

**BOLTON INLAND WETLANDS COMMISSION  
REGULAR MEETING, JUNE 28, 2022, 7:00 P.M.  
MOTIONS & MINUTES  
VIRTUAL**

Lally called the meeting to order at 7:00 p.m.

		<b>Present</b>	<b>Absent</b>
REGULAR MEMBERS:	Andrew Gordon		X
	Ross Lally - Chairperson	X	
	James Loersch – Vice Chairperson	X	
	Open		
	Open		
ALTERNATE MEMBERS:	Dave Lynn	X	
	Open		
STAFF:	Barbara Kelly	X	

Lynn was seated.

**1. Approval of Agenda**

**Motion:** The Bolton Inland Wetlands Commission approves the agenda as presented.

By: Lynn

Seconded: Loersch

Voting:

For: Lally, Loersch, Lynn

Against: None

Abstain: None

**2. Public Comment**

No one was present to speak.

**3. Old Business**

None

**4. New Business**

**A. IWC #2022-5; 271 Hop River road; an existing auto repair shop to be removed and replaced with a convenience store**

Gregg Fedus, Fedus Engineering, and Nathaniel Fleming were present for the applicant. Fedus: When we were putting together the final plans for PZC the

applicant realized the building was not worth saving and the pumps are too close to the road. We decided to start with a fresh canvas. This is a large lot that backs up to the Hop River Rail Trail. The two curbs cuts on the property will be kept and pulled back onto the property. There will be a new island in the front, seven fueling dispensers, and the building will be pushed back to give adequate parking between the dispensers and the store. Previously the parking was in the back. There will be a drive-thru lane with adequate bypass. A detention basin will take storm water that has been pre-treated. The basin will be 25' from the wetlands. A new well location will be proposed as the EHHD and state Department of Public Health did not like the well so close to the detention basin. There is a new septic location allowing it to be stretched out a little more. The Health District is reviewing the location now. A lot of the debris has been cleared up.

Lally: Heard the agent say there are to be more conversations about the well and septic system with the Health District. There will be a path back to the rail trail.  
Fedus: Yes, it is not a bad walk back there. Lally: It will be a good thing to provide snacks for the users of the trail and for the business. This is a good first step in that direction. Fedus: There will be public restrooms, too. Lally: To the west of the fueling station what is the 20' canopy? Fedus: That is the diesel pump which is near to the same location as the previous location. Staff: Looking at both versions of the plans the location of the diesel pump overlays exactly. Lally: Make sure the tailings from the well drilling is properly contained. Fedus: We can put some notes on the plan about that. Loersch: Will there be additional parking for the connection to rail to trails if people want to park there and use the trail. Fedus: We did not plan on that. The intention is really for people already on the trail to get snacks. Any additional parking would be closer to the wetlands.

Staff: Asked the agent to point out the outlet for the stormwater basin? Fedus: The basin will fill up and outlet on a section of weir along the top of the embankment. It will flow in a couple of directions toward the wetlands. He will clarify this on an updated plan. Staff: She did check with Health Department and they have not gotten to do their review. In the northernmost portion the wetlands are not flagged off site. They will be taking a look at how close that is to the surface water. In terms of the trail, Bolton and Coventry are working to have a trail on the other side of Route 6. There will be parking diagonally to the northwest there. If you know where they are likely to require bridges or crossings you can identify them on the plan and they can be permitting here or they will have to come back for a jurisdictional ruling. In the landscaping plan perhaps the owner will consider installing a bike rack and a bench or flat top rocks if someone comes down from the to purchase a snack or use the rest rooms. Fedus: We will look at installing a bike rack. And in Connecticut filling stations have to provide free air. Lally: These amenities will make the convenience store a bit more bike friendly. Loersch: Stay respectful of the wetlands. As you go further back you get closer to the wetlands.

## **5. Approval of Minutes**

### **A. May 24, 2022 Regular Meeting**

**Motion:** The Bolton Inland Wetlands Commission approves the minutes of the May 24, 2022, Regular Meeting as presented.

By: Loersch

Seconded: Lynn

Voting:

For: Loersch, Lynn

Against: None

Abstain: Lally

## 6. Wetlands Agent Report

Staff reported:

- She saw the property transfers in the paper for Williams Road and Route 44. We should be seeing activity for the construction of the new Bolton Vet Hospital.
- The IWA was granted the permit for 180 Bolton Center Road but there has been no activity there. She traded phone messages with an abutter asking why they were not notified. She explained the reason through email and has not heard back.
- Yesterday she and Jim Rupert met onsite at 65 Shoddy Mill Road with a trustee for the mortgage on the property. They are looking to clear up the situation there. The wetlands impact is over three years old. They understand the scope after talking through the process. This is new ground for the trustee. Staff feels this should be handled through court order rather than with permits. She suggested they might want to contact a soil scientist to look at the remediation. The slope the bank that was cut away was really steep. It is obvious that if was cut too steep and is not stable. The surface of the fill area has been vegetated by Mother Nature. She encouraged them to do the remediation sooner rather than later. There is still equipment and lots of vehicles on the edge of the wetlands. The trustee is feeling there is a need to preserve the assets.

## 7. Other

None

## 8. Adjournment

**Motion:** The Bolton Inland Wetlands Commission moves to adjourn the meeting at 7:41 p.m.

By: Lynn

Seconded: Loersch

Voting:

For: Lally, Loersch, Lynn

Against: None

Abstain: None

Respectfully submitted,

Yvonne B. Filip

Yvonne B. Filip  
Commission Clerk

PLEASE SEE THE MINUTES OF SUBSEQUENT MEETINGS FOR THE APPROVAL OF THESE MINUTES AND ANY CORRECTIONS HERETO.



# IW-22-5

Inland Wetlands

**Status:** Active

**Date Created:** Jun 24, 2022

## Applicant

Nathaniel Fleming  
nffleming@fedusengineering.com  
70 ESSEX STREET  
MYSTIC, CT 06355  
8024406130

## Location

271 HOP RIVER RD  
BOLTON, CT 06043

## Owner:

IMS PETROLEUM,LLC  
271 HOP RIVER RD BOLTON, CT 06043

## Internal Use

### Conditions

--

### Petition Received?

--

### Date Received

--

### Date of Newspaper Publication of Inland/Wetlands Commission Action

--

### Summary of Inland/Wetlands Commission Action

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### Bond Required?

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## Additional Applicant Info

### Applicant Type

Other

## Permit Info

### Type of Application

Modification

### Permit For

Permit Renewal, Extension or Modification

**Occupancy Type** Commercial **Lots** 1

**Work Description**

AN EXISTING AUTO REPAIR SHOP TO BE REMOVED AND REPLACED WITH A CONVENIENCE STORE. EXISTING DEBRIS AREAS ON-SITE TO BE CLEANED AND REMOVED. DEBRIS AREAS DEPICTED ON SITE PLAN ARE NOT LIMITED TO CLEAN-UP AREAS.

**Development Title**

271 Hop River Road

**Comments**

--

Distance from Inland Wetlands and Watercourses: **Proposed Distance** 25

**Requested Distance**

25

**Wetland / Watercourses Project Information**

**Size of Subject Property (acres)**

14.6

**Total area of wetlands to be affected by the activity (acres)**

0

**Open water body altered (acres)**

0

**Stream alternation (linear feet)**

0

**Buffer/upland area altered (acres)**

1.5

**Area of wetlands/watercourses restored, enhanced, or created (acres)**

0

**Described how the proposed activity affects wetlands, watercourses, and the regulated areas.**

Activity will not affect wetlands or water courses.

**Described measures that will be taken to minimize the impact on wetlands, watercourses, and the regulated areas.**

Grass filter strip and water treatment of all water on the pavement.

**Is there a Conservation or Preservation Restriction on the Property?**

No

**Is this an activity associated with a use for which you intend to apply to the Planning & Zoning Commission?**

Yes

Please read and check the following statements. By checking these boxes, you agree to abide by the statutes and ordinances of the Town of Bolton and the State of Connecticut.

**I understand that the Commission may require additional information at any time during the review of the application as described in Section 7.6 of the Inland Wetlands and Watercourses Regulations.**



**The Applicant must ensure that this application is complete and conforms with the Inland Wetlands and Watercourses Regulations (available at the Land Use Office for \$10.00). Ten (10) copies of supporting documents must be provided. The Commission encourages the applicant to discuss any project with the Town Staff and/or the Commission before submitting an application. The Commission requests that applications be submitted at least one week before the meeting.**



**The Agency shall monitor all Bolton wetland and watercourses and have enforcement powers as described in Section 14 of the Inland Wetlands and Watercourses Regulations. The Commission Members and designed agent(s) may make regular inspections upon reasonable notice of all regulated activities to investigate possible violations of the Inland Wetlands and Watercourses Regulations.**



**If this application is filed with the Inland Wetlands Agent under Section 12.1 of the Inland Wetlands and Watercourses Regulations, the Applicant may appeal the Agent's decision according to the process described in section 12.2 of the Inland Wetlands and Watercourses Regulations.**



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### Attorney Info

**Name**

--

**Address**

--

**City**

--

**State**

--

**Zip**

--

**Phone**

--

**Email**

--

---

### Engineer Information

**Company Name**

--

**Engineer Name**

--

**Address**

--

**City**

--

**State**

--

**Zip**

--

**Phone** **Registration #**

--

--

**Insurance Expiration**

**AOR**

--

--

**Email**

--

**Contractors**

**Name**

Gregg Fedus, Fedus Engineering, LLC

**Address**

70 Essex Street

**City**

Mystic

**State**

CT

**Zip**

06355

**Phone No**

802-440-6130

**Email**

nflaming@fedusengineering.com

**DBA**

--

**Mobile Phone No**

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**Additional Project Info**

**Date of Receipt**

--

**Hearings Commencement Deadline**

--

**Hearings Completion Deadline**

--

**Decision Deadline**

--

**Total Acreage**

--


**Distance to Town Line**

--


**Extended**

**Hearing Not Required**

**Attachments**

 21-000985 - Bolton - 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 - Rev.2.pdf  
Uploaded by Nathaniel Fleming on Jul 21, 2022 at 11:16 am

 Abutting Addresses.pdf  
Uploaded by Nathaniel Fleming on Jun 24, 2022 at 10:01 am


 21-000985 - Bolton - 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 - Rev.2.pdf  
Uploaded by Nathaniel Fleming on Jul 21, 2022 at 11:16 am





IMG\_3620.jpg

Uploaded by Nathaniel Fleming on Jun 24, 2022 at 10:00 am





 2. Revised Plans 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 - Rev.2.pdf

Uploaded by Danielle Palazzini on Jul 21, 2022 at 11:22 am

## History

Date	Activity
Jun 24, 2022 at 9:48 am	Nathaniel Fleming started a draft of Record IW-22-5
Jun 24, 2022 at 9:50 am	Nathaniel Fleming altered Record IW-22-5, changed ownerEmail from "" to "asifman500@gmail.com"
Jun 24, 2022 at 9:50 am	Nathaniel Fleming altered Record IW-22-5, changed ownerName from "" to "IMS PETROLEUM,LLC"
Jun 24, 2022 at 9:50 am	Nathaniel Fleming altered Record IW-22-5, changed ownerPhoneNo from "" to "8605367390"
Jun 24, 2022 at 10:05 am	Nathaniel Fleming submitted Record IW-22-5
Jun 24, 2022 at 10:16 am	completed payment step Permit Fee on Record IW-22-5
Jun 24, 2022 at 10:16 am	approval step Application Review was assigned to Barbara Kelly on Record IW-22-5
Jun 24, 2022 at 10:27 am	Danielle Palazzini changed Work Description from "AN EXISTING AUTO REPAIR SHOP TO BE REMOVED AND REPLACED WITHA CONVENIENCE STORE. EXISTING DEBR" to "AN EXISTING AUTO REPAIR SHOP TO BE REMOVED AND REPLACED WITH A CONVENIENCE STORE. EXISTING DEB" on Record IW-22-5
Jul 21, 2022 at 11:21 am	Danielle Palazzini added attachment 2. Revised Plans 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 to Record IW-22-5
Jul 21, 2022 at 11:21 am	Danielle Palazzini removed attachment 2. Revised Plans 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 from Record IW-22-5
Jul 21, 2022 at 11:22 am	Danielle Palazzini added attachment Revised Plans 271 Hop River Road - Asif Choudrey - Site Plan - Wetlands June 2022 - R to Record IW-22-5

## Timeline

Label	Status	Activated	Completed	Assignee	Due Date
 Permit Fee	Paid	Jun 24, 2022 at 10:05 am	Jun 24, 2022 at 10:16 am	-	-
 Application Review	Active	Jun 24, 2022 at 10:16 am	-	Barbara Kelly	-
 Inland Wetlands	Inactive	-	-	-	-
 Issue Permit	Inactive	-	-	-	-

INLAND WETLAND SUBMISSION  
**271 HOP RIVER ROAD**  
 PROPOSED CONVENIENCE STORE  
 271 HOP RIVER ROAD, BOLTON - CONNECTICUT  
 APPLICANT:  
**IMS PETROLEUM, LLC**

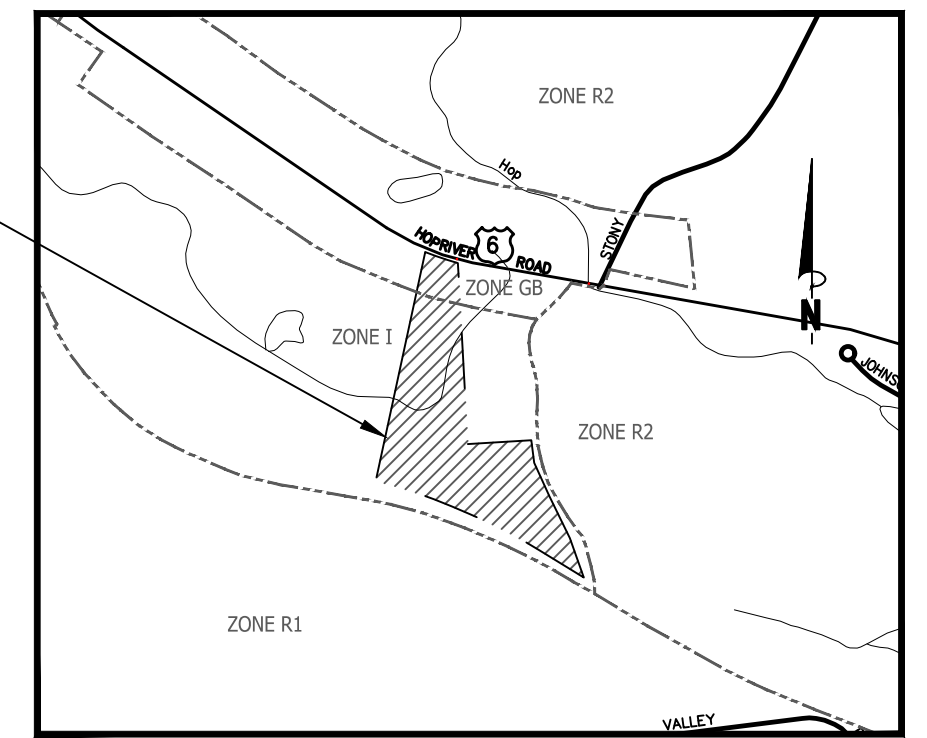
77 JOHNSON RD  
 N/F  
 JOHN & FEDERICA JOHNSON MEMORIAL CAMP, INC.  
 M/B/L: 8/10  
 V/9/1095  
 MAILING ADDRESS  
 287 JAGGER LN  
 HEBRON, CT 06248

STEELES CROSSING ROAD  
 N/F  
 STATE OF CONNECTICUT/DEP  
 M/B/L: 8/112  
 V/110/576  
 MAILING ADDRESS  
 79 ELM ST  
 HARTFORD, CT 06106

TOOMEY RD  
 N/F  
 STATE OF CONNECTICUT  
 M/B/L: 12/87A  
 V/47/1061  
 MAILING ADDRESS  
 79 ELM ST  
 HARTFORD, CT 06106

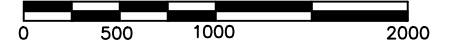
99 HOP RIVER RD  
 N/F  
 99 HOP RIVER RD, LLC  
 M/B/L: 8/107  
 V/163/625  
 MAILING ADDRESS  
 407 1/2 LAUREL DR  
 FREINDSWOOD DR, TX 77546

255 HOP RIVER RD  
 N/F  
 255 HOP RIVER RD, LLC  
 M/B/L: 8/105  
 V/80/774  
 MAILING ADDRESS  
 255 HOP RIVER RD  
 BOLTON, CT 06403



**Location Map**

Scale: 1"=1000'



**Legend**

EXISTING	
SYMBOL	DESCRIPTION
□	MONUMENT
○	EX. IP / REBAR
●	DRILL HOLE
○—○	UTILITY POLE W/ LIGHT
—	STONEWALL
—X—X—	FENCE LINE
—w—w—	WATER VALVE
—ohw—	OVERHEAD WIRES
---	PROPERTY LINE
-.-.-	ADJACENT PROPERTY LINE
- - - -	INDEX CONTOUR
- - - -	CONTOUR
—WF—XX—	WETLANDS BOUNDARY/FLAG
—	MEAN LOW WATER LINE
—	MEAN HIGH WATER LINE
—	HIGH TIDE LINE
---	COUNTY JURISDICTIONAL LINE
- - - -	ZONE LINE
- - - -	EASEMENT LINE
---	BUILDING SETBACK LINE
—W—	EXISTING WATER LINE
—SS—	EXISTING SEWER LINE
N/F	NOW OR FORMERLY
□	CATCH BASIN
(TYP.)	TYPICAL
5.8	SPOT ELEVATION
DH	DRILL HOLE
(POB)	POINT OF BEGINNING
TP1	TEST PIT
P1	PERCOLATION TEST
φ	UTILITY POLE
⊙	DRAINAGE MANHOLE
⊙	SEWER MANHOLE
⊙	HYDRANT
⊙	WATER SHUTOFF
PROPOSED	
○	IRON PIN TO BE SET

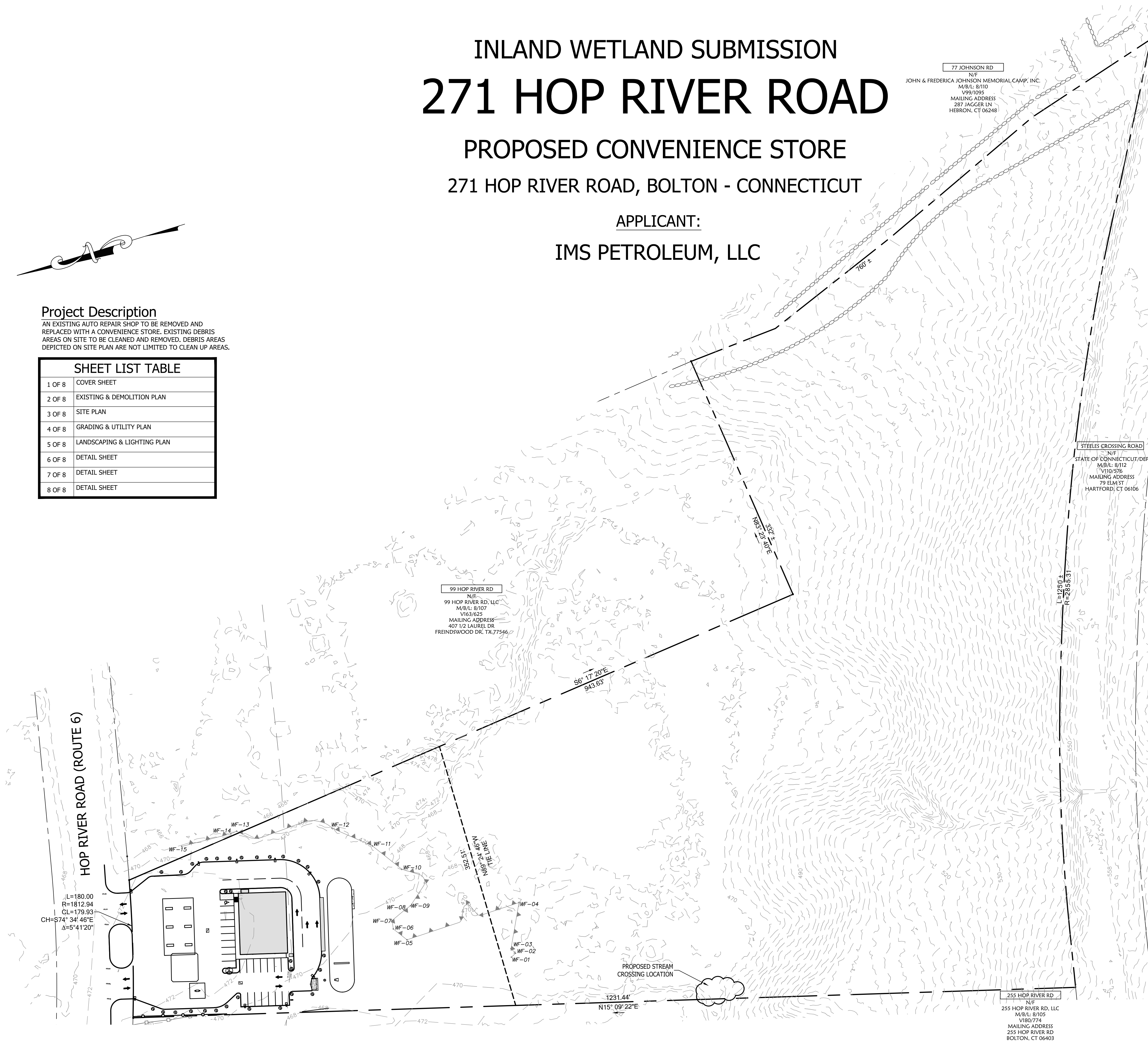
**Subject Parcel Information**

OWNER:	IMS PETROLEUM, LLC
PARCEL ADDRESS:	271 HOP RIVER ROAD, BOLTON, CT 06043
MAILING ADDRESS:	271 HOP RIVER ROAD, BOLTON, CT 06043
MBL:	8/106
DEED:	VOLUME 185 PAGE 947
AREA:	639,104.1± SF = 14.6± AC
FLOOD ZONE:	ZONE X PER FIRM MAP # 09011C0228G
	EFFECTIVE DATE: 6/1/1981

**Project Description**

AN EXISTING AUTO REPAIR SHOP TO BE REMOVED AND REPLACED WITH A CONVENIENCE STORE. EXISTING DEBRIS AREAS ON SITE TO BE CLEANED AND REMOVED. DEBRIS AREAS DEPICTED ON SITE PLAN ARE NOT LIMITED TO CLEAN UP AREAS.

