



Massachusetts Port Authority
One Harborside Drive, Suite 200S
East Boston, MA 02128-2090
Telephone (617) 568-5950
www.massport.com

April 6, 2018

Amelia Croteau
Executive Secretary
Boston Conservation Commission
Boston City Hall - Room 709
Boston, MA 02201

Re: **Supplemental package** - Notice of Intent for Taxi Pool Relocation
Logan Airport
East Boston

Dear Ms. Croteau:

Enclosed please find eight (8) copies of the supplemental information requested via email by Mr. Nicholas Moreno.

1. Updated plan titled NOI4
2. USGS topographic map of project area
3. Updated project narrative addressing various comments
4. Product cut sheet for Cultec 100HD stormwater chambers

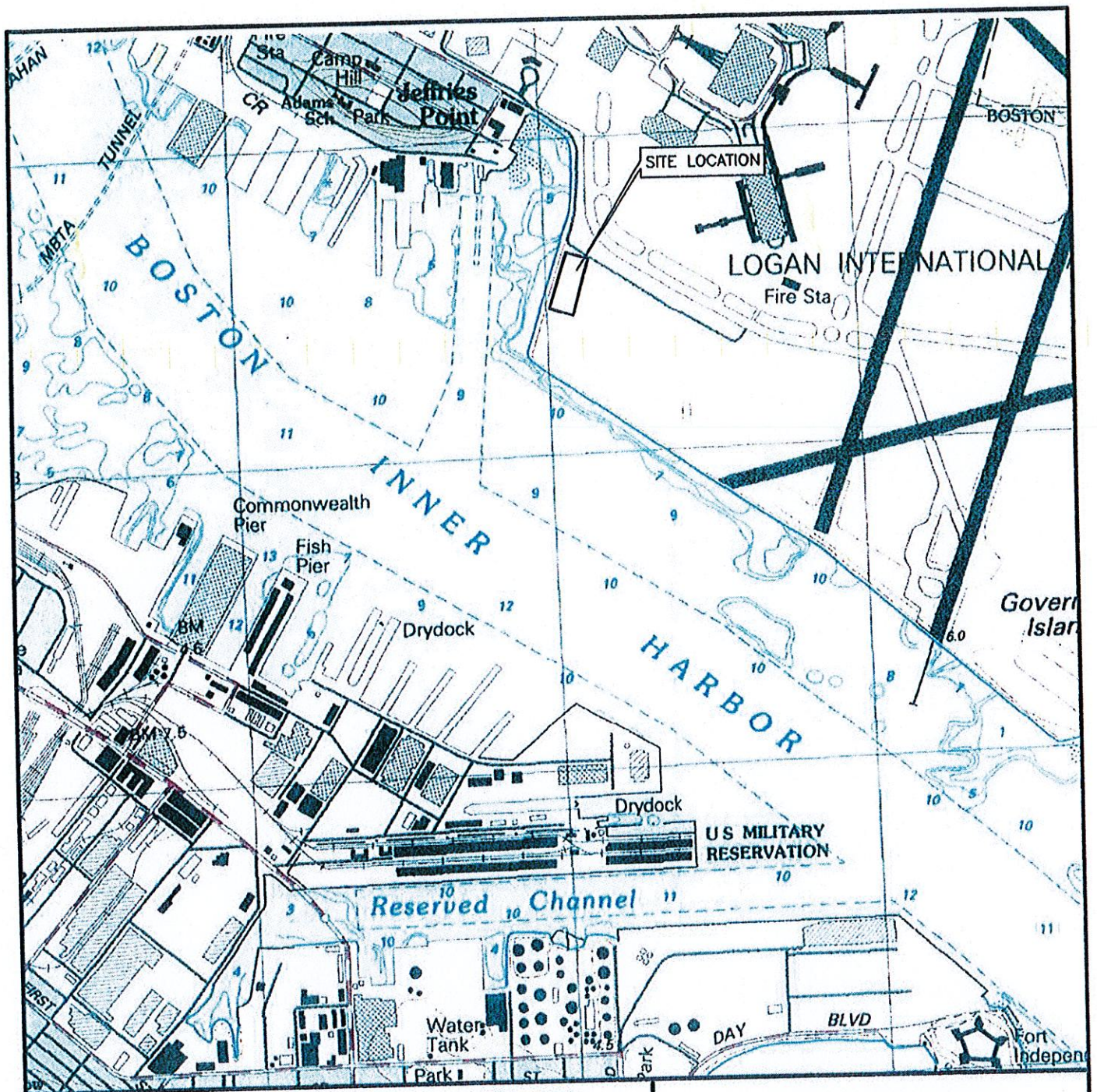
Please feel free to contact me at (617) 568-3953 should you have any questions or need additional information.

