

## TOWN OF NEWBURGH PLANNING BOARD

PROJECT NAME: PROJECT NO.: PROJECT LOCATION:

**REVIEW DATE:** 

**MEETING DATE:** 

**PROJECT REPRESENTATIVE:** 

UNITY PLACE WAREHOUSE 21-29 NORTHWEST CORNER OF OLD LITTLE BRITAIN RD. & UNITY WAY SECTION 95, BLOCK 2, LOT 14.1 & 19.12 30 DECEMBER 2022 5 JANUARY 2023 BROOKER ENGINEERING

- 1. A City of Newburgh flow acceptance letter has been requested.
- 2. Security for storm water/erosion & sediment control is required.
- 3. Security for landscaping is required. Landscaping security amount should be coordinated with Karen Arent's office. Town Board approval for landscaping and storm water security amounts required.
- 4. TheTown Attorney's comments regarding weight restrictions on Old Little Britain Road should be addressed. Weight restrictions may be associated with the Culvert (Murphy's Ditch) located West of the project site.
- 5. The applicants are requested to address traffic impacts and "fair share contribution" to any improvements required at Old Little Britain Road intersections.
- 6. Coverage under the NYSDEC Construction SPDES Permit is required. This office will process a municipal authorization upon request.
- 7. Confirmation that the project is within the Sewer District and not subject to an Outside User Agreement should be provided.
- 8. Confirmation of the lot combination should be received.

Respectfully submitted,

MHE Engineering, D.P.C.

Patient & Afones

Patrick J. Hines Principal PJH/ltm

## **NEW YORK OFFICE**

33 Airport Center Drive, Suite 202, New Windsor, NY 12553 845-567-3100 | F: 845-567-3232 | mheny@mhepc.com **PENNSYLVANIA OFFICE** 



- CONSTRUCTION IN THE EVENT OF ANY DISRUPTION TO THE EXISTING UTILITY. SHUT-DOWNS SHALL BE AT THE DISCRETION OF THE RESPECTIVE UTILITY COMPANIES AND COORDINATED WITH THE MUNICIPALITY AND THE ENGINEER FOR PUBLIC NOTICE IF NECESSARY. TEMPORARY SERVICE SHALL BE PROVIDED AND MAINTAINED AT NO ADDITIONAL COST.

- 17. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

- MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM; TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.

- PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.

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2	+ • •	NGINEERING COMMEN	TS MT	09/26/22	
1 1	PUMP STATION DESIGN	& WATER NOTES	JC	08/23/22	
	AS PER 6/16/2022 PLAN	NING BOARD COMMEN	ITS JO	07/11/2022	
REV	DESCRIPTION		BY	DATE	
DISCL UNAU OF TH	DISCLAIMER: UNAUTHORIZED ALTERATION OR ADDITIONS TO THESE PLANS IS A VIOLATION OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.				
	BROOKER ENGINEERING, PLLC   PROFESSIONAL ENGINEERS AND LAND SURVEYORS   LAND DEVELOPMENT • MUNICIPAL • STRUCTURAL • HYDROLOGICAL • SURVEYING   www.BrookerEngineering.com   74 Lafayette Avenue, Suite 501   Suffern, NY 10901   (845) 357-4411				
PROJE	PROJECT: UNITY PLACE WAREHOUSE TOWN OF NEWBURGH ORANGE COUNTY NEW YORK				
GRADING, DRAINAGE & UTILITY PLAN					
		PROJECT NO:	DRAWN:	CHECKED:	
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		PROJECT NO: 21202	JO JO	CHECKED:	
		PROJECT NO: 21202 SCALE: 1	JO JO ' = 40'	CHECKED: DR	
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05/27/2022

- 4



![](_page_4_Figure_0.jpeg)