SHEET LIST TABLE	
1 OF 8	COVER SHEET
2 OF 8	EXISTING & DEMOLITION PLAN
3 OF 8	SITE PLAN
4 OF 8	GRADING & UTILITY PLAN
5 OF 8	LANDSCAPING & LIGHTING PLAN
6 OF 8	DETAIL SHEET
7 OF 8	DETAIL SHEET
8 OF 8	DETAIL SHEET



NO.	DATE	REVISIONS
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

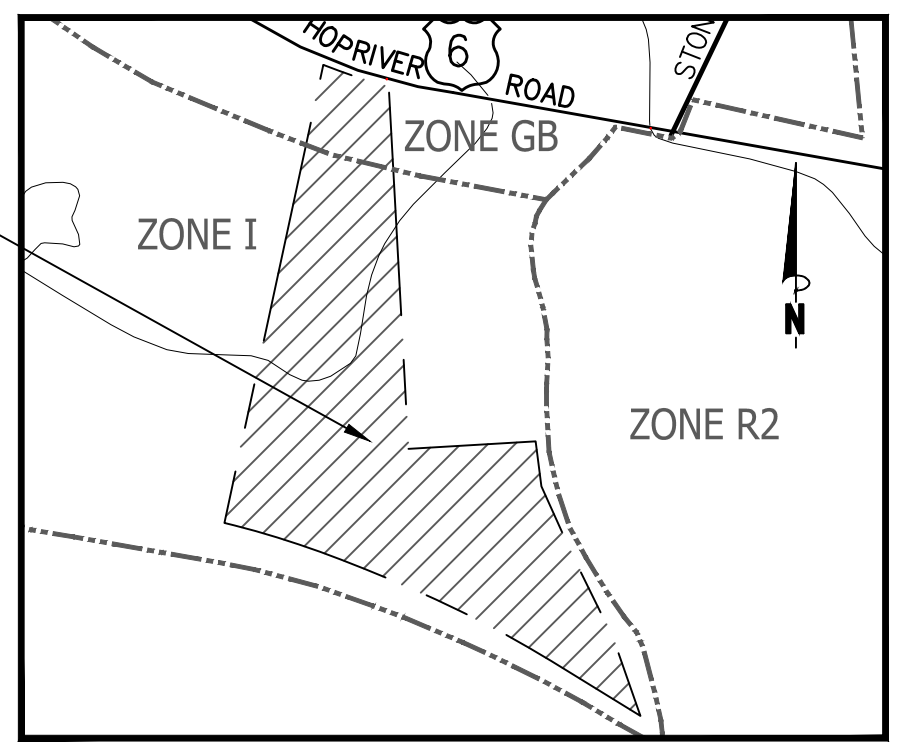
**Cover Sheet**  
 of  
 271 Hop River Road  
 Bolton, Connecticut  
 Prepared For:  
 IMS PETROLEUM, LLC  
 June 15, 2022

DRAWING SCALE: 1"=20'  
 0 10 20 40

**FEDUS ENGINEERING, LLC**  
 CIVIL ENGINEERS  
 Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
 Office: (860) 536-7390 Fax: (860) 536-1644

SHEET NO. 1 OF 8    JOB NO. 21-000985    DRAWN BY: CAC

Gregg T. Fedus P.E.  
 CT. License No. 21231



**Location Map**

Scale: 1"=1000'  
0 500 1000 2000

**Legend**

EXISTING	
SYMBOL	DESCRIPTION
	MONUMENT
	EX. IP / REBAR
	DRILL HOLE
	UTILITY POLE W/ LIGHT
	STONEWALL
	FENCE LINE
	WATER VALVE
	OVERHEAD WIRES
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	INDEX CONTOUR
	CONTOUR
	WETLANDS BOUNDARY/FLAG
	MEAN LOW WATER LINE
	HIGH TIDE LINE
	COUNTY JURISDICTIONAL LINE
	ZONE LINE
	EASEMENT LINE
	BUILDING SETBACK LINE
	EXISTING WATER LINE
	EXISTING SEWER LINE
	NOW OR FORMERLY CATCH BASIN
	TYPICAL SPOT ELEVATION
	DRILL HOLE
	POINT OF BEGINNING
	TEST PIT
	PERCOLATION TEST
	UTILITY POLE
	DRAINAGE MANHOLE
	SEWER MANHOLE
	HYDRANT
	WATER SHUTOFF
PROPOSED	
	IRON PIN TO BE SET

99 HOP RIVER RD  
N/F  
99 HOP RIVER RD, LLC  
M/B/L: 8/107  
V163/625  
MAILING ADDRESS  
407 1/2 LAUREL DR  
FREINDSWOOD DR, TX 77546  
(NO DESIGN CONFLICTS)

HOP RIVER ROAD (ROUTE 6)

$L=180.00$   
 $R=1812.94$   
 $CI=179.93$   
 $CH=S74°34'46"E$   
 $\Delta=5°41'20"$

255 HOP RIVER RD  
N/F  
255 HOP RIVER RD, LLC  
M/B/L: 8/105  
V180/774  
MAILING ADDRESS  
255 HOP RIVER RD  
BOLTON, CT 06403  
(NO DESIGN CONFLICTS)

**Subject Parcel Information**

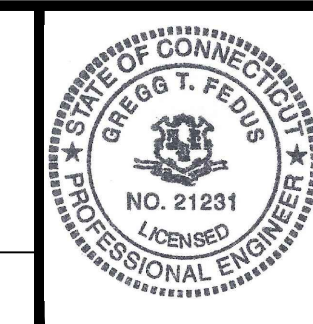
OWNER: IMS PETROLEUM, LLC  
PARCEL ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06043  
MAILING ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06043  
MBL: 8/106  
DEED: VOLUME 185 PAGE 947  
AREA: 639,104.1± SF = 14.6± AC  
FLOOD ZONE: ZONE X PER FIRM MAP # 09011C0228G  
EFFECTIVE DATE: 6/1/1981

NO.	DATE	REVISIONS
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

Existing Conditions/Demolition Plan  
of  
271 Hop River Road  
Bolton, Connecticut  
Prepared For:  
IMS PETROLEUM, LLC  
June 15, 2022

DRAWING SCALE: 1"=20'  
0 10 20 40

Gregg T. Fedus P.E.  
CT. License No. 21231



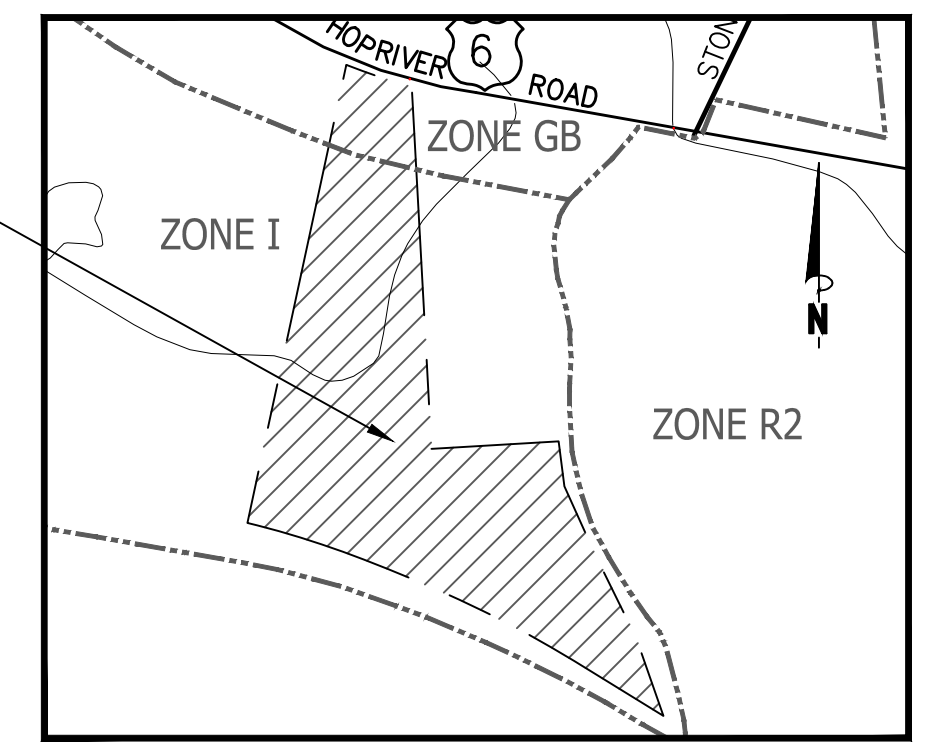
**FEDUS ENGINEERING, LLC**  
CIVIL ENGINEERS  
Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
Office: (860) 536-7390 Fax: (860) 536-1644

SHEET NO. 2 OF 8 JOB NO. 21-000985 DRAWN BY: CAC

GB ZONING REQUIREMENTS TABLE				
SECTION	REGULATION	REQUIREMENTS	EXISTING	PROPOSED
11C	MINIMUM LOT SIZE	40,000 SF	639,104 SF	639,104 SF
11C	MINIMUM LOT FRONTAGE	200'	180'*	180'*
11C	MINIMUM FRONT YARD	35'	50.3'	140.0'
11C	MINIMUM SIDE YARD	*	33.8' (E), 76.7' (W)	72.2' (E), 78.0' (W)
11C	MINIMUM REAR YARD	*	1,088.7'	999.0'
11C	MAXIMUM BUILDING HEIGHT	40'	< 45'	18.25'
11C	MINIMUM FLOOR AREA	600 SF	5,674 SF	5,024 SF
11C	MAXIMUM LOT COVERAGE	25%	1.1%	0.8%
11C	MAXIMUM IMPERVIOUS COVERAGE	65%	3.1%	7.0%
11J	MINIMUM LANDSCAPING IN GB	25% OF LOT	-	-

\* THE MINIMUM SIDE AND REAR YARD IN THE INDUSTRIAL ZONE SHALL BE 50 FEET WHERE ABUTTING A RESIDENTIAL ZONE (SEE § 11.1C)  
 \*\*EXISTING NON-CONFORMING CONDITION

PARKING REQUIREMENTS				
SECTION	REGULATION	MAXIMUM REQ.	MINIMUM REQ.	PROPOSED
15-O	FREE STANDING RETAIL	5 PER 1,000 SF GROSS FLOOR AREA 5,024 SF x 5 PER 1,000 = 25.1	2 PER 1,000 SF GROSS FLOOR AREA 5,024 SF x 2 PER 1,000 = 10.1	23 SPACES
15-O	VAN-ACCESSIBLE PARKING	NA	1 SPACE REQUIRED	1 SPACES



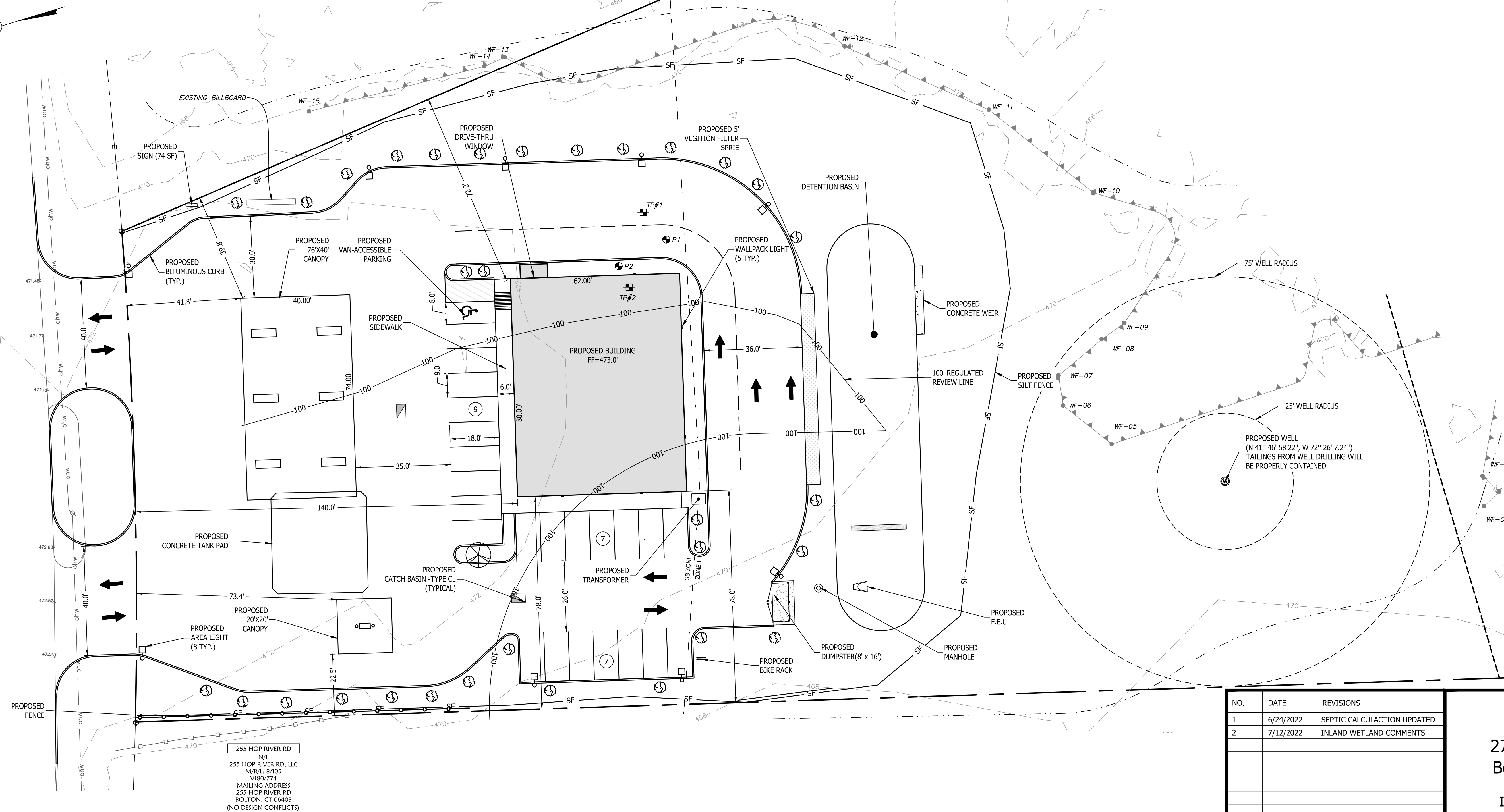
Location Map

Scale: 1"=1000'  
 0 500 1000 2000

Legend

EXISTING	
SYMBOL	DESCRIPTION
□	MONUMENT
○	EX. TP / REBAR
●	DRILL HOLE
○—○	UTILITY POLE W/ LIGHT
—	STONEWALL
x	FENCE LINE
○	WATER VALVE
—	OVERHEAD WIRES
---	PROPERTY LINE
---	ADJACENT PROPERTY LINE
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---	EXISTING WATER LINE
---	EXISTING SEWER LINE
---	N/F
---	NOW OR FORMERLY CATCH BASIN
---	TYPICAL
---	SPOT ELEVATION
○	DRILL HOLE
○	POINT OF BEGINNING
+	TEST PIT
+	PERCOLATION TEST
○	UTILITY POLE
○	DRAINAGE MANHOLE
○	SEWER MANHOLE
○	HYDRANT
○	WATER SHUTOFF
PROPOSED	
○	IRON PIN TO BE SET

HOP RIVER ROAD (ROUTE 6)



255 HOP RIVER RD  
 N/F  
 255 HOP RIVER RD, LLC  
 M/B/L: 8/105  
 V180/774  
 MAILING ADDRESS  
 255 HOP RIVER RD  
 BOLTON, CT 06403  
 (NO DESIGN CONFLICTS)

99 HOP RIVER RD  
 N/F  
 99 HOP RIVER RD, LLC  
 M/B/L: 8/107  
 V163/625  
 MAILING ADDRESS  
 407 1/2 LAUREL DR  
 FREINSDWOOD DR, TX 77546  
 (NO DESIGN CONFLICTS)

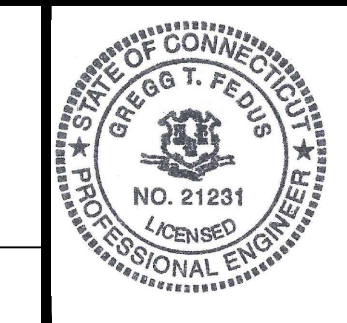
**Subject Parcel Information**  
 OWNER: IMS PETROLEUM, LLC  
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 MAILING ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06043  
 MBL: 8/106  
 DEED: VOLUME 185 PAGE 947  
 AREA: 639,104.1± SF = 14.6± AC  
 FLOOD ZONE: ZONE X PER FIRM MAP # 09011C0228G  
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1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

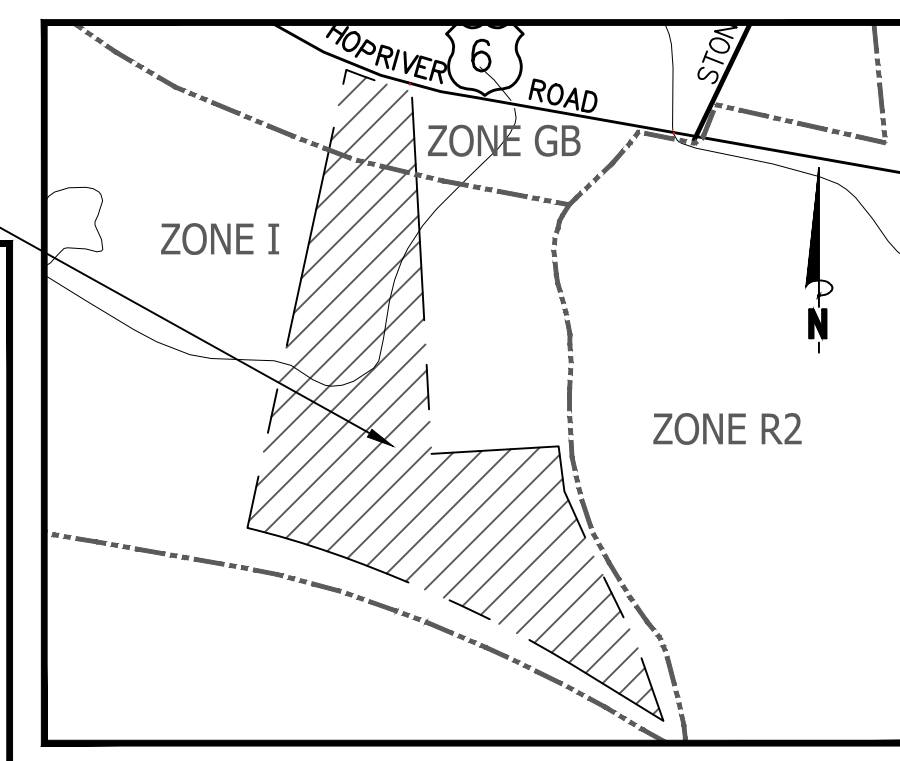
**Site Plan**  
 of  
 271 Hop River Road  
 Bolton, Connecticut  
 Prepared For:  
 IMS PETROLEUM, LLC  
 June 15, 2022