Sincerely,
MASSACHUSETTS PORT AUTHORITY


Daniel Dragani, P.E.
Project Manager

Enclosures

cc: James Stolecki, P.E., L.S.P. – Massport Environmental



SCALE IN FEET
SCALE 1"=1500'

SITE LOCUS MAP
HARBORSIDE DRIVE
EAST BOSTON
MASSACHUSETTS



Source: Office of Geographic and Environmental Information (MassGIS)
Commonwealth of Massachusetts
Executive Office of Environmental Affairs

FIGURE 1

PROJECT DESCRIPTION

The proposed project consists of making modifications to a surface parking lot to accommodate the relocation of the existing Taxi Pool facility at Logan Airport. The surface parking lot is located adjacent to the Logan Office Center as shown on the attached Location Plan. The current Taxi Pool is adjacent to the East Boston Memorial Park. The relocation of the taxi staging operations is part of a program to improve traffic flow at Logan Airport.

The existing surface parking lot was previously used for taxi staging operations during construction of the Consolidated Rental Car facility. At that time, Massport constructed a building for the taxi drivers as well as installing infrastructure and site utilities including improvements to the stormwater drainage system. That work was reviewed by the Conservation Commission which issued an Order of Conditions in March 2010 under DEP File number 006-1223.

As shown on attached drawings, site work to be conducted within the 100-foot Buffer Zone will consist of the following:

- Trenching for electrical conduit installation to power vehicle charging stations
- Electrical transformer and load center pads (concrete)
- Installation of posts for the charging stations
- Additional plantings along the Harborwalk to match existing species

In addition to the above project components, work to be conducted outside of the Buffer Zone include constructing a prayer building and smoking shelter. There will be a raised median as shown on Drawing NOI4 that will have a crushed stone surface and an underdrain connected to the existing storm drain. There is no other drainage work proposed.

The tables provided on the plans indicate there will be an increase in pervious area of approximately 4100 square feet due to the removal of existing pavement and concrete and installation of the pervious median described above. Stormwater runoff from the paved surfaces will flow to the two existing "Stormceptor" stormwater treatment units that are designed to removed Total Suspended Solids and petroleum.

Stormwater from the area containing the proposed project site discharges to Massport's West Outfall which is permitted under the Logan Airport's National Pollution Discharge Elimination System (NPDES) permit. Massport operates and maintains pollution control equipment at the West Outfall consisting of a bar screen, an oil skimmer unit and an oil/water separator.

STORMWATER REPORT

Each of the standards contained in the Massachusetts Stormwater Management Standards is addressed below and summarized in the attached Checklist.

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Logan Airport Taxi Pool Relocation
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Standard 1: No New Untreated Discharges

As stated above, there will be no new impervious area created by the project and, therefore, no new discharges will be introduced into the stormwater system.

Standard 2: Peak Rate Attenuation

Since stormwater runoff from the drainage area discharges to Boston Harbor, there is no requirement to attenuate the peak rate of runoff. However, there will be a decrease in the runoff rate due to the reduction in impervious area.

Standard 3: Recharge

There will be an increase in the recharge rate under the post-development condition due to an increase in pervious area including the raised crushed stone median. The crushed stone median will have Cultic 100HD units beneath it with an overflow structure to divert stormwater from the northerly section of the parking lot to the infiltration area.

Standard 4: Water Quality

The proposed Taxi Pool Relocation site is currently a parking lot, and the area is permitted under NPDES Permit No. MA0000787 that was issued by EPA for Logan Airport in 2007. The permit required that Massport develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to address all activities at the airport including parking areas.

The Best Management Practices identified in the SWPPP and adhered to by Massport include the following:

- Pavement Sweeping – The paved areas, including streets and parking areas are swept on a continuous basis using vacuum and brush-type sweepers.
- Maintenance of Drainage Structures – Catch basins and stormwater treatment units (e.g. Stormceptors) are inspected on an annual basis and cleaned as necessary. In areas of high sediment loading, filter inserts are installed in catch basins.
- Pollution Control Equipment at Outfalls – The equipment is inspected and maintained on a weekly basis, at a minimum.

