located at 1157 Acushnet Avenue, New Bedford, MA

Ms. Duff:

You asked me to conduct a preliminary inspection and evaluation of the referenced structure with respect to its overall condition. I understand that you are in the process of evaluating the structure for adaptive re-use. On Tuesday, October 30, 2018, I visited the site to conduct a walk-through inspection. This inspection was preliminary in nature and was intended only to observe the general configuration of the primary structural systems and their overall condition.

The building, constructed circa 1896, is primarily a brick masonry bearing wall structure measuring approximately 60' by 90'. It was purpose-built for use as a theater. The north and south side walls, as well as the west rear wall are composed of multiple wythes of running bond-laid red clay brick. The wall thickness appears to start at five wythes and tapers as it meets incidental floor and roof framing above. The front façade of the building is is a curtain wall that is framed with dimensional lumber. The main roof of the building is a flat roof composed of spruce board decking that spans between support lines. The main supports consist of riveted 8' foot deep steel bridge trusses that span from brick wall to brick wall. These trusses directly support the roof decking and also provide support for intermediate supports consisting of timber purlins. The purlins bear on timber diagonals that in turn bear upon the steel trusses at the panel points. The plaster ceiling framing of the theater space below is supported by being hung from the steel roof trusses.

The theater has a steeply sloping balcony assembly that is framed from dimensional lumber and is substantially supported by an interior bearing wall at the rear of the theater seating and by some sort of steel beam or truss arrangement on the stage side that could not be observed without destructive testing. The stage and fly areas of the theater have some substantial wood framed platforms that form the upper works of the stage and support the fly workings. These are all framed with heavy timer sections. The roof over the back stage area is elevated well above the roof of the balance of the building.

In general, the building is in surprisingly good condition. The interior and exterior of the exposed brick bearing walls reveal them to be in very good condition. There are a couple of areas where persistent water infiltration caused some degradation of the mortar and spalling of the brick faces, but these are isolated. The roof planking and timbers appear to be in good condition. The steel bridge trusses appear to be in very good condition. There was no observable evidence of structural distress in any of the principle building components. Overall, the primary elements of the structure and the building envelope are intact and offer a solid basis for ongoing use of the building. Additional, in-depth structural inspection should be included in the development of the building to provide a detailed review of use-specific conformance with current codes.

If you have any questions regarding this report, or if you require additional information, please do not hesitate to call.

Very Truly Yours,

Robert M. Desrosiers, P.E., M. ASCE