DRAWING SCALE: 1"=20'  
 0 10 20 40

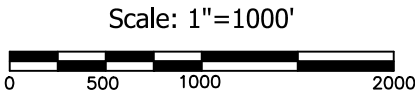
Gregg T. Fedus P.E.  
 CT. License No. 21231



**FEDUS ENGINEERING, LLC**  
 CIVIL ENGINEERS  
 Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
 Office: (860) 536-7390 Fax: (860) 536-1644



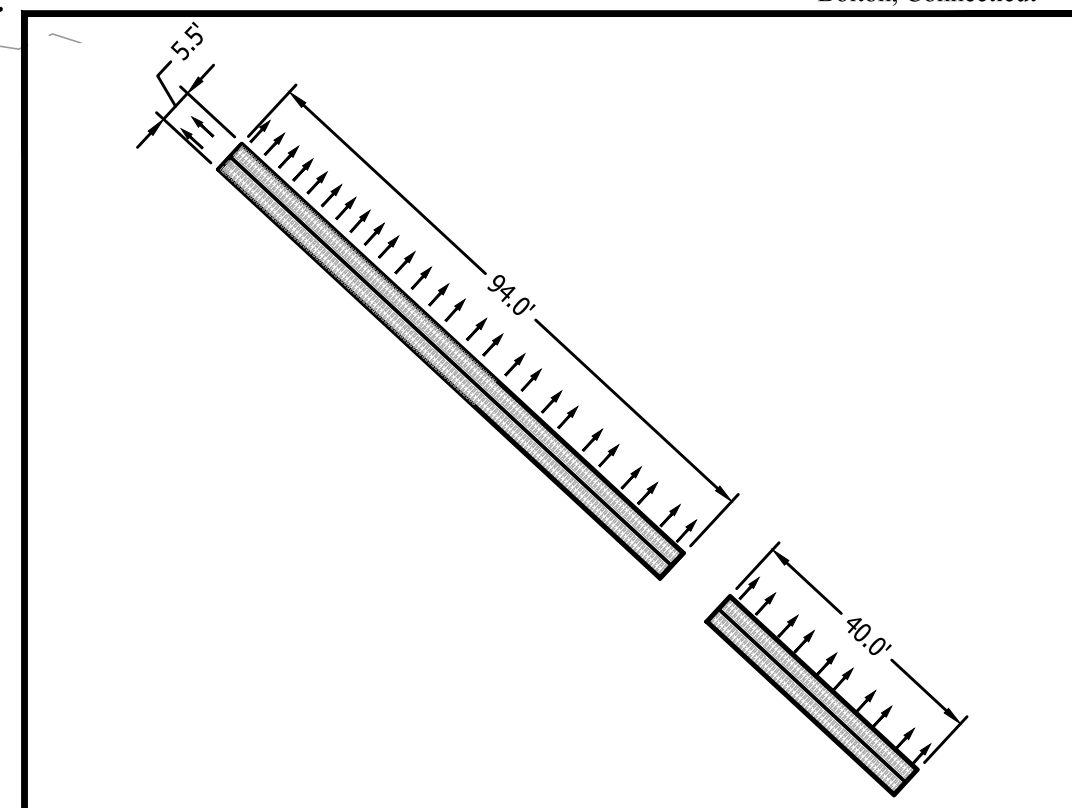
Location Map  
Scale: 1"=1000'



Legend

- EXISTING**
- MONUMENT
  - EX. IP / REBAR
  - DRILL HOLE
  - UTILITY POLE W/ LIGHT
  - STONEM WALL
  - FENCE LINE
  - WATER VALVE
  - OVERHEAD WIRES
  - PROPERTY LINE
  - ADJACENT PROPERTY LINE
  - INDEX CONTOUR
  - CONTOUR
  - WETLANDS BOUNDARY/FLAG
  - MEAN LOW WATER LINE
  - MEAN HIGH WATER LINE
  - HIGH TIDE LINE
  - COUNTY JURISDICTIONAL LINE
  - ZONE LINE
  - EASEMENT LINE
  - BUILDING SETBACK LINE
  - EXISTING WATER LINE
  - EXISTING SEWER LINE
  - NOW OR FORMERLY
  - CATCH BASIN
  - TYPICAL
  - SPOT ELEVATION
  - DRILL HOLE
  - (POB)
  - TEST PIT
  - PERCOLATION TEST
  - UTILITY POLE
  - DRAINAGE MANHOLE
  - SEWER MANHOLE
  - HYDRANT
  - WATER SHUTOFF
- PROPOSED**
- IRON PIN TO BE SET

LATERAL FLOW DIAGRAM  
SCALE: 1" = 30'



**FEDUS ENGINEERING, LLC.**  
**PERCOLATION TEST TABLE - P1**

ELAPSED TIME (MINUTES)	READING (INCHES)	DROP (INCHES)	PERCOLATION RATE (MINUTES/INCH)
0	5		
5	8	3	1.67
10	10	2	2.50
15	11	1	5.00
20	12	1	5.00
25	12 1/2	1/2	10.00
30	13	1/2	10.00

PROJECT: 271 Hop River Road, Bolton 08/14/21  
Depth: 42" with Shelf at 27" - Measurements from Shelf  
Pre-soak: 2 hours

HOP RIVER ROAD (ROUTE 6)

L=180.00  
R=1812.94  
CL=179.93  
CH=S74° 34' 46"E  
Δ=5° 41' 20"

**FEDUS ENGINEERING, LLC.**  
**PERCOLATION TEST TABLE - P2**

ELAPSED TIME (MINUTES)	READING (INCHES)	DROP (INCHES)	PERCOLATION RATE (MINUTES/INCH)
0	2		
5	4	2	2.50
10	5	1	5.00
15	6	1	5.00
20	7	1	5.00
25	7 3/4	3/4	6.67
30	8 1/2	3/4	6.67
35	9	1/2	10.00
40	9 1/2	1/2	10.00

**Subject Parcel Information**

OWNER: IMS PETROLEUM, LLC  
PARCEL ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06043  
MAILING ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06043  
MBL: 8/106  
DEED: VOLUME 185 PAGE 947  
AREA: 639,104.1± SF = 14.6± AC  
FLOOD ZONE: ZONE X PER FIRM MAP # 09011C0228G  
EFFECTIVE DATE: 6/1/1981

**DEEP TEST PIT DATA / SOIL DESCRIPTIONS**

PERFORMED BY: FEDUS ENGINEERING, LLC - GREGG FEDUS, P.E.  
WITNESSED BY: EASTERN HIGHLANDS HEALTH DISTRICT  
DATE: 8-12-21

TEST PIT: 1	TEST PIT: 2
0'-33" TOPSOIL FILL	0'-30" TOPSOIL FILL
33'-54" BROWN SANDY LOAM	30'-39" ORGANIC TOPSOIL
57'-66" RED BROWN SAND, WITH GRAVEL	39'-53" RED-BROWN SANDY LOAM
66'-95" BROWN SILTY SAND	53'-96" GRAVEL/BROWN SILTY LOAM
MOTTLES: 66"	MOTTLES: 53"
GROUNDWATER: 95"	GROUNDWATER: NO
LEDGE: NO	LEDGE: NO
ROOTS: NO	ROOTS: NO
RESTRICTIVE: 66"	RESTRICTIVE: NO

**217 HOP RIVER ROAD - SEPTIC DESIGN DATA**  
**RETAIL STORE DESIGN**

4,960 SF RETAIL STORE = 4,960 SF x 0.1 GPD/SF = 496 GPD  
DESIGN FLOW USED = 1,200 GPD  
PERCOLATION TEST - USE LESS THAN 10.1 MIN/INCH

TABLE 7 PROBLEMATIC SEWAGE  
REQUIRED ELA = DESIGN FLOW/APPLICATION RATE  
1,200 GPD / 0.80 RATE = 1,500 SF

LEACHING TRENCH GST 6224 = 18.1 SF/LF  
MINIMUM REQUIRED TRENCH = 82.9 LF

TRENCH PROVIDED = 134  
EFFECTIVE LEACHING PROVIDED = 2,425.4 SF

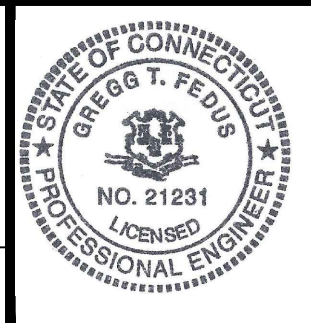
MLSS = HF x FF x PF RS = 36"  
HF = 28.0 HYDRAULIC GRADIENT = (471.19'-467.61')/72' = 4.97%  
FF = 4.0  
PF = 1.0  
MLSS = 28 x 4.0 x 1.0 = 112 LF  
PROVIDED 94 LF + 40 LF = 136 LF. NEEDED 112 LF OKAY WITH 2 SIDE LATERAL FLOW.

NO.	DATE	REVISIONS
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

**Grading & Utility Plan**  
of  
271 Hop River Road  
Bolton, Connecticut  
Prepared For:  
**IMS PETROLEUM, LLC**  
June 15, 2022

DRAWING SCALE: 1"=20'

**FEDUS ENGINEERING, LLC**  
CIVIL ENGINEERS  
Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
Office: (860) 536-7390 Fax: (860) 536-1644



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CT. License No. 21231

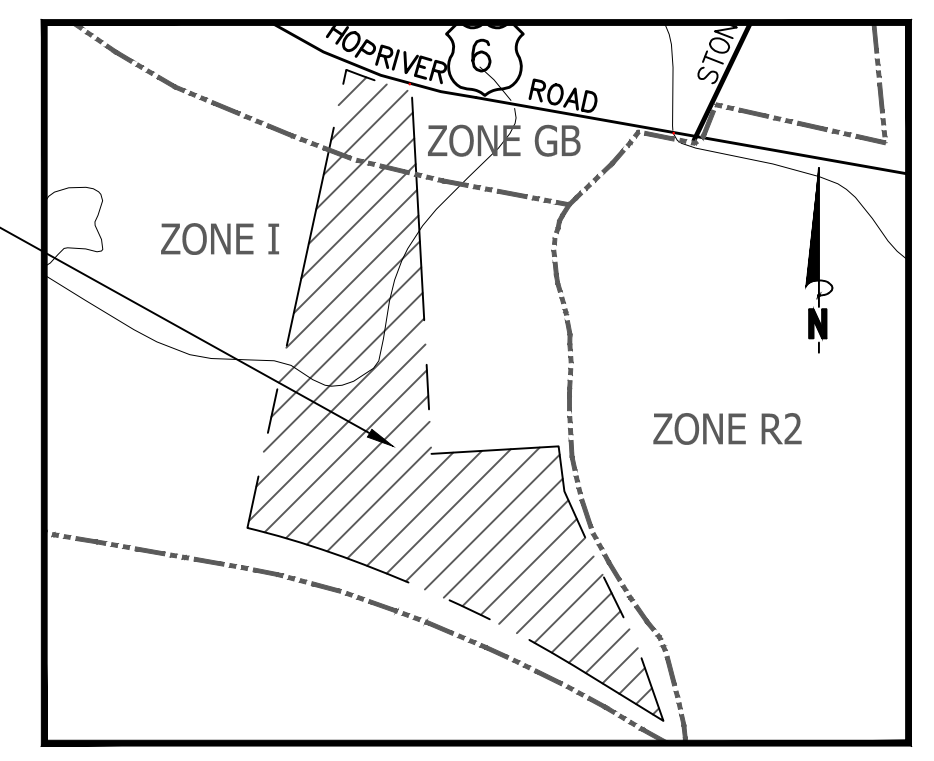
PLANT LIST				
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE, ROOTS, REMARKS
BP	1	BETULA POPULIFOLIA	GRAY BIRCH	10'-15' TALL
KL	27	KALMIA LATIFOLIA	MOUNTAIN LAUREL	6'-10'

99 HOP RIVER RD  
 N/F  
 99 HOP RIVER RD, LLC  
 M/B/L: 8/107  
 V163/625  
 MAILING ADDRESS  
 407 1/2 LAUREL DR  
 FREINDSWOOD DR, TX 77546  
 (NO DESIGN CONFLICTS)

255 HOP RIVER RD  
 N/F  
 255 HOP RIVER RD, LLC  
 M/B/L: 8/105  
 V180/774  
 MAILING ADDRESS  
 255 HOP RIVER RD  
 BOLTON, CT 06403  
 (NO DESIGN CONFLICTS)

**Subject Parcel Information**  
 OWNER: IMS PETROLEUM, LLC  
 PARCEL ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06403  
 MAILING ADDRESS: 271 HOP RIVER ROAD, BOLTON, CT 06403  
 MBL: 8/106  
 DEED: VOLUME 185 PAGE 947  
 AREA: 639,104.1± SF = 14.6± AC  
 FLOOD ZONE: ZONE X PER FIRM MAP # 09011C0228G  
 EFFECTIVE DATE: 6/1/1981

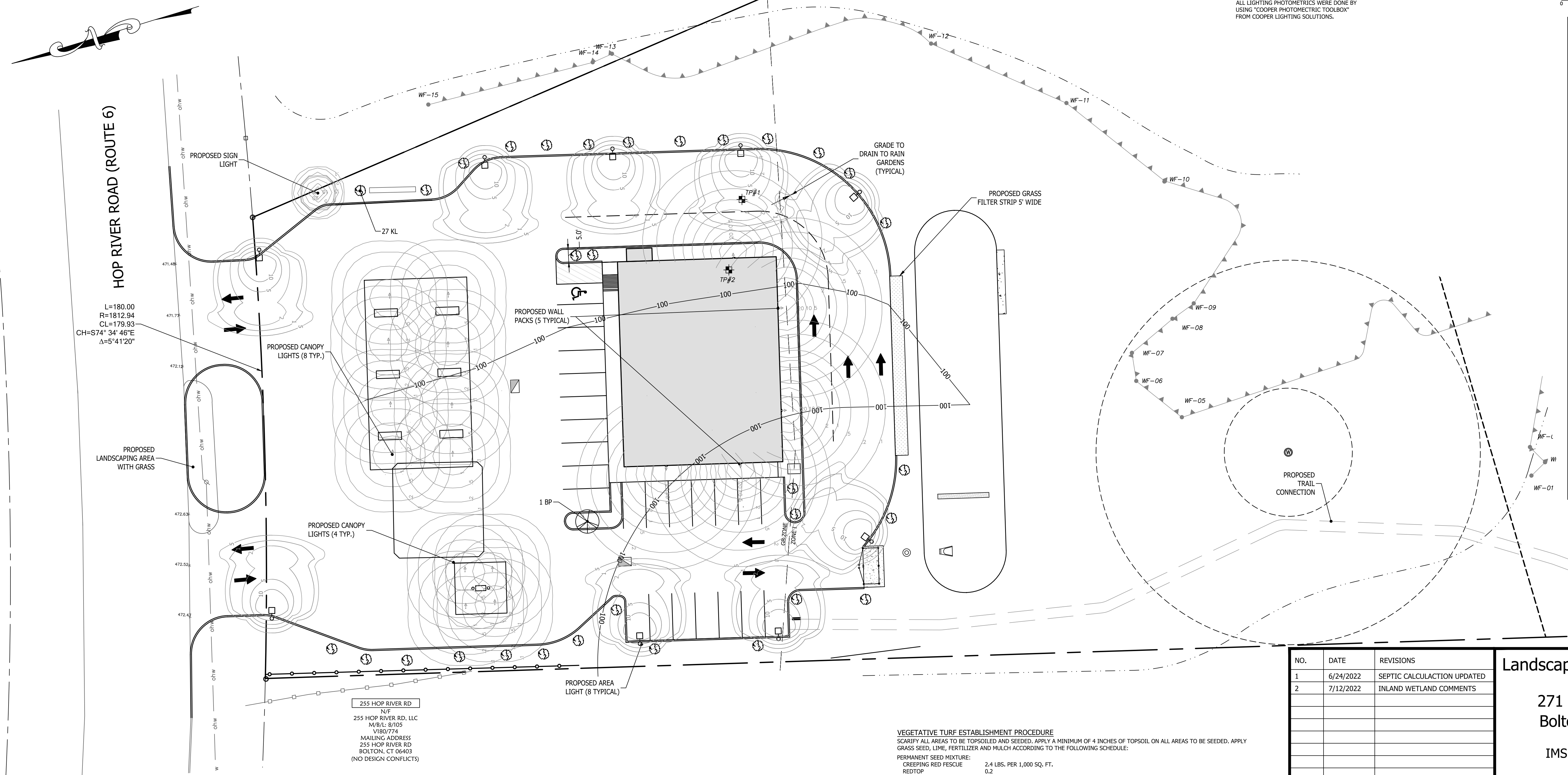
**VEGETATIVE TURF ESTABLISHMENT PROCEDURE**  
 SCARIFY ALL AREAS TO BE TOPSOILED AND SEEDED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEEDED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:  
 PERMANENT SEED MIXTURE:  
 CREEPING RED FESCUE: 2.4 LBS. PER 1,000 SQ. FT.  
 REDTOP: 0.2  
 TALL FESCUE: 2.4  
 TOTAL: 5.0  
 FERTILIZER:  
 10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.  
 LIMESTONE:  
 APPLY AT 150 LBS. PER 1,000 SQ. FT.  
 MULCHING:  
 SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT.  
 TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.  
 SEEDING DATES:  
 SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1.  
 SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.



**Location Map**  
 Scale: 1"=1000'

Legend	
EXISTING	
[Symbol]	DESCRIPTION
[Symbol]	MONUMENT
[Symbol]	EX. TP / REBAR
[Symbol]	DRILL HOLE
[Symbol]	UTILITY POLE W/ LIGHT
[Symbol]	STONEWALL
[Symbol]	FENCE LINE
[Symbol]	WATER VALVE
[Symbol]	OVERHEAD WIRES
[Symbol]	PROPERTY LINE
[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	INDEX CONTOUR
[Symbol]	CONTOUR
[Symbol]	WETLANDS BOUNDARY/FLAG
[Symbol]	MEAN LOW WATER LINE
[Symbol]	MEAN HIGH WATER LINE
[Symbol]	HIGH TIDE LINE
[Symbol]	COUNTY JURISDICTIONAL LINE
[Symbol]	ZONE LINE
[Symbol]	EASEMENT LINE
[Symbol]	BUILDING SETBACK LINE
[Symbol]	EXISTING WATER LINE
[Symbol]	EXISTING SEWER LINE
[Symbol]	N/F
[Symbol]	NOW OR FORMERLY CATCH BASIN
[Symbol]	(TYP.)
[Symbol]	TYPICAL SPOT ELEVATION
[Symbol]	DRILL HOLE
[Symbol]	(POB)
[Symbol]	TEST PIT
[Symbol]	PERCOLATION TEST
[Symbol]	UTILITY POLE
[Symbol]	DRAINAGE MANHOLE
[Symbol]	SEWER MANHOLE
[Symbol]	HYDRANT
[Symbol]	WATER SHUTOFF
PROPOSED	
[Symbol]	IRON PIN TO BE SET

NOTE:  
 ALL LIGHTING PHOTOMETRICS WERE DONE BY USING "COOPER PHOTOMETRIC TOOLBOX" FROM COOPER LIGHTING SOLUTIONS.