This site was previously modified from an overflow parking lot to the taxi pool holding area in 2010 and the drainage system upgraded at that time included two stormceptor systems that will remain. The TSS removal at that time was calculated at 78%, which was attributed to the two stormwater treatment units, and complied with the “maximum extent practicable” requirement for redevelopment projects. As the site is going back to the taxi pool holding area and no new drainage is anticipated for this project, the TSS removal rate will remain at 78%.

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

As stated under Standard 4, Massport has implemented a Stormwater Pollution Prevention Plan (SWPPP) in accordance with its NPDES stormwater permit. In addition to the Best Management Practices (BMPs) listed under Standard 4, the following BMPs are in place:

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- Pollution Prevention Team – The SWPPP identifies Massport employees who are responsible for implementing and documenting the BMPs.
- SWPPP Inspections – All areas of the airport are inspected on a monthly basis to identify potential pollution sources.
- Spill Prevention and Response – Massport has a full-time Emergency Response Contractor at the airport.

Standard 6: Critical Areas

This standard is not applicable because stormwater from the site does not discharge to a critical area as defined by the Stormwater Management Standards.

Standard 7: Redevelopment Subject to Standards only to the maximum extent practicable

Accordingly, Standard 4 has been met to the maximum extent practicable (Standards 2 and 6 are not applicable for the reasons previously stated). Although the standard does not apply, Massport is proposing to install Cultec 100HD units to infiltrate stormwater from the northerly section of the parking lot

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

The contract specifications for the Taxi Pool Relocation project will require the contractor to install and maintain erosion and sedimentation controls around the limits of work. These controls are shown on plan NOI2 which is attached to the Notice of Intent. The erosion and sedimentation controls referenced under Standard 8 and shown on NOI2 will prevent any impacts to the Coastal Bank or Boston Harbor.

Standard 9: Operation and Maintenance Plan

The information required under Standard 9 is contained in the SWPPP that has been developed and implemented for Logan Airport. The SWPPP identifies responsible individuals and provides a schedule for routine inspection and maintenance of stormwater structural controls. These controls include catch basins and stormwater treatment units which are inspected and cleaned of accumulated sediment on a routine basis.

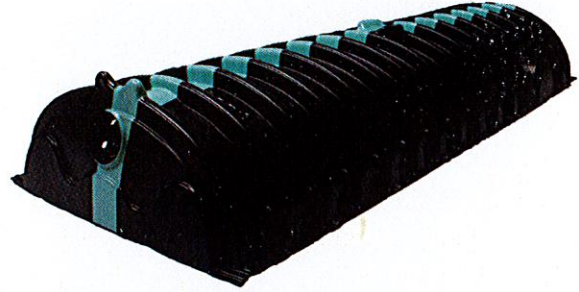
Standard 10: Prohibition of Illicit Discharges

There are currently no sanitary sewer lines within the parking lot area. During the renovation to the existing Taxi Pool building and during the construction of the proposed new building, measures will be taken to ensure proper connection of utilities and prevention of illicit discharges to the stormwater drainage system.



CULTEC Contactor® 100HD Stormwater Chamber

The Contactor® 100HD is a 12.5" (318 mm) tall, low profile chamber and is typically used for installations with depth restrictions or when a larger infiltrative area is required. The Contactor 100HD has the side portal internal manifold feature. The HVLV® SFCx2 Feed Connector is inserted into the side portal of the Contactor 100HD to create the internal manifold.