		PROPOSED ELEVATIONS: SOUTH DETENTION	OPOSED LAYOUT: SOUTH	PRC
	313.68	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	DETENTION	
FLAMP	309.18	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	STORMTECH MC-7200 CHAMBERS	55
MANIFOLD	308.68	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	STORMTECH MC-7200 END CAPS	8
	308.68	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	STONE ABOVE (in)	12
	308.68	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	STONE BELOW (in)	9
CONCRETE STRUC	307.68	TOP OF STONE:	STONE VOID	40
CONCRETE STRUC	306.68	TOP OF MC-7200 CHAMBER:	INSTALLED SYSTEM VOLUME (CF)	
/w/wfir	301.87	36" x 24" BOTTOM MANIFOLD INVERT (24" PIPE):	(PERIMETER STONE INCLUDED)	16070
	301.87	24" x 24" BOTTOM MANIFOLD INVERT:	(COVER STONE INCLUDED)	109/9
	301.87	24" ISOLATOR ROW PLUS INVERT:	(BASE STONE INCLUDED)	
	301.87	24" BOTTOM CONNECTION INVERT:	SYSTEM AREA (SF)	4068
3	301.68	BOTTOM OF MC-7200 CHAMBER:	SYSTEM PERIMETER (ft)	297.3
3	300.93	UNDERDRAIN INVERT:		
3	300.93	BOTTOM OF STONE:		
3	300.88	36" x 24" BOTTOM MANIFOLD INVERT (36" PIPE):		

ESCRIPTION	INVERT*	MAX FLOW
00IEPP24BC / TYP OF ALL 24" BOTTOM	2.06"	
00IEPP18BC / TYP OF ALL 18" BOTTOM	1.77"	
#: MC350024RAMP		
	1.77"	
	-4.24"	
	1.77"	
OTHERS)		11.0 CFS OUT
ERS)		16.5 CFS IN
UNDERDRAIN		

INVERT\* MAX FLOW

34.0 CFS IN

— BED LIMITS

2.06"

2.06"

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![](_page_4_Figure_4.jpeg)

## DETENTION FACILITY STORMTECH MC-7200 DETAIL N.T.S.

ISOLATOR ROW PLUS (SEE DETAIL) PLACE MINIMUM 17.50' OF ADSPLUS175 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

![](_page_4_Figure_7.jpeg)

![](_page_4_Figure_8.jpeg)

![](_page_4_Figure_9.jpeg)

- 24" (600 mm) HDPE ACCESS PIPE REQUIRED USE

PART #: MC3500IEPP24BC OR MC3500IEPP24BW

FACTORY PRE-CORED END CAP

![](_page_4_Figure_10.jpeg)

# **INSPECTION & MAINTENANCE**

SITE DESIGN ENGINEER

(24" [600 mm] MIN RECOMMENDED)

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT A. INSPECTION PORTS (IF PRESENT) A 1 REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN A 2 REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL) A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. B. ALL ISOLATOR PLUS ROWS REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED

- APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS. STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

			*INVERT ABOVE BAS	E OF CHAMBER
PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
	A	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MC720024RAMP		
)	B	24" x 24" BOTTOM MANIFOLD, ADS N-12	2.26"	
<b>`</b>	6	36" x 24" ADS N-12 (36" PIPE)	-9.66"	
)		36" x 24" ADS N-12 (24" PIPE)	2.26"	
E STRUCTURE	D	OCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		21.0 CFS OUT
E STRUCTURE	E	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		28.5 CFS IN
AIN	F	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		
ON PORT	G	4" SEE DETAIL		

	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
NEER'S PLANS. EMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
<35% FINES OR	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN
I LIEU OF THIS	OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
	AASHTO M43 <sup>1</sup> 3, 4	NO COMPACTION REQUIRED.
	AASHTO M43 <sup>1</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

![](_page_4_Figure_24.jpeg)

![](_page_4_Figure_25.jpeg)

- ONE LAYER OF ADSPLUS175 WOVEN GEOTEXTILE BETWEEN

8.25' (2.51 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

OUNDATION STONE AND CHAMBERS

**4" PVC INSPECTION PORT DETAIL** MC SERIES CHAMBER

![](_page_4_Picture_27.jpeg)

![](_page_4_Picture_28.jpeg)

![](_page_4_Picture_29.jpeg)

![](_page_4_Picture_30.jpeg)

![](_page_4_Figure_31.jpeg)

![](_page_4_Figure_32.jpeg)

![](_page_4_Picture_33.jpeg)

![](_page_4_Picture_34.jpeg)

![](_page_4_Figure_36.jpeg)