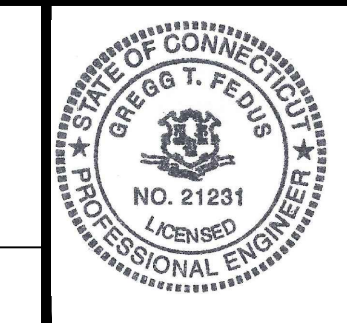


NO.	DATE	REVISIONS
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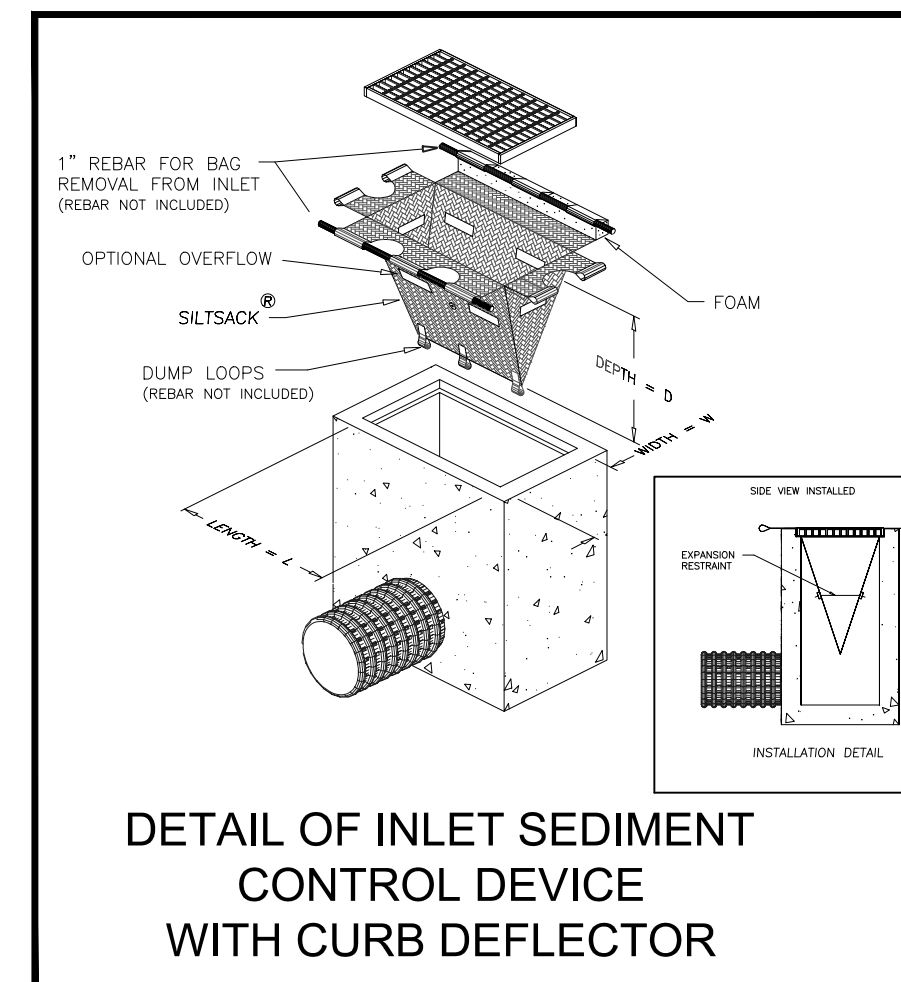
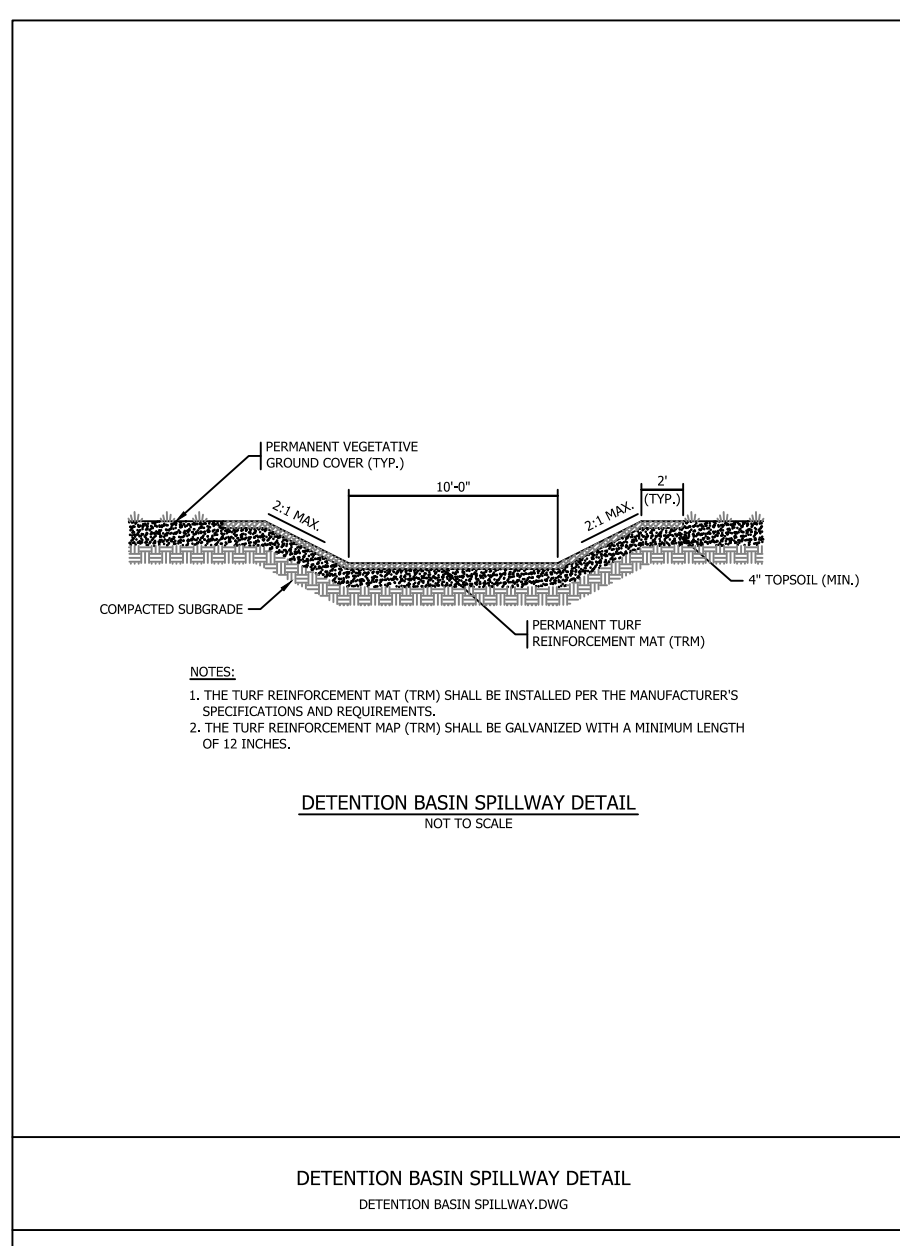
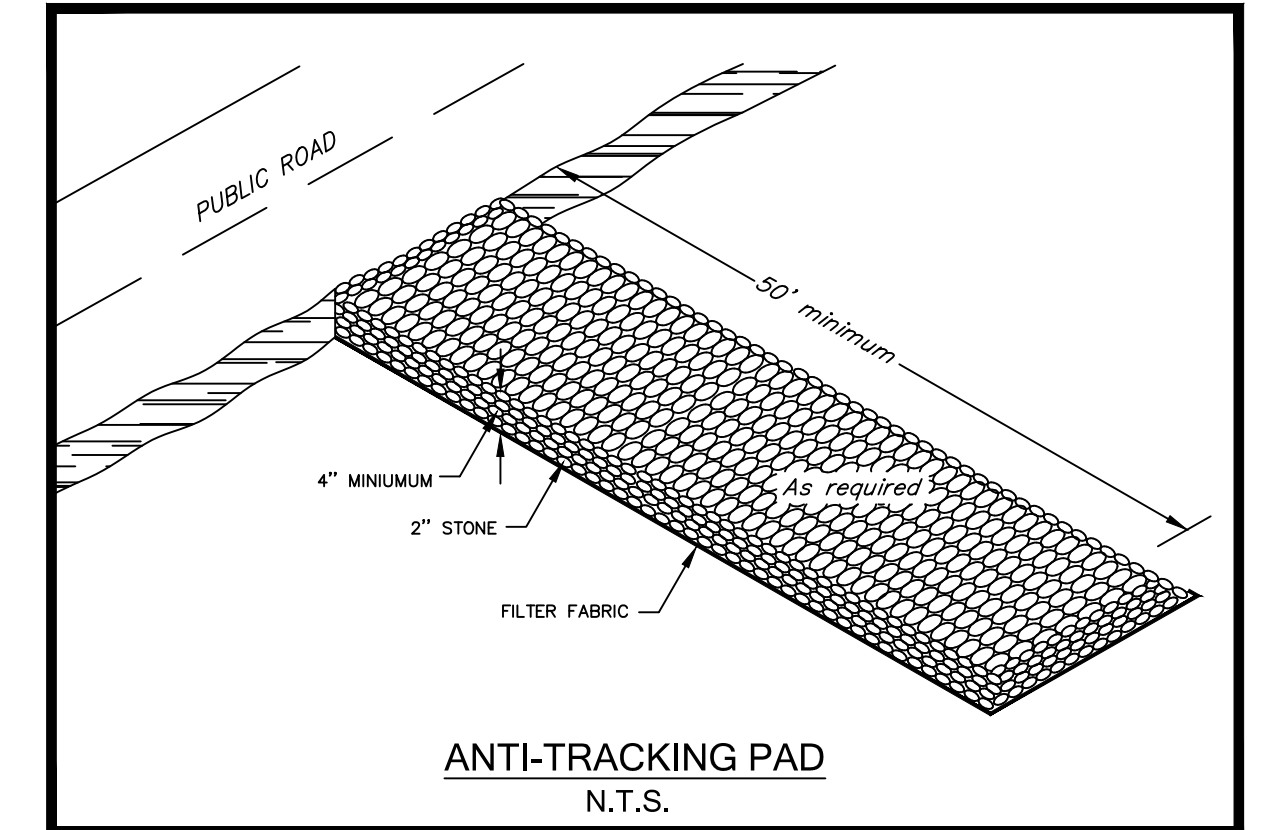
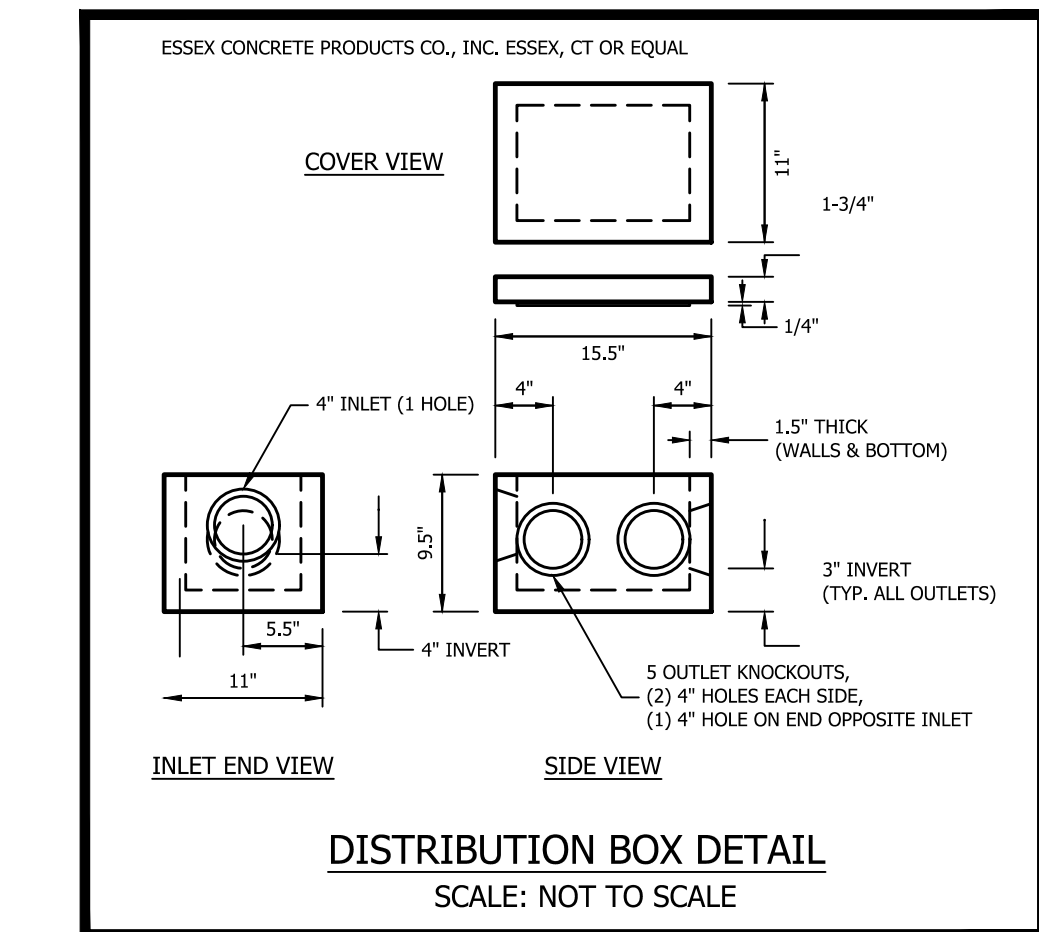
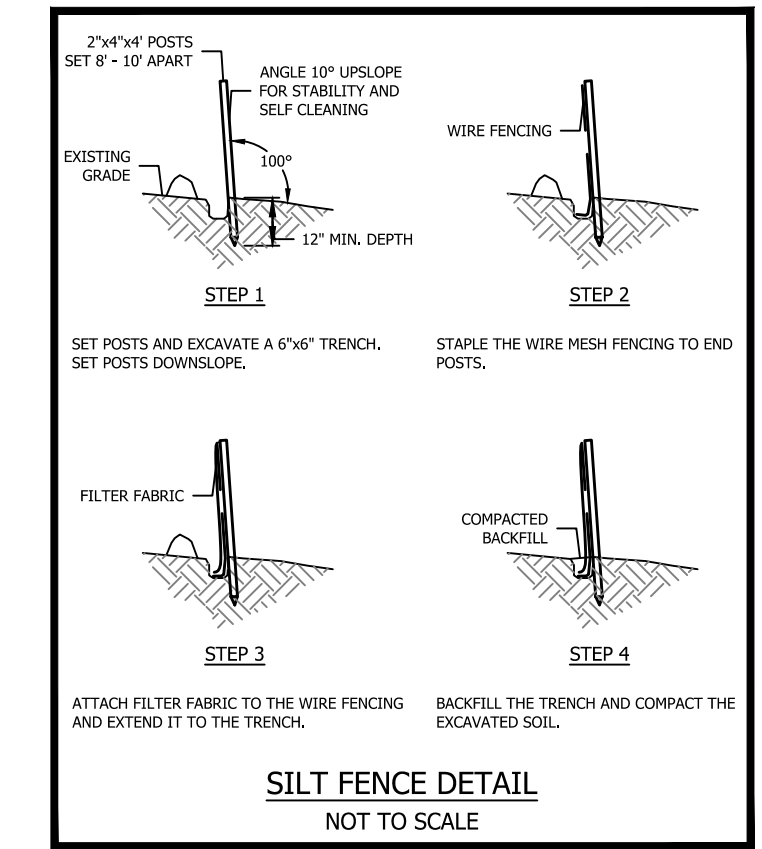
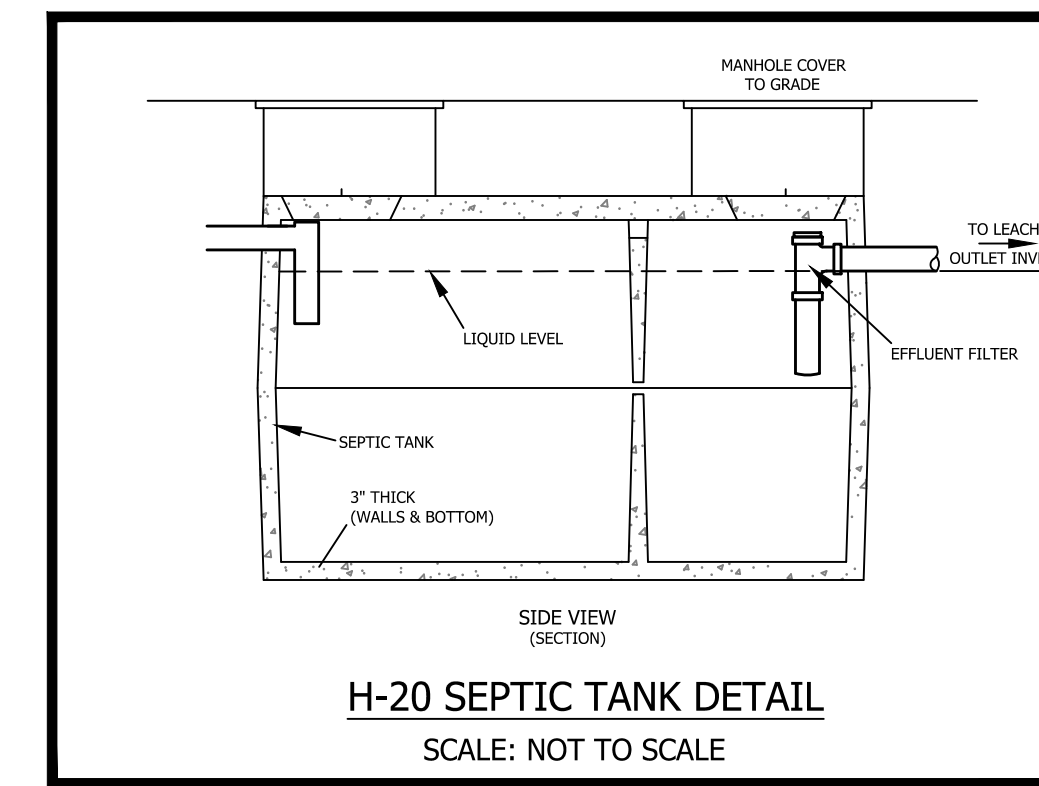
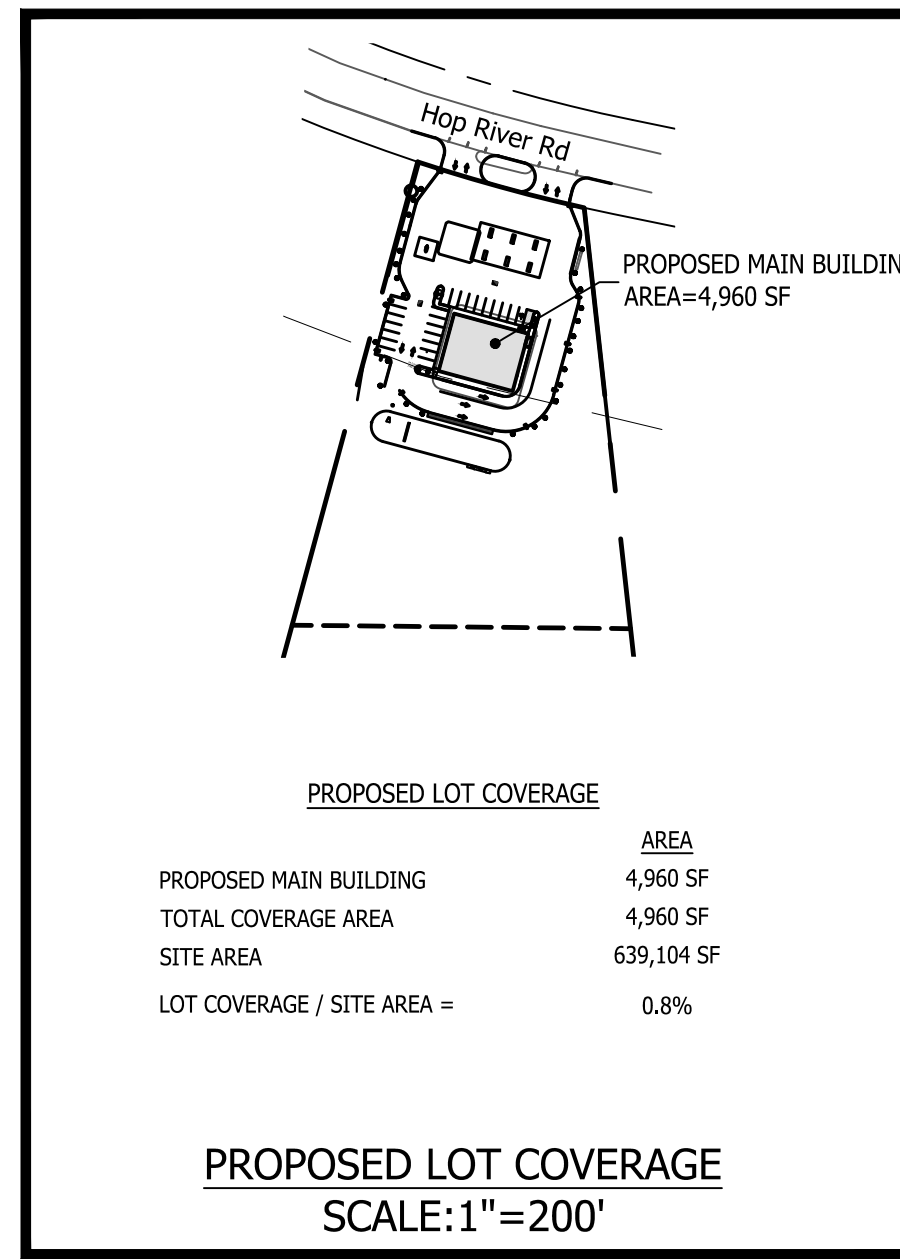
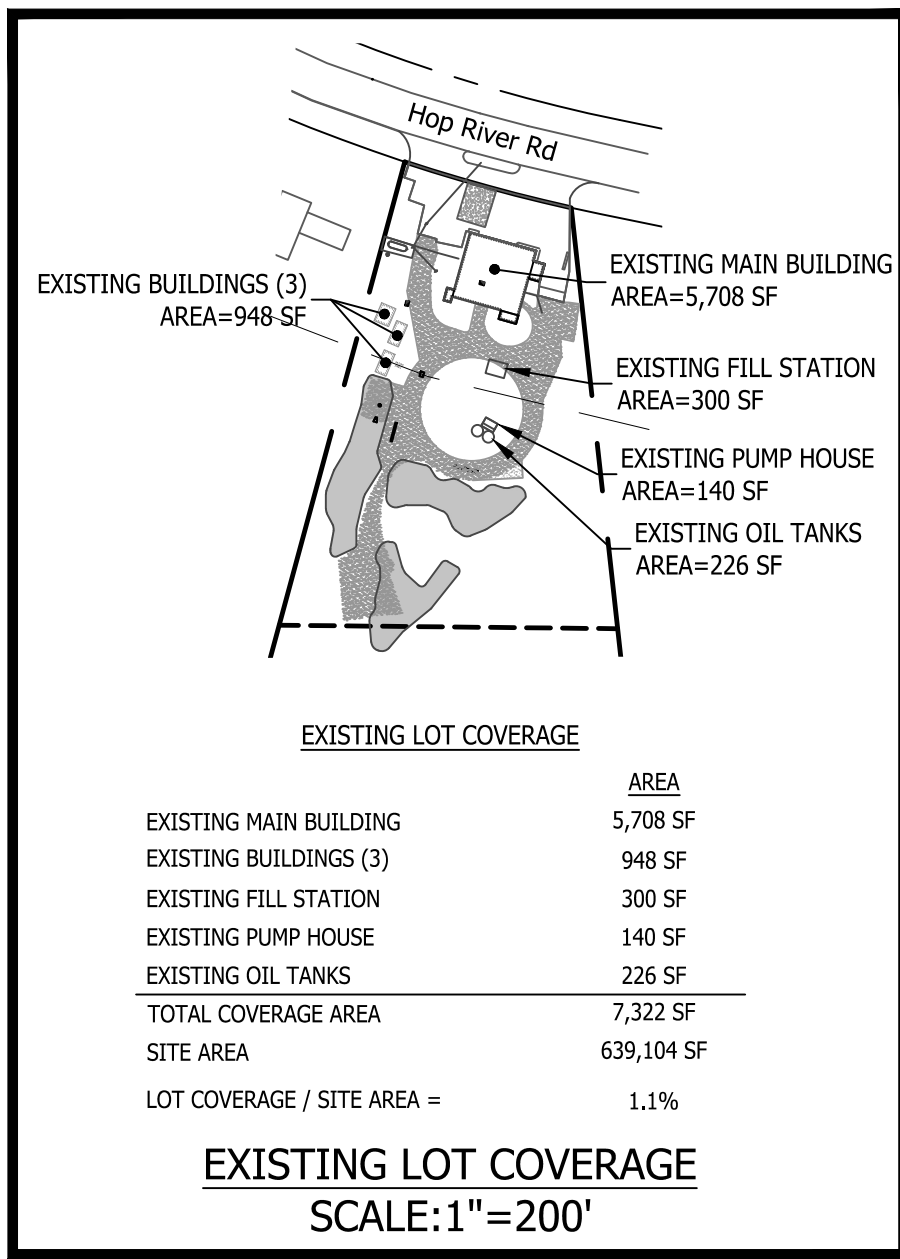
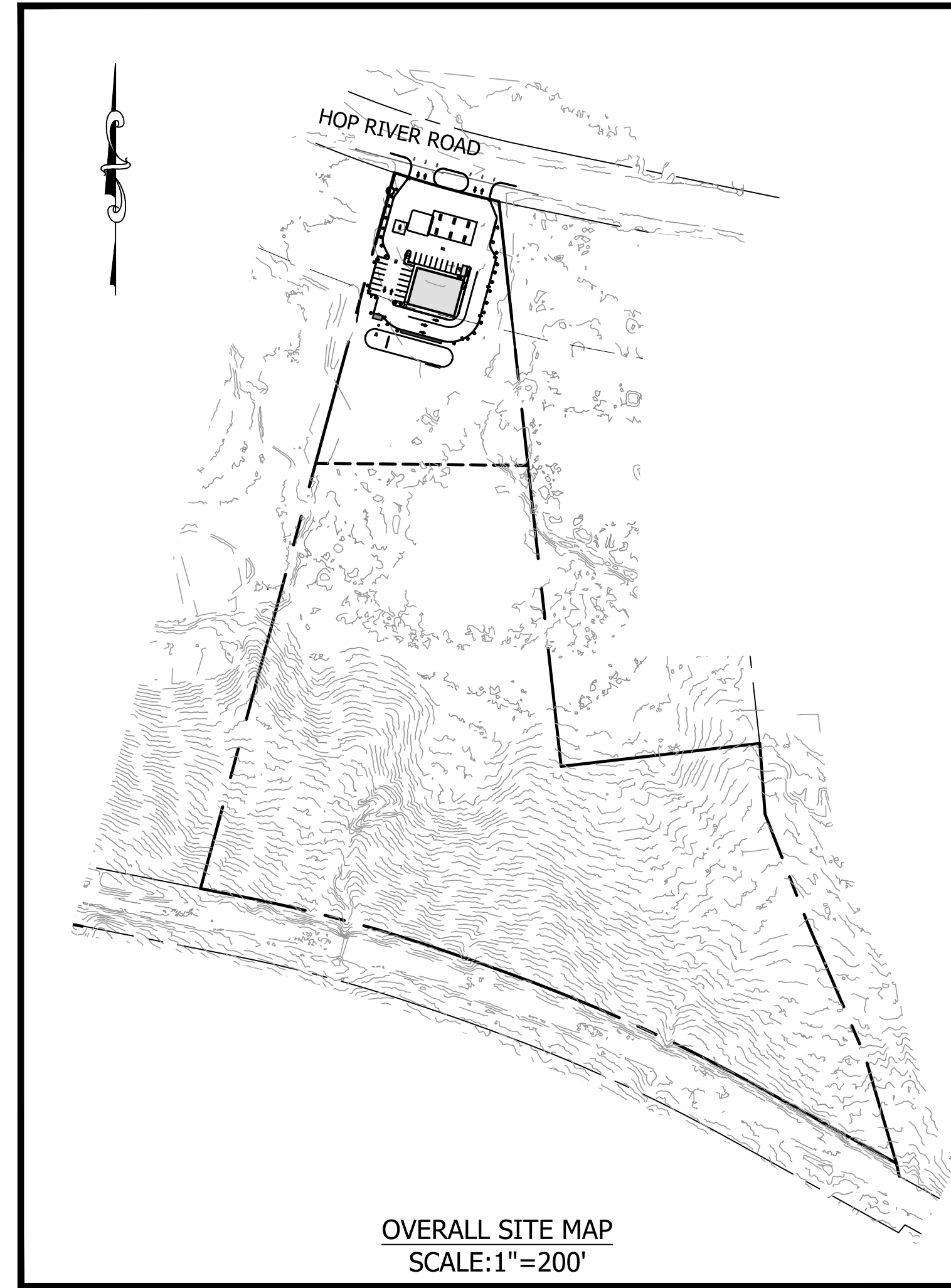
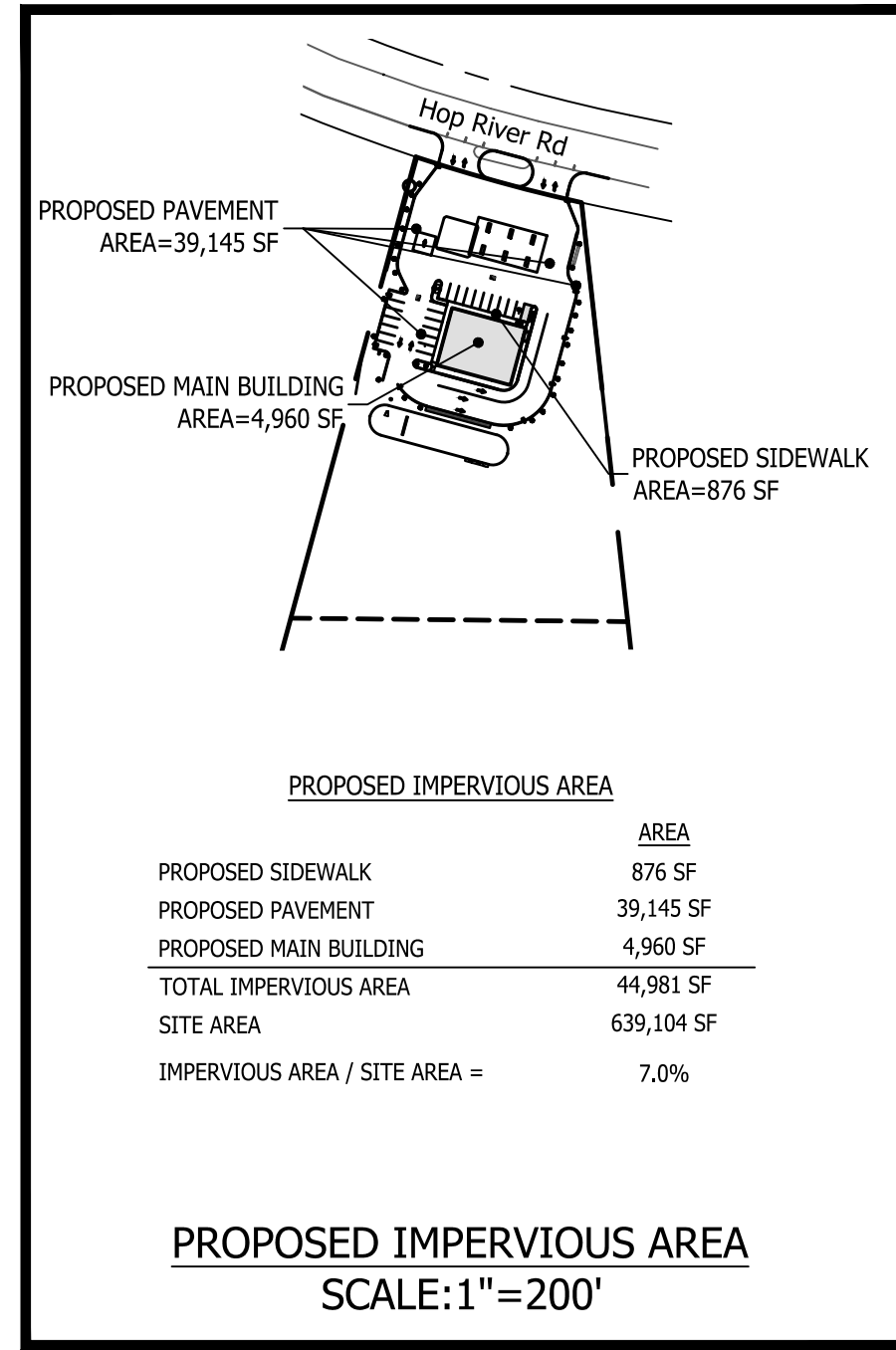
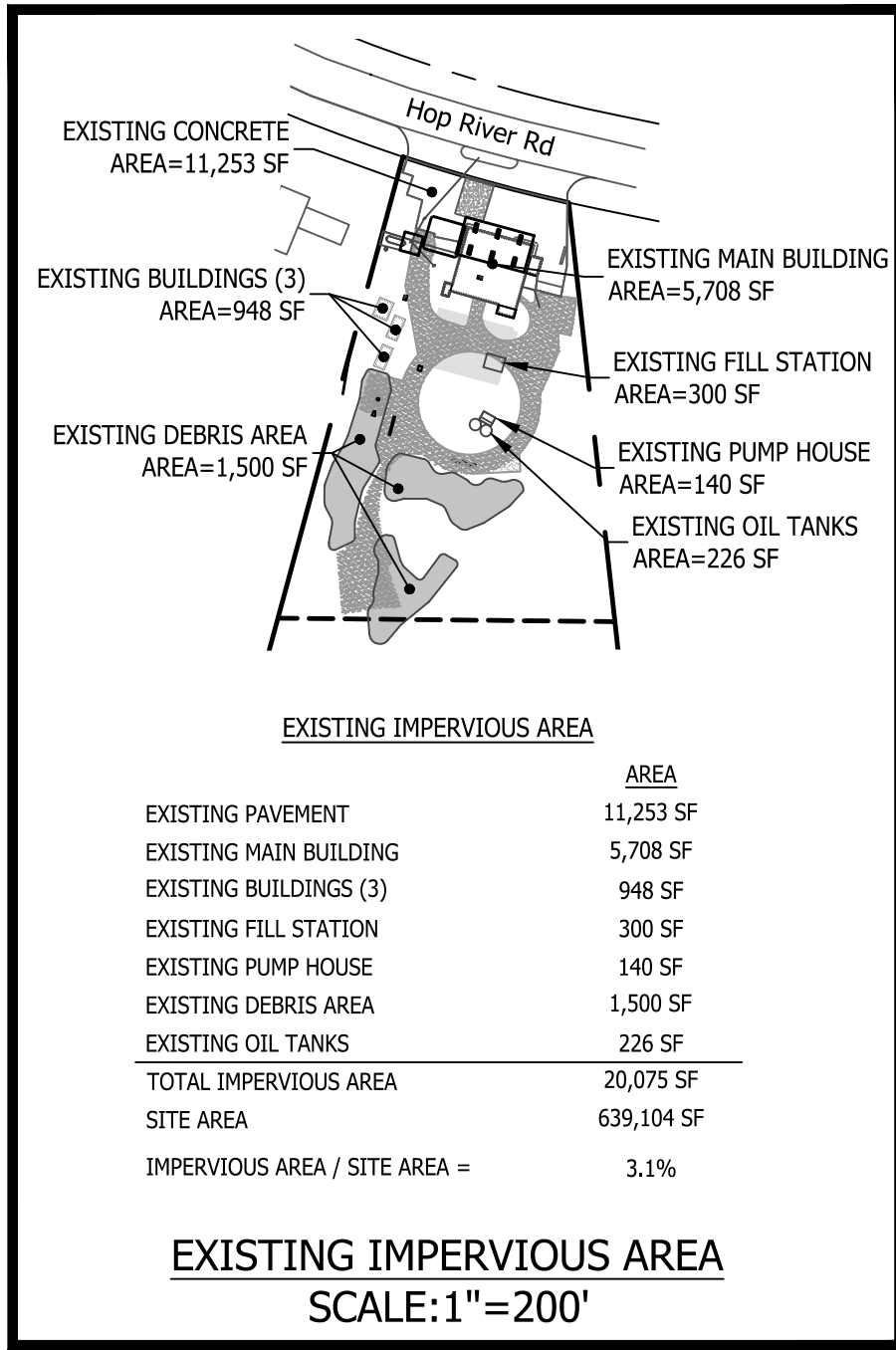
**Landscaping & Lighting Plan**  
 of  
 271 Hop River Road  
 Bolton, Connecticut  
 Prepared For:  
 IMS PETROLEUM, LLC  
 January 3, 2022