Size (L x W x H)	8' x 36" x 12.5" 2.44 m x 914 mm x 318 mm
Installed Length	7.5' 2.29 m
Length Adjustment per Run	0.5' 0.15 m
Chamber Storage	1.87 ft ³ /ft 0.17 m ³ /m 14.00 ft ³ /unit 0.40 m ³ /unit
Min. Installed Storage	3.84 ft ³ /ft 0.36 m ³ /m 28.81 ft ³ /unit 0.82 m ³ /unit
Min. Area Required	25 ft ² 2.32 m ²
Min. Center to Center Spacing	3.33' 1.02 m
Max. Allowable Cover	12' 3.66 m
Max. Inlet Opening in End Wall	10" 250 mm
Max. Allowable O.D. in Side Portal	6.9" 175 mm
Compatible Feed Connector	HVLV SFCx2 Feed Connector

Contactor® 100HD Bare Chamber Storage Volumes

Elevation		Incremental Storage Volume				Cumulative Storage	
in.	mm	ft ³ /ft	m ³ /m	ft ³	m ³	ft ³	m ³
12	305	0.009	0.001	0.068	0.002	13.995	0.396
11	279	0.067	0.006	0.503	0.014	13.928	0.394
10	254	0.110	0.010	0.825	0.023	13.425	0.380
9	229	0.139	0.013	1.043	0.030	12.600	0.357
8	203	0.159	0.015	1.193	0.034	11.558	0.327
7	178	0.174	0.016	1.305	0.037	10.365	0.294
6	152	0.184	0.017	1.380	0.039	9.060	0.257
5	127	0.192	0.018	1.440	0.041	7.680	0.217
4	102	0.203	0.019	1.523	0.043	6.240	0.177
3	76	0.203	0.019	1.523	0.043	4.718	0.134
2	51	0.203	0.019	1.523	0.043	3.195	0.090
1	25	0.223	0.021	1.673	0.047	1.673	0.047
Total		1.866	0.173	13.995	0.396	13.995	0.396

Calculations are based on installed chamber length.

Visit www.cultec.com/downloads.html for Product Downloads and CAD details.

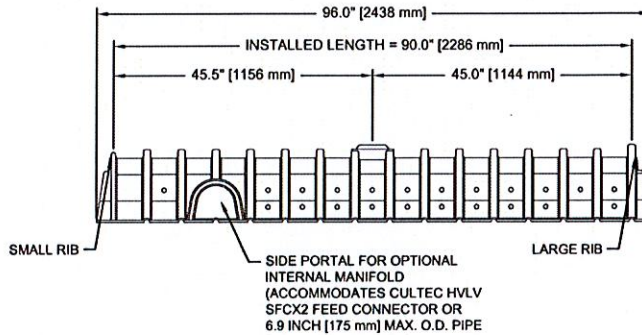
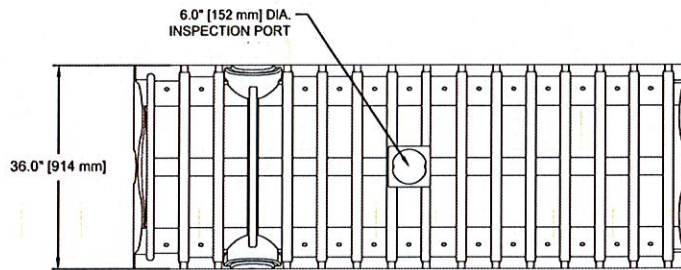
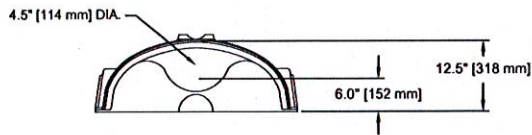
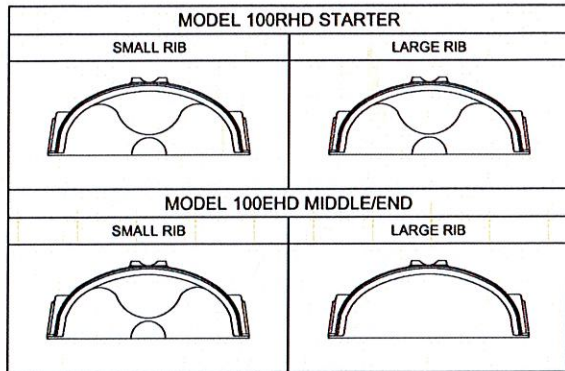
	Stone Foundation Depth		
	6" 152 mm	12" 305 mm	18" 457 mm
Chamber and Stone Storage Per Chamber	28.81 ft ³ 0.82 m ³	33.81 ft ³ 0.96 m ³	38.81 ft ³ 1.10 m ³
Min. Effective Depth	2.04' 0.62 m	2.54' 0.77 m	3.04' 0.93 m
Stone Required Per Chamber	1.37 yd ³ 1.05 m ³	1.84 yd ³ 1.40 m ³	2.30 yd ³ 1.76 m ³

Calculations are based on installed chamber length.
Includes 6" (152 mm) stone above crown of chamber and typical stone surround.
Stone void calculated at 40%.