DRAWING SCALE: 1"=20'

Gregg T. Fedus P.E.  
 CT. License No. 21231



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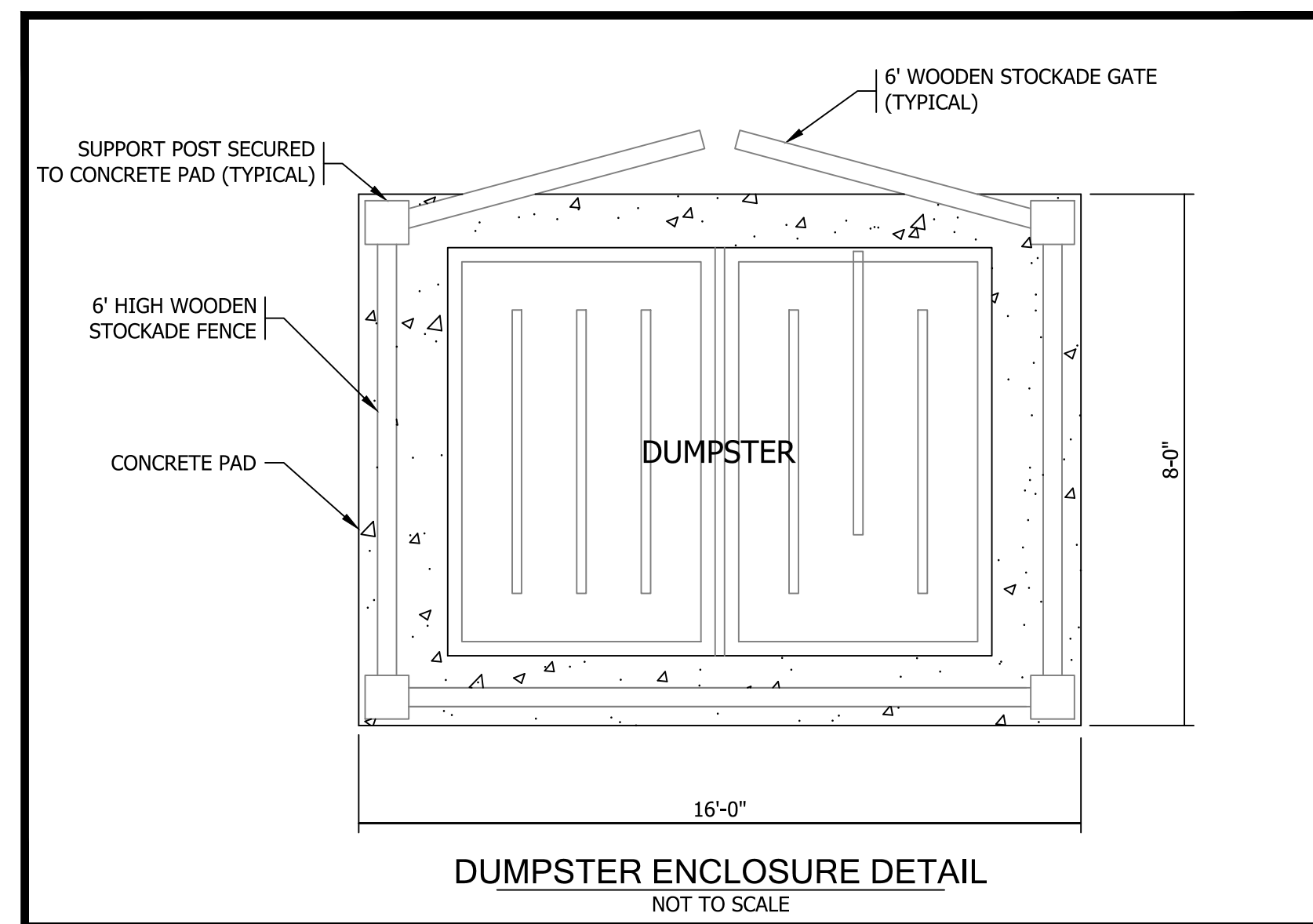


SPOT GRADES	
473.27	472.55
473.21	472.81
473.37	472.79
473.29	472.76
471.97	472.67
473.27	472.76
473.13	473.12
472.89	473.40
472.62	473.51
472.33	473.30
TOTAL	9459.02
9411.21 ± 20	472.95 AVG

BUILDING HEIGHT CALCULATION	
HIGHEST RIDGE ELEV.	491.20
AVERAGE EXISTING GRADE	472.95
AVG. - HIGHEST RIDGE = PROP. BUILDING HEIGHT	18.25

**BUILDING HEIGHT DETAIL**  
SCALE: 1"=40'



Specifications

1. Must be independently tested at the NSF Laboratory...  
 2. Installation...  
 3. Flow Criteria...  
 4. Installation...  
 5. All inlet elevations...  
 6. All inlet elevations...  
 7. All inlet elevations...  
 8. All inlet elevations...  
 9. All inlet elevations...  
 10. All inlet elevations...

Flow Criteria	Capacity	Height	Length
155 Removal	100 GPM	24.00	10.00
155 Removal	200 GPM	24.00	10.00
155 Removal	300 GPM	24.00	10.00
155 Removal	400 GPM	24.00	10.00
155 Removal	500 GPM	24.00	10.00
155 Removal	600 GPM	24.00	10.00
155 Removal	700 GPM	24.00	10.00
155 Removal	800 GPM	24.00	10.00
155 Removal	900 GPM	24.00	10.00
155 Removal	1000 GPM	24.00	10.00

Hydroworks HydroStorm

PROJECT: [Blank]  
 LOCATION: [Blank]  
 REVISION DATE: 08/07/2020

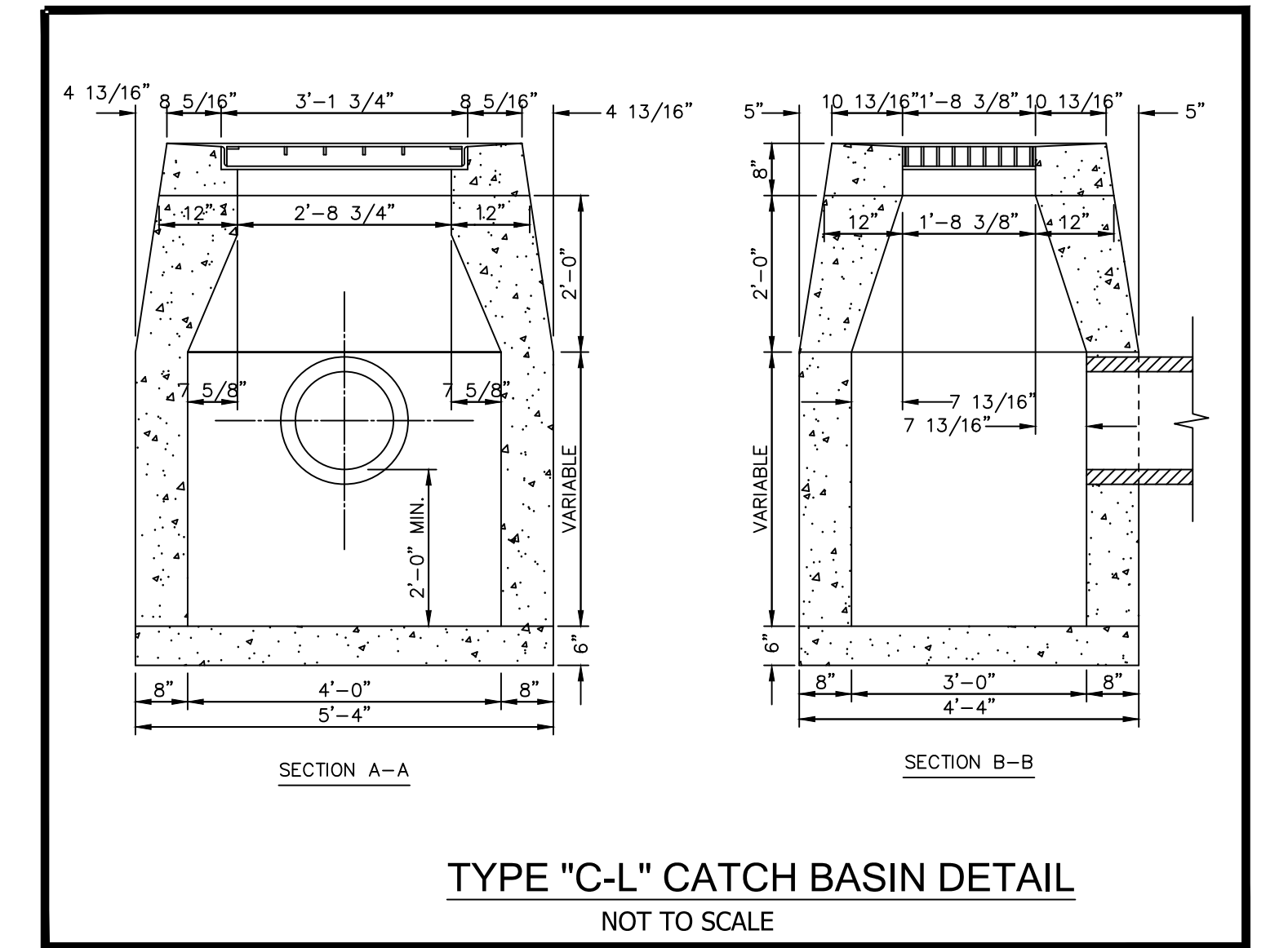
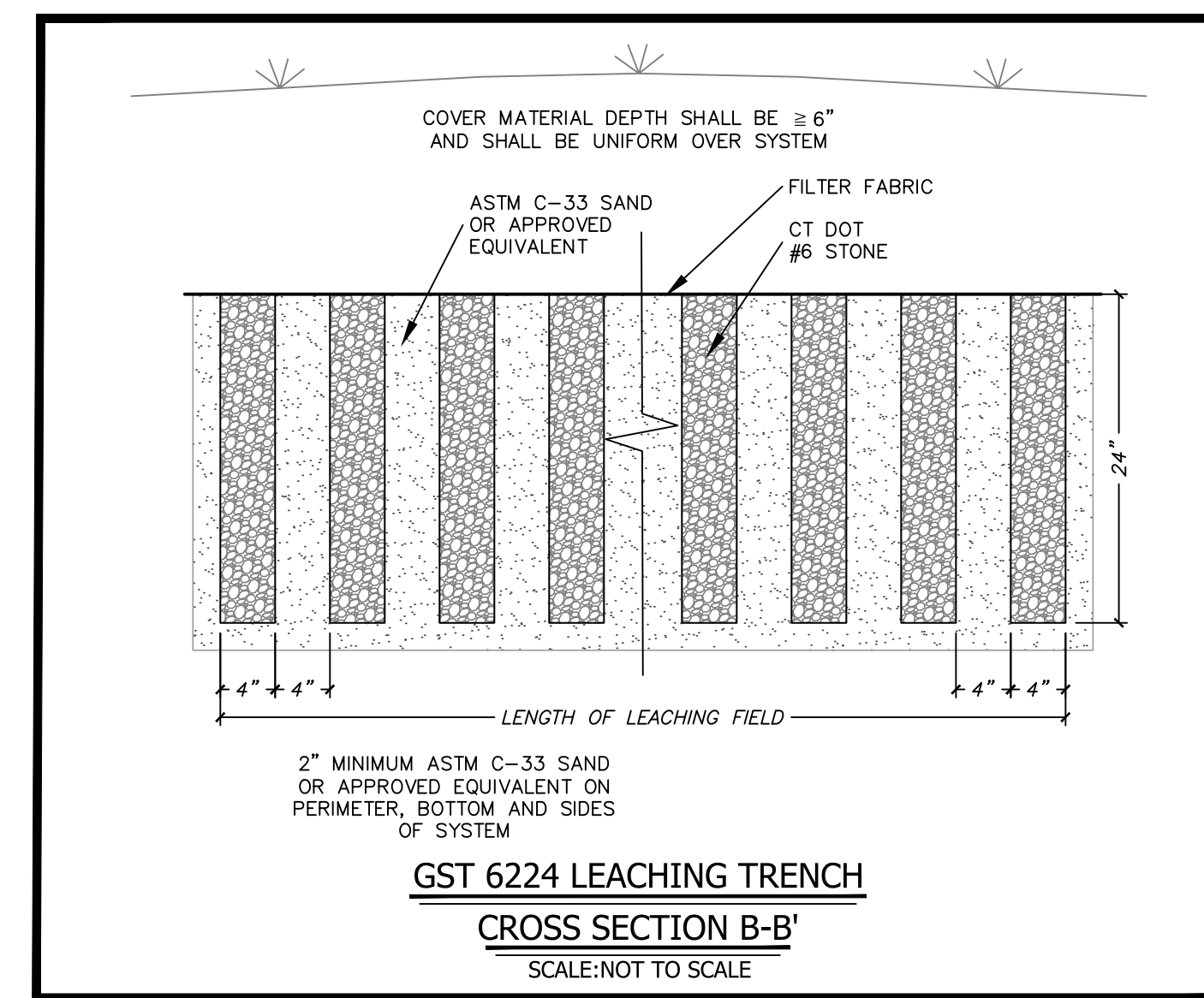
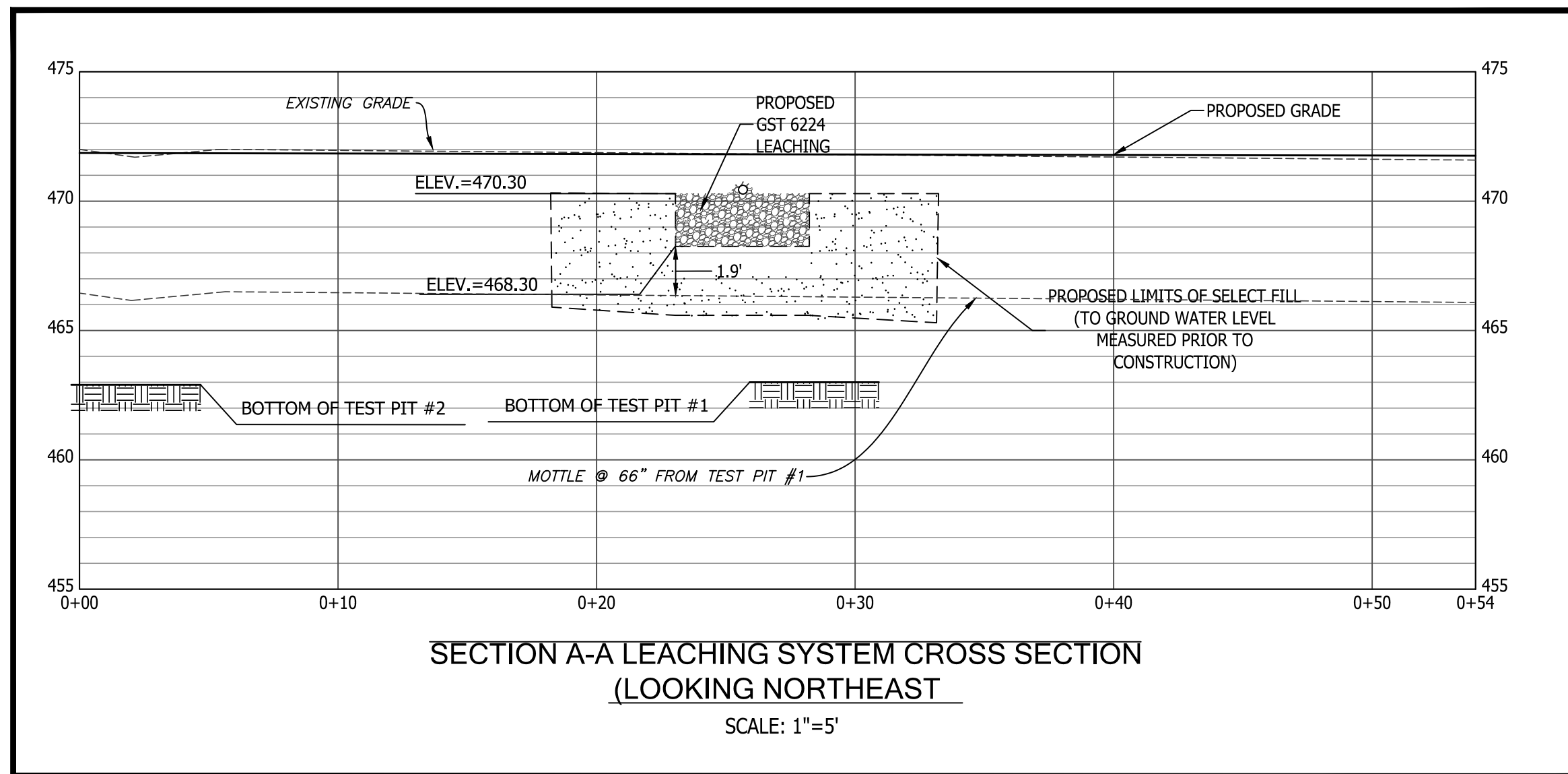
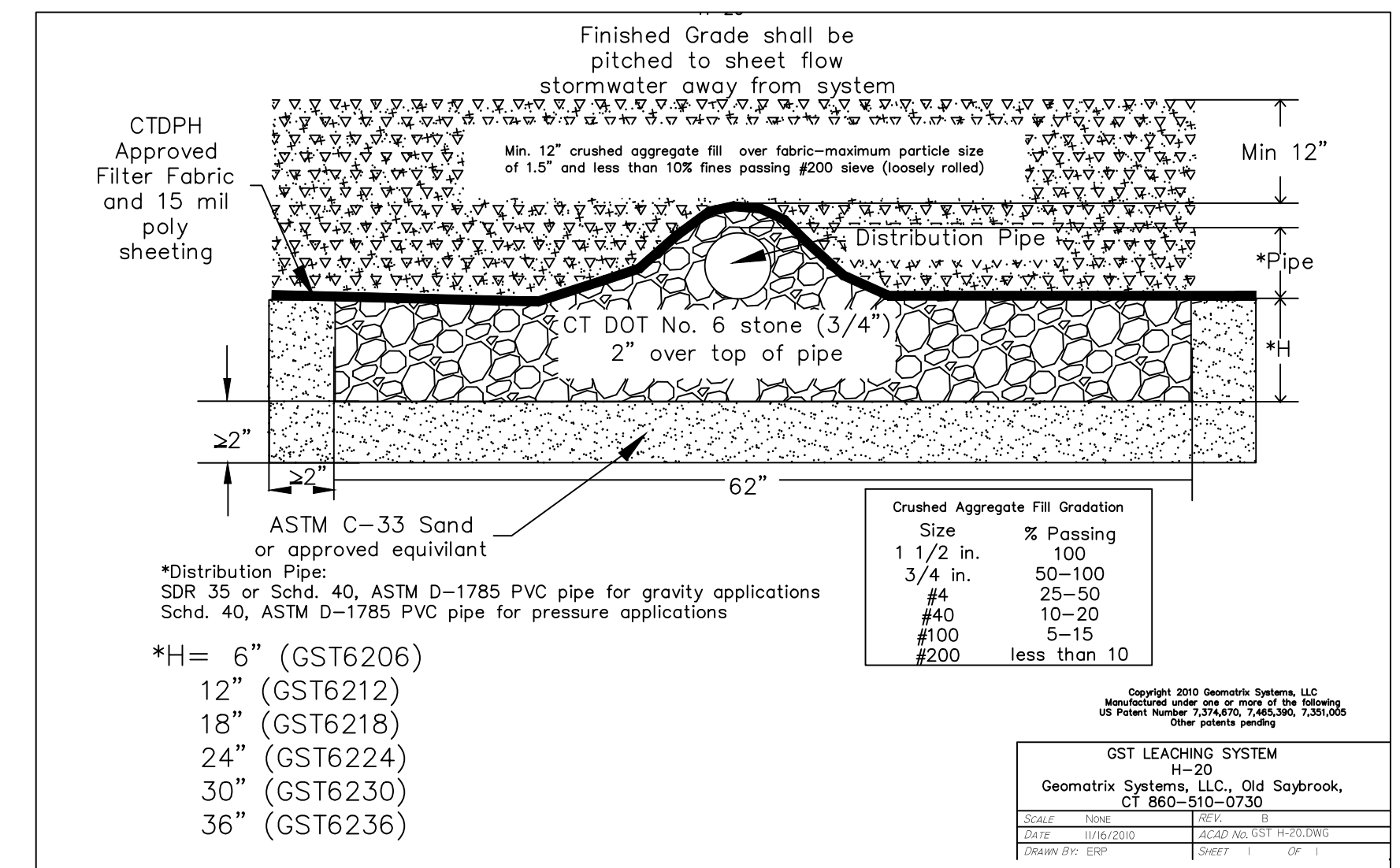
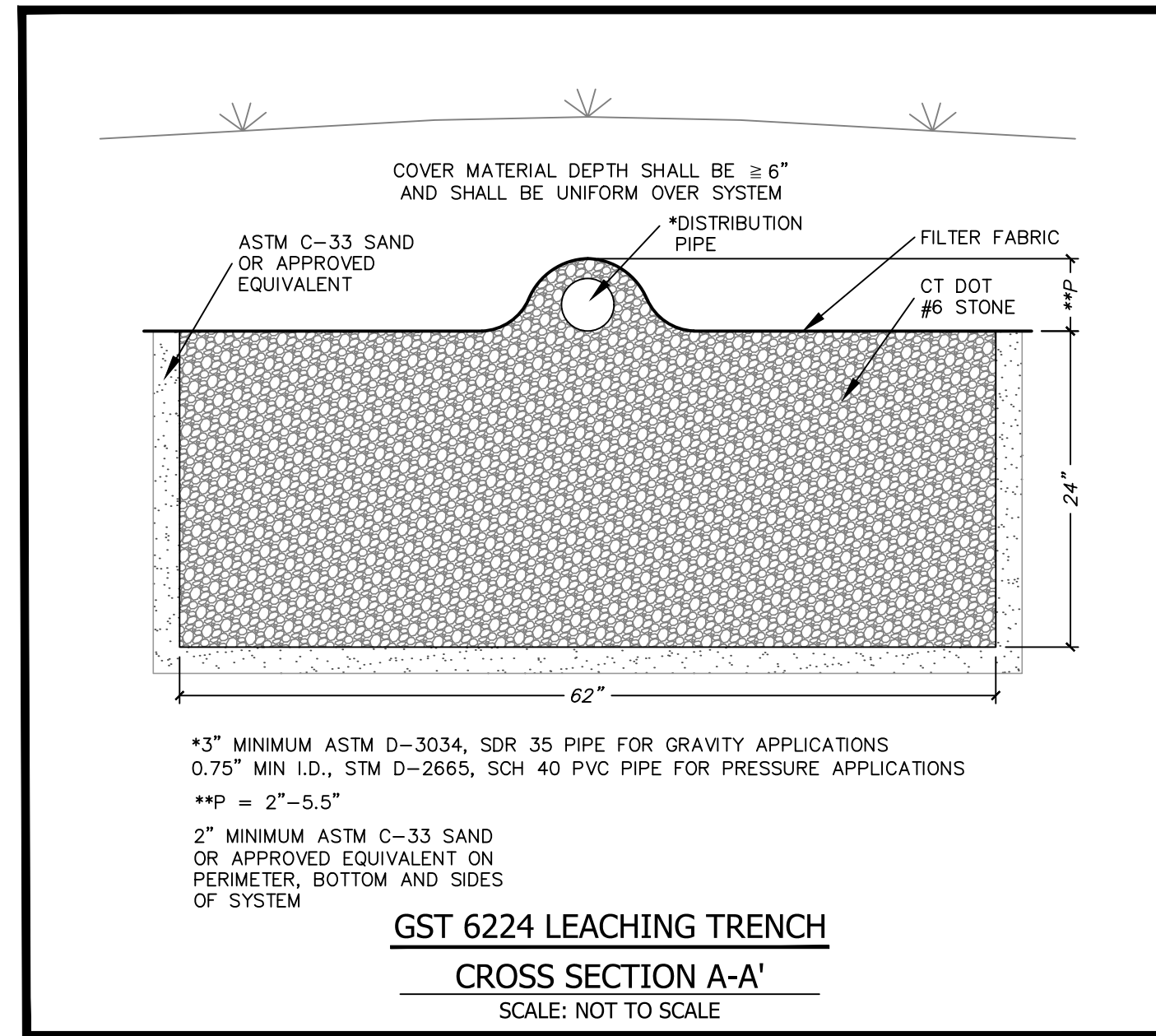
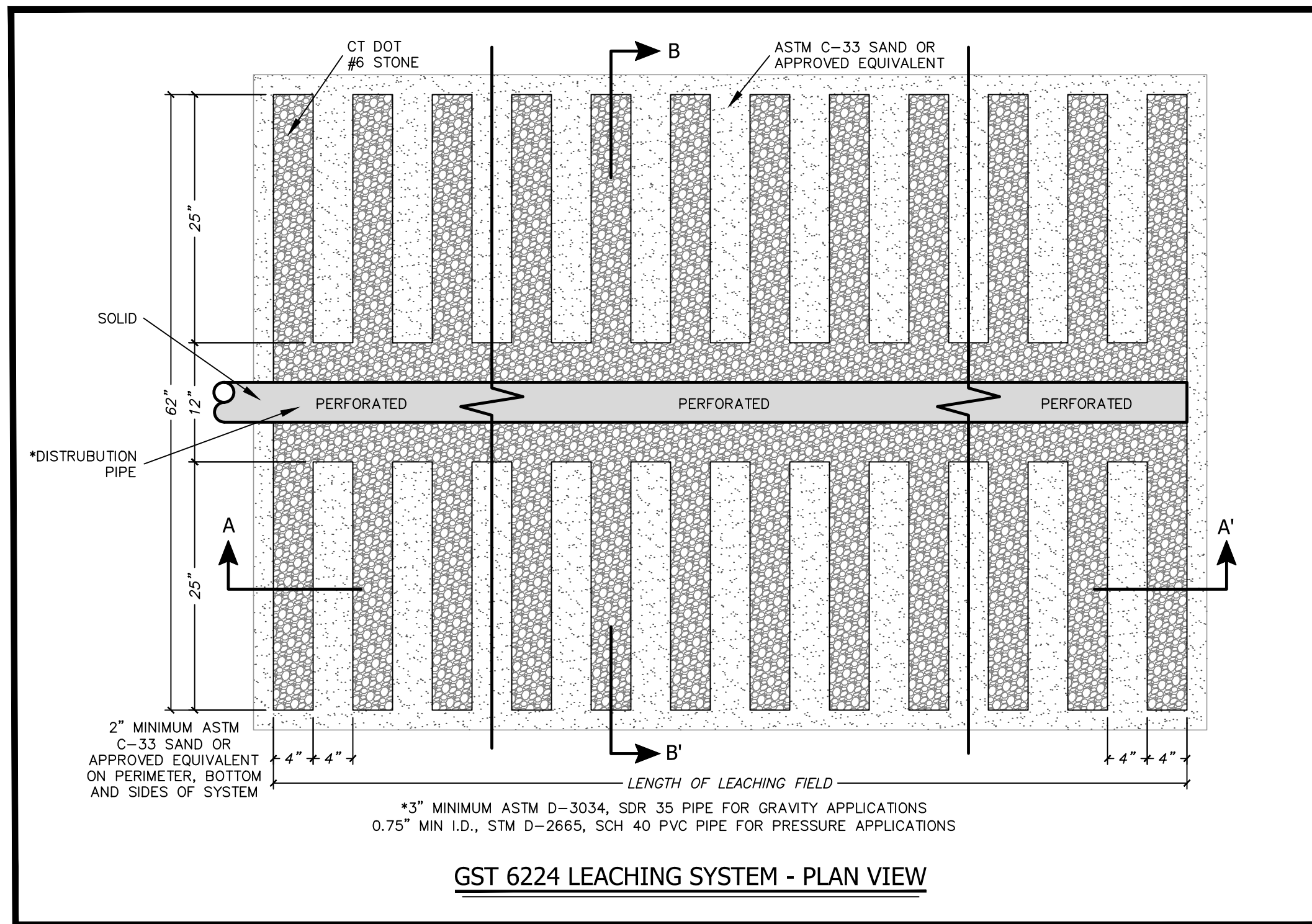
NO.	DATE	REVISIONS
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**Detail Sheet**  
 of  
 271 Hop River Road  
 Bolton, Connecticut  
 Prepared For:  
 IMS PETROLEUM, LLC  
 January 3, 2022