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

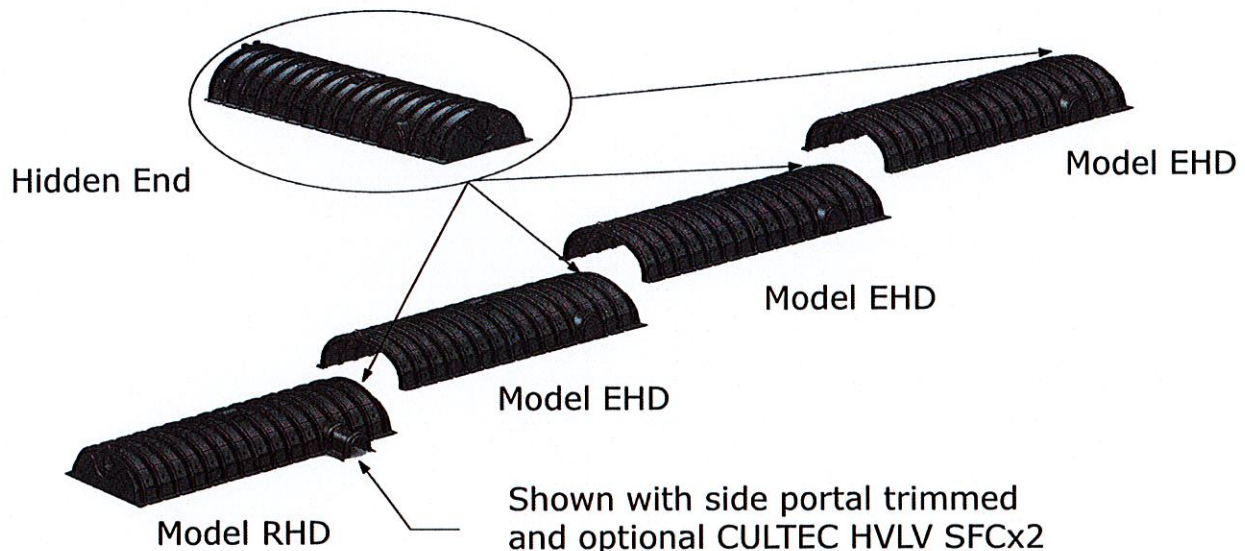


Three View Drawing



CULTEC CONTACTOR 100HD CHAMBER STORAGE = 1.866 CF/FT [0.173 m³/m]
 INSTALLED LENGTH ADJUSTMENT = 0.5' [0.15 m]
 ALL CONTACTOR 100HD HEAVY DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.

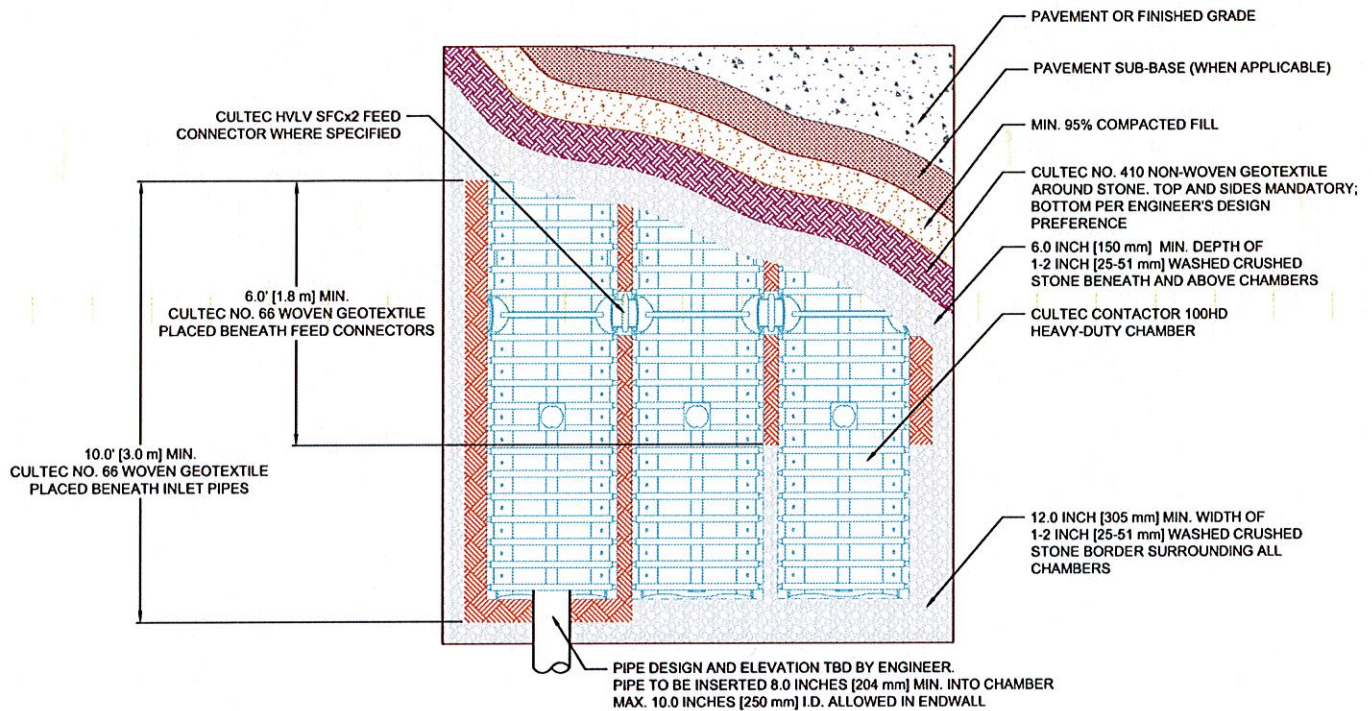
Typical Interlock Installation



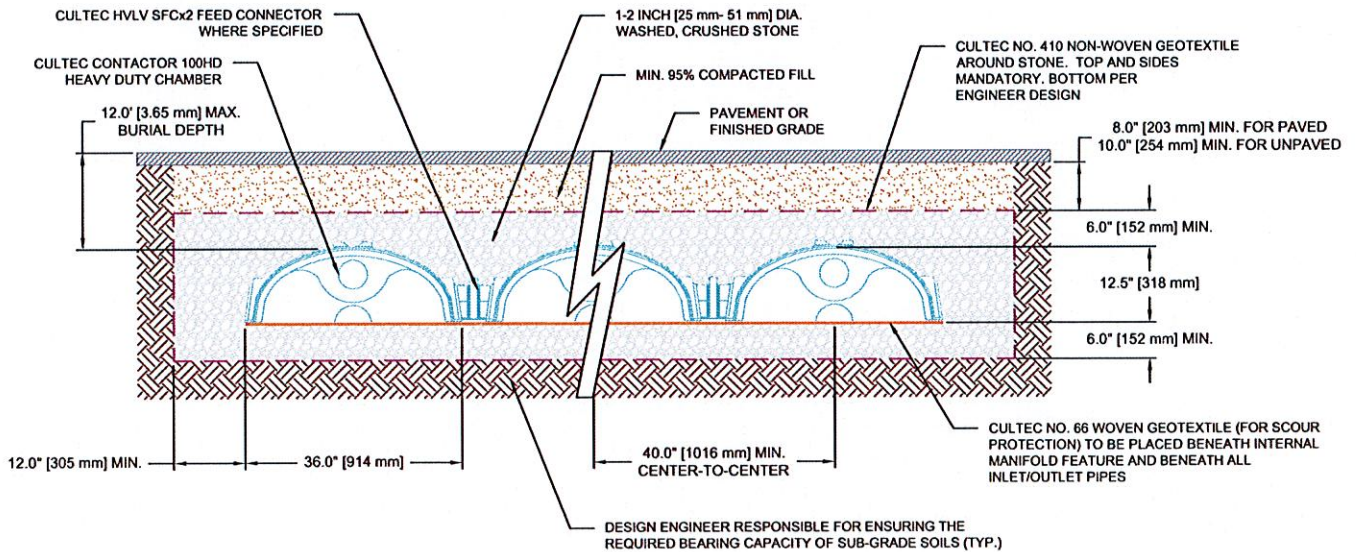
For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.