DRAWING SCALE: 1"=20'

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SHEET NO. 6 OF 8 JOB NO. 21-000985 DRAWN BY: CAC



**NOTES - SEPTIC SYSTEM**

- PROPOSED CONSTRUCTION TO CONFORM TO THE LATEST REVISION OF THE STATE OF CONNECTICUT PUBLIC HEALTH CODE.
- ELEVATIONS BASED ON INFORMATION GATHERED BY LICENSED SURVEYOR.
- ENGINEER AND SANITARIAN WILL BE CONTACTED IF SOIL CONDITIONS OTHER THAN THOSE SHOWN ON PLAN ARE ENCOUNTERED AND WORK WILL BE HALTED PENDING REVIEW OF THOSE CONDITIONS.
- ELEVATIONS SHOWN REFER TO THE INVERT (FLOW LINE) OF THE PROPOSED LEACHING SYSTEM UNLESS NOTED OTHERWISE.
- SEPTIC TANK CONSTRUCTION JOINTS SHALL BE SEALED WITH ASPHALT CEMENT. ALL PIPE CONNECTIONS TO THE SEPTIC TANK AND DISTRIBUTION BOXES SHALL BE SEALED WITH A POLYETHYLENE GASKET ("POLYLOK" OR APPROVED EQUAL).
- SEPTIC TANK BAFFLES SHALL CONFORM TO TECHNICAL STANDARDS OF THE PUBLIC HEALTH CODE.
- SEPTIC TANKS SHALL HAVE AN APPROVED NON-BYPASS EFFLUENT FILTER AT THE OUTLET.
- SEPTIC TANK SHALL BE TWO COMPARTMENT TANK WITH HEAVY DUTY STEEL HANDLES FOR MANHOLE ACCESS COVERS AND GAS BAFFLES INSTALLED AT OUTLET PIPING. TANKS TO BE WATER TIGHT.
- ALL PIPES DOWNSTREAM OF THE SEPTIC TANK SHALL BE 4" DIAMETER SCH 40 ASTM D1785 OR D2665. ALL PIPES UPSTREAM OF THE SEPTIC TANK SHALL BE 4" DIAMETER SCH 40 ASTM D1785 OR D2665.
- NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER AND SANITARIAN.
- EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO FIELD MODIFICATION AS REQUIRED BY THE DESIGN ENGINEER OR TOWN OFFICIALS TO INCREASE EROSION AND SEDIMENT CONTROL MEASURES.
- ALL FILTER FABRIC SHALL BE 1.5 OZ./YD. (ASTM D-5261), PERMEABILITY OF 1.0 SEC. (ASTM D-4491) AND A TRAPEZOID TEAR OF 15 LBS. (ASTM D-4533) OR EQUAL.
- ALL DISTURBED AREAS SHALL BE TOPSOILED AND TURF ESTABLISHED.
- BASED ON AVAILABLE RECORDS AT THE TOWN OF EAST HADDAM HEALTH DEPARTMENT, NO SEPARATING DISTANCE CONFLICTS ARE PRESENT WITH WELLS, SEPTIC SYSTEMS AND HOUSES ON ADJACENT LOTS.
- BUILDINGS HAVE NO GARBAGE GRINDERS, OR LARGE TUBS OVER 100 GALLONS.
- NO FOOTING DRAINS SHALL BE INSTALLED WITHIN 25' OF PROPOSED SEPTIC SYSTEM.
- LICENSED SURVEYOR TO STAKE SYSTEM. LICENSED SEPTIC INSTALLER TO DO SITE PREPARATION WORK. BENCH MARK TO BE SET IN FIELD.
- NO WORK (OTHER THAN TREE CLEARING) SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
- STRIP INSPECTIONS SHALL BE DONE BY BOTH THE ENGINEER AND SANITARIAN.
- TEN FOOT SEPARATION FROM WATER LINE TO SYSTEM TO BE VERIFIED IN FIELD.
- SYSTEM AREA SHOULD BE RE-STRIPPED AND REFILLED PRIOR TO START OF CONSTRUCTION TO PREVENT HEAVY EQUIPMENT COMPACTION FROM DRIVEWAY.

**INSTALLATION NOTES**

- LAYOUT SYSTEM.
- PREPARE SITE AND REMOVE ANY TREES WITH A DRIP LINE FALLING WITHIN 10 FEET OF THE LEACHING SYSTEM.
- EXCAVATE TRENCH TO A DEPTH THAT IS AT LEAST 2" BELOW THE BASE ELEVATION OF THE GST TO ACCOMMODATE A MINIMUM OF 2" OF SAND. TRENCH WIDTH SHOULD BE A MINIMUM OF 45" FOR THE GST 37 SERIES AND 70" FOR GST 62 SERIES.
- RAKE/SCARIFY SIDEWALLS AND BOTTOM OF TRENCH TO ADDRESS ANY SMEARING OF FINES, AND THEN DO NOT WALK IN TRENCH BOTTOM.
- PLACE A MINIMUM OF 2" OF ASTM C-33 SAND OR APPROVED EQUIVALENT (SAND) IN THE BOTTOM OF THE EXCAVATION TO SERVE AS BASE FOR GST, RAKE AND LEVEL AND UNIFORMLY COMPACT. IF A 2" LIFT OF SAND IS PRESENT SIMPLY WALKING ON IT SHOULD PROVIDE SUFFICIENT COMPACTION.
- SET THE GST FORMS IN CENTER OF TRENCH.
- PLACE COVERS OVER ENTIRE CENTER STONE CHANNEL AND ALTERNATING STONE FINGER COMPARTMENTS.
- PLACE SAND INTO VOID SPACE BETWEEN TRENCH SIDEWALL AND GST FORM. ALSO FILL THE SAND FINGER VOIDS IN THE FORMS AND UNIFORMLY COMPACT.
- REMOVE ALL COVERS FROM OVER ENTIRE CENTER STONE CHANNEL AND STONE FINGER COMPARTMENTS.
- PLACE CLEAN CT DOT #6 (3/4") STONE INTO THE INTERIOR OF THE GST FORM.
- PULL FIRST GST FORM AND "LEAP FROG" FORM AHEAD OF THE LAST GST FORM.
- REPEAT SEQUENCE UNTIL DESIRED TRENCH LENGTH IS INSTALLED.
- ENSURE THAT SAND AND BACKFILL MATERIALS ARE COMPACTED TO PREVENT SETTLEMENT.
- INSTALL APPROVED DISTRIBUTION PIPING ON TOP OF THE 12" CENTRAL STONE CHANNEL.
- PLACE STONE AROUND THE DISTRIBUTION PIPE.
- PUT APPROVED FILTER FABRIC OVER THE SYSTEM.
- BACKFILL SYSTEM TO ENSURE THAT UNIFORM COVER AND COMPACTION EXISTS OVER THE TOP OF THE SYSTEM (A MINIMUM OF 6" OF COVER IS REQUIRED). WHEN GST IS INSTALLED BELOW AREAS SUBJECT TO H-20 LOADING, SEE NOTE BELOW.
- FINISH GRADE OVER THE SYSTEM SHOULD ENSURE THAT STORM WATER SHEET FLOW IS DIVERTED AWAY FROM THE LEACHING SYSTEM, TANK(S) AND PUMP TANK(S) IF PRESENT.
- SEED AND HAY DISTURBED AREA. THE USE OF WOOD CHIPS AS COVER MATERIAL IS NOT RECOMMENDED.
- MAINTAIN THE AREA TO PREVENT TREE ROOTS FROM IMPACTING THE SYSTEM.
- PROPERLY SERVICE THE SEPTIC TANK EVERY 3-5 YEARS; OR AS ADVISED BY THE REGULATORY AGENCY OR YOUR SERVICE PROVIDER.

**SELECT FILL SPECIFICATIONS:**

SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE A CLEAN MATERIAL COMPRISED OF SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY THE DESIGN ENGINEER. SELECT FILL EXCEEDING 6 PERCENT PASSING THE #200 SIEVE BASED ON A WET SIEVE TEST CANNOT BE APPROVED BY THE DESIGN ENGINEER.

- THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
- UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED (GRAVEL PORTION) ON THE #4 SIEVE.
- THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
- THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70 - 100	70 - 100
#40	10 - 50*	10 - 75
#100	0 - 20	0 - 5
#200	0 - 5	0 - 2.5

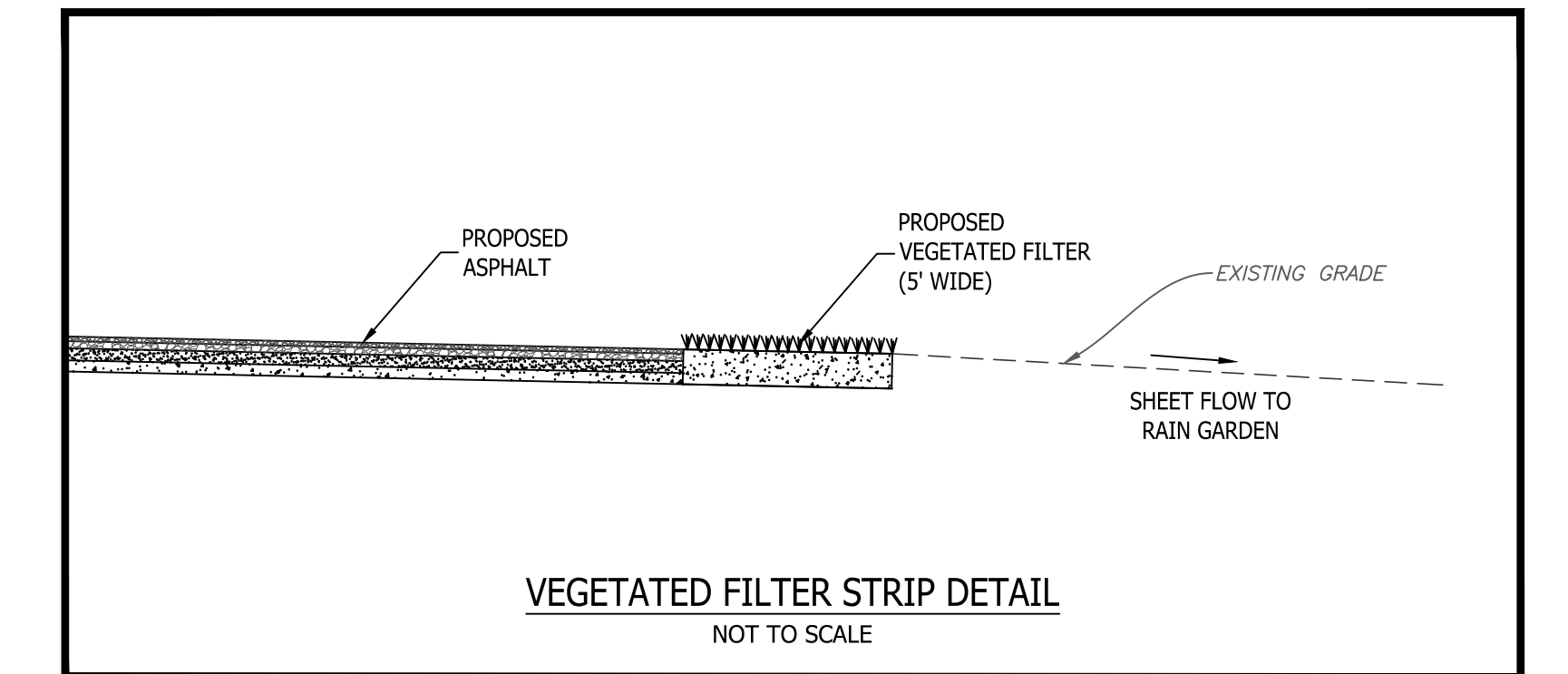
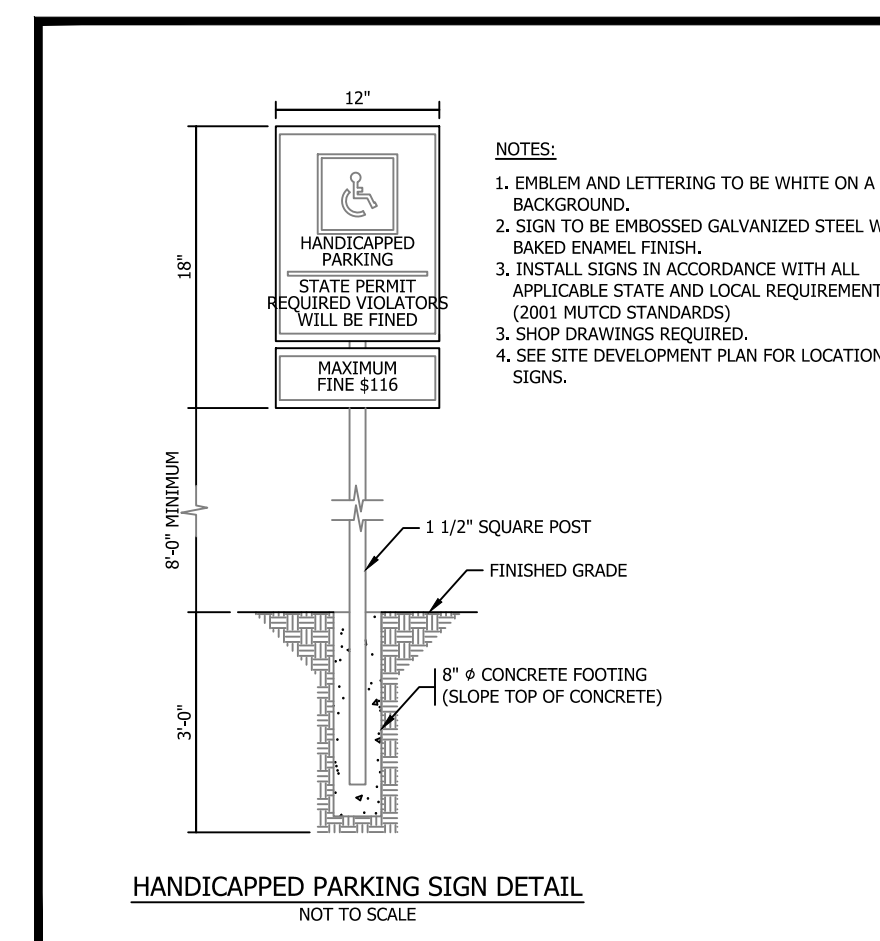
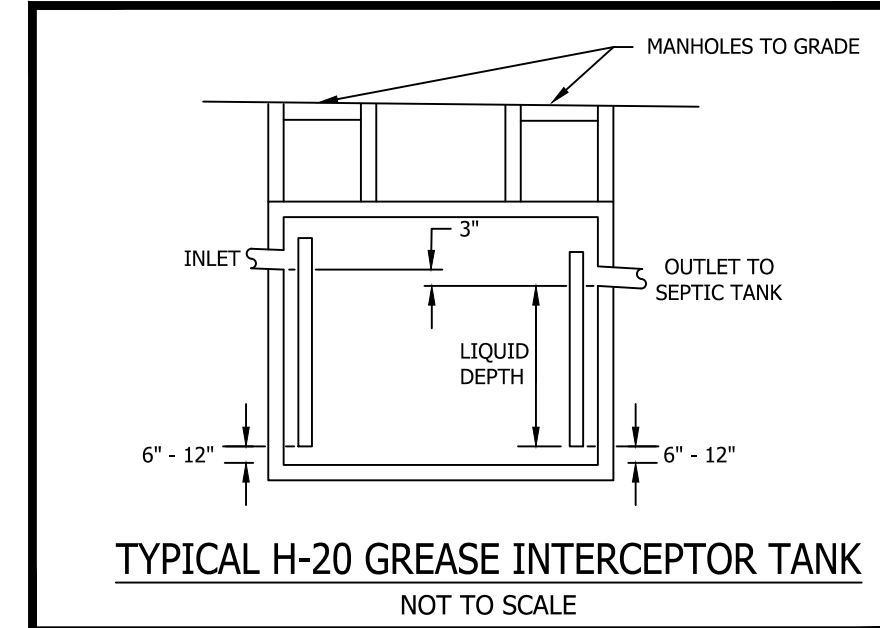
\* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75 IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10 AND THE #200 SIEVE DOES NOT EXCEED 5.

SELECT FILL THAT DOES NOT MEET THE DRY SIEVE GRADATION CRITERIA BUT MEETS THE WET SIEVE GRADATION CRITERIA IS ACCEPTABLE. SIEVE TESTING OF SELECT FILL IS REQUIRED FOR LARGE (2,000 GPD OR GREATER) SYSTEMS WHENEVER THE LEACHING SYSTEM IS LOCATED TOTALLY IN SELECT FILL. THE LOCAL DIRECTOR OF HEALTH MAY REQUIRE SIEVE TESTING OF SELECT FILL ON SMALL SDDS IN ACCORDANCE WITH PHC SECTION 19-13-B103E (D) (6).

THE LICENSED INSTALLER IS RESPONSIBLE FOR PREPARING THE LEACHING AREA WITH NECESSARY SELECT FILL. TOPSOIL IN THE LEACHING SYSTEM AREA SHALL BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT, UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING RECEIVING SOIL FROM OVER COMPACTION/DAMAGE. THE INSTALLER IS RESPONSIBLE FOR PROPERLY COMPACTING SELECT FILL TO FACILITATE CONSTRUCTION AND TO PREVENT SETTLEMENT. SELECT FILL SHALL EXTEND A MINIMUM OF 5 FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE LEACHING SYSTEM.

THE COMMISSIONER OF PUBLIC HEALTH SHALL APPROVE MANUFACTURED FILL. ROCK OR OTHER PRODUCT USED TO PRODUCE MANUFACTURED FILL SHALL HAVE A LOSS OF ABRASION OF NOT MORE THAN 50 PERCENT USING AGASTO METHOD T-96, AND WHEN TESTED FOR SOUNDNESS USING AGASTO METHOD T-104 NOT HAVE A LOSS OF MORE THAN 15 PERCENT AT THE END OF 5 CYCLES. SUPPLIERS OF MANUFACTURED FILL SHALL MAKE APPLICATION FOR APPROVAL TO THE COMMISSIONER OF PUBLIC HEALTH. DOCUMENTATION SHALL BE SUBMITTED ON THE MANUFACTURED FILL OPERATION AND PRODUCTION PROCESS. FILL SPECIFICATIONS (GRADATION, PERMEABILITY, ETC.) AND A NARRATIVE OF THE QUALITY CONTROL/QUALITY ASSURANCE PROGRAM SHALL ALSO BE INCLUDED FOR ALL ACTIVE PRODUCTION SITES. APPROVED MANUFACTURED FILL PRODUCERS SHALL PROVIDE ANNUAL PRODUCT REGISTRATIONS TO THE COMMISSIONER OF PUBLIC HEALTH BY JULY 1ST OF EACH YEAR.

\*SELECT FILL\* SHOULD BE PLACED ON THE EDGE OF THE SITE AND SPREAD OVER THE PREPARED AREA WITH A BULLDOZER. NO TRUCKS SHOULD RUN OVER THE FILL UNTIL 12 INCHES OF FILL HAS BEEN PLACED. THE REMAINDER OF THE FILL SHOULD BE PLACED IN LAYERS 8 TO 12 INCHES DEEP AND COMPACTED BY NORMAL BULLDOZING OR OTHER CONSTRUCTION EQUIPMENT. FILLING AND COMPACTION SHOULD BE DISCONTINUED DURING RAIN STORMS AND FOR 24 HOURS THEREAFTER. ALL FILL SHOULD BE PLACED AND COMPACTED BEFORE ANY OF THE LEACHING SYSTEM IS INSTALLED.



NO.	DATE	REVISIONS
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

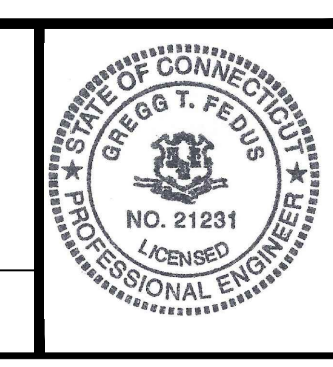
**Detail Sheet**  
of  
**271 Hop River Road**  
**Bolton, Connecticut**  
Prepared For:  
**IMS PETROLEUM, LLC**  
January 3, 2022

DRAWING SCALE: 1"=20'



**FEDUS ENGINEERING, LLC**  
CIVIL ENGINEERS  
Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
Office: (860) 536-7390 Fax: (860) 536-1644

Gregg T. Fedus P.E.  
CT. License No. 21231





### Lumark Prevail Discrete LED Area / Site Luminaire

**Product Features**

- Direct-mounted discrete light engine for improved optical uniformity and visual comfort
- Lumen packages range from 4,300 - 41,000 nominal lumens (30W - 300W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 148 lumens per watt
- Standard universal quick mount arm with universal drill pattern

**Quick Facts**

- Ordering Information page 2
- Mounting Details page 1
- Optical Configurations page 4
- Product Specifications page 4
- Energy and Performance Data page 8
- Control Options page 7

**Product Certifications**

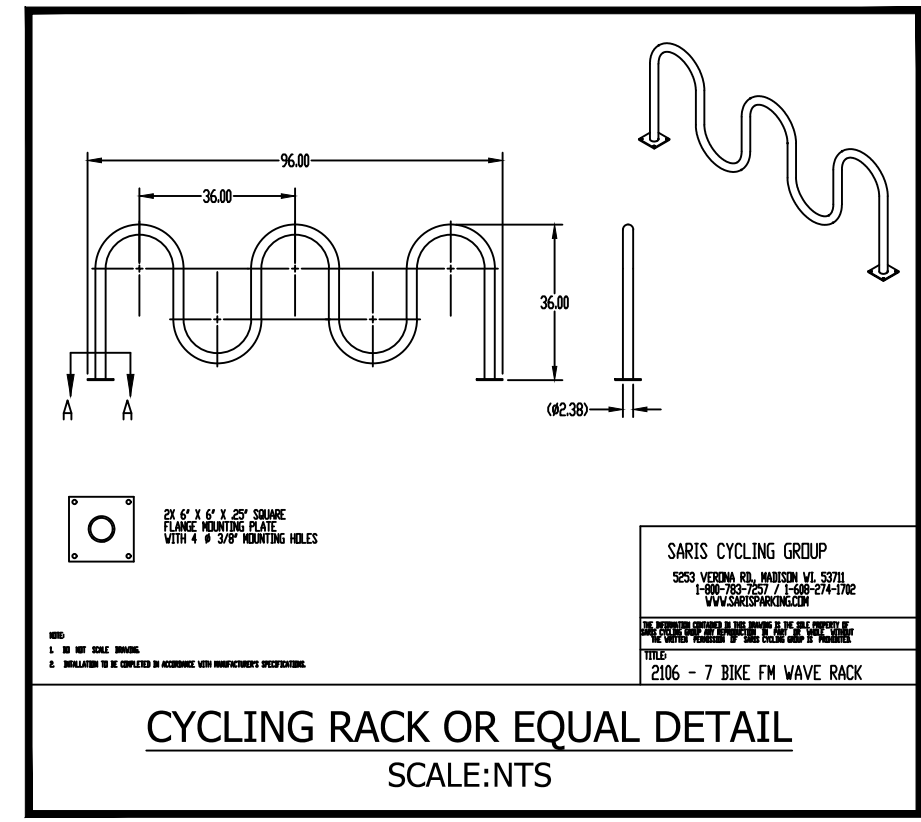
- UL Listed
- ENEC
- IP66
- IEC
- VDE
- TUV
- FC
- BAA

**Connected Systems**

- WaveLinX

**Dimensional Details**

**COOPER Lighting Solutions**



### OPTION 1 CITGO Illumination View

**FRONT VIEW**

**SIDE VIEW**

48" 1/2" CROWN  
 48" 1/2" CROWN  
 40" 1/2" CROWN  
 18" CROWN  
 26" 1/2" 1/2" CROWN  
 24" 1/2" 1/2" CROWN

CG050508HD  
 CG0500-024E23P0  
 CG020028XC

**REVISION HISTORY**

NO.	DATE	DESCRIPTION
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

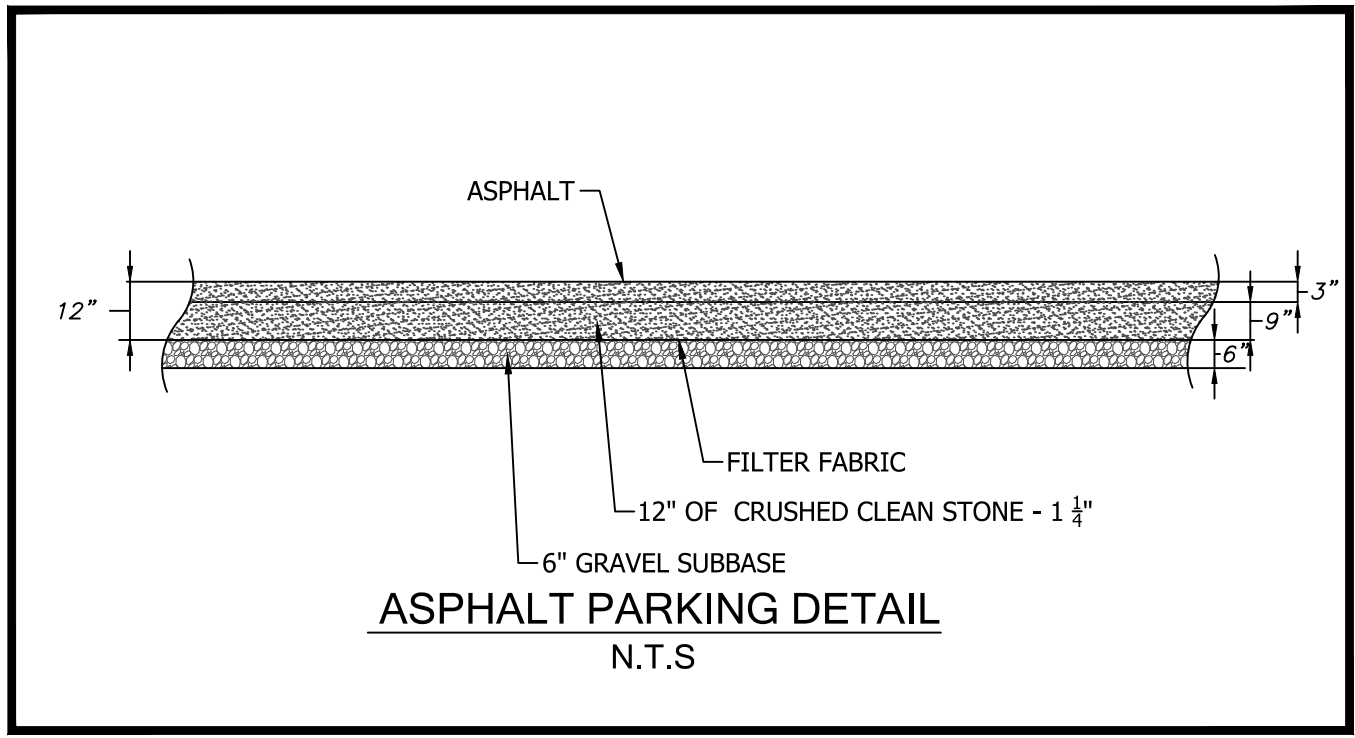
**GENERAL NOTES**

1. All lighting shall be in accordance with the Illumination Manual (IM) or other applicable documents.  
 2. All lighting shall be in accordance with the City of Bolton specifications.  
 3. All lighting shall be in accordance with the City of Bolton specifications.

**RENDERING**

**APPROVAL SIGNATURE** \_\_\_\_\_ **DATE** \_\_\_\_\_

Please Note: Weight and Measure requirements vary by State, County and Municipality. It is the responsibility of the customer to confirm that these specifications are compliant with all local Regulations, Statutes and Ordinances. Compliance must be confirmed by the party obtaining the permit. SignResource is not liable for misinterpretation of local Weight and Measure requirements or any rule changes that may occur after the order has been placed. If permitting and installation is provided by SignResource, we will make every effort to verify the signage permit is in compliance at the time of installation.



**PERVIOUS ASPHALT MAINTENANCE:**

- A. PREVENT CLOGGING OF PAVEMENT SURFACE WITH SEDIMENT**
- A. VACUUM PAVEMENT TWICE PER YEAR
  - B. MAINTAIN PLANTED AREAS ADJACENT TO PAVEMENT
  - C. IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT
  - D. DO NOT ALLOW CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACE
  - E. CLEAN INLETS DRAINING TO THE SUBSURFACE BED TWICE PER YEAR
- B. SNOW/ICE REMOVAL**
- A. POROUS PAVEMENT SYSTEMS GENERALLY PERFORM BETTER AND REQUIRE LESS TREATMENT THAN STANDARD PAVEMENTS
  - B. DO NOT APPLY ABRASIVES SUCH AS SAND OR CINDERS ON OR ADJACENT TO POROUS PAVEMENT
  - C. SNOW PLOWING IS FINE BUT SHOULD BE DONE CAREFULLY (I.E. SET THE BLADE SLIGHTLY HIGHER THAN USUAL)
  - D. SALT APPLICATION IS ACCEPTABLE, ALTHOUGH MORE ENVIRONMENTALLY-BENIGN DEICERS ARE PREFERABLE

### Lumark Axcet Wall Mount Luminaire

**Product Features**

- Full cutoff and refractive lens models available
- Energy and maintenance savings up to 95% compared to HID
- Energy efficient illumination results in up to 144 LPW
- Replaces 70W up to 450W HID equivalents

**Quick Facts**

- Available in 14W - 123W (1,800 - 17,000 lumens) models
- Full cutoff and refractive lens models available
- Energy and maintenance savings up to 95% compared to HID
- Energy efficient illumination results in up to 144 LPW
- Replaces 70W up to 450W HID equivalents

**Product Certifications**

- UL Listed
- ENEC
- IP66
- IEC
- VDE
- TUV
- FC
- BAA

**Connected Systems**

- WaveLinX Lite
- Enlighted

**Dimensional Details**

Full Cutoff | Refractive Lens | Deep Back Housing

Dimensional Data	Axial Small	Axial Large
A	8" (203mm)	11-1/2" (293mm)
B	7-1/2" (191mm)	10-3/4" (273mm)
C	6-1/4" (160mm)	6-7/8" (175mm)
D	6-1/4" (160mm)	5-1/8" (135mm)

**COOPER Lighting Solutions**

### Galaxy II PETROLEUM GAS CANOPY

**FEATURES**

- Value focused, budget-friendly canopy lighting solution
- Available in 4 wattages-30, 65, 100 and 120 Watts
- Low glare, even illumination and no pixilation for outstanding illumination
- High efficacy up to 155 LPW for maximum energy savings
- Universal retrofit solution for HID replacements for various sizes
- Driver accessible and field serviceable under canopy
- Pendant or surface mount options with 3/4" conduit
- IP66 rating to keep water and insects out



**SPECIFICATIONS**

**CONSTRUCTION**

- Die-cast aluminum, low profile housing
- New construction or retrofit solution
- Targets a large range of applications
- Easy installation
- White powder coat finish
- Heat sink design to disperse heat away from fixture
- Suitable for wet locations

**OPTICS**

- Textured glass drop lens
- Type V distribution
- Low glare

**INSTALLATION**

- Surface or pendant mounted
- Easy installation and serviceable below the deck

**ELECTRICAL**

- Universal 120-277 input voltage
- Power Factor > 0.9 at full load
- Total Harmonic Distortion < 20% at full load
- 6 kV Surge Protection
- 0-10 Volt Dimmable Driver
- Operating temperature: -40°C to +40°C

**CERTIFICATIONS**

- UL Listed
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at [www.designlights.org](http://www.designlights.org)
- Wet Location Listed
- IP66 Rated
- 5 year warranty
- See [HL Standard Warranty](#) for additional information

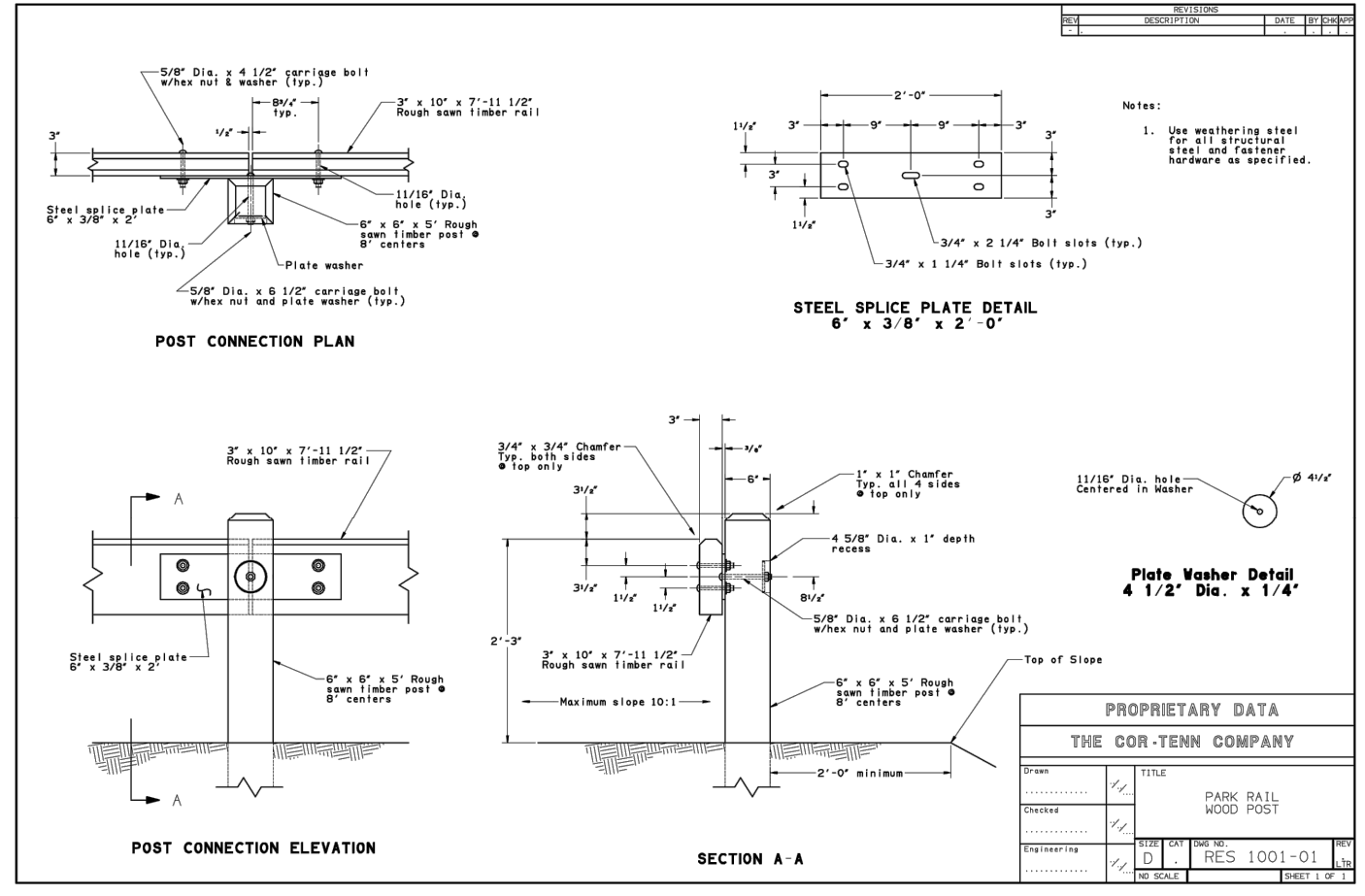
**ORDERING GUIDE**

CATALOG # \_\_\_\_\_

Example: GSY-100-4K7

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

CATALOG #: \_\_\_\_\_



NO.	DATE	REVISIONS
1	6/24/2022	SEPTIC CALCULATION UPDATED
2	7/12/2022	INLAND WETLAND COMMENTS

**Detail Sheet**

of

**271 Hop River Road**

**Bolton, Connecticut**

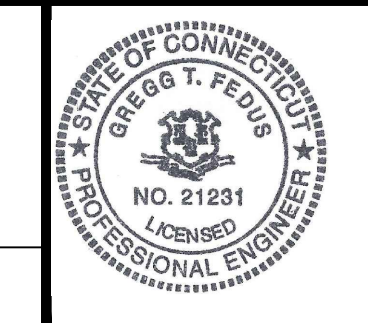
Prepared For:

**IMS PETROLEUM, LLC**

January 3, 2022



Gregg T. Fedus P.E.  
C.T. License No. 21231



**FEDUS ENGINEERING, LLC**  
CIVIL ENGINEERS

Mailing Address: 70 Essex Street Mystic, Connecticut 06355  
Office: (860) 536-7390 Fax: (860) 536-1644

SHEET NO. 8 OF 8 JOB NO. 21-000985 DRAWN BY: CAC

ID	Site Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
08-106	271 HOP RIVER ROAD	M & M OIL LLC	271 HOP RIVER ROAD	BOLTON	CT	06043
08-110	77 JOHNSON ROAD	JOHN & FEDERICA JOHNSON MEMORIAL CAMP INC.	287 JAGER LANE	HEBRON	CT	06248
08-107	299 HOP RIVER ROAD	299 HOP RIVER ROAD LLC	407 1/2 LAREL DRIVE	FRIENDWOOD	TX	077546
08-138	254 HOP RIVER ROAD	ADA ASSOCIATES	8 WEST STREET EXT	ANDOVER	CT	06232
08-112	TOOMEY ROAD	STATE OF CONNECTICUT	79 ELM STREET	HARTFORD	CT	06106
08-108	71 JOHNSON ROAD	ASPINALL MARGARET	71 JOHNSON ROAD	BOLTON	CT	06043
08-132A	HOP RIVER ROAD	STAVENS BROTHETRS INC.	PO BOX 406	WALLINGTON	CT	06279
08-105	255 HOP RIVER ROAD	255 HOP RIVER ROAD LLC	255 HOP RIVER ROAD	BOLTON	CT	06043