Plan View Drawing



Typical Cross Section for Traffic Application



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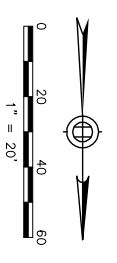
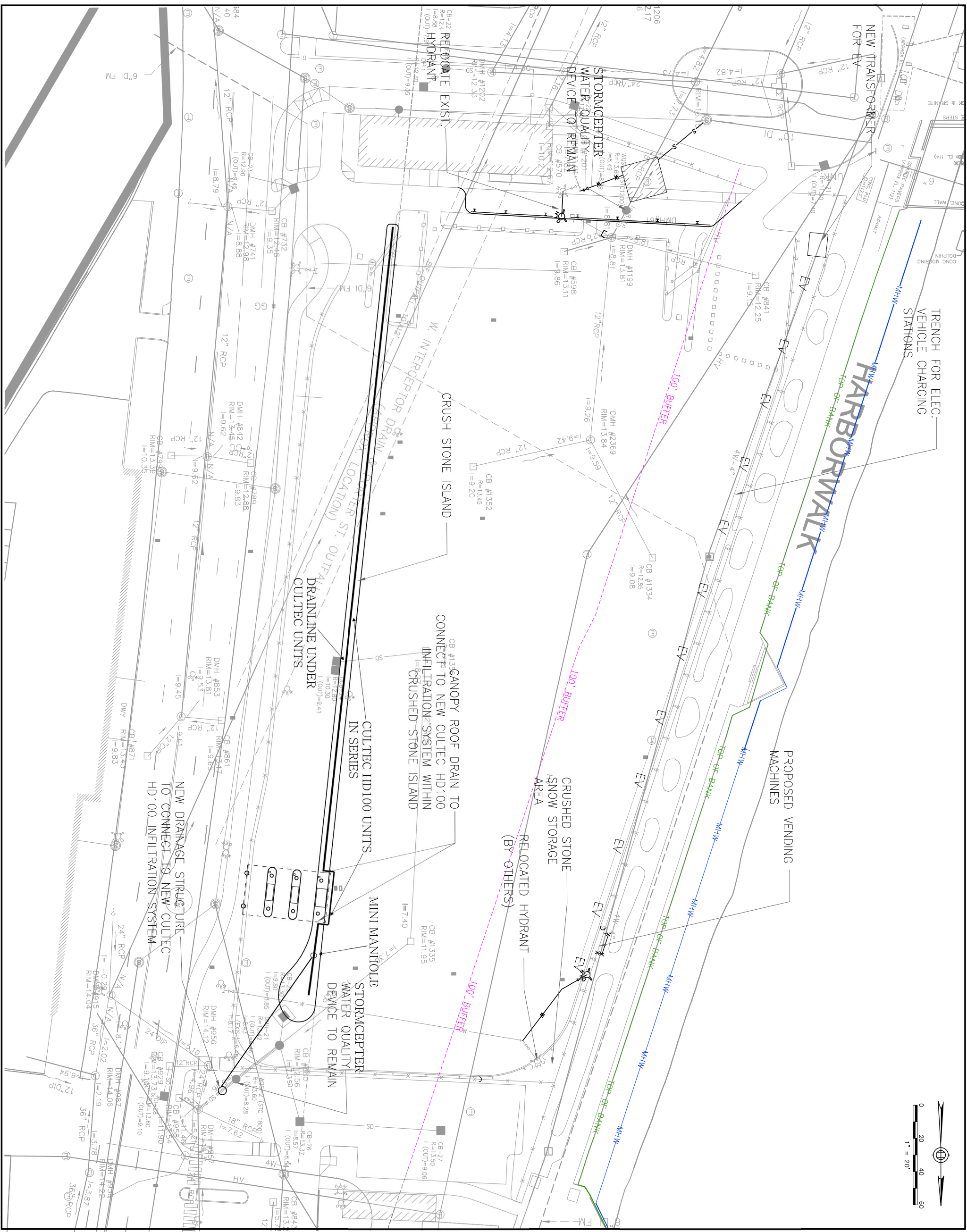
CULTEC Contactor® 100HD Specifications

GENERAL

CULTEC Contactor® 100HD chambers are designed for underground stormwater management. The chambers may be used for retention, recharging, detention or controlling the flow of on-site stormwater runoff.

CHAMBER PARAMETERS

1. The chambers shall be manufactured in the U.S.A. by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
2. The chamber shall be vacuum thermoformed of black polyethylene.
3. The chamber shall be arched in shape.
4. The chamber shall be open-bottomed.
5. The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings or separate end walls.
6. The nominal chamber dimensions of the CULTEC Contactor® 100HD shall be 12.5 inches (318 mm) tall, 36 inches (914 mm) wide and 8 feet (2.44 m) long. The installed length of a joined Contactor® 100HD shall be 7.5 feet (2.29 m).
7. Maximum inlet opening on the chamber end wall is 10 inches (250 mm).
8. The chamber shall have two side portals to accept CULTEC HVLV® SFCx2 Feed Connectors to create an internal manifold. The nominal I.D. dimensions of each side portal shall be 5.75 inches (146 mm) high by 7.5 inches (191 mm) wide. Maximum allowable O.D. in the side portal is 6.9 inches (175 mm).
9. The nominal chamber dimensions of the CULTEC HVLV® SFCx2 Feed Connector shall be 7.6 inches (194 mm) tall, 12 inches (305 mm) wide and 19.7 inches (500 mm) long.
10. The nominal storage volume of the Contactor® 100HD chamber shall be 1.866 ft³ / ft (0.173 m³ / m) - without stone. The nominal storage volume of a single Contactor® 100RHD Stand Alone unit shall be 14.93 ft³ (0.42 m³) - without stone. The nominal storage volume of a joined Contactor® 100EHD as an Intermediate unit shall be 13.995 ft³ (0.396 m³) - without stone. The nominal storage volume of the length adjustment amount per run shall be 0.93 ft³ (0.09 m³) - without stone.
11. The nominal storage volume of the HVLV® SFCx2 Feed Connector shall be 0.294 ft³ / ft (0.027 m³ / m) - without stone.
12. The Contactor® 100HD chamber shall have forty-four discharge holes bored into the sidewalls of the unit's core to promote lateral conveyance of water.
13. The Contactor® 100HD chamber shall have 16 corrugations.
14. The end wall of the chamber, when present, shall be an integral part of the continuously formed unit. Separate end plates cannot be used with this unit.
15. The Contactor® 100RHD Starter/Stand Alone unit must be formed as a whole chamber having two fully formed integral end walls and having no separate end plates or separate end walls.
16. The Contactor® 100EHD Middle/End unit must be formed as a whole chamber having one fully formed integral end wall and one fully open end wall and having no separate end plates or end walls.
17. The HVLV® SFCx2 Feed Connector must be formed as a whole chamber having two open end walls and having no separate end plates or separate end walls. The unit shall fit into the side portals of the Contactor® 100HD and act as cross feed connections.
18. Chambers must have horizontal stiffening flex reduction steps between the ribs.
19. Heavy duty units are designated by a colored stripe formed into the part along the length of the chamber.
20. The chamber shall have a raised integral cap at the top of the arch in the center of each unit to be used as an optional inspection port or clean-out.
21. The units may be trimmed to custom lengths by cutting back to any corrugation on the large rib end.
22. The chamber shall be manufactured in an ISO 9001:2008 certified facility.
23. Maximum allowable cover over the top of the chamber shall be 12' (3.66 m) for the Heavy Duty version.
24. The chamber shall be designed to withstand traffic loads when installed according to CULTEC's recommended installation instructions.



MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
TAXI POOL & TNC RELOCATION
LOGAN INTERNATIONAL AIRPORT
EAST BOSTON, MASSACHUSETTS

PROJECT SUBMISSION NAME:
L1545-C5

PROJECT SUBMISSION NUMBER:
NO1

RESUBMISSION STATUS:



REVISION	DATE	DESCRIPTION	BY

PREPARED BY: **mwp**
75 ARINGTON STREET
BOSTON, MA 02116
617.421.7330
WWW.MWP.COM

PROJECT NUMBER AND TITLE:
L1545-C5
TAXI POOL

SHEET TITLE:
**TAXI HOLDING AREA
GRADING & UTILITY
PLAN**

FOR PERMITTING

DISCIPLINE: **CIVIL**

DESIGNED BY:	APPROVED BY:
SDB	KAM
CHECKED BY:	DATE:
KAM	2018-APR-4

SCALE: **AS NOTED**

SHEET NUMBER:
NO